



Planning & Design

How Transit Planning & Data Reshaped Transportation in Napa Valley

Known for world-class wine, Napa County is home to roughly 76,000 residents with over 3.8 million visitors a year.* A mixture of rural and urban areas with a dynamic geographical landscape and diverse community needs, the Napa Valley Transportation Authority which provides bus, community shuttle, and paratransit services, faces unique challenges.



CASE STUDY



4,030

rides per month

10

vehicles

300

riders served per day

2 month

vehicles

*Pre-COVID





The Solution:

In Spring 2020, at the onset of the coronavirus pandemic ridership declined 67% on eight NVTA fixed-route operations. Principal Planner at Napa Valley Transportation Authority Rebecca Schenck, recognized their current service model was no longer effectively serving Napa County's needs.

In search of a solution to better support the NVTA community during an unprecedented time, Schenck partnered with TransLoc's Planning & Design team to analyze and determine how to implement new safety and health protocols while continuing to meet the transportation needs of Napa County residents.

In just over a month, NVTA was able to temporarily pause their fixed-route operations and transition to TransLoc's

on-demand services. With constant fluctuations in ridership, NVTA used TransLoc's reporting suite to monitor and adapt services, ensuring a positive rider experience.

NVTA's data showed that transitioning to on-demand services allowed for shorter, more direct trips, while also creating the space required to adhere to proper social-distancing guidelines. Trips that previously required riders to take two buses, could now be accomplished in one.

TransLoc's OnDemand software also enabled NVTA to easily monitor and regulate how many riders were utilizing the service at any given time. By December 2020, hourly ridership was increasing each month, while also maintaining consistent wait and ride times.



CASE STUDY



<10min

average wait times

2020

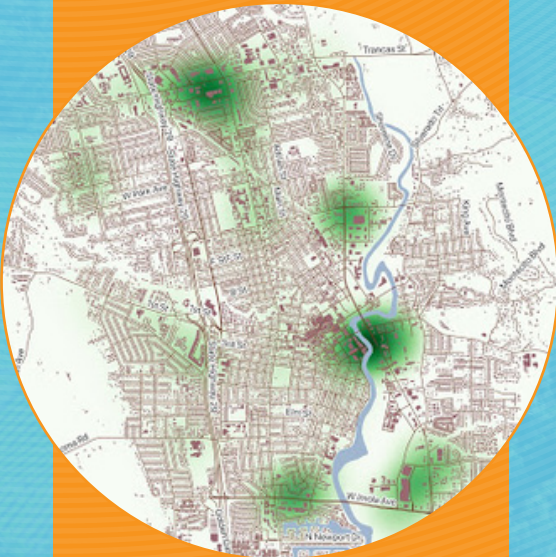
NVTA partners with TransLoc

TransLoc

 CASE STUDY

NVTA
NAPA VALLEY TRANSPORTATION AUTHORITY

Heat maps help visualize where riders start and end trips using historic and demographic data.



The Solution:

The switch to on-demand services allowed NVTA to adapt to falling ridership and evolving movement patterns providing mobility throughout the region using limited resources.

As ridership has continued to grow Schenck recognized the advantages of a **hybrid service model with both fixed-route and on-demand services for residents**. With an influx in riders, wait time for on-demand services increased.

The City of Napa wanted to evaluate options to reintroduce fixed-route services, while also maintaining NVTA's goal of keeping rider wait times low, while using limited driver and vehicle resources efficiently.

“When we went to on-demand services, we no longer had to guess where people needed to go for their essential trips. The riders told us with every requested ride when and where they needed to go.”

— Rebecca Schenck

Schenck enlisted TransLoc's Planning & Design team of certified transit planners to provide recommendations on how to re-establish fixed-route services in Napa County.

By creating **heat maps of where riders started and ended trips using historic transit and demographic data**, the TransLoc team developed three alternative fixed-route options and conducted simulations to see how each would perform over various growing ridership scenarios.



The Results:

A typical transit agency may take six months or longer to provide an analysis, but TransLoc's team was able to provide their research within two months.

The Planning & Design team provided a comprehensive analysis including;

- heatmaps of mobility patterns
- comparison graphs of ridership data over time
- equity analysis of historically-underserved populations
- route alternatives
- walkshed analysis
- ridership growth scenarios
- ride cancellation/no show analysis
- cost analysis
- key recommendations

The team outlined their recommendations for routes to reintroduce fixed-route operations and key metrics to monitor.

In June 2021, just over a year after a drastic decline in ridership, Schenck's team implemented their new fixed-route services based on TranLoc's recommendations.



A Guide to Multimodal Transit

Learn HOW to create a harmonious multimodal transit program in our "Guide to Multimodal Transit."

[READ THE FULL GUIDE](#)

Planning & Design Services

TransLoc's Planning & Design team will partner with you to ensure your transit system achieves your goals.



[FIND OUT MORE](#)