

September 7, 2016  
CAC Agenda Item 6.2a  
Continued From: New

# NVTA TRANSIT AND MOBILITY SERVICES

**Citizen Advisory Committee**  
**September 7, 2016**

**NVTA**  
NAPA VALLEY TRANSPORTATION AUTHORITY

# NVTA Services

- ◎ **Local Route Service**
- ◎ **Regional Fixed Route Service**
- ◎ **Regional Express Bus Service**
- ◎ **ADA Paratransit**
- ◎ **Community Shuttles**
- ◎ **Taxi Scrip**
- ◎ **Mileage Reimbursement**
- ◎ **Shared Vehicle Program**

# Local Fixed Route Service

- **Made up of Routes 1-8.**
- **Service is provided within the city limits of Napa.**
- **30 to 45 minute headways (period between buses)**
- **“Loop style” service**



# Regional Fixed Route Service

- ⦿ **Consists of Routes 10 and 11.**
- ⦿ **Route 10 serves stops between Calistoga and Napa Valley College.**
- ⦿ **Route 11 serves stops between Vallejo and the Redwood Park & Ride in the north Napa.**
- ⦿ **Both services operate on hourly headways but create more frequent service where they overlap between NVC and the Redwood Park & Ride Lot.**

# Regional Express Bus

- ⦿ **Consists of Routes 21, 25, and 29.**
- ⦿ **Non-standardized headways.**
- ⦿ **Route 21 serves Napa, Fairfield, and Suisun City.**
- ⦿ **Route 25 serves Napa and Sonoma.**
- ⦿ **Route 29 serves Napa County, Vallejo, and El Cerrito del Norte BART.**

# ADA Paratransit

- ⦿ **Federally mandated to be available within  $\frac{3}{4}$  mile of a fixed route bus system.**
- ⦿ **Designed to ensure equal transportation for individuals unable to use traditional fixed route.**
- ⦿ **Individuals wishing to use paratransit must first be deemed eligible by a screening process.**

# Calistoga Shuttle

- Operates door to door within the City of Calistoga as well as serving several outlying wineries.
- Operates Monday – Saturday, twelve months of the year. Sundays are operated between June and October
- Partly subsidized by the Calistoga Chamber of Commerce

# St. Helena Shuttle

- ⦿ Operates door to door within the City of St. Helena as well on a fixed route to better serve the schools within the city.
- ⦿ Operates seven days a week the whole year.
- ⦿ Partly subsidized by the City of St. Helena



# Yountville Trolley

- ⦿ Operates door to door within the Town of Yountville.
- ⦿ Operates seven days a week.
- ⦿ The trolley is a completely free service.
- ⦿ Partly subsidized by the Town of Yountville

# American Canyon Transit

- ⦿ Operates door to door within the City of American Canyon as well as on a fixed route to better serve the schools during the mornings and afternoons.
- ⦿ The service was changed on demand/door to door in August 2015.
- ⦿ American Canyon subsidizes the difference between fares collected and 16% of the annual operational costs.

# Taxi Scrip

- ◎ **This program allows qualifying individuals to purchase scrip 50 cents on the dollar.**
- ◎ **The amount one can purchase is capped as well as the amount used on a trip.**
- ◎ **Only available in the City of Napa.**
- ◎ **Trips should be limited to lifeline services.**

# Mileage Reimbursement

- ⦿ **Program is only available to eligible elderly and/or disabled Napa residents who live or wish to travel outside the paratransit service area and are unable to drive.**
- ⦿ **Qualified individuals select drivers who they then reimburse at the federal per mile rate.**
- ⦿ **Trips should be limited to lifeline services.**

# Shared Vehicle Program

- ① **Designed to help non-profit organizations serving elderly and/or disabled populations provide transportation for their clients.**
- ① **Qualified organizations can borrow vehicles from NVTA by providing a driver and paying for fuel.**

# Vine Service Ridership

- ◎ **All Vine Services**
  - FY 15/16 – 1,215,687 (2%↓)
- ◎ **Vine Routes 1 – 8, 10 & 11**
  - FY 15/16 – 1,013,818 (1%↓)
- ◎ **Vine Routes 21, 25, & 29**
  - FY 15/16 – 99,215 (2%↑)
- ◎ **Community Shuttles & Paratransit**
  - FY 15/16 – 102,654 (8%↓)

# What's New?

- ① **New schedules were released August 14<sup>th</sup>.**
- ① **The myStop app is available for download on Apple and Android devices.**
- ① **Wi-Fi is available on all Vine buses**

# Transit Goals in the coming year?

- ⦿ **Bus Stop Policy**
- ⦿ **Comprehensive Operational Analysis (COA)**
- ⦿ **Express Bus Study**
- ⦿ **Investigating automated dispatch and other technologies to improve efficiencies**



# Questions





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## NAPA VALLEY TRANSPORTATION AUTHORITY CAC Agenda Letter

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**TO:** Citizen Advisory Committee  
**FROM:** Kate Miller, Executive Director  
**REPORT BY:** Diana Meehan, Associate Planner  
(707) 259-8327 / Email: [dmeehan@nvta.ca.gov](mailto:dmeehan@nvta.ca.gov)  
**SUBJECT:** Technical Training Presentation: MUTCD- Pedestrian Crossings at Intersections-Traffic Signal Warrants

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### **RECOMMENDATION**

Information only

### **EXECUTIVE SUMMARY**

The Manual on Uniform Traffic Control Devices (MUTCD) is a document published by the Federal Highway Administration (FHWA) of the United States Department of Transportation (USDOT) to specify the standards by which traffic signs, road surface markings, and signals are designed, installed, and used.

The California MUTCD 2014 edition provides uniform standards and specification for all traffic control devices in California. Two warrants in particular specifically apply to pedestrians; the Pedestrian Volume Warrant (Warrant 4) meaning there is a large number of pedestrians that would benefit from the installation of a traffic signal, and the School Crossing Warrant (Warrant 5), meaning there is a good opportunity to improve a crossing for children near school.

Staff will provide an overview of the MUTCD with a focus on the two pedestrian-specific traffic signal warrants.

### **FISCAL IMPACT**

No

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## **BACKGROUND AND DISCUSSION**

Traffic signals are not placed at intersections nor are they altered for function without first considering a number of factors. Due to high cost and lower efficiency for moving high volumes of vehicles, signals are typically a last option considered. The California MUTCD Chapter 4C., Traffic Control Signal Needs Studies, provides guidance and standards for determining the need for signalization at intersections. Engineering studies of traffic conditions, pedestrian characteristics and physical characteristics of intersections are performed to determine whether installation of a traffic control signal is justified at a particular location. These studies include analysis of factors relative to the existing operation and safety of a particular location and the potential to improve the conditions using the following warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network
- Warrant 9, Intersection Near a Grade Crossing

Two warrants are specific to pedestrians; Warrant 4, Pedestrian Volumes, and Warrant 5, School Crossings. The MUTCD states that “A traffic control signal should not be installed unless one or more of the factors described are met.” Where warranted, traffic signals can benefit pedestrians in certain situations. In areas with high volumes of pedestrians and vehicles, particular consideration is made towards moving pedestrians safely and efficiently across intersections while maintaining traffic volumes.

Traffic signals are expensive to build and have ongoing operation and maintenance costs. Sometimes, less expensive alternatives are sufficient in providing safer crossing for pedestrians while moving vehicle traffic. The City of Napa has recently installed Rapid Rectangular Flashing Beacons (RRFB’s) which are a cost effective and efficient safety alternative for crossing pedestrians.

At signalized intersections, the standard pedestrian crossing interval (clearance time) in California was recently changed from 4 feet per second to 3.5 feet per second. This interval allows adequate time for pedestrians walking at a slower pace, such as children or seniors. This clearance time may be reduced under certain conditions as stated in MUTCD Section 4E.6.10:

*Where pedestrians who walk slower than 3.5 feet per second, or pedestrians who use wheelchairs, routinely use the crosswalk, a walking speed of less than 3.5 feet per second should be considered in determining the pedestrian clearance time.*

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*10a-Where older or disabled pedestrians routinely use the crosswalk, a walking speed of 2.8 feet per second should be considered in determining the pedestrian clearance time.*

Warrant 4, Pedestrian Volume is intended for application where traffic volume on a major street is so heavy, that pedestrians experience excessive delay in crossing the major street (Attachment 1). MUTCD Chapter 4E describes pedestrian control features that are used at intersections to help pedestrians cross. Common pedestrian signal heads include:

- Steady Walking Person (symbolizing walk) permits pedestrian to proceed
- Flashing Upraised Hand-(symbolizing Don't Walk) pedestrian shall not proceed into intersection, but pedestrians already within the intersection shall proceed to the far side of the intersection.
- Steady Upraised Hand(symbolizing Don't Walk) pedestrian shall not enter the roadway
- Countdown Pedestrian Signals-Flashing number indicates time left to cross (displayed simultaneously with upraised flashing hand)
- Audible signals-For sight impaired pedestrians may include audible tones, speech messages and/or vibrating surfaces
- Pedestrian Detectors-May be pushbuttons or passive detection devices
- Leading Pedestrian Interval (LPI)-Gives the pedestrian a 3 second advance, allowing greater visibility of the pedestrian crossing for left or right turning vehicles

For more information on the California MUTCD including frequently asked questions:

<http://www.dot.ca.gov/trafficops/camutcd/docs/CAMUTCD2014-faq.pdf>

## **SUPPORTING DOCUMENTS**

Attachment(s): PowerPoint to be provided at meeting