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# 2018 BRADCO HIGH DESERT REPORT

## VICTOR VALLEY TRANSIT AUTHORITY

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# VVTA Adapts to the Speed of Life

Travel plans change at the speed of life. Public transit must be quick to identify and adapt to the emerging needs of its community. Victor Valley Transit Authority (VVTA) continues its quest to serve the burgeoning transportation needs of its High Desert community.

A challenging task — considering its operational footprint nearly spans a whopping 1,000 square miles and claims many niche communities — VVTA is amid a series of systemwide improvements to take a focused aim at overcoming those challenges. From strategic new facility buildouts and transit fleet additions, to the deployment of advanced technologies, bus routing, and bus stop signage, VVTA is on the move.

Just like transit agencies throughout the country, VVTA has experienced a recent mild decline in fixed route (big bus) ridership. Overall though, VVTA's total ridership demonstrates its long-standing growth trajectory. Total ridership jumped from 1.7 million in 2013, to 1.9 million in 2015, and up again to 2.5 million in 2017. VVTA's operational strength is still embraced by a fixed route transit system that spans 11,873 miles.

Big on the bucket list of connecting service to the Inland Empire are plans to introduce a CSU San Bernardino bus stop in time for the fall 2018 semester start. There is also the possibility for additional trips between Victorville and the San Bernardino valley.

### **COMPREHENSIVE OPERATIONAL ANALYSIS**

VVTA commissioned the renowned consulting firm, AECOM, to perform a Comprehensive Operational Analysis (COA) of its entire system. Completed in February 2017, the study reviewed service performance in relation to community developments within VVTA's operational area. The effort sought to determine how effective the existing services were and identify what modifications were needed to best serve the community in the coming years.

The recommendations were based on 18-months of analysis, consisting of community outreach, public comments, and collaboration with key stakeholders within the VVTA service area. The COA addressed the needs for system growth and enhancements, required to improve on-time performance, and create continuity between Barstow Area Transit (BAT) and VVTA as these two bus systems merged in September 2015.

Since VVTA is fiscally conservative, the changes outlined within the COA were based on a financially-constrained environment. Growth recommendations were phased and designed with the flexibility of meeting future funding realities.

## **COA IMPLEMENTATION**

The VVTA Board approved the findings of the COA and in October 2017 VVTA implemented many of the findings. VVTA expanded service hours, worked toward a reduction of wait times, and adjusted routes to match population growth trends and movement throughout the High Desert. The long-awaited fare alignment standardized fares between the Victor Valley and Barstow service areas, simplifying passenger travel. The adjustment reduced fare on some services, increased on others, while many remained the same.

“Although many transit agencies increase their fares for riders every two years, VVTA has not raised fares in 10 years, even though the level of service has improved, and our population has grown,” said VVTA Executive Director Kevin Kane with regard to the service changes. “VVTA remains a best value for its level of service, featuring some of the lowest fares in Southern California.”

Route numbers were relabeled based on the type of service they provide and where they operate. Routes numbers 1-9 primarily now serve Barstow. Route numbers 10-19 and 200-299 are delegated for inter-city routes. Route numbers 20-29 are reserved for county areas. Route numbers 30-39 primarily serve Adelanto. Route numbers 40-49 primarily serve Apple Valley. Route numbers 50-59 primarily serve Victorville. And route numbers 60-69 primarily serve Hesperia. Commuter routes continued with numbers 100-199.

“Anytime the transit agency makes changes in their system is going to benefit the majority of its riders but will still negatively impact some, however, I believe this system upgrade is certainly more intuitive,” said VVTA Executive Director Kevin Kane prior to the changes. “Operationally, we will be able to better direct our resources, thereby eliminating redundancies inherent with overlapping route services. By providing more direct connections, we look to improve reliability and on-time performance, which will benefit our riders.”

## **ROUTE CHANGES**

VVTA touted 36 routes prior to and following the COA despite the addition of new routes. This was due in part the consolidation of several routes.

In Barstow, weekday service started an hour earlier in the morning and ended an hour later in the evening. On the weekend, service hours were also extended. Barstow Routes 1, 2, and 3 were redesigned to eliminate redundant routing, which revealed on-time performance improvements and a reduction of travel times between key locations in the months following the COA implementation.

The new Route 6 now provides service between Walmart and Barstow Community College. Route 4 was renumbered to county service designation as Route 28, providing service between Barstow,

Hinkley, and Helendale every three hours. Route 5 was renumbered to county service designation to Route 29, providing scheduled service between Barstow, Yermo, Daggett, and Newberry Springs.

For inter-city routes, Route 15 B-V Link routing was streamlined to improve on-time performance. The route, which serves Barstow, Apple Valley, Victorville, San Bernardino, and Fontana, added service to the Victorville Civic Center and Victorville Courthouse and adjusted two Barstow trips to depart two hours earlier, according to passenger demand. No changes were made to Route 200 Needles Link, which serves Needles, Barstow, and Victorville.

For Victor Valley routes, the agency's first express route, the 45X, was renumbered to 50X. This route was also the first bus in the agency's history to feature a full vinyl wrap.

Route 33 was rerouted, extending service to Molina Medical Center in Adelanto. Route 21P (Pinon Hills) was rerouted to operate between the Mall of Victor Valley and Pinon Hills every two hours. Route 21W (Wrightwood) was rerouted to operate between Mall of Victor Valley and Wrightwood every two hours. Combined, both segments now operate hourly between Mall of Victor Valley and Phelan.

Portions of Routes 44 and 48 were combined to create new Route 68. This new route now serves key locations in Hesperia and Victorville, including the Hesperia Civic Center, Lime Street Park, Hesperia Library, and the Mall of Victor Valley.

In order to accommodate the needs of VVC students for the fall semester, Route 42, began service August 2017. The route connects VVTA's major transfer point at Victor Valley College (VVC) to previously-unserved locations throughout northern Apple Valley. Featured bus stops include VVC Regional Public Safety Training Center, Walmart Distribution Center, Los Ranchos Mobile Home Park, and the High Desert Juvenile Detention Center, which is available by request only.

## **NEW DESIGN FOR BUS STOP SIGNS**

In concert with the COA changes, VVTA developed a newly designed sign for its bus stops. These more recognizable signs began gracing the curbside of the High Desert landscape in late 2017. All 1,018 bus stops signs have been standardized and are being replaced throughout the system. The signs display the hallmark agency colors and provide several passenger-friendly benefits including visibility from both sides, route identification, and a unique bus stop ID number which is used in GIS tracking.

## **INTERACTIVE VOICE RESPONSE**

VVTA is slated to debut its on-demand Interactive Voice Response (IVR) Phone System by summer 2018. The automated phone system delivers real-time bus routing and scheduling information to those in need of answers fast. The automated call flow is engineered to quickly identify rider needs and deliver that information instantaneously.

This will put an end to the annoying elevator hold music that some customers may experience during peak call hours. The automated call flow is fluid and provides a dynamic travel planning experience that is quick, efficient, and accessible from any landline or mobile phone.

Using the unique bus stop ID numbers, passengers will be able to access real-time bus arrival times for an individual stop via the IVR system.

The systems will automate routine customer inquiries and enable customer service agents to focus on the customers who really need their help.

## **WiFi CONNECTIVITY AND MOBILE APPS**

Following the launch of the 2017 COA changes, VVTA unveiled its new operations and passenger information infrastructure. Developed by Syncromatics, this innovative transit dispatch and tracking solution combines innovative hardware and software to deliver real-time monitoring of key transit systems.

Operationally, supervisors and analysts can now monitor most vehicle systems and performance in real-time. This monitoring includes key data points such as on-time performance, automated passenger counting, vehicle health monitoring, and a myriad of other crucial metrics.

For passengers, both the web-based and dedicated mobile app delivers routing and scheduling assistance including predicative bus arrival times based on algorithms. Furthermore, the system introduces free WiFi connectivity to passengers. The system also interfaces with digital signage, providing passengers with real-time display an annunciation of arrival times right on their smart phones.

The platform integrates with the new bus stop numbering system, allowing passengers to lookup stops and request predictive bus arrival time information via text messaging. A passenger simply texts “VVTA” followed by the stop number to 41411 to receive instant bus arrival information.

## **FUELING STATIONS**

VVTA currently owns and operates two strategically located alternative fuel stations in Barstow and Hesperia. These stations meet the fueling needs of the general public, private trucking companies, government agencies, and VVTA. Because alternative fueling stations are not as abundant as unleaded fueling stations, the two locations provide a significant service to the High Desert alternative fuel consumers as well as those consumers traveling from out of state. Its list of local clients include Matheson, Burrtec, Advanced Disposal, City of Barstow, and San Bernardino County.

In a move to streamline fleet fueling operations and reduce fuel costs, the VVTA Hesperia Fuel Station was constructed and began operation in 2009 and now dispenses Compressed Natural Gas (CNG) and unleaded gasoline. The location eventually became home to VVTA Administration and the VVTA Hesperia Yard in 2011.

Following the merger of VVTA with Barstow Area Transit in September 2015, VVTA purchased the City of Barstow Fuel Station in July 2016. The site, provides quick access to Interstate 15, will also serve as the future location of the VVTA Barstow Maintenance Yard.

In 2017, the Hesperia station dispensed approximately 32,000 Gasoline Gallon Equivalent (GGE) of CNG to the public. The Barstow station dispensed approximately 60,000 GGE of CNG and 1,037 GGE of Liquefied Natural Gas (LNG) to the public.

VVT alone consumed 975,049 gallons of CNG and 152,104 gallons of unleaded gasoline in 2017. VVTA dispensed in excess of 1 Million gallons of CNG in 2017.

In addition to the operational and cost saving advantages of the owned fuel stations, VVTA has valuable access to additional real-time reporting metrics. These include instantaneous monitoring of fleet as well as vehicle-specific fuel data, mileage, and engine oil consumption. This monitoring capability delivers VVTA a proactive posture in ongoing preventive maintenance activities through trending analysis.

## **MAINTENANCE ADVANCEMENTS**

VVTA continues refinement of one of the transit industry's first paperless Preventive Maintenance Inspection (PMI) programs, which launched in 2015 and is incorporated into the existing fleet management system. Using tablets, the program provides technicians with one-touch access to vehicle- and component-specific shop manuals and historical maintenance data during inspections. The program auto-generates work orders on individual line item inspection failures to ensure that all items are addressed, repaired, and not overlooked due to human error.

Switching to a paperless system has provided mechanics and analysts quick and easy access to real time data of fleet information, current vehicle repairs, and vehicle history. Such features are saving hundreds of personnel hours, minimizing the time required to review work orders, PMI information, parts inventory, and repair history.

Collaborating with its operations contractor, Transdev, VVTA continues making strides in streamlining preventive maintenance fleet operations by introducing operating procedures commonly seen consumer car dealerships.

## **NEW BARSTOW DIVISION FACILITY**

VVTA recently began plans to replace its leased and outdated Barstow maintenance yard with a modern facility to be located adjacent to its Barstow Fuel Station.

The future maintenance yard will stand on a spacious 5.5-acre parcel. The building will span approximately 8,500 square feet and feature three maintenance bays, a parts department, convenient storage rooms for tools and tires, and 2,400 square feet of office space for transit operations. The facility will be constructed from a cost-saving metal structure and boast an appealing façade and internal walls necessary for office and maintenance-related space.

VVTA will soon proceed with issuing a request for proposals for two design-build companies. Assuming VVTA Board approval and that the project proceeds as planned, VVTA anticipates breaking ground on the project in late 2018. Completion of construction is anticipated in the summer of 2019.

## **GETTING ROOMIER IN BARSTOW**

VVTA recently took delivery of five new 40-foot “Clean Air” CNG transit coaches. These coaches will be deployed in Barstow and are the first full-size buses ever to operate in Barstow and the surrounding service areas.

The coaches feature the advanced, near-zero emissions Cummins L9N engines, which are acclaimed as the lowest certified Ultra Low NOx emission engines in North America, boasting a 90-percent lower emission than the current North American EPA standards.

These buses offer improved comfort and a smoother ride than the current chassis-on-frame cutaway vehicles. The new buses will offer free WiFi connections, real-time vehicle tracking, and fareboxes that align with VVTA’s goal of introducing mobile ticketing to its system in 2018.

## **MOBILE TICKETING**

With the planned launch of TouchPass mobile ticketing in summer 2018, the new fare system will deliver improved passenger convenience and on-time performance. No longer will passengers have to fumble around for exact change at the farebox or wait for a driver to view their boarding pass. They simply flash the fare card or mobile app at the farebox reader while boarding the bus. It’s that simple. This new boarding method has proven to significantly reduce dwell times at stops, helping passengers get to their next destination on time.

The new system offers passengers the ability to pay fares on their phone or any internet-connected device. Such fare products are protected from loss, if the passenger registers their TouchPass account through the web portal or mobile app.

## **MOVING FORWARD**

As VVTA continues its quest to “Connect Community to Opportunity,” great consideration into passenger-centric service improvements and fiscal-minded efficiency remains at the forefront. Its community partnerships are instrumental in achieving continued success in public transportation.

From the challenges of fielding an all-battery electric fleet in a rural region, to moving students toward higher education and the community to employment opportunities, it’s not only about dollars and cents. It’s about people. VVTA remains committed to moving its community wisely into the future.