



**NAPA COUNTY GRAND JURY  
2016-2017**

**June 22, 2017**

**FINAL REPORT**

**NAPA VALLEY TRANSPORTATION AGENCY  
VISION 2040 PLAN**

*County Traffic Problems Need a Comprehensive Plan  
with Measurable Results*



# NAPA VALLEY TRANSPORTATION AGENCY VISION 2040 PLAN

## *County Traffic Problems Need a Comprehensive Plan with Measurable Results*

### **SUMMARY**

The Napa Valley Transportation Authority (NVTA) is responsible for providing a realistic and executable traffic management plan for the county. Published in 2015, the NVTA Vision 2040 (V2040) transportation plan is not a comprehensive plan, nor does it contain measurable goals by which progress can be monitored. This 400+ page document should be the guide for planning and funding of Napa County transportation needs for the next 25 years, but it does neither.

The Grand Jury found that the V2040 proposed highway improvements list, bike lanes, and new buses are inadequate to truly solve Napa County's traffic congestion problems. Moreover, their long list of proposed improvements can't be fully executed due to a shortfall in funding. The Jury also found that the NVTA has no way to measure annual traffic congestion relief. Specifically, neither the NVTA Board nor the public has a way of determining progress toward the NVTA stated goals.

The Grand Jury recommends that the Board of Supervisors form a multidisciplinary task force to support the NVTA in developing a true "Transportation Vision." This task force should seek innovative sources of funding along with developing goals that are actionable and outcomes that are measurable.

Napa County residents require solutions to traffic congestion and the participation of their government officials working together, including the Board of Supervisors, City mayors, NVTA Board members, and the County representative on the Metropolitan Transportation Commission (MTC).

The NVTA Board needs to require accountability for new thinking on integrated transportation solutions and find new and innovative sources of funding. Future expenditures should be based on quantifiable goals and measurable results.

### **GLOSSARY:**

CMA - Congestion Management Agency

GHG - Greenhouse Gas Emissions

JPA - Joint Powers Authority

MTC - Metropolitan Transportation Commission

MTC Plan 2040 - Metropolitan Transportation Commissions' Transportation Management Plan;  
<http://2040.planbayarea.org/>

NCTPA – Napa County Transportation Planning Agency (name for NVTA prior to 2016).

NVTA - Napa Valley Transportation Authority

TDM - Travel Demand Management

V2040 - Vision 2040; Napa County transportation management plan;  
<http://www.nvta.ca.gov/countywide-plan-vision-2040> )

VMT - Vehicle Miles Traveled

## **BACKGROUND**

### **NVTA Operational Responsibilities**

The NVTA is the transportation planning agency for all six governmental jurisdictions (the County and five cities) within Napa County. They are also the County's designated Congestion Management Agency (CMA), and therefore are responsible for preparing and implementing congestion management programs. Their primary responsibilities are the planning and implementation of Federal and State Fund Programming and Transportation and Housing Planning. In addition, they are the Transportation Tax Authority for the County, as well as the Public Transit Provider, which includes the VINE bus service and the On Demand/ADA Shuttle Service.

### **Vision 2040 Plan**

The State of California and MTC mandate that all traffic congestion agencies develop a 25-year transportation plan to solve traffic issues. V2040 was adopted in September 2015. The plan's stated goals are to:

1. Serve the transportation needs of the entire community regardless of age, income or ability.
2. Improve system safety in order to support all modes and serve all users.
3. Use taxpayer dollars efficiently.
4. Support Napa County's economic vitality.
5. Minimize the energy and other resources required to move people and goods.
6. Prioritize the maintenance and rehabilitation of the existing system.

### **Challenges to Napa County Transportation as described in the Vision 2040 Document**

In examining how Napa County can increase funding and reduce traffic, V2040 outlines these findings and conclusions:

- Due to increased population and a growing economy, traffic congestion is projected to worsen over the next 25 years.
- Funding sources for transportation have dropped significantly resulting in severe limitations on both new projects and on simply maintaining existing infrastructure.
- Continuing limitations on funding points to the need for alternative methods of managing traffic through better road design and intelligent transportation systems.

- Napa County needs both maintenance and infrastructure expansion and will have to carefully balance how funds for maintenance and expansion are apportioned.

### **Traffic Congestion Trends**

As reported in V2040, traffic congestion in Napa County continues to worsen. Most of this is due to the creation of new jobs as a result of a vibrant tourism industry. Extreme traffic congestion has the potential to threaten the livelihood of Napa’s tourism business, along with diminishing the quality of life for all County residents.

In the past 10 years, Napa tourism has grown and so has traffic congestion. Currently, traffic problems are not primarily the result of tourism but of commuters who work in the wine or hospitality business. While County leaders support the economic engine of tourism, they have not always committed to solving the problem of lack of affordable housing, which is directly related to traffic congestion.

- In 2016, Napa Valley's visitor industry generated \$80.3 million in tax revenues for government entities in Napa County, which is an increase of 25 percent over the \$64.2 million in tax revenues generated in 2014.<sup>1</sup> Taxes directly generated by the visitor industry include revenues from the transient occupancy tax (hotel tax), sales taxes, and property and transfer taxes paid on lodging facilities.
- The tourism industry supports an estimated 13,437 jobs, with a combined payroll of \$387 million<sup>2</sup>.

Currently, there are about 71,000 jobs in Napa County and 55,000 housing units. The cost of housing (relatively high cost) and the nature of employment (relatively low wages) in the county, results in many Napa workers having to find more affordable housing elsewhere. A household needs to earn \$95,000 per year to purchase a median-priced home for \$606,000. In 2014, the annual median income of Napa’s workforce was \$38,168.<sup>3</sup> Increased housing demand and income mismatch will continue to result in more commuter vehicle miles traveled and more congestion on Napa’s roads.

If projections are accurate, this could result in 30,000 workers commuting into Napa each day by 2040 (a 45 % increase over today) and an additional 2,000 outbound-commuters, or a total of 16,000 daily trips entering and leaving the county.

### **Transportation Funding Trends and Challenges**

The transportation funding from Federal and State government sources are shrinking for the NVT. The V2040 project list is only 60 percent funded (\$1.1 billion out of \$1.9 billion). There is simply not enough money from traditional sources to solve our traffic problems through executing a “wish list” of construction projects.

The Measure T half cent sales tax (starting July 1, 2018) will provide some funding, mostly for street maintenance. The estimated revenue is \$12 million per year to be divided among Napa County and its five cities. With the reduction of gas prices in recent years, increases in fuel

---

<sup>1</sup> Visit Napa Valley 2016 research report.

<sup>2</sup> Ibid.

<sup>3</sup> V2040 Fehr & Peers Travel Behavior Study, December 2014.

efficiency and the growing number of electric vehicles, the revenue from the gas tax will continue to decrease.

The net result is that NVRTA needs to find other ways for Napa to self-fund transportation solutions.

## **METHODOLOGY**

### **Interviews**

The Grand Jury interviewed:

- NVRTA staff
- NVRTA Board members
- NVRTA Technical Advisory Committee members
- Napa Valley Vintners
- Visit Napa Valley staff
- Sonoma County Transportation Authority (SCTA) staff
- Wine and Tourism Market Research experts

### **Documents Reviewed**

- NVRTA's *Vision 2040 Moving Napa Forward*, including:
  - The report's 12 white papers and reports
  - Fehr & Peers Transportation Consultants' *Travel Behavior Study*, conducted in 2013-2014
  - The nine-page *Public Comments* section
- SCTA's transportation plan, *Moving Forward 2040*
- MTC's Vision Plan, *Plan Bay Area 2040 Draft released April 3, 2017*
- Organization charts – NVRTA staff and NVRTA Board
- *Silicon Valley Bank –State of the Wine Industry Report – 2016*
- *Visit Napa Valley in-market research survey -2014*
- Newspaper articles concerning traffic issues in the *Napa Valley Register*, *American Canyon Eagle*, *San Francisco Chronicle*, and *L.A Times*.
- *What Do We Know Now About Napa Transportation?* - by Barbara Insel  
Stonebridge Research Group LLC, October 29, 2015

### **Internet Searches**

- NVRTA website; <http://www.nvta.ca.gov/countywide-plan-vision-2040> . (Accessed as of June 15, 2017).
- Metropolitan Transportation Commission; <http://mtc.ca.gov/> and The MTC Vital Signs measurements; <http://mtc.ca.gov/tools-resources/vital-signs> . (Accessed as of April 2017).

## NVTA Board Meetings

- Numerous, including NVTA Board retreat March 15, 2017 at Mont La Salle, Napa CA.

## DISCUSSION

Vision 2040 was developed over a two-year time period at a cost in excess of \$250,000. However, the Grand Jury found that this time and expense did not result in an actionable plan to measure and solve traffic congestion. The Grand Jury found the most interesting assessments and impactful ideas in the report came from the *Public Comments* section in the last nine pages of this lengthy report.

The first was from the Napa County Farm Bureau, which stated:

1. There is no clear vision, priorities, or performance measures that lead to direction of future investments.
2. Preliminary modeling results do not show improvements to the proposed transportation plans.

The second was from the V2040 Citizens Advisory Committee (CAC). This committee offered the following recommendations:

1. Remove barriers to rail transit.
2. Build infrastructure for active transportation (walkers and bikers) especially in Napa and American Canyon.
3. Add new Park & Ride lots and shuttles.
4. Invite and advocate for new technology.
5. Connect to affordable housing.

The CAC produced a matrix chart ranked for how to prioritize their various recommendations to reduce traffic congestion (see Appendix A). The NVTA saw value in the work of the CAC and decided in June 2016 to continue the CAC because it wanted community input. However, as of June 2017, only 10 of the 19 CAC volunteer positions are filled.<sup>4</sup>

## Studies, Studies, and More Studies

The V2040 report includes a 134-page countywide transportation plan, followed by nearly 300 pages of lists, projections, and copies of three other studies:

- NCTPA Community Based Transportation Plan of July 7, 2015. Napa County Priority Development Area (PDA) Investment and Growth Strategy, NCTPA, April 4, 2013
- Napa County Travel Behavior Study, Draft Survey Results and Data Analysis Report, NCTPA, December 8, 2014

Buried within the V2040 report are suggestions for even more studies:

---

<sup>4</sup> All CAC members are appointed by the NVTA.

“NCTPA recommends conducting a study to look at future corridor management elements that could improve system-wide traffic operations.”<sup>5</sup>

“The north south connection between Vallejo and St. Helena (Calistoga) given the potential employment, residential, and visitor growth for both passenger and freight traffic could significantly reduce congestion and offers another potential for further study.”<sup>6</sup>

What the Grand Jury observed were studies upon studies, yet no specific, actionable, measurable plans to reduce traffic congestion. One example of this is the costly Fehr & Peers Travel Behavior Study which details where traffic emanates from and why, and yet, the V2040 report doesn't appear to utilize this data in planning (see Appendix B).

## **Learning from Other Agencies**

The Grand Jury studied the Sonoma County Transportation Authority report; *Moving Forward 2040* and was impressed by their five Comprehensive Transportation Plan (CTP) goals including measurable metrics for each, which correlate with the State 2040 transportation plan and the *MTC; Plan Bay Area Performance Targets* (Appendix C).

*Moving Forward 2040* serves as the “vision” for transportation in Sonoma County, with goals for the transportation system, and for the well-being of the community. Transportation projects, policies, community and political resources are assessed for their role in helping to meet the goals of the CTP.

Performance Assessment in the 2016 CTP is crucial in helping to understand what tools are needed for Sonoma to reach stated goals. The project lists include many types of transportation related projects and services, and provides documentation of transportation needs, which are necessary in planning future funding and sources of funding.

## **Examples of Sonoma County Measurable Transportation Goals and Targets:**

1. Maintain the System; Roadway Condition – Improve countywide Pavement Condition Index (PCI) for arterial and collector streets to 80 (very good condition) by 2040. Improve countywide PCI for residential streets to 65 (good condition) by 2040.
2. Relieve Traffic Congestion; Congestion Reduction – Reduce Person Hours of Delay (PHD) by 20% below 2005 levels by 2040.
3. Reduce Greenhouse Gas Emissions; Reduce GHG emissions to 40% below 1990 levels by 2040. Climate Action 2020 targets shall be incorporated into the CTP when they are finalized.
4. Plan for Safety and Health; Active Transportation - Increase active transportation mode share (bike, walk, and transit) to 15% by 204 (2010 – 8.38%). Safety – Reduce total daily accident rates by 20% by 2040.
5. Promote Economic Vitality; Reduce transportation costs for business and residents – Reduce average peak period travel time per trip by 10% by 2040 (2010 – 11.31 minutes).

---

<sup>5</sup> *Vision 2040*, p.106.

<sup>6</sup> *Ibid.*, p. 115.

The Grand Jury also found articles about other California cities and counties that are encouraging private investment in transportation solutions. When local agencies and their governments changed their laws to accommodate innovative experiments, investments followed. One nearby example is *Bishop Ranch* in San Ramon which uses *Transdev*<sup>7</sup> autonomous shuttles to move commuters from parking lot to office. NVTA should consider developing a plan to promote Napa County as a test market for companies investing in transportation technology and traffic improvement.

## CONCLUSION

In many interviews, the Grand Jury found that knowledgeable individuals had the mistaken assumption that the NVTA's responsibilities were limited to just providing public transit bus services and not as a congestion management agency. The NVTA has not educated the community (nor even convinced some of its own Board members) that it serves functions other than managing buses and building bike trails.

In fact, lack of communication is even seen on its website. When checking the website in June 2017, the last press releases were from 2015 and 2016. In addition, the Grand Jury found the website cumbersome when trying to locate agendas and minutes from NVTA meetings. There also were no public updates on plans, actions, and progress in reducing traffic congestion.

The Vision 2040 document with its 400+ pages doesn't offer an actual plan of how these goals and objectives will be achieved. The transportation solutions NVTA has proposed are to improve transportation infrastructure to make it easier for workers to access jobs, which include:

- Develop alternative transportation options for commuters (Travel Demand Management)
- Improve highway and road infrastructure making it more effective to reduce congestion and auto emissions
- Promote Priority Development Areas (PDAs) Planning efforts
- Developments that bring jobs closer to housing
- Infrastructure improvements that improve traffic flow and encourage walking and biking

Missing in these solutions are any measurable regional traffic congestion reduction goals, plans, and quantifiable tracking of actions and results.

The public needs a local county task force that will address all the essential issues and develop a plan that will address traffic congestion, economic development, high-value job creation, and affordable housing with a comprehensive approach and a simple scorecard for review.

---

<sup>7</sup> *Transdev* is the same company that operates The Vine Bus system for NVTA. One of their divisions has developed autonomous shuttles.

## **FINDINGS**

The Grand Jury finds that:

- F1.** A majority of interviewees view the Vision 2040 Report's proposed highway improvement lists, bike lanes, and new buses as insufficient to solve Napa County's traffic congestion problems.
- F2.** No quantifiable measurements are in place for the Board or the public to assess Napa County congestion management goals, determine results on a timeline, or evaluate the efficacy of NVTA budgets and spending.
- F3.** The NVTA does an inadequate public relations job of educating the community of all their responsibilities, activities and progress toward achieving goals.
- F4.** The NVTA needs to better utilize data and travel demand software to (a) project future transportation conditions, (b) forecast the need for and the potential effectiveness of transportation projects and infrastructure improvements, and (c) identify the impacts of land use development.
- F5.** The most salient suggested actions in V2040 were made by the Citizen Advisory Committee (CAC) and the Napa County Farm Bureau.
- F6.** The NVTA is missing opportunities to promote Napa County as a test market for transportation technology companies investing in new research and development.

## **RECOMMENDATIONS**

The Grand Jury recommends that:

- R1.** By November 30, 2017, the Napa County Board of Supervisors form a multidisciplinary task force that includes traffic, economic, employment, and housing experts to make recommendations for comprehensive planning, innovative solutions to traffic congestion and funding sources.
- R2.** The NVTA Board set clear expectations, determinate goals, and timelines to establish quantifiable traffic congestion performance targets with measurable results and annual progress reports to the public, starting in January 2018.
- R3.** The NVTA seek new, dependable sources of funding ideas specifically for traffic congestion improvement actions by July 2018.
- R4.** The NVTA prioritize and approve future expenditures based on quantifiable and achievable short and long range goals, starting in July, 2018.
- R5.** The NVTA test new technologies and traffic management software starting in 2017.
- R6.** By January 2018, the NVTA have a plan to promote Napa County as an ideal test market for companies investing in transportation technology and market research and development.

## **REQUEST FOR RESPONSES**

Pursuant to Penal Code section 933.05, the Grand Jury requests responses as follows:

From the following individuals:

- Executive Director, NVTA: **F1** through **F6** and **R2** through **R6**.

From the following governing bodies:

- Board of Supervisors; **F1, F2, F3,** and **R1, R2, R3, R6**.
- NVTA Board of Directors; **F1** through **F6** and **R2** through **R6**.

## **COMMENDATIONS**

The Grand jury commends:

1. The NVTA management, staff and Board members for being very helpful and responsive with all Grand Jury requests to discuss the issues, and for quickly providing all additional information upon request.
2. The NVTA for its progress in proving how a unique public- private partnership can work to develop and implement the *Napa Valley Vine Trail*.

## **DISCLAIMER**

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.
--

## APPENDIX A – V2040 CAC CONGESTION MITIGATION RECOMMENDATIONS

**Ranking of Traffic Mitigation Scenarios**

Study Chapters	Scenario	Potential Impact to Traffic	Potential Impact to Environ.	Potential Impact to Health	Potential Impact to Community	Potential Impact to Budgets
Mode Shift & TDM	Some people shift out of cars (e.g. shuttles) & to other times	2	1	2	2	-1
Travel Behavior	More people commute over time	-2	-2	-1	-2	-2
Land Use	More people live closer to their jobs	2	2	1	2	-1
Communities of Concern	Service increases for our neediest	1	1	1	1	-1
Transportation Funding	More funding becomes available	0	0	0	0	2
Environmental Issues	ABAG requirements mandate changes	-2	2	2	2	-2
Transportation & Health	More opportunities for active transportation are created esp. intracity	2	1	2	2	-1
Traffic Operations	Use data to improve traffic flow	1	1	1	1	-1
Emerging Technologies	Driverless Cars become real	3	3	2	3	-1
Rail	Rail corridor use happens	3	2	1	3	-2
Napa Economy: Jobs & Housing	Jobs continue to grow	-2	-2	-1	-2	-2
Napa Economy: Goods Movement	Goods movement impacted by traffic	-1	-1	-1	-1	-1

## APPENDIX B

### Results of the Fehr & Peers *Travel Behavior Study*:

To summarize the travel behavior of visitors, employees, residents, and students who make work and non-work trips in Napa County:

- 55% internal (within Napa County) trips:
  - Work, recreational or non-work based
- 45% external (outside Napa County) trips, of which:
  - 36% imported/exported, 9% pass-through
  - 25% of external trips are generated by workers commuting into Napa County
  - Approximately 20,000 imported work trips per day.
- The workforce is largely dependent on the wine and tourism industry for jobs (40% of labor force).
- The top five fastest growing job sectors in Napa County, which will account for 63% of the projected job growth, are low wage earning job sectors. The fastest-growing job sectors in the County are in the hospitality and retail industries which generally pay lower wages.
- There are approximately 71,000 jobs in Napa County and 55,000 housing units. The cost of housing (relatively high cost) and the nature of employment (relatively low wage) in the County contribute to Napa workers living in more affordable housing elsewhere.
  - A person needs to earn \$95,000/year to purchase a median-priced \$606,000 home. Napa County annual median income of Napa's workforce is \$38,168.
  - The housing/income mismatch will result in more vehicle miles traveled and the inevitable associated congestion on Napa's roads. If projections are accurate, this could result in 30,000 workers commuting into Napa each day by 2040 – a 45% increase, and an additional 2,000 outbound-commuters or a total of 16,000 daily trips leaving the County for work over this same time period.

# APPENDIX C

## TABLE 3: MTC; PLAN BAY AREA PERFORMANCE TARGETS (JULY 2013)

TABLE 3: PLAN BAY AREA PERFORMANCE TARGETS		
Goal/Outcome	#	Target
CLIMATE PROTECTION	<b>1</b>	Reduce per-capita CO <sub>2</sub> emissions from cars and light-duty trucks by 15% <i>Statutory - Source: California Air Resources Board, as required by SB 375</i>
ADEQUATE HOUSING	<b>2</b>	House 100% of the region's projected growth by income level (very-low, low, moderate, above-moderate) without displacing current low-income residents <i>Statutory - Source: ABAG, as required by SB 375</i>
HEALTHY & SAFE COMMUNITIES	<b>3</b>	Reduce premature deaths from exposure to particulate emissions: <ul style="list-style-type: none"> <li>• Reduce premature deaths from exposure to fine particulates (PM<sub>2.5</sub>) by 10%</li> <li>• Reduce coarse particulate emissions (PM<sub>10</sub>) by 30%</li> <li>• Achieve greater reductions in highly impacted areas</li> </ul> <i>Source: Adapted from federal and state air quality standards by BAAQMD</i>
	<b>4</b>	Reduce by 50% the number of injuries and fatalities from all collisions (including bike and pedestrian) <i>Source: Adapted from California State Highway Strategic Safety Plan</i>
	<b>5</b>	Increase the average daily time walking or biking per person for transportation by 70% (for an average of 15 minutes per person per day) <i>Source: Adapted from U.S. Surgeon General's guidelines</i>
OPEN SPACE AND AGRICULTURAL PRESERVATION	<b>6</b>	Direct all non-agricultural development within the urban footprint (existing urban development and urban growth boundaries) <i>Source: Adapted from SB 375</i>
EQUITABLE ACCESS	<b>7</b>	Decrease by 10% the share of low-income and lower-middle income residents' household income consumed by transportation and housing <i>Source: Adapted from Center for Housing Policy</i>
ECONOMIC VITALITY	<b>8</b>	Increase gross regional product (GRP) by an average annual growth rate of approximately 2% <i>Source: Bay Area Business Community</i>
TRANSPORTATION SYSTEM EFFECTIVENESS	<b>9</b>	<ul style="list-style-type: none"> <li>• Increase non-auto mode share by 10%</li> <li>• Decrease automobile vehicle miles traveled per capita by 10%</li> </ul> <i>Source: Adapted from Caltrans Smart Mobility 2010</i>
	<b>10</b>	Maintain the transportation system in a state of good repair: <ul style="list-style-type: none"> <li>• Increase local road pavement condition index (PCI) to 75 or better</li> <li>• Decrease distressed lane-miles of state highways to less than 10% of total lane-miles</li> <li>• Reduce share of transit assets past their useful life to 0%</li> </ul> <i>Source: Regional and state plans</i>