



Victor Valley Transit Authority COA

Final Report - June 2024



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1 Executive Summary

The Comprehensive Operations Analysis (COA) is a five-year and beyond blueprint that will guide the Victor Valley Transit Authority (VVT) in providing transit service to the Victor Valley, Barstow, and North Desert region. The COA provides a comprehensive analysis of all VVT's services to provide guidance in improving the delivery of services based on the goals and objectives of the organization. The COA is presented in three phases.

FIGURE 1: COA PROJECT PHASES



1.1 About VVTA

VVTA provides fixed route and deviated fixed route services in the incorporated cities and towns as well as the unincorporated and rural areas surrounding the Barstow and Victor Valley communities. In compliance the Americans with Disabilities Act (ADA) VVTA provides Direct Access service to members of the community who, due to age or disability, are unable to access regular route services. VVTA recently implemented Micro-Link microtransit to provide service coverage in areas that are more difficult to serve with regular fixed route buses. Route 15 is an intercity service connecting Barstow, Victorville, and San Bernardino area communities. VVTA also provides commuter bus service connecting Victor Valley and Barstow to the National Training Center at Fort Irwin. To serve commuters, VVTA does have a subsidized vanpool program.

1.2 Needs and Opportunities

The needs and opportunities are a summary of findings that are germane to and will inform the system planning process. The findings of the needs and opportunities are presented based on each of the analyses conducted and are presented below.

1.2.1 SERVICE EVALUATION

- » Ridership is still recovering from the impacts of the COVID-19 pandemic. Riders are returning to the system, but overall ridership remains at less than half of pre-pandemic levels.
- » Crowding is not an issue on any route.
- » VVTA bus routes that offer route deviations do not deviate often.
- » Route 1 is the best performing route. It serves areas with high transit demand in Barstow along Main Street, providing quick service, and has a strong generator as the end of the route at Walmart. While productivity is high, crowding is not an issue.
- » The performance of county routes, routes serving rural areas, is low. These routes do not carry very many passengers. These routes are less frequent but serve areas with mobility needs.
- » On-time performance is an issue for services, with 23% of trips arriving late. Besides route and running time changes to improve on-time performance, strategic through-routing should also help improve on-time performance.
- » Victor Valley College is still one of the destinations with the greatest demand. People traveling to and from Victor Valley College do like the speed of the 50X. The directness of the proposed Route 55, which will replace Route 50X, will maintain the benefits of the 50X while providing an increased level of service. Route 50X currently operates Monday through Thursday once per hour for only a few hours while Route 55 will operate every 30 minutes all-day on weekends and operate on weekends.
- » The vanpool program is competing directly with the commuter program with 35 percent of all vanpools serving Fort Irwin. The commuter program should be discussed with Fort Irwin leadership. The vanpool program also highlights that another potential commuter market is the Marine Corps Logistics Base.
- » Route 15 continues to be a popular service and continued growth should be considered.
- » The expansion of Micro-Link could serve areas that are not well served by VVTA bus routes today or replace lower performing routes that are not seeing ridership growth.
- » Military Veterans are not adequately connected to medical services as they access care at the VA Medical Center in Loma Linda and the Hospital at Fort Irwin.

1.2.2 MARKET ASSESSMENT

- » There are areas that have a higher concentration of senior citizens that do not have access to bus routes including portions of West Victorville, Jess Ranch in Apple Valley, Spring Valley Lake, and South Hesperia.
- » There are areas that have a higher concentration of minority residents that are not near bus routes in South Adelanto and South Hesperia.
- » Hesperia south of Main St between the aqueduct and 3rd Ave based on youth population and minority population, zero-car households, and along the Mojave Drive corridor in Victorville.
- » The Mojave Drive corridor has concentrations of minority population, Low-income population, youth population, college population, and senior population, and zero-car households.

1.2.3 PUBLIC OUTREACH

- » Missed connections between buses at the transit centers is the biggest issue for VVTA passengers as it leads to trips being longer, thereby making transit less attractive.
- » Span needs to be expanded to serve the needs of riders. Later service is needed to access jobs, college courses, and shopping.
- » Passengers feel that travel times are too long. They like services that are direct and quick such as 50X. Part of the travel time concern is related to missed connections when buses are late.
- » Service coverage is good, there are a few locations that have a high transit propensity that are not served. Customers did not mention any locations that they wish to travel to that they are unable to reach. Route changes, or new routes, may be needed to serve new developments as the region continues to grow.

1.3 Service Alternatives and Future Needs Analysis

The service changes included in this plan are meant to redesign the VVTA network in order to improve performance of the service and to address the evolving needs of the changing Victor Valley region. A two-tiered approach was used to develop a redesign of the VVTA network. The Short-Term Network includes service changes that can be made in the next one to two years and reflect constrained resources and adaptations to near-term developments within VVTA's service area. The Vision Plan contains service changes that are to occur over the longer term, over the next five years and beyond, reacting to upcoming developments like the opening of Brightline. The Vision Plan also includes more resource-intensive service improvements that will require additional resources beyond those needed for the short-term plan. The plans were developed with the following guiding principles in mind.

1.3.1 ADDRESSING NEW LAND USE AND DEVELOPMENT PATTERNS

As communities in Victor Valley continue to grow, VVTA will adjust its services to meet new demands. Where densities and land use patterns warrant, VVTA service changes have been developed to meet new demand for transit service. New developments will be served either by adjusting the alignment of existing routes, the introduction of new fixed routes, or the introduction of a new Micro-Link service.

1.3.2 IMPROVING SERVICE FREQUENCY WHERE POSSIBLE AND WARRANTED

This service plan improves service frequency when possible and when demand warrants it. Improving service frequencies is key to improving ridership; this is especially important as the majority of VVTA services currently operate at frequencies of 60 minutes or greater. Improving service frequencies is key to generating ridership growth.

1.3.3 ENSURE THAT SPAN OF SERVICE IS ADEQUATE THROUGHOUT THE WEEK

The service plan seeks to improve VVTA's service so that customers can rely on it for more trips. The key to improving VVTA's service is ensuring that it operates when passengers need, especially earlier in the morning and later in the evenings. Currently, resources limit possible service span.

1.3.4 STREAMLINED ALIGNMENTS

The service plans present route modifications to improve performance of routes by eliminating unproductive areas, offering more streamlined service between high ridership destinations.

1.3.5 EXPANDING MICRO-LINK SERVICE IN AREAS THAT FIT ITS ROLE

This service plan seeks to expand the role of Micro-Link as a key service that VVTA offers. Micro-Link is being used to expand service to areas of dispersed demand, but in a manner that utilizes fewer vehicles than regular fixed route service.

1.4 The Proposed Networks

The Short-Term Network is a suite of improvements that can be made within a short timeframe with all short-term recommendations proposed for implementation in the first year.

FIGURE 2: PROPOSED SHORT-TERM NETWORK (VICTOR VALLEY AREA)

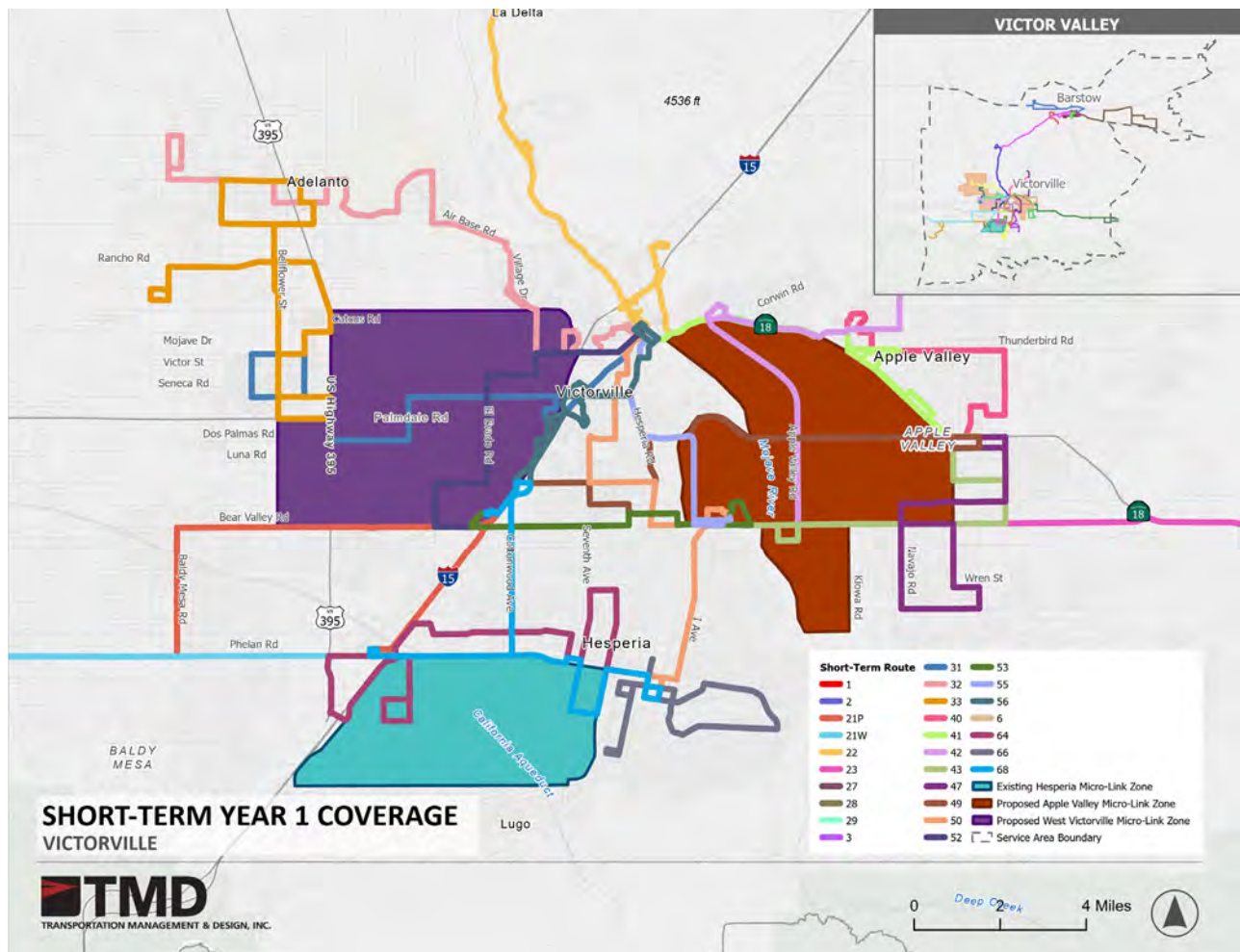
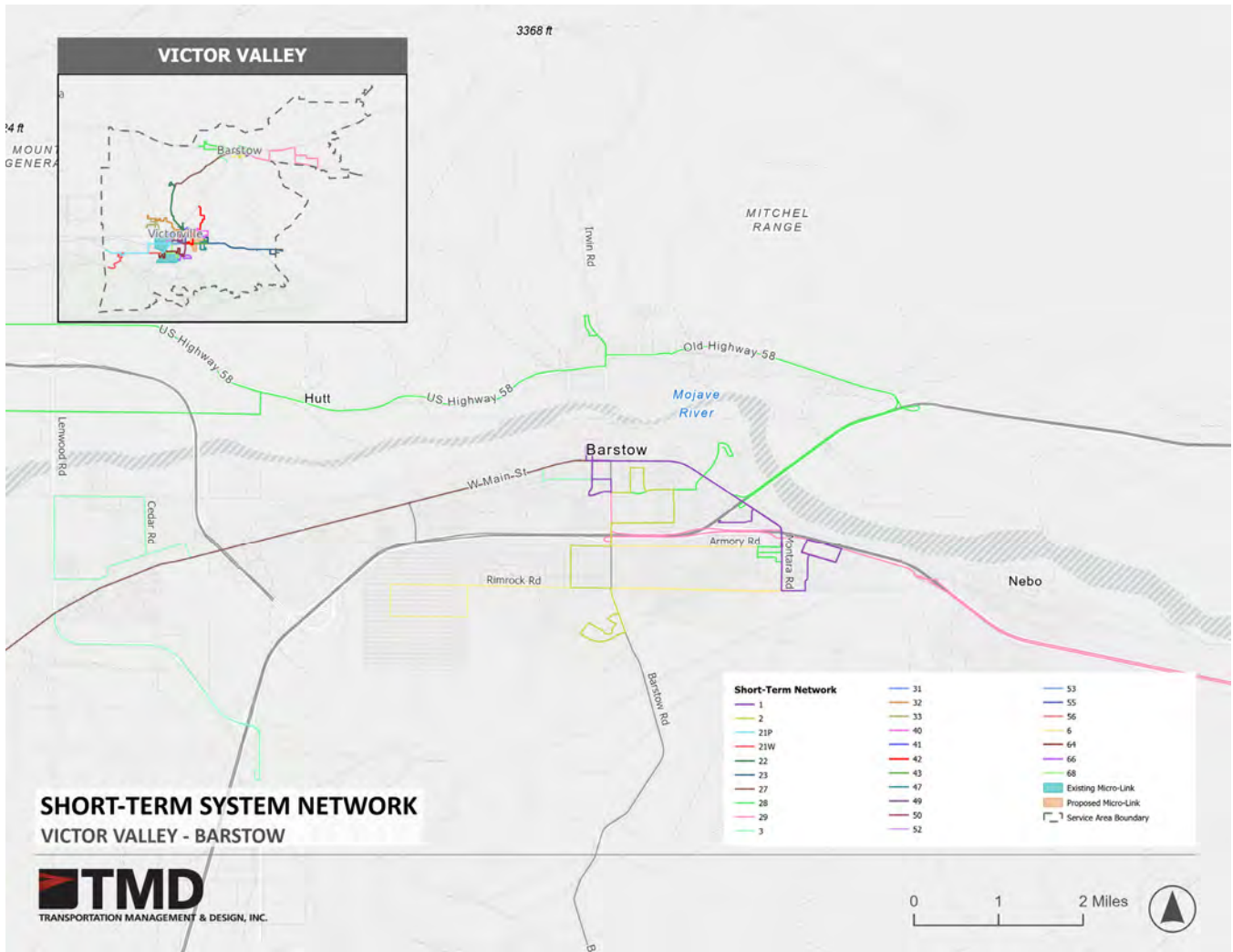


FIGURE 3: PROPOSED SHORT-TERM NETWORK (BARSTOW AREA)



The Vision Plan is an aspirational plan for VVTA and allocates extensive resources to further improving service and span and service to future developments. The implementation program will seek to incrementally build to the vision plan based on available funding.

FIGURE 4: PROPOSED VISION PLAN (VICTOR VALLEY AREA)

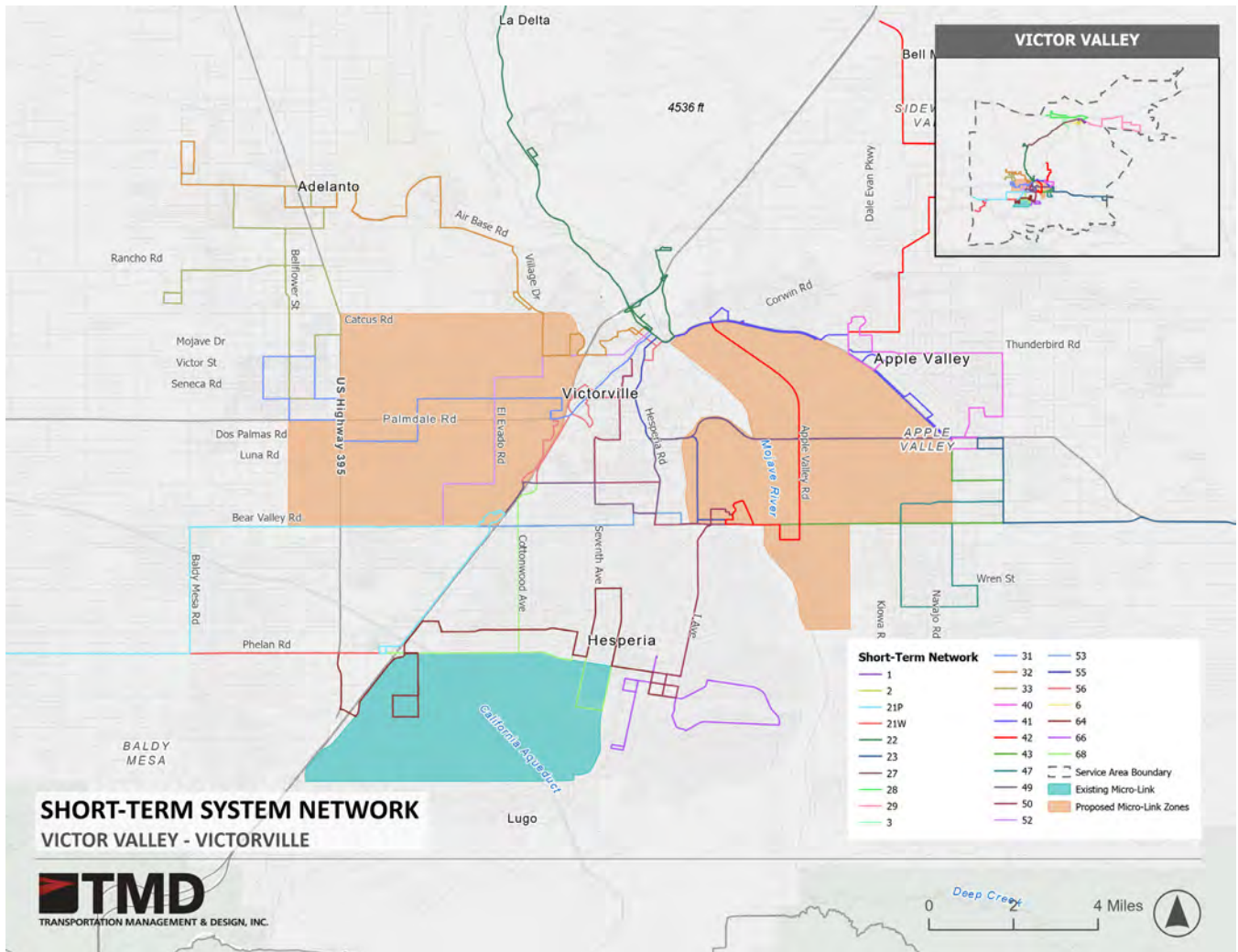
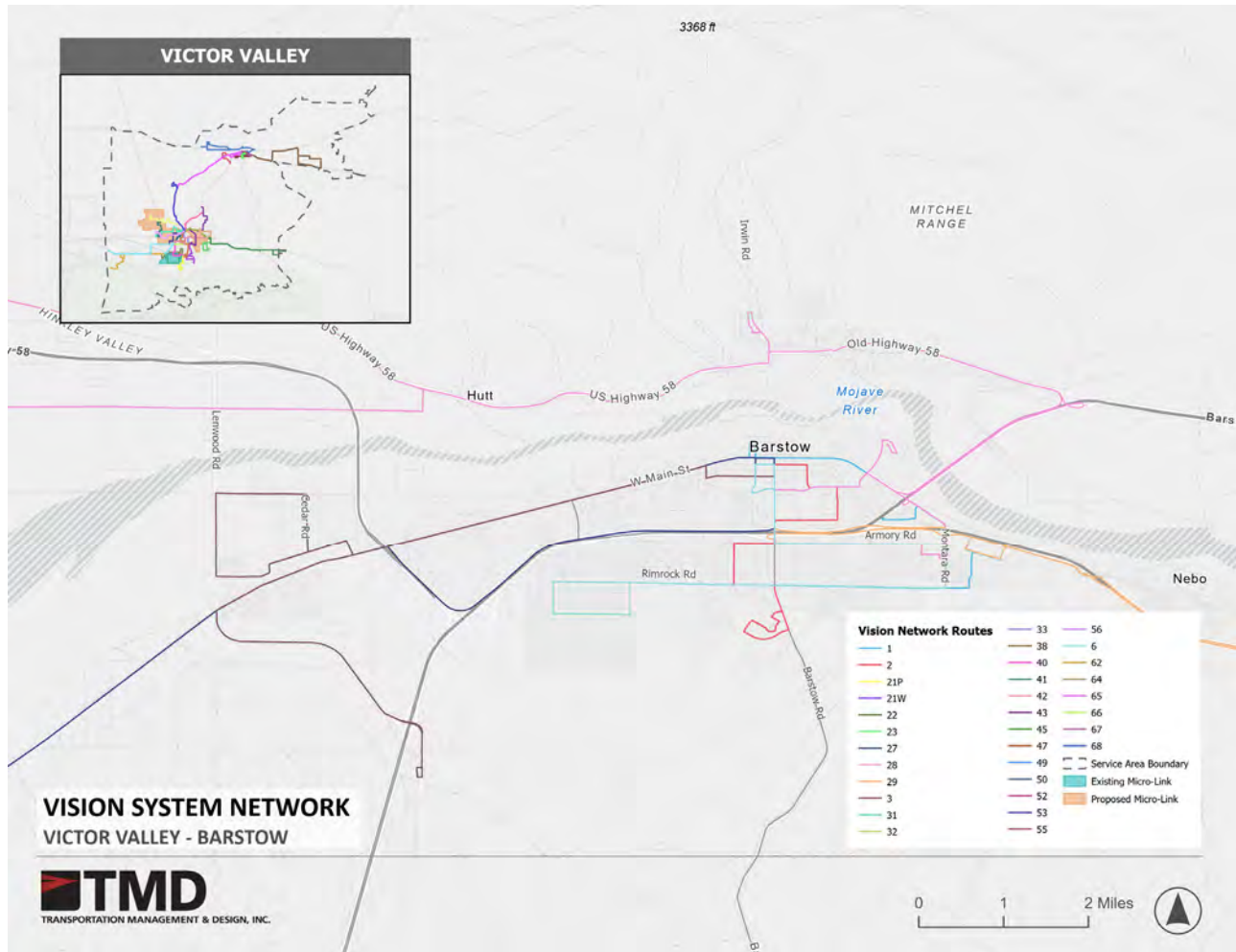


FIGURE 5: PROPOSED VISION PLAN (BARSTOW AREA)



1.5 Service Plan

The service plans for VVTA are based on the route concepts developed in Phase 2 and support rebuilding VVTA's ridership and supporting growth in the region. They account for changes in commuting patterns post-COVID and are responsive to comments from the public regarding what riders need from the system. The descriptions below present the changes to the service plans for fixed route services from what was presented in Phase 2.

1.5.1 FIXED ROUTE AND COUNTY SERVICES

The service plan that was developed in Phase 2 of the study was presented to the public in April 2024. The response to the new routes and services was incredibly positive with riders enthusiastic about span enhancements and more frequent services. The implementation program implements the new routes based on available funding and prioritizes serving major new developments, improving current services for passengers, and financial constraints.

1.5.2 DIRECT ACCESS

Any changes to fixed route services will affect Direct Access services. As fixed route coverage expands throughout the service area, the Direct Access coverage area will increase (and the shape of zones 2 and 3 as well). Per the Americans with Disabilities Act (ADA) rules, VVTA obligated to have Direct Access service available during the same hours that fixed route service operates so changes in fixed route span will result in changes to Direct Access span.

1.5.3 ROUTE 15

Changes to Route 15 include adding service and adding stops. Additional weekday service between Barstow and Victorville will support needs for accessing courthouse services in each community. Additional service between Victorville and San Bernardino will support access to healthcare, connections to CSUSB, and access to jobs. Additional stops will be added to Route 15 at park and ride lots and locations near Interstate 15 where transfers to other services can occur, including Brightline stations.

1.5.4 NTC COMMUTER

The COA recommends that NTC leadership and VVTA need to develop a specific plan about the future of transportation between the VVTA service area and NTC. It is recommended that any changes to the NTC would happen in the second year of the plan (Fiscal Year 2025/2026) with a year-long process of working with NTC leadership to develop a new service plan and working with commuter bus riders to transition to a new service.

1.5.5 VANPOOL

The travel patterns for the Post-COVID period make vanpools more difficult to form and maintain due to more flexible work schedules that include hybrid home/office work. It is recommended that VVTA vanpool program adopt a model that sells seats on vanpools for each day of the week versus having all participants of the vanpool required to travel five days per week. This model will also allow part-time workers access to vanpools. The second recommendation is to market the vanpool program to employers in the VVTA service area or who have a lot of employees commuting from the VVTA service area.

1.5.6 CONSOLIDATED TRANSPORTATION SERVICES AGENCY (CTSA)

VVTA's CTSA program has been a crucial tool in supporting mobility for those who are unable to use VVTA's fixed route transit network. To support mobility two programs are proposed to be restarted which include the Transit Ambassador Program and the Travel Training programs which will support part of the CTSA mission of helping people to learn to use VVTA's services. A new program that is planned is a Veteran's transportation program to support the needs of Veterans who may not be able to access VVTA fixed routes, may not qualify for Direct Access, and cannot easily access key destinations for Veterans such as the VA Medical Center in Loma Linda. A longer-term program, which can be considered as part of the expansion of the Hesperia Yard, is the development of a mobility center. The mobility center can be used to train people to use fixed route bus services and evaluate passengers for Direct Access services.

1.6 Implementation Plan

The implementation plan presents a timeline for adding service that builds toward the Vision plan yet is financially constrained. The implementation plan incrementally adds service in all five years covered by the COA. The timeline for service changes is presented for each year below.

1.6.1 YEAR 1/FY2025

In Year 1 all short-term service changes are recommended to be implemented. This includes new Routes 27 and 49 along with improvements to frequency for Barstow County routes, Route 32, and Route 55. Routes 25 and 54 are recommended to be discontinued with modifications to other routes and existing Micro-Link services providing service in the same areas as Route 25 and Route 54. Route 50X service is discontinued and replaced with improved frequency and direct routing on Route 55 which will operate a more direct routing between the VVTC and VVC, operate more frequently, and operate seven days a week. The service span of Barstow area routes is recommended to be improved to match the services in the Victor Valley area. A new Apple Valley Micro-Link zone is recommended to be implemented in Year 1. Additional stops are recommended for Route 15 at the L Street park and ride, Bear Valley park and ride,

Main Street and Cataba Road, and the Hesperia park and ride. One additional existing northbound Route 15 trip is recommended to be modified to provide service to CSUSB.

1.6.2 YEAR 2/FY2026

Changes in year 2 include span improvements on weekdays to Routes 1 through 6 and Routes 31 through 68. The span improvements will result in service ending one hour later in the evening. One additional roundtrip is recommended to be added to Route 15 between Barstow and Victorville. Implementation of the future NTC service that will be developed in year 1 will occur in year 2.

1.6.3 YEAR 3/FY2027

Year 3 will see the introduction of new Route 67 serving the Silverwood development in Hesperia. This new route will allow for modifications to Route 66 serving Hesperia. A new Micro-Link zone will be implemented in Adelanto and alignment of Route 33 will change to accommodate this service. Route 15 Sunday service will be improved with a schedule that is the same as Saturday service.

1.6.4 YEAR 4/FY2028

Two new routes are recommended to be implemented in Year 4. Route 38 along Mojave Drive in Victorville and Adelanto will be implemented and allow for improved coverage in Adelanto by changing the Route 31 loop and a more direct routing for Route 32. New Route 62 will operate between the Hesperia Transfer point and the Mall allowing Route 68 to serve the Main Street corridor between Super Target and the Hesperia Transfer Point.

1.6.5 YEAR 5/FY 2029

Brightline West route changes are expected to be implemented in Year 5. These changes include a New Route 45 between Victorville and the Apple Valley Brightline station along with an extension to Route 42 to serve the station. Route 22 will be modified based on the new Route 45 serving the Stoddard Wells area stops currently served by Route 22. Route 15 will have stops at the two Brightline stations. Two roundtrips will be added to Route 15 service between Victorville and San Bernardino on weekdays. Service spans on Routes 1 through 6 and Routes 31 through 68 will improve on weekdays with service starting one hour earlier and ending one hour later.

1.6.6 BEYOND 5 YEARS

The five-year implementation plan does provide considerable progress towards the vision network, it is financially constrained and does not implement all services. The bullets below present the prioritization for service improvements to consider if additional funding becomes available. It is important to note that new routes and frequency enhancements will require the purchase of expansion buses.

1. Weekend span improvements
2. County service span improvements
3. Implementation of Route 65
4. 30-minute service on Routes 1, 2, 3, 6, 33, 38, 40, 42, 45, 47, 49, 50, 56, 62, 64, 66, 67, 68
5. 20-minute service on Routes 31, 41, 43, 52, 53, 55
6. 60-minute service on Routes 21P, 21W, 22, 23, 27, 28, 29
7. Weekend 30-minute service on frequent routes

1.7 Fare Modernization

The modernization program will include a fare capping program and an open loop payment system. Fare capping rewards passengers with free rides after they meet the fare equivalent of a daily, weekly, or monthly pass. An open loop fare payment system allows for a regular credit card to be used as a farecard and does not require pre-payment. As part of the fare policy change, a 25-cent increase in the base fare is proposed that would be concurrent with the implementation of the modernized fare system along with Direct Access fares and ADA subscription fares which would be implemented in year 2 of the COA plan, FY 2026. Along with this fare change the county and Micro-Link services will be incorporated into the fixed route fare policy creating a single more simplified fare structure for local services.

1.8 Administration Plan

In implementing the recommendations of the COA, VVTA will increase its fleet size to over 50 buses. A fleet of 50 buses is a threshold for several rules and regulations at the federal level that VVTA will have to account for. There are different thresholds for greater fleet sizes that VVTA should also keep in mind as they expand their fleet. To accommodate the reporting requirements for increasing service, a Planning Manager position is recommended to oversee planning and reporting functions. This position will be added in Year 2 before the fixed route bus fleet reaches 50 buses.

1.9 Capital Plan for the VVTA Service Area

The capital plan supports the proposed five-year operating plan, which will maintain current operations in a state of good repair and also will support its growth during the period. Of major import is the transition of the vehicle fleet to zero-emission buses (ZEB) leveraging hydrogen powered fuel cell technology which requires the development of hydrogen fueling facilities in Barstow and Hesperia. The capital plan includes replacement and expansion vehicles, development of bus transfer hubs, facility upgrades and development, and a range of ancillary items including security, amenities, and shop equipment, all of which support the ZEB transition.

TABLE 1: 5-YEAR CAPITAL PLAN BY LINE ITEM1.10 FINANCIAL PLAN

<i>Line-Item Name</i>	<i>FY 2025</i>	<i>FY 2026</i>	<i>FY 2027</i>	<i>FY 2028</i>	<i>FY 2029</i>
40-Foot FCEB	\$10,675,000	\$5,924,825	\$10,679,497	\$1,571,412	\$3,237,108
Paratransit Vehicles	\$850,000	\$525,300	\$1,082,118	\$1,114,582	\$956,682
Microtransit Vehicles	\$190,000	\$-	\$604,713	\$-	\$641,540
Non-Revenue Vehicles	\$310,000	\$319,300	\$328,879	\$474,244	\$558,252
Cost rollover for 3 buses	\$1,596,462	\$-	\$-	\$-	\$-
On-Board Vehicle Modems (security)	\$110,000	\$-	\$-	\$-	\$-
Hesperia Hydrogen	\$-	\$-	\$-	\$-	\$-
Hesperia Shop Upgrades for Hydrogen	\$1,430,000	\$-	\$-	\$-	\$-
Barstow Hydrogen and chargers	\$15,000,000	\$-	\$-	\$-	\$-
Garage and Shop Equipment	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
GFI Vault Upgrade	\$75,000	\$-	\$-	\$-	\$-
Barstow Transit Center	\$730,000	\$141,684	\$-	\$-	\$-
Victorville Transportation Center Expansion	\$	\$-	\$2,385,227	\$-	\$-
Automatic Passenger Counters	\$150,000	\$-	\$-	\$-	\$-
Hesperia Yard and Transit Center	\$1,800,000	\$-	\$-	\$-	\$-
Hesperia Facility Capital Lease	\$1,539,550	\$1,540,300	\$1,539,050	\$1,540,800	\$1,535,300
Barstow Facility Capital Lease	\$641,900	\$641,900	\$640,150	\$642,900	\$641,400
Transit Amenities/Street furniture	\$-	\$75,000	\$100,000	\$100,000	\$100,000
Grant Management Software	\$50,000	\$-	\$-	\$-	\$-
IT and Office Equipment Replace	\$55,000	\$50,000	\$50,000	\$50,000	\$50,000
Security – Capital Projects	\$-	\$110,000	\$110,000	\$110,000	\$110,000
Capital Total	\$35,302,912	\$9,428,309	\$17,619,634	\$5,703,938	\$7,930,282

1.10 Financial Plan

The financial plan presents the projected funding and costs for Victor Valley Transit Authority (VVTA) through Fiscal Year (FY) 2029 based on the COA operating plan. San Bernardino County Transportation Authority (SBCTA) projected operating funding levels. Operating cost items and levels are based on the COA operating and capital plan and historical data on cost increases. The funding sources and the overall financial plan are presented in the following tables.

TABLE 2: FUNDING LEVEL PROJECTIONS

Source	FY 2025	FY 2026	FY 2027	FY 2028	
LTF	\$35,077,895	\$35,428,674	\$35,782,960	\$36,140,790	\$36,502,198
STA	\$370,319	\$370,319	\$370,319	\$370,319	\$370,319
LCTOP	\$1,452,160	\$1,452,160	\$1,452,160	\$1,452,160	\$1,452,160
SB1/SGR	\$882,666	\$900,319	\$918,326	\$936,692	\$955,426
LCFS	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
SB125 – TIRCP	\$24,099,833	\$24,099,833	\$-	\$-	\$-
SB125 – ZETCP	\$1,633,819	\$845,448	\$845,448	\$-	\$-
Measure I	\$1,760,600	\$1,807,960	\$1,860,753	\$1,912,854	\$1,979,804
AB2766	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Section 5307	\$11,811,833	\$11,811,833	\$11,811,833	\$11,811,833	\$11,811,833
Section 5311	\$977,663	\$977,663	\$977,663	\$977,663	\$977,663
Section 5339	\$1,083,060	\$1,083,060	\$1,083,060	\$1,083,060	\$1,083,060
CMAQ	\$3,044,000	\$4,400,000	\$2,500,000	\$4,115,983	\$6,311,981
RINS Credits	\$540,000	\$540,000	\$540,000	\$540,000	\$540,000
CNG Station Sales	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
CNG Credits	\$682,000	\$-	\$-	\$-	\$-
HVIP Incentive Program	\$3,300,000	\$-	\$-	\$-	\$-
Competitive Grants	\$12,000,000	\$-	\$-	\$-	\$-
Passenger Fares	\$2,439,834	\$2,067,021	\$2,142,274	\$2,236,059	\$2,377,026
Advertising	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Interest Income	\$950,000	\$950,000	\$950,000	\$950,000	\$950,000
Other	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000
TOTAL:	\$103,825,681	\$88,454,290	\$62,954,796	\$64,247,412	\$67,031,469

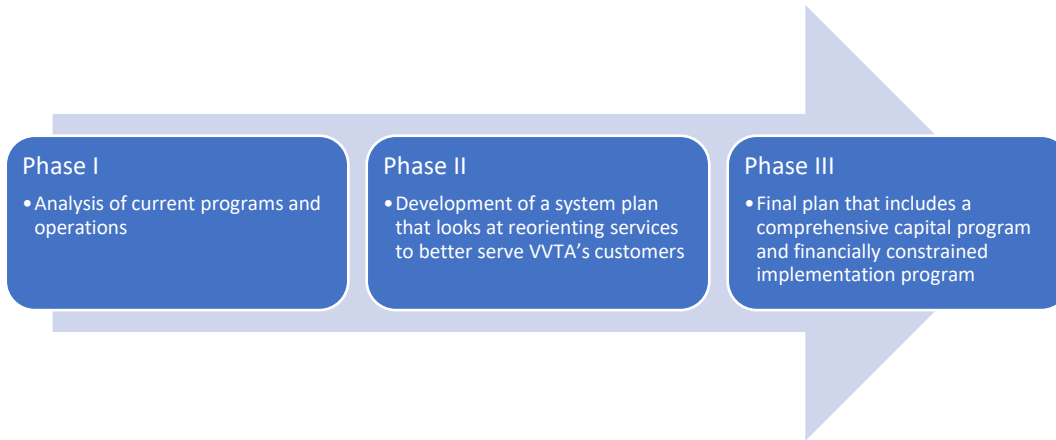
TABLE 3: FINANCIAL PLAN

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Costs					
Transit Operations Costs	\$46,175,510	\$48,734,285	\$53,490,852	\$58,738,557	\$65,245,138
CTSA Costs	\$861,225	\$930,436	\$999,954	\$1,075,221	\$1,156,751
Vanpool Costs	\$1,762,358	\$1,935,113	\$2,124,970	\$2,333,629	\$2,562,963
Facility Costs	\$1,036,700	\$1,308,535	\$1,352,462	\$1,398,585	\$1,447,014
Administration Costs	\$4,603,741	\$5,050,469	\$5,394,056	\$5,762,108	\$6,156,431
Total Operating Costs	\$54,439,534	\$57,958,838	\$63,362,294	\$69,308,101	\$76,568,297
Capital Costs	\$35,302,912	\$9,428,310	\$17,619,634	\$5,703,937	\$7,930,283
Revenues					
Fare Revenue	\$2,439,834	\$2,067,021	\$2,142,274	\$2,236,059	\$2,377,026
Funding	\$101,385,848	\$86,387,269	\$60,812,522	\$62,011,354	\$64,654,443
Total Revenue	\$103,825,681	\$88,454,290	\$62,954,796	\$64,247,412	\$67,031,469
Balance	\$14,083,236	\$21,067,142	(\$18,027,133)	(\$10,764,625)	(\$17,467,111)
Carryover Revenue	\$24,540,269	\$38,623,505	\$59,690,647	\$41,663,514	\$30,898,889
Net Revenue	\$38,623,505	\$59,690,647	\$41,663,514	\$30,898,889	\$13,431,778

2 Existing Transit Service Analysis

The Comprehensive Operations Analysis (COA) is a five-year and beyond blueprint that will guide the Victor Valley Transit Authority (VVTA) in providing transit service to the Victor Valley, Barstow, and North Desert region. The COA provides a comprehensive analysis of all VVTA's services to provide guidance in improving the delivery of services based on the goals and objectives of the organization. The COA is presented in three phases.

Figure 6 - COA Project Phases



This chapter is a transit service assessment that presents an inventory of VVTA's services and a service assessment of VVTA's operations. Data for this assessment comes from internal VVTA data sources including public timetables and schedules, Automatic Passenger Counts (APC), and collected operations statistics for Fiscal Year 2022/2023. The inventory and analyses conducted in this chapter present VVTA services' performance and highlight which services are more effective and which may have issues that need to be addressed.

2.1 The Customer Experience

VVTA sells a product to a customer, one trip at a time. To maintain and grow its ridership base, VVTA must focus on delivering a positive customer experience every day. Improvements to each phase of the passenger trip – planning, accessing the stop, waiting, and riding – will greatly benefit customers and improve the transit experience.

2.1.1 TRIP PLANNING

The customer experience starts the moment a rider plans their trip. Customers should be able to quickly and easily determine where and when service is available, how much a trip will cost, and what payment methods they can use; a service that is too confusing can defer customers from using the service. VVTA customers have several options for planning their trip. The VVTA website includes a trip planner where passengers can enter an origin and destination address to plot a trip; after entering their origin and destination, passengers are directed to Google Maps which provides an itinerary for making their trip. VVTA maintains GTFS feeds that allow for trip planning on most internet map platforms that have a trip planning function.

For mobile phone users, VVTA does guide passengers to download the Transit App for trip planning. The Transit App is not only good for trip planning but also provides passengers with real-time bus arrival times. Other sources for real-time arrival times include VVTA's real-time website: ontime.vvta.org. The schedules pages on VVTA's website also provide real-time information on bus locations. Transit directions are also available through the mobile Google Maps and Apple Maps apps.

In addition to the trip planner, the VVTA website also has links to the system map, a list of all routes in the system, and links to PDF files for schedules for each route in the system.

2.1.2 STOP ACCESSIBILITY

The quality of the walk experience also plays a role in the overall customer experience. Walking to the stop is part of a transit journey, and riders should feel safe when walking to and from the bus and enjoy a pleasant walking experience. A few factors contribute to a high-quality pedestrian environment. Sidewalks are important and should be wide, in good condition, and free of obstructions. Protected crossings are also important so riders can safely cross the street to access a bus stop. Narrow streets can improve the pedestrian environment, as cars generally move slower, and street crossings are shorter.

Victor Valley is not especially pedestrian friendly. Streets are typically very wide, with fast-moving traffic. Long block lengths throughout the region mean pedestrians must walk longer distances to reach pedestrian crossings. The prevalence of surface parking lots in the region is also not conducive to pedestrian travel since pedestrians must walk further distances to access buildings and must interact with automobile traffic to do so.

Achieving the right stop spacing requires balancing the needs of riders both on and off the bus. Riders off the bus prefer closer stop spacing, so they have a shorter walk to the bus. Riders on the bus prefer wider stop spacing, so the bus stops less often, and they have a faster trip. Targeted average stop spacing in urban environments that best achieves this balance is between 0.25 and 0.33 miles. A quarter mile stop spacing means that riders in between stops are at most a 3-minute walk away from the next stop. Route context must be considered, however; some parts of the route may have closer spacing if serving key destinations while some parts may have wider spacing if serving lower-density areas without destinations.

Overall, the majority of VVTA's local routes have a spacing between stops at distances between 0.25 and 0.5 miles. The local routes with the widest average spacing are Routes 42, 32, and 31. Routes 42 and 32 spend a portion of their routes traveling along undeveloped and industrial areas while Route 31 operates partly on the I-15 freeway.

Table 4 - Average Distance Between Stops of Local VVTA Routes

Route	Average Distance Between Stops (Miles)
1	0.24
2	0.27
3	0.35
6	0.29
31	0.50
32	0.41
33	0.52
41	0.38
42	0.62
43	0.38
47	0.37
50	0.39
52	0.33
53	0.33
54	0.37
55	0.31
56	0.30
66	0.28
68	0.40

The lack of ADA accessible curb ramps throughout the region also presents a problem to users who use wheeled conveyances for travel; ADA accessible curb ramps are primarily found only in the central business districts of the cities of Victor Valley. This is shown on Figure 7 and Figure 8.

Figure 7: Pedestrian Network, Victorville

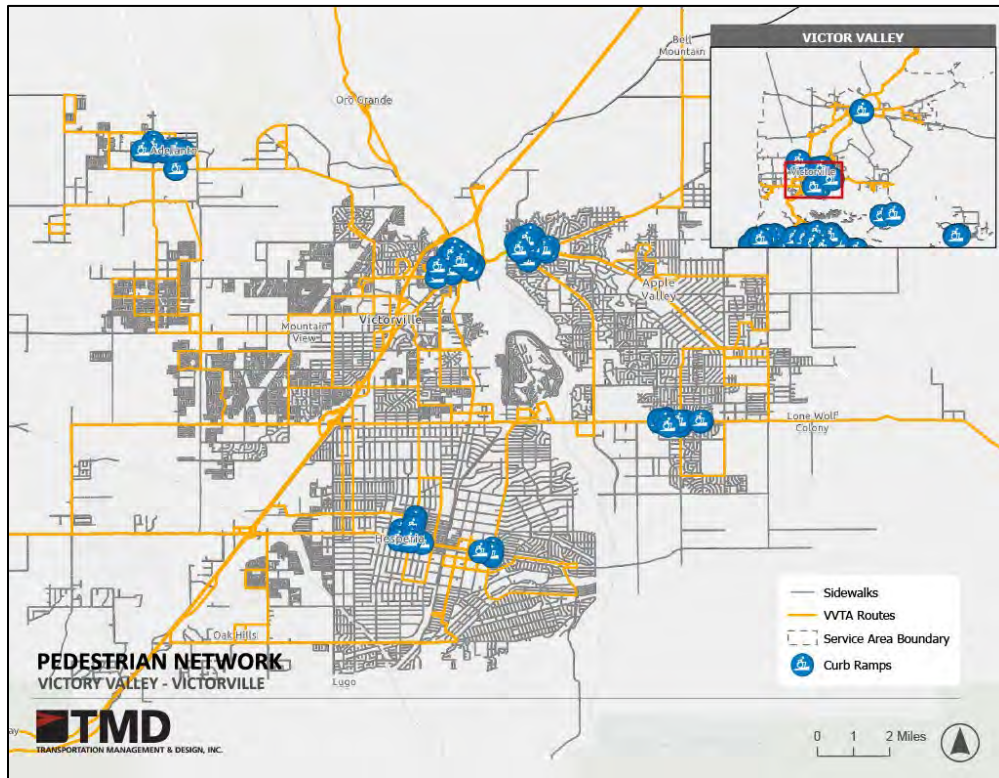
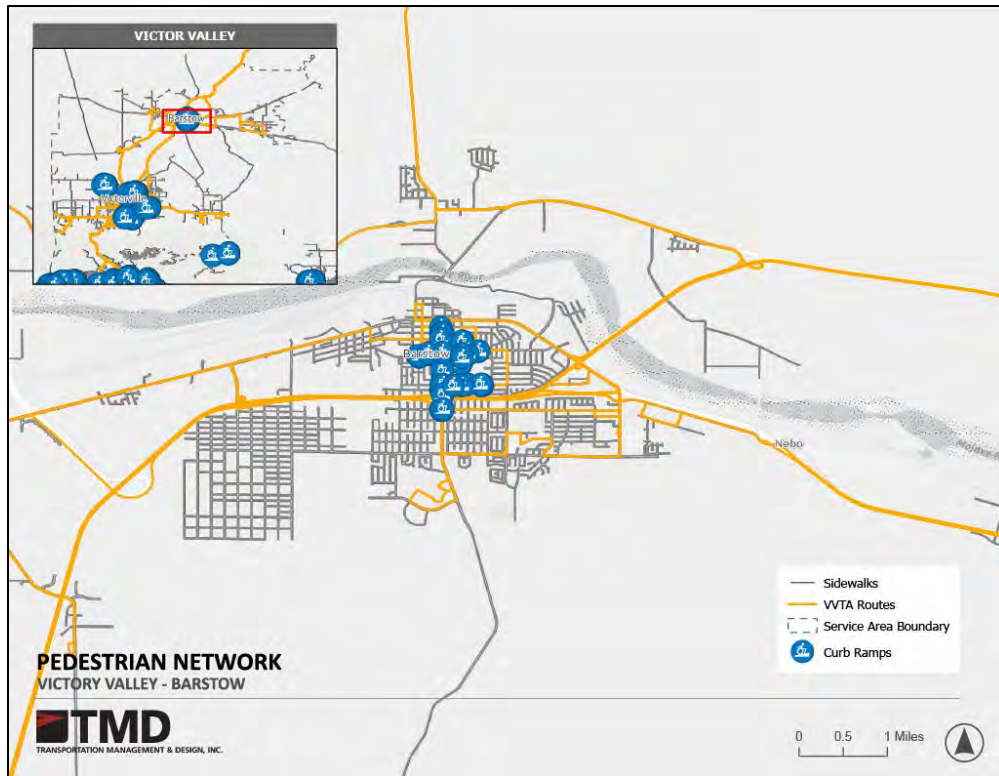


Figure 8: Pedestrian Network, Barstow



2.1.3 SERVICE FREQUENCY

Frequency of service, or how many trips a route operates per hour, is the number one factor that attracts riders to use the bus. Riders want to be able to show up at a stop without consulting a schedule and have a bus arrive within a few minutes. When service is infrequent (trips come less than every 15 minutes), most riders will not spontaneously use transit, but rather will plan their arrivals around the timetable to minimize wait time. This requires them to organize their plans around the bus schedule, making transit much less attractive.

Frequencies are low across the VVTA network. Only seven routes operate more frequently than every 60 minutes during the midday. Many routes in the VVTA network operate every 60 minutes or less frequently. Frequencies seen in the VVTA network are not conducive to spontaneous travelling, requiring advanced planning on the part of any potential passenger. Low frequencies on VVTA services make it complicated to make transfers to other routes and make it difficult for VVTA service to compete effectively with private vehicles for travelers with a choice.

Midday frequencies are similar to peak frequencies. Most routes have similar peak and midday frequencies, partially because many routes have such low frequency (trips come every 60 minutes or less) service all day.

Weekend frequencies are similar to weekday frequencies, and Saturday and Sunday service is similar. The frequency of service on route 31 reduces to every 60 minutes on weekends.

Figure 9 shows that there is correlation between route frequency and ridership, with the most frequent routes having the highest ridership. Table 5 presents the frequency by route.

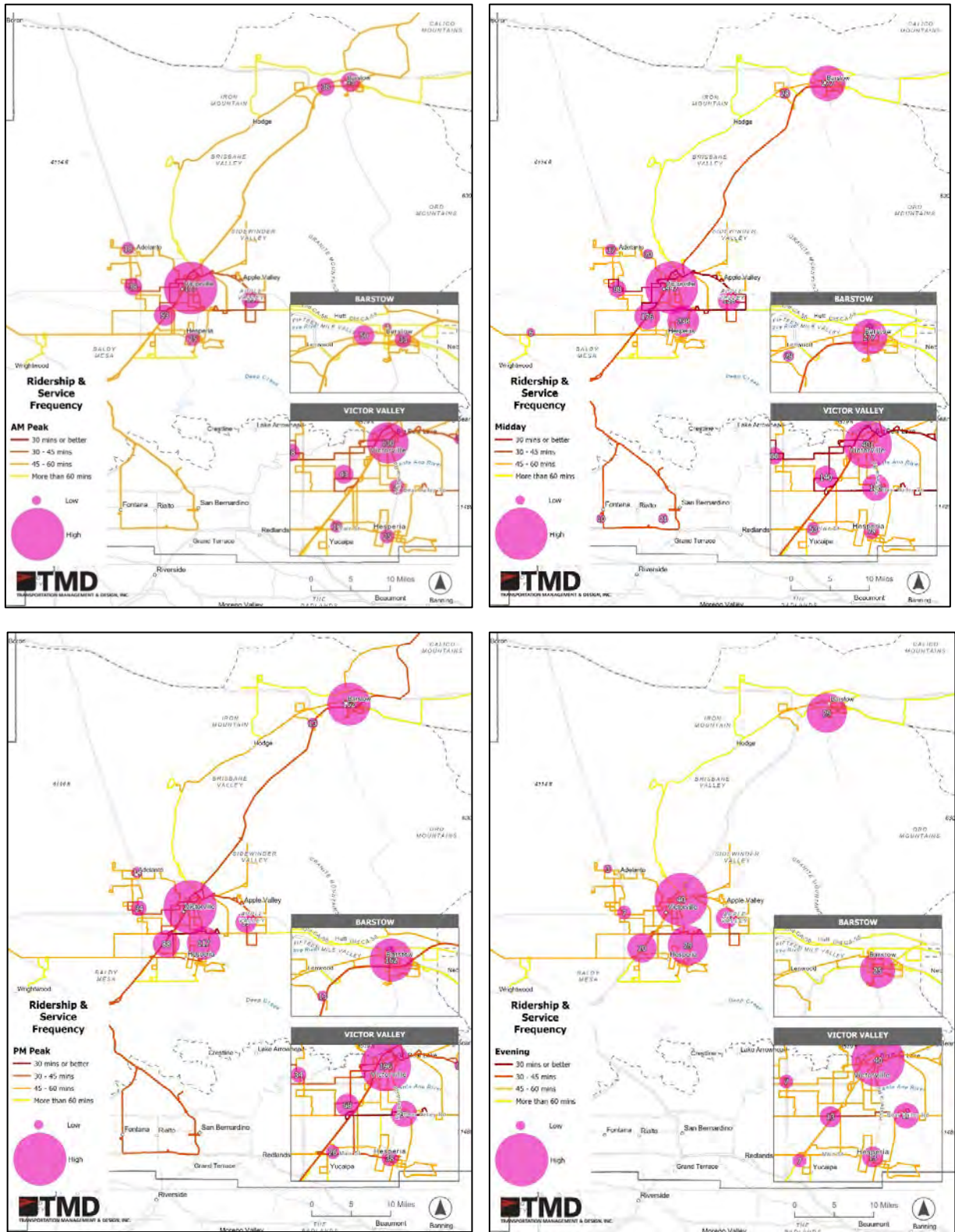
Table 5 - Frequency by Time Period and Day Type

Route	Weekday				Saturday				Sunday		
	AM*	Mid*	PM*	Eve*	AM*	Mid*	PM*	Eve*	AM*	Mid*	PM*
1	60	60	60	60	60	60	60		60	60	60
2	60	60	60	60	60	60	60		60	60	60
3	60	60	60	60	60	60	60		60	60	60
6	60	60	60	60	60	60	60		60	60	60
15	60	40	40		30	60	60		60	60	60
21P	60	60	60	60	60	60	60			60	60
21W	120	120	120	120	120	120	120		120	120	120
22	120	120	120	120	120	120	120	120	120	120	120
23	120	120	120	120	120	120	120	120		120	120
25	120	120	120	120	120	120	120		120	120	120
28	180	180	180	180	180	180	180		180	180	180
29	180	180	180	180	180	180	180		180	180	180
31	35	30	40	60	60	60	60	60	60	60	60
32	60	60	60	60	40	50	50	60	60	50	45
33	60	60	60	60	60	60	60	60	60	60	60
40	60	60	60	60	40	50	50	60	60	60	60
41	36	30	40	60	60	60	60	60	60	60	60
42	60	60	60	60	60	50	50	60	60	50	60
43	45	30	60	60	60	60	60	60	60	60	60
47	35	40	40	40	40	45	50	30	60	60	60
50	60	60	60	60	60	60	60	60	60	60	60
50X	60	60	60								
52	36	30	40	60	60	60	60	60	60	60	60
53	60	25	30	40	60	60	60	60	60	60	60
54	60	60	60	60	40	50	50	60	60	60	60
55	60	60	60	60	60	60	60	60	60	60	60
56	60	60	60	60	60	60	60	60	60	60	60
64	60	60	60	60	60	60	60	60	60	60	60
66	60	60	60	60	60	60	60	60	60	60	60
68	60	60	60	60	60	60	60	60	60	60	60
111	300		240								
114	60		40								
115	60		60								
118			240								

Note- Buses on Route 50x** Operate from Monday to Thursday.

Abbreviations- AM*= AM Peak, Mid*= Midday, PM*= PM Peak, Eve*= Evening

Figure 9: Ridership and Service Frequency by Time Period



2.2 Fare Policy

2.2.1 FARE MEDIA

VVTA riders have multiple choices for paying for their fares. All routes accept cash at the farebox. The **VVTA Value Card** are non-rechargeable passes that can be used as regular fares that come in \$5, \$10 or \$20 denominations. The **UMO Mobility App** is a smartphone application that allows passengers to pay for their fares and to purchase fare passes. **Single day passes** and **31-day passes** are also available for riders to purchase.

2.2.2 FARE BY ROUTE TYPE

Fares for VVTA service vary by the type of service that a passenger is using and by rider category. Each tier of route service types has different single trip, day pass and 31-day pass fares. Passengers are required to pay a premium fare on County routes when riding in the non-incorporated regions of San Bernadino County. Passengers are also required to pay a premium fare when using Flex routes when a route deviation is required.

Table 6 - Single Trip Cash Fares by Route Type and Rider Category

Route Type	Routes	Regular Fare	Student ¹	Vet/ Senior/ Disabled/ Medicare	Children
Local	1, 2, 3, 6, 31, 32, 33, 41, 42, 43, 47, 50, 52, 53, 54, 55, 56, 66, 68	\$1.50	\$1.25	\$0.75	Free
County	22, 23, 28, 29	\$2.50	\$2.25	\$1.25	Free
Flex*	22, 23, 28, 29, 40, 47, 54, 66	\$2.00	\$2.00	\$1.00	Free
NTC Commuter*	111, 114, 115, 118	\$13	N/A	N/A	Free
B-V Link	15	\$6.50	n/a	\$3.25	Free

2.2.3 RIDER CATEGORIES

Based on a passenger's ridership category, passengers pay a different fare for a single trip, day pass or 31-day pass. **Children** 5 and under typically ride free, there is a 3-child maximum per adult fare. **Senior/disabled/Medicare** all require photo ID, people 60 and over are considered seniors. **Veteran** fares require a military veteran photo ID. **Students** can pay reduced fares when they show a valid student photo ID, students between the ages of 6 and 13 do not require an ID. Students at Excelsior Charter School, Options for Youth Charter School, Victor Valley College and Cal State University San Bernadino students can ride VVTA service without paying a fare when showing a valid student ID card.

¹ Currently SBCTA is providing STA funding for a K-12 fare-free trial. Fares presented on this table are the fare policy when this trial is not occurring

2.3 Bus Service Quality

The quality of service once passengers are travelling is critical in retaining passengers and attracting new passengers. Key factors that shape bus service quality are bus speeds, on time performances, and the directness of routes.

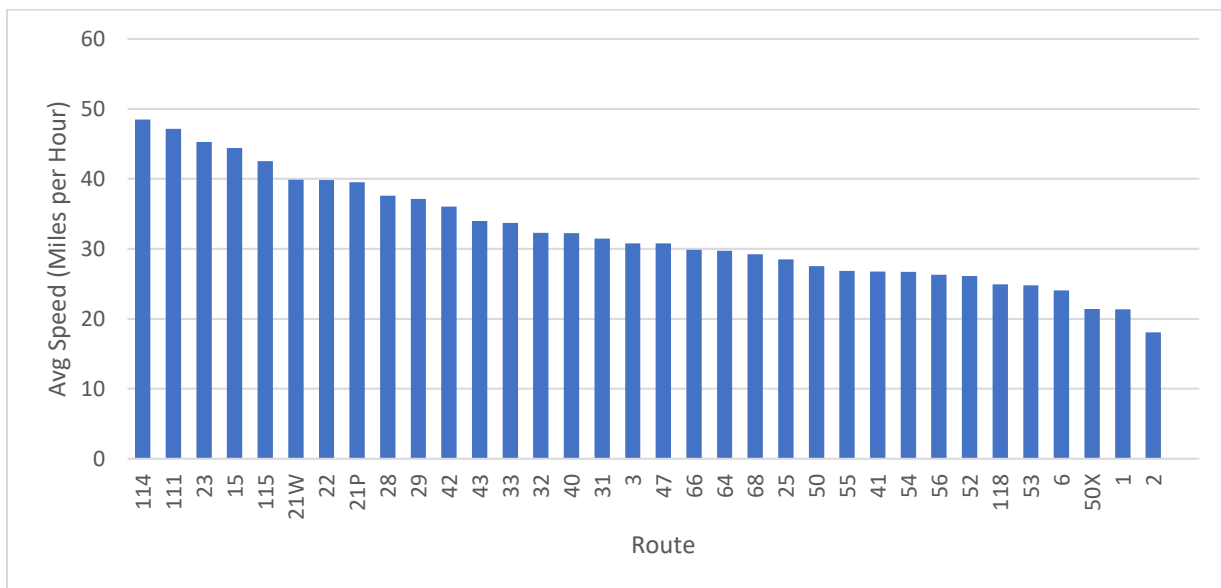
2.3.1 BUS SPEEDS

Bus speeds are a major component of bus service quality. Not only do bus speeds affect travel times, but they also directly impact how much transit service can be provided given limited resources.

The routes with the highest average travel speeds are primarily those that operate on highways and freeways, these include the routes that serve Fort Irwin (Routes 114, 111), and routes that operate with long distances between stops (Routes 23 and 15).

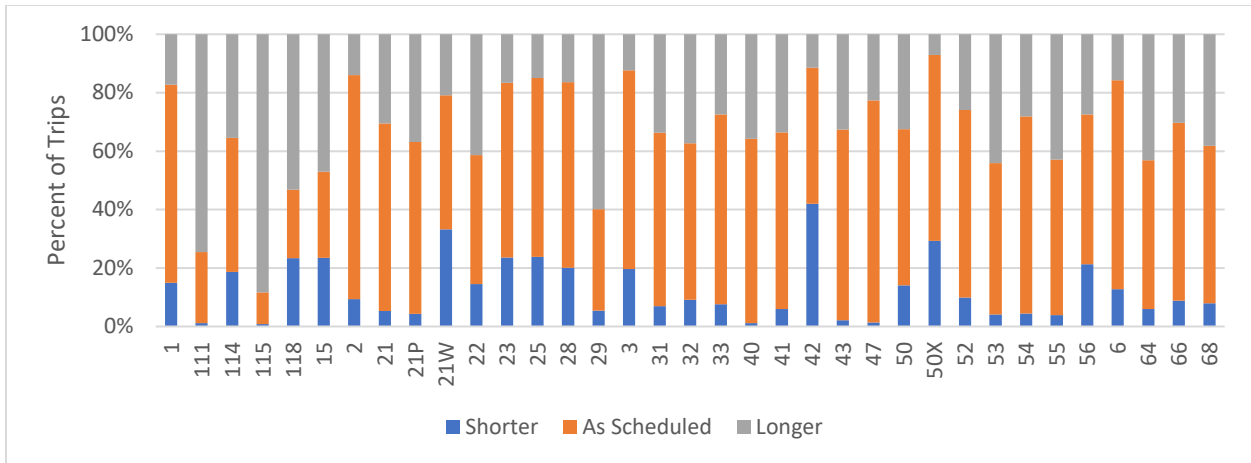
The average operating speed for VVTA routes on weekdays was 32.2 miles per hour. The routes with the slowest operating speeds primarily operated within the cities of Barstow (Routes 1 and 2) and Victor Valley (Route 50X). Routes that operate on local streets operate at slower speeds since they stop more often and are subject to the trip variability that traffic signals introduce.

Figure 10: Average Operating Speed by Route, Weekdays



Scheduling accurate running times for service is also important for both the efficient use of resources and for trip reliability for passengers. On weekdays, 60 percent of bus trips had running times that were expected given schedules, 11 percent had shorter running times and 29 percent had longer running times. Longer than expected running times were found primarily in routes serving Fort Irwin (Routes 115, 111, 118) and intercity routes serving Barstow (Routes 29, 15). Longer than expected runtimes can cause on-time performance issues as routes may arrive late to their timepoints. Runtime issues can be mitigated by modifying schedules to accurately reflect the run times that routes are experiencing or by investing in infrastructure that prioritizes public transportation vehicles such as Transit Signal Priority and bus-only lanes.

Figure 11 - Actual Travel Times vs Scheduled Travel Times on VVTA Routes

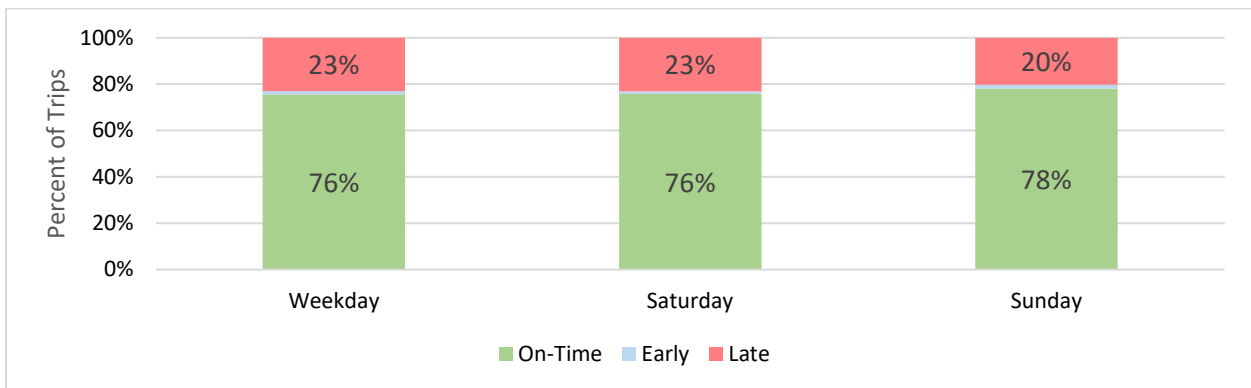


2.3.2 ON-TIME PERFORMANCE

The on-time performance analysis yields insightful results to identify opportunities for service improvements in terms of reliability and efficiency. The propensity to use transit services is higher amongst passengers who are confident that the services will be on time. This analysis will help understand the gaps that may have been affecting the VVTA’s service performance goals. Data has been considered for the analysis between July 1, 2022, and June 30, 2023. VVTA defines on-time service as zero minutes early to five minutes late.

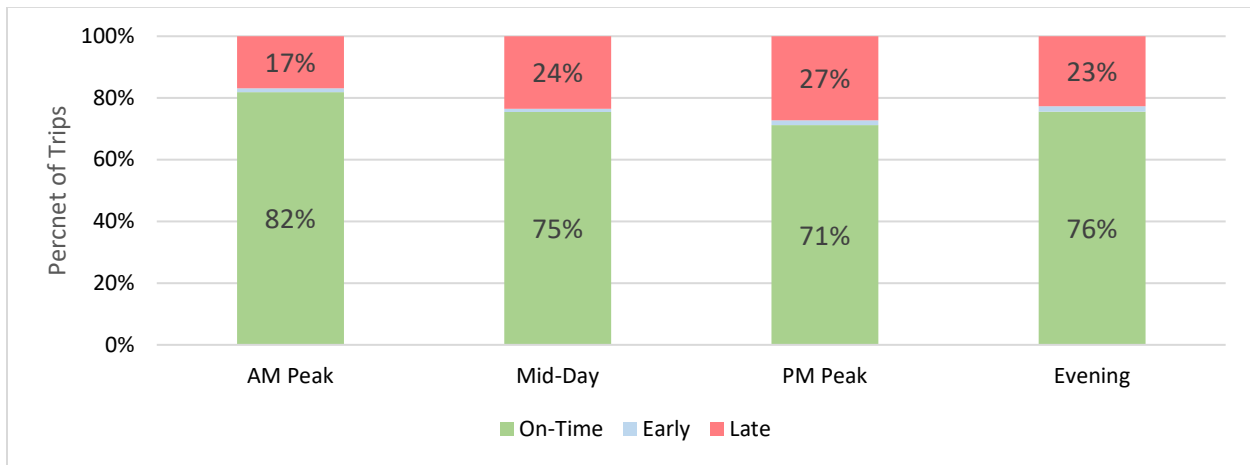
The system level on-time performance by day type analysis shows that, on average, 23 percent of the trips are late on weekdays and Saturdays. On Sundays, there is an improvement of 3 percent with 20 percent of trips arriving late. Regarding trips arriving early, the numbers are considerably less, i.e., less than two percent of trips arrive early in each day type. Figure 12 reflects the on-time performance by Day Type at the system level.

Figure 12 -System Level On-Time Performance by Day type



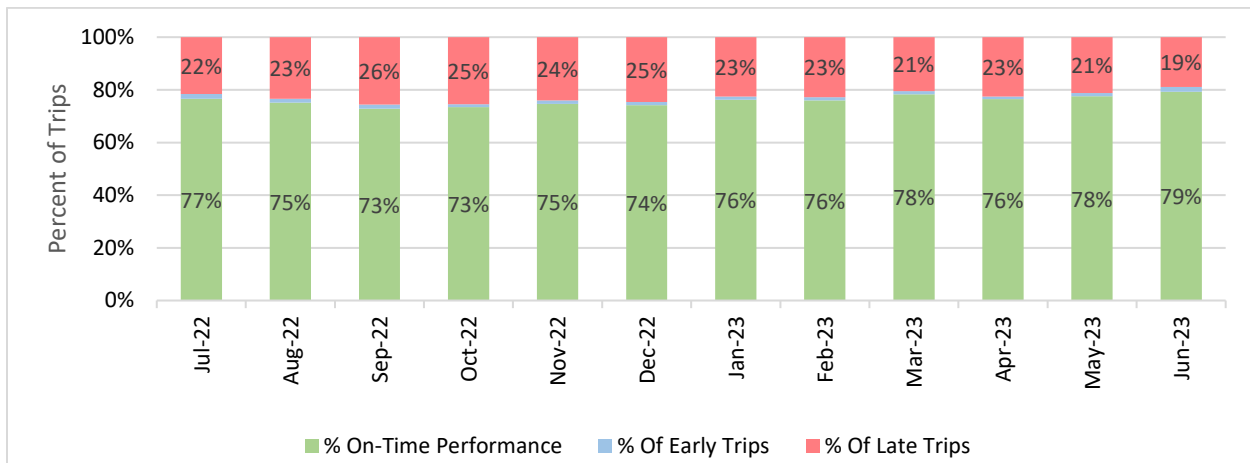
The analysis by time period at the system level shows that the highest number of trips are late during the PM Peak time, followed by Mid-Day, Evening, and AM Peak, i.e., 27 percent, 24 percent, 23 percent, and 17 percent, respectively. For all the time periods, trips arriving early are below two percent, less than those arriving late. Figure 13 reflects the on-time performance by time period at the system level.

Figure 13 - System Level On-Time Performance by Time Period



The trend analysis of on-time performance from July 2022 to June 2023 shows variations in the pattern associated with late, early, and on-time observations. On average, in this period, 76 percent of the trips were on time, 23 percent were late, and less than 2 percent were early. The percentage of late observations in July 2022 was 22 percent and increased to 25 percent in December 2022, with some fluctuations in between. However, from January 2023 onwards, there is a declining trend of late observations, with 23 percent of late observations in January and 19 percent of late observations in June 2023.

Figure 14 - System Level On-Time Performance, July 2022 – June 2023



At the route level on-time performance analysis, the routes with the highest proportion of trips observed to be late are 53, 15, 111, 55, 56, 118, 43, 23, 64, and 22. Moreover, when weighting by route-level ridership, a few more routes that are potentially impacted due to late performance are 68, 41, 54, 32, and 31.

On time performance issues may be caused by a variety of issues including operator related issues, running time variability, or running times not being calibrated correctly. When looking at the routes with the lowest on time performance, eight out of the ten worst performing routes had above average

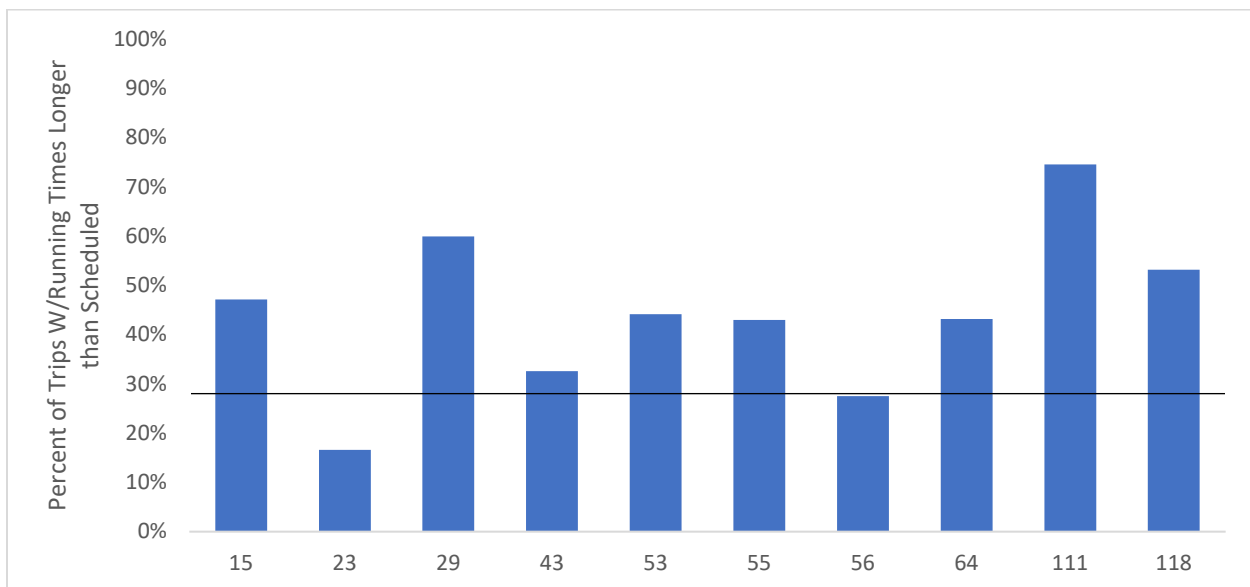
rates of running times running longer than scheduled. Calibrating schedules to accurately reflect running times may alleviate some on time performance issues seen on some routes.

Table 7 - Routes with Most Late Trips

Criteria	Route	Late trips					Weekday Ridership	Frequency	Span
		Total	AM	Mid	PM	Eve			
By the proportion of trips	*Rt 53	46%	27%	49%	51%	53%	212	30 min (9 am - 5 pm), 1 Hr.	5 am - 8 pm
	*Rt 15	43%	48%	38%	46%		173	2 Hrs. to 3 Hrs.	6 am - 6 pm
	Rt 111	40%	56%		24%		14		
	*Rt 55	39%	25%	48%	40%	47%	146	1 Hr.	6 am - 9 pm
	*Rt 56	39%	21%	36%	68%	25%	168	1 Hr.	6 am - 9 pm
	Rt 118	37%			37%		1		
	*Rt 43	32%	19%	37%	36%	28%	109	30 min (Midday), 1 Hr.	6 am - 8 pm
	Rt 23	32%	18%	33%	42%	32%	54	2 Hrs.	5 am - 7 pm
	*Rt 64	29%	14%	31%	40%	30%	94	1 Hr.	6 am - 8 pm
	Rt 22	28%	31%	30%	24%	24%	48	2 hrs.	6 am - 7 pm
Weighted by Ridership	Rt 68	27%	16%	31%	33%	22%	155	1 Hr.	6 am - 8 pm
	Rt 32	22%	11%	22%	31%	27%	177	1 Hr.	6 am - 8 pm
	Rt 41	21%	20%	18%	20%	47%	203	30 min (7 am - 4 pm), 1 Hr.	5 am - 8 pm
	Rt 54	21%	17%	24%	23%	16%	88	1 Hr.	6 am - 8 pm
	Rt 31	17%	13%	15%	23%	15%	210	30 min (7 am - 4 pm), 1 Hr.	5 am - 7 pm

Note- *Rt are the routes with both a high number of late trips and impacted riders.

Figure 15 - Percent of Trips With Running Time Longer Than Scheduled, Routes with Most Late Trips



2.3.3 ROUTE DIRECTNESS

Travel time is also affected by the directness of a route, and deviations from a route’s primary alignment play a significant role in increasing overall travel time. Route deviations are usually in place to provide “front door” service to neighborhoods, shopping plazas, medical facilities, or employers that are located off of the main corridor. Rather than requiring riders to walk from the main corridor, the bus deviates from its main alignment to serve the destination, increasing travel times for riders. Industry best practice says that there should be no more than five passenger-minutes of delay per boarding gained at along the deviation.

Deviations are a common feature of VVTA routes, 18 out of VVTA’s 34 routes have deviations in their alignments. Common reasons for deviations among VVTA routes were to primarily serve schools, shopping centers, and to provide coverage to underserved residential areas. The Super Target is a specific destination where several route alignments are significantly deviated to serve.

An example of a significant deviation is Route 68’s deviation north to the Victor Valley Mall, any potential passenger that wants to travel to and from Main Street would have to travel more than six additional miles, making this route unsuited for those trips.

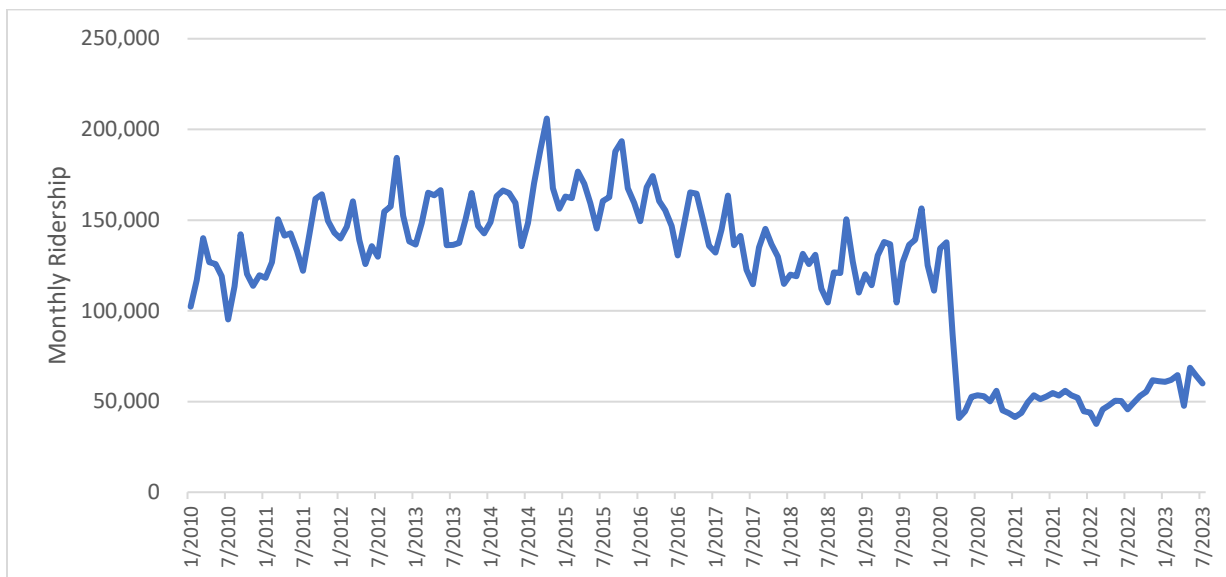
Situations like these are challenging to address as deviations in the VVTA network are made to important destinations, which is especially important in areas where walking is difficult, but the deviations provide a hindrance to passengers that are travelling longer lengths of the route.

2.4 How Riders Use the Network

2.4.1 RIDERSHIP TRENDS

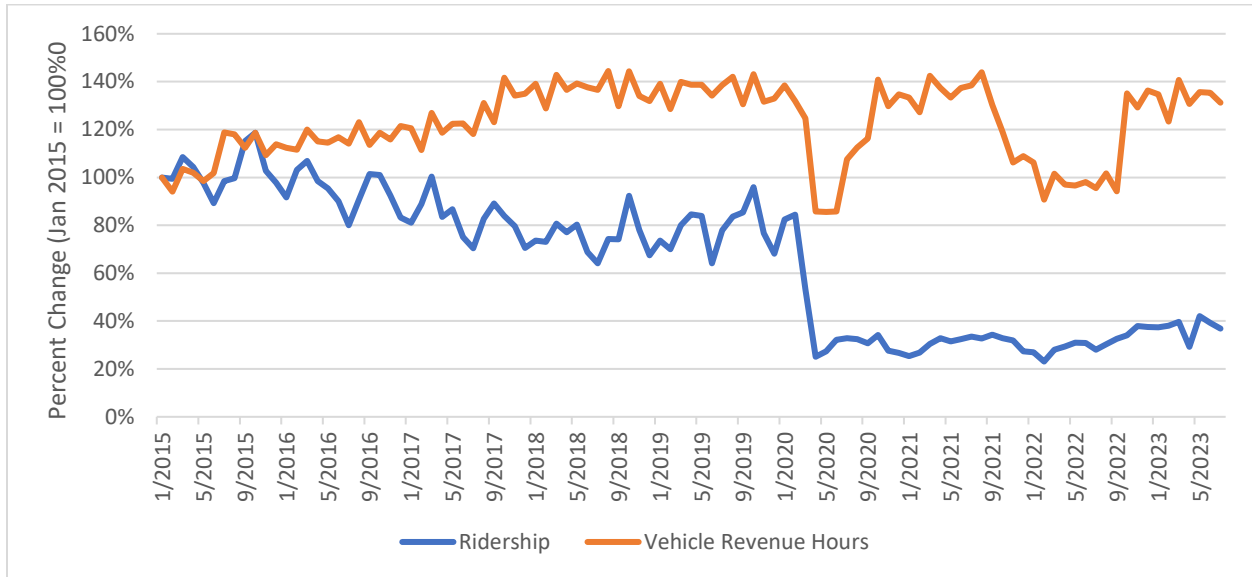
Like other transit agencies throughout the country, the COVID-19 pandemic had a significant impact on VVTA’s ridership; between 2019 and 2022 ridership declined 61 percent from 1,539,000 riders in 2019 to 603,000 riders in 2022. Ridership has started to recover in early 2023, with ridership up 39 percent in the first six months of 2023 compared to the same period in 2022.

Figure 16 - VVTA Fixed Route Monthly Ridership, 2015 - 2023



The amount of service that VVTA is providing has returned to pre-COVID levels as seen in Figure 17. In the first six months of 2023 VVTA has operated 97,300 vehicle revenue hours while they operated 99,600 vehicle revenue hours during the same period in 2019. The mismatch between the level of service provided in the VVTA system and ridership demand has resulted in low productivity and greater inefficiencies in service, which are to be explored further in this chapter.

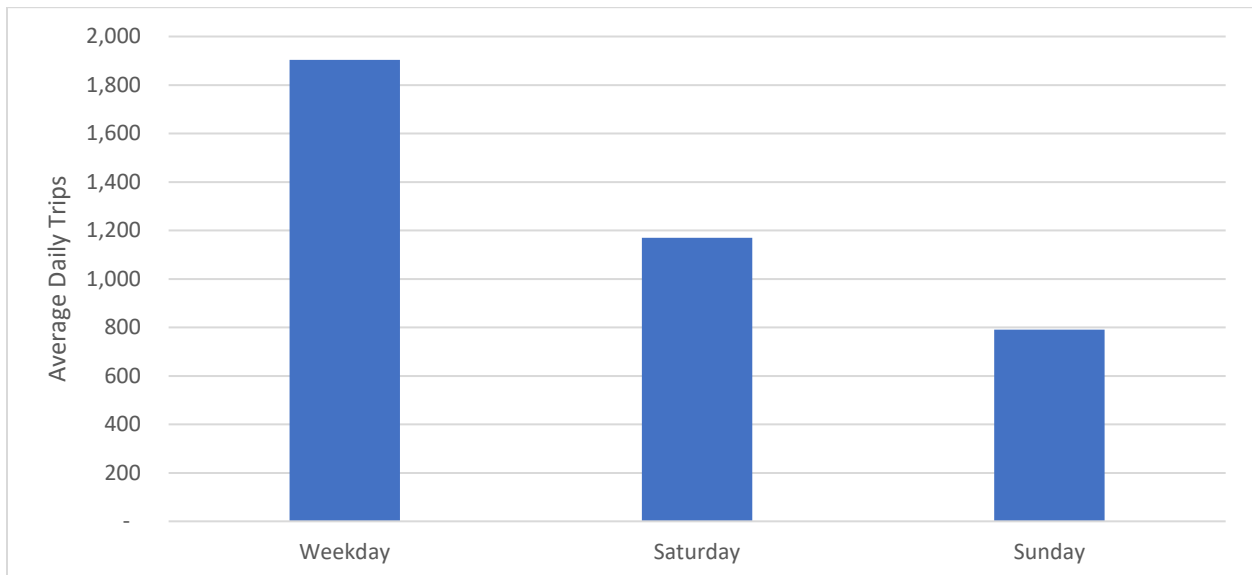
Figure 17 - Percent Change in Ridership and Vehicle Revenue Hours, 2015-2023



2.4.2 RIDERSHIP BY DAY OF WEEK

Weekdays have the highest daily ridership on the VVTA system with 1,900 average daily trips. This is both a factor of the higher level of service offered on the weekdays and general travel behavior. Ridership declines on the weekend, with Saturdays having 1,170 average daily rides and ridership declining further on Sundays with 790 average daily trips.

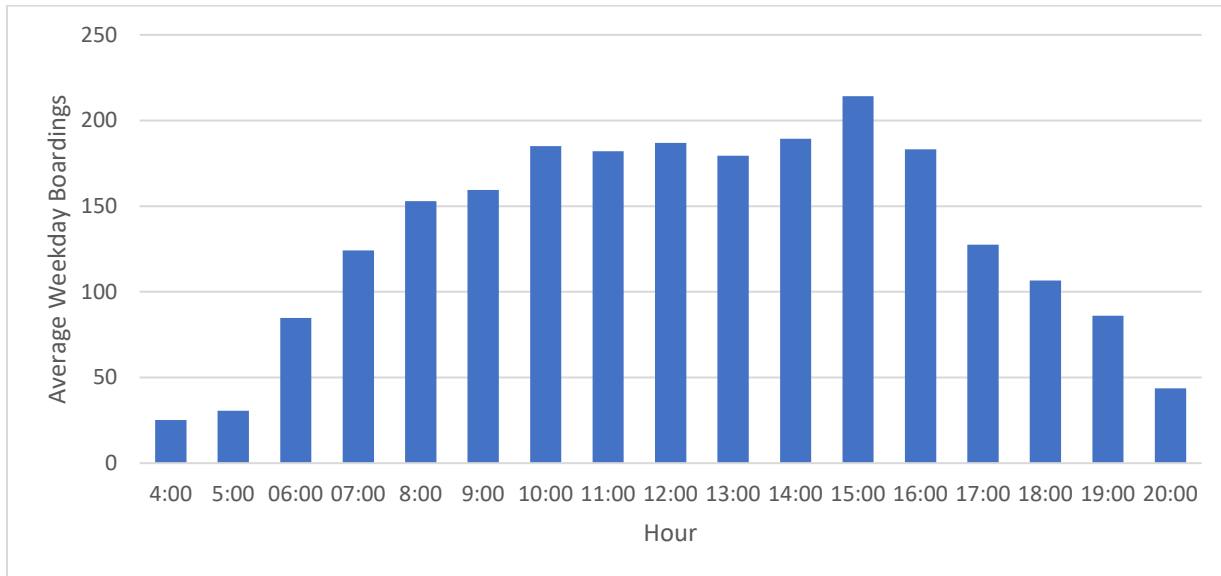
Figure 18 - Average Daily Boardings by Day of Week, All Routes, FY 2023



2.4.3 RIDERSHIP BY TIME OF DAY

Approximately half of all trips occur during the midday period. As seen in transit systems throughout the country, the COVID-19 pandemic has had an impact on travel behavior with AM and PM peaks becoming less prominent. More trips also occur in the PM peak (28 percent of daily weekday trips) than they do during the AM peaks (18 percent of daily weekday trips).

Figure 19 - Average Daily Boardings by Hour, Weekdays, FY 2023



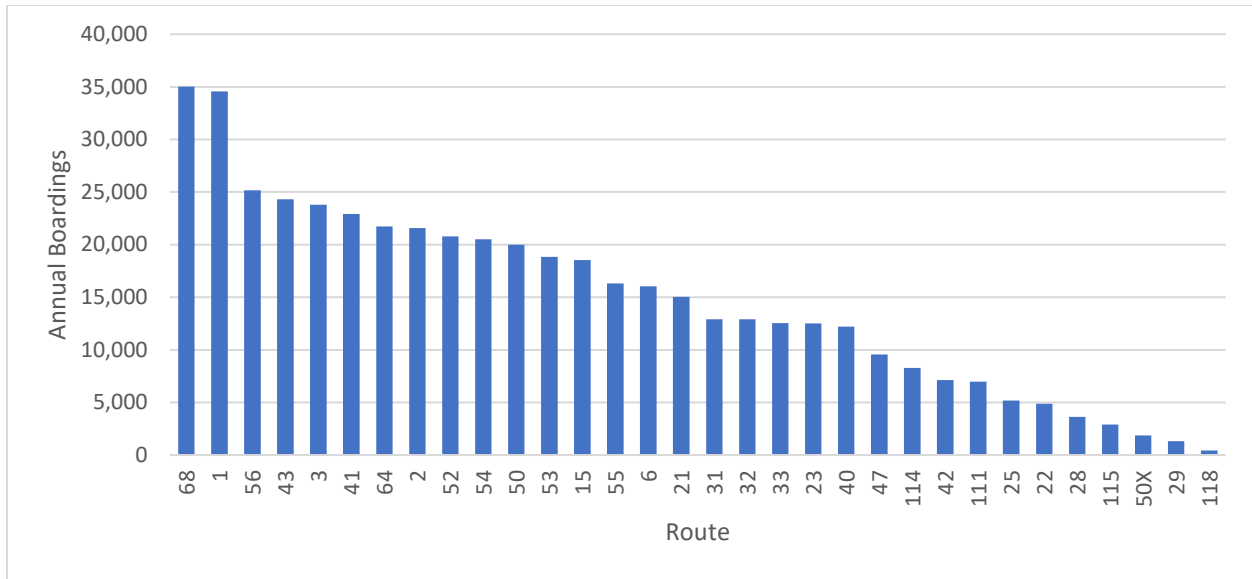
2.4.4 RIDERSHIP BY ROUTE

VVTA services carried 564,400 passengers in FY 2023. The two routes with the highest ridership, routes 68 and 1, each carried approximately 8 percent of VVTA's total ridership. Besides the two highest performing routes, ridership is fairly evenly distributed, 14 out of 32 routes carried between 3 and 6 percent of system of ridership.

The highest ridership routes were primarily routes that offered service within cities and served each city's downtown region such as Route 68 serving downtown Hesperia, Route 1 serving downtown Barstow, and Route 56 serving downtown Victorville. Other destinations that the highest ridership routes served were retail destinations including Super Target in Hesperia and Wal-Mart in Barstow. These destinations generate demand throughout the day allowing routes to serve these locations with all-day service. Each of the top 5 highest ridership routes also served schools. The top five routes also had the highest frequency service in the VVTA system, with trips being provided throughout the day every hour.

The lowest ridership routes were primarily routes that travelled between cities as opposed to higher ridership routes that traveled within cities. The lowest ridership route served Barstow, Hesperia, and Fort Irwin. These longer travel time routes are more susceptible to being replaced by more convenient automobile trips if passengers have the option. Not surprisingly, the lowest ridership routes also have limited service, Routes 118 and 115 each only have two trips per day.

Figure 20 - Annual Ridership by Route, FY 2023



2.4.5 BUS RIDERSHIP BY STOP

The stops with the highest average daily ridership are the Apple Valley Post Office which serves as a transit hub for some of the highest ridership routes in the VVTA system and the Victor Valley Mall, a major commercial destination, and a transit hub. These two stops have almost two times the ridership of the next highest ridership routes. Other high ridership stops were primarily in commercial centers which was the case for four of the highest ridership stops. Other destinations served by high ridership stops was the Hesperia Senior Living facility, downtown Barstow, Barstow Community College, and the San Bernadino Transit Center.

Table 8 - Top Ten Stops by Average Weekday Boardings, FY 2023

Rank	Stop	Routes Served	Average Weekday Boardings
1st	20000 Apple Valley Post Office	23 , 40 , 41 , 43 , 47	148.7
2nd	50016 Victor Valley Mall	21P , 21W , 52 , 53 , 54	143.2
3rd	50012-15 Victor Valley College	42, 50X, 55, 53, 43, 50	89.13
4th	10000 Hwy 395 SB & Palmdale Rd	31 , 33 , 54	84.3
5th	40178 Main St EB & Cataba Rd	21P , 21W , 25 , 64 , 68	75.6
6th	40202 Olive St EB & G Ave	50 , 64 , 66	61.2
7th	30223 Montara Rd NB & Armory Rd	1 , 111 , 115 , 118	59.7
8th	40001 G Ave NB & Olive St	25 , 50 , 66 , 68	42.4
9th	1111 E Mountain View St WB & 2nd Ave	1 , 2 , 3 , 6 , 15 , 28 , 29	42.0
10th	30077 Barstow College	2 , 6	39.6

Figure 21: Ridership by Stop, Victorville, Weekday

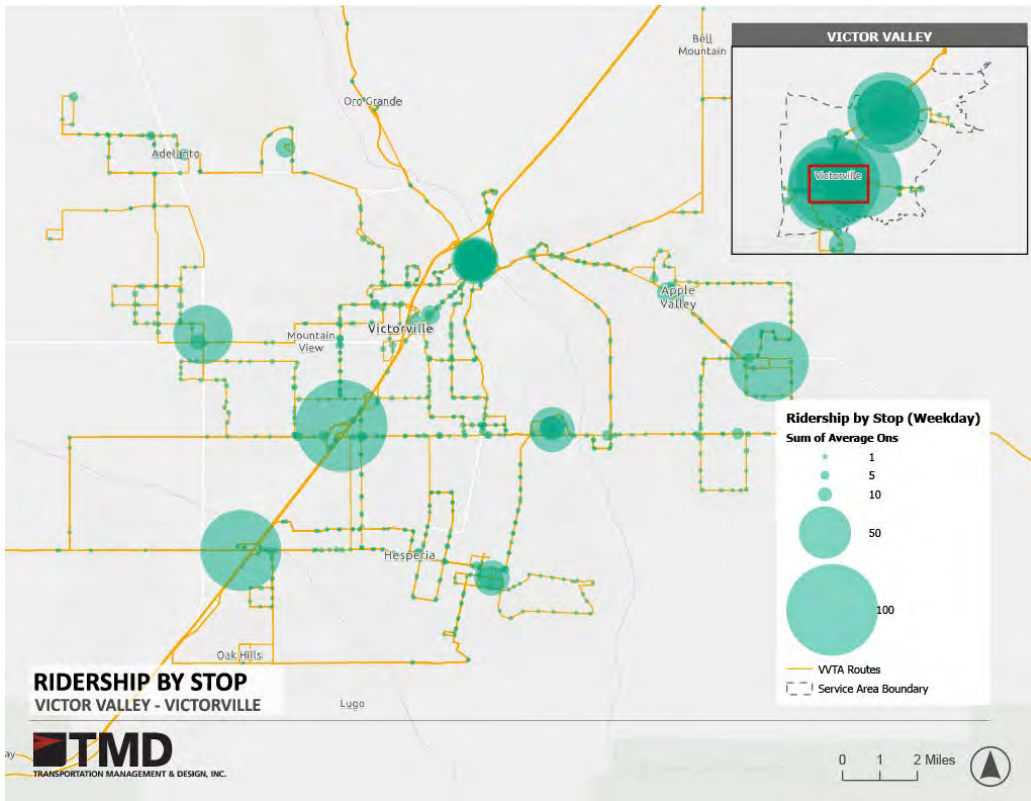
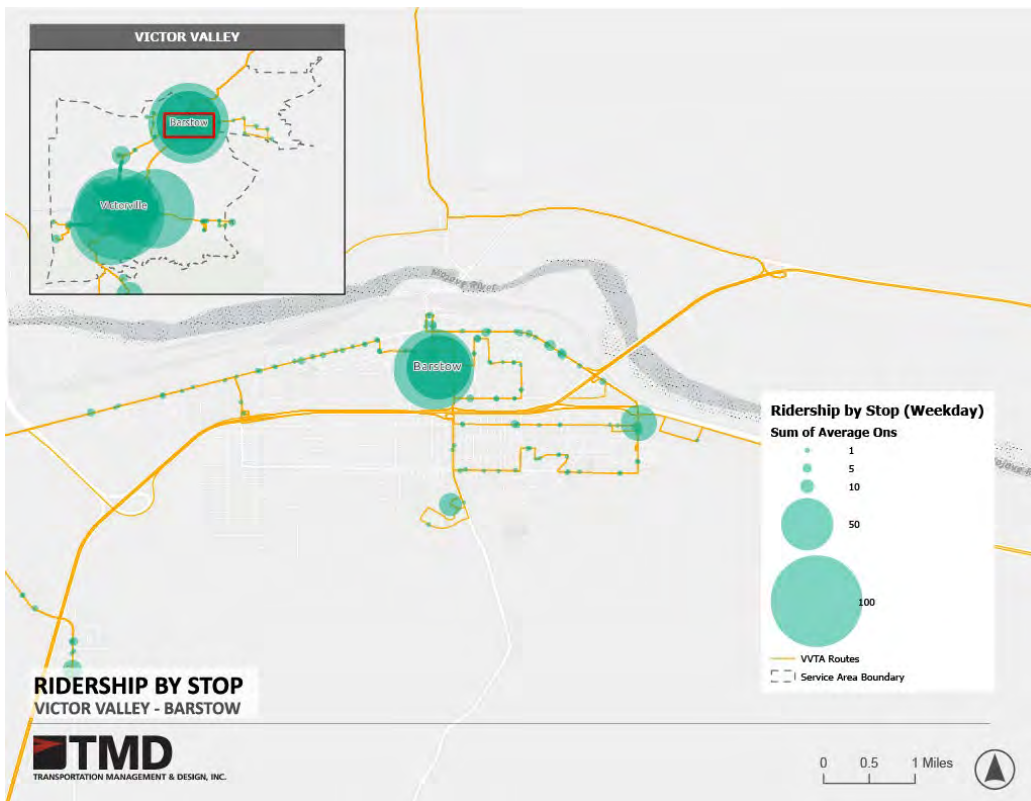


Figure 22: Ridership by Stop, Barstow, Weekday



2.5 Service Performance

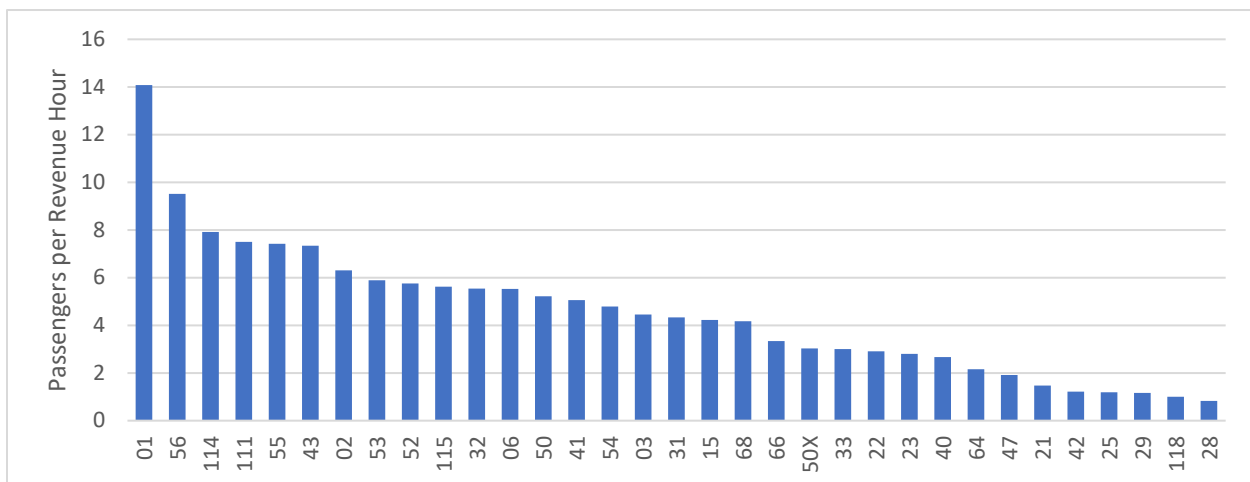
2.5.1 PRODUCTIVITY

One of the most common metrics for measuring performance is productivity, which measures the number of passengers carried per hour of service. On weekdays, VVTA services carry an average of 4.5 passengers per revenue hour. The most productive route was Route 1, which is also one of the highest ridership routes in the system, carrying 14 passengers per revenue hour. Route 1's higher productivity is a function of the high demand destinations it serves and its efficient routing which is anchored by two major destinations in Barstow.

High ridership in the VVTA system is not necessarily correlated with high productivity. There are some routes with higher ridership with low productivity since they are inefficiently routed or require extensive resources to serve trip patterns in the region. Route 68, which along with route 1 is one of the highest ridership routes in the VVTA system, has below average productivity, carrying an average of 4.2 passengers per revenue hour of service. Although it has high ridership, its inefficient routing which deviates almost 4 miles to the Victor Valley Mall before returning to Main Street requires extensive resources to serve passengers.

13 routes carried 3 passengers or less per revenue hour. Some of the least productive routes in the VVTA system are routes that require extensive resources due to their length and alignment that is not proportional to the level of demand there is for the service. This is the case for routes 29, 28, and 25. These routes receive infrequent service, every 2 to 3 hours, to make them efficient but they still carry between 0.8 and 1.2 passengers per hour. Route 42 is not productive due to the level of service provided on the route being out of line with the demand for the service; service is provided every hour between 6:30 am and 8:30 pm, which is one of the longest spans of any VVTA route, but ridership is still low compared to the number of resources required to provide the service.

Figure 23 - Productivity by Route, Weekday, FY 2023



Productivity on VVTA services declines on weekends, with the carrying 3.0 passengers per revenue hour on Saturdays and carrying 2.6 passengers per revenue hour on Sundays. As on weekdays, Route 1 is the most productive route on weekends, followed by routes 56 and 52.

Figure 24 - Productivity by Route, Saturday, FY 2023

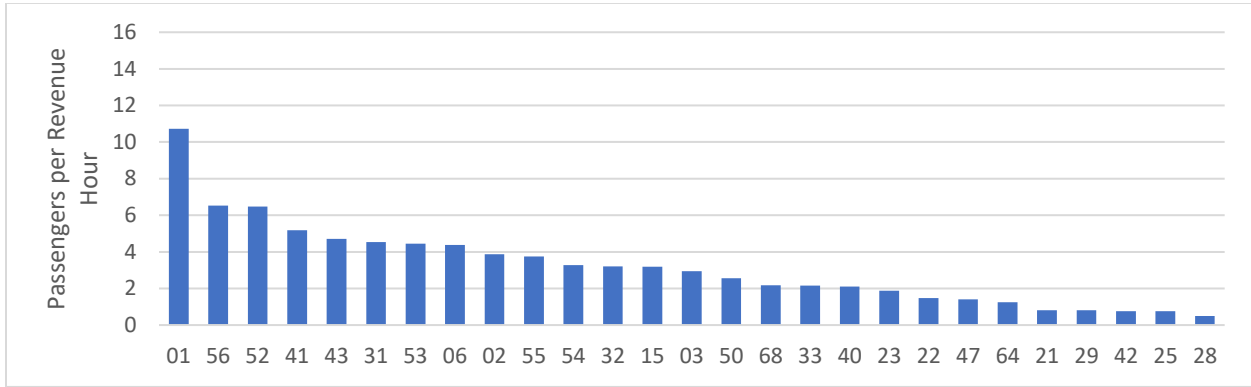
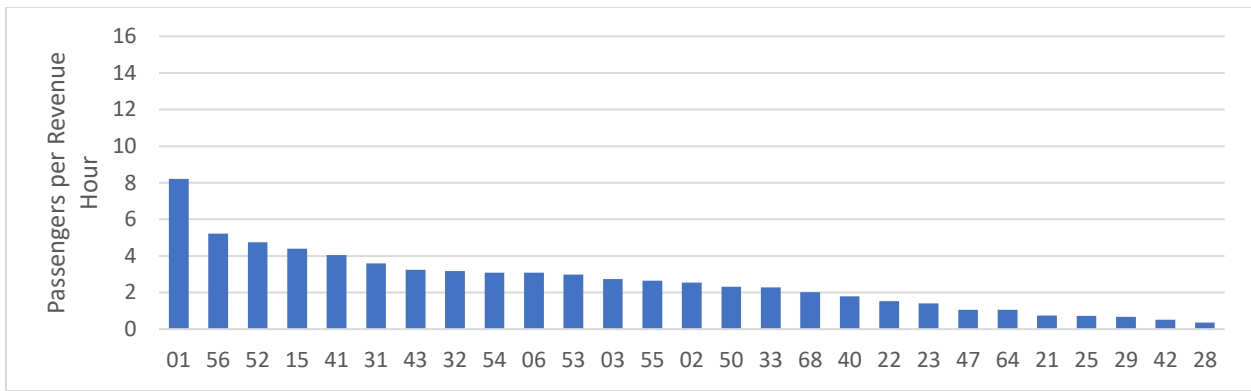


Figure 25 - Productivity by Route, Sunday, FY 2023

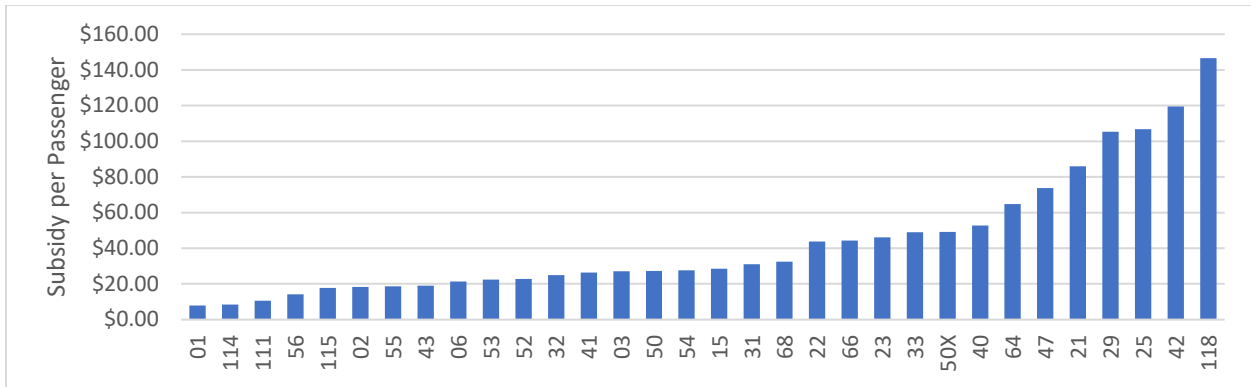


2.5.2 FINANCIAL PERFORMANCE

A route’s subsidy per passenger and farebox recovery ratio are key indicators of financial performance. These indicators show how sustainable a route and how efficiently a service is operating.

The average subsidy required per passenger on weekdays in FY 2023 was \$28.69. The routes with the lowest subsidies per passenger were primarily the most productive routes (Route 1) or routes that served Fort Irwin, since their higher fares minimize the subsidies needed to provide those services. Five routes had subsidies greater than \$100 per passenger. These routes tended to be the least productive routes which require a greater number of resources to operate despite low ridership demand. Route 118 stands out as having a high subsidy, even though it serves Fort Irwin; Route 118 has lower ridership than other Fort Irwin routes, this lengthy trip requires a higher ridership demand to make the service more efficient.

Figure 26 - Subsidy per Passenger, Weekdays, FY 2023



Greater subsidies per passenger are required on weekends, the system-level subsidy per passenger is \$45.92 on Saturdays and \$53.80 on Sundays. Subsidies per passenger range from a low of \$10.36 on Route 1 on Saturdays to a high of \$352.90 per trip on Route 28 on Sundays. The “County Routes” require the highest subsidies on weekends due to low demand for service; ideally these routes would offset the large number of resources required to travel long distances by charging higher fares, but low ridership is not able to mitigate their high cost of provisioning the service.

Figure 27 - Subsidy per Passenger, Saturdays, FY 2023

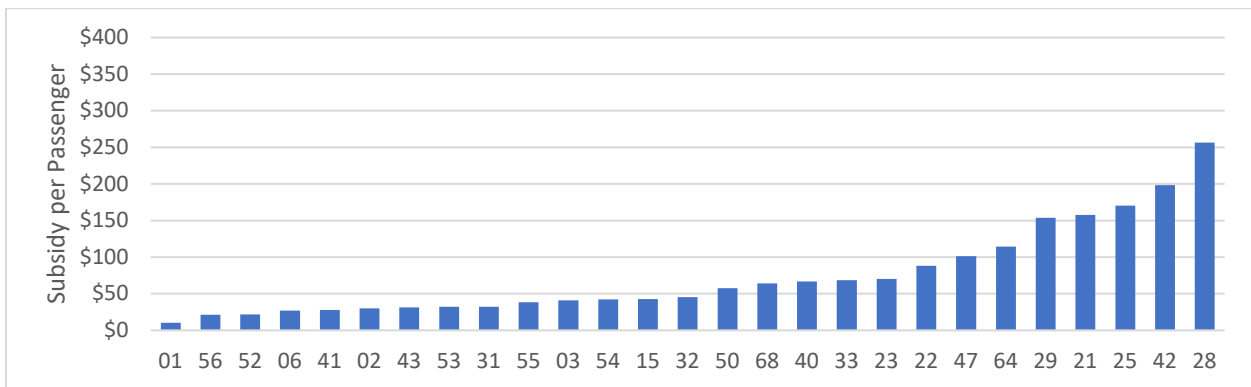
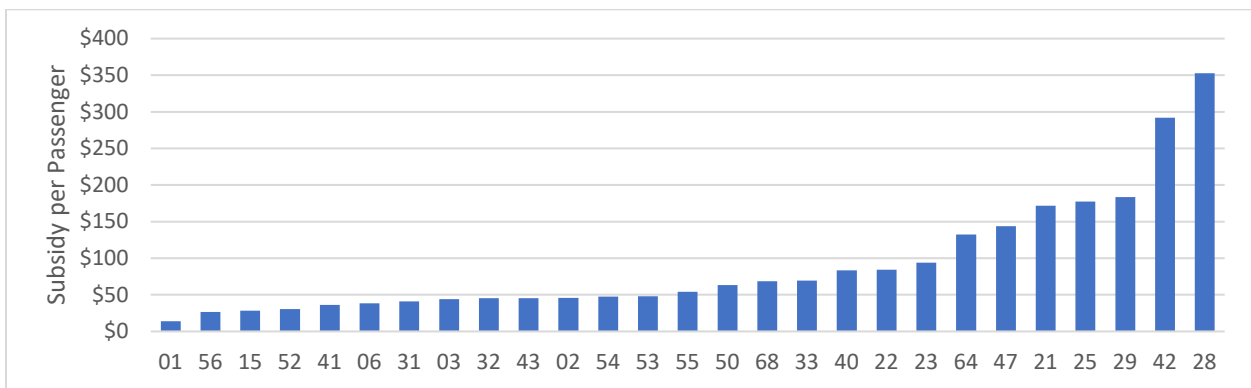


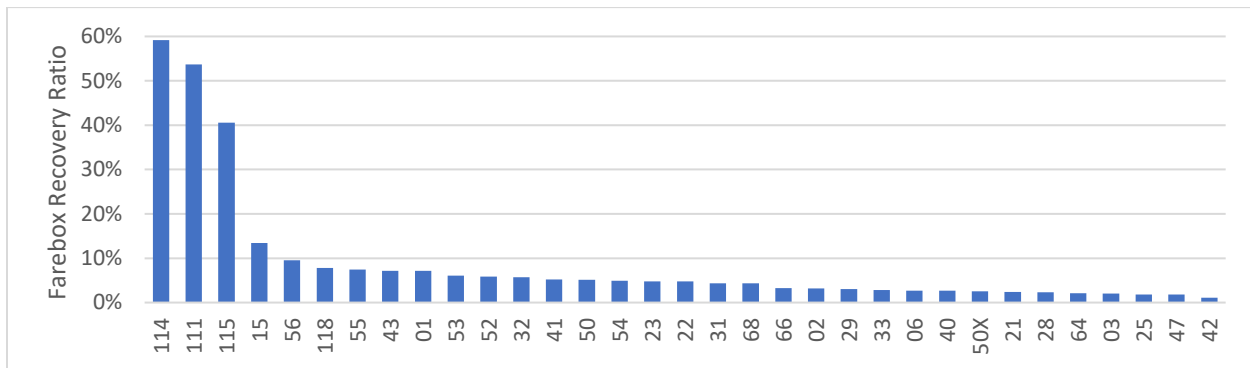
Figure 28 - Subsidy per Passengers, Sunday



The average farebox recovery ratio for weekday service in FY 2023 was 6.9 percent. The routes with the highest farebox recovery ratios were the routes serving Fort Irwin (Route 114 - 59 percent, Route

111 - 54 percent, Route 115 - 41 percent); since these routes were able to charge higher fares, they were able to recovery a greater proportion of their operating costs through their fare revenue. Most routes covered less than 10 percent of their operating costs through passenger fares. Only two routes that did not serve Fort Irwin recovered more than 10 percent of their operating costs through passenger fares, routes 15 and 56; Route 15 also charges a premium fare to provide service to San Bernadino, while Route 56 is able to efficiently serve a large number of passengers.

Figure 29 - Farebox Recovery Ratios of VVTA Routes, Weekdays, FY 2023



Farebox recovery declines on weekends, on Saturdays VVTA routes cover 3.1 percent of operating costs through farebox revenue while on Sundays, they cover 2.8 percent of operating costs. Routes with above average farebox recovery ratios include routes 56, 52, 1 and 15. Route 15 has a higher farebox recovery ratio since it can charge passengers higher fares to offset costs.

Figure 30 - Farebox Recovery Ratios of VVTA Routes, Saturdays, FY 2023

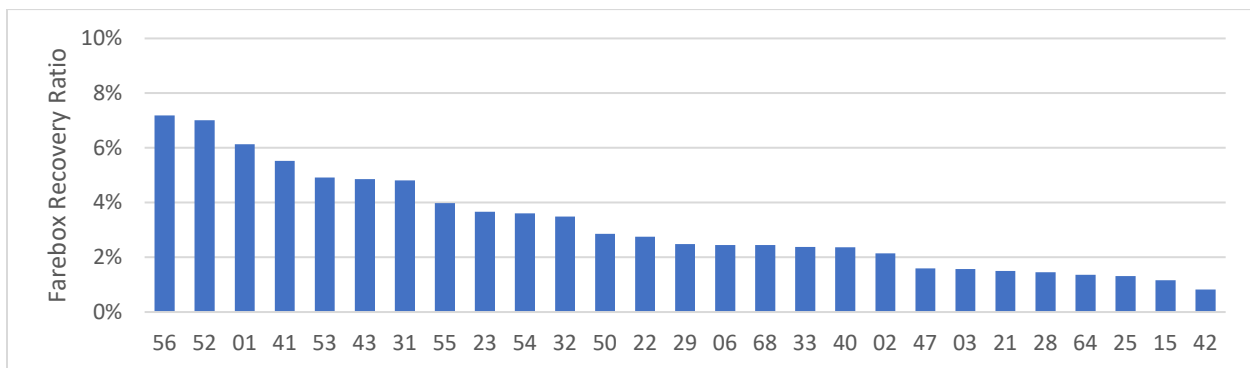
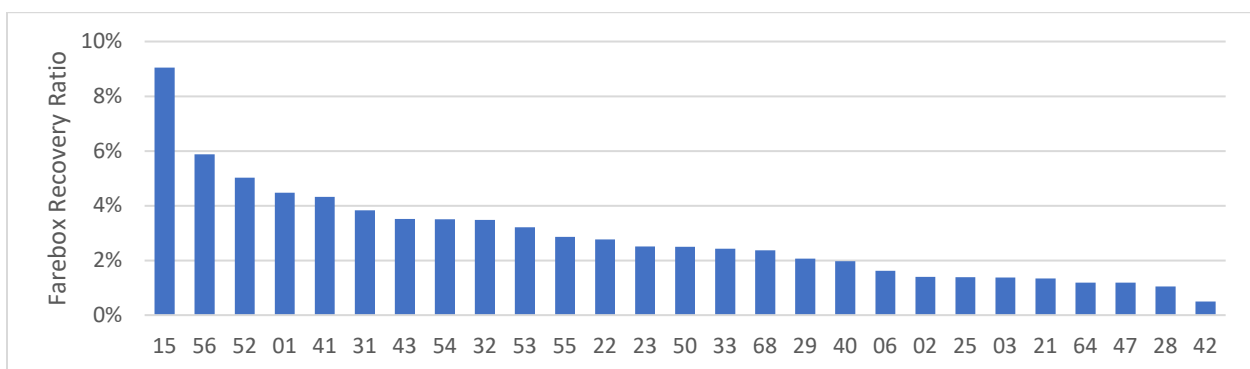


Figure 31 - Farebox Recovery Ratios of VVTA Routes, Sundays, FY 2023



2.5.3 PASSENGER LOADS

Passenger loads are a key determinant of passenger comfort and serve as another way to analyze service efficiency; overcrowded buses negatively impact the travel experience for passengers while underutilized vehicles may show that service is not performing efficiently. Overcrowding was not an issue on VVTA service, almost all routes operated with passenger loads below maximum seating capacity throughout the day. Only one route exhibited passenger loads over maximum seating capacity, Route 114 which provides service between Hesperia and Fort Irwin. Further analysis should be conducted to determine if additional trips are required to alleviate crowding this route.

Table 9 - Median Passenger Load Factors Weekdays

Route	Median Load			
	AM Peak	Midday	PM Peak	Evening
1	0.10	0.14	0.15	0.09
111	0.21		0.17	
114	1.66		0.31	
115	0.23		0.06	
15	0.13	0.16	0.21	
2	0.07	0.11	0.11	0.09
21	0.04	0.08	0.07	0.09
22	0.07	0.07	0.06	0.08
23	0.06	0.07	0.07	0.18
25	0.04	0.05	0.05	0.03
28	0.03	0.05	0.09	0.10
29	0.04	0.07	0.07	0.03
3	0.07	0.23	0.25	0.27
31	0.11	0.12	0.22	0.10
32	0.22	0.11	0.12	0.33
33	0.05	0.08	0.08	0.06
40	0.05	0.11	0.05	0.04
41	0.07	0.17	0.17	0.09
42	0.05	0.06	0.05	0.03
43	0.10	0.14	0.08	0.06
47	0.03	0.05	0.06	0.04
50	0.15	0.36	0.60	0.52
50X	0.26	0.25	0.17	
52	0.10	0.18	0.17	0.30
56	0.17	0.51	0.72	0.84
6	0.04	0.17	0.20	0.04
55	0.08	0.15	0.12	0.09
53	0.15	0.17	0.27	0.19
54	0.19	0.16	0.19	0.25
64	0.05	0.10	0.07	0.16
68	0.06	0.14	0.33	0.13
118			0.14	

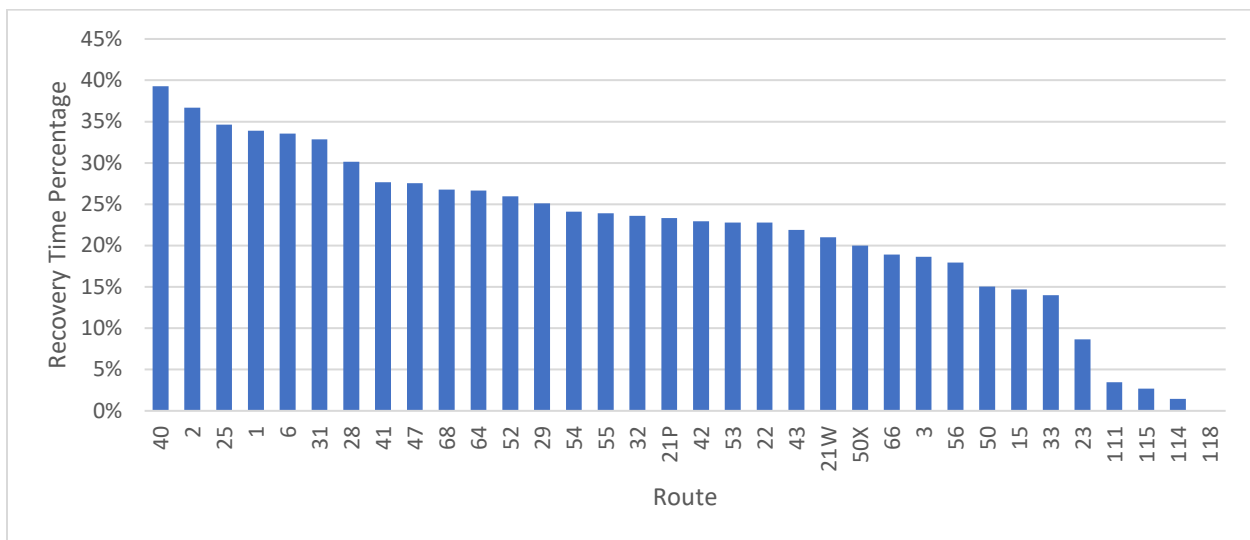
2.5.4 RECOVERY TIME

Recovery time measures the time the bus spends at the end of the line to allow for schedule recovery and driver breaks and is a primary indication of efficiency in service delivery.

The industry best practice target is for recovery time to be around 15 percent of in-service running time. A route that takes 60 minutes to drive from end to end would have 9 minutes of layover time. The average recovery time at the system level for VVTA service is 23 percent. Six VVTA routes have recovery percentages of 15 percent or less. 13 routes have recovery percentages of over 25 percent meaning that one-quarter of the time a bus is out in service, it is sitting parked at the end of the line, time it could be in service carrying passengers and generating revenue.

Recovery time is often highest on short-distance circulator routes, and in these cases, a higher percentage is warranted to allow operator enough break time between trips. For longer distance routes, recovery time should be reduced to increase the amount of time vehicles are in revenue service. Since recovery time is largely driven by running time and desired frequencies, strategies for reducing recovery time include shortening or lengthening route alignments, changing frequencies, or interlining routes.

Figure 32 - Recovery Time Percent of Total In-Service Running Time, Weekdays, 2022



2.6 Route Profiles

As part of the COA for VVTA the performance of each route was analyzed in order to inform recommendations for service changes to each route. The following page provides an in-depth look at how each route in the VVTA system is performing today. Each route profile includes information on service is structured through frequency and service spans, and how it performs through daily boardings, productivity, cost efficiency, and on time-performance. At the bottom of each route profile is also a map that shows where and how many passengers board the route on an average weekday.

Route 1

Barstow City Hall - Walmart

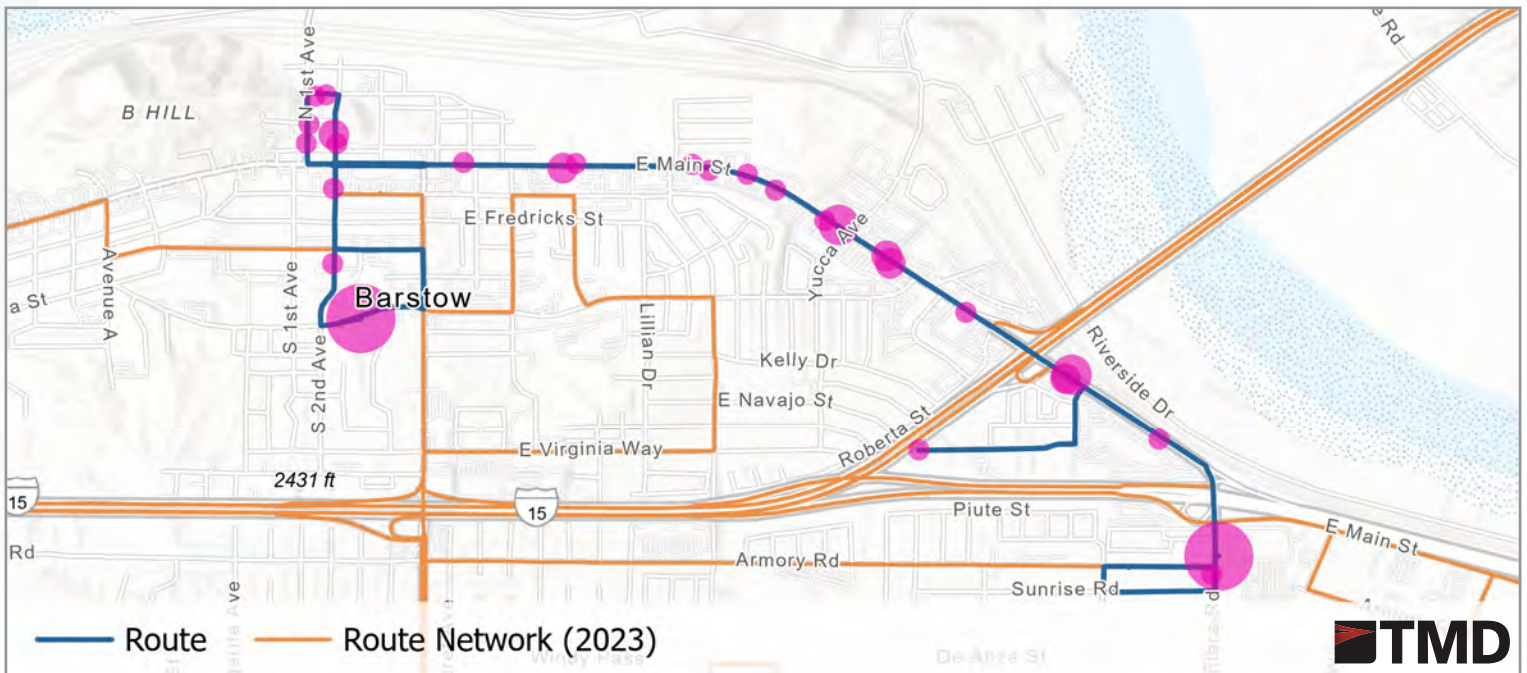
Barstow



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:35 AM to 7:47 PM	8:00 AM to 4:50 PM	8:00 AM to 4:49 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	223 1 System Rank	127 1 System Rank	99 1 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	14.1 4.55 System Average	10.7 2.98 System Average	8.2 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$8.40 \$26.43 System Average	\$11.00 \$45.28 System Average	\$14.40 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	7.10% 7.00% System Average	6.10% 3.00% System Average	4.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	93.00%	90.70%	92.50%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 2

Barstow City Hall - Barstow College

Barstow



Route Performance:

Weekday

Saturday

Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

60

60

60

Hours of Operation

The hours the bus is in service

6:00 AM to 7:50 PM

8:00 AM to 4:50 PM

8:00 AM to 4:53 PM

Daily Passenger Boardings

The average number of daily boardings

106

15 System Rank

51

16 System Rank

37

14 System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

6.3

4.55 System Average

3.9

2.98 System Average

2.6

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$18.90

\$26.43 System Average

\$30.70

\$45.28 System Average

\$46.50

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

3.20%

7.00% System Average

2.10%

3.00% System Average

1.40%

3.00% System Average

On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

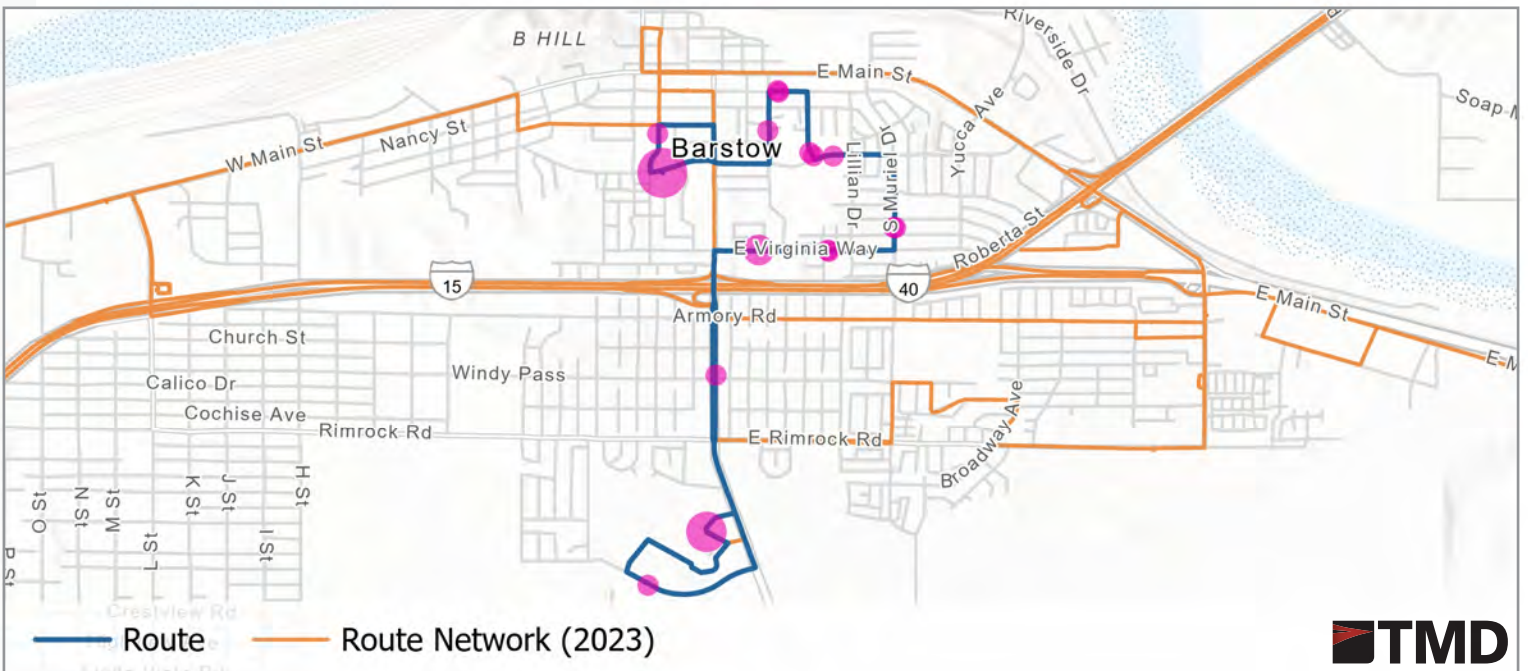
95.00%

93.80%

96.40%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 3

Barstow City Hall - Lenwood

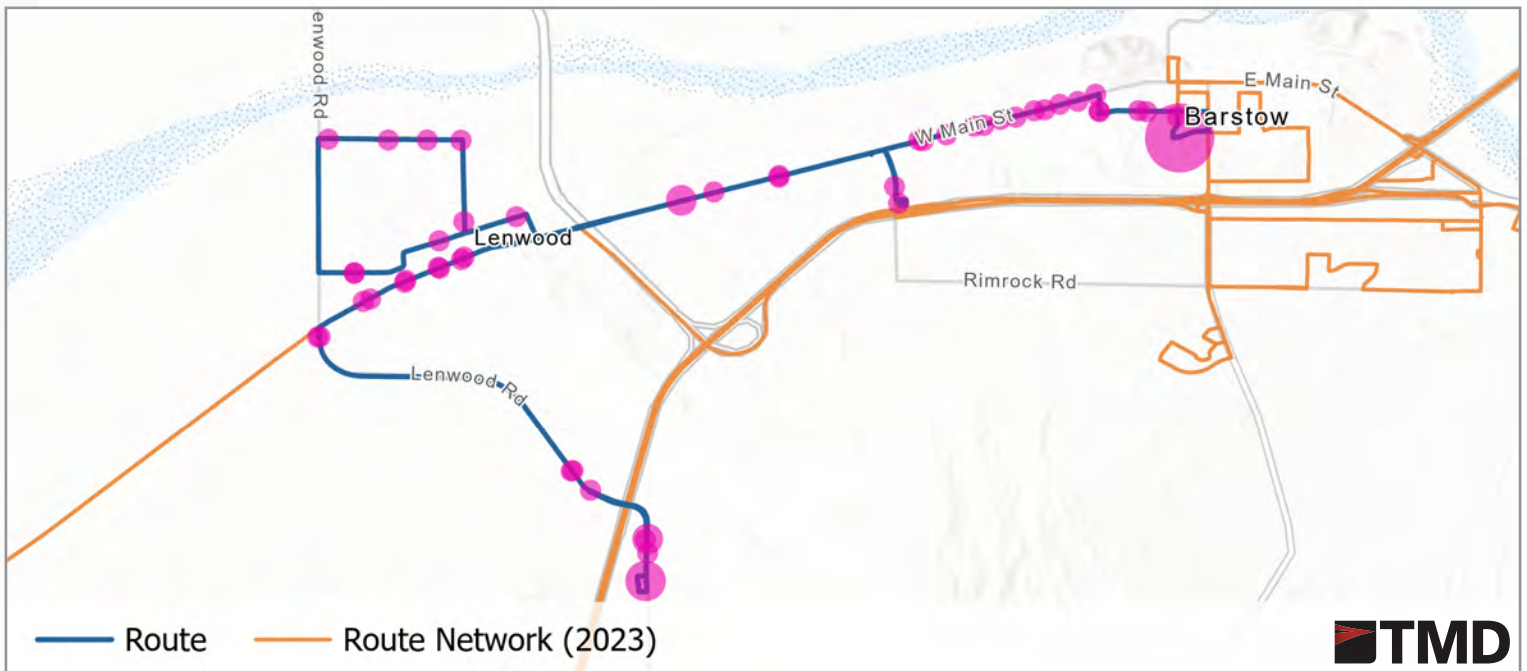
Barstow



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:00 AM to 7:47 PM	8:00 AM to 4:47 PM	8:00 AM to 4:48 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	179 6 System Rank	110 5 System Rank	90 3 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	4.4 4.55 System Average	2.9 2.98 System Average	2.7 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$27.60 \$26.43 System Average	\$41.80 \$45.28 System Average	\$44.70 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.10% 7.00% System Average	1.60% 3.00% System Average	1.40% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	93.00%	95.30%	93.50%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 6

Barstow City Hall - Barstow College

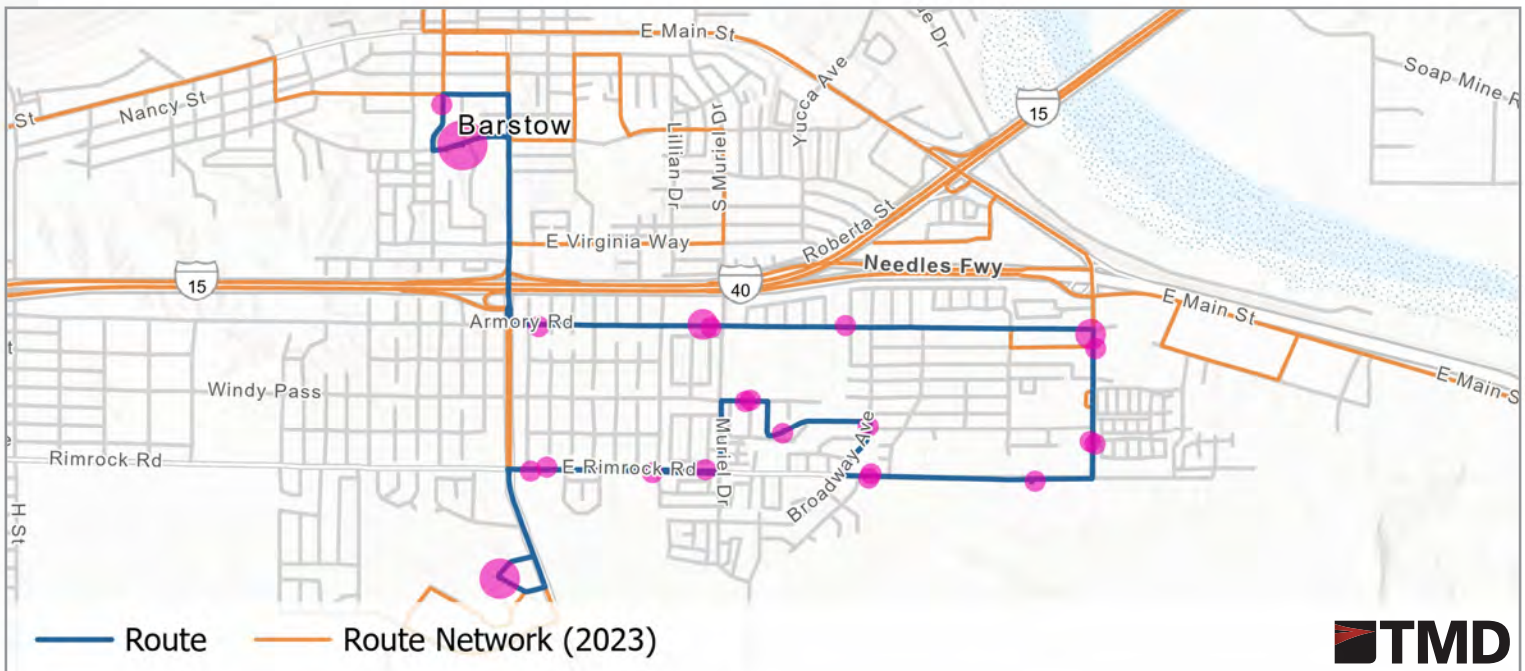
Barstow



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:00 AM to 7:50 PM	8:00 AM to 4:50 PM	8:00 AM to 4:50 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	112 13 System Rank	55 15 System Rank	37 15 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	5.5 4.55 System Average	4.4 2.98 System Average	3.1 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$21.90 \$26.43 System Average	\$27.60 \$45.28 System Average	\$39.20 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.70% 7.00% System Average	2.50% 3.00% System Average	1.60% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	95.00%	95.20%	96.40%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 15

Barstow - Victorville - San Benardino

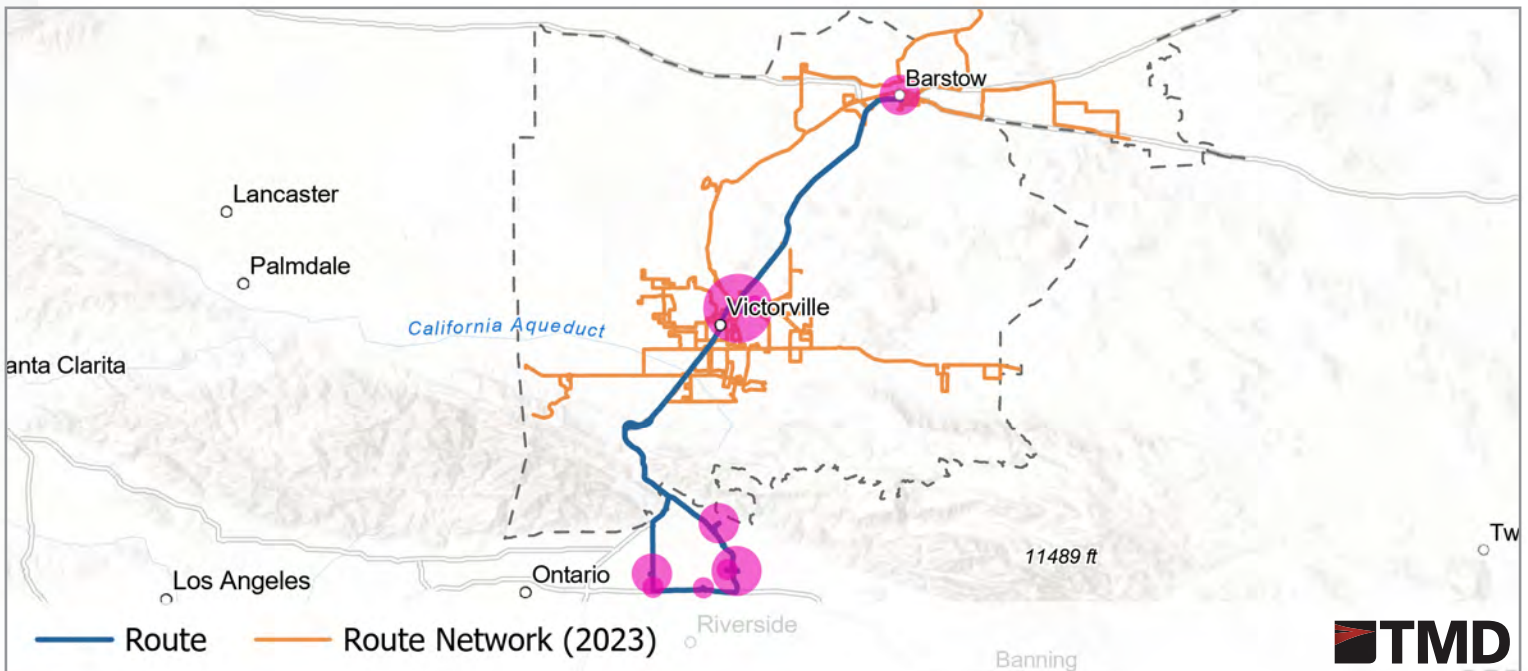
Victorville



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	120	120	300
Hours of Operation <small>The hours the bus is in service</small>	6:25 AM to 7:58 PM	7:30 AM to 7:24 PM	8:00 AM to 5:46 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	173 8 System Rank	98 7 System Rank	41 13 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	4.2 4.55 System Average	3.2 2.98 System Average	4.4 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$32.90 \$26.43 System Average	\$43.40 \$45.28 System Average	\$31.20 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	13.40% 7.00% System Average	1.20% 3.00% System Average	9.00% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	55.00%	64.70%	34.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 21P

Hesperia Super Target - Pinon Hills

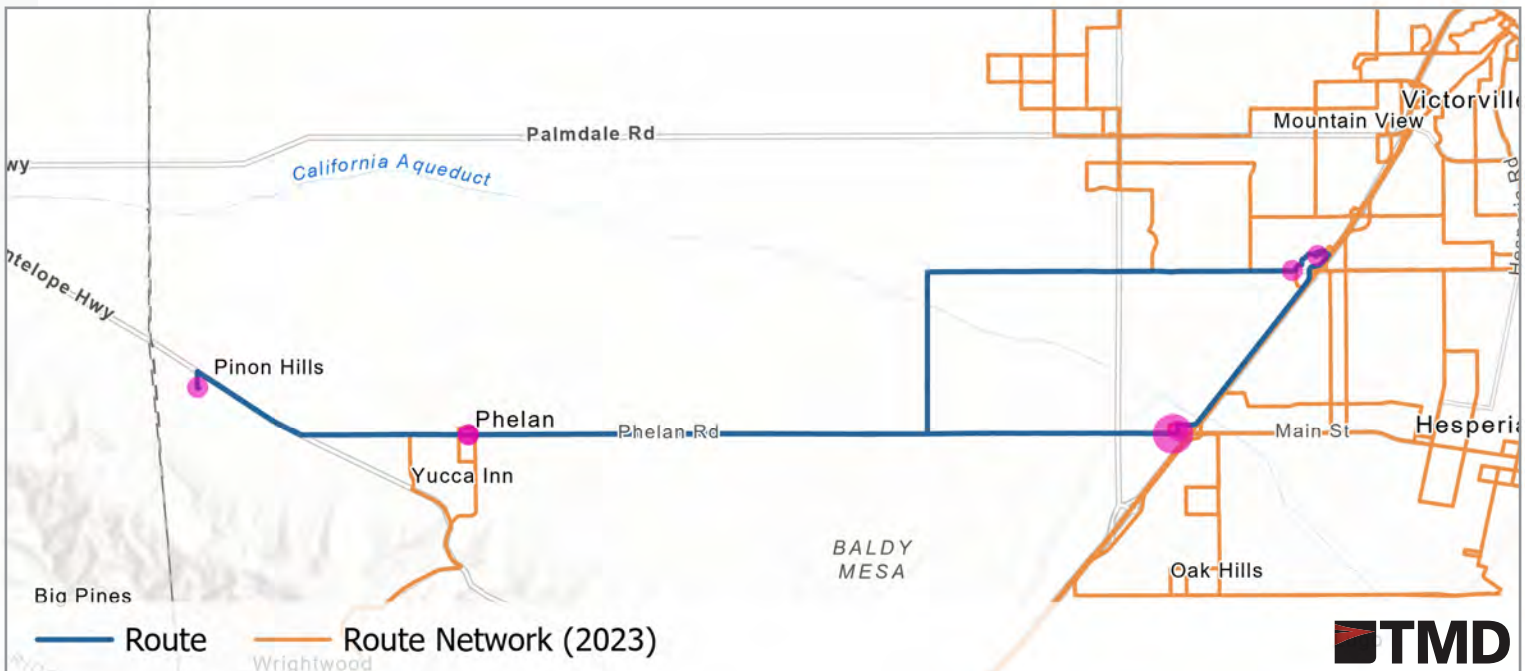
Hesperia/Oak Hills



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	90	120	120
Hours of Operation <small>The hours the bus is in service</small>	7:00 AM to 9:00 PM	7:00 AM to 6:21 PM	9:00 AM to 5:50 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	31 25 System Rank	17 26 System Rank	13 25 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	1.5 4.55 System Average	0.8 2.98 System Average	0.7 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$88.00 \$26.43 System Average	\$160.00 \$45.28 System Average	\$174.30 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.40% 7.00% System Average	1.50% 3.00% System Average	1.30% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	76.00%	74.10%	71.20%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 21W

Hesperia Super Target - Wrightwood

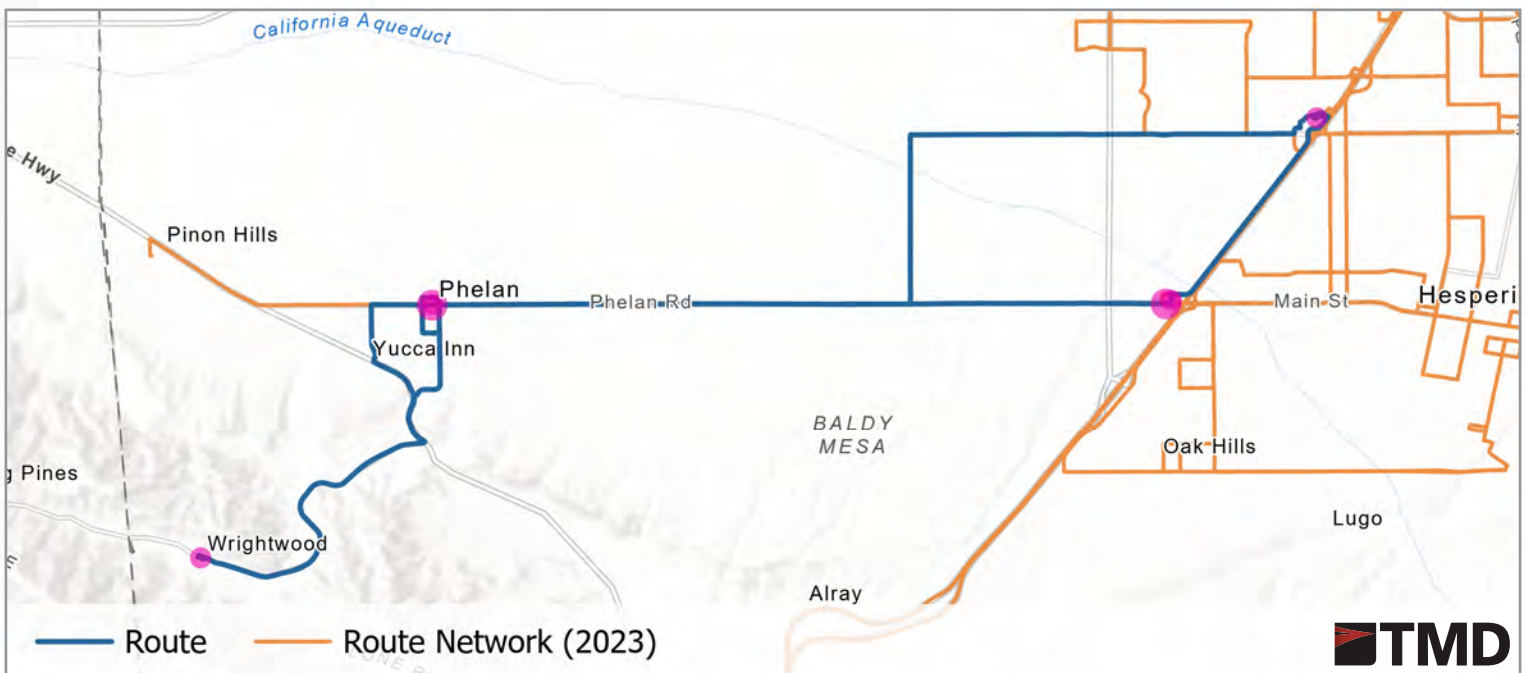
Hesperia/Oak Hills



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	120	120	120
Hours of Operation <small>The hours the bus is in service</small>	5:55 AM to 9:07 PM	7:12 AM to 7:02 PM	8:00 AM to 4:57 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	27 26 System Rank	23 24 System Rank	12 26 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	1.5 4.55 System Average	0.8 2.98 System Average	0.7 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$88.00 \$26.43 System Average	\$160.00 \$45.28 System Average	\$174.30 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.40% 7.00% System Average	1.50% 3.00% System Average	1.30% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	76.00%	74.10%	71.20%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 22

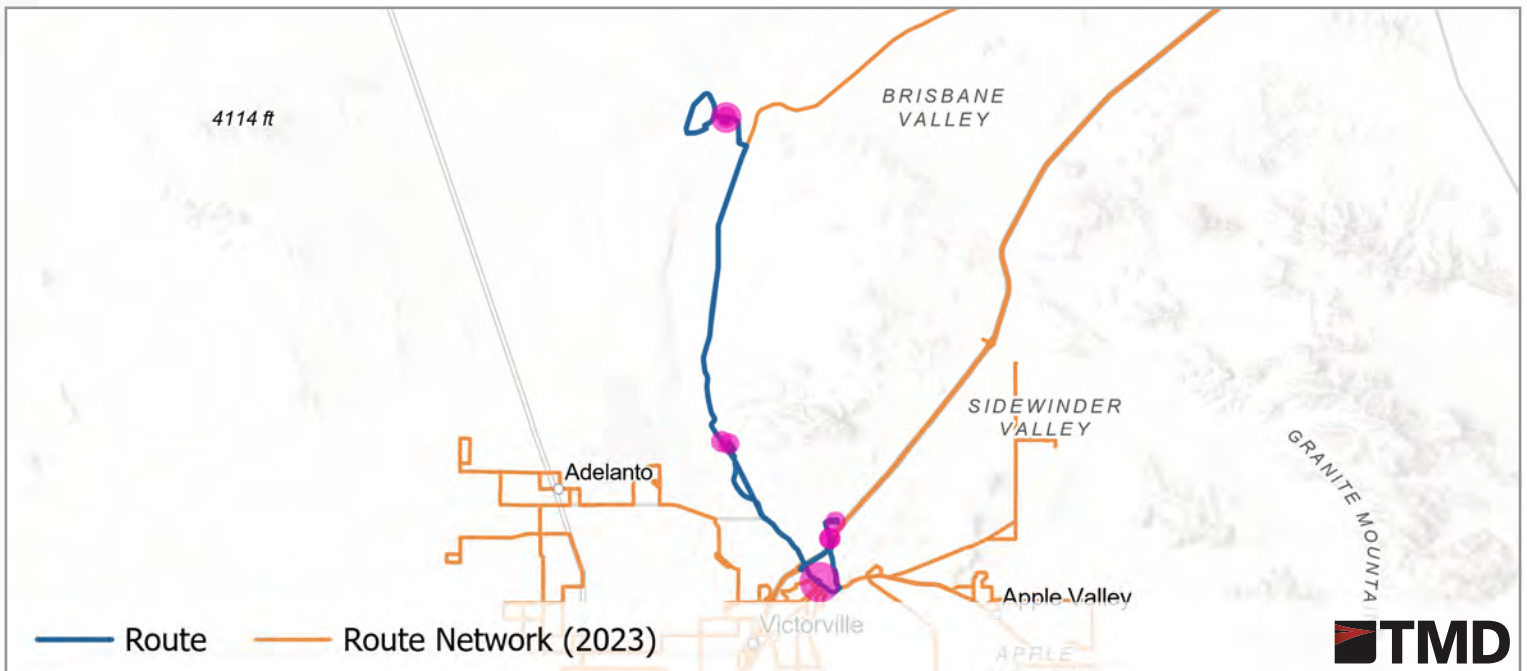
VVTC - Helendale
Helendale/Silver Oak



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	120	120	120
Hours of Operation <small>The hours the bus is in service</small>	6:00 AM to 8:06 PM	7:00 AM to 7:50 PM	8:00 AM to 5:02 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	48 21 System Rank	28 23 System Rank	17 24 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	2.9 4.55 System Average	1.5 2.98 System Average	1.5 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$45.90 \$26.43 System Average	\$90.60 \$45.28 System Average	\$86.70 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	4.80% 7.00% System Average	2.70% 3.00% System Average	2.80% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	69.00%	80.70%	79.70%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 23

Apple Valley Post Office - Lucerne Valley

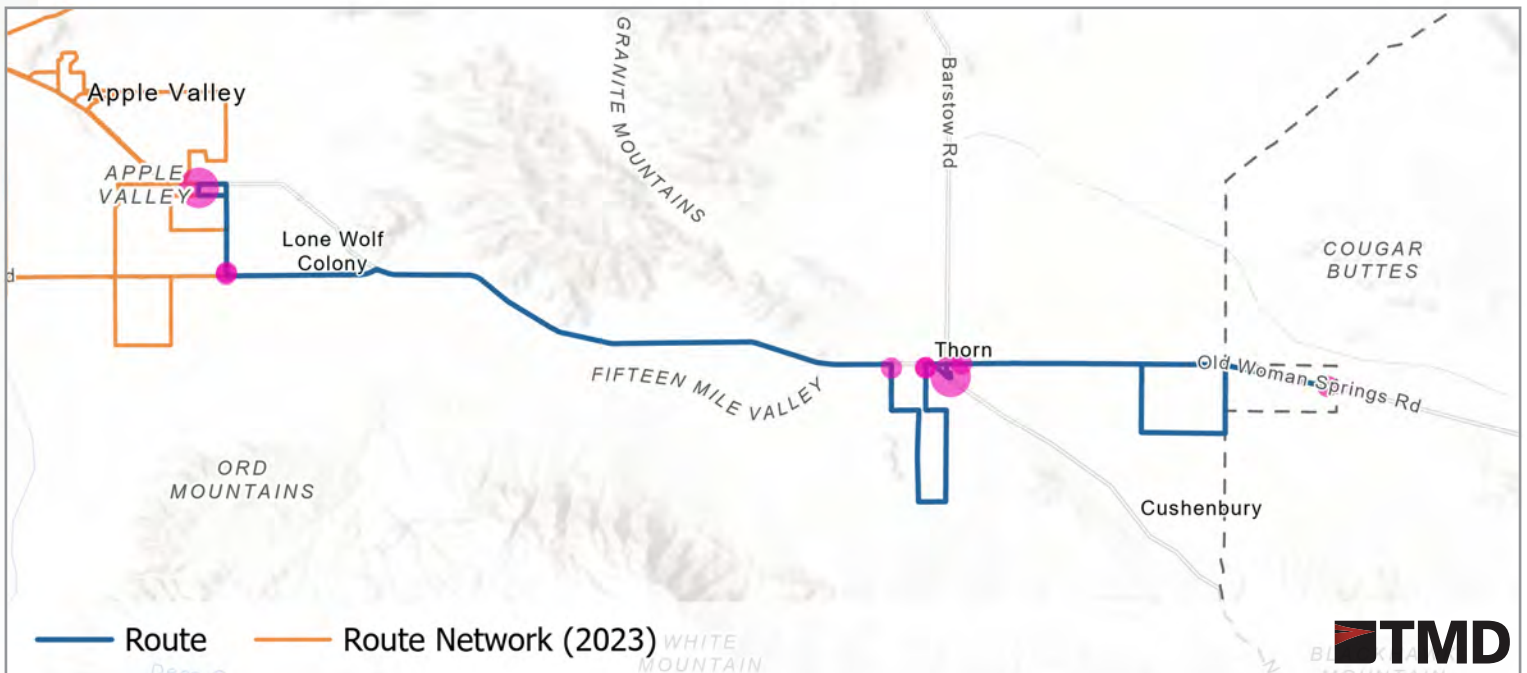
Lucerne Valley



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	120	120	120
Hours of Operation <small>The hours the bus is in service</small>	5:18 AM to 8:54 PM	7:00 AM to 8:53 PM	9:00 AM to 6:52 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	54 19 System Rank	47 17 System Rank	28 17 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	2.8 4.55 System Average	1.9 2.98 System Average	1.4 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$48.50 \$26.43 System Average	\$72.70 \$45.28 System Average	\$96.30 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	4.80% 7.00% System Average	3.70% 3.00% System Average	2.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	67.00%	66.90%	66.80%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 25

Hesperia Post Office - Super Target

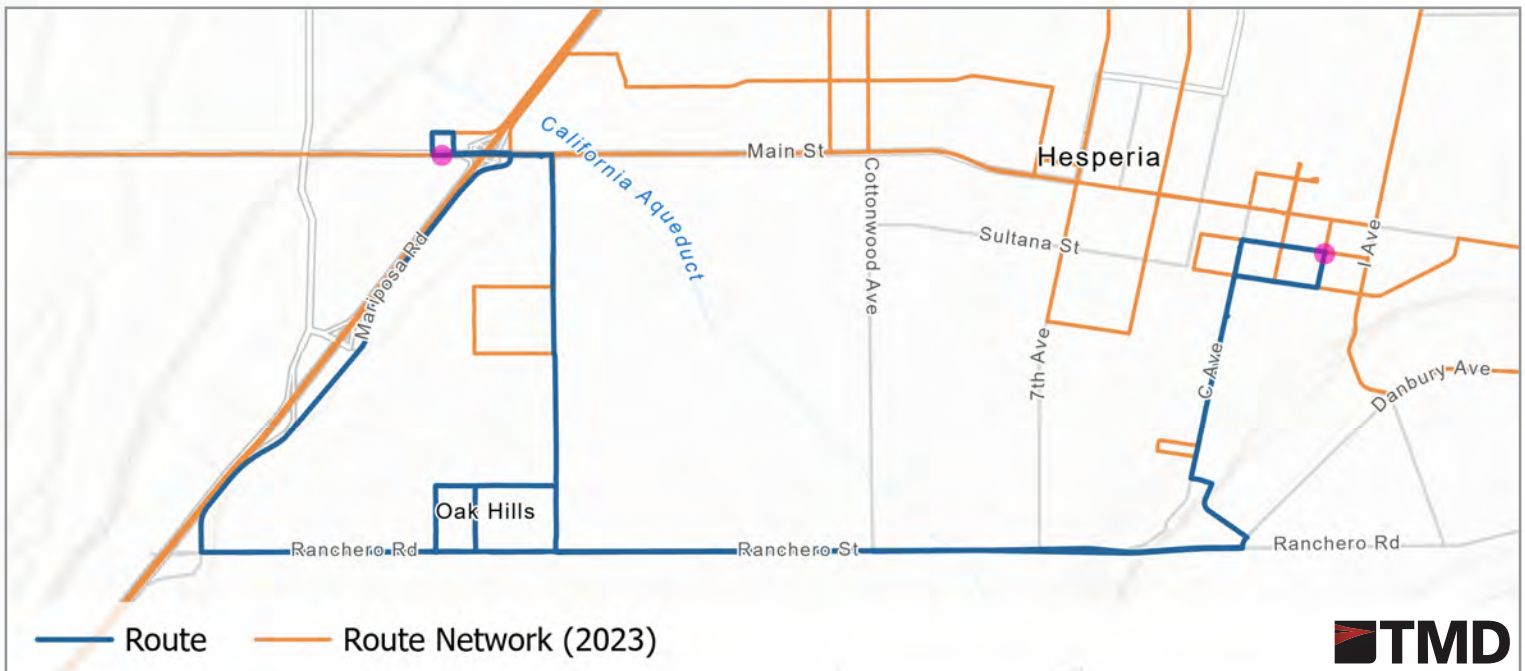
Hesperia/Oak Hills



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	120	120	120
Hours of Operation <small>The hours the bus is in service</small>	8:01 AM to 8:29 PM	8:07 AM to 7:07 PM	8:59 AM to 6:07 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	3 33 System Rank	3 29 System Rank	2 29 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	1.2 4.55 System Average	0.8 2.98 System Average	0.7 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$108.80 \$26.43 System Average	\$172.50 \$45.28 System Average	\$179.70 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	1.80% 7.00% System Average	1.30% 3.00% System Average	1.40% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	76.00%	80.80%	81.10%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 28

Barstow - Hinkley - Helendale

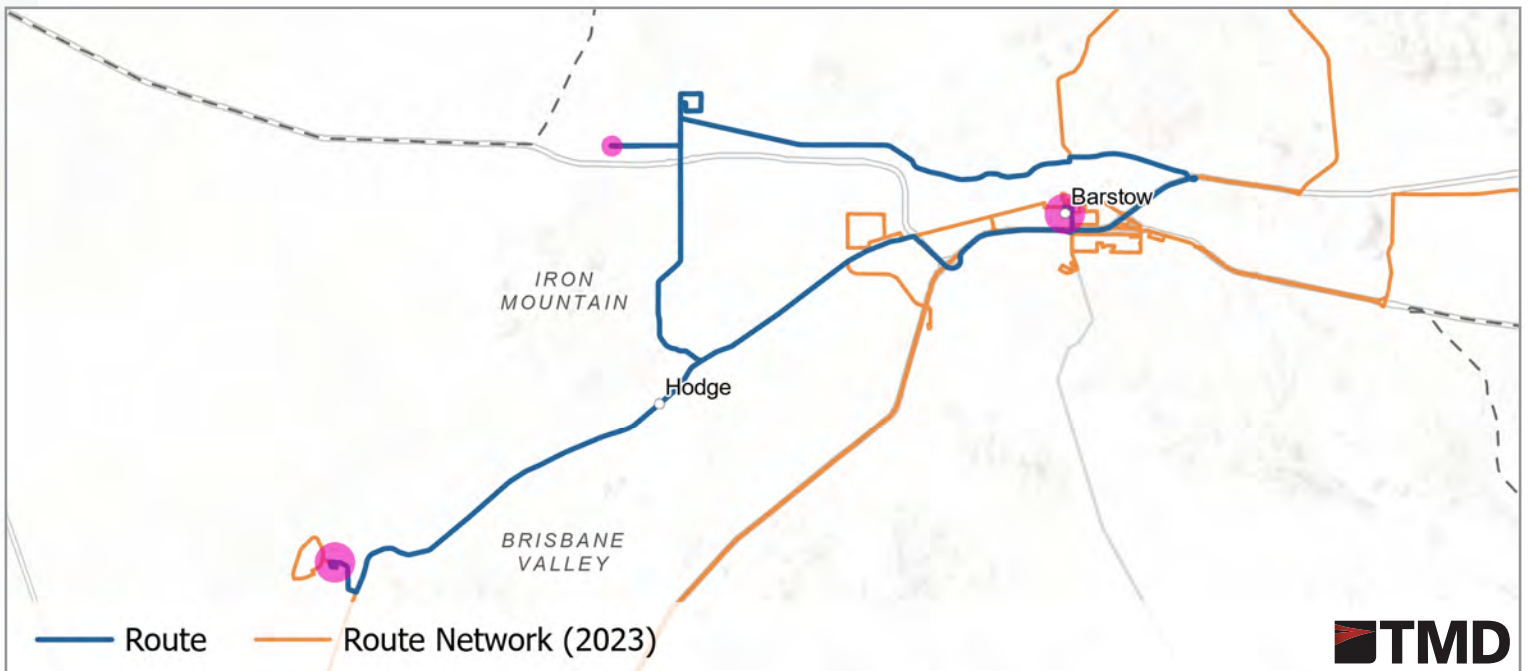
Helendale/Silver Oak



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	180	180	180
Hours of Operation <small>The hours the bus is in service</small>	6:00 AM to 8:28 PM	8:00 AM to 4:37 PM	8:00 AM to 4:38 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	35 24 System Rank	22 25 System Rank	18 22 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	0.8 4.55 System Average	0.5 2.98 System Average	0.4 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$154.20 \$26.43 System Average	\$260.30 \$45.28 System Average	\$356.60 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.30% 7.00% System Average	1.50% 3.00% System Average	1.00% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	88.00%	80.60%	87.90%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 29

Barstow - Newberry Springs

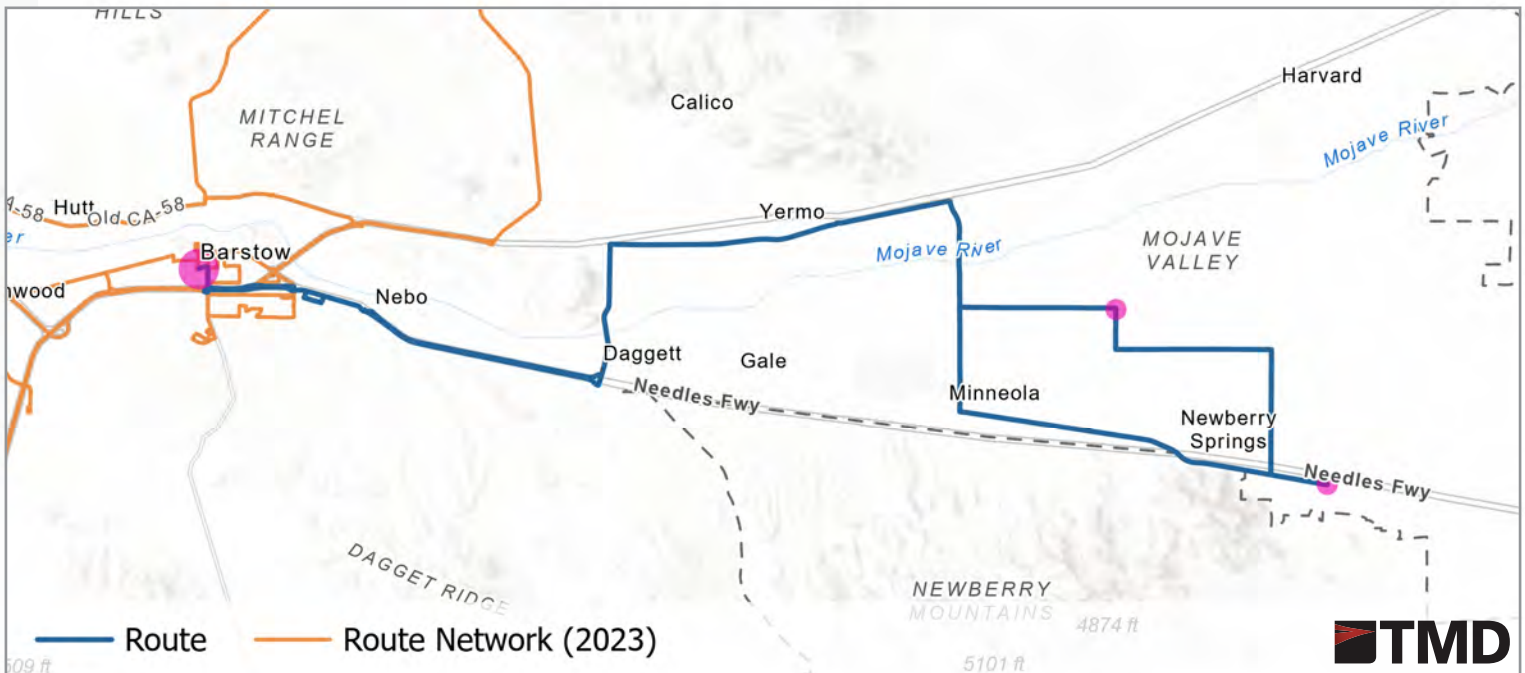
Barstow



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	180	180	180
Hours of Operation <small>The hours the bus is in service</small>	6:00 AM to 8:29 PM	8:00 AM to 4:29 PM	8:00 AM to 4:28 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	25 27 System Rank	11 27 System Rank	12 27 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	1.2 4.55 System Average	0.8 2.98 System Average	0.7 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$108.60 \$26.43 System Average	\$157.60 \$45.28 System Average	\$187.20 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	3.00% 7.00% System Average	2.50% 3.00% System Average	2.10% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	73.00%	56.10%	69.60%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023



Route 31

VVTC - Adelanto

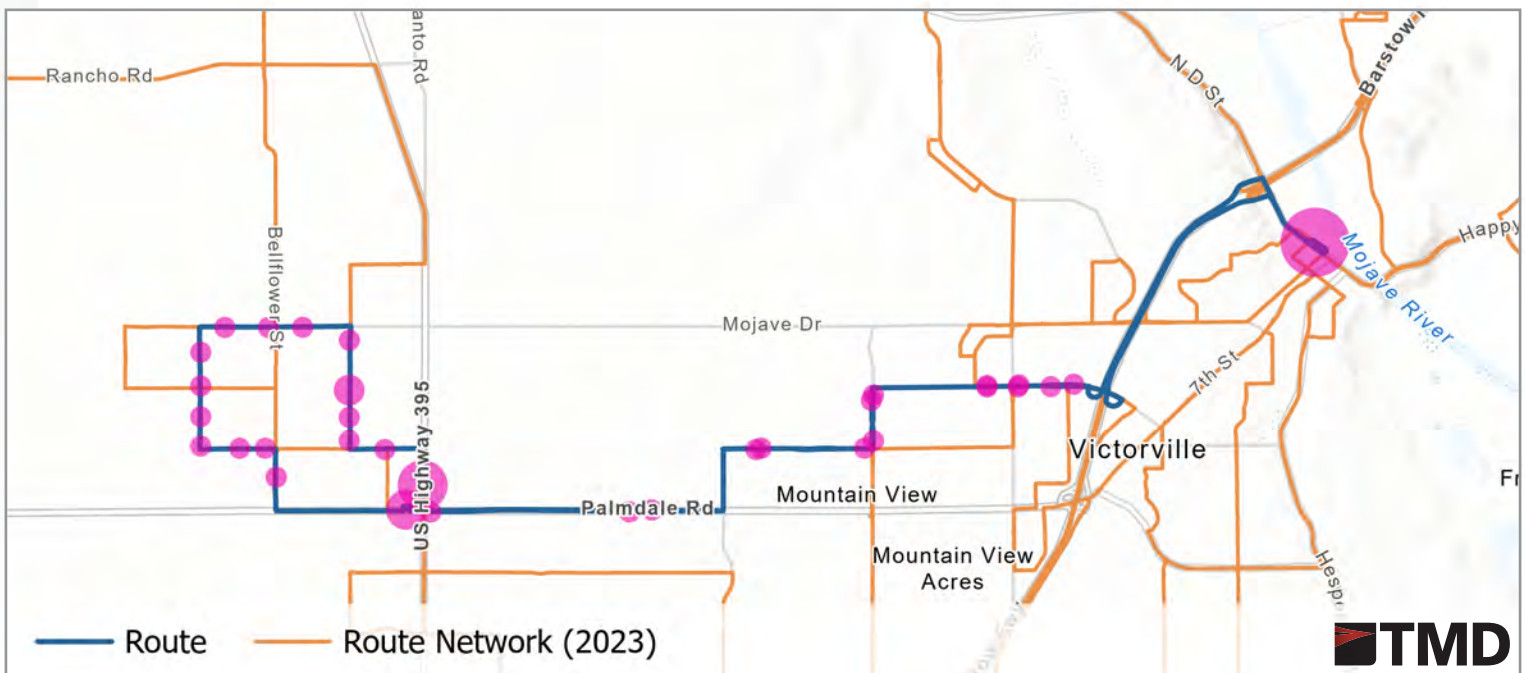
Adelanto



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	30	60	60
Hours of Operation <small>The hours the bus is in service</small>	5:55 AM to 8:23 PM	6:28 AM to 8:11 PM	7:43 AM to 6:00 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	210 4 System Rank	91 10 System Rank	61 8 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	4.3 4.55 System Average	4.5 2.98 System Average	3.6 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$32.50 \$26.43 System Average	\$34.00 \$45.28 System Average	\$42.60 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	4.40% 7.00% System Average	4.80% 3.00% System Average	3.80% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	82.00%	67.10%	77.20%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS-2023

Route 32

VVTC - North Adelanto

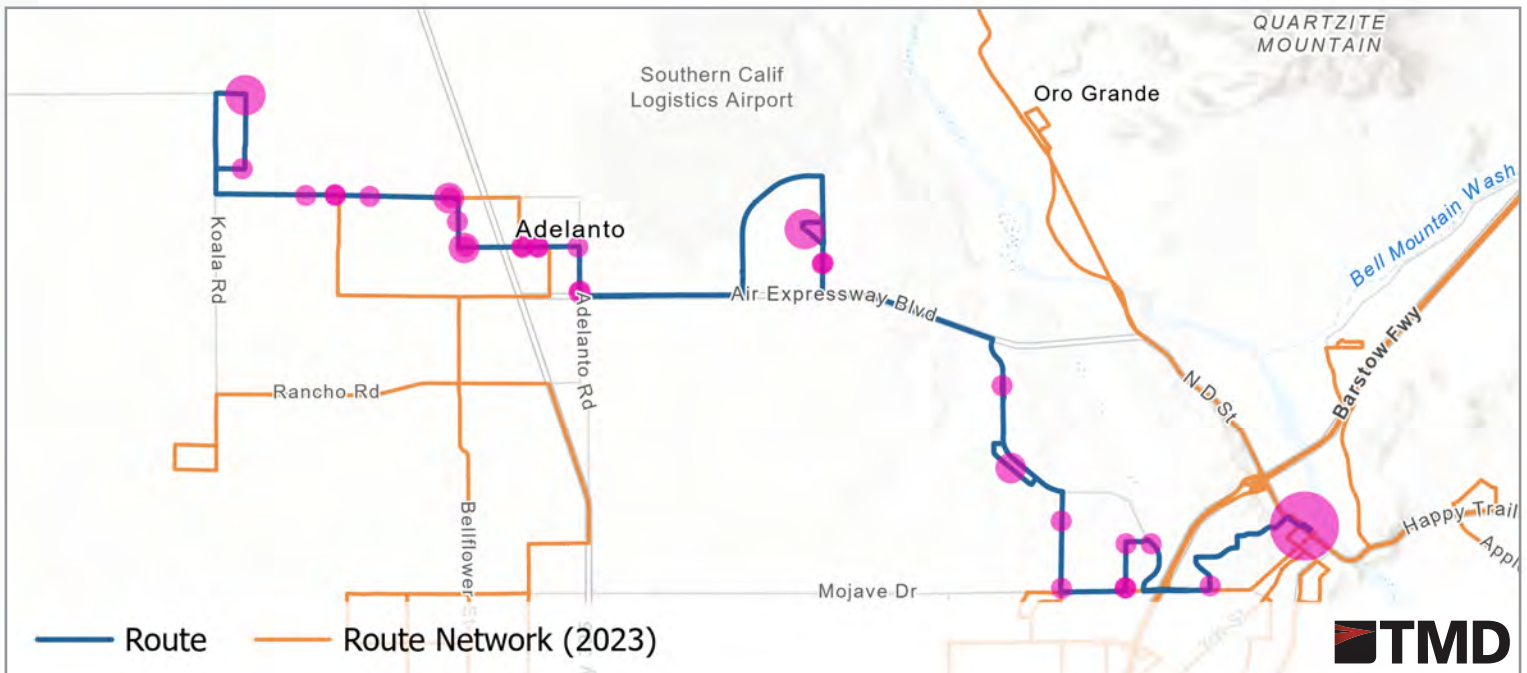
Adelanto



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	30	30
Hours of Operation <small>The hours the bus is in service</small>	6:10 AM to 9:22 PM	6:56 AM to 8:18 PM	7:45 AM to 6:29 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	177 7 System Rank	110 6 System Rank	95 2 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	5.5 4.55 System Average	3.2 2.98 System Average	3.2 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$26.50 \$26.43 System Average	\$46.80 \$45.28 System Average	\$47.10 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	5.70% 7.00% System Average	3.50% 3.00% System Average	3.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	77.00%	53.40%	75.90%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 33

Hwy 395 & Palmdale Rd - Bartlett & Greening

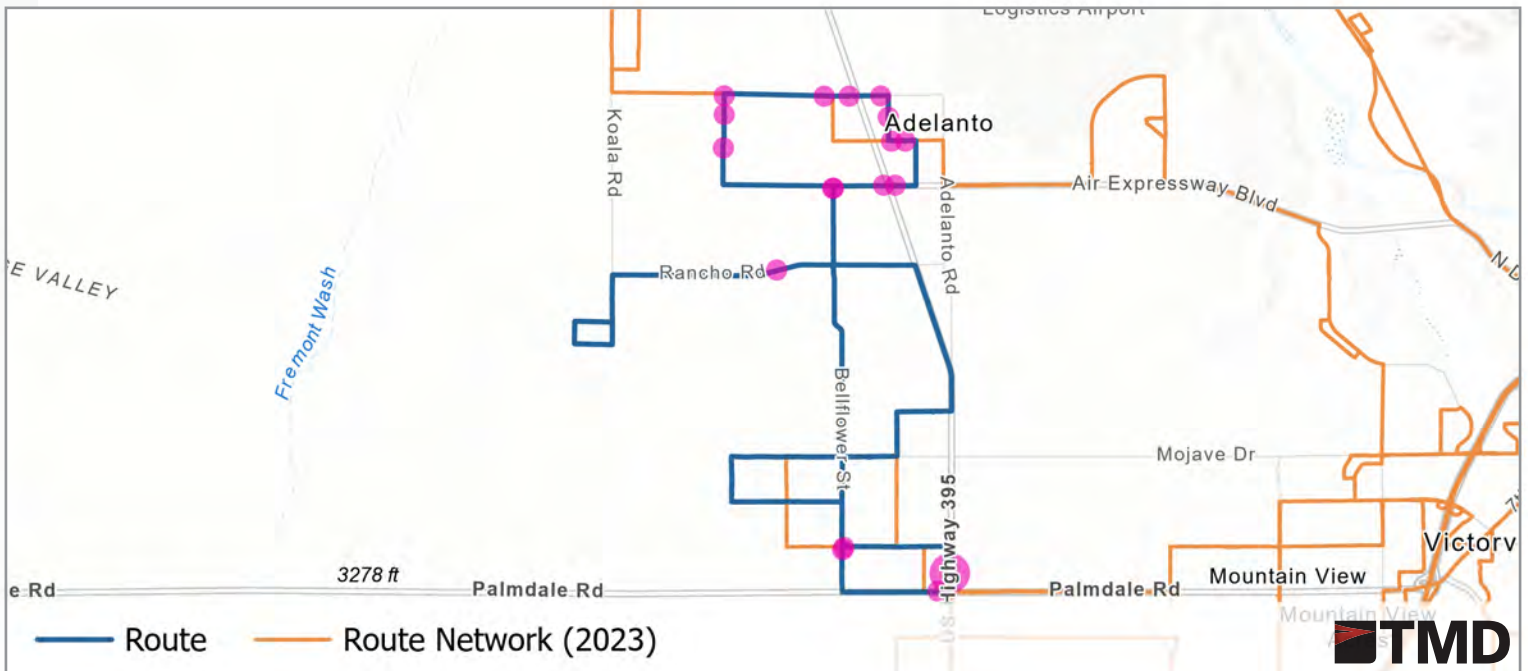
Adelanto



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	5:49 AM to 8:38 PM	7:03 AM to 8:01 PM	7:43 AM to 5:38 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	55 18 System Rank	42 20 System Rank	24 19 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	3 4.55 System Average	2.2 2.98 System Average	2.3 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$50.40 \$26.43 System Average	\$70.10 \$45.28 System Average	\$71.20 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.80% 7.00% System Average	2.40% 3.00% System Average	2.40% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	74.00%	74.30%	70.20%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 40

Apple Valley Post Office - Walmart

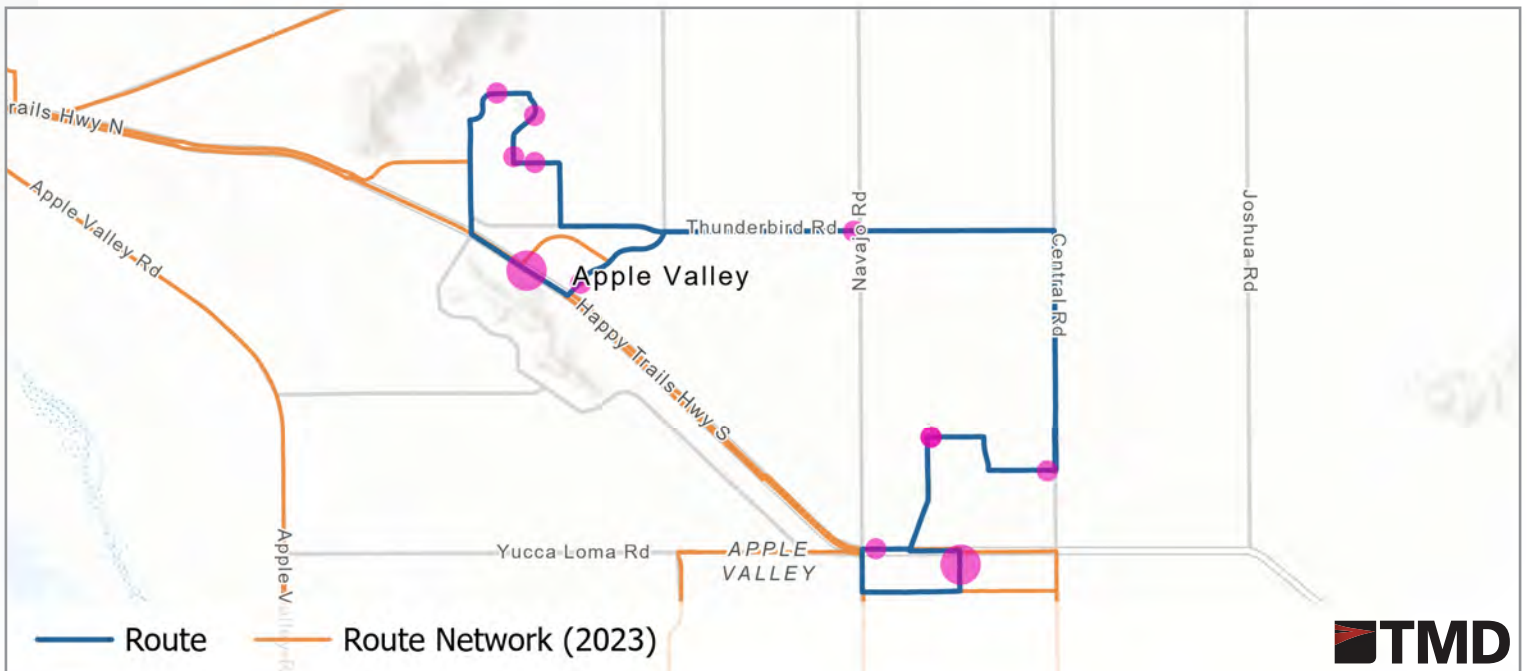
Apple Valley



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:05 AM to 8:49 PM	7:00 AM to 8:09 PM	7:55 AM to 5:33 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	53 20 System Rank	35 21 System Rank	21 20 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	2.7 4.55 System Average	2.1 2.98 System Average	1.8 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$54.20 \$26.43 System Average	\$68.60 \$45.28 System Average	\$85.30 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.60% 7.00% System Average	2.40% 3.00% System Average	2.00% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	91.00%	90.70%	83.70%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 41

Apple Valley Post Office - VVTC

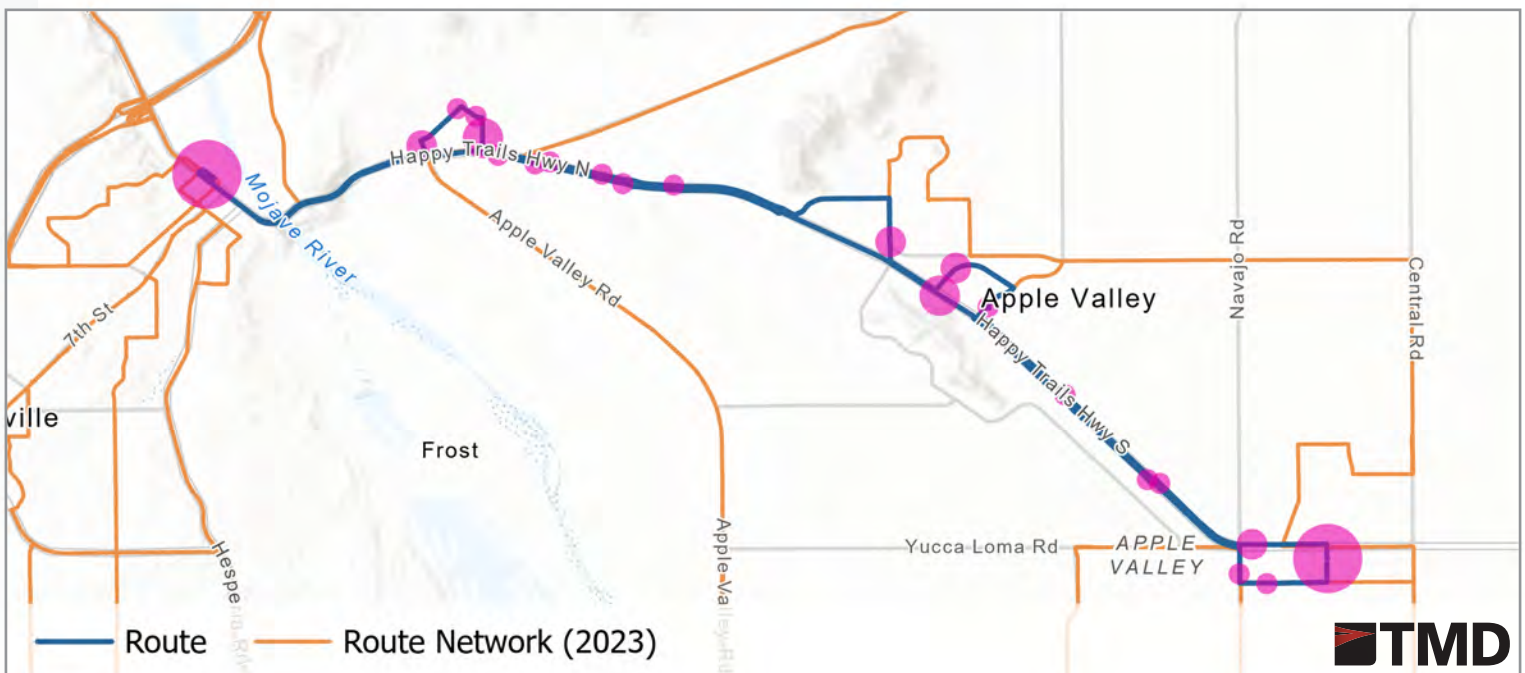
Apple Valley



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	30	60	60
Hours of Operation <small>The hours the bus is in service</small>	5:50 AM to 9:07 PM	6:28 AM to 8:03 PM	7:42 AM to 6:06 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	203 5 System Rank	96 8 System Rank	61 9 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	5.1 4.55 System Average	5.2 2.98 System Average	4 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$27.70 \$26.43 System Average	\$29.40 \$45.28 System Average	\$37.90 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	5.20% 7.00% System Average	5.50% 3.00% System Average	4.30% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	78.00%	74.90%	74.50%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 42

Victor Valley College - Regional Training Center

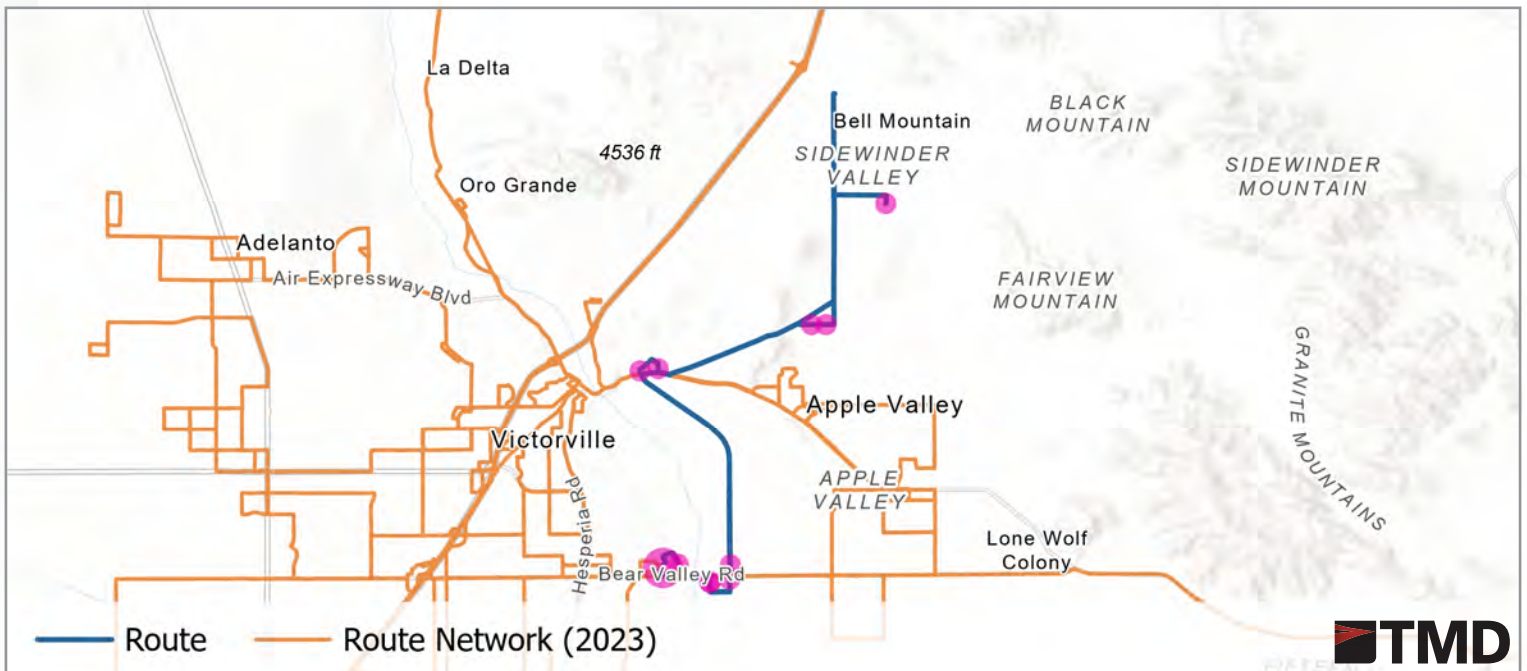
Apple Valley



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:30 AM to 9:15 PM	7:30 AM to 8:35 PM	8:23 AM to 6:04 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	46 22 System Rank	35 22 System Rank	27 18 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	1.2 4.55 System Average	0.8 2.98 System Average	0.5 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$120.90 \$26.43 System Average	\$200.10 \$45.28 System Average	\$293.50 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	1.10% 7.00% System Average	0.80% 3.00% System Average	0.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	73.00%	74.70%	73.70%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 43

Apple Valley Post Office - Victor Valley College

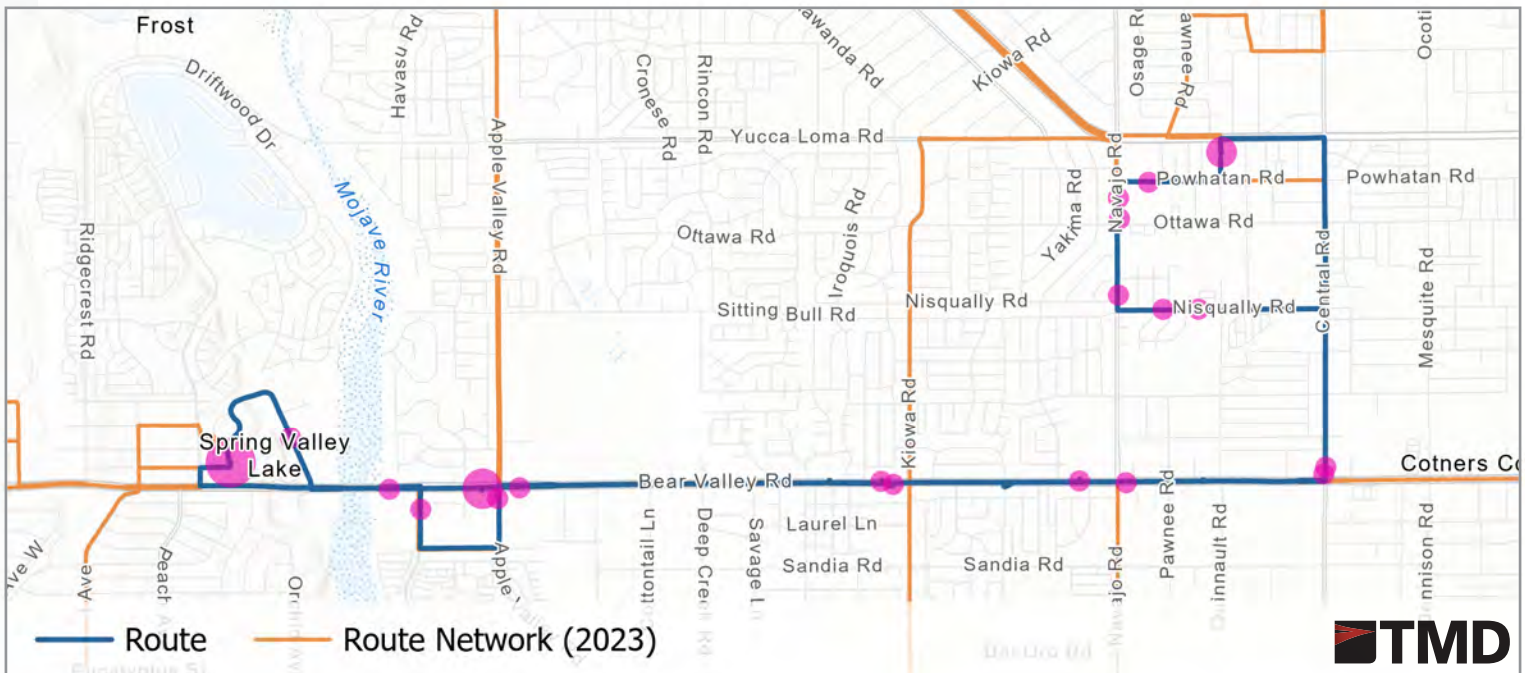
Apple Valley



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	30	30	30
Hours of Operation <small>The hours the bus is in service</small>	6:03 AM to 9:05 PM	7:15 AM to 8:05 PM	7:43 AM to 6:03 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	109 14 System Rank	46 18 System Rank	34 16 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	7.3 4.55 System Average	4.7 2.98 System Average	3.2 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$20.40 \$26.43 System Average	\$33.20 \$45.28 System Average	\$47.20 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	7.20% 7.00% System Average	4.90% 3.00% System Average	3.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	67.00%	75.50%	73.70%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 47

Apple Valley Post Office - Bear Valley & Navajo

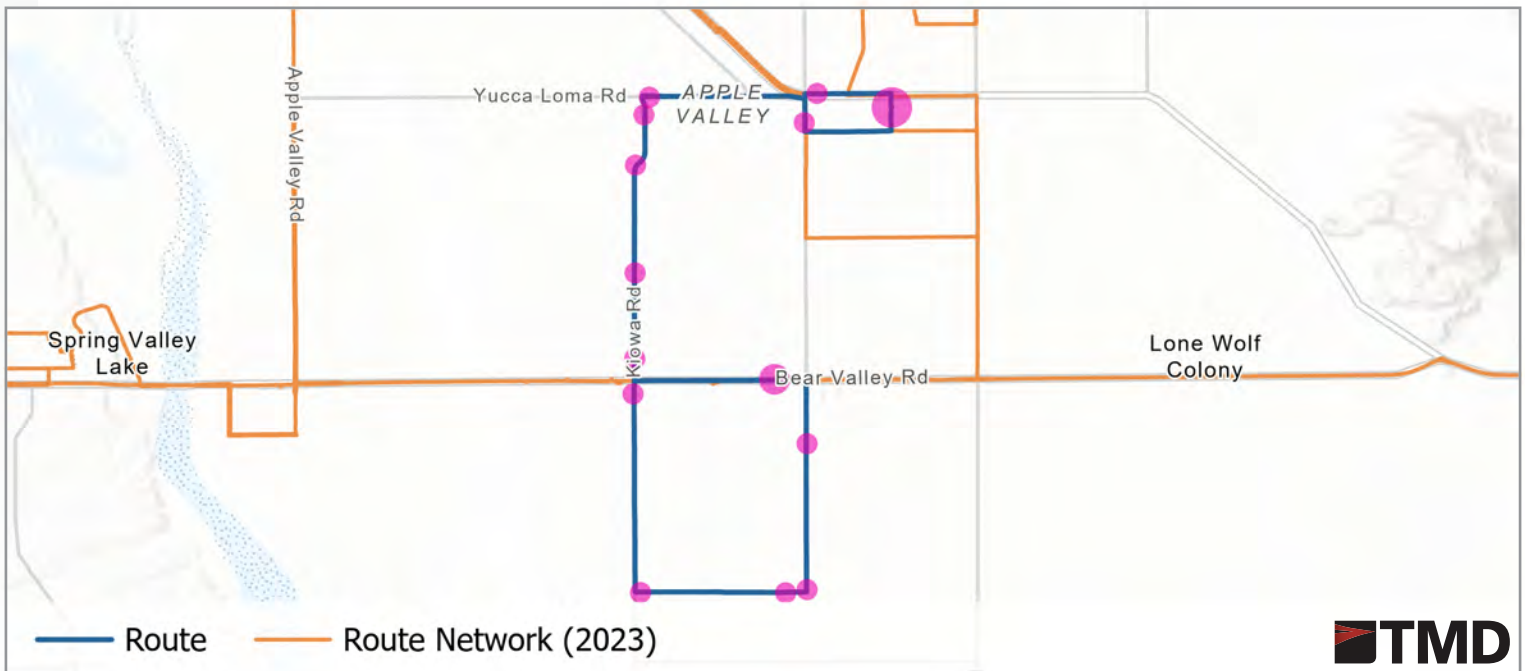
Apple Valley



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	30	30	60
Hours of Operation <small>The hours the bus is in service</small>	6:05 AM to 8:52 PM	7:00 AM to 8:05 PM	8:43 AM to 6:00 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	46 23 System Rank	44 19 System Rank	17 23 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	1.9 4.55 System Average	1.4 2.98 System Average	1.1 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$75.10 \$26.43 System Average	\$102.80 \$45.28 System Average	\$145.40 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	1.80% 7.00% System Average	1.60% 3.00% System Average	1.20% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	87.00%	92.00%	83.10%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 50

VVTC - Hesperia Post Office

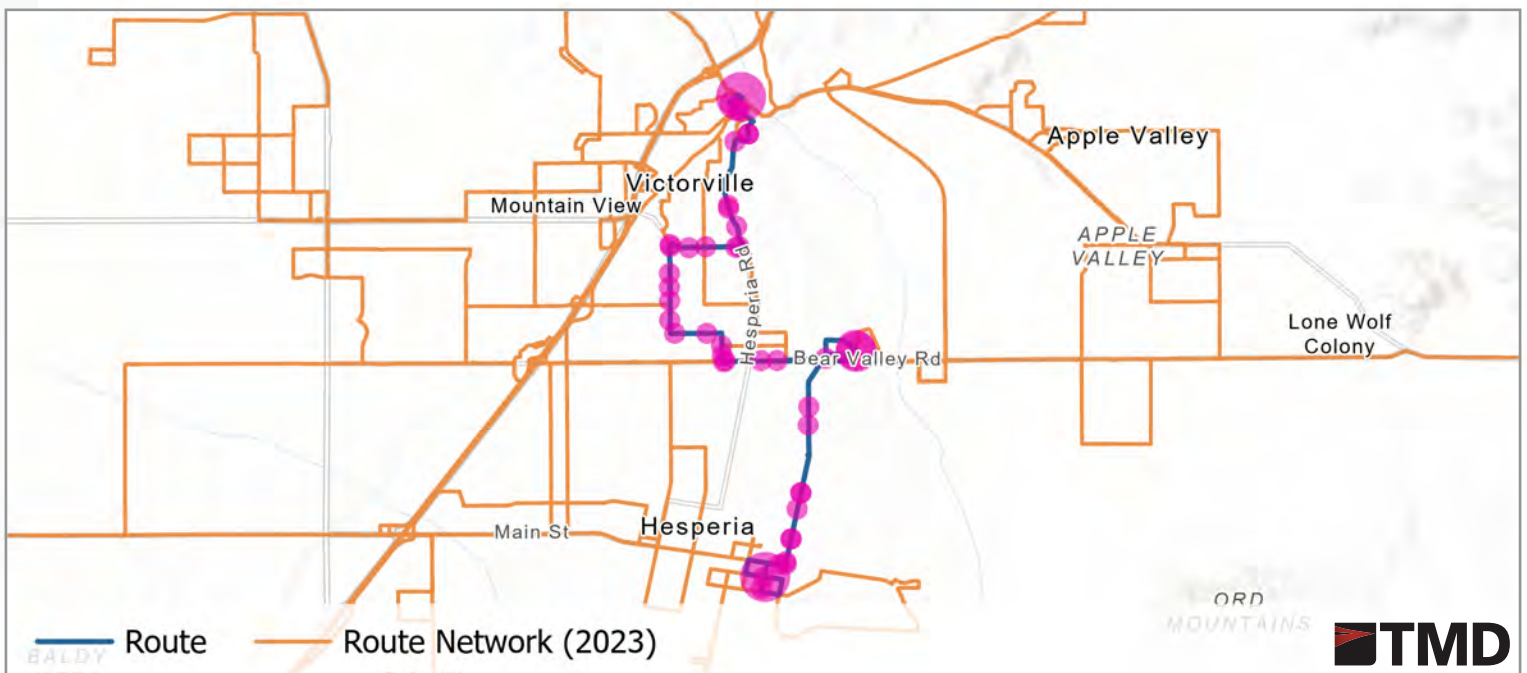
Victorville



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:15 AM to 9:33 PM	7:05 AM to 8:24 PM	8:05 AM to 5:55 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	169 9 System Rank	94 9 System Rank	62 7 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	5.2 4.55 System Average	2.5 2.98 System Average	2.3 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$28.80 \$26.43 System Average	\$59.10 \$45.28 System Average	\$64.90 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	5.10% 7.00% System Average	2.90% 3.00% System Average	2.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	71.00%	73.10%	79.10%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023



Route 50X

VVTC - Victor Valley College Express

Victorville



Route Performance: Weekday Saturday Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

60

Hours of Operation

The hours the bus is in service

7:15 AM to 6:04 PM

Daily Passenger Boardings

The average number of daily boardings

21

29 System Rank

System Rank

System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

3

4.55 System Average

2.98 System Average

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$50.40

\$26.43 System Average

\$45.28 System Average

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

2.50%

7.00% System Average

3.00% System Average

3.00% System Average

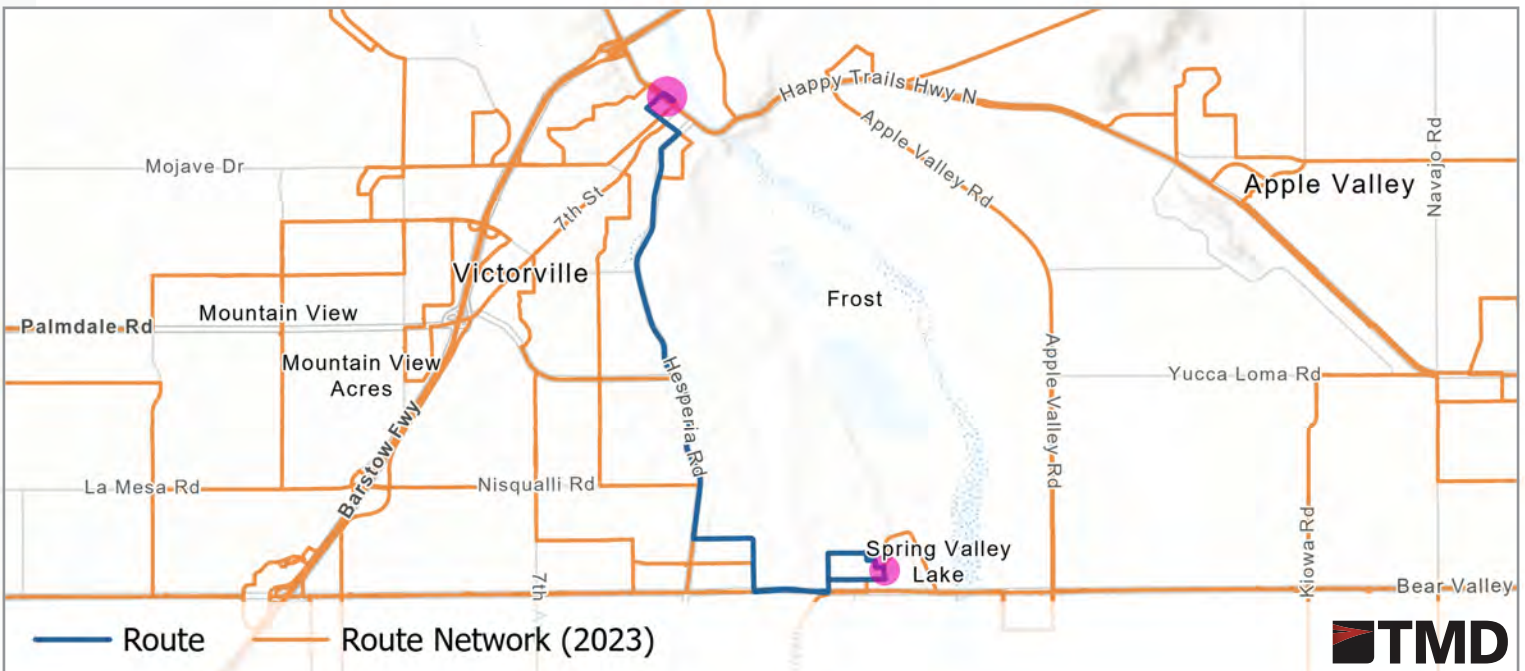
On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

79.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 52

VVTC - Mall of Victor Valley

Victorville



Route Performance:

Weekday

Saturday

Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

30

60

60

Hours of Operation

The hours the bus is in service

6:20 AM to 9:06 PM

7:05 AM to 8:02 PM

7:40 AM to 6:03 PM

Daily Passenger Boardings

The average number of daily boardings

215

2 System Rank

122

2 System Rank

68

5 System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

5.8

4.55 System Average

6.5

2.98 System Average

4.7

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$24.20

\$26.43 System Average

\$23.50

\$45.28 System Average

\$32.00

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

5.80%

7.00% System Average

7.00%

3.00% System Average

5.00%

3.00% System Average

On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

81.00%

55.20%

67.10%

Weekday Passenger Boardings

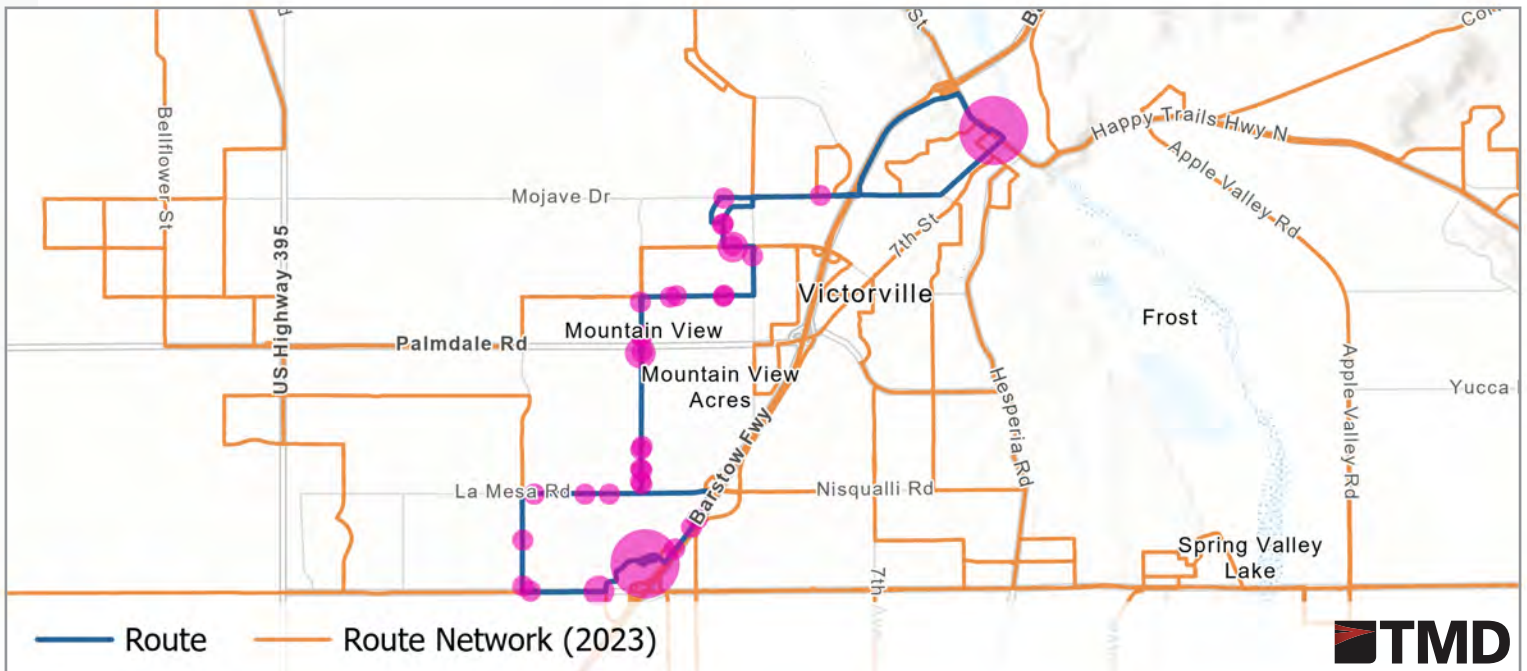
Ridership: ● 0-5

● 6-10

● 11-25

● 26-50

● 51-100



Route 53

Victor Valley College - Mall of Victor Valley

Victorville



Route Performance:

Weekday

Saturday

Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

20

60

60

Hours of Operation

The hours the bus is in service

5:59 AM to 9:09 PM

7:15 AM to 7:50 PM

7:43 AM to 6:19 PM

Daily Passenger Boardings

The average number of daily boardings

212

3 System Rank

85

11 System Rank

51

11 System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

5.9

4.55 System Average

4.4

2.98 System Average

3

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$23.80

\$26.43 System Average

\$34.00

\$45.28 System Average

\$49.80

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

6.10%

7.00% System Average

4.90%

3.00% System Average

3.20%

3.00% System Average

On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

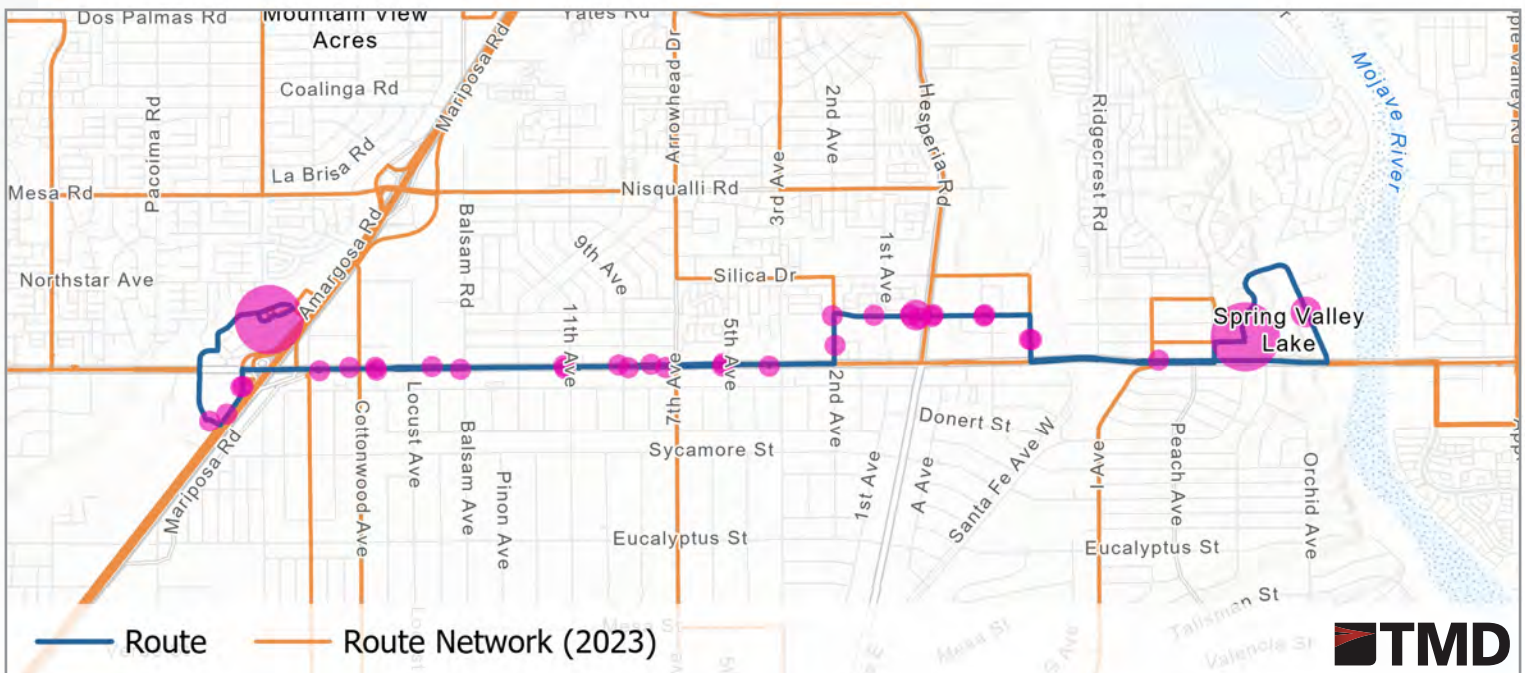
53.00%

41.30%

61.90%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 54

Hwy 395 & Palmdale - Mall of Victor Valley

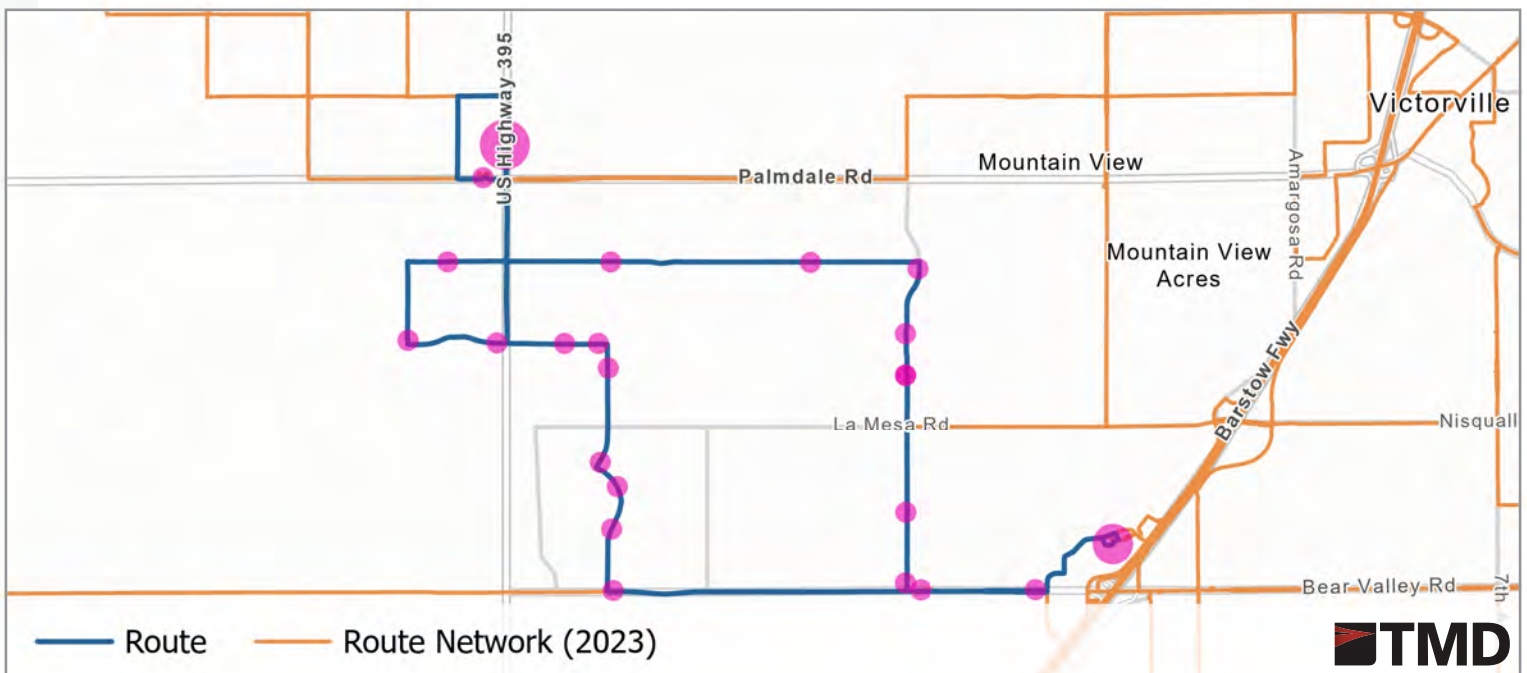
Victorville



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	120
Hours of Operation <small>The hours the bus is in service</small>	6:04 AM to 9:01 PM	7:13 AM to 7:56 PM	8:33 AM to 5:05 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	88 17 System Rank	67 13 System Rank	21 21 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	4.8 4.55 System Average	3.3 2.98 System Average	3.1 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$29.10 \$26.43 System Average	\$43.90 \$45.28 System Average	\$49.10 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	4.90% 7.00% System Average	3.60% 3.00% System Average	3.50% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	79.00%	71.50%	71.70%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023

Route 55

VVTC - Victor Valley College

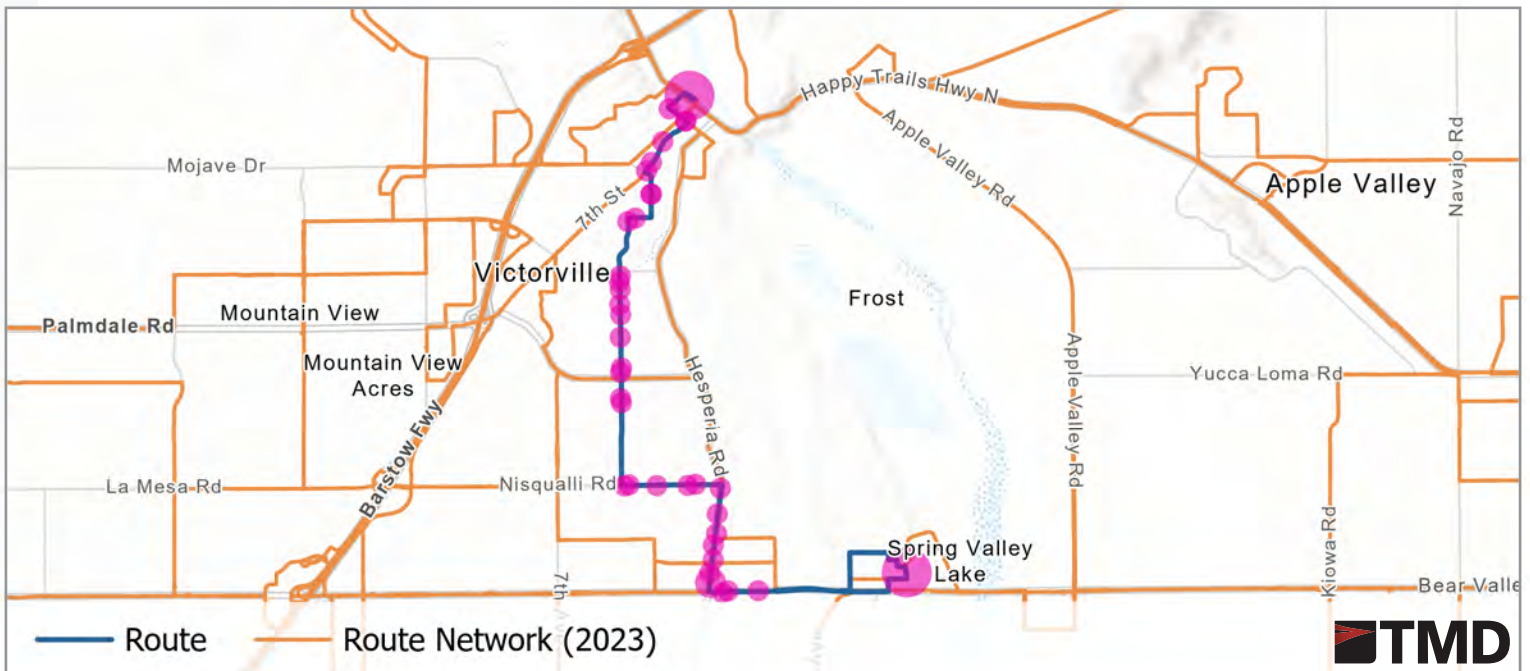
Victorville



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	5:46 AM to 9:03 PM	7:05 AM to 7:58 PM	7:42 AM to 6:03 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	146 12 System Rank	76 12 System Rank	55 10 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	7.4 4.55 System Average	3.7 2.98 System Average	2.6 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$20.20 \$26.43 System Average	\$39.80 \$45.28 System Average	\$55.90 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	7.50% 7.00% System Average	4.00% 3.00% System Average	2.90% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	60.00%	84.50%	81.50%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 56

VVTC - Lorene & 7th
Victorville



Route Performance:

Weekday

Saturday

Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

60

60

60

Hours of Operation

The hours the bus is in service

5:44 AM to 9:07 PM

7:05 AM to 7:59 PM

7:43 AM to 6:10 PM

Daily Passenger Boardings

The average number of daily boardings

168

10 System Rank

111

4 System Rank

68

4 System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

9.5

4.55 System Average

6.5

2.98 System Average

5.2

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$15.60

\$26.43 System Average

\$22.80

\$45.28 System Average

\$28.20

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

9.50%

7.00% System Average

7.20%

3.00% System Average

5.90%

3.00% System Average

On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

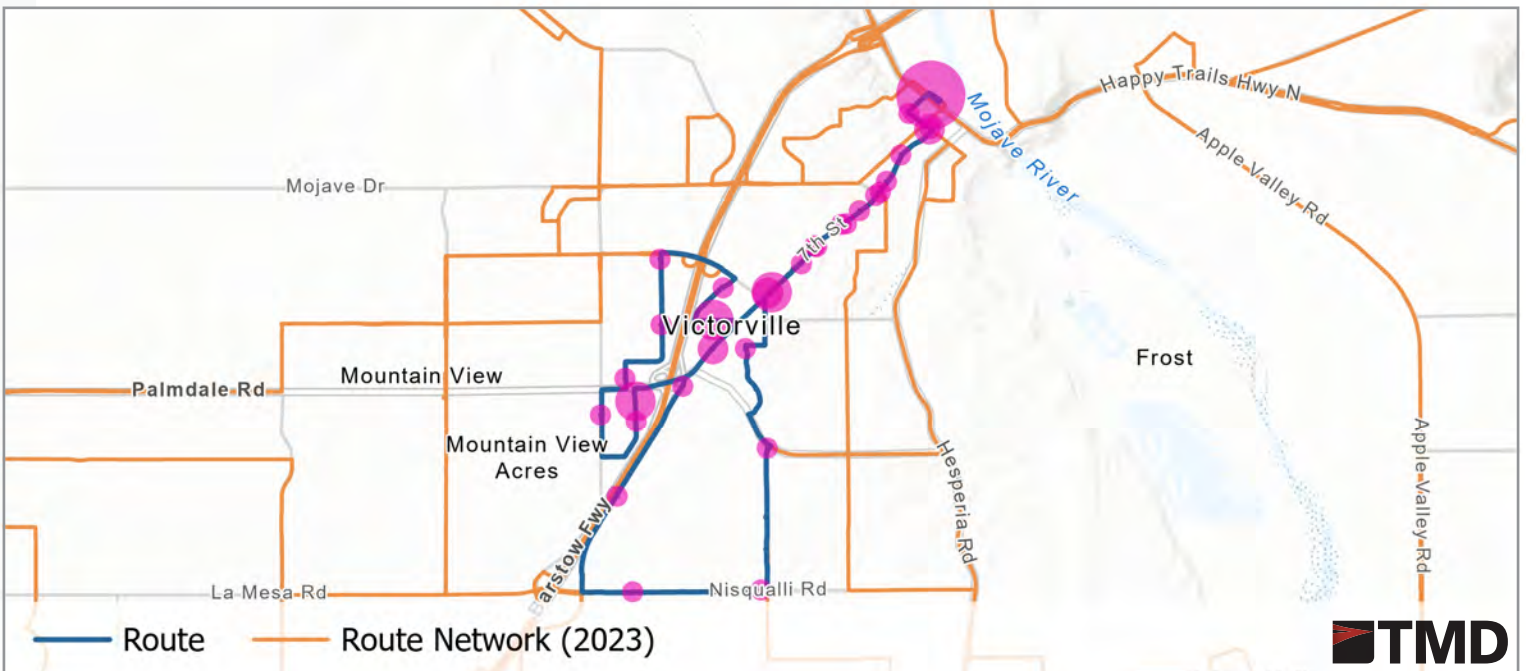
59.00%

78.20%

75.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 64

Hesperia Post Office - Super Target

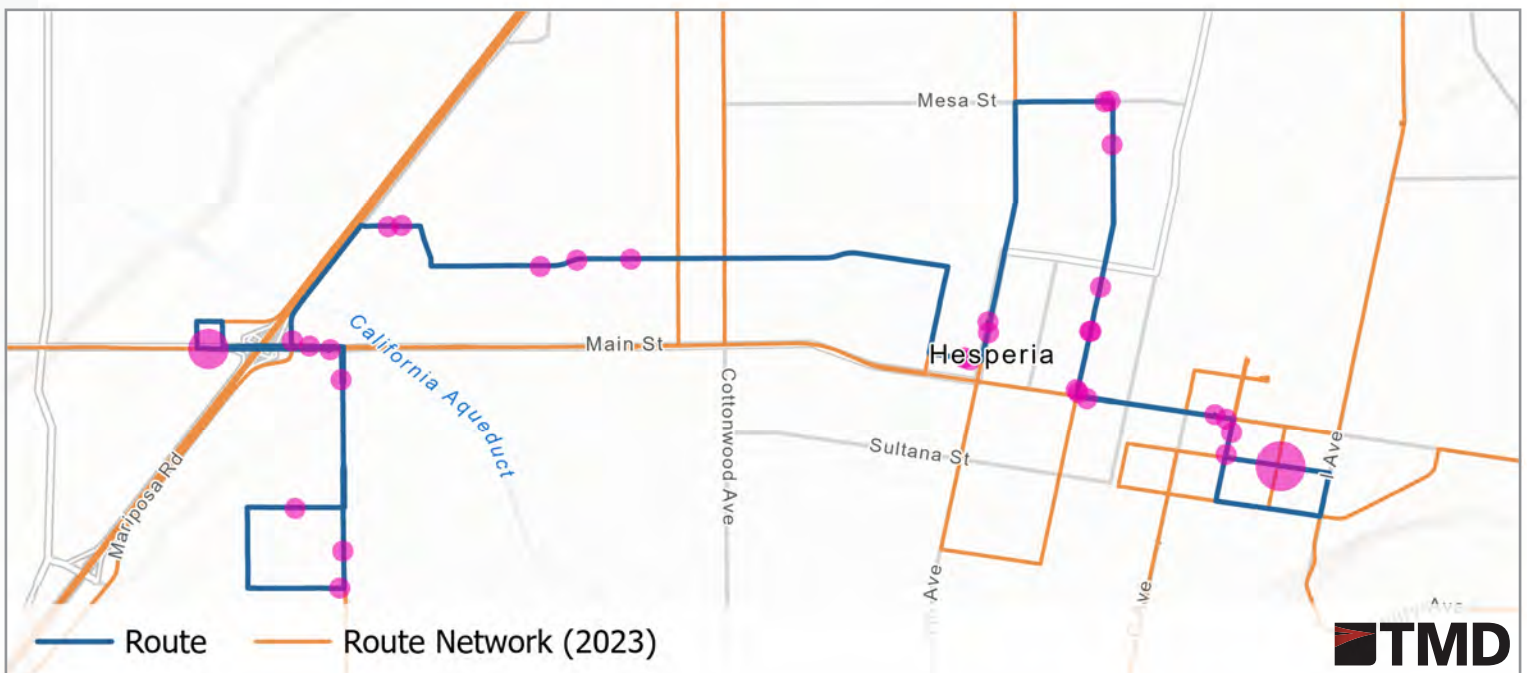
Hesperia/Oak Hills



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:14 AM to 8:54 PM	7:07 AM to 7:53 PM	8:07 AM to 5:56 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	94 16 System Rank	65 14 System Rank	49 12 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	2.2 4.55 System Average	1.2 2.98 System Average	1.1 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$66.20 \$26.43 System Average	\$116.10 \$45.28 System Average	\$134.20 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	2.10% 7.00% System Average	1.40% 3.00% System Average	1.20% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	70.00%	68.60%	74.70%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Data Source: APC, Productivity Index Report, OTP, GTFS- 2023



Route 66

Hesperia East Deviation

Hesperia/Oak Hills



Route Performance:

Weekday

Saturday

Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

120

120

120

Hours of Operation

The hours the bus is in service

6:09 AM to 9:06 PM

7:07 AM to 7:43 PM

8:15 AM to 4:54 PM

Daily Passenger Boardings

The average number of daily boardings

9

31 System Rank

4

28 System Rank

3

28 System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

3.3

4.55 System Average

1.7

2.98 System Average

1.7

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$45.80

\$26.43 System Average

\$95.60

\$45.28 System Average

\$87.20

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

3.30%

7.00% System Average

1.70%

3.00% System Average

2.00%

3.00% System Average

On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

Weekday Passenger Boardings

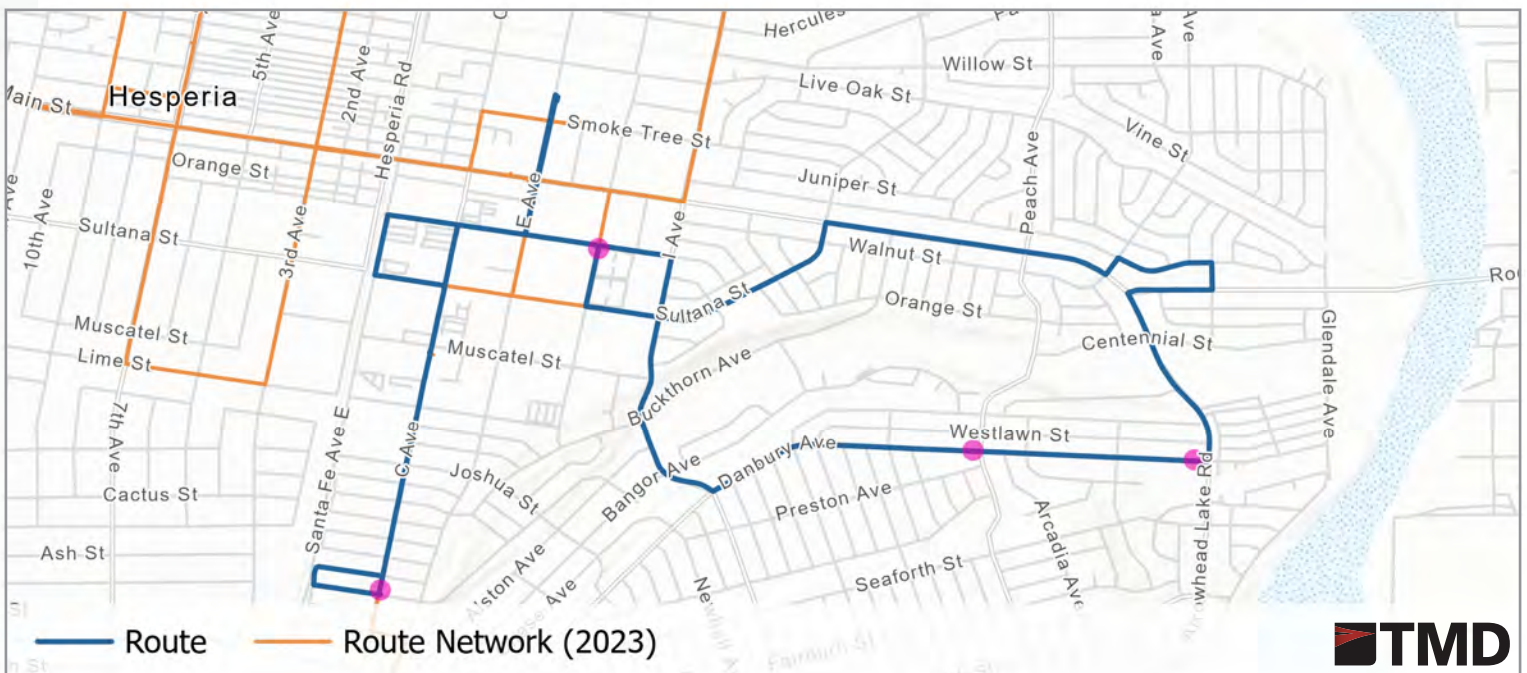
Ridership: ● 0-5

● 6-10

● 11-25

● 26-50

● 51-100



Route 68

Hesperia Post Office - Super Target

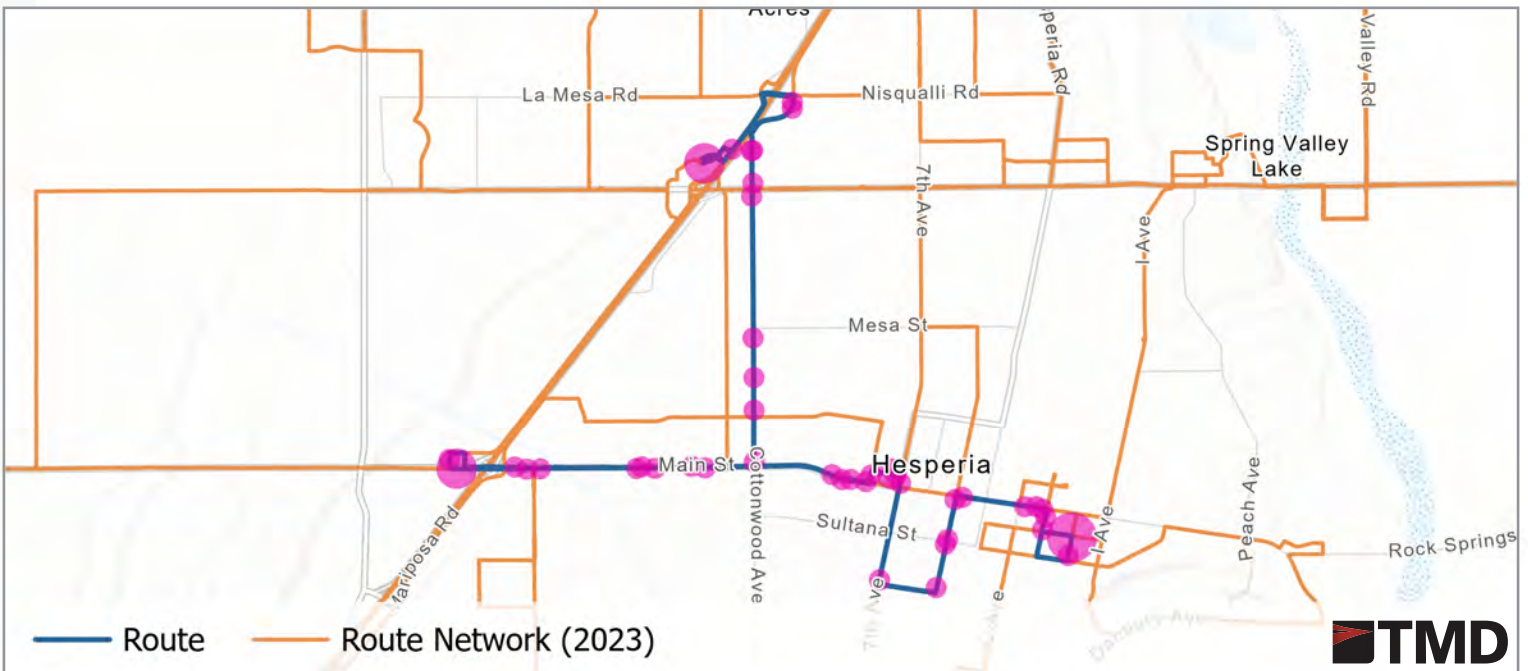
Hesperia/Oak Hills



Route Performance:	Weekday	Saturday	Sunday
Peak Frequency (min.) <small>The average time, in minutes, between buses</small>	60	60	60
Hours of Operation <small>The hours the bus is in service</small>	6:15 AM to 9:11 PM	7:07 AM to 8:06 PM	8:07 AM to 6:11 PM
Daily Passenger Boardings <small>The average number of daily boardings</small>	155 11 System Rank	112 3 System Rank	67 6 System Rank
Productivity (Boardings per Revenue Hour) <small>The number of boardings divided by the number of revenue hours the bus is in operation</small>	4.2 4.55 System Average	2.2 2.98 System Average	2 2.54 System Average
Cost Per Passenger <small>The total cost to operate the route per day, divided by average daily boardings</small>	\$33.90 \$26.43 System Average	\$65.50 \$45.28 System Average	\$70.10 \$46.52 System Average
Fare Box Recovery <small>Passenger revenue divided by the operating costs</small>	4.30% 7.00% System Average	2.50% 3.00% System Average	2.40% 3.00% System Average
On-Time Performance <small>The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)</small>	71.00%	71.80%	82.10%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 111

Barstow - Fort Irwin
NTC Commuter



Route Performance: Weekday Saturday Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

60

Hours of Operation

The hours the bus is in service

4:15 AM to 5:42 PM

Daily Passenger Boardings

The average number of daily boardings

14

30 System Rank

System Rank

System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

7.5

4.55 System Average

2.98 System Average

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$22.70

\$26.43 System Average

\$45.28 System Average

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

53.70%

7.00% System Average

3.00% System Average

3.00% System Average

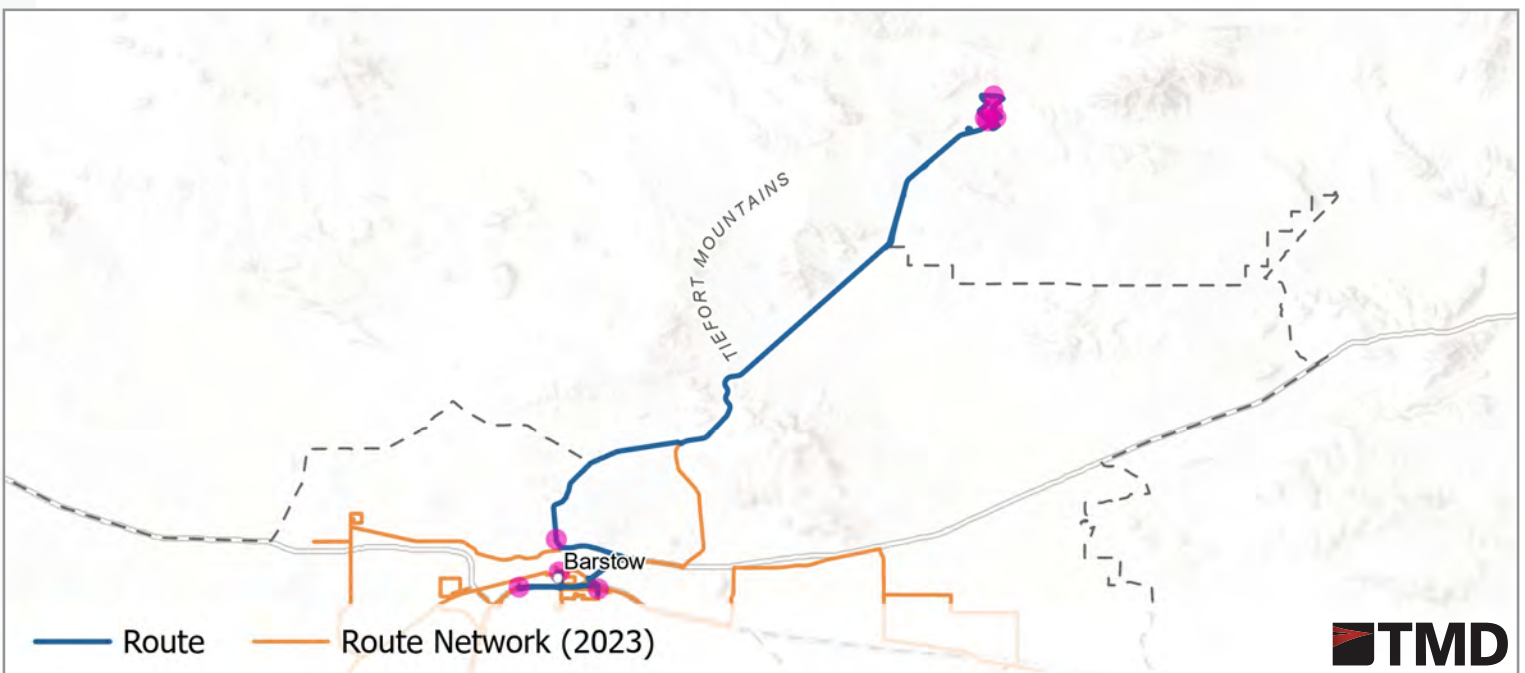
On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

59.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 114

Hesperia - Fort Irwin
NTC Commuter



Route Performance: Weekday Saturday Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

30

Hours of Operation

The hours the bus is in service

3:45 AM to 6:58 PM

Daily Passenger Boardings

The average number of daily boardings

22

28 System Rank

System Rank

System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

7.9

4.55 System Average

2.98 System Average

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$20.60

\$26.43 System Average

\$45.28 System Average

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

59.20%

7.00% System Average

3.00% System Average

3.00% System Average

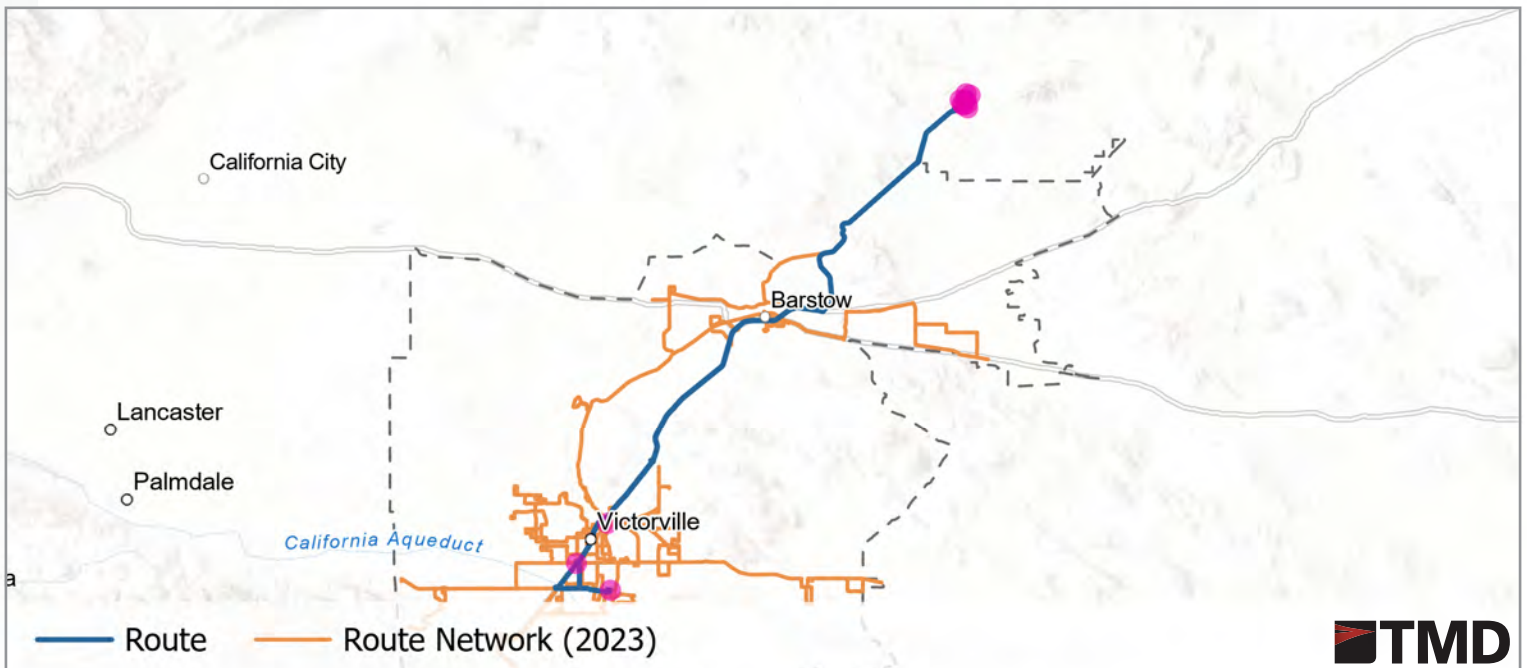
On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

74.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 115

Helendale - Fort Irwin

NTC Commuter



Route Performance: Weekday Saturday Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

One-Trip per direction/day

Hours of Operation

The hours the bus is in service

4:45 AM to 6:42 PM

Daily Passenger Boardings

The average number of daily boardings

6

32 System Rank

System Rank

System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

5.6

4.55 System Average

2.98 System Average

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$29.90

\$26.43 System Average

\$45.28 System Average

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

40.60%

7.00% System Average

3.00% System Average

3.00% System Average

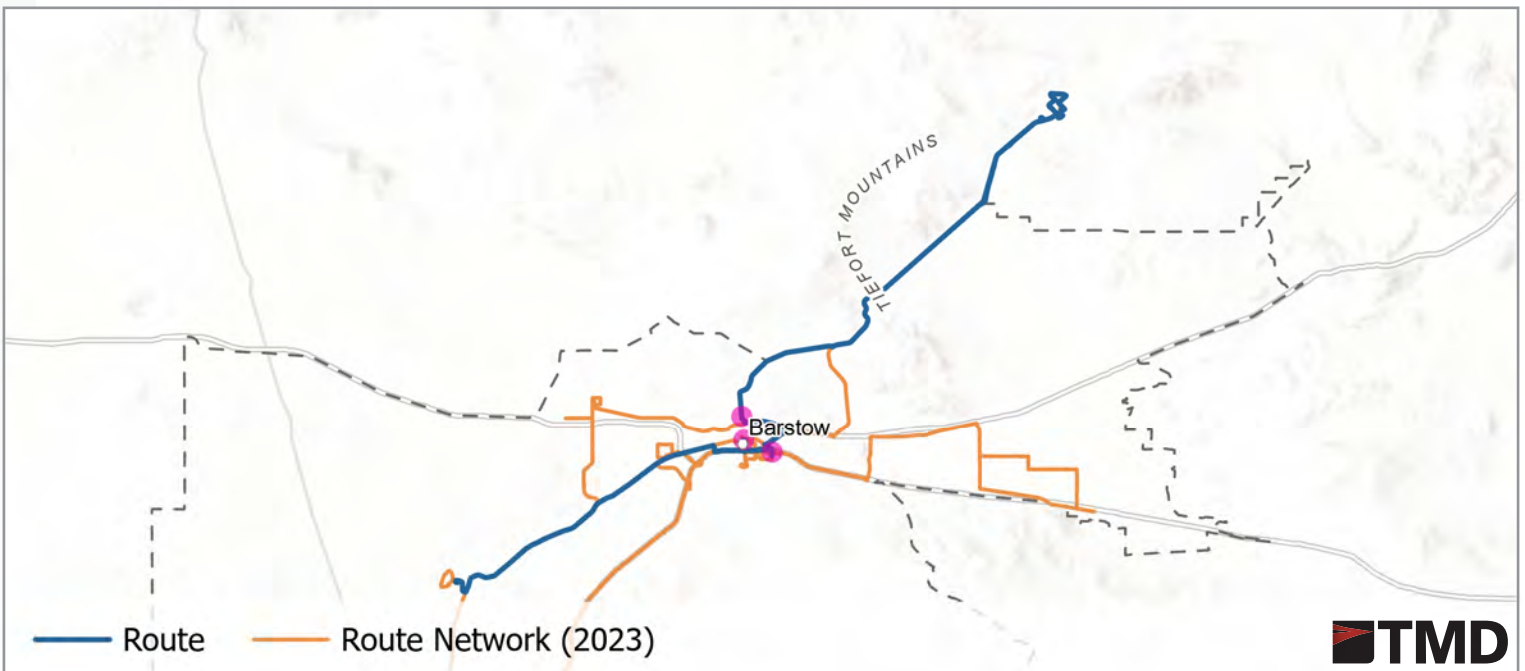
On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

78.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



Route 118

Fort Irwin - Barstow - Hesperia

NTC Commuter



Route Performance: Weekday Saturday Sunday

Peak Frequency (min.)

The average time, in minutes, between buses

One-Trip/day

Hours of Operation

The hours the bus is in service

6:10 PM (Single Trip)

Daily Passenger Boardings

The average number of daily boardings

1

34 System Rank

System Rank

System Rank

Productivity (Boardings per Revenue Hour)

The number of boardings divided by the number of revenue hours the bus is in operation

1

4.55 System Average

2.98 System Average

2.54 System Average

Cost Per Passenger

The total cost to operate the route per day, divided by average daily boardings

\$159.10

\$26.43 System Average

\$45.28 System Average

\$46.52 System Average

Fare Box Recovery

Passenger revenue divided by the operating costs

7.80%

7.00% System Average

3.00% System Average

3.00% System Average

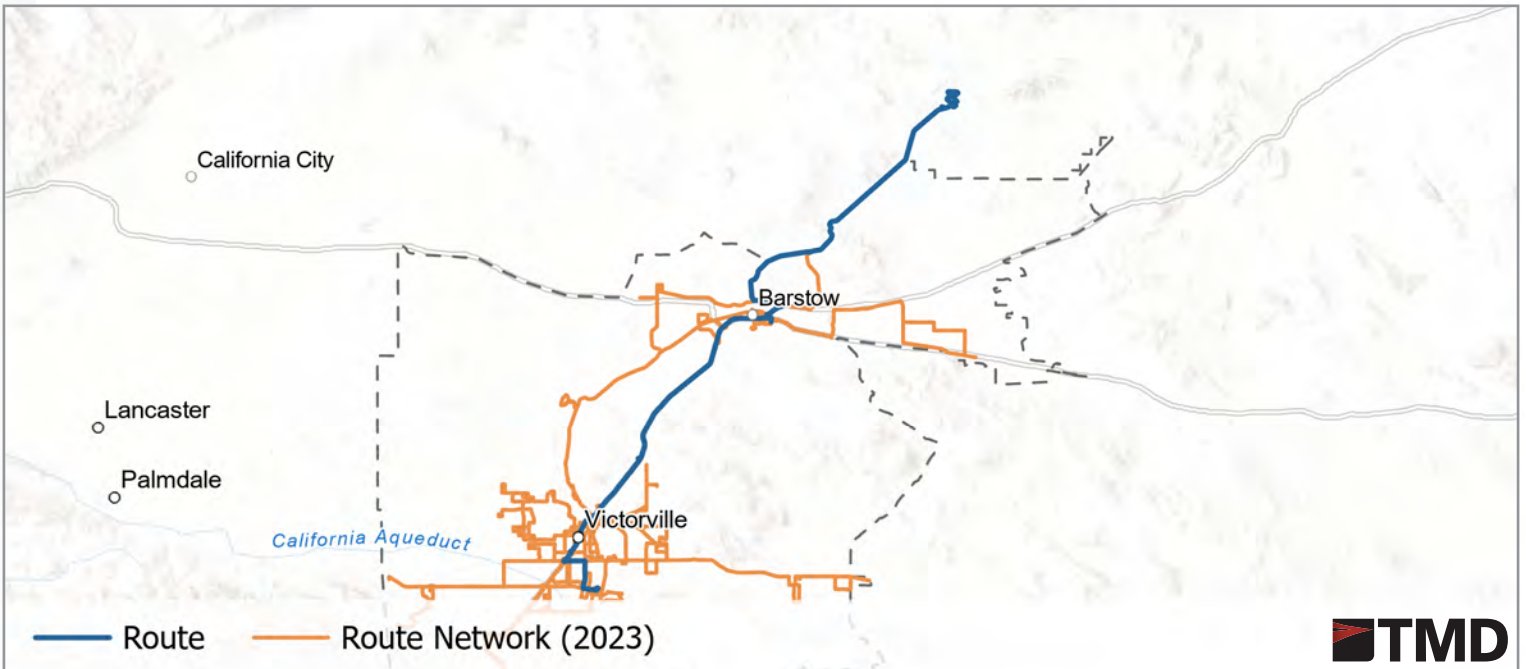
On-Time Performance

The percentage of trips that arrive on time (no more than 1 minute early or 5 minutes late)

58.00%

Weekday Passenger Boardings

Ridership: ● 0-5 ● 6-10 ● 11-25 ● 26-50 ● 51-100



2.7 Demand Response Service

In addition to fixed route service, VVTA provides demand response service as well. VVTA's demand response services are composed of its ADA Paratransit services (ADA Direct Access) and microtransit service (Micro-Link).

Direct Access is provided to origins and destinations within $\frac{3}{4}$ of a mile of VVTA fixed-route service. Fees are based on the zones in which passengers travel, costs range from \$2.50 in Zone 1 to \$6.00 in Zone 3. Micro-Link service is available to all users and serves two areas, one in Victorville and one in Hesperia. One-way trips on Micro-Link are \$2.00.

2.7.1 ORIGINS AND DESTINATION

Destinations for Direct Access trips were fairly evenly distributed across the Direct Access service area. Major concentrations of trip destinations were primarily found at employment agencies, places of employment and at the San Bernadino County Transitional Assistance Department. Origins and destinations for Micro-Link were not analyzed as this service is still in the pilot phase.

Figure 33: Paratransit Trip Destinations, Victorville

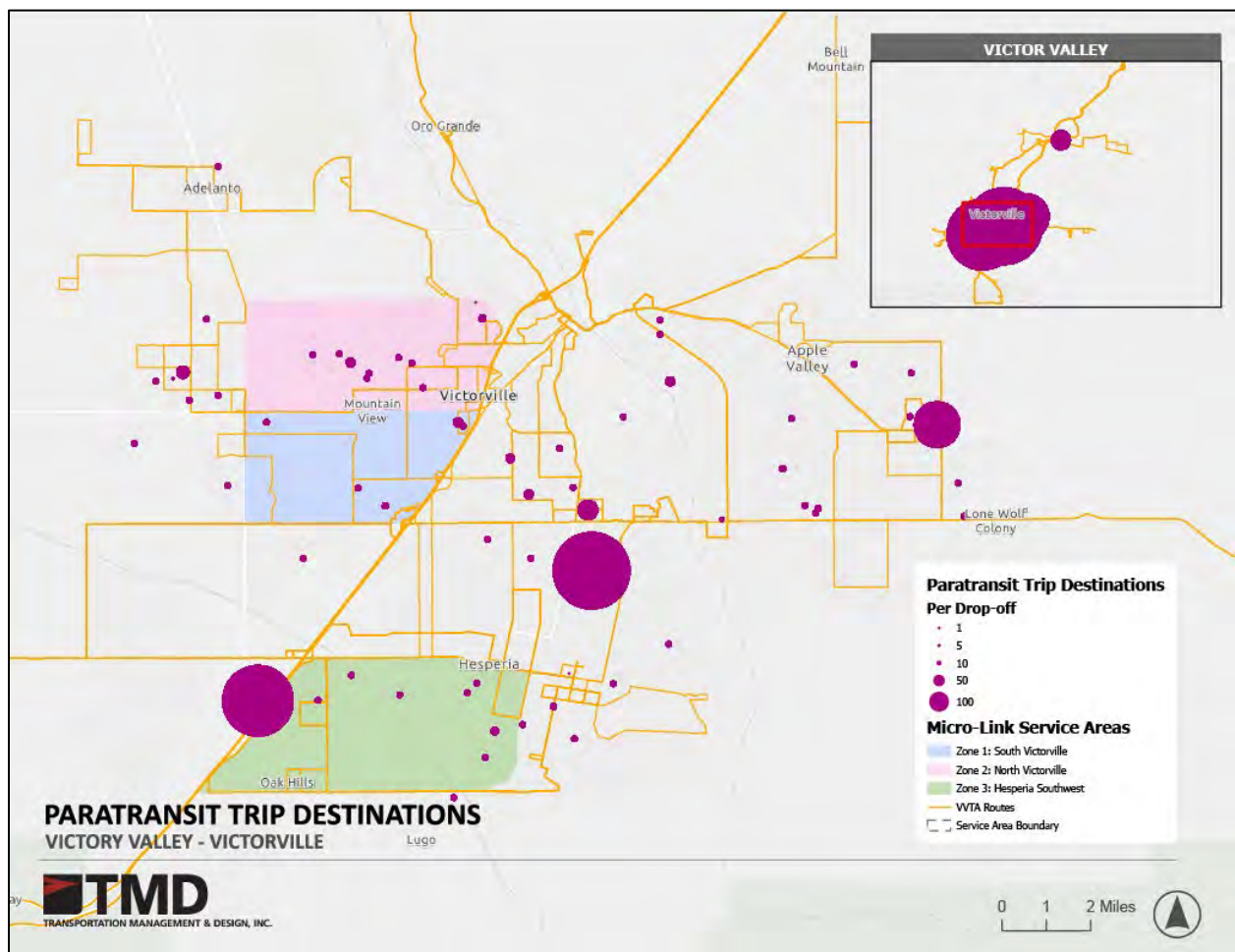
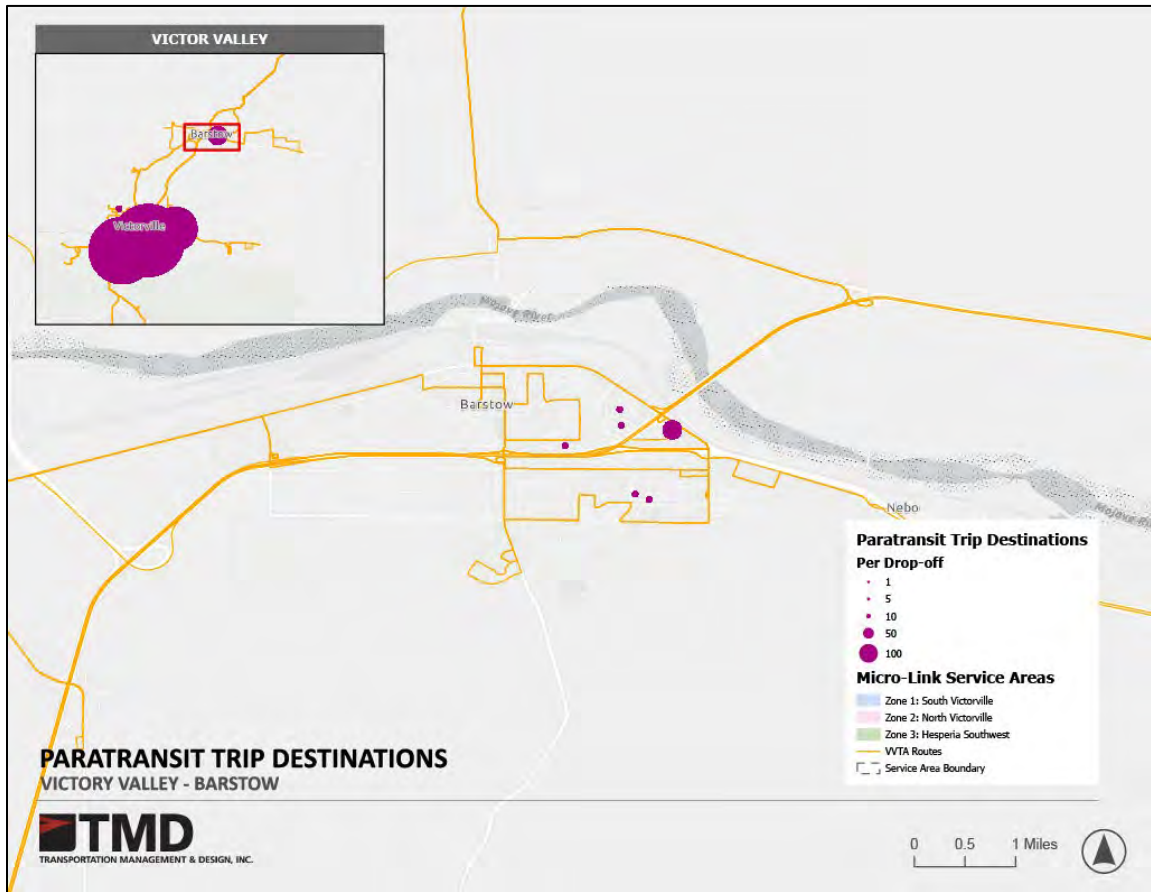


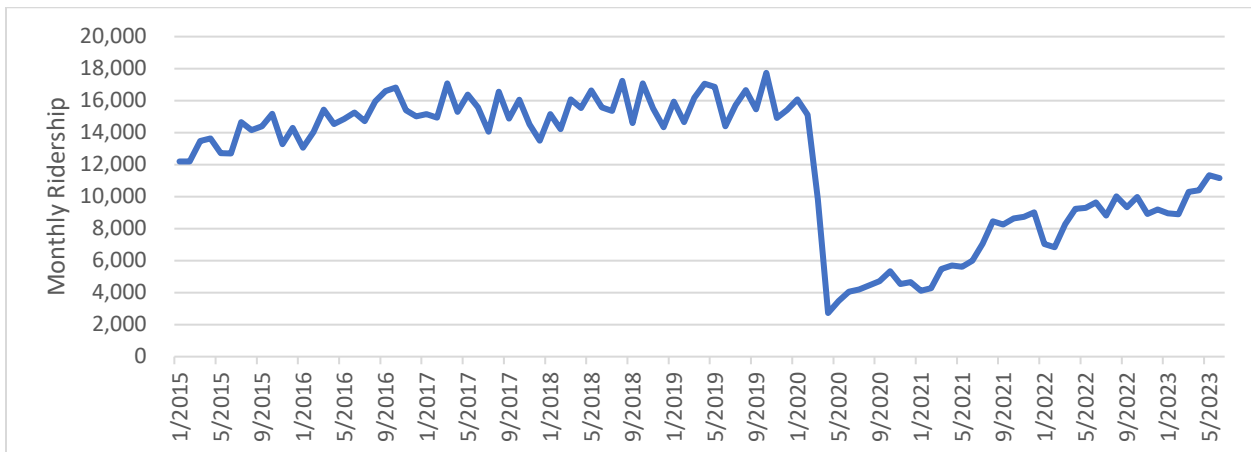
Figure 34: Paratransit Trip Destinations, Barstow



2.7.2 PERFORMANCE

As on fixed-route services, ridership on demand response services was significantly impacted by the COVID-19 pandemic with ridership dropping 44 percent from 190,975 trips in 2019 to 106,581 in 2022. Ridership demand has been increasing steadily since the initial drop in 2020 with ridership growing in both 2021 and 2022. Ridership continues to grow in the first six months of 2023 with ridership up 22 percent when compared to the same time period in 2022.

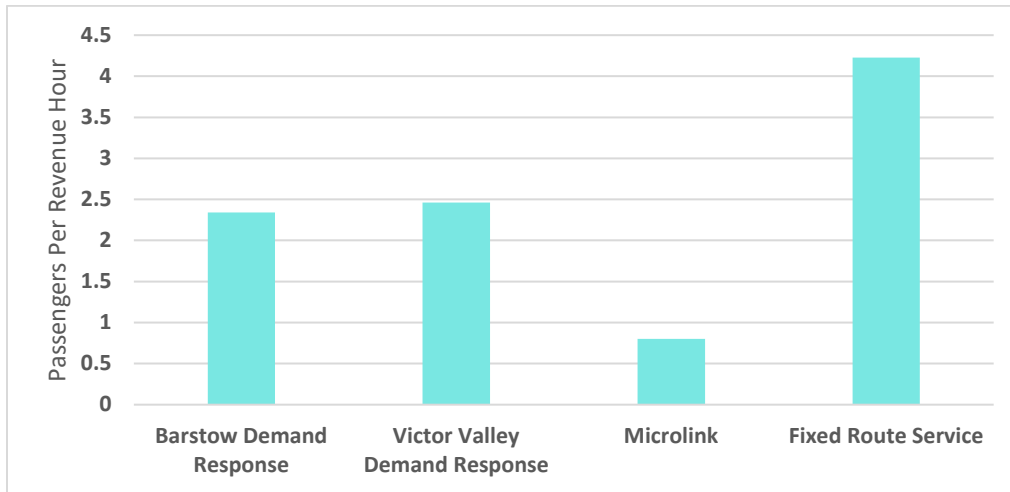
Figure 35 - Monthly Ridership, VVTA Demand Response Services



2.7.3 PRODUCTIVITY

Due to the nature of demand response services they tend to carry less passengers per revenue hour than regular fixed route services. Productivity on Direct Access was 2.3 passengers per hour in Barstow and 2.5 passengers per hour in Victor Valley. Productivity on Direct Access was not significantly lower than the average productivity on VVTA fixed route service. Productivity on Micro-Link was less than that seen on the more traditional Direct Access service, Micro-Link provided 0.8 passenger trips per revenue hour.

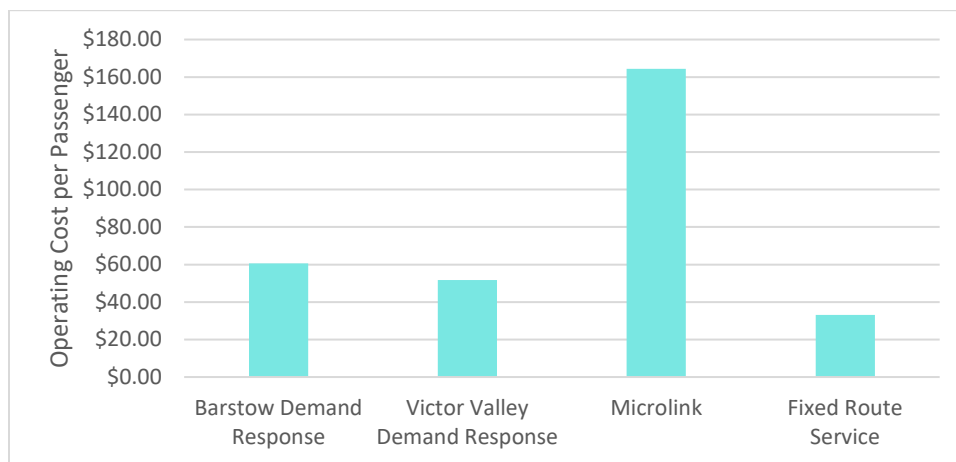
Figure 36 - VVTA Demand Response Productivity FY 2023



2.7.4 FINANCIAL PERFORMANCE

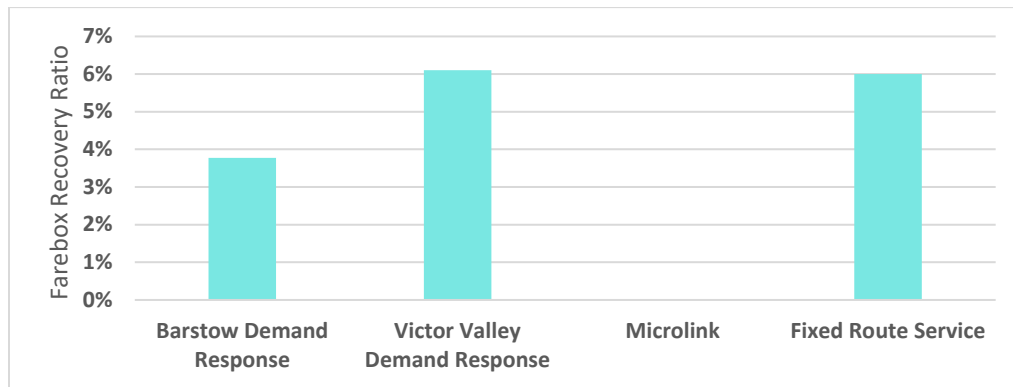
Service on demand response services is more expensive to provide than traditional fixed-route service. Operating costs per passenger on Direct Access were \$60.54 in Barstow and \$51.67 in Victor Valley. Service is significantly more expensive to provide on the Micro-Link service with each trip costing \$164.42. These are all more expensive to provide than fixed route services, which averages \$33.17 in operating costs per passenger.

Figure 37 - Operating Cost per Passenger, Demand Response Services FY 2023



Since Direct Access can charge more per trip based on the zones travelled through, demand response recovers similar levels of its operating expenses through fare revenue as fixed route services. Direct Access in Victor Valley has a farebox recovery ratio of 6.1 percent, slightly higher than fixed route service which recovers 6.0 percent of its operating expenses through fare revenues. Farebox recovery ratios are lower for Barstow Direct Access services (3.8 percent) and Micro-Link services (0.0 percent).

Figure 38 - Farebox Recovery Ratio, Demand Response Services, FY 2023



2.8 Capital Assets

The purpose of this Capital Inventory section is to provide a clear understanding of the assets owned by Victor Valley Transit Authority (VVTA) and their conditions as well as summarizing the FY 23-24 capital program and FY24-29 Fleet Replacement Plan. Included in VVTA’s capital assets are buses, vans, non-revenue vehicles, bus stop infrastructure (signs, benches, shelters, trash receptacles, and lighting), and administrative and maintenance facilities.

2.8.1 CAPITAL ASSET INVENTORY

The capital assets include the revenue vehicle fleet, non-revenue fleet, other vehicles, transfer facilities, bus stops, and the operations and maintenance facilities in Barstow and Hesperia. Additionally, a description of the capital program is included as part of the capital assets. Table 10 provides a summary of VVTA’s fleet inventory.

Table 10 – VVTA Fleet Inventory Summary 2023

Capital Type	Total
Bus	78
Demand Response Vehicle	41
Non-Revenue Vehicle	49
Vanpool	272
Community Transit	4
Out of Service Vehicles	24
Operations and Maintenance Facilities	2
Bus Stops	1,701

2.8.1.1 Fixed Route Fleet

There are 78 vehicles in VVTA’s fixed route fleet of which 65 vehicles are found within the Hesperia Division while 13 are in the Barstow Division. The Fixed Route Fleet is used for traditional fixed-route bus service, and flex service. The fixed route revenue fleet consists primarily of 40-foot NABI low floor buses, 40-foot El Dorado buses, 40-foot New Flyer Xcelsior buses, 35-foot El Dorado buses, and 32 – foot El Dorado EZ Rider II buses. The age of the fleet ranges from 2 to 15 years old. In terms of service years, nine vehicles exceed their 12-year useful life. Most of the current fleet uses compressed natural gas (CNG) as a fuel source, but there are several gasoline powered buses used for paratransit services and battery electric buses for MB uses in the fleet. The fixed route fleet inventory is presented in

Table 11.

Table 11 – Fixed Route Fleet Inventory 2023

Year	Make and Model	Length	Capacity	Fuel	Number of Vehicles
2008	NABI	40 feet	40 Seating / 15 Standing	CNG	4
2010	NABI	40 feet	40 Seating / 15 Standing	CNG	5
2014	El Dorado Axess	40 feet	40 Seating / 20 Standing	CNG	9
2015	El Dorado Axess	40 feet	40 Seating / 20 Standing	CNG	1
2015	MCI D4500	45 feet	53 Seating / 26 Standing	CNG	5
2016	Aerotech 240	24 feet	20 Seating / 10 Standing	Gasoline (GA)	3
2016	El Dorado Axess	40 feet	40 Seating / 20 Standing	CNG	3
2016	El Dorado XHF	35 feet	36 Seating / 20 Standing	CNG	2
2017	Aerotech 240 MB	24 feet	20 Seating / 0 Standing	CNG	1
2018	El Dorado Axess- CB	40 feet	40 Seating / 20 Standing	CNG	1
2018	El Dorado Axess-35	35 feet	35 Seating / 31 Standing	CNG	4
2018	El Dorado Axess-40	40 feet	40 Seating / 20 Standing	CNG	11
2019	New Flyer Xcelsior-40	40 feet	40 Seating / 20 Standing	Battery Electric Battery (BEB)	7
2020	El Dorado Axess	40 feet	40 Seating / 20 Standing	CNG	2
2020	El Dorado EZ Rider II	32 feet	33 Seating / 15 Standing	CNG	6
2021	El Dorado Axess 40	40 feet	40 Seating / 20 Standing	CNG	2
2021	El Dorado EZ Rider II	32 feet	27 Seating / 15 Standing	CNG	4
2021	El Dorado Axess-35	35 feet	31 Seating / 16 Standing	CNG	3
2021	New Flyer Xcelsior-40	40 feet	40 Seating / 20 Standing	BEB	4

2.8.1.2 Demand Response Fleet

There are 41 vehicles in the VVTA’s demand response fleet, seven of which are based in the Barstow Division and 34 to the Hesperia Division. Most vehicles consist of 24-foot El Dorado Aerotech 240 vehicles. The oldest vehicles in the demand response fleet are over 10 years old. Most vehicles run on compressed natural gas (78 percent), while the remaining use gasoline as their fuel source. Caltrans holds the title to two 2011 El Dorado Aerotech 240 and two 2017 El Dorado Aerotech 240 vehicles. VVTA is the owner of the remaining vehicles. The demand response fleet is used for their ADA paratransit services. Table 12 presents VVTA’s demand response fleet inventory.

Table 12 – Demand Response Fleet Inventory 2023

Year	Make and Model	Length	Capacity	Fuel	Number of Vehicles
2010	ARBOCS	26 feet	17 Seating / 0 Standing	CNG	5
2010	Dodge Caravan	17 feet	5 Seating / 0 Standing	GA	2
2011	El Dorado Aerotech 240	25 feet	16 Seating / 0 Standing	GA	2
2015	El Dorado Aerotech 240	24 feet	16 Seating / 8 Standing	CNG	2
2016	El Dorado Aerotech 240	24 feet	20 Seating / 10 Standing	CNG	4
2016	El Dorado Aerotech 240 SUO MB	24 feet	20 Seating / 10 Standing	GA	5
2017	El Dorado Aerotech 240	24 feet	20 Seating / 10 Standing	CNG	9
2019	El Dorado Aerotech 240/16	24 feet	16 Seating / 10 Standing	CNG	12
2021	Dodge Lonestar	21 feet	9 seating / 0 standing	GA	3

2.8.1.3 Vanpool Fleet

There are 272 vanpool vehicles in VVTA’s capital inventory, 267 of which are from the Enterprise contract and 5 of which are from the Airport Van Rental contract. The majority of vehicles consist of Ford Transit T-150 (of various years). The oldest vehicles are 9 years old and all, but one vehicle runs on gasoline. VVTA has one hybrid gasoline vanpool vehicle, a 2019 Chrysler Pacifica Hybrid. Table 13 reflects VVTA’s vanpool fleet inventory².

Table 13 – Vanpool Fleet Inventory 2023

Year	Make and Model	Length	Capacity (Seats)	Fuel	Contract	Number of Vehicles
2014	Chevy Express 2500	18 feet	12	GA	Enterprise	1
2015	Chevy Express 2500	18 feet	12	GA	Enterprise	12
2016	Chevy Express 2500	18 feet	12	GA	Enterprise	4
2017	Ford Transit T-350 Med	18 feet	12	GA	Enterprise	2
2018	Chrysler Pacifica	17 feet	7	GA	Airport Van Rental	1
2018	Ford Expedition	17 feet	8	GA	Enterprise	2
2018	Ford Transit T-150 Low	18 feet	12	GA	Enterprise	7
2018	Ford Transit T-150 Med	18 feet	12	GA	Enterprise	12
2018	Ford Transit T-350 Low	18 feet	12	GA	Enterprise	3
2018	Kia Sedona	16 feet	7	GA	Airport Van Rental	1
2019	Chevy Traverse	16 feet	7	GA	Enterprise	4
2019	Chrysler Pacifica	17 feet	7	GA	Enterprise	2
2019	Chrysler Pacifica Hybrid	17 feet	7	Hybrid Gasoline	Airport Van Rental	1
2019	Dodge Caravan	16 feet	7	GA	Enterprise (8) / Airport Van Rental (1)	9
2019	Dodge Durango	17 feet	7	GA	Enterprise (8) / Airport Van Rental (1)	9
2019	Ford Explorer	16 feet	7	GA	Enterprise	6
2019	Ford Flex	17 feet	7	GA	Enterprise	11
2019	Ford Transit T-150	18 feet	12	GA	Enterprise	34
2019	Infiniti QX60	17 feet	7	GA	Enterprise	1

² VVTA’s vanpool fleet length and capacity information are not available.

Year	Make and Model	Length	Capacity (Seats)	Fuel	Contract	Number of Vehicles
2019	Nissan Pathfinder	16 feet	7	GA	Enterprise	1
2019	Toyota Sienna	17 feet	7	GA	Enterprise	1
2019	Volkswagen Atlas	16 feet	7	GA	Enterprise	3
2020	Buick Enclave	18 feet	7	GA	Enterprise	17
2020	Chevy Traverse	16 feet	7	GA	Enterprise	12
2020	Chrysler Voyager	17 feet	7	GA	Enterprise	5
2020	Dodge Durango	17 feet	7	GA	Enterprise	13
2020	Ford Expedition	17 feet	8	GA	Enterprise	4
2020	Ford Explorer	16 feet	7	GA	Enterprise	3
2020	Ford Transit T-150	18 feet	12	GA	Enterprise	34
2020	Nissan Pathfinder	16 feet	7	GA	Enterprise	11
2020	Toyota Sienna	17 feet	7	GA	Enterprise	2
2021	Chevy Traverse	16 feet	7	GA	Enterprise	2
2021	Chrysler Pacifica	17 feet	7	GA	Enterprise	1
2021	Dodge Durango	17 feet	7	GA	Enterprise	4
2021	Ford Expedition	17 feet	8	GA	Enterprise	2
2021	Ford Explorer	16 feet	7	GA	Enterprise	7
2021	Ford Transit T-350	18 feet	15	GA	Enterprise	7
2021	Volkswagen Atlas	16 feet	7	GA	Enterprise	20

2.8.1.4 Non-Revenue Fleet

VVTA has 49 non-revenue fleet vehicles, six of which belong to the Barstow Division while 43 belong to the Hesperia Division. Non-revenue vehicles include administrative and operations vehicles. The non-revenue fleet consists of a variety of vehicle types. The vehicles' age of the fleet ranges from 18 years old to less than two years old. Several nonrevenue fleet vehicles are hybrids or electric, while others run on gas or compressed natural gas. VVTA owns all the vehicles in the non-revenue fleet. The inventory of the non-revenue fleet is found in Table 14.

Table 14 – Non-Revenue Fleet Inventory 2023

Year	Make and Model	Length	Capacity	Fuel	Number of Vehicles
2005	Ford Escape	15 feet	5 Seating / 0 Standing	GA	1
2007	Ford F-150	18 feet	6 Seating / 0 Standing	GA	1
2008	Ford Escape	15 feet	5 Seating / 0 Standing	GA	1
2010	Dodge Caravan - Sup	17 feet	5 Seating / 0 Standing	GA	1
2011	Ford Flex	17 feet	7 Seating / 0 Standing	GA	1
2011	Honda Civic	15 feet	5 Seating / 0 Standing	CNG	2
2012	Ford Escape	15 feet	5 Seating / 0 Standing	GA	2
2012	Ford Flex	17 feet	7 Seating / 0 Standing	GA	1
2013	Honda Civic	15 feet	5 Seating / 0 Standing	CNG	2
2013	Honda Civic	15 feet	5 Seating / 0 Standing	CNG	2
2014	Polaris GEM	11 feet	4 Seating / 0 Standing	EB	1
2016	Ford Flex	17 feet	7 Seating / 0 Standing	GA	1

Year	Make and Model	Length	Capacity	Fuel	Number of Vehicles
2016	Ford Focus	14 feet	5 Seating / 0 Standing	EB	2
2017	Nissan Leaf	15 feet	5 Seating / 0 Standing	EB	4
2018	Ford Explorer - VVTA	17 feet	7 Seating / 0 Standing	GA	4
2020	Ford Explorer- VVTA	16 feet	7 Seating / 0 Standing	GA	2
2020	Ford Fusion - VVTA 938	-	5 Seating / 0 Standing	Hybrid Gasoline (HG)	3
2020	GMC Terrain	-	-	UNL	1
2021	Ford Explorer VVTA	-	-	GA	1
2021	Ford Transit Connect	-	-	GA	3
2022	Chrysler Voyager	-	-	GA	2
2022	Ford Escape	-	-	GA	10
2022	Ford F-150	-	-	GA	1
2022	Ford Maverick	-	-	GA	1
2022	GMC Terrain	-	-	GA	1

2.8.1.5 Other Vehicles

2.8.1.5.1 Community Transit

VVTA actively collaborates with entities dedicated to directly supporting underserved minority communities, including those with limited English proficiency (LEP). These organizations encompass schools and non-profit entities, engaging directly with individuals from minority backgrounds. Through the VVTA Mobility Management department and the development of its nonprofit transit brokerage program, VVTA offers transit service to underserved and LEP populations, such as those who receive services from the Abundant Living and/or Foothill AIDS nonprofit. Two vehicles are dedicated to each nonprofit.

2.8.1.5.2 Out of Service

As of July 2023, VVTA has a total of 25 vehicles out of service. Fourteen have been removed from service. Eight are on long-term hold, which means they are not in service due to repairs. Three vehicles are on “Special Assignment” which indicates that they are training buses.

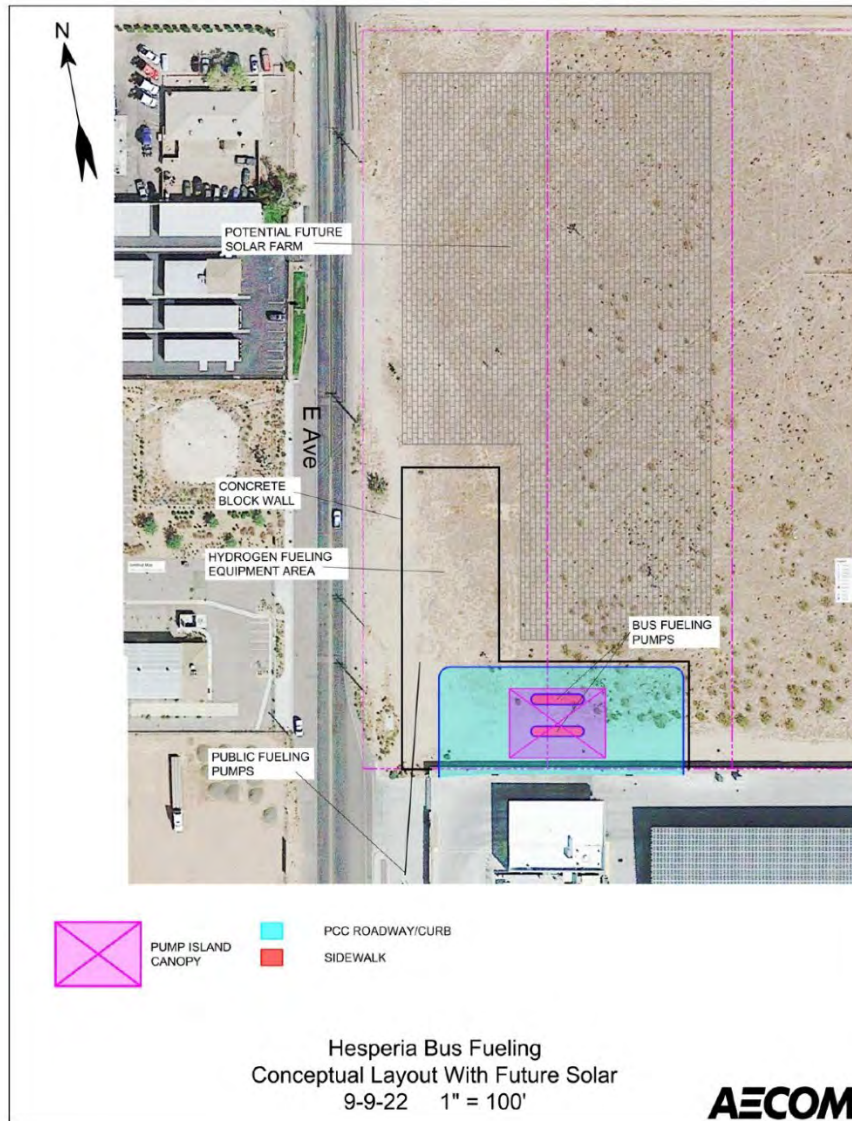
2.8.1.6 Operations and Maintenance (O&M) Facilities

VVTA’s primary O&M facility is in the City of Hesperia at 17150 Smoke Tree Street. This facility accommodates VVTA's administrative headquarters and offers dedicated areas for fleet maintenance and storage. Another maintenance hub for VVTA operations is in the City of Barstow. On August 11, 2020³, VVTA opened a new 5.5-acre O&M facility located on 2641 West Main Street. This establishment serves as a modern, energy-efficient replacement for the former site on Santa Fe Avenue. This facility is adjacent to VVTA’s CNG/liquefied natural gas (LNG) public Fuel Station at 100 North Sandstone Court.

³ Victor Valley Transit Authority (n.d.), VVTA Opens New Facility on Route 66 in Barstow, Accessed: August 25, 2023. Available at: <https://vvta.org/barstow-route66/>

Currently, VVTA is undergoing the environmental clearance process to open a new turnkey hydrogen fueling station located in the City of Hesperia. The hydrogen fueling station would be accessible for both public and private use. The lot on which the hydrogen fueling station would be located is approximately 1.6 acres and would have the capacity to serve up to 20 buses every five to seven days and serve up to 20 cars daily. See Figure 39 for a conceptual layout of the proposed lot for THE Hydrogen Fueling Station.

Figure 39 – VVTA Facility Expansion



Source: AECOM 2022

2.8.1.7 Transfer Facility

The main transfer point in the VVTA service area is the Victor Valley Transportation Center in the City of Victorville. Located off D Street and 6th Street, the transfer center is equipped with six berths in a shallow sawtooth configuration. Customer amenities at the Victorville Transfer Center Transfer Center include bus stop signs, bus shelters, benches, and trash receptacles. The routes using the

Victorville Transfer Center include Routes 15, 22, 31, 32, 41, 50, 50X, 52, 55, 56, 114 and 118. The Victorville Transfer Center is adjacent to the Greyhound Victorville Station and the Amtrak Southwest Chief's Victorville Station. The Barstow Transfer Center⁴ is located adjacent to City Hall near the intersection of E Mountain View Street and Belinda Avenue. The routes using the Barstow Transfer Center include Routes 1, 2, 3, 6, 28, and 29.

There are several other timed transfer locations throughout the VVTA service area including Victor Valley College in Victorville, the Apple Valley Post Office in Apple Valley, the Hesperia Post Office in Hesperia, and Stater Brothers Market in Adelanto (US Route 395 and Palmdale Road). The Mall of Victor Valley in Victorville is not a timed transfer location, although several routes do connect at this location.

The bus stop at Victor Valley College is also a major destination and transfer point. The bus stop includes five bus berths in a shallow sawtooth configuration. Amenities at the stop include bus stop signs, a sheltered waiting area, benches, a water fountain, and trash receptacles. Routes using the bus stop include Routes 42, 43, 45, 50, 50x, 53, and 55.

A shelter and trash receptacle are located at the Apple Valley Post Office on-street bus stop. The stop is served by Routes 23, 40, 41, 43, and 47. The Hesperia Post Office is served by two bus stops located catty-corner from each other. Amenities at the stops include a bus stop sign, bus shelter, benches, and trash receptacle. The two bus stops are served by Routes 25, 50, 64, 66 and 68. The bus stop at the Mall of Victor Valley has shelters and access to the mall for waiting. The bus stop serves Routes 21P, 21W, 52, 53, 54, and 68.

2.8.1.8 Bus Stop Information

There are 1,701 bus stops within the VVTA service area, not including deviated bus stop locations. Figure 40 presents VVTA's bus stop sign. The 2017 Comprehensive Operation Analysis (COA) summarized amenities guidelines for the placement of benches and shelters at bus stops. These guidelines state that all bus stops should have bus stop signs, bus stops that have more than 25 boardings per day should have benches, and bus stops that have more than 50 passengers per day should have a shelter. All the transfer point bus stops meet the bus ridership threshold for a shelter and a bench. These bus stops are typically marked by a sign clearly stating, "Victor Valley Transit Authority," a customer service VVTA phone number and email address, the stop number, the bus route, and the days of the week the respective bus route operates (Monday – Friday, Peak Hour, and/or Express). However, variations exist as certain stops possess a bus shelter without a corresponding sign, and some locations lack any visual cue of their bus stop status. Notably, a considerable portion of bus stops along Route 23 to the east of Apple Valley lack both signs and shelters. Bus stop amenities encompass a range of features such as shelters, benches, simme-seats, trash receptacles, and lighting. Many stops are equipped with shelters alongside benches and trash receptacles. Moreover, a handful of stops boast solar-powered lighting installations.

⁴ There are plans to replace the Barstow Transfer Center to a facility on Williams Street. However, the facility is yet to be funded.

Figure 40: VVTA Bus Stop Sign



Source: <https://caltransit.org/cta/assets/Image/TC%20photos/2019/June/OBW%20collage.jpg>

2.8.2 CAPITAL PROGRAM

The ongoing VVTA capital program encompasses initiatives related to facilities, fleet maintenance, fleet renewal, improvements to bus stops, and security measures. The capital projects mentioned incurred expenses amounting to \$32,294,235 for fiscal year (FY) 2022-2023. For FY23-24, the total capital amounts to \$42,395,150. For a comprehensive rundown of VVTA capital projects, refer to Table 15.

Table 15 – Capital Expense Summary FY23-24

Program	FY 23-24 Expense
Fixed Route	\$135,350,000
Complementary Paratransit	\$1,800,000
County Routes	-
Intercity Route	\$1,000,000
Barstow Division	\$841,400
Community Routes	-
Microtransit	\$1,140,000
Facilities	\$3,299,698
VVTA Administration	\$41,432
Zero-Emission Bus (ZEB) Transition	\$20,922,620
Total Capital Expense	\$42,395,150

Source: VVTA 2023

In FY 23-24, designated replacement capital projects expenses amount to \$6,045,000. Cumulative expenditures between the years 2024 to 2029 are currently approximated at \$56,770,200. See Table 16 and Table 17 for a list of VVTA’s estimated fleet replacement plan and cost per vehicle type.

Table 16 – VVTA Fleet Replacement Plan FY24-29

Fleet Type	FY24	FY25	FY26	FY27	FY28	FY29
ADA (Hesperia)	2	4	3	2	7	3
ADA (Barstow)	0	0	0	0	0	0
Fixed (Hesperia)	3	1	6	6	2	7
Fixed (Barstow)	0	0	2	0	0	0
Commuter	0	0	0	0	5	0
Micro-Link	6	0	0	0	0	0
Support	1	0	5	0	0	0
Estimated Cost	\$6,045,000	\$2,224,800	\$13,642,200	\$10,169,700	\$12,703,950	\$11,984,550
Percent Increase	-	3% Increase	6% Increase	9% Increase	9% Increase	9% Increase
Combined FY24-29	\$56,770,200					

Table 17 – VVTA Fleet Replacement Average Cost per Vehicle 2023

Vehicle Type	Average per Unit Cost
Paratransit	\$165,000
FCEB	\$1,500,000
Micro-Link Van	\$190,000
Support	\$ 75,000

2.9 Key Findings

Important findings and takeaways from this service analysis. These are based completely on data presented in this chapter. Additional findings and conclusions related to public perception and desires, along with the service area are presented in subsequent chapters. The key service analysis findings are presented below:

- Ridership has declined significantly since the COVID-19 pandemic which is like many transit agencies throughout the country.
- Ridership has not caught up to the return to near pre-COVID service levels, the gap between service levels and slow ridership growth has led to low productivity and high subsidy levels.
- Compared to previous COAs there has been a shift in high ridership routes from college routes to routes serving services and shopping areas. This includes significant changes in performance and rankings of routes.
- On-time performance continues to be a concern for VVTA services; on time performance issues may be tied to inadequate running times built into schedules.
- The VVTA bus network currently relies on timed transfers to provide connections throughout the service area. Connections play a significant role and currently need to be timed. Changes in service frequency need to consider connecting passengers.

3 Passenger Survey Summary and Transfer Analysis

Two surveys were conducted for the Comprehensive Operations Analysis (COA). The first survey was a rider origin-destination survey which is used to gauge rider opinions on Victor Valley Transit Authority (VVTA) services, provide information on bus use and trip patterns, and provide a demographic database for Title VI equity analyses and market research. The rider survey was also used to develop a transfer matrix since VVTA does not currently track transfers. The second survey was a student survey, which was sent to the parents of elementary, middle, high school, and charter school students who could not be surveyed as part of the general ridership survey. The student population is an important rider group to capture as students comprise a large percentage of VVTA's ridership. This report provides a summary of both surveys and an analysis of transfers.

3.1 Rider Survey

In the fall of 2023, a system-wide on-board Rider Origin Destination (OD) survey of all VVTA fixed routes, county routes, Route 15, and NTC commuter routes was conducted. The survey was conducted in the Victor Valley area, including Adelanto, Apple Valley, Barstow, Helendale/Silver Lakes, Hesperia/Oak Hills, Lucerne Valley, Victorville, and other incorporated areas.

The rider survey task included developing a sampling plan, designing the survey instrument, collecting data, processing, expanding, analyzing, and reporting the results. The full data collection was performed from October 5, 2023, through October 11, 2023.

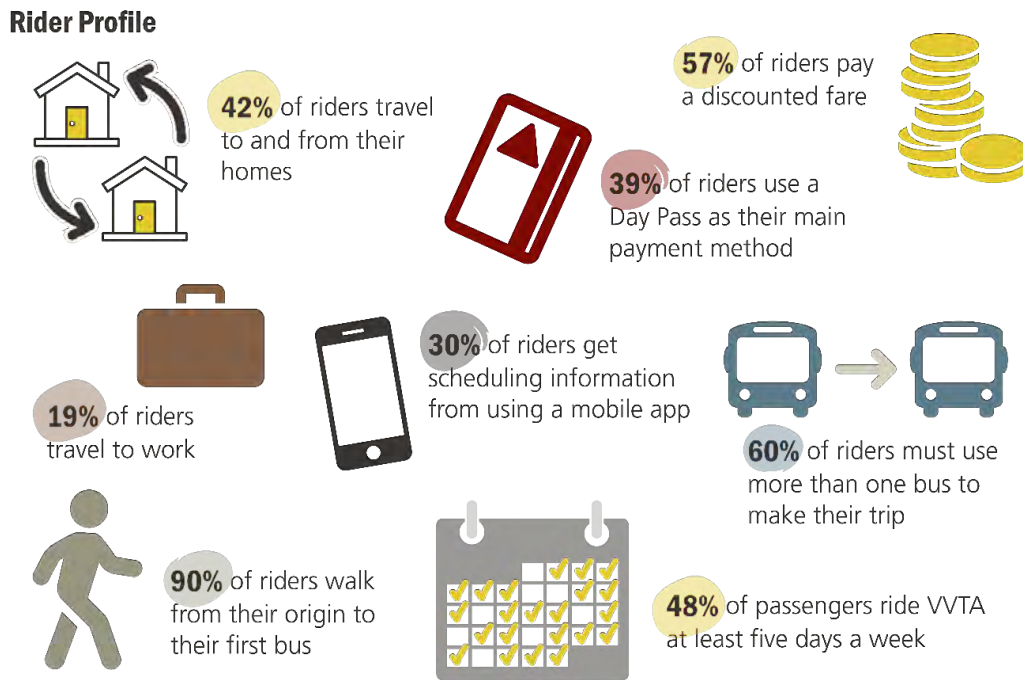
3.1.1 SURVEY DESIGN AND ADMINISTRATION

The survey design process, including the design of the survey questionnaire and sampling plan was developed in collaboration with VVTA and the consultant team. The goal was to obtain at least 400 weekday and 60 Weekend OD surveys, totaling 460 collected OD surveys. A total of 488 surveys were collected (413 weekday surveys and 75 Weekend surveys). Surveys were available in both English and Spanish, and surveyors were able to administer the survey in both languages.

3.1.2 SURVEY RESULTS

Sets of statistics at the regional level are presented based on the survey results. These statistics focused on rider demographics, transit travel patterns, and trip purposes. These profiles are based on weekday travel only. Figure 41 presents a rider profile that shows the usage of VVTA services, and Figure 42 presents the demographic profile of passengers. The detailed survey results are in Appendix C.

Figure 41: Rider Profile – How Service is Used



Based on the survey findings, it is evident that various population segments utilize VVTA's services for different purposes. Specifically, 19 percent of respondents rely on VVTA for commuting to or from their workplaces, while 23 percent use the service for shopping-related activities. Further analysis reveals that within the shopping category, 19 percent engage in activities such as dining out, garment shopping, and similar pursuits, whereas only 4 percent utilize VVTA for grocery shopping trips. Additionally, 8 percent of respondents utilize VVTA to access medical services, and 15 percent for recreational outings, social visits, and entertainment purposes.

Regarding trips originating from home, the predominant activities at the destination include work (13 percent), personal errands/business (8 percent), and college-related trips (also 8 percent).

It is essential to analyze the diversity of trip purposes based on respondents' socio-economic status, particularly their employment status and retirement indicator. Trips varied significantly among respondents based on their employment status and retirement status. For instance, a substantial portion of trips made by unemployed respondents seeking work were directed towards college visits and personal errands/business, constituting 36 percent collectively. Conversely, retired respondents predominantly made trips to and from shopping locations, accounting for 51 percent (with 31 percent allocated to dining, clothes, and other purchases and 21 percent for grocery shopping). Retired respondents also engaged in trips related to personal errands/business (31 percent) and medical services (17 percent).

Examining household incomes, respondents earning less than \$25,000 utilized VVTA services for trips to shopping destinations (31 percent), personal errands/business (24 percent), and work (19 percent). Moreover, 16 percent of their trips were directed towards recreational outings/social visits

and entertainment, with 12 percent of the respondents using the service for college/university visits and 7 percent for medical service-related trips.

Table 18- Trips' Purpose w.r.t Origins & Destinations

Trip Purpose w.r.t Origin/Destination	College/ University	Medical Services	Personal Business/Errands	Recreational/ Social Visit/ Entertainment	School K-12	Shopping (Dining, Clothes, Other)	Shopping (Grocery)	Work	Residence
College/ University			3	5		1			23
Medical Services	1		3			1	2		19
Personal Business/Errands	1		5	1		7		1	35
Recreational/ Social Visit/ Entertainment			2	7			3	1	19
School K-12									5
Shopping (Dining, Clothes, Other)			2	2		6			34
Shopping (Grocery)			2	1		2			17
Work	2		1	1		4		1	20
Residence	36	12	41	20	11	29	22	60	

Table 19 – Trip's Purpose w.r.t Origins and Destinations of Respondents with HH incomes less than \$25,000

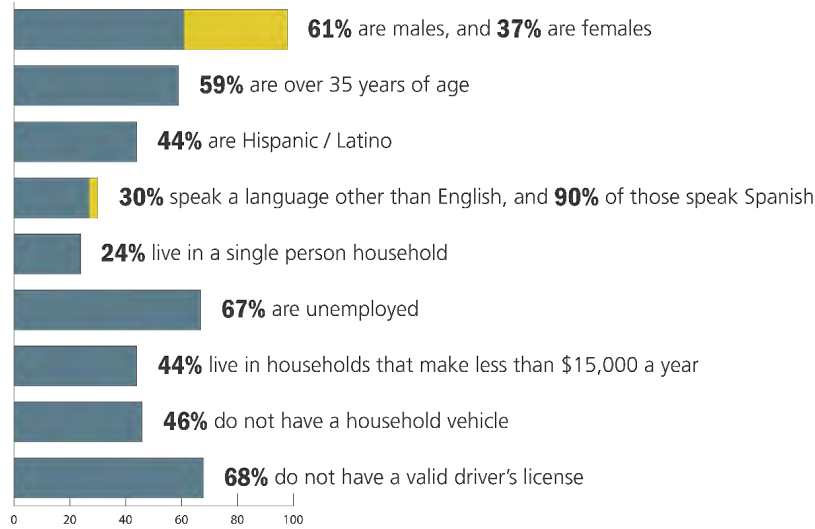
Trip Purpose w.r.t Origin/Destination	College/ University	Medical Services	Personal Business/Errands	Recreational/ Social Visit/ Entertainment	School K-12	Shopping (Dining, Clothes, Other)	Shopping (Grocery)	Work	Residence
College/ University			1			1			7
Medical Services			1				2		8
Personal Business/Errands			3			3			19
Recreational/ Social Visit/ Entertainment			1	4			2	1	16
Shopping (Dining, Clothes, Other)			2	2		3			11
Shopping (Grocery)				1		2			6
Work	1					2			6
Residence	17	5	22	14	2	15	10	31	

Table 20 Trip's Purpose w.r.t Origins and Destinations of Respondents with HH incomes more than \$75,000

Trip Purpose w.r.t Origin/Destination	College/ University	Medical Services	Personal Business/Errands	Recreational/ Social Visit/ Entertainment	School K-12	Shopping (Dining, Clothes, Other)	Work	Residence
College/ University							1	1
Personal Business/Errands							1	1
Recreational/ Social Visit/ Entertainment							2	2
Residence	3	1	1	1	1	1		8

Figure 42: Passenger Profile – Who Uses the Service

Passenger Profile



3.1.3 TITLE VI IMPLICATIONS

As part of the Title VI of the Civil Rights Act of 1964, VVTA needs to understand the racial and economic breakdown of ridership for the system and each route. The rider survey did ask riders about household income, race/ethnicity, and English proficiency. Household Income by Household size is presented in Table 21 which shows that 38.1 percent of riders have a household income of less than \$25,000 while less than one and a half percent have a household income of greater than \$100,000. Race/ethnicity is presented in Table 22 which shows that almost 70 percent of riders are non-white and approximately 44 percent of riders are of Hispanic/Latino/Spanish origin. Table 23 presents English proficiency and shows that approximately 75 percent of riders speak English well or very well while 14 percent do not speak English at all.

Table 21 – Household Income by Household Size

HH Size/Household Income	Weekday						Weekend						Totals
	1	2	3	4	5+	Sub-total	1	2	3	4	5+	sub-total	
Less than \$15,000	12.2%	9.1%	6.1%	6.1%	6.8%	40.2%	24.6%	3.3%	11.5%	4.9%	6.6%	50.8%	42.0%
\$15,000 - \$24,999	5.1%	4.1%	4.4%	3.7%	8.8%	26.0%	4.9%	4.9%	1.6%	0.0%	3.3%	14.8%	24.1%
\$25,000 - \$34,999	2.0%	2.4%	2.4%	2.0%	3.4%	12.2%	1.6%	3.3%	6.6%	1.6%	9.8%	23.0%	14.0%
\$35,000 - \$49,999	0.3%	2.0%	0.7%	1.7%	2.7%	7.4%	3.3%	0.0%	0.0%	0.0%	0.0%	3.3%	6.7%
\$50,000 - \$74,999	1.0%	3.7%	0.7%	0.7%	4.4%	10.5%	1.6%	0.0%	0.0%	3.3%	1.6%	6.6%	9.8%
\$75,000 - \$99,999	0.0%	0.3%	0.3%	0.0%	1.7%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%
More than \$100,000	0.7%	0.0%	0.0%	0.0%	0.7%	1.4%	0.0%	0.0%	0.0%	0.0%	1.6%	1.6%	1.4%
Sub-total	21.3%	21.6%	14.5%	14.2%	28.4%	100.0%	36.1%	11.5%	19.7%	9.8%	23.0%	100.0%	100.0%
			82.9%						17.1%				

Table 22 – Race / Ethnicity

Race / Ethnicity	Weekday	Weekend	Totals
Native American / Alaska Native	4.7%	11.2%	6.7%
Asian / Pacific Islander	2.5%	6.1%	3.6%
Black / African American	26.3%	23.3%	25.4%
Hispanic / Latino / Spanish	44.6%	42.5%	43.9%
White / Caucasian	31.4%	20.2%	27.9%

Table 23 – English Proficiency

English Proficiency	Weekday	Weekend	Totals
Very well	61.5%	73.9%	65.9%
Well	7.4%	12.5%	9.2%
Less than well	14.4%	7.3%	11.9%
Not at all	16.7%	6.3%	13.0%

3.1.4 STUDENT STATUS

The survey asked riders whether they attend a school regardless of the trip purpose. 29 percent of riders indicated they were a student. Table 24 summarizes rider’s student status. Historically, VVTA’s ridership has been skewed heavily towards students (past surveys have indicated 50 to 60 percent of riders were students). However, riders younger than 18 are unable to participate in surveys without parental consent. To capture the student ridership, a separate survey was sent to parents of school students and is summarized in the next section of this report.

Table 24 – Student Status

Student Status	Weekday	Weekend	Totals
Not a student	71.4%	70.8%	71.2%
Yes - 9th-12th grade	6.3%	9.8%	7.4%
Yes - Full-time College / University	18.9%	5.9%	14.8%
Yes - Part-time College / University	3.0%	9.6%	5.0%
Yes - Vocational / Technical / Trade School	0.1%	1.2%	0.5%
Yes - Other	0.3%	2.7%	1.0%

3.2 Student Survey

The student survey was conducted via email, with the questionnaire sent to parents via email. The survey conducted within the VVTA transit area has yielded significant insights into students' transportation needs and experiences. A total of 163 surveys were completed. Table 25 shows the detailed breakdown by school district/charter school. Key findings are as follows.

Table 25: Response by School District/Charter School

School District/Charter School	Percentage
Hesperia Unified	83.4%
Academy for Academic Excellence	11.7%
Excelsior Charter Schools	1.2%
Victor Elementary	1.2%
Mirus	0.6%
Alta Vista	0.6%
Encore	0.6%
Apple Valley Unified	0.6%

- **Service Usage-** 25 percent of the respondents’ children currently ride VVTA.
- **Free Fares-** In the survey, when asked if they would consider using VVTA services upon learning about the free access for K-12 students, 69 percent responded affirmatively.
- **Schedule Flexibility-** 63 percent of the respondents thought that the Ride Free Program provided them and their children with increased flexible schedules.
- **Stop locations-** Overall, 53 percent of respondents indicated dissatisfaction with the proximity of the stops to their child’s school. Table illustrates the number and percentage of satisfied respondents by school concerning stop locations.

Table 26: Are Bus Stops Close to the School?

Are the bus stops sufficiently close to your child's school?		
School	Yes (n)	Yes (%)
Hesperia Unified	55	48%
Victor Elementary	1	100%
Apple Valley Unified	1	100%
Excelsior Charter Schools	2	100%
Alta Vista	1	100%
Encore	0	0%
Academy for Academic Excellence	2	18%

- **Partnership with the Sheriff's Department-** When asked about their comfort level with their child riding VVTA buses, considering VVTA’s collaboration with the San Bernardino Sheriff’s Department (known as the Sheriff Transit Unit), only 9 percent of respondents expressed unease. Notably, 48 percent were unaware of this partnership.
- **Ride Free Program-** A significant 56 percent of respondents believe that the Ride Free Program could motivate their child’s engagement in after-school activities.
- **Preference for VVTA updates and Information-** 48 percent of respondents prefer receiving VVTA’s updates and information via text message, 29 percent via email, 13 percent through social media channels, 7 percent via VVTA’s website, and 3 percent via VVTA’s mobile apps.

- **Social Media Platform-** 50 percent of respondents use Facebook, 39 percent use Instagram, while the remaining 12 percent utilize other social media platforms such as TikTok or True Social.
- **Service Needs-** Respondents were queried about service modifications that would incentivize more frequent usage of VVTA’s services. Results showed 48 percent would be encouraged by increased weekday service frequency, 33 percent by service expansions to new areas, 22 percent by extended service hours in the evening, 17 percent by earlier service hours, and 10 percent by expanded weekend services.
- **Comments Section-** The description of comments that stood out in terms of reflecting the needs are as follows:
 - Increasing the number of buses connecting various locations within Hesperia is essential due to the district's parent-choice school model. Many children opt for schools outside their designated area, necessitating improved transportation options to accommodate their choices.
 - To facilitate accessibility for high school students residing along Peach, between Main and Bear Valley, it is beneficial to establish multiple bus stops. These stops would cater to students living too near to take the school bus to Sultana High School, offering them the option to use city buses for transportation to and from school and after-school engagements. Additionally, this initiative supports disabled parents by ensuring transportation for their children.
 - Students attending Canyon Ridge High School who reside off Rancho and Cottonwood face a significant challenge as the nearest bus stop, connecting them to Oak Hills and subsequently to the school, is located 2.5 miles away. This considerable distance poses difficulties, especially during extreme weather conditions.
 - At present, students at Sultana High School encounter a transportation gap as the current 66 bus route does not align with their school schedule. The nearest bus arrives nearly two hours after dismissal, creating a substantial waiting period. Moreover, in the mornings, missing the initial bus impedes timely arrival at school, which starts at 7:24 AM, with the subsequent bus passing thereafter. For families whose children attend Kingston Elementary, a similar issue persists. Despite walking a mile to and from school, there is an absence of available bus routes servicing areas near Rancho or Kingston, impacting accessibility for these students and their families.
 - Transportation from Sultana High School to the Timberlane park area poses challenges, particularly after late sports practices or games. One respondent stated that due to chronic illness they are unable to physically retrieve their child during late sessions. Similarly, early morning practices, commencing at 5 AM, present difficulties in ensuring her timely arrival due to health limitations.

3.3 Transfer Analysis

VVTA does not track transfers and relies on the COA survey to analyze transfer patterns. Rider transfer information was collected from the onboard survey. The survey sample was expanded to reflect ridership and the number of transfers between routes was estimated and summarized in a matrix (see Table 29). To further analyze transfers, Table 27 includes the top 10 connections. The top

connections are in Barstow and involve connections to and from Route 3. The number of transfers by location are presented on Table 28 which shows that the Victor Valley Transportation Center is by far the location with the greatest number of transfers. Since Barstow has only one transfer point, all transfers on the Barstow routes occur there which is why it is the second busiest transfer point.

Table 27: Top 10 Connections

Transfer Routes	Number of Transfers	Transfer Location
Routes 1 and 3	195	Barstow City Hall
Routes 3 and 6	158	Barstow City Hall
Routes 52 and 53	137	Mall of Victor Valley
Routes 2 and 3	115	Barstow City Hall
Routes 50 and 64	107	Hesperia Post Office
Routes 41 and 43	105	Apple Valley Post Office
Routes 43 and 50	104	Victor Valley College
Routes 23 and 41	90	Apple Valley Post Office
Routes 43 and 53	90	Victor Valley College
Routes 41 and 50	80	Victor Valley Transportation Center

Table 28: Transfers by Location

Transfer Location	Number of Transfers	Routes
Victor Valley Transportation Center	1,333	15, 22, 31, 32, 41, 50, 50X, 52, 55, 56, NTC
Barstow City Hall	752	1, 2, 3, 6, 15, 28, 29
Mall of Victor Valley	399	21P, 21W, 52, 53, 54, 68
Victor Valley College	373	42, 43, 50, 50X, 53, 55
Apple Valley Post Office	356	23, 40, 41, 43, 47
Hesperia Post Office	242	25, 50, 64, 66, 68
Palmdale and US 395 (Adelanto)	70	31, 33, 54
St Mary's Medical Center	32	15, 41, 42

Table 29: Transfer Matrix

		To Route																																	
		1	2	3	6	15	21P	21W	22	23	25	28	29	31	32	33	40	41	42	43	47	50	50X	52	53	54	55	56	64	66	68	NTC			
From Route	1	-	13	96	2	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	2	13	-	52	23	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	3	99	63	-	63	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	6	63	8	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	15	4	-	17	-	-	-	-	-	-	-	37	-	-	43	-	-	22	10	-	-	59	11	8	-	-	-	-	3	-	-	-	-		
	21P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-		
	21W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-		
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	31	-	-	-	-	2	-	-	3	-	-	-	-	-	28	-	-	32	-	-	-	28	19	5	-	-	32	25	-	-	-	-	-	-	
	32	-	-	-	-	13	-	-	-	-	-	-	-	2	-	-	-	5	-	-	-	20	14	33	-	-	29	32	-	-	-	-	-	-	
	33	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	
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	41	-	-	-	-	-	-	-	32	60	-	-	-	36	26	-	20	-	-	75	2	6	-	29	-	-	6	-	-	-	-	-	-	-	
	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-	-	
	43	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	15	30	-	-	-	99	-	-	24	-	-	-	-	-	-	-	-	-	-
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	50X	-	-	-	-	17	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	1	-	-	19	-	-	-	-	-	-	-	-
	52	-	-	-	-	2	27	-	-	-	-	-	-	8	-	-	35	-	-	-	-	-	-	-	12	-	3	10	-	-	38	13	-	-	
	53	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	4	66	-	62	19	125	-	59	-	-	-	-	-	-	-	-	
	54	-	-	-	-	-	-	-	-	-	-	-	-	1	-	48	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-
	55	-	-	-	-	36	-	-	15	-	-	-	-	5	32	-	-	57	-	-	-	-	-	27	11	-	-	3	-	-	-	-	-	-	-
	56	-	-	-	-	39	-	-	-	-	-	-	-	6	37	-	-	3	-	-	-	-	-	19	28	-	-	12	-	-	-	-	-	-	-
	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	3	-	-
66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	1	4	48	-	-	25	-	-	-	-	-	
NTC	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	

4 Local and Regional Development Patterns and Market Assessment

The Local and Regional Development Patterns and Market Assessment analyzes the key characteristics of the physical environment and customer demand. Attributes like where people live, work, shop, and play shape the mobility needs of Victor Valley. This assessment also looks at planned development in the Victor Valley Transit Authority (VVTA) service area. Understanding these needs shaped the recommendations of this study. There are four key components of the market assessment:

1. **Physical Environment** - The built environment, influenced by density, land use, and street design, directly affects transit's ability to be useful and efficient.
2. **Population and Employment Trends** – At its core, transit connects people to where they need to go, so it is important to understand where people live and work within the region.
3. **Demographic Analysis and Customer Demand** - By understanding who rides transit, VVTA can better allocate transit service to where those populations live.
4. **Regional Travel Behavior** – Where and when people travel through the Victor Valley and Barstow region across all modes can give an indication of where there may be unmet need for more transit service.

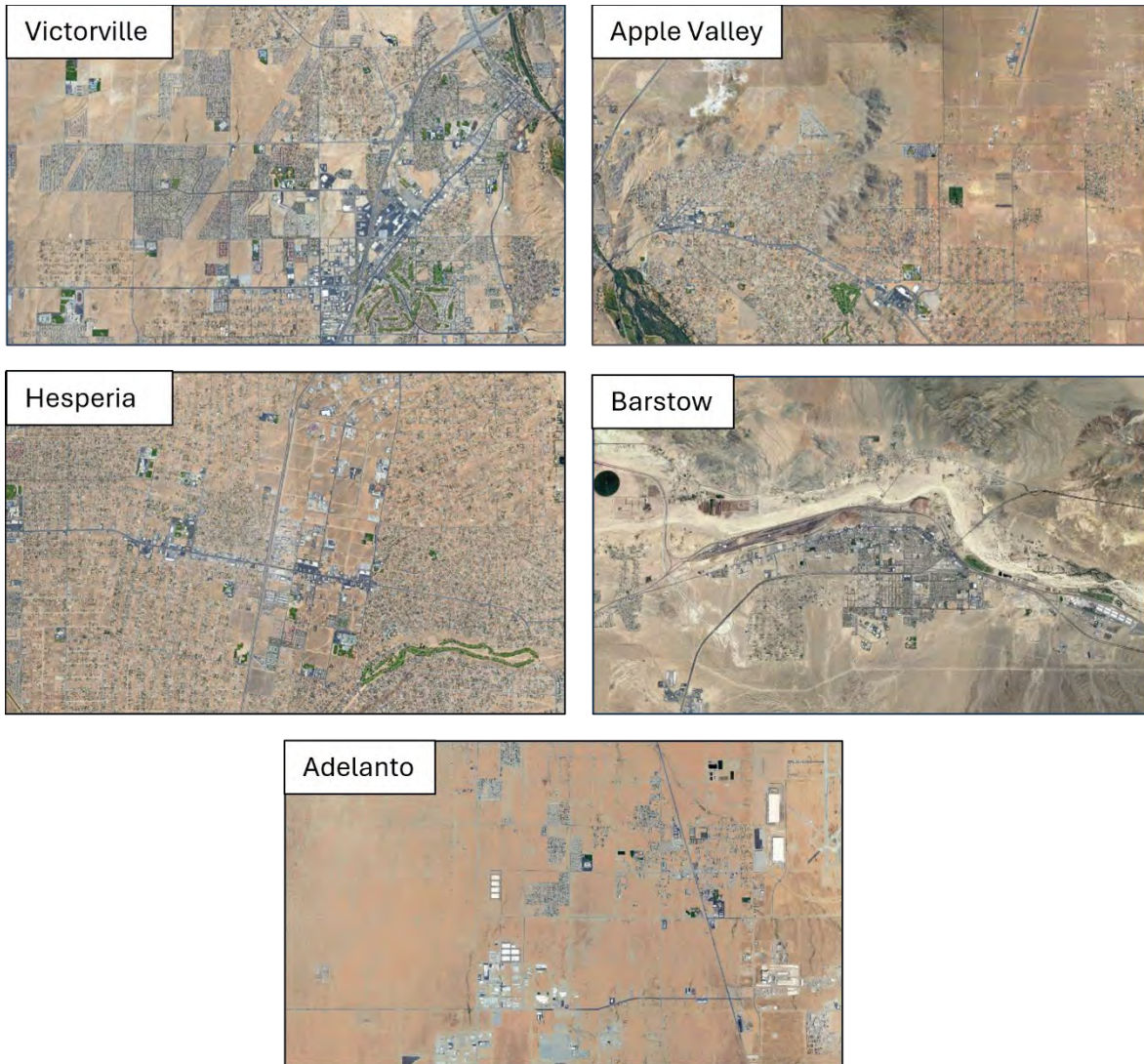
4.1 Land Use, the Built Environment, and Transit

Transit use is affected by land use and the built environment. This portion of the market assessment looks at the built environment and land use to understand where the transit supportive land uses exist and where the built environment is less conducive to transit use.

4.1.1 DESIGN

When analyzing bus route efficiency, it is important to note how a city's geography can affect transit use, affecting such factors as travel times and access to the transit network. The VVTA service area covers the much of Eastern San Bernadino County. There are 5 major jurisdictions: Victorville, Adelanto, Hesperia, Apple Valley, and Barstow along with unincorporated areas in San Bernardino County. These cities are centered around Interstate 15 which connects Los Angeles to Las Vegas and beyond. The landscape is primarily composed of wide-open desert which has been filled in by large mid to low density single use residential and commercial developments. Large industrial sites like warehouses and distribution centers have popped up across the service area, and the BNSF railway in Barstow has resulted in the area being a major distribution hub for the Southern California region, connecting to the rest of the country. These jobs have brought people to the high desert and therefore created the demand for public transit. However, the spread-out nature of the development makes transit access difficult in many areas. The indirect and winding suburban roads make accessing bus stops difficult. Many of the major grocery, dining and retail stores are concentrated together at the intersections of major arterials or placed near highway exits.

Figure 43: Street Design from Google Earth



4.1.2 WALKABILITY

The National Walkability Index developed by the Environmental Protection Agency creates a walkability score based on intersection density, proximity to transit stops, and diversity of land uses.

Figure 44 and Figure 45 show which areas of Victor Valley are considered walkable based on this index. Many of the areas served by VVTA are “Above Average” or “Most” Walkable. The high walkability score is good news for transit, since usually most riders access their first transit stop and destination by walking. In areas where walking is more convenient, taking transit becomes more convenient as well. However, some routes serve areas that are considered below average walkable, making access public transit harder. While VVTA should still provide transit service in less walkable areas, it is important to understand the limitations that lower walkability places have on being able to generate higher levels of ridership.

Figure 44: National Walkability Index (Victorville)

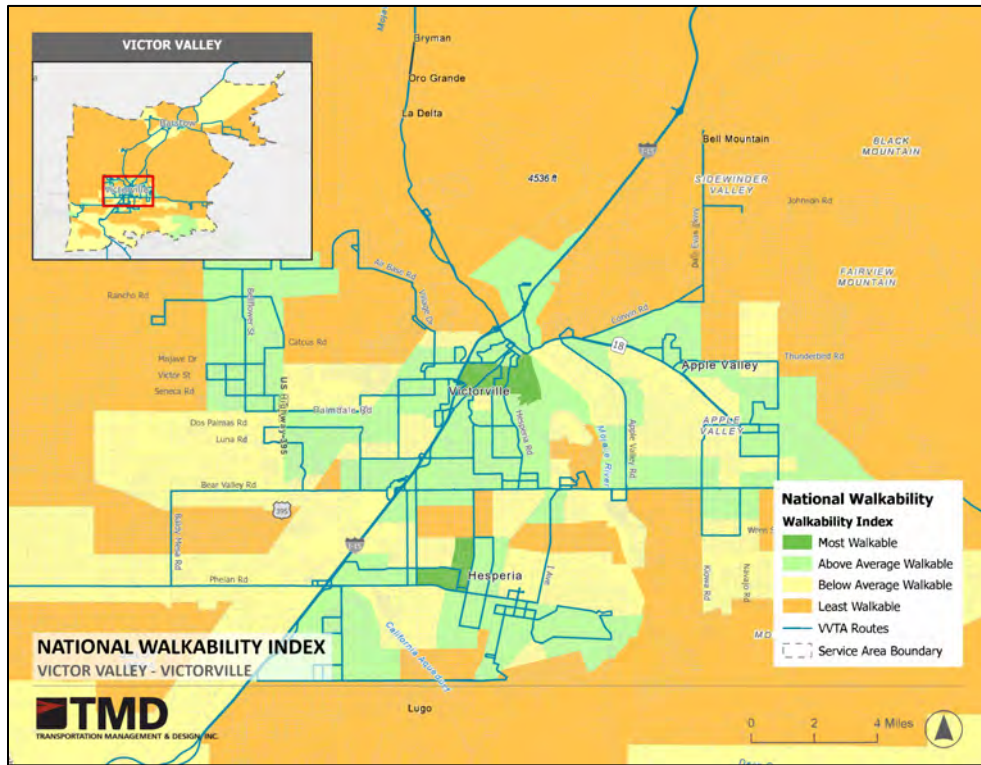
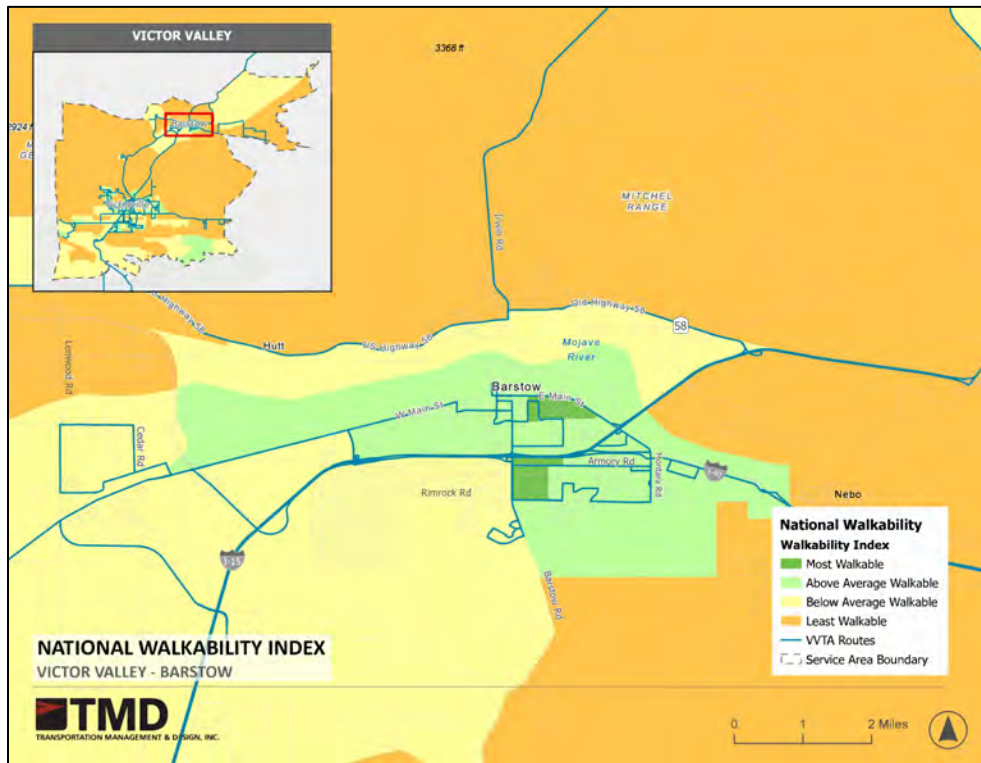


Figure 45: National Walkability Index (Barstow)



4.1.3 DENSITY

Denser areas have more people concentrated together, and the more people there are, the larger the potential rider base. Denser areas are ideal for transit because many people are located within a small geography, so the bus does not have to travel as far to serve riders. The VVTA service area has a total population of 481,545 and is spread across approximately 2,800 square miles. As shown in Figure 46 and Figure 47, the highest densities can be found in Victorville and Mountain View as well as in Barstow. There are additional pockets of density in Adelanto, Hesperia, and Apple Valley. Outside of these areas however, population densities are extremely low. Creating an efficient transit network in these outer areas is more difficult, since potential riders are more spread out, and there are fewer destinations. VVTA will need to think critically about the routes that serve these areas and assess demand as populations change and develop.

Figure 46: Population Density (Victorville)

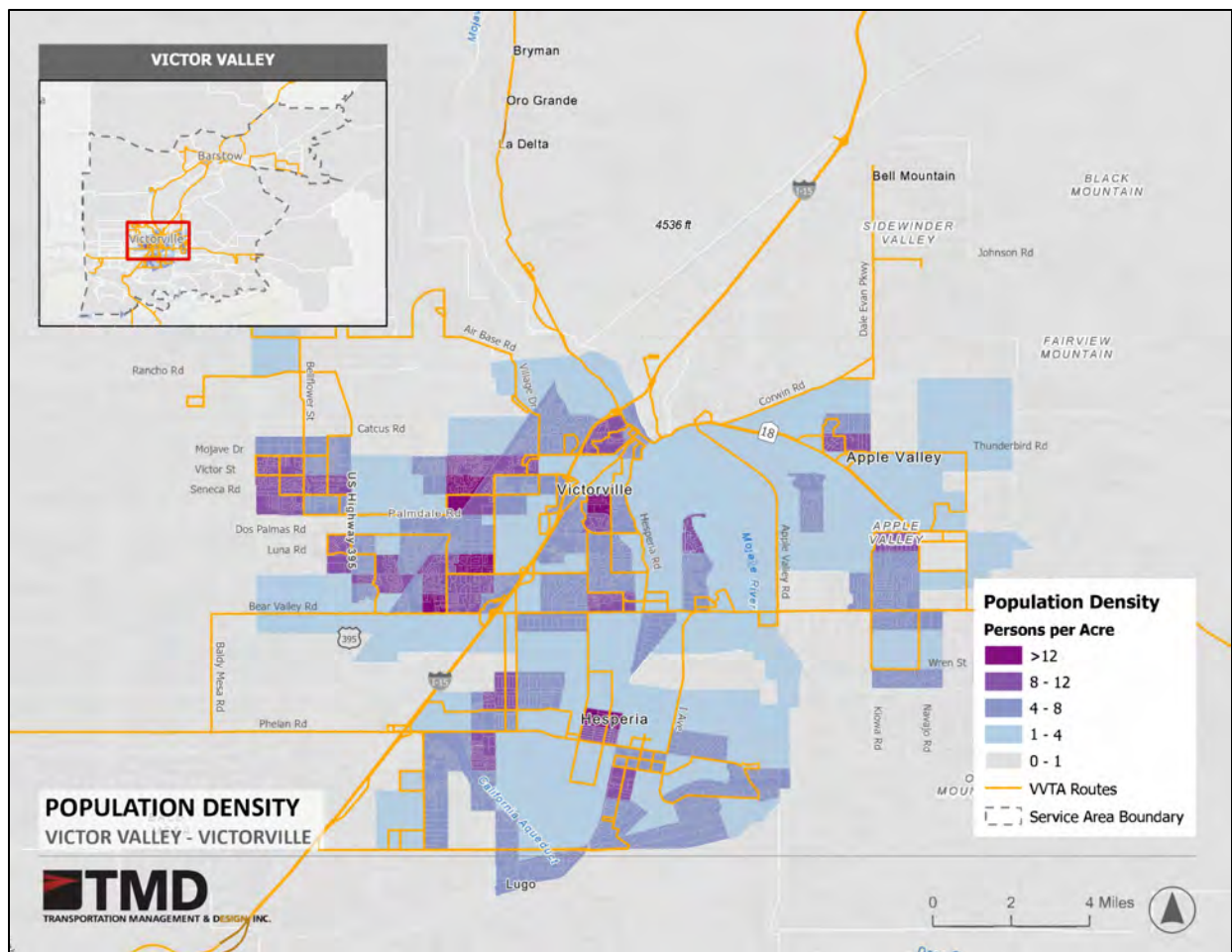
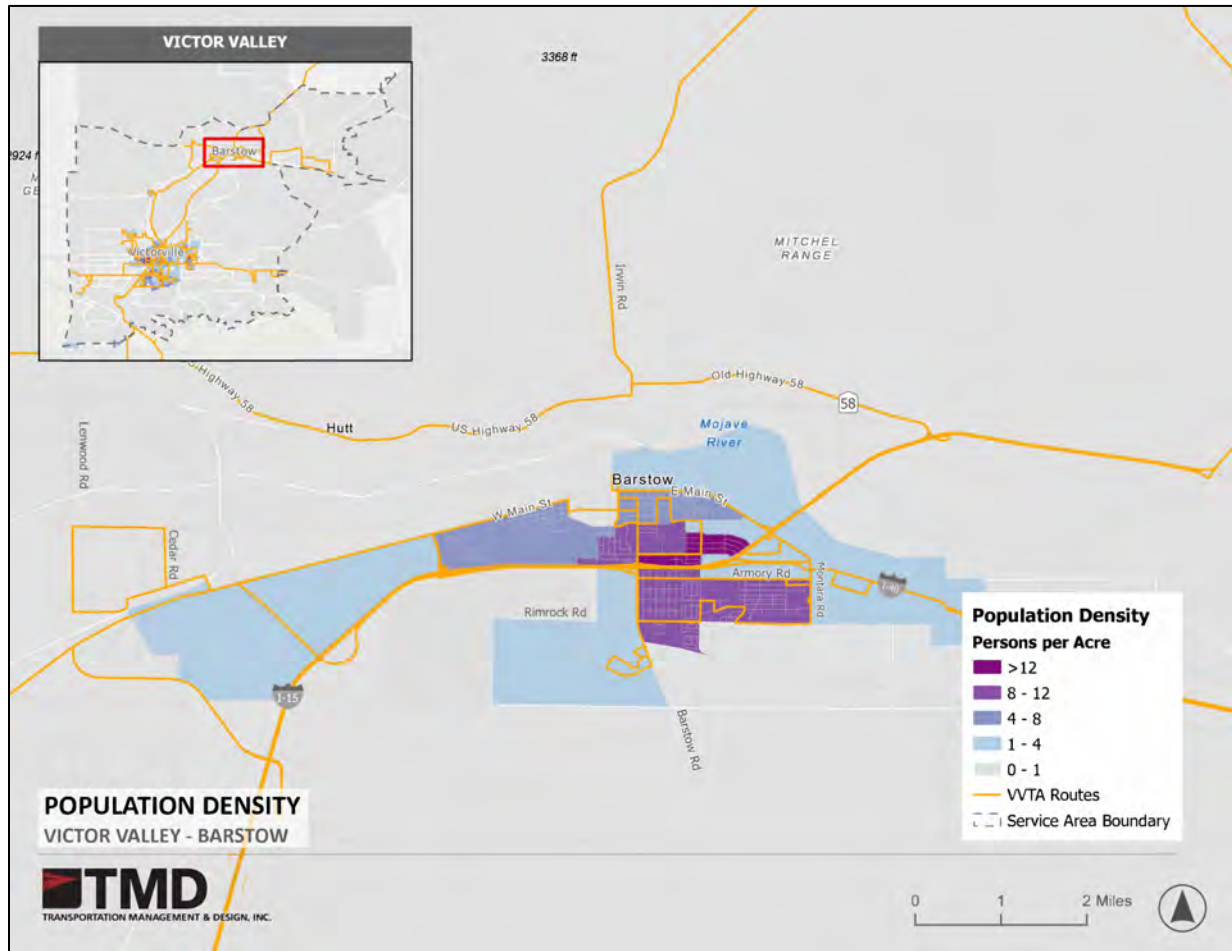


Figure 47: Population Density (Barstow)



4.1.4 DIVERSITY OF DESTINATIONS

Zoning maps for the Victor Valley service area show that most land use delegations are low to medium density residential uses. Additionally, however, there is a lot of land designated for ‘Specific Plan’ which allows developers to propose a change to the existing land use characteristics of the land parcels. This shows that the area is growing and changing, new investments continue to be made in the area which can help improve the demand for public transportation in the area. Zoning maps for the Victor Valley communities are presented in Figures 48 through 51.

Figure 48: Zoning Map (Victorville)

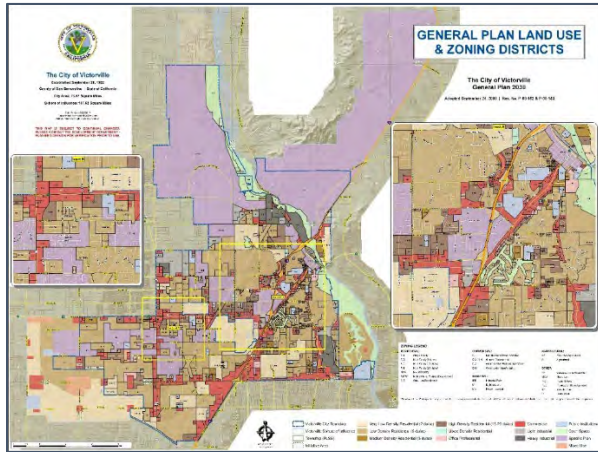


Figure 50: Zoning Map (Apple Valley)

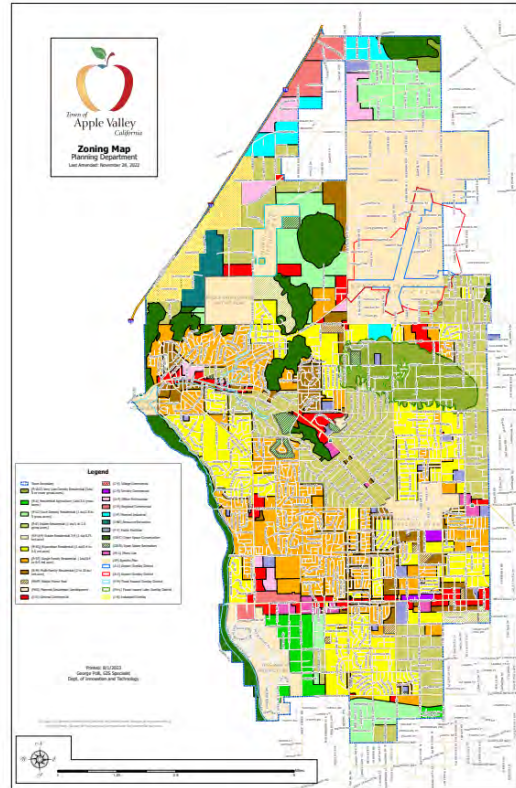


Figure 49: Zoning Map (Adelanto)

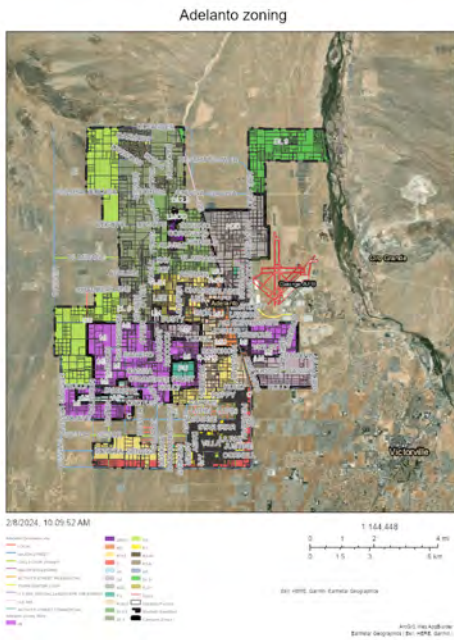
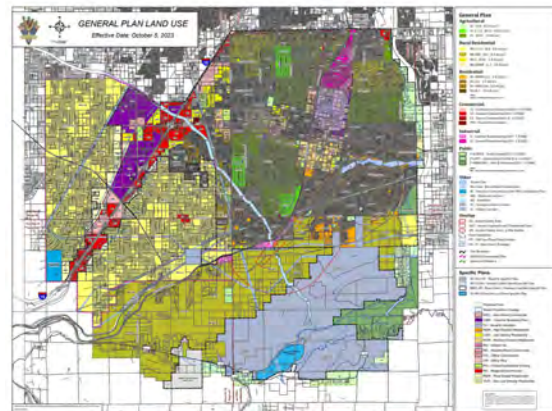
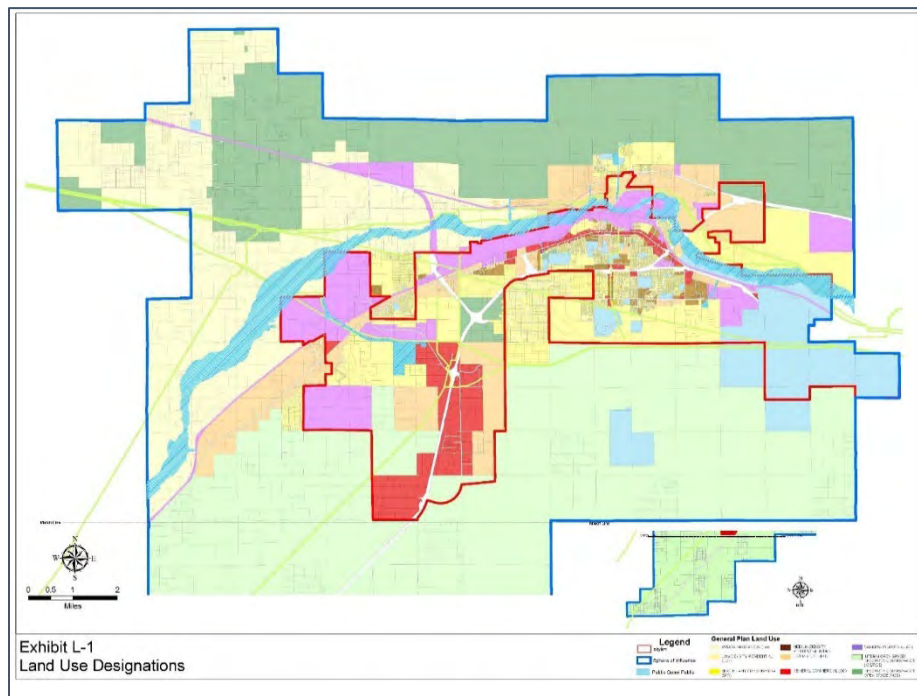


Figure 51: Zoning Map (Hesperia)



Similarly in Barstow, most of the land use is dedicated for low density and single-family residential zones. In the area north of I-15, more of the land is zones for “diverse use” compared to the area south of I-15. Mixed use and higher density zoning makes transit services more successful because there are higher concentrations of people and a variety of destinations to access. Additionally, the purple in Figure 52 very clearly shows the strong industrial opportunities in Barstow, particularly the BNSF rail yard.

Figure 52: Zoning Map (Barstow)



4.2 Employment and Potential Destinations

The combined total employment count of the largest five jurisdictions in the Victor Valley Service area was 121,795 jobs. The number of jobs per land acre is higher west of I-15 and in pockets in Apple Valley and Hesperia. Northeastern Barstow also stands out as an area with higher-than-average jobs per acre in the service area. In Apple Valley education and social services is the largest industry in the service area. This is in line with the employment densities presented in Figure 53 that shows that the area over by the Phoenix Academy stands out with more jobs compared to its neighboring areas. There are schools like Eagle Ranch Elementary School, Mesa Linda Middle School, and Morgan Kincaid Preparatory School that stand out as major employers in the Eagle Ranch and Mountain View Area in Victorville. There are jobs on Main Street in Hesperia, Sultana High School and Lime Street Elementary School which could support the density of jobs seen in southeastern Hesperia. In Barstow, the highest densities of jobs are near or includes the Barstow Mall, and other shopping destinations along E Main St, right off I-15. Additionally, Barstow Community Hospital, as shown on Figure 54. Table 30 shows the jobs by industry in each community. Many of these destinations are adequately served by VVTA routes currently. As the region grows and new industrial plants are built, additional service may be warranted to serve the new jobs being built.

Figure 53: Job Density (Victorville)

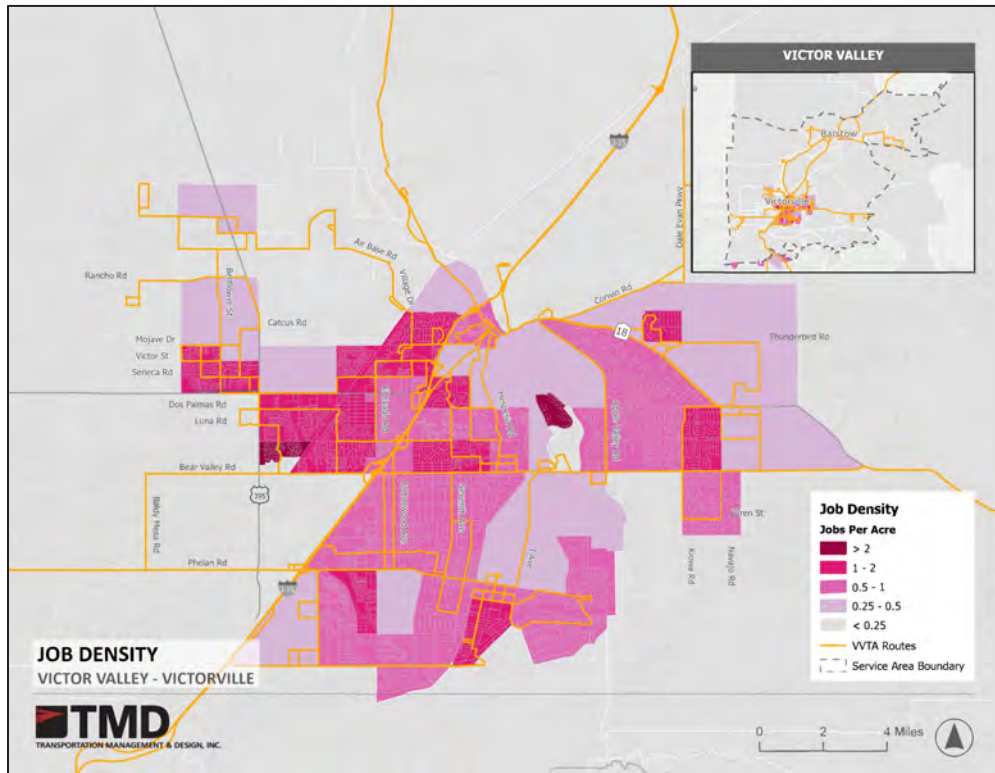


Figure 54: Job Density (Barstow)

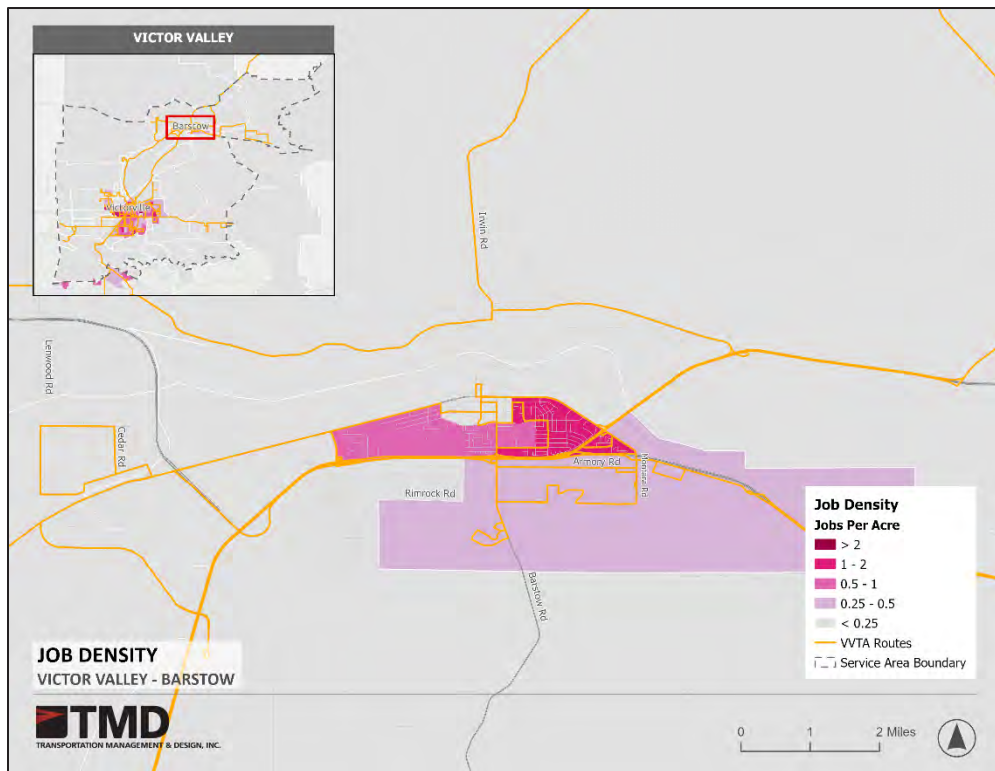


Table 30: Diversity of Job Industries

City	Total Employment	Top 5 Industries	Top 5 Employers
Victorville	41,794 ⁵	Educational, health and social services	Southern California Logistics Airport
		Retail trade	Victor Elementary School District
		Transportation and warehousing, utilities	Victorville College
		Professional, scientific, management, admin., waste management	Desert Valley Hospital/ Medical Center
		Arts, entertainment, recreation, accommodation food services	Victor Valley Global Medical Center
Barstow	8,101 ⁶	Educational, health and social services	
		Arts, entertainment, recreation, accommodation food services	
		Public Administration	
		Professional Services	
		Transportation	
Hesperia	36,191 ⁷	Management, business, science, and arts occupations	Hesperia Unified School District
		Service occupations	County of San Bernadino
		Sales and office occupations	Walmart Super Center
		Natural resources, construction, and maintenances occupations	Super Target
		Production, transportation, and material moving occupations	Stater Bros. Markets
Apple Valley	26,030 ⁸	Educational, health and social services	Apple Valley Unified School District
		Retail trade	St Mary Regional Medical Center
		Transportation and warehousing, utilities	Walmart Distribution Center
		Professional, scientific, management, admin., waste management	Target Stores
		Arts, entertainment, recreation, accommodation food services	Walmart Stores
Adelanto	9,679 ⁹	Transportation and warehousing, utilities	Adelanto School District
		Educational, health and social services	GEO (Prison)
		Retail trade	Stater Bros. Markets
		Manufacturing	City of Adelanto
		Arts, entertainment, recreation, accommodation food services	Starbucks Coffee

⁵ [Project Reports Non-technical Template \(victorvilleca.gov\)](https://www.victorvilleca.gov)

⁶ [City of Barstow Draft 6th Cycle Housing Element](#)

⁷ [Housing Element Update 2021-2029 | City of Hesperia - Official Website](#)

⁸ [Apple Valley Drafty Housing Element Update](#)

⁹ [DRAFT HOUSING ELEMENT UPDATE \(adelanto.ca.us\)](https://www.adelanto.ca.us)

4.3 Population and Rider Markets

4.3.1 POPULATION TRENDS

The following table shows the population trends over the past 10 years (Table 31). Between 2010 and 2022 the population of each of the key 5 Victor Valley Jurisdictions saw an increase in population. Apple Valley saw the smallest increase with 9.7 percent change between 2010 and 2022. In the 2 years following the start of the COVID-19 pandemic, only one jurisdiction, Barstow, saw a decrease in population. Hesperia estimates that their population will increase by 24.3 percent from 2019-2045¹⁰. These cities have room to grow as well as areas that are available for infill and added density. The increase in jobs and housing in the area should continue the trends of population growth.

Table 31: Population Trends Over Time

City	Total Population 2010	Total Population 2020	Total Population 2022	Percent Change Between 2010-2022	Percent Change Between 2020-2022
Victorville	115,903	134,802	137,221	18.4%	1.8%
Barstow	22,639	25,409	25,231	11.4%	-0.7%
Hesperia	90,173	99,383	100,744	11.7%	1.4%
Apple Valley	69,135	75,789	75,867	9.7%	0.1%
Adelanto	31,765	38,040	38,783	22.1%	2.0%

4.3.2 RIDER MARKETS

4.3.2.1 Seniors

Seniors are more likely to be transit dependent; they may no longer be able to drive, or they may choose not to, meaning they are more likely to take the bus for their mobility needs. Seniors make up 12 percent of the population of the Victor Valley service area population. The concentration of senior populations coincides with medical facilities and shopping centers as shown on Figure 55 and Figure 56. There is only one strong concentration of seniors, Jess Ranch in Apple Valley, which looks like it is not adequately served by transit services. However, this neighborhood is comprised of gated communities where VVTA buses are not able to access, otherwise there is good coverage for seniors. This lack of coverage for this area is not concerning. The case is the same in Barstow, but there is one medical facility that is not served by a VVTA route. The best solutions for senior mobility are most often direct services connecting residential areas to medical services and socialization opportunities. Most concentrations of the senior citizen population are well served by the current network.

¹⁰ [City of Hesperia 2021-2029 Housing Element](#)

Figure 55: Density of Senior Residents (Victorville)

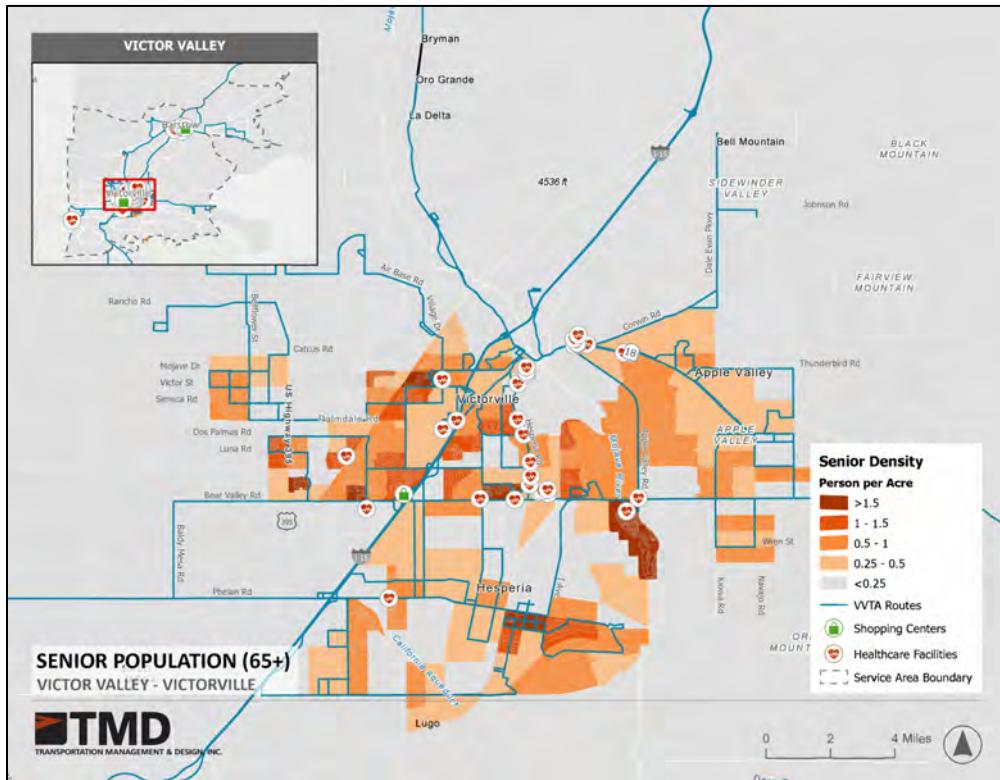
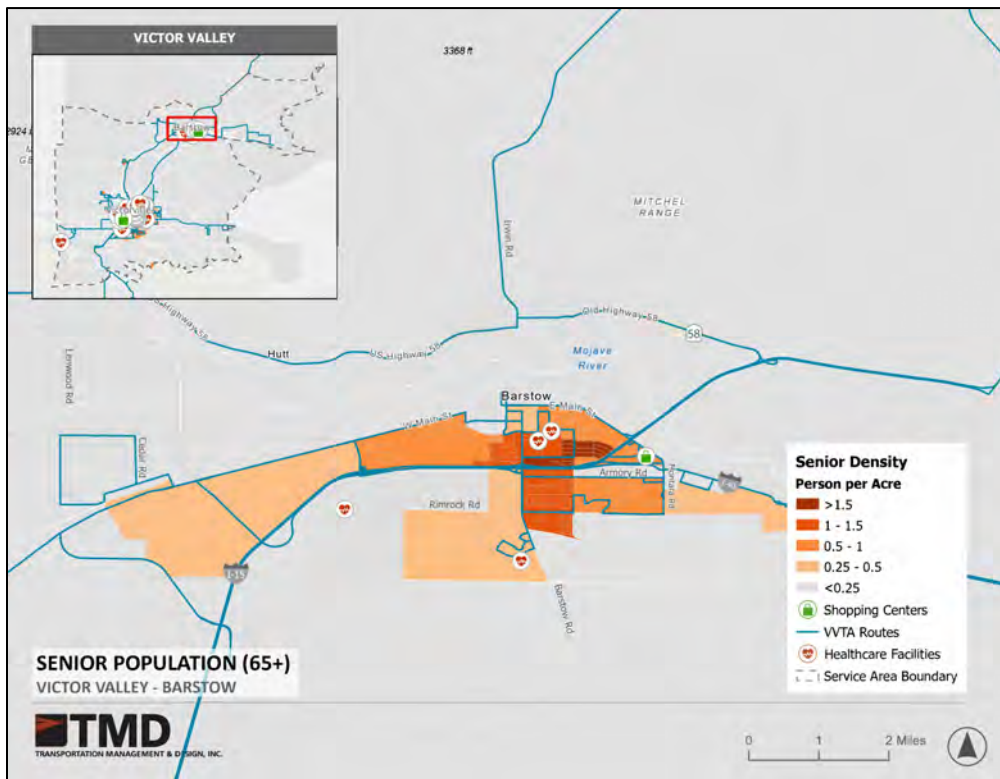


Figure 56: Density of Senior Residents (Barstow)



4.3.2.2 Young Adults

Of the young adult population in the Victor Valley region, many are enrolled in local colleges and universities. Young adults ages 18-24 make up 10 percent of the population in the service area. Because students are less likely to be able to afford their own cars, providing transit service to this demographic group is important and a good driver of demand. This can be seen in the ridership trends; 20 percent of riders are aged 18-24 and therefore overrepresented among riders compared to the service area population. The largest colleges in the area are Victor Valley College and Barstow Community College which had total enrollments of 10,777 and 2,444 students in 2021, respectively. The college-aged population in Victorville is not necessarily centered around the college institutions in the area as shown on Figure 57 and Figure 58. This means that students are traveling from farther away. There are a few concentrations in Victorville and Hesperia that could be better served by VVTA routes. In Barstow the concentrations of college age students are adequately covered, and Barstow Community College is served by Routes 2 and 6. However, the university market has been decreasing due to COVID-19 as many universities have moved to online and distance learning. This has changed the way that college students move throughout the service area and was kept in mind when developing draft recommendations.

Figure 57: Density of College Aged Residents (Victorville)

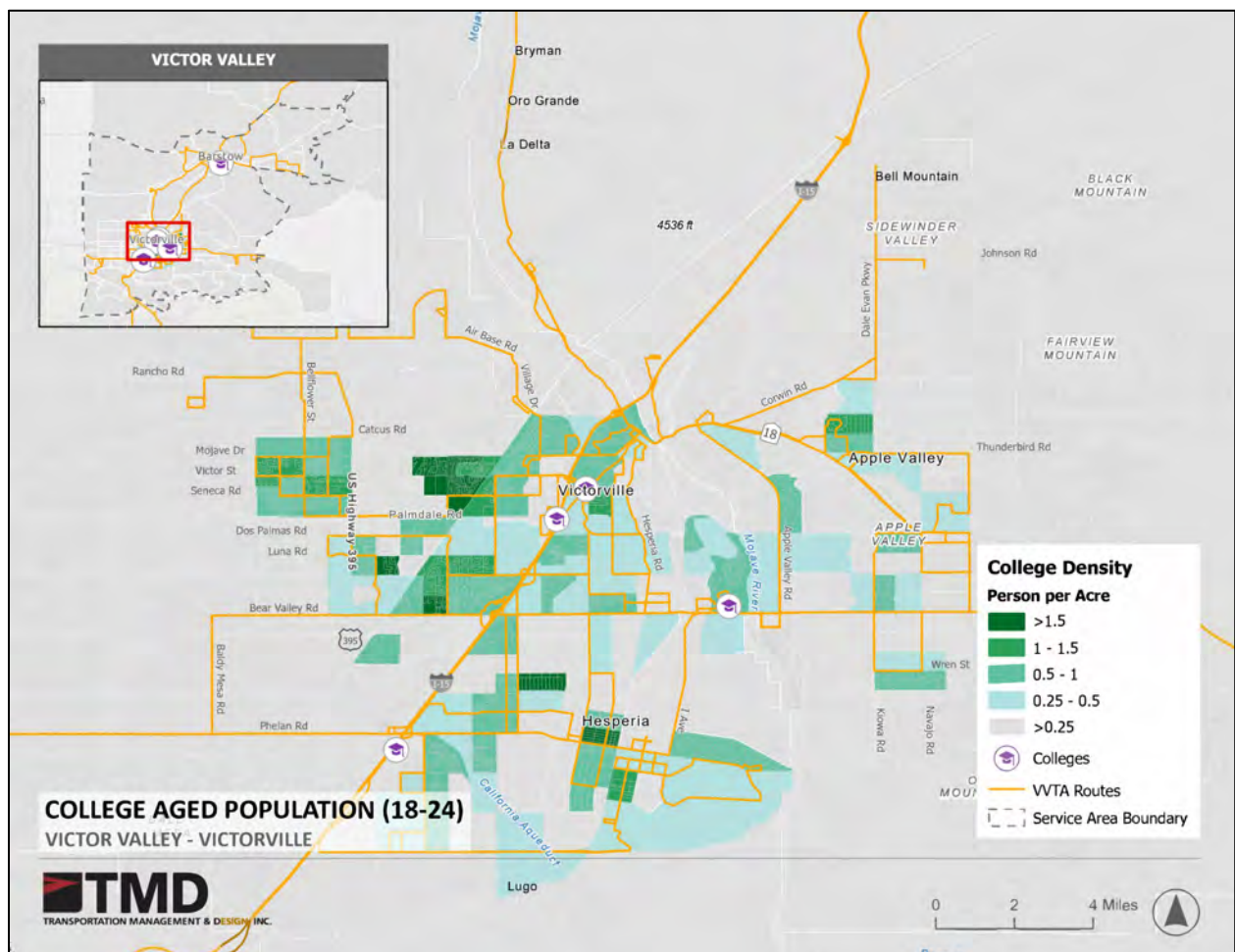
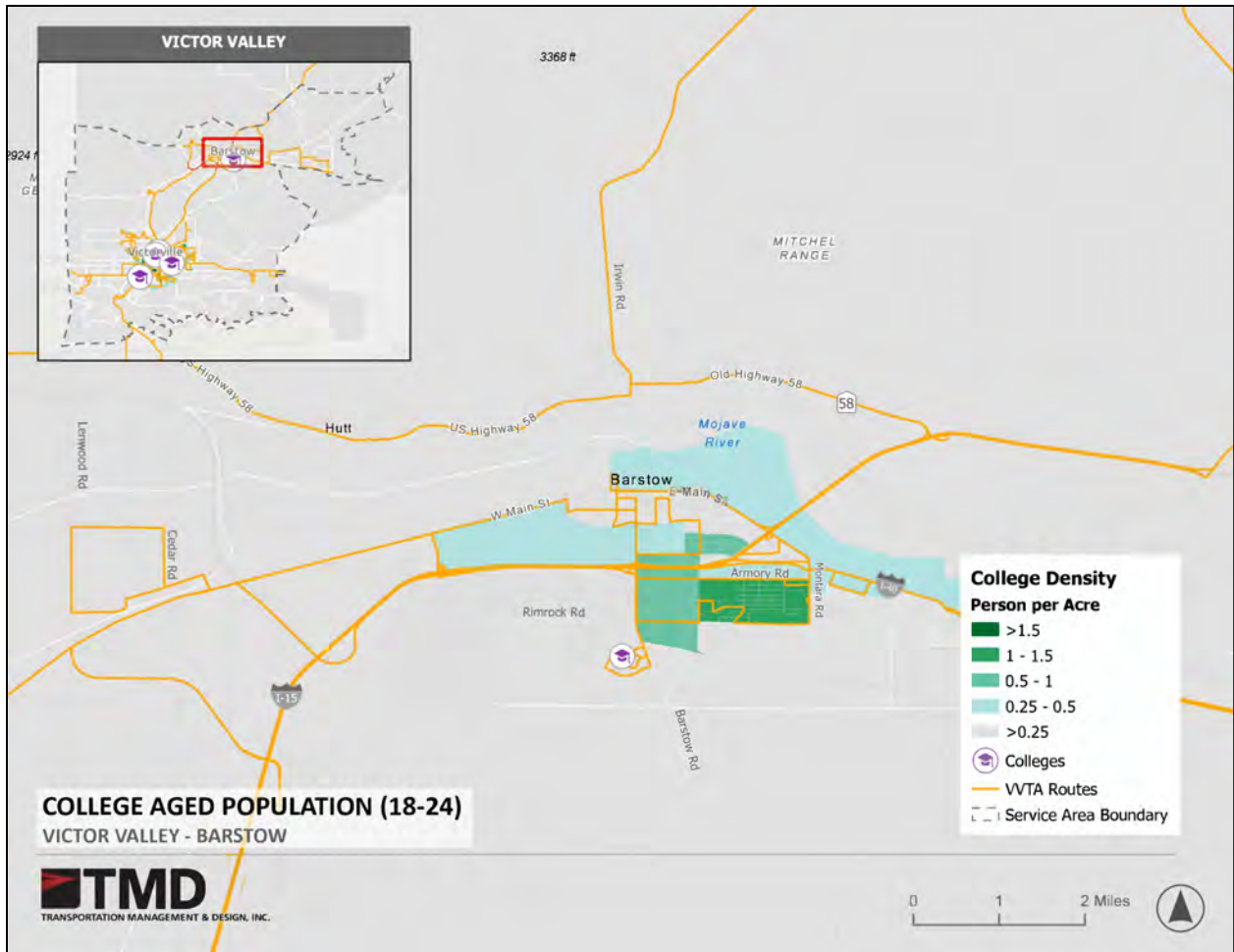


Figure 58: Density of College Aged Residents (Barstow)



4.3.2.3 Youth Population

The under-18 population can also be more transit-reliant, as they may not have access to a car or are too young to drive but still want to travel independently. Furthermore, the Victor Valley Union School district has restrictive eligibility for school bus service. Public transit allows those who cannot drive to still have independence and access to a variety of destinations. In Victorville and Barstow, trends and concentrations can be seen in the youth population. Where there is a higher density of youth under 18, a school is also nearby. Children under 18 years old make up 26 percent of the population of the service area. On VVTA routes however, people under the age of 18 make up only 6 percent of riders. As seen in Figure 59 and Figure 60, there are some schools that are not accessible by public transit. It would be worthwhile to investigate if providing more transit options to schools is feasible.

Figure 59: Density of Youth (Under 18) Residents (Victorville)

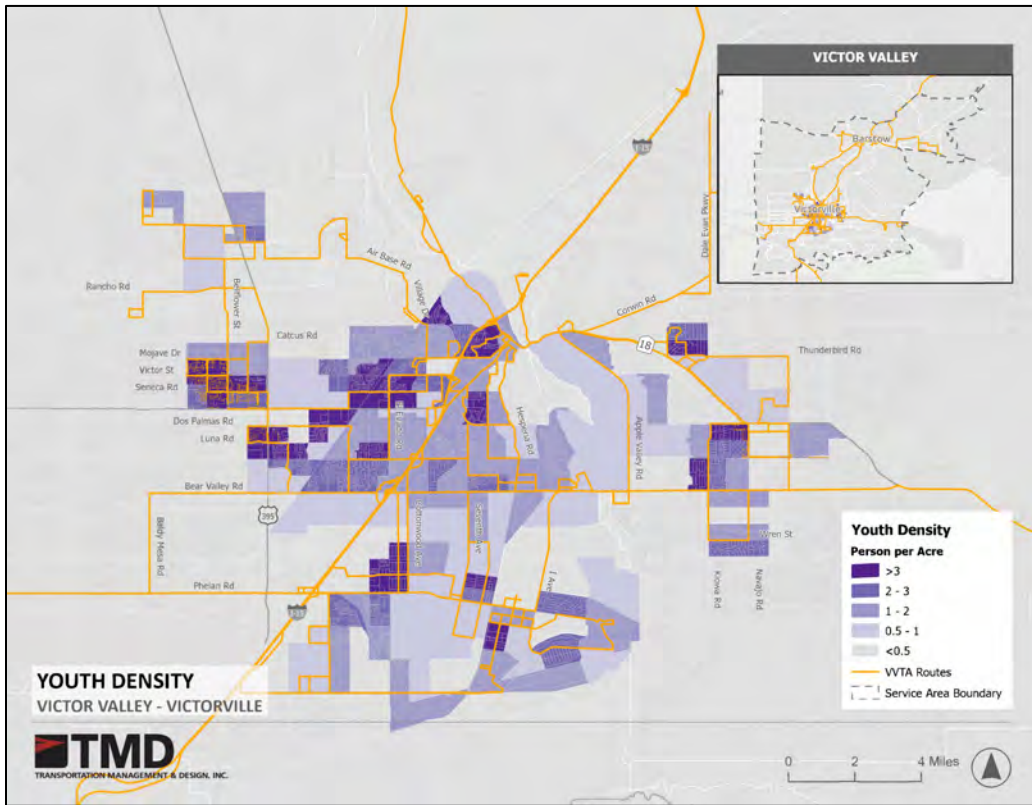
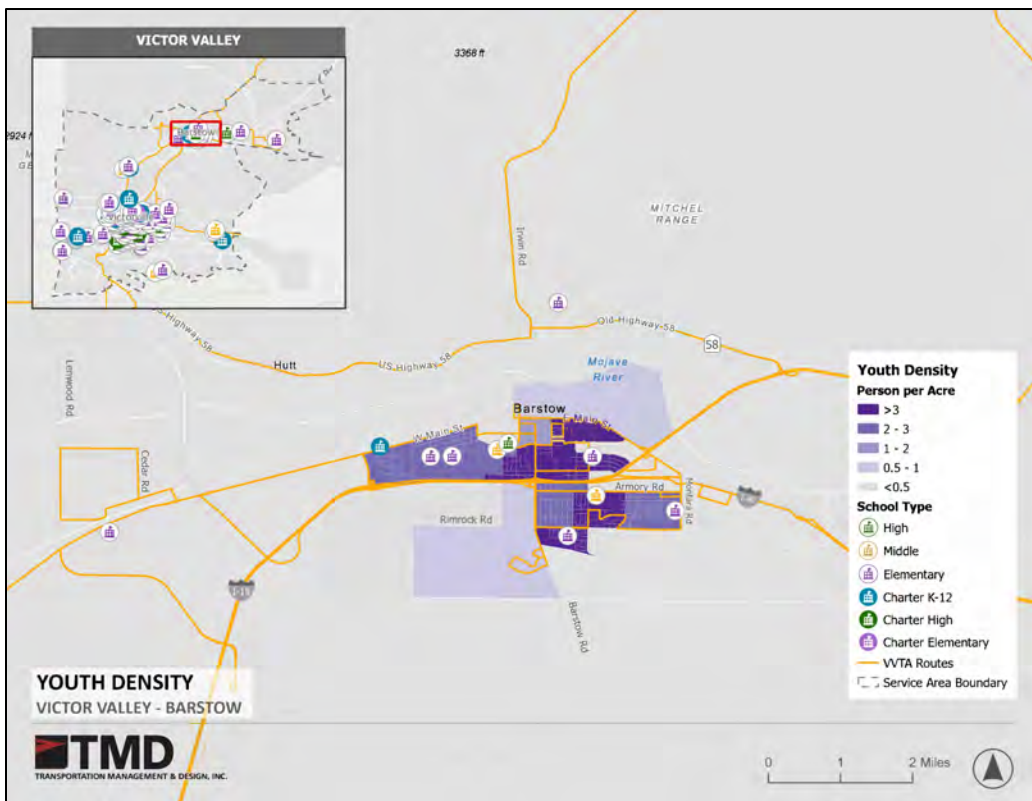


Figure 60: Density of Youth (Under 18) Residents (Barstow)



4.3.2.4 Low-Income Populations

Low-income populations are a demographic that is more likely to take transit. Because car ownership is expensive, low-income households have fewer cars and therefore may rely on other modes to meet all their mobility needs. Households that make under \$25,000 annually represent a large part of the study area’s transit ridership - they constitute 11 percent of the service area’s population and 49 percent of VVTA riders. The areas with the lowest median income include households in Hesperia, Apple Valley, Victorville, and Barstow. Median household incomes are generally higher closer to I-15 which can be seen in the lighter color in Figure 61 and Figure 62. Most concentrations of low-income households have access to healthcare facilities and shopping destinations, but providing direct access on transit to these destinations for low-income households will open the doors to new opportunities.

Figure 61: Density of Low-Income Residents (Victorville)

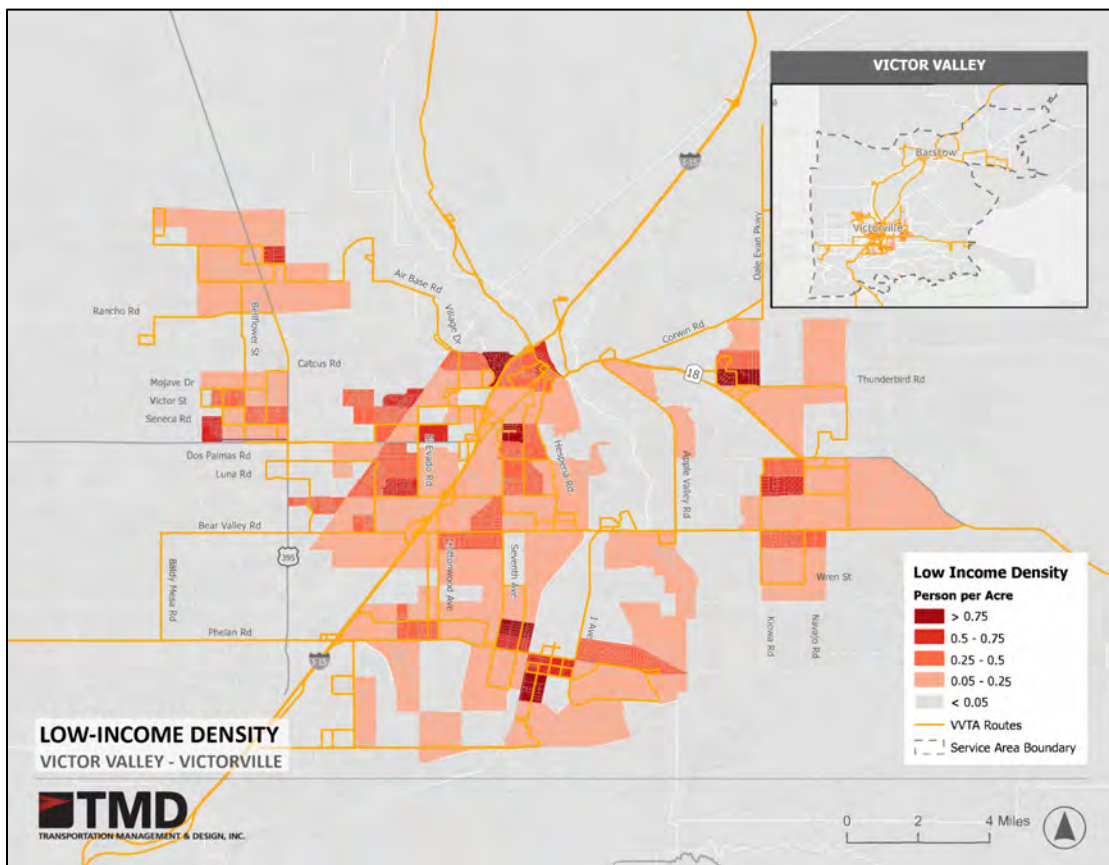
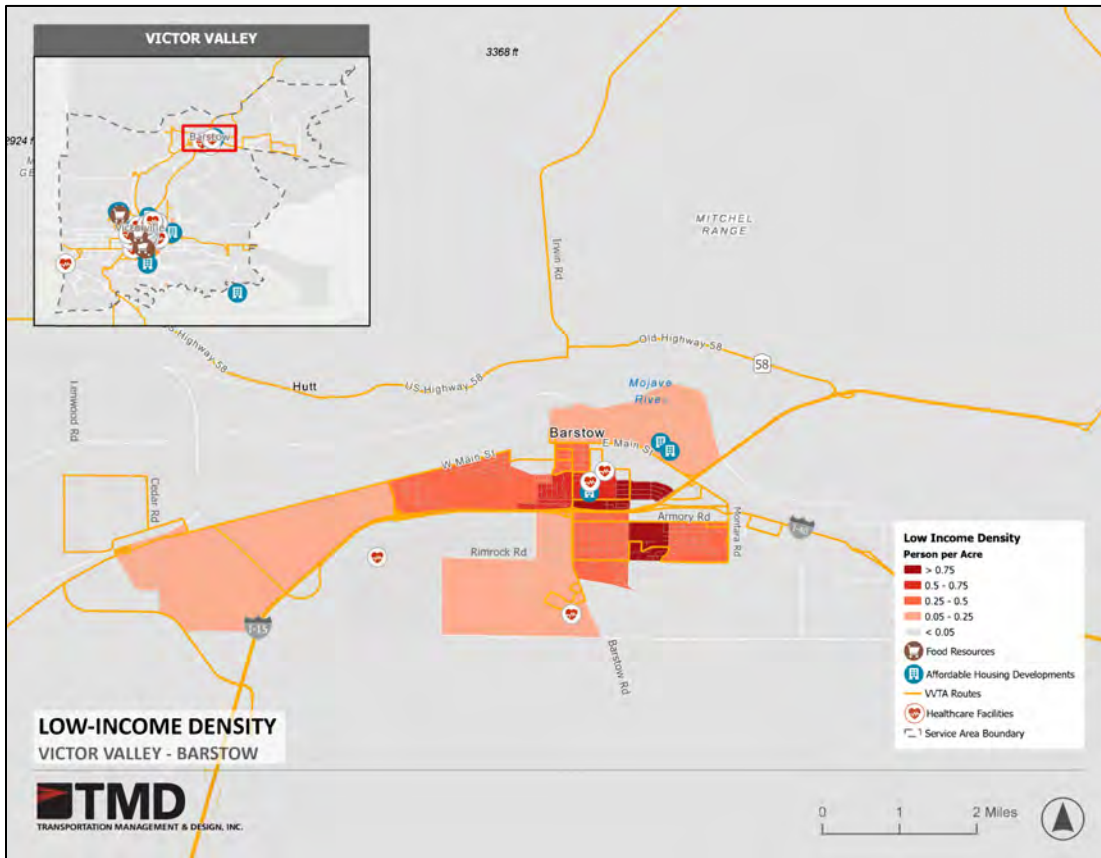


Figure 62: Density of Low-Income Residents (Barstow)



4.3.2.5 Minority Populations

While identifying as a minority household is not a direct indicator of higher transit use, it is important to pay close attention to the concentration and distribution of minority households in the service area for two reasons. The first is VVTA is committed to providing equitable transit service. The second is to protect these communities from Title VI implications. Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or national origin by an entity that receives funding from the federal government, including transit agencies. When transit agencies make service changes, they must ensure that service changes do not place a disparate impact on minority populations.

About half of residents in the VVTA service area identify as non-white, totaling 49 percent of residents in the region. On VVTA routes however, they make up a larger proportion of VVTA riders, totaling 75 percent of riders. Figure 63 shows a strong separation of population density by race and ethnicity in the Victor Valley Region, with many people who identify as minority living on the western side of I-15. Additionally, there are small pockets of high densities of minority residents in Apple Valley, South Adelanto, and south of Hesperia. In Barstow, the highest density of minority residents is in the middle of town, closest to I-15. As shown in Figure 64, many of the minority population concentrations do not have direct access to food or medical destinations, meaning that providing transit access to and from these key destinations will be important for these communities.

Figure 63: Density of Minority Residents (Victorville)

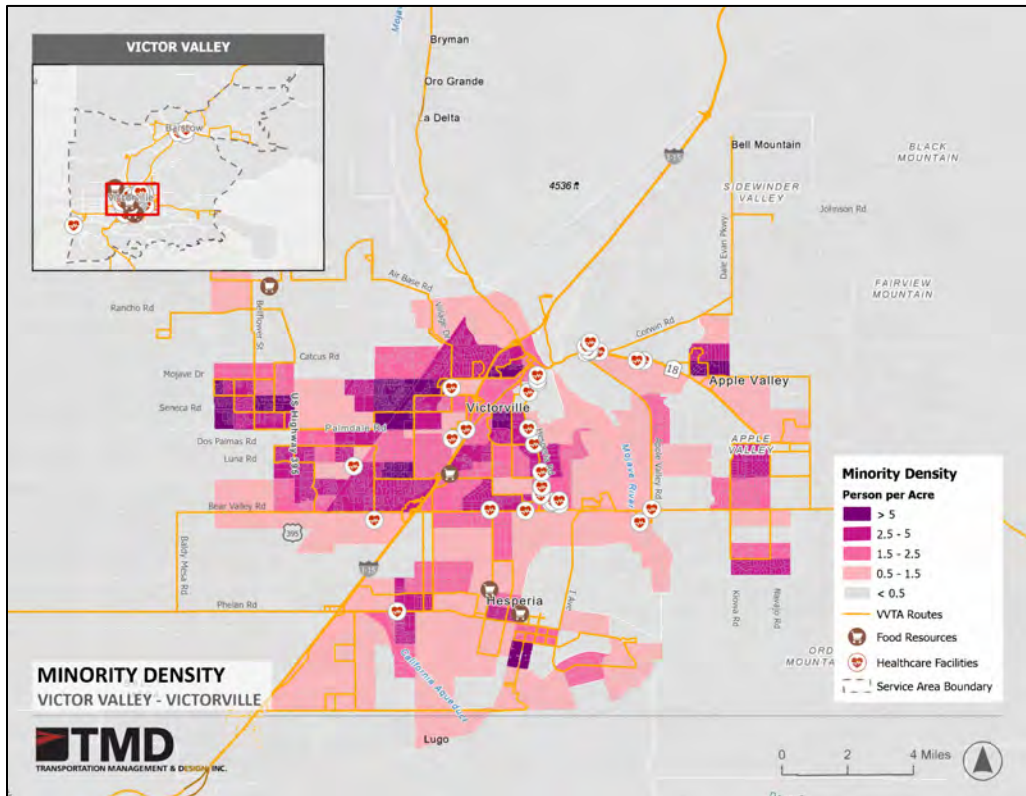
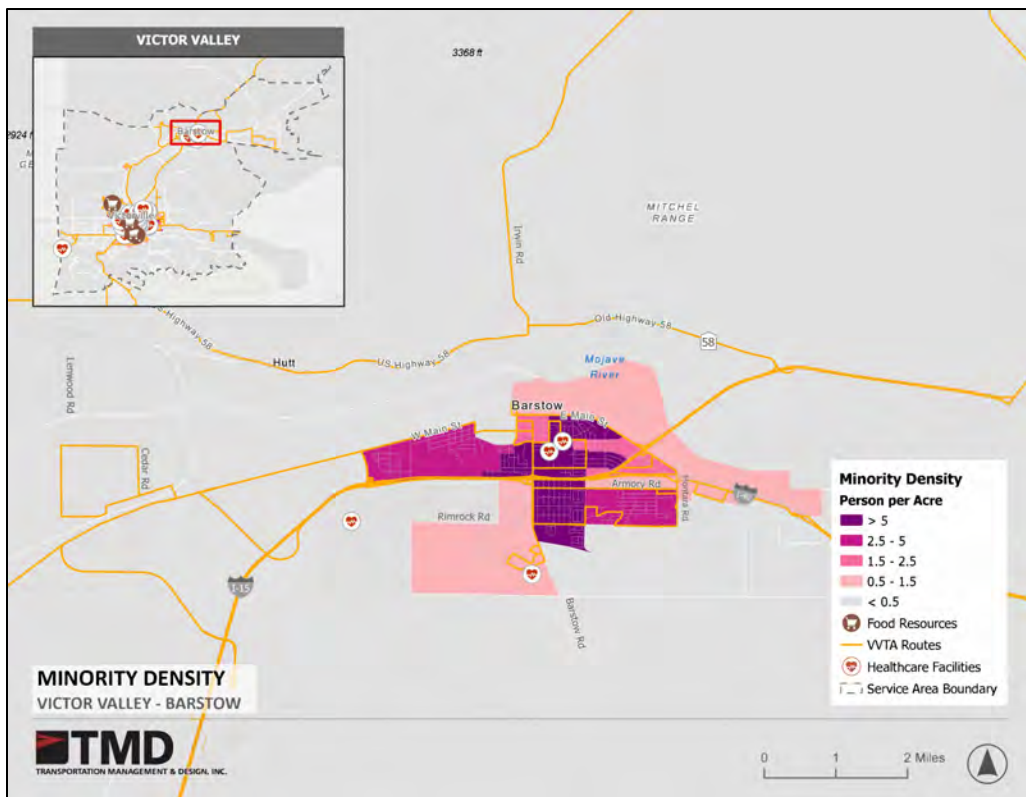


Figure 64: Density of Minority Residents (Barstow)



4.3.2.6 Zero-Vehicle Households

Lack of access to a private vehicle is one of the top indicators of someone’s likelihood to utilize transit. Zero-vehicle households represent only 1 percent of regional households, but 41 percent of transit riders do not have access to a car at home. An additional 26 percent have access to only one vehicle in their household. In the Victor Valley region, zero-vehicle households are more concentrated in Victorville, Apple Valley, southeastern Hesperia, and parts of Adelanto. Additionally, the area of Barstow north of I-15 has a stronger concentration of zero-vehicle households than the households on the southern side. This is shown on Figure 65 and Figure 66 These areas are most likely very transit dependent, so offering frequent and reliable service to these communities is extremely important. The density of households that do not own a car is exceptionally low throughout the service area, with only a few block groups with more than 0.3 zero vehicle households per acre. These block groups are well served by public transit, but there are some block groups in Adelanto and Apple Valley that could need additional bus services.

Figure 65: Density of Zero Vehicle Households (Victorville)

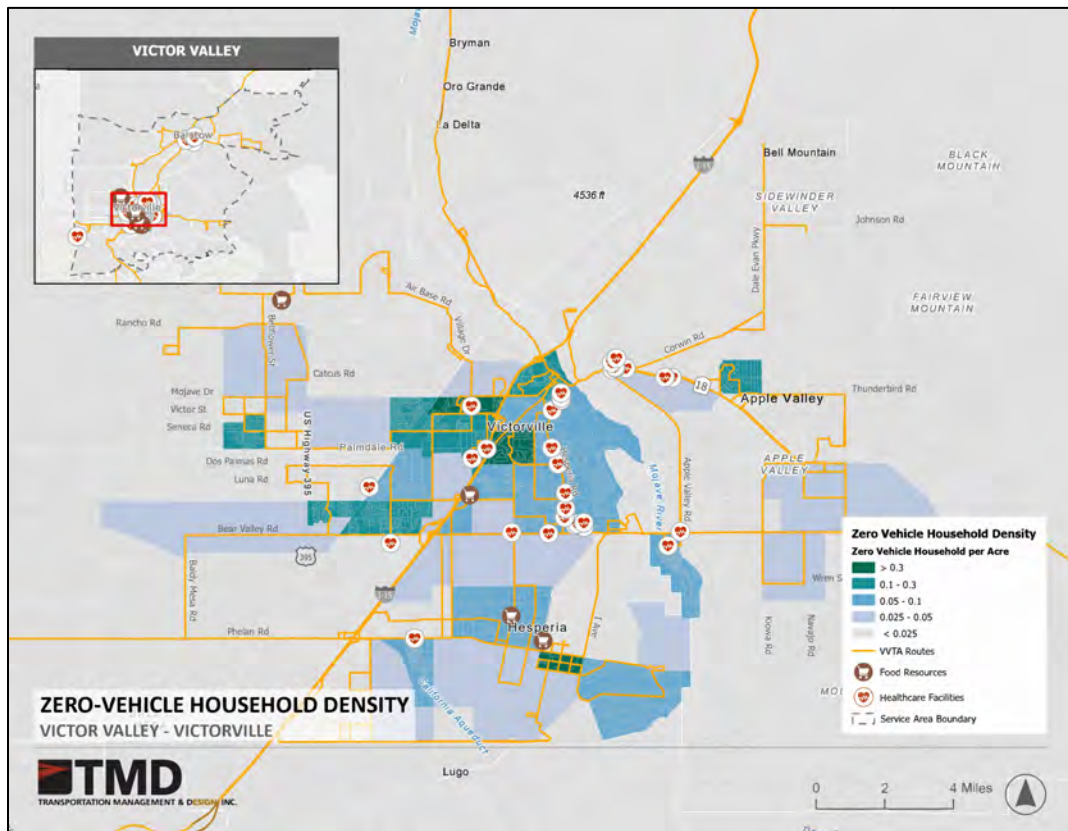
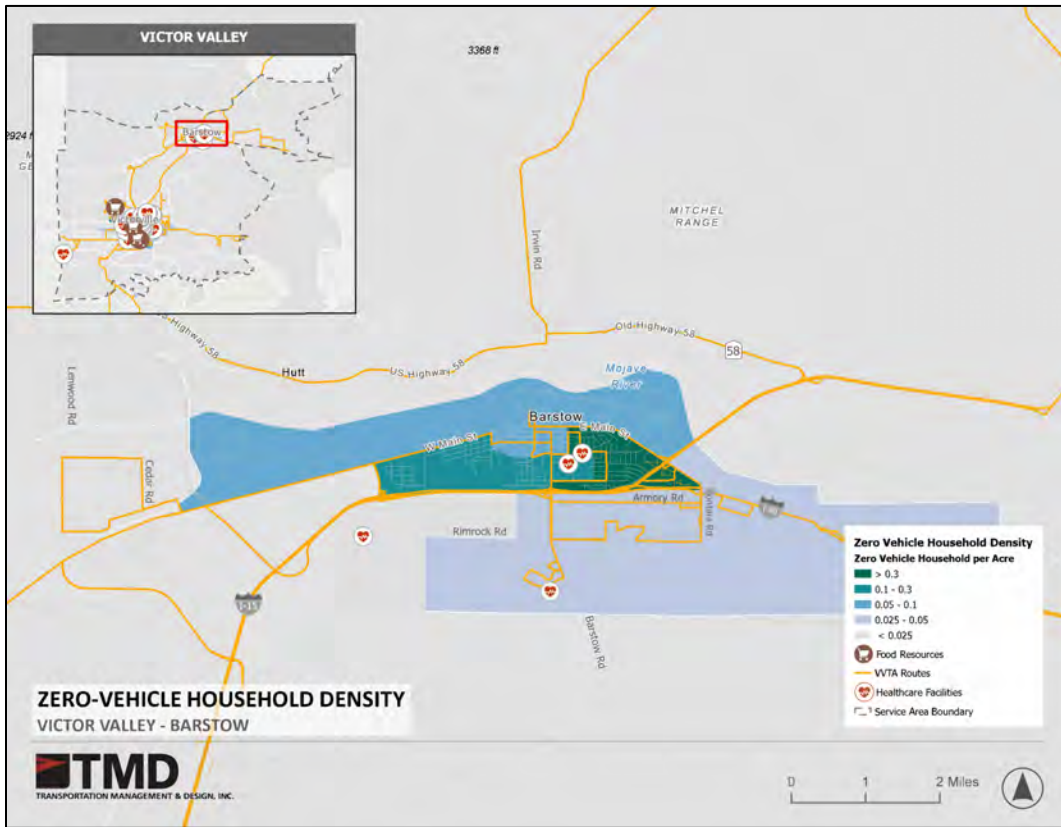


Figure 66: Density of Zero Vehicle Households (Barstow)

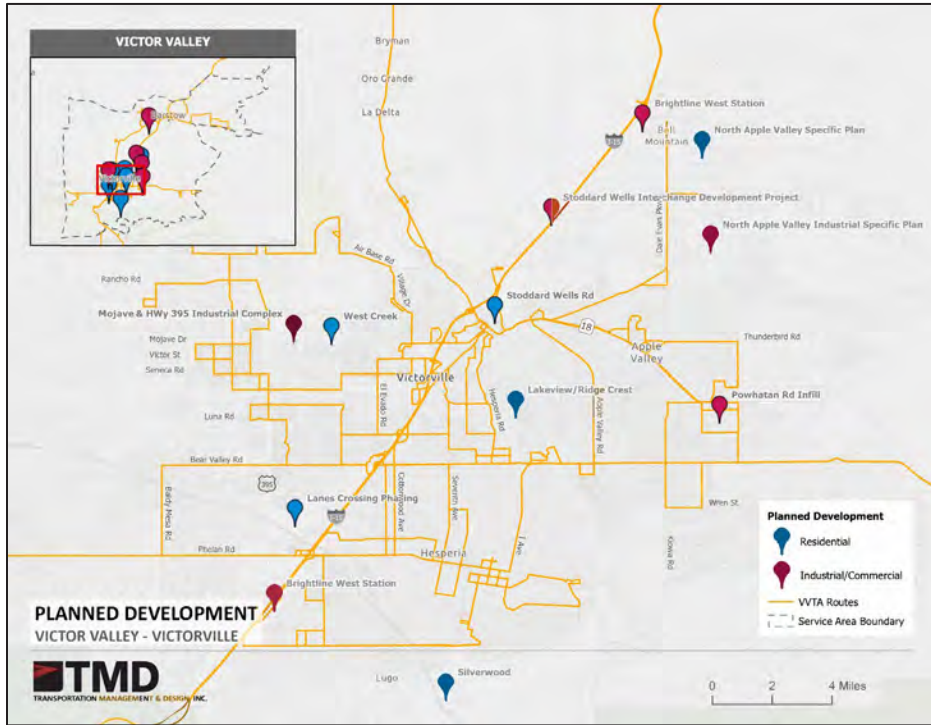


4.4 Planned Development

The high-desert area is going through major changes and growth. There are numerous commercial, industrial, and residential developments which are currently planned, their locations are identified in Figure 67. Besides the projects that are already planned, there are plans for developing areas of the High Desert. These developments, described in this section, will bring jobs and economic growth to the area through increased shipping and distribution of goods in Southern California and beyond.

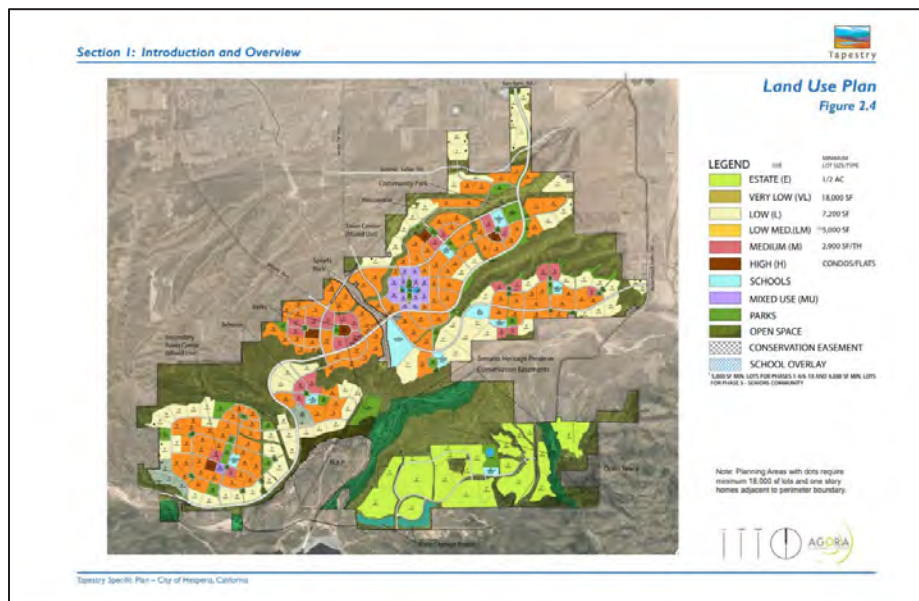
There are three major residential developments in Victorville. The two residential developments west of I-15 and east of Hwy 395 include West Creek and Lanes Crossing. West Creek will be between Hopland Street and Mojave Drive to the north and south, and between Amythyst Road and Cobalt Road to the east and west. 827 housing units will be built close to schools for families and the new industrial complex, which will provide additional jobs to the area. The second is the Lanes Crossing Plan which will provide 550 units in the Southernmost area within the city limits. One smaller development is being added adjacent to Spring Valley Lake and will provide 378 homes in the area.

Figure 67: Planned Development



In Hesperia, a new mixed-use development is in the early planning and development stages. The Silverwood Development site plan is shown on Figure 68. A specific plan was adopted in early 2016 and outlines the overall vision, goals, objectives, design guidelines and development standards for the development. The plan proposes one large and two smaller communities centered around mixed-use centers. Planned density ranges from highest density in the mixed-use centers to lowest density with Estate Residential. The build out time frame is 30 years and 16,000 homes.

Figure 68: Land Use Plan for the Silverwood Residential Development



In October 2022, BNSF Railway announced its plans to build the Barstow International Gateway Project¹¹ which is shown on Figure 69. This development expands the shipping abilities of the area and the efficiency of the rail system. The project is expected to bring thousands of direct jobs to the high desert, which could increase the transit demand in the region with more jobs and opportunities opening for new residents.

Figure 69: Barstow International Gateway Graphic



One of the biggest and most impactful development projects is the Brightline West Rail Line that will connect Los Angeles to Los Vegas through the High Desert. The project has short-term and long-term economic impacts bringing 35,000+ construction jobs and 1,000+ permanent jobs¹². The connection between Apple Valley, Hesperia, and Rancho Cucamonga will hopefully get more commuters off I-15, easing traffic congestion in the area. The North Apple Valley Specific Plan outlines development around the new Brightline Train stop and I-15 as well as the Apple Valley Airport. Apple Valley also has plans to redevelop and infill Yucca Loma and Powhatan Road between Navajo Road and Central Road. Creating more density by infilling existing development and redeveloping existing land uses will lead to more effective public transit in the area. Apple Valley's commitment to pedestrianization of key corridors will also assist in the accessibility of transit to its residents. Brightline West is shown on Figure 70.

¹¹ [Barstow International Gateway \(BIG\) - BNSF California](#)

¹² [Job Creation | Brightline West](#)

Figure 70: Brightline West System Map

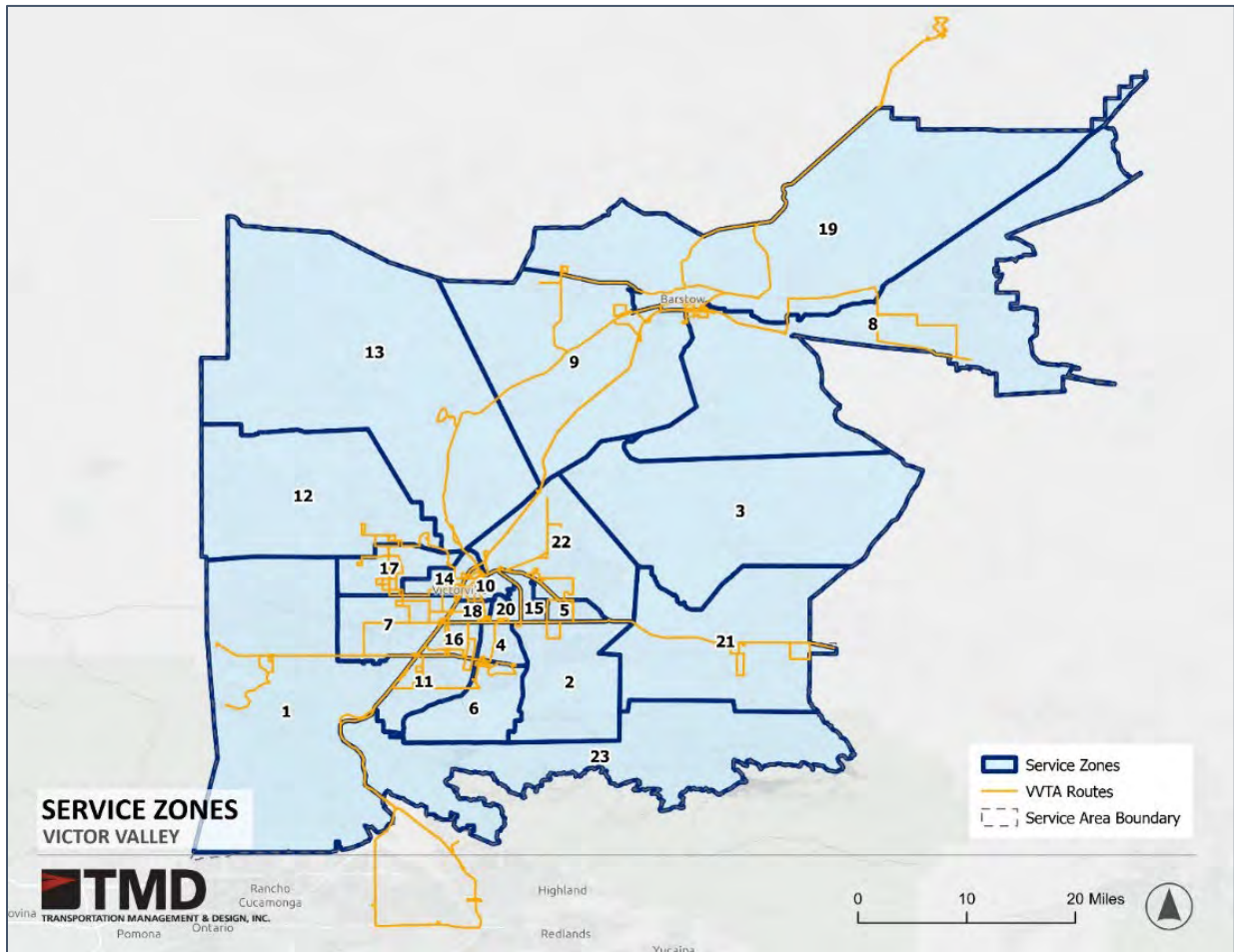


The current VVTA system network does not directly serve any of these developments, but some routes do get close. Routes 15 and 22 pass by on Stobbard Wells Road, adding a stop as new developments once those developments are built will provide service to the Victor Valley Transportation Center, Saint Mary Medical Center, Barstow and even access to San Bernadino. For the rest of the mentioned developments, the closest bus service would be about a mile away. It will be important to track these projects as they build out and check for transit need and demand levels.

4.5 Travel Patterns (Replica)

Over the last decade, the emergence of comprehensive travel data provided through location-based services and online platforms has provided transit agencies with new tools for understanding regional travel behavior. Replica is an online data platform that aggregates location-based services data, credit card transactions, and U.S. Census data to deliver detailed but anonymized information on regional trip-making. For this project, the study area was divided into 19 different analysis zones (shown in Figure 71), defined by major cross-streets, freeways, neighborhoods, and geographic barriers (rivers or washes). The following analysis will provide an understanding of how people move throughout the service area now, as well as how travel patterns have changed in the four years from 2019 to 2022.

Figure 71: VVTA Zones Map

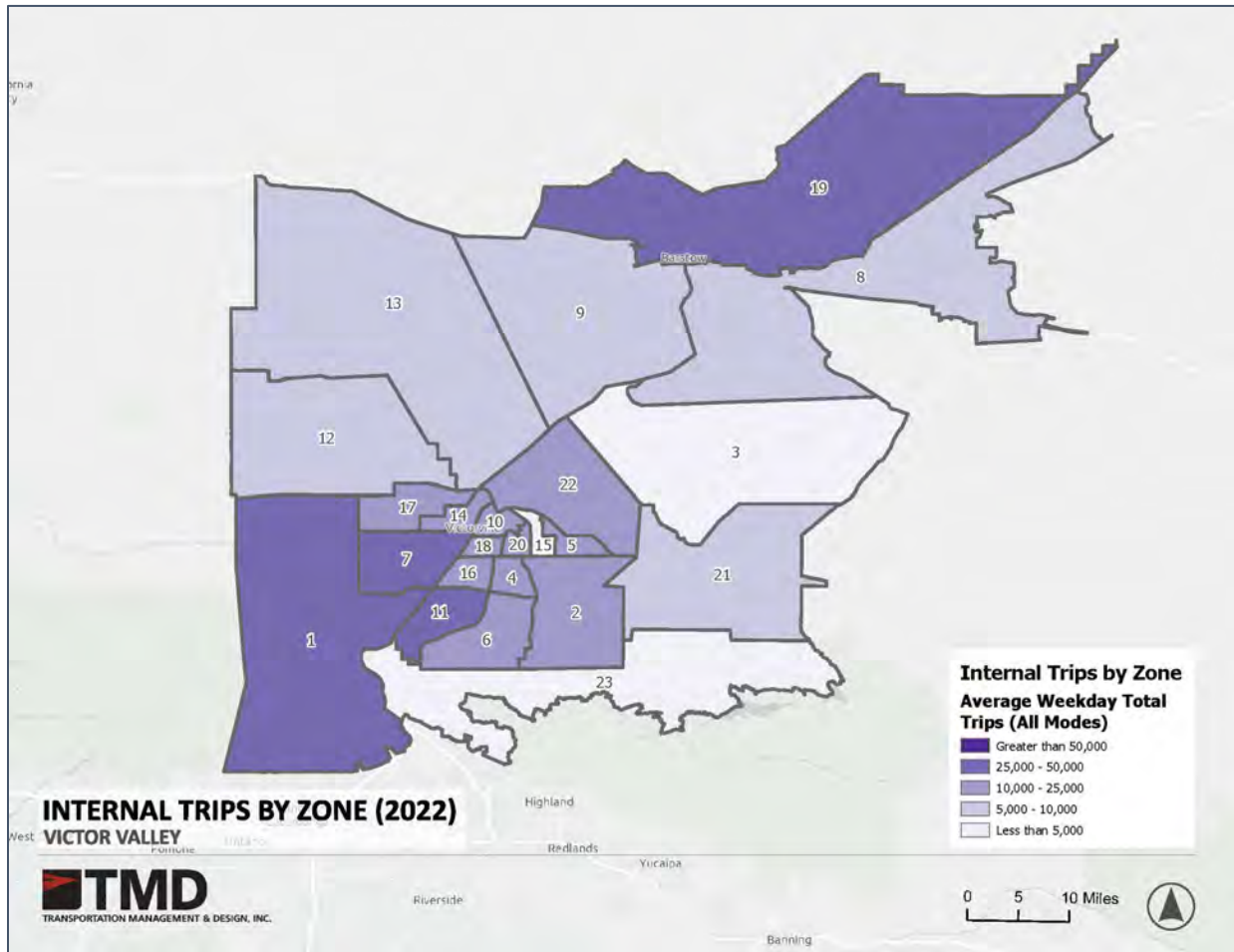


4.5.1 CURRENT TRAVEL PATTERNS

Overall, 1.31 million trips take place in the service area across all modes on an average weekday. Of these trips, 33 percent remain internal to their zone, while 67 percent of trips are between multiple zones (Figure 72). Zone 7 accounts for the most daily trips with 204,228 trips on an average weekday, followed by Zone 1 which accounts for 121,322 trips per day in the service area. Zones 19, 21, 22, and 23 have the largest shares of internal trips by zone, with more than 90 percent of their trips occurring internally. These zones are less densely populated than others, people in these zones are less inclined to travel far from their homes. The zones with the next largest number of internal trips are zones 17, 18, and 20 which are all a lot denser than the other zones and are more likely to have a large variety of destinations residents, meaning they are less likely to need to leave their zone.

The intra-zone travel patterns show that most travel within the service area is intra-zone (67 percent). Of the 23 zones in the service area, 16 have more than 50 percent of their trips occurring to another zone. This could mean that people do not feel like that have the destinations they need close to home, and therefore travel to other zones for work, shopping, recreation, and schooling.

Figure 72: Weekday Internal Trips by Zone



The zone-to-zone trips that have the highest volumes are presented in Table 32 and Figure 73. The zones that have the most trip activity outside of their own zone are 1, 2, 4, 7, and 10. These five zones in their pairs have a total of about 70,000 trips or more each day. Zone 7 appears in 3 of the top ten origin-destination pairs with zone 14, 18, and 1. This makes sense because there are large dense residential neighborhoods and strong destinations along I-15. Additionally, the top pairs are all zones that are next to each other, so there are no zones where the top pair is to a zone that they do not border.

In Barstow, zones 8 and 19 are the strongest Origin-Destination (OD) Pair with about 14,000 trips, followed by 9 and 19 with about 12,000 trips between them.

Figure 73: Weekday Origin-Destination Pairs

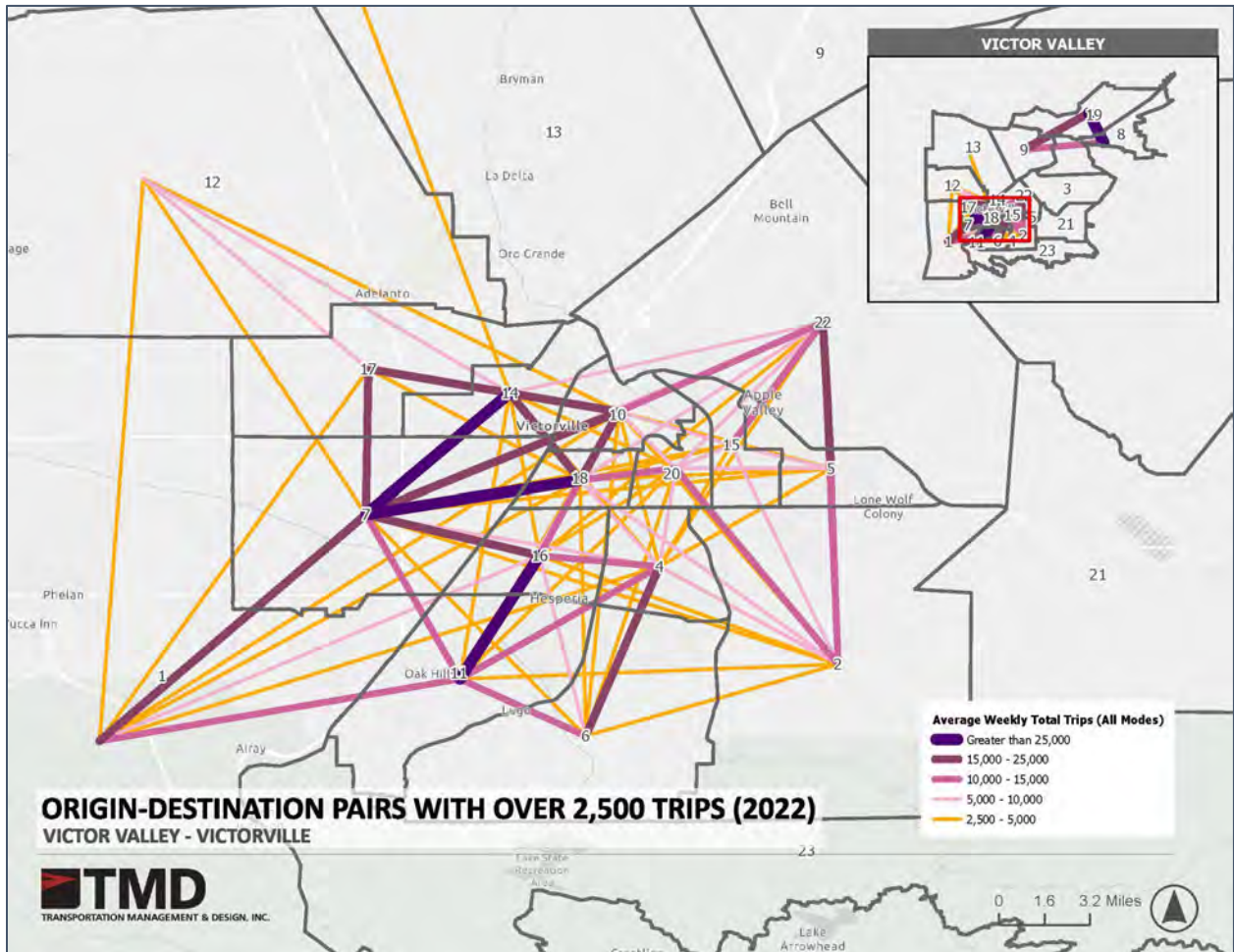


Table 32: Top 10 Origin-Destination Pairs

Origin – Destination Zone Pair		Total Trips per Day Between Zone Pairs	Percent of All Trips that Go to Zone (X)	
Zone A	Zone B		Zone A	Zone B
7	14	33,753	17%	41%
8	19	28,575	52%	86%
7	18	27,481	13%	70%
11	16	26,695	33%	33%
9	19	24,173	57%	73%
10	14	22,205	22%	22%
4	6	20,660	21%	32%
5	22	20,314	31%	71%
1	7	18,664	15%	9%
14	18	18,217	22%	47%

4.5.2 IMPACT OF COVID-19

The COVID-19 pandemic greatly disrupted general travel behavior. For most people it meant changing work travel patterns, and only making trips when necessary. However, the Replica findings for the Victor Valley service area show that the total number of trips taking place on an average weekday increased from 1.13 million trips in the fall of 2019, to 1.31 million trips in 2022, a 15.9 percent increase in trips. This is true of weekend travel as well with trips increasing from 959 thousand trips in 2019 to 1.14 million trips in 2022, an 18.9 percent increase in trips.

Although weekday trips increased overall, the distribution of trips throughout the day is uneven. In Figure 74 through Figure 77 we can see that there is a smaller share of morning trips taking place compared to afternoon trips. This is in line with trends from other cities in that the way and times that people commute has shifted after the start of the COVID-19 pandemic. Similarly, the weekend trips have the same shift in the share of trips taking place by starting hour. There is a smaller share of morning trips taking place compared to afternoon and evening trips. In 2022, overall, there are 87 percent as many trips being made on the weekends as on the weekdays. However, VVTA only operates 79 percent of weekday service levels on Saturdays and 53 percent of weekday service levels on Sundays.

Figure 74: Weekday Trips by Time-of-Day Total Volume

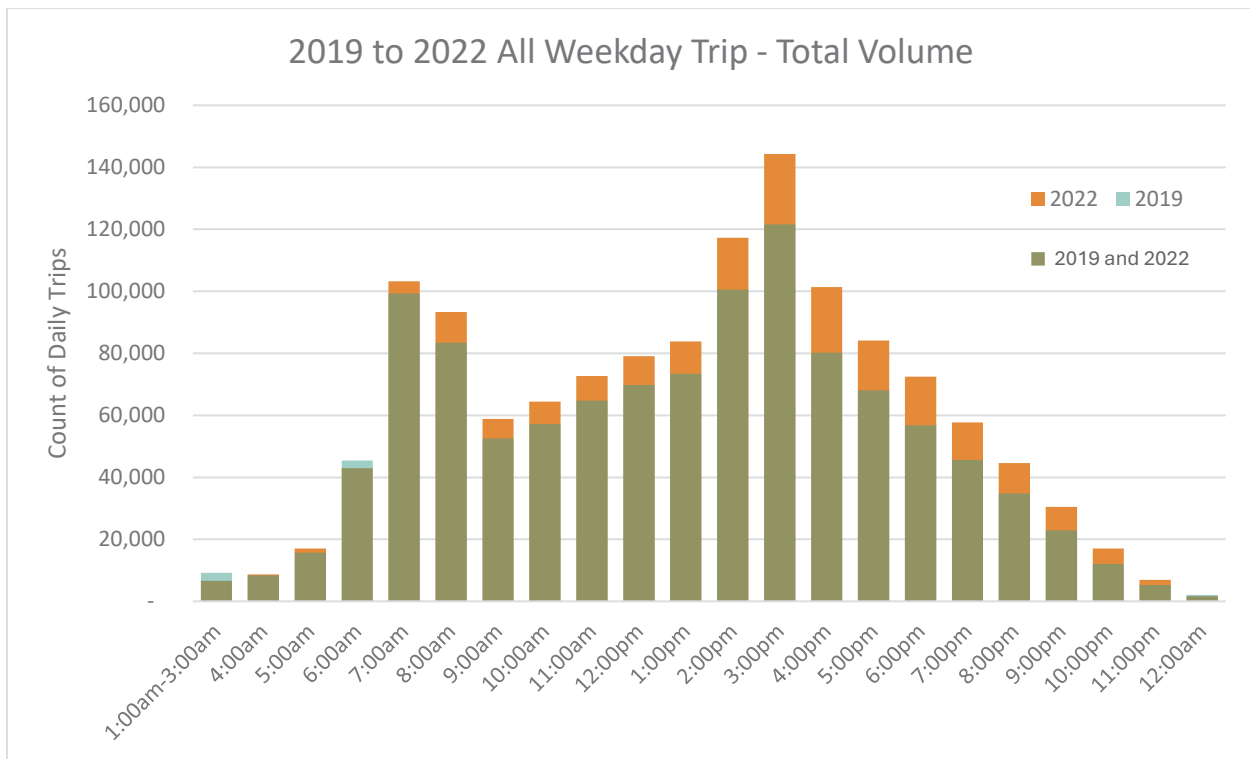


Figure 75: Weekday Trips by Time-of-Day Percent

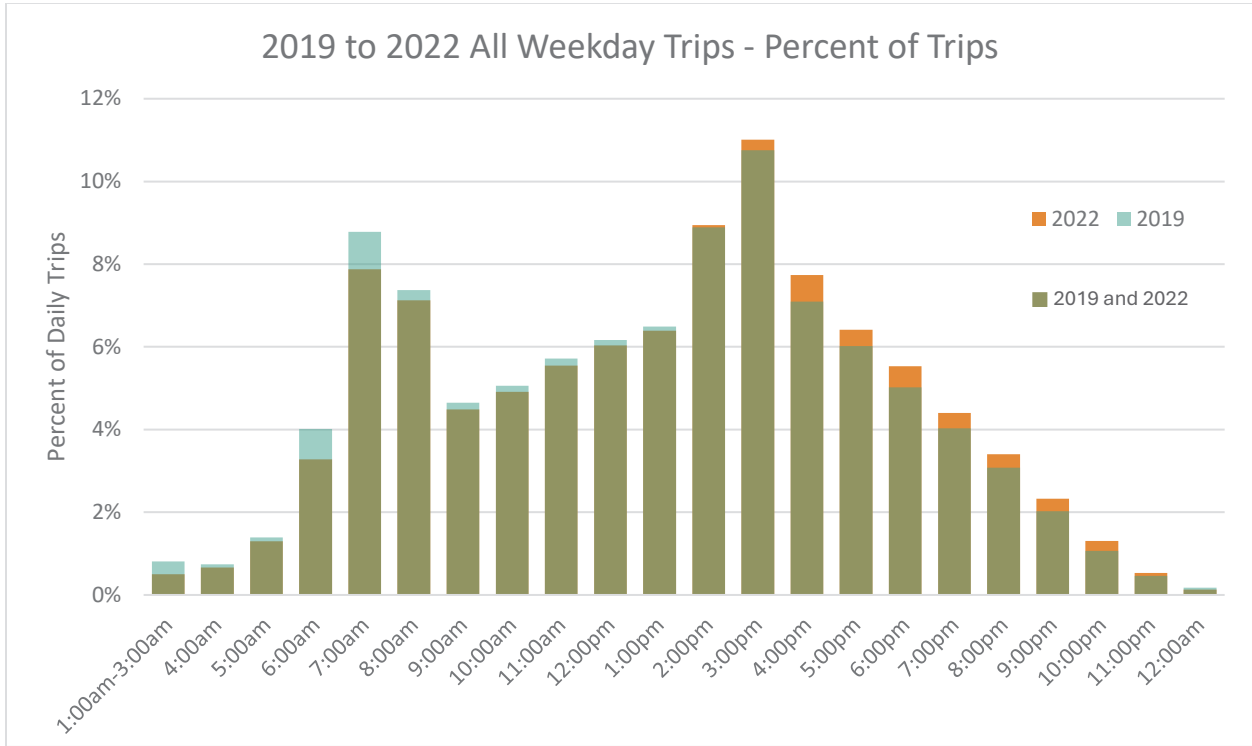


Figure 76: Weekend Trips by Time-of-Day Total Volume

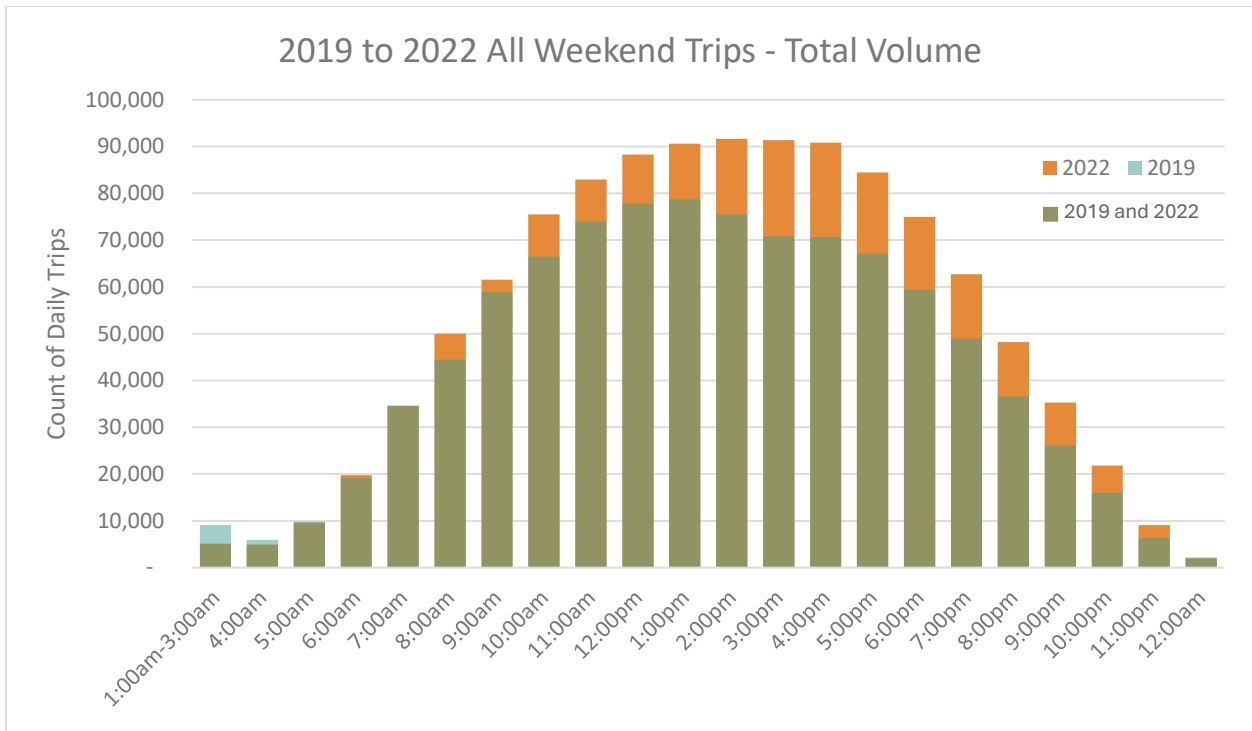
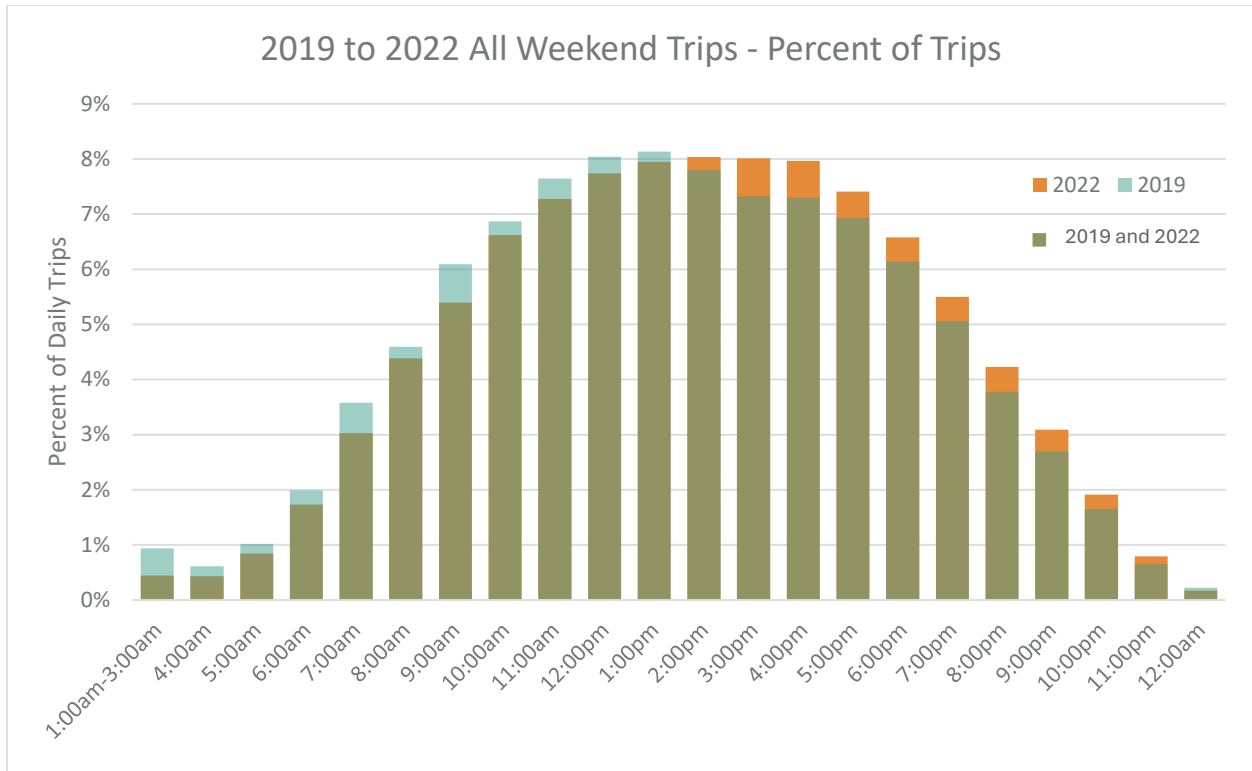


Figure 77: Weekend Trips by Time-of-Day Percent



4.5.3 TRIP LENGTHS

Table 33 and Table 34 show how trip length varies by trip purpose and trip time, respectively. The share of trips that are less than 2 miles is minor compared to other trip distances, which is in line with the findings from the travel flows, that many people travel outside of their home zones for a variety of purposes. Excluding home trips, overall, shopping and eating destinations were the most popular trip purposes in the Victor Valley area while errands and recreation were least popular.

Table 33: Trip Length by Trip Purpose

Trip Purpose	0.5-1mi	1-2mi	2-4mi	4-8mi	8-16mi	16+mi	Total
Shop	34%	37%	37%	35%	30%	26%	34%
Eat	13%	15%	17%	17%	14%	13%	16%
School	16%	15%	13%	11%	8%	9%	12%
Social	14%	11%	10%	11%	15%	14%	12%
Work	8%	8%	9%	11%	16%	26%	12%
Errands	6%	5%	5%	6%	6%	5%	6%
Recreation	5%	5%	5%	5%	5%	3%	5%
Other	4%	4%	4%	4%	5%	4%	4%
Total	8%	15%	23%	30%	17%	7%	

Trip distances were stagnant across all time periods. Each distance range had similar shares of trips across all time periods. About half of all weekday trips in Victor Valley are between 2-8 miles long.

Few people travel short distances or super long distances. Ensuring that VVTA routes adequately serve these kinds of trip lengths will help attract riders and ensure that current customers can use VVTA to access their destinations.

Table 34: Trip Length by Time Period

Distance	AM Peak	Midday	PM Peak	Evening	Total
0.5-1mi	8%	7%	7%	6%	7%
1-2mi	15%	15%	16%	15%	15%
2-4mi	23%	24%	24%	23%	23%
4-8mi	28%	30%	29%	29%	29%
8-16mi	17%	17%	17%	18%	17%
16-32mi	5%	5%	5%	5%	5%
32-64mi	3%	2%	2%	2%	2%
Over 64mi	1%	0%	0%	1%	1%
Total	21%	36%	31%	12%	

4.6 Key Findings

- College Aged Residents, Minorities and residents who live in zero-vehicle households are overrepresented in their respective shares of VVTA riders compared to the overall population. Understanding their transit use patterns and trip demands will allow VVTA route to best serve these communities.
- As the region grows with the addition of the new residential and industrial developments, tracking the transit demand for these new destinations and adding service to them as the development reaches completion will be needed.
- Findings from the travel analysis show that trips are shifting later in the day, more in the afternoon and evening, but still have strong peak hours. Bus service needs to align with this shift in daily trips.
- Trips are longer distances, which is in line with land use patterns and lack of residential and commercial density, how can VVTA use this information to ensure that these trips are covered.

5 Needs and Opportunities Analysis

This Needs and Opportunities Analysis summarizes the findings from the first round of public outreach efforts and the analysis of service performance to identify issues and opportunities to inform the development of the alternative networks for VVTA. The Public Outreach section includes the opinions of riders and stakeholders on VVTA’s services and ways the transit network could better serve the region. The Service Performance Analysis section includes how VVTA services are performing compared to service standards, gaps within the current service area coverage, findings and patterns related to deviations on deviated routes, an analysis of vanpools, and the CTSA program.

5.1 Public Outreach

This section summarizes the first round of outreach for the COA. The input gathered from various stakeholder groups, including the public, VVTA employees, local agencies, key stakeholders, and VVTA’s ridership data was incorporated into service alternatives. This summary contains the public outreach schedule, descriptions of the outreach events, and major discussion themes that emerged during the outreach process. A detailed memorandum of the entire outreach process and detailed discussions and findings from each event type are presented in the outreach report in Appendix B.

5.1.1 PUBLIC OUTREACH SCHEDULE

The first round of outreach occurred between October 23, 2023 and January 16, 2024. Public outreach events were advertised with bilingual (English and Spanish) digital and print flyers via VVTA’s social media accounts, website, and with printed flyers in VVTA buses. A one-page flyer about the COA process was also shared to promote outreach events. A schedule of the public outreach activities is presented on Table 35.

5.1.2 POP-UP SESSIONS

The purpose of the pop-up sessions was to hold informal, one-on-one conversations with transit users. Outreach staff held discussions in English and Spanish at various high traffic transit centers and bus stops within the VVTA service area. These pop-up sessions provided opportunities for VVTA to hear from people who may not be inclined to attend formal outreach events. Approximately 56 passengers provided input through these sessions. Materials used for these sessions included three bilingual boards including 24”x36” maps depicting service area and routes, and discussion questions.

Table 35: Public Outreach Schedule

Date	Activity	Participants (Estimate)
Tuesday, October 24, 2023	<i>Stakeholder Interview</i> City of Victorville 14343 Civic Drive, Victorville, CA 92392 [10:00 – 11:00 am]	4
	<i>Stakeholder Interview</i> Rock’n Our Disabilities 13358 Palm Street, Hesperia, CA 92344 [10:00 – 11:00 am]	1
	<i>Pop-up Session</i> Victor Valley Transportation Center 16825 D Street, Victorville, CA, 92395 [2:30 – 5:00 pm]	26
	<i>Stakeholder Interview</i> Victor Valley Transit Authority – Rotary Club 13229 Spring Valley Parkway, Victorville, CA 92395 [12:00 – 4:00 pm]	20
	<i>Stakeholder Interview</i> High Desert Chamber of Commerce 16010 Apple Valley Road, Apple Valley, CA 92307 [2:00 – 3:00 pm]	4
	<i>Stakeholder Interview</i> Victor Valley College 18422 Bear Valley Road, Victorville, CA 92395 [4:30 – 5:30 pm]	2
Wednesday, October 25, 2023	<i>Driver/Staff Meetings</i> Barstow Maintenance Facility 2641 W. Main Street, Barstow, CA 92311 [10:30 am – 1:30 pm]	15
	<i>Pop-up Session</i> Barstow City Hall 220 E Mountain View Street, Barstow, CA 92311 [2:30 – 5:00 pm]	16
	<i>Stakeholder Interview</i> City of Barstow 220 East Mountain View Street, Barstow, CA 92311 [3:30 – 4:30 pm]	4
Thursday, October 26, 2023	<i>Driver/Staff Meetings</i> Hesperia Maintenance Facility 17150 Smoke Tree Street, Hesperia, CA, 92345 [10:30 am – 1:30 pm]	10
	<i>Pop-up Session</i> Victor Valley College 18422 Bear Valley Road, Victorville, CA 92395 [2:30 – 5:00 pm]	14
Monday, October 30, 2023	<i>Stakeholder Interview</i> Providence Health 18300 CA-18, Apple Valley, CA 92307 [3:30 – 4:30 pm]	1
Tuesday, October 31, 2023	<i>Stakeholder Interview</i> City of Hesperia 9700 Seventh Avenue, Hesperia, CA 92345 [10:00 – 11:00 am]	1
Monday, December 11, 2023	<i>Virtual Public Meeting</i> Zoom Webinar [5:00 – 6:00 pm]	1
Wednesday, January 10, 2024	<i>Stakeholder Interview</i> Town of Apple Valley 14955 Dael Evans Parkway, Apple Valley, CA 92307 [12:30 – 1:30 pm]	1
Tuesday, January 16, 2024	<i>Stakeholder Interview</i> San Bernardino Sheriff Department 655 East Third Street, San Bernardino, CA 92415 [11:00 – 12:00 pm]	2

5.1.3 DRIVER/STAFF MEETINGS

The purpose of the VVTA driver/staff meetings was to obtain input from VVTA drivers and staff about day-to-day transit service issues, such as new service needs, problem locations, and customer requests or concerns, as well as ideas for improvements. Materials for stakeholder interviews included 24”x36” map boards depicting the service area and routes, and bilingual (English/Spanish) fact sheets.

5.1.4 VIRTUAL PUBLIC MEETING AND QUESTIONNAIRE

The purpose of the virtual public meeting was to share information with VVTA riders. During the public meeting, a Zoom questionnaire was provided to obtain feedback from participants about VVTA services, connections, priority improvements, trade-offs for service updates, and safety and security. The public meeting was recorded and made available on VVTA’s website for riders to learn more.

A separate online questionnaire was advertised on VVTA’s social media for riders to share their feedback and thoughts if they were not able to attend the Zoom public meeting. The questions were the same as the Zoom questionnaire. The online questionnaire remains open for feedback; however, this outreach summary incorporates responses received through January 12, 2024.

5.1.5 STAKEHOLDER INTERVIEWS

The purpose of the stakeholder interviews was to help identify transit service needs and issues. Individual and group stakeholder interviews were held between October 24, 2023, and January 16, 2024. A total of nine organizations participated in the stakeholder interview process. Stakeholders included representatives from the following organizations:

- City of Victorville
- City of Barstow
- City of Hesperia
- Town of Apple Valley
- San Bernardino Sheriff Department
- Victor Valley College
- Victor Valley Transit Authority
- High Desert Chamber of Commerce
- Providence Health
- Rock’n Our Disabilities

5.1.6 DISCUSSION QUESTIONS AND MAJOR THEMES

5.1.6.1 Discussion Questions

The discussion questions used to guide conversations during the stakeholder interviews are provided in this section.

- Do your clients/customers/employees rely on VVTA services?
- What transportation issues do your clients/customers/employees have?
- What locations do your customers/clients/employees need to access?
- What are the transportation issues that VVTA should focus on addressing?

- Prioritize the following improvements for VVTA – span, frequency, locations served, fares, other
- What regional trends and developments should we be watching?

5.1.6.2 Major Discussion Themes

This section provides an overview of the major discussion themes that emerged during the stakeholder interviews. These discussion themes include:

- Incorporate Transportation Infrastructure into New Development
- Implement Connections
- Community Connection
- Areas for Operational Improvement
- Frequency
- Span of Service
- Service Coverage
- Feedback on Fares
- Feedback on Direct Access Service
- Desire for Increased Amenities
- Safety Concerns and Security
- Population Served

5.1.6.2.1 Incorporate Transportation Infrastructure into New Development

Stakeholders indicated that VVTA service would be an important part of new development and expansion in the area and recommended coordinating with local cities, such as Victorville and North Apple Valley to incorporate transportation infrastructure into new projects. Growth areas that were identified include:

- Victory Valley College (VVC): Campus expansion including a 5,000-seat event stadium, 600-seat event space, and student housing
- Brightline Station coming to the Valley
- Victorville: Residential growth in West Victorville; expansion of roadways including US 395, rezoning for infill and higher-density development
- Barstow: BNSF Railroad development, bringing in around 20,000 jobs; residential development
- Hesperia: Transportation infrastructure updates, some commercial development
- City of Apple Valley: Complete streets improvements, North Apple Valley Development, warehouse development, Yucca Loma redevelopment, new park development

Implement Connections

Broader connections to transit were also discussed. These included connections to the planned Brightline Rail station and the future BNSF Railway hub in Barstow. Connections to other areas of the Victor Valley, including the Southern California Logistics Airport were identified as possibilities to consider for future routes.

Community Connection

Overall, stakeholders indicated that their communities had positive feedback regarding VVTA service and highlighted that VVTA had fruitful working relationships throughout Victor Valley, including with the business community. Stakeholders felt that VVTA’s advertising and marketing of their services was effective. Stakeholders acknowledged that VVTA provides needed transportation at a good cost throughout the area.

Areas for Operational Improvement

However, stakeholders did identify some areas for improvement and concerns. Much of the feedback was related to the frequency and span of service. It was often mentioned that buses may need to run at more frequent intervals to accommodate a variety of work, school, and patient schedules. Specific requests included running buses later for VVC students and patients discharged from Providence Health. Additionally, stakeholders identified that infrastructure updates were needed at some bus stops, particularly in areas where there are no sidewalks and stops are just in the sand. Feedback related to the coverage area of service included discussion of Adelanto's disconnection from the VVC campus, the single route running on the Cajon Pass, stops along Powhattan Road, Bear Valley, and Yucca Loma in Apple Valley, and lack of service in some areas, including North Barstow (due to a bridge replacement project). Stakeholders felt that service span was a limiting factor for attracting job seekers to current employers and for long-distance commuters who either live outside of the service area or who had commutes requiring multiple transfers. Issues with the current span of service were also raised when stakeholders considered future development and expansion including possible VVC satellite campuses and a new transit center in Barstow (pending funding).

5.1.6.2.2 Feedback on Fares

Feedback on fares was minimal, but included:

- Discussion of 30-day vouchers
- Clarification of the pass sale system
- Issues on the bus due to fare evasion
- Affordability of fares for riders who may be unhoused

5.1.6.2.3 Feedback on Direct Access Service

Feedback on VVTA's Direct Access service was also provided and echoed general feedback about service frequency in addition to other concerns:

- Increased access to vouchers
- Updates to communication services, including text messages for when pick-up vans are nearby and app access
- Confirming if the van donation program still exists

5.1.6.2.4 Desire for Increased Amenities

A desire for increased amenities was often identified by stakeholders these included:

- Customer restrooms at transit centers
- Amenities at bus stops, including better bus shelters, and opportunities for municipalities to have readily accessible amenities on hand to replace current amenities, as needed
- On-board bus amenities including Wi-Fi and charging and USB ports

5.1.6.2.5 Safety Concerns and Security

Stakeholders also identified that safety was a concern for riders at some specific locations. This challenge, combined with other factors such as cleanliness, delayed service, and stigma around riding the bus, were raised as potential factors which may discourage bus ridership. The San

Bernardino Sheriff Department (Sheriff Department) discussed that the VVTA contract with the department has been working well. The Sheriff Department mentioned that the biggest area for crime is at the D Street Hub. The Sheriff Department also mentioned future safety considerations including for the Brightline stations and coordination with communities within the San Bernardino Valley that Route 15 runs through for which they do not provide law enforcement.

Populations Served

Recommendations from stakeholders related to populations served included: increased services for senior citizens, including “senior mobile home parks” – through Micro-Link services; services for job seekers; and increased outreach to students at the beginning of the semesters at VVC.

5.2 System Performance Analysis

The system performance analysis provides an overview of how well VVTA services are performing and how well the community is served. The service analysis presents the performance and services as compared to standards and guidelines that have been established. The coverage analysis presents service availability compared to major generators and areas that show a propensity for transit service. An analysis of route deviations shows if there are any areas that would justify more regular service. The vanpool analysis presents the commute patterns that utilize the vanpool program, identifying potential commuter bus services markets. Finally, the CTSA analysis offers the CTSA programs and opportunities for expansion.

5.2.1 SERVICE ANALYSIS

In this section, the analysis of VVTA's service pertains to the performance of fixed routes, employing a range of service and financial indicators. These indicators encompass Passengers per Revenue Hour, Passengers Per Revenue Mile, Cost per Revenue Hour, Cost per Mile, Cost per Passenger, Revenue per Passenger, and Farebox Recovery. The derivation of these indicators is based on data sourced from the Transtrack Platform's Business Analytics Report for the Fiscal Year 2022/23.

5.2.1.1 Fixed Route Service and Financial Indicators

This section reflects the performance of the fixed route network at the route and system level by utilizing the performance measures mentioned above.

5.2.1.1.1 Service Indicators

Service indicators serve as metrics that illuminate the efficiency of the service. A system's efficiency is evaluated through two key indicators: Passengers per Revenue Hour and Passengers per Revenue Mile. The values of these indicators exhibit a direct correlation to the level of productivity, with higher values signifying heightened productivity and, conversely, lower values indicating decreased productivity. Each indicator is described below, with the service standards presented on Table 36 and Table 37.

5.2.1.1.1.1 Passengers per Revenue Hour

The indicator reflects the number of passengers using the service during active operations.

$$\frac{\text{Passengers}}{\text{Revenue}}$$

Table 36: Service Standard – Passenger per Hour

Service Type	Weekday	Saturday	Sunday
Local	15	10	8
Circulator/Deviated	8	6	5
County	5	4	3
Intercity (B-V Link)	5	4	3
Commuter (NTC Commuter)	5	N/A	N/A

5.2.1.1.1.2 Passengers per Revenue Mile

The indicator reflects the number of passengers per mile of active operation.

$$\frac{\text{Passengers}}{\text{Revenue Mile}}$$

Table 37: Service Standard – Passenger per Revenue Mile

Service Type	Weekday	Saturday	Sunday
Local	1.25	1	0.75
Circulator/Deviated	0.5	0.35	0.25
County	0.2	0.15	0.1
Intercity (B-V Link)	0.25	0.25	N/A
Commuter (NTC Commuter)	0.2	N/A	N/A

5.2.1.1.1.3 Service Indicators Analysis

An analysis of the service indicators is presented in

Table 38. The color grading is based on route performance with routes that are more productive colored in green and routes that are not are less productive colored red. The key findings are presented below.

- The routes with the highest productivity on weekdays are Route 1, 52, 55, 56, and 114.
- The least productive routes on weekdays are Routes 25, 28, 29, 42, and 118.
- On weekends, the routes with the highest productivity are 1, 31, 52, 55, and 56.
- The least productive routes on weekends are 23, 25, 28, 29

Table 38: Service Performance

Route Number	Passengers per Revenue Hour				Passengers per Revenue Mile			
	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
1	14.08	10.72	8.21	13.15	19.15	14.18	10.58	17.74
2	6.30	3.88	2.55	5.68	3.33	1.93	1.32	2.98
3	4.45	2.94	2.74	4.12	1.41	0.85	0.84	1.29
6	5.53	4.38	3.08	5.17	2.32	1.76	1.22	2.15
15	4.22	3.19	4.41	4.10	1.02	0.65	n/a	1.01
21P/21W	1.48	0.81	0.74	1.33	0.77	0.49	0.40	0.70
22	2.90	1.47	1.53	2.58	1.10	0.49	0.49	0.94
23	2.81	1.87	1.41	2.55	0.39	0.22	0.18	0.34
25	1.19	0.75	0.73	1.08	0.41	0.22	0.20	0.35
28	0.82	0.49	0.36	0.75	0.18	0.09	0.07	0.16
29	1.16	0.80	0.68	1.09	0.28	0.16	0.17	0.26
31	4.34	4.54	3.60	4.31	5.77	3.24	2.47	5.13
32	5.54	3.21	3.17	4.99	5.58	2.83	2.64	4.83
33	3.00	2.16	2.28	2.84	1.17	0.60	0.42	0.98
40	2.67	2.11	1.79	2.54	1.20	0.94	0.44	1.09
41	5.06	5.18	4.04	5.01	6.43	3.16	2.48	5.54
42	1.22	0.76	0.51	1.10	0.55	0.29	0.21	0.48
43	7.34	4.70	3.25	6.71	3.50	1.46	1.08	2.92
47	1.91	1.40	1.06	1.79	1.54	0.85	0.42	1.30
50	5.22	2.55	2.32	4.58	4.00	1.80	1.55	3.43
52	5.76	6.47	4.74	5.75	10.29	5.12	4.01	8.86
53	5.89	4.44	2.99	5.59	6.86	2.53	1.97	5.74
54	4.79	3.28	3.09	4.49	2.90	1.38	0.75	2.37
55	7.42	3.75	2.65	6.46	7.56	3.88	2.68	6.59
56	9.52	6.53	5.23	8.69	5.80	3.75	3.46	5.30
64	2.16	1.24	1.06	1.94	0.87	0.48	0.42	0.77
66	3.34	1.66	1.75	3.01	n/a	n/a	n/a	n/a
68	4.17	2.17	2.02	3.70	2.17	0.99	0.91	1.87
111	7.50	n/a	n/a	7.50	0.86	n/a	n/a	0.86
114	7.92	n/a	n/a	7.92	1.48	n/a	n/a	1.48
115	5.63	n/a	n/a	5.63	0.64	n/a	n/a	0.64
118	1.01	n/a	n/a	1.01	0.20	n/a	n/a	0.20
50X	3.03	n/a	n/a	3.03	n/a	n/a	n/a	n/a
System	4.55	2.98	2.54	4.21	2.05	1.16	1.05	1.85

Source- Transtrack: Business Analytics Report (FY 2023)

5.2.1.1.2 *Financial Indicators*

Financial indicators aid in understanding the financial health of the transit service. The measures employed to assess the financial indicators are Operating Cost per Revenue Hour, Operating Cost per Revenue Mile, and Operating Cost per Passenger. The values of these indicators exhibit an indirect correlation to the efficiency level, with higher values signifying lower efficiency and, conversely, lower values indicating higher efficiency. The financial performance standards are presented on Table 39 through Table 42.

5.2.1.1.2.1 *Operating Cost per Revenue Hour*

This indicator determines the financial efficiency of the service during the active operating period.

$$\frac{\text{Operating Cost}}{\text{Revenue Hour}}$$

Table 39: Service Standard – Operating Cost per Revenue Hour

Service Type	Weekday	Saturday	Sunday
Local	\$60.00	\$60.00	\$60.00
Circulator/Deviated	\$60.00	\$60.00	\$60.00
County	\$75.00	\$75.00	\$75.00
Intercity (B-V Link)	\$75.00	\$75.00	N/A
Commuter Commuter) (NTC	\$75.00	N/A	N/A

5.2.1.1.2.2 *Operating Cost per Revenue Mile*

This indicator determines the financial efficiency of the service in terms of distance traveled during the active operating period.

$$\frac{\text{Operating Cost}}{\text{Revenue Miles}}$$

Table 40: Service Standard – Operating Cost per Revenue Mile

Service Type	Weekday	Saturday	Sunday
Local	\$4.00	\$4.00	\$4.00
Circulator/Deviated	\$4.00	\$4.00	\$4.00
County	\$3.00	\$3.00	\$3.00
Intercity (B-V Link)	\$4.00	\$4.00	N/A
Commuter Commuter) (NTC	\$4.00	N/A	N/A

5.2.1.1.2.3 *Operating Cost per Passenger*

This indicator determines the financial efficiency of the service in terms of passengers served during the active operating period.

Operating Cost
Passenger

Table 41: Operating Cost per Passenger

Service Type	Weekday	Saturday	Sunday
Local	\$3.00	\$4.00	\$5.00
Circulator/Deviated	\$9.00	\$11.00	\$11.00
County	\$14.00	\$20.00	\$20.00
Intercity (B-V Link)	\$28.00	\$28.00	N/A
Commuter (NTC Commuter)	\$14.00	N/A	N/A

5.2.1.1.2.4 Revenue per Passenger

This indicator determines the average revenue earned from the service regarding passengers served during the active operating period.

Fare Revenue
Passenger

Table 42: Service Standard: Fare Revenue per Passenger

Service Type	Weekday	Saturday	Sunday
Local	\$0.60	\$0.60	\$0.50
Circulator/Deviated	\$1.08	\$0.88	\$0.88
County	\$1.40	\$1.40	\$1.00
Intercity (B-V Link)	\$4.20	\$2.80	N/A
Commuter (NTC Commuter)	\$11.90	N/A	N/A

5.2.1.1.2.5 Financial Indicator Findings

The key financial indicator findings are presented below. The financial performance indicators are presented for each in Table 43. The color grading is based on route performance with routes that are more financially efficient colored in green and routes that are not are less financially efficient colored red. The key financial findings are:

- On weekdays, the routes with high revenue per passenger were Route 118, Route 111, Route 114, and Route 115.
- The routes with low revenue per passenger were Route 3, Route 6, Route 2, and Route 1
- On Weekdays, the routes with the highest operating cost per revenue hour, indicating a lower level of financial efficiency, were Route 111, Route 115, Route 114, and Route 118.
- On Weekdays, the routes with low operating cost per revenue hour, indicating a higher level of financial efficiency, were Route 1, Route 2, Route 6, and Route 3.
- On Saturdays, the routes with high operating Costs per revenue hour were Route 66, Route 43, and Route 31.

- On Sundays, the routes with high operating Costs per revenue hour were Route 33, Route 47, and Route 40.
- On weekdays, the routes that experienced high operating costs per revenue mile, indicating a lower level of financial efficiency, were Route 52, Route 31, Route 41, and Route 1.
- On weekdays, the routes that experienced low operating costs per revenue mile, indicating a higher level of financial efficiency, were Route 115, Route 23, Route 111, Route 28, and Route 114.
- On Saturdays, the routes that experienced high Operating Cost per Revenue Mile were Route 1, Route 55, Route 32, and Route 52.
- On Sundays, the routes that experienced high operating costs per revenue mile were Route 1, Route 55, Route 52, and Route 32.
- On weekdays, routes with high operating costs per passenger were Route 118, Route 28, Route 42, and Route 25.
- The routes with a low operating cost per passenger were Route 1, Route 56, Route 2, and Route 55.
- On Saturdays, the routes with the highest operating cost per passenger were Route 28, Route 42, Route 25, and Route 29.
- The routes with low operating costs per passenger were Route 1, Route 56, Route 52, and Route 2.
- On Sundays, routes with high operating cost per passenger were Route 28, Route 42, Route 29, and Route 25.
- The routes with low operating cost per passenger were Route 1, Route 56, Route 52, and Route 15.

Table 43: Financial Performance

Route	Cost per Revenue Hour				Cost per Revenue Mile				Cost per Passenger			
	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
1	\$128.23	\$126.84	\$127.40	\$128.01	\$174.44	\$167.83	\$164.28	\$172.69	\$9.11	\$11.84	\$15.52	\$9.73
2	\$128.71	\$128.07	\$128.52	\$128.63	\$68.00	\$63.70	\$66.47	\$67.38	\$20.42	\$33.02	\$50.38	\$22.65
3	\$135.04	\$133.86	\$134.28	\$134.84	\$42.93	\$38.58	\$41.34	\$42.27	\$30.35	\$45.58	\$48.98	\$32.72
6	\$131.75	\$131.03	\$131.55	\$131.66	\$55.29	\$52.53	\$52.18	\$54.67	\$23.83	\$29.91	\$42.73	\$25.48
15	\$152.16	\$151.51	\$154.10	\$152.16	\$36.81	\$30.95	n/a	\$37.53	\$36.06	\$47.56	\$34.98	\$37.13
21	\$143.76	\$144.07	\$141.58	\$143.60	\$74.87	\$86.13	\$76.66	\$76.27	\$97.44	\$176.90	\$191.13	\$108.23
22	\$146.14	\$145.66	\$145.52	\$146.01	\$55.42	\$48.57	\$46.89	\$53.46	\$50.32	\$98.85	\$94.87	\$56.69
23	\$149.31	\$148.99	\$148.29	\$149.16	\$20.55	\$17.56	\$18.90	\$19.93	\$53.16	\$79.59	\$105.49	\$58.58
25	\$141.59	\$141.42	\$142.45	\$141.65	\$48.70	\$41.37	\$39.61	\$46.43	\$118.95	\$188.18	\$196.22	\$131.15
28	\$137.75	\$137.13	\$137.71	\$137.68	\$30.06	\$25.21	\$28.94	\$29.40	\$167.42	\$281.10	\$386.63	\$184.45
29	\$136.68	\$136.37	\$136.93	\$136.67	\$33.17	\$27.11	\$34.46	\$32.59	\$117.33	\$169.47	\$202.14	\$125.93
31	\$150.31	\$162.39	\$161.63	\$151.86	\$199.94	\$115.95	\$111.05	\$180.77	\$34.65	\$35.78	\$44.91	\$35.22
32	\$156.48	\$160.12	\$158.32	\$157.15	\$157.46	\$141.24	\$131.76	\$152.05	\$28.22	\$49.89	\$49.94	\$31.47
33	\$161.69	\$161.39	\$172.73	\$162.38	\$62.98	\$44.68	\$32.07	\$56.06	\$53.91	\$74.60	\$75.65	\$57.23
40	\$153.65	\$153.48	\$162.19	\$154.15	\$69.36	\$68.30	\$40.18	\$66.14	\$57.59	\$72.86	\$90.49	\$60.74
41	\$149.51	\$159.71	\$161.28	\$151.02	\$189.83	\$97.31	\$99.16	\$166.86	\$29.54	\$30.81	\$39.91	\$30.14
42	\$158.01	\$161.57	\$158.66	\$158.54	\$71.43	\$62.32	\$65.91	\$69.55	\$129.29	\$213.85	\$311.44	\$144.56
43	\$159.26	\$164.07	\$161.74	\$159.99	\$75.92	\$51.03	\$53.66	\$69.66	\$21.70	\$34.89	\$49.83	\$23.86
47	\$153.42	\$152.20	\$162.75	\$153.80	\$123.62	\$92.58	\$63.64	\$111.80	\$80.29	\$109.00	\$152.82	\$86.00
50	\$158.33	\$157.65	\$158.33	\$158.24	\$121.41	\$111.44	\$105.39	\$118.26	\$30.32	\$61.82	\$68.17	\$34.52
52	\$148.46	\$158.99	\$159.37	\$149.90	\$265.19	\$125.77	\$134.68	\$230.74	\$25.77	\$24.57	\$33.62	\$26.05
53	\$149.02	\$157.80	\$156.22	\$150.18	\$173.56	\$89.83	\$103.24	\$154.43	\$25.31	\$35.54	\$52.29	\$26.89
54	\$148.17	\$152.68	\$158.96	\$149.39	\$89.79	\$64.07	\$38.64	\$79.05	\$30.94	\$46.53	\$51.52	\$33.29
55	\$157.47	\$155.77	\$155.05	\$157.01	\$160.46	\$161.46	\$157.30	\$160.27	\$21.24	\$41.57	\$58.61	\$24.31

Route	Cost per Revenue Hour				Cost per Revenue Mile				Cost per Passenger			
	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
56	\$156.60	\$155.48	\$154.51	\$156.24	\$95.40	\$89.25	\$102.18	\$95.19	\$16.45	\$23.79	\$29.56	\$17.98
64	\$152.34	\$152.32	\$149.77	\$152.09	\$61.12	\$58.49	\$59.51	\$60.61	\$70.38	\$122.98	\$141.04	\$78.48
66	\$161.22	\$166.68	\$160.63	\$161.77	n/a	n/a	n/a	n/a	\$48.27	\$100.70	\$91.89	\$53.81
68	\$150.02	\$150.04	\$148.51	\$149.88	\$78.21	\$68.25	\$66.95	\$75.56	\$35.96	\$69.17	\$73.64	\$40.46
111	\$180.07	n/a	n/a	\$180.07	\$20.64	n/a	n/a	\$20.64	\$24.01	n/a	n/a	\$24.01
114	\$172.06	n/a	n/a	\$172.06	\$32.15	n/a	n/a	\$32.15	\$21.74	n/a	n/a	\$21.74
115	\$177.52	n/a	n/a	\$177.52	\$20.31	n/a	n/a	\$20.31	\$31.56	n/a	n/a	\$31.56
118	\$169.24	n/a	n/a	\$169.24	\$32.88	n/a	n/a	\$32.88	\$167.79	n/a	n/a	\$167.79
50X	\$161.23	n/a	n/a	\$161.23	n/a	n/a	n/a	n/a	\$53.13	n/a	n/a	\$53.13
System	\$150.07	\$151.35	\$150.38	\$150.23	\$67.62	\$58.76	\$62.48	\$66.08	\$33.02	\$50.82	\$59.30	\$35.66

Source- Transtrack: Business Analytics Report (FY 2023)

5.2.1.1.3 Farebox Recovery

This indicator determines the percentage of operating costs recovered from the fare revenue. Farebox recovery standard is presented on Table 44 and performance by route is presented in Table 45. The color grading is based on route performance with routes that have a higher farebox recovery colored in green and routes that gave a lower farebox recovery colored red.

$$\frac{\text{Fare Revenue}}{\text{Operating Expenses}}$$

Table 44: Service Standard: Farebox Recovery Percentage

Service Type	Weekday	Saturday	Sunday
Local	20.00%	15.00%	10.00%
Circulator/Deviated	12.00%	8.00%	8.00%
County	10.00%	7.00%	5.00%
Intercity (B-V Link and Needles Link)	15.00%	10.00%	N/A
Commuter (NTC Commuter)	85.00%	N/A	N/A

Table 45: Farebox Recovery

Route	Revenue per Passenger				Farebox Recovery			
	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
Fixed Routes and Deviated Routes								
1	\$0.60	\$0.68	\$0.64	\$0.61	6.60%	5.72%	4.14%	6.27%
2	\$0.60	\$0.66	\$0.65	\$0.61	2.96%	1.99%	1.30%	2.70%
3	\$0.57	\$0.66	\$0.62	\$0.58	1.88%	1.44%	1.26%	1.77%
6	\$0.59	\$0.68	\$0.63	\$0.60	2.46%	2.26%	1.48%	2.35%
15	\$4.41	\$0.51	\$2.83	\$3.96	12.24%	1.06%	8.08%	10.67%
21P/21W	\$2.09	\$2.41	\$2.33	\$2.12	2.14%	1.36%	1.22%	1.96%
22	\$2.20	\$2.49	\$2.40	\$2.23	4.37%	2.52%	2.53%	3.94%
23	\$2.33	\$2.67	\$2.42	\$2.37	4.38%	3.35%	2.29%	4.04%
25	\$1.99	\$2.26	\$2.50	\$2.05	1.68%	1.20%	1.27%	1.57%
28	\$3.54	\$3.80	\$3.72	\$3.57	2.12%	1.35%	0.96%	1.93%
29	\$3.31	\$3.91	\$3.86	\$3.38	2.82%	2.31%	1.91%	2.69%
31	\$1.53	\$1.73	\$1.65	\$1.56	4.43%	4.84%	3.68%	4.42%
32	\$1.65	\$1.73	\$1.92	\$1.67	5.85%	3.47%	3.85%	5.32%
33	\$1.75	\$2.17	\$2.19	\$1.82	3.25%	2.91%	2.90%	3.18%
40	\$1.45	\$1.58	\$1.90	\$1.48	2.52%	2.17%	2.10%	2.44%
41	\$1.47	\$1.93	\$1.70	\$1.52	4.97%	6.27%	4.26%	5.04%
42	\$1.33	\$1.38	\$1.44	\$1.34	1.03%	0.65%	0.46%	0.93%
43	\$1.38	\$1.58	\$1.56	\$1.40	6.34%	4.53%	3.12%	5.86%
47	\$1.44	\$2.01	\$1.78	\$1.51	1.79%	1.84%	1.16%	1.76%
50	\$1.38	\$1.66	\$1.66	\$1.41	4.55%	2.69%	2.44%	4.10%
52	\$1.43	\$1.75	\$1.78	\$1.47	5.53%	7.12%	5.29%	5.64%
53	\$1.25	\$1.69	\$1.67	\$1.29	4.94%	4.75%	3.19%	4.81%
54	\$1.52	\$1.84	\$1.84	\$1.56	4.90%	3.96%	3.56%	4.69%
55	\$1.41	\$1.63	\$1.59	\$1.43	6.64%	3.93%	2.72%	5.90%
56	\$1.45	\$1.73	\$1.84	\$1.50	8.81%	7.26%	6.24%	8.35%
64	\$1.57	\$1.94	\$1.80	\$1.61	2.23%	1.58%	1.27%	2.06%
66	\$1.55	\$1.62	\$1.93	\$1.58	3.21%	1.61%	2.10%	2.93%
68	\$1.67	\$1.79	\$1.86	\$1.69	4.66%	2.59%	2.53%	4.18%
111	\$12.18	n/a	n/a	\$12.18	50.72%	n/a	n/a	50.72%
114	\$12.16	n/a	n/a	\$12.16	55.96%	n/a	n/a	55.96%
115	\$12.14	n/a	n/a	\$12.14	38.48%	n/a	n/a	38.48%
118	\$12.43	n/a	n/a	\$12.43	7.41%	n/a	n/a	7.41%
50X	\$0.83	n/a	n/a	\$0.83	1.56%	n/a	n/a	1.56%
System	\$2.12	\$1.53	\$1.61	\$2.05	6.43%	3.02%	2.71%	5.75%

Source- Transtrack: Business Analytics Report (FY 2023)

5.2.2 COVERAGE ANALYSIS

In the Victor Valley service area, approximately 93.8 percent of the population has half-mile access to the VVTA routes. Similarly, 93.1 percent of jobs are within half-mile access to the VVTA routes. Respectively, the service area has a population-to-jobs ratio of 5.1. Regarding methodology, the job and population matrix combines the density of people and jobs per square mile through bivariate colors with quantile breaks. The more pigment hues of the matrix towards the top right represent block groups with the highest population and jobs per square mile. Conversely, the lighter hues towards the bottom left represent block groups with the lowest population and jobs per square mile.

For the Victorville service area, the block groups with the highest population and job density combination revolve around The Mall of Victory Valley, the Desert Valley Hospital, and north of Palmdale Rd/west of CA-15. Route 21P, 21W, 52, 53, 54, and 68 service the surrounding Mall of Victory Valley area. The routes provide total coverage within a half mile for job access, as many retailers and restaurants are in this block group. Likewise, the surrounding neighborhoods across from the Oro Grande Wash contribute to the high population density. Routes 50 and 53 serve the Desert Valley Hospital and the surrounding neighborhoods. Additionally, Routes 15, 31, 52, 56, 114, and 118 provide service and full half-mile access to the block groups north of Palmdale and west of CA-15. The area comprises various apartment complexes, car dealerships, a Home Depot, and various strip malls. In contrast, there are also block groups without population or job access outside of the half-mile VVTA buffer. Neighborhoods around Mojave Dr and Amethyst Rd are not within a half-mile of access to VVTA routes. Similarly, southeast of Sultana St and Fuente Ave are residences and storefronts that are outside the half mile VVTA access. These areas with higher population and job density serve as potential opportunities for alternative VVTA routes. This is shown on Figure 78, Figure 79, and Figure 80.

Figure 78: Population and Jobs Coverage – Victor Valley Area

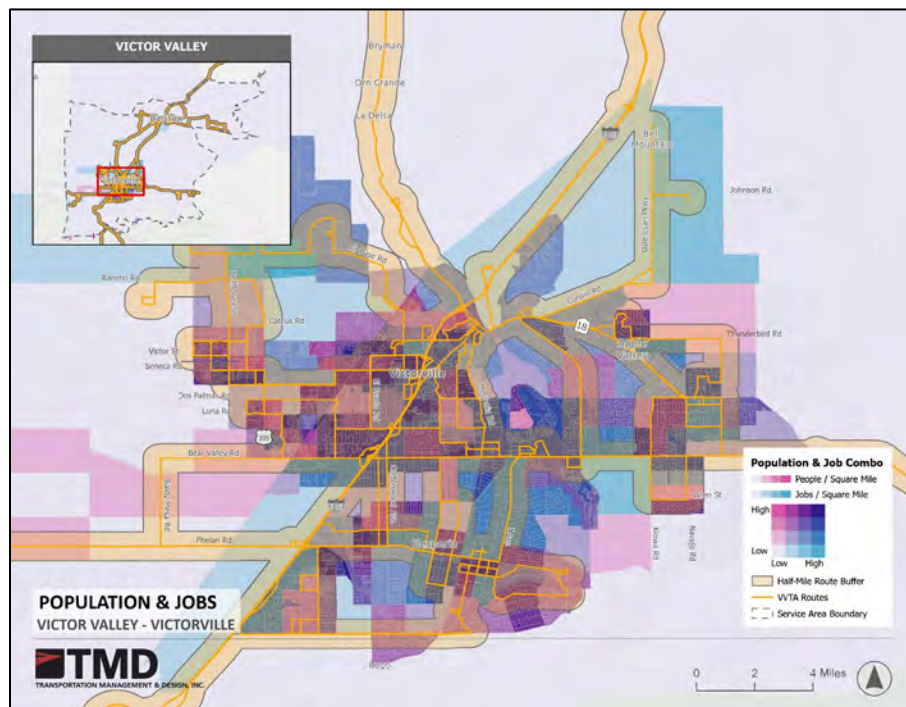


Figure 79: Population Outside of Coverage – Victorville Area

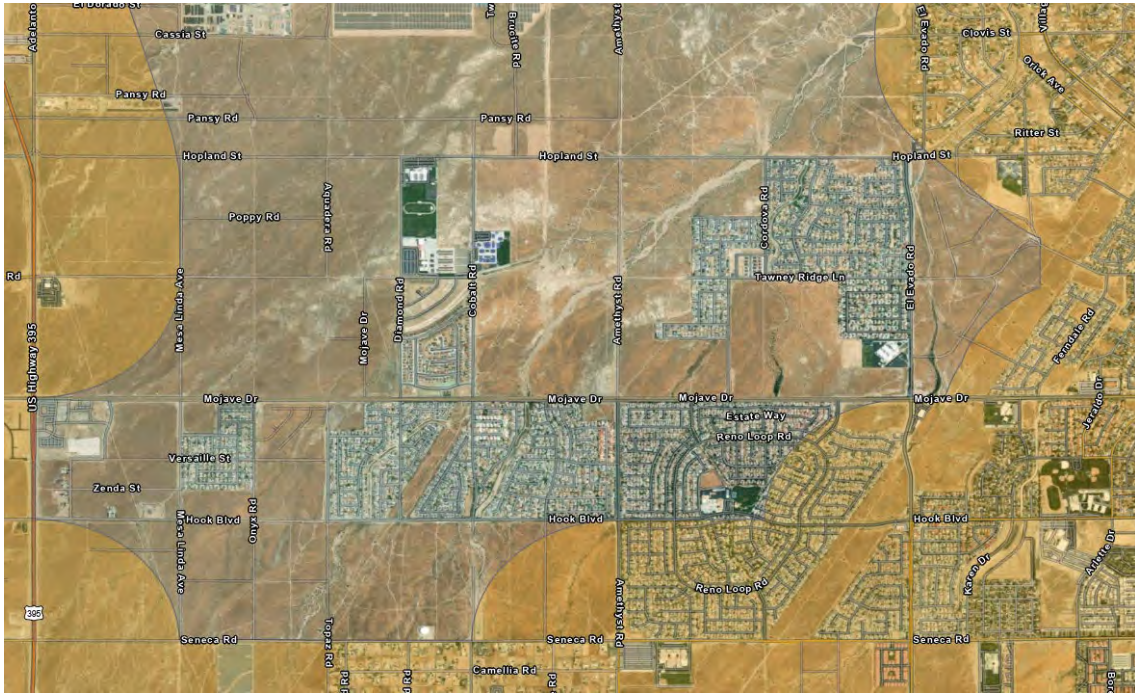
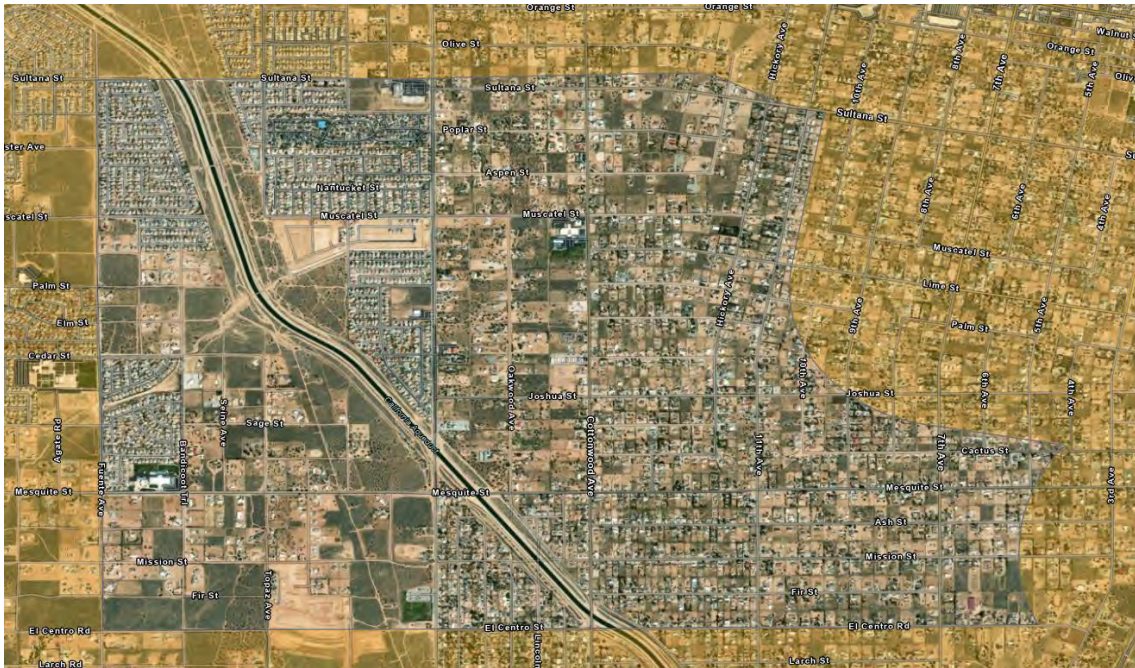


Figure 80: Population Outside of Coverage – Victorville Area



For the Barstow service area, the block groups with the highest population and job density combination revolve around the Barstow Community Hospital and the neighborhoods surrounding Barstow Rd/CA-15 as shown on Figure 81. Figure 82 illustrates a low-density neighborhood outside of the coverage area on the outskirts of Barstow. However, most neighborhoods and businesses are within the half-mile VVTA coverage area.

Figure 81: Population and Jobs Coverage – Barstow Area

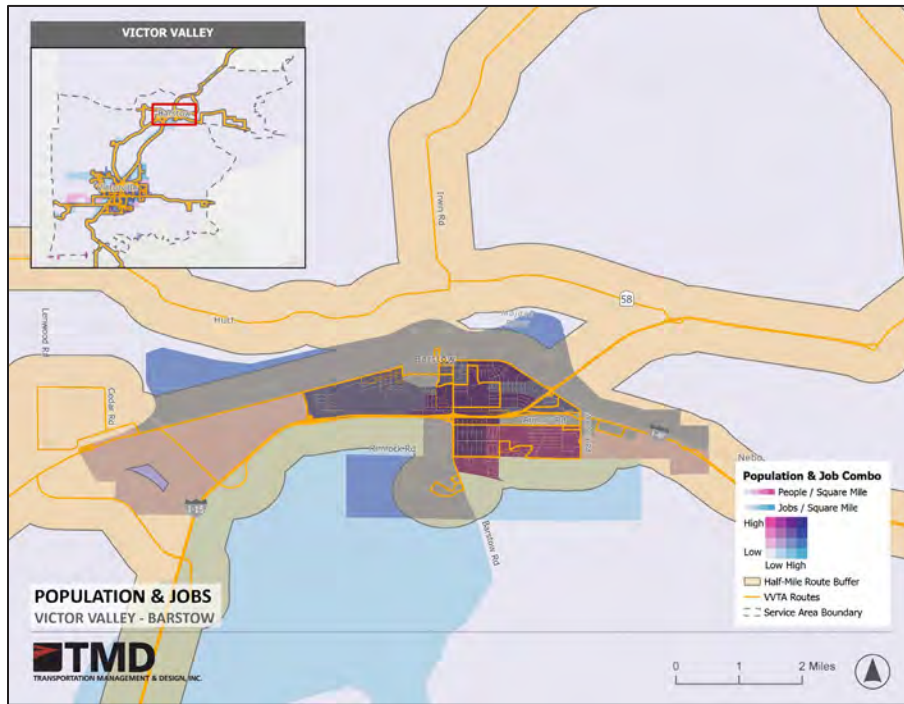
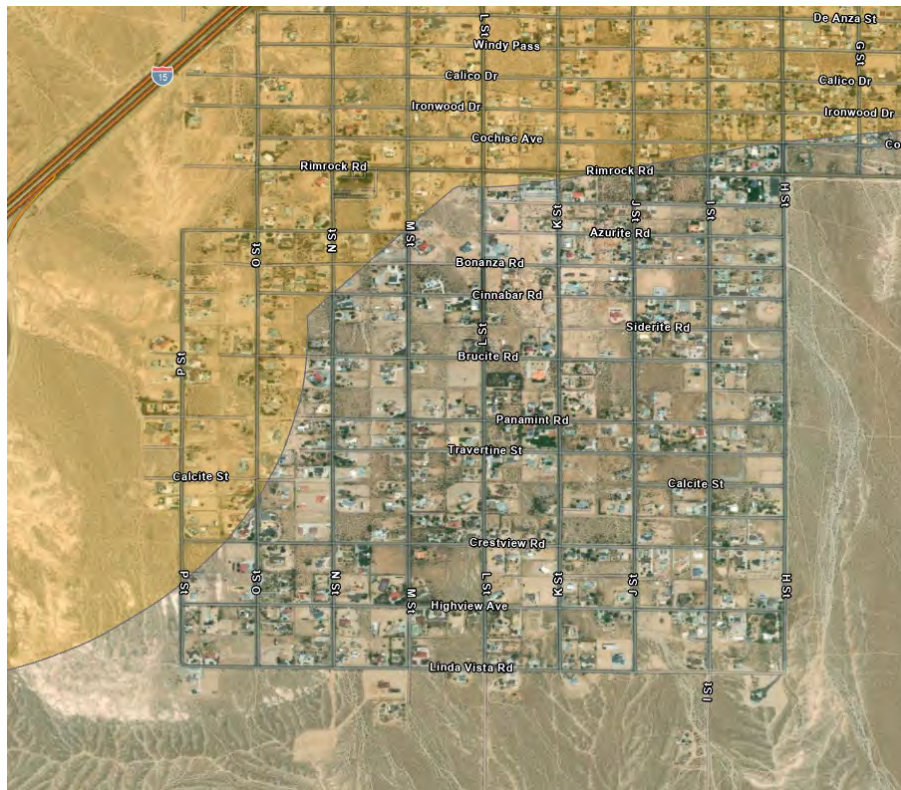


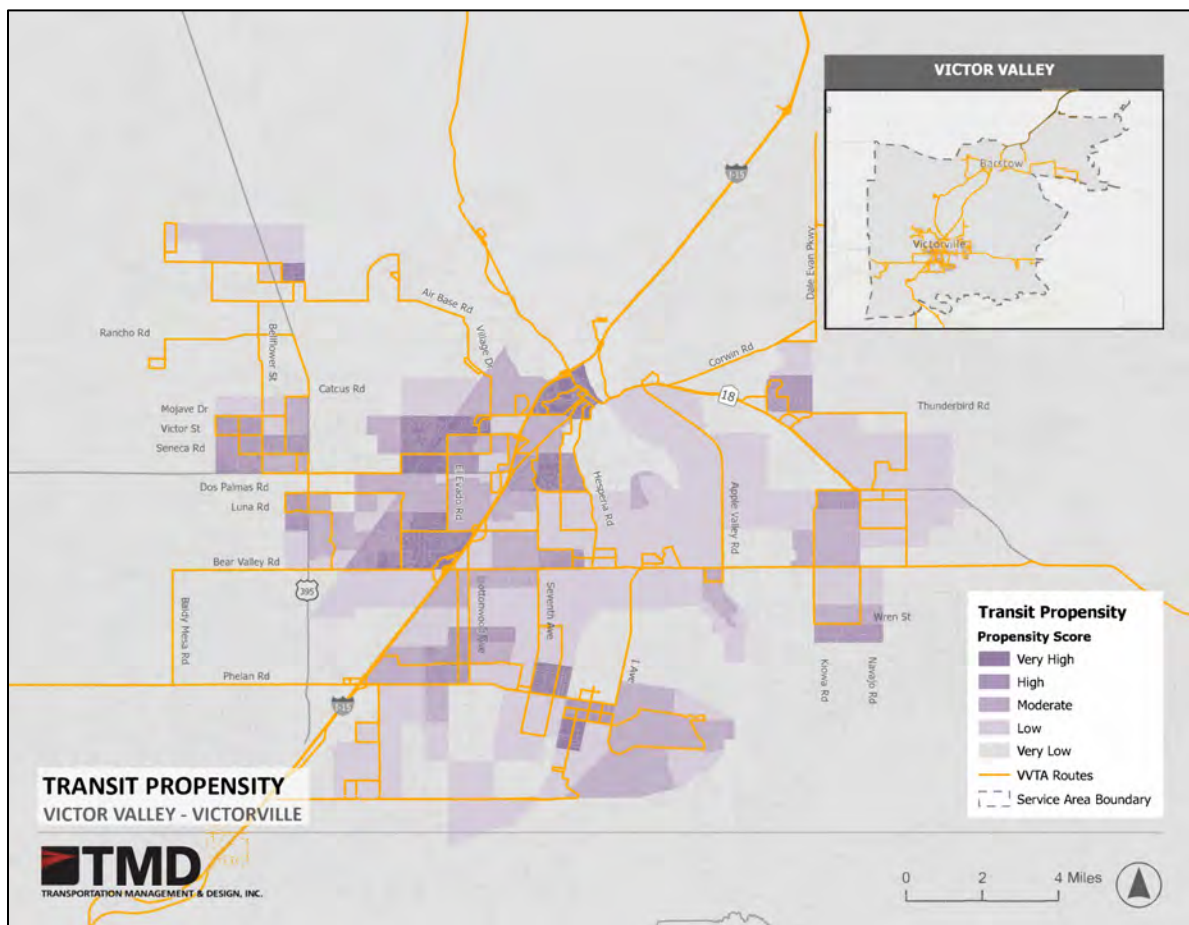
Figure 82: Population and Job Outside Coverage – Barstow Area



5.2.3 TRANSIT PROPENSITY ANALYSIS

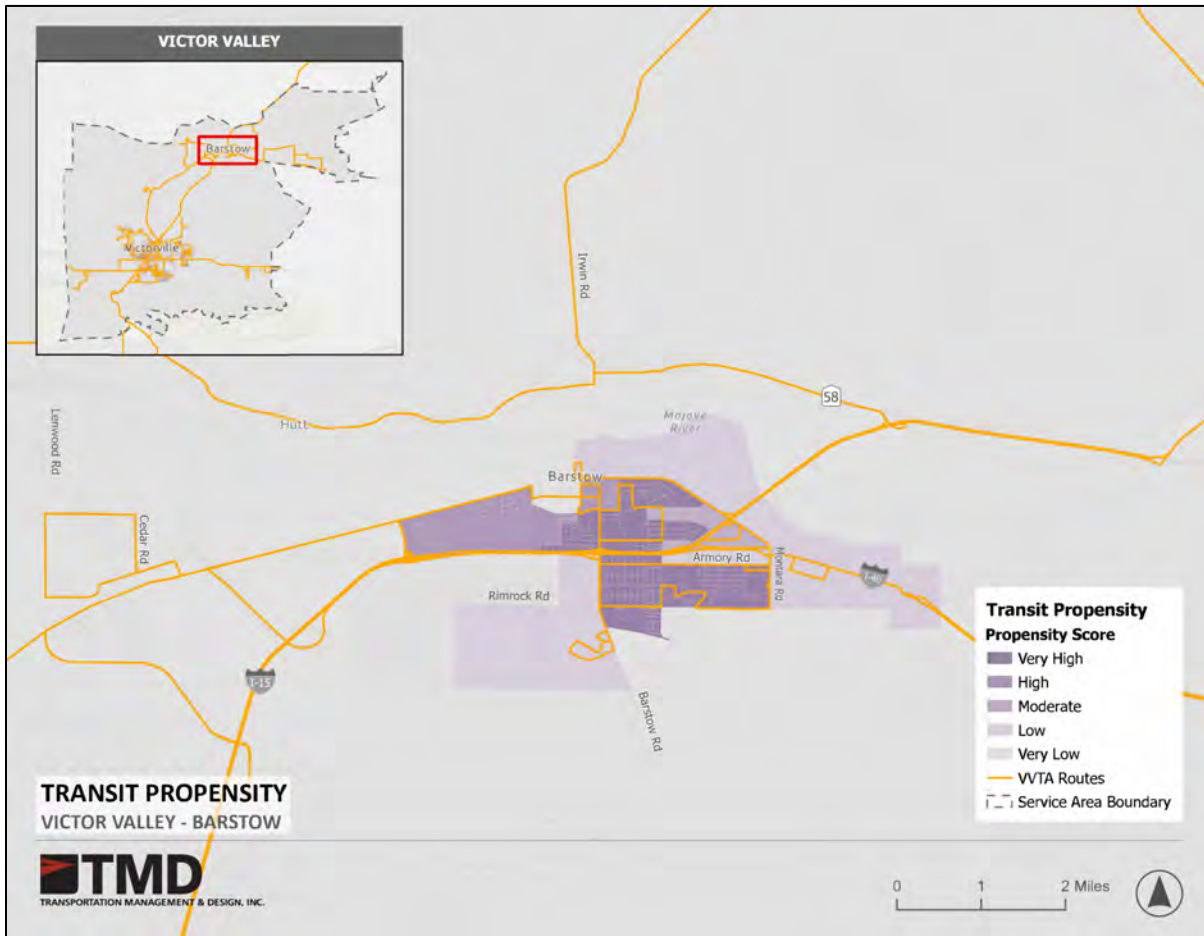
An intricate approach was employed in conducting the transit propensity analysis for VVTA, incorporating a spectrum of variables to ascertain regional transit preference. Leveraging variables such as Youth Density, College Student Density, Senior Density, Minority Density, Low-Income Density, ZVEH (Zero-Vehicle Household) Density, Weekly Trip Density, Boardings, Intersection Density, Population Density, and Job Density, the analysis took shape by correlating these factors with the foundational benchmarks of Job Density and Population Density. Employing these base variables facilitated a weighted evaluation, providing a robust framework to accurately gauge each factor's influence on transit propensity. Data normalization rendered these diverse variables commensurable, allowing for a fair comparison and treatment in the analytical process. Transit propensity is shown on Figure 83 and Figure 84.

Figure 83: Transit Propensity – Victor Valley Area



The propensity maps for Victorville highlight potential zones where addressing local needs could be focused. Based on these scores, areas around Hook Blvd and El Evado Rd, particularly to the west and northeast, show potential for new services. Moreover, the southern areas along Seaforth St currently need more services but have potential for provision. Despite good coverage in Apple Valley, service gaps exist along Tamiani Rd and Sitting Bull Rd. Notably, the block group northwest of Spring Valley Lake displays a high transit propensity score but needs more service provision in the existing scenario.

Figure 84: Transit Propensity – Barstow Area



The propensity map for Barstow indicates potential areas where new services could be introduced based on the propensity scores. For example, areas near Barstow Unified School District could be catered to by a bus service that goes into the area, as in the current scenario, all the services in that area are operating on Barstow Freeway and National Trails Highway. Similarly, Broadway Ave near Barstow Junior High School could be a potential stretch for a new service based on the propensity score in that area.

5.2.4 DEVIATION ANALYSIS

VVTA has nine routes that allow for deviations and two routes that have deviation request areas. While VVTA does allow for deviations, VVTA services do not deviate often. In Fiscal Year 2022/2023 VVTA had requests for deviations 363 times, averaging slightly more than once per day. The annual deviations by route and time of day are presented in Figure 85. Route 1 has the most deviations with 124 per year, all requests to serve either the Riverside Drive request area or Excelsior High school on State Street. While Route 21 had the second highest number of deviations with 98, most of these were requests to serve places on the fixed route beyond Phelan that were not being regularly served due to driver shortages. Route 22 had 42 deviation requests for service around the Silver Lakes. All routes had at most 30 requests.

Figure 85: Annual Deviations by Route and Hour

Weekday	AM Peak							Mid-Day						PM Peak				Evening
	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	
1			1		9	5	10	12	10	12	10	22	13	2	1	4	2	1
21	1	3	1	1	5	5	7	9	9	14	5	9	7	1	3			1
22	1				5	7	6	2	3	3	1			3		7		1
23				1				1	2	1		1	1	1	1			
28								1										
29			1	2	3			6	1	1		2	2	2	1		3	
40	1								2					1				
42				3	1	3	2	2				2	1					
47						1	3			2		1		2				
54							2	5	2	1	1	1	2	1				
66												1				1		

Saturday	AM Peak							Mid-Day						PM Peak				Evening
	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	
1								1	1	1		1	1					
21						2	2	2		1	1			1	1			
22									2									
29						2							1					
42						1	1											
54						1		2			1							

Sunday	AM Peak							Mid-Day						PM Peak				Evening
	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	
1						1		1	1			2						
21						1	1		1	1	2		1					
22							1											
29							1		1									
40								1										
42					2													
54											2							

5.2.5 VANPOOL ANALYSIS

VVTA’s vanpool program provides a 50 percent subsidy for the cost of a vanpool lease. The lease includes the vehicle and insurance, while the vanpool participants pay for fuel. A benefit to VVTA for the vanpool program is that vanpool mileage and usage are included in VVTA’s Federal formula funding. The requirement for the vanpool program is that either the home or work location must be in the vanpool service area. VVTA has 209 registered Vanpools listed in the vanpool database; of those, 187 are active, with 1,200 people participating in the vanpool program. Destinations with a high demand for vanpool services may be candidates for commuter service.

The work destinations of vanpools show that 72 percent of vanpools and 73 percent of vanpool participants are going to the US Department of Defense locations in the High Desert, including Fort Irwin, the Marine Corps Logistics Base, and Edwards Air Force Base. Fort Irwin, which represents five percent of all vanpools and 34 percent of all participants, is served by the NTC Commuter service. The Marine Corps Logistics Base is located near Barstow and may be an opportunity for commuter

bus service. Edwards Air Force Base has a variety of origins and would be more challenging to serve with a commuter service from Victor Valley or Barstow. All other locations need more participants to consider providing commuter bus service. Table 46 presents the top vanpool workplace destinations.

Table 46: Vanpool Program Work Destinations

	Number		Percentage	
	Vanpools	Participants	Vanpools	Participants
Fort Irwin	66	403	35.29%	33.58%
Marine Corps Logistics Base	40	264	21.39%	22.00%
Edwards Air Force Base	30	211	16.04%	17.58%
Victorville Federal Prison	13	73	10.70%	11.67%
San Bernardino	11	55	5.88%	4.58%
Other	27	194	14.44%	16.17%

5.2.6 CTSA DESCRIPTION

VVTA is the designated Consolidated Transportation Services Agency (CTSA) for the High Desert region. The CTSA provides mobility options for those who cannot access bus services. Through the CTSA, VVTA operates Micro-Link and Direct Access amongst other programs described below.

5.2.6.1 Vehicle Brokerage Service

The vehicle brokerage is a partnership between VVTA and area non-profit organizations where VVTA supplies agencies with retired Direct Access vehicles for transporting their clients. As part of the brokerage program, VVTA facilitates passenger trips for Direct Access passenger trips on vehicles operated by the brokerage program which helps to manage growth in Direct Access service. The partnership encompasses comprehensive assistance, encompassing driver training, essential equipment such as phones, tablets, and system software, and a vehicle maintenance program through an approved maintenance contractor.

5.2.6.2 Transportation Reimbursement Independence Program (TRIP)

The TRIP program is a volunteer driver reimbursement program. The programs support High Desert residents who do not or are unable to drive due to age or disability or live in rural areas not supported by public transportation. The program provides a mileage-based reimbursement, with a maximum of 500 miles, to a volunteer driver when providing transportation to a program participant.

5.2.6.3 Fare Media Scholarship

With the assistance of LCTOP grant funds, VVTA invites nonprofit providers to apply for the Fare Media Scholarship. The Fare Media Scholarship provides day passes for our Fixed-route system to all eligible nonprofits so that they can provide vital transportation to their clientele who otherwise would not be able to afford it.

5.2.6.4 Big River and Trona Transportation

VVTA partners with the Trona Senior and Community Center in Trona and the Bonnie Baker Senior Center in Big River to provide transportation services to senior, disabled, and low-income residents in their respective communities. VVTA provides the van for service and reimburses the cost of transportation.

5.2.6.5 Potential Future Programs

Besides the current programs, additional programs would help meet the needs of High Desert residents. Based on discussions with staff, there have been requests to restart the travel training programs and the transit ambassador program and as well as provide transportation for veterans to and from medical appointments.

Travel training consists of showing the public how to ride the VVTA system, read schedules, understand bus rules and etiquette, utilize deviations and much more. VVTA has been recruiting travel training volunteers in preparation to restart this program.

Transit Ambassadors ride VVTA's bus system at their leisure for at least 10 hours a month and offer a friendly smile and information on the system if needed. Reporting for each trip is done via an app called TrackItForward. This app is not only free, but Ambassadors also have the option to fill out their information on a PC or their mobile device, track which routes taken, transfer stations utilized and leave important notes for ridership improvement.

Single seat medical transportation is a major need for Veterans in the High Desert. Veterans travel to the VA Hospital in Loma Linda or to Fort Irwin for medical appointments. Due to the number of locations that the Route 15 serves, it is unable to serve every medical facility in the San Bernardino area. The NTC Commuter service provides limited service to the hospital in Fort Irwin and does not serve the hours of medical appointments. A demand response Veterans Transportation service would better serve Veterans taking medical trips.

5.3 Needs and Opportunities

The needs and opportunities are a summary of findings that are germane to and informed the system planning process. The findings of the needs and opportunities are presented based on each of the analyses conducted and are presented below.

5.3.1 SERVICE EVALUATION

The service evaluation findings are based on the analysis of fixed route and deviated fixed route analysis as well as the service analysis. Based on these analyses the key findings are:

- Ridership is still recovering from the impacts of the COVID-19 pandemic. Riders are returning to the system, but overall ridership remains below pre-pandemic levels.
- Crowding is not an issue on any route.
- VVTA bus routes that offer route deviations do not deviate often.
- Route 1 is the best performing route. The reasons surrounding this are because it serves areas with high transit demand in Barstow along Main Street, providing quick service, and has a strong generator as the end of the route at Walmart. While productivity is high, crowding is not an issue.
- The performance of county routes, routes serving rural areas, is low. These routes do not carry very many passengers. These routes are less frequent as they serve areas that do have mobility needs.
- On-time performance is an issue for services. Besides route and running time changes to improve on-time performance, strategic through-routing should also help improve on-time performance.

- Victor Valley College is still one of the destinations with the most demand. People traveling to and from Victor Valley College do like the speed of the 50X.
- The vanpool program is competing directly with the commuter program with 35 percent of all vanpools serving Fort Irwin. The commuter program should be discussed with Fort Irwin leadership. The vanpool program also highlights that another potential commuter market is the Marine Corps Logistics Base.
- Route 15 continues to be a popular service and continued growth should be considered.
- The expansion of Micro-Link could serve areas that are not well served by VVTA bus routes today or replace lower performing routes that are not seeing ridership growth.
- Military Veterans are not adequately connected to medical services as they access care at the VA Medical Center in Loma Linda and the Hospital at Fort Irwin.

5.3.2 MARKET ASSESSMENT

The market assessment looked at demographic indicators and development to identify if there are any areas in the service area where there are service gaps. The needs and opportunities for enhancements of geographic coverage include:

- There are areas that have a higher concentration of senior citizens that do not have access to bus routes including: portions of West Victorville, Jess Ranch in Apple Valley, Spring Lake, South Hesperia.
- There are areas that have a higher concentration of minority residents that are not on bus routes in South Adelanto and South Hesperia.
- Hesperia south of Main St between the aqueduct and 3rd Ave based on youth population and minority population, zero-car households, and along the Mojave Drive corridor in Victorville.
- The Mojave Drive corridor has concentrations of minority population, Low-income population, youth population, college population, and senior population, zero-car households.

5.3.3 PUBLIC OUTREACH

Most of the comments received from the public during the outreach process were related to service. Here are some the major comments that the study team heard:

- Missed connections between buses at the transit centers is the biggest issue for VVTA passengers as it leads to trips being longer, thereby making transit less attractive.
- Span needs to be expanded to serve the needs of riders. Later service is needed to access jobs, college courses, and shopping.
- Passengers feel that travel times are too long. They like services that are direct and quick such as 50X. Part of the travel time concern is related to missed connections when buses are late.
- Service coverage is good, there are a few locations that have a high transit propensity that are not served. Customers did not mention any locations that they wish to travel to that they are unable to reach. Route changes, or new routes, may be needed to serve new developments as the region continues to grow.

6 Fare Policy Analysis

The COA provides an opportunity for VVTA to take a comprehensive look at its fare policy and determine if the current policy meets the needs of VVTA and VVTA's customers. This chapter provides an analysis of VVTA's current fare structure, presents alternative fare structures, and analyzes the impacts of potential fare policies. Recommendations are based on goals and objectives for the fare policy and are part of the COA recommendations. Preliminary discussions on goals and objectives for fare policy included creating a policy that will encourage ridership growth/return to service, meet the changing state and county requirements for farebox recovery, and ensure safety and security for riders and bus operators.

6.1 Current Fare Structure

VVTA's current fares vary by service and pass type. There are separate fare levels for local routes, county routes which are the 20-series routes that serve rural areas in San Bernardino County, Route 15, NTC Commuter, Micro-Link microtransit, and Direct Access. Fares are available for single trips and transfers are not included in the base fare. Rider can request deviations, for a surcharge, on Route 21P, 21W, 22, 23, 28, 29, 40, 47, 54, and 66. Passengers who need to transfer to complete their trip are encouraged to buy a Day Pass, which is less than the cost of three one-way trips. A stored value card is available to riders, but it does not provide a discount for trips.

Discounted fares are available for students, senior/disabled customers, and veterans. School identification is needed for student fares and a military veteran identification is needed for veteran fares. Currently school-aged students, in grades kindergarten through 12th grade, can ride buses for free which is supported by a one-year grant provided by San Bernardino County Transportation Authority (SBCTA). Up to three children 5-year-old and under ride for free with a paying adult.

Discounted passes are also available for purchase. VVTA offers a 31-day pass for local and county routes, which are valid for thirty-one consecutive days after activation. Two types of monthly passes are available for NTC service: the MEGA monthly pass which is for non-DOD employees and allows for free rides on all services except Direct Access and charges for route deviations are extra, and the Commuter Military Pass which is available for DOD employees who qualify for the Mass Transit Benefit Program. Passes can be bought onboard buses, at the VVTA offices in Hesperia and Barstow, Victor Valley College bookstore, and the City or Town Halls in Adelanto, Apple Valley, Barstow, Hesperia, or Victorville.

Direct Access fares are determined based on distance between a customer pick-up or drop-off location and a fixed route bus stop. Zone 1 fares are charged for locations within $\frac{3}{4}$ miles of a fixed route bus stop, with some exceptions. Zone 2 fares are charged between $\frac{3}{4}$ miles and $1\frac{1}{2}$ miles of a fixed route bus stop. Zone 3 fares are charged for locations between $1\frac{1}{2}$ and $2\frac{1}{4}$ miles of a fixed route bus stop, which is the extent of the Direct Access paratransit service area.

VVTA has contracts with a few educational institutions that allow students to ride VVTA buses for free. Excelsior Charter School and Options for Youth Charter School students can ride for free with their student identification, versus paying a student fare. Students from Victor Valley College can ride for free with their ASB card and students from Cal State San Bernardino can ride for free with their Coyote Card. Besides these free fare programs, VVTA has a subsidized fare media program,

funded by Caltrans' Low Carbon Transit Operations Program, which provides free fare passes for social service agencies that apply.

The current fares are presented on Table 47 below. VVTA's GFI fareboxes accept cash and passes and have a reader to allow for the UMO app which is VVTA's cell phone payment application to be used to pay fares.

Table 47: Current Fares

Fare Category	Regular	Student	Senior/Disabled /Veteran	Child
Single Trip				
Local Route	\$ 1.50	\$ 1.25	\$ 0.75	Free
County Route	\$ 2.50	\$ 2.25	\$ 1.25	Free
Deviation¹³	\$ 2.00	\$ 2.00	\$ 1.00	Free
Route 15	\$ 6.50	n/a	\$ 3.25	Free
NTC Commuter	\$ 13.00	n/a	n/a	Free
Micro-Link	\$ 2.00	\$ 1.00	\$ 1.00	Free
Day Pass				
Local Route	\$ 4.00	\$ 3.50	\$ 2.00	Free
County Route	\$ 6.00	\$ 5.00	\$ 3.00	Free
Monthly/31 Day Pass				
Local Route 31 Day Pass	\$ 55.00	\$ 45.00	\$ 27.50	Free
County 31 Day Pass	\$ 80.00	\$ 70.00	\$ 40.00	Free
NTC Monthly Pass	\$ 180.00	n/a	n/a	Free
NTC Commuter Military Pass	\$ 255.00	n/a	n/a	Free
Direct Access				
Zone 1 Single Trip (within ¾ mile of a fixed route)				\$ 2.50
Zone 2 Single Trip (between ¾ mile and 1½ miles of a fixed route)				\$ 4.50
Zone 3 Single Trip (between 1½ miles and 2¼ of a fixed route)				\$ 6.00

Source: VVTA Fare Policy

6.2 Fare History

Historically VVTA has not raised fares very often. VVTA has not needed to raise fares as historically enough revenue has been raised to meet farebox recovery requirements. The last fare increase was at the completion of the previous COA in 2017. The primary reason for the fare increases in 2017 was to align the fare policies between portions of the newly integrated Barstow system and the rest of the VVTA system. Before 2017, the previous fare increase was in 2007. Raising fares in conjunction with the COA has been an effective strategy to mitigate ridership loss as service improvements are introduced at the same times that fares are increased.

The 2007 fare increase raised the base fare for regular passengers by \$0.25 from \$1.00 to \$1.25 which was a 25 percent increase. Similar increases were made for all other services. Care was taken to ensure that the fare increases for all services are primarily in increments of 25 cents. When this

¹³ The deviation charge is an additional charge for requested deviations on deviated routes

fare increase occurred, ridership was increasing on the VVTA system and ridership grew by 2.4 percent. This was during a period of rapid growth for VVTA, and the 2008 ridership growth was the lowest percentage growth between the years 2007 and 2015.

The 2017 fare increase raised the base fare for fixed route services by \$0.25 from \$1.25 to \$1.50 where it remains today. This was a 20 percent increase, and similar increases were made for all other services and to passes. Like the previous fare increase, most fare categories were rounded to be within a 25-cent increment. This fare increase occurred the year after VVTA had its highest ever annual ridership and overall ridership declined by 8 percent after the fare increase. The ridership loss after the fare increase was less than the ridership loss the previous year but greater than the 2019 ridership loss.

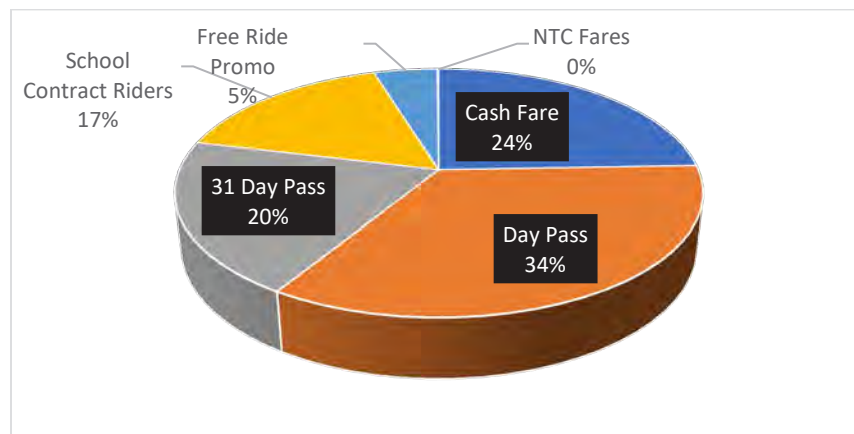
6.3 Fare Revenue Analysis

The fare revenue analysis looked at the fare payment characteristics for each mode of service in Fiscal Year 2022/2023. The fare revenue analyzed fare payment by route group. Fixed route and County route fare payment characteristics for Victor Valley and Barstow areas are analyzed as one group. The other groups include Route 15 service, NTC Commuter service, and Direct Access.

6.3.1 FIXED ROUTE AND COUNTY SERVICE

Regular and county route passengers who pay with cash fares represent 24 percent of riders. Day pass users represent 34 percent of riders while 31-Day pass users represent 20 percent of riders. Students who attend schools that VVTA provides free service to represent 17 percent of riders. The fixed route, fixed route, and county route fare payment characteristics are presented on Figure 86.

Figure 86: Fixed route and County Route Fare Payment Characteristics

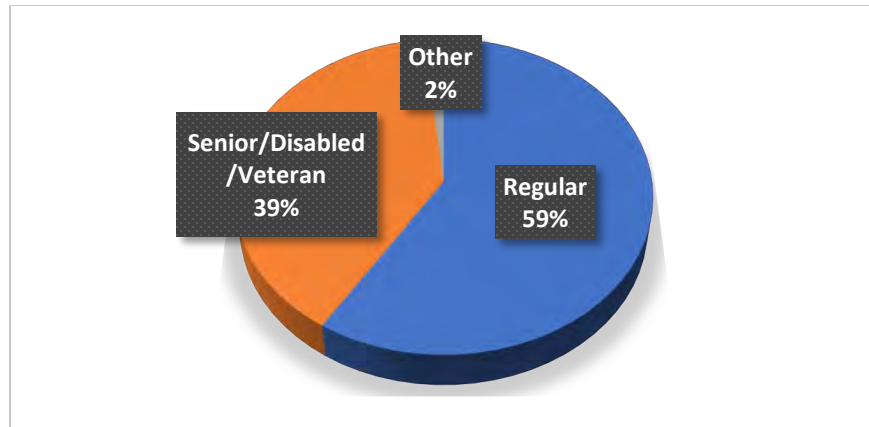


Source: Transtrack Fare Type Summary by Month FY 2023

6.3.2 ROUTE 15

The Route 15 service does not provide multi-ride discounted fares. About 59 percent of all riders are regular cash passengers, and 39 percent of passengers are senior/disabled/veteran riders. Two percent of riders pay using another fare type. Figure 87 presents the rider characteristics for the Route 15.

Figure 87: Route 15 Link Fare Payment Characteristics

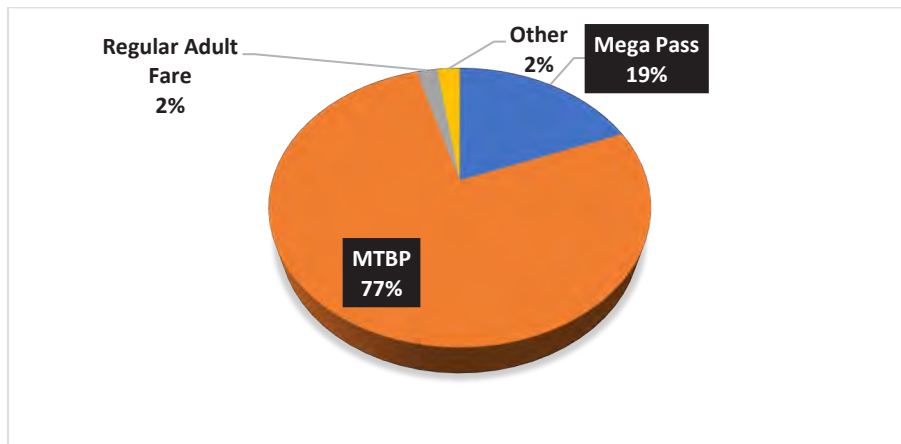


Source: Transtrack Fare Type Summary by Month FY 2023

6.3.3 NTC COMMUTER SERVICE

While there are cash fares available on the NTC Commuter service, most passengers pay either using the MEGA Pass, Monthly Pass, or the Military Monthly Pass. The Military Monthly Pass is utilized by 77 percent of riders and is for Department of Defense employees, with the cost tied to the Mass Transit Benefit Program. All other riders can purchase the Mega Pass, which is used by 19 percent of riders. Two percent of passengers pay with cash or cash equivalent and two percent utilize other payment types. This is shown on Figure 88.

Figure 88: NTC Fare Payment Characteristics

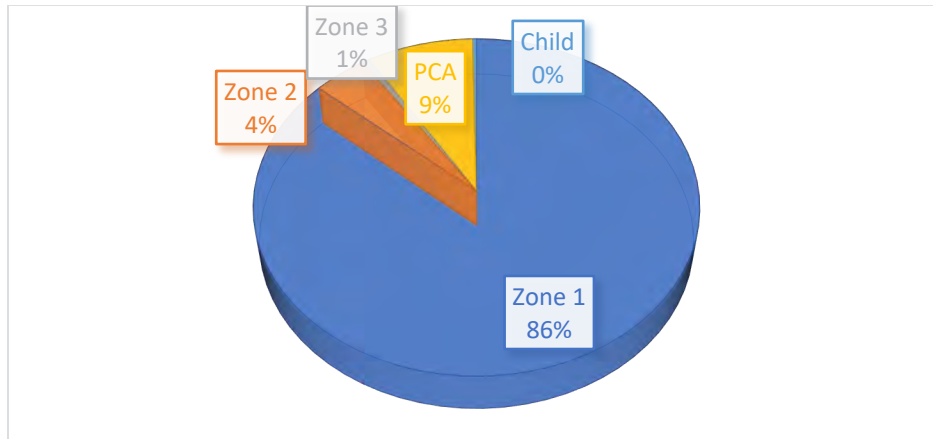


Source: Transtrack Fare Type Summary by Month FY 2023

6.3.4 DIRECT ACCESS

Direct Access does not have bulk discounted fares. Analysis of the fare payment characteristics shows that approximately 86 percent of all Direct Access trips pay a zone 1 fare. An additional four percent have an origin or destination in Zone 2. Approximately one percent of Direct Access passengers are zone 3 passengers. Nine percent of riders are personal care attendants (PCA) and less than one percent are children. This is shown on Figure 89.

Figure 89: Direct Access Fare Payment Characteristics



Source: Transtrack Fare Type Summary by Month FY 2023

Table 48 shows the annual change in ridership and revenue, including the impact on the average fare, over a 10-year period. Table 48 also shows the impact to ridership of VVTA’s merger with Barstow Area Transit and the impact of the COVID-19 pandemic. While ridership has not fully recovered from the pandemic, fare revenue collected in 2023 is at its highest point since before the COVID-19 pandemic began, and in VVTA’s history. This is primarily due to contracts that VVTA has with educational institutions that allow students to ride free, which includes Victor Valley College, California State University – San Bernardino, Excelsior Charter School, and Options for Youth Charter School. Also, funded fare promotions, such as free fares in October funded with STA funds are included in fare revenue. As shown on Table 48, these fixed revenue contracts have resulted in a high average fare, greater simplicity, and a more user-friendly policy that is helping ridership recover.

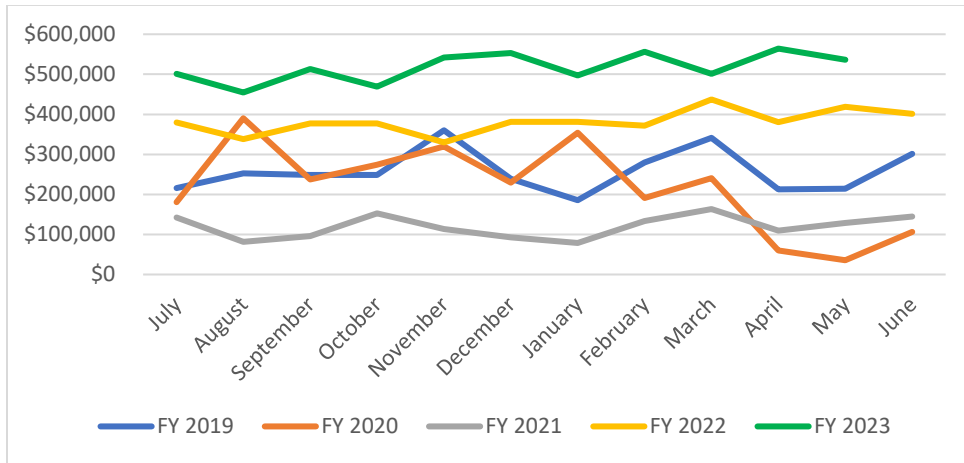
Table 48: Annual Fare Revenue versus Ridership

Fiscal Year	Fare Revenue		Ridership		Average Fare	
	Revenue	Annual Change	Total Boardings	Annual Change	Fare per Passenger	Annual Change
2014	\$ 2,622,376		2,369,864		\$ 1.11	
2015	\$ 2,811,142	6.71%	2,695,288	12.07%	\$ 1.04	-6.09%
2016	\$ 2,837,234	0.92%	2,725,591	1.11%	\$ 1.04	-0.19%
2017	\$ 2,861,283	0.84%	2,502,130	-8.93%	\$ 1.14	8.97%
2018	\$ 2,761,599	-3.61%	2,305,976	-8.51%	\$ 1.20	4.51%
2019	\$ 3,099,434	10.90%	2,240,399	-2.93%	\$ 1.38	13.43%
2020	\$ 2,618,988	-18.34%	1,971,684	-13.63%	\$ 1.33	-4.15%
2021	\$ 1,437,854	-82.15%	1,467,736	-34.34%	\$ 0.98	-35.59%
2022	\$ 4,574,997	68.57%	1,119,280	-31.13%	\$ 4.09	76.03%
2023	\$ 5,054,896	9.49%	1,350,088	17.10%	\$ 3.74	-9.17%

Source: Transtrack Key Performance Indicators Report

Looking at revenue collected by month, Fiscal Year 2023 has the highest revenue collected in each month compared to each month in previous years. School contracts for free rides for students, and other fare free ridership programs whose funding is applied to fare revenue, have contributed to the higher revenues per month. This is shown on Figure 90.

Figure 90: Five-Year Trend of Fare Revenue by Month

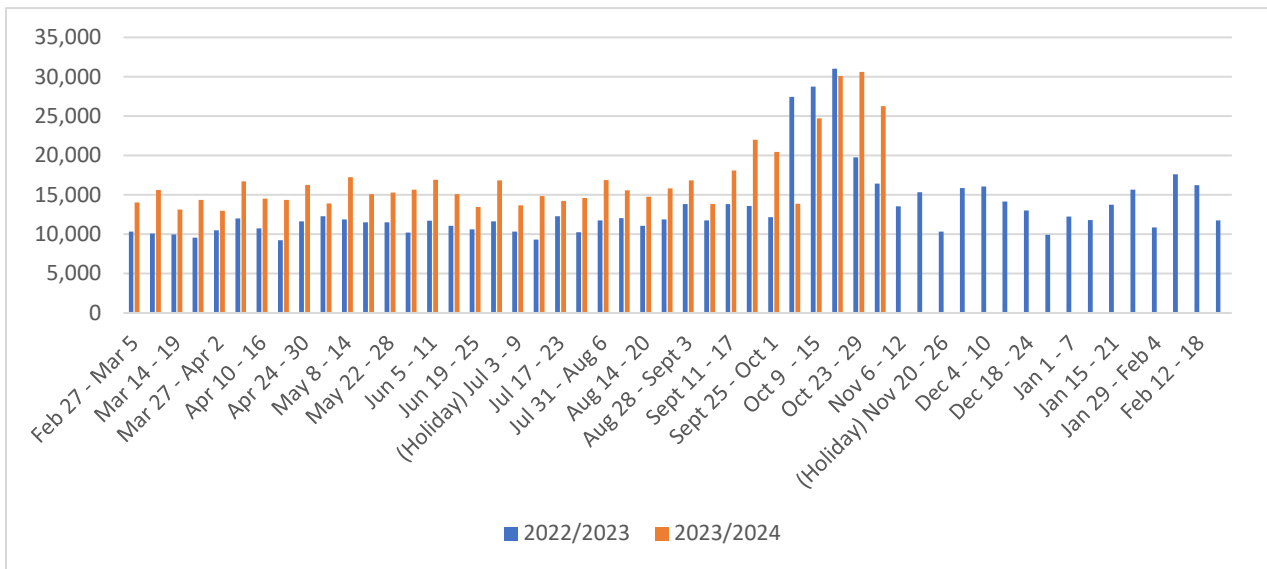


Source: Transtrack Fare Type Summary by Month

6.4 Ridership Analysis

Looking at monthly ridership during 2022 and 2023 shows that ridership has been growing by an average of approximately 28 percent year over year. This is shown on Figure 91 below. October is an important month to look at for the fare analysis as both in 2022 and 2023 fares were not charged by VVTA in October. There are three patterns that are notable about the growth in ridership patterns shown on the Figure 91 in the month of October. The first pattern is that the average ridership growth in October was slower than other months, averaging just under 2 percent year over year. The second observation is the year-over-year ridership growth was more significant during the last two weeks of October, which is evident of people becoming aware of the free service and using it. The third observation is that October ridership was double the ridership of most other months. These findings are important when considering lower fares or elimination of fares on VVTA services.

Figure 91: Weekly Ridership in Calendar Year 2022 and 2023



Source: VVTA weekly ridership counts

6.5 Potential Fare Options

There are a few fare policy options that VVTA could consider. After discussions with VVTA senior staff five fare policy options emerged. Preliminary discussions on goals and objectives for fare policy included creating a policy that will encourage ridership growth/return to service, meet the changing state and county requirements for farebox recovery, and ensure safety and security for riders and bus operators. A description of each fare policy with impacts is presented below.

6.5.1 OPTION 1: MAINTAIN CURRENT FARE POLICY

The first fare policy option is to maintain the current fare structure including maintaining the same passes. This fare policy option is the baseline for the purpose of evaluating each of the options. It is a viable fare policy option and the impact of maintaining the current fare structure is that there would be no changes to costs, revenues, equity, safety and security, or administration. With the fare policy held constant, ridership and revenue changes would be solely tied to the route network and ridership characteristics.

6.5.2 OPTION 2: MAINTAIN CURRENT FARE POLICY WITH FARE INCREASE

This second option is to maintain the current fare structure but increase fares amongst the current fare categories. This would not change any of the costs for collecting fare or administration for reporting fare revenue collected. When fares increase, typically, ridership decreases. Fare increases will raise the amount of revenue collected from fare paying passengers. Safety and security will not be impacted by fare increases with riders not willing to pay higher fares. Direct Access fares would increase along with the base fare. There could be equity impacts to increasing fares if the fare changes disproportionately effect impoverished and minority/non-white populations.

6.5.3 OPTION 3: ELIMINATE THE FARE DIFFERENCE BETWEEN FIXED ROUTE AND COUNTY SERVICES

Currently fixed routes and county routes have different fares. For describing this alternative, the assumption is that county fares would be lowered to match the fixed route fares. Lowering county route fares should increase the ridership on county routes. This would lower the fare revenue collected per passenger on the county services. Eliminating the difference in fares would improve equity as certain portions of the population would not have to pay more based on where they travel on a local service bus. Operating or capital costs would remain the same; however administrative time would decrease because of not having to track fare revenue for local and county services separately. Changing the fares for county services will have no impact on Direct Access fares and services, nor will it impact safety and security for riders.

6.5.4 OPTION 4: INSTITUTE FARE CAPPING

Fare capping rewards passengers with free rides after they meet the fare equivalent of a daily, weekly, or monthly pass. Riders typically use a smartcard or smartphone with a mobile pass, such as VVTA's UMO system. An example of how fare capping could work for VVTA is presented on Table 49 based on current fares for regular riders.

Table 49: Sample Fare Capping Scenarios

	Purchase Price	Number of Purchases for a Day Pass	Number of Purchases for a 31-Day Pass
One Regular Boarding	\$1.50	3	37
Day Pass	\$4.00	-	14
31-Day Pass	\$55.00	-	-

Fare capping would impact VVTA services. Fare capping will encourage ridership by making passes more accessible to passengers who pay one trip at a time. This will reduce the amount of revenue collected from fares by mid-month as many people who purchase individual trips will have qualified for a free ride. Making passes more accessible to riders will make VVTA a more equitable system. Managing a fare capping program may take additional administrative resources but the operating and capital resources for fare capping are already in place through VVTA’s cell phone fare payment UMO app. Safety and security will be improved as there will be fewer issues with passengers not having cash or refusing to pay. As fares would not change there would be no impact to Direct Access services.

6.5.5 OPTION 5: FARE FREE SYSTEM

Fare-free transit is being explored in several locations throughout the country. In fare-free transit, fares are eliminated. For VVTA that means that there would be no costs or administration of fare types related to fare collection. Riders would be unencumbered by fares which would encourage more trips to be taken on VVTA buses. This is a benefit for equity as it eliminates the need for low-income passengers to pay for transportation services.

There are several concerns related to operating a fare-free system. One concern is that it will eliminate revenue collected by fares and, based on current rules that are suspended, would have an impact on Transportation Development Act (TDA) revenue sources through 2024. TDA’s farebox recovery requirements do allow for other revenue sources, such as fare-free grants, local funding such as Measure I, and other similar funding sources, to be used for calculating TDA farebox recovery ratios, however, by themselves, these funding sources would not be sufficient to meet the TDA required farebox recovery ratios. Another concern is that if fares are eliminated on fixed route services, then fares cannot be charged for Direct Access which may encourage more rides on Direct Access vehicles. Another concern is that without having fares as a barrier to riders, unhoused people may use buses as a mobile shelter which would lead to safety concerns. Free fares could lead to crowding on buses and Direct Access and additional costs for increased services or addressing on-time performance. A final concern is that the increased ridership would lead to an increase in operating and capital costs for all free services. This is a particular concern for Direct Access as the elimination of fares may be an incentive for riders to utilize this higher-cost service.

Figure 91, presented earlier, shows that ridership during October, when VVTA had a ride for free promotion, is close to double the annual average. Changing to a fare free system would be a permanent change as it may be more of concern to be fare free at only select times and a cost benefit of fare free transit would be the removal of fare equipment from buses which would no longer need to be maintained.

6.5.6 ANALYSIS OF OPTIONS

The five fare policy options described in the previous section have been analyzed based on seven criteria. Table 50 presents the comparative analysis of the fare policies for each category. The analysis does not account for regulatory requirements, such as TDA farebox requirements as fare revenue could partially be backfilled by other sources and such requirements are currently suspended with their future in doubt.

Table 50: Fare Policy Options Comparison

Impact Categories	Current Fare Policy	Current Fare Policy with Fare Increase	Eliminate Fare Differences between Fixed and County Routes	Fare Capping	Fare-Free
Ridership	Neutral	Temporary ridership loss	Improve county route ridership	Encourage ridership	Encourage ridership
Revenue	Neutral	Increase fare revenue	Reduce fare revenue from county routes	Reduce fare revenue	Eliminate fare revenue
Equity	Neutral	Negative impact	Benefit to low-income county route riders	Benefit to low-income riders	Benefit to low-income riders
Capital and Operating Costs	Neutral	Neutral	Neutral	Neutral	Reduction in fare collection costs but may require additional service and concerns about funding impacts
Administration	Neutral	Neutral	Reduced administration	Increased administration	Reduced administration
Safety and Security	Neutral	Neutral	Neutral	Safety and security improvement	Safety and security improvement but concerns over unhoused riders using buses for shelter
Direct Access Paratransit	Neutral	Lower Ridership	Neutral	Neutral	Eliminates fares, may increase demand

6.6 Proposed Fare Policy

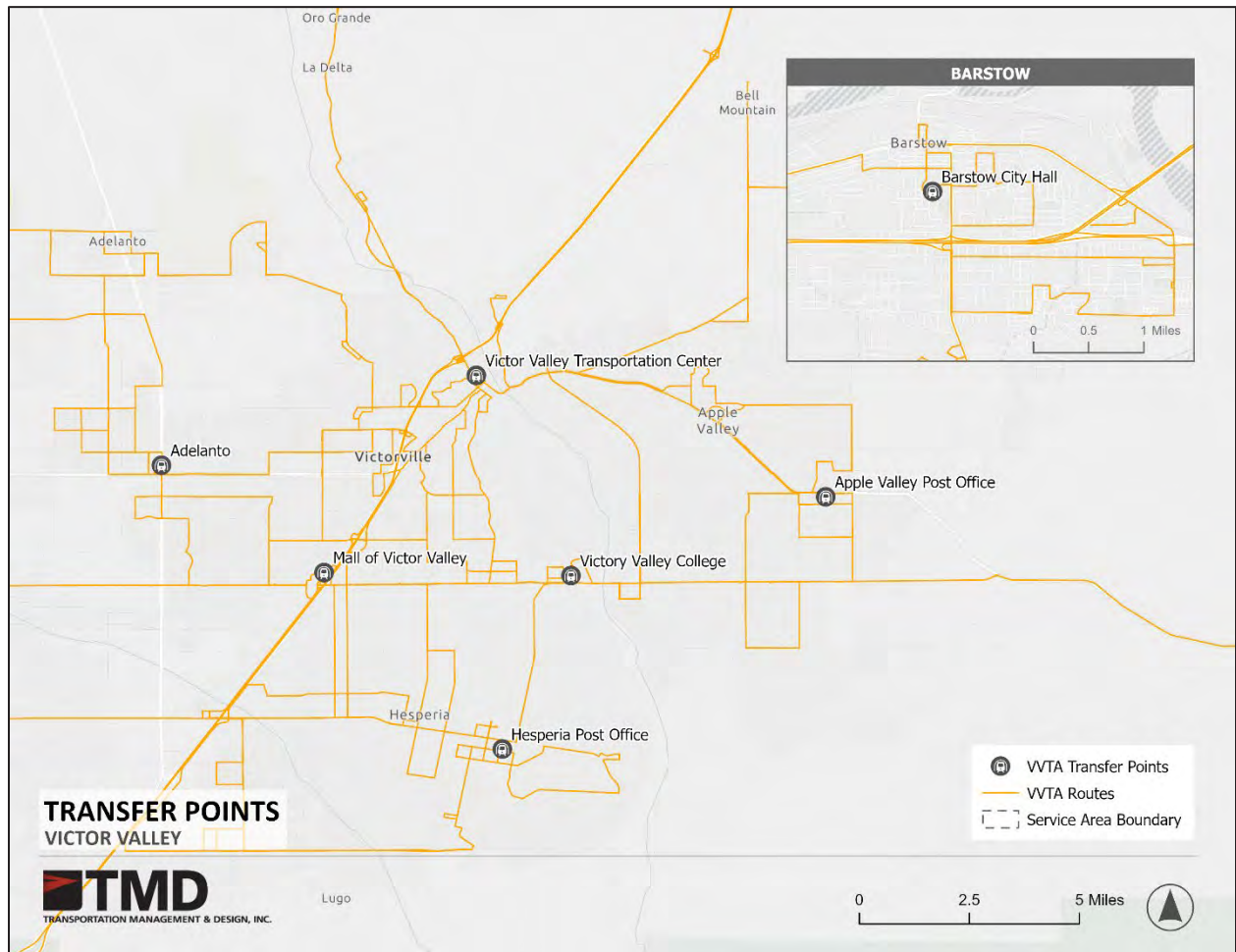
This analysis of fare policy options informs recommendations of the COA. The final fare policy recommendations consider current and future policies regarding fare policy and revenue impacts to VVTA. The final fare policy could include elements from multiple fare policy options. Besides a recommended fare policy, the following fare policy elements will encourage ridership:

- Create a Monthly Pass for Route 15 for regular riders which will encourage riders
- Allow Direct Access paratransit riders to ride fixed route buses for free which should reduce demand on Direct Access in favor of fixed route services with a lower cost per passenger

7 Transfer Point Analysis

Transfers and connecting bus services allow passengers to access a broader network of routes and destinations. A transfer hub expands riders' ability to reach places and services not directly served by a single route, thereby enhancing their overall mobility without relying on a personal vehicle. VVTA operates seven (7) strategic transfer points throughout its service area. These hubs serve as convergence points for multiple bus routes, enabling passengers to switch between routes and mobility providers and reach their ultimate destinations. Bus schedules are coordinated to facilitate seamless transfers at many of these transfer points. Moreover, these transfer points are often the terminus point for bus routes which offer bus operators the opportunity to take breaks between trips, or even longer changeover breaks. The seven (7) transfer points are presented on Figure 92 and summarized in the following section.

Figure 92: Transfer Point Locations



7.1 Transfer Point Summaries

7.1.1 VICTOR VALLEY TRANSPORTATION CENTER

The Victor Valley Transportation Center (VVTC) is Victorville's main transfer point. VVTC is located on D Street in Victorville. The transfer point is co-located with the Victorville bus station and is located approximately 600 feet from the Victorville Amtrak station. Serving as the major transfer center for VVTA service routes, VVTC's nine (9) docks serve 12 routes: Routes 15, 22, 31, 32, 41, 50, 50X, 52, 55, 56, 114, and 118. There are two WaySine real-time signages at either end of the island at this transportation center.

VVTA has a plan in place for rehabilitating the facility with the aim of addressing areas for improvements at the VVTC in the near term, with a goal of improving service quality and increasing ridership. These improvements include lack of dedicated office space, restroom improvements and expansion, rehabilitating canopy for waiting area protection. Over the long term, additional requirements including the incorporation of bus cutouts, development of hydrogen fueling capabilities, and establishment of public charging stations will also be addressed.

7.1.2 HESPERIA TRANSFER POINT

The Hesperia Transfer Point is located on-street at the Hesperia Post Office at the intersection of G Avenue and Olive Street. This transfer location has two bus stops, one of them located at the southeast corner of G Avenue and Olive Street on G Avenue and the other bus stop is located on the northeast corner of the intersection along Olive Street. This transfer point is served by the following routes: Routes 25, 50, 64, 66, and 68. A bus shelter and bench are provided at the bus stop at the southeast corner of G Avenue and Olive Street. There are two (2) WaySine real-time bus information signage at this transfer point, one at each stop.

VVTA is currently undergoing the process to design and construct a new transfer hub in Hesperia. The Transfer Hub will be located on a 10-acre lot just east of the VVTA Hesperia Facility. The Hub will include 10 (ten) sawtooth cut bus stops, an opening between the sawtooth cut areas to accommodate awaiting passengers, shelter covering to shade the passengers, passenger benches, two (2) public gendered restrooms, 2-3 stalls each (Must meet all ADA requirements), 2 private gender-neutral restrooms, an office for Security, and a shaded area for vending machines. The building will have an appealing façade to match the adjacent Victor Valley Transit Authority Facility aesthetic. The project will also include a parking lot which will be placed directly adjacent to the transfer hub and must provide sufficient spaces to accommodate approximately 75-100 passenger vehicles, 10-15 of those being designated as customer parking.

7.1.3 BARSTOW TRANSIT CENTER

The Barstow Transit Center has been recently relocated to E. Mountain View Street in front of Barstow City Hall, between S 2nd Avenue and Belinda Avenue on the south curb. The Barstow Transit Center serves Routes 1, 2, 3, 6, 15, 28 and 29. Passenger amenities at the Barstow Transit Center include a bench, and a VVTA post and two (2) real-time WaySine sign¹⁴. There are facilities (port-a-

¹⁴ Victor Valley Transit Authority. No date (n.d.). New Barstow Transfer Center. Available at: <https://vvta.org/barstowtc/>

potties) for the drivers to use on undeveloped land close^r to 2nd Avenue. Plans have been drafted for the establishment of a transit center along Williams Street, situated between Barstow Road and S 2nd Avenue. This location is already being used as a bus stop for the Fort Irwin National Training Center (NTC) Commuter service. NTC commuter routes provide weekday commuter bus service between those who work at the Fort Irwin NTC and those travelling from the communities of Victorville, Hesperia, Barstow, or Helendale¹⁵. The city expressed a preference to relocate the transit center to the Williams Street location and has previously applied for grants to develop the site. This site relocation could be an opportunity for VVTA, the City of Barstow and San Bernardino County Transportation Authority to collaborate and develop a new transit center.

VVTA and other stakeholders of this transit center should proactively explore opportunities to secure state and federal grants such as the State of California's Transit and Intercity Rail Capital Program (TIRCP), Low Carbon Transit Operations Program (LCTOP), and Low- or No-Emission Grant Program (LOWNO). Pursuing these grants could provide the necessary funding for the development of a modern transfer center as well as integrating innovative zero-emission technology. This strategic approach aligns with the state's commitment to green initiatives and builds on VVTA's current undertaking with Hesperia's transfer hub (mentioned above) and thereby fostering a more eco-friendly and efficient public transportation system for the benefit of the community served by VVTA.

7.1.4 VICTOR VALLEY COLLEGE

The Victor Valley College (VVC) bus stop serves as a significant destination and pivotal transfer point, offering five (5) bus berths arranged in a shallow sawtooth configuration. Passenger amenities at this stop comprise four (4) real-time bus stop signage, a sheltered waiting area, seating benches, a water fountain, and garbage cans. Several routes, including Routes 42, 43, 50, 50X, 53, and 55, utilize this stop.

7.1.5 APPLE VALLEY POST OFFICE

The Apple Valley Post Office bus stop is a significant on-street transfer point in Apple Valley. Five (5) routes serve this stop including Routes 23, 40, 41, 43 and 47. Notable passenger amenities at this stop include a bus shelter, one WaySigne real time signage, and a trash receptacle.

7.1.6 ADELANTO TRANSFER POINT

There are two on-street bus stops located at Stater Brothers Market in Adelanto near the intersection of US 395 and Palmdale Road, one on US395 and the other on Palmdale Road, both of which have one real-time signage. Bus stop #10000 is the transfer point/layover but the other bus stop is not the transfer point. The stops are served by Routes 31, 33, and 54. Routes are timed to meet at the stop along US-395.

7.1.7 MALL OF VICTOR VALLEY

The Mall of Victor Valley is a prominent shopping and retail center located in Victorville, California. The Mall bus stop is located near the mall entrance between Macy's and the Food Court. It holds significance for VVTA bus riders as it serves as a central transportation hub for five (5) key bus routes

¹⁵ Victor Valley Transit Authority. 2019. NTC Commuter. Available at https://vvta.org/wp-content/uploads/2019/11/VVTA_NTC_20190630.pdf

(Routes 21, 44, 52, 53, and 54) providing direct access to the mall. The Mall of Victor Valley bus stop amenities include waiting shelters and a trash receptable. Bus schedules are not coordinated at this location.

7.2 Victor Valley Transit Authority Transfer Efficiency

Transfers play a pivotal role in a bus network by enhancing the flexibility and accessibility of jobs, schools, and other destinations for passengers. An analysis of VVTA bus transfers during a two-week period in the Fall of 2023 revealed that 40% of all transfers involved key routes, including Routes 1, 2, 3, 6, 23, 41, 43, 50, 52, 53, and 64. The results can be found in Table 51 showing VVTA’s top bus transfer combinations. The left column indicates the transfer combination (in either direction), while the right column denotes the total number of the specific transfer combination observed during the data collection period. The middle column refers to the transfer combination of different routes with transfer direction included. Notable destinations along these routes encompass Barstow College, Barstow City Hall, VVC, VVTC, the Mall of Victor Valley, Walmart, and the Apple Valley Post Office. Within this top 35%, Route 3 witnessed the highest number of transfers (23 times), followed by Route 53 (21 times). The most frequent transfer combinations included Route 6 and Route 3, Route 1 and Route 3, Route 31 and Route 32, and Routes 52 and 53.

In addition, during the survey data collection period, most transfer combinations (78%) required only one bus transfer, while 34 observed trips necessitated two transfers. However, the collected data did not incorporate average transfer time. Passengers have concerns about long waits between buses if connections are missed. Overall transfer combinations observed can be found in Table 52.

Table 51. Top 40 Percent VVTA Bus Transfer Combinations

Transfer Routes ¹⁶	Number of Transfers	Transfer Location
Routes 1 and 3	195	Barstow City Hall
Routes 3 and 6	158	Barstow City Hall
Routes 52 and 53	137	Mall of Victor Valley
Routes 2 and 3	115	Barstow City Hall
Routes 50 and 64	107	Hesperia Post Office
Routes 41 and 43	105	Apple Valley Post Office
Routes 43 and 50	104	Victor Valley College
Routes 23 and 41	90	Apple Valley Post Office
Routes 43 and 53	90	Victor Valley College
Routes 41 and 50	80	Victor Valley Transportation Center

Source: VVTA COA Passenger Survey, 2023

¹⁶ Note this is in either direction.

Table 52. VVTA Overall Transfer Matrix

		To Route																																				
		1	2	3	6	15	21P	21W	22	23	25	28	29	31	32	33	40	41	42	43	47	50	50X	52	53	54	55	56	64	66	68	NTC						
From Route	1	-	13	96	2	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	2	13	-	52	23	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	3	99	63	-	63	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	6	63	8	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	15	4	-	17	-	-	-	-	-	-	-	37	-	-	43	-	-	22	10	-	-	59	11	8	-	-	-	3	-	-	-	-	-	-				
	21P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-			
	21W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-			
	22	-	-	-	-	3	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	3	12	-	-	-	-	-	-	-	-	-	-	-			
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-			
	28	-	6	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	29	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	31	-	-	-	-	2	-	-	3	-	-	-	-	-	28	-	-	32	-	-	-	28	19	5	-	-	32	25	-	-	-	-	-	-	-			
	32	-	-	-	-	13	-	-	-	-	-	-	-	2	-	-	-	5	-	-	-	20	14	33	-	-	29	32	-	-	-	-	-	-	-	-		
	33	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	
	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	41	-	-	-	-	-	-	-	32	60	-	-	-	36	26	-	20	-	-	75	2	6	-	29	-	-	6	-	-	-	-	-	-	-	-	-		
	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	43	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	15	30	-	-	-	99	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	
	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	50	-	-	-	-	17	-	-	42	-	6	-	-	8	-	-	74	-	5	-	-	-	-	42	4	-	12	15	95	28	6	-	-	-	-	-		
	50X	-	-	-	-	17	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	1	-	-	19	-	-	-	-	-	-	-	-	-	-	
	52	-	-	-	-	2	27	-	-	-	-	-	-	-	8	-	-	35	-	-	-	-	-	-	12	-	3	10	-	-	-	-	-	38	13	-	-	
	53	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	4	66	-	62	19	125	-	59	-	-	-	-	-	-	-	-	25	-	-	
	54	-	-	-	-	-	-	-	-	-	-	-	1	-	48	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	11	-	-
	55	-	-	-	-	36	-	-	15	-	-	-	-	5	32	-	-	57	-	-	-	-	-	27	11	-	-	3	-	-	-	-	-	-	-	-	-	
	56	-	-	-	-	39	-	-	-	-	-	-	-	6	37	-	-	3	-	-	-	-	-	19	28	-	-	12	-	-	-	-	-	-	-	-	-	
	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	3	-	-	
66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	1	4	48	-	-	25	-	-	-	-	-	-	-		
NTC	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	

Source: VVTA COA Passenger Survey, 2023

Data collected over Fall 2023 also identified transfers by location. As shown in Table 53, VVTC had the highest number of transfers (1,333) out of all VVTA’s transfer points. VVTC also had the highest number of routes that services one transfer point with 12 buses serving VVTC.

Table 53. VVTA Transfers by Location

Transfer Location	Number of Transfers	Routes
Victor Valley Transportation Center	1,333	15, 22, 31, 32, 41, 50, 50X, 52, 55, 56, 114, 118
Barstow City Hall	752	1, 2, 3, 6, 15, 28, 29
Mall of Victor Valley	399	21P, 21W, 52, 53, 54, 68
Victor Valley College	373	42, 43, 50, 50X, 53, 55
Apple Valley Post Office	356	23, 40, 41, 43, 47
Hesperia Post Office	242	25, 50, 64, 66, 68
Palmdale and US 395 (Adelanto)	70	31, 33, 54
St Mary’s Medical Center	32	15, 41, 42

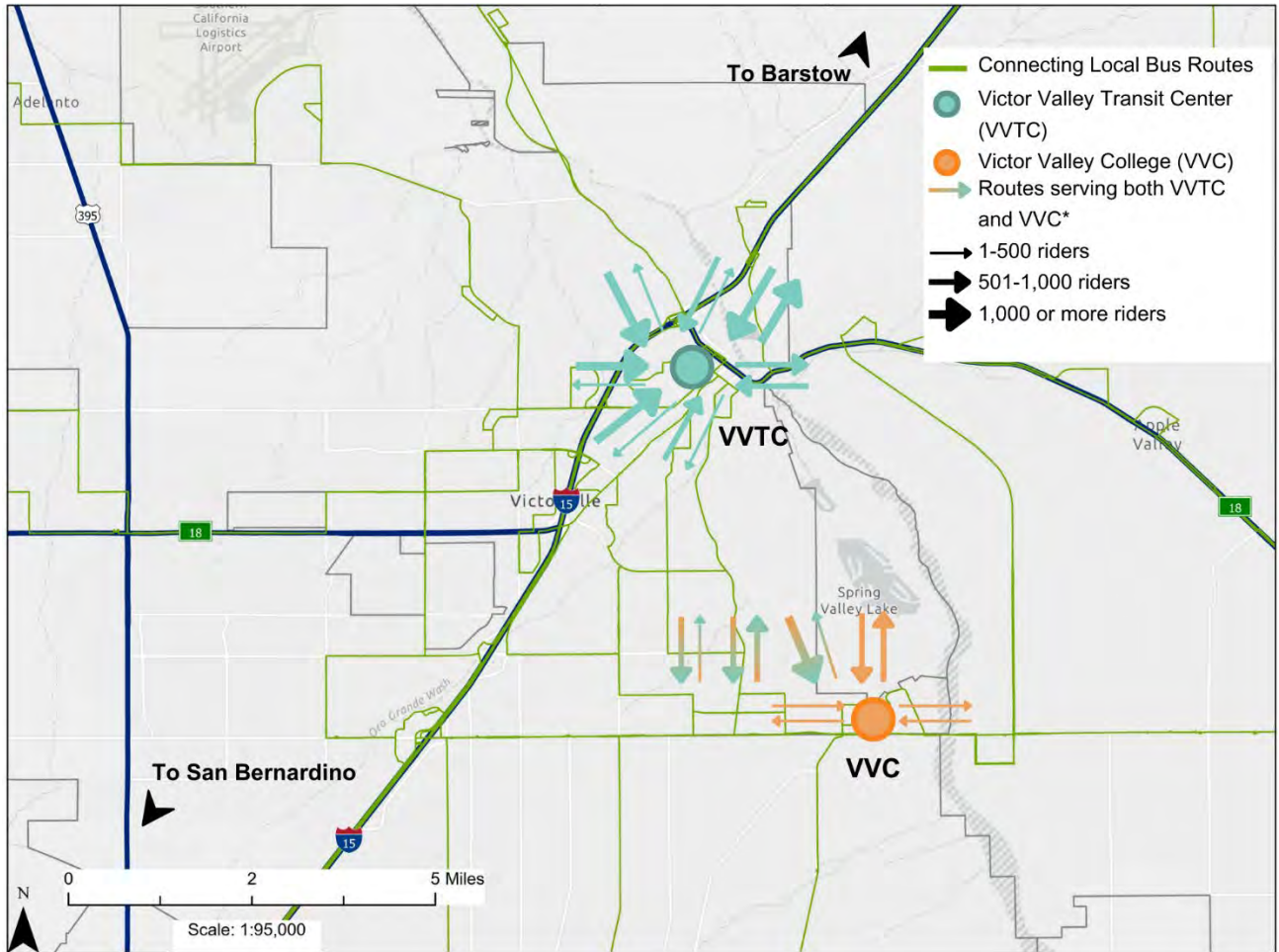
Source: VVTA COA Passenger Survey, 2023

7.3 Victor Valley Transportation Center and Victor Valley College Ridership Analysis

To assess the efficacy of the VVTC and VVC as transfer hubs, ridership analysis relied on VVTA’s boarding and alighting data from July 1, 2022, to June 30, 2023. Data analyses employed Automated Passenger Count (APC) data for weekday transfer service at VVTC and VVC. Similar ridership patterns were observed for weekend transfer service at these two transfer hubs, therefore was not included in this chapter. The evaluation of weekday transfer service is sufficient to generate key findings related to ridership trends at VVTC and VVC (see for an illustration of these findings).

Ridership volumes in this analysis are defined by three thresholds: High Ridership Route (1,000+ riders), Medium Ridership Route (500-1,000 riders), and Low Ridership Route (<500 riders). Thresholds were developed calculating total ridership for each route and finding natural breaks in the ridership counts.

Figure 93. Victor Valley Transit Center and Victor Valley College Transfer Centers Ridership



*Ridership counts for routes serving both VVTC and VVC are aggregated from

7.3.1 VICTOR VALLEY TRANSPORTATION CENTER FINDINGS

The VVTC is served by routes with a wide range of boarding and alighting performances. For routes using VVTC as either a destination or a transfer point, four fell into the High Ridership Route threshold (1,000 riders or more). More specifically, Route 15 has the highest boarding and alighting activity at VVTC on weekdays. This route notably serves San Bernardino, indicating that travel between Barstow, Victorville, and San Bernardino has high ridership, with VVTC serving as an integral node in this travel pattern. Route 118, which is a commuter bus service to Fort Irwin NTC, has the lowest weekday boarding and alighting activity at VVTC. See Table 54 for detailed ridership counts for routes that offer transfer at VVTC. Ridership counts were calculated using APC data.

Table 54. Victor Valley Transit Center Weekday Ridership

Route	Stop Name	Stop Number	Weekday Boardings	Weekday Alightings	Weekday Sum of Boardings and Alightings
Route 114	VVTC - Dock 3	50020	315	729	1,044
Route 118	VVTC - Dock 3	50020	1	5	6
Route 15	VVTC - Dock 6	50023	6,941	7,680	14,621
Route 22	VVTC - Dock 5	50022	398	1,181	1,579
Route 31	VVTC - Dock 2	50019	200	1,305	1,505
Route 32	VVTC - Dock 8	50017	285	1,524	1,809
Route 41	VVTC - Dock 7	50024	387	479	866
Route 50	VVTC - Dock 4	50021	216	486	702
Route 50X	VVTC - Dock 7	50024	558	155	713
Route 52	VVTC - Dock 1	50018	344	873	1,217
Route 55	VVTC - Dock 3	50020	378	409	787
Route 56	VVTC - Dock 9	50025	360	512	872

Source: APC Data, 2023

Other notable routes, due to their high ridership at VVTC, are Routes 22, 31, and 32. In general, this indicates that the most popular routes utilize VVTC as a transfer center and travel eastbound and southbound. Analyzing routes with the highest travel volume that specifically serve VVTC reveals key ridership trends. High boarding and alighting activity at VVTC for Route 22 indicates a high demand for travel from Helendale towards Victorville, stopping through VVTC. Route 31, compared to Route 15, offers local service, with riders mostly traveling from the southern part of Adelanto to Victorville. Route 32 operates between VVTC and Adelanto, with VVTC acting as a terminus for this route. Route 32 serves the Southern California Logistics Airport (SCLA). The high ridership of Route 32 implies that many riders are traveling from Adelanto, or SCLA, eastbound towards VVTC.

Routes 50, 50X, and 55 offer transfer at both VVTC and VVC. When reviewing boardings and alightings trends at VVTC for all three (3) routes, more individuals are boarding southbound routes and alighting northbound routes at VVTC (see Table 54). Route 55 travels between VVTC and VVC, but unlike Route 50X which offers express service between VVTC and VVC, it makes many stops along the way between the two transfer centers. Route 50 travels south beyond VVC to Hesperia. Coupled with strong southbound alighting trends for VVC’s transfer center, there is a clear narrative in which riders along routes serving both VVTC and VVC are traveling to and from VVC.

7.3.2 VICTOR VALLEY COLLEGE FINDINGS

Given the comparatively lower overall weekday ridership for routes serving only VVC versus VVTC, all but one northbound bus route falls into the Low Ridership Route threshold of 500 riders or less for weekday boardings and alightings at VVC. Route 43 has the lowest ridership trend for all routes analyzed. Route 42 has the highest ridership, categorized within the Medium Ridership Route threshold of 501 to 1,000 riders. Table 55 provides detailed ridership counts for routes that offer transfer at VVC. The sum of ridership along all lines of each route are indicated with grey shading and

represented by an asterisk, with each lines’ individual ridership count listed below their respective route.

In general, for routes serving both VVTC and VVC (Routes 50, 50X, and 55), there is a higher volume of southbound ridership towards VVC. Route 50X’s SB service has notably high ridership. Importantly, this route’s southbound service has the third highest ridership level (following Route 15NB and 15SB respectively, which only serve VVTC). As an express route, Route 50X only stops between VVTC and VVC. This finding is substantiated by ridership trends for Routes 50 and 55, which when assessing boardings and alightings at the VVC transfer point, are busiest along southbound routes. Like Route 50X, high ridership for Routes 50 and 55 trend southbound, with riders notably traveling from VVTC towards VVC. Ridership for Routes 50 and 55 at VVC’s transfer point are in the middle to higher end of the Lowest Ridership Route threshold.

The high southbound boarding and alighting count at VVC indicates that there is a significant need for individuals to travel from VVTC south to VVC. Ridership analysis in this section suggests that VVC is a high traffic transfer point. However, given the location of the VVC transfer point, these riders may be students or staff of the community college. Thus, as a higher education institution, VVC is a destination rather than a transfer point.

Table 55. Victor Valley College Weekday Ridership

Route	Stop Name	Stop Number	Weekday Boardings	Weekday Alightings	Weekday Sum of Boardings and Alightings
Route 42	VVC - Dock 1	50015	545	235	780
Route 43	VVC - Dock 5	50011	171	77	248
Route 50	VVC – Dock 4	50014	137	182	319
Route 50X	VVC – Dock 1	50015	240	1,267	1,507
Route 53	VVC - Dock 5	50011	247	227	474
Route 55	VVC – Dock 3	50012	122	603	725

Source: APC Data, 2023

7.4 Conclusion

7.4.1 TRANSFER POINT EVALUATION SUMMARY

Key takeaways from VVTA’s transfer point evaluation include:

- Many transfers within the VVTA bus system involve just two routes (i.e., one transfer), with approximately 12% of the observed trips requiring two transfers.
- Of the top 40% of transfer combinations observed, top routes involving transfers include Route 1, 3, and 6.

7.4.2 RIDERSHIP ANALYSIS SUMMARY

Ridership analysis from VVTA’s weekday transfer service revealed key takeaways:

- The most popular routes utilize VVTC as a transfer center.
- VVTC has higher weekday ridership volume compared to VVC, with twice as many routes transferring at VVTC than VVC. VVTC serves Route 15, which has the highest sum of weekday boardings and alighting both for northbound and southbound service (See Table 54). High ridership for Route 15 may result from its regional significance between Barstow to San Bernardino and implies that regional travels are higher in demand than local travels.
- Route 43, transferring through VVC, has the lowest ridership volume for all routes analyzed.
- For routes serving both VVTC and VVC as transfer points (Route 50, 50X, and 55), ridership is higher southbound toward VVC. Route 50X ridership is notably high, and as an express route making stops only between VVTC and VVC, reveals a trend to travel from VVTC southbound to VVC.
- Routes employing both VVTC and VVC as transfer hubs seem to have a higher ridership base compared to those routes only serving VVC. Though VVTC is the main transfer hub for VVTA service, VVC's ridership volumes are higher for routes that also serve VVTC.

7.4.3 TRANSFER POINT CONCLUSIONS

- While the VVTC is an efficient transfer point within VVTA's network, space at VVTC is at capacity. Future increases to bus service at VVTC would necessitate additional bus bays. Further analysis is needed to assess how future infrastructure development could be supported at VVTC.
- The most important route connections at VVTC based on total weekday boardings and alightings include Routes 15, 22, 31, 32, and 50X. These routes all had over 1,000 riders boardings and alightings at VVTC.
- The new Hesperia transfer hub will address the on-street limitations found at the current Hesperia transfer point at the Hesperia Post Office.
- Within the City of Barstow, there is an opportunity (supported by the city) to relocate the Barstow Transit Center to Williams Street although grants are needed to fund this endeavor. Grant opportunities include, but are not limited to, TIRCP, LCTOP, and LOWNO.
- Outside of the City of Victorville, the Adelanto and Apple Valley transfer points function well, although the Apple Valley Post Office transit point is lacking passenger amenities.

The Mall of Victor Valley experiences a high number of transfers though bus schedules are not coordinated for efficient transfers. Further changes to VVTA bus service should be considered coordinating bus schedules at this location or someplace close by. Although data reveals a high volume of transfers at VVC, this transfer point is more of a destination given its higher educational purpose.

8 Financial Analysis

This chapter provides the funding and cost projections for Victor Valley Transit Authority (VVTA) through Fiscal Year (FY) 2029. Operating revenue sources are described and available funding levels, supplied by San Bernardino County Transportation Authority (SBCTA) are provided. Operating cost items and levels are based on projections from the most recent VVTA Short Range Transit Plan (SRTP). Capital funding is also presented in this chapter.

8.1 Funding Sources

VVTA receives funding from a variety of sources. Many of these sources have rules, guidelines, and timelines regarding how they may be spent. This section provides a description of the funding sources available for Victor Valley Transit and describes some of the limitations of these sources. SBCTA and VVTA have provided estimates for the expected level of funding for VVTA to 2029.

8.1.1 FEDERAL TRANSIT ADMINISTRATION GRANT PROGRAMS

The Federal Transit Administration (FTA) has several grant programs that public transit agencies utilize to support operations and capital needs. Federal programs include competitive grant programs and programs that are apportioned through statutory formulas. Below is a list of programs that VVTA utilizes and their eligibility. These are all formula funded programs.

8.1.1.1 Section 5307 Urbanized Area

Section 5307 supports transit capital and operating assistance in urbanized areas and is used for transportation related planning. VVTA uses Section 5307 to support the capital program and operations. This is a formula-based program determined by a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles as well as population and population density as the urbanized area. This program requires a local match of 20 percent for capital project purposes but can be as low as 10 percent for ADA related capital purchases. For using these funds for operations, this program requires a 50 percent match. The projected funding for this program is based on Federal Funding Year (FFY) 2023 apportionment and future funding levels will be based on actual FTA apportionments.

8.1.1.2 Section 5339 Buses and Bus Facilities

VVTA is using Section 5339 funding primarily for new Paratransit bus purchases and Garage & Shop Equipment. This will help maintain reliable service. Section 5339 is a formula grant program, and a 20 percent local match is required. Beyond the formula allocation, there are competitive grants through this program that are based on asset age and for the deployment of low emission vehicles. The competitive grant provides opportunities to increase funding for vehicles and facilities if they can meet the criteria of the competitive programs within this funding program. The competitive grants do require staff resources to apply for and administer. The projected funding for this program is based on FFY 2023 apportionment and future funding levels will be based on actual FTA apportionments.

8.1.1.3 Section 5311 Formula Grants for Rural Areas

VVTA is using 5311 funding to support county bus route operations, as well as operations of certain segments of the regular fixed route services in rural areas. Section 5311 may also be used for capital procurement for items used for rural transit, however, due to Caltrans policies and match

requirements, VVTA has historically applied 5311 funds to operations. This is a formula-based funding program that is based on service area size in terms of land area and population, revenue vehicle miles, and low-income population within the rural service area. This program requires a 50 percent match if being used for rural area operations or 20 percent if being used for either capital programs or ADA non-fixed route services. The projected funding for this program is based on FFY 2023 apportionment and future funding levels will be based on actual FTA apportionments.

8.1.1.4 Congestion Mitigation and Air Quality (CMAQ)

Congestion Mitigation and Air Quality (CMAQ) program is a federal program designed to fund projects that help improve air quality. Mass transit investments qualify for CMAQ monies which VVTA is using for zero-emission bus (ZEB) infrastructure. Funding through FFY26 is programmed in the FTIP and funding future years are based on VVTA's ZEB plan. After FFY26 funds will have to be applied for through SCAG.

8.1.1.5 Renewable Identification Numbers (RINS)/Renewable Fuel Standard Credits

This credit is available to VVTA for the use of renewable fuel. Since the assumption of this financial analysis is that the service will be maintained at current levels this credit is expected to be the same amount for all years.

8.1.1.6 Clean Fuel Incentive/CNG Fuel Credits

Public transit agencies fuel their vehicles with compressed natural gas (CNG), liquefied natural gas (LNG), or liquified hydrogen benefit from a \$0.50 per gallon tax credit. A similar credit would be available for hydrogen fuel and battery electric buses. Since the assumption of this financial analysis is that the service will be maintained at current levels this credit is expected to be the same amount for all years.

8.1.2 STATE FUNDING SOURCES

The State of California provides funding for transit through a few agencies and programs. Caltrans manages most of the state transit funding programs. Other programs are coordinated between Caltrans and the California Air Resources Board (CARB). All state funding is passed to VVTA through SBCTA. The state funding sources used by VVTA are described below.

8.1.2.1 Transportation Development Act

The Transportation Development Act (TDA) provides two major sources of funding for public transportation: the Local Transportation Fund (LTF) and the State Transit Assistance fund (STA). LTF is generated by a ¼ cent sales tax statewide while STA is generated from a diesel sales tax. Both STA and LTF can be used to fund VVTA operations or capital purchases. These funds are for the development and support of public transportation needs that exist in California and are allocated to areas of each county based on population, taxable sales, and transit performance. In Victor Valley, LTF is used to support operations and capital needs for VVTA, while STA is solely used to support VVTA's capital program. LTF provides funding for operations, maintenance, administration, yard operations, and the capital program.

Besides LTF and STA there is Article 3 funding which is available for bicycle and pedestrian facilities, with the local jurisdictions identifying projects for Article 3 funding. 2 percent of LTF funds are Article

3 funds which VVTA uses to improve bicycle and pedestrian access to bus services. The projects that VVTA funds through Article 3 include path of travel improvements.

The funding amount presented reflects FY23 and FY24 SBCTA Board approved allocations. FY25 is based on State Controller's Office estimates. Future estimates use a 1 percent escalation, which reflects current market conditions. Actual LTF amounts will vary depending on revenues received. STA population share allocations are made based on a transit provider's approved/amended Short-Range Transit Plan and demonstrated funding need.

8.1.2.2 SB1/State of Good Repair

A major source of capital funding used by VVTA is SB1/State of Good Repair (SGR). This funding comes from the Road Repair and Accountability Act of 2017, Senate Bill (SB) 1 (Chapter 5, Statutes of 2017), signed by the Governor on April 28, 2017. SGR provides revenues for transit infrastructure repair and service improvements. Actual amounts available for operator shares are calculated by the State.

8.1.2.3 AB2766

Assembly Bill 2766 imposed a \$4.00 fee to motor vehicle registration to provide funding for projects that meet California Clean Air Act mandates. VVTA uses AB2766 funding to support fixed route operations. AB2766 funding does not fluctuate year over year, nor has there been any growth in funding.

8.1.2.4 Low Carbon Transit Operations Program (LCTOP)

This program is administered by Caltrans in cooperation with the California Air Resource Board (CARB) to provide capital and operating assistance for programs that reduce greenhouse gas emissions. For agencies that serve disadvantaged communities, 50 percent of LCTOP monies must be used on projects or operations that serve disadvantaged passengers. This program is funded from 5 percent of the proceeds from cap-and-trade auctions. FY25 funding is based on amounts published by the State Controller's Office. Operator shares to be determined and received directly from the State.

8.1.2.5 Low Carbon Fuel Standard Credits (LCFS)

The California Air Resources Board (CARB) provides credits to alternative fuel producers which can in turn be sold to gross polluters to buy down their Carbon Intensity limits, per State of California Carbon Intensity Laws. VVTA receives credits from current CNG production. Revenue from this source can fluctuate based on the market value of LCFS credits.

8.1.2.6 Transit and Intercity Rail Capital Program (TIRCP)

The Transit and Intercity Rail Capital Program (TIRCP) to provide grants from the Greenhouse Gas Reduction Fund (GGRF) to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, and bus and ferry transit systems, to significantly reduce emissions of greenhouse gases, vehicle miles traveled, and congestion. SB 125 guides the distribution of \$4 billion in General Fund through TIRCP on a population-based formula to regional transportation planning agencies, which will have the flexibility to use the money to fund transit operations or capital improvements. The budget also establishes the \$1.1 billion Zero-Emission Transit Capital Program, also administered by CalSTA, to be allocated to regional

transportation planning agencies on a population-based formula and another formula based on revenues to fund zero-emission transit equipment and operations. VVTA can use TIRCP for both capital and operations. Funding amounts are based on the FY24 SBCTA Board approved formula-based apportionments. Future apportionments are dependent on continued appropriations by the State Legislature.

8.1.2.7 Zero-Emission Transit Capital Program (ZETCP)

The Zero-Emission Transit Capital Program funding is for use for zero-emission transit equipment, including, but not limited to, zero-emission vehicles and refueling infrastructure and, to fund transit operations expenditures that prevent service reduction or elimination, to maintain or increase transit ridership. VVTA could use this funding for ZEB infrastructure and for operations that increase ridership. Funding amounts are based on the FY24 SBCTA Board formula-based approved apportionments. Future apportionments are dependent on continued appropriations by the State Legislature.

8.1.3 LOCAL FUNDING SOURCES

Two sources are considered local, which are Measure I and passenger fares. Measure I is managed by SBCTA while passenger fares are directly generated through fare payments and fare agreements. These two sources are described below.

8.1.3.1 Measure I

Measure I is the half-cent sales tax collected throughout San Bernardino County for transportation improvements. San Bernardino County voters first approved the measure in November 1989 to ensure that needed transportation projects were implemented countywide through 2010. In 2004, San Bernardino County voters overwhelmingly approved the extension of the Measure I sales tax, with 80.03 percent voting to extend the measure through 2040. VVTA uses Measure I funding to subsidize fares for Direct Access services and is used to fund CTSA programs. Funding presented is based FY23 and FY24 Board approved allocations, while the FY25 funding is based on SBCTA budget. Future estimates are based on projections by SBCTA financial consultant and will vary based on revenues received.

8.1.3.2 Passenger Fares

Passenger fares are the directly generated revenues that VVTA collects from boarding passengers and prepaid fare media. Passenger fares are tied directly to ridership on the VVTA system. Passenger fares provide support to the operation of VVTA buses. Passenger fare revenue is a function of ridership. For this analysis passenger fares are assumed to grow by 3 percent per year.

8.1.3.3 CNG Station Sale

VVTA has fueling stations that sell CNG fuel to the general public generating revenue for VVTA to use for operations. This direct source can be used as general funding for VVTA services. The CNG sales are not projected to grow over the next five years.

8.1.4 FUNDING PROJECTIONS

SBCTA, as the County Transportation Commission is the steward of most transit funding within San Bernardino County. SBCTA has provided an estimate of funding levels for most of the funding

programs listed above. The total amount from all funding sources for operations are presented in Table 56.

Table 56: Funding Level Projections

Source	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
LTF	\$35,077,895	\$35,428,674	\$35,782,960	\$36,140,790	\$36,502,198
STA	\$370,319	\$370,319	\$370,319	\$370,319	\$370,319
LCTOP	\$1,452,160	\$1,452,160	\$1,452,160	\$1,452,160	\$1,452,160
SB1/SGR	\$882,666	\$900,319	\$918,326	\$936,692	\$955,426
LCFS	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
SB125 – TIRCP	\$24,099,833	\$24,099,833	\$-	\$-	\$-
SB125 – ZETCP	\$1,633,819	\$845,448	\$845,448	\$-	\$-
Measure I	\$1,760,600	\$1,807,960	\$1,860,753	\$1,912,854	\$1,979,804
AB2766	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Section 5307	\$11,811,833	\$11,811,833	\$11,811,833	\$11,811,833	\$11,811,833
Section 5311	\$977,663	\$977,663	\$977,663	\$977,663	\$977,663
Section 5339	\$1,083,060	\$1,083,060	\$1,083,060	\$1,083,060	\$1,083,060
CMAQ	\$3,044,000	\$4,400,000	\$2,500,000	\$4,115,983	\$6,311,981
RINS Credits	\$540,000	\$540,000	\$540,000	\$540,000	\$540,000
CNG Station Sales	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
CNG Credits	\$682,000	\$-	\$-	\$-	\$-
HVIP Incentive Program	\$3,300,000	\$-	\$-	\$-	\$-
Competitive Grants	\$12,000,000	\$-	\$-	\$-	\$-
Passenger Fares	\$2,439,834	\$2,067,021	\$2,142,274	\$2,236,059	\$2,377,026
Advertising	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Interest Income	\$950,000	\$950,000	\$950,000	\$950,000	\$950,000
Other	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000
TOTAL:	\$103,825,681	\$88,454,290	\$62,954,796	\$64,247,412	\$67,031,469

8.2 Operating Cost Projections

The operating cost projections presented below are based on current operations. The financial plan that is presented as part of the implementation plan has different cost figures, based on unit costs presented in this chapter, as it incorporates service and overall system recommendations from the COA. The purpose of presenting the costs below is to state the projected cost of the current system and the amount of revenue that may be available to support any future recommendations. Fiscal Year 2024 operating costs are included to show the significant operating cost growth between FY 2024 and FY 2025.

8.2.1 COST CATEGORIES

VVTA’s budgeting process separates costs into eleven categories that represent VVTA’s functional areas: Administration, Facilities Yard, Direct Access, Fixed Route, County Route, Barstow Division, Route 15, Commuter, Micro-Link, Vanpool, and CTSA. The description of each cost category as well

as the factors that go into the costs are presented in the functional area description below. The cost projections included are based on analyzing growth in each line item in VVTA's budget.

8.2.1.1 Administration

Administration functional area represents the costs for the overall administration of VVTA services. This includes salary and benefits for VVTA administration staff, liability insurance, contracts for assorted services (not operating contracts), utility costs, leases and rentals, office expenses including office equipment, staff/Board professional development, stipends, and association dues and subscriptions. Administration costs are projected to grow at a rate of about 5 percent per year based on current staffing levels.

8.2.1.2 Facilities Yard

The Facilities Yard functional area represents the operating expense of the VVTA operations and maintenance yard, excluding administration costs. This includes utility costs, building maintenance costs, equipment repairs, and equipment and supplies. The costs for the Barstow operating and maintenance facility are included in the Barstow Division program. Costs are expected to grow by 5 percent per year.

8.2.1.3 Direct Access

Direct Access ADA costs represent the operation and maintenance expense of the Direct Access ADA service in Victor Valley. Fuel costs for ADA vehicles are also included in this functional area along with other supplies that are critical to the operation and maintenance of Direct Access. Based on the recent Collective Bargaining Agreement (CBA) between Keolis and the union representing Keolis employees, overall operating costs for Direct Access are projected to increase by 31 percent in FY 2025 and grow at rate between 2.5 percent and 5.5 percent per year. This does not include the operation with Direct Access in Barstow, which is included in the Barstow Division costs.

8.2.1.4 Fixed Route

The fixed route costs represent the costs for the regional fixed route operations and includes routes in the 30, 40, 50, and 60 route number series. This functional area does not include costs for services in Barstow, which are listed separately. It is expected that operating costs will increase by approximately 30.4 percent in FY 2025 due to the new CBA. In subsequent years operating costs are expected to increase by between 4.5 percent and 6.1 percent per year. The range not only includes labor cost changes but also the transition from CNG to hydrogen fueling.

8.2.1.5 County Route

The county route functional area represents the costs for operating Route 21P, Route 21W, Route 22, Route 23, and Route 25. It is expected that operating costs will increase by approximately 31.5 percent in FY 2025 due to the new CBA. In subsequent years operating costs are expected to increase by between 5 percent and 6.7 percent per year. The range not only includes labor cost changes but also the transition from CNG to hydrogen fueling along with the longer distances these routes travel.

8.2.1.6 Barstow Division

This line item refers to the operation of all services in the Barstow area. This includes the city Routes 1 through 3, and 6, county Routes 28 and 29, and Direct Access service costs in the Barstow area.

Costs associated with fuel, storage, and maintenance of the fleet in Barstow are also included in this budget item. It is expected that operating costs will increase by approximately 32.4 percent in FY 2025 due to the new CBA. In subsequent years operating costs are expected to increase by between 4.7 percent and 6.6 percent per year. The range not only includes labor cost changes but also the transition from CNG to hydrogen fueling.

8.2.1.7 Route 15

Intercity is the category for the Route 15 service that operates between Barstow, Apple Valley, Victorville, and the San Bernardino Valley. It is expected that operating costs will increase by approximately 28.5 percent in FY 2025 due to the new CBA. In subsequent years operating costs are expected to increase by between 4.0 percent and 5.4 percent per year. The range not only includes labor cost changes but also the transition from CNG to hydrogen fueling.

8.2.1.8 Commuter

Commuter bus service to the National Training Center at Fort Irwin is the only commuter bus service operating between Victor Valley and Barstow to the National Training Center at Fort Irwin. The costs for Fort Irwin services include operating expenses and maintenance of vehicles for the service. It is expected that operating costs will increase by approximately 8.0 percent in FY 2025 due to the new CBA. In subsequent years operating costs are expected to increase by between 1.1 percent and 8.4 percent per year. The cost increases are assumed to be lower as the labor costs for commuter bus did not increase as significantly as fixed route and demand response costs and currently there are no Hydrogen Fuel Cell buses in the market that can be used to replace the fleet of the NTC coaches.

8.2.1.9 Micro-Link

Micro-Link is VVTA's microtransit service that operates in two zones: West Victorville and South Hesperia. It is expected that operating costs will increase by approximately 62 percent in FY 2025 due to the new CBA and assuming the operator cost per hour will be the same as Direct Access. In subsequent years operating costs are expected to increase by between 3.5 percent and 5.6 percent per year.

8.2.1.10 Vanpool

This functional area represents the vanpools that are funded by VVTA. VVTA subsidizes the costs for vanpool and markets the service, and supplies. Vanpool subsidies are expected to grow by between 11.1 and 11.9 percent per year.

8.2.1.11 CTSA

The CTSA budget category funds the programs that operate from the CTSA. The CTSA program is designed to enhance mobility in the high desert area and help manage the growth in the Direct Access paratransit program. The rate of cost growth for the CTSA is approximately 5 percent per year. This does not include new programs that may be recommended.

8.2.2 COST PROJECTIONS AND ANNUAL COST PER HOUR

Operating cost projections are based on annual cost increases at the rates stated in each of the descriptions above based on the current service levels. The cost figures in this section provide the operating costs for current services and are used to project an average cost per hour for each service, which will be used to estimate the cost of the service recommendations. Table 57 presents

the preliminary costs for each of VVTA’s programs and Table 58 includes overall cost per hour for each service including all aspects of operations. For cost estimates it is assumed that services that operate out of Barstow and Hesperia will have the same cost structure.

Table 57: Operating Cost

Program	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fixed Route	\$23,313,173	\$24,356,134	\$25,771,802	\$27,326,764	\$28,968,109	\$23,313,173
Direct Access	\$5,192,271	\$5,366,959	\$5,654,523	\$5,922,755	\$6,230,466	\$5,192,271
County Routes	\$3,862,982	\$4,057,516	\$4,315,689	\$4,602,472	\$4,909,920	\$3,862,982
Barstow Division	\$5,600,345	\$5,865,823	\$6,229,849	\$6,631,981	\$7,068,187	\$5,600,345
Route 15	\$1,570,856	\$1,634,355	\$1,719,514	\$1,812,232	\$1,908,827	\$1,570,856
Commuter	\$1,689,920	\$1,791,789	\$1,940,001	\$1,961,606	\$2,125,084	\$1,689,920
Micro-Link	\$2,239,543	\$2,319,063	\$2,448,314	\$2,568,942	\$2,706,875	\$2,239,543
Van Pools	\$2,067,542	\$2,301,080	\$2,565,074	\$2,864,003	\$3,203,080	\$2,067,542
CTSA	\$799,181	\$854,398	\$913,938	\$978,174	\$1,047,510	\$799,181
VVTA						
Yard/Facilities	\$769,125	\$807,581	\$847,960	\$890,358	\$934,876	\$769,125
VVTA						
Administration	\$4,472,839	\$4,696,481	\$4,931,305	\$5,177,871	\$5,436,764	\$4,472,839
TOTAL	\$51,577,776	\$54,051,181	\$57,337,970	\$60,737,158	\$64,539,698	\$51,577,776

Table 58: Program Operating Cost per Hour

Service	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fixed Route	\$170.10	\$177.71	\$188.04	\$199.39	\$211.36
Direct Access	\$128.85	\$133.18	\$140.32	\$146.97	\$154.61
County Routes	\$167.48	\$175.92	\$187.11	\$199.54	\$212.87
Route 15	\$175.65	\$182.75	\$192.27	\$202.64	\$213.44
Commuter	\$289.77	\$307.23	\$332.65	\$336.35	\$364.38
Micro-Link	\$125.96	\$130.43	\$137.70	\$144.48	\$152.24

8.3 Capital Program

The capital program for the existing service supports VVTA’s fleet transition to zero-emission buses (ZEB) and maintaining the system in a state of good repair. Table 59 presents the list of current projects that will support the continued functions of VVTA based on current service levels. This includes additional service and revenue vehicles, ITS improvements, security improvements, shelters and bus stop amenities, and maintenance components. As part of the recommendations, an overall capital plan was developed and is presented in Chapter 11.

Table 59: Capital Program

Capital Costs	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
40-Foot FCEB	\$10,675,000	\$5,924,825	\$10,679,497	\$1,571,412	\$3,237,108
Paratransit Vehicles	\$850,000	\$525,300	\$1,082,118	\$1,114,582	\$956,682
Microtransit Vehicles	\$190,000	\$-	\$604,713	\$-	\$641,540
Non-Revenue Vehicles	\$310,000	\$319,300	\$328,879	\$474,244	\$558,252
Cost overrun for 3 buses	\$1,596,462	\$-	\$-	\$-	\$-
On-Board Vehicle Modems (security)	\$110,000	\$-	\$-	\$-	\$-
Hesperia Hydrogen	\$-	\$-	\$-	\$-	\$-
Hesperia Shop Upgrades for Hydrogen	\$1,430,000	\$-	\$-	\$-	\$-
Barstow Hydrogen and chargers	\$15,000,000	\$-	\$-	\$-	\$-
Garage and Shop Equipment	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
GFI Vault Upgrade	\$75,000	\$-	\$-	\$-	\$-
Barstow Transit Center¹⁷	\$730,000	\$141,684	\$-	\$-	\$-
Victorville Transit Center Expansion	\$	\$-	\$2,385,227	\$-	\$-
Automatic Passenger Counters	\$150,000	\$-	\$-	\$-	\$-
Hesperia Yard and Transit Center	\$1,800,000	\$-	\$-	\$-	\$-
Hesperia Facility Capital Lease	\$1,539,550	\$1,540,300	\$1,539,050	\$1,540,800	\$1,535,300
Barstow Facility Capital Lease	\$641,900	\$641,900	\$640,150	\$642,900	\$641,400
Transit Amenities/Street furniture	\$-	\$75,000	\$100,000	\$100,000	\$100,000
Grant Management Software	\$50,000	\$-	\$-	\$-	\$-
IT and Office Equipment Replace	\$55,000	\$50,000	\$50,000	\$50,000	\$50,000
Security	\$-	\$110,000	\$110,000	\$110,000	\$110,000
Capital Total	\$35,302,912	\$9,428,309	\$17,619,634	\$5,703,938	\$7,930,282

¹⁷ The table includes 20 percent of the total cost of the Barstow Transit Center, which is \$ 871,684. The full cost of the Victorville Transportation Center expansion of \$2,385,227 is shown above in FY2027.

9 Service Alternatives and Future Needs Analysis

The service changes included in this plan are meant to redesign the VVTA network in order to improve performance of the service and to address the evolving needs of the changing Victor Valley region. A two-tiered approach was used to develop a redesign of the VVTA network. The Short-Term Network includes service changes that can be made in the next one to two years and reflect constrained resources and adaptations to near-term developments within VVTA's service area. The Vision Plan contains service changes that are to occur over the longer term, over the next five years and beyond, reacting to upcoming developments like the opening of Brightline. The Vision Plan also includes more resource-intensive service improvements that will require additional resources than those needed for the short-term plan.

9.1 Inputs and Process

9.1.1 GUIDING PRINCIPLES

9.1.1.1 Addressing new land use and development patterns

As communities in Victor Valley continue to grow, VVTA will adjust its services to meet new demands. Where densities and land use patterns warrant, VVTA service changes have been developed to meet new demand for transit service. New developments will be served either by adjusting the alignment of existing routes, the introduction of new fixed routes, or the introduction of a new Micro-Link service.

9.1.1.2 Improving service frequency where possible and warranted

This service plan improves service frequency when possible and when demand warrants it. Improving service frequencies is key to improving ridership; this is especially important as the majority of VVTA services currently operate at frequencies of 60 minutes or greater. Improving service frequencies is key to generating ridership growth. Currently, Routes 31, 41, 43, 52, and 53 do operate every 30-minute service on weekdays and the plan looks at other opportunities for more routes to operate more frequently.

9.1.1.3 Ensure that span of service is adequate throughout the week

The service plan seeks to improve VVTA's service so that customers can rely on it for more trips. Key to improving VVTA's service is ensuring that it operates when passengers need, especially earlier in the morning and later in the evenings. Currently, resources limit how early and late VVTA services can operate.

9.1.1.4 Expanding Micro-Link service in areas that fit its role

This service plan seeks to expand the role of Micro-Link as a key service that VVTA offers. Micro-Link is being used to expand service to areas of dispersed demand, but in a manner that utilizes fewer vehicles than regular fixed route service. The Vision Plan introduces two new Micro-Link service areas, one serving Central Apple Valley and one serving North Adelanto.

9.1.2 COMMUNITY OUTREACH

The COA process has included several outreach efforts to understand community priorities around transit service improvements. As part of this effort, it was important to engage current riders, non-riders, and VVTA operators and staff to gain insight into local mobility needs and desired improvements. Service alternatives developed for the COA were shaped by feedback gathered from these efforts. Key takeaways from these outreach efforts included:

- Passengers want later and more frequent service.
- Transferring between routes was seen both as very important and needing improvement, 60 percent of riders use more than one bus to make their trip.
- VVTA passengers use bus service for a variety of trip purposes, 19% use VVTA service to commute, while 23% use it to go shopping.
- Service to schools is important, 29% of riders were students.
- Passengers stated that the bus travel times could use improvement.
- VVTA gets passengers to where they want to go in the Victor Valley region, service coverage was seen as satisfactory.

9.1.2.1 Surveys

Two surveys were conducted as part of the 2024 COA effort and informed the development of proposed service alternatives. A system-wide on-board Rider Origin Destination survey was conducted on all routes in the Fall of 2023. The survey collected rider demographics and asked passengers how they currently use the service. A student survey was also conducted in the Fall of 2023. This survey provided key insights into students' transportation needs and experiences.

9.1.2.2 Pop Up Outreach

Pop up outreach efforts were conducted at three VVTA transit centers in the fall of 2023. Project staff interviewed passengers at Victor Valley Transit Center, at the transfer location in front of Barstow City Hall, and at the Victor Valley College Transit Center. Passengers were asked about how they used the service, what they liked about the service and how they would like the service to be changed.

9.1.2.3 Operator and Staff Meetings

Project staff conducted outreach efforts targeting operators at the Barstow and Victorville VVTA facilities. Operators were asked about their recommendations for improving service, issues with particular routes, and what they were hearing from customers.

9.1.2.4 Community Presentations

Project staff provided presentations on and informed stakeholder groups about the COA effort. Presentations were meant to share information about the COA effort and to solicit feedback on ways to improve transit service. Presentations were made at the Victorville Rotary Club and the Apple Valley Chamber of Commerce.

9.1.2.5 Virtual Workshop

A virtual workshop was held in December 2023. The workshop presented the public with information about the COA process and asked questions about how to improve VVTA services.

9.2 Service Alternatives and Vision Plan

Two service alternatives were developed for the VVTA Comprehensive Operations Analysis, a Short-Term Network, and a Vision Plan. The Short-Term Network presents a variety of service improvements that can be implemented in the short term and represents a modest increase (23%) in resources used that will be factored into the financial plan. The Vision Plan is a more ambitious suite of service improvements that will require new additional resources to be identified, representing a 156% expansion in service. Table 60 presents the change in revenue hours and peak vehicles on each route in each time period.

Table 60: Fixed Route Service Annual Resources

Route	Tier	Bus Type	Current		Short-Term		Vision	
			Revenue Hours	Peak Buses	Revenue Hours	Peak Buses	Revenue Hours	Peak Buses
1 - East Main Street	Tier 2	Standard	4,445	1	5,006	1	8,770	2
2 - Barstow College	Tier 2	Standard	4,460	1	5,006	1	8,770	2
3 - Lenwood	Tier 2	Standard	8,771	2	10,012	2	17,540	4
6 - Rimrock/Barstow Heights	Tier 2	Standard	4,460	1	5,006	1	8,770	2
21P - Pinon Hills	Tier 3	Small	4,145	1	4,648	1	7,442	2
21W - Wrightwood	Tier 3	Small	4,145	1	4,902	1	7,696	2
22 - VVTC-Helendale	Tier 3	Small	4,712	1	4,700	1	7,494	2
23 - Lucerne Valley	Tier 3	Small	5,205	1	5,058	1	7,852	2
25 - Oak Hills	Tier 3	Small	3,017	1	-	-	-	-
27 - Barstow/Helendale	Tier 3	Small	-	-	4,567	1	7,361	2
28 - Hinkley	Tier 3	Small	4,588	1	4,567	1	7,361	2
29 - Newberry Springs	Tier 3	Small	4,574	1	4,567	1	7,361	2
31 - Adelanto South	Tier 1	Standard	9,020	3	10,848	3	23,770	5
32 - Adelanto North	Tier 2	Standard	8,810	2	15,600	4	15,822	3
33 - Adelanto Connector	Tier 2	Small	4,214	1	5,006	1	8,770	2
38 - Mojave Drive/Adelanto	Tier 2	Standard	-	-	-	-	17,332	4
40 - Apple Valley North Circulator	Tier 2	Small	4,180	1	5,006	1	8,770	2
41 - Apple Valley/Victorville	Tier 1	Standard	8,510	3	10,848	3	23,770	5
42 - Apple Valley Road	Tier 2	Standard	8,391	2	10,624	2	11,952	2
43 - Bear Valley Road/Apple Valley	Tier 1	Standard	5,958	2	7,800	2	14,746	3
45 - Stoddard Wells	Tier 2	Standard	-	-	-	1	17,540	4
47 - Apple Valley South Circulator	Tier 2	Small	4,086	1	5,006	2	8,770	2
49 - Yucca Loma	Tier 2	Standard	-	-	10,012	2	17,540	4
50 - Hesperia/Victorville	Tier 1	Standard	9,999	2	10,012	2	17,540	4
50X - Victor Valley College Express	Tier 2	Standard	1,370	1	-	-	-	-
52 - Mall of Victor Valley/Victorville	Tier 1	Standard	8,803	3	10,848	3	23,770	5
53 - Bear Valley Road /Mall	Tier 1	Standard	8,134	3	7,800	2	14,746	3
54 - West Victorville	Tier 2	Standard	4,010	1	-	-	-	-
55 - Victor Valley College/Victorville	Tier 2	Standard	5,056	1	7,800	2	14,122	3
56 - Victorville Circulator	Tier 2	Standard	5,016	1	5,006	1	8,770	2
62 - Mall of Victor Valley/Hesperia	Tier 2	Standard	-	-	-	-	15,261	3
64 - Willow Street/Hesperia	Tier 2	Standard	8,453	2	10,012	2	17,540	4
65 - Rancho Road/Hesperia	Tier 2	Standard	-	-	-	-	15,822	3
66 - East Hesperia Circulator	Tier 2	Small	1,953	1	5,006	1	8,770	2
67 - Silverwood Connector	Tier 2	Standard	-	-	-	-	8,770	2
68 - Main Street/Hesperia	Tier 2	Standard	8,494	2	10,012	2	17,540	4
Total			166,979	44	205,285	48	427,850	95

9.2.1 SHORT-TERM NETWORK

The Short-Term Network is a suite of service improvements that can be made within the next one to two years. Implementing all the changes included in the Short-Term Network will require a 23% increase in revenue hours and four additional peak vehicles when compared to the current service. The Short-Term Network is characterized by the following types of improvements. The short-term network is presented on Figure 94 and Figure 95.

9.2.1.1 New Destinations Served

The Short-Term Network will serve new destinations that are not served by VVTA today. Routes 42 and 64 will now serve Brightline stations, while other routes will serve new areas of Barstow, Victorville, and Hesperia. Two new routes, 27 and 49, will provide more consistent service to Helendale and provide new direct connections between Apple Valley and the Mall of Victor Valley.

9.2.1.2 Streamlined Alignments

The Short-Term Network includes a variety of route modifications to improve performance of routes by eliminating unproductive deviations, offering more streamlined service between high ridership destinations.

9.2.1.3 Span Improvements

The Short-Term Network includes expansive span improvements, 14 routes will have their spans increased. Expanded spans of service will make VVTA service more useful for the public as passengers will be able to take trips earlier in the morning and later in the evening. Span improvements will also be made to Micro-Link services in order to match the span of fixed-route services.

9.2.1.4 Frequency Improvements

The Short-Term Network includes frequency improvements on 11 routes. The initial round of frequency improvements included in the Short-Term Network includes frequency improvements that will mitigate crowding issues on several routes.

Figure 94: Proposed Short-Term Network (Victor Valley area)

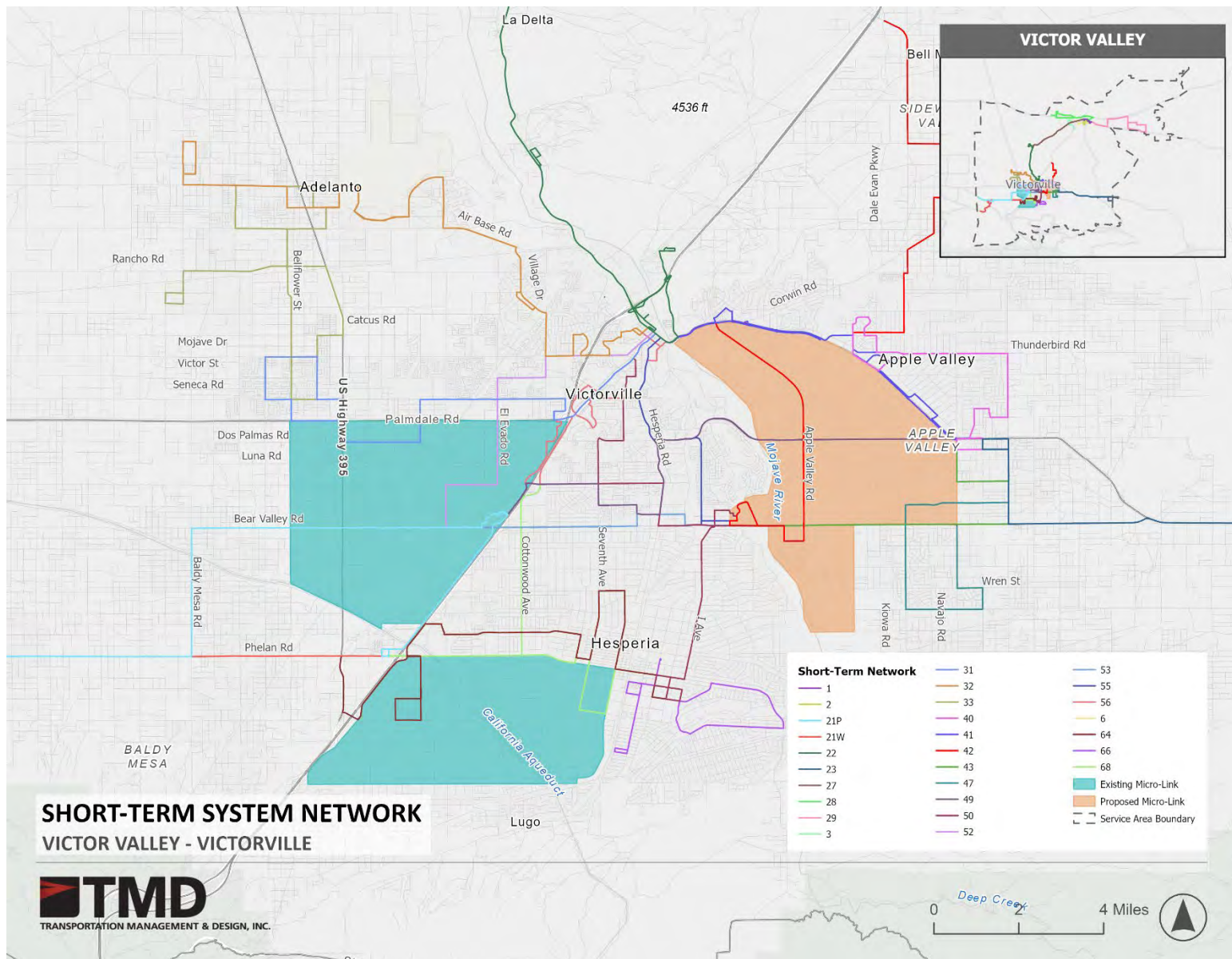
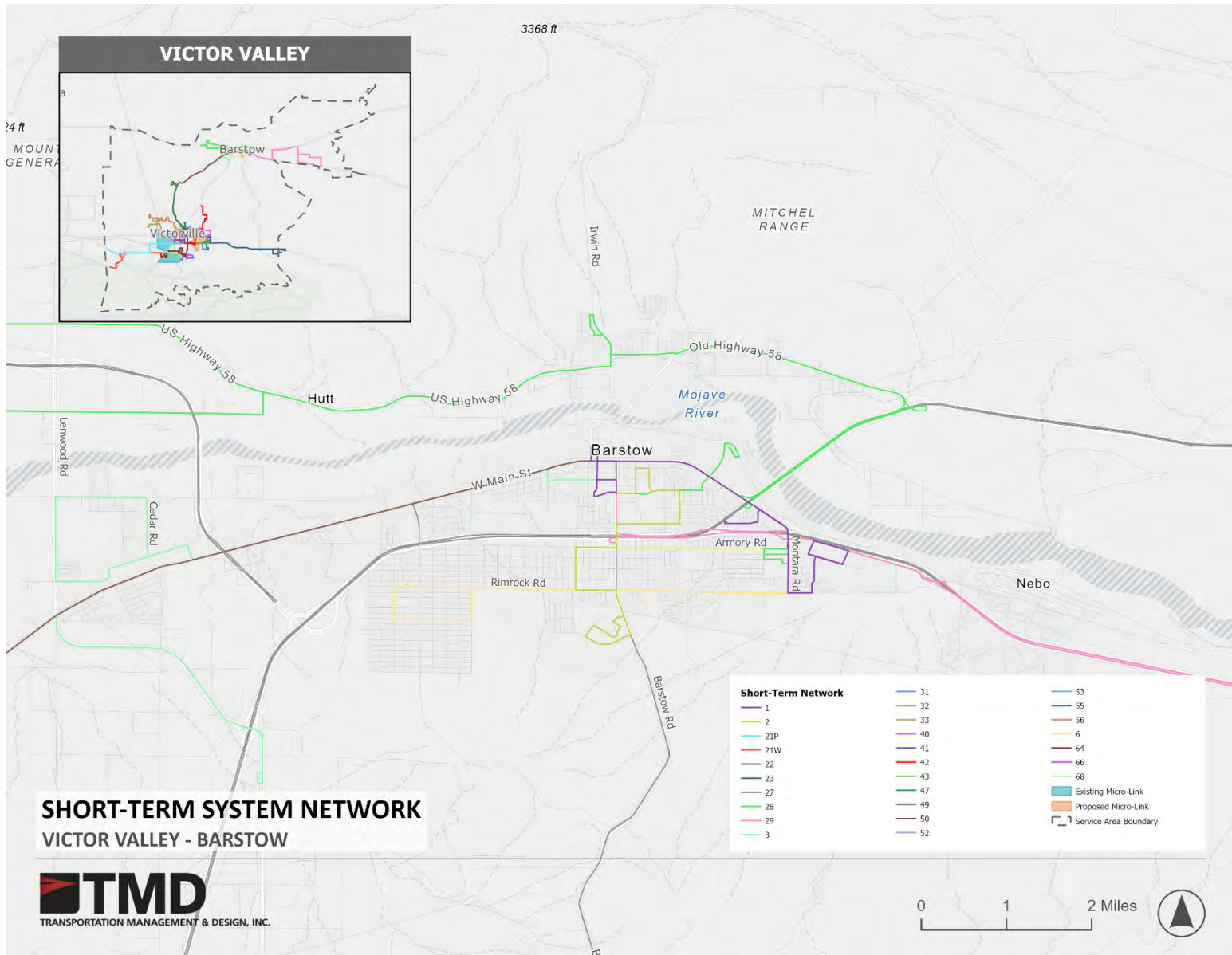


Figure 95: Proposed Short-Term Network (Barstow area)



9.2.2 VISION PLAN

The Vision Plan is an aspirational plan for VVTA. The Vision Plan allocates extensive resources to further improving service and span. The Vision Plan also provides service to future developments beyond the scope of the Short-Term plan. These developments include new transit centers and additional developments in Apple Valley, the Silverwood development, and others. The Vision Plan also expands the Micro-Link service adding two new microtransit zones in Central Apple Valley and North Adelanto. The Vision Plan would require a 156% increase in annual revenue hours and double the peak vehicles; additional resources still need to be identified to implement the Vision Plan. The Vision Plan is presented in Figure 96 and Figure 97.

9.2.2.1 More Extensive Frequency Improvements

The Vision Plan allocates more resources to improving frequencies. Frequency improvements are more extensive than those found in the Short-Term Network with 20 routes receiving improved frequencies.

9.2.2.2 More Extensive Span Improvements

The Vision Plan allocates more resources to improving spans, seeking to make VVTA service more useful to more people. These span improvements build on span improvements found in the Short-Term Network; 23 routes are proposed to have improved spans.

9.2.2.3 New Transit Centers

The Vision Plan highlights the addition of two new transit centers, the Hesperia Transit Center, and the Barstow Transit Center. Routes 1, 2, 3, and 6 will have new alignments serving the Barstow Transit Center on Williams Street. Routes 50, 62, 64, 66, and 68 will serve the new Hesperia Transit Center.

9.2.2.4 Streamlining of Service

Service has been restructured on some routes to improve route directness and travel time between key destinations in Victor Valley. The addition of new routes will allow routes 22, 32, 64, and 68 to provide more consistent service to their key destinations. For example, new route 62 allows route 68 to provide more streamlined service between Super Target and downtown Hesperia.

9.2.2.5 Serving New Development

The Vision Plan introduces four new routes that will serve fast growing developments in Victor Valley. Route 38 will serve the developing Mojave Corridor, Route 45 will serve new developments in Apple Valley, Route 65 will serve the growing Rancho Road Corridor, and Route 67 will serve the Silverwood development.

9.2.2.6 New Microtransit Zones: Central Apple Valley And North Adelanto

The Vision Plan proposed two new Micro-Link zones, one serving Central Apple Valley and one serving North Adelanto.

Figure 96: Proposed Vision Plan (Victor Valley area)

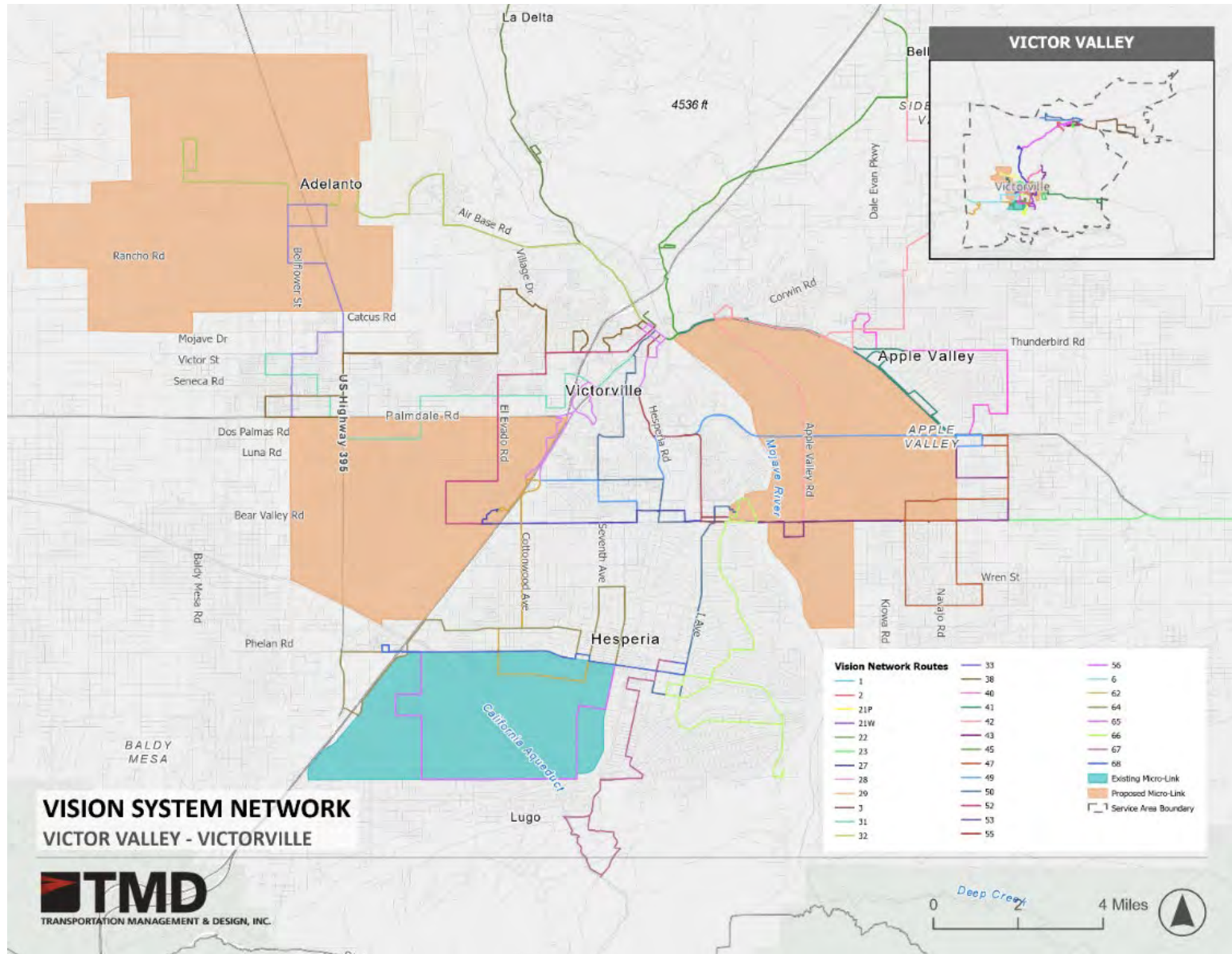
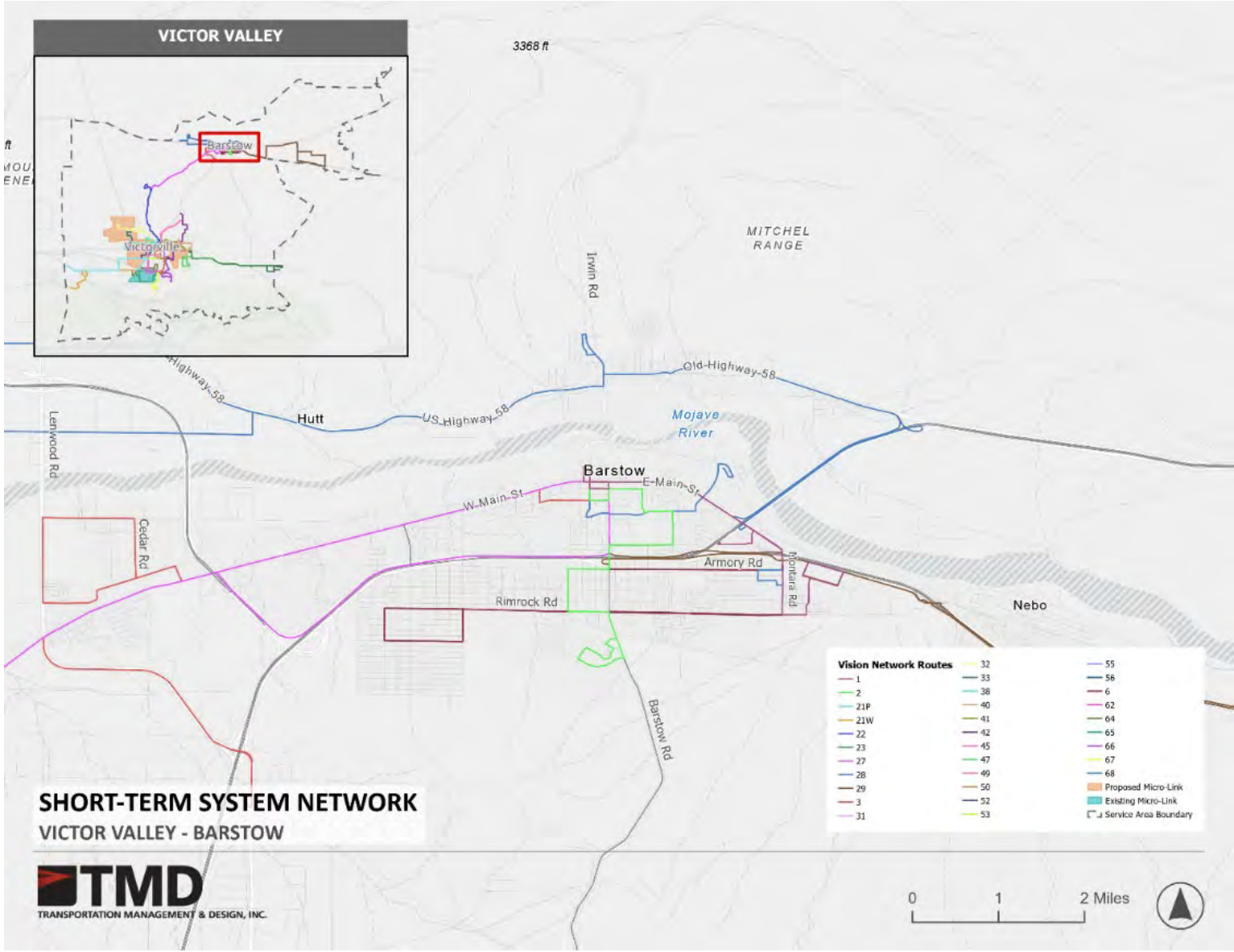


Figure 97: Proposed Vision Plan (Barstow area)



9.2.3 FUTURE NEEDS

The Vision Plan is a long-term vision for VVTA services; however, it is not likely that the full Vision Plan will be realized due to cost considerations. Beyond the services in the Vision Plan, as the High Desert region continues to grow, service will need to expand to serve new areas. Investment in current services would include further improvements of service frequencies, particularly on weekends, which will attract riders to the VVTA network. If ridership grows along major corridors, higher speed limited stop or BRT services could be introduced longer-term. Brightline service and local area population growth may justify additional interregional services in the longer term. All of these services will not only require operating funding but investment in capital resources.

9.3 Network Impacts

The analysis of network impacts presents the change in transit access for the service area and riders. The analyses look at overall network access, network change for riders, and service frequency that riders will experience. The analysis evaluates both the Short-Term and Vision Plans.

9.3.1 NETWORK ACCESS

Network access measures the change in population that is within a half mile straight buffer of VVTA services. The overall change in network access is presented on Table 61, with Table 62 presenting access to the frequent network which is defined as services that have 30-minute headways in the current and Short-Term networks and 20-minute headways in the Vision Plan network. These two tables show that all demographics will see an increase in access to the overall transit network. The reduction in access to the frequent network is due to Route 32 no longer being included in the frequent network in the Vision Plan.

Table 61: VVTA Network Access Change

Category	Total People or Jobs			Percent Change	
	Current	Short-Term	Vision Plan	Short-Term	Vision Plan
Total population	332,581	340,836	358,501	2.5%	7.8%
Senior citizens (over 65)	38,657	41,439	43,337	7.2%	12.1%
Young adults (age 18-24)	32,164	32,796	34,446	2.0%	7.1%
Youth population (under 18)	103,855	104,849	110,143	1.0%	6.1%
Low-income population	11,754	11,800	12,291	0.4%	4.6%
Minority population	139,907	142,122	148,343	1.6%	6.0%
Zero-vehicle households	5,069	5,199	5,436	2.6%	7.2%
Total jobs	58,315	61,211	64,136	5.0%	10.0%

Table 62: VVTA Frequent Route Network Access Change (30-minute short-term/20-minute vision)

Category	Total People or Jobs			Percent Change	
	Current	Short-Term	Vision Plan	Short-Term	Vision Plan
Total population	120,688	146,708	127,020	21.6%	5.2%
Senior citizens (over 65)	13,777	16,535	13,636	20.0%	-1.0%
Young adults (age 18-24)	11,756	14,054	12,648	19.5%	7.6%
Youth population (under 18)	39,197	46,549	40,281	18.8%	2.8%
Low-income population	4,472	5,522	4,527	23.5%	1.2%
Minority population	53,892	67,143	59,250	24.6%	9.9%
Zero-vehicle households	1,690	2,209	1,910	30.7%	13.1%
Total jobs	19,945	23,742	19,981	19.0%	0.2%

9.3.2 NETWORK CHANGE

The network change presents the change in how serviced is provided. A graphical representation of the service change is presented on the discontinued segments maps presented on Figure 98 and Figure 99. Table 63 presents how riders will be impacted. This table shows that most riders, approximately 72 to 82 percent of riders, will continue to be served by the same route, and approximately 2 percent of riders will no longer be served directly. A more significant percentage of riders, approximately 13 percent to 22 percent of riders, will use the same stop which will be served by a different route. The greater change in the Vision Plan reflects major route changes that impact which routes will serve each stop.

Table 63: Route Change Impacts to Riders

	Short-term	Vision Plan
No Change	1,534	1,394
Bus stop relocated but same route	25	28
Riders will use a different Route	254	389
Riders will use microtransit	17	24
Service eliminated with service available within 1/4 mile	19	19
Service eliminated - no alternatives within 1/4 mile	21	21

Figure 98: Discontinued Segments (Victor Valley area)

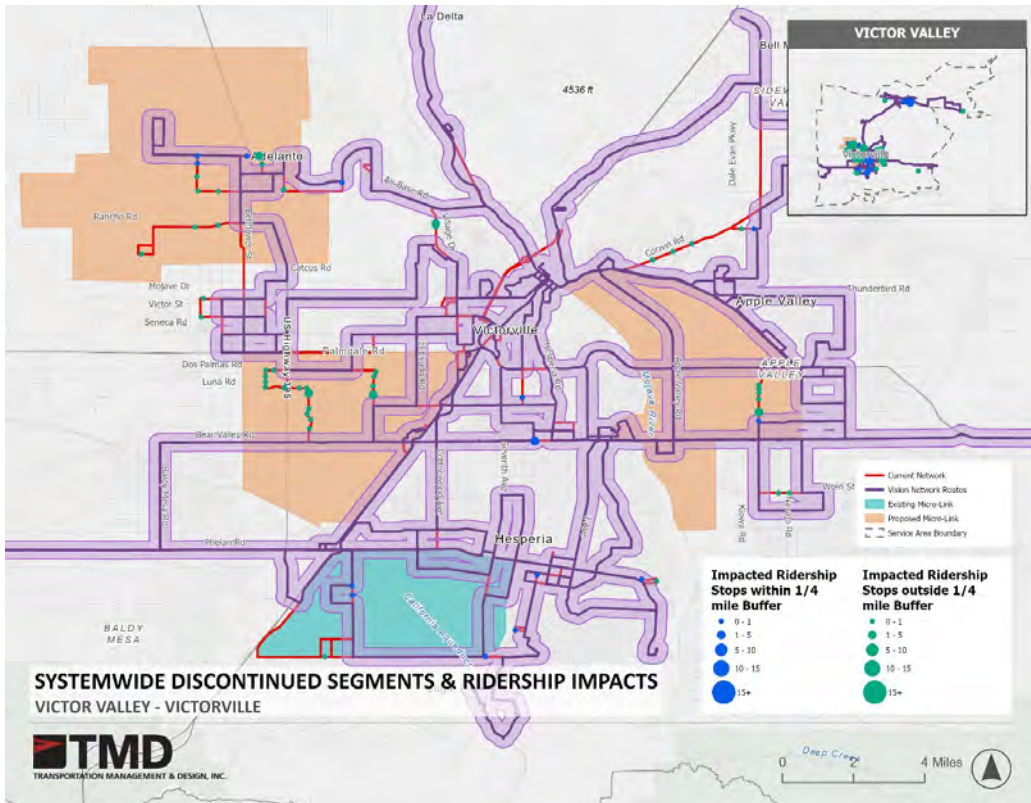
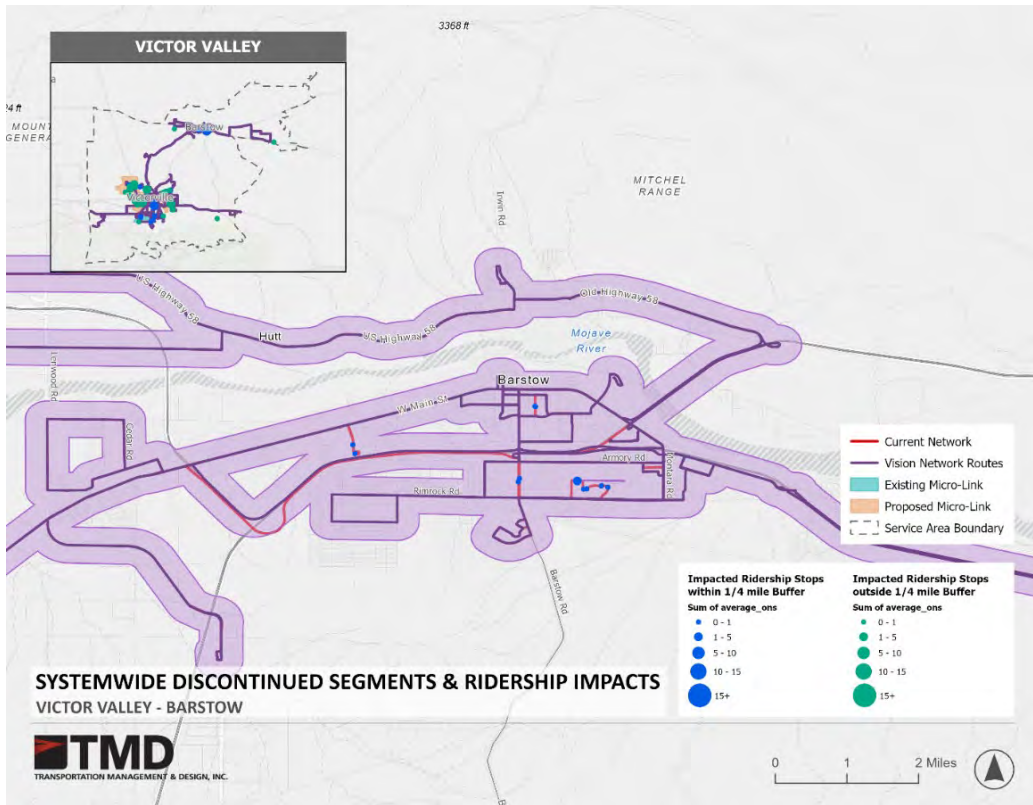


Figure 99: Discontinued Segments (Barstow area)



9.3.3 SERVICE FREQUENCY IMPACTS

An analysis of frequency changes experienced by riders is presented on Table 64. This table shows that 12 to 13 percent of current riders will see short-term frequency improvements. The Vision Plan improves frequency for 95 percent of current riders. While approximately two percent of riders will lose access to service at the current stop they are using, service will be available less than half a mile away for most riders losing service.

Table 64: Level of Service Change for Riders

	Short-Term	Vision
Same level of service	1,574	33
More service	238	1,777
Less service	1	-
Microtransit	17	24
Service eliminated	40	40

9.4 VVTA Route Recommendations

The following pages present the route recommendations for VVTA services.

VVTA Route Recommendations

The route recommendations for VVTA are divided into two phases: short-term and vision. The short-term recommendations are recommendations that provide operational improvements to VVTA services and can be implemented in a short time frame. Many of the short-term recommendations can be implemented within a year. The vision recommendations present the long-term recommendations that further enhance VVTA's services. The vision network responds to growth in the region by improving service frequency and spans, and responds to major new developments and infrastructure such as the Brightline service. The vision network will guide the development of an implementation program, as this is the network to build towards in future years. Each year, improvements would be introduced to VVTA services to build towards this network, based on projected funding, but this network would most likely not be fully implemented within the next five years.

Route Info

Key information on changes to the routes in each phase is presented in this section. This includes alignment changes, headway/frequency changes, and span changes. These changes are based on the analyses and outreach conducted for the COA during the service analysis phase. The reasons for the changes are also presented in the route information section.

Route 1

East Main Street
Tier 2

Proposed Changes: Short-Term

- » Extension to Valley Street and Armory Road to provide service to areas that are not served today
- » Full-time service along State Street in the outbound direction to eliminate the need for deviations to be requested
- » Span improvements to improve service for the customer

Proposed Changes: Vision

- » Route modification to serve Williams Street Transit Center
- » Weekday frequency improvements to improve service for the customer
- » Span improvements to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	6:00 AM - 7:00 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	8:00 AM - 4:00 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:00 AM - 4:00 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM

Schedule Recommendations

The schedule recommendations present the change in headway and span for weekday, Saturday, and Sunday. Current, short-term, and vision spans and frequencies are presented for comparison.

Route Map

Each route's proposed alignment is shown in teal. The existing alignment is shown in dark gray. If the existing route is not visible, the proposed route will operate on the same alignment. The lighter orange routes are the rest of the proposed network.

Service Tiers

The COA plan presents improvements to frequency and span of service for all routes and services. VVTA fixed route services (current regular route and county services) will be classified into three service tiers primarily based on proposed weekday headways. The tiers are defined by the vision level of service.

- » **Tier 1** - Frequent Service
- » **Tier 2** - Regular Service
- » **Tier 3** - County Service

Routes

Route 1 East Main Street

Route 2 Barstow College

Route 3 Lenwood

Route 6 Rimrock/Barstow Heights

Route 21P Pinon Hills

Route 21W Wrightwood

Route 22 VVTC-Helendale

Route 23 Lucerne Valley

Route 25 Oak Hills

Route 27 Barstow-Helendale

Route 28 Hinkley

Route 29 Newberry Springs

Route 31 Adelanto South

Route 32 Adelanto North

Route 33 Adelanto Connector

Route 38 Mojave Drive-Adelanto

Route 40 Apple Valley North Circulator

Route 41 Apple Valley-Victorville

Route 42 Apple Valley Road

Route 43 Bear Valley Road - Apple Valley

Route 45 Stoddard Wells

Route 47 Apple Valley South Circulator

Route 49 Yucca Loma

Route 50 Hesperia-Victorville

Route 50X Victor Valley College Express

Route 52 Mall of Victor Valley - Victorville

Route 53 Bear Valley Road - Mall

Route 54 West Victorville

Route 55 Victor Valley College - Victorville

Route 56 Victorville Circulator

Route 62 Mall of Victor Valley - Hesperia

Route 64 Willow Street - Hesperia

Route 65 Ranchero Road - Hesperia

Route 66 East Hesperia Circulator

Route 67 Silverwood Connector

Route 68 Main Street - Hesperia

Route 15 Barstow-Victorville-San Bernardino

NTC NTC Commuter

ML Victorville West Micro-Link

ML Hesperia Southwest Micro-Link

ML Apple Valley Central Micro-Link

ML Adelanto North Micro-Link

Route 1

East Main Street

Tier 2



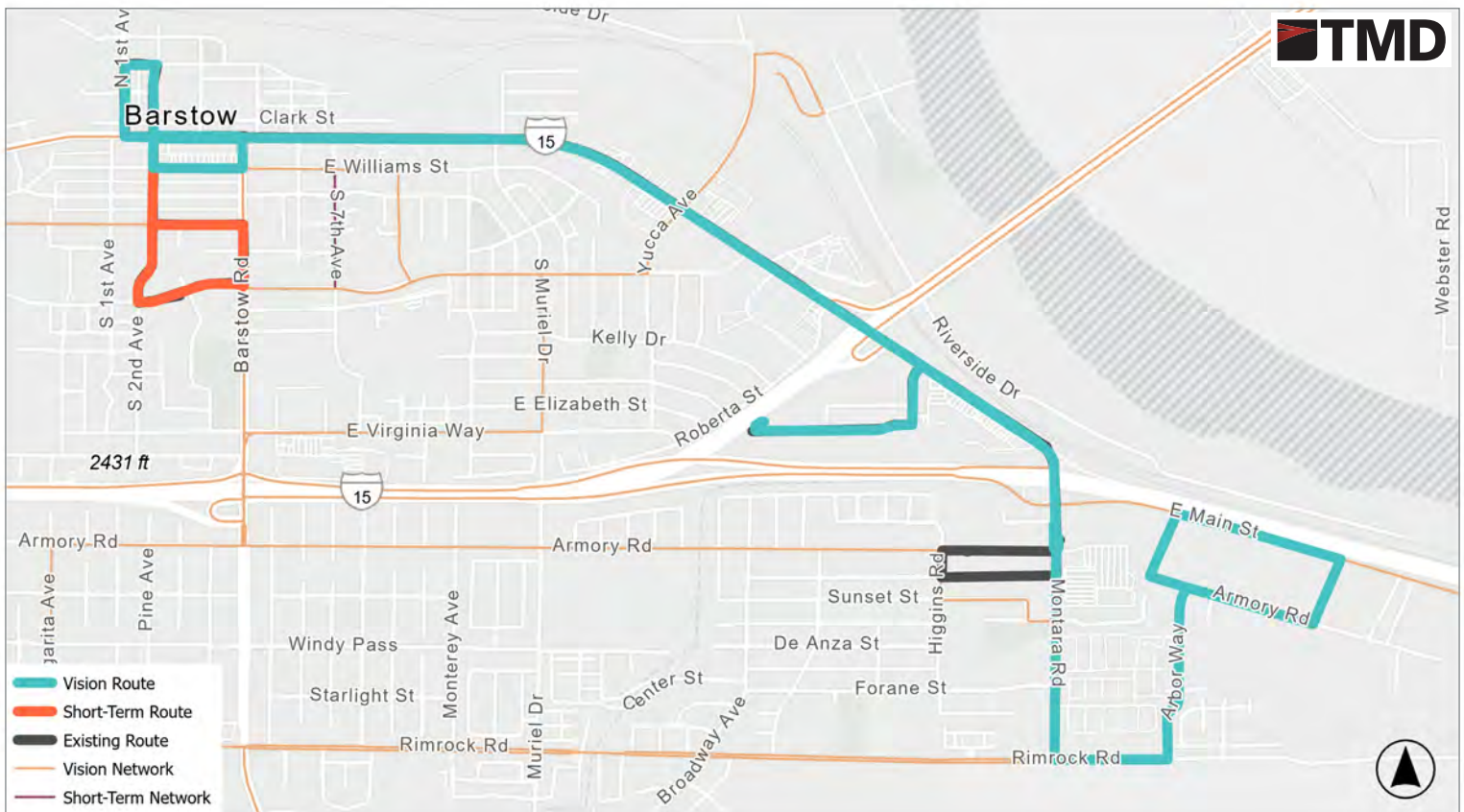
Proposed Changes: Short-Term

- » Extension to Valley Street and Armory Road to provide service to areas that are not served today
- » Full-time service along State Street in the outbound direction to eliminate the need for deviations to be requested
- » Span improvements to improve service for the customer

Proposed Changes: Vision

- » Route modification to serve Williams Street Transit Center
- » Weekday frequency improvements to improve service for the customer
- » Span improvements to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	6:00 AM - 7:00 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	8:00 AM - 4:00 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:00 AM - 4:00 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 2

Barstow College

Tier 2



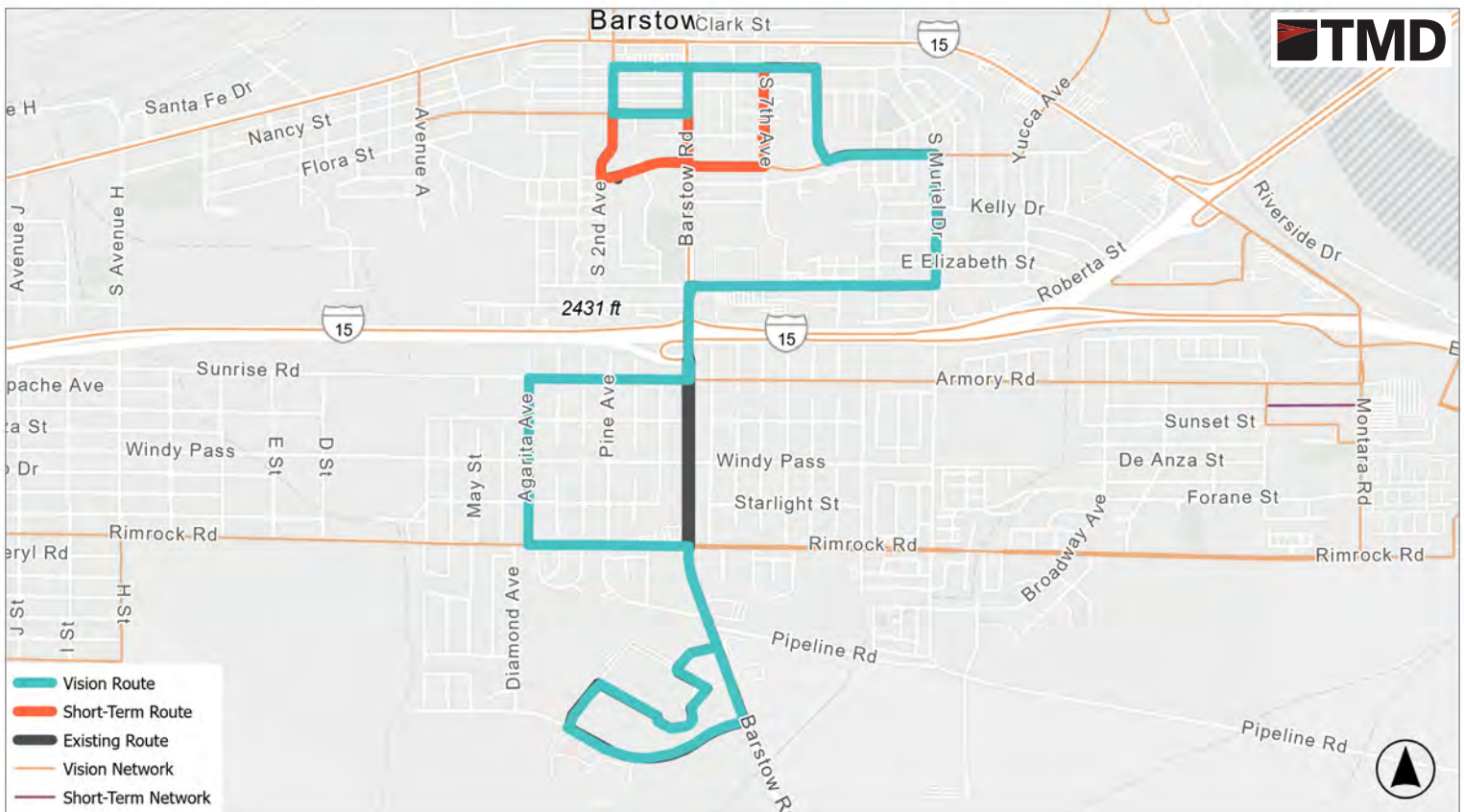
Proposed Changes: Short-Term

- » Route modification to provide direct service to neighborhoods along Argentina Avenue
- » Span improvements to improve service for the customer

Proposed Changes: Vision

- » Route modification to serve Williams Street Transit Center
- » Weekday frequency improvements to improve service for the customer
- » Span improvements to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Short-Term Frequency (minutes)	Short-Term Service Hours	Vision Frequency (minutes)
Weekday	60	6:00 AM - 7:00 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	8:00 AM - 4:00 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:00 AM - 4:00 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 3

Lenwood

Tier 2



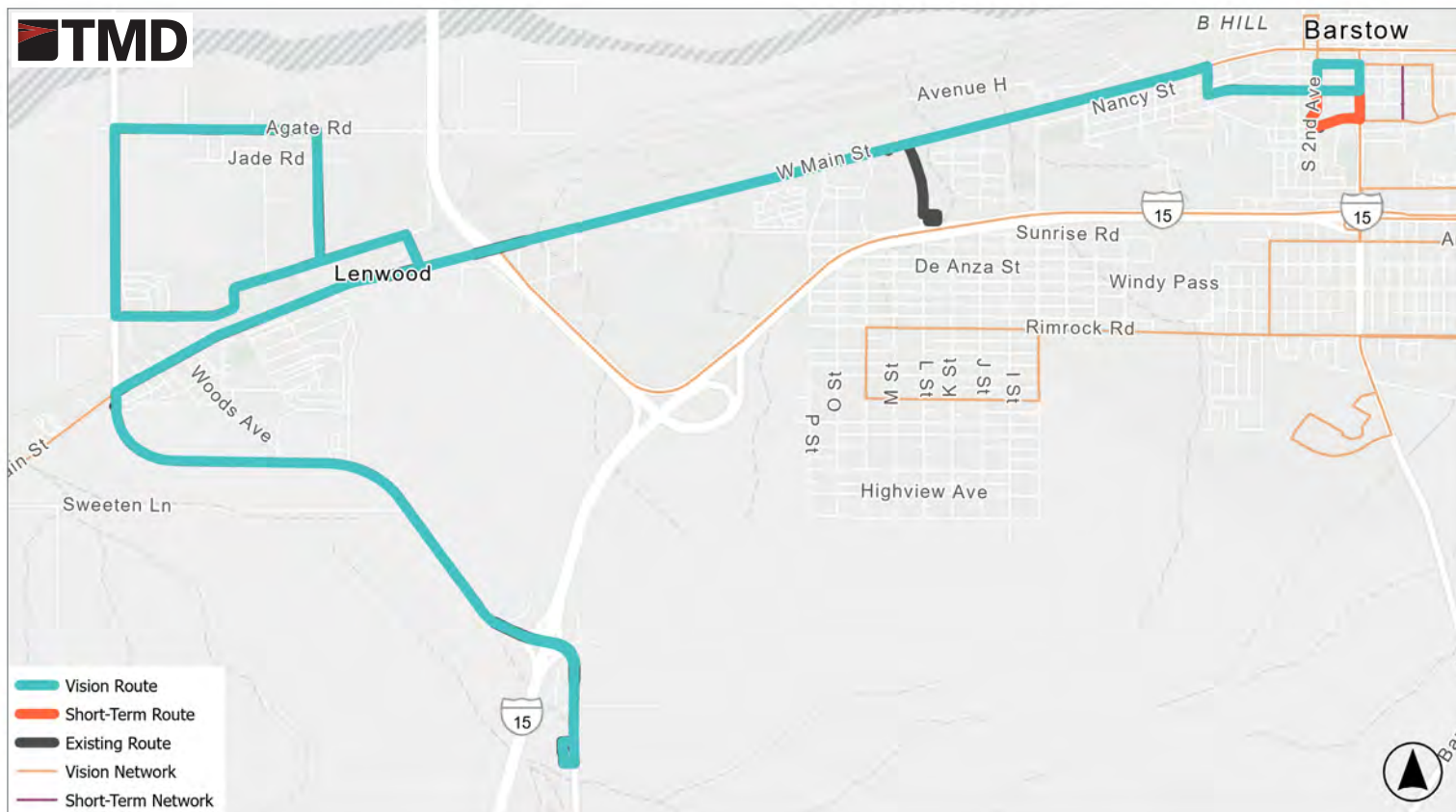
Proposed Changes: Short-Term

- » Service discontinued to L Street Park & Ride to improve trip times
- » Span Improvements to improve service for the customer

Proposed Changes: Vision

- » Route modification to serve Williams Street Transit Center
- » Weekday frequency improvements to improve service for the customer
- » Span improvements to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	60	6:00 AM - 7:00 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	8:00 AM - 4:00 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:00 AM - 4:00 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 6

Rimrock/Barstow Heights

Tier 2



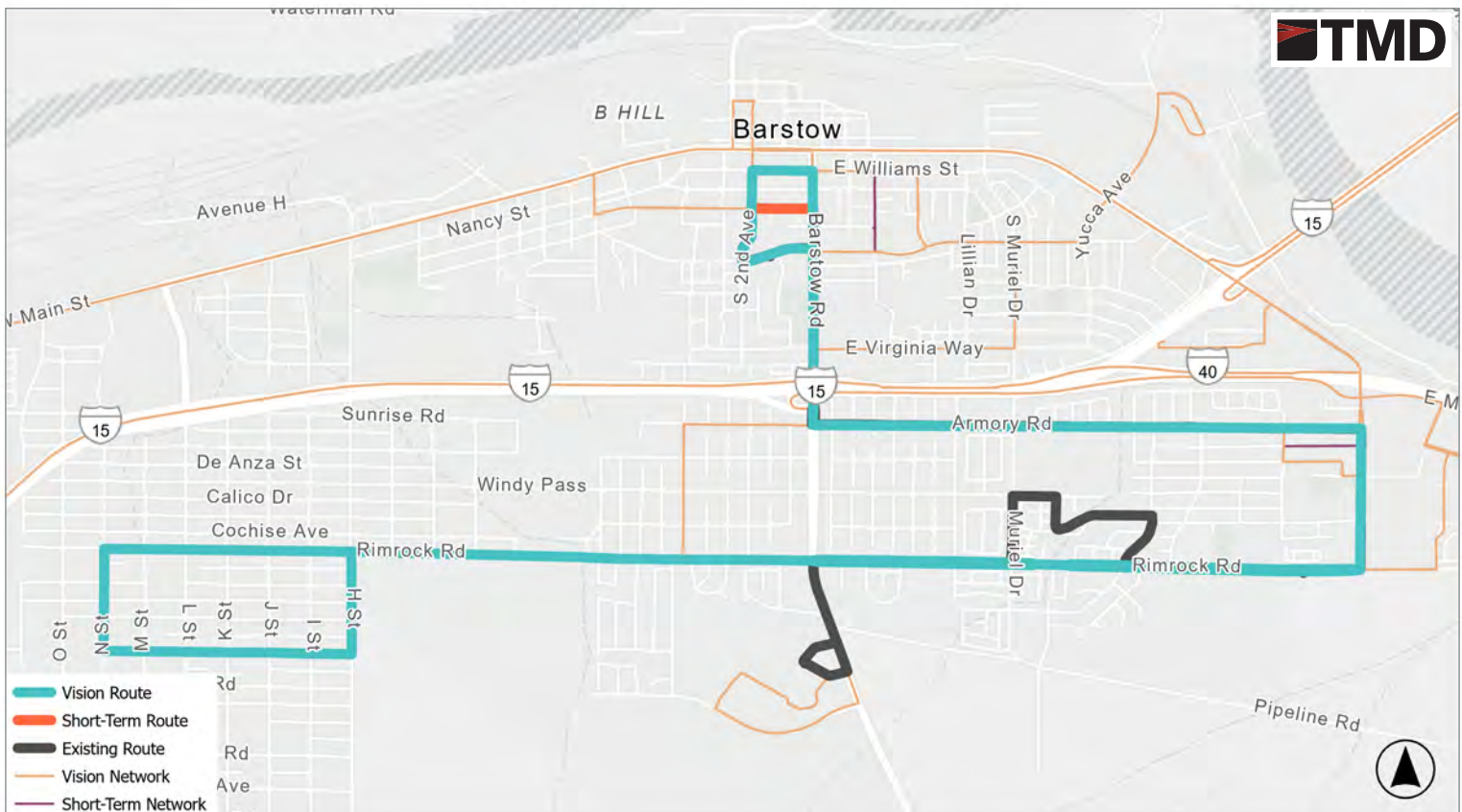
Proposed Changes: Short-Term

- » Extended to Barstow Heights to provide service to areas that are not served today
- » Route will no longer serve Barstow College or Center Street and Upton Drive to improve travel times
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Route modification to serve Williams Street Transit Center
- » Weekday frequency improvements to improve service for the customer
- » Span improvements to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Short-Term	Frequency (minutes)	Service Hours
Weekday	60	6:00 AM - 7:00 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	8:00 AM - 4:00 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:00 AM - 4:00 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 21P

Pinon Hills

Tier 3



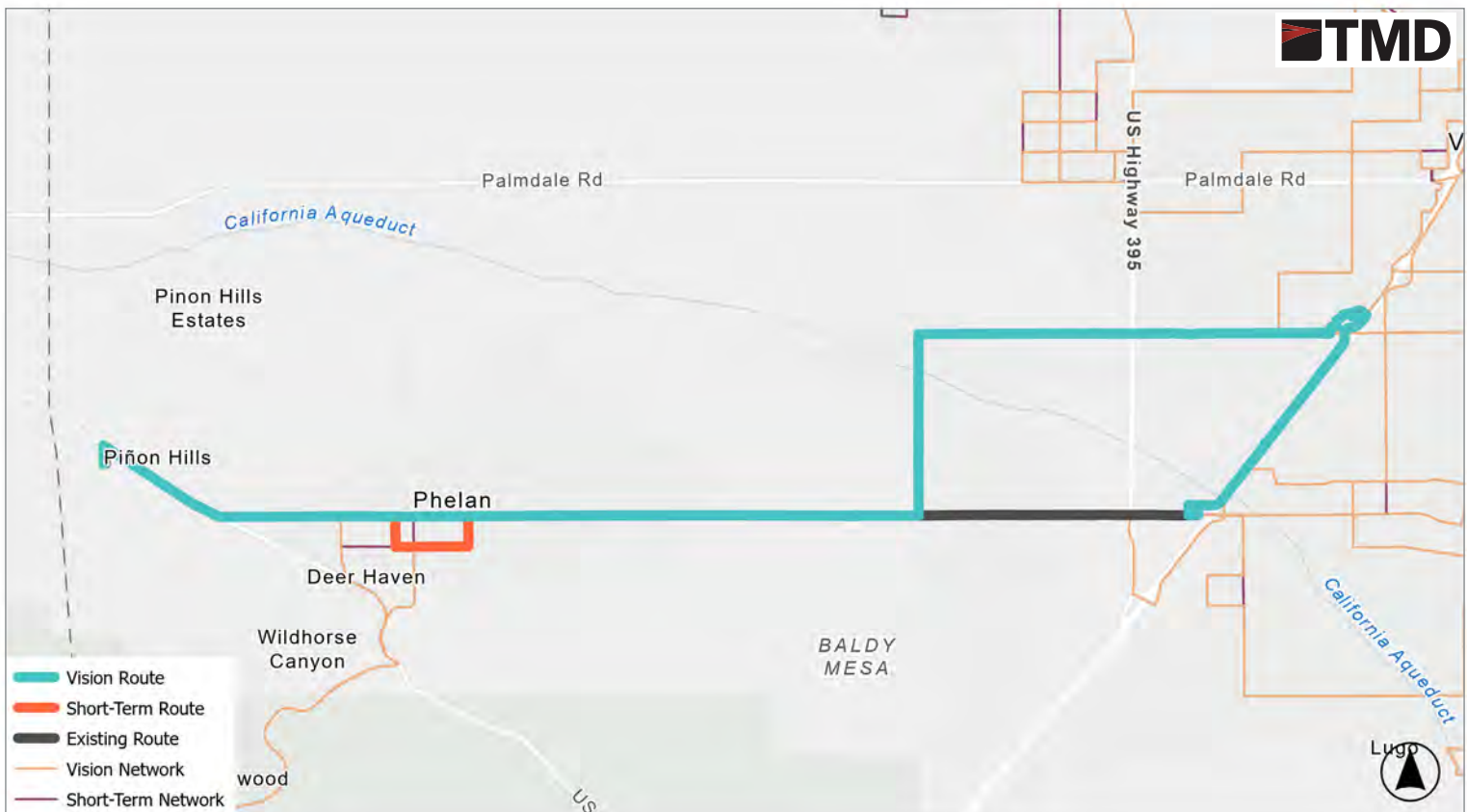
Proposed Changes: Short-Term

- » Route modification to provide two-way service along Amargosa Road to better serve new developments along this corridor
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	120	7:00 AM - 7:30 PM	120	7:00 AM - 9:00 PM	60	7:00 AM - 9:00 PM
Saturday	120	7:00 AM - 5:00 PM	120	7:00 AM - 7:00 PM	120	7:00 AM - 9:00 PM
Sunday	120	8:00 AM - 6:00 PM	120	9:00 AM - 6:00 PM	120	9:00 AM - 6:00 PM



Route 21W

Wrightwood

Tier 3



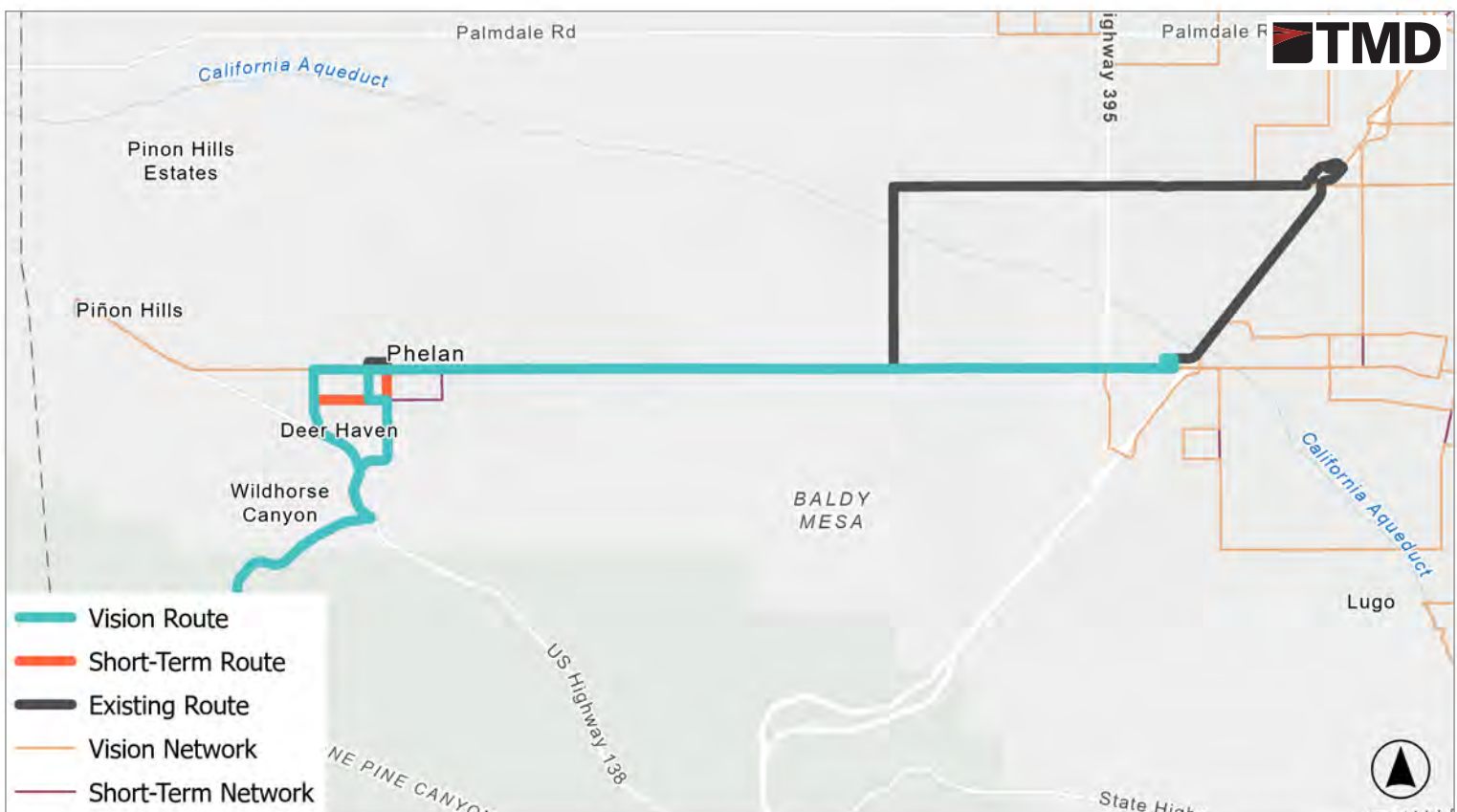
Proposed Changes: Short-Term

- » Route modification to improve on-time performance and running time
- » Will no longer serve the Mall of Victor Valley or Bear Valley Road
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	120	6:00 AM - 8:00 PM	120	6:00 AM - 9:00 PM	60	6:00 AM - 9:00 PM
Saturday	120	8:00 AM - 6:00 PM	120	7:00 AM - 7:00 PM	120	7:00 AM - 9:00 PM
Sunday	120	8:00 AM - 6:00 PM	120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM



Route 22

VVTC-Helendale

Tier 3



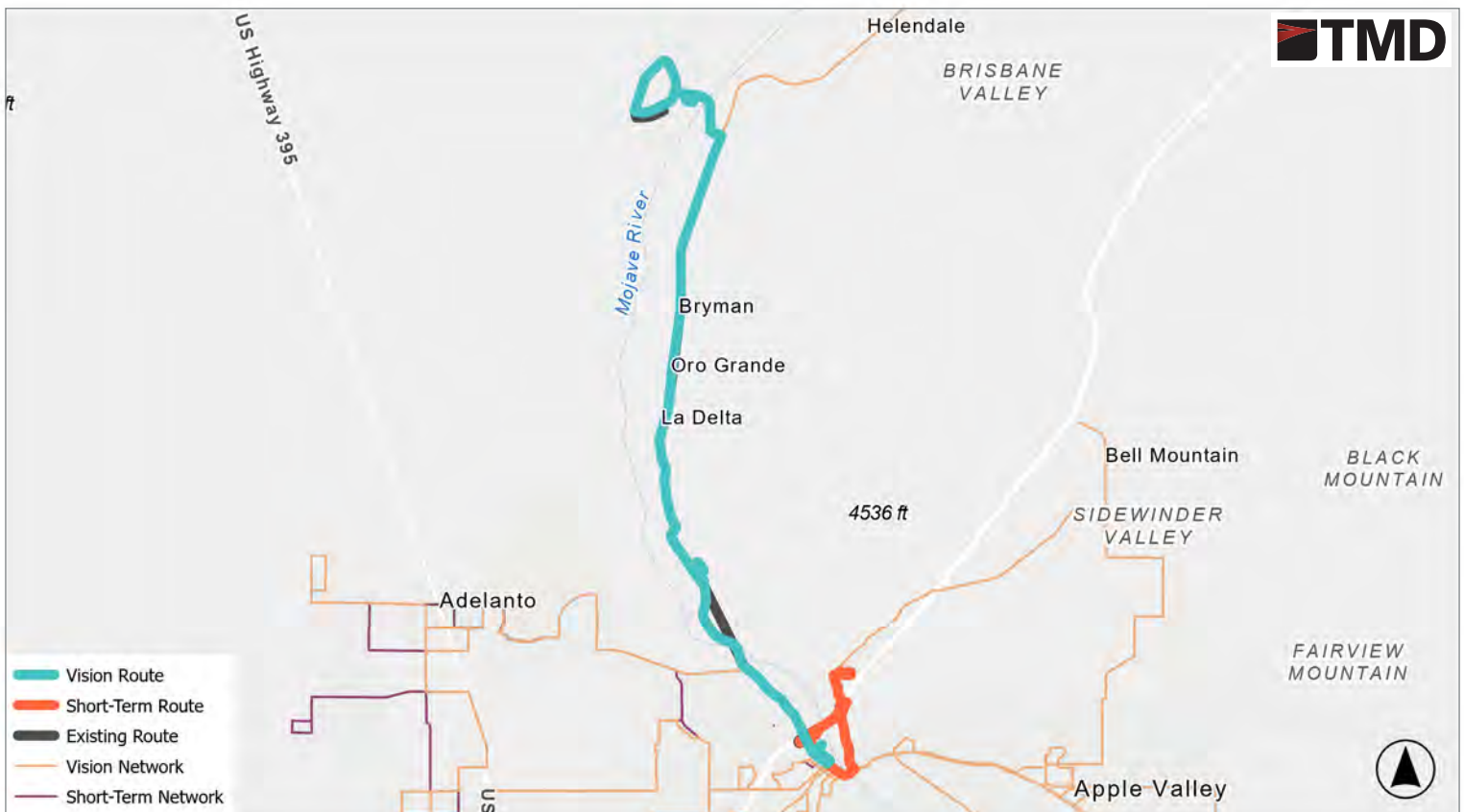
Proposed Changes: Short-Term

- » Modification to provide direct access to the Wellness Center
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Will no longer serve Stoddard Wells Road, service replaced by proposed Route 45
- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	120	6:00 AM - 7:15 PM	120	6:00 AM - 8:00 PM	60	6:00 AM - 8:00 PM
Saturday	120	7:00 AM - 7:00 PM	120	7:00 AM - 8:00 PM	120	7:00 AM - 8:00 PM
Sunday	120	8:00 AM - 4:10 PM	120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM



Route 23

Lucerne Valley

Tier 3



Proposed Changes: Short-Term

- » Will no longer operate along Crystal Creek Road and Mesa Road, service available as a deviation that has little ridership
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	120	6:00 AM - 9:00 PM	120	6:00 AM - 9:00 PM	60	6:00 AM - 9:00 PM
Saturday	120	7:00 AM - 8:00 PM	120	7:00 AM - 8:00 PM	120	7:00 AM - 9:00 PM
Sunday	120	8:00 AM - 6:00 PM	120	9:00 AM - 7:00 PM	120	9:00 AM - 7:00 PM



Route 25

Oak Hills

Tier 3



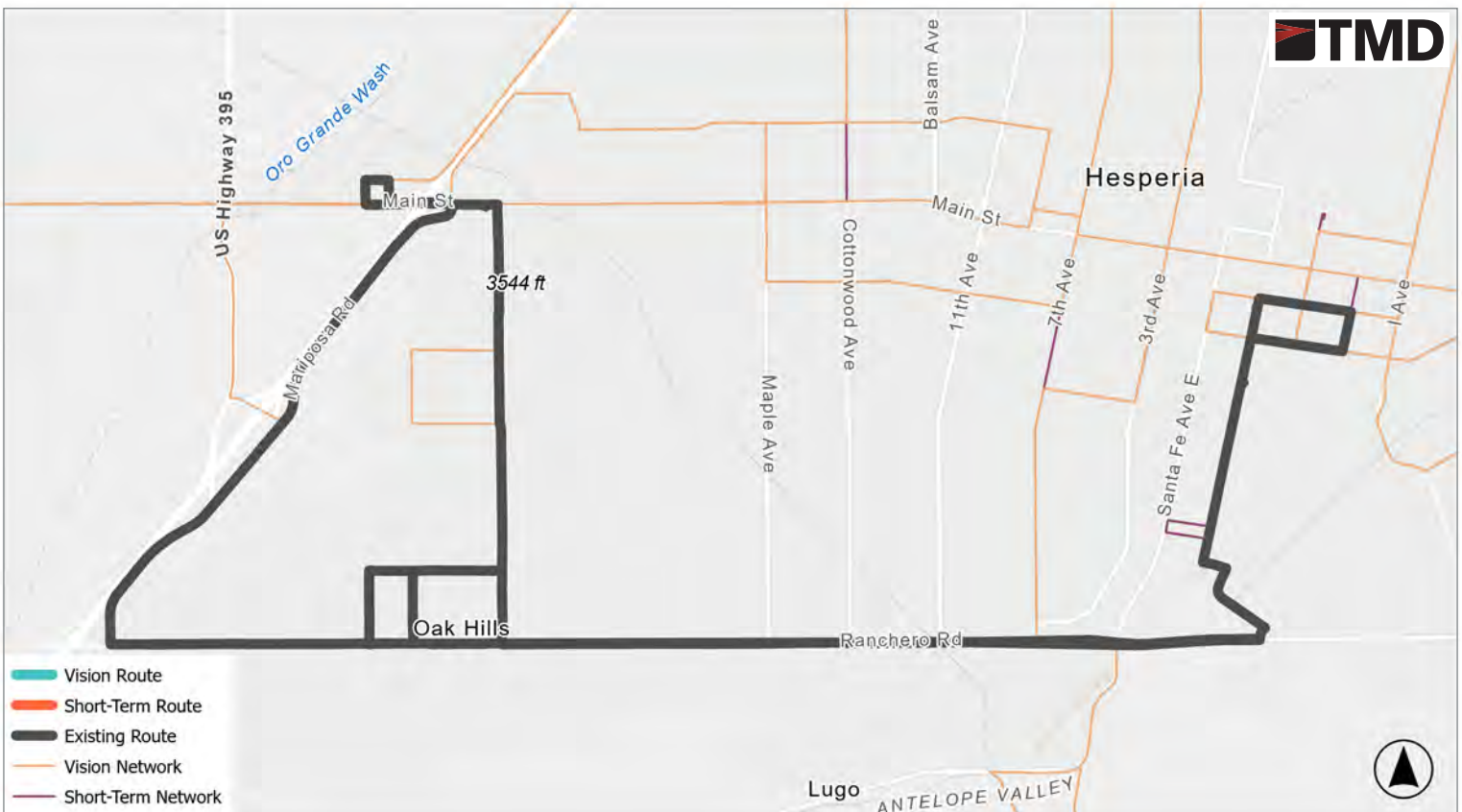
Proposed Changes: Short-Term

- » Route discontinued due to low ridership
- » Replaced with Hesperia Southwest Micro-Link and modifications to Route 64

Proposed Changes: Vision

»

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	120	8:00 AM - 8:00 PM				
Saturday	120	8:00 AM - 6:40 PM				
Sunday	120	9:00 AM - 5:40 PM				



Route 27

Barstow-Helendale

Tier 3



Proposed Changes: Short-Term

- » New route connecting Barstow and Helendale to allow for faster travel times

Proposed Changes: Vision

- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues serving BNSF

	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday			120	6:00 AM - 9:00 PM	60	6:00 AM - 9:00 PM
Saturday			120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM
Sunday			120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM



Route 28

Hinkley

Tier 3



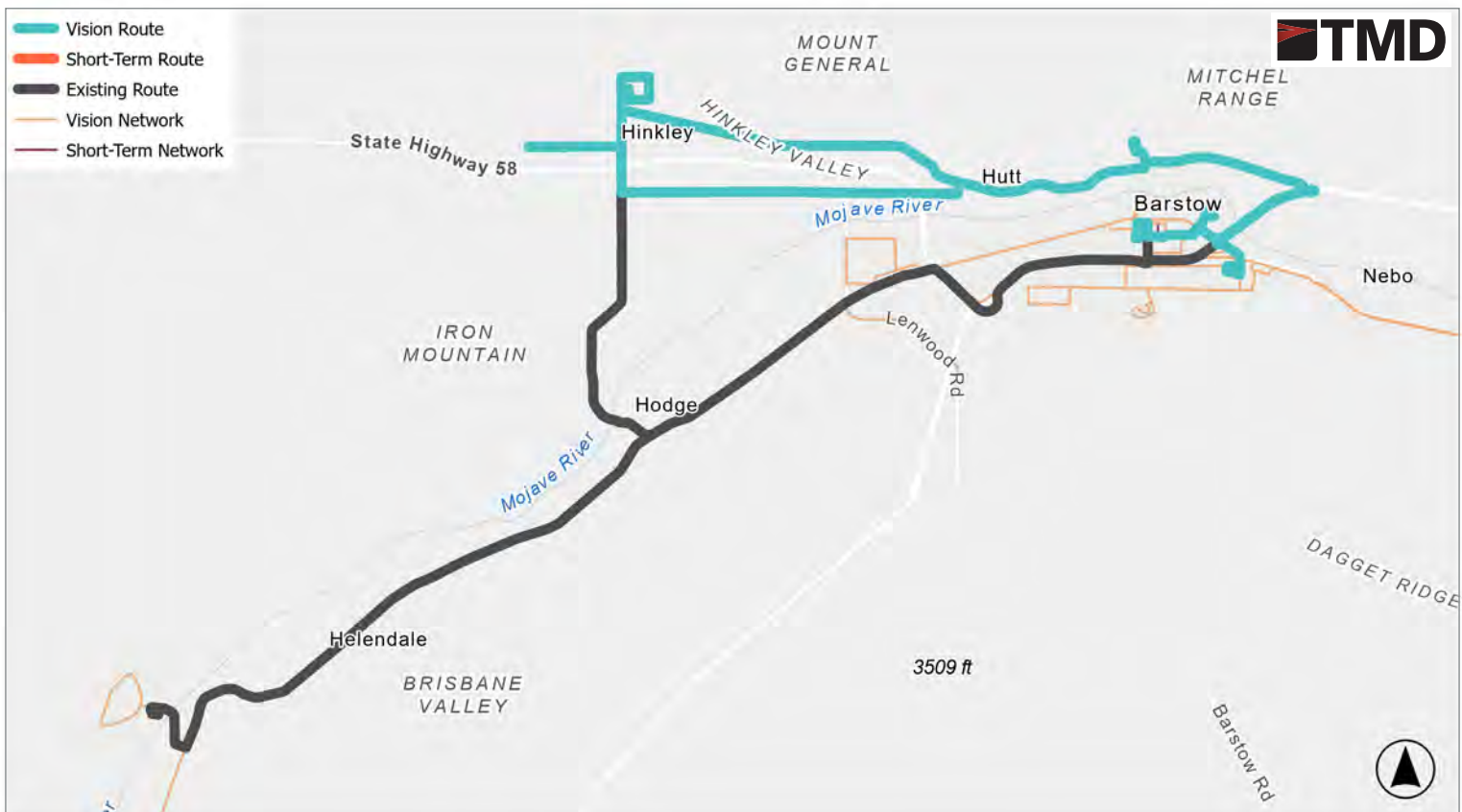
Proposed Changes: Short-Term

- » Will no longer serve Helendale, service replaced by proposed Route 27 to allow for faster travel times
- » Two-way service in North Barstow to improve transit access north of the Mojave River
- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	180	6:00 AM - 6:00 PM	120	6:00 AM - 9:00 PM	60	6:00 AM - 9:00 PM
Saturday	180	8:00 AM - 2:00 PM	120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM
Sunday	180	8:00 AM - 2:00 PM	120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM



Route 29

Newberry Springs

Tier 3



Proposed Changes: Short-Term

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Weekday Frequency improvement to improve service for the customer and address potential crowding issues

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	180	6:00 AM - 6:00 PM	120	6:00 AM - 9:00 PM	60	6:00 AM - 9:00 PM
Saturday	180	8:00 AM - 2:00 PM	120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM
Sunday	180	8:00 AM - 2:00 PM	120	8:00 AM - 5:00 PM	120	8:00 AM - 5:00 PM



Route 31

Adelanto South

Tier 1



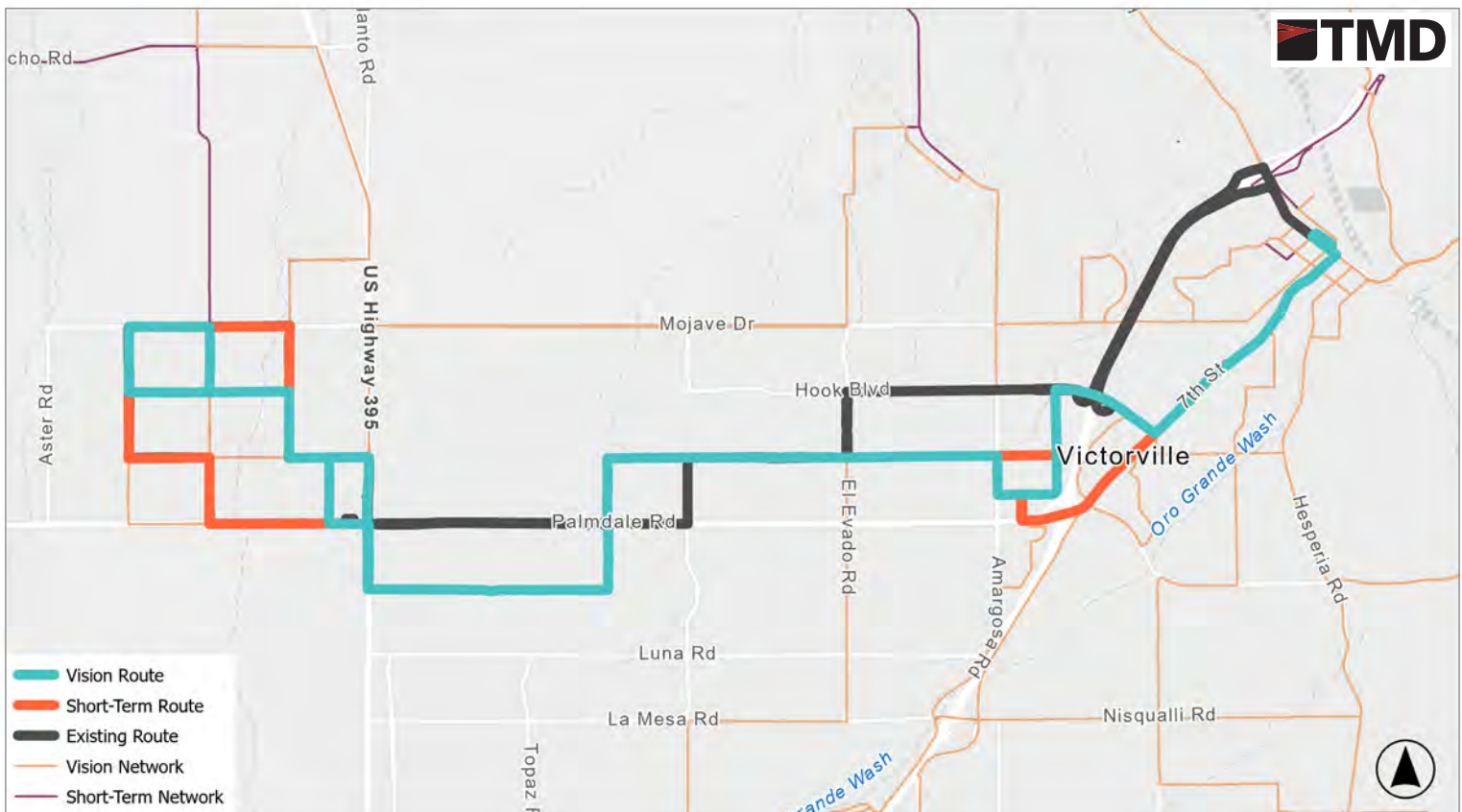
Proposed Changes: Short-Term

- » Service modified to serve Dos Palmas Road and Seventh Street to serve areas of higher ridership
- » Weekend Frequency improvement to improve service for the customer and address potential crowding issues

Proposed Changes: Vision

- » Restructure of service in Adelanto to improve coverage in conjunction with proposed Route 38
- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	Peak: 30, Off-Peak: 60	6:00 AM - 8:00 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 20, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	75	7:00 AM - 7:30 PM	60	7:00 AM - 8:00 PM	30	6:00 AM - 9:00 PM
Sunday	90	8:00 AM - 4:50 PM	60	8:00 AM - 6:00 PM	30	7:00 AM - 7:00 PM



Route 32

Adelanto North

Tier 2



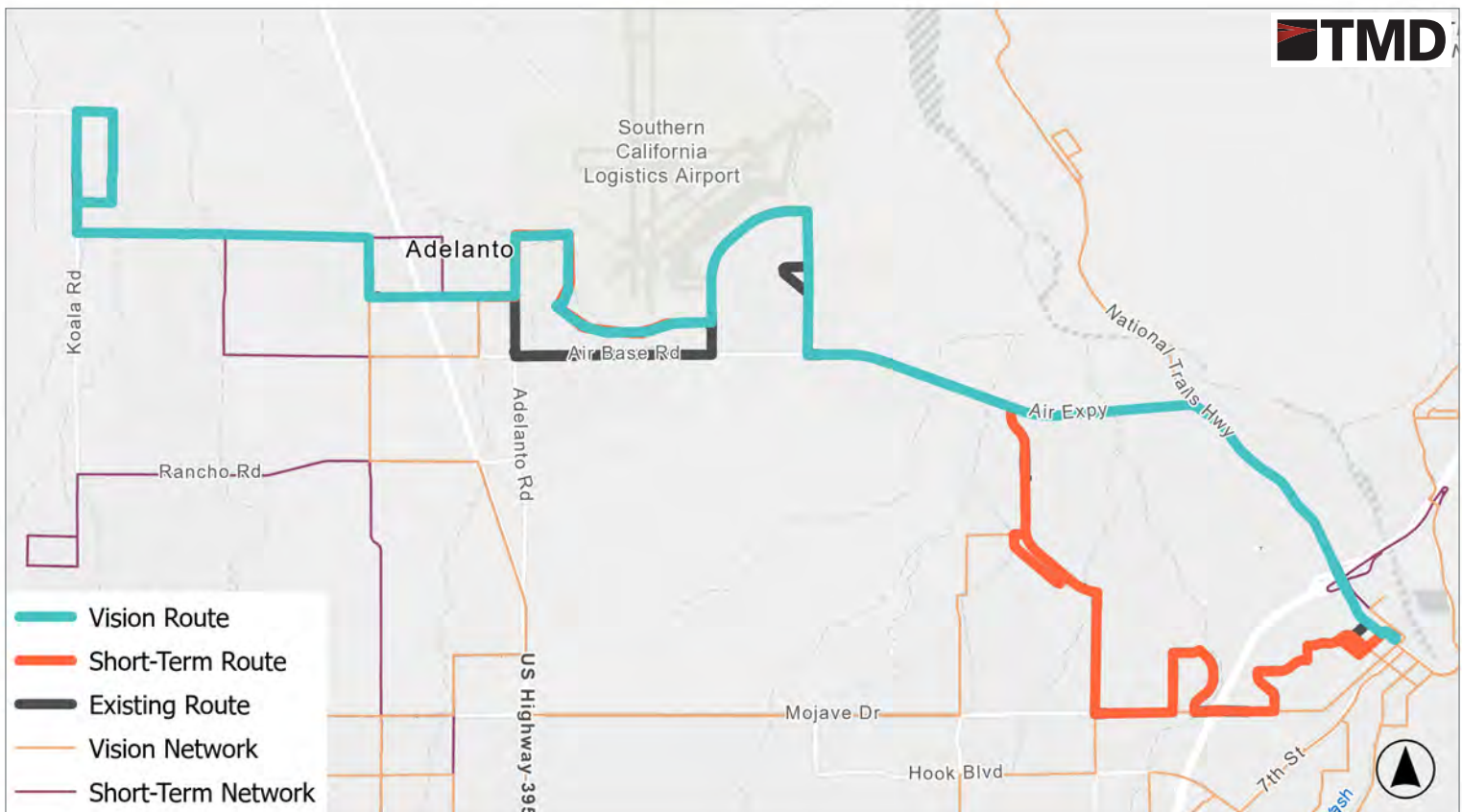
Proposed Changes: Short-Term

- » Improve weekday frequency to 30 minutes to improve service for the customer and address potential crowding issues

Proposed Changes: Vision

- » Service restructured to improve route directness and travel time between Victorville and North Adelanto, based on implementation of proposed Route 38
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	6:15 AM - 8:40 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	50	7:00 AM - 7:35 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	50	7:50 AM - 5:50 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 33

Adelanto Connector

Tier 2



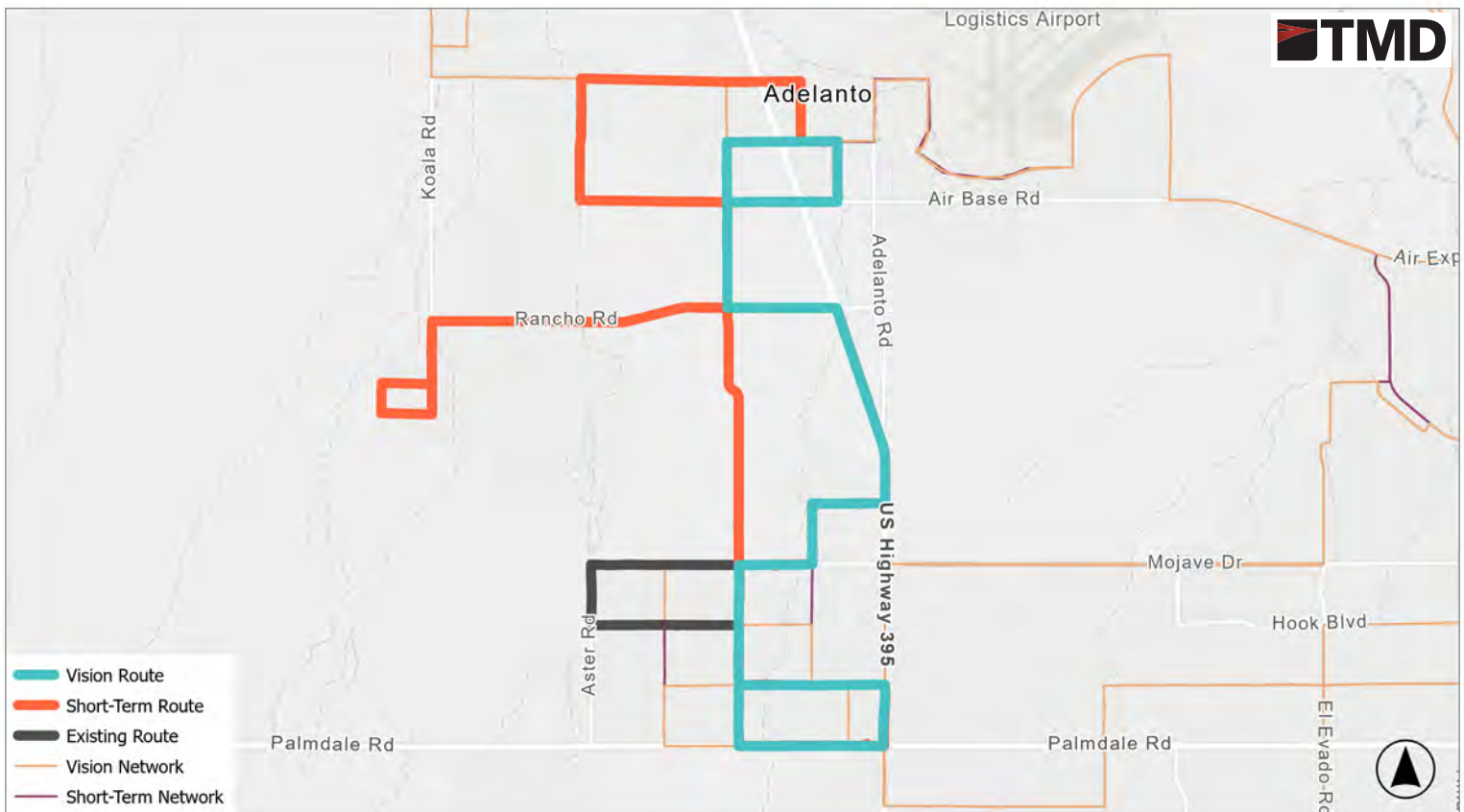
Proposed Changes: Short-Term

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Service discontinued to areas along Rancho Road and Aster Street due to low ridership
- » Micro-Link will serve discontinued areas

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	70	5:49 AM - 7:40 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	75	7:03 AM - 6:58 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	120	7:43 AM - 5:13 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 38

Mojave Drive-Adelanto

Tier 2



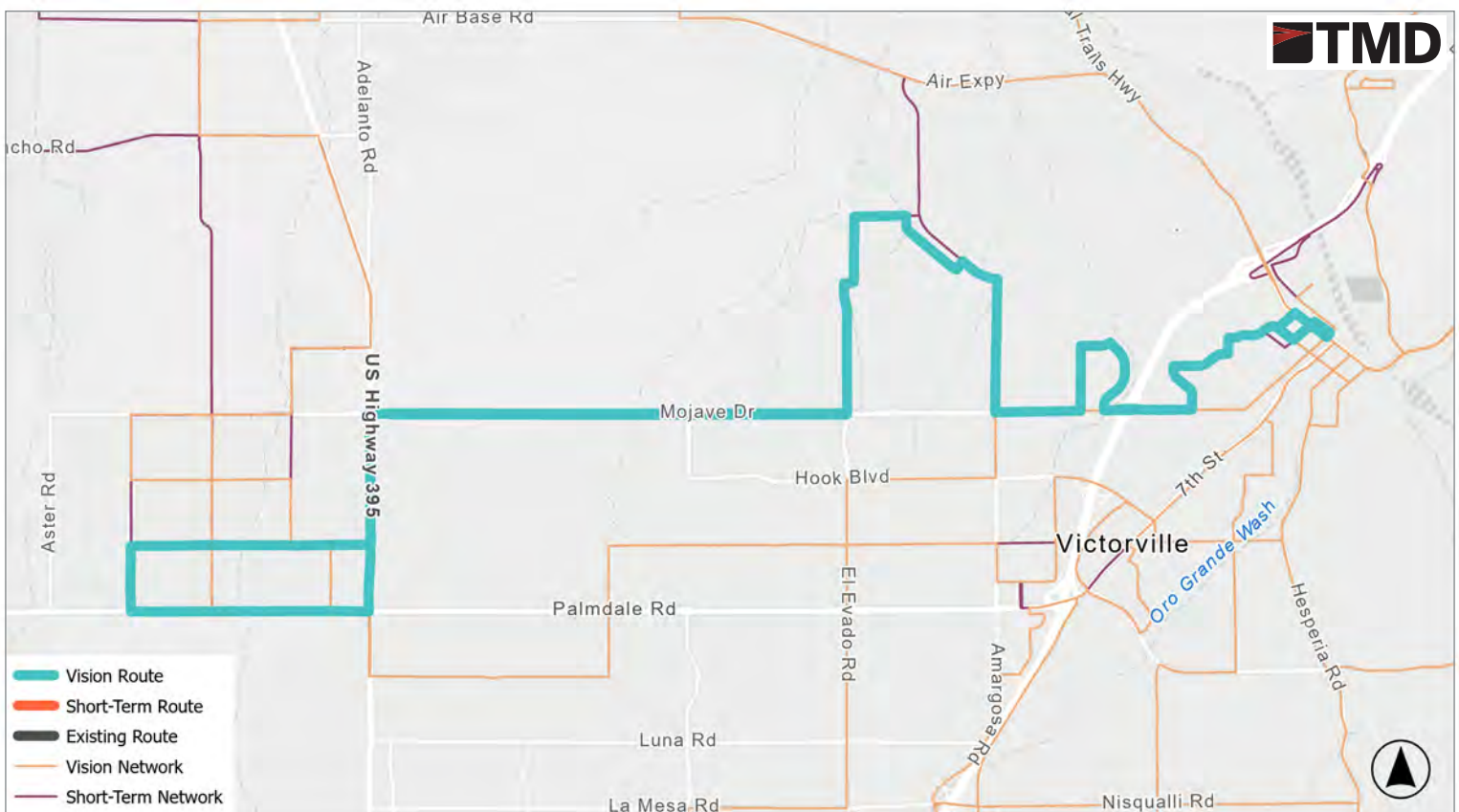
Proposed Changes: Short-Term

- » No service in the short term

Proposed Changes: Vision

- » New route serving the developing Mojave Drive corridor and improved coverage in South Adelanto
- » Allows for restructuring of Route 32

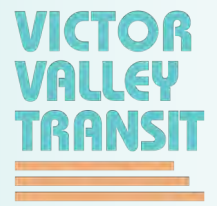
CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday					Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday						6:00 AM - 9:00 PM
Sunday						7:00 AM - 7:00 PM



Route 40

Apple Valley North Circulator

Tier 2



Proposed Changes: Short-Term

- » Frequency improvement to improve service for the customer and address potential crowding issues on weekends
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	6:05 AM - 8:05 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	55	7:00 AM - 7:50 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	90	7:55 AM - 4:55 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 41

Apple Valley-Victorville

Tier 1



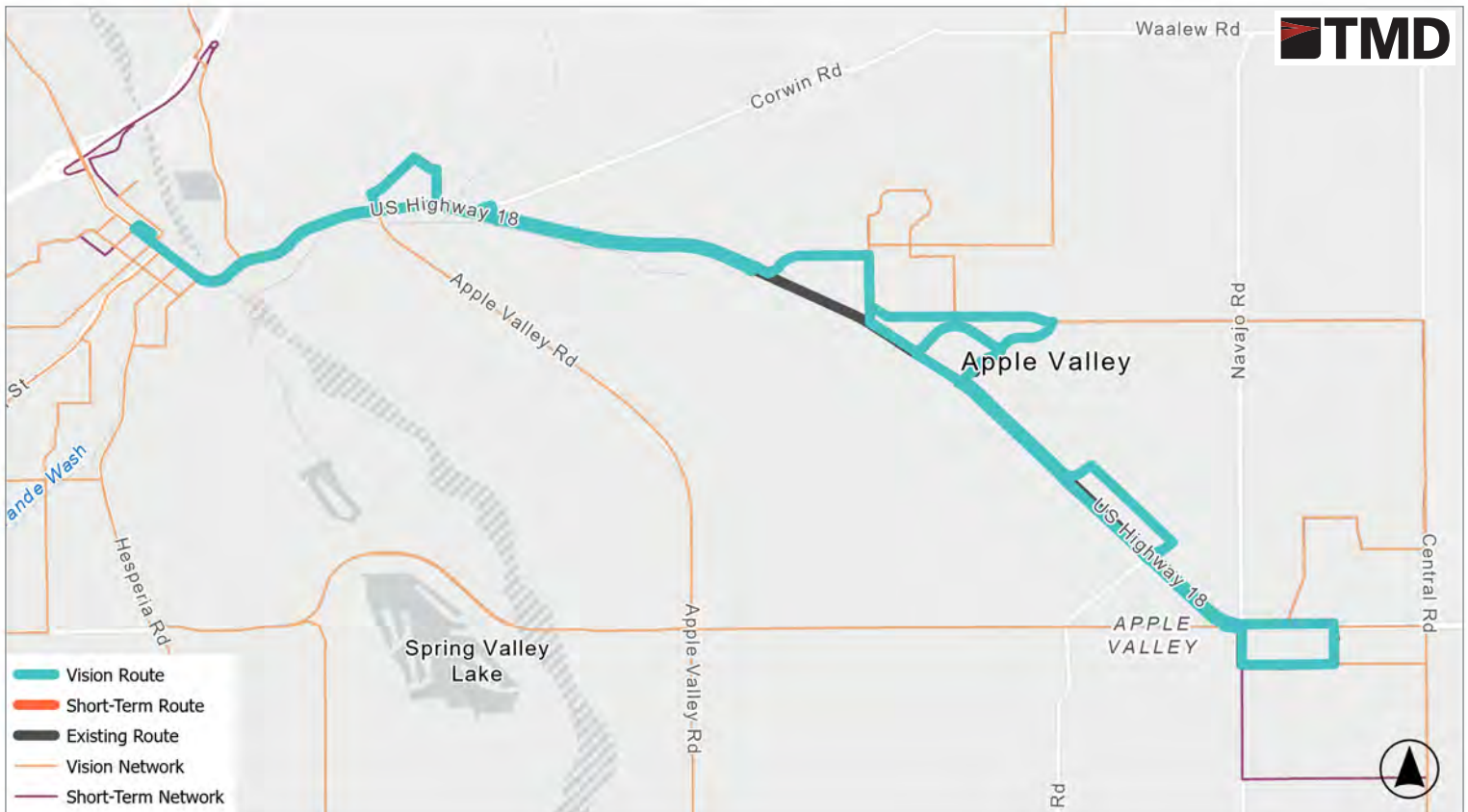
Proposed Changes: Short-Term

- » Modification of service for better service to residential neighborhoods

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	Peak: 30, Off-Peak: 60	5:50 AM - 8:40 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 20, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	75	6:28 AM - 7:35 PM	60	7:00 AM - 8:00 PM	30	6:00 AM - 9:00 PM
Sunday	75	7:42 AM - 5:45 PM	60	8:00 AM - 6:00 PM	30	7:00 AM - 7:00 PM



Route 42

Apple Valley Road

Tier 2



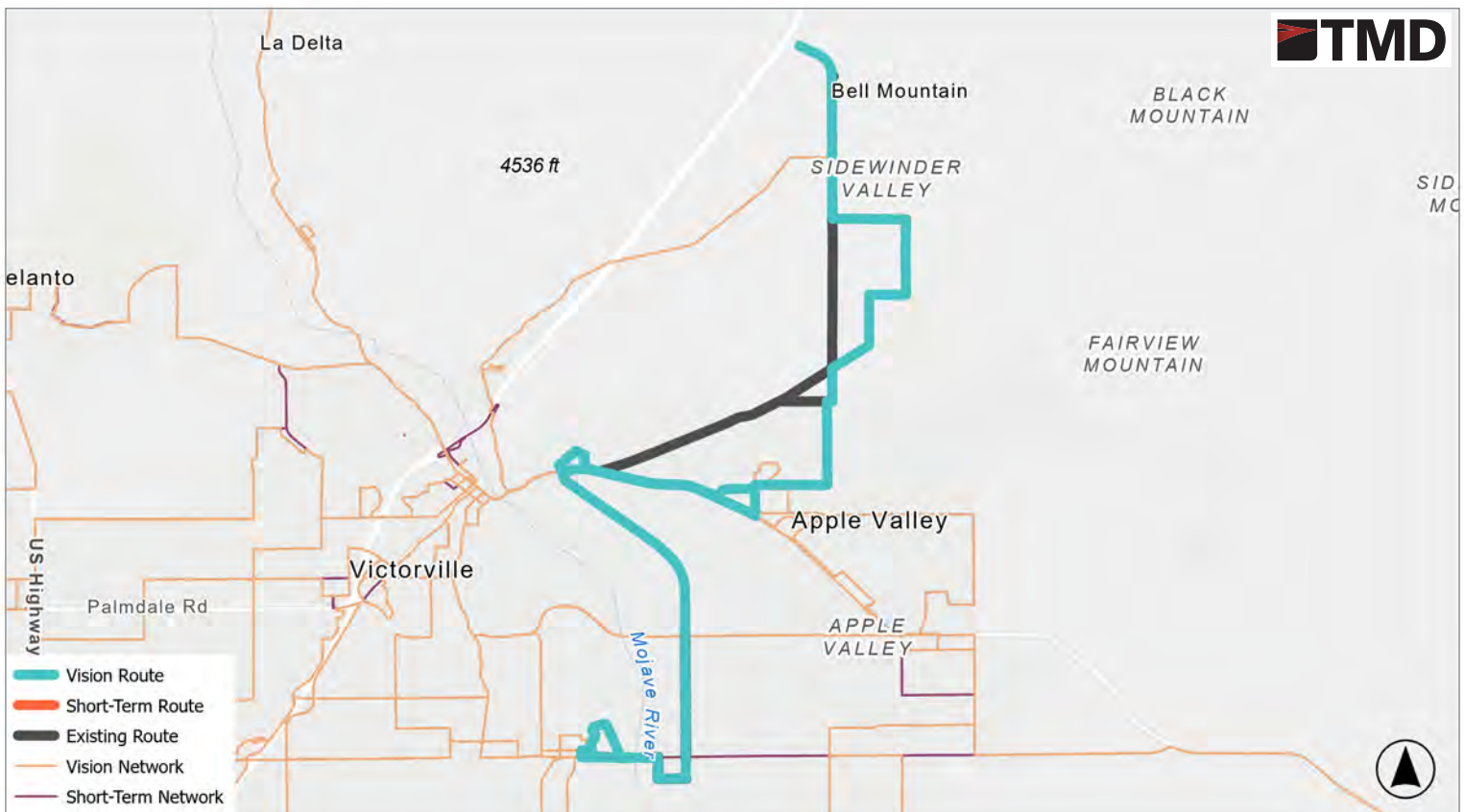
Proposed Changes: Short-Term

- » Route modification to serve Zuni Road to connect this area of Apple Valley to Victor Valley College
- » Extension to future Brightline Station

Proposed Changes: Vision

- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	6:30 AM - 8:30 PM	60	6:00 AM - 9:00 PM	60	5:00 AM - 11:00 PM
Saturday	53	7:30 AM - 8:02 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	53	8:23 AM - 5:23 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 43

Bear Valley Road - Apple Valley

Tier 1



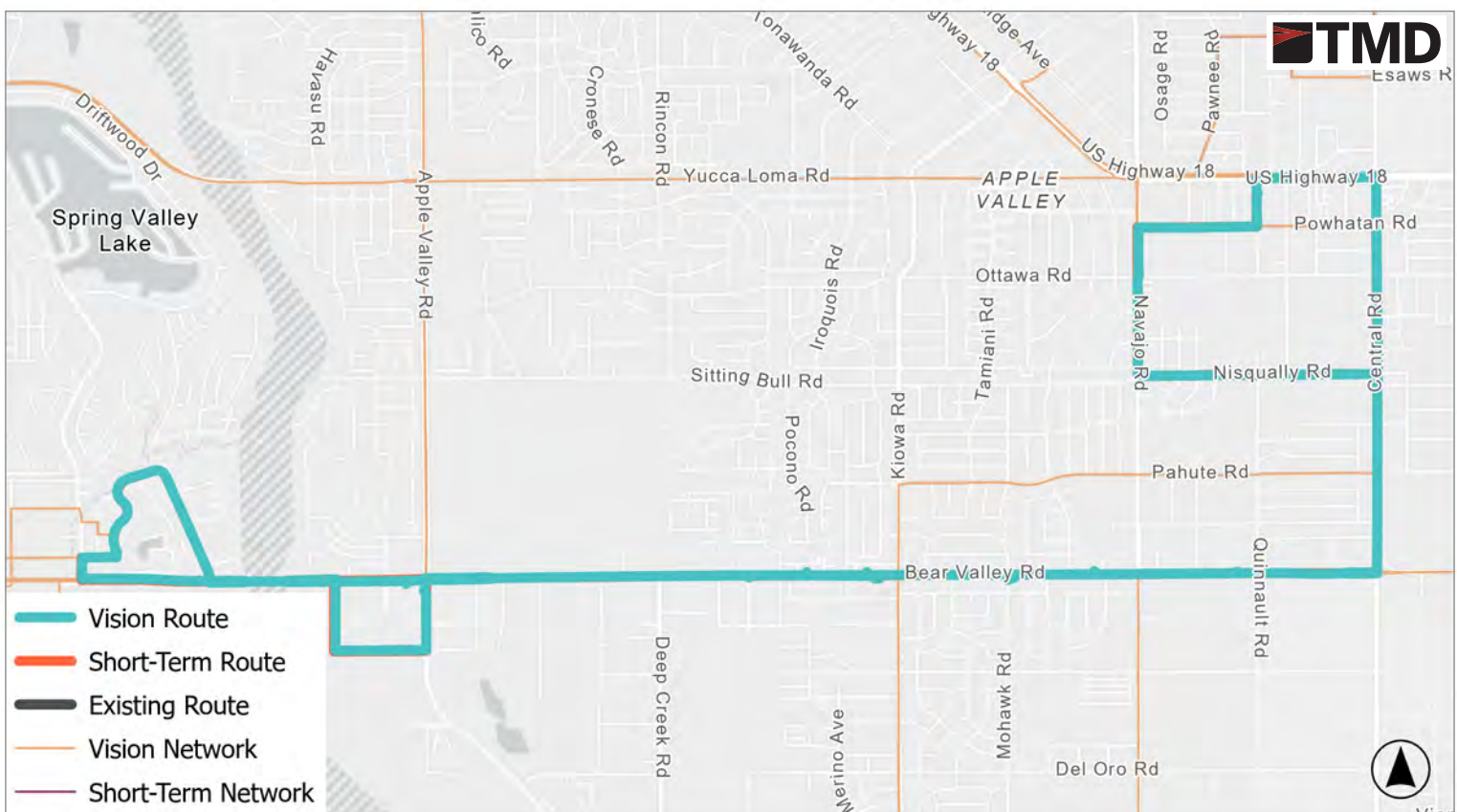
Proposed Changes: Short-Term

- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	Peak: 30, Off-Peak: 60	6:03 AM - 8:45 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 20, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	7:15 AM - 7:15 PM	60	7:00 AM - 8:00 PM	30	6:00 AM - 9:00 PM
Sunday	60	7:43 AM - 5:43 PM	60	8:00 AM - 6:00 PM	30	7:00 AM - 7:00 PM



Route 45

Stoddard Wells

Tier 2



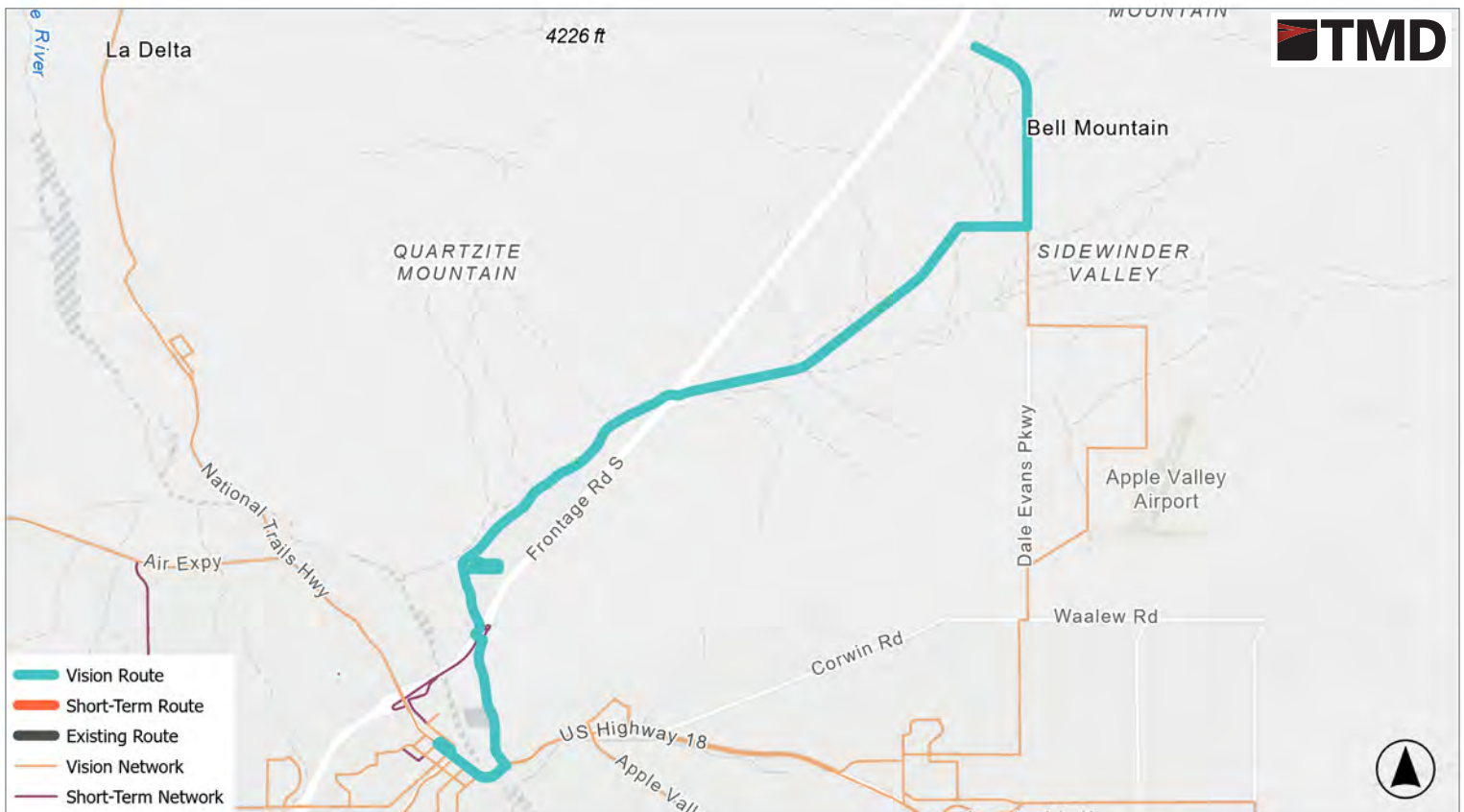
Proposed Changes: Short-Term

- » No service in the short term

Proposed Changes: Vision

- » New route serving Stoddard Wells Road and Brightline Station serving new developments in Apple Valley
- » Replaces a portion of Route 22

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday					Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday					60	6:00 AM - 9:00 PM
Sunday					60	7:00 AM - 7:00 PM



Route 47

Apple Valley South Circulator

Tier 2



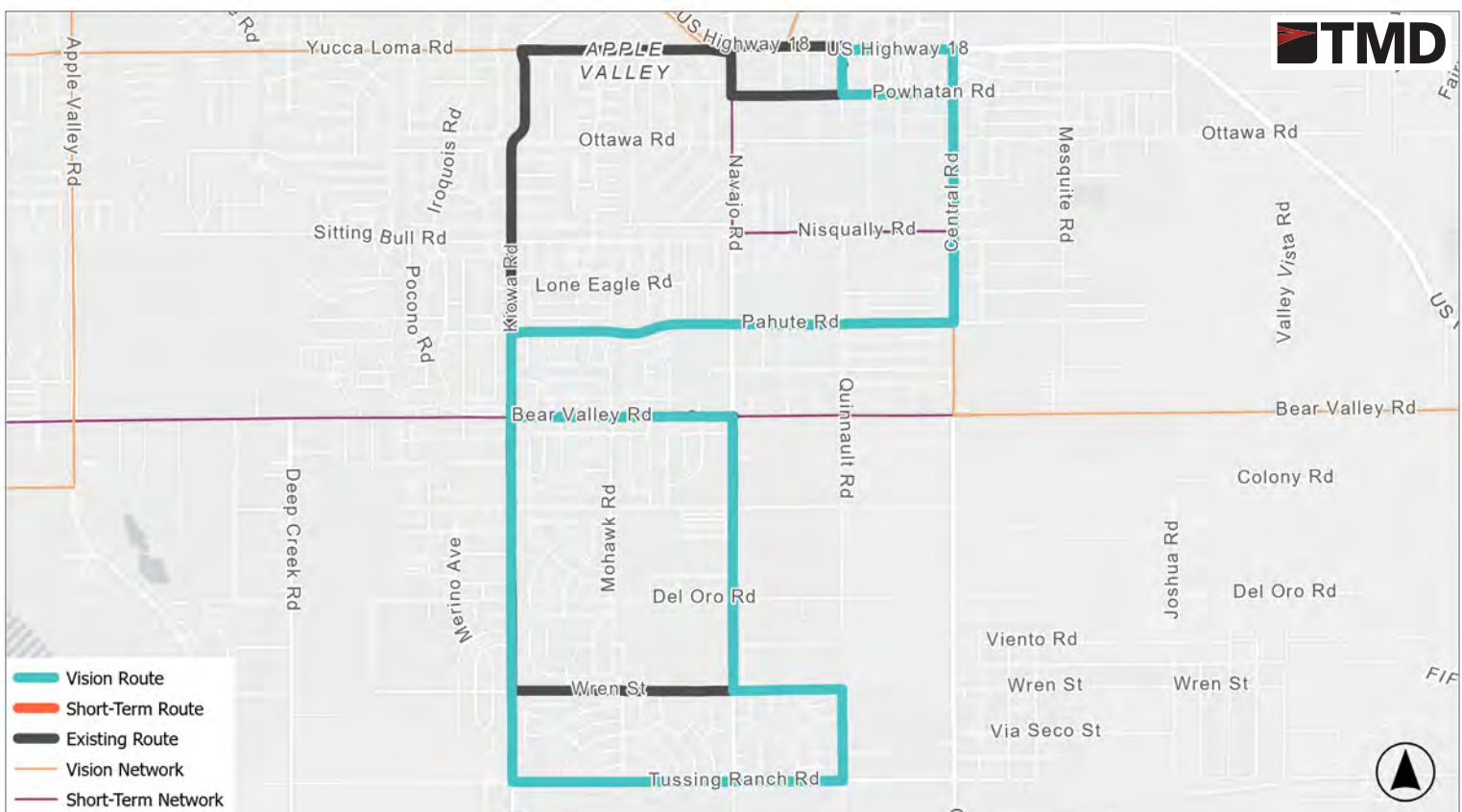
Proposed Changes: Short-Term

- » Route modification to provide service along Pah-Ute Road, service along Yucca Loma Road to be provided by new Route 49
- » Service extended south to Tussing Ranch Road and east to Quinault Road
- » Span improvement to improve service for the customer

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	40	6:05 AM - 8:35 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	48	7:00 AM - 6:12 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	90	8:43 AM - 5:43 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 49

Yucca Loma

Tier 2



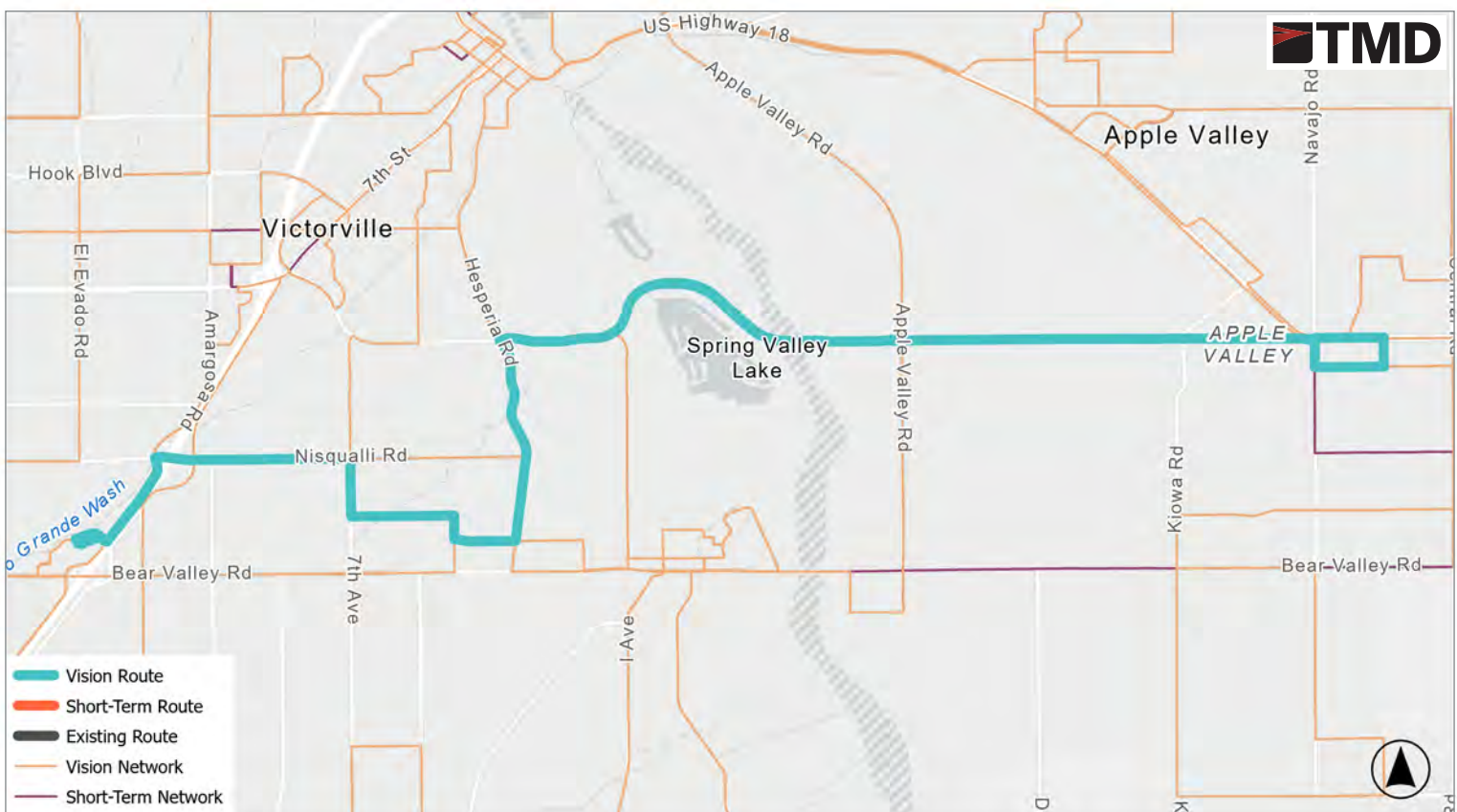
Proposed Changes: Short-Term

- » New route along Yucca Loma Road utilizing the new bridge
- » Serves the Nisqualli Road corridor in Victorville
- » Connects Apple Valley and the Mall without the need for a transferring between buses

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday			60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday			60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday			60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 50

Hesperia-Victorville

Tier 1



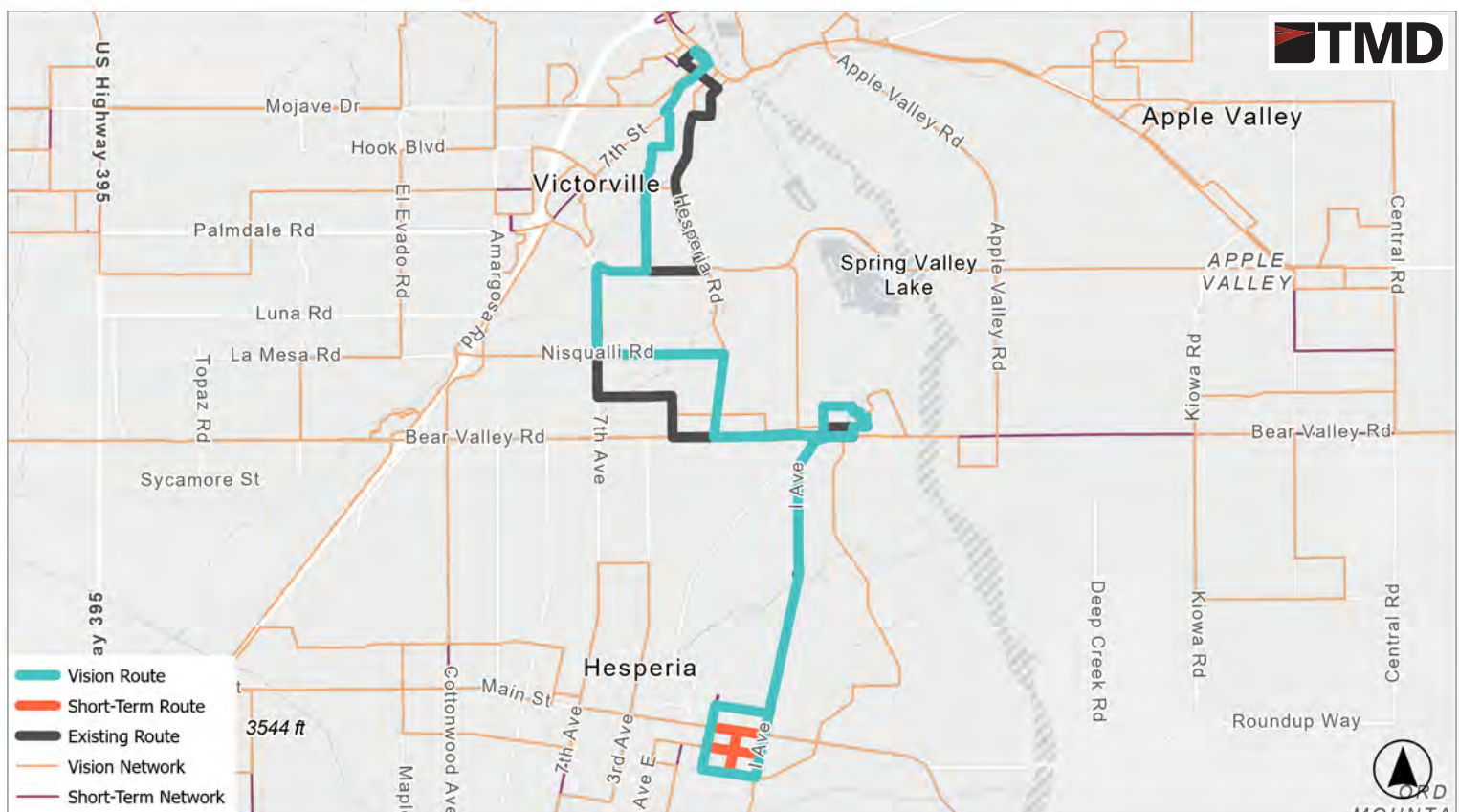
Proposed Changes: Short-Term

- » Service restructure in Victorville with Route 49 and 55 serving areas that are no longer served by Route 50

Proposed Changes: Vision

- » Route modified to serve new Hesperia Transit Center
- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	60	6:15 AM - 8:40 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	7:05 AM - 7:35 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:05 AM - 5:07 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 50X

Victor Valley College Express

Tier 2



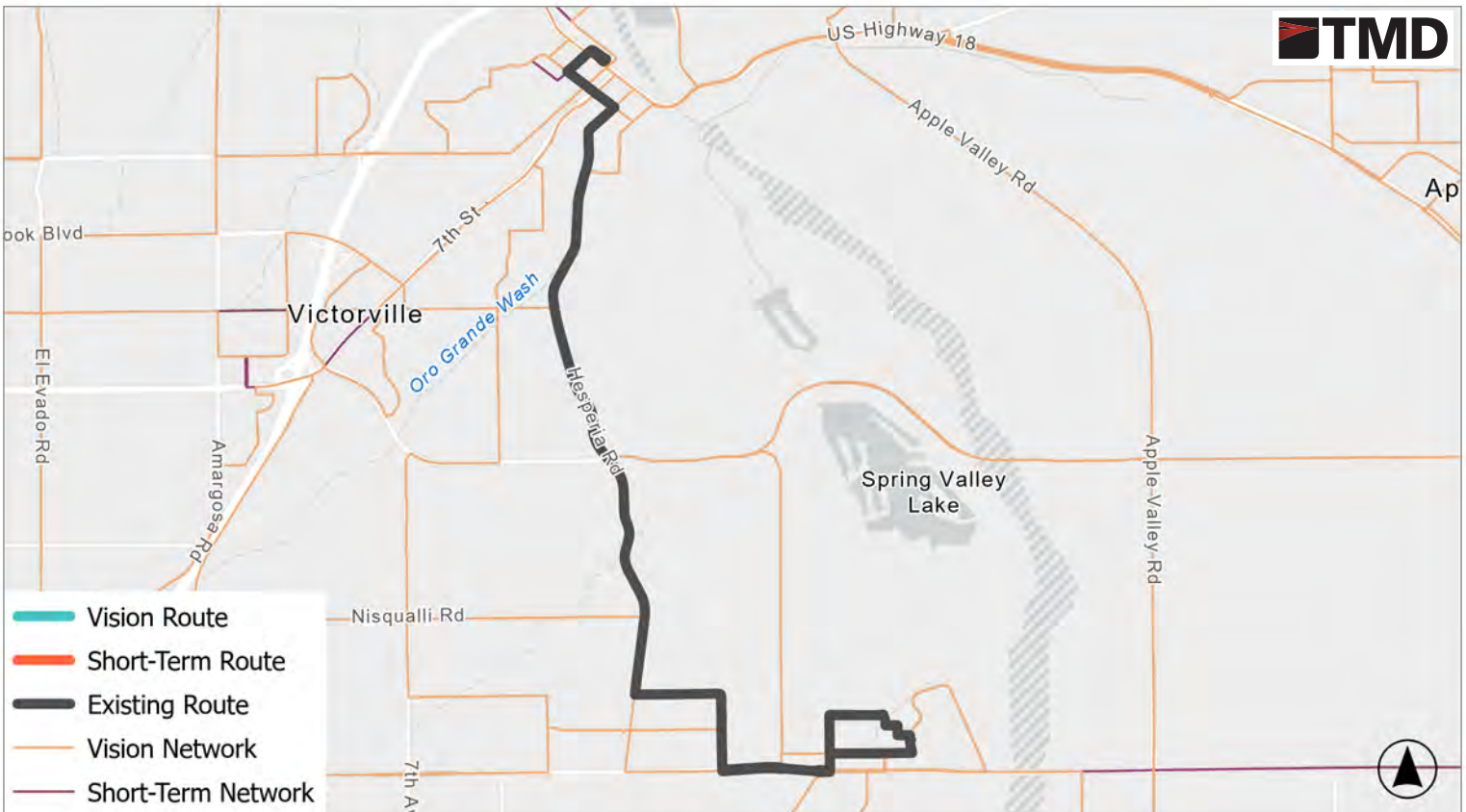
Proposed Changes: Short-Term

- » Route discontinued
- » Replaced with streamlined Route 55

Proposed Changes: Vision

»

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	7:15 AM - 5:15 PM				
Saturday						
Sunday						



Route 52

Mall of Victor Valley - Victorville

Tier 1



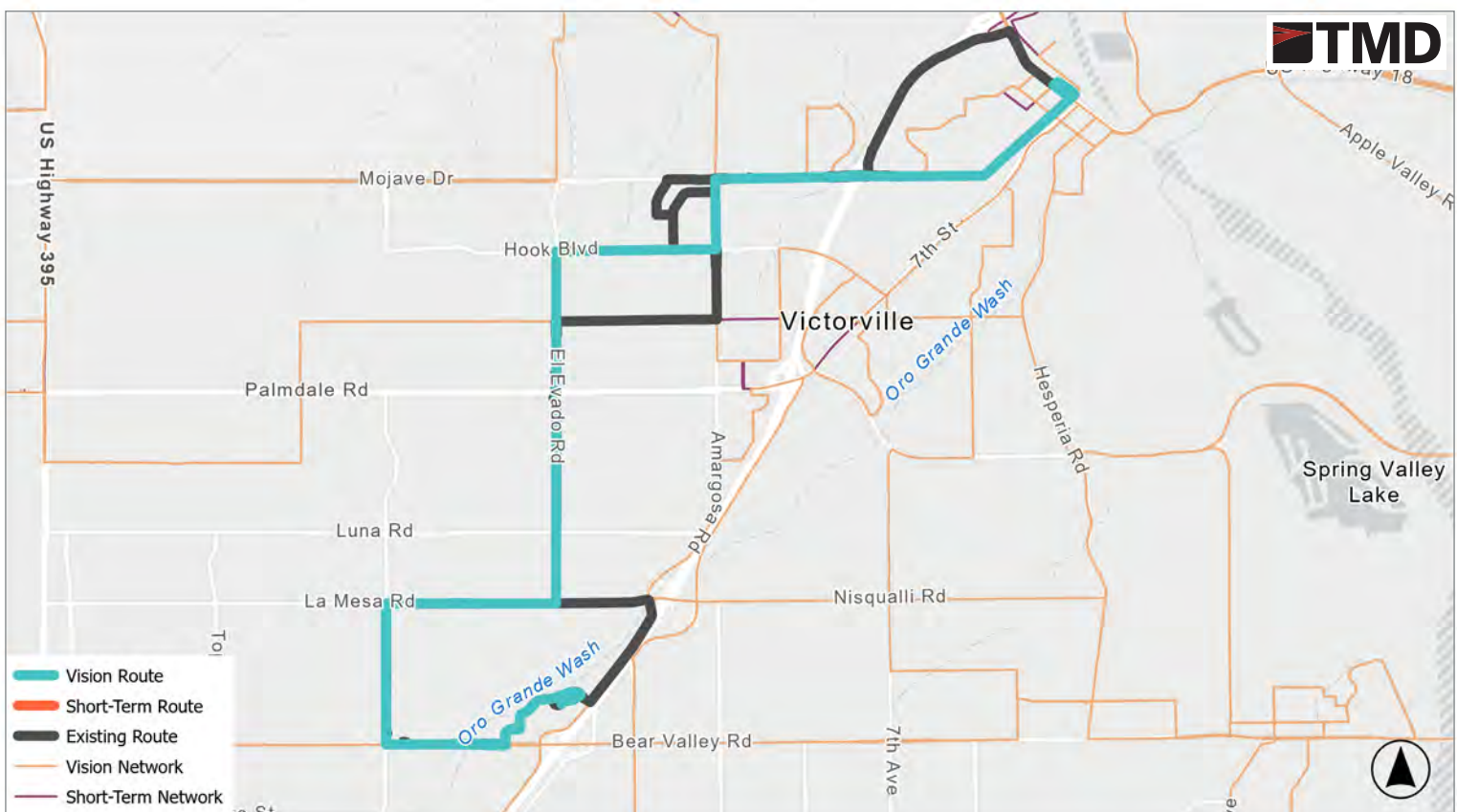
Proposed Changes: Short-Term

- » No service along Amargosa Road south of El Evado Road, two-way service provided along Amethyst Road
- » Service will not operate along Arlette Drive and Del Norte Drive
- » New service along Sixth Street to Victor Valley High School

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	Peak: 30, Off-Peak: 60	6:20 AM - 8:40 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 20, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	75	7:05 AM - 7:35 PM	60	7:00 AM - 8:00 PM	30	6:00 AM - 9:00 PM
Sunday	75	7:40 AM - 5:37 PM	60	8:00 AM - 6:00 PM	30	7:00 AM - 7:00 PM



Route 53

Bear Valley Road - Mall

Tier 1



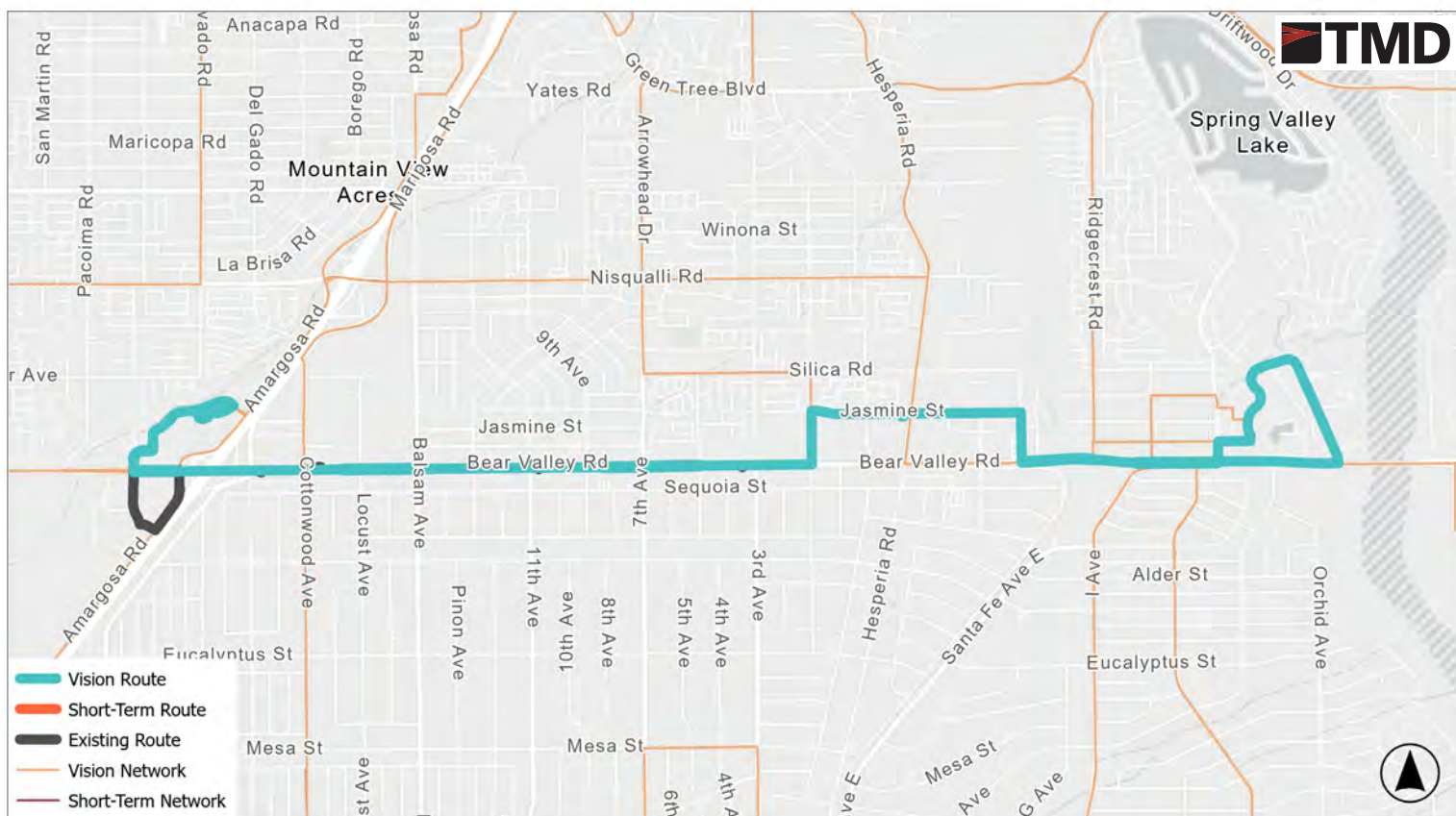
Proposed Changes: Short-Term

- » Service to Dunia Plaza will no longer operate to improve travel times
- » Weekend Frequency improvement to improve service for the customer and address potential crowding issues

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	Peak: 30, Off-Peak: 60	5:59 AM - 8:50 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 20, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	68	7:15 AM - 7:29 PM	60	7:00 AM - 8:00 PM	30	6:00 AM - 9:00 PM
Sunday	68	7:43 AM - 5:18 PM	60	8:00 AM - 6:00 PM	30	7:00 AM - 7:00 PM



Route 54

West Victorville

Tier 2



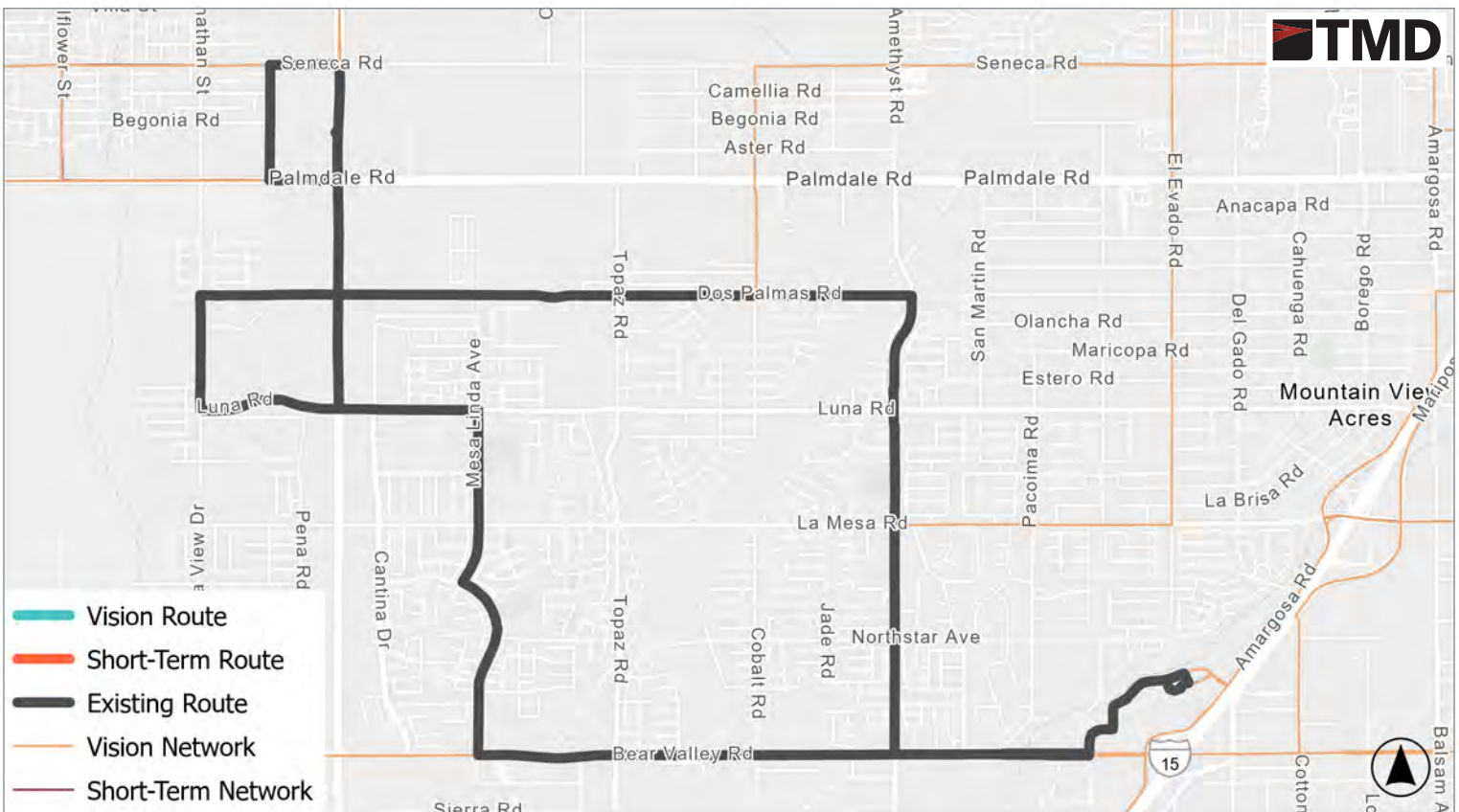
Proposed Changes: Short-Term

- » Route discontinued
- » Replaced with Victorville West Micro-Link

Proposed Changes: Vision

»

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	60	6:04 AM - 8:40 PM				
Saturday	53	7:13 AM - 7:35 PM				
Sunday	120	8:33 AM - 4:21 PM				



Route 55

Victor Valley College - Victorville

Tier 2



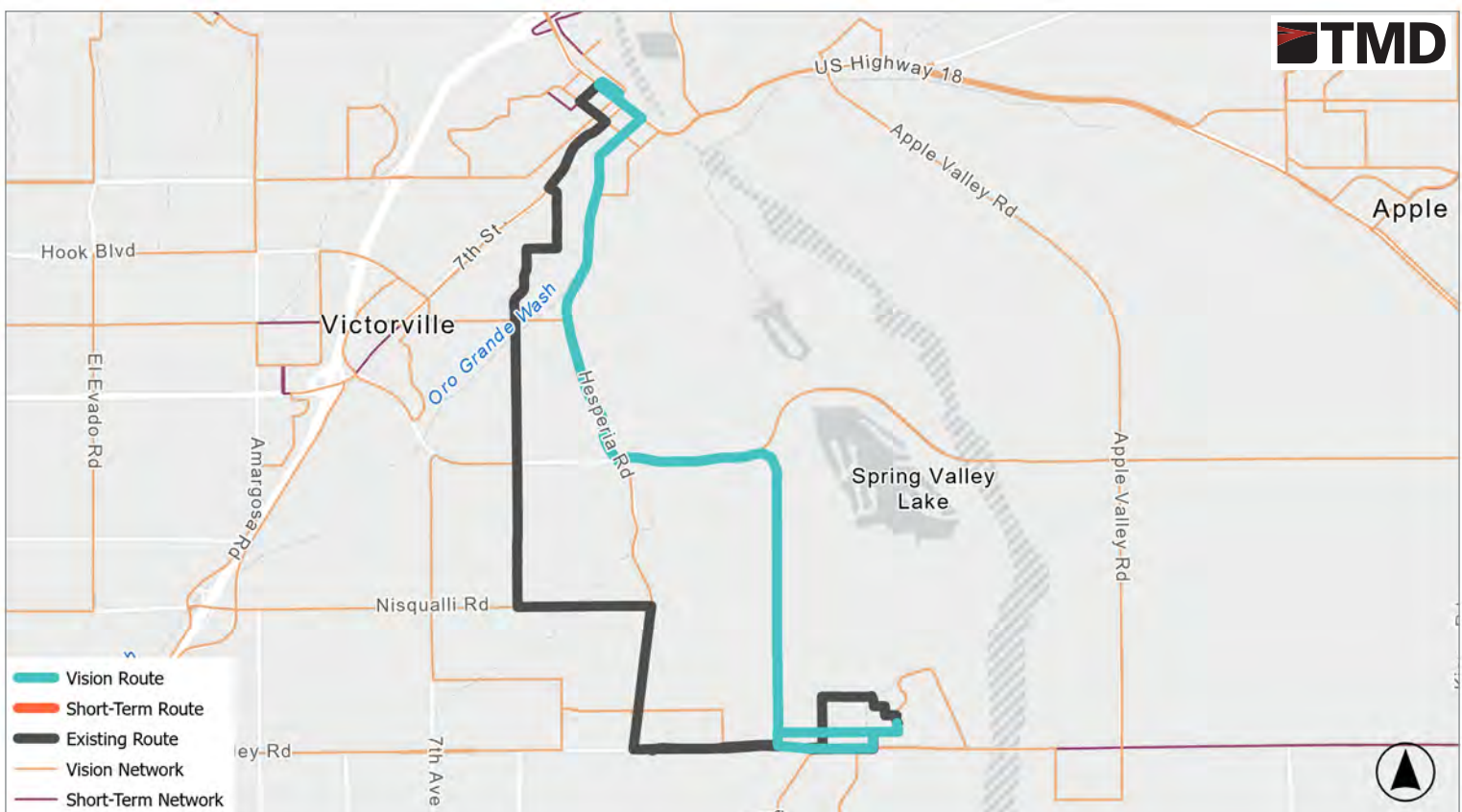
Proposed Changes: Short-Term

- » Service streamlined in Victorville with Route 49 and 50 serving areas that are no longer served by Route 50
- » Frequency improvement to improve service for the customer and address potential crowding issues

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	70	5:46 AM - 8:40 PM	Peak: 30, Off-Peak: 60	6:00 AM - 9:00 PM	Peak: 20, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	75	7:05 AM - 7:35 PM	60	7:00 AM - 8:00 PM	30	6:00 AM - 9:00 PM
Sunday	75	7:42 AM - 5:42 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 56

Victorville Circulator

Tier 2



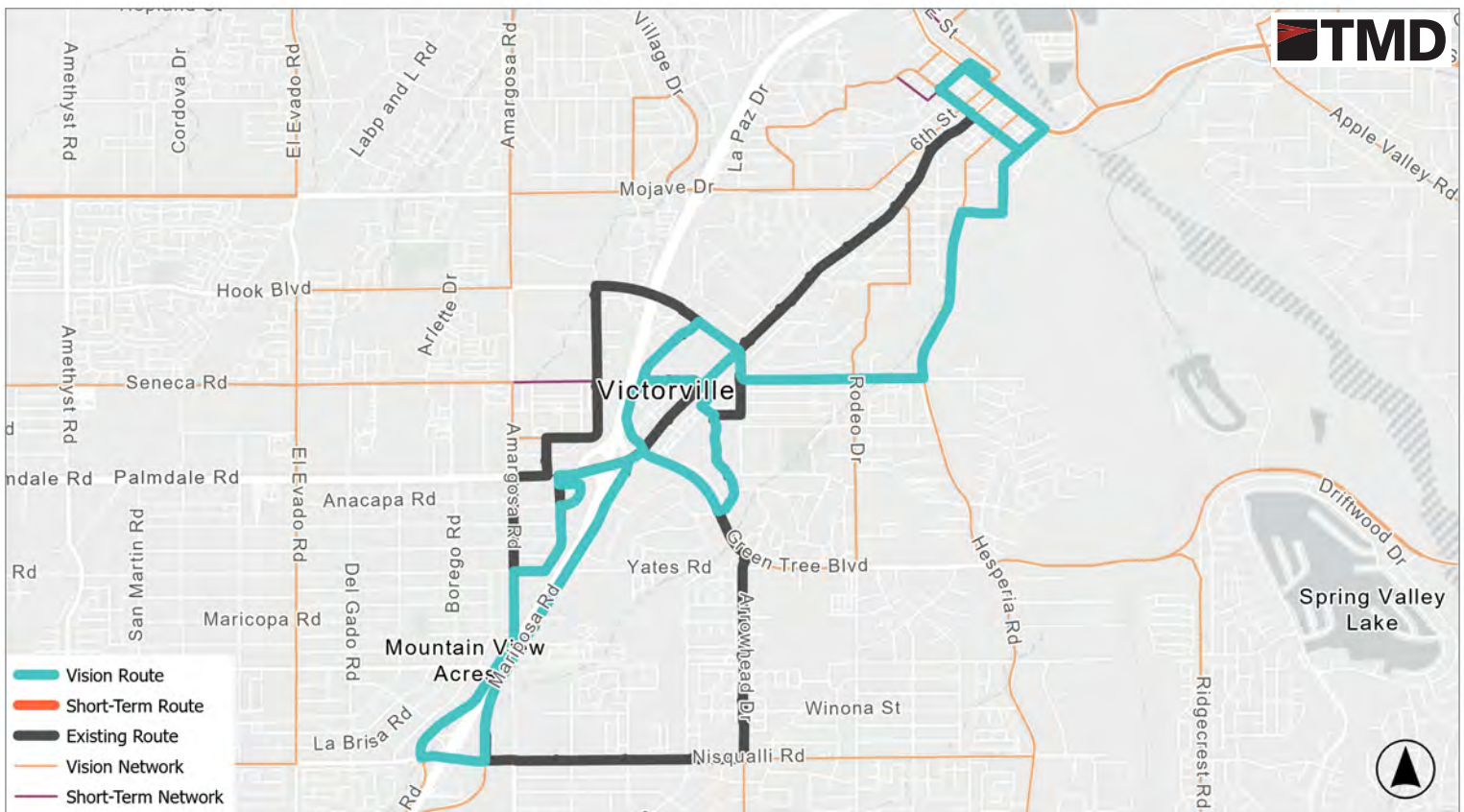
Proposed Changes: Short-Term

- » Route modifications in conjunction with changes to Routes 50 and 55
- » Frequency improvement to improve service for the customer and address potential crowding issues

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	80	5:44 AM - 8:40 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	75	6:24 AM - 6:20 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	80	7:50 AM - 6:00 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 62

Mall of Victor Valley - Hesperia

Tier 2



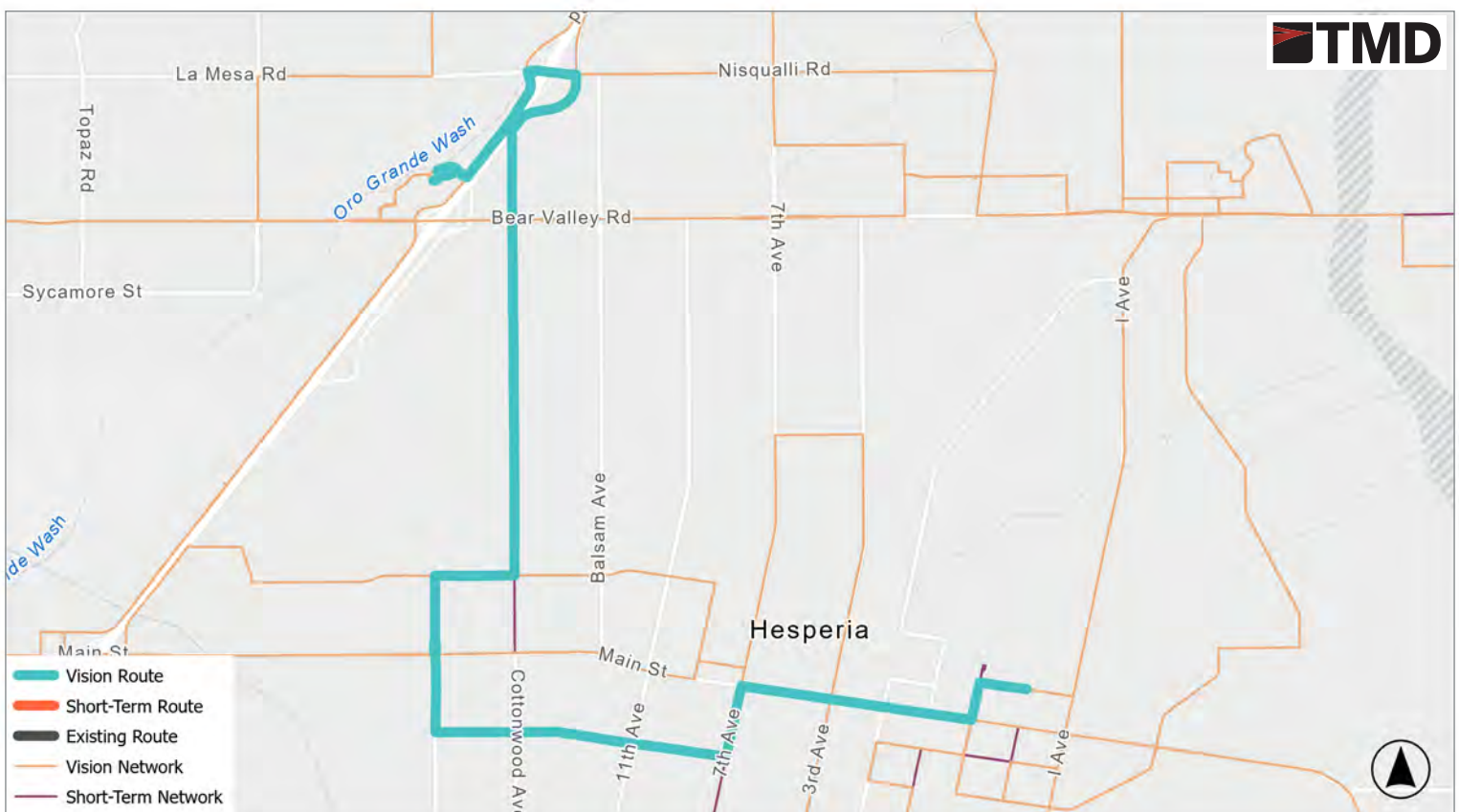
Proposed Changes: Short-Term

- » No service in the short term

Proposed Changes: Vision

- » New route connecting the Hesperia Transit Center with the Mall of Victor Valley
- » Allows for simplification of Route 68

	CURRENT		PROPOSED				
	Service Days	Frequency (minutes)	Service Hours	Short-Term	Service Hours	Vision	
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday						Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday						30	6:00 AM - 9:00 PM
Sunday						30	7:00 AM - 7:00 PM



Route 64

Willow Street - Hesperia

Tier 2



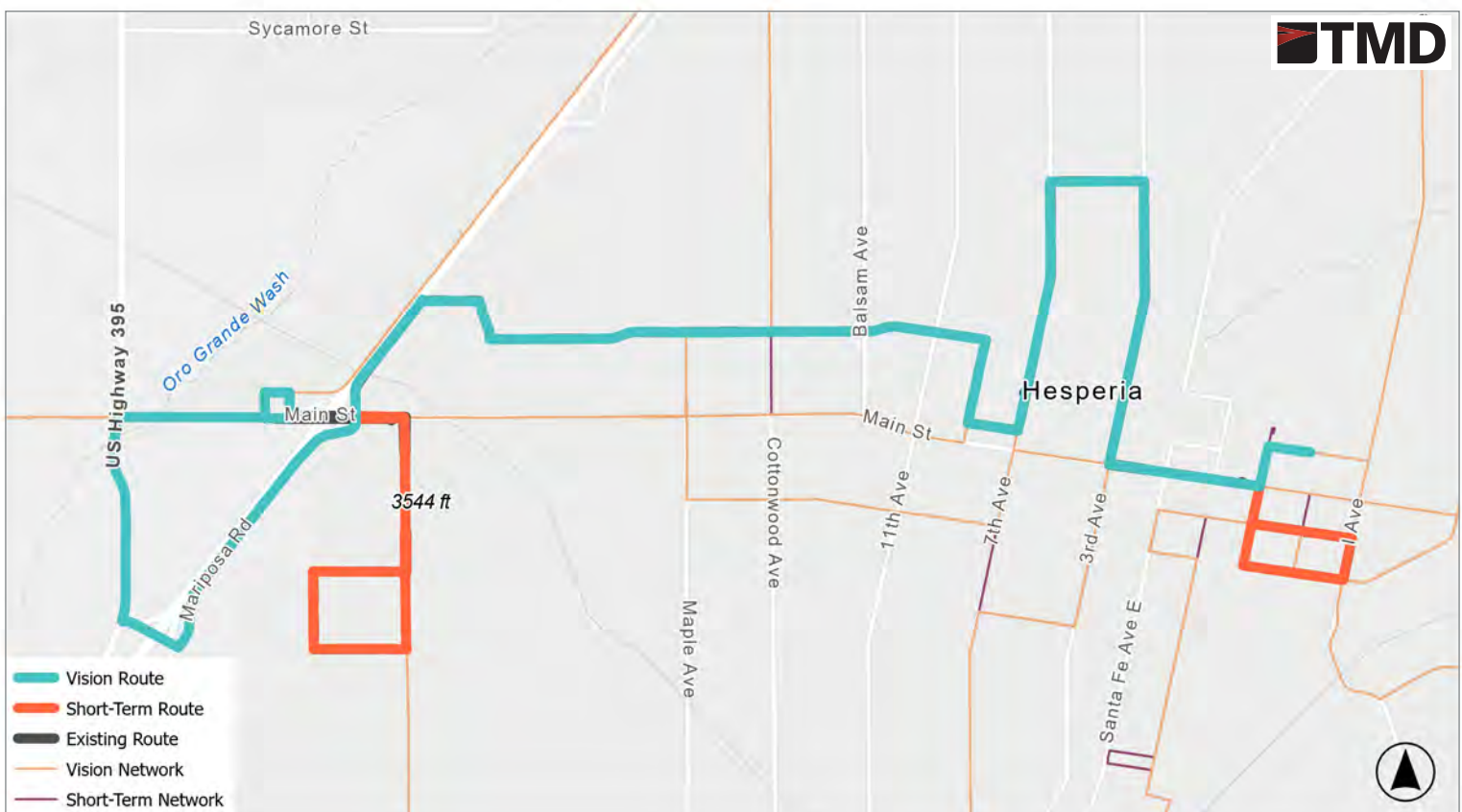
Proposed Changes: Short-Term

- » Extension to future Brightline station and truck stop near Jonathan Street.
- » Serves Mariposa Road that was served by Route 25

Proposed Changes: Vision

- » Modify to serve proposed Hesperia Transit Center
- » No longer serves Escondido Road which will be served by proposed Route 65
- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	60	6:14 AM - 8:17 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	7:07 AM - 7:07 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:07 AM - 5:14 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 65

Ranchero Road - Hesperia

Tier 2



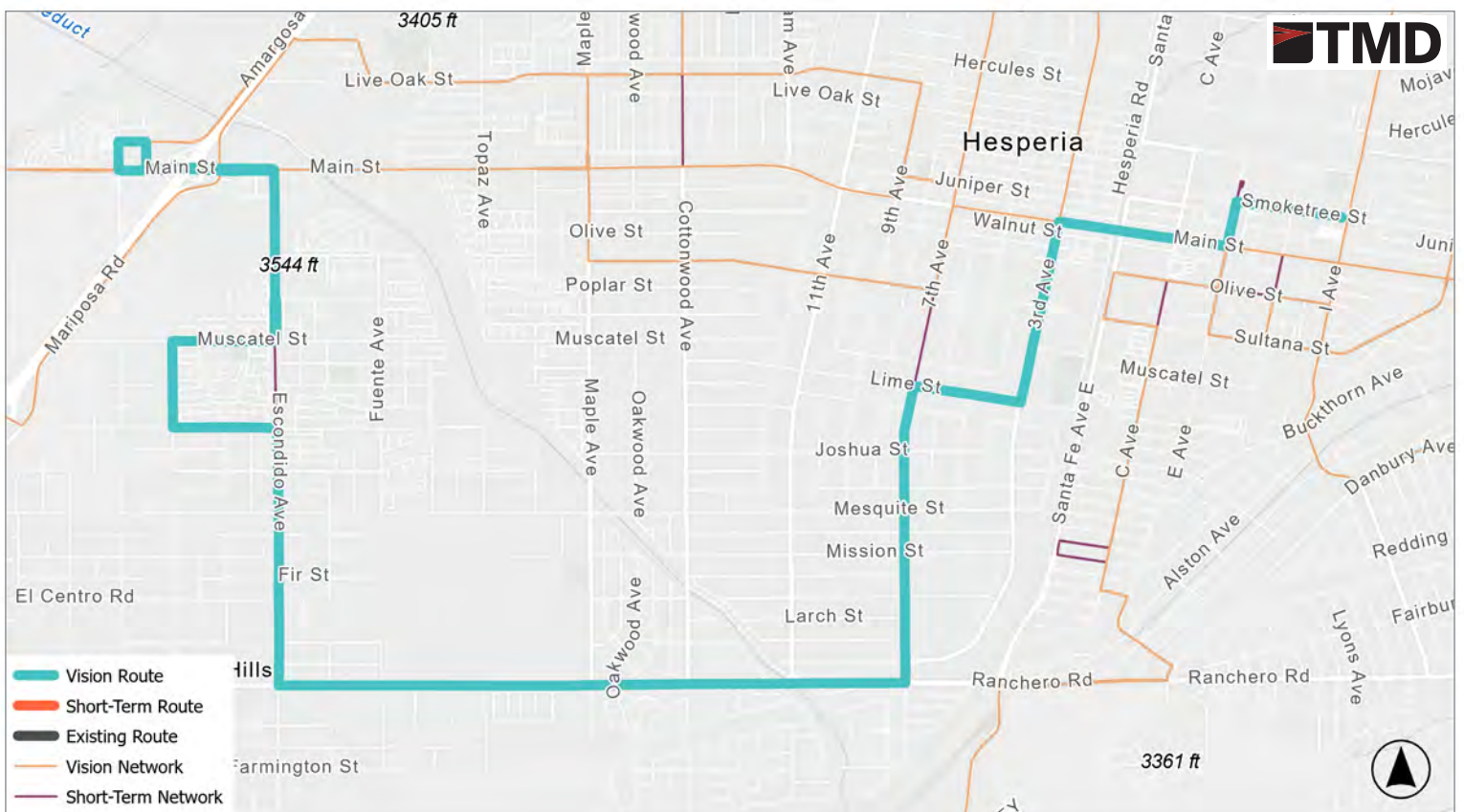
Proposed Changes: Short-Term

» No service in the short term

Proposed Changes: Vision

» New route serving the growing Ranchero Road corridor

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday					Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday					60	6:00 AM - 9:00 PM
Sunday					60	7:00 AM - 7:00 PM



Route 66

East Hesperia Circulator

Tier 2



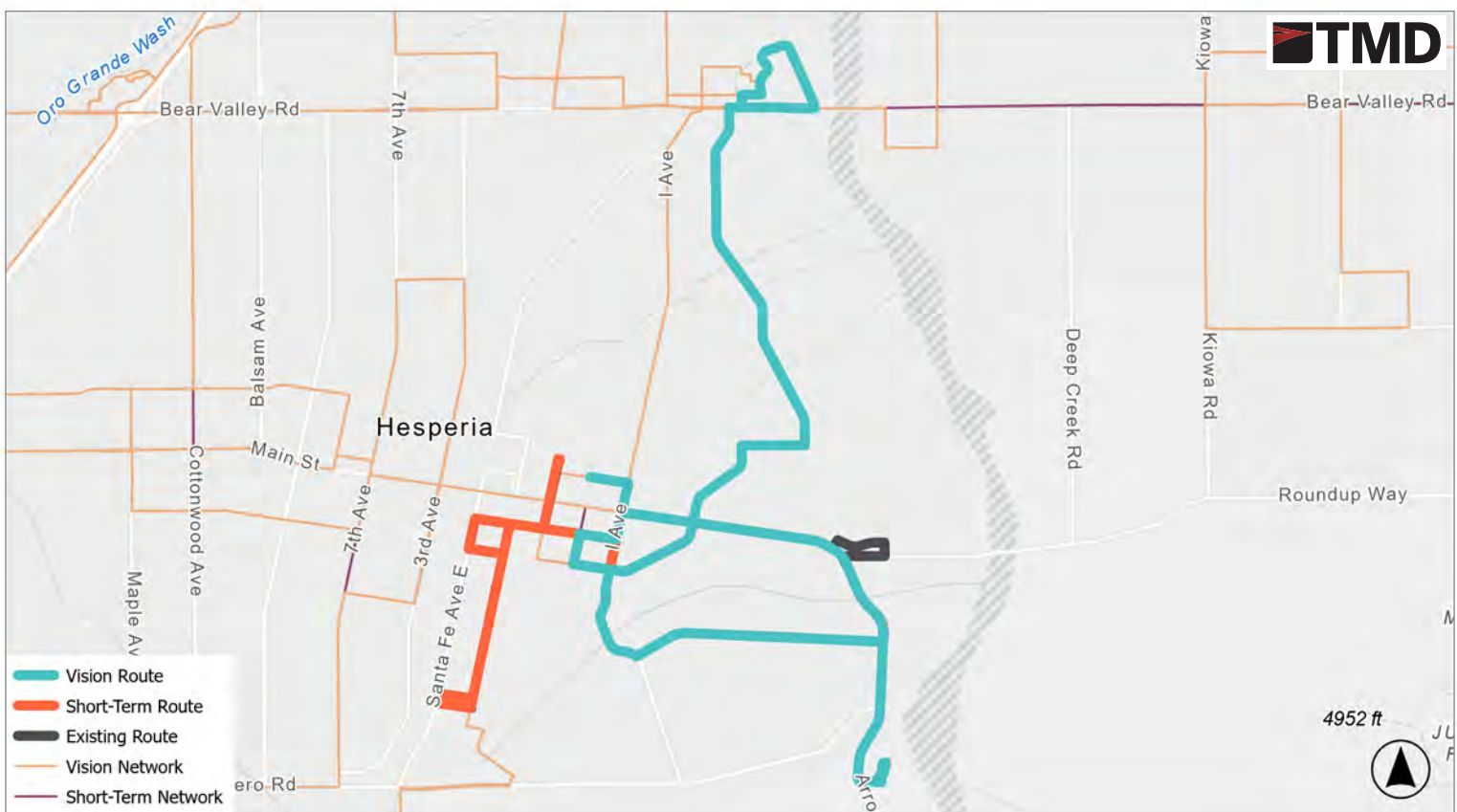
Proposed Changes: Short-Term

- » Frequency improvement to improve service for the customer and address potential crowding issues

Proposed Changes: Vision

- » Service restructured with the implementation of Route 67 and to serve the new Hesperia Transit Center
- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)
Weekday	128	6:09 AM - 8:42 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	120	7:07 AM - 8:07 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	120	8:15 AM - 4:15 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 67

Silverwood Connector

Tier 2



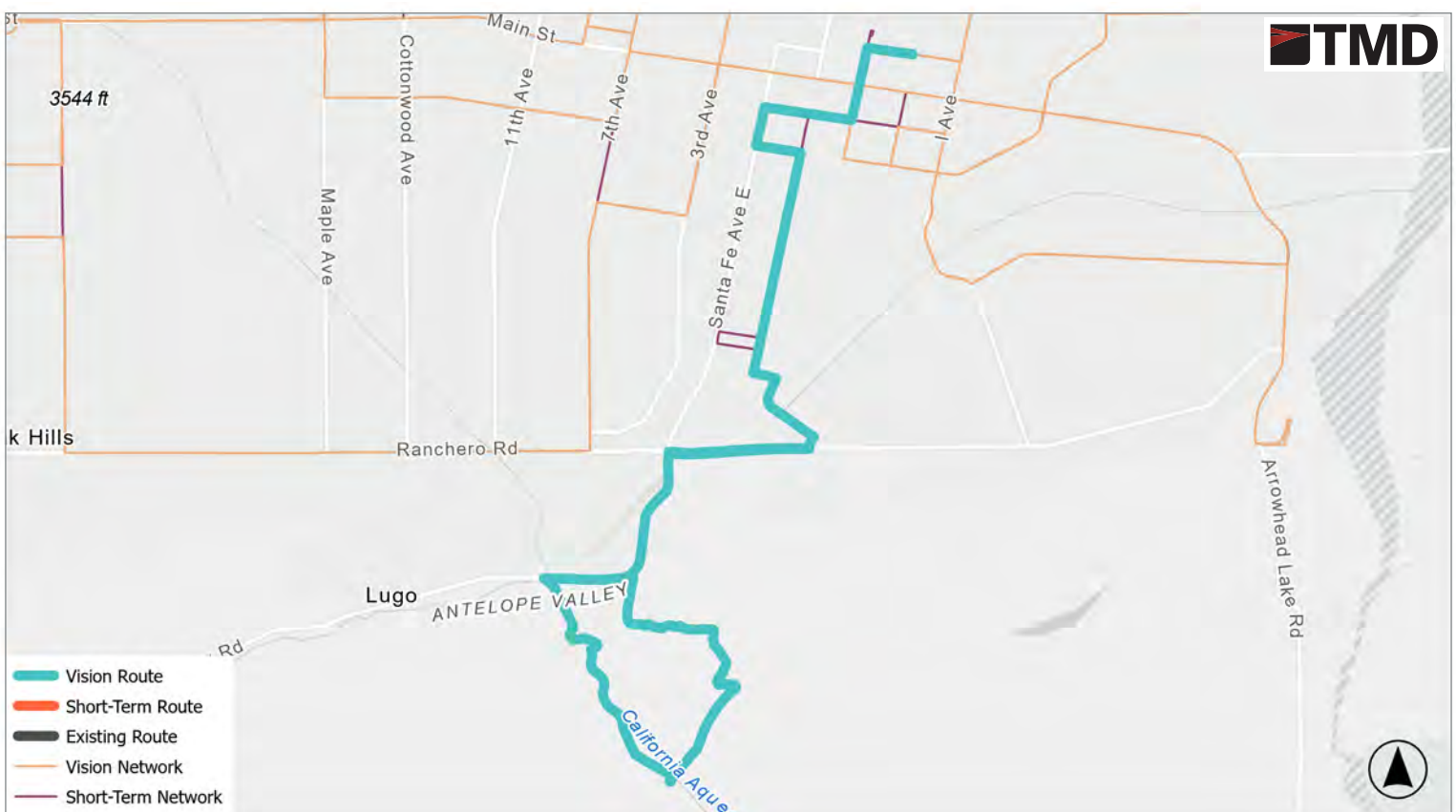
Proposed Changes: Short-Term

» No service in the short term

Proposed Changes: Vision

- » New route serving the Silverwood development
- » Replaces a portion of Route 66

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday					Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday					60	6:00 AM - 9:00 PM
Sunday					60	7:00 AM - 7:00 PM



Route 68

Main Street - Hesperia

Tier 2



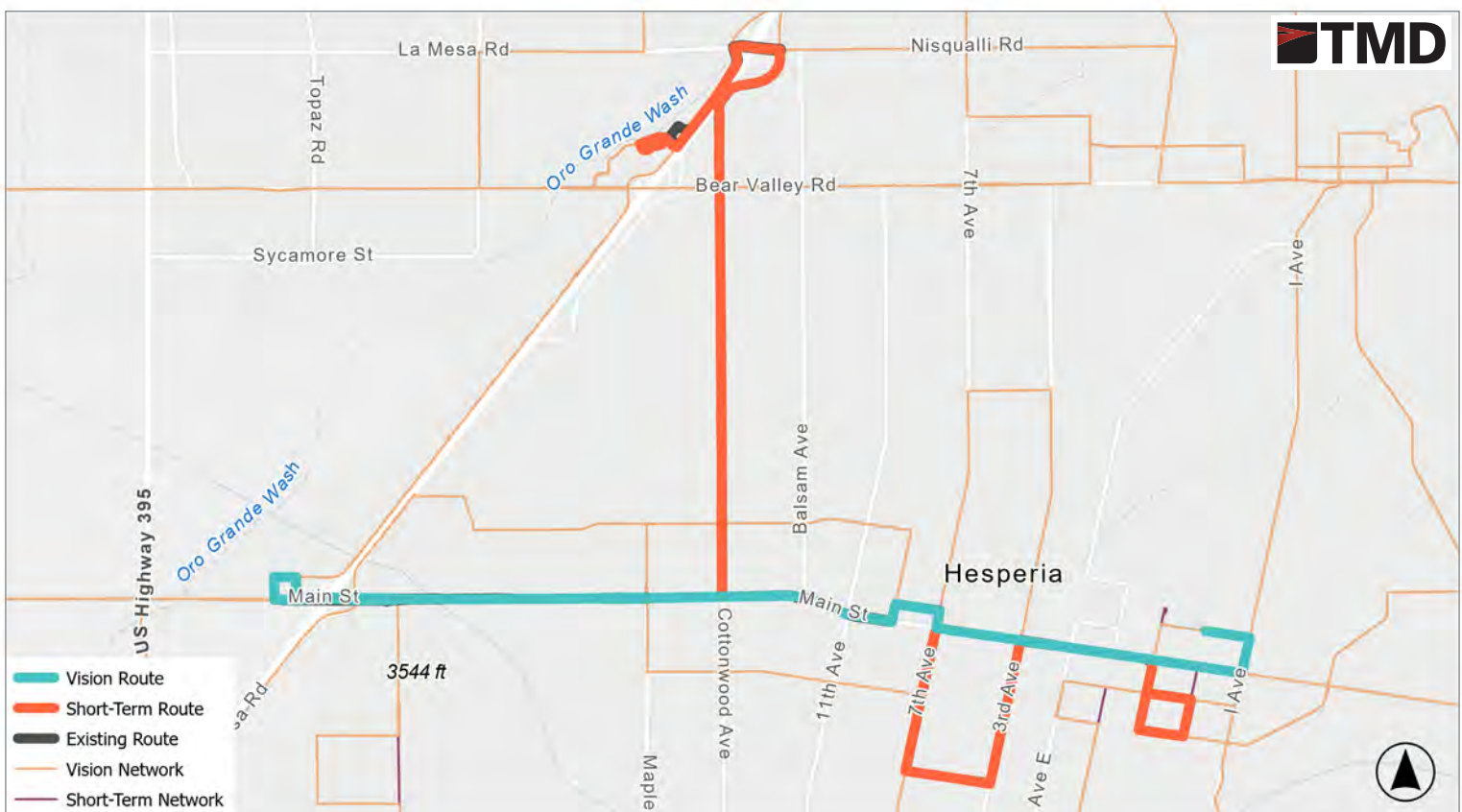
Proposed Changes: Short-Term

- » No changes

Proposed Changes: Vision

- » Modify to serve proposed Hesperia Transit Center
- » No longer serves Cottonwood Avenue and Mall of Victor Valley, which will be served by proposed Route 62
- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Span improvement to improve service for the customer

	CURRENT		PROPOSED			
	Service Days	Frequency (minutes)	Service Hours	Short-Term Frequency (minutes)	Short-Term Service Hours	Vision Frequency (minutes)
Weekday	60	6:15 AM - 8:30 PM	60	6:00 AM - 9:00 PM	Peak: 30, Off-Peak: 60	5:00 AM - 11:00 PM
Saturday	60	7:07 AM - 7:31 PM	60	7:00 AM - 8:00 PM	60	6:00 AM - 9:00 PM
Sunday	60	8:07 AM - 5:31 PM	60	8:00 AM - 6:00 PM	60	7:00 AM - 7:00 PM



Route 15

Barstow-Victorville-San Bernardino



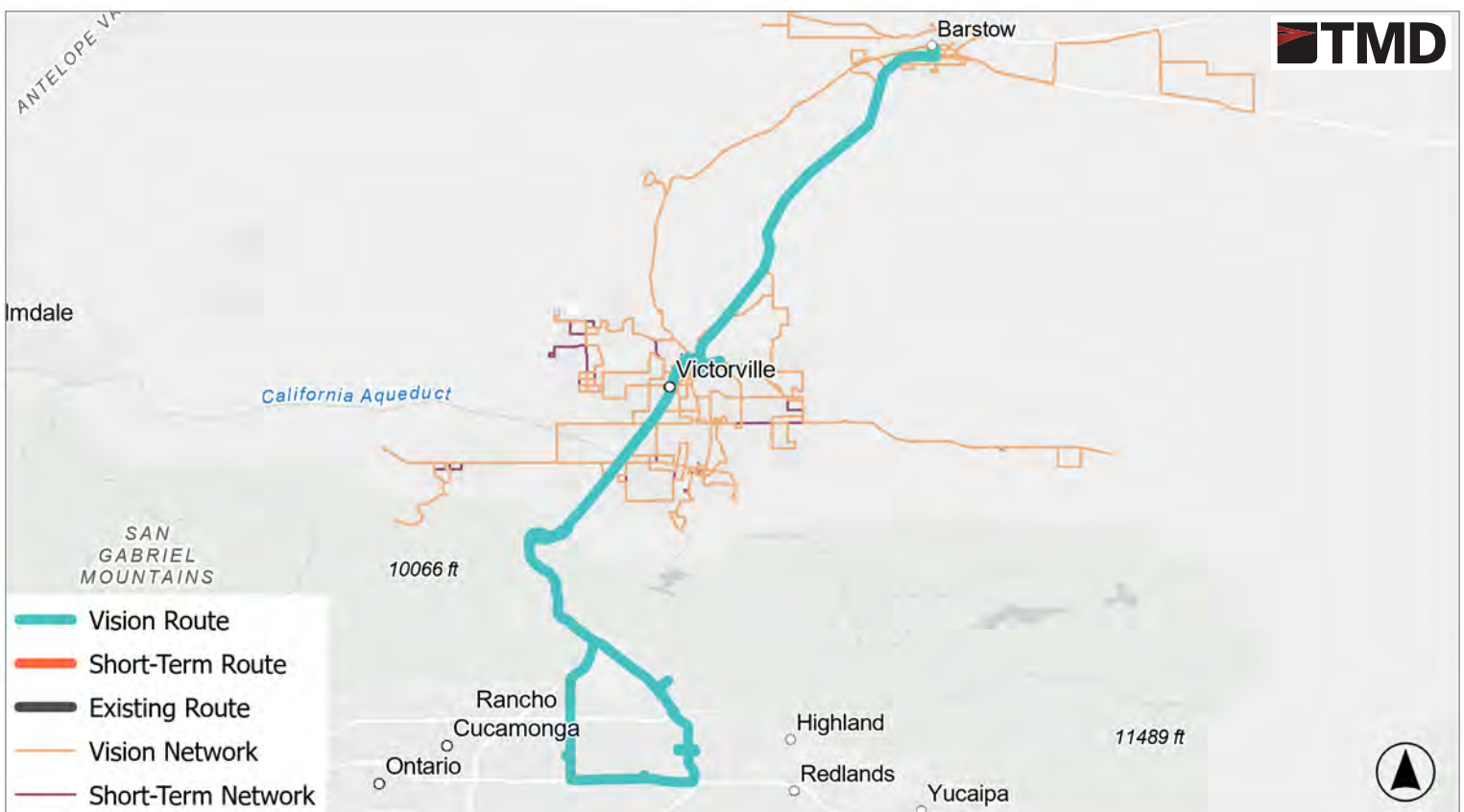
Proposed Changes: Short-Term

- » Additional trip serving CSUSB to better serve users traveling north from the campus

Proposed Changes: Vision

- » Frequency improvement to improve service for the customer and address potential crowding issues
- » Additional stops at Park and Ride, Brightline stations, and transfer points

	CURRENT		PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	120-244	6:25 AM - 6:30 PM	120-244	6:25 AM - 6:30 PM	120-244	6:25 AM - 6:30 PM
Saturday	135-235	7:30 AM - 5:55 PM	135-235	7:30 AM - 5:55 PM	135-235	7:30 AM - 5:55 PM
Sunday	300	8:00 AM - 3:30 PM	300	8:00 AM - 3:30 PM	300	8:00 AM - 3:30 PM



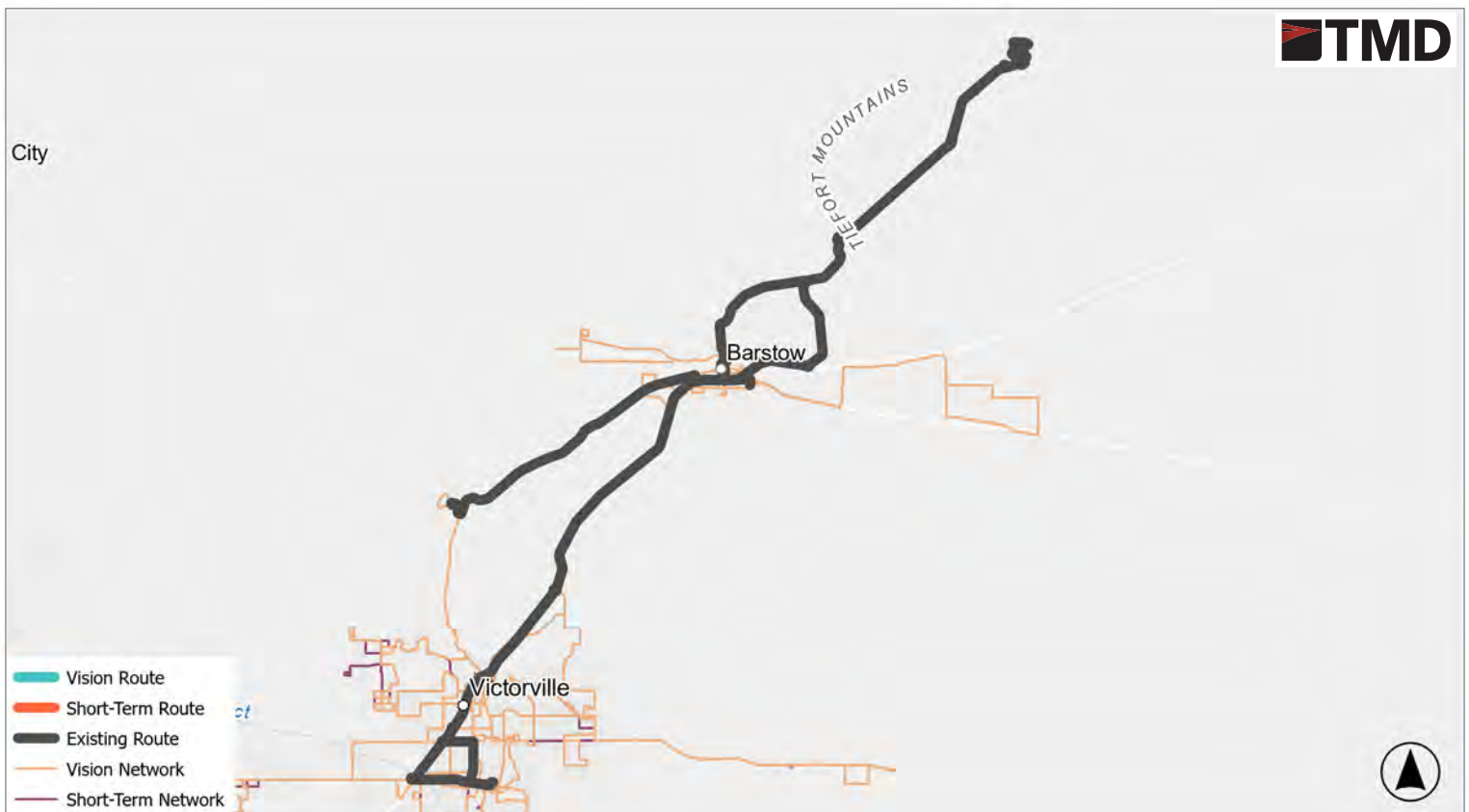
Proposed Changes: Short-Term

» No changes

Proposed Changes: Vision

» Work with NTC leadership to determine the future of transportation service

Service Days	CURRENT		PROPOSED			
	Frequency (minutes)	Service Hours	Short-Term		Vision	
			Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	AM: 60, PM: 30	4:15 AM - 6:10 PM	AM: 60, PM: 30	4:15 AM - 6:10 PM		
Saturday						
Sunday						



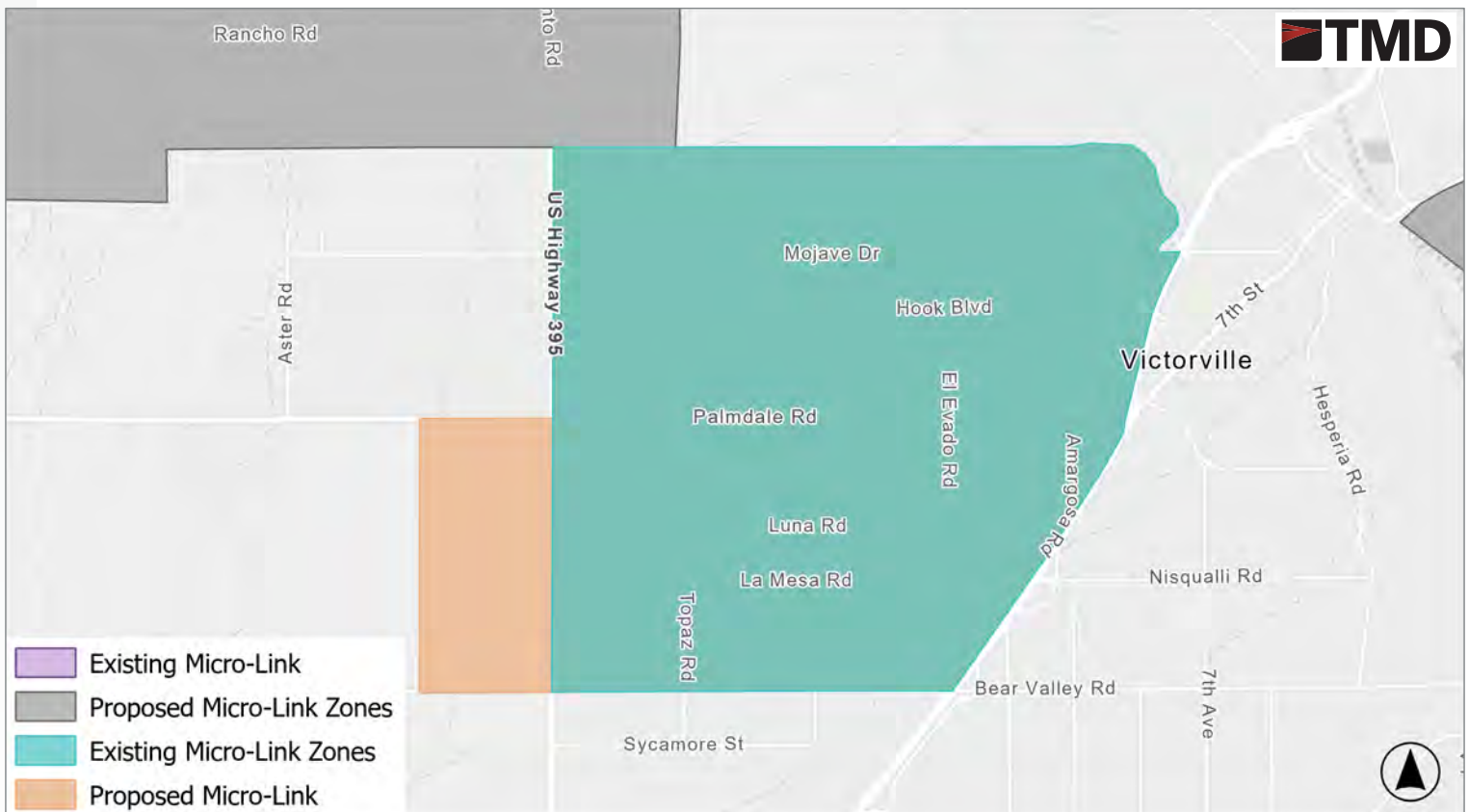
Proposed Changes: Short-Term

- » Span adjustment to match fixed-route span
- » New weekend service

Proposed Changes: Vision

- » Changes to boundaries to reflect new Route 38
- » Span adjustment to match fixed-route span

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	On-demand	6:00 AM - 8:00 PM	On-demand	6:00 AM - 9:00 PM	On-demand	5:00 AM - 11:00 PM
Saturday			On-demand	7:00 AM - 8:00 PM	On-demand	6:00 AM - 9:00 PM
Sunday			On-demand	8:00 AM - 6:00 PM	On-demand	7:00 AM - 7:00 PM



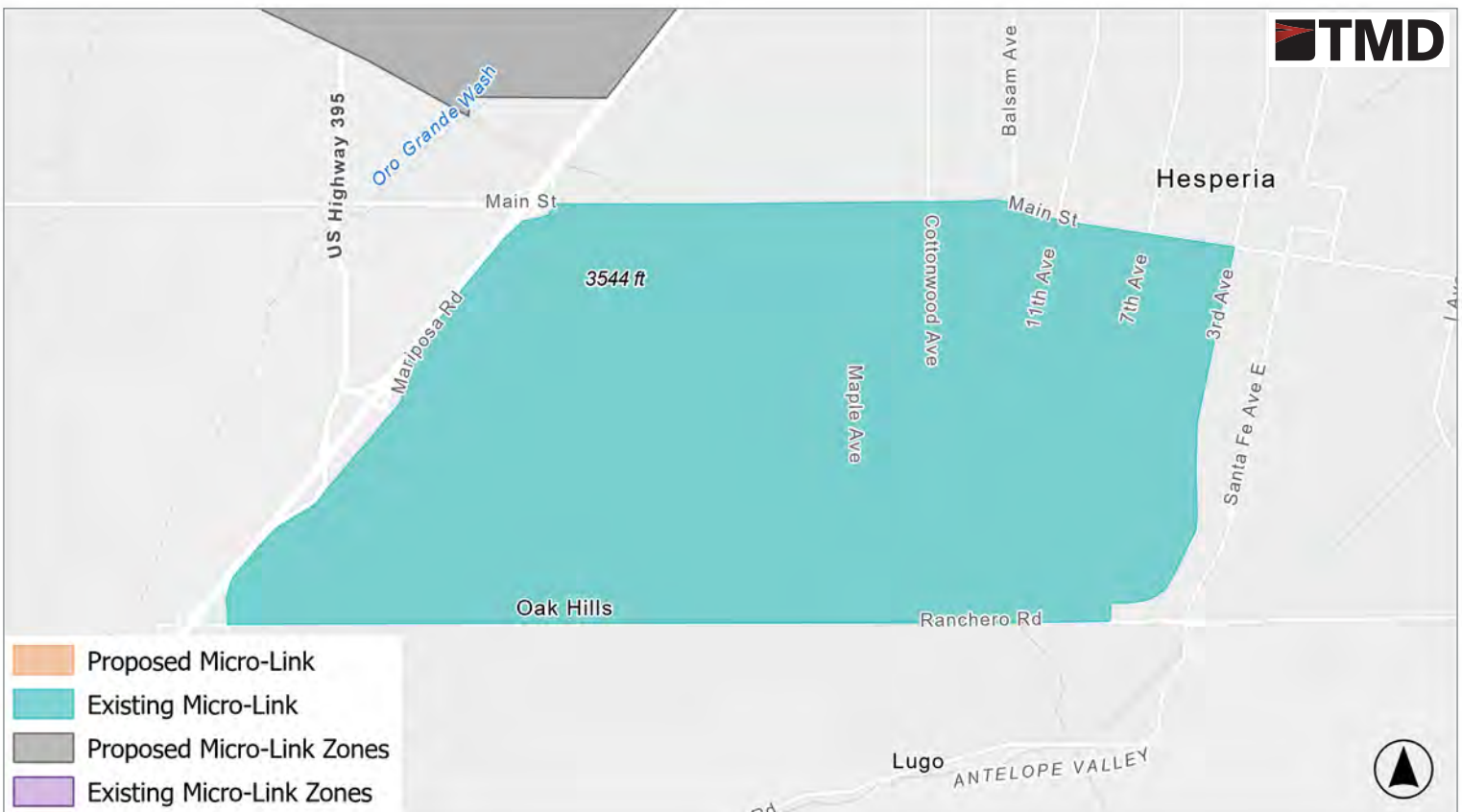
Proposed Changes: Short-Term

- » Span adjustment to match fixed-route span
- » New weekend service

Proposed Changes: Vision

- » Span adjustment to match fixed-route span

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday	On-demand	6:00 AM - 8:00 PM	On-demand	6:00 AM - 9:00 PM	On-demand	5:00 AM - 11:00 PM
Saturday			On-demand	7:00 AM - 8:00 PM	On-demand	6:00 AM - 9:00 PM
Sunday			On-demand	8:00 AM - 6:00 PM	On-demand	7:00 AM - 7:00 PM



- Proposed Micro-Link
- Existing Micro-Link
- Proposed Micro-Link Zones
- Existing Micro-Link Zones

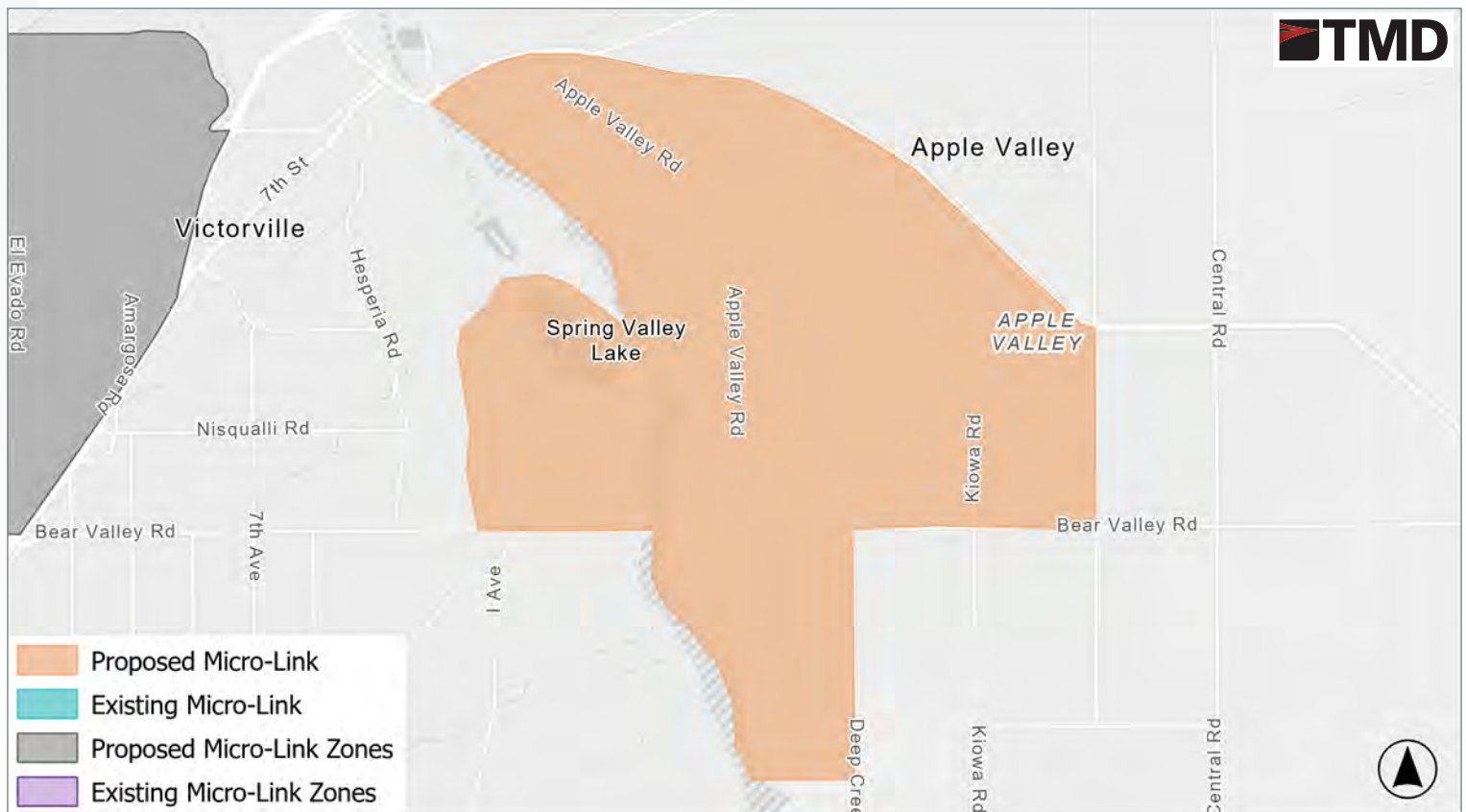
Proposed Changes: Short-Term

» New microtransit zone

Proposed Changes: Vision

» Span adjustment to match fixed-route span

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday			On-demand	6:00 AM - 9:00 PM	On-demand	5:00 AM - 11:00 PM
Saturday			On-demand	7:00 AM - 8:00 PM	On-demand	6:00 AM - 9:00 PM
Sunday			On-demand	8:00 AM - 6:00 PM	On-demand	7:00 AM - 7:00 PM



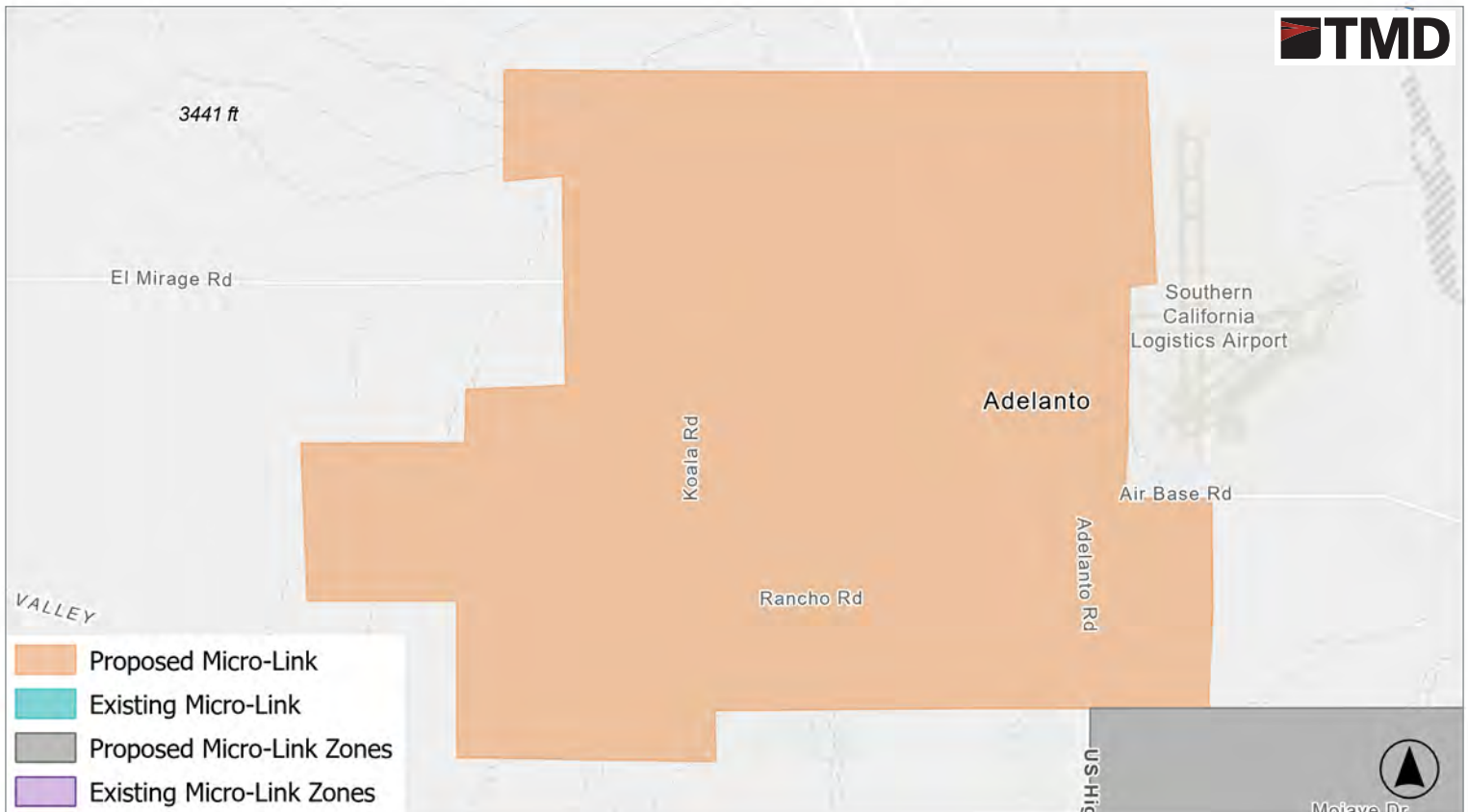
Proposed Changes: Short-Term

»

Proposed Changes: Vision

» New microtransit zone

CURRENT			PROPOSED			
			Short-Term		Vision	
Service Days	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours	Frequency (minutes)	Service Hours
Weekday					On-demand	5:00 AM - 11:00 PM
Saturday					On-demand	6:00 AM - 9:00 PM
Sunday					On-demand	7:00 AM - 7:00 PM



9.5 Direct Access

Changes to the fixed route network will cascade into changes to the service area boundaries for Direct Access. The key impacts to Direct Access will be the new routes and service areas that would be implemented as part of the Vision Network which will extend service further south in Hesperia and further north and south in Apple Valley and span increases associated with increases to fixed route spans. There will be short-term impacts to Direct Access in Barstow with the extension in service into Barstow Heights. Figure 100 and Figure 101 present the impacts to Direct Access by showing the minimum service area for Direct Access which is based on a buffer of ¾ mile around each route fixed route, excluding county services that are route deviation, NTC commuter services, and Route 15.

Figure 100: Changes to the Direct Access Minimum ¾ Mile Service Area (Victor Valley Area)

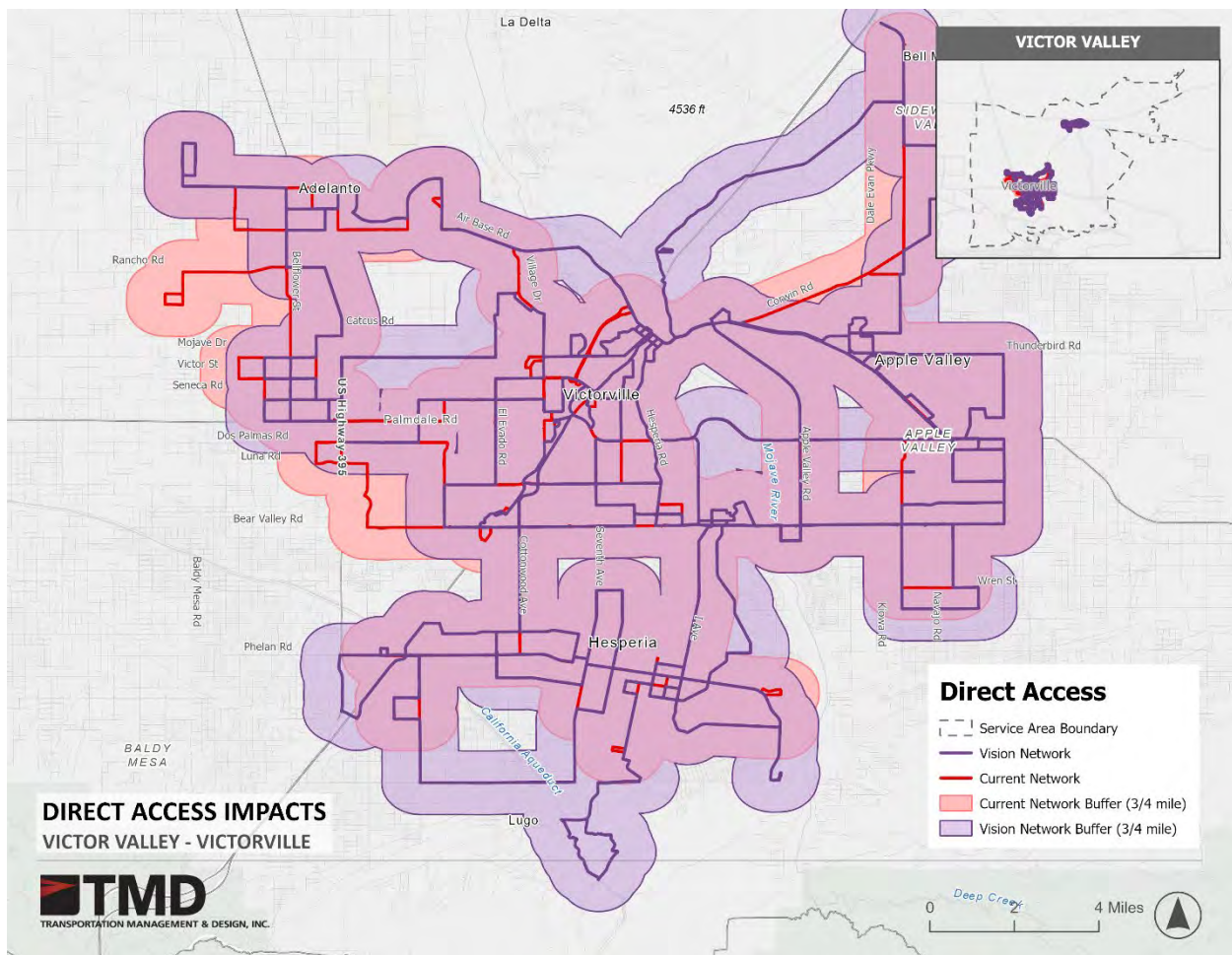
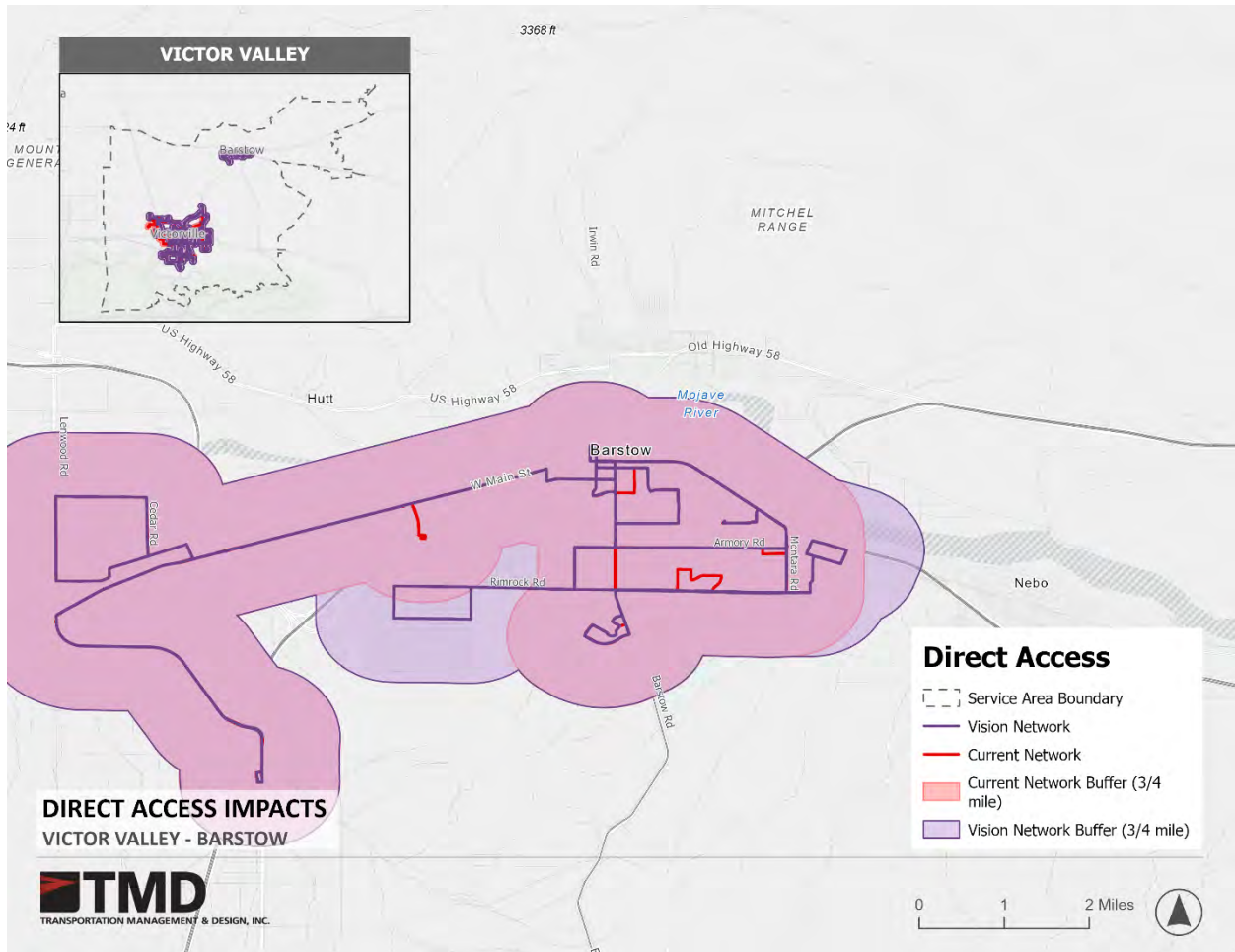


Figure 101: Changes to the Direct Access Minimum ¾ Mile Service Area (Barstow Area)



9.6 Consolidated Transportation Services Agency (CTSA)

The CTSA has been an effective program to connect people who are not able to drive or utilize VVTA fixed route bus services for transportation. To further support mobility in the Victor Valley Transit service area, current programs should be maintained and expanded. VVTA has recently restarted the transit ambassador program and the travel training program which has been marketed to area non-profits. There are a couple of programs that the CTSA could implement as part of the five-year plan and some additional programs that can be implemented longer term, which are described below.

9.6.1 VETERANS TRANSPORTATION

The Veterans community is one of the largest and most vulnerable communities in society. VVTA is currently working with the veteran's community to identify transportation needs and how to prioritize funding for veterans' transportation programs. Currently, veterans need connections to social services and healthcare services, which are provided at the VA Hospital in Loma Linda, which is not currently served by VVTA routes. A veterans transportation program could provide market specific services to connect veterans to the VA Hospital as well as the medical facilities at Fort Irwin, under a scenario that the NTC Commuter service is discontinued.

9.6.2 CAR SHARE PROGRAM

VVTA previously operated a car-share program in Needles. This program was a useful program to allow Needles residents to access services outside the Needles area, however, this program was discontinued due to the lack of availability of vehicles in the rural community. This program, along with future car-share programs in other rural communities would be useful to connect these communities with services and can be implemented if there is a vehicle provider available to service a car-share contract in rural areas.

9.6.3 LONGER TERM PROGRAMS

Some of the longer-term programs could support mobility in the High Desert and may be a part of capital expansion or require additional funding. Some programs identified include:

- Expanding the current UPass program to additional schools including trade schools and other local area institutions of learning such as Barstow College, San Joaquin Valley College, and Azusa Pacific University
- Transportation service programs geared to connecting unhoused people to jobs and services
- Working with the Wellness Center in Victorville to connect the unhoused community to jobs at Victor Valley Transit
- Incorporate a mobility training and assessment center into the expansion of the Hesperia Operations and Maintenance Facility to assess and train paratransit riders to use fixed route services

9.7 Vanpool

VVTA's vanpool program is one of the largest vanpool programs in the country. It benefits VVTA as the vanpool ridership and mileage are factors that impact the formula used for certain funding programs. While 73 percent of the current vanpools are to three military locations, there are opportunities to expand the vanpool program. Vanpools should be marketed to the following currently served locations and other employers:

- Fort Irwin
- Marine Corps Logistics Base
- Edwards Air Force Base
- BNSF
- Federal Corrections Complex in Victorville
- Other area correctional facilities
- VA Hospital in Loma Linda
- County employees
- SCLA businesses
- Warehouses in Fontana
- Brightline
- Needles community

Enterprise is considering adding a dynamic to the vanpool program where it sells seats on a vanpool instead of just leasing a vehicle to vanpool occupants. This model will be beneficial in the post-

COVID operating environment where people are not necessarily traveling to a work location five days a week. This may also help transition people who currently use the NTC Commuter service to a vanpool service if it is decided to eliminate the NTC commuter service.

9.8 Next Steps

These alternatives were presented to the public through an extensive outreach process which includes community events, meetings with VVTA bus operators, a virtual office hour, and drop-in sessions with riders. Materials presenting the service alternatives were made available on VVTA's website.

The service alternatives were refined based on public outreach and presented in Chapter 11. This plan includes a cost constrained implementation schedule, identification of capital and staffing needs, and a five-year financial plan.

10 Second Round of Public Outreach

The second round of public outreach effort focused on obtaining community members' feedback on the proposed service changes. The input gathered from the public and VVTA employees during the second round informed the COA recommendations. This chapter provides an overview of the second round of public outreach process and a summary of findings. A detailed memorandum of the entire outreach process and detailed discussions and findings from each event type are presented in the outreach report in Appendix E. Thirteen public outreach events were held between April 4, 2024, and May 10, 2024, including:

- **Two Driver/Staff Meetings:** Meetings were held to collect input from VVTA driver/staff meetings on the draft service alternatives. Materials for driver/staff meetings included 24x36" bilingual (English/Spanish) map boards depicting the proposed route maps, proposed route profiles, and a bilingual fact sheet.
- **Seven Pop-Up Sessions:** Pop-up sessions were held throughout Victor Valley at various high traffic transit centers and bus stops within the VVTA service area. The project team held informal, one-on-one conversations with transit riders in English and Spanish informing riders of the proposed changes. These pop-up sessions provided opportunities for VVTA to hear from people who may not be inclined to attend formal outreach events. Approximately 127 passengers provided input through these sessions. Materials for the pop-up sessions included 24x36" bilingual (English/Spanish) map boards, the proposed route profiles depicting the service area and routes and a bilingual fact sheet.
- **Three Community Events:** Project team members attended three high traffic community events, such as farmer's markets and night markets, throughout Victor Valley. Informal, one-on-one conversations with community members were held in English and Spanish. These community events provided opportunities for VVTA to hear from both riders and non-riders. Approximately 31 people provided input through these sessions
- **One Virtual Drop-In Session:** One virtual public drop-in session was held to share information, answer questions, and receive feedback from the public on the draft service alternatives. The virtual drop-in session was designed to reach community members who may not be able to attend the in-person events. However, there were no attendees during the virtual drop-in session.

All public outreach events were advertised with bilingual (English and Spanish) digital and print flyers via VVTA's social media accounts, website, and with printed flyers in VVTA buses. A one-page flyer about the COA process was also shared to promote outreach events.

In addition, the project team created a **webpage** and **online survey**. The purpose of the project webpage was to function as a centralized information hub as well as a public feedback collector for the project. The project webpage included: interactive maps hosted on the Remix platform where people could add comments and specific feedback about particular routes or stops, a bilingual fact sheet, flyers, and an online survey where people could share feedback on the proposed route and service updates.

Table 65 summarizes the overall schedule of public outreach activities. Throughout the outreach process approximately 218 participants provided input on the draft service alternatives.

Table 65: Public Outreach Schedule

Date	Activity	Participants (Estimate)
Friday, April 12, 2024	<i>Community Event</i> Victorville Night Market 15583 7th Street Victorville, CA 92395 [5:00 – 9:00 pm]	16
	<i>Community Event</i> Hesperia Community Famer’s Market 15833 Smoke Tree Street, Hesperia, CA 92345 [10:00 am – 3:00 pm]	N/A, cancelled due to weather
Monday, April 15, 2024	<i>Pop-up Session</i> Hesperia Post Office 17240 Olive Street, Hesperia, CA 92345 [9:30 – 11:00 am]	21
	<i>Pop-up Session</i> Main/Cataba Stop (Super Target) 12795 Main Street, Hesperia, CA 92345 [11:30 – 1:00 pm]	10
	<i>Pop-up Session</i> Victor Valley College 18422 Bear Valley Road, Victorville, CA 92395 [2:30 – 4:00 pm]	29
Tuesday April 16, 2024	<i>Pop-up Session</i> Victor Valley Transportation Center 16838 S D Street, Victorville, CA 92395 [11:30 – 1:30 pm]	30
	<i>Pop-up Session</i> Carl’s Jr. Bus Stop 14292 US-395, Adelanto, CA 92395 [2:30 – 4:00 pm]	17
	<i>Pop-up Session</i> Apple Valley Post Office 22099 CA-18, Apple Valley, CA 92307 [2:30 – 4:00 pm]	6
	<i>Virtual Drop-in Session</i> Zoom [6:00 – 7:00 pm]	0
Wednesday, April 17, 2024	<i>Driver/Staff Meeting</i> Barstow Maintenance Facility 2641 W Main Street, Barstow, CA 92311 [11:30 – 1:00 pm]	17
	<i>Pop-up Session</i> Barstow City Hall 220 Mountain View Street, Barstow, CA 92311 [2:30 – 4:00 pm]	14
Thursday, April 18, 2024	<i>Community Event</i> High Desert Farmer’s Market 18422 Bear Valley Road, Victorville, CA 92345 [5:00 – 6:00 pm]	15
	<i>Driver/Staff Meeting</i> Hesperia Maintenance Facility 17150 Smoke Tree Street, Hesperia, CA 92345 [11:30 – 1:00pm]	15
Thursday April 4, 2024, through Friday May 10, 2024	<i>Questionnaire</i> Hosted on VVTA’s website	19 ¹⁸
	<i>Interactive Maps</i> Hosted on VVTA’s website	9

¹⁸ Note: For the Questionnaire and Interactive Maps, the number of participants indicates number of responses received

10.1 Discussion Questions and Major Themes

10.1.1 DISCUSSION QUESTIONS

Project team members approached members of the public at each event and asked the questions below and recorded their responses:

- What do you think about these routes and/or service modifications?
- Are there additional changes we should consider?
- Are there service issues that need a closer look? (e.g., senior service, disabled service, transportation to evening or weekend work shifts)
 - Service times (early morning, late evening, weekend)
 - Connections
- Is there anything else you would like the project team to keep in mind as we move forward?

10.1.2 MAJOR DISCUSSION THEMES

Collected feedback fell into the following categories:

- General Feedback
- Span and Frequency
- Transfers and Connections
- Connections and Additional Service
- Accessibility
- Micro-Link Service
- Drivers and Operators
- Route-Specific Feedback

10.1.2.1 General Feedback

The public, riders, operators, and staff expressed overall support for the proposed updates and were curious to learn more. The community agreed that more frequent service and extended service into the evening would be beneficial for passengers. Those interviewed also noted:

Support for the Williams Street Transit Center concept.

- Support for single fare policy where the fare is the same on county routes and fixed routes.
- Support for Route 28 serving Riverside Drive instead of operating it as a deviation of Route 1.
- Appreciation that the plan is a growth plan and will expand VVTA's service.
- An idea for a bus service between Barstow and LA Union Station.
- A suggestion to resume bus service to Needles.
- One operator expressed frustration that there is only one bathroom at the Victor Valley Transit Center
- There is a need for more bus shelters.
- The audibility of on-bus announcements needs to be improved.
- One passenger expressed that they would like "better local buses here in the Valley – at least as good as LA's."

10.1.2.2 Service Span and Frequency

Many of the passengers interviewed indicated that they were enthusiastic and supportive of the recommended changes related to service span and frequency. The addition of late-night service and buses running more frequently (every 30 minutes) were mentioned as positives. However, some

passengers commented that they were hoping for additional early morning service and weekend service. Passengers mentioned that earlier and later service was still needed to get to work, school, or social events. Service accommodating late and early working hours as well as on-time performance was identified as particularly critical—one passenger noted that extended service hours are a “must-have” to keep a job. There was also discussion about the possibility of express routes between Victorville and Hesperia and travel between Los Angeles and Orange counties. Passengers supported the additional services closer to Spring Valley Lake and Mojave Drive. One passenger expressed the need for a stop on Southbound Rodeo Drive at Pebble Beach. There was also support for the county route schedule changing to a frequency of every two hours from 180 minutes.

10.1.2.3 Transfers and Connections

Passengers discussed the importance of ensuring that transfers and connections should be made on time, citing the continued difficulty of connections. Although passengers did indicate that the 30-minute service update would be helpful to reduce the number of missed connections, in some cases caused by prior buses running late or departing early. Passengers still felt that there could be improved connections in Barstow and between Hesperia and South Adelanto.

10.1.2.4 Connections and Additional Service

Community members provided feedback that they were looking for connections to areas outside of VVTA’s current service area including Big Bear, Yucca Valley, and Palmdale. One community member requested that the Needles service be restored. Another community member raised that they wanted to be certain that VVTA would serve Brightline.

10.1.2.5 Accessibility

One community member mentioned the possibility of travel/ride training for developmentally disabled riders. Other accessibility comments include the need for more sidewalks throughout the service area.

10.1.2.6 Micro-Link Service

Drivers and operators expressed some concerns related to the North Adelanto Micro-Link and were hesitant to provide Micro-Link service north of Air Base Road in part due to feeling unsafe in the area. They also noted that Micro-Link service is extremely popular with high school students.

Overall, passengers supported the proposal to replace Route 54 with Micro-Link service, although expressed concerns about the impact that this change may have on fares, especially for Victor Valley College students. One passenger recommended expanding Mico-Link service to include Vasquez and Orlick.

Additional Micro-Link service areas identified by passengers include:

- In Hesperia north of Main Street
- Additional locations in Apple Valley
- For non-emergency trips to hospitals

10.1.2.7 Drivers and Operators

Many passengers said that drivers are nice and helpful. One passenger indicated that they would like to see more drivers hired as soon as possible and another had concerns about buses passing passengers on late night trips.

10.1.2.8 Route Specific Feedback

- Route 1: Likes the proposed changes to this route.
- Route 6: Likes the plan and proposed changes to this route; likes the frequency.
- Route 15: Having Route 15 make more stops for additional connections is a good idea.
- Route 28: Likes the split of Hinkley route with the “new” 28, likes proposal for the split of the 28.
- Route 53: Traffic is very bad on Bear Valley Road, which limits the performance of Route 53.
- Route 56: This route has crowding issues, the changes to Route 31 should help with that.

11 Action and Capital Plan

This chapter presents the COA action and capital plan. This plan was developed based on the service recommendations and informed by the public outreach process. The plan is constrained based on the available funding presented in the financial plan. A five-year program of service improvements along with capital needs to support new and improved services is provided. An analysis of the impacts of the service plan is presented to ensure service changes are consistent with VVTA’s Title VI program.

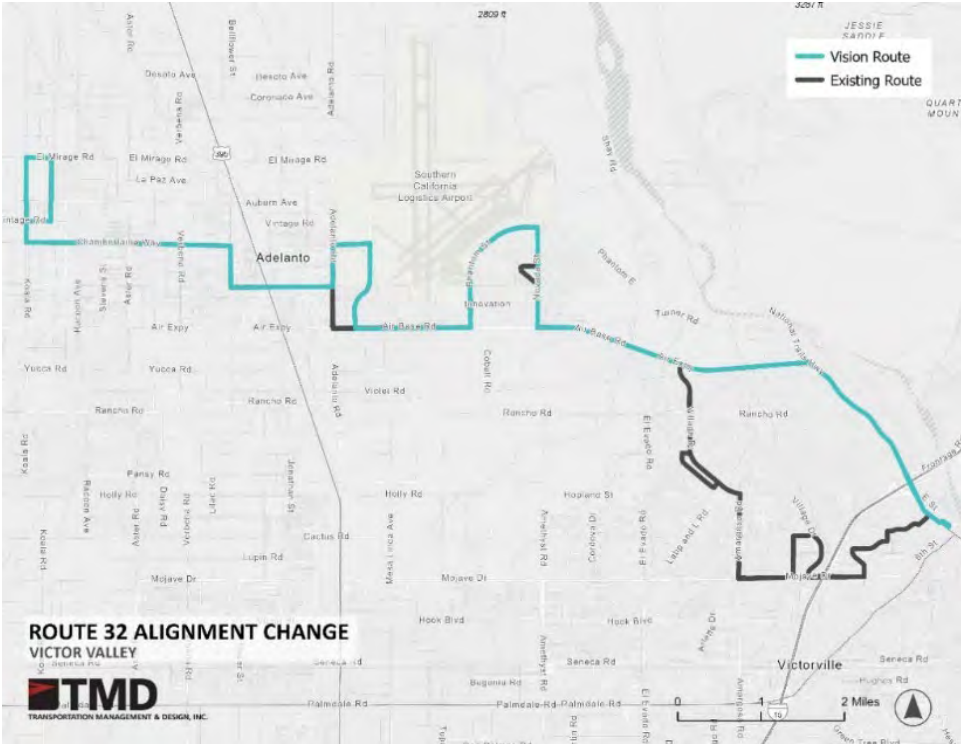
11.1 Service Plan

The service plans for VVTA are based on the route concepts developed in Chapter 9 and support rebuilding VVTA’s ridership and supporting growth in the region. They account for changes in commuting patterns post-COVID and are responsive to comments from the public regarding what riders need from the system. The descriptions below present the changes to the service plans for fixed route services from what was presented in Chapter 9.

11.1.1 FIXED ROUTE AND COUNTY SERVICES

The service plan that was developed in Chapter 9 of the study was presented to the public in April 2024. The response to the new routes and services was positive with riders enthusiastic about span enhancements and more frequent services. Based on the response from the public very few changes to the service plan have been made, the most notable change is Route 32 will operate along Air Expressway, instead of Innovation Way, between Phantom West and Gateway Drive as this street has not yet been constructed. This is shown on Figure 102.

Figure 102: Updated Route 32 Alignment



The implementation program implements the new routes based on available funding and prioritizes serving major new developments, improving current services for passengers, and financial constraints. The implementation program does have certain route changes that have to be implemented together in order to preserve service coverage for riders including:

- Changes to Routes 1, 2, 3, and 6
- Discontinuation of Route 25 requires fare changes to Micro-Link and changes to Route 66
- Implementation of Route 27 allows changes to Route 28
- Implementation of Route 38 allows for changes to Routes 31 and 32
- Implementation of Adelanto North Micro-Link allows with changes to Route 33
- Discontinuation of Route 50X requires changes to routes 50, 55, and 56, along with the implementation of Route 49
- Discontinuation of Route 54 requires fare changes to Micro-Link and changes to Route 31
- Implementation of Route 62 allows for changes to Route 68
- Implementation of Route 65 allows for changes to Route 64
- Implementation of Route 67 allows for the second round of changes to Route 66

11.1.2 DIRECT ACCESS

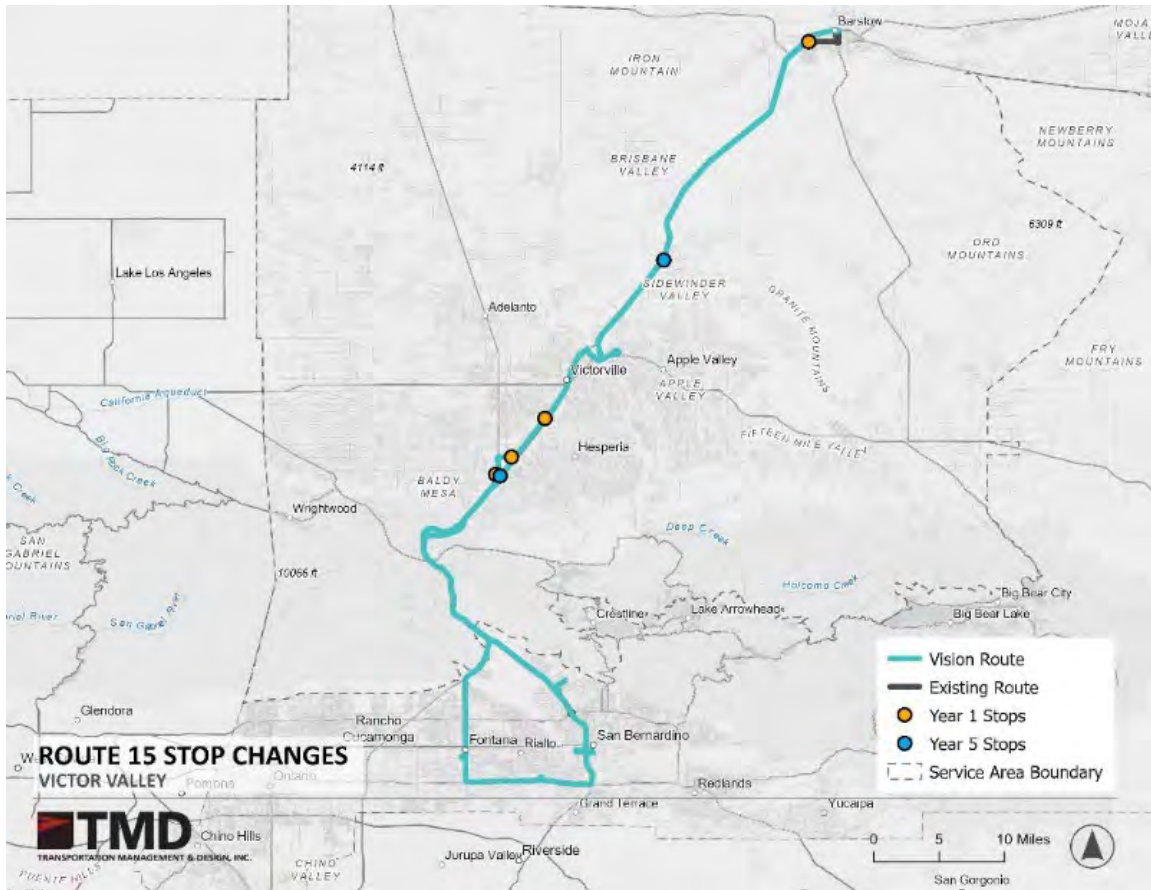
Any changes to fixed route services will affect Direct Access services. As fixed route coverage expands throughout the service area, the Direct Access Zone 1 coverage area will increase. Also, changes in fixed route span will result in changes to Direct Access span. Per Americans with Disabilities Act (ADA) rules, VVTA is obligated to have Direct Access service available during the same hours that fixed route service operates.

11.1.3 ROUTE 15

Route 15 service between Barstow and San Bernardino has been an extremely popular service since it was implemented. Specific needs for the service that have been identified through public outreach include more access to the service, additional trips for courthouse services, additional connections to CSUSB, and more opportunities to travel to the San Bernardino Valley. Below are the recommendations for Route 15 which are presented on Figure 103:

- Add an additional weekday trip between Barstow and Victorville to connect to Family Court
- Convert an existing weekday northbound afternoon trip to serve CSUSB
- Add additional weekday trips between Victorville and San Bernardino
- Add additional stops per recommendation:
 - Short-term: L Street Park and Ride, Bear Valley Park and Ride, Super Target in Hesperia
 - Long-term: Apple Valley Brightline, Hesperia Park and Ride/Brightline
- Operate the Saturday schedule on Sunday

Figure 103: Route 15 Changes



11.1.4 NTC COMMUTER

The NTC Commuter program was originally envisioned as being an unsubsidized service. Fares were based on the Mass Transportation Benefit Program (MTDBP) for Department of Defense Employees (DOD). Even with the MTBP available for DOD employees, ridership has not been at a level where the service is self-sustainable and potential riders have been using other modes such as the vanpool program. The COA recommends that NTC leadership and VVTA need to develop a specific plan about the future of transportation to the NTC. Options to consider include:

- Should the NTC service continue as commuter bus service in its current form or should riders transition to another service such as vanpool.
- If commuter bus service is to continue, methods to encourage increased usage so the service is sustainable.
- If vanpool service is deemed the best option for serving Fort Irwin, then vanpool service needs to be available for part-time workers at the NTC.
- How should the service be funded to ensure it remains financially viable in the long-term.

Any decision regarding the NTC will have a major impact on riders and access to the NTC facilities. It is therefore recommended that any changes to the NTC would happen in the second year of the plan (Fiscal Year 2025/2026) with a year-long process of working with NTC leadership to develop a new service plan and working with commuter bus riders to transition to a new service.

11.1.5 VANPOOL

The vanpool program provides long distance travel for commuting to work. VVTA benefits from the Vanpool program as the vehicle's miles associated with the program are a part of the formula for certain funding sources. Users of the vanpool program receive a subsidy from VVTA for the cost of a vanpool and a flexible commuting option. The travel patterns for the post-COVID period make vanpools more difficult to form and maintain due to more flexible work schedules that include hybrid home/office work. It is recommended that VVTA vanpool program adopt a model that sells seats on vanpools for each day of the week versus having all participants of the vanpool required to travel five days per week. This model will also allow part-time workers access to vanpools.

The largest market for VVTA vanpools is NTC and the vanpool program competes directly with the NTC Commuter program. The vanpool program will be impacted by any changes to the current NTC Commuter program. As a number of the workers who currently use the NTC Commuter buses are part-time non-DOD employees, the new model of selling seats on the vanpool will maintain commute access to NTC jobs for non-DOD employees.

Besides the current vanpools, there are opportunities to increase the number of users that benefit from the vanpool program. Increased marketing of vanpools to Victor Valley area employers who are employing people from outside the region presents one possible market. Employers include the corrections facilities in the region, the BNSF Railroad, and employers at SCLA. Similar opportunities exist for employers outside of Victor Valley that have a lot of workers coming from Victor Valley that are not located near Route 15 services such as the warehouses in Rancho Cucamonga and Ontario International Airport area.

11.1.6 CONSOLIDATED TRANSPORTATION SERVICES AGENCY (CTSA)

VVTA's CTSA program has been a crucial tool in supporting mobility for those who are unable to use VVTA's fixed route transit network. To support mobility, two programs are proposed to be re-started which include the Transit Ambassador Program and the Travel Training programs which will support part of the CTSA mission of helping people to learn to use VVTA's services. A new program that will be implemented is a Veteran's transportation program to support the needs of Veterans who may not be able to access VVTA fixed routes, may not qualify for Direct Access, and cannot easily access key destinations for Veterans such as the VA Medical Center in Loma Linda. A longer-term program, which can be considered as part of the expansion of the Hesperia Yard, is the development of a mobility center. The mobility center can be used to train people to use fixed route bus services and evaluate passengers for Direct Access services.

11.2 Implementation Plan

A phased implementation program allows for VVTA to add service incrementally based on available funding and capital resources such as buses. The implementation plan does implement the entirety of the short-term network and substantially builds towards the vision network, however, not all routes and service headway improvements are included in this implementation program.

Service statistics, including revenue hours, revenue miles, and vehicles operated in maximum service (VOMS) are calculated based on a bottom-up model. Individual route cycle time and mileage are calculated based on the route alignment and multiplied by the number of roundtrips per day

which is based on the route’s headway and service span. Route statistics are annualized by using the number of service days by day type for Fiscal Year 2025 which is 253 weekdays, 51 Saturdays, and 53 Sundays. The number of VOMS for each route is based on dividing the cycle time of the route by the route’s headway during the midday on weekdays.

Ridership projections are aggressive as VVTA has been seeing higher than normal ridership growth due to the ridership loss stemming from the COVID-19 pandemic. A projected ridership increase of 20 percent for year 1 is assumed which is half of the Fiscal Year 2024 ridership increase which stems from the new and improved services as well as continued ridership recovery. In the second year a 5 percent background growth is assumed based on recovery with an additional 1/3 of the percentage of growth in revenue hours applied to ridership. In subsequent years, the growth in ridership is limited to a 2 percent background and 1/3 of the revenue hour percent growth.

The financial analysis provides the basis for revenues and costs associated with the COA and presented in the financial plan. Non-fare revenues are provided by SBCTA and presented in the financial analysis. Fare revenues are based on ridership and on the current average fare per passenger for each service type for Fiscal Year 2024, as calculated based on the fare revenue collected divided by unlinked boardings for each mode. Operating costs are based on the projection of cost factors for each mode and applying the projected revenue hours.

The year-by-year changes to the VVTA service network are presented below.

11.2.1 YEAR 1/FY2025

The first-year service changes implement the short-term network in its entirety. This includes changes to the alignments of most routes in Victor Valley and Barstow. Spans in Barstow will be improved so they match the span of service in Victor Valley. The impacts of the year 1 service changes are presented on Table 66.

Table 66: Year 1/FY 2025 Service Change Impacts

	Fixed Route	Route 15	NTC Commuter	Micro-Link	Direct Access
Revenue Hours	204,538	8,837	5,809	16,110	55,271
Vehicles Operated in Maximum Service	46	3	5	6	36
Revenue Miles	3,570,728	270,187	270,325	241,650	829,065
Ridership	1,258,690	60,856	42,871	15,000	139,982
Operating Cost	\$32,348,886	\$1,502,885	\$1,034,094	\$2,335,788	\$7,873,448
Fare Revenue	\$1,200,734	\$230,096	\$484,476	\$14,309	\$510,219
Net Cost	\$31,148,151	\$1,272,790	\$549,619	\$2,321,478	\$7,363,230

The year 1 changes are presented on Figure 104 and Figure 105 and summarized below:

- Routes discontinued and replaced with Micro-Link service: 25 and 54
- Route 50X will be discontinued and replaced with a streamlined Route 55
- Routes with weekday headway improvement from 60 to 30 minutes: 32 and 55
- Routes with headway improvement form every 180 minutes to 120 minutes on all days: 28 and 29
- New routes: 27 between Barstow and Helendale and 49 between Apple Valley and the Mall of Victor Valley unitizing the Yucca Loma corridor

- New Micro-Link service: Apple Valley
- One additional current weekday Route 15 northbound trip will serve CSUSB
- NTC Commuter service will continue to operate in Year 1, VVTA will need to work with the leadership at NTC to plan and transition to any future NTC service
- Direct Access service coverage and span will need to be adjusted based on changes to VVTA routes.

Figure 104: Year 1/FY2025 Service (Victor Valley)

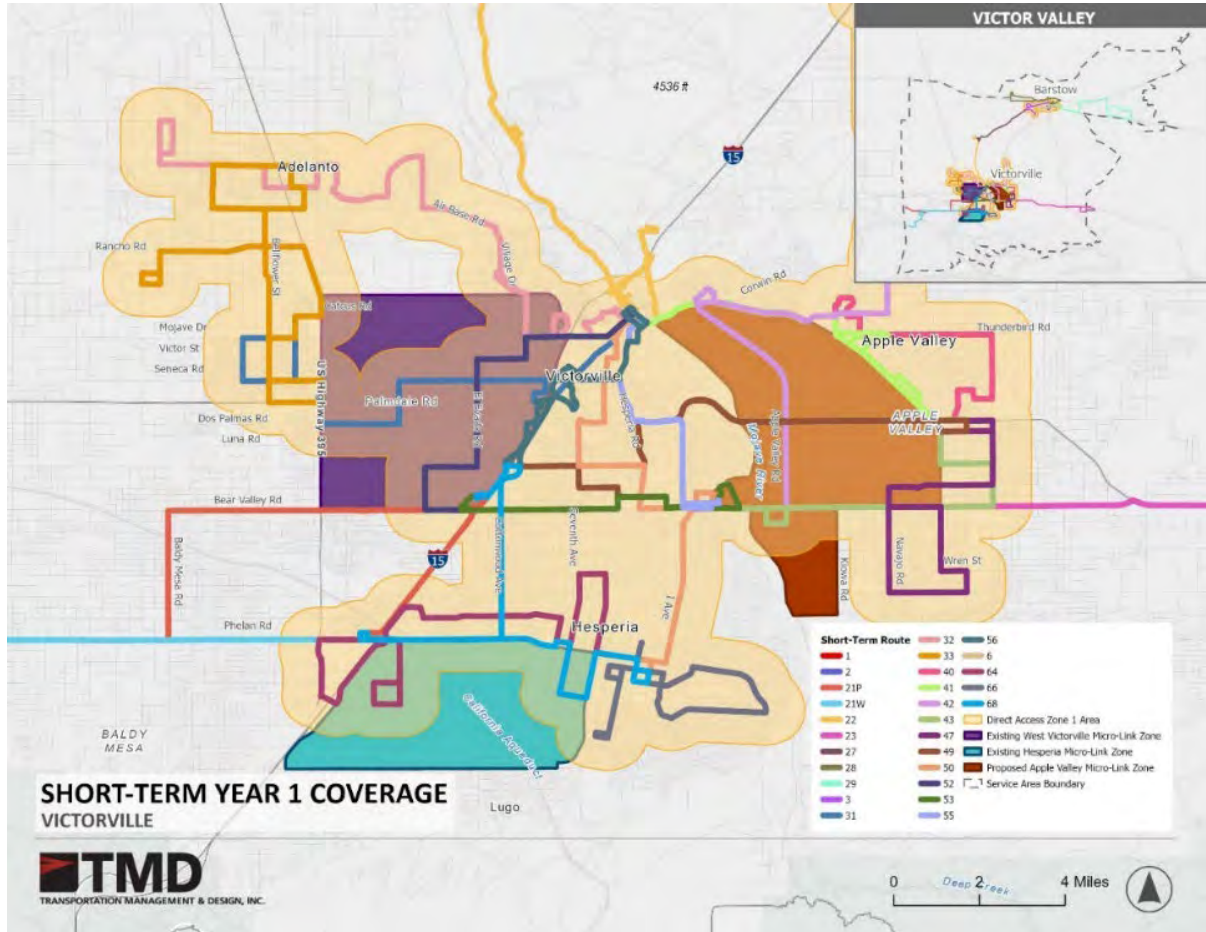
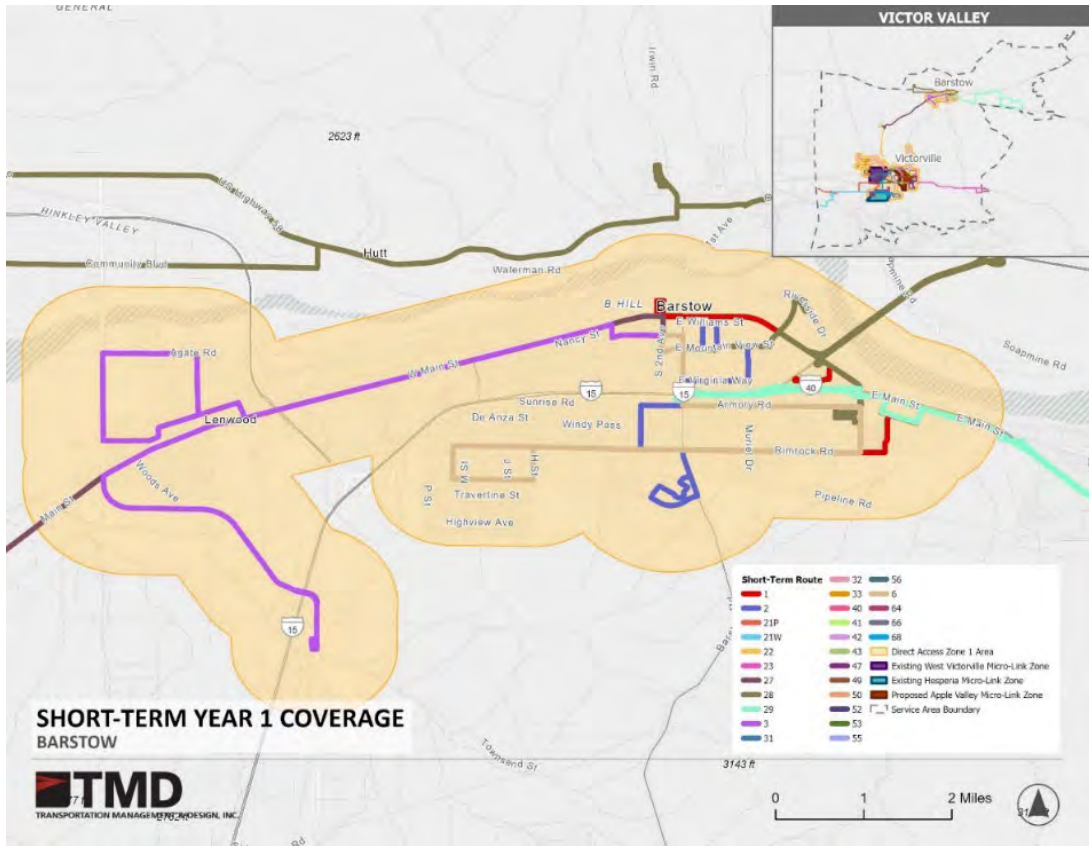


Figure 105: Year 1/FY2025 Service (Barstow)



11.2.2 YEAR 2/FY2026

The service changes in year 2 will primarily be span and additional service on Route 15. The impacts of the year 2 service changes are presented in Table 67. A description of changes is presented below:

- Fixed Routes 1 through 6 and Routes 31 through 68 will operate one hour later into the evening
- Span for Direct Access service will be improved to match fixed route service
- One additional roundtrip on Route 15 between Barstow and Victorville will be implemented to better serve passengers who need access to Family Court in Barstow
- Changes to NTC Commuter service would occur this year based on discussion with NTC leadership

Table 67: Year 2/FY 2026 Service Change Impacts

	Fixed Route	Route 15	NTC Commuter	Micro-Link	Direct Access
Revenue Hours	212,445	9,500	-	16,110	56,700
Vehicles Operated in Maximum Service	46	3	-	6	36
Revenue Miles	3,694,556	288,074	-	241,650	850,500
Ridership	1,337,843	63,595	-	15,300	146,981
Operating Cost	\$34,783,716	\$1,657,230	\$0	\$2,405,185	\$8,321,012
Fare Revenue	\$1,276,244	\$240,452	\$0	\$14,596	\$535,730
Net Cost	\$33,507,472	\$1,416,778	\$0	\$2,390,590	\$7,785,283

11.2.3 YEAR 3/FY2027

Year 3 route changes are presented on Figure 106 and the impact of the year 3 service changes are presented on Table 68. These changes are described below:

- New Route 67 service will begin to the Silverwood development area in Hesperia allowing for modifications to Route 66
- A new Micro-Link zone will be implemented in Adelanto allowing for changes to streamline Route 33
- Direct Access service coverage will increase based on the implementation of Route 67
- Route 15 Sunday schedule will be improved by operating the same timetable that is operated on Saturday.

Figure 106: Year 3/FY2027 Service (Victor Valley)

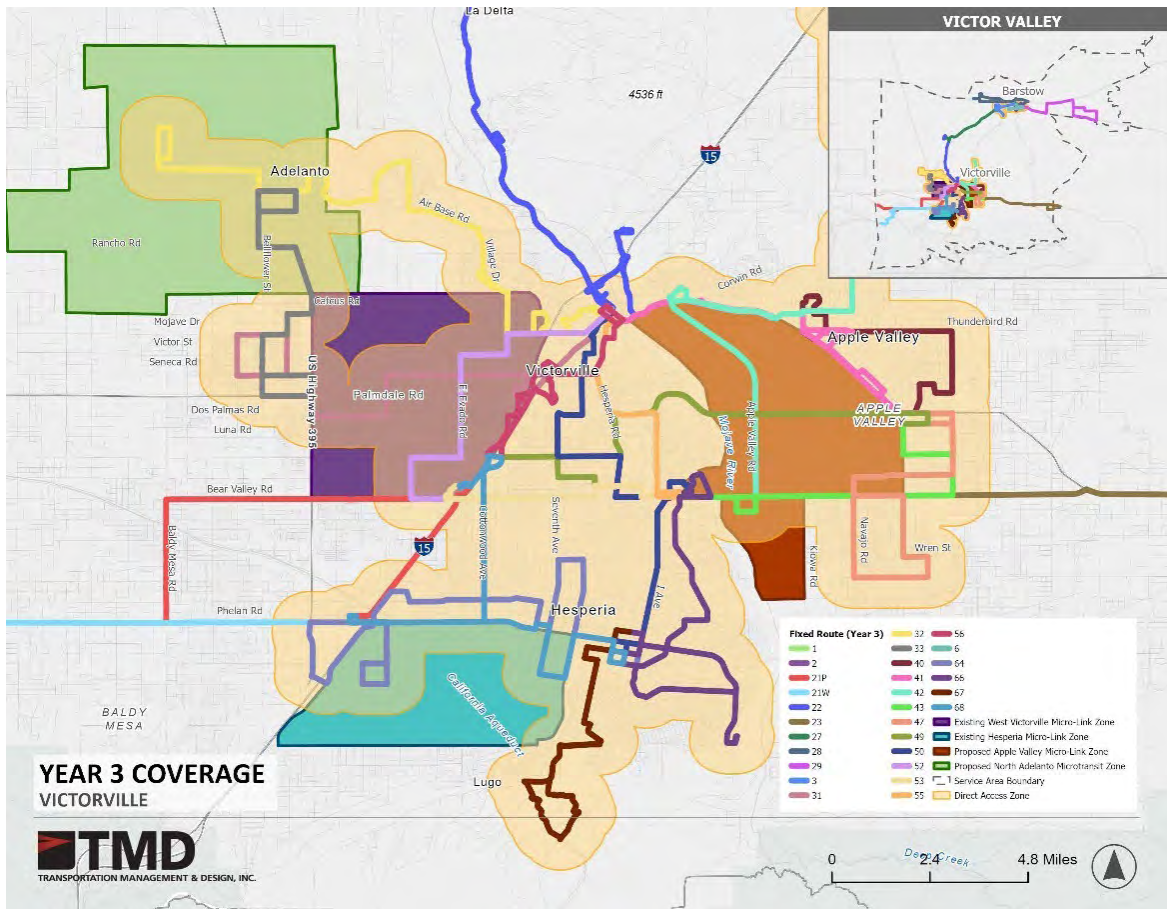


Table 68: Year 3/FY 2027 Service Change Impacts

	Fixed Route	Route 15	NTC Commuter	Micro-Link	Direct Access
Revenue Hours	217,686	10,100	-	21,480	57,800
Vehicles Operated in Maximum Service	47	3	-	8	16
Revenue Miles	3,739,000	306,062	-	322,200	867,000
Ridership	1,375,602	66,206	-	18,000	154,330
Operating Cost	\$37,648,756	\$1,858,342	\$0	\$3,370,579	\$9,024,589
Fare Revenue	\$1,312,264	\$250,323	\$0	\$17,171	\$562,516
Net Cost	\$36,336,492	\$1,608,019	\$0	\$3,353,407	\$8,462,073

11.2.4 YEAR 4/FY2028

In year 4 two new routes will be implemented allowing for changes to other routes. Figure 107 presents the route changes and Table 69 presents the impacts of year 4 service changes which are described below:

- New Route 38 will operate along the Mojave Drive corridor between Victorville and Adelanto, serving a loop in South Adelanto allowing for changes to the Route 31 loop in South Adelanto and for Route 32 to be streamlined between SCLA and the VVTC
- New Route 62 will operate between the Hesperia Hub and the Mall of Victor Valley which will allow Route 68 to operate solely along the Main Street corridor between the Hesperia Hub and Super Target.

Figure 107: Year 4/FY2028 Service (Victor Valley)

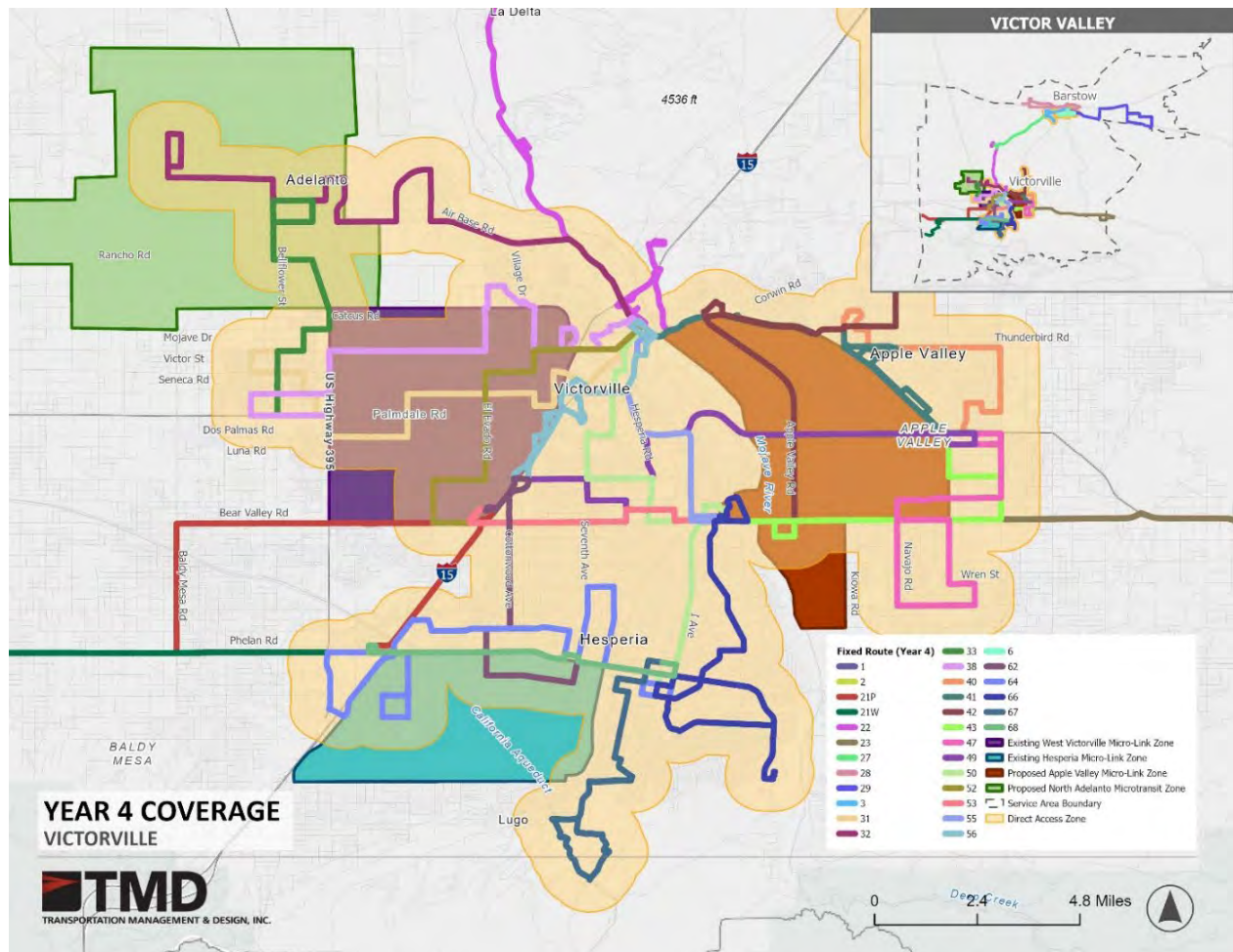


Table 69: Year 4/FY 2028 Service Change Impacts

	Fixed Route	Route 15	NTC Commuter	Micro-Link	Direct Access
Revenue Hours	234,638	10,100	-	21,480	58,900
Vehicles Operated in Maximum Service	50	3	-	8	36
Revenue Miles	3,868,618	306,062	-	322,200	883,500
Ridership	1,438,822	67,530	-	18,360	162,046
Operating Cost	\$41,895,723	\$1,929,824	\$0	\$3,523,360	\$9,618,345
Fare Revenue	\$1,372,572	\$255,330	\$0	\$17,515	\$590,642
Net Cost	\$40,523,151	\$1,674,494	\$0	\$3,505,846	\$9,027,703

11.2.5 YEAR 5/FY2029

Brightline West service is expected to start in Year 5 and service changes in Year 5 focus on improving access to Brightline stations. Figure 108 presents the route changes and Table 70 presents the impacts of year 4 service changes that are described below:

- The Hesperia Brightline Station will already be served by Route 64 and the Apple Valley Station will be served by Route 42
- A new route 45 will be implemented between Victorville and the Apple Valley Station serving the Stoddard Wells Road corridor which will allow for streamlining of Route 22
- Stops at each of the Brightline stations will be added to Route 15 and two additional roundtrips will be added between Victorville and San Bernardino
- The span of service for all fixed routes will be increased by two hours on weekdays with service beginning one hour earlier and ending one hour later

Figure 108: Year 5/FY2029 Service (Victor Valley)

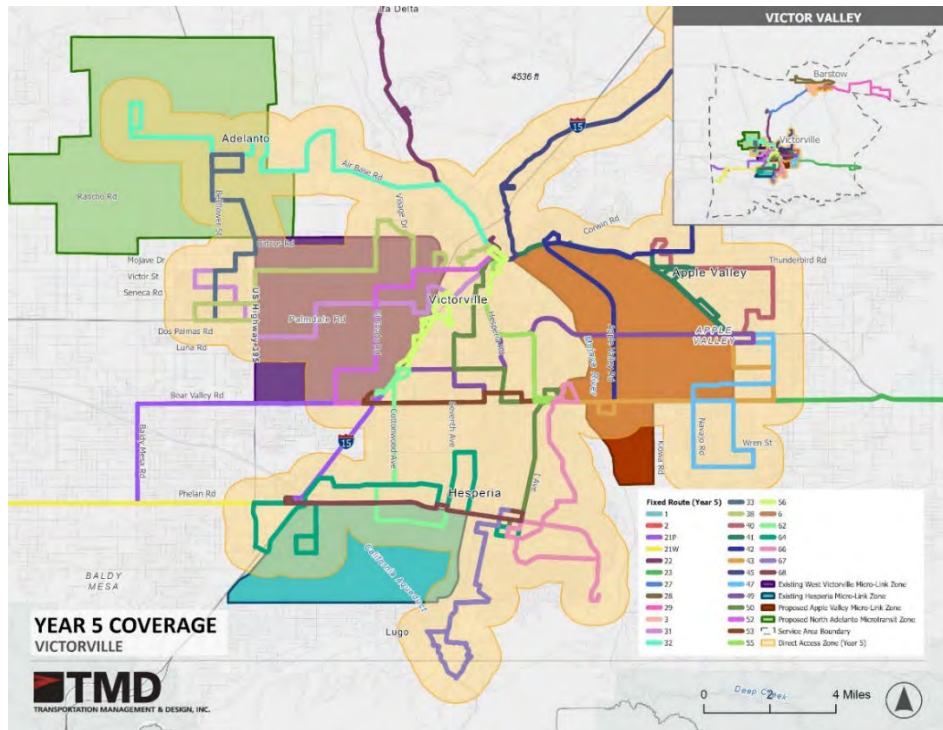


Table 70: Year 5/FY 2029 Service Change Impacts

	Fixed Route	Route 15	NTC Commuter	Micro-Link	Direct Access
Revenue Hours	261,945	13,100	-	21,480	60,000
Vehicles Operated in Maximum Service	52	4	-	8	36
Revenue Miles	4,220,193	338,269	-	322,200	900,000
Ridership	1,523,414	75,567	-	18,727	170,149
Operating Cost	\$47,283,933	\$2,539,916	\$0	\$3,583,399	\$9,981,521
Fare Revenue	\$1,453,270	\$285,716	\$0	\$17,865	\$620,174
Net Cost	\$45,830,662	\$2,254,200	\$0	\$3,565,534	\$9,361,347

11.2.6 BEYOND 5 YEARS

Not all elements of the vision plan are included in the implementation program with the primary reason being funding. The COA is designed to be flexible in implementation allowing for financial realities to delay or accelerate new or expanded services. Delaying new services or reducing the capital program are options to consider if funding is lower than projected. Conversely, if VVTA receives additional funding, elements of the implementation or capital program can be accelerated.

Additional funding could allow for additional elements to be implemented to bring VVTA services closer to the vision plan. Additional service spans, which would occur on weekends and for County services can be implemented easily as they do not require additional buses. Implementation of additional new routes or improving service headways would require additional buses and an expansion of storage and maintenance facilities may be needed. Below are the elements of the vision plan that were not included in the five-year implementation plan and are listed in priority order:

- Weekend span improvements
- County service span improvements
- Implementation of Route 65 which will require additional buses
- More frequent weekday service with priority based on observed crowding on routes which will require additional buses
 - 30-minute service on Routes 1, 2, 3, 6, 33, 38, 40, 42, 45, 47, 49, 50, 56, 62, 64, 66, 67, 68
 - 20-minute service on Routes 31, 41, 43, 52, 53, 55
 - 60-minute service on Routes 21P, 21W, 22, 23, 27, 28, 29
- Weekend 30-minute service on frequent routes

11.3 Fare Modernization

With the exception of incorporating new fare payment technologies and new services, the fare policy and fare amounts have remained unchanged since Fiscal Year 2017. As the fare policy can influence ridership, modernizing the fare policy and implementing a fare change along with fare modernization would serve VVTA and VVTA riders well. The proposed fare policy expands payment options, incorporates new technology, and enhances equity in fare policy. The proposed fare policy does recognize and continue contracts for free transportation and free rides for children under five years of age accompanied by a paying passenger.

The modernization program will include a fare capping program and an open loop payment system. Fare capping rewards passengers with free rides after they meet the fare equivalent of a daily, weekly, or monthly pass. A fare capping program would allow VVTA to eliminate daily and monthly passes. Incrementally paying for trips until the rider reaches a certain point improves equity as it makes unlimited rides achievable for those who cannot afford a single outlay for passes as shown on Table 71.

The open-loop fare payment system will improve access to fare media by allowing more options for paying your fare. Open loop payment technology refers to payment methods that may be used to purchase things other than fares versus typical transit fare payment systems that require an app or card that can only be used for that transit system. An open loop fare payment system allows for a regular credit card to be used as a farecard and does not require pre-payment. This improves access to fare payment for new riders or those who do not ride frequently and makes it so that regular riders do not require a separate pass.

As part of the fare policy change, a 25-cent increase in the base fare is proposed that would be concurrent with the implementation of the modernized fare system. Along with this fare change the county and Micro-Link services will be incorporated into the fixed route fare policy creating a single more simplified fare structure for local services. Micro-Link is incorporated into this fare structure to accommodate riders of routes that are being discontinued within the Micro-Link zones. Table 71 presents the new fare levels and fare policy for VVTA.

Table 71: Proposed Fares

Fare Category	Current Fare	Proposed Fare	Daily Paid Trip Cap	Weekly Paid Trip Cap	Monthly Paid Trip Cap
Local Route					
Regular Fare	\$1.50	\$1.75	3 trips	12 trips	37 trips
Student Fare	\$1.25	\$1.50	3 trips	12 trips	37 trips
Senior/Disabled/Veteran Fare	\$0.75	\$0.75	3 trips	12 trips	37 trips
Regular Day Pass	\$4.00	Replaced by fare capping program			
Student Day Pass	\$3.50	<ul style="list-style-type: none"> After 3 trips in a day additional trips taken in the same day are fare free 			
Senior/Disabled/Veteran Day Pass	\$2.00				
Regular 31-Day Pass	\$55.00	<ul style="list-style-type: none"> After 12 trips in a week additional trips taken in the week are fare free 			
Student 31-Day Pass	\$45.00				
Senior/Disabled/Veteran 31-Day Pass	\$27.50	<ul style="list-style-type: none"> After 37 trips in a month additional trips taken in the month are fare free 			
County Route					
Regular Fare	\$2.50	Merged into local route fare policy			
Student Fare	\$2.25				
Senior/Disabled/Veteran Fare	\$2.00				
Regular Day Pass	\$6.00				
Student Day Pass	\$5.00				
Senior/Disabled/Veteran Day Pass	\$3.00				
Regular 31-Day Pass	\$80.00				
Student 31-Day Pass	\$70.00				
Senior/Disabled/Veteran 31-Day Pass	\$40.00				
Deviations					
Regular	\$2.00	\$2.00	No fare capping for deviations		
Student	\$2.00	\$2.00			
Senior/Disabled/Veteran	\$1.00	\$1.00			
Micro-Link					
Regular	\$2.00	Merged into local route fare policy			
Student	\$1.00				
Senior/Disabled/Veteran	\$10.00				
Route 15					
Regular	\$6.50	\$7.00	3 trips	12 trips	37 trips
Student	\$6.50	\$7.00	3 trips	12 trips	37 trips
Senior/Disabled/Veteran	\$3.25	\$3.50	3 trips	12 trips	37 trips
NTC Commuter					
Regular	\$13.00	\$13.00	No fare capping for NTC Commuter service		
Student	\$13.00	\$13.00			
Senior/Disabled/Veteran	\$13.00	\$13.00			
NTC Monthly Pass	\$180.00	\$180.00			
NTC Commuter Military Pass	\$255.00	\$255.00			
Direct Access					
Zone 1	\$2.50	\$3.00	No fare capping for Direct Access service		
Zone 2	\$4.50	\$5.00			
Zone 3	\$6.00	\$6.50			
Zone 1 Subscription (monthly fare)	\$130.00	\$155.00			
Zone 2 Subscription (monthly fare)	\$160.00	\$175.00			
Zone 3 Subscription (monthly fare)	\$180.00	\$190.00			

11.4 Title VI Analysis

As a recipient of Federal Funds, VVTA must follow all federal non-discrimination rules and regulations, including Title VI of the Civil Rights Act. In following the rules and regulations of the Title VI act, service changes and fare policy changes must be evaluated to determine if they have a disparate impact on minority groups or a disproportionate burden on low-income groups.

The Title VI assessment is based on VVTA's Title VI Program for Fiscal Years 2022 through 2024. The Title VI program establishes VVTA's policies and procedures including data collected, complaint procedures, outreach policies and plans, and analyses of the VVTA service area. The Title VI program includes these procedures for minority, low-income, and limited English proficiency (LEP) populations.

As an agency operating fewer than 50 buses in maximum service for any mode, VVTA is not have an official definition of a disparate impact or a major service change, however the policy does state that when conducting a major service change, including schedule changes, that a public meeting is to be held during the third or fourth quarter of the fiscal year before the service change and a policy of guarding against disparate impacts. The COA included an outreach program that included online comments, events at public events throughout the service area, and passenger drop-in sessions at all transfer points to present the service changes. Also, the adoption of the COA and service changes included a formal public hearing in front of the COA board as part of the June 2024 Board of Director meeting.

The COA includes recommendations for both service changes and fare changes. The service changes are primarily service increases throughout the service area with a few routes that will be discontinued and replaced with other services. Service performance and impact to riders were considerations for each route being discontinued and phasing for service improvements. The fare changes are designed to increase equity for riders by increasing access to discounted fares for those who pay cash, which are the passengers who cannot afford the larger cash outlay for passes. The Title VI analysis includes variables such as Race Category, Income Category, and Language Proficiency.

11.4.1 SUMMARY

County routes have a higher representation of Hispanic/Latino/Spanish and Native American/Alaska Native individuals than the system average (Table 72). In contrast, Local routes exhibit a more balanced racial composition that aligns more closely with the system's average demographic characteristics. Approximately two-thirds of trips on County routes are made by individuals with household incomes of less than \$15,000, followed by those between \$15,000 and \$24,999. Notably, about 33% of trips on County routes come from individuals who did not disclose their income. Conversely, local routes have representation from household income groups earning above \$25,000.

When examining the intersection of household incomes with race and ethnicity, it is observed that trips made by Hispanic/Latino/Spanish and Black/African American individuals on County routes predominantly fall within the less-than-\$15,000 income bracket, which is significantly above the system average. On the other hand, White/Caucasian individuals also represent a substantial portion of the less-than-\$15,000 income group on local routes (Table 13). Additionally, County

routes show a higher representation of larger households (e.g., three- and four-person households) that generally earn less than \$15,000, while high-income households (those earning \$50,000 and above) are minimally represented on County routes, indicating that lower-income individuals primarily use these routes.

County routes have a higher percentage of full-time and part-time employed individuals than local routes. Local routes, on the other hand, have a higher percentage of individuals who are not employed and not seeking work and a higher percentage of retirees. Additionally, the percentage of individuals seeking work is much higher on local routes than on County routes (Table 72).

The proposed Fare Policy could be a key enabler for improving transportation access to County residents. The fare policy changes do represent a benefit to the service area as a whole.

11.4.1.1 Race and Ethnicity

Trips made by Hispanic / Latino / Spanish individuals have the highest representation on the county routes, i.e., 45.3%, and a significant presence on fixed routes, i.e., 35.9%. Black / African American individuals make trips more prevalent on fixed routes, i.e., 29.3%, compared to the county routes, i.e., 17%. Native American / Alaska Native individuals have a higher representation on county routes, i.e., 10.2%, than on fixed routes, i.e., 2.7%. White / Caucasian individuals have a relatively consistent representation across both county routes, i.e., 20.8%, and fixed routes, i.e., 22.6%. The Other race category and those who Prefer not to answer have minimal but similar representation across both routes. Routes 32 and 55 which will have improvements to headways in Year 1 do have higher percentage of non-white riders. Riders on discontinued routes will be accommodated by Micro-Link services and have access through other routes.

Table 72: Routes Utilization by Race Category

Race Category	County Routes	Local Routes	Overall
Asian / Pacific Islander	0.0%	1.2%	1.1%
Black / African American	17.0%	29.3%	28.2%
Hispanic / Latino / Spanish	45.3%	35.9%	36.7%
Native American / Alaska Native	10.2%	2.7%	3.4%
White / Caucasian	20.8%	22.6%	22.4%
Other	6.7%	7.2%	7.2%
Prefer not to answer	0.0%	1.1%	1.0%

Table 73: Average Daily Trips (First and Second Route) by Race Category

Route Type	Trips First and Second Route	Asian / Pacific Islander	Black / African American	Hispanic / Latino / Spanish	Native American / Alaska Native	White / Caucasian	Other	Prefer not to answer
County Routes	21	0	0	0	0	0	0	0
	22	0	14	6	0	15	0	0
	23	0	1	0	0	4	0	0
	25	0	0	26	0	0	0	0
	28	0	1	0	9	0	3	0
Local Routes	1	0	0	9	0	0	3	0
	2	0	1	22	0	1	3	0
	3	0	0	3	0	63	11	0
	6	0	6	18	0	9	6	0
	31	0	34	24	0	0	0	3
	32	0	20	9	0	25	5	0
	33	0	0	0	0	0	0	0
	40	0	0	2	0	0	0	0
	41	0	24	8	1	35	1	0
	43	0	2	11	1	11	9	0
	47	0	0	11	0	0	0	0
	50	0	31	41	0	7	0	0
	50X	0	15	7	0	0	0	0
	52	11	17	9	0	4	18	0
	53	0	0	88	0	33	13	0
	54	0	2	0	0	0	0	0
	55	0	77	9	0	18	0	8
	56	0	19	23	23	1	0	0
64	0	4	0	0	0	0	0	
66	0	0	14	0	0	0	0	
68	0	16	29	0	1	0	0	

11.4.1.2 Household Size & Income

Most riders on county routes have an income of less than \$15,000 (62.4%), compared to local routes (33.3%). Higher-income categories (\$25,000 and above) have minimal representation on county routes. The \$15,000 - \$24,999 income category is more represented on fixed routes (16.1%) than on county routes (3.8%). Many respondents in both categories chose Refused/No Answer, especially on county routes (33.8%).

Table 74: Average Daily Trips (First and Second Route) by Income Category

Route Type	Trips First and Second Route	Less than \$15,000	\$15,000 - \$24,999	\$25,000 - \$34,999	\$35,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,999	More than \$100,000	Refused/ No Answer
County Routes	21	0	0	0	0	0	0	0	0
	22	14	0	0	0	0	0	0	21
	23	0	3	0	0	0	0	0	2
	25	26	0	0	0	0	0	0	0
	28	9	0	0	0	0	0	0	4
Local Routes	1	9	0	0	0	0	0	0	3
	2	1	21	0	1	0	0	0	5
	3	52	14	11	0	0	0	0	0
	6	21	11	0	0	6	0	0	0
	31	22	0	0	0	14	0	0	25
	32	24	15	1	0	6	0	0	12
	33	0	0	0	0	0	0	0	0
	40	0	0	0	0	0	0	0	2
	41	33	10	8	0	15	0	0	3
	43	20	0	4	0	0	0	0	9
	47	0	0	0	0	0	0	0	11
	50	27	13	12	0	0	1	9	17
	50X	1	0	0	0	0	0	0	21
	52	7	0	12	18	0	0	0	22
	53	28	23	6	25	0	0	0	52
	54	0	2	0	0	0	0	0	0
	55	44	17	0	0	0	2	0	49
	56	17	7	16	0	0	0	9	17
64	0	0	0	0	0	0	4	0	
66	0	0	14	0	0	0	0	0	
68	2	14	21	0	0	0	0	8	

Black/African American riders show income diversity on fixed routes, with notable representation in the Less than \$15,000 (7.6%), \$15,000 - \$24,999 (4.3%), and higher income categories, including More than \$100,000 (2.5%). Higher-income categories (\$35,000 and above) show minimal representation across most race categories and route types, indicating that higher-income individuals are less likely to use these transportation services. Hispanic/Latino/Spanish riders have a significant presence in the Less than \$15,000 category on both county routes (33.5%) and fixed

routes (10.4%), but also show representation in other income categories on local routes. Native American/Alaska Native riders are predominantly in the Less than \$15,000 category on county routes (11.7%) and show minor representation in other income categories on local routes.

Table 75: Intersection of Race Category, Income Category, and Route Type

Race Category	Route Type	Less than \$15,000	\$15,000 - \$24,999	\$25,000 - \$34,999	\$35,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,999	More than \$100,000	Refused/ No Answer
Asian / Pacific Islander	County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
	Overall	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Black / African American	County	17.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
	Local	7.6%	4.3%	0.0%	0.0%	1.6%	0.2%	2.5%	12.7%
	Overall	8.4%	4.0%	0.0%	0.0%	1.5%	0.2%	2.3%	11.8%
Hispanic / Latino / Spanish	County	33.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.6%
	Local	10.4%	6.1%	6.3%	2.8%	1.2%	0.0%	0.0%	9.6%
	Overall	12.2%	5.6%	5.8%	2.6%	1.1%	0.0%	0.0%	9.5%
Native American / Alaska Native	County	11.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local	0.2%	0.8%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
	Overall	1.1%	0.7%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
White / Caucasian	County	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	21.4%
	Local	11.7%	3.5%	0.9%	0.0%	1.6%	0.1%	0.0%	4.5%
	Overall	10.8%	3.4%	0.8%	0.0%	1.5%	0.1%	0.0%	5.8%
Other	County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%
	Local	3.0%	0.6%	1.3%	1.9%	0.0%	0.0%	0.0%	0.7%
	Overall	2.8%	0.6%	1.2%	1.7%	0.0%	0.0%	0.0%	0.9%
Prefer not to answer	County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Local	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Overall	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

County routes tend to have a higher representation of larger households (e.g., three- and four-person households) that predominantly earn less than \$15,000. High-income households (\$50,000 and above) have minimal to no representation on county routes, indicating these routes are predominantly used by lower-income individuals. Local routes show significant income diversity, with households spread across different income categories, including higher-income brackets like \$75,000 - \$99,999 and more than \$100,000 for specific household sizes like six-person households. Local routes show a significant representation of six-person households (16.7%), indicating these routes may be utilized more by larger families.

Table 76: Income by Household Size

HH Size	County Routes	Local Routes	Overall	HH Size	County Routes	Local Routes	Overall
One	12.2%	18.4%	17.9%	Six	0.0%	16.7%	15.4%
Less than \$15,000	96.1%	42.7%	45.5%	Less than \$15,000	0.0%	1.1%	1.1%
\$15,000 - \$24,999	3.9%	14.5%	14.0%	\$15,000 - \$24,999	0.0%	32.4%	32.4%
\$25,000 - \$34,999	0.0%	1.8%	1.7%	\$25,000 - \$34,999	0.0%	28.3%	28.3%
\$35,000 - \$49,999	0.0%	10.8%	10.2%	\$35,000 - \$49,999	0.0%	16.1%	16.1%
\$50,000 - \$74,999	0.0%	0.0%	0.0%	\$50,000 - \$74,999	0.0%	0.0%	0.0%
\$75,000 - \$99,999	0.0%	0.0%	0.0%	\$75,000 - \$99,999	0.0%	0.0%	0.0%
More than \$100,000	0.0%	0.0%	0.0%	More than \$100,000	0.0%	11.9%	11.9%
Refused/No Answer	0.0%	30.3%	28.7%	Refused/No Answer	0.0%	10.3%	10.3%
Two	3.1%	14.6%	13.7%	Seven	0.0%	1.1%	1.0%
Less than \$15,000	0.0%	37.5%	36.8%	Less than \$15,000	0.0%	0.0%	0.0%
\$15,000 - \$24,999	66.9%	21.5%	22.3%	\$15,000 - \$24,999	0.0%	0.0%	0.0%
\$25,000 - \$34,999	0.0%	16.1%	15.9%	\$25,000 - \$34,999	0.0%	0.0%	0.0%
\$35,000 - \$49,999	0.0%	0.0%	0.0%	\$35,000 - \$49,999	0.0%	0.0%	0.0%
\$50,000 - \$74,999	0.0%	7.4%	7.2%	\$50,000 - \$74,999	0.0%	0.0%	0.0%
\$75,000 - \$99,999	0.0%	0.0%	0.0%	\$75,000 - \$99,999	0.0%	0.0%	0.0%
More than \$100,000	0.0%	0.0%	0.0%	More than \$100,000	0.0%	0.0%	0.0%
Refused/No Answer	33.1%	17.4%	17.7%	Refused/No Answer	0.0%	100.0%	100.0%
Three	42.5%	19.0%	20.9%	Eight	7.6%	0.2%	0.8%
Less than \$15,000	40.6%	35.1%	36.0%	Less than \$15,000	0.0%	25.9%	6.9%
\$15,000 - \$24,999	0.0%	9.9%	8.3%	\$15,000 - \$24,999	0.0%	0.0%	0.0%
\$25,000 - \$34,999	0.0%	6.4%	5.4%	\$25,000 - \$34,999	0.0%	0.0%	0.0%
\$35,000 - \$49,999	0.0%	0.0%	0.0%	\$35,000 - \$49,999	0.0%	0.0%	0.0%
\$50,000 - \$74,999	0.0%	0.0%	0.0%	\$50,000 - \$74,999	0.0%	0.0%	0.0%
\$75,000 - \$99,999	0.0%	0.0%	0.0%	\$75,000 - \$99,999	0.0%	74.1%	19.6%
More than \$100,000	0.0%	0.0%	0.0%	More than \$100,000	0.0%	0.0%	0.0%
Refused/No Answer	59.4%	48.6%	50.4%	Refused/No Answer	100.0%	0.0%	73.5%
Four	34.7%	14.3%	15.9%	Nine	0.0%	1.8%	1.6%
Less than \$15,000	96.4%	47.1%	55.6%	Less than \$15,000	0.0%	3.4%	3.4%
\$15,000 - \$24,999	3.6%	7.5%	6.9%	\$15,000 - \$24,999	0.0%	0.0%	0.0%
\$25,000 - \$34,999	0.0%	11.2%	9.3%	\$25,000 - \$34,999	0.0%	0.0%	0.0%
\$35,000 - \$49,999	0.0%	0.0%	0.0%	\$35,000 - \$49,999	0.0%	0.0%	0.0%
\$50,000 - \$74,999	0.0%	7.3%	6.0%	\$50,000 - \$74,999	0.0%	90.4%	90.4%
\$75,000 - \$99,999	0.0%	0.0%	0.0%	\$75,000 - \$99,999	0.0%	6.2%	6.2%
More than \$100,000	0.0%	0.0%	0.0%	More than \$100,000	0.0%	0.0%	0.0%
Refused/No Answer	0.0%	26.9%	22.3%	Refused/No Answer	0.0%	0.0%	0.0%
Five	0.0%	8.9%	8.2%	Ten or More	0.0%	5.0%	4.7%
Less than \$15,000	0.0%	26.5%	26.5%	Less than \$15,000	0.0%	77.3%	77.3%
\$15,000 - \$24,999	0.0%	16.1%	16.1%	\$15,000 - \$24,999	0.0%	9.0%	9.0%
\$25,000 - \$34,999	0.0%	12.6%	12.6%	\$25,000 - \$34,999	0.0%	0.0%	0.0%
\$35,000 - \$49,999	0.0%	0.0%	0.0%	\$35,000 - \$49,999	0.0%	0.0%	0.0%
\$50,000 - \$74,999	0.0%	0.0%	0.0%	\$50,000 - \$74,999	0.0%	13.7%	13.7%
\$75,000 - \$99,999	0.0%	0.0%	0.0%	\$75,000 - \$99,999	0.0%	0.0%	0.0%
More than \$100,000	0.0%	5.3%	5.3%	More than \$100,000	0.0%	0.0%	0.0%
Refused/No Answer	0.0%	39.4%	39.4%	Refused/No Answer	0.0%	0.0%	0.0%

11.4.1.3 Language Proficiency

Most respondents across county and local routes primarily speak English at home, with percentages around 69-77%. There is a notable difference in the percentage of respondents who speak another language at home, with local routes (31.19%) having a higher proportion than county routes (23.47%). Overall, about 30.59% of respondents speak another language at home, indicating some level of linguistic diversity among respondents using public transportation routes.

Table 77: Speak another Language other than English at Home

Response	County Routes	Local Routes	Overall
No	76.53%	68.81%	69.41%
Yes	23.47%	31.19%	30.59%

All respondents using county routes reported speaking English "Very well," indicating a homogeneous proficiency level. Local routes show a more varied distribution of English proficiency, with significant percentages reporting proficiency levels other than "Very well." Overall, a majority (74.2%) of respondents reported speaking English "Very well," while a notable portion reported varying degrees of proficiency, emphasizing the importance of language accessibility in public transportation services.

Table 78: English Proficiency: Transit Riders who Speak another Language besides English at Home

English Proficiency	County Routes	Local Routes	Overall
Very well	100.0%	72.5%	74.2%
Well	0.0%	11.9%	11.2%
Less than well	0.0%	10.6%	10.0%
Not at all	0.0%	5.0%	4.7%

11.4.1.4 Fare Type

Day Passes are commonly used, especially on local routes. One-way cash fares are more prevalent on county routes than on local routes. A significant portion of riders use the 31-Day Pass as their fare type. A small percentage use the UMO Mobility App or Card. Many riders on both route types use Victor Valley College student status for fare payment. Some riders on local routes utilize free fare for K-12 students. Other forms of free fare are used by a small percentage of riders. The usage of one-way cash fares is notably higher on county routes than on fixed routes, suggesting different payment preferences or demographics.

Table 79: Fare-type Used for the Trip

Fare Type	County Routes	Local Routes	Overall
31-Day Pass	19.3%	20.8%	20.7%
Day Pass	26.7%	40.9%	39.8%
One-way Cash Fare	29.3%	7.0%	8.8%
UMO Mobility App/Card	0.0%	0.3%	0.3%
Trade School Student ID	0.0%	0.7%	0.6%
Victor Valley College Student	23.5%	18.1%	18.5%
Free, Youth (K-12 Student)	0.0%	9.4%	8.6%
Free, Other	0.0%	2.7%	2.5%
Other	1.2%	0.1%	0.2%

Many riders benefit from reduced fares, applicable to veterans, seniors, Medicare beneficiaries, and individuals with disabilities. Most riders pay regular fares, which is a broad usage across both county and fixed routes, although more amongst county riders than the local route riders. A notable percentage of riders use student fares, particularly on local routes, reflecting a student population's reliance on public transit. Student fares are more commonly used on local routes than county routes, likely due to commuting patterns and student population density in urban areas.

Table 80: Fare Category

Fare Category	County Routes	Local Routes	Overall
Reduced, Veteran / Senior / Medicare / Disabled	24%	25%	25%
Regular	52%	43%	44%
Student	23%	32%	31%

11.4.2 FINDINGS

The overall findings of the Title VI analysis are that there are no disparate impacts related to fares of service changes. Proposed changes to fare policy will not have a disparate on minority riders or a disproportionate impact on low-income riders. The proposed fare policy results in an ultimate cost savings for county route riders, who are more likely to be low-income, Hispanic, Latino or Native American than the overall VVTA rider. Discontinued routes associated with this service implementation plan have the potential to cause disproportionate and/or disparate impacts if not mitigated. Below is a summary of the route changes that would have had a disparate impact and the mitigations:

- Route 25 is proposed to be discontinued and has above average low-income ridership and minority ridership. Disparate and disproportionate impacts associated with the discontinuation of this route will be mitigated by the availability of Routes 64 and 66 along with Micro-Link service in areas served by this route.

- Route 54 is proposed to be discontinued and has above average low-income ridership and minority ridership. Disparate and disproportionate impacts associated with the discontinuation of this route will be mitigated by the availability of Route 31 and Micro-Link service in areas served by this route.
- Route 50X is proposed to be discontinued and has above average minority ridership. Disparate impacts associated with the discontinuation of this route will be mitigated by the new streamlined Route 55 alignment which will provide comparable service between VVTC and the Victor Valley College transit center.

11.5 Administration Plan

As VVTA continues to grow additional administrative staff will be needed to provide oversight and reporting. With the implementation program presented in the COA it is expected that VVTA will grow beyond 50 local route buses operated in maximum service in FY 2027 which will require additional state and federal reporting requirements. Changes in administration are detailed below.

11.5.1 YEAR1 POSITIONS

In year 1 there will be a significant restructuring in VVTA service and the beginning of growth of the VVTA system. Along with growth, VVTA will continue its transition to ZEBs. There are three positions that will be added to VVTA in FY 2025 to support VVTA. These positions are as follows:

- Human Resources Specialist – the Human Resources specialist will assist in staff support and ensure that VVTA staff policies are enforced.
- Two support positions for the Facility and Maintenance Department – which will provide additional support for the maintenance department with ZEBs and facility management along with capital projects related to facilities.

11.5.2 ADMINISTRATION IMPACTS OF SYSTEM GROWTH

In implementing the recommendations of the COA, VVTA will increase its fleet size to over 50 buses. A bus fleet of 50 vehicles acts as a threshold for several rules and regulations at the federal level that VVTA will have to account for. There are different thresholds for greater fleet sizes that VVTA should also keep in mind as they expand their fleet. Below is a description of the impacts.

11.5.2.1 Federal Title VI Requirements

There are specific Title VI reporting requirements for transit providers that operate 50 or more fixed route vehicles in peak service and are located in a UZA of 200,000 or more in population. Every three years these transit operators are required to include the following in their Title VI programs:

- **Collect and report data including:**
 - Demographic and service profile maps and charts.
 - Data regarding customer demographics and travel patterns, collected from passenger surveys.
- **Evaluate service and fare equity changes.** Equity analyses are required for any major service changes and/or fare changes implemented since the last Title VI Program submission.

- **Monitor transit service.** This includes the results of the monitoring program of service standards and policies and documentation of any action taken to verify the governing entity’s consideration, awareness, and approval of the monitoring results.

11.5.3 CALIFORNIA AIR RESOURCES BOARD – INNOVATIVE CLEAN TRANSIT REGULATION

The California ICT regulation defines a “Large Transit Agency” for agencies not operating in the South Coast or San Joaquin Valley Air Basins as those that have at least 100 buses in annual maximum service in an urbanized area with a population of at least 200,000. Though the VVTA does not currently meet this size threshold, it should keep it in mind as it expands.

- Transit agency size impacts Zero-Emission Bus Purchase requirements
 - Large Transit agencies
 - Starting January 1st, 2023: 25% of new bus purchases must be ZEB
 - Starting January 1st, 2026: 50% of new bus purchases must be ZEB
 - Starting January 1st, 2029: 100% of new bus purchases must be ZEB
 - Small Transit agencies (all agencies that are not large transit agencies)
 - Starting January 1st, 2026: 25% of new bus purchases must be ZEB
 - Starting January 1st, 2029: 100% of new bus purchases must be ZEB

11.5.4 YEAR 2 POSITION

Based on the current staffing and additional reporting and monitoring requirements of system growth, one new position is recommended in FY 2027 which is a planning manager. Many of the additional reporting requirements will add to the planning department’s workload. The planning manager will manage the planning department staff and be an additional resource to allow VVTA to proactively interact with planning boards and transportation agencies in the region.

11.5.5 OFFICE SPACE IMPACTS

As VVTA continues to grow the space for both VVTA staff and contractor staff is becoming constrained. The capital program does include an expansion of the Hesperia facility and additional office space will be a part of the longer-term expansion. Short-term solutions may require conversion of common spaces into staff working space if VVTA outgrows current workspaces before the administration space expansion can occur.

11.6 Capital Plan for the VVTA Service Area

The capital plan supports the proposed five-year operating plan, which will maintain current operations in a state of good repair and also will support its growth during the period. Of major import is the transition of the vehicle fleet to zero-emission buses (ZEB) leveraging hydrogen powered fuel cell technology which requires the development of hydrogen fueling facilities in Barstow and Hesperia. The capital plan includes replacement and expansion vehicles, facility upgrades and development, and a range of ancillary items including security, amenities, and shop equipment, all of which support the ZEB transition.

11.6.1 TRANSIT VEHICLES

The first major set of purchases are for replacement and expansion vehicles. The vehicle replacement schedule is shown in Table 81. The fixed route vehicles are all 40-foot fuel cell electric

buses (FCEB). A fuel cell bus is a bus that uses a hydrogen fuel cell as its power source for electrically driven wheels, sometimes augmented in a hybrid fashion with batteries or a supercapacitor. The only emission from the bus is water. These buses are not available at present in 35- or 30-foot lengths. There are 17 buses scheduled over the five-year period to replace the current fleet, and 11 additional buses for the operating expansion program.

The 25 paratransit vehicles are replacements for the current fleet. For microtransit the vehicle in 2025 is for replacement, the three in 2027 are for expanded service in Adelanto (two in service and one spare), and the three in 2029 are for replacement. Finally, the non-revenue vehicles are all replacements for those used by VVTA staff including street supervisors, and a maintenance service vehicle.

Table 81: Vehicle Replacement Schedule

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
40-Foot FCEB Replacements	3	4	7	1	2	17
40-Foot FCEB Expansion	4	-	-	-	-	4
Paratransit Vehicles	5	3	6	6	5	25
Microtransit Vehicles	1	-	3	-	3	7
Non-Revenue Vehicles	5	5	5	7	8	30

11.6.2 OPERATING AND MAINTENANCE FACILITIES

The second major item in the capital plan are the facilities needed to service the new fleet. With the introduction of hydrogen fuel cell electric buses, VVTA will have to make significant changes at its facilities to accommodate them:

- The operating and maintenance facilities in Hesperia and Barstow will have their shops upgraded and will have hydrogen fueling stations built.
- Additional garage and shop equipment for Barstow and Hesperia are included in the capital plan.
- Expansion at the Hesperia facility to accommodate additional offices and other facility upgrades at all locations.

11.6.3 TRANSFER CENTERS

The third set of major capital items are the transfer centers in Barstow and Victorville. In Barstow, a new facility will be built, and a schematic design is shown in Figure 109. The facility as shown would accommodate 8 buses in a sawtooth configuration and would include a range of passenger amenities including shelters, benches, and information screens. The expanded transfer center in Victorville, a concept shown in Figure 110, would be enlarged by 3 bus bays to accommodate 12 buses. Line-item cost estimates for the Barstow Facility are summarized in Table 82 and line-item cost estimates for Victorville are summarized in Table 83.

Figure 109: Barstow Transit Hub Concept



Figure 110: Victorville Transfer Center Expansion Concept

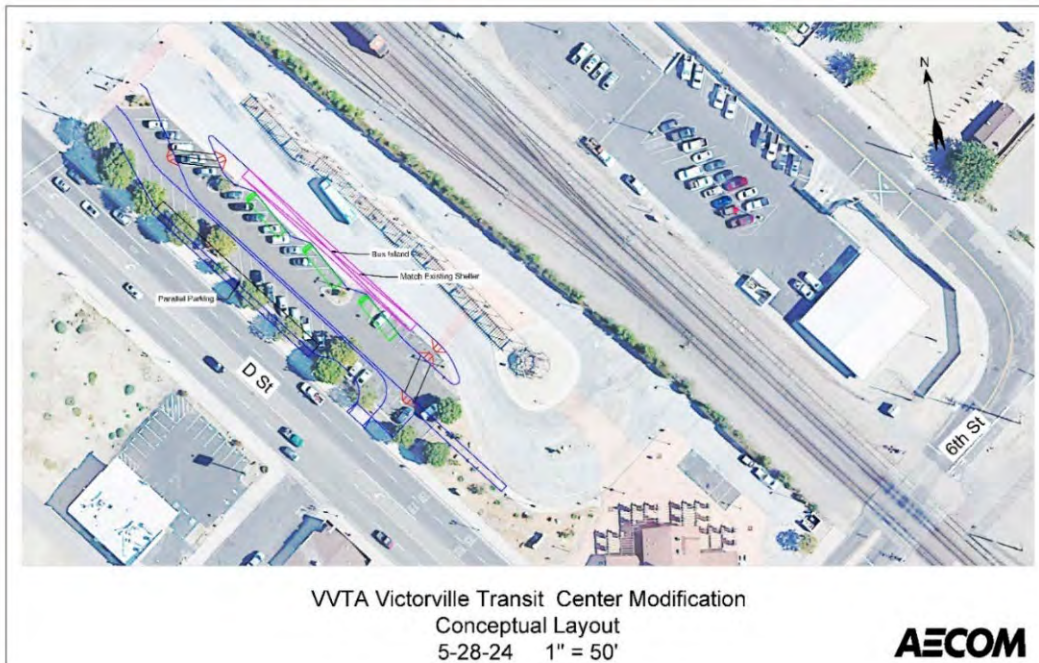


Figure 110: Victorville Transfer Center Expansion Concept

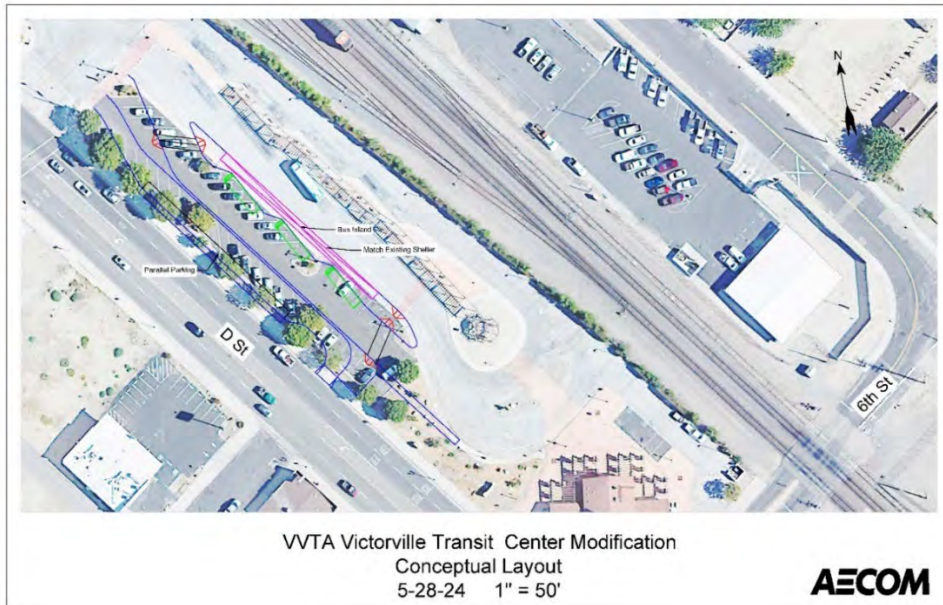


Table 82: Barstow Transit Hub Line-Item Cost Estimate

ITEM	UNIT	QUANTITY	UNIT PRICE	COST
General				
Mobilization	LS	1	\$290,000.00	\$290,000.00
Construction Project Information Sign	EA	1	\$700.00	\$700.00
Prepare Water Pollution Control Program	LS	1	\$10,000.00	\$10,000.00
Water Pollution Control	LS	1	\$15,000.00	\$15,000.00
Traffic Control System	LS	1	\$20,000.00	\$20,000.00
Demolition / Site Preparation				
Earthwork / Site Grading	CY	1,000.00	\$40.00	\$40,000.00
AC and Base Removal	SF	10,560	\$8.00	\$84,480.00
Curb, Curb and Gutter Removal	LF	1,634	\$8.00	\$13,072.00
Sidewalk and Base Removal	SF	4,900	\$10.00	\$49,000.00
Driveway and Base Removal	SF	1,295	\$10.00	\$12,950.00
Utilities				
Electric Service	LS	1	\$25,000.00	\$25,000.00
Water Service Connection (Bathroom)	LS	1	\$15,000.00	\$15,000.00
Sewer Connection (Bathroom)	LS	1	\$20,000.00	\$20,000.00
General Utility Relocations	LS	1	\$50,000.00	\$50,000.00
Drainage	LS	1	\$100,000.00	\$100,000.00
CCTV System	LS	1	\$75,000.00	\$75,000.00
Lighting	LS	1	\$250,000.00	\$250,000.00
Facilities				
PCC Paving w/AB (Bus)	SF	6,930	\$40.00	\$277,200.00
PCC Paving w/AB (Sidewalk)	SF	14,767	\$20.00	\$295,340.00
PCC Retaining Wall	LF	663	\$1,000.00	\$663,000.00
AC Paving	SF	6,215	\$30.00	\$186,450.00
Curb / Curb and Gutter w/AB	LF	1,161	\$45.00	\$52,245.00
Guardrail	LF	663	\$175.00	\$116,025.00
Stairs	EA	4	\$3,500.00	\$14,000.00
ADA Ramps	EA	3	\$4,000.00	\$12,000.00
Bus Shelters	EA	4	\$75,000.00	\$300,000.00
Site Furniture	LS	1	\$50,000.00	\$50,000.00
Transit Support Building	SF	420	\$350.00	\$147,000.00
Signing and Striping	LS	1	\$30,000.00	\$30,000.00
Site Monument / Identifier	EA	1	\$15,000.00	\$15,000.00
			SUBTOTAL	\$3,228,462.00
			CONTINGENCY (35%)	\$1,129,961.70
TOTAL PROJECT CONSTRUCTION COST				\$4,358,423.70

Table 83: Victorville Transfer Center Line-Item Cost Estimate

ITEM	UNIT	QUANTITY	UNIT PRICE	COST
General				
Mobilization	LS	1	\$160,000.00	\$160,000.00
Construction Project Information Sign	EA	1	\$700.00	\$700.00
Prepare Water Pollution Control Program	LS	1	\$10,000.00	\$10,000.00
Water Pollution Control	LS	1	\$15,000.00	\$15,000.00
Traffic Control System	LS	1	\$20,000.00	\$20,000.00
Demolition / Site Preparation				
Earthwork / Site Grading	CY	500.00	\$40.00	\$20,000.00
AC and Base Removal	SF	12,850	\$8.00	\$102,800.00
Curb, Curb and Gutter Removal	LF	1,455	\$8.00	\$11,640.00
Sidewalk and Base Removal	SF	2,995	\$10.00	\$29,950.00
Bus PCC and Base Removal	SF	1,955	\$10.00	\$19,550.00
Utilities				
Drainage	LS	1	\$100,000.00	\$100,000.00
CCTV System	LS	1	\$50,000.00	\$50,000.00
Lighting	LS	1	\$250,000.00	\$250,000.00
Facilities				
PCC Paving w/AB (Bus)	SF	11,610	\$30.00	\$348,300.00
PCC Paving w/AB (Sidewalk)	SF	6,340	\$15.00	\$95,100.00
AC Paving	SF	400	\$30.00	\$12,000.00
Curb / Curb and Gutter w/AB	LF	1,676	\$45.00	\$75,420.00
Guardrail	LF	465	\$175.00	\$81,375.00
ADA Ramps	EA	5	\$4,000.00	\$20,000.00
Bus Shelters	EA	1	\$200,000.00	\$200,000.00
Site Furniture	LS	1	\$25,000.00	\$25,000.00
Landscaping Modifications	LS	1	\$100,000.00	\$100,000.00
Signing and Striping	LS	1	\$20,000.00	\$20,000.00
			SUBTOTAL	\$1,766,835.00
			CONTINGENCY (35%)	\$618,392.25
TOTAL PROJECT CONSTRUCTION COST				\$2,385,227.25

11.6.4 OTHER CAPITAL ITEMS

Other items included in the capital plan, while less costly overall, are important to maintain and improve the overall operation of the system. These include the following:

- A new fare collection system with associated upgrades to software, the GFI vault, and an automatic passenger counting (APC) program
- Upgrades to the security program including on-board vehicle modems and new camera equipment at the transfer centers

- A general program of passenger amenities and street furniture at bus stops across the area
- Upgrades to IT and office equipment, a pressure washer trailer to keep shelters and facilities clean, and a parking area repaving program

This capital plan covers a five-year period through FY 2029. Beyond the five years of this plan, VVTA will likely be looking at further expansion of its services, which will add more buses to the fleet and may trigger the need for expanding its bases at Hesperia and Barstow at that time.

11.6.5 LONG-TERM BUS RAPID TRANSIT

Additionally, consideration has been given to the role of bus rapid transit (BRT) for VVTA. The pandemic was a significant setback for transit across the country and the 2025-2029 plan is focused upon rebuilding ridership and accommodating new and planned developments throughout the area. As it stands, the ridership projections suggest that no route will have a headway better than 30 minutes during this plan period, which will not support BRT. However, the long-term vision suggests that some routes may reach headways of 20 minutes at the end of the period, reaching the threshold at which BRT may be feasible. The most likely corridors for the potential BRT implementation are Bear Valley Road, Highway 18/Palmdale Road, and a BRT route connecting the Victorville Transfer Center and Victor Valley College.

11.6.6 BRIGHTLINE FACILITIES

With the implementation of Brightline, currently in construction and scheduled to be in operation in 2028¹⁹ (the later years of this plan), there will be two stations built at Apple Valley and Hesperia. The stations, constructed as part of the Brightline capital plan and not a part of the VVTA capital plan, will need to include facilities for VVTA buses to serve the stations and San Bernardino County Sheriff’s Department including office space, hold rooms, and interview rooms as well as sheriff substations in both locations. Both locations will also need to have restroom facilities that are accessible to VVTA riders.

VVTA will be serving the two stations, and to do so it will need three bus bays in Hesperia station and five bus bays at Apple Valley station in addition to bus facilities for long-distance bus connections.

11.6.7 ESTIMATED CAPITAL COSTS

The cost of all items across the five-year period are shown in Table 84, with the major expenses being for vehicles, facility improvements to manage hydrogen fuel cells, and capital costs for the transfer centers in Barstow and Victorville.

The high capital cost associated with this plan in FY 2025 over other years is attributable to the substantial cost of the hydrogen facilities at both sites coupled with the initial funding for the Barstow transfer center, and the purchase of the new fuel cell buses and other replacement vehicles. The spike in FY 2027 is related to the cost of the Victorville transfer center expansion and purchase of seven (7) replacement 40-foot vehicles, the largest annual purchase in the plan.

¹⁹ <https://cal.streetsblog.org/2024/04/23/brightline-west-breaks-ground-on-vegas-to-socal-high-speed-rail>

Table 84: 5-Year Capital plan by Line Item

Line-Item Name	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
40-Foot FCEB	\$10,675,000	\$5,924,825	\$10,679,497	\$1,571,412	\$3,237,108
Paratransit Vehicles	\$850,000	\$525,300	\$1,082,118	\$1,114,582	\$956,682
Microtransit Vehicles	\$190,000	\$-	\$604,713	\$-	\$641,540
Non-Revenue Vehicles	\$310,000	\$319,300	\$328,879	\$474,244	\$558,252
Cost overrun for 3 buses	\$1,596,462	\$-	\$-	\$-	\$-
On-Board Vehicle Modems (security)	\$110,000	\$-	\$-	\$-	\$-
Hesperia Hydrogen	\$-	\$-	\$-	\$-	\$-
Hesperia Shop Upgrades for Hydrogen	\$1,430,000	\$-	\$-	\$-	\$-
Barstow Hydrogen and chargers	\$15,000,000	\$-	\$-	\$-	\$-
Garage and Shop Equipment	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
GFI Vault Upgrade	\$75,000	\$-	\$-	\$-	\$-
Barstow Transit Center ²⁰	\$730,000	\$141,684	\$-	\$-	\$-
Victorville Transit Center Expansion	\$	\$-	\$2,385,227	\$-	\$-
Automatic Passenger Counters	\$150,000	\$-	\$-	\$-	\$-
Hesperia Yard and Transit Center	\$1,800,000	\$-	\$-	\$-	\$-
Hesperia Facility Capital Lease	\$1,539,550	\$1,540,300	\$1,539,050	\$1,540,800	\$1,535,300
Barstow Facility Capital Lease	\$641,900	\$641,900	\$640,150	\$642,900	\$641,400
Transit Amenities/Street furniture	\$-	\$75,000	\$100,000	\$100,000	\$100,000
Grant Management Software	\$50,000	\$-	\$-	\$-	\$-
IT and Office Equipment Replace	\$55,000	\$50,000	\$50,000	\$50,000	\$50,000
Security	\$-	\$110,000	\$110,000	\$110,000	\$110,000
Capital Total	\$35,302,912	\$9,428,309	\$17,619,634	\$5,703,938	\$7,930,282

11.7 Financial Plan

The financial plan presents costs and revenues for implementing the recommendations of the COA. Costs were estimated based on VVTA’s current cost structure and hours of service that are projected to operate. Non-fare revenue projections were provided by San Bernardino County Transportation Authority (SBCTA) based on their projections to Fiscal Year 2029. These costs and revenues provide a planning level estimate of costs and revenues. Planning level cost estimates tend to be higher than actual cost since these estimates are based on broad assumptions regarding cost increases. Costs and revenues will be refined each year as part of the budgeting process. The financial plan is presented in Table 85.

²⁰ The table includes 20 percent of the total cost of the Barstow Transit Center, which is \$ 871,684. The full cost of the Victorville Transportation Center expansion of \$2,385,227 is shown above in FY2027.

Table 85: Financial Plan

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Costs					
Transit Operations Costs	\$46,175,510	\$48,734,285	\$53,490,852	\$58,738,557	\$65,245,138
CTSA Costs	\$861,225	\$930,436	\$999,954	\$1,075,221	\$1,156,751
Vanpool Costs	\$1,762,358	\$1,935,113	\$2,124,970	\$2,333,629	\$2,562,963
Facility Costs	\$1,036,700	\$1,308,535	\$1,352,462	\$1,398,585	\$1,447,014
Administration Costs	\$4,603,741	\$5,050,469	\$5,394,056	\$5,762,108	\$6,156,431
Total Operating Costs	\$54,439,534	\$57,958,838	\$63,362,294	\$69,308,101	\$76,568,297
Capital Costs	\$35,302,912	\$9,428,310	\$17,619,634	\$5,703,937	\$7,930,283
Revenues					
Fare Revenue	\$2,439,834	\$2,067,021	\$2,142,274	\$2,236,059	\$2,377,026
Funding	\$101,385,848	\$86,387,269	\$60,812,522	\$62,011,354	\$64,654,443
Total Revenue	\$103,825,681	\$88,454,290	\$62,954,796	\$64,247,412	\$67,031,469
Balance	\$14,083,236	\$21,067,142	(\$18,027,133)	(\$10,764,625)	(\$17,467,111)
Carryover Revenue	\$24,540,269	\$38,623,505	\$59,690,647	\$41,663,514	\$30,898,889
Net Revenue	\$38,623,505	\$59,690,647	\$41,663,514	\$30,898,889	\$13,431,778

Appendix A

Service Frequencies



Appendix

Table 1 - VVTA Trip Frequencies by Hour, Weekdays

Route	Trip	Weekday																
		4 AM to 5 AM	5 AM to 6 AM	6 AM to 7 AM	7 AM to 8 AM	8 AM to 9 AM	9 AM to 10 AM	10 AM to 11 AM	11 AM to 12 PM	12 PM to 1 PM	1 PM to 2 PM	2 PM to 3 PM	3 PM to 4 PM	4 PM to 5 PM	5 PM to 6 PM	6 PM to 7 PM	7 PM to 8 PM	8 PM to 9 PM
1	Barstow City Hall Walmart / Montara-Armory			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
2	Barstow City Hall Barstow College			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
3	Lenwood Barstow City Hall			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
6	Barstow College Barstow City Hall			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
15	Barstow/Barstow via Victor Valley Transportation Center San Bernardino/San Bernardino via Victor Valley Transportation Center			60			60		60			30		60		30		
21P	Pinon Hills Super Target / Main-Cataba				60	60	60	60	60	60	60	60	60	60	60	60	60	60
21W	Wrightwood Super Target / Main-Cataba		60			60		60		60		60		60		60		60
22	Helendale Victor Valley Transportation Center				60		60		60		60		60		60		60	
23	Lucerne Valley Apple Valley Post Office		60		60		60		60		60		60		60		60	
25	Hesperia Post Office/Hesperia Post Office via Oak Hills HS Super Target & Main-Cataba/Super Target & Main-Cataba Hills HS via Oak Hills HS					60		60				60		60			60	

Route	Trip	Weekday																
		4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM
		to 5 AM	to 6 AM	to 7 AM	to 8 AM	to 9 AM	to 10 AM	to 11 AM	to 12 PM	to 1 PM	to 2 PM	to 3 PM	to 4 PM	to 5 PM	to 6 PM	to 7 PM	to 8 PM	to 9 PM
28	Helendale Barstow City Hall			60			60		60		60		60		60		60	
29	Newberry Springs Barstow City Hall			60		60		60		60		60		60		60		60
31	Hwy 395-Palmdale via So. Adelanto Victor Valley Transportation Center		60		30	30	30	30	30	30	30	30	30	30	60	60	60	
32	Adelanto / Muskrat-El Mirage Victor Valley Transportation Center			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
33	Bartlett-Greening Highway 395-Palmdale		60	60	60		60	60	60	60		60	60	60	60	60	60	60
40	Walmart Apple Valley Post Office			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
41	Apple Valley Post Office Victor Valley Transportation Center			60	30	30	30	30	30	30	30	30	30	60	60	60	60	60
42	Public Safety Training Center/Waalew-Dale Evans Victor Valley College			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
43	Victor Valley College Apple Valley Post Office			30	60	60	60	30	30	30	30	30	60	60	60	60	60	60
47	Victor Valley College Apple Valley Post Office			30	30	60	30	60	30	60	30	60	30	60	30	60	30	60
50	Hesperia Post Office Victor Valley Transportation Center			60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
50X	Victor Valley College Victor Valley Transportation Center				60	60	60	60				60	60	60	60			
52	Victor Valley Mall Victor Valley Transportation Center			60	30	30	30	30	30	30	30	30	30	30	60	60	60	60
53	Victor Valley College Victor Valley Mall		60	60	60	60	60	30	20	30	20	20	30	30	30	60	30	60
				60	60	60	30	20	30	20	30	20	30	20	30	60	60	60

Table 2 - VVTA Trip Frequencies by Hour, Saturdays

Route	Trip	Saturday																	
		4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	
		to 5 AM	to 6 AM	to 7 AM	to 8 AM	to 9 AM	to 10 AM	to 11 AM	to 12 PM	to 1 PM	to 2 PM	to 3 PM	to 4 PM	to 5 PM	to 6 PM	to 7 PM	to 8 PM	to 9 PM	
1	Barstow City Hall					60	60	60	60	60	60	60	60						
	Walmart / Montara-Armory					60	60	60	60	60	60	60	60						
2	Barstow City Hall					60	60	60	60	60	60	60	60						
	Barstow College					60	60	60	60	60	60	60	60						
3	Lenwood					60	60	60	60	60	60	60	60						
	Barstow City Hall					60	60	60	60	60	60	60	60						
6	Barstow College					60	60	60	60	60	60	60	60						
	Barstow City Hall					60	60	60	60	60	60	60	60						
15	Barstow/Barstow via Victor Valley Transportation Center			60			60			60			60			60			
	San Bernardino/San Bernardino via Victor Valley Transportation Center					30				60			60			60			
21P	Pinon Hills			60			60			60			60			60			
	Super Target / Main-Cataba					60			60			60			60			60	
21W	Wrightwood					60			60			60			60			60	
	Super Target / Main-Cataba			60			60			60			60			60			

Route	Trip	Saturday																	
		4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	
		to 5 AM	to 6 AM	to 7 AM	to 8 AM	to 9 AM	to 10 AM	to 11 AM	to 12 PM	to 1 PM	to 2 PM	to 3 PM	to 4 PM	to 5 PM	to 6 PM	to 7 PM	to 8 PM	to 9 PM	
22	Helendale				60			60			60			60			60		
	Victor Valley Transportation Center					60			60			60			60			60	
23	Lucerne Valley				60			60			60			60			60		
	Apple Valley Post Office				60			60			60			60			60		
25	Hesperia Post Office/Hesperia Post Office via Oak					60			60			60			60			60	
	Super Target & Main-Cataba/Super Target & Main-Cataba Hills HS via Oak Hills HS					60			60			60			60			60	
28	Helendale					60				60				60					
	Barstow City Hall						60				60				60				
29	Newberry Springs					60				60				60					
	Barstow City Hall						60				60				60				
31	Hwy 395-Palmdale via So. Adelanto				60	60	60	60			60	60	60	60			60	60	60
	Victor Valley Transportation Center			60	60	60			60	60	60	60			60	60	60		60
32	Adelanto / Muskrat-El Mirage				30	60	60	60	60			30	60	60	60	60	30	60	60
	Victor Valley Transportation Center			60	60	60	60	60			30	60	60	60	60	30	60	60	60

Route	Trip	Saturday																
		4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM
		to 5 AM	to 6 AM	to 7 AM	to 8 AM	to 9 AM	to 10 AM	to 11 AM	to 12 PM	to 1 PM	to 2 PM	to 3 PM	to 4 PM	to 5 PM	to 6 PM	to 7 PM	to 8 PM	to 9 PM
33	Bartlett-Greening				60	60		60	60	60	60		60	60	60	60		
	Highway 395-Palmdale				60	60	60	60		60	60	60		60	60	60	60	
40	Walmart				30	60	60	60	60	60	60	60	60	60	60	60	30	60
	Apple Valley Post Office				60	60	60	60	60	60	30	60	60	60	60	60	60	60
41	Apple Valley Post Office				60	60	60	60		60	60	60		60	60	60		
	Victor Valley Transportation Center			60	60	60		60	60	60		60	60	60	60	60		
42	Public Safety Training Center/Waalew-Dale Evans				60	60	60	60	60	30	60	60	60	60	60	60	60	60
	Victor Valley College				60	60	60	60	30	60	60	60	60	60	60	30		
43	Victor Valley College				60	60	60	60	60	60	60	60	60	60	60	60	60	
	Apple Valley Post Office				60	60	60	60	60	60	60	60	60	60	60	60	60	
47	Victor Valley College				30	60	60	60	30	60	60	60	30	60	60	60	30	
	Apple Valley Post Office				60	60	30	60	60	60	30	60	60	60	30	60	60	
50	Hesperia Post Office				60	60	60	60	60	60	60	60	60	60	60	60	60	
	Victor Valley Transportation Center				60	60	60	60	60	60	60	60	60	60	60	60	60	
50X	Victor Valley College																	
	Victor Valley Transportation Center																	
52	Victor Valley Mall				60	60	60	60		60	60	60	60		60	60	60	

Table 3 - VVTA Trip Frequencies by Hour, Sundays

Route	Trip	Sunday															8 PM to 9 PM
		4 AM to 5 AM	5 AM to 6 AM	6 AM to 7 AM	7 AM to 8 AM	8 AM to 9 AM	9 AM to 10 AM	10 AM to 11 AM	11 AM to 12 PM	12 PM to 1 PM	1 PM to 2 PM	2 PM to 3 PM	3 PM to 4 PM	4 PM to 5 PM	5 PM to 6 PM	6 PM to 7 PM	
1	Barstow City Hall					60	60	60	60	60	60	60	60	60			
	Walmart / Montara-Armory					60	60	60	60	60	60	60	60	60			
2	Barstow City Hall					60	60	60	60	60	60	60	60	60			
	Barstow College					60	60	60	60	60	60	60	60	60			
3	Lenwood					60	60	60	60	60	60	60	60	60			
	Barstow City Hall					60	60	60	60	60	60	60	60	60			
6	Barstow College					60	60	60	60	60	60	60	60	60			
	Barstow City Hall					60	60	60	60	60	60	60	60	60			
15	Barstow/Barstow via Victor Valley Transportation Center					60						60					
	San Bernardino/San Bernardino via Victor Valley Transportation Center								60					60			
21P	Pinon Hills						60		60		60		60		60		
	Super Target / Main-Cataba							60		60		60		60		60	

Route	Trip	Sunday																8 PM to 9 PM	
		4 AM to 5 AM	5 AM to 6 AM	6 AM to 7 AM	7 AM to 8 AM	8 AM to 9 AM	9 AM to 10 AM	10 AM to 11 AM	11 AM to 12 PM	12 PM to 1 PM	1 PM to 2 PM	2 PM to 3 PM	3 PM to 4 PM	4 PM to 5 PM	5 PM to 6 PM	6 PM to 7 PM	7 PM to 8 PM		
21W	Wrightwood					60			60			60			60			60	
	Super Target / Main-Cataba						60		60			60			60			60	
22	Helendale					60			60			60			60			60	
	Victor Valley Transportation Center						60		60			60			60			60	
23	Lucerne Valley						60		60			60			60			60	
	Apple Valley Post Office						60		60			60			60			60	
25	Hesperia Post Office/Hesperia Post Office via Oak						60		60			60			60			60	
	Super Target & Main-Cataba/Super Target & Main-Cataba Hills HS via Oak Hills HS					60			60			60			60			60	
28	Helendale					60			60			60			60			60	
	Barstow City Hall								60			60			60			60	
29	Newberry Springs					60			60			60			60			60	
	Barstow City Hall						60				60			60			60		60
31	Hwy 395-Palmdale via So. Adelanto					60	60	60			60	60	60	60			60		60

Route	Trip	Sunday																8 PM to 9 PM	
		4 AM to 5 AM	5 AM to 6 AM	6 AM to 7 AM	7 AM to 8 AM	8 AM to 9 AM	9 AM to 10 AM	10 AM to 11 AM	11 AM to 12 PM	12 PM to 1 PM	1 PM to 2 PM	2 PM to 3 PM	3 PM to 4 PM	4 PM to 5 PM	5 PM to 6 PM	6 PM to 7 PM	7 PM to 8 PM		
	Victor Valley Transportation Center				60	60			60	60	60	60			60	60	60		
32	Adelanto / Muskrat-El Mirage				60	60	60	60	60	30	60	60	60	60	30				
	Victor Valley Transportation Center				60	60	60	60	30	60	60	60	60	30	60				
33	Bartlett-Greening				60			60		60			60			60		60	
	Highway 395-Palmdale				60			60		60			60			60			
40	Walmart				60			60	60		60	60			60	60			
	Apple Valley Post Office					60	60			60	60		60	60			60		
41	Apple Valley Post Office					60	60	60		60	60	60	60			60			
	Victor Valley Transportation Center				60	60			60	60	60	60			60	60	60		
42	Public Safety Training Center/Waalew-Dale Evans					60	60	60	60	30	60	60	60	60	60	60			
	Victor Valley College					60	60	60	30	60	60	60	60	60	60	60			
43	Victor Valley College					60	60	60	60	60	60	60	60	60	60	60			
	Apple Valley Post Office				60	60	60	60	60	60	60	60	60	60	60	60			
47	Victor Valley College					60			60	60		60	60		60	60			

Route	Trip	Sunday																8 PM to 9 PM
		4 AM to 5 AM	5 AM to 6 AM	6 AM to 7 AM	7 AM to 8 AM	8 AM to 9 AM	9 AM to 10 AM	10 AM to 11 AM	11 AM to 12 PM	12 PM to 1 PM	1 PM to 2 PM	2 PM to 3 PM	3 PM to 4 PM	4 PM to 5 PM	5 PM to 6 PM	6 PM to 7 PM	7 PM to 8 PM	
	Apple Valley Post Office						60	60		60	60		60	60				
50	Hesperia Post Office				60	60	60	60	60	60	60	60	60	60				
	Victor Valley Transportation Center				60	60	60	60	60	60	60	60	60	60				
50X	Victor Valley College Victor Valley Transportation Center																	
52	Victor Valley Mall				60	60	60		60	60	60	60		60				
	Victor Valley Transportation Center			60	60		60	60	60	60		60	60	60				
53	Victor Valley College				60	60	60	60	60	60		60	60	60				
	Victor Valley Mall			60	60	60		60	60	60	60	60	60	60				
54	Highway 395-Palmdale				60		60		60		60		60					
	Victor Valley Mall				60		60		60		60		60					
55	Victor Valley College				60	60	60		60	60	60	60		60				
	Victor Valley Transportation Center			60	60		60	60	60	60		60	60	60				
56	Victor Valley Transportation Center				60	60	60		60	60	60	60		60				

Figure 1: AM Peak Ridership and Service Frequency, Victorville

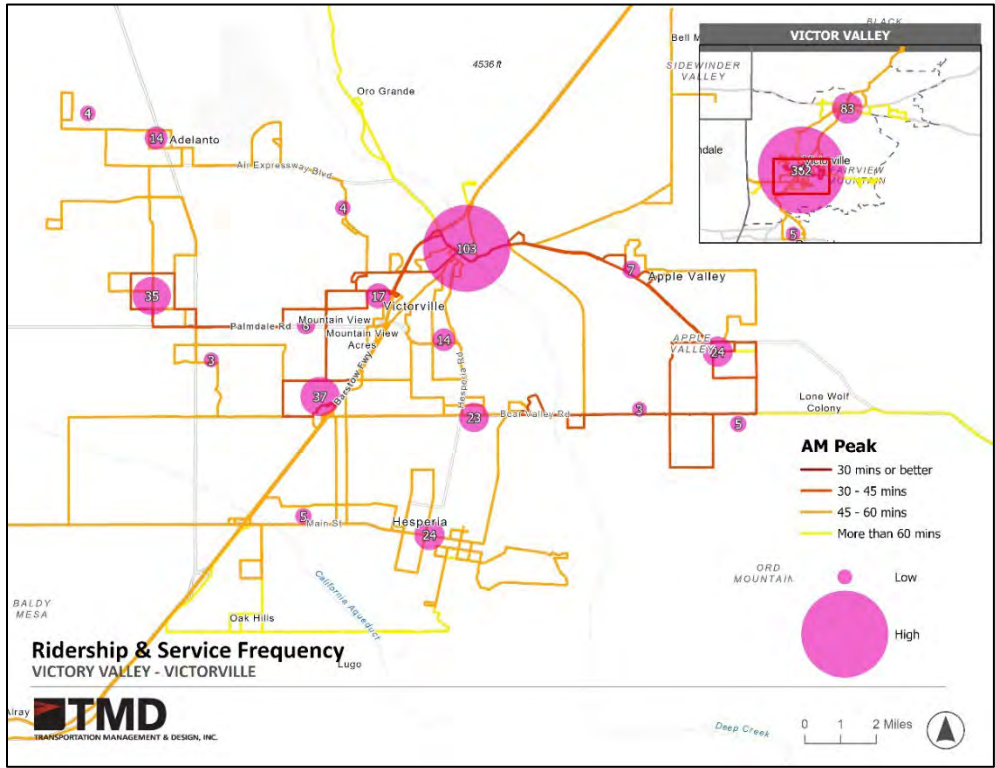


Figure 2: AM Peak Ridership and Service Frequency, Barstow

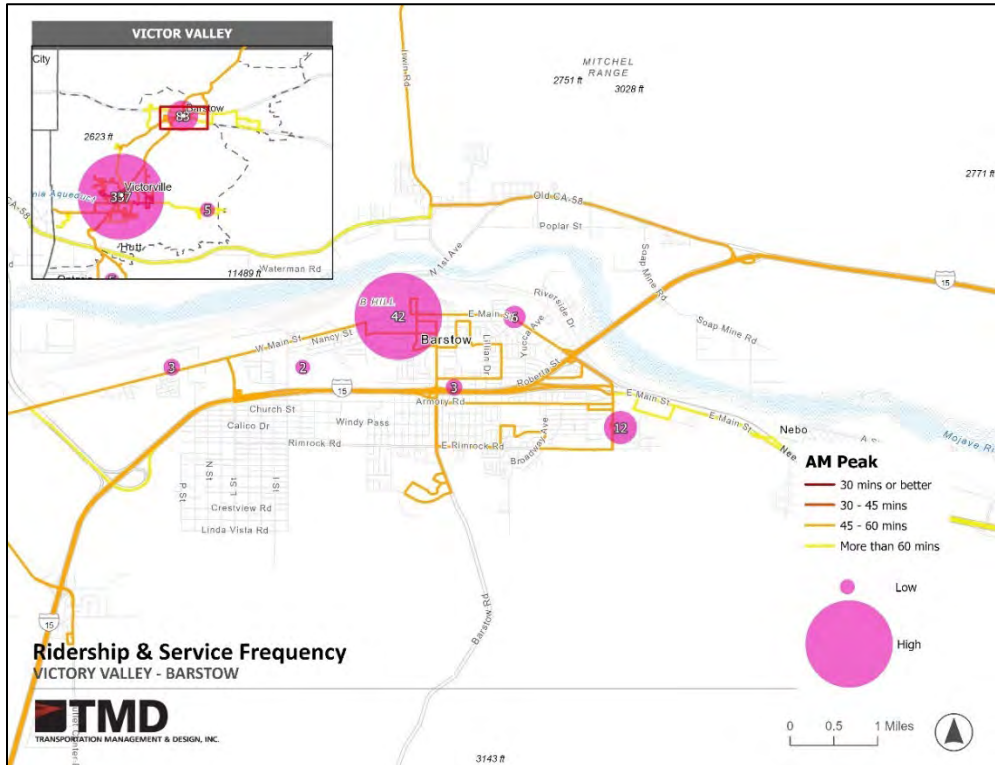


Figure 3: Midday Ridership and Service Frequency, Victorville

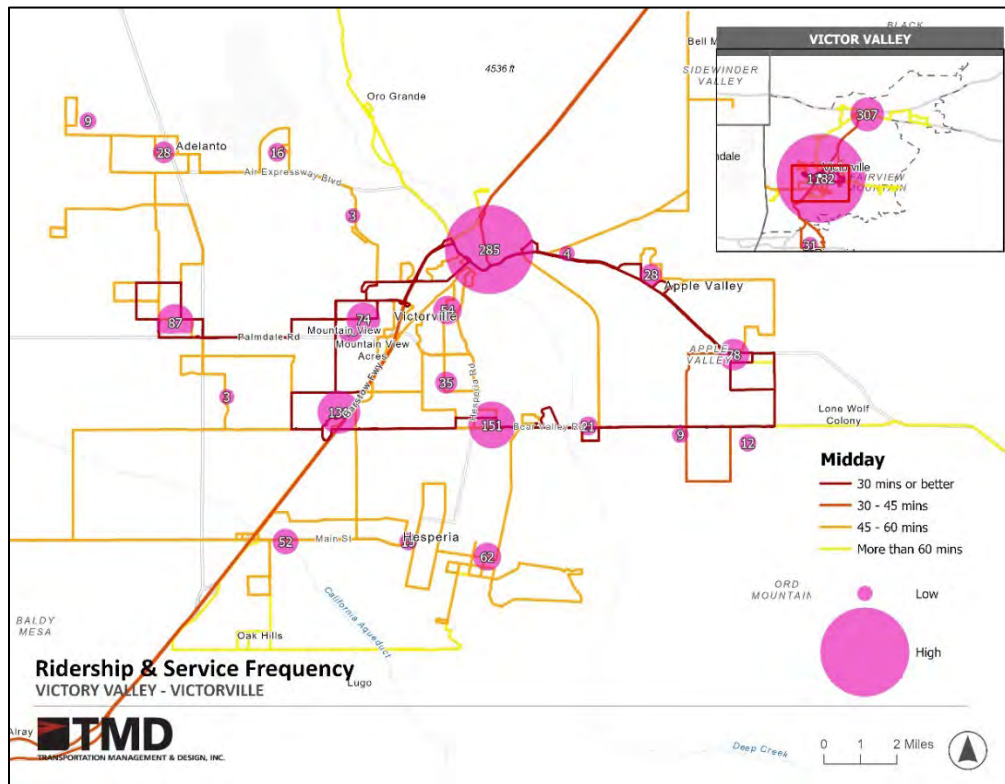


Figure 4: Midday Ridership and Service Frequency, Barstow

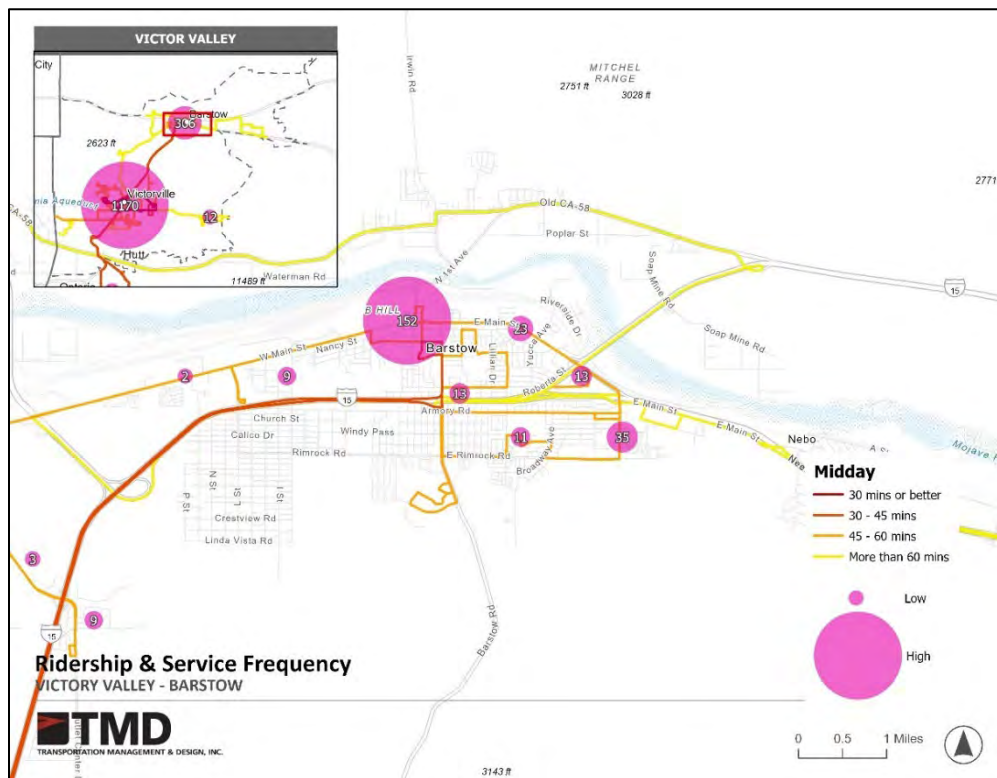


Figure 5: PM Peak Ridership and Service Frequency, Victorville

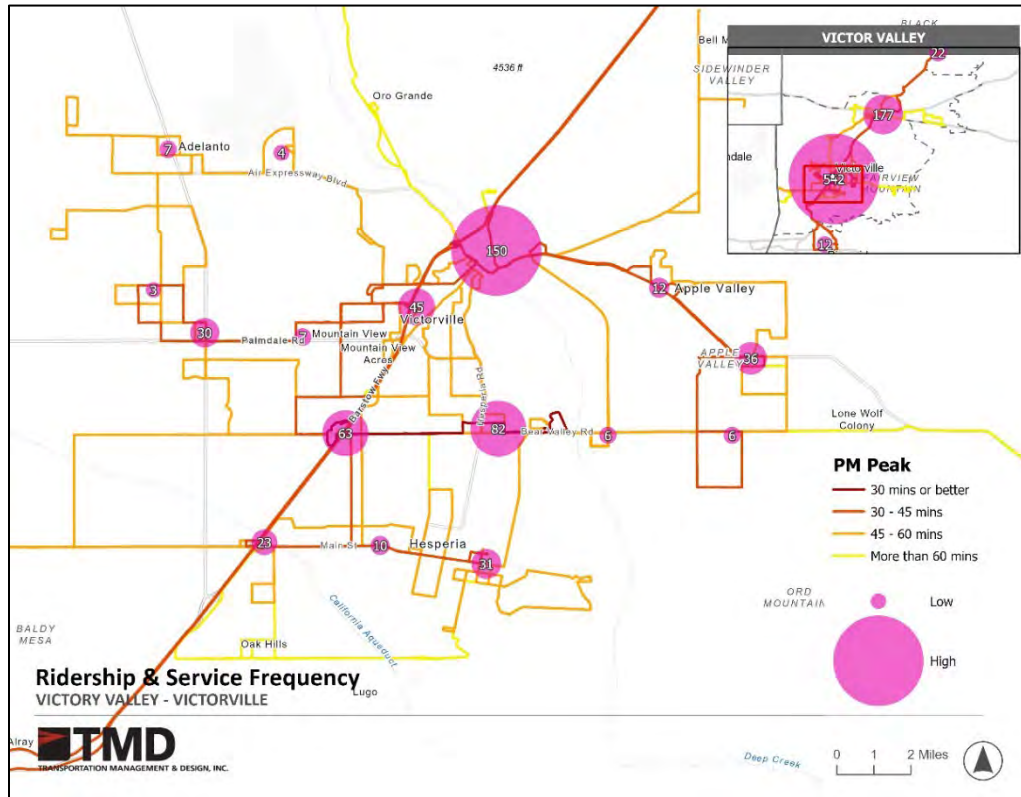


Figure 6: PM Peak Ridership and Service Frequency, Barstow

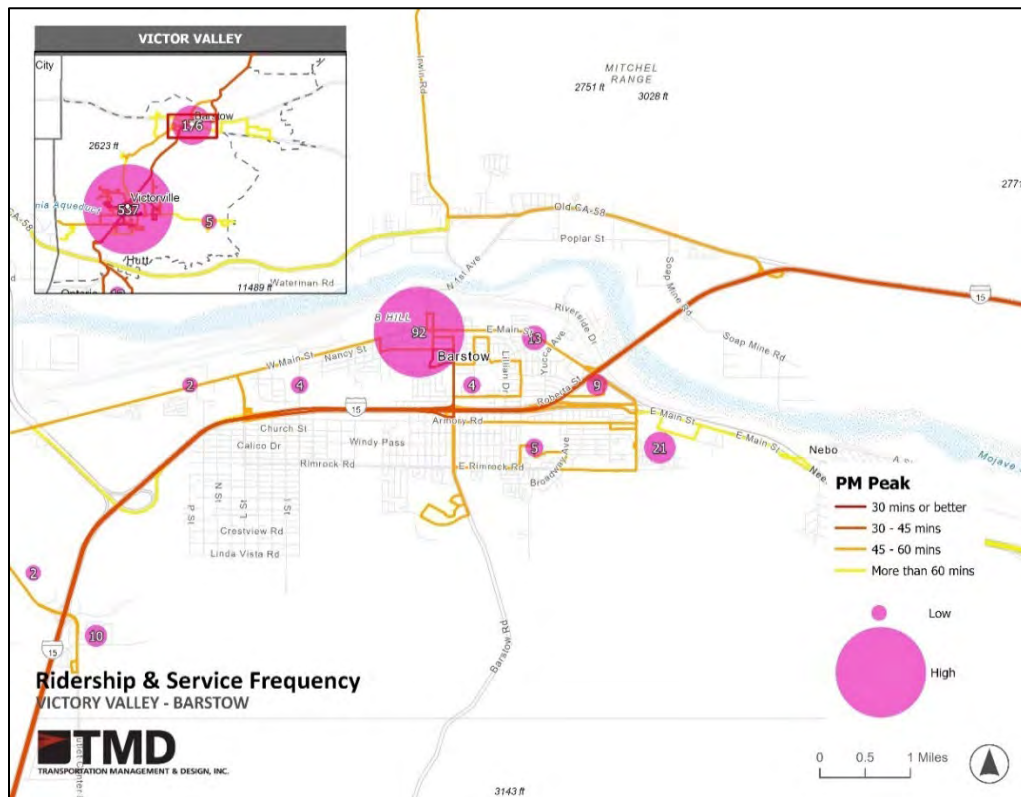


Figure 7: Evening Ridership and Service Frequency, Victorville

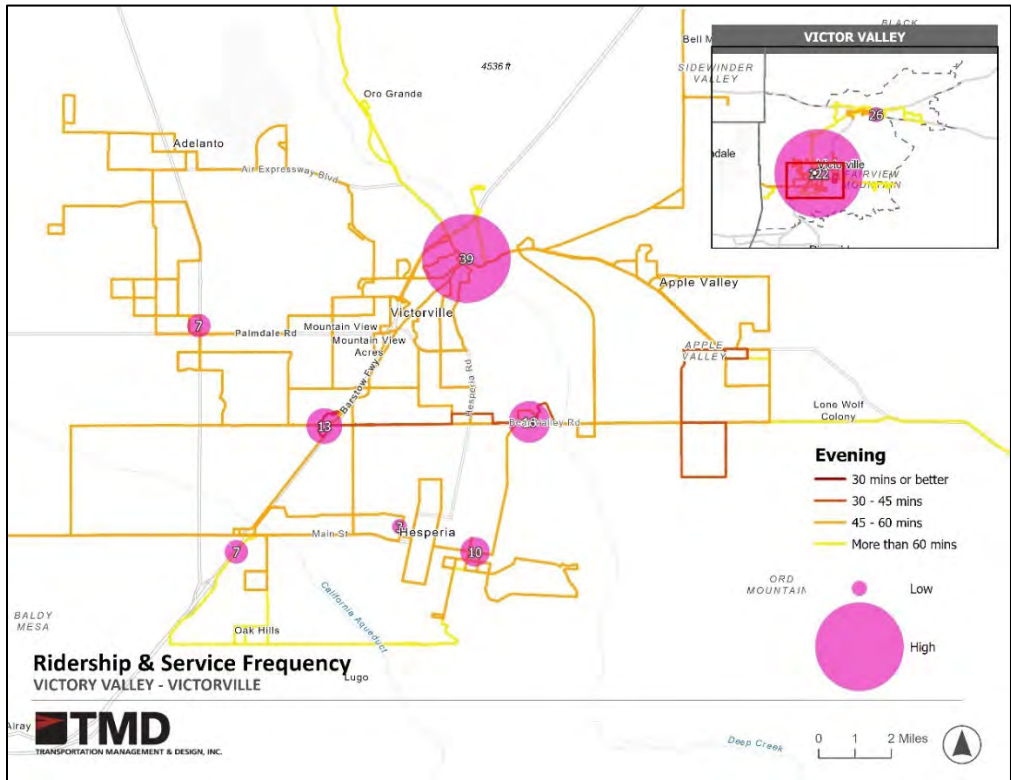
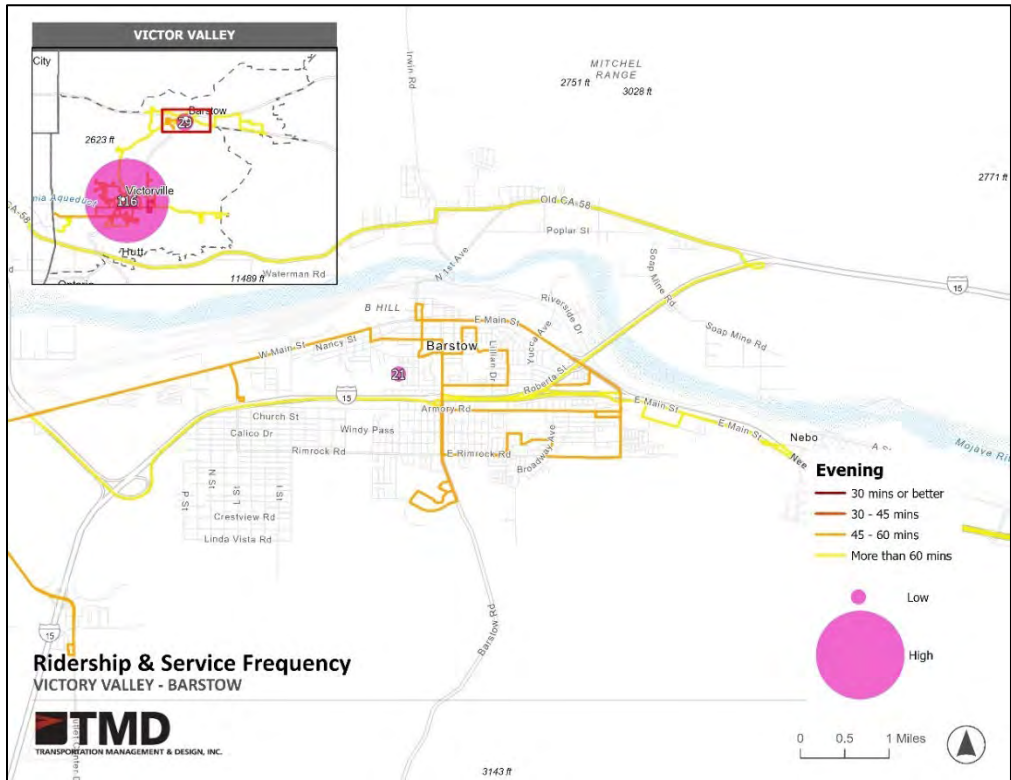


Figure 8: Evening Ridership and Service Frequency, Barstow



Appendix B

Phase 1 Outreach Summary



Victor Valley Transit Authority Comprehensive Operational Analysis

Phase 1 Outreach Summary

Victor Valley Transit Authority

February 11, 2024

Prepared for:

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1. Introduction

VVTA is conducting a Comprehensive Operational Analysis (COA) to assess the current service levels, identify existing transit issues in the service area, and propose recommendations for system redesign. This document provides a summary of Phase 1 outreach efforts for the COA. The input gathered from various stakeholder groups, including the public, VVTA employees, local agencies, key stakeholders, and VVTA's ridership data will be incorporated into service alternatives to be prepared for VVTA.

Section 2 contains the public outreach schedule, and descriptions of the outreach events. Sections 3, 4, 5, and 6 present major discussion themes that emerged during the stakeholder interviews, pop-up workshops, driver/staff meetings, and virtual public meeting.

2. Public Outreach Schedule

Date	Activity	Participants (Approximate Number)
Tuesday, October 24, 2023	<i>Stakeholder Interview</i> City of Victorville 14343 Civic Drive, Victorville, CA 92392 [10:00 – 11:00 am]	4
	<i>Stakeholder Interview</i> Rock'n Our Disabilities 13358 Palm Street, Hesperia, CA 92344 [10:00 – 11:00 am]	1
	<i>Pop-up Session</i> Victor Valley Transportation Center 16825 D Street, Victorville, CA, 92395 [2:30 – 5:00 pm]	26
	<i>Stakeholder Interview</i> Victor Valley Transit Authority – Rotary Club 13229 Spring Valley Parkway, Victorville, CA 92395 [12:00 – 4:00 pm]	20
	<i>Stakeholder Interview</i> High Desert Chamber of Commerce 16010 Apple Valley Road, Apple Valley, CA 92307 [2:00 – 3:00 pm]	4
	<i>Stakeholder Interview</i> Victor Valley College 18422 Bear Valley Road, Victorville, CA 92395 [4:30 – 5:30 pm]	2
Wednesday, October 25, 2023	<i>Driver/Staff Meetings</i> Barstow Maintenance Facility 2641 W. Main Street, Barstow, CA 92311 [10:30 am – 1:30 pm]	15
	<i>Pop-up Session</i> Barstow City Hall 220 E Mountain View Street, Barstow, CA 92311 [2:30 – 5:00 pm]	16
	<i>Stakeholder Interview</i> City of Barstow 220 East Mountain View Street, Barstow, CA 92311 [3:30 – 4:30 pm]	4
Thursday, October 26, 2023	<i>Driver/Staff Meetings</i> Hesperia Maintenance Facility 17150 Smoke Tree Street, Hesperia, CA, 92345 [10:30 am – 1:30 pm]	19
	<i>Pop-up Session</i> Victor Valley College 18422 Bear Valley Road, Victorville, CA 92395 [2:30 – 5:00 pm]	14
Monday, October 30, 2023	<i>Stakeholder Interview</i> Providence Health	1

	18300 CA-18, Apple Valley, CA 92307 [3:30 – 4:30 pm]	
Tuesday, October 31, 2023	<i>Stakeholder Interview</i> City of Hesperia 9700 Seventh Avenue, Hesperia, CA 92345 [10:00 – 11:00 am]	1
Monday, December 11, 2023	<i>Virtual Public Meeting</i> Zoom Webinar [5:00 – 6:00 pm]	1
Wednesday, January 10, 2024	<i>Stakeholder Interview</i> Town of Apple Valley 14955 Dael Evans Parkway, Apple Valley, CA 92307	2
Tuesday, January 16, 2024	<i>Stakeholder Interview</i> San Bernardino Sheriff Department 655 East Third Street, San Bernardino, CA 92415 [11:00 – 12:00 pm]	2

Public outreach events were advertised with bilingual (English and Spanish) digital and print flyers via VVTA’s social media accounts, website, and with printed flyers in VVTA buses. A one-page flyer about the COA process was also shared to promote outreach events. These materials are provided in Appendix A.

2.1 Stakeholder Interviews

The purpose of the stakeholder interviews was to help identify transit service needs and issues.

Individual and group stakeholder interviews were held between October 24, 2023, and January 16, 2024. A total of ten organizations participated in the stakeholder interview process. Stakeholders included representatives from the following organizations:

- City of Victorville
- City of Barstow
- City of Hesperia
- Town of Apple Valley
- San Bernardino Sheriff Department
- Victor Valley College
- Victor Valley Transit Authority
- High Desert Chamber of Commerce
- Providence Health
- Rock’n Our Disabilities

Materials for stakeholder interviews included 24x36” map boards depicting the service area and routes, and bilingual (English/Spanish) fact sheets. Discussion questions and major discussion themes raised during the stakeholder interviews are provided in section 3.0. PDFs of the boards are provided in Appendix A.

2.2 Pop-up Sessions

The purpose of the pop-up sessions was to hold informal, one-on-one conversations with transit users. Outreach staff held discussions in English and Spanish at various high traffic transit

centers and bus stops within the VVTA service area. These pop-up sessions provided opportunities for VVTA to hear from people who may not be inclined to attend formal outreach events. Approximately 56 passengers provided input through these sessions. Materials used for these sessions included three bilingual boards including 24x36" maps depicting service area and routes, and discussion questions. Discussion questions and major discussion themes raised during these sessions are provided in Section 4.0. PDFs of the boards used for outreach are provided in Appendix A.

2.3 Driver/Staff Meetings

The purpose of the VVTA driver/staff meetings was to obtain input from VVTA drivers and staff about day-to-day transit service issues, such as new service needs, problem locations, and customer requests or concerns, as well as ideas for improvements. Materials for stakeholder interviews included 24x36" map boards depicting the service area and routes, and bilingual (English/Spanish) fact sheets. Discussion questions and major discussion these raised during these meetings are provided in section 5.0. PDFs of the boards used for outreach are provided in Appendix A.

2.4 Virtual Public Meeting and Questionnaire

The purpose of the virtual public meeting was to share information with VVTA riders. During the public meeting, a Zoom questionnaire was provided to obtain feedback from participants about VVTA services, connections, priority improvements, trade-offs for service updates, and safety and security. The public meeting was recorded and made available on VVTA's website for riders to learn more.

A separate online questionnaire was advertised on VVTA's social media for riders to share their feedback and thoughts if they were not able to attend the Zoom public meeting. Questions were the same as the Zoom questionnaire. The online questionnaire remains open for feedback; however, this outreach summary incorporates responses received through January 12, 2024. The questionnaire and major discussion themes raised during these sessions are provided in section 6.0.

3. Stakeholder Interviews: Discussion Questions and Major Themes

3.1 Discussion Questions

The discussion questions used to guide conversations during the stakeholder interviews are provided in this section.

- Do your clients/customers/employees rely on VVTA services?
- What transportation issues do your clients/customers/employees have?
- What locations do your customers/clients/employees need to access?
- What are the transportation issues that VVTA should focus on addressing?
- Prioritize the following improvements for VVTA – span, frequency, locations served, fares, other
- What regional trends and developments should we be watching?

3.2 Major Discussion Themes

This section provides an overview of the major discussion themes that emerged during the stakeholder interviews. These discussion themes include:

- Incorporate Transportation Infrastructure into New Development
- Implement Connections
- Community Connection
- Areas for Operational Improvement
 - Frequency
 - Span of Service
 - Service Coverage
- Feedback on Fares
- Feedback on Direct Access Service
- Desire for Increased Amenities
- Safety Concerns and Security
- Population Served

To provide context to VVTA service needs, stakeholders discussed growth throughout Victor Valley:

- Victory Valley College (VVC): Campus expansion including a 5,000-seat event stadium, 600-seat event space, and student housing
- Brightline Station coming to the Valley
- Victorville: Residential growth in West Victorville; expansion of roadways including US 395, rezoning for infill and higher-density development
- Barstow: BNSF Railroad development, bringing in around 20,000 jobs; residential development
- Hesperia: Transportation infrastructure updates, some commercial development

- City of Apple Valley: Complete streets improvements, North Apple Valley Development, warehouse development, Yucca Loma redevelopment, new park development

Incorporate Transportation Infrastructure into New Development:

Stakeholders indicated that VVTA service would be an important part of new development and expansion in the area and recommended coordinating with local cities, such as Victorville and North Apple Valley to incorporate transportation infrastructure into new projects.

Implement Connections:

Broader connections to transit were also discussed. These included connections to the planned Brightline Rail station and the future BNSF Railway hub in Barstow. Connections to other areas of the Victor Valley, including the Southern California Logistics Airport were identified as possibilities to consider for future routes.

Community Connection:

Overall, stakeholders indicated that their communities had positive feedback regarding VVTA service and highlighted that VVTA had fruitful working relationships throughout Victor Valley, including with the business community. Stakeholders felt that VVTA's advertising and marketing of their services was effective. Stakeholders acknowledged that VVTA provides needed transportation at a good cost throughout the area.

Areas for Operational Improvement:

However, stakeholders did identify some areas for improvement and concerns. Much of the feedback was related to the frequency and space of service. It was often mentioned that buses may need to run at more frequent intervals to accommodate a variety of work, school, and patient schedules. Specific requests included running buses later for VVC students and patients discharged from Providence Health. Additionally, stakeholders identified that infrastructure updates were needed at some bus stops, particularly in areas where there are no sidewalks and stops are just in the sand. Feedback related to the coverage area of service included discussion of Adelanto's disconnection from the VVC campus, the single route running on the Cajon Pass, stops along Powhattan Road, Bear Valley, and Yucca Loma in Apple Valley, and lack of service in some areas, including North Barstow (due to a bridge replacement project). Stakeholders felt that service span was a limiting factor for attracting job seekers to current employers and for long-distance commuters who either live outside of the service area or who had commutes requiring multiple transfers. Issues with the current span of service was also raised when stakeholders considered future development and expansion including possible VVC satellite campuses and a new transit center in Barstow (pending funding).

Feedback on Fares:

Feedback on fares was minimal, but included:

- Discussion of 30-day vouchers
- Clarification of the pass sale system
- Issues on the bus due to fare evasion
- Affordability of fares for riders who may be unhoused

Feedback on Direct Access Service:

Feedback on VVTA's Direct Access service was also provided and echoed general feedback about service frequency in addition to other concerns:

- Increased access to vouchers
- Updates to communication services, including text messages for when pick-up vans are nearby and app access
- Confirming if the van donation program still exists

Desire for Increased Amenities:

A desire for increased amenities was often identified by stakeholders these included:

- Customer restrooms at transit centers
- Amenities at bus stops, including better bus shelters, and opportunities for municipalities to have readily accessible amenities on hand to replace current amenities, as needed
- On-board bus amenities including Wi-Fi and charging and USB ports

Safety Concerns and Security:

Stakeholders also identified that safety was a concern for riders at some specific locations. This challenge, combined with other factors such as cleanliness, delayed service, and stigma around riding the bus, were raised as potential factors which may discourage bus ridership. The San Bernardino Sheriff Department (Sheriff Department) discussed that the VVTA contract with the department has been working well. The Sheriff Department mentioned that the biggest area for crime is at the D Street Hub. The Sheriff Department also mentioned future safety considerations including for the Brightline stations and coordination with communities within the San Bernardino Valley that Route 15 runs through for which they do not provide law enforcement.

Populations Served:

Recommendations from stakeholders related to populations served included: increased services for senior citizens, including “senior mobile home parks” – perhaps through Micro-Link services; services for job seekers; and increased outreach to students at the beginning of the semesters at VVC.

4. Pop-up Sessions: Discussion Questions and Major Discussion Themes

4.1 Discussion Questions

The discussion questions used to guide conversations during the customer comment sessions are provided in this section.

- Describe your riding experience – where are you coming from and where are you going?
- Are connections easy?
- What works well for you about VVTA services?
- What places would you like to travel to on VVTA buses that you can't get to today?
- What improvement would be most important to you?
- What is a second improvement you would want to see?
- What safety or security issues do you experience either on board buses or at bus stops/transfer stops?

4.2 Major Discussion Themes

This section provides an overview of the major discussion themes that emerged during the pop-up sessions. These discussion themes include:

- Overall Satisfaction with Service
- More Frequent and Extended Service
- Fares
- Additional Service Routes and Issues with Specific Routes
- Transfers and Connections
- Additional Accommodations for Passengers/Challenges with Using the Bus
- Need for Additional Communication

Overall Satisfaction with Service:

Many of the passengers interviewed indicated that VVTA bus service was working well for them. Passengers identified that fares seemed reasonable, drivers were friendly, buses were overall clean and well-kept, and that it was easy to learn about services on VVTA's website. Some services and connections worked well for passengers, particularly at Victor Valley Transit Center (VVTC), however, many passengers provided feedback regarding the span and frequency of service, discussed later in this section. Passengers use VVTA's services for a variety of reasons including social visits, lack of car access or car issues, shopping, work, and traveling to school. Although they were not interviewed, many Excelsior High School students also use VVTA's services.

More Frequent and Extended Service:

Concerns about frequency and span of service were brought up by many passengers during the pop-up sessions. Passengers expressed that they often experienced long waits – longer than 30 or 45 minutes for their buses to arrive. These lengthy transfers or wait times meant that passengers were spending long amounts of time in transit. Some participants noted that missing the bus caused them to need to seek out alternative methods for traveling to work due to the infrequency of service. Passengers also shared that missing their transfers caused issues in

their VVTA trips. Passengers also identified that extended hours of service were also important to them. Weekend service, evening, and early morning service hours were specifically felt to be lacking. One passenger noted “24-hour service would be a dream.”

Fares:

Some passengers indicated that the fares worked for them, especially students who receive free fares for VVTA buses. Other passengers acknowledged that they felt the fares were too high – directly related to the bus frequency and concerns over transfers costing extra money. One passenger indicated that an “intertransfer” fare with the Omnitrans system would be useful.

Additional Service Routes and Issues with Specific Routes:

Some passengers indicated that they would like to see additional routes or that there were specific needs for additional stops including:

- 50x should run on Fridays to/from VCC
- 50 and 55 should run every 30 minutes
- Route 55 can run up to 35 minutes later; difficult to transfer from route, never connects with the 50x
- Confusion over the 50 and 50x routes
- More frequent service on 50x would be nice
- 50 and 55 sometimes have on-time performance issues
- More service on the 15 bus (BV link)
- Need service to the “mariana” area
- Route 55 needs more service
- Route 22 needs more service
- 22 can run late sometimes, more often is the key issue – more so than the span of service
- A stop is needed along Palmdale Rd and Bellflower near the Shell Station
- Connecting to Route 32 was stated as a particular problem
- Route 52 is often not on-time
- 31 bus to/from Adelanto has some real timekeeping issues
- 56 should run every 30 minutes

Transfers and Connections:

- Wants transfer reciprocity between VVTA and San Bernadino transit operators
- Utilizing bikes on VVTA routes, one passenger mentioned that many people from Newbury Springs bring their bikes
- Metrolink should run up here
- Electrify whole fleet

Additional Accommodations for Passengers/ Challenges with Using the Bus:

In addition to challenges with lengthy travel times and service and timing/transfer gaps, passengers also noted concerns about fights on the bus, cleanliness, and lack of amenities such as chargers and Wi-Fi. Passengers also discussed that they would like to see public restrooms at transit centers and free water for passengers during the summer. Some passengers noted that considering the unhoused population was important.

Need for Additional Communication:

Passengers identified challenges with understanding some communication and scheduling related to bus routes. These included buses with “out of service” head signs, even when the buses were running; issues navigating the website – especially when it came to transfers; issues using the VVTA app; and out of date signage.

5. Driver/Staff Meetings: Discussion Questions and Major Discussion Themes

5.1 Discussion Questions

The discussion questions used to guide conversations during the stakeholder interviews are provided in this section.

- What locations along the route are seeing a lot of traffic congestion that is impacting travel time?
- What intersections cause problems along your route because of lack of signals or difficult turns?
- Where do you see issues in accessing bus stops?
- What locations do you hear from riders that they would like to go to but have difficulty getting to on VVTA buses?
- What issues do riders mention as being an issue for VVTA?
- What would rank as the greatest improvement to service for riders that VVTA could implement?

5.2 Major Discussion Themes

This section provides an overview of the major discussion themes that emerged during driver input sessions. The below topics were addressed in the driver input sessions. Appendix B provides notes, organized by theme including details and specifics.

- Bus Route Concerns and Opportunities for Improvement
- Feedback Received from Riders
- Bus Stop Improvements
- Amenities
- Software Issues
- Route Specific Feedback
- Other Challenges and Recommendations

6. Virtual Public Meeting and Questionnaire: Questionnaire Responses

6.1 Questionnaire

A bilingual (English/Spanish) version of the below questionnaire was used during the virtual public meeting and is available online.

Usage of VVTA Services

1. What VVTA services do you use?
 - Regular Route (Routes 1 through 6 and 31 through 56)
 - County Route (Routes 21 through 29)
 - Route 15
 - NTC Commuter
 - Micro-Link
 - Direct Access
 - Vanpool
2. How often do you use VVTA services?
 - Every day
 - 4 to 5 days a week
 - 2 to 3 days a week
 - Once a week
 - A few times a month
 - Every six months
 - Never rode

Connections

1. Do you connect between buses and services?
 - Yes
 - No
2. Where do you connect between buses?
 - Barstow City Hall
 - Victor Valley Transportation Center
 - US 395 in Adelanto
 - Apple Valley Post Office
 - Hesperia Post Office
 - Victor Valley College
 - Super Target – Hesperia
 - St Mary's Hospital
 - Mall of Victor Valley

Prioritize Improvements you would like for VVTA Services

- Barstow City Hall
- Victor Valley Transportation Center
- US 395 in Adelanto

- Apple Valley Post Office
- Hesperia Post Office
- Victor Valley College
- Super Target – Hesperia
- St Mary’s Hospital
- Mall of Victor Valley

Trade-offs

1. Will you be willing to walk further to/from a bus stop for faster trips?
 - Yes
 - No
2. Would you be willing to pay for a higher fare for more service?
 - Yes
 - No
3. How should VVTA focus service?
 - More locations with less service (in terms of how often, how early, and how late service operates)
 - Fewer locations with more service (in terms of how often, how early, and how late service operates)

Safety and Security (rate on a scale of 1-5, 1=Very safe and 5=Not safe at all)

1. Do you feel safe aboard VVTA buses?
2. Do you feel safe connecting between VVTA buses at transit centers?
3. Do you feel safe at VVTA bus stops?
4. Has the partnership with the San Bernardino County Sheriff’s Department improved feelings of safety?
5. Where do you feel unsafe and what makes you feel less safe on VVTA buses and at bus stops and transit centers?

6.2 Questionnaire Responses

The below responses were collected between December 11, 2023, and January 16, 2024. Thirteen people responded to the online questionnaire, including responses from the one participant at the virtual public meeting on Monday, December 11, 2023. See Appendix D for full questionnaire responses.

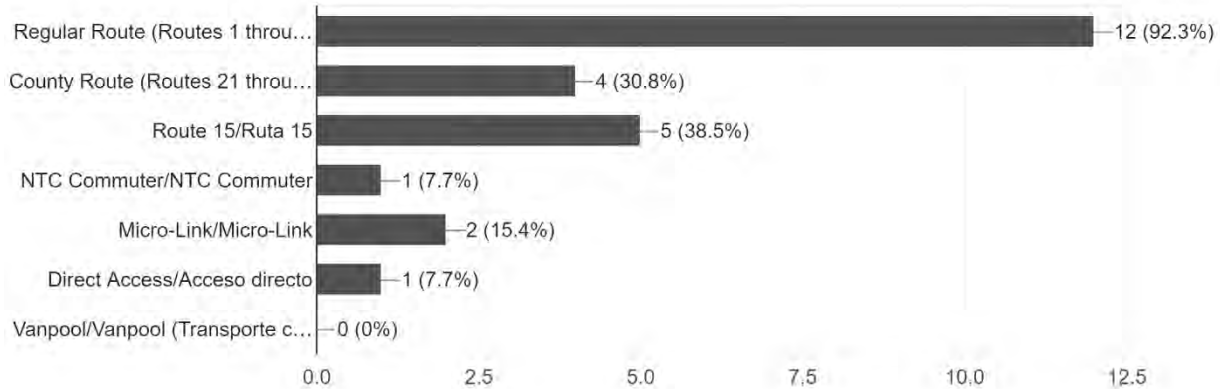
Usage of VVTA Services:

Almost all of those that responded to the questionnaire indicated that they used VVTA’s regular routes (1 through 6 and 31 through 56). While approximately 39% of respondents indicated that they utilized Route 15 and 31% use County Route. Only 8% of respondents use the NTC Commuter and 15% use Micro-Link services. The relative majority of respondents (33%) indicated that they use VVTA’s services 2 to 3 days a week, while 25% use VVTA’s services

every day and 25% use services 4 to 5 days a week. Approximately 8% of respondents use VVTA's services a few times a month or once a week.

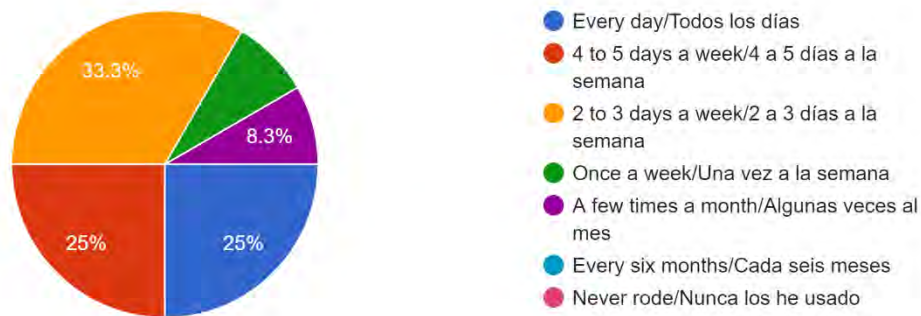
1. What VVTA services do you use?/¿Qué servicios de VVTA utiliza?

13 responses



2. How often do you use VVTA services?/¿Con qué frecuencia utiliza los servicios de VVTA?

12 responses

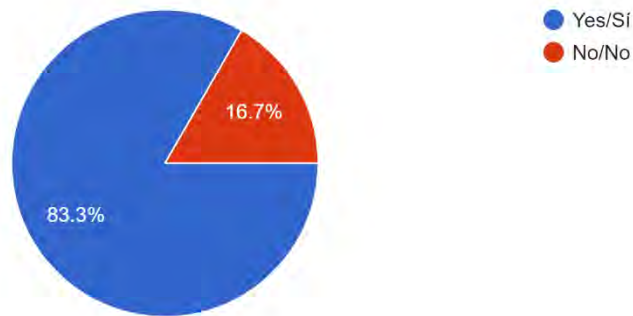


Connections:

Eighty-three percent of those who participated in the questionnaire connect between buses and services, connections are most frequently made at the Victor Valley Transportation Center, Victor Valley College, and the Mall of Victor Valley. 67% of respondents indicated that connections are difficult and that the main issues which made connections challenging were late buses, the times scheduled to make connections, walking distances, and the frequency of bus service.

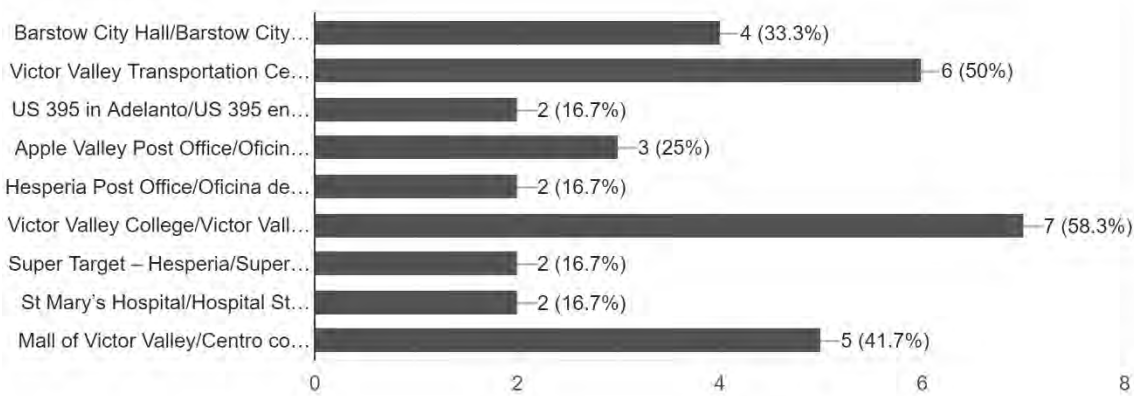
1. Do you connect between buses and services?/¿Se conecta entre autobuses y servicios?

12 responses



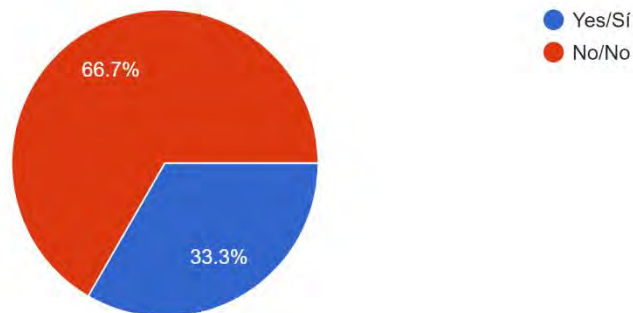
2. Where do you connect between buses?/¿Dónde se conecta entre autobuses?

12 responses



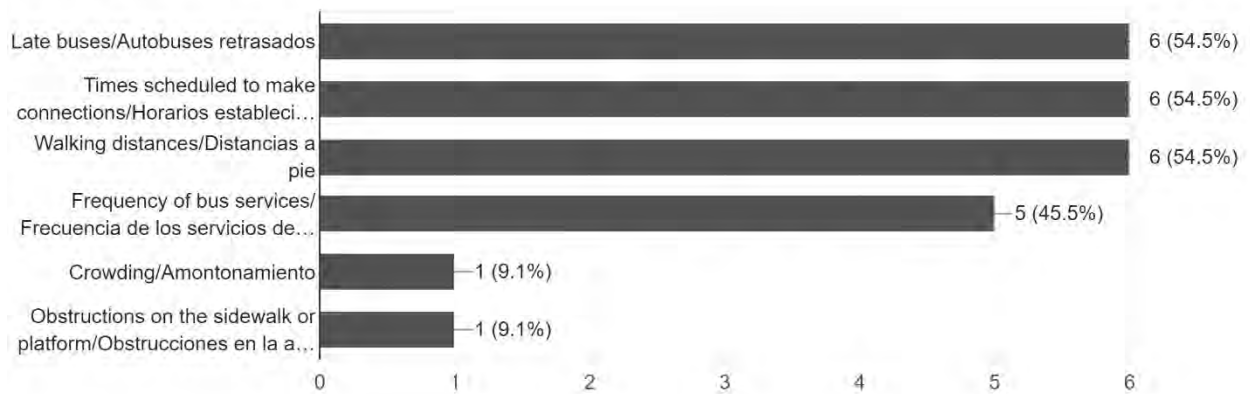
3. Are connections difficult?/¿Son difíciles las conexiones?

12 responses



4. What issues make connections difficult?/¿Qué problemas dificultan las conexiones?

11 responses

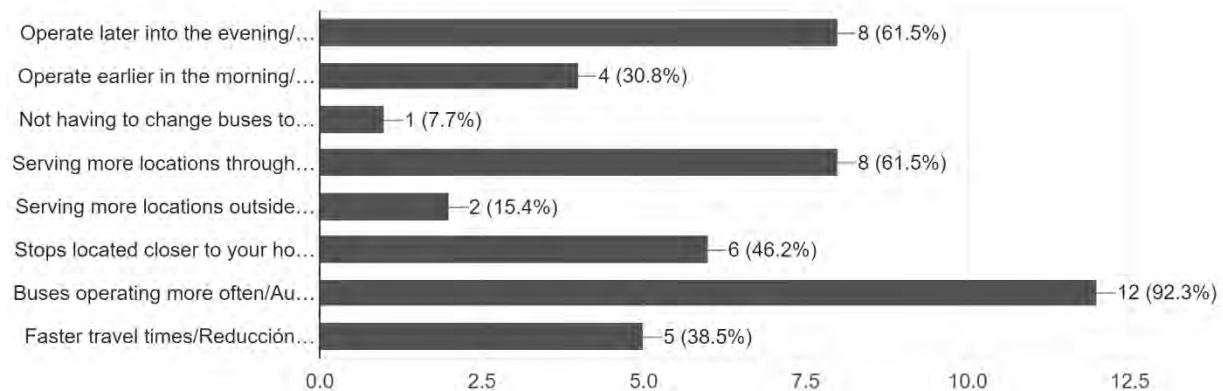


VVTA Service Improvements:

The main service improvements that respondents would like to see were buses operating later into the evening, serving more locations throughout Victor Valley, and stops located closer to their homes. Almost all respondents answered that they would like buses to operate more often.

1. Prioritize improvements you would like for VVTA Services. Please select your top 3 improvements. / Priorice las mejoras que desearía ...icios VVTA. Seleccione sus 3 mejoras principales.

13 responses



2. If you selected "Serving more locations throughout Victor Valley" or "Serving more locations outside of Victor Valley," share the locations below./ *Si seleccionó "Prestar servicio a más ubicaciones en Victor Valley" o "Prestar servicio a más ubicaciones fuera de Victor Valley," comparte las ubicaciones a continuación.*

8 responses

Hesperia/ and Oak Hills

They should be more stops depending on what's around. For example; my family has not been able to go to certain events at the adelanto stadium because the stop closest to it, we would have to walk 30min.

The area between Main st. and Bear valley rd east of I-15 and west of Hesperia Rd.

Less walking to get to a bus stop and less walking to get to your destination

N/A.

We need a bus stop at the Adelanto stadium. Adelanto is hosting events and there is no public access to them.

The Victorville Transfer Center has an arbor that is open to the sky. In the summer, it would be nice to have a shaded area to sit under.

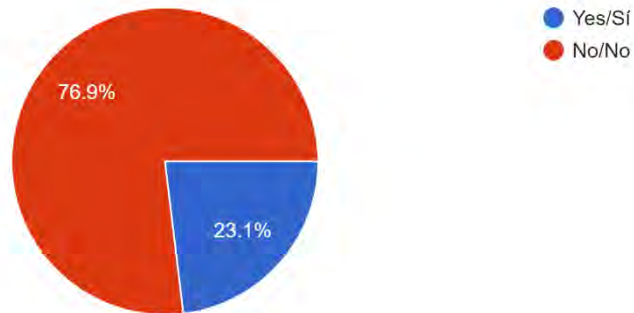
Route from Upper Knolls (Apple Valley) to Mariposa Rd and Bear Valley Rd

Trade-Offs:

Approximately 77% of respondents would not be willing to walk further to/from a bus stop for faster trips, while 23% would be willing to. The percentage of respondents who would be willing to pay higher fares for more service and who would not be willing to pay a higher fare for more service was equal at about 46% while 8% of respondents think that fares should be lowered even if it means service will be reduced. Responses were split evenly as to how VVTA should focus service – half of respondents think that VVTA should have more locations with less service, while the other 50% think that VVTA should have fewer locations with more service.

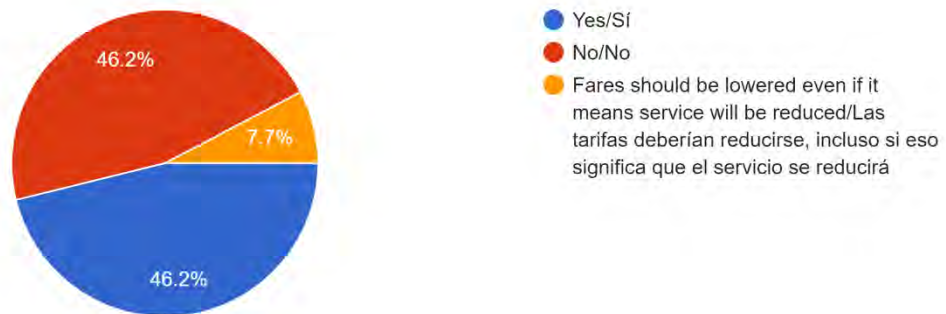
1. Will you be willing to walk further to/from a bus stop for faster trips?/¿Estaría dispuesto a caminar más hacia/desde una parada de autobús para hacer viajes más rápidos?

13 responses



2. Would you be willing to pay a higher fare for more service?/¿Estaría dispuesto a pagar una tarifa más alta por más servicio?

13 responses



3. How should VVTA focus service?/¿Cómo debería enfocar VVTA el servicio?

12 responses

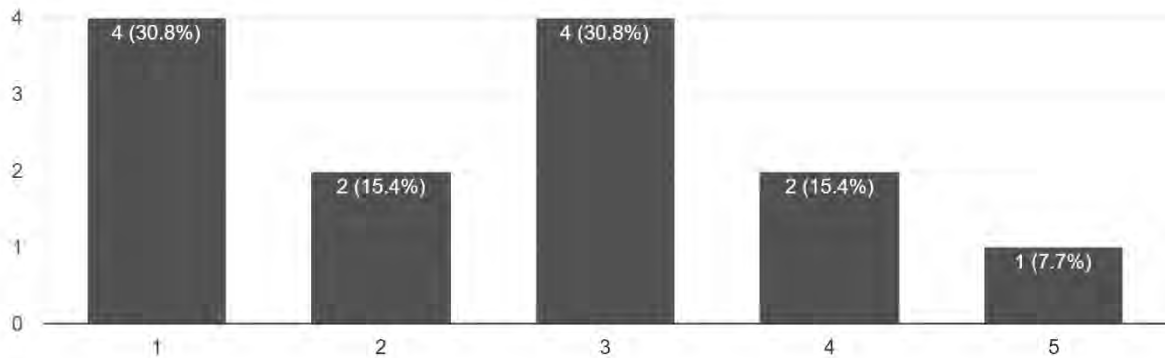


Safety and Security:

Respondents were asked to rate their feelings of safety with 5 being “not safe at all” and 1 “very safe.” Responses varied relating to how safe respondents feel on VVTA buses (Question 1). The highest number of responses were 1 and 3. Responses about safety at bus transfer centers (Question 2) was split, with 30% of respondents feeling very safe and 23% of respondents answering with a rating of 4, closer to the “not safe at all” option. At bus stops (Question 3), most respondents answered with a rating of 3. Responses were split between ratings relatively evenly regarding the partnership with the San Bernardino County Sheriff’s Department (Question 4) with 23% responding 2, 3, and 4.

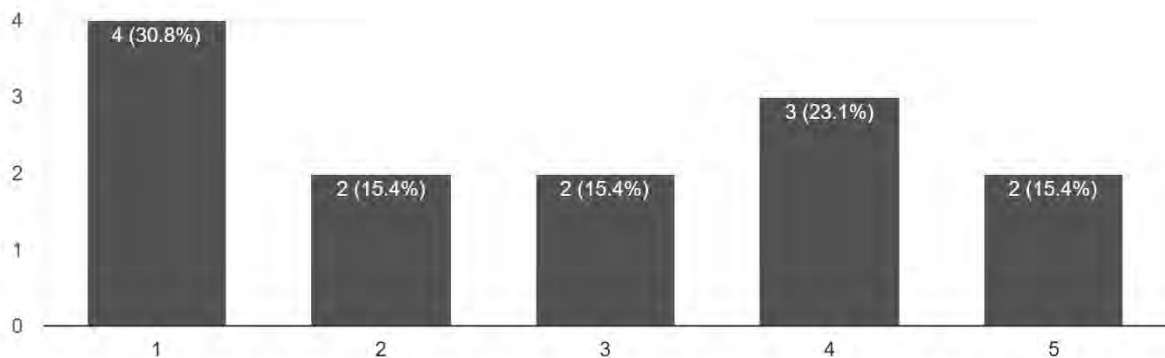
1. Do you feel safe aboard VVTA buses?/¿Se siente seguro(a) a bordo de los autobuses VVTA?

13 responses



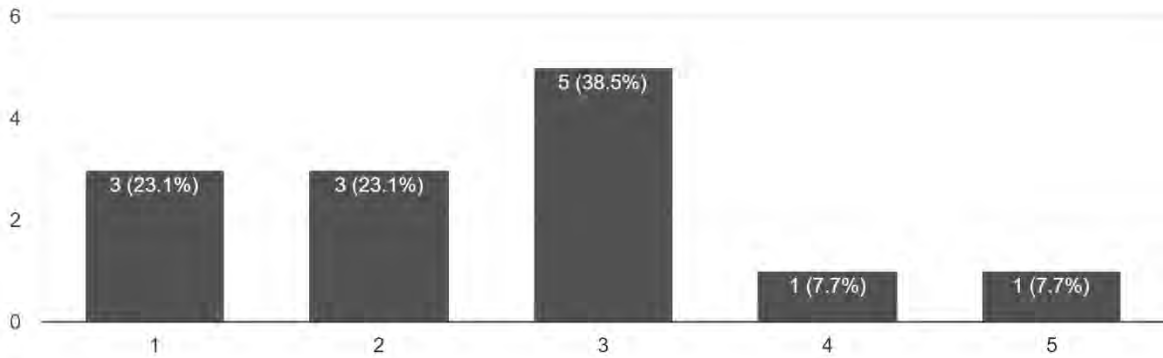
2. Do you feel safe connecting between VVTA buses at transit centers?/¿Se siente seguro(a) realizando transbordos entre autobuses VVTA en los centros de tránsito?

13 responses



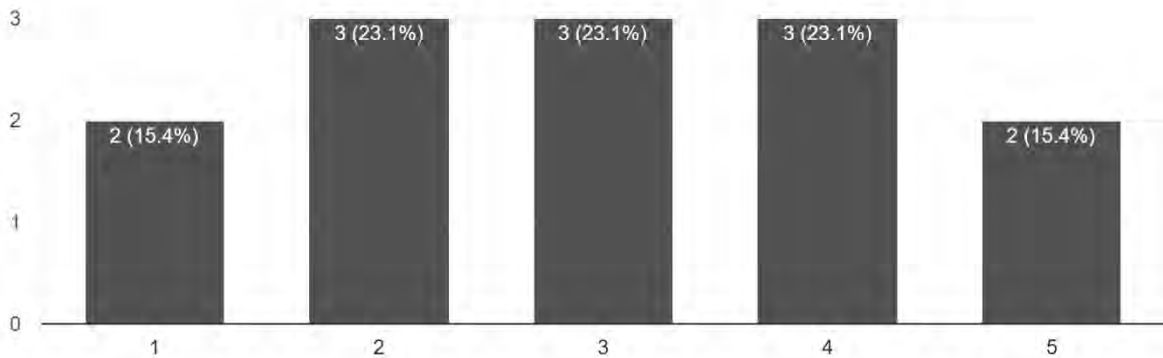
3. Do you feel safe at VVTA bus stops?/¿Se siente seguro(a) en las paradas de autobús de VVTA?

13 responses



4. Has the partnership with the San Bernardino County Sheriff's Department improved feelings of safety?/¿Ha mejorado la sensación de seguridad gr...mento del Sheriff del condado de San Bernardino?

13 responses



5. Where do you feel unsafe and what makes you feel less safe on VVTA buses and at bus stops and transit centers?/¿Dónde se siente inseguro(a) y qué le hace sentirse menos seguro(a) en los autobuses de VVTA y en las paradas de autobús y centros de tránsito?

8 responses

victor Valley college after Sunset, Victorville transportation center.

I feel unsafe at the bus stops that are completely dark and away from people.

Drivers aren't provided with non lethal means to deter hostile passengers.

People with mental illness walking and talking to themselves

The one thing that makes me feel unsafe is the drug addicts at the transportation center at night and at Victor Valley Mall by the bus stops. Some of them walk funny, and they can come up to you if you look at them. I, as a 18 year old dislike the smell of smoking, and some do it anyway. As a college student, I experienced a person who was drinking a bottle of whiskey, and it had a terrible stench.

I used to wait for route 31 at the transit center at around 6:04 PM on the weekdays when I got home from college. It takes forever for the bus to leave in 45 minutes when it's the only bus at the transit center. I would like that to be adjusted as well with a fast schedule, please. Thank you, VVTA, for looking at this, and I hope it will improve this feedback as well. Have a nice day/night.

Feel free to contact me of my feedback at andreminger758@gmail.com

Bus stops need lights. The desert gets very dark, cars and buses can't see stop. Sometimes the bus skips the stop because the driver can't see me or people.

Sometimes some riders take the bus and they smell so much to marijuana, this make me feel unsafe

Victorville hub at d street

Appendices

Appendix A: Outreach Materials

1. Boards
2. Flyers (Physical and Digital)
3. Fact Sheet
4. Interview Forms

We want to hear from you!

¡Queremos saber su opinión!

1

Describe your riding experience – where are you coming from and where are you going?

Describa su experiencia de viaje en autobuses: ¿de dónde viene y a dónde va?

2

Are you able to make connections between buses and services easily?

¿Puede realizar conexiones entre autobuses y servicios fácilmente?

3

What works well for you about VVTA services?

¿Qué es lo que mejor le funciona de los servicios de VVTA?

4

What places would you like to travel to on VVTA buses that you can't get to today?

¿A qué lugares le gustaría viajar en los autobuses VVTA a los que hoy no puede llegar?

5

What improvement would be most important to you?

¿Qué mejora sería más importante para usted?

6

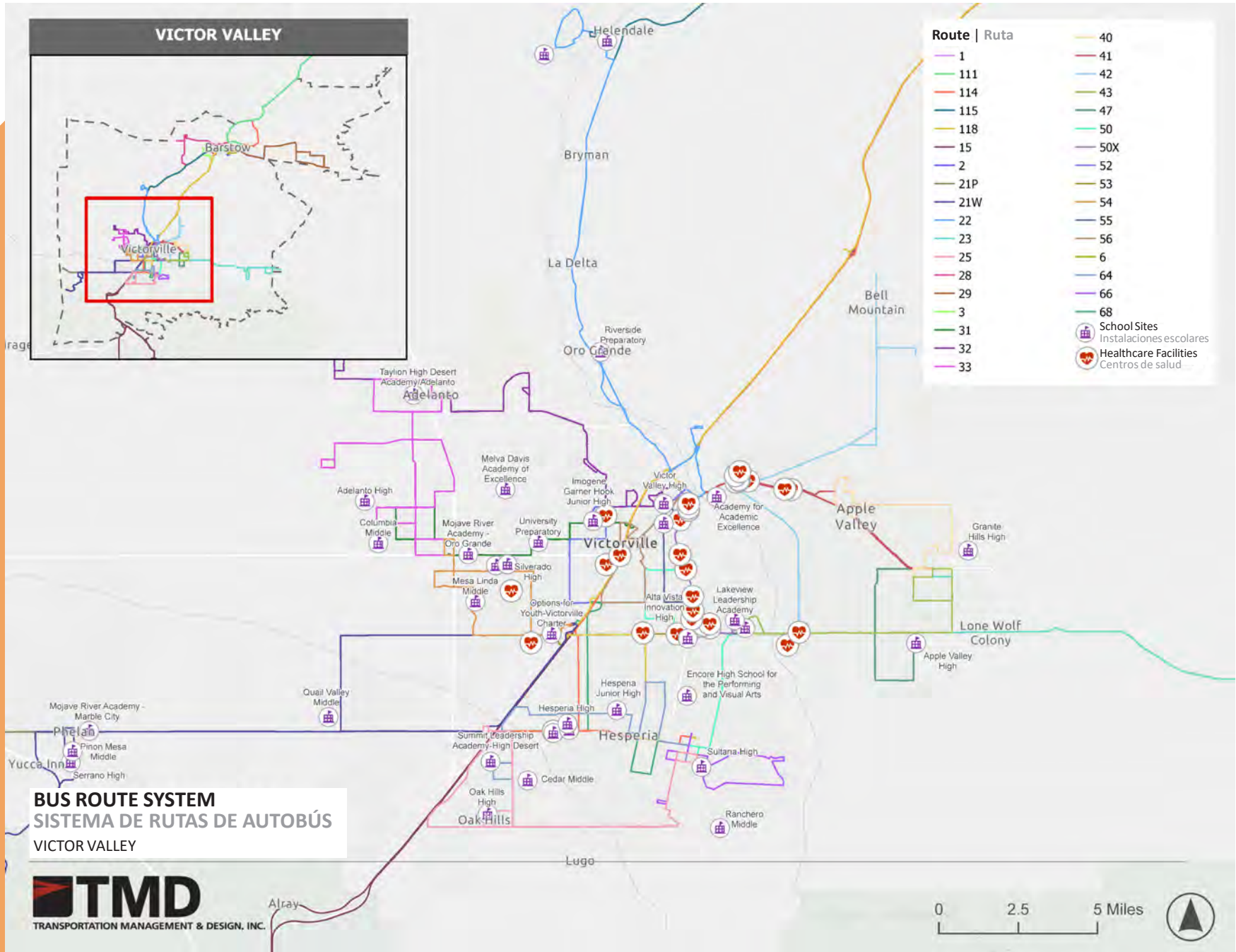
What is a second improvement you would want to see?

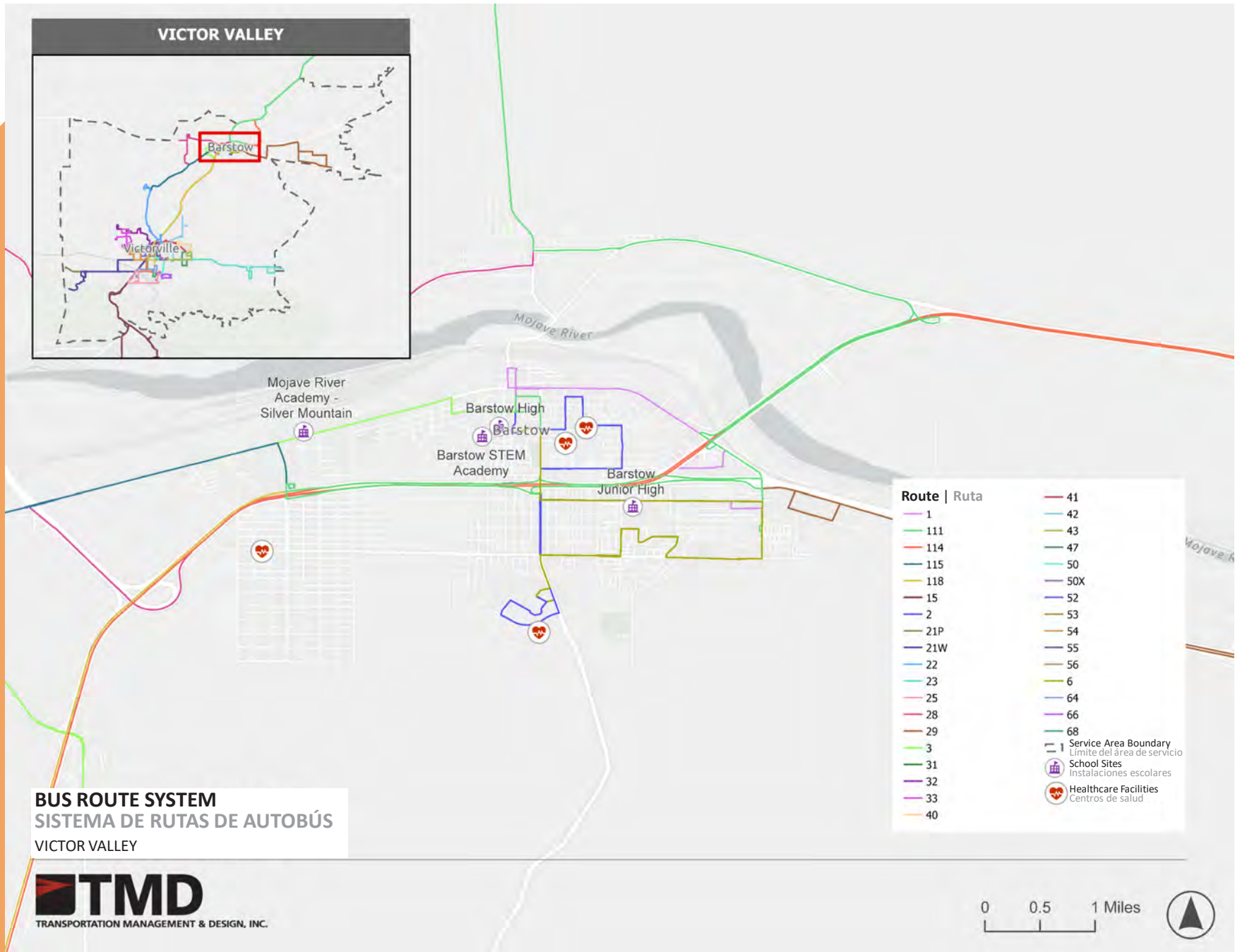
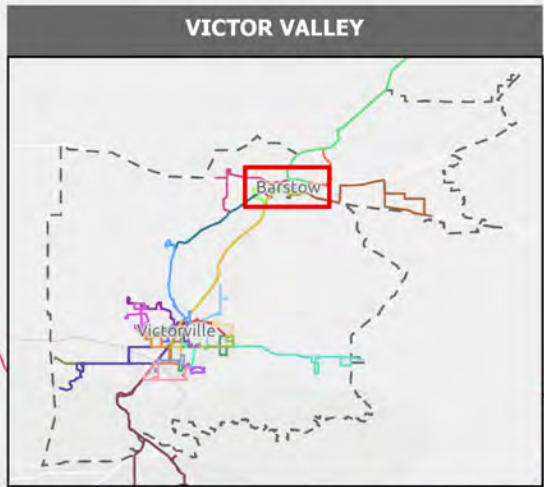
¿Cuál es la segunda mejora que le gustaría ver?

7

What safety or security issues do you experience either on board buses or at bus stops/transfer stops?

¿Qué problemas de seguridad experimenta a bordo de los autobuses o en las paradas?





BUS ROUTE SYSTEM
SISTEMA DE RUTAS DE AUTOBÚS
VICTOR VALLEY

Route Ruta	
1	41
111	42
114	43
115	47
118	50
15	50X
2	52
21P	53
21W	54
22	55
23	56
25	6
28	64
29	66
3	68
31	Service Area Boundary
32	Limite del área de servicio
33	School Sites
40	Instalaciones escolares
	Healthcare Facilities
	Centros de salud



Victor Valley Transit Authority Comprehensive Operational Analysis

Análisis Operativo Integral de la Autoridad de Tránsito de Victor Valley

Victor Valley Transit Authority (VVTA), in partnership with Transportation Management & Design, Inc. (TMD) is evaluating all aspects of the VVTA system throughout the greater Victor Valley area to determine potential improvements to create a more equitable, effective, and efficient transit network. This analysis is called a Comprehensive Operational Analysis (COA).

La Autoridad de Tránsito de Victor Valley (VVTA, por sus siglas en inglés), en asociación con Transportation Management & Design, Inc. (TMD) está evaluando todos los aspectos del sistema de la VVTA en toda el área metropolitana de Victor Valley para determinar posibles mejoras para crear una red de tránsito más equitativa, eficaz y eficiente. Este análisis se llama Análisis Operativo Integral (COA, por sus siglas en inglés).

SHARE YOUR THOUGHTS!

Check vvta.org for updates and more information!

Join us for in-person and virtual events in October and November 2023

Pop-up Sessions:

Tuesday, October 24, 2:30–5:00 pm
Victor Valley Transportation Center
16838 S D St, Victorville, CA 92395

Wednesday, October 25, 2:30–5:00 pm
Barstow City Hall
220 E Mountain View St Ste A, Barstow, CA 92311

Thursday, October 26, 2:30–5:00 pm
Victor Valley College
18422 Bear Valley Road, Victorville, CA 92395

Virtual Meetings:

Details coming soon.

For More Information:

Visit vvta.org
or scan the QR code.



¡COMPARTA SU OPINIÓN!

Visite vvta.org para obtener actualizaciones y más información.

Acompáñenos en los eventos presenciales y virtuales en octubre y noviembre de 2023

Eventos Comunitarios “Pop-Up”:

Martes, 24 de octubre, 2:30–5:00 pm
Victor Valley Transportation Center
16838 S D St, Victorville, CA 92395

Miércoles, 25 de octubre, 2:30–5:00 pm
Barstow City Hall
220 E Mountain View St Ste A, Barstow, CA 92311

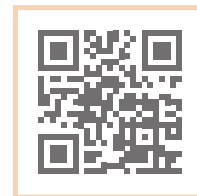
Jueves, 26 de octubre, 2:30–5:00 pm
Victor Valley College
18422 Bear Valley Road, Victorville, CA 92395

Juntas virtuales:

Más detalles pronto.

Para más información:

Visite vvta.org
o escanee el código QR.





Victor Valley Transit Authority Comprehensive Operational Analysis

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Goals of the VVTA Comprehensive Operational Analysis



Identify what services are working well and what services could be improved



Create a transit system that supports the needs of the community



Propose recommendations for future service changes or expansions

SHARE YOUR THOUGHTS!

Join us for our virtual meeting to learn more and provide feedback about your experience with VVTA:

When:

Monday, December 11, 5:00 – 6:00 pm

Where:

Go to: zoom.us/join

Webinar ID: 880 1114 1892

Or Telephone:

(669) 900-6833

(877) 853-5257 US Toll Free

We hope to see you!

For more information, visit vvta.org or scan the QR code:



Website/sitio web: vvta.org

Phone/teléfono: 760-948-3030

Análisis Operativo Integral de la Autoridad de Tránsito de Victor Valley

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Objetivos del Análisis Operativo Integral de la VVTA



Determinar qué servicios funcionan bien y cuáles podrían mejorarse



Crear un sistema de tránsito que responda a las necesidades de la comunidad



Proponer recomendaciones para futuros cambios o ampliaciones de los servicios

¡COMPARTA SUS IDEAS!

Acompáñenos en nuestra reunión virtual para obtener más información y darnos su opinión sobre su experiencia con VVTA:

Cuándo:

Lunes, 11 de diciembre, 5:00 – 6:00 pm

Dónde:

Vaya a: zoom.us/join

Webinar ID: 880 1114 1892

O por teléfono:

(669) 900-6833

(877) 853-5257 número gratuito en los Estados Unidos

¡Esperamos verle!

Para más información visite vvta.org o escanee el código QR:



Virtual Public Meeting

Join us for a virtual meeting to share your thoughts about how VVTA can create a more equitable, effective, and efficient transit network.

December 11, 5-6pm, Zoom

Visit vvta.org for more info.

Reunión pública virtual

Acompáñenos en una reunión virtual para compartir sus ideas sobre como VVTA puede crear una red de transporte más equitativa, efectiva y eficiente.

11 de diciembre, 5-6 pm por Zoom

Para más información visite vvta.org.



Victor Valley Transit Authority Comprehensive Operational Analysis

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Goals of the VVTA Comprehensive Operational Analysis



Identify what services are working well and what services could be improved



Create a transit system that supports the needs of the community



Propose recommendations for future service changes or expansions



Future Public Input Opportunities

Following the current phase, the project team will review the data collected and public input to help guide the initial development of service recommendations. Once initial recommendations are developed, they will be shared with riders, stakeholders, and the public in spring 2024 through additional public outreach events.



For more information visit

vvta.org

or scan the QR code

Análisis Operativo Integral de la Autoridad de Tránsito de Victor Valley

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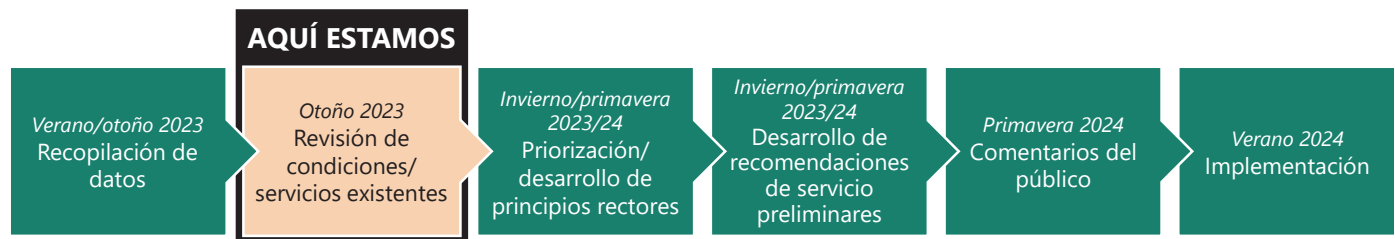
Determinar qué servicios funcionan bien y cuáles podrían mejorarse



Crear un sistema de tránsito que responda a las necesidades de la comunidad

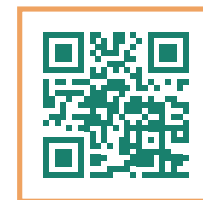


Proponer recomendaciones para futuros cambios o ampliaciones de los servicios



Futuras oportunidades de participación pública

Después de la fase actual, el equipo del proyecto revisará los datos recabados y los comentarios del público para ayudar a guiar el desarrollo inicial de las recomendaciones de servicio. Una vez que se hayan desarrollado las recomendaciones iniciales, se compartirán con los usuarios, las partes interesadas y el público en la primavera de 2024 a través de eventos adicionales de divulgación pública.



Para más información, visite vvta.org o escanee el código QR

VVTA Round 1 Public Outreach

Questions for bus operators/staff

1. What locations along the route are seeing a lot of traffic congestion that is impacting travel time?
2. What intersections cause problems along your route because of lack of signals or difficult turns?
3. Where do you see issues in accessing bus stops?
4. What locations do you hear from riders that they would like to go to but have difficulty getting to on VVTA buses?
5. What issues do riders mention as being an issue for VVTA?
6. What would rank as the greatest improvement to service for riders that VVTA could implement?

Questions for Stakeholders

1. Do your clients/customers/employees rely on VVTA services?
2. What transportation issues do your clients/customers/employees have?
3. What locations do your customers/clients/employees need to access?
4. What are the transportation issues that VVTA should focus on addressing?
5. Prioritize the following improvements for VVTA – span, frequency, locations served, fares, other
6. What regional trends and developments should we be watching?

Questions for Drop-ins

1. Describe your riding experience – where are you coming from and where are you going?
2. Are connections easy?
3. What works well for you about VVTA services?
4. What places would you like to travel to on VVTA buses that you can't get to today?
5. What improvement would be most important to you?
6. What is a second improvement you would want to see?
7. What safety or security issues do you experience either on board buses or at bus stops/transfer stops?

Appendix B: Driver Session Notes, Organized by Theme

Bus Route Concerns and Improvements:

- Congestion on holidays
- Jasper Road and Agate Road has a used area/dirt road that could help build ridership
- Need to have stops put back at the public library, maybe could be served by library at route 3
- ZIP bridge detour does not have any additional time on it and not enough running time now becomes a concern
- Split shifts are too long
- Signals on Bear Valley and Mariposa/Mall area the signal cycle is too short (Bear Valley/Mariposa)
- Green Tree NB light left turn onto and Hesperia, light is impossible
- Also light at G +Main intersection is a concern
- In Barstow, in front of post office, back ups if more than one bus shows up, bus bunching causes issues
- Real time bus signs need to be dimmed, too bright, dangerous at night
- Service along Rim Rock west of Barstow Road no longer there, there is now a convalescent home (Barstow Heights)
- Need funding for bus shelters, need more cover from rain, lighting, etc.
- Customer harassment a big issue
- Bus operators say management issues have improved since switching to Keolis
- Need for operator relief facility at City Hall
- Bear Valley, the bus stop signs are behind traffic lights going EB
- Bear Valley and Amargosa, the traffic signal timing is too tight
- Tablets are out of date with regards to speed limits; could be causing slow speeds; 395 doesn't have speed limit signs; operators are confused
- Need coverage into areas in Phelan (on Johnson Road/Wilson Ranch)

Rider Feedback:

- Riders ask about the old Route 200 bus, it was removed during COVID
- Would also like a "free transfer" system from VVTA, riders always ask
- Requests for a lot of services in the Barstow area
 - Used to be Route 28
- Need a full-length Main Street bus (riders always ask)
- Passengers want the 66 to run later into the evening

Bus Stop Improvements:

- Challenges approaching the curb at the post office bus stop (Barstow)
- 21p and 21w are missing a lot of bus stop signs

Amenities:

- Driver relief facility/info booth would be nice at City Hall transfer stop

Other:

- Barstow: Craig/Brian are doing some minor "maintenance" on some routes (e.g., Baghdad Café layover)
 - Running time in the routes
 - Barstow could be a "diamond in the rough" has a lot of potential
 - Some discussion of the CNG range issue
- Went through swiftly route reporting software outputs
- Need for additional drivers and timing of the bid preparation
- ADA tablets on Direct Access are "iffy" and need replacing
 - Radius is an issue, coverage is spotty
- Feels bus interiors should be cleaner leaving the garage

Route Specific:

Route 1:

- Lots of folks trying to skip fare
- Good ridership on Route 1 (Main Street)
- Needs more stops, too far apart at Bank of America, b/w 7th and Main and Autozone, need a stop, the automatic system is still calling out unused/discontinued stops
 - On 3, at C+Main, L+Main, for A/Main, Perris/Main
- Potholes on Route 1 at sunrise and Monterra, at Barstow Station
- Barstow road to Rim Rock; riders complain about not stopping before PO on Route 1
- Route 1, why not do deviation every time, the school calls it in anyway

Route 1 + 6:

- Fort Irwin and Route 1 stop, opposite Walmart the stop sign is too close to the mirrors
- Glare from the ADA communicator sign at night is dangerous

Route 2:

- Some congestion on holidays, but not much
- Food 4 Less is most popular on Route 2
- Right turn from Mountain View to Muriel, issue with cars parked right up to the corner
- Senior center on Route 2 (on Melissa) is also well-used
- Speed humps on 2 by Barstow College
- Route 2 by Food for Less, they get honks whenever they stop
- Rite Aid stop doesn't announce
- Route 2 stop sign in front of the senior living needs at least a waiting bench
- Skills issues on Route 2, turn from Mountain View to Mound
- Route 2 speed bumps cause issues
- Route 2 Food 4 Less, when bus stops it causes back ups
- Bus stop by Food 4 Less, sidewalk not good enough
- Route 2 stop in front of senior living needs at least a waiting bench

Route 3:

- Stop NS of National Trails on Sun Valley is dangerous due to curve
- No stop at the Barstow Library due to homeless issues; Route 3 stops early
- Route 3 needs a stop between Jasper and Agate on Cedar, too much space between existing stops

Route 6:

- Several blind spots
- Center + Upton is a "bad neighborhood" issues with kids, bb guns

Route 21:

- At 9 am, problem with route 21 sitting at McDonalds, 21 p and W are bunching. 21W at 5:50 am, 9 :42 am buses are right on top of each other until pulling out at Cataba St.

Route 22+28:

- Should be scheduled to meet at Helendale at the same time
- Routes 28 and 22 show up in the same timeframe, how up in 15 minutes, OTP issues
- Route 28 and 22 meet at same time, messes up closing

Route 29:

- Layover point changes to Chevron – it's a good change
- OB 29 area (behind Walmart) is an area with some ridership, but not really shows up in APC system
- Route 29 had issues at Baghdad Café, changed timepoint; problem standing down at the location, now standing down at Chevron
- The route 29 change is confusing for operators

Route 31:

- Route 31 eastbound at University Prep, parents are parked at both stops, every day at 3 pm, have to put on hazards, have to pick up children at the middle of the street since there is no access to the bus stop

Route 33:

- Route time to detention center is not enough (only given 3 mins)
 - “fix” to do that on request like the 42 does
- To do detention center does not leave enough time

Route 41:

- Route 41, issues making stop going off highway 15

Route 47:

- Bus coming off of Highway 18 onto Navajo the left turn is bad to make
 - “fix” is to go straight down to Kiawah like 41 and gets you back to where 47 is

Route 50:

- Need a hard look at Route 50, in terms of service levels, timing, etc.
- Major issues making left from Green St to Hesperia St, traffic signal is skipping left turn signals, causing OTP issues for Route 50
- School buses sometimes back up the VVTA bases at the park-n-ride lot
 - Major issues making left from Green St to Hesperia St, traffic signal is skipping left turn signals, causing OTP issues for Route 50
- Right turn on 50 + 55 leaving college (on the child development area) is difficult
 - Traffic and center divider “island” makes it difficult

Route 52:

- Turn from Roy Rogers right onto Arlette Drive is very difficult to do
 - “fix” is to stay on Mariposa perhaps

Route 53:

- Timing issues on 53 after noon
- Check out route 53, why are people 20 minutes late in the PM? What in spite of high speed limit?

Route 64:

- Route 64 has time at the end of the route, no time at Cataba and Main, no down time; used to go in and run through the Escondido loop, too much to go in and out, confuses passengers

L Street Park and Ride:

- L Street Park and ride, school buses parks, holds up buses, messes up OTP

Appendix C: All Notes from Outreach Events

Stakeholder Meeting 1 - Victorville City Hall

- Stu explain the overall context of a COA

- Jenele - what is riding? is it rebounding?
- Alex (?) says it is in the process of recovering

- Fredy - West Creek 2 + 3 → (Mojave + Amargosa)
Map Crossing → (Mesa Linda + Mesa)

↳ about 1,350 new SFD together
↳ will send plans

- potential longer term west of U.S. 395 has areas zoned for residential

• many lots to develop

• Pahrville Rd. west of Amargosa may get a zoning change for multi-family

• Bear Valley Rd. → "wellness overlay" coming

• Ridecrest Rd. → apartments on west side coming

• Sutter Wells Rd. → 300 new units coming

- for industrial → Mojave + U.S. 395
→ Airport / airport area

- 7th Street → now zoned mixed use all the way to D Street

- their new "specific plan" is geared to more mixed use

• push on-street parking back with ped access

• Caltrans working on D Street and also widening U.S. 395

- Old Town transfer center doesn't really have any measurable concerns

• Wellness Center (for the unhoused) also soon to be open

- no "major transit centers" or "corridors" are designated for the high desert which would trigger some zoning overlays that reduce parking, etc.

- Caltrans looking to test TSP on CA 18 corridor

- Victorville is "pro-growth" - both in terms of residential and commercial

• Old Town updated recently to help create density

• less vehicle-dependence

• "smart growth" within specific areas

- Mall subs down → some safety incidents there

- I-15 @ Eucalyptus was considered for a new hospital

• uses a new "health + wellness" overlay which has some as-of-right development preferences

- mostly for transit-dependent → "by necessity"

• opportunity to grow in the mixed use areas

• "five COAs from now" will be ready

- sense that frequency is a key improvement
 - elderly access to transit
- Library moving to golf course club house site → 7th & Green Tree
- we should speak to Victor Elementary School District about their family centers
- would ~~like~~ like to see WTA reach out to them for site plan review

Stakeholder Meeting 2 - Dana @ disability succs.

- we go through the context of the study
- needs to run more frequently → span can also be an issue → better since COVID
- they give them 30 one-day marches
- coverage seems good in the area

- Direct Access issue and concerns:

- "pricy" (2-fee)
- member maybe for Direct Access?
- most get by rules here
- do they have an App? → if no, should
- no tip drill issue she have about

- frequency is the concern is the most worried about

* van donation program → what happened to it?

Stakeholder Meeting 3 - Rotary Club Luncheon

- intros

- service through Spring Valley area + Ft. Irwin is appreciated

- question about the high desert corridor

- Chris then talks about: Hesperia Transit Center
hydrogen-powered buses
(fuel cell)
(refueling facility)

- Stu mentions innovation at WTA and the reasons why

- board size
- funding
- staff commitment

• vanpool program, for example, is the 11th largest in the USA

- should VVTA focus on the "disadvantaged communities" more than it does?

- Chris replies that we recognize the variety of users and that we try to change the perception of who uses the bus to better match reality

- minister also says to look at the needs of senior citizens in the Valley

• Chris mentions how "Microlink" service can help the seniors

• serve the "senior mobile home parks"

- much mention of Brightline coming to the Valley

- VVC building a new stadium → VUTA will likely have a special route

- LRT from/to Old Town and the new Brightline station?

• would be very long term thinking

• people ride rail more than bus

Stakeholder Meeting 4 - Chamber of Commerce (Apple Valley)

- hasn't heard any real complaints about WTA per se

- job seekers need longer spans

- some mention made of frequency
- both for attracting and retaining employees

- seem to be a lack of overly negative complaints about WTA

- WTA does a good job at marketing itself, they feel

- area keeps growing → Tapestry development in Harpersville

- retail / food (supermarket) development is continuing

VUTC - Drop-hs - 10/24/23

- 1 - good experience
 - wifi connections spotty
 - connection pretty good @ VUTC
 - SOX should run on Fridays as well to/from VC
 - 22 can run late sometimes
 - * more often is the key issue - more so than span of service

- 2 - can look down
 - * more often is really the main thing, all else seems fine

- 3 - uses it for ~~to~~^{to/from} school (both ways - VC)
 - nothing really comes to mind → seems to run well when he needs it

- 4 (Spanish) - overall good service
 - uses it mainly for shopping
 - * again, more frequency!

- 5 - uses it to visit family
- very few problems
 - feels both frequency & span are fine
 - fare seems very reasonable → "better than paying for an Uber"

- 6 - uses it mainly for VUC
- more frequent service on 50x would be nice
 - buses seem clean and well-kept
 - fare is good - she rides for free

- 7 - feels that sometimes drivers are a little stop-start
- honestly feels that there needs to be more service on the 15 bus
(BV Link)
 - chargers & wi-fi are a must! on all buses

- 8 - uses it to visit family
- buses are clean
 - * later service would be good on buses

- would be good to have more clear
(easy to read) schedules

9 - mainly uses it for work

- fares are "excellent" compared to
Omnitrans

- need service near the "Mariana" area

- span & frequency are fine

- app should be a "little bit
easier to use"

> should always go to day you
are opening the app for schedules

- need "intertransfer" fare with the
Omnitrans system

10 - SPANISH - uses it mainly for work

- 31 bus to / from Adelanto has
some real timekeeping issues

> route is entirely too lengthy

> seems to have a lot of on/off riders
its whole length

- 11 - ^{(most days) (both ways)} uses it to / from ~~school~~ school (VVC)
- overall, feels service is good
 - like that service is free for students @ VVC
 - was easy to learn about WTA service on the web

- 12 - uses it for work
- would be good if it ran later at night
 - fees are "very fair" and allow for people to ride often

- 13 - mainly uses it for school - adult education
- + *need more frequency like LA has

- 14
- > takes way too long to get places
 - schedules need BOTH more span AND frequency
 - "even Omnitrans runs more often"
 - need generally more coverage in areas near the 31 → lengthy walks
 - feels fares are too high given the frequency
 - Metrolink should run up here

- need more sun coverage at the
VTC

15 - sometimes folks on drugs are loud on the
bus

- would like to see service run later at
night → "24 hour service would be a dream"

16 - uses it for travel to/from VVC

- likes to ride and not drive

- easy to connect at the VVC

- fares are also quite reasonable

17 - uses it for job-hunting

* the real issue is the weekend frequency

* SPAN is an issue on Sundays

Stakeholder Meeting 5 - VVC

- they are California's fastest growing college
- opening the new 5K seat stadium
 - also have a 600 seat event space
 - they are up post COVID numbers over 20% in terms of enrollment and FTE
 - 24 new faculty being hired
 - starting to have students enroll for a year and not just a semester
- campus re-design "on hold" and will remain as is with current layout
- they feel they have sufficient parking and are not looking to add
- on campus housing to be built in the future (once funding obtained)
 - no real change to the parking inventory
- may expand to a satellite SCLA campus (aviation)

- truck driving simulator is out there
- also would like a site in Hesperia at some point
 - > students mainly from Hesperia
 - > property near U.S. 395 + Main would likely not be developable

- public service academy campus is not seen as a potential "campus center"

- no real negative complaints about VVTA

- one issue → Adelanto feels disconnected from VC

- Microlink zones do not serve the VVC campus

- future satellites may require new bus services

Barstow Driver Meetings

1 - mostly straightforward → no congestion like in Victorville

- layover point on Route 29 changed to the Chevron (was Baghdad Cafe) → is a good change

- the 08 29 area (behind the Walmart) is an area with some ridership

- but not really shows up in APC system

- Food-4-Less is most popular on Route 2

- on Route 2, right turn from Mt. View to Muriel → issue with cars parked right up to the corner

- Route 1 has alot of folks trying to skip fare

- Senior Center on Route 2 (on Melissa) is also well-used

- good ridership on Route 1 (Main Street)

2 - some congestion on holidays, but not much

+ - Route 6 has several blind spots along the

3 route (stop signs)

- "Post Office bus stop" should be moved or made longer → it gets harder to approach the curb

- speed bumps on 2 by Boston College

- Route 2 by Food-4-Less they get humps when they stop

- 22 + 28 should be scheduled to meet at Helendale at the same time

- school buses sometimes back up the VTA buses at the park-n-ride lot

4 - riders ask about the old Route 200 bus → was removed during COVID

- would also like a "free transfer" system from the VTA (riders always ask)

5 - Route 1 needs more stops - two for apt

• @ Bank of America

• b/w 7th & Main & Autozone → need a stop

- automatic system is still calling cent unused / discontinued stops

↙ on 3, @ C + Main & L + Main → for e.g., A/Main, Perris/Main

- on Route 2, Bite Aid stop doesn't
announce

- POTHOLES - on Route 1 @ Sunrise + Monterra
- @ Barstow station

6 - they get requests for alot of service
(DISPATCHER) in the North Barstow area
- need to be Route 28

- Route 3 stop NS of National Trails on
Sun Valley is dangerous due to curve

- Route 2 stop in front of senior living needs at
least a waiting bench

7 - need a full length Main Street bus
(riders always ask)

8 - Ft. Irwin + Route 1 stop → opposite
+ Route 6 almost the
stop sign is
too close to
mirrors

- glare from the ADA annunciator sign at night
is dangerous

9 - Jagers Road + Agit. (spelling?) Road
has an unpaved area / dirt road
that could help build ridership

- need to have stops put back at the
Public Library

• maybe could be served by library on
Route 3

- dinner relief facility / info booth would
be nice at the City Hall transfer
stop

- Route 6 Center + Upton is a bad
neighborhood → issues with kids, BB guns

Barstow City Hall Drop - Ins

- 1 - to and from work is the most
 - would like to see free fares as a permanent feature
 - * later service
 - * more frequent service (rider missed bus and got a ride to work)

- 2 - uses the bus for various trips
 - buses "shut down too early" - need to run later as the population is growing
 - "maybe" run the in-town routes every half hour
 - should have a free bottle of water for every rider in the summer
 - * transfers should not cost anything extra!
 - whole fleet should be electrified

3 - needs to have more coverage in
the Boston

4 - footrests!
- wi-fi could be more reliable
- would like to see lavatories at
the transfer center

5 - uses it to get to/from school (vvc)
- feels like some stops are just passed
by
- on-boardment derivations are not always
easy to arrange

6 - "already did it online"
- drivers are friendly

7 - "nothing really wrong with service" - the
buses "run fine"
- overall, the drivers are "pretty
decent drivers"

8 - uses it for rides to / from work & shopping

- weekend service levels could be improved

- connecting at the transit center is pretty easy

- fare book seem reasonable

- has no real issues → things are pretty decent and "it sure beats walking"

meeting w/ Craig & Brian

- Boston → he's doing some minor "maintenance" on some routes (e.g. Baghdad Cafe layover)

→ this time in the routes

→ Boston could be a "diamond in the rough" → has a lot of potential

- some discussion of the CUG range issue

- Stu asks about segmentation and running time data

• went through Swiftly route reporting software outputs

- some discussion of the need for additional drivers and timing of the bid preparation

Victorville Garage Driver Interviews

1 - timing issue on 53 after noon

2 - 47 bus coming off Highway 18 onto Navajo the left turn is hard to make

• "fix" is to go straight down to Kiawah like 41 and get you back to where 47 is

- 33 route time to detention center is not enough (only given 3 minutes)

• "fix" is to do that on request like the 42 does

- 52 turn from Roy Rogers right onto Arlette Drive is very difficult to do

• "fix" is to stay on Annapolis perhaps

3 - ADA tablets on Direct Access are

"iffy" & need replacing

• radios an issue → coverage spotty

4 - split shifts are too long

5 - ZIP bridge detour does not have any additional time on it and not enough running time now
• becomes a concern

- ZIP + ZIP are missing about of bus stop signs.

- need coverage into areas in Phelan (on Johnson Rd / Wilson Ranch)

- feels bus windows should be cleaner leaving the garage

- signals on Bear Valley + Meriposa / Mall area → the signal cycle is too short
• Bear Valley / Meriposa

6 - Route 33 to do detour center does not have enough time!

7 - Right turn on 50 + 55 leaving college (on the Child Development area) is difficult
• traffic + center divider "island" makes it difficult

- passengers want to run later into the evening

8 - Green Tree NB light left turn onto
+ Hesperia → light is impossible
9

- also light @ G + Main intersection is also a concern

- need a hard look at Route 50 in terms of service levels, timing, etc.

YVC - bus transfer center

1 - Route 55 needs more service

2 - "it's fine"

- one thing is Route 22 needs more service

3 - likes that the buses are free

- 56 should run every 30 minutes

- feels bus service should run 24/7, but at least later on Sundays

4 - buses should run more often

- buses should definitely run late

- sometimes bus is late and he misses connection at the transfer center

5 - feels good that it's free for students

- 50 + 55 should at least run every 30 minutes

- they need to keep the signs up-to-date + add/replace them when stops added/removed

- 6 - feels service is pretty good
- says website is a bit "finicky"
in terms of the bus tracker

- 7 - is a WC student who uses it mainly
for access to school
- just uses it to Victorville
* would love to see later evening service
- SO + SS sometimes have on-time performance
issues
- "provides a much-needed service"!

- 8 (Spanish) - 43 route rider
- sometimes the bus is dirty
• dog owners bring dogs and
put them on the seats!
- sometimes they run a few minutes
late
- drivers are very friendly
- cleanliness of the bus's needs
to be addressed
• unhoosed sometimes soil seats

Drop-Ins

Victor Valley Transportation Center

- More frequent than hourly service needed
- Buses are needed later than 9PM and a later bus leaving Fontana is needed on the BV Link
- A stop is needed along Palmdale Rd and Bellflower near the Shell Station
- Service does need to start a little earlier
- Need to consider the unhoused population
- Transit centers need public restrooms
- Missing connections is a big problem especially when connecting to a route that has an hourly headway (or longer)
- Route 33 works well
- Connecting to Route 32 was stated as a particular problem
- Route 52 is often not on-time

Victor Valley College

- Observation – a lot of Excelsior High School students use this stop, probably more than VVC students from our observation. We did not interview high school students
- Buses run well, timings are good
- Wait between buses should not be more than 45 minutes
- It is a problem when we miss connections

Barstow Transit Center

- Service works fine

Driver Meetings

Barstow

- Free rides is bringing in new passengers
- Route 3 is seeing more passengers due to free rides and people are telling their friends
- Route 2 – Mountain View and Muriel is a tight turn when cars are coming and people are parked
- 1 and 3 used to be bad but are now timed well
- There are people traveling between Hinkley and Helendale, the return trip is long
- Post office transit center had a lot of issues with passengers having to cross streets to get between buses
- Like the locked port-a-potties at City Hall
- Full length bus route is needed along Main Street because it is a long deviation to get from transit center
- City Hall needs more trash cans
- Barstow Heights is not served and there is a Convalescent Home there
- Routes 28 and 29 needs to be tuned better
- More bus stop amenities are needed
- Turnover at management is high but current GM is good

- Routes 28 and 29 needs to be tuned better
- More bus stop amenities are needed
- Turnover at management is high but current GM is good
- There is no stop at the library – stop was eliminated due to concerns with the unhoused
- Route 3 is good, changing the route would not affect on-time performance
- North Barstow is not served well primarily due to the bridge being out
- A new transit center with a small dispatch office, driver ready room for lunch, and both public and driver restrooms – Mountain View and Rimrock has the land needed for a transit center
- NEbwwery Route – people are using the route to go to/from Walmart
- There are accidents at Rimrock/Barstow Rd and Rimrock/Muriel
- Concern about safety of the bus stop at NB Lenwood Rd at National Trails
- Route 6 area around Center and Upton which floods and there have been issues with kids attacking the bus
- NTC bus stop along Montera, if you curb the bus then the sign will take out the bus

Hesperia

- Line 43 Monday through Wednesday Run 1018 there are issues with the connection from Line 40 affecting college students at VVC
- Line 21W connections with Line 54
- Line 64 Escondido Ave. Loop not enough running time. Can this be served another way?
- Line 64 w/b on Main before Mariposa farside stop leaves bus too close to the corner
- Line 53 in the direction of VV Mall at Cottonwood you have to cross 3 lanes of busy traffic to access the mall via L-Amargosa Rd
- Long splits and long spread times
- Something happens at noon and Route 53 gets a little crazy. A lot of traffic.
- Route 47 – leaving the transit center transitioning from North Outer Highway 18 to Yucca Loma is a difficult maneuver
- The pavement along Route 32 in Adelanto is not great – except Chamberlaine
- Bus stop signs are not visible along Bear Valley Road and westbound 7th/11th/9th and eastbound at 9th. Issues include trees or other polls
- Difficult to get across Bear Valley Road from Cottonwood to make the left onto Amargosa
- Stop at Panera Bread leaving Walmart on Route 53 before turning left onto Amargosa is not labelled
- The intersection of Greentree and Hesperia Road traffic is an issue since the new segment and frequently the left turn signal phase for EB Greentree onto NB Hesperia Rd is skipped

Stakeholders

City of Victorville

- Growth will occur in West Victorville
 - Mojave/Amethyst will have 827 homes
 - Mesa Linda/Mesa Street will have 550 homes
- Development west of 395 will occur beyond the 5 year timeframe as electricity is an issue
- Area around La Mesa and Amargosa has been rezoned for higher density development
- Bear Valley Road corridor will be upzoned

- Plans for 378 units along Lakeview/Ridgecrest area
- Industrial growth near Mojave/US 395 and in SCLA
- 7th Street corridor between La Paz and D Street is rezoned for mixed use and Old Town is zoned for infill redevelopment
- 7th Street will be reduced to one lane in each direction in the Old Town area with on-street parking
- SBCTA plans on for US 395 expansion so that the corridor is two lanes in each direction through Victor Valley
- 300 units along Stoddard Wells Drive between I-15 and Hwy 18
- Wellness Center near Victor Valley Transportation Center should help unhoused populations in Victorville
- VVTA coverage in Victorville is pretty good
- City has concerns about TSP as it would ruin signal coordination
- Victorville is a pro-growth community. Most development is single family houses but there is some redevelopment that is higher density in the older parts of town that have the infrastructure to support it.
- Lack of sidewalks are a big issue for being more transit supportive
- Considering TOD development at transit nodes
- Areas near healthcare are being zoned for health and wellness uses with sidewalks. This includes as of right development of healthcare offices and retirement homes with walkable infrastructure
- Civic center area is zoned for more dense development
- The partnership VVTA has with the sheriff's office is a good thing
- Mall has some safety concerns – crime in the mall itself
- VVTA's role is connecting people and places and the customers use VVTA as a necessity
- Improved frequency is important to attract riders
- Access for the elderly is needed due to sidewalk issues and weather conditions
- The city likes the microtransit service
- The library is moving to a site near Greentree and 7th
- VVTA should coordinate with the City on development projects so VVTA can request developers include transit infrastructure items - make the ask during the development review process.

City of Barstow

- Likes the working relationship with VVTA, VVTA is quick to be able to adjust service as needed and work with the community. A good example is the holiday free shuttle
- BNSF is the big development that will bring in around 20k jobs. BNSF has assembled most of the parcels which will be southwest of the city (past Lenwood). Size is 4,600 acres and should break ground in 2024
- The city has annexed land along Route 66 to Hinkley Road
- Residential development will occur on the south side of Rimrock Road
- Casino has been on the books for a while along Outlet Center Drive, the issues that have been preventing the casino have been addressed, including lawsuit with the state. Infrastructure will need to be extended to the site

- Not a lot of development planned right now but developers have been calling and once there is movement on BNSF it is likely that development will occur
- VVTA provides needed transportation throughout the Barstow area at a good cost
- Concern about safety at the post office when it was the transit center
- Like the idea of the Williams Street transit center – the city applied for a grant but it was not awarded, could work with VVTA or SBCTA for another grant – the city does not have the money to build it on their own.
- Service to North Barstow is lacking since the bridge replacement began, the bridge will be back soon
- The city would like a supply of bus stop amenities so they can quickly replace when the amenities are damaged
- There will be pavement improvements in areas of Barstow Heights as part of the moving some utilities underground.
- Brightline will not stop in Barstow but a future in-fill station may be possible.
- Often get questions regarding pass sales

City of Hesperia

- Liaison between VVTA and City of Hesperia – TAC and board meetings
- Not a lot of interaction – needs are being met.
- Master Plan community in the south end – former tapestry – model homes q1 2024 and build out in 30 years 16k homes – this is the biggest growth area and servicing areas
- Southwest portion of the city – Rancho and I-15 to Escondido
- More commercial along the I-15 – Rancho and 15 fast food
- Caliente and Rancho industrial complexes are built
- No changes on Main Street
- Growth area has been north of Main west Maple seen some residential growth
- Some commercial along Bear Valley Road – more car washes but some restaurants Balsam to Cottonwood
- Mesa Linda and Main – industrial growth
- NW corner Main St industrial
- Civic Center area restaurant – might become a county fire station
- Charter school is going in at Hesperia Rd Third Ave, Mojave and Hercules – Pathways to College – the site is being graded
- Parks in the city would be revitalized
- Hesperia Lakes Park does have a lot of events
- Some issues with crime before improved since sheriff contract
- VVTA has been a good neighbor
- Not hearing about current needs but running later for college students at VVC
- College traffic has decreased
- Access to VVC is very important
- Rancho Road from I-15 to 7th Avenue widening making into a five lane road and new signals
- Aqueduct bridge being taken out of service – an 8 month project for the bridge – use Mesquite to get across the aqueduct

- 138 is packed with traffic
- Caltrans improvements to 15 is creating traffic
- Maple Ave improvements south of Main Street – widening at select locations
- No plans for additional annexations
- Pathway to Colleges school should keep our eyes open
- City should have good coverage – focus on high density areas south of Main St – 15 to Maple
- Movement of the hub will be a big help to get rid of loitering by the Post Office – a lot of issues alleviated

City of Adelanto

- Upcoming meeting

Town of Apple Valley

- Upcoming meeting

San Bernardino County Transportation Authority

- Upcoming meeting

Victor Valley College

- Met with the ASB
- VVC is the fastest growing college in the state
- Considered a medium/large college and is growing quickly
- Building an athletic stadium and an events scenter
- Adding new programs to respond to the needs of jobs in Victor Valley
- Major competition is not from other colleges but training at jobs themselves
- Trying to get students to enroll for multiple semesters
- Going to build some on campus housing
- There is additional land owned if more parking is needed
- Expansion of programs at SCLA to support aeronautic industries
- A south campus in the development formerly known as Tapestry is possible but the campus in Hesperia near Main/US 395 is not likely to happen
- Buses are considered safe and ASB does not hear many complaints
- Adelanto is not well connected to campus and it is a long ride
- Buses should have Wifi and charging
- VVTA should have staff and a bus stationed on campus at the beginning of a semester

High Desert Chamber of Commerce

- Have not heard any issues with VVTA
- They do provide information regarding bus schedules
- VVTA is a good member of the community and participates in events with the chamber and other parts of the community so they are respected by the business community
- There are some issues with employee attraction and retention that could be addressed by improved transit service – biggest issues being span of service.

Providence Health

- Wonder why more people are not using the system versus paying for gas
- Is safety or cleanliness an issue? Are they not on-time?
- 1,700 employees at St Mary's and none ride the bus – it is unfortunate.
- As an organization they are good partners – shelter was attracting homeless and replaced shelter with bench. Well received by employees
- 250 patients day – bus stop has 16 alightings. But never seen a patient.
- 24-hour facility nurse 7-7 12 hour shifts which is 40 percent
- Other departments are three shifts or nurse
- Span is an issue. Trying to get doctors to discharge earlier in the day to get them on the bus.
- Patients are often released at 10PM and how do they get home
- St Marys is not going to close
- JV with Kaiser for the new campus but the state attorney general said this is a an issue so back to the drawing so conversations are happening but not likely in the next five years so unknown. Nothing done in the next five years
- Attracting and retaining employees is a national challenge in healthcare. Geography is enhanced with struggles. Sometimes contracted employees are needed
- Working with colleges VVC and Barstow for employees. Nursing students from SJVC and Azusa Pacific. High school attracting employees for jobs that don't need a degree and scholarship program.
- Many high desert residents work in healthcare outside the valley and are commuting long distance – similar pay to San Bernardino hospitals
- Not hearing that transportation is an issue
- Stigma to being a bus rider going to work. Many employees are not getting paid high and people would want to use a low cost mode of transportation. A more discrete location for employees.
- Most employees are local but some long distance commuters
- Home access for the bus might be an issue. Travel time might be too long
- Sufficient parking for employees – always a spot available but nothing close by
- Flexibility on how they access bus service is needed. Logistics are difficult and many transfers.
- Is there an opportunity for more flexible transit.
- Outpatients need more access for daily trip.
- Medical care access is an issue
- Why are employees not using the service? Need to find out.
- They think a voucher exists for buses
- Department huddles for VVTA can talk with employees to educate employees on how to use and how to get home or not.
- If net cost of driving balances out the time of transit
- Travel time is a real issue.
- Will improvements get the benefit of more riders.
- More people are able to work in healthcare remotely. More people working from home. No remote work for clinical departments.

Rock'n Our Disabilities

- Some clients are using fixed route and Direct Access
- VVTA does provide vouchers for disabled families but more are needed
- Service needs to operate more frequently and later – some programs end at 7 which is tough to get the bus
- Programs are at multiple sites throughout Victor Valley
- Overall coverage is not an issue but the stops can be far from the sites
- There are no vouchers for Direct Access which does not help clients
- Most clients are driven to/from programs by family members or friends.
- Would like to see VVTA have a program were Direct Access can send a text when the van is close by instead of having to wait outside for a long period of time.
- Fares may be too high for some customers – particularly the unhoused population whose transportation needs need to be considered
- Need customer restrooms at transit centers and better shelters
- Consider the unhoused population

VVTA Field Work Notes

10/24/23 – 10/26/23

- **VVTA Rotary Club (10/24/23)**
 - We should consider looking into light rail to connect to the Bright Line station
- **Apple Valley Chamber of Commerce (10/24/23)**
 - Looking forward to the Bright Line
 - People have been talking about it for 10 years
 - Nobody has heard anything about what the VVTA lacks
 - No specific calls about VVTA
 - Work force development
 - People have complained about service span, not early or late enough
 - Only one route running up and down the Cajon Pass
 - SB on the Cajon Pass has a lot of traffic
 - Issues for current employers for attracting prospective job seekers
 - The chamber gets a lot of complaints, but nothing about the VVTA
 - People that do call are looking for services that will get them to appointments or get groceries
 - Once a week people come in to get a map from the Café
 - The Apple Valley chamber gets the most foot traffic
 - VVTA is good about advertising their services
 - GM Kevin was an important voice, helped with the chamber
 - Southwest Logistics Airport, do they need service?
 - A lot of industrial uses around
 - The high desert is growing quite a bit, the 2016 Chamber map is out of date
 - Still affordable, for California
 - Silverwood/Tapestry in Hesperia
 - People leaving high priced areas to move to Victor Valley
 - High desert vs Inland Empire as refuge from high prices
 - New developments, car washes, sprouts, Starbucks
 - Sprouts is going to be built near the Victor Valley Mall, will replace Outback
 - Plenty of supermarkets
 - Victor Valley Mall is a mini hub for the transit system
 - Crime has increased at the VV mall, safety issues increasing
- **Victor Valley Transit Center Public Outreach (10/24/23)**
 - Respondent #1
 - Lives in Ontario, CA.
 - Only uses Route 15, travels from Ontario for social visits
 - Wants transfer reciprocity between VVTA and San Bernadino transit operators
 - Confused over 50 and 50x
 - Respondent #2
 - Doesn't like that service is every 30 minutes, would like more buses
 - Has issues transferring, as soon as route 50 pulls into VVTC, other buses are pulling out

- Notices a lot of fights on the bus, feels like operator should be stepping in; other riders smoke marijuana on the bus
 - Respondent #3
 - Uses service since she doesn't like Uber and doesn't have a private vehicle
 - Confused when operators forget to remove "Out of Service" from head sign when they are actually in service
 - Operator Comments
 - Connections are important, changed rules for standing down
 - Want to know what can be done about riders that abuse the service animal policy
 - Wants to know the status of the homeless shelter that is being built near the VVTC
 - Route 55 can run up to 35 minutes late; difficult to transfer from route, never connects with the 50x
 - Homeless riders like to take Route 55 to the park
- **Victor Valley College (10/24/23)**
 - Fastest growing college in California, 25% growth
 - New 5k seat stadium
 - Educational Convention Center (?), largest venue in the high desert
 - CDL, cosmetology classes and emergency call classes are all free
 - 1k student waitlist for each class
 - The community has seen that Victor Valley College is growing
 - Passed threshold from small school to medium school easily
 - Some other colleges around the state have had contract stipulations that allow professors to remain remote for longer than Victor Valley College
 - Faculty obligations, required by the state
 - Class times have not been expanded; staff wants to allow students to enroll for multiple semesters at a time
 - Bear Valley road has a big turnaround in the middle of the road, not changing those dynamics
 - There are enough parking spots currently, but there is room to grow parking lots
 - Next proposal is going to be on campus housing
 - There is room for a new parking lot next to Panera on Bear Valley Road if needed
 - New funding is going to facility expansion, acquire land near the airport
 - A promise was made to expand work force development in Hesperia
 - Students primarily come from Hesperia
 - If expansion goes ahead, there may be potential transportation issues related to dispersed geography of facilities
 - BNSF is going to place their hub in Barstow
 - No real complaints about the bus
 - Issues on the bus due to fare evasion
 - Adelanto is not well connected
 - Not much growth in Lucerne Valley, more growth in Hesperia
 - Promote reverse service from San Bernadino to VVC

- VVC's competition is the service industry
- Look to Imperial Valley College shuttle as example of how to deal with dispersed college facilities
- Need to show that transportation matters to students
 - Wi-Fi on the buses, infotainment, usb ports
- Drop off people in a good mood
- **Barstow Garage – Operators (10/25/23)**
 - Congestion is primarily in Victorville
 - Route 29 had issues at Baghdad Café, changed timepoint; problem standing down at the location, now standing down at Chevron
 - The route 29 change is confusing for operators
 - Skills issues on Route 2, turn from Mountain View to Mound
 - Routes 28 and 22 show up in the same timeframe, how up in 15 minutes, OTP issues
 - Barstow road to Rim Rock; riders complain about not stopping before PO on Route 1
 - In front of post office, back ups if more than one bus shows up, bus bunching causes issues
 - Route 2 speed bumps cause issues
 - Higgins and Armory: parking messes up stops
 - Route 2 Food 4 Less, when bus stops it causes back ups
 - Route 28 and 22 meet at same time, messes up closing
 - L Street Park and ride, school buses parks, holds up buses, messes up OTP
 - Route 1, why not do deviation every time, the school calls it in anyway
 - Bus stop by Food 4 Less, sidewalk not good enough
 - Real time bus signs need to be dimmed, too bright, dangerous at night
 - Service along Rim Rock west of Barstow road no longer there, there is now a convalescent home (Barstow Heights)
 - Need funding for bus shelters, need more cover from rain, lighting , etc
 - Customer harassment a big issue
 - Bus operators say management issues have improved since switching to Keolis
 - No stop at the Barstow Library due to homeless issues; Route 3 stops early
 - A lot of congestion around City Hall
 - Need for operator relief facility at City Hall
 - Route 3 needs a stop between Jasper and Agate on Cedar, too much space between existing stops
- **Barstow City Hall – Riders (10/25/23)**
 - No real issues brought up by riders
 - A lot of people from Newberry Springs bring their bikes
- **Victorville Garage – Operators (10/26/23)**
 - Check out route 53, why are people 20 minutes late in the PM? What in spite of high speed limit?
 - Route 41, issues making stop going off highway 15
 - Route 31 eastbound at University Prep, parents are parked at both stops, every day at 3 pm, have to put on hazards, have to pick up children at the middle of the street since there is no access to the bus stop

Apple Valley

- Grant projects two major planning studies Hwy 18 between Bass Hill and AV Road and complete streets plan
- Complete streets plan is looking at the entire town which includes VVTA buses which will look at where transit riders are and what the timeline is. Goal is 30 percent conceptual design for six projects
- North Apple Valley area – not funded grant – specific plan near the Brightline and Stoddard Wells Rd area – look at for industrial and mixed use development for high and medium density housing. Needs coordination with VVTA. A lot of the north Apple Valley that will include housing
- A lot of warehouse space in development stage for North Apple Valley
- Circulation element update looks heavily in North Apple Valley area
- Bear Valley and Central node movie theater is owned by the Town. Likely an area for commercial and residential development. Community Arts Center
- Low income area behind Town Hall (along Route 40) – thought is the area needs connectivity to the college. (NW portion of Thunderbird and Dael Evans)
- Need sidewalks leading to the bus stops -a lot of stops are just stops in the sand
- Widening the area of Quinault near post office
- Powhattan Rd fill in gaps between Central an Navajo needs more stops
- Hwy 18 between Navajo and Central to be more pedestrianized
- Yucca Loma being redeveloped – needs more stops – Town wants to accommodate the stops on Yucca Loma
- Deep Creek Rd development and is a connector to Hesperia. Road will be improved and development will occur
- Additional stops along Bear Valley near AV Road
- Access to bus stops is an issue.
- Caltrans is putting high visibility crosswalks but they need is signal phasing. Outer Highway repurposing and improving
- Potential for a multiuse trail along Hwy18 with bus turnouts
- Golf course – no stop nearby. Golf course is a community and event center. Private tenant runs restaurant and bar. Town sees this as very important as they spent \$2million for ASA improvements
- Stop needed just east of Yoga/Apple Valley Seventh Day Adventist. Near a trail head for major park (near Thunderbird)
- Thunderbird looking for improvements – Rancherias and Dale Evans. Talk about sidewalk
- Transportation to more areas would be better for people
- VVTA not a major issue as a partner. AV works with VVTA on grants.
- New major park being developed next to Alternative Education Center Pah-Ute and Navajo which is the School District – ideally along Pah-Ute itself
- Would love to talk about changes more than every five years

San Bernardino Sheriff Department

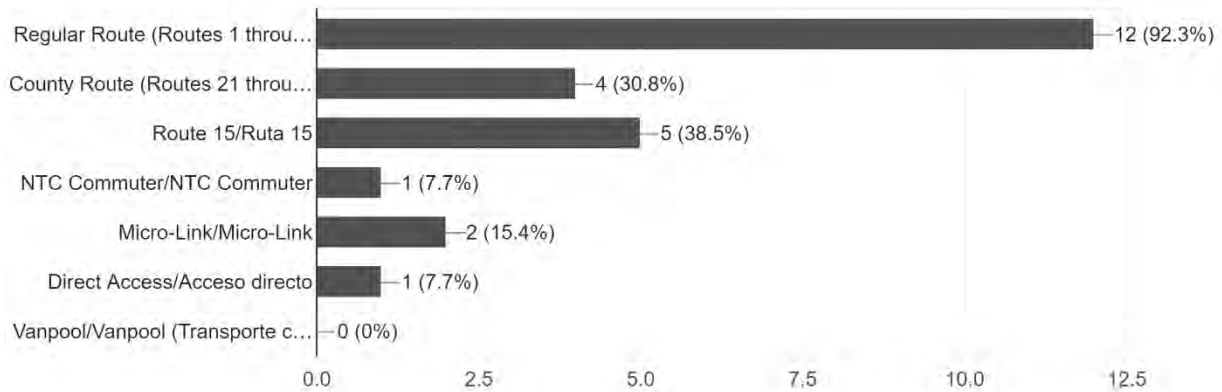
- It is not certain who will provide security for Brightline but the two stations will need facilities for police use. This would include interview rooms, a holding area, and places for officers to write reports. This needs to be in the station plans.
- VVTA Contract with the sheriff's department has been working well. Sherriff department is the law enforcement providers for most of the cities and towns in VVTA service area. Concern is establishing MOU in other communities in San Bernardino Valley that Route 15 go through for proper response and rolls.
- It is expected that there will be a restructuring of the department to have a transit bureau as they also provide security for Metrolink in San Bernardino County
- The biggest crime hotspot is at the D Street hub

Appendix D: Questionnaire Responses

Usage of VVTA Services:

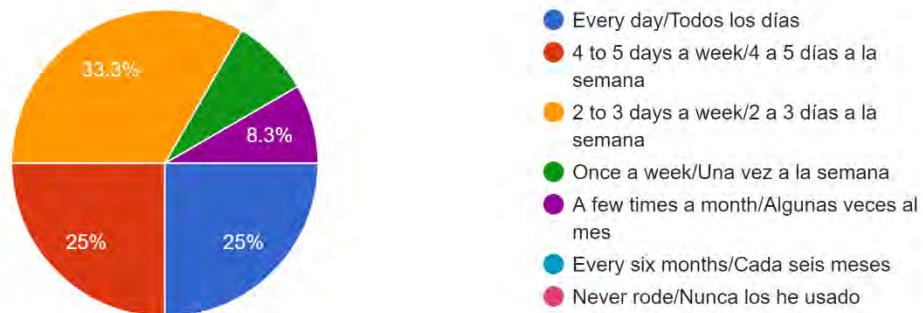
1. What VVTA services do you use?/¿Qué servicios de VVTA utiliza?

13 responses



2. How often do you use VVTA services?/¿Con qué frecuencia utiliza los servicios de VVTA?

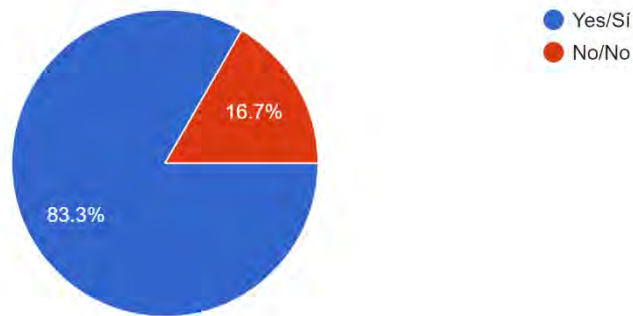
12 responses



Connections:

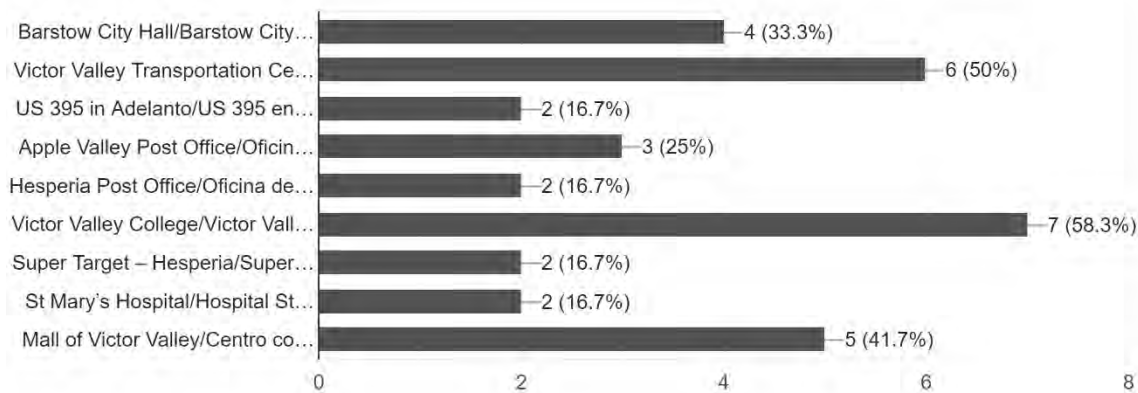
1. Do you connect between buses and services?/¿Se conecta entre autobuses y servicios?

12 responses



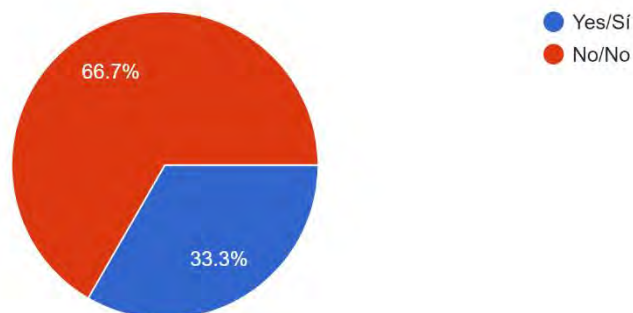
2. Where do you connect between buses?/¿Dónde se conecta entre autobuses?

12 responses



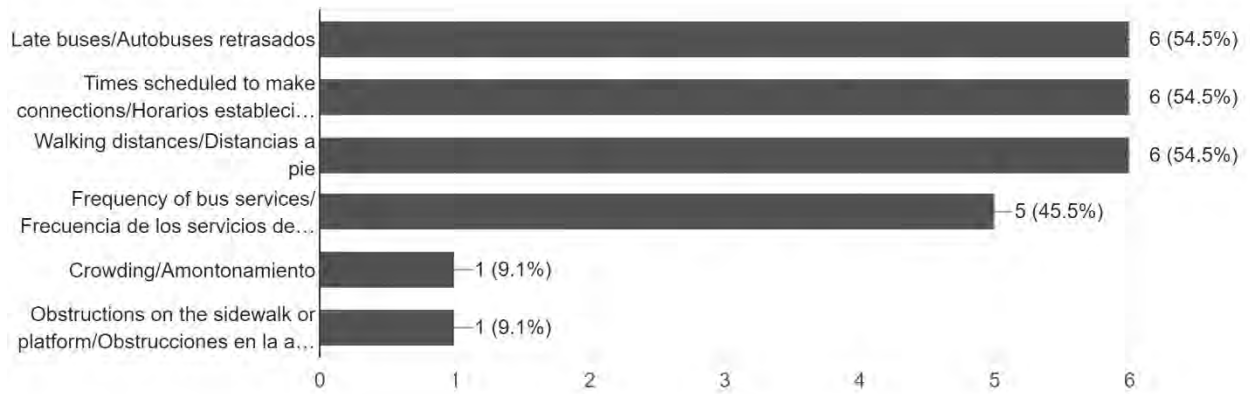
3. Are connections difficult?/¿Son difíciles las conexiones?

12 responses



4. What issues make connections difficult?/¿Qué problemas dificultan las conexiones?

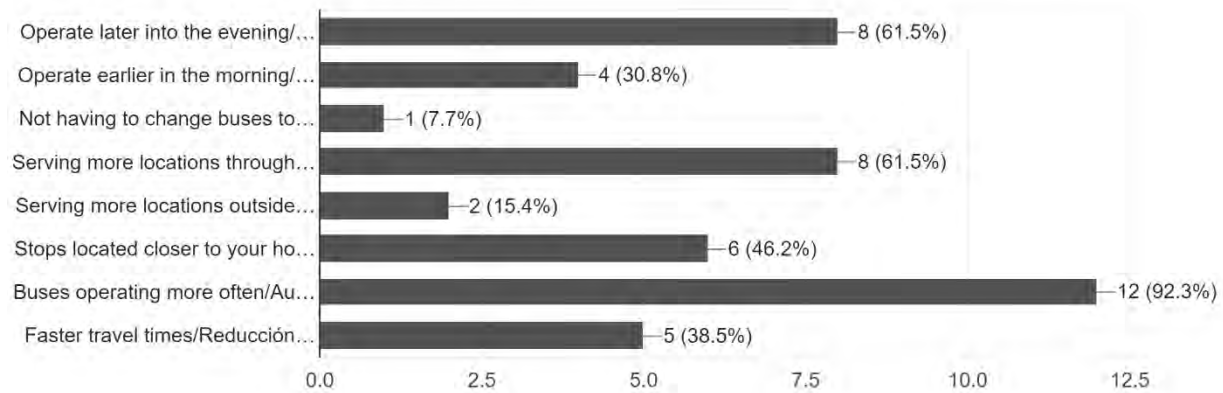
11 responses



VVTA Service Improvements:

1. Prioritize improvements you would like for VVTA Services. Please select your top 3 improvements. / Priorice las mejoras que desearía ...icios VVTA. Seleccione sus 3 mejoras principales.

13 responses



2. If you selected "Serving more locations throughout Victor Valley" or "Serving more locations outside of Victor Valley," share the locations below./ Si seleccionó "Prestar servicio a más ubicaciones en Victor Valley" o "Prestar servicio a más ubicaciones fuera de Victor Valley," comparta las ubicaciones a continuación.

8 responses

Hesperia/ and Oak Hills

They should be more stops depending on what's around. For example; my family has not been able to go to certain events at the adelanto stadium because the stop closest to it, we would have to walk 30min.

The area between Main st. and Bear valley rd east of I-15 and west of Hesperia Rd.

Less walking to get to a bus stop and less walking to get to your destination

N/A.

We need a bus stop at the Adelanto stadium. Adelanto is hosting events and there is no public access to them.

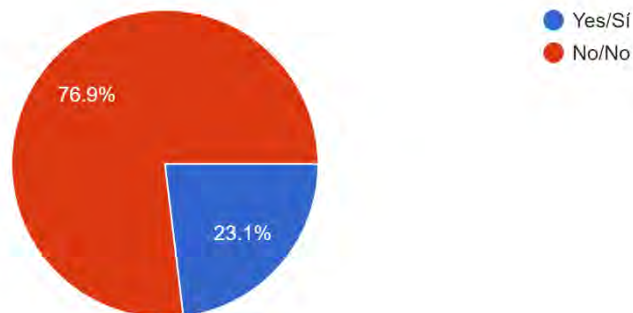
The Victorville Transfer Center has an arbor that is open to the sky. In the summer, it would be nice to have a shaded area to sit under.

Route from Upper Knolls (Apple Valley) to Mariposa Rd and Bear Valley Rd

Trade-offs:

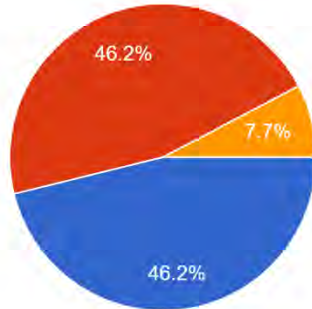
1. Will you be willing to walk further to/from a bus stop for faster trips?/¿Estaría dispuesto a caminar más hacia/desde una parada de autobús para hacer viajes más rápidos?

13 responses



2. Would you be willing to pay a higher fare for more service?/¿Estaría dispuesto a pagar una tarifa más alta por más servicio?

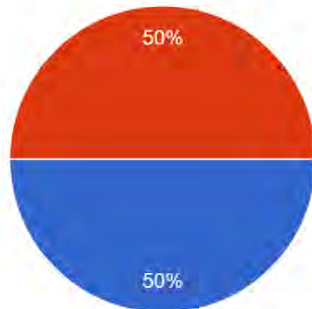
13 responses



- Yes/Sí
- No/No
- Fares should be lowered even if it means service will be reduced/Las tarifas deberían reducirse, incluso si eso significa que el servicio se reducirá

3. How should VVTA focus service?/¿Cómo debería enfocar VVTA el servicio?

12 responses

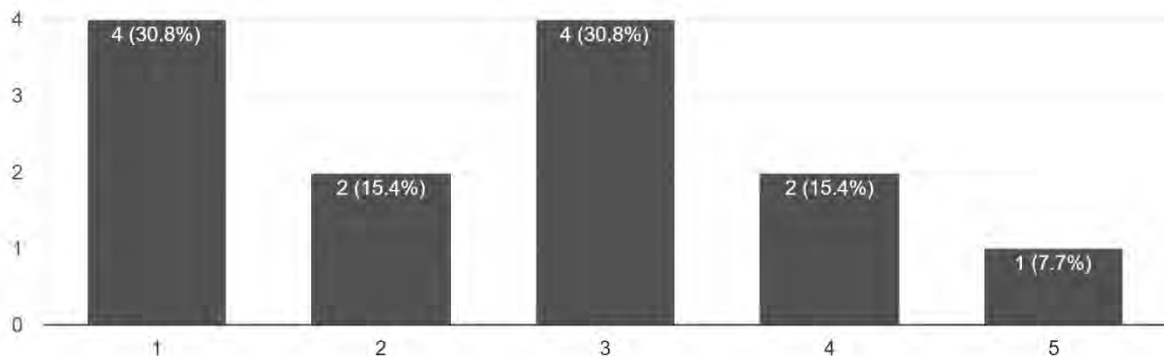


- More locations with less service (in terms of how often, how early, and how late service operates)/Más ubicaciones con menos servicio (en términos de con qué frecuencia, qué tan temprano y qué tan tarde opera el servicio)
- Fewer locations with more service (in terms of how often, how early, and how late service operates)/Menos ubicaciones con más servicio (en términos de con qué frecuencia, qué t...

Safety and Security:

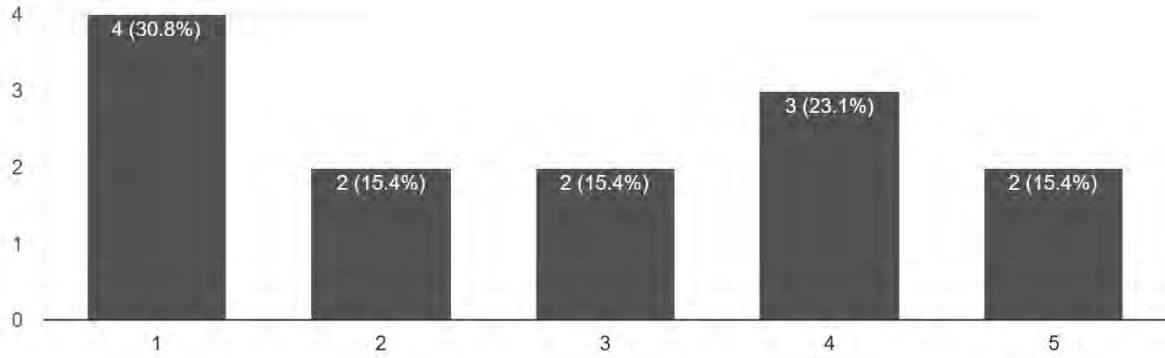
1. Do you feel safe aboard VVTA buses?/¿Se siente seguro(a) a bordo de los autobuses VVTA?

13 responses



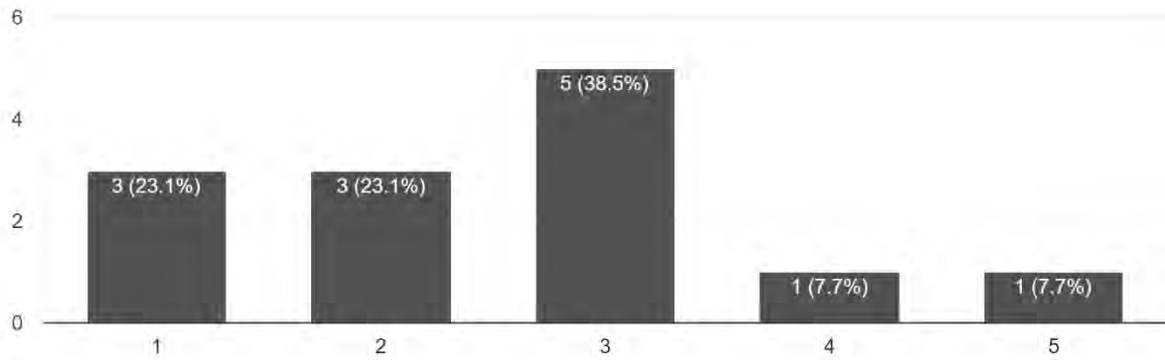
2. Do you feel safe connecting between VVTA buses at transit centers?/¿Se siente seguro(a) realizando transbordos entre autobuses VVTA en los centros de tránsito?

13 responses

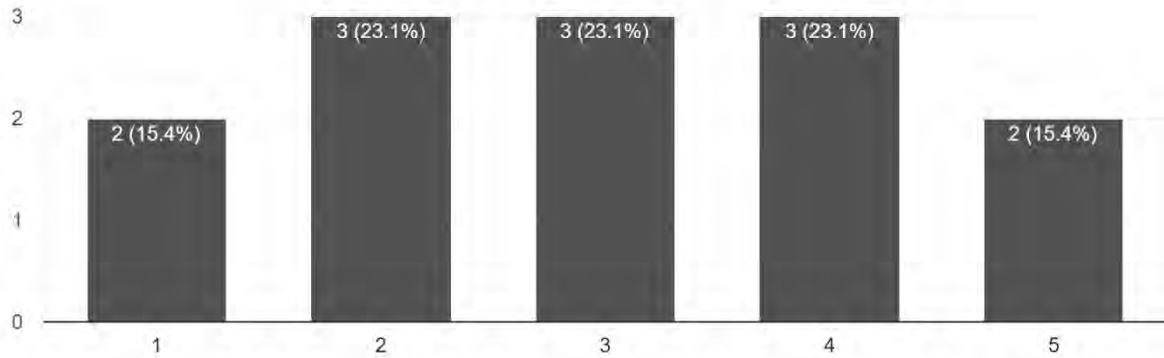


3. Do you feel safe at VVTA bus stops?/¿Se siente seguro(a) en las paradas de autobús de VVTA?

13 responses



4. Has the partnership with the San Bernardino County Sheriff's Department improved feelings of safety?/¿Ha mejorado la sensación de seguridad gr...mento del Sheriff del condado de San Bernardino?
13 responses



5. Where do you feel unsafe and what makes you feel less safe on VVTA buses and at bus stops and transit centers?/¿Dónde se siente inseguro(a) y qué le hace sentirse menos seguro(a) en los autobuses de VVTA y en las paradas de autobús y centros de tránsito?

8 responses

victor Valley college after Sunset, Victorville transportation center.

I feel unsafe at the bus stops that are completely dark and away from people.

Drivers aren't provided with non lethal means to deter hostile passengers.

People with mental illness walking and talking to themselves

The one thing that makes me feel unsafe is the drug addicts at the transportation center at night and at Victor Valley Mall by the bus stops. Some of them walk funny, and they can come up to you if you look at them. I, as a 18 year old dislike the smell of smoking, and some do it anyway. As a college student, I experienced a person who was drinking a bottle of whiskey, and it had a terrible stench.

I used to wait for route 31 at the transit center at around 6:04 PM on the weekdays when I got home from college. It takes forever for the bus to leave in 45 minutes when it's the only bus at the transit center. I would like that to be adjusted as well with a fast schedule, please. Thank you, VVTA, for looking at this, and I hope it will improve this feedback as well. Have a nice day/night.

Feel free to contact me of my feedback at andreminger758@gmail.com

Bus stops need lights. The desert gets very dark, cars and buses can't see stop. Sometimes the bus skips the stop because the driver can't see me or people.

Sometimes some riders take the bus and they smell so much to marijuana, this make me feel unsafe

Victorville hub at d street

Appendix C

2023 On-Board Transit Survey



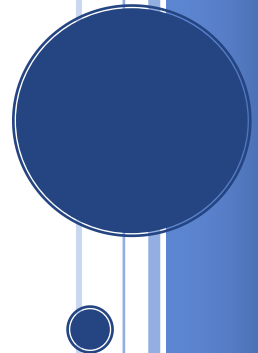


FINAL REPORT

*2023 Victor Valley Transit Authority (VVTA) On-Board
Transit Survey*

Prepared for: Victor Valley Transit Authority (VVTA)

ETC Institute
12/11/2023



FINAL REPORT

2023 Victor Valley Transit Authority (VVTA) On-Board Transit Survey

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EXECUTIVE SUMMARY

Background

In the fall of 2023 The Victor Valley Transit Authority with consultant support from ETC Institute and Transportation Management and Design Inc (TMD), conducted a system-wide on-board Origin Destination (OD) survey of all VVTA fixed routes. The study was conducted in the Victor Valley area which includes Adelanto, Apple Valley, Barstow, Helendale / Silver Lakes, Hesperia / Oak Hills, Lucerne Valley, Victorville, and other incorporated areas. The survey will provide data to develop for a Comprehensive Operational Analysis (COA) / Short Range Transit Plan (SRTP) for the Victor Valley service areas.

Survey tasks included developing a sampling plan, designing the survey instrument, conducting data collection, processing, expansion, analyzing, and reporting the results. The full data collection was performed from October 5, 2023, through October 11, 2023.

Survey Design and Administration

The survey design process consisted of VVTA, ETC and TMD collaborating to design the survey questionnaire and develop a sampling plan that would ensure adequate data collection to perform analysis. The goal was to obtain at least 400 weekday OD surveys and 60 Weekend surveys totaling 460 collected OD surveys. A total of 413 weekday surveys and 75 Weekend surveys were collected combining for a total of 488 surveys collected.

Survey Results

ETC Institute created sets of statistics at the regional level. These statistics focused on passengers' transit traveler demographics, transit travel patterns, and trip purposes. These profiles are based off weekday travel only.

Trip Profiles

- Forty-two percent of VVTA passengers begin their trip at home and 42 percent of passengers end their trip at home. VVTA passengers do not make many work trips with only 8 percent of passengers coming from work as their origin and only 13 percent of passengers going to work as their destination.
- Most VVTA passengers get from their origin and to their destination by walking. Ninety percent of passengers walk from their origin to their first bus and 92 percent walk from their last bus to their final destination.
- Sixty percent of VVTA passengers have to use more than one bus to make their trip.
- VVTA passengers main fare payment is a Day Pass with 39 percent of passengers using this fare method and 57 percent of VVTA passengers pay a discounted fare.
- Thirty-one percent of VVTA passengers have been riding VVTA for four years or more and 48 percent of passengers ride VVTA five days a week or more.
- Thirty percent of VVTA passengers get scheduling information from using a mobile app and of those who use a mobile app to get scheduling information, 46 percent use the VVTA app.

Passenger Profiles

- More Males (61%) ride VVTA in comparison to Females (37%) and 59 percent of passengers are 35 years of age and over.

- Forty-four percent of VVTA passengers are Hispanic / Latino and 30 percent of passengers speak another language other than English with the majority speaking Spanish (90% of passengers that speak another language).
- Nearly one-quarter (24%) of VVTA passengers live in single person households, while 67 percent are unemployed, and 44 percent live in households that make less than \$15,000 a year.
- Nearly half (46%) of VVTA passengers do not have a household vehicle available to them, and 68 percent do not have a valid driver's license.

1. INTRODUCTION

The 2023 Victor Valley Transit Authority (VVTA) On-Board Transit Survey involved an Origin and Destination (OD) onboard passenger survey interviewing bus riders on both weekdays and weekends. This area includes Adelanto, Apple Valley, Barstow, Helendale / Silver Lakes, Hesperia / Oak Hills, Lucerne Valley, Victorville, and other incorporated areas Overall, the goals were to collect over 400 weekday OD surveys and 60 Weekend surveys totaling 460 collected OD surveys. A total of 413 weekday surveys and 75 weekend surveys were collected combining for a total of 488 surveys collected.

Table 1: Overall Survey Goals

Survey Type	Goal	Completed
Weekday OD Surveys	400	413
Saturday OD Surveys	60	75
Total OD Surveys	460	488

Purpose and Objectives

The purpose of the project was to gather updated travel behavior data from transit users in the region that encompasses all fixed bus route services in the VVTA area. The data collected will provide data to develop and provide a Comprehensive Operational Analysis (COA) / Short Range Transit Plan (SRTP) for the Victor Valley service areas.

This report summarizes the survey methods and findings. Chapter 2 provides a description of the sampling approach, survey instrument and procedures, and survey administration. Chapter 3 provides survey weighting and expansion procedures and decomposition analysis. Chapter 4 provides detailed information for the variables collected during the OD survey, summarizes the data, and provides comparisons to the 2014 survey. Included in the appendices are the Survey Sampling Plans (Appendix A) and Survey Questionnaire (Appendix B).

2. SURVEY ADMINISTRATION

2.1 Sampling Plans

To ensure the distribution of completed surveys mirrors the distribution of VVTA passengers, ETC Institute and VVTA established proportional sampling goals for the Origin-Destination survey.

Table 2: Project Time Periods

Time Period	Time Range
AM Peak	Before 9:00am
Midday	9:00 a.m. to 3:00 p.m.
PM Peak	3:00 to 7:00 p.m.
Evening	After 7:00 p.m.

Sources of Ridership Data

The source of the ridership used to plan for the survey was September 2023 average weekday and weekend ridership. This data source was summarized by ETC. ETC then created cell level (route/direction/time-of-day) ridership data by normalizing the daily ridership totals for weekday goals. These cell level sample sizes created by ETC were used to fine tune the collection and conduct the expansion. For weekend surveys, goals were created at the route level only due to lower ridership and different trip purposes.

OD Survey Sample Size Weekday

ETC Institute developed a sampling plan that would ensure the completion of the OD survey by at least 400 surveys. The sampling plan for the Origin-Destination survey was designed to obtain completed surveys from a minimum of 11% of the ridership on each VVTA fixed route. Overall, 413 weekday surveys were collected.

Sampling goals were created to guide the collection by route, time period, and direction. Appendix A contains the sample plans which show the OD survey sampling goals and number of total weekday surveyed trips collected by time-of-day and direction.

OD Survey Sample Size Weekend

Weekend sampling goals were based on collecting 60 surveys. Weekend routes were sampled at a 4% rate. Ultimately, 75 weekend surveys were collected. Appendix A contains the sample plans which show the OD survey sampling goals and number of total weekend surveyed trips collected by route.

2.2 Survey Design

The survey was designed to obtain information in three major categories: OD travel patterns, usage information, and rider demographics. Once the survey questionnaire was finalized, ETC designed a tablet-based intercept interview survey as the primary survey medium. The survey is included as Appendix B. The survey was created to ensure that all information pertaining to the passengers' one way trip were captured along with personal and household demographics and customer experience.

The tablet survey methodology utilized the tablet's on-screen mapping features allowing for real-time geocoding of addresses and locations using exact address, intersections, and/or place names. The riders would then confirm the geocoded location on the screen map via an indicator icon. The interviewers used the mapping feature to collect the global positioning system (GPS) coordinates of all survey locations (home address, origin address, destination address, boarding location(s), and alighting location(s)). This allowed the interviewer to answer any questions as well as ensure the accuracy of the data collected. The respondent was allowed to select the answers to some

demographic questions directly on the tablet to allow for more privacy, e.g., household income, gender.

2.4 Survey Field Administration

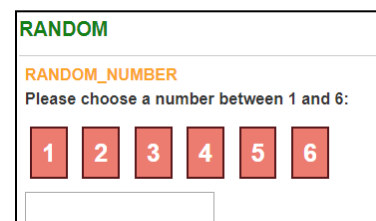
ETC used experienced staff from previous survey efforts to conduct the interviews. Interviewers boarded their assigned vehicle and selected passengers at random to participate in the survey. Surveys were conducted Monday through Sunday.

Selection of OD Participants

For the OD interview the tablet generated a random number (shown in Figure 1) to determine which passengers were asked to participate in the survey after boarding the vehicle.

If four people boarded a bus, the tablet randomly generated a number from 1 to 6. If the tablet responded 2, the second person who boarded the bus was asked to participate in the survey. If the tablet responded 1, the first person was asked to participate in the survey, and so forth. The selection was limited to the first six people who boarded a bus or train at any given stop to ensure the interviewer could keep track of the passengers as they boarded.

Figure 1 - OD Survey Random Number Generator



For example, if 20 people boarded a vehicle, the tablet program would randomly pick one of the first six people for the survey. If the interview was refused by the randomly selected passenger, then the passenger who boarded before the passenger selected would be attempted.

Respondents who did not have time to complete the survey during their bus trip, or who spoke a language different from the interviewer, were given the option of providing their phone numbers to conduct the survey at another time. Those who provided their phone numbers for callbacks were then contacted by ETC Institute's call center to complete the survey. Interviewers that spoke the foreign language of the passenger translated the English tablet version during the interview and indicated in which language the interview was conducted. Additionally, interviewers carried paper surveys in Spanish that could be distributed for self-administration.

Interviewers selected passengers in accordance with the sampling procedures previously described. The interviewer then:

- Approached the passenger identified and asked him/her/them to participate in the survey.
- If the passenger refused, the interviewers ended the survey, excused themselves and completed three observational questions (age, race, and gender).
- If the passenger agreed to participate, the interviewer asked the passenger if he/she/they had at least 5 minutes to complete the survey.
- If the person did not have at least 5 minutes on the bus, the interviewer asked the person to provide his/her name and mobile phone number or e-mail in order to send a link to a self-administered on-line version. This methodology ensured that people who completed short trips on public transit were well represented. The vast majority of records were able to be completed onboard.
- If the person had at least 5 minutes on the bus, the interviewer completed the survey on the vehicle.

2.6 OD Data Review Process

The establishment of specific sampling goals and procedures for managing the goals ensured that a representative sample was obtained. The geocoding tools embedded in Google map searches, ETC Institute Visual Review program, and Caliper® Maptitude geographic information system (GIS) software, allowed for the geocoding accuracy that was achieved.

The following subsections describe the QA/QC processes that were implemented after the data were collected.

Process For Identifying Complete Records

To classify a survey as being completed, the record must contain all elements of the one-way trip. ETC Institute has classified required trip data as containing complete answers to the following:

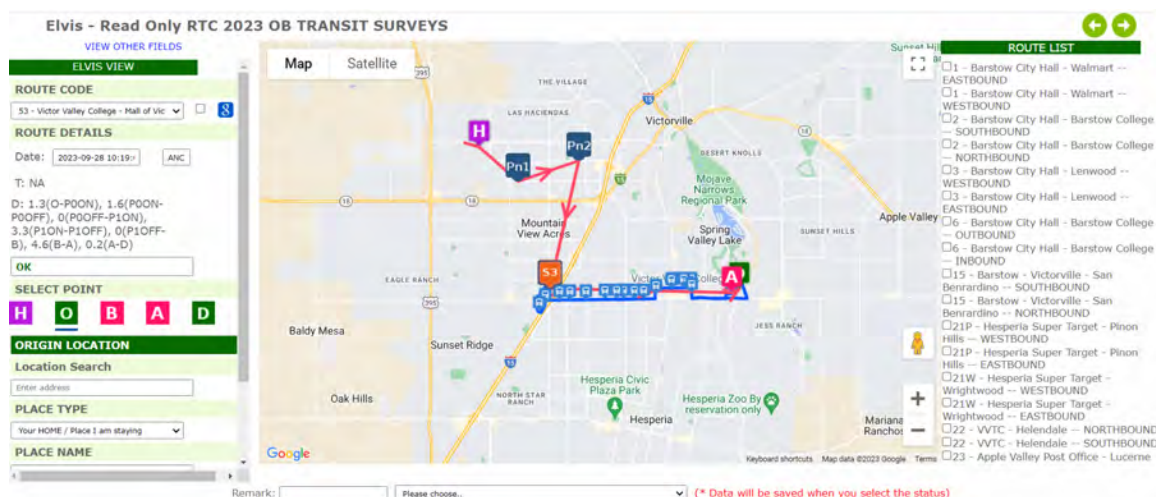
- Route/Direction
- Time of trip
- Transfers made
- Home address
- Origin address
- Destination address
- Origin place type
- Destination place type
- Access mode
- Egress mode
- Boarding location
- Alighting location

In addition to the required trip-data questions, an interview must be considered complete by the online survey program. This occurs if the interviewer navigates through all questions from the survey, including demographics.

Online Visual Review Tool

ETC Institute online visual review tool allowed for the review of all completed records. The tool displayed all elements of the one-way trip, as well as a series of distance ratio checks. After directions were finalized, each record went through speed/distance/time checks. Figure 2 shows an example of the online visual review tool.

Figure 2 - Online Visual Review Tool (Editable Version)



Pre-Distance Checks

The series of distance and ratio checks were contained in the online visual review tool for ETC Institute’s Transit Review Team (TRT) to systematically approach the reviewing of completed records. The TRT process for editing surveys is described later in this section. *Note: The distance and ratio checks described are meant to alert the reviewer that closer evaluation may be needed. However, this does not indicate the record was inaccurate or unusable.*

The distances for the checks are created using the great-circle distance formula that is based on a straight line from point A to point B that considers the curvature of the earth. After all transfer reviews were conducted, three QA/QC ratio checks were conducted. First, the distance between the boarding and alighting location was divided by the distance between origin and destination. Second, the distance between origin and boarding location was divided by the distance between origin and destination. Third, the distance between the alighting location and destination was divided by the distance between origin and destination.

Transit Review Team

The TRT reviewed all completed records, paying special attention to records that were flagged by the previously described checks. Typically, around 10 percent of all records receive an automatic flag. The issues listed in Table 6 result in actions that allow about 50 percent of those records that are flagged to be retained.

Table 3 - General Issues

Issue	Description of Issue	Action
Origin/Destination Condition 1	Origin/Destination appears incorrect because the wrong location of a multiple-location organization was selected	If, for example, an Origin/Destination appears illogical based on the college campus that was selected, but an appropriate campus of the same college does appear logical given the other points and answer choices of the trip, then the appropriate campus will be selected.
Origin/Destination Condition 2	Origin/Destination appears to have been geocoded to the incorrect city/state	If for example, an Origin/Destination appears illogical based on the city/state that was geocoded, but the address/intersection is logical within the trip if the city/state are changed. This occurs occasionally because the interviewer selects the wrong choice from the list of address choices that appear in the online survey instrument, then the appropriate address information will be inserted.
Access/Egress Mode	Access/Egress Mode seems illogical based on trip	If the access/egress mode involves the use of a vehicle and the distance from either origin to boarding or alighting to destination is less than 0.2 miles, then the access/egress mode is recoded to walk/walked and that change will be reflected in the database.
Directionality of Record	Boarding and alighting locations indicate that the trip is going in the opposite direction of what was selected by the interviewer	Change direction of route selected and, if necessary, update boarding and alighting locations based on appropriate direction.

Post-Processing Additional Checks

After records were reviewed by the TRT, the next step involves the application of QA/QC non-trip checks. Non-trip related checks included:

- Ensuring the respondents who indicated they were employed reported that at least one member of the household was employed.
- Ensuring the time-of-day a survey was completed was reasonable given the published operating schedule for the route.
- Ensuring that the appropriate fare type was used given the age of respondent.
- Removing personal information to protect the anonymity of the respondents.

Once all records complete the pre-processing and post-processing QA/QC checks, those deemed complete and usable are appended to the completion report to ensure that goals are met. After the final review is completed, a data dictionary was created to describe the data in the database.

3. SURVEY WEIGHTING AND EXPANSION

When survey goals are created, they are typically based off a percentage of the average weekday ridership for the routes in the system. That is further broken down by time periods and directions. The time periods that are created (9:00am to 3:00pm for example) are based off the specific needs of the client. Once a sample percentage is agreed upon, the goals for the survey collection are based off the ridership for each route by time period and direction, and then multiplied by the sampling percentage. For “Circular” or “Loop” routes, the ridership is typically only broken down into time period as there are many riders that will board going in one direction but alight going the other direction due to the functionality of the route. This typically is also the case if there are directional routes where many riders travel through the terminus and alight going the opposite direction of initial boarding.

The purpose of developing survey goals is to collect an appropriate number of survey records that will be “expanded” to represent the total average weekday ridership of each route by time period and direction. The weekday surveys were expanded by route, direction, and time-of-day and the weekend surveys were expanded at the route level only.

Linked Trip Expansion Factors

The linked-trip expansion factor helps to account for the number of transfers that were made by each passenger. Linked expansion factors are generated after the unlinked expansion factors are created. The equation that is used to calculate the linked trip multiplying factor is shown below:

$$\text{Linked Trip Multiplying Factor} = [1 / (1 + \# \text{ of transfers})]$$

If a passenger did not make a transfer, the linked trip factor would be 1.0, because the person would have only boarded one vehicle. If a person made two transfers, the linked trip expansion factor would be 0.33 because the person would have boarded three transit vehicles during his/her one-way trip. An example of the linked trip expansion factors is provided in Figure 5.

Figure 3 - Sample Calculations of Linked Trip Multiplying Factors

Number of Transfers	Calculation [1/(1+Number of Transfers)]	Linked Trip Multiplying Factor
0	[1/(1+0)]	1
1	[1/(1+1)]	0.5
2	[1/(1+2)]	0.33
3	[1/(1+3)]	0.25

Once the linked trip multiplier is created, it is multiplied by the unlinked expansion factor to create the linked expansion factor.

3.1 Decomposition Analysis

Decomposition analysis measures the overall representativeness of the survey records relative to linked and unlinked trips on an individual route basis. Self-enumeration surveys have historically suffered from substantial errors in route level boarding levels when linked trips were determined by simply dividing the boarding factor by one plus the number of transfers.

The advent of the personal interview, coupled with tablet technology, and more effective management of interviewers has reduced this issue. The decomposition analysis examines each record and the recorded sequence of routes and tabulates boardings for each route using this information. After all records have been examined, total boardings by route are summarized and compared with the observed level of boardings. The result of this analysis will help to determine the relationship between observed and estimated boardings by route.

The decomposition analysis below and on the following pages shows the summed link factors for the routes on which the survey was conducted. The findings from the decomposition analysis show that the overall results for the on-board survey do an excellent job of representing the system. In fact, at the overall level, there is 0.00% difference between the total boardings calculated from the summed linked weight factors and the observed ridership. The routes that deviate the farthest from the summed linked factors compared to the observed counts are typically the routes that are expected to deviate the most as they are low volume ridership routes and therefore have a higher inherit error probability. The following table shows the difference between derived and observed boardings by route.

Table 4: Decomposition Analysis by Route

Route Name	Route Surveyed	Transfer Route	Total Summed Linked	Observed Boardings	Total Difference	% Difference
1 - Barstow City Hall - Walmart	227.04	63.84	290.88	331.62	40.73	12.28%
111 - Barstow - Fort Irwin	57.15	0.00	57.15	57.15	0.00	0.00%
114 - Hesperia - Fort Irwin	69.35	6.69	76.03	92.46	16.43	17.77%
115 - Helendale - Fort Irwin	26.23	0.00	26.23	26.23	0.00	0.00%
15 - Barstow - Victorville - San Benardino	206.32	83.45	289.77	290.77	1.00	0.34%
2 - Barstow City Hall - Barstow College	117.83	45.14	162.97	179.77	16.80	9.35%
21P - Hesperia Super Target - Pinon Hills	51.33	13.72	65.04	53.00	-12.04	-22.72%
21W - Hesperia Super Target - Wrightwood	18.81	0.00	18.81	37.62	18.81	50.00%
22 - VVTC - Helendale	67.76	57.80	125.56	80.54	-45.02	-55.90%
23 - Apple Valley Post Office - Lucerne Valley	59.14	18.69	77.83	100.31	22.48	22.41%
25 - Hesperia Post Office - Super Target	38.69	15.66	54.35	38.69	-15.66	-40.47%
28 - Barstow - Hinkley - Helendale	16.44	9.59	26.03	31.31	5.28	16.86%
29 - Barstow - Newberry Springs	26.97	0.00	26.97	43.46	16.49	37.95%
3 - Barstow City Hall - Lenwood	163.37	169.94	333.31	242.15	-91.16	-37.64%
31 - VVTC - Adelanto	229.22	64.35	293.57	311.23	17.67	5.68%
32 - VVTC - North Adelanto	134.00	109.08	243.08	195.69	-47.39	-24.22%
33 - Hwy 395 & Palmdale Rd - Bartlett & Greening	84.28	16.49	100.77	97.46	-3.31	-3.40%
40 - Apple Valley Post Office - Walmart	84.56	14.32	98.88	110.62	11.73	10.61%
41 - Apple Valley Post Office - VVTC	149.23	123.01	272.23	243.85	-28.39	-11.64%
42 - Victor Valley College - Regional Training Center	49.81	3.56	53.36	78.31	24.94	31.85%
43 - Apple Valley Post Office - Victor Valley College	168.38	114.97	283.34	243.69	-39.65	-16.27%
47 - Apple Valley Post Office - Bear Valley & Navajo	46.10	18.74	64.84	69.85	5.00	7.17%
50 - VVTC - Hesperia Post Office	171.60	161.56	333.17	309.46	-23.71	-7.66%
50X - VVTC - Victor Valley College Express	36.90	27.33	64.23	80.18	15.96	19.90%
52 - VVTC - Mall of Victor Valley	223.97	89.07	313.04	342.62	29.58	8.63%
53 - Victor Valley College - Mall of Victor Valley	200.85	107.40	308.25	317.85	9.59	3.02%
54 - Hwy 395 & Palmdale - Mall of Victor Valley	86.65	18.84	105.49	128.77	23.28	18.08%
55 - VVTC - Victor Valley College	129.02	71.95	200.97	199.46	-1.50	-0.75%
56 - VVTC - Lorene & 7th	127.43	39.94	167.37	201.54	34.17	16.95%
6 - Barstow City Hall - Barstow College	84.64	50.33	134.98	162.85	27.87	17.11%
64 - Hesperia Post Office - Super Target	120.16	48.66	168.82	123.62	-45.20	-36.57%
66 - Hesperia East Deviation	31.57	6.98	38.55	39.31	0.76	1.93%
68 - Hesperia Post Office - Super Target	187.35	42.80	230.15	244.62	14.46	5.91%
Total	3492.12	1613.90	5106.03	5106.03	0.00	0.00%

4. SURVEY FINDINGS

The fully weighted and expanded VVTA data were used to create the following analyses which include trip analyses and demographic analysis. The survey results are listed in the order of the survey questions which include weekday and weekend results from the survey. The results are based off the survey instrument which is provided in Appendix B. Results are displayed by weekday surveys, weekend surveys, and weekday total surveys.

4.1 Trip Level Analysis

The top Origin place type is home with 42 percent of passengers beginning their trip at home. Twenty-one percent more weekend riders began their trip at home in comparison to weekday riders. Personal Business and Errands was the second highest origin place type with 11 percent and the third highest origin place type is shopping (Dining, Clothes, other Shopping) with 11 percent.

Table 5 – Origin Place Type

Origin Place Type	(1) Weekday	(2) Weekend	Totals
Your HOME / Place I am staying	34.9%	56.3%	41.6%
Work or Work Related	9.3%	4.7%	7.9%
College / University (students only)	8.4%	0.0%	5.8%
School K-12 (students only)	2.3%	0.0%	1.6%
Medical Services (doctor, clinic, hospital) non-work	6.8%	0.9%	4.9%
Personal Business / Errands	10.6%	11.4%	10.9%
Recreational / Social Visit / Entertainment	6.4%	8.9%	7.2%
Shopping (Dining, Clothes, Other)	11.7%	8.0%	10.6%
Shopping (Grocery)	5.9%	4.2%	5.4%
Non-destination Trip	3.7%	5.7%	4.3%

The top Destination place type is home with 42 percent of passengers ending their trip at home. Twenty-one percent more weekday riders ended their trip at home in comparison to weekend riders. Personal Business and Errands was the second highest destination place type with 14 percent and the third highest destination place type is work or work related with 13 percent.

Table 6 – Destination Place Type

Destination Place Type	(1) Weekday	(2) Weekend	Totals
Your HOME / Place I am staying	48.8%	27.9%	42.4%
Work or Work Related	9.9%	19.6%	12.9%
College / University (students only)	5.4%	1.9%	4.3%
School K-12 (students only)	1.8%	0.0%	1.2%
Medical Services (doctor, clinic, hospital) non-work	1.4%	0.0%	0.9%
Personal Business / Errands	10.5%	21.5%	13.9%
Recreational / Social Visit / Entertainment	7.1%	6.1%	6.8%
Shopping (Dining, Clothes, Other)	11.1%	13.6%	11.9%
Shopping (Grocery)	4.0%	9.3%	5.6%

The majority (90%) of VVTA passengers walk to get to their very first bus. Six percent of passengers access their first bus with a personal vehicle (Drove alone and parked, Drove or rode with others and parked, and Was dropped off by someone). Ten percent more weekend passengers walk to their first bus while five percent more weekday riders access their bus by personal vehicle.

Table 7 – Access Mode

Access Mode	(1) Weekday	(2) Weekend	Totals
Walk	86.8%	96.7%	89.9%
Wheelchair	3.1%	0.0%	2.1%
Bike (personal)	0.9%	0.5%	0.8%
E-Bike or E-Scooter	0.1%	0.0%	0.0%
Drove alone and parked	2.5%	0.0%	1.7%
Drove or rode with others and parked	0.5%	0.0%	0.4%
Was dropped off by someone	4.9%	2.8%	4.2%
Uber, Lyft, etc.	1.2%	0.0%	0.8%

The majority (92%) of VVTA passengers walk from their last bus in order to get to their final destination. Four percent of passengers egress to their destination by a personal vehicle (Be picked up by someone, Get in a parked vehicle and drive alone, and Get in a parked vehicle and drive/ride with others).

Table 8 – Egress Mode

Egress Mode	(1) Weekday	(2) Weekend	Totals
Walk	92.4%	92.5%	92.4%
Wheelchair	3.2%	0.0%	2.2%
Bike (personal)	1.0%	0.5%	0.8%
Be picked up by someone	2.2%	7.0%	3.7%
Get in a parked vehicle & drive alone	0.1%	0.0%	0.1%
Get in a parked vehicle & drive/ride w/others	0.7%	0.0%	0.5%
Uber, Lyft, etc.	0.0%	0.0%	0.0%
Other	0.4%	0.0%	0.3%

Over half (51%) of VVTA passengers use a total of two bus routes to get from their origin to their destination. Forty percent of passengers do not make any transfers and only use one bus route for their trip. These results are based off unlinked data.

Table 9 – Transfers Used

Total Transfers Used	(1) Weekday	(2) Weekend	Totals
0	40.0%	40.0%	40.0%
1	50.2%	53.1%	51.1%
2	9.8%	6.9%	8.9%

The top fare type used by VVTA passengers use is a Day Pass (39%), the second highest fare type used is One-way Cash Fare (19%), and the third highest is 31-Day Pass (18%). Student passes were used in more significance (8% more) during the weekdays when school was in session.

Table 10 – Fare Type

Fare Type	(1) Weekday	(2) Weekend	Totals
One-way Cash Fare	15.6%	25.9%	18.8%
Day Pass	35.2%	46.6%	38.7%
31-Day Pass	21.1%	10.5%	17.8%
CSUSB Student	1.9%	0.0%	1.3%
Victor Valley College Student	13.2%	6.8%	11.2%
Trade School Student ID	0.2%	0.0%	0.1%
UMO Mobility App/Card	1.5%	4.0%	2.3%
Free, Youth (K-12 Student)	5.9%	6.2%	5.9%
Free, Other	3.7%	0.0%	2.6%
Other	1.8%	0.0%	1.2%

Forty-three percent of VVTA passengers pay Regular Fare while over half (57%) of passengers pay a discounted fare.

Table 11 – Fare Discount

Fare Discount	(1) Weekday	(2) Weekend	Totals
Regular	43.2%	42.7%	43.1%
Reduced, Veteran / Senior / Medicare / Disabled	33.2%	43.0%	36.2%
Student	23.6%	14.3%	20.7%

Passengers were asked how many years they have been riding VVTA. Sixty-two percent of passengers have been riding VVTA for more than one year and 31 percent of passengers have been riding more than 4 years.

Table 12 – Transit Usage Length

Transit Usage Length	(1) Weekday	(2) Weekend	Totals
This is my first time	2.3%	0.0%	1.6%
Less than 1 year	39.0%	30.7%	36.4%
1-4 years	28.8%	35.7%	31.0%
More than 4 years	29.9%	33.6%	31.0%

Passengers were asked how many days of the week they ride VVTA. Nearly half (48%) of passengers' ride VVTA more than 5 days a week.

Table 13 – Transit Usage Frequency

Transit Usage Frequency	(1) Weekday	(2) Weekend	Totals
Less than 1 day per week	8.7%	6.4%	8.0%
1-2 days per week	20.9%	14.2%	18.8%
3-4 days per week	25.2%	26.3%	25.6%
5-6 days per week	27.2%	30.7%	28.3%
7 days per week	18.0%	22.3%	19.3%

Passengers were asked how they would make their current trip if VVTA services were not available. Over a quarter (27%) of passengers would ride with someone else, 24 percent would walk, and 21 percent of passengers would not be able to make their trip.

Table 14 – If VVTA Were Not Available – How Would Current Trip be Made

Alternative Transportation	(1) Weekday	(2) Weekend	Totals
I would not have been able to make this trip	22.1%	17.3%	20.6%
Driven myself	8.4%	2.6%	6.6%
Carpool or rode with someone else	30.1%	20.8%	27.2%
Walked	20.3%	31.5%	23.8%
Biked	3.9%	6.0%	4.6%
Uber/Lyft/Taxi	14.5%	20.1%	16.2%
Other	0.7%	1.7%	1.0%

Passengers were asked what sources they used to get VVTA schedule information. Over a quarter (29%) of passengers’ access information through a mobile app, 21 percent receive information at the bus stop or transit hubs, and 21 percent access information from the VVTA website. Out of the Social Media responses, the main source is Facebook (52%). Out of the Mobile App responses, the main source is VVTA (46%).

Table 15 – VVTA Information Sources

Schedule information Sources	(1) Weekday	(2) Weekend	Totals
Bus Cards/Digital Screens on buses	16.6%	27.0%	19.9%
Bus Stop/ Transit Hubs	18.8%	27.0%	21.4%
Mobile App	32.5%	22.5%	29.4%
Website (www.vvta.org)	24.3%	13.2%	20.8%
Social Media	0.5%	0.6%	0.5%
Text messages through VVTA App	1.2%	3.4%	1.9%
Talking with Other Passengers / Word of Mouth	5.3%	4.5%	5.0%
Other	0.8%	1.8%	1.1%

Passengers were asked if they were aware of or use Micro-Link. Nearly three quarters (72%) of VVTA passengers are unaware of Micro-Link.

Table 16 – Awareness of Micro-Link

Aware of Micro-Link	(1) Weekday	(2) Weekend	Totals
Yes I use Micro-Link	1.5%	3.6%	2.1%
Yes I am aware of Micro-Link but do not use it	29.3%	19.7%	26.3%
No	69.3%	76.7%	71.6%

Passengers were asked if they feel safer riding VVTA since the partnership between the San Bernadino Sheriff Department and VVTA which resulted in a Sheriff Transit Unit. Over half (51%) of VVTA passengers feel safer while 30 percent of passengers are not aware of the partnership.

Table 17 – Passenger Safety

Passenger Safety	(1) Weekday	(2) Weekend	Totals
Yes, feel safer	55.6%	41.7%	51.3%
No, do not feel safer	17.3%	21.4%	18.6%
Was not aware of the partnership	27.1%	36.9%	30.1%

Passengers were asked to select three options that would encourage them to use VVTA more often. The highest (52%) selected service enhancement is the need for more frequent weekday service. The second highest (47%) service enhancement is the need for more weekend service. The third highest (44%) service enhancement is the need for later hours of service. The totals in the table below total more than 100 percent due to passengers being allowed to select three items.

Table 18 – Service Enhancements

Service Enhancements	(1) Weekday	(2) Weekend	Totals
More frequent weekday service (buses come more often)	50.0%	56.9%	52.2%
More weekend service	39.1%	64.1%	46.9%
Earlier hours of service	23.6%	16.4%	21.4%
Later hours of service	46.8%	38.4%	44.2%
Fewer transfers	4.6%	4.3%	4.5%
Service to new area(s), please name the area or destination	10.5%	15.4%	12.0%

4.1 Household and Passenger Analysis

Forty percent of VVTA passengers live in households with two persons or less. Nearly one quarter (24%) of passengers live in households with five or more persons.

Table 19 – Household Size

Household Size	(1) Weekday	(2) Weekend	Totals
One (1)	18.1%	36.0%	23.7%
Two (2)	16.8%	16.5%	16.7%
Three (3)	20.0%	19.5%	19.8%
Four (4)	16.8%	12.7%	15.5%
Five (5)	8.6%	5.2%	7.5%
Six (6)	6.6%	7.0%	6.7%
Seven (7)	6.1%	0.9%	4.5%
Eight (8)	1.8%	0.0%	1.2%
Nine (9)	2.1%	0.0%	1.5%
Ten or More (10+)	3.2%	2.2%	2.9%

Nearly half (46%) of VVTA passengers do not have a working vehicle at their home. Eleven percent of passengers have three or more household vehicles.

Table 20 – Number of Household Vehicles

Household Vehicles	(1) Weekday	(2) Weekend	Totals
None (0)	41.5%	54.9%	45.7%
One (1)	24.9%	30.4%	26.6%
Two (2)	20.3%	8.7%	16.6%
Three (3)	5.7%	3.1%	4.9%
Four (4)	3.8%	2.0%	3.3%
Five (5)	0.5%	0.0%	0.3%
Six (6)	1.3%	0.0%	0.9%
Seven (7)	1.0%	0.0%	0.7%
Eight (8)	0.9%	0.9%	0.9%

Out of the passengers that responded that they had one or more household vehicles, 68 percent responded that they could not have used one of their household vehicles to make the trip they were making with VVTA.

Table 21 – Could Have Used Household Vehicle on Current Trip

Use Vehicle for Current Trip	(1) Weekday	(2) Weekend	Totals
Yes	31.7%	32.1%	31.8%
No	68.3%	67.9%	68.2%

Almost three quarters (72%) of VVTA passengers live in households with an annual income less than \$24,999.00. Only two percent of passengers live in households with income greater than \$75,000.00.

Table 22 – Household Income

Household Income	(1) Weekday	(2) Weekend	Totals
Less than \$15,000	39.1%	53.6%	44.1%
\$15,000 - \$24,999	31.8%	19.6%	27.6%
\$25,000 - \$34,999	8.8%	17.1%	11.6%
\$35,000 - \$49,999	5.0%	2.4%	4.1%
\$50,000 - \$74,999	13.4%	6.7%	11.1%
\$75,000 - \$99,999	1.4%	0.0%	1.0%
More than \$100,000	0.5%	0.7%	0.6%

Sixty-eight percent of VVTA passengers do not possess a valid driver's license.

Table 23 – Drivers' License Status

Drivers' License Status	(1) Weekday	(2) Weekend	Totals
Yes	36.2%	24.0%	32.4%
No	63.8%	76.0%	67.6%

Twenty-nine percent of VVTA passengers are students (K-12, College, Trade, or Other). The majority (15%) of passengers that are students are Full time college students.

Table 24 – Student Status

Student Status	(1) Weekday	(2) Weekend	Totals
Not a student	71.4%	70.8%	71.2%
Yes - 9th-12th grade	6.3%	9.8%	7.4%
Yes - Full-time College / University	18.9%	5.9%	14.8%
Yes - Part-time College / University	3.0%	9.6%	5.0%
Yes - Vocational / Technical / Trade School	0.1%	1.2%	0.5%
Yes - Other	0.3%	2.7%	1.0%

Thirty-three percent of VVTA passengers are employed either full or part-time. Thirty-six percent of passengers are unemployed and not seeking work.

Table 25 – Employment Status

Employment Status	(1) Weekday	(2) Weekend	Totals
Employed full-time	23.9%	20.4%	22.8%
Employed part-time	10.4%	9.9%	10.2%
Not currently employed, but seeking work	13.9%	8.1%	12.1%
Not currently employed, and not seeking work	36.5%	35.0%	36.0%
Retired	13.0%	25.4%	16.9%
Stay at home parent / Homemaker	2.3%	1.2%	2.0%

The highest (43%) age category of VVTA passengers is in the 35 – 64 years of age range. 22 – 34 years of age makes up the second highest (22%) age category and the third highest is over 65 with 16 percent of passengers.

Table 26 – Age

Age	(1) Weekday	(2) Weekend	Totals
0-17	6.3%	6.2%	6.3%
18-22	15.7%	8.8%	13.5%
22-34	22.4%	19.9%	21.6%
35-64	43.3%	42.3%	43.0%
65 and Over	12.3%	22.9%	15.6%

Forty-four percent of VVTA passengers are Hispanic / Latino. The second highest category is White / Caucasian with 28 percent followed by Black / African American at 25 percent.

Table 27 – Race / Ethnicity

Race / Ethnicity	(1) Weekday	(2) Weekend	Totals
Native American / Alaska Native	4.7%	11.2%	6.7%
Asian / Pacific Islander	2.5%	6.1%	3.6%
Black / African American	26.3%	23.3%	25.4%
Hispanic / Latino / Spanish	44.6%	42.5%	43.9%
White / Caucasian	31.4%	20.2%	27.9%

The majority (61%) of VVTA passengers are Male. More Females use VVTA during the weekday in comparison to the weekend and less Males use VVTA during the week in comparison to weekend.

Table 28 – Gender

Gender	(1) Weekday	(2) Weekend	Totals
Female	42.5%	23.8%	36.6%
Male	54.4%	76.2%	61.2%
Other	3.1%	0.0%	2.1%

Passengers were asked if they spoke another language at home other than English. Thirty percent of VVTA passengers speak a secondary language.

Table 29 – Other Language Spoken at Home

Speak Another Language	(1) Weekday	(2) Weekend	Totals
Yes	27.8%	33.6%	29.6%
No	72.2%	66.4%	70.4%

Out of the 30 percent of passengers that speak other languages, the major other language spoke is Spanish with 90 percent. The following table is based off of only passengers that speak another language at home.

Table 30 – Other Languages

Other Languages Spoken	(1) Weekday	(2) Weekend	Totals
American Sign Language (ASL)	0.5%	0.0%	0.3%
French	2.3%	0.0%	1.5%
German	0.1%	0.0%	0.0%
Italian	0.4%	0.0%	0.2%
Old Spanish	1.9%	0.0%	1.2%
Russian	1.5%	0.0%	0.9%
Sanskrit	0.2%	0.0%	0.1%
Spanish	86.0%	97.9%	90.2%
Tagalog	7.1%	0.0%	4.6%
Vietnamese	0.0%	2.1%	0.7%

One quarter (25%) of VVTA passengers that speak another language, speak English less than well. The following table is based off of only passengers that speak another language at home.

Table 31 – English Proficiency

English Proficiency	(1) Weekday	(2) Weekend	Totals
Very well	61.5%	73.9%	65.9%
Well	7.4%	12.5%	9.2%
Less than well	14.4%	7.3%	11.9%
Not at all	16.7%	6.3%	13.0%

Seven percent of the surveys conducted were conducted in Spanish.

Table 32 – Language Survey was Conducted

Language Survey was Conducted	(1) Weekday	(2) Weekend	Totals
ENGLISH	93.8%	91.3%	93.0%
SPANISH	6.2%	8.7%	7.0%

APPENDIX A SURVEY SAMPLING PLANS

Weekday Sample Plans

ROUTE_DIRECTION	Sample Goals					Total Surveys	Collected Surveys					Total Surveys
	AM Peak (1:00am-)	Midday (9:00am-)	PM Peak (3:00-6:59pm)	Evening (7:00pm -)	Total		AM Peak (1:00am-)	Midday (9:00am-)	PM Peak (3:00-6:59pm)	Evening (7:00pm -)	Total	
1 - Barstow City Hall - Walmart -- EASTBOUND	1	3	2	0	5	22	6	7	4	0	17	27
1 - Barstow City Hall - Walmart -- WESTBOUND	1	3	2	0	5		2	3	5	0	10	
2 - Barstow City Hall - Barstow College -- NORTHBOUND	0	1	1	0	2	11	0	4	3	0	7	14
2 - Barstow City Hall - Barstow College -- SOUTHBOUND	0	1	1	0	3		0	4	3	0	7	
3 - Barstow City Hall - Lenwood -- EASTBOUND	1	2	1	0	4	16	1	4	4	0	9	17
3 - Barstow City Hall - Lenwood -- WESTBOUND	1	2	1	0	5		3	4	1	0	8	
6 - Barstow City Hall - Barstow College -- INBOUND	0	1	1	0	2	10	2	2	1	0	5	11
6 - Barstow City Hall - Barstow College -- OUTBOUND	0	1	1	0	3		0	5	1	0	6	
15 - Barstow - Victorville - San Benardino -- NORTHBOUND	0	2	1	0	4	17	0	3	7	0	10	22
15 - Barstow - Victorville - San Benardino -- SOUTHBOUND	1	2	1	0	4		4	3	5	0	12	
21P - Hesperia Super Target - Pinon Hills -- EASTBOUND	0	0	0	0	0	3	0	2	0	0	2	5
21P - Hesperia Super Target - Pinon Hills -- WESTBOUND	0	1	0	0	1		0	2	0	1	3	
21W - Hesperia Super Target - Wrightwood -- EASTBOUND	0	0	0	0	1	3	0	2	0	0	2	4
21W - Hesperia Super Target - Wrightwood -- WESTBOUND	0	0	0	0	1		0	1	0	1	2	
22 - VVTC - Helendale -- NORTHBOUND	0	0	1	0	1	5	0	1	3	0	4	8
22 - VVTC - Helendale -- SOUTHBOUND	0	1	0	0	1		1	3	0	0	4	
23 - Apple Valley Post Office - Lucerne Valley -- EASTBOUND	0	1	0	0	1	5	0	2	0	0	2	5
23 - Apple Valley Post Office - Lucerne Valley -- WESTBOUND	0	0	0	0	1		1	2	0	0	3	
25 - Hesperia Post Office - Super Target -- EASTBOUND	0	0	0	0	0	0	0	1	0	0	1	1
25 - Hesperia Post Office - Super Target -- WESTBOUND	0	0	0	0	0		0	0	0	0	0	
28 - Barstow - Hinkley - Helendale -- EASTBOUND	0	0	0	0	1	4	0	4	1	0	5	8
28 - Barstow - Hinkley - Helendale -- WESTBOUND	0	0	0	0	1		0	3	0	0	3	
29 - Barstow - Newberry Springs -- EASTBOUND	0	0	0	0	1	3	0	1	0	0	1	4
29 - Barstow - Newberry Springs -- WESTBOUND	0	0	0	0	0		0	2	1	0	3	
31 - VVTC - Adelanto -- EASTBOUND	1	2	1	0	3	21	3	6	1	0	10	29
31 - VVTC - Adelanto -- WESTBOUND	2	4	2	0	7		2	10	7	0	19	
32 - VVTC - North Adelanto -- EASTBOUND	1	2	1	0	4	18	7	3	1	0	11	24
32 - VVTC - North Adelanto -- WESTBOUND	1	2	1	1	4		5	1	5	2	13	
33 - Hwy 395 & Palmdale Rd - Bartlett & Greening LOOP	0	1	0	0	2	5	1	3	0	0	4	9
33 - Hwy 395 & Palmdale Rd - Bartlett & Greening LOOP	0	0	0	0	1		0	5	0	0	5	
40 - Apple Valley Post Office - Walmart -- NORTHBOUND	0	1	0	0	1	5	1	4	0	0	5	7
40 - Apple Valley Post Office - Walmart -- SOUTHBOUND	0	1	0	0	1		0	2	0	0	2	

Weekday Sample Plans Continued

ROUTE_DIRECTION	Sample Goals					Total Surveys	Collected Surveys					Total Surveys
	AM Peak (1:00am- 8:59am)	Midday (9:00am- 2:59pm)	PM Peak (3:00- 6:59pm)	Evening (7:00pm - 12:00am)	Total		AM Peak (1:00am- 8:59am)	Midday (9:00am- 2:59pm)	PM Peak (3:00- 6:59pm)	Evening (7:00pm - 12:00am)	Total	
41 - Apple Valley Post Office - VVTC -- EASTBOUND	1	3	1	0	5	20	4	3	4	1	12	23
41 - Apple Valley Post Office - VVTC -- WESTBOUND	1	3	1	0	5		6	4	1	0	11	
42 - Victor Valley College - Regional Training Center -- NORTHBOUND	0	0	0	0	0	5	0	4	0	0	4	6
42 - Victor Valley College - Regional Training Center -- SOUTHBOUND	0	0	0	0	1		1	0	1	0	2	
43 - Apple Valley Post Office - Victor Valley College -- EASTBOUND	0	3	1	0	5	11	0	7	1	0	8	14
43 - Apple Valley Post Office - Victor Valley College -- WESTBOUND	0	0	0	0	1		0	5	1	0	6	
47 - Apple Valley Post Office - Bear Valley & Navajo -- NORTHBOUND	0	0	0	0	1	5	1	1	1	0	3	7
47 - Apple Valley Post Office - Bear Valley & Navajo -- SOUTHBOUND	0	1	0	0	2		0	3	1	0	4	
50 - VVTC - Hesperia Post Office -- NORTHBOUND	1	2	1	0	4	17	3	2	3	0	8	18
50 - VVTC - Hesperia Post Office -- SOUTHBOUND	1	2	1	0	5		4	4	2	0	10	
50X - VVTC - Victor Valley College Express -- NORTHBOUND	0	0	0	0	0	2	0	0	1	0	1	5
50X - VVTC - Victor Valley College Express -- SOUTHBOUND	0	0	0	0	1		1	1	2	0	4	
52 - VVTC - Mall of Victor Valley -- NORTHBOUND	1	3	1	0	5	21	3	10	5	0	18	34
52 - VVTC - Mall of Victor Valley -- SOUTHBOUND	1	3	1	0	6		1	10	4	1	16	
53 - Victor Valley College - Mall of Victor Valley -- EASTBOUND	1	2	1	0	4	21	7	2	2	0	11	23
53 - Victor Valley College - Mall of Victor Valley -- WESTBOUND	0	4	2	0	6		7	3	2	0	12	
54 - Hwy 395 & Palmdale - Mall of Victor Valley LOOP	0	1	1	0	2	9	0	2	0	0	2	13
54 - Hwy 395 & Palmdale - Mall of Victor Valley LOOP	1	1	0	0	2		1	6	4	0	11	
55 - VVTC - Victor Valley College -- NORTHBOUND	1	2	1	0	3	15	1	1	5	0	7	20
55 - VVTC - Victor Valley College -- SOUTHBOUND	1	2	1	0	3		1	5	7	0	13	
56 - VVTC - Lorene & 7th -- NORTHBOUND	1	2	1	0	4	17	1	2	3	0	6	17
56 - VVTC - Lorene & 7th -- SOUTHBOUND	1	2	1	0	4		4	4	3	0	11	
64 - Hesperia Post Office - Super Target -- EASTBOUND	1	1	0	0	2	9	3	2	1	0	6	11
64 - Hesperia Post Office - Super Target -- WESTBOUND	0	1	1	0	2		3	1	1	0	5	
66 - Hesperia East Deviation -- CIRCULATOR LOOP	0	0	0	0	0	1	1	2	0	0	3	3
68 - Hesperia Post Office - Super Target -- EASTBOUND	0	1	1	0	3	16	5	1	2	0	8	18
68 - Hesperia Post Office - Super Target -- WESTBOUND	1	3	1	0	5		3	2	5	0	10	
111 - Barstow - Fort Irwin -- NORTHBOUND	0	0	0	0	0	1	1	0	0	0	1	1
111 - Barstow - Fort Irwin -- SOUTHBOUND	0	0	0	0	0		0	0	0	0	0	
114 - Hesperia - Fort Irwin -- NORTHBOUND	0	0	0	0	0	2	0	0	0	0	0	4
114 - Hesperia - Fort Irwin -- SOUTHBOUND	0	0	1	0	1		0	0	4	0	4	
115 - Helendale - Fort Irwin -- NORTHBOUND	0	0	0	0	0	1	1	0	0	0	1	1
115 - Helendale - Fort Irwin -- SOUTHBOUND	0	0	0	0	0		0	0	0	0	0	
118 - Fort Irwin - Barstow - Hesperia -- NORTHBOUND	0	0	0	0	0	0	0	0	0	0	0	0
118 - Fort Irwin - Barstow - Hesperia -- SOUTHBOUND	0	0	0	0	0		0	0	0	0	0	
Totals	26	79	41	9	154	320	102	186	119	6	413	413

Weekend Sample Plans

ROUTE_DIRECTION	Sample Goals	Collection
1 - Barstow City Hall - Walmart -- EASTBOUND		
1 - Barstow City Hall - Walmart -- WESTBOUND	5	5
2 - Barstow City Hall - Barstow College -- NORTHBOUND		
2 - Barstow City Hall - Barstow College -- SOUTHBOUND	2	2
3 - Barstow City Hall - Lenwood -- EASTBOUND		
3 - Barstow City Hall - Lenwood -- WESTBOUND	4	5
6 - Barstow City Hall - Barstow College -- INBOUND		
6 - Barstow City Hall - Barstow College -- OUTBOUND	2	2
15 - Barstow - Victorville - San Benardino -- NORTHBOUND		
15 - Barstow - Victorville - San Benardino -- SOUTHBOUND	3	3
21P - Hesperia Super Target - Pinon Hills -- EASTBOUND		
21P - Hesperia Super Target - Pinon Hills -- WESTBOUND	1	1
21W - Hesperia Super Target - Wrightwood -- EASTBOUND		
21W - Hesperia Super Target - Wrightwood -- WESTBOUND	1	1
22 - VVTC - Helendale -- NORTHBOUND		
22 - VVTC - Helendale -- SOUTHBOUND	1	1
23 - Apple Valley Post Office - Lucerne Valley -- EASTBOUND		
23 - Apple Valley Post Office - Lucerne Valley -- WESTBOUND	2	2
25 - Hesperia Post Office - Super Target -- EASTBOUND		
25 - Hesperia Post Office - Super Target -- WESTBOUND	0	1
28 - Barstow - Hinkley - Helendale -- EASTBOUND		
28 - Barstow - Hinkley - Helendale -- WESTBOUND	1	2
29 - Barstow - Newberry Springs -- EASTBOUND		
29 - Barstow - Newberry Springs -- WESTBOUND	0	2
31 - VVTC - Adelanto -- EASTBOUND		
31 - VVTC - Adelanto -- WESTBOUND	3	3
32 - VVTC - North Adelanto -- EASTBOUND		
32 - VVTC - North Adelanto -- WESTBOUND	4	5
33 - Hwy 395 & Palmdale Rd - Bartlett & Greening LOOP		
33 - Hwy 395 & Palmdale Rd - Bartlett & Greening LOOP	1	1
40 - Apple Valley Post Office - Walmart -- NORTHBOUND		
40 - Apple Valley Post Office - Walmart -- SOUTHBOUND	1	1
41 - Apple Valley Post Office - VVTC -- EASTBOUND		
41 - Apple Valley Post Office - VVTC -- WESTBOUND	3	3
42 - Victor Valley College - Regional Training Center -- NORTHBOUND		
42 - Victor Valley College - Regional Training Center -- SOUTHBOUND	1	3
43 - Apple Valley Post Office - Victor Valley College -- EASTBOUND		
43 - Apple Valley Post Office - Victor Valley College -- WESTBOUND	2	2
47 - Apple Valley Post Office - Bear Valley & Navajo -- NORTHBOUND		
47 - Apple Valley Post Office - Bear Valley & Navajo -- SOUTHBOUND	1	1
50 - VVTC - Hesperia Post Office -- NORTHBOUND		
50 - VVTC - Hesperia Post Office -- SOUTHBOUND	3	4
52 - VVTC - Mall of Victor Valley -- NORTHBOUND		
52 - VVTC - Mall of Victor Valley -- SOUTHBOUND	4	6
53 - Victor Valley College - Mall of Victor Valley -- EASTBOUND		
53 - Victor Valley College - Mall of Victor Valley -- WESTBOUND	3	3
54 - Hwy 395 & Palmdale - Mall of Victor Valley LOOP		
54 - Hwy 395 & Palmdale - Mall of Victor Valley LOOP	2	2
55 - VVTC - Victor Valley College -- NORTHBOUND		
55 - VVTC - Victor Valley College -- SOUTHBOUND	3	2
56 - VVTC - Lorene & 7th -- NORTHBOUND		
56 - VVTC - Lorene & 7th -- SOUTHBOUND	4	4
64 - Hesperia Post Office - Super Target -- EASTBOUND		
64 - Hesperia Post Office - Super Target -- WESTBOUND	2	3
66 - Hesperia East Deviation -- CIRCULATOR LOOP		
66 - Hesperia East Deviation -- CIRCULATOR LOOP	0	1
68 - Hesperia Post Office - Super Target -- EASTBOUND		
68 - Hesperia Post Office - Super Target -- WESTBOUND	4	4
Totals	60	75

APPENDIX B SURVEY QUESTIONNAIRE

Victor Valley 2023 Transit On Board Survey

Please take a few minutes to be counted as we plan the future of your transit system.

All personal information will only be disclosed as required by law. VVTA will not sell this data.

What is your **HOME ADDRESS** (please be specific, ex: 123 W. Main St):
 (If you are visiting Victor Valley, please list the **hotel** or address where staying; If you are unhoused select bubble O)

Street Address _____ City _____ State _____ Zip Code _____

COMING FROM?

1. What type of place are you **COMING FROM NOW?**
 (the starting place for your one-way trip)
 Work
 College / University (students only)
 School K-12 (students only)
 Medical appointment (doctor, clinic, hospital), non-work
 Recreational / Social Visit / Entertainment
 Shopping (Grocery)
 Shopping (Dining, Clothes, other)
 Personal Business / Errands
 Your **HOME/place I am staying** → Go to Question #4
 Non-destination Trip → Go to Question #12
 Other: _____
2. What is the **NAME** of the place you are coming from now?

3. What is the **EXACT ADDRESS** of this place? (OR Intersection if you do not know the exact address:)

 City: _____ State: _____ Zip: _____
4. How did you **GET FROM** your origin (the place in Question #1) **TO THE VERY FIRST bus / train** you used for this one-way trip?
 Walk Bike (personal)
 Wheelchair Skateboard
 Uber, Lyft, etc. Taxi
 E-Bike or E-Scooter
 Was dropped off by someone (answer 4a)
 Drove alone and parked (answer 4a)
 Drove or rode with others and parked (answer 4a)
 Other _____
- 4a. Where did you board the first bus you used for this one-way trip (Nearest intersection / Park-n-Ride lot):

5. Where did you **get ON** this bus? Please provide the nearest intersection / station name / Park-n-Ride lot:

GOING TO?

6. What type of place are you **GOING TO NOW?**
 (the ending place for your one-way trip)
 Work
 College / University (students only)
 School K-12 (students only)
 Medical appointment (doctor, clinic, hospital), non-work
 Recreational / Social Visit / Entertainment
 Shopping (Grocery)
 Shopping (Dining, Clothes, other)
 Personal Business / Errands
 Your **HOME/place I am staying** → Go to Question #9
 Other: _____
7. What is the **NAME** of the place you are going to now?

8. What is the **EXACT ADDRESS** of this place? (OR Intersection if you do not know the exact address:)

 City: _____ State: _____ Zip: _____
9. How will you **GET TO** your destination (listed in Question #6) after you get off the **LAST bus / train** you will use for this one-way trip?
 Walk Bike (personal)
 Wheelchair Skateboard
 Uber, Lyft, etc. Taxi
 E-Bike or E-Scooter
 Be picked up by someone (answer 9a)
 Get in a parked vehicle & drive alone (answer 9a)
 Get in a parked vehicle & drive/ride w/others (answer 9a)
 Other _____
- 9a. Where will you get off the last bus you are using for this one-way trip (Nearest intersection / Park-n-Ride lot):

10. Where will you **get OFF** this bus? Please provide the nearest intersection / station name / Park-n-Ride lot:

11a. Did you transfer FROM another bus/train **BEFORE** getting on this bus? Yes No

11b. Will you transfer TO another bus/train **AFTER** getting off this bus? Yes No

11c. Please list the **BUS ROUTES (SYSTEM)** in the exact order for this one-way trip

START → → → → → END

1st Route 2nd Route 3rd Route 4th Route

Continue →

OTHER INFORMATION ABOUT THIS TRIP

12. What time did you BOARD this bus/? _____ : _____ am / pm (circle one)

13. Will you (or did you) make this same trip using the same transit routes in exactly the opposite direction today? No Yes - At what time did/will you leave for this trip in the opposite direction? _____ am/pm (circle one)

14. How did you pay to ride the Bus? One-way Cash Fare Day Pass 31-Day Pass
 Victor Valley College Student CSUSB Student Trade School Student ID
 UMO Mobility App/Card Free, Youth (K-12 Student) Free, Other
 Other, specify _____

14a. Was this fare? Regular Student Reduced, Veteran / Senior / Medicare / Disabled

15. How long have you been riding VVTA buses?
 More than 4 years 1-4 Years Less than 1 year This is my first time

16. How often do you ride VVTA buses? 7 days per week 1-2 days per week Less than 1 day per week
 5-6 days per week 3-4 days per week

17. If VVTA were not available, how would you have made this trip? Walked Biked
 Driven myself Uber/Lyft/Taxi Carpool or rode with someone else Paratransit or Dial-a-Ride
 I would not have been able to make this trip Other _____

18. Where do you typically get VVTA information? Bus Cards/Digital Screens on buses
 Marketing collateral Website (www.vvta.org) Text messages through VVTA App
 Bus Stop/ Transit Hubs Talking with Other Passengers / Word of Mouth
 Social Media, which platform do you use most often? _____
 Mobile App, which App do you use most often? _____
 Other _____

19. Are you aware of or use Micro-Link?
 No Yes, I'm aware of Micro-Link Yes, I use Micro-Link

ABOUT YOU AND YOUR HOUSEHOLD

20. Including YOU, how many people live in your household? _____ people

21. How many vehicles (cars, trucks, or motorcycles) are available to your household? _____ vehicles
 21b. [if #21 is 1 or more] Could you have made this trip by car today? Yes No

22. Do you have a valid driver's license? Yes No

23. What is your employment status? (check the one response that BEST describes you)
 Employed full-time Not currently employed, but seeking work Retired
 Employed part-time Not currently employed, and not seeking work Stay at home parent / Homemaker

24. What is your student status? (check the one response that BEST describes you)
 Not a student Yes - Full-time college/university Yes - Part-time college/university
 Yes - K - 8th grade Yes - 9th-12th grade Yes - Vocational/technical/trade school Yes - Other

25. What is your AGE? _____ years

26. Do you speak a language other than English at home? No Yes - Which language? _____
 26a. [if #26 is Yes] How well do you speak English? Very Well Well Less than well Not at all

27. What is your race / ethnicity? (check all that apply)
 Native American/Alaska Native Black/African American Hispanic/Latino/Spanish
 Asian/Pacific Islander White/Caucasian Prefer not to answer
 Other race: _____

28. What is your gender? Male Female Other

29. Which of the following BEST describes your TOTAL ANNUAL HOUSEHOLD INCOME in 2022 before taxes?
 Less than \$15,000 \$25,000 - \$34,999 \$50,000 - \$74,999 More than \$100,000
 \$15,001 - \$24,999 \$35,000 - \$49,999 \$75,000 - \$99,999

30. Do you feel safer riding VVTA buses given the partnership between the San Bernardino Sheriff Department and VVTA resulting in the establishment of the Sheriff Transit Unit?
 Was not aware of the partnership Yes, feel safer No, do not feel safer

31. What would encourage you to use VVTA more often? (Select up to three options)
 More frequent weekday service (buses come more often) More weekend service
 Earlier hours of service Later hours of service Fewer transfers
 Service to new area(s), please name the area or destination _____

REGISTER TO WIN A SAMSUNG GALAXY TAB A or 1 of 5 Monthly Passes

People who submit an accurately completed survey will be entered in a random drawing. You must provide your home address at the beginning of the survey and answer all questions to be eligible.

Your Name: _____
 Phone Number: (____) _____

Thank you for your help!

Appendix D

Barstow O&M Facility Title VI Analysis



Barstow O&M Facility Title VI Analysis

This Title VI analysis documents the processes involved in the section, design, and construction of Victor Valley Transit Authority (VVTA)'s new Operations and Maintenance (O&M) Facility. It analyzes the potential retroactive disparate impact or disproportionate burden on the Title VI population defined by race, and income. Lastly, recommendations are made to help VVTA better apply Title VI principles to their future practice.

Introduction

VVTA is a transit agency providing a suite of transit service including fixed route service, intercity service, commuter service, microtransit, paratransit service, and vanpool service in the Victor Valley, California area. The services are being provided to the cities of Adelanto, Apple Valley, Hesperia, Victorville and portions of San Bernardino County, including Lucerne Valley, Phelan, Wrightwood, Piñon Hills, Oro Grande, and Helendale. The VVTA fleet includes 68 fixed-route buses, 40 ADA direct access paratransit vehicles, 8 commuter buses, 5 Micro-Link vehicles as well as 26 support vehicles.

Prior to the construction of the Barstow O&M Facility located at 2641 W. Main Street in Barstow (see **Figure 2**), vehicles were housed at a facility in east Barstow located at 1612 State Street. The east Barstow facility was leased, lacked a maintenance shop, did not support the growing fleet and staff size, and was located six miles away from the Compressed Natural Gas (CNG) fueling stations causing over 100 miles daily in deadhead just to fuel vehicles. The 2018 City of Barstow COA documented that a permanent facility is needed for future service growth. A new facility would support current and future expansion, meeting the region's growing transit needs, while reducing costs through on-site maintenance and reducing deadhead mileage for fueling. Owning instead of leasing a facility would allow for the introduction of zero-emission vehicles to the fleet and necessary charging/fueling infrastructure, thus promoting the agencies mission to improve sustainability and reduce their carbon footprint. VVTA was able to acquire the new property, in conjunction with the City of Barstow's initiative to diversify their land holdings.

In 2016, a Phase 1 Environmental Site Assessment (ESA) was completed for the proposed facility site located at the northwest corner of Sandstone Court and National Trails Highway in Barstow, California. A Phase 1 ESA relates only to the requirements of the Comprehensive Environmental Review, Compensation and Liability Act (CERCLA, commonly known as Superfund), which pertains to hazardous substances. A National Environmental Policy Act (NEPA) Environmental Assessment (EA) was not required as the construction of the facility was funded through Certificates of Participation which will be paid down with local funds..

After the completion of Phase 1 ESA, the assessment revealed no evidence of current (as of June 2016) or historic recognized environmental conditions (RECs) or Controlled RECs in connection with the subject property on Main Street. The facility was then identified as a capital project in VVTA's annual operating and capital budget for fiscal year 2018-2019. The building of the 9,998 sq. ft. facility was designed by MZT Architects and Building Designers. The construction began in July 2019, with doors officially opening on August 11, 2020. The facility & site needs from the agency are listed below:

- Less than six miles from the current CNG fueling center

- Appropriately zoned
- Vacant lot
- Lot size 5.5 acres or greater
- Compatible surrounding land uses
- Site lacks environmental hazards
- Site has easy access to existing utilities (electricity, water, gas, sewer)

Requirements and Guidance

Title VI of the Civil Rights Act of 1964 (Title VI) provides that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” See 42 U.S.C. § 2000d.

FTA Circular 4702.1B, Title VI Requirements and Guidelines for Federal Transit Administration Recipients (2012), requires an equity analysis to ensure that the location of a maintenance, storage, or operation facility is selected without regard to race, color, or national origin. Title 49 of the Code of Federal Regulations (C.F.R.) Section 21.9(b)(3) states, “In determining the site or location of facilities, a recipient or applicant may not make selections with the purpose or effect of excluding persons from, denying them the benefits of, or subjecting them to discrimination under any program to which this regulation applies, on the grounds of race, color, or national origin; or with the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of the Act or this part.”

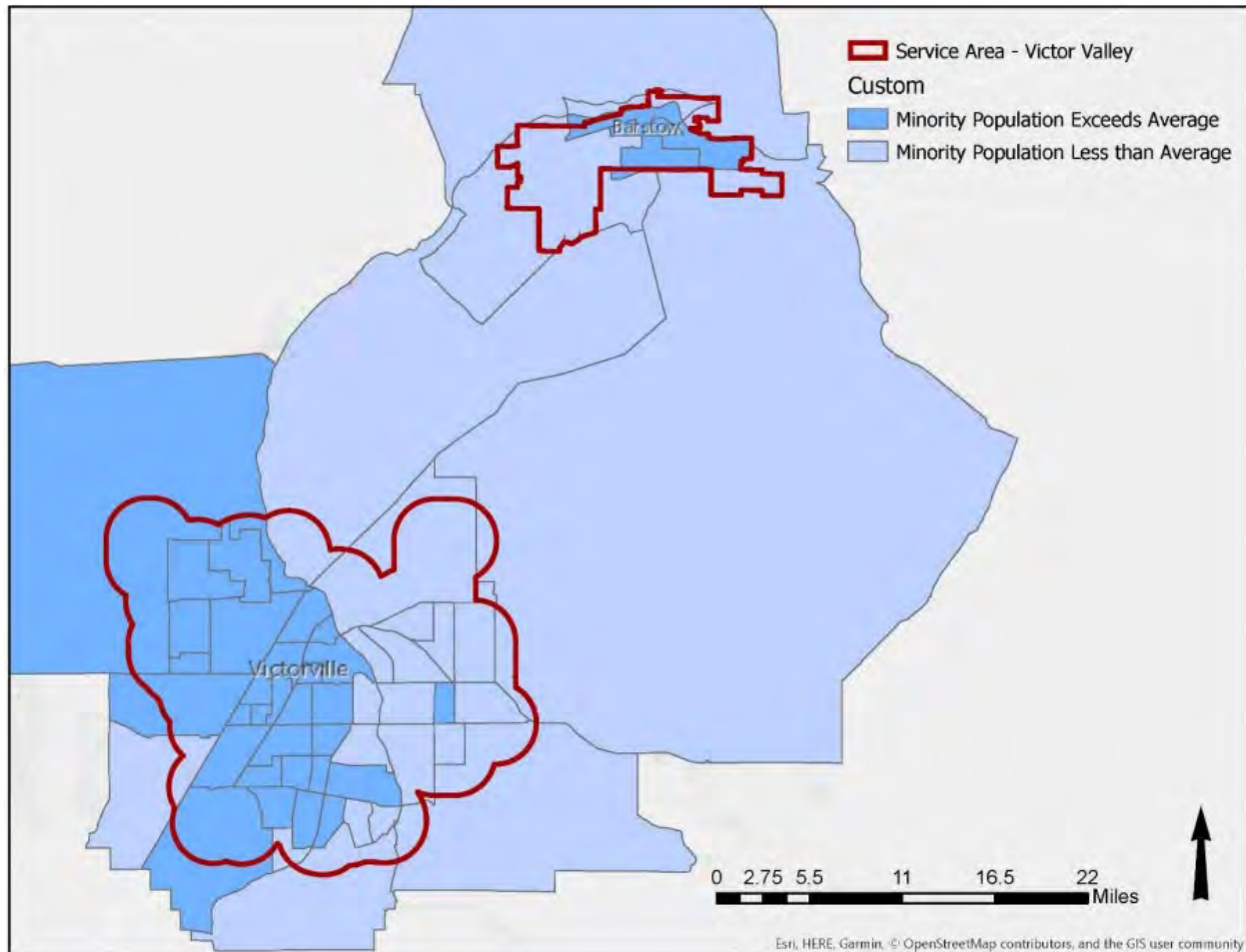
Title 49 C.F.R. Part 21, Appendix C, Section (3)(iv) provides, “The location of projects requiring land acquisition and the displacement of persons from their residences and businesses may not be determined on the basis of race, color, or national origin.”

VVTA is committed to ensuring that no person is excluded from participation in or denied the benefits of its transit services on the basis of race, color, or national origin, as protected by Title VI in Federal Transit Administration (FTA) Circular 4702.1.B. By applying the principles and essence of Title VI and FTA requirements, VVTA’s Title VI Program¹ defines service area, minority population, and low-income population as:

- Service area is shown in **Figure 1** below. In this Title VI analysis, City of Barstow is used as the service area of VVTA in this jurisdiction because the services from this division are Barstow services and planning pre-dates the merger.

¹ https://vvta.org/wp-content/uploads/2019/03/VVTA_TITLE-VI_PROGRAM_2019-2021_BA_20180803.pdf

Figure 1. VVTA Service Area



Source: https://vvta.org/wp-content/uploads/2019/03/VVTA_TITLE-VI_PROGRAM_2019-2021_BA_20180803.pdf

- Census tracts, blocks, or block groups where the total minority population residing in these areas exceeds the average percentage of minority population for the service area as a whole.
- Within the VVTA Service Area, the percentage of low-income population does not meet or exceed the threshold reported by federal sources.

The purpose of this facility analysis is to assess the equity impacts of the Project, ensuring that the site selection of the Barstow O&M facility didn't result in a disparate impact on the basis of race, color, or national origin. The site was largely vacant aside from the VVTA CNG fueling station. Given that the construction of the Project was not funded by Federal funding sources but through Certificate of Participation, a Title VI Analysis was not conducted for site selection at the time.

Background

The Barstow O&M Facility is currently located at 2641 W. Main Street in Barstow near Main Street and California State Route 58 (see **Figure 2**). The Barstow O&M Facility aims to support the operations and maintenance of services that address the increasing demands of riders and enhance accessibility to employment, educational institutions, healthcare services, and shopping opportunities. In addition, the

Barstow O&M Facility is adjacent to the Liquified Compressed Natural Gas (LCNG) and gas station, making it easier and quicker to fuel CNG and gasoline operated vehicles cutting approximately 38,880 unnecessary miles annually when operators had to deadhead to the Barstow refueling facility. The facility has been authorized to participate in the Southern California Edison (SCE) Charge Ready Transport Program, enabling significant cost savings and facilitating the future integration of zero-emission battery-electric buses into the Barstow fleet operated by VVTA.

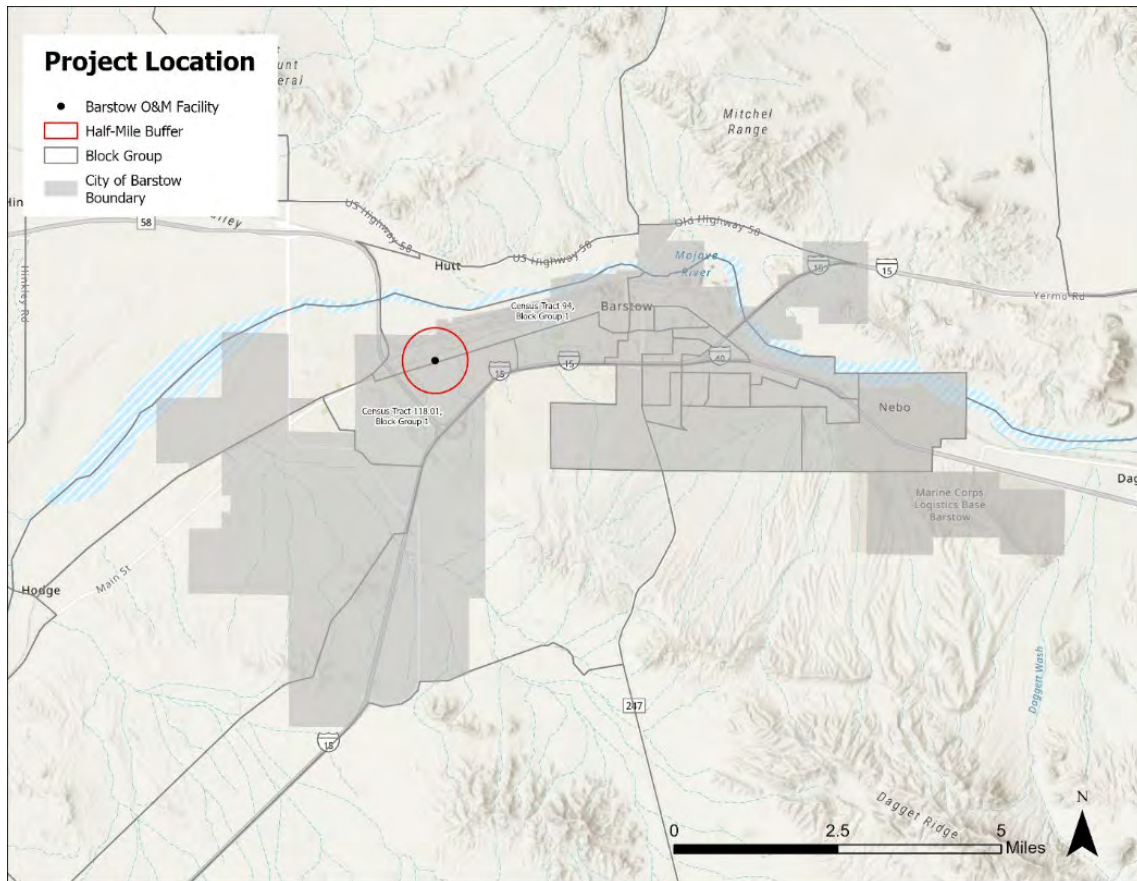
The site is located in the Mojave Desert, which is characterized as flat and desert like with sparse low growth shrub like vegetation. Zoned as “Diverse Use” (DU), the purpose of the zone is to encourage a harmonious intermingling of business and residential structures. The site is surrounded on two sides by undeveloped DU-zoned parcels. Opposite the site on W Man Street is a mix of DU and single family residential zoning. As shown in **Figure 2**, the closest parcel zoned as residential to the Barstow O&M Facility is located 700 feet to the southeast. On the north side of the site is the BNSF rail yard, zoned industrial. Any use permitted in the commercial, single family residential, and low density residential are allowed by right. A bus O&M facility classifies as a “truck repair and service center” and would require a conditional use permit.

Figure 2. Zoning Map



Source: AECOM 2024; City of Barstow Zoning Map 2015; U.S. Census Bureau, TIGER/Line Shapefile, Nation, U.S., Census Block Groups 2020.

Figure 3. Project Location



Source: AECOM 2024; U.S. Census Bureau, TIGER/Line Shapefile, Nation, U.S., Census Block Groups 2020.

Phase 1 Environmental Site Assessment Report Summary

In 2016, a Phase 1 ESA was completed for the Barstow O&M Facility site, located at the northwest corner of Sandstone Court and National Trails Highway in Barstow, California.

The site is located on approximately 6.65 acres of property. The majority (5.58 acres) of the property was vacant, and the Barstow CNG Fuel Station (operated by the Victor Valley Transit Authority) occupies the remaining 1.07 acres. Previous records indicate that while the site was vacant and undeveloped through 1995, by 2005, the site was developed to its current state. Land use surrounding the site consists of the BNSF Railway – Barstow Yard, along with undeveloped land, to the north, mixed residential and commercial properties to the south and east, and undeveloped vacant land west of the project site.

The ESA focused its evaluation on RECs which include site conditions that may reveal signs of releases and potential releases of pollutants, hazardous substances, petroleum and petroleum products, contaminants, and controlled substances. Following the assessment, no evidence of current or previous RECs or Controlled RECs at the project site property was identified. However, the Phase 1 ESA noted a significant data-gap, given the lack of San Bernardino County Fire Department (SBCFD) data, which upholds records of hazardous material, waste generation, underground storage tanks, and other potential environmental issues. As such, the Phase 1 ESA qualified its findings, as there may be

unidentified environmental concerns within the site, and recommended review of SBCFD data at the site.

Analysis Methodology

The Title VI analysis for the Barstow O&M Facility site was conducted using American Community Survey 5-year estimate (2015-2020) data at the block group level. The intent of the analysis was to determine if there was any disparate impacts or disproportionate burdens to populations in the vicinity of the site. A disparate impact disproportionately affects minorities, while a disproportionate burden refers disproportionately affecting low-income populations.

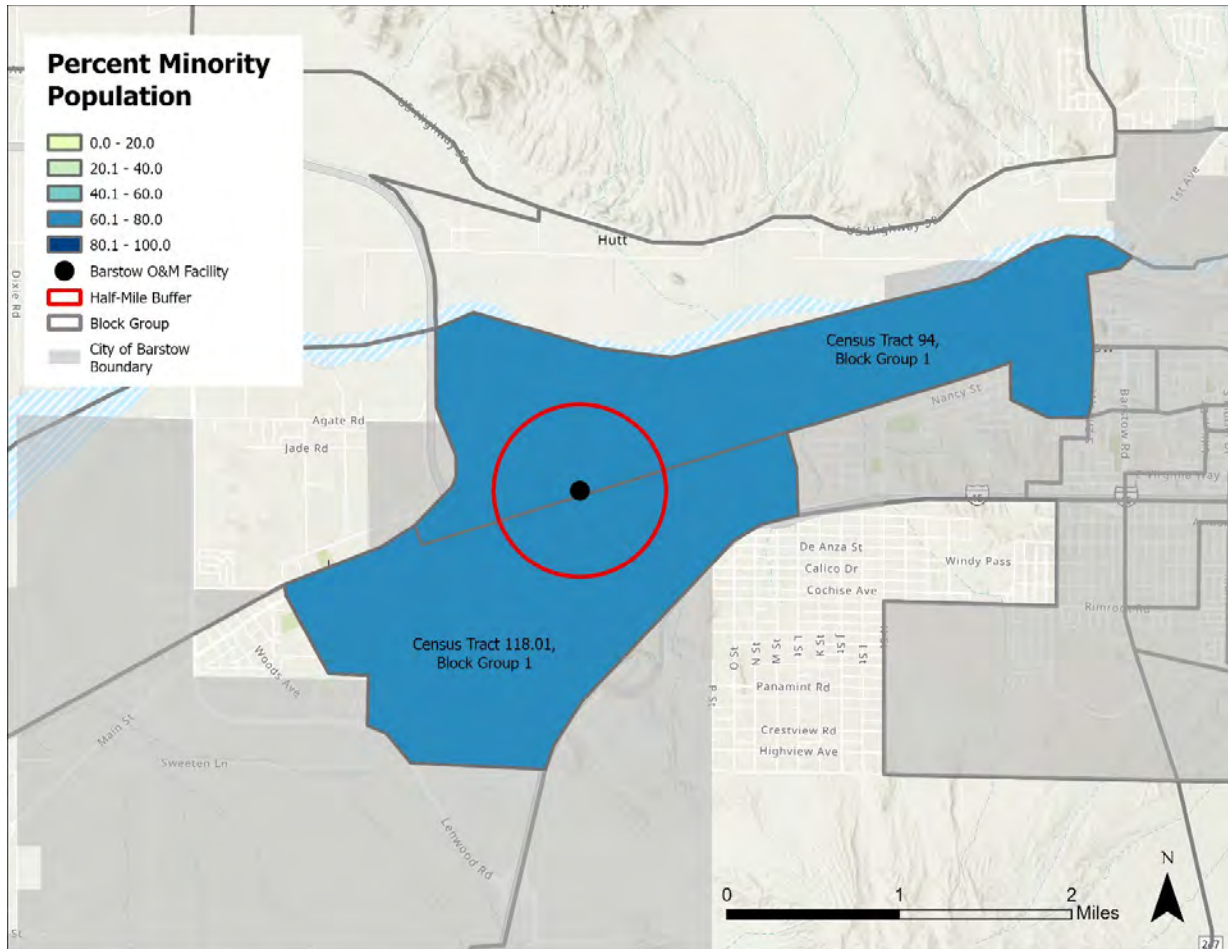
The Barstow O&M Facility Project Study Area (PSA) is defined as block groups that fall within a half-mile radius of the Barstow O&M Facility site. Minority and low-income populations were identified in the block groups that were within a half-mile buffer of the Barstow O&M Facility site (**Table 1** and **Table 3**). These populations were then compared to the City of Barstow (VVTA service area in this jurisdiction) statistics. This analysis was conducted to ensure that the Barstow O&M Facility site was selected without regard to race, color, or national origin.

The same Title VI demographic metrics of the Barstow O&M Facility will also be compared with the State Street O&M Facility to determine if the new site will have less disparate impact on the Title VI population than the old site.

Minority Populations

Minority populations were identified using American Community Survey *Table B03002 Hispanic or Latino Origin by Race*. Minorities are individuals that are not white. This analysis was conducted at the block group level using 2015-2020 5-year estimates.² **Figure 4** and **Figure 5** illustrate the 0.5 miles buffer from the new and old facilities and the block groups intersect with the buffer. **Table 1** and **Table 2** summarize the percentage of minority population for each block group, defined PSA, and City of Barstow.

Figure 4. Percentage of Minority Populations by Block Group at Barstow O&M Facility



Source: AECOM 2024; U.S. Census Bureau, TIGER/Line Shapefile, Nation, U.S., Census Block Groups 2020.

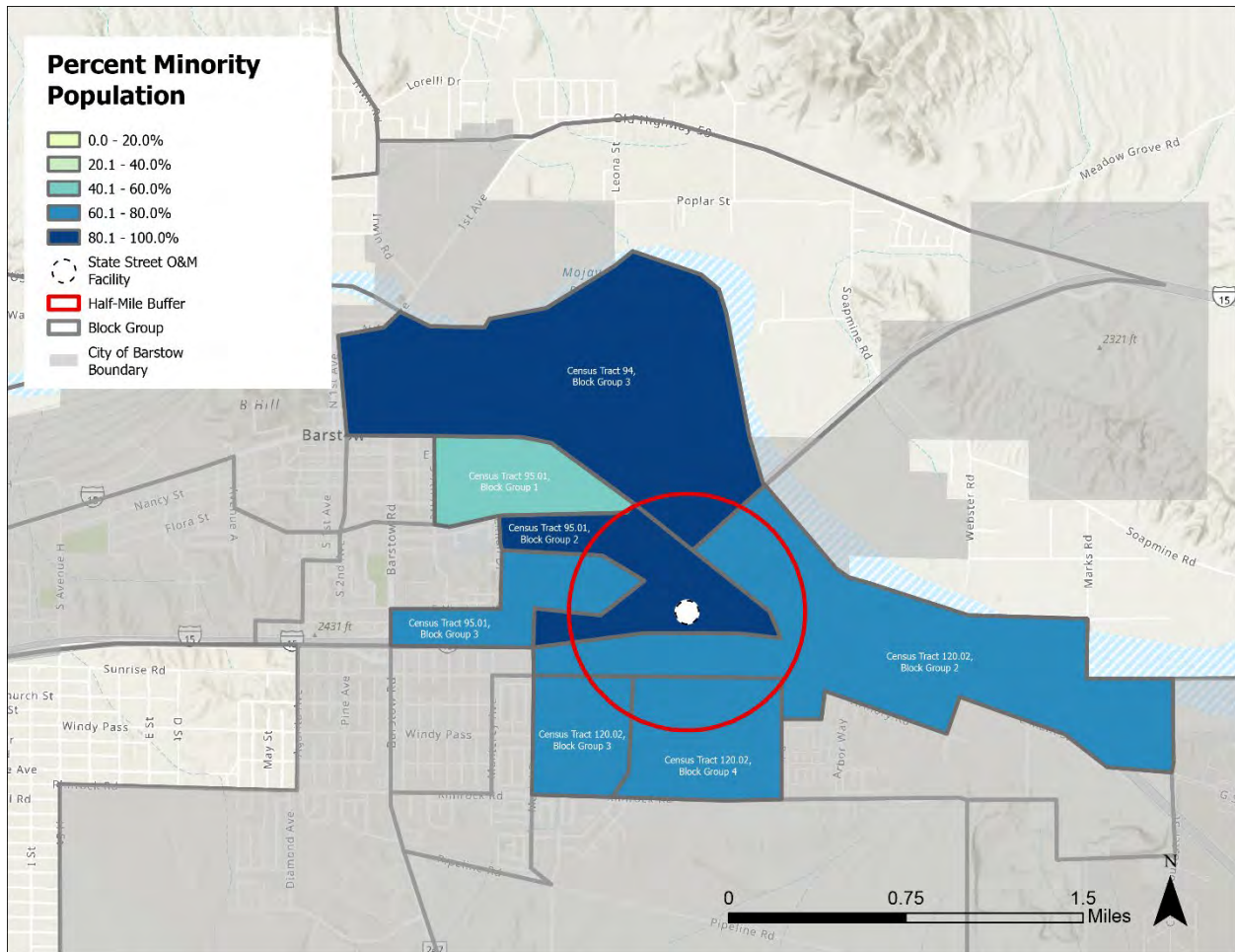
² The site construction was completed in 2020, therefore, the Title VI analysis was conducted using 2020 5 year estimates data.

Table 1. Minority Populations at Barstow O&M Facility

Census Tract #, Block Group #	Population	Minority Population	Percent Minority
Census Tract 94, Block Group 1	1,065	768	72.1%
Census Tract 118.01, Block Group 1	1,761	1,258	71.4%
Barstow O&M Facility PSA	2,826	2,026	71.7%
City of Barstow	25,939	18,989	73.2%

Source: U.S. Census Bureau 2020

Figure 5. Percentage of Minority Populations by Block Group at State Street O&M Facility



Source: AECOM 2024; U.S. Census Bureau, TIGER/Line Shapefile, Nation, U.S., Census Block Groups 2020.

Note: Census Tract 95.01, Block Group 1 will be excluded from the calculation in the table due to the size of overlap between the Block Group and buffer. The buffer just skirts the Block Group.

Table 2. Minority Populations at State Street O&M Facility

Census Tract #, Block Group #	Population	Minority Population	Percent Minority
Census Tract 95.01, Block Group 2	932	754	80.9%
Census Tract 120.02, Block Group 2	1,131	748	66.1%
Census Tract 94, Block Group 3	1,729	1,467	84.8%
Census Tract 95.01, Block Group 3	1,965	1,556	79.2%
Census Tract 120.02, Block Group 3	1,147	889	77.5%

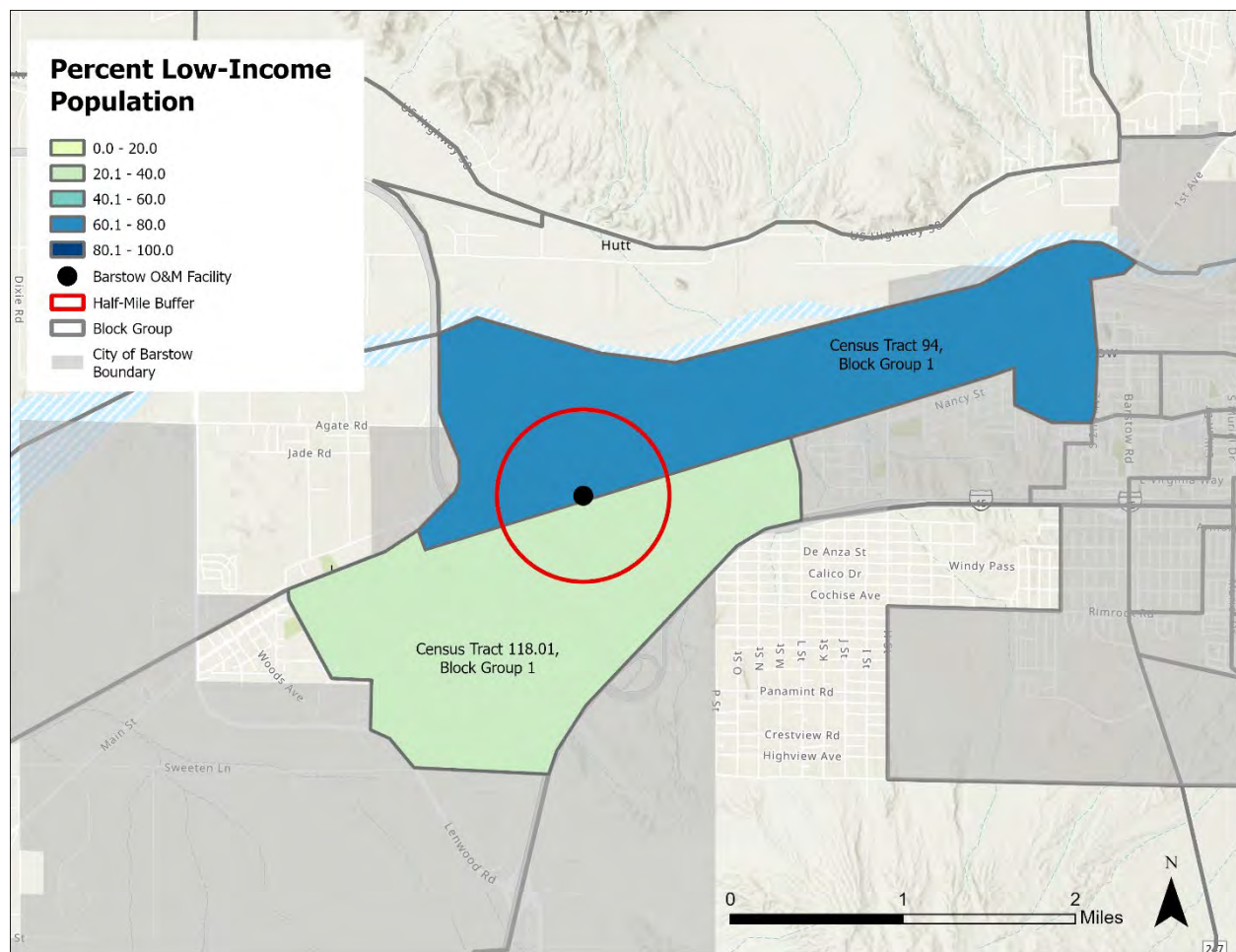
Census Tract #, Block Group #	Population	Minority Population	Percent Minority
Census Tract 120.02, Block Group 4	2,318	1,810	78.1%
State Street O&M Facility PSA	9,222	7,224	78.3%
City of Barstow	25,939	18,989	73.2%

Source: U.S. Census Bureau 2020

Low-Income Populations

Low-income populations are defined as any individual or household with income at or below the U.S. Census poverty thresholds. As suggested by FTA Circular 4702.1B, all individuals whose family income is at or below 150 percent of the poverty line were considered low-income. VVTA’s Title VI program uses FTA’s suggested definition for low-income population. Low-income populations were identified using American Community Survey *Table C17002 Ratio of Income to Poverty Level in the Past 12 Months*. This analysis was conducted at the block group level using 2015-2020 5-year estimates. **Figure 6** and **Figure 7** illustrate the 0.5 miles buffer from the new and old facilities and the block groups intersect with the buffer. **Table 3** and **Table 4** summarize the percentage of low-income population for each block group, defined PSA, and City of Barstow.

Figure 6. Percentage of Low-Income Populations by Block Group at Barstow O&M Facility



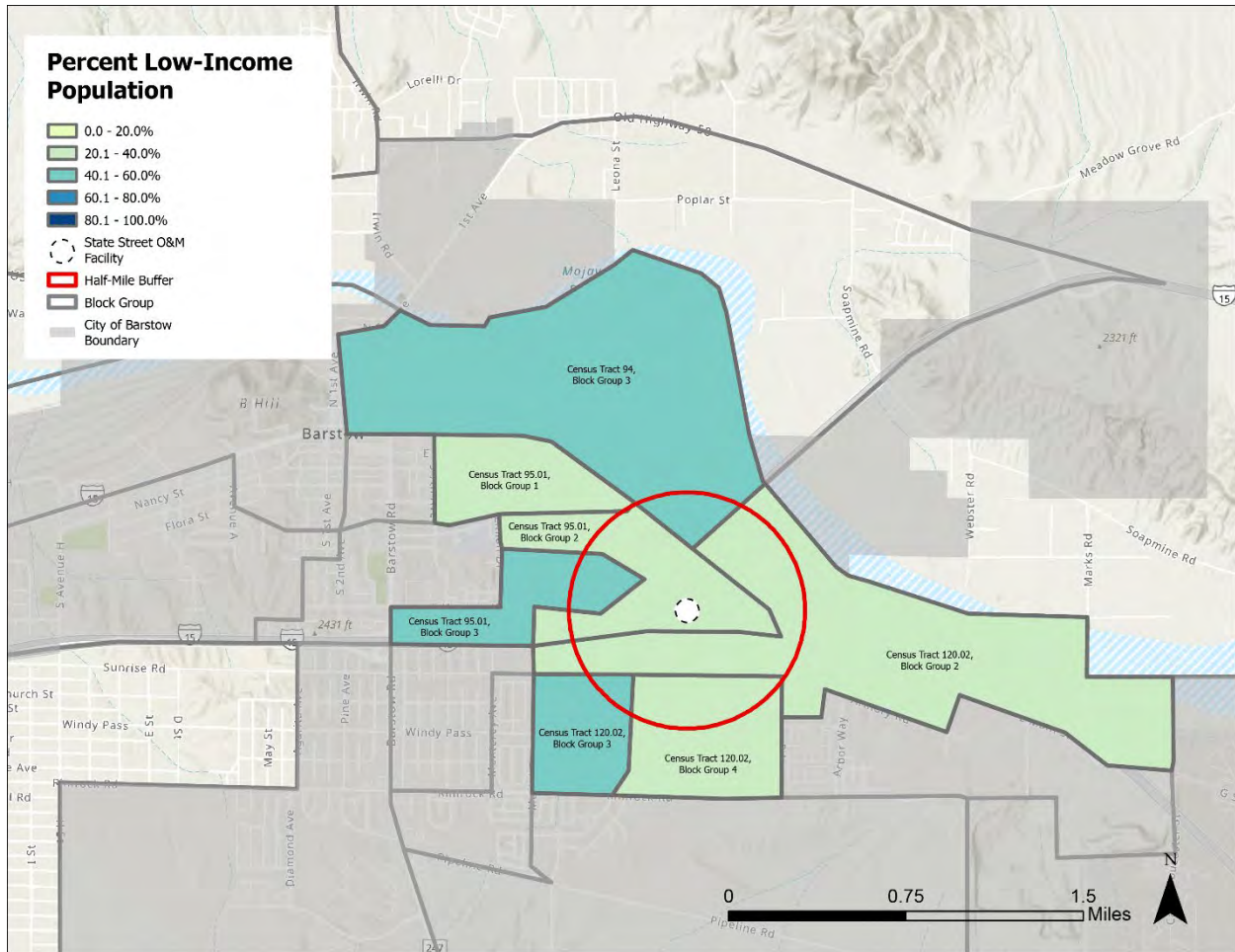
Source: AECOM 2024; U.S. Census Bureau, TIGER/Line Shapefile, Nation, U.S., Census Block Groups 2020.

Table 3. Low-Income Populations at Barstow O&M Facility

Census Tract #, Block Group #	Population	Low-Income Population	Percent Low-Income
Census Tract 94, Block Group 1	1,065	764	71.7%
Census Tract 118.01, Block Group 1	1,751	518	29.6%
Barstow O&M Facility PSA	2,816	1,282	45.5%
City of Barstow	25,939	10,012	38.6%

Source: U.S. Census Bureau 2020

Figure 7. Percentage of Low-Income Populations by Block Group at State Street O&M Facility



Source: AECOM 2024; U.S. Census Bureau, TIGER/Line Shapefile, Nation, U.S., Census Block Groups 2020.

Note: Census Tract 95.01, Block Group 1 will be excluded from the calculation in the table.

Table 2. Low-Income Populations at State Street O&M Facility

Census Tract #, Block Group #	Population	Low-Income Population	Percent Low-Income
Census Tract 95.01, Block Group 2	932	292	31.3%
Census Tract 120.02, Block Group 2	1,131	312	27.6%
Census Tract 94, Block Group 3	1,691	1,005	59.4%

Census Tract #, Block Group #	Population	Low-Income Population	Percent Low-Income
Census Tract 95.01, Block Group 3	1,895	853	45.0%
Census Tract 120.02, Block Group 3	1,097	647	59.0%
Census Tract 120.02, Block Group 4	2,305	505	21.9%
State Street O&M Facility PSA	9,051	3,614	39.9%
City of Barstow	25,939	10,012	38.6%

Source: U.S. Census Bureau 2020

Zoning Analysis

The census block groups are still rather larger in Barstow so it is important to show the closest residential area to the Barstow O&M facility on Main Street. As indicated in **Figure 2**, the nearest residential, Low Density Residential, is approximately 700 ft east of the facility.

Results of Title VI Analysis

The Barstow O&M Facility PSA is located on block groups with lower averages for minority population but one of the block group adjacent to the facility site has a higher low-income populations relative to the City of Barstow. Therefore, disparate impact to minority populations is not anticipated but disproportionate burden on low-income populations is anticipated. However, the site was already owned by VVTA and no one was displaced as a result of the new Barstow O&M Facility.

Minority Populations

The impact threshold for this metric is defined by the average percentage of minority population of City of Barstow, which is 73.2 percent. The minority population within the Barstow O&M Facility PSA is 71.7 percent, lower than the impact threshold. The minority population within the State Street O&M Facility PSA is 78.3 percent, higher than the impact threshold.

Conclusions of Effects

The Barstow O&M Facility would not be expected to have disparate impacts on the basis of race, color, or national origin because it is located in block groups where the minority populations are less than the City of Barstow. The Barstow O&M Facility has less impact on the minority population compared to the old State Street Facility.

Low-Income Populations

The impact threshold for this metric is defined by the average percentage of low-income population of City of Barstow, which is 38.6 percent. The low-income population within the Barstow O&M Facility PSA is 45.5 percent, higher than the impact threshold. The low-income population within the State Street O&M Facility PSA is 39.9 percent, higher than the impact threshold. Both of the sites have 50% (one out of two for the new site and three out of six for the old site) of the RSA block groups having low-income populations higher than the impact threshold.

Conclusions of Effects

The Barstow O&M Facility would have expected to have disproportionate burden on the basis of low-income populations because it is located in census tract 94, block group 1 (71.7%) where the low-income populations are much higher than the City of Barstow (38.6%). Relative to the State Street O&M Facility, the Barstow O&M Facility has a higher disparate impact on low-income populations (45.5% and 39.9%, respectively) and a lower disparate impact on minority populations (71.7% and 78.3%, respectively).

Mitigation Measures

The Phase I ESA revealed that no RECs were identified in connection with the site, therefore no negative impacts can be expected from the site activities.

The distance of the site to the nearest residential area is 700 ft. The site will generate deadhead and in-service bus activities along Main Street. The deadhead trips and new buses in service might increase the noise level at the residential area, though it might be insignificant since most of the new buses will be electric vehicles. The significance of the increased noise level would have to be calculated by comparing the noise level prior to the facility construction with the existing noise level with the facility being built.

A conditional use permit PCUP-18-0013 was submitted to the City of Hesperia for the construction of the facility. Measures such as curb ramps being ADA compliant, street improvements, operation compliance, stormwater management, chemical containment, wastewater sampling, sewer easement, and landscape and irrigation plan were proposed in the permit to help mitigate any disproportionate burden on low-income population.

Outreach

Outreach as it relates to the planning of the Barstow O&M Facility was not conducted.

Conclusions and Recommendations

The site identified and evaluated for the location of the Barstow O&M Facility was selected without disparate impacts regarding race, color, or national origin. Minority and low-income populations were evaluated at the block group level in the vicinities of the Barstow O&M facility. The average for the minority population in the vicinity of the Barstow O&M Facility is lower than the service area average, however, the average for low-income population of one of the vicinity block groups is higher than the service area average. Therefore, a disproportionate burden on the low-income populations is anticipated with the selection of the Barstow O&M Facility Site. Mitigation measures outlined in The Phase I ESA document and the conditional use permit PCUP-18-0013 are sufficient to address the disproportionate burden on the low-income population adjacent to the Barstow O&M facility.

Therefore, recommendations for VVTA to better apply the Title VI principles of the Civil Rights Act of 1964, Title 49 C.F.R. Part 21, and implementing guidance promulgated by FTA in Circular 4702.1B are:

1. Leveraging future stakeholder advisory group meetings to solicit public feedback on the facility. Existing facility is to be expanded to accommodate future hydrogen fueling station which would

require stakeholder advisory group meetings to encourage community input on a regular basis throughout the entirety of the project to foster a sense of buy-in and co-creation.

2. Update existing Title VI Program to include facility improvement discussions and public participation plan. Include an evaluation of multiple sites prior to new construction will be conducted for future facilities and public outreach process when expanding a facility or passing an impact threshold.
3. Establish formal Title VI DIDB Policy in the next program update on August 1st 2024.
4. Include Title VI in decision support tool strategies for capital assets as part of the TAM (Transit Asset Management) plan.

Appendix E

Phase 2 Outreach Summary



Victor Valley Transit Authority Comprehensive Operational Analysis

Phase 2 Outreach Summary

Victor Valley Transit Authority

June 28, 2024

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1. Introduction

The Victor Valley Transit Authority (VVTA) is conducting a Comprehensive Operational Analysis (COA) to assess the current service levels, identify existing transit issues in the service area, and propose recommendations for system redesign. Public input from Phase 1 of the process was incorporated into the draft service recommendations which were shared with the public during Phase 2. Phase 2 of the outreach effort focused on obtaining community member's feedback on the proposed service changes. The input gathered from the public and VVTA employees during Phase 2 will inform the draft and final COA.

Section 2 of this summary contains the public outreach schedule and descriptions of the outreach events. Sections 3, 4, 5, and 6 present major discussion themes that emerged during the driver/staff meetings, pop-up sessions, community events, and online engagement, respectively.

2. Phase II Public Outreach Schedule

Date	Activity	Participants (Approximate Number)
Friday, April 12, 2024	<i>Community Event</i> Victorville Night Market 15583 7 th Street Victorville, CA 92395 [5:00 – 9:00 pm]	16
Saturday, April 13, 2024	<i>Community Event</i> Hesperia Community Farmer’s Market 15833 Smoke Tree Street Hesperia, CA 92345 [10:00 am – 3:00 pm]	N/A, cancelled due to weather
Monday, April 15, 2024	<i>Pop-Up Session</i> Hesperia Post Office 17240 Olive Street Hesperia, CA 92345 [9:30 – 11:00 am]	21
	<i>Pop-Up Session</i> Main/Cataba Stop (SuperTarget) 12795 Main Street Hesperia, CA 92345 [11:30 am – 1:00 pm]	10
	<i>Pop-Up Session</i> Victor Valley College (Main Bus Stop) 18422 Bear Valley Road Victorville, CA 92395 [2:30 – 4:00 pm]	29
Tuesday, April 16, 2024	<i>Pop-Up Session</i> Victor Valley Transportation Center 16838 S D Street Victorville, CA 92395 [11:30 am – 1:00 pm]	30
	<i>Pop-Up Session</i> Carl’s Jr. Bus Stop 14292 US-395 Adelanto, CA 92301 [2:30 – 4:00 pm]	17
	<i>Pop-Up Session</i> Apple Valley Post Office 22099 US Highway 18 Apple Valley, CA 92307	6
	<i>Virtual Drop-In Session</i> Zoom 6:00 – 7:00 pm	0
Wednesday, April 17, 2024	<i>Driver/Staff Meeting</i> Barstow Maintenance Facility 2641 W. Main Street Barstow, CA 92311	17

	[11:30 am – 1:00 pm]	
	<i>Pop-Up Session</i> Barstow City Hall 220 Mountain View St, Suite A Barstow, CA 92311	14
Thursday, April 18	<i>Community Event</i> High Desert Farmers Market 18422 Bear Valley Road Victorville, CA 92395	15
	<i>Driver/Staff Meeting</i> Hesperia Maintenance Facility 17150 Smoke Tree Street, Hesperia, CA 92345 [11:30 am – 1:00 pm]	15
Thursday, April 4, 2024 – Friday, May 10, 2024	<i>Questionnaire</i> Hosted on VVTA’s website	19 ¹
Thursday, April 4, 2024 – Friday, May 10, 2024	<i>Interactive Maps</i> Hosted on VVTA’s website	9
	Total	218

Public outreach events were advertised with bilingual (English and Spanish) digital flyers and short videos via VVTA’s social media accounts, website, and with digital flyers on VVTA buses. These materials are provided in Appendix A.

2.1 Driver/Staff Meetings

The purpose of the VVTA driver/staff meetings was to obtain input from VVTA drivers and staff about the proposed service recommendations. Materials for driver/staff meetings included 24x36” bilingual (English/Spanish) map boards depicting the proposed route maps, proposed route profiles, and a bilingual fact sheet. Discussion questions and major discussion themes raised during these meetings are provided in Section 3. PDFs of the boards, route profiles, and fact sheet used for outreach are provided in Appendix A.

2.2 Pop-Up Sessions

The purpose of the pop-up sessions was to hold informal, one-on-one conversations with transit users. Outreach staff held discussions in English and Spanish at various high traffic transit centers and bus stops within the VVTA service area. These pop-up sessions provided opportunities for VVTA to hear from people who may not be inclined to attend formal outreach events. Approximately 127 passengers provided input through these sessions. Materials for the pop-up sessions included 24x36” bilingual (English/Spanish) map boards, the proposed route profiles depicting the service area and routes and a bilingual fact sheet. Discussion questions and major discussion themes raised during these sessions are provided in Section 4. PDFs of the boards, route profiles, and fact sheet used for outreach are provided in Appendix A.

2.3 Community Events

The purpose of the community events was to hold informal, one-on-one conversations with community members that may or may not be current transit users. Outreach staff held discussions in English and Spanish at various high traffic community events, such as farmer’s markets and night markets, throughout Victor Valley. These community events provided

¹ Note: For the Questionnaire and Interactive Maps, the number of participants indicates the number of responses received.

opportunities for VVTA to hear from people who may not be inclined to attend format outreach events. Approximately 31 people provided input through these sessions. Discussion questions and major discussion themes raised during these meetings are provided in Section 5. PDFs of the boards, route profiles, and fact sheet used for outreach are provided in Appendix A.

2.4 Virtual Drop-In Session

The purpose of the virtual public drop-in session was to share information, answer questions, and receive feedback from the public. The virtual drop-in session was designed to reach community members who may not be able to attend in-person events. However, there were no attendees during the virtual drop-in session.

2.5 Webpage and Online Questionnaire

The purpose of the project webpage was to act as a centralized information hub as well as a public feedback collector for the project. The project webpage included: interactive maps hosted on the Remix platform where people could add comments and specific feedback about particular routes or stops, a bilingual fact sheet, flyers, and an online questionnaire where people could share feedback on the proposed route and service updates. This outreach summary includes feedback received between April 4 and May 10, 2024 via the online questionnaire and interactive maps. Questionnaire and map responses are provided in Section 6.

3. Driver/Staff Meetings: Discussion Questions and Major Themes

3.1 Discussion Questions

- What do you think about these route and/or service modifications?
- Are there additional changes we should consider?
- Are there service issues that need a closer look? (e.g., senior service, disabled service, transportation to evening or weekend work shifts)
 - Service times (early morning, late evening, weekend)
 - Connections
- Is there anything else you would like the project team to keep in mind as we move forward?

3.2 Major Discussion Themes

This section provides an overview of the major discussion themes that emerged during the driver/staff meetings. Main discussion points included:

- General Feedback
- Micro-Link Service
- Route Specific Feedback

General Feedback:

Drivers, operators, and staff expressed overall support for the proposed updates and were curious to learn more. Drivers and operators also indicated that more frequent and extended service hours night service would be beneficial for passengers. Those interviewed noted:

- Support for the Williams Street Transit Center concept
- Support for single fare policy where the fare is the same on county routes and regular routes
- Support for Route 28 serving Riverside Drive instead of operating it as a deviation of Route 1
- Appreciation that the plan is a growth plan
- Idea of a bus between Barstow and LA Union Station
- Suggestion to resume bus service to Needles
- One operator expressed frustration that there is only one bathroom at the Victor Valley Transportation Center

Micro-Link Service:

Drivers and operators expressed some concerns related to the North Adelanto Micro-Link and were hesitant to provide Micro-Link service north of Air Base Road in part due to feeling unsafe in the area. They also noted that Micro-Link service is very popular with high school students.

Route Specific Feedback:

- Route 15: Having Route 15 make more stops for additional connections is a good idea
- Route 56: This route has crowding issues, the changes to Route 31 should help with that
- Route 53: Traffic is very bad on Bear Valley Road, which limits performance of Route 53

- Route 28: Likes the split of Hinckley route with the “new” 27, likes proposal for the split of the 28
- Route 6: Likes the plans and proposed changes to this route; likes the frequency
- Route 1: Likes the proposed changes to this route

4. Pop-up Sessions: Discussion Questions and Major Discussion Themes

4.1 Discussion Questions

The discussion questions used to guide conversations during the pop-up sessions are provided in this section:

- What do you think about these route and/or service modifications?
- Are there additional changes we should consider?
- Are there service issues that need a closer look? (e.g., senior service, disabled service, transportation to evening or weekend work shifts)
 - Service times (early morning, late evening, weekend)
 - Connections
- Is there anything else you would like the project team to keep in mind as we move forward?

4.2 Major Discussion Themes

This section provides an overview of the major discussion themes that emerged during the pop-up sessions. These discussion themes included:

- General Feedback
- Span and Frequency
- Transfers and Connections
- Micro-Link Service
- Drivers and Operators
- Route-Specific Feedback

General Feedback:

Passengers were, on the whole, supportive of the proposed changes, especially extended service hours and more frequent service, although some passengers indicated that the long term proposed changes needed to be implemented sooner. General feedback provided by passengers included:

- Need for more bus shelters.
- Improving the audibility of on-bus announcements.
- One passenger expressed that they would like “better local buses here in the Valley – at least as good as Los Angeles’.”
- Accessibility concerns were also expressed, including the need for a sidewalk to the stop at Super Target so that it is easier for seniors to access the stop.

Service Span and Frequency:

Many of the passengers interviewed indicated that they were enthusiastic and supportive of recommended changes related to service span and frequency. The addition of late-night service and buses running more frequently (every 30 minutes) were mentioned as positives. However, some passengers commented that they were hoping for additional early morning service and weekend service. Passengers mentioned that earlier and later service was still needed to get to work, school, or social events. Service accommodating late and early working hours as well as on-time performance was identified as particularly critical– one passenger noted that extended

service hours are a “must-have” to keep a job. There was also discussion about the possibility of express routes between Victorville and Hesperia and travel between Los Angeles and Orange counties. Passengers supported the additional services closer to Spring Valley and Mojave Drive. One passenger expressed the need for a stop on Southbound Rodeo Drive at Pebble Beach. There was also support for Routes 28 and 29 operating every two hours instead of every three hours.

Transfers and Connections:

Passengers discussed the importance of ensuring that transfers and connections should be made on time, citing the continued difficulty of connections. Although passengers did indicate that the 30-minute service would be helpful to reduce the number of missed connections, which in some cases are caused by prior buses running late or departing early. Passengers still felt that there could be improved connections in Barstow and between Hesperia and Adelanto (New Adelanto).

Micro-Link:

Overall, passengers supported the proposal to replace Route 54 with Micro-Link service, although expressed concerns about the impact that this change may have on fares, especially for Victor Valley College students. One passenger recommended expanding Mico-Link service to include Vasquez and Orlick.

Drivers and Operators:

Many passengers expressed that drivers are nice and helpful. One passenger indicated that they would like to see more drivers hired as soon as possible and another had concerns about buses passing passengers on late night trips.

Route-Specific Feedback:

Overall, passengers were supportive of proposed route changes. Feedback received was related to the need for additional connections, more frequent service, some concern over the discontinuation of particular routes, and some service needs. A full list of route-specific feedback can be found in Appendix B.

5. Community Events: Discussion Questions and Major Discussion Themes

5.1 Discussion Questions

The discussion questions used to guide conversations during the community events are provided in this section.

- What do you think about these route and/or service modifications?
- Are there additional changes we should consider?
- Are there service issues that need a closer look? (e.g., senior service, disabled service, transportation to evening or weekend work shifts)
 - Service times (early morning, late evening, weekend)
 - Connections
- Is there anything else you would like the project team to keep in mind as we move forward?

5.2 Major Discussion Themes

Although many of those interviewed use VVTA service, some community members mentioned that they did not use the system often because they had access to a car. This section provides an overview of the major discussion themes that emerged during the community events:

- Service Span and Frequency
- Connections and Additional Service
- Accessibility
- Route-Specific Feedback

Span and Frequency:

Community members indicated that the proposed service span and frequency improvements will make the system easier to use. However, community members added some additional feedback including:

- Additional service to Sultana High School is helpful, and the proposed service updates on Routes 43 and 47 are convenient.
- Desire for extended service hours and overall improvement to the service at Victor Valley College.
- Expressed that there should be no routes operating with frequency intervals longer than 120 minutes.

Connections and Additional Service:

Community members provided feedback that they were looking for connections to areas outside of VVTA's current service area including Big Bear, Yucca Valley, and Palmdale. One community member requested that the Needles service be restored. Another community member raised that they wanted to be certain that VVTA would serve Brightline.

Accessibility:

One community member brought up the possibility of travel/ride training for developmentally disabled riders.

Route-Specific Feedback:

Community members provided specific feedback on a number of routes. Generally, community members were supportive of the change, but provided feedback on some of the proposed

updates and indicated some additional service needs. Community members also expressed wanting to learn more about some of the new routes. For a full list of route-specific feedback, please see Appendix B.

6. Webpage and Online Questionnaire

6.1 Webpage Content, Online Questionnaire, and Interactive Maps

The project webpage was hosted on VVTA's website and included project information (bilingual fact sheet and flyers) interactive maps hosted on the Remix platform with a place to add comments and questions on particular routes and stops, and an online questionnaire. The sections below summarize the feedback across the map comments and online questionnaire.

Some comments have been lightly edited for clarity but retain their meaning.

6.2 Map Responses

Map Comments – Short Term Vision

Map comments on the short-term vision plan included suggestions for additional stops, questions about proposed route changes, and wait times between connecting routes.

Latitude	Longitude	Line Name	Stop Name	Comment
34.53979	-117.347	N/A	N/A	Need stop here. My friends and I always have to walk so far to catch the bus. My friend overheats very easily and has gotten rather sickly from the walk
34.51405	-117.335	31 Victorville - Adelanto South	Seneca Rd WB & Comstock Dr FS	Why is the 52 replaced by 31 to Hwy 395 & Palmdale? I don't necessarily like getting on 2 buses to get to the mall. I prefer getting on 52, and that's it. It's too much time to wait for 31 if I have an appointment to go to or whenever I have to go somewhere. Although I prefer 31, I just want it to be like that at El Evado Rd & Hook instead.
34.52873	-117.293	56 Transportation Center - Lorene / 7th	11th St SB & Verde St (VV Hospital)	Why is 56 going to VV Hospital? I thought 50 was the only route that goes to this hospital first, Desert Valley Hospital, and then Hesperia Post Office. I think 56 can just stay on its original route to Victorville: Lorene & 7th instead. I've never been on route 56 except for 50 to get to VV Hospital.

The name for 7th seems misleading since it doesn't go to too many stops on 7th Street. Correct me if I'm wrong since I have limited knowledge of 56. Thank you for reading this.

Map Comments – Draft Vision

Map comments on the draft vision plan included recommendations for additional stops and the need for broader span of service on a number of routes.

Latitude	Longitude	Line Name	Stop Name	Comment
34.53649	-117.347	38-Mojave Dr	N/A	For this route have a stop here between Hopland and Mojave :)
34.54243066574193	-117.24	45-Stoddard Wells	VVTC - Dock 1	Awesome, near Rt 23, a bus/route running down HWY 247 connecting Barstow and Lucerne Valley would be hugely beneficial to the Victor Valley. (The intersection by Cafe 247, Barstow RD)
34.58789277279833	-117.396	32 Victorville - Adelanto North	N/A	At least 6 team members and I work at Amazon. We desperately need a stop all the way down gateway. Not even Lyft recognizes our area. Very tough to get to work.
34.51383150233934	-117.439	N/A	N/A	Have 38 extend service to Seneca and Stevens. That would give a double direction service on Verbena Road and Palmdale Road. For the service on Seneca Road between Highway 395 and Verbena Road that would be by the return of 51 and 54.
34.52049847290729	-117.426	N/A	N/A	Have the returning route 51 run on this part of Verbena Road and then there will be double direction service on 31 and 51 with 51 heading to the mall and 31 heading to Bellflower and Rancho.
34.30916200283896	-117.47	N/A	N/A	With a possibility of route 15 having a stop at the Cajon Junction and a possibility of the returning route 24 connecting the stop at Cajon Junction we could add a route 26 that connects Cajon Junction to Hesperia.

6.3 Questionnaire

A bilingual (English/Spanish) version of the below questionnaire was available online via a link provided on the VVTA website.

6.4 Questionnaire Responses

Questionnaire responses were collected between April 4 and May 10, 2024. Nineteen people responded to the online questionnaire. See Appendix C for full list of questionnaire responses.

1. What do you think about these route and/or service modifications?

Respondents overall expressed support for the route and service modifications, although some indicated that there were updates that could be helpful. These included additional Micro-Link service, changes to proposed connections, additional service needed in specific areas, and concerns over passenger and driver safety during proposed later-evening service. However, another respondent expressed support for the later-evening service. One respondent expressed confusion over the proposed service changes and a few respondents indicated that the current route system was already working well for them. Concerns were also shared about the location and distance between specific bus stops and routes including along Route 31, and more service needed on Apple Valley Road south of Bear Valley Road.

2. Are there additional changes we should consider?

Respondents mentioned the need for additional Micro-Link service north of Main Street on Maple Avenue and in the Sycamore and Eucalyptus area of Hesperia. Also noted was the need for additional stops in particular areas – three respondents mentioned the need for a stop at Del Oro and Apple Valley Road. There were also requests for higher frequency for off-peak and weekend service, longer bus wait times, concerns regarding changes to Route 52 and Route 54, consideration of changes in the Helendale area, and a recommendation to cancel routes with low ridership.

3. Are there service issues that need a closer look?

Respondents mentioned that additional Micro-Link service was needed north of Main Street on Maple Avenue and more service in Apple Valley and mentioned the possibility of Micro-Link service focusing on hospital trips. Respondents also mentioned the need for increased bus stop accessibility and safety during evening hours, feedback related to Direct Access reservation hours and usage of the mobile app for “ADA customers.” Also mentioned was weekend service, earlier and later service, and concerns around current policies for bringing bike onboard buses. Feedback was also shared related to Route 31.

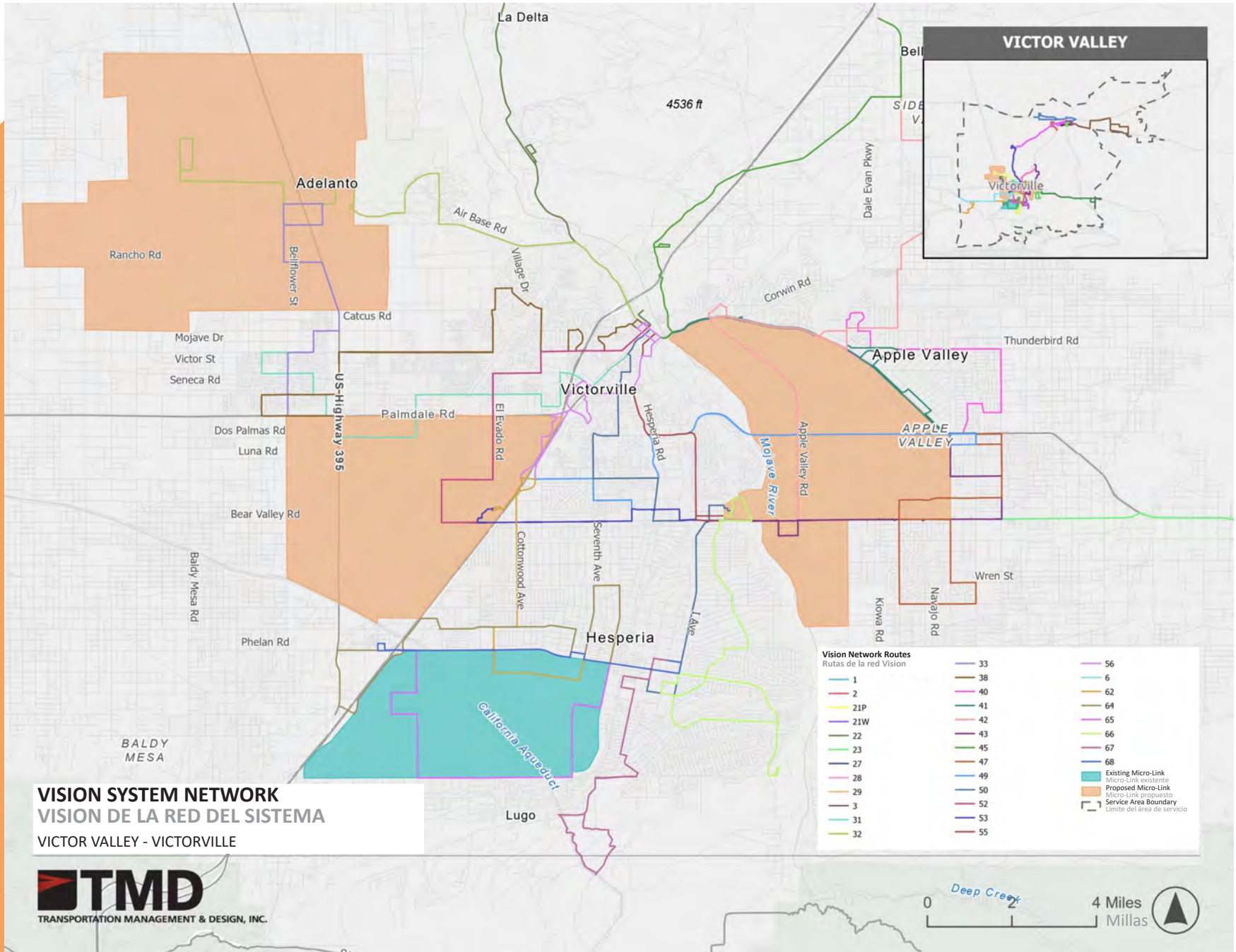
4. Is there anything else that you would like the project team to keep in mind as we move forward?

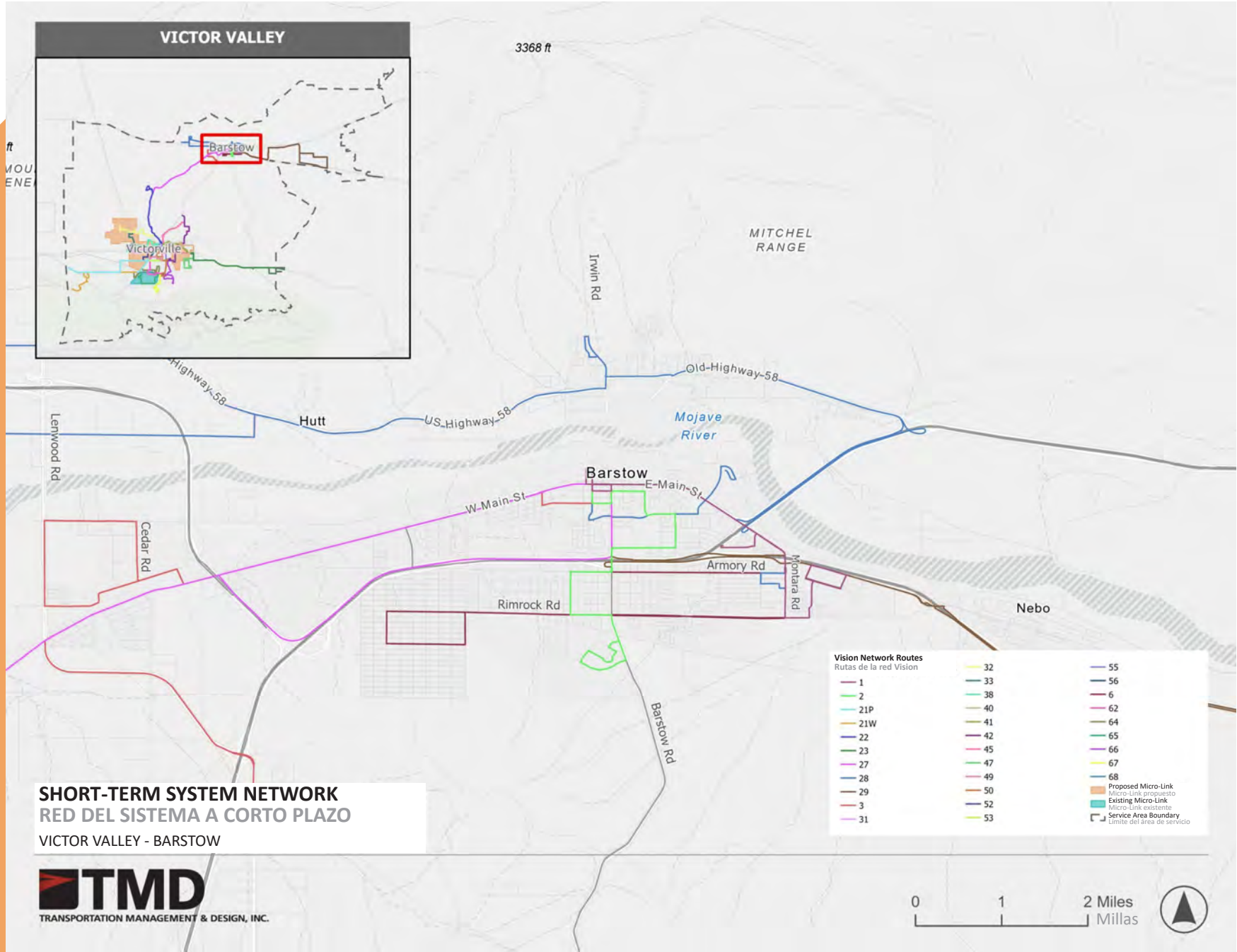
Respondents indicated that additional Micro-Link service is needed north of Main Street on Maple Avenue. There were also questions related to Route 50X. Also expressed were concerns about safety for pedestrians accessing bus stops, drivers, the need for better hours and better service, increased routes for additional access to Victor Valley College, and concerns about driver and passenger safety. One respondent expressed thanks for VVTA working with students and valuing VVTA's service.

Appendices

Appendix A: Outreach Materials

1. Boards
2. Flyers (Physical and Digital)
3. Fact Sheet





Victor Valley Transit Authority Comprehensive Operational Analysis

Victor Valley Transit Authority (VVTA), in partnership with Transportation Management & Design, Inc. (TMD) is evaluating all aspects of the VVTA system throughout the greater Victor Valley area to determine potential improvements to create a more equitable, effective, and efficient transit network. This analysis is called a Comprehensive Operational Analysis (COA).

Análisis Operativo Integral de la Autoridad de Tránsito de Victor Valley

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SHARE YOUR THOUGHTS!

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Victorville Night Market

Friday, April 12,
5:00 - 9:00 pm

15583 7th St,
Victorville, CA 92395

Hesperia Community Farmer's Market

Saturday, April 13,
10:00 am - 3:00 pm

15833 Smoke Tree St,
Hesperia, CA 92345

Hesperia Post Office

Monday, April 15,
9:30 - 11:00 am

17240 Olive St,
Hesperia, CA 92345

Main/Cataba Stop (SuperTarget)

Monday, April 15,
11:30 am - 1:00 pm

12795 Main St,
Hesperia, CA 92345

Victor Valley College (Main Bus Stop)

Monday, April 15,
2:30 - 4:00 pm

18422 Bear Valley Rd,
Victorville, CA 92395

Victor Valley Transportation Center

Tuesday, April 16,
11:30 am - 1:00 pm

16838 S D St,
Victorville, CA 92395

Carl's Jr. Bus Stop

Tuesday, April 16,
2:30 - 4:00 pm

14292 US-395,
Adelanto, CA 92301

Apple Valley Post Office

Tuesday, April 16,
2:30 - 4:00 pm

22099 US Highway 18,
Apple Valley, CA 92307

Virtual Drop In Session

Tuesday, April 16,
6:00 - 7:00 pm

Visit <https://zoom.com/join>
Meeting ID: 819 7807 2495
Or Telephone:
(669) 900-6833

Barstow City Hall

Wednesday, April 17,
2:30 - 4:00 pm

220 Mountain View St Ste A,
Barstow, CA 92311

High Desert Farmers Market

Thursday, April 18,
8:00 am - 12:00 pm

18422 Bear Valley Rd
Victorville, CA 92395

For More
Information



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**Proposed route and service updates are here!
Share your thoughts in person or online!**



Visit vvta.org/coaphase2/ for more information.

Para más información visite vvta.org/coaphase2/

**¡Ya están aquí las actualizaciones de las rutas y servicios propuestas!
¡Comparta su opinión en persona o en línea!**



VISION. PLAN. IMPLEMENT.

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Objetivos del Análisis Operativo Integral de la VVTA



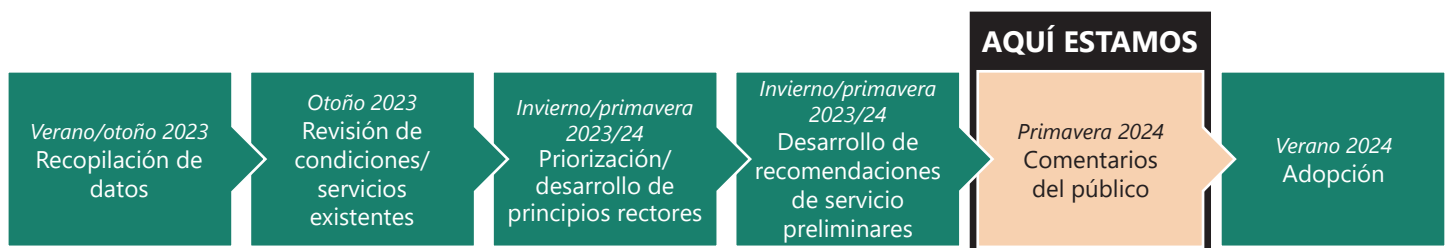
Determinar qué servicios funcionan bien y cuáles podrían mejorarse.



Crear un sistema de tránsito que responda a las necesidades de la comunidad

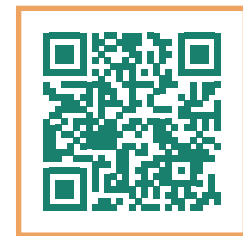


Proponer recomendaciones para futuros cambios o ampliaciones de los servicios



¡Comparta su opinión!

Visite nuestro sitio web para consultar las recomendaciones de servicio propuestas y hacernos llegar su opinión a través de nuestro cuestionario en línea. También estaremos en la comunidad recopilando opiniones entre el 13 y el 19 de abril de 2024. Consulte nuestro sitio web para conocer las fechas, horas y lugares específicos en los que podrá encontrarnos.



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Goals of the VVTA Comprehensive Operational Analysis



Identify what services are working well and what services could be improved



Create a transit system that supports the needs of the community

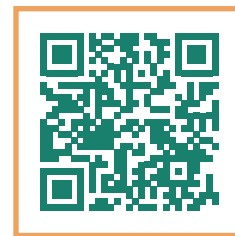


Propose recommendations for future service changes or expansions



Share Your Thoughts!

Visit our website to review the draft service recommendations and provide your input via our online questionnaire. We'll also be out in the community gathering feedback between April 13 and April 19, 2024. Check out our website for specific dates, times, and locations for where you can find us!



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Appendix B: Route-Specific Feedback

Route-Specific Feedback Received at Community Events and Pop-Up Sessions

Route	Pop-Up Session Comments	Community Event Comments
2	<ul style="list-style-type: none"> ○ Uses 2 mainly, thinks that later service would be a “huge plus” 	
15	<ul style="list-style-type: none"> ○ [Important] More service needed on 15 as all the cases are being moved to the Barstow Court House for Family Law cases ○ 15 rider: would like to see more service on the 15, but thinks more service in Barstow is a “great idea” 	<ul style="list-style-type: none"> ○ Phelan should be connected to Route 15 at the McDonalds at Route 138 and I-15 ○ Great that Route 15 will have connections at Super Target and Hesperia ○ Has ideas for traffic avoidance “detours” for Route 15 when 1-15 is backed up ○ Thinks 15’s terminal loop should be made a bi-directional loop ○ Questions why the 15 still serves the hospital in Victorville: has ideas on re-doing the loop through the hospital; maybe do a shuttle to the VVTC? (Route 41 operates between VVTC and the hospital) ○ 15 needs more service ○ Focus needed on one-time specific route issues such as on Route 15 which is “usually running late to San Bernardino”
21	<ul style="list-style-type: none"> ○ Likes the idea of a 21 p/w going to service every 30 minutes ○ Likes 21 changes <ul style="list-style-type: none"> ▪ Uses bike on bus – no issues 	
23	<ul style="list-style-type: none"> ○ Would like to see 23 run later ○ 23 U turn at Moss? Park may not be a good idea (double yellow) ○ Likes the proposal for the 23 very much – would be useful 	
25	<ul style="list-style-type: none"> ○ Concerns about 25 being discontinued and resulting coverage ○ 25 user worried about coverage 	

28	○ (Driver) Likes the split of the 28 idea	
29	○ 29 riders – would like to see more frequent service on the rural routes	○ 29 will keep the loop at the terminal
31/38	○ Happy with the 31 changes	○ Would like to see changes to the 31/38 “loop” route in Adelanto
32	○ Route 32 improved frequency is great	○ Likes the 32 proposal
41	○ Feels any improvements to 41 should be prioritized	○
42	○ “42 needs to run later at night!”	○ Has questions about the changes to the 42 (and its operation on the service road)
43	<ul style="list-style-type: none"> ○ 43 rider, it leaves early and he then misses his appointments <ul style="list-style-type: none"> ▪ Coming from the 40, but its not late → 43 just leaves early ▪ Would also like to see services run later at night ▪ PLEASE RESTORE the “5 min. courtesy” ○ The 43 leaves early <ul style="list-style-type: none"> ▪ “no more courtesy calls” – why not? ○ 43 rider thinks that increased frequency is “awesome” ○ Likes the later span proposal for the 43 	
45	○	○ Likes the 45’s proposals for the future
47 + 49	<ul style="list-style-type: none"> ○ 47 rider → would like to see more late night service <ul style="list-style-type: none"> ▪ Also more service at stops (i.e. new stops) 	○ Curious about 47/49 changes
50X	○ No complaints about 50X potentially going away	
50	<ul style="list-style-type: none"> ○ Likes the new span and frequency for the 50 ○ 50 + 68 rider likes the 30 minute peak service ○ 50 rider – likes the long term idea of 30 minute service 	

- Would like to see 50 run every 30 minutes all day long
- Uses 50 and likes every ½ hour idea, but thinks it should be all day
- Uses the 50 and wants later service
- 50 rider – thinks service should definitely run more after and later at night
 - Generally likes the proposal
- Uses 50 and would love to see later evening service
 - 50 also needs more frequent service; this is true of any bus that serves VVC
-

-
- 53
- 53 runs well and is usually on time – half hour service would be really nice on time
 - Also uses VVTA for the Mall
 - Every 20 minutes long term even better
 - 53 rider – wants ½ hour service “ASAP” on other routes he connects with
 - Driver: 53’s left turn into Walmart is unsafe (to get over to Amargosa)
 - Looks like may have been handled
 - Use Camp Rock Road instead of the u-turn (an easier right turn)

-
- | | | |
|---------|---|--|
| 53 + 54 | ○ Feels the 54 should run more often but the plan calls for a micro service there instead | ○ First Route 54 misses route 53 making getting to the college difficult |
|---------|---|--|

-
- | | | |
|----|---|---|
| 49 | ○ Need service over the new Yucca Loma Bridge, really likes the new 49 proposal | ○ Likes the 49 concept (although he had ideas for using the 52 there) |
|----|---|---|

-
- 55
- Likes the every-20-minute long term proposal for the 55
 - Likes all of the changes proposed for the VVC routes

	<ul style="list-style-type: none"> ▪ Especially likes the 55 changes ▪ Loves the longer span proposals <ul style="list-style-type: none"> ○ Both 55 + 31 will run every 20 minutes long term -- LOVES the idea ○ Generally likes the proposals for the 55 	
56	<ul style="list-style-type: none"> ○ 56 bus is always too crowded; pass-bys and also runs late very often ○ 56 riders → will be replaced by a more frequent 31 bus ○ 56 needs improvement ASAP – would be helpful ○ Feels like 56 should run more often, but the plan calls for a more frequent 31 	<ul style="list-style-type: none"> ○ Has questions about the 56 in the Burning Tree area
64	<ul style="list-style-type: none"> ○ Like the 64 going every half hour helps with class schedule ○ Connect w/50 to VVC ○ Be sure that 64 changes cover a “good bit” 	
66	<ul style="list-style-type: none"> ○ 66 is a good idea ○ Like the 66 running every hour in the short term 	
General Feedback/Comments	<ul style="list-style-type: none"> ○ Uses 64, 62, and 50 – like the idea of 30 minute peak service 	<ul style="list-style-type: none"> ○ Shared ideas with using the numbers “46” and “44” for new routes (has left comments on the website) ○ Shared idea about the US395 Bear Valley Road area ○ The turn off of Arlette is difficult so it is good that the bus is being removed from Arlette ○ Uses 21+54 the most, but uses all of the system a bit ○ Idea about the US 395 Bear Valley Road Area ○ Has ideas to change the “steamlining” of the 50 and 55 service patterns ○ Has questions/ideas about: Needles Link, the Antelope Valley route, and Lucerne Valley/Yucca Valley route.

- Has ideas for a “new” 60/61 service in the Rock Spring area
 - Thinks that NTC Commuter buses could be better used as a Cal State San Bernardino bus from Barstow via Apple Valley
 - Feels like we need an express service to Montclair for connection to Foothill Transit (and eventually the A Line Extension)
 - Feels like a direct connection to Big Bear is also needed
 - Possibly an extension of 23?
 - Thinks there are several places where the span needs to be adjusted
 - Has question on details of which routes serve the lower campus at VVC
 - Park area in Victorville needs a new shuttle service – could be a central Victorville destination – could be the “58”
 - Would like to see BRT on Bear Balley, Main, CA 18
 - Likes the new service proposal near the truck stop on Joshua (near Brightline Station?)
 - Has questions/input on the Barstow routes
 - Idea for “48” to go up Navajo to Brightline
 - 21+54 the most, but uses all the system a bit
 - Shared ideas for a “new” 57 along 3rd
-

Appendix C: Online Questionnaire Response

1. What do you think about these route and/or service modifications?

ID Response

-
- 1 I think they will work pretty well, especially the routes going out to Yermo and Daggett area. I'm sure there's lots of people that would benefit from those routes
-
- 2 Still does not fix the transit issues located north of Main Street & Maple
-
- 3 They are pretty good
-
- 4 Need Micro-Link service, Sycamore, and eucalyptus area of Hesperia
-
- 5 I never been on Barstow route
-
- 6 Need more service
-
- 7 All routes are fine
-
- 8 I liked the old routes and making the connections for appointments and going shopping which when the transfer point is at D street which many seniors and disabled felt that we were not heard or listened to what we wanted. Also all the routes we can't get to shopping for groceries. not everyone wants to shop at stater bros. is the only shopping that 31 rts. go. now we can get to Food4Less or the new Superior [Grocers] store but we can't get to Cardenas store which most of the Latino families like to shop. the 31 rt. went there then they cut that out of the rt. you would have to walk 1/4 to 1 mile to get to that store and CVS. they made it difficult to shop and get to appointments. so now i depend on direct accesses to get me to do my errands ds. i just hope you can get it straighten out.
-
- 9 I like the proposed longer hours
-
- 10 This made me confused and puzzled about these changes. I prefer 50 that only goes to Victor Valley Global Medial Center and not 56. Does this mean we are getting new routes for other areas?
-
- 11 I think you have good routes as it is I believe earlier run time and a bit later would be cool tho
-
- 12 I think there is not enough service to the communities on Apple Valley Rd south of Bear Valley. I've been told that because they are affluent neighborhoods, they don't need bus service, but that couldn't be further from the truth. Many of the kids in these neighborhoods attend charter schools that don't offer bus service and the closest bus stop is 1.5 miles from Deep Creek and almost 3 miles from the furthest community on Apple Valley Rd. My son bikes almost 2 miles a day and crosses busy intersections to get to and from the bus and his cousin's bike almost twice as far.
-
- 13 No response.
-
- 14 Mostly good. I'll add recommendation below in #2.

- 15 need more bus service or Micro-Link north of Main Street between Maple and eucalyptus.

- 16 I don't see any stops that adequately services the Estates, south of Bear Valley Rd.

- 17 I think it's fine overall.

- 18 i don't like the new start and end times. start times during the week should not be before 6am. and they should end by 9pm. NOT 11pm. 11pm is too late. There is low ridership after 9pm. And, it is very dangerous for the drivers and passengers after 9pm due to the heavy homeless population that rides on the buses. Weekends should not start before 6am and all routes should end by 6pm. Also, For Apple Valley Micro-Link the zone should extend to Central Ave. Up to Hwy 18.

2. Are there additional changes we should consider?

ID Response

- 1 Not at this time

- 2 Need Micro-Link service north of Main Street on Maple Avenue.

- 3 Removal of 60 and 120 minute intervals on off peak and weekend service on most routes, and an extra look on route service in Victorville and Apple Valley

- 4 Need Micro-Link service, Sycamore, and eucalyptus area of Hesperia

- 5 Nope

- 6 Rimrock Rd ,main St, Barstow Rd ,helendale area

- 7 The driver should have to wait at least 5 minutes in order for riders to make it to the bus on time because if a rider is running towards the bus and the bus is right there at the stop they just blow past you even though you're right there and they can't see you

- 8 no not now. i will ask for something for unmet needs when that comes around in aug. sept. 2024.

- 9 No, not at all because I like taking one bus to the mall instead of two buses in Victorville. I like getting on 52 and that's it. I don't want to get on 31 and 52. I don't think it's worth it. I know you guys are trying to improve, but this worries me since I'm not the type of person who is used to big changes like this and it will take months to memorize the routes I've been on.

- 10 That's about it honestly

- 11 Minimally a stop at Apple Valley Rd and Del Oro rd to pick up the residents of the Estates. Additionally, Deep Creek is a busy road and there is not a single stop on it.

- 12 Please add a stop at Del Oro and Apple Valley Rd. We currently have 3 students who take the bus daily to Excelsior and the college with more being added in the next 6 years. It is unsafe for the kids to travel 2-3 miles to the current bus stop.

- 13 I'm requesting a stop at Apple Valley Rd. and Del Oro on the basis that the communities south of Bear Valley Rd. on Apple Valley Rd. are grossly underserved, and that it is unsafe and therefore unreasonable to expect students to travel 3 miles to access public transit.

- 14 please provide Micro-Link service to the north side of Main Street along Maple Avenue

- 15 The addition of stops to service the Estates in Apple Valley, as many young adults and children use these routes to get to VVC.

- 16 Routes going directly down the hwy 395 or keeping the 54 which goes towards the Victor Valley Mall from Palmdale road. This change seems to cut off a direct route to that part of the city.

- 17 Consider canceling routes w/low ridership.

3. Are there service issues that need a closer look?

ID Response

- 1 Maybe Micro-Link for hospital locations only. For individuals that need to go to the hospital but do not want to call Uber or 911 & do not have a friend to take them and do not want to take the regular bus all the way to the hospital.

- 2 Disabled service and access, weekend service and improving bus stop accessibility and safety for evening hours

- 3 Need Micro-Link serviced north of Main Street on Maple Avenue.

- 4 Service times on some routes that start at 6:00 AM and end at 8:00 PM, would probably start at 5:30 or 5:50 AM and end at 9:30 or 10:00 PM

- 5 Need direct access reservation hours changed to 6 PM so the people that work can make reservations when they get off work.

- 6 The schedule for the bus routes on the weekend should be early like in the weekdays

- 7 Yes every 30 minutes not every hr and a half .

- 8 I'm a college student, so this is an awesome idea, but 31 shouldn't be a very long route except for the ones that are county deviation routes.

- 9 Would also love to see Micro transit extend to this area of Apple Valley. Next year, in my family alone, we will have 4 kids riding the bus to Excelsior and the bike limit

on the bus is 3. So, when that time comes, one student will have to wait for a separate bus to take them to school. As it is, if a passenger with a bike is already on the bus, one of our kids gets left behind.

10 For safety an additional stop on Del Oro and AV Rd would serve the housing communities around us and help others get to the college.

11 We have only experienced one uncomfortable instance with bicycles allowed on the bus, where one of our students was denied access to bring her bicycle aboard despite a visibly obvious openness of space to accommodate it. Were the bus crowded, they would have at least understood the decision, however since that was not the case that day, our three students felt dishonored and put in a difficult position, simply trying to get to school on time. (This was a few months ago, now, but thank you for the opportunity to share here.)

12 Allow ADA customers to use mobile app to make rights [rides].

13 Keeping an additional bus in route later in the evening for busier buses.

14 No.

4. Is there anything else you would like the project team to keep in mind as we move forward?

ID Response

1 Not at this time

2 Need Micro-Link service north of Main Street on Maple Avenue.

3 Long term plans for the commuter and inter city routes

4 Please extend Micro-Link area to service north of Main Street so that people can go to the grocery store if they live on the north side of Main Street.

5 Drivers

6 Better hours and better service

7 Hi, I would like to ask what it's purpose here? Does this mean 50X will not exist anymore? I think 31 should just stay in South Adelanto instead of going to 7th the most than 55 and 56. I think there should be 2 buses for 56 to be running Victorville: Lorene & 7th instead of one bus running.

8 My son has been hit by a car crossing the street to get to the bus stop. Cars don't always respect 4 way stops and asking children to walk/bike in our sometimes extreme climates and heavy traffic is unsafe.

9 No. I appreciate the service.

- 10 Just a big thanks for working with students in our desert. This is a help to them, their families and a boon for the community. We value your great work. Please do try to accommodate our request to add that stop at Apple Valley Rd. and Del Oro. :)

- 11 Would love to have Micro-Link service north side of Main Street along Maple passed Maple Elementary so people can go to the grocery store when needed.

- 12 Increasing the routes to allow more access to VVC from more remote locations

- 13 A large problem wasn't the bus routes but the availability of the buses. It's difficult navigating the city when each bus takes an hour in-between.

- 14 Please consider bus driver and passenger safety when making your changes. We have a large ridership population that is mentally ill, on drugs or intoxicated. It would be nice to have more safety measures in place to prevent unfortunate "incidents." Example a fully enclosed area for the bus drivers while driving.

Appendix D: All Notes from Outreach Events

4/15/24

Victorville Night Market (16 people)

- Span and frequency improvements will make the system easier to use
- The turn off of Arlette is difficult so it is good that the bus is being removed from Arlette
- More service to Sultana High School is better so the fact the plan increases service is good

Hesperia Farmers Market - cancelled due to high winds

Victor Valley College (5 people)

- Later night service is great addition
- Getting service closer to Spring Valley will be useful

4/16/24

Victor Valley Transportation Center (7 people)

- General support of later service and more frequent service
- Regardless of route, a stop is needed on Southbound Rodeo Dr at Pebble Beach
- A Victorville/Hesperia express route is needed
- In general people also did like the route changes and understood the trade-offs and why some of these changes are better than today
- Microlink should be extended to Vasquez and Orlick
- Good that service is being added onto Mojave Drive – we need that quickly

Carl's Jr in Adelanto (12 people)

- Microlink is a good replacement for the 54
- Earlier service is needed as people need to be at work at 6 not leave at 6
- Route 32 improved frequency is great
- First Route 54 misses route 53 making getting to the college difficult
- The concept of using Microlink as a replacement for the 54 is okay but there is a concern about what that will mean for fares particularly for VVC students
- More shelters are needed
- Drivers are nice
- Concerns about buses passing passengers especially during last trips
- Overall like the changes to span and frequency and route changes

4/17/24

Barstow Maintenance Facility (7 people)

They absolutely loved the plan, I really did not hear of anything that they said would not work or they did not like. One operator brought up the notion of a bus between Barstow and LA Union Station. A few mentioned the bus to Needles should be brought back.

Barstow City Hall (3 people)

I heard a lot of support for the county routes being improved to every 2 hours as being great.

4/18/24

High Desert Farmers Market (3 people)

- Connections to areas outside Victor Valley Transit's service area would be great such as Big Bear, Yucca Valley, and Palmdale
- Needles service should be restored
- Phelan should be connected to Route 15 at the McDonalds at Route 138 and I-15
- Great that Route 15 will have connections at Super Target and Hesperia

Hesperia Bus Operators (8 people)

- Overall thoughts that this is a good plan
- Having Route 15 make more stops for additional connections is a good idea
- Route 56 has crowding issues – the changes to Route 31 should be really good to help Route 56
- More frequent service and later night service will be great for riders
- Some Microlink operators have a concern about the North Adelanto microlink as they feel unsafe in the area

4/15/24

- Post office
 - 7 interviews
 - Generally supportive of plan
- Main/Cataba
 - 2 interviews
 - Generally supportive of plan
 - One passenger wanted later and earlier buses in order to attend San Joaquin Valley College
- Victor Valley College
 - 4 interviews
 - Generally supportive of plan
 - No complaints about 50X potentially going away

4/16/24

- VVTC
 - 4 interviews
 - Generally supportive of plan
 - Common for passengers to inquire about traveling to Los Angeles and Orange Counties
- VVTA - Adelanto
 - 5 interviews
 - Generally supportive of plan
 - Passengers reiterated the need to ensure reliability of transfers

4/17/24

- Barstow Drivers
 - Generally supportive of plan
- Barstow City Hall
 - 2 interviews
 - Generally supportive of plan

4/18/24

- Farmers Market
 - 2 interviews with non-bus riders
 - Didn't take bus cause they had a car
 - One market attendee was very interested in travel training for mentally-challenged riders
- Hesperia Drivers
 - 7 drivers interviewed
 - Generally supportive of plan and curious about learning more
 - Microlink very popular with high school students
 - Traffic is very bad on Bear Valley Road which limits performance of route 53
 - Operators hesitant about providing Microlink service north of Air Base Road
 - One operator upset that there is only one bathroom stall at Victor Valley Transit Center

ROUND TWO

Heperia Post Office - 4/15/24

1 - likes the idea of 30 minute service in the long-term

2 - concerns about 25 being discontinued and resulting coverage
> be sure that 64 changes cover a "good bit"

3 - likes the new span + frequency for the 50
> be sure coverage in Victorville is maintained

4 - uses 64, 62 and 50 - like the idea of 30 minute peak service

5 - 50 + 68 rider like the 30 minute peak service

6 - 25 user worried about coverage

7 - 66 barely is a good idea
> more construction would be better!

8 - 50 rider - likes the long term idea
* SPANISH *
of 30 minute service
> connectors difficult

9 - would like to see 23 run later
at night

10 - would like to see 50 run every
30 minutes ALL DAY LONG

11 - like the 66 running every hour in
the short term

12 - more frequency & stops is a "plus"
> drivers are very nice

* * > issues with getting a sidewalk to the
stop @ SuperTarget - not easy for
seniors to walk

13 - uses 50 and likes every 1/2 hour
idea, but thinks it should be all
day

14 - not a rider but wanted info on fares

Main and Catalpa - 4/15/24

1 - likes the idea of 21p/w going to service every 30 minutes

2 - DRIVER 53: left turn into Walmart is unsafe (to get over to Amargosa)

> looks like may have been handled

- 23 U-Turn at Moss Park may not be a good idea (double-yellow)

> use Camp Park road instead of the U-turn (an easier right turn)

3 - better Bantam connections needed
> more frequency needed

4 - like the 64 going every half hour helps with class schedule
> connects w/so to WC

5 - needs better connections between
Heppner and Adelanto (New Adelanto)
> makes connections to work difficult

6 - VVC student - uses 53 + 68
> 30 minute service would be very
helpful w/ missed connections

7 - would like 1/2 hourly service as
it would "make it easier to
do errands"

8 - likes 21 changes
> uses bike on bus - no issues

Victor Valley College - 4/15/24

1 - likes the every-20-minute long term
proposal for the 55

2 - likes any proposal "where the buses
run later at night"

3 - "42 needs to run later at night"!

4 - 53 runs well and is usually on time - half hour service would be really nice on time
> also uses VUTA for the Mall
> every 20 minutes long term even better

5 - 53 rider → want 1/2 hour service "ASAP" on other routes
he connects with

6 - 43 rider → driver tends to miss riders at some stops
> would love every 20 minute service
> also would LOVE later evening service

7 - on-line announcements need to work and be audible

8 - likes all of the changes proposed for the VUC routes
> especially likes the 55 changes
> loves the longer span proposals

9 - uses the 50 and wants later service

10 - uses it mainly for the VUC access
> likes routes that run more late at night

11 - 50 rider - thinks service should definitely run more often & later at night
> generally likes the proposal

12 - 43 rider - thinks every 20 minutes long-term is "awesome"

13 - uses a variety of routes → really wants to see later service (for work shifts)

14 - uses several routes and
thinks later service is better

15 - overall, should "have more
service that runs on-time"

16 - uses 50x to get to VVC and
thinks the changes to 55 are
a good idea

> likes the larger span

- feels the 56 should run more
often, but the plan calls
for a more frequent 31

> happy w/ the 31 changes

- feels the 54 should run more
often, but the plan calls for
a micro service there instead

17 - likes the later span proposal for
the 43
SPANISH

18 - both 55 + 31 will run every 20 minutes
long-term → LOVES the idea?

19 - sees 50 mins for VVC access
> on-time performance is a great concern for her
> missing a connection means she may miss a class

20 - generally likes the proposals for the 55

VVTC - 4/16/24

1 - likes later at night service → longer spans "will help folks keep their jobs"

2 - really need to see more service on the weekends
> weekend shopping trips can take 2 hours in each direction

3 - likes the idea of more frequent service
> more useful than span extension

4 - connections to Borstow need to be improved

5 - more SO and would love to see later evening service

6 - S2 + S3 rider would also love to see later evening service
> was once stranded in Hesperia when service ended

7 - waiting for Binghamd, but would like "better local buses here in the Valley - at least as good as LA's"

8 - VVC rider - thinks more frequent service is a great idea + should be done sooner

9 - later service is a "must-have" to keep a job
> drivers are always helpful

10 - 56 bus is always too crowded; pass-bys

+ > also runs late very often

11 > 50 also needs more frequent service;
(SPANISH) this is true of any bus that
serves VVC

** > ALSO more service needed on 15 as all
IMPORTANT the cases are being moved to the
Boston Court House for Family Law
cases

12 - likes the idea of the changes, but
thinks they need to happen much
sooner

13 - thinks buses need to run on time
so that connections can be made
> feels any improvements to 41 should
be prioritized

14 - 56 needs improvement ASAP - would
be helpful

15 - 56 riders → will be replaced
+ by a more frequent 31 bus
16 > would like to see VVA line more
drivers ASAP

17 - need earlier AM service too
18 > would really help with connections
and getting to WC
19 > would like to see more drivers
hired ASAP

Apple Valley Post Office - 4/16/24

1 - would really like to see service
run later in the evening, especially
to VVC
> uses it to/from VVC

2 - 43 rider → it leaves early and
he then misses his appointments
> coming from the 40, but it's not
late → 43 just leaves early

Best

- would also like to see service run later at night
 - PLEASE RESTORE the "5 min. courtesy"
- 3 - also say the 43 leaves early
- > "no more courtesy calls" - why not?
 - need service over the new Yucca Valley Bridge → really likes the new 49 proposal
- 4 - 47 rider → would like to see more late night service
- > ALSO more service at stops (i.e., new stops)
- 5 - likes the proposal for the 23 very much → would be useful
- 6 - the buses are very useful and should all run later in the evening AND earlier in the day

Barstow Drivers - 4/17/24

1-2-3-4 → like the more frequent
idea

> like the Williams Street
Transit Center concept

- like no more fare changes with County
routes → single fare

5 → like split of Thibodeau route
with the "new" 28

6 → likes that its a growth plan

7 → likes removing Riverside destination
from the 1
> also likes plan for the 6

8 → likes the changes to the 6
> also thinks more frequency is a
good idea + pass will love it

9 → like the Route 1 change, and
think the proposed split of
the 28 is a great idea
> like the better frequency as well

10 → also like the proposal for the
split of the 28

Barstow City Hall - 4/17/24

1 - 15 riders → would like to see
more service on the 15, but
thinks more service in Barstow
is a "great idea"

2 - 29 riders → would like to
see more frequent service
on the rural routes
> drivers are great

4 - likes the split of the 28 idea
(DRIVER)

5 - rides several routes
> likes the idea of greater frequency especially

6 - rides all the "in town" routes → just wants to see more frequent service to make for easier connections

7 - uses 2 mainly → thinks that later service would be a "huge plus"

8 - likes the idea of later service "so she can go play bridge at night"

9 - drivers are always helpful

Farmers' Market - 4/18/24

1-2 → have cars and don't use the bus

> daughter went on one at an event and declared it "smelly"

3 → not a rider → "I have a car"

4 → wants rider training info → Daniel gave her all the Travel Training info

→ Allie from community integration program (developmentally disabled)

5 → WC student who uses the 43 + 52

> thinks service is "convenient"

> likes idea of more frequent service

6 → uses 21 + 54 the most, but uses all the system a bit
(Domenic)

- > has questions about the changes to the 42 (and its operation on the service road)
- > also curious about the 47/49 changes
- > also likes the 45's proposals for the future
- > shared ideas with using the numbers "46" and "44" for new routes (has left comments on the website)
- > also shared ideas about the US 395 / Bear Valley Road area
- > would like to see changes to the 31/38 "loop" routes in Adelanto
- > likes the 49 concept (although he had ideas for using the 52 there)
- > also has ideas to change the "streamlining" of the 50 + 55 service patterns
- > also has ideas for a "new" 57 along 3RD
- > has ideas for traffic avoidance "detours" for Route 15 when I-15 is backed up

> has questions / ideas about: Route 200

Route 18 (Antelope Valley
Metrolink)

Route "300" (Lucerne Valley)

> has ideas for a "new" 60/61 service
in the Rock Springs area

> thinks the NTI metrorail could
be better used as a Cal State
San Bernardino bus from Borstar
via Apple Valley

> also feels we need an express
service to Montclair for connections
to Foothill Transit (and eventually the
A Line extension...)

> feels a direct connection to Big Bear
is also needed (Sto mentions Mountain
Transit used to serve the Victor Valley)
possibly via an extension of 23?

> thinks 15's terminal loop should be made
a bi-directional loop

> thinks there are several places where the
stop has need to be adjusted

> has questions on details of which routes
serve the lower campus at VUC

> has questions about the 56 in the
Dorming Tree area

> feels the Hook Park area in Victorville needs
a new shuttle service → could be a central
Victorville deviation

→ could be the "58"

> would like to see BRT on • Bear Valley
• Main
• CA 18

> likes the 32 proposal

> likes the new service proposal near the truck stop
on Joshua (near Brightline station?)

> questions why the 15 still serves the
hospital in Victorville • has ideas on re-doing
the loop through the
hospital

• maybe do a shuttle
to the WIC? (Stu
says 41 does that)

> 15 needs more service

> also has question / input on the
Borston routes

> 29 will keep the loop at the terminal

> should be no 120 minute service and
no lengthening of headways
> idea for "48" to go up Navajo to Brightline
7 - wants to be certain that we end up
serving Brightline

8 - likes the idea of more service
overall, but feels that on-time
needs to be addressed.
> 15 bus is "usually running late
to San Bernardino"

9 - wants VVC service to be
improved

10 - runs automotive program at VVC
and they definitely need later
service

