

# Appendix F: Transit Ridership



## MEMORANDUM

Date: February 10, 2016  
To: Brent Pearse, VTA  
From: Carrie Modi and Danielle Dai, Fehr & Peers  
Subject: **Story-Keyses Bus Ridership and Bus Stop Amenity Analysis**

*OK16-0122*

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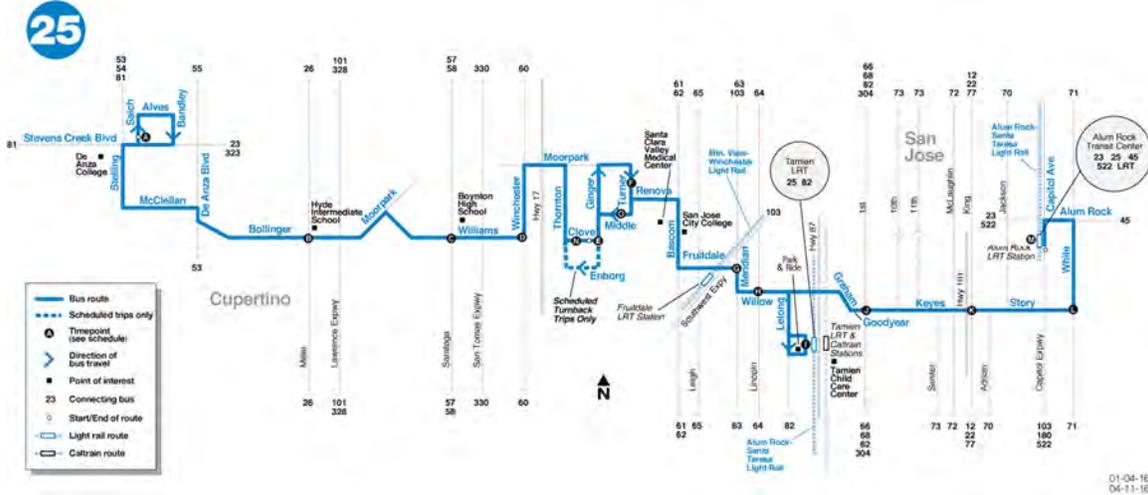
This memorandum summarizes existing bus ridership and bus stop amenity information for VTA Line 25, which runs along the Story-Keyses corridor. This memorandum complements the transit reliability analysis memorandum currently being prepared, which is focused on transit operations, and will be submitted separately. Ultimately, this memorandum will be integrated with other existing conditions information in the Story-Keyses Corridor Complete Streets Study document.

### **Line 25 Overview**

Line 25 is an approximately 20-mile bus Line that runs from De Anza College in Cupertino to the west, to Alum Rock Transit Center in San Jose to the east. The Line serves many schools including San Jose City College, the Santa Clara Valley Medical Center, the Tamien Caltrain and LRT station, and other local destinations. The line connects to several other VTA bus and light rail Lines, terminating at the Alum Rock Transit Center. **Figure 1** displays the Line.



**Figure 1 VTA Line 25**



Source: VTA 2016

**Line Service**

The Line runs from about 6 a.m. to 12:30 a.m. on weekdays, and operates approximately every 10 minutes from Valley Medical Center to the Alum Rock Transit Center and every 30 minutes from De Anza College to the Valley Medical Center. On weekends, the Line runs from about 6:30 a.m. to midnight and operates approximately every 15 minutes from Valley Medical Center to the Alum Rock Transit Center and every 30 minutes from De Anza College to the Valley Medical Center.

**Ridership**

Line 25 is the third highest ridership bus Line in Santa Clara County, accounting for nearly 7% of all bus ridership for VTA. The line is a highly productive VTA Line, with 7,056 average weekday boardings.<sup>1</sup> Ridership has stayed relatively constant over the past couple years.<sup>2</sup> **Figure 2** shows bus stops on the Story-Keyes corridor by average daily boardings and alightings in 2014. Along the corridor, the three highest use bus stops are:

- **Story Road and South King Road:** This is a transfer point for three other VTA bus Lines (Lines 12, 22, and 77). It serves an important commercial node with grocery stores, restaurants, and other businesses as well as Emma Prusch Farm Park. This location is on

<sup>1</sup> VTA Transit Service Plan, FY 2016 – FY 2017

<sup>2</sup> VTA Transit Service Plan, FY 2014 – FY 2015



the San Jose's Vision Zero Priority Safety Corridor and is a location with many reported pedestrian collisions. There are a total of 640 boardings and alightings for the stop in the westbound direction, and 684 boardings and alightings for the stop in the eastbound direction.

- **Keyes Street and South 1<sup>st</sup> Street:** This is a transfer point to four other VTA bus Lines (Lines 66, 68, 82, and 304). It also serves a mix of commercial uses. There are a total of 556 boardings and alightings for the stop in the westbound direction, and 505 boardings and alightings for the stop in the eastbound direction.
- **Keyes Street and Senter Road:** This stop serves local retail along Keyes Street and is the closest bus stop to the Happy Hollow Park & Zoo, Leninger Community Center, San Jose Municipal Stadium, and Sharks Ice Skating Rink. Senter Road is classified as one of San Jose's Vision Zero priority Safety Corridors. There are a total of 514 boardings and alightings for the stop in the westbound direction, and 472 boardings and alightings for the stop in the eastbound direction.

### Bus Stop Amenities

VTA recently conducted an exhaustive bus stop inventory along Line 25, with an inventory of a variety of design elements. **Figure 3** presents key findings of that inventory pertaining to streetscape and pedestrian environment considerations on the Story-Keyes corridor. The type of seating element, presence of shelter, and identified accessibility issues are mapped, as these are the key issues that the Study may address. One bus stop (Story Road west of McLaughlin Avenue), which does not have an adequate boarding pad is noted for needing accessibility improvements.

In May 2016, VTA adopted the *Transit Passenger Environment Plan* (TPEP), which establishes guidelines for bus stop elements, prioritizes amenity improvements to high-ridership bus stops, and identifies a new, modern bus stop design for Santa Clara County. In the TPEP, bus stops are classified into the following categories based on the number of daily passenger boardings:

- Basic Stops (< 40 daily boardings)
- Core Stops (40 to 199 daily boardings)
- Major Stops (>200 daily boardings)
- Community Destination Stops (stop design based on adjacent use, i.e. civic building)

**Figure 3** also maps the bus stop types along the Story-Keyes corridor based on current ridership. The Story-Keyes Corridor contains eight major stops and a mix of core and basic stops. As seen in



the figure, the major stops all have a bus shelter, which is in line with TPEP. Real-time information (RTI) decals are on all stops in the corridor. The stops also all have street lighting, often on the same side of the stop. Bicycle parking is not provided at bus stops along the corridor.

**Table 1** highlights bus stop amenity guidance for each bus stop type in the Story-Keys corridor.

<b>TABLE 1:TPEP BUS STOP TYPES AND AMENITIES</b>			
	<b>Basic</b>	<b>Core</b>	<b>Major</b>
<b>Daily Boardings</b>	< 40	40 – 199	> 200
<b>Standard bus stop sign</b>	Yes	Yes	Yes
<b>Enhanced bus stop sign</b>	No	No	Maybe
<b>Real-Time Information</b>	Yes, RTI decal on standard bus stop sign	Yes, RTI decal on standard bus stop sign	Yes, RTI decals or flexible message sign, if possible
<b>Shelter system</b>	No	Maybe	Yes
<b>Seating</b>	Maybe	Yes	Yes
<b>Bicycle rack</b>	One U-rack if along bicycle facility, more if demand warrants	One U-rack if along bicycle facility, more if demand warrants	One U-rack, more if demand warrants
<b>Lighting</b>	Relies on street lighting; consider solar-powered fixture where necessary	In-shelter, solar or pedestrian-activated lighting, if possible	In-shelter, solar or pedestrian-activated lighting, if possible

Source: VTA Transit Passenger Environment Plan (TPEP), 2016.

Figure 2 Bus Ridership for VTA Line 25

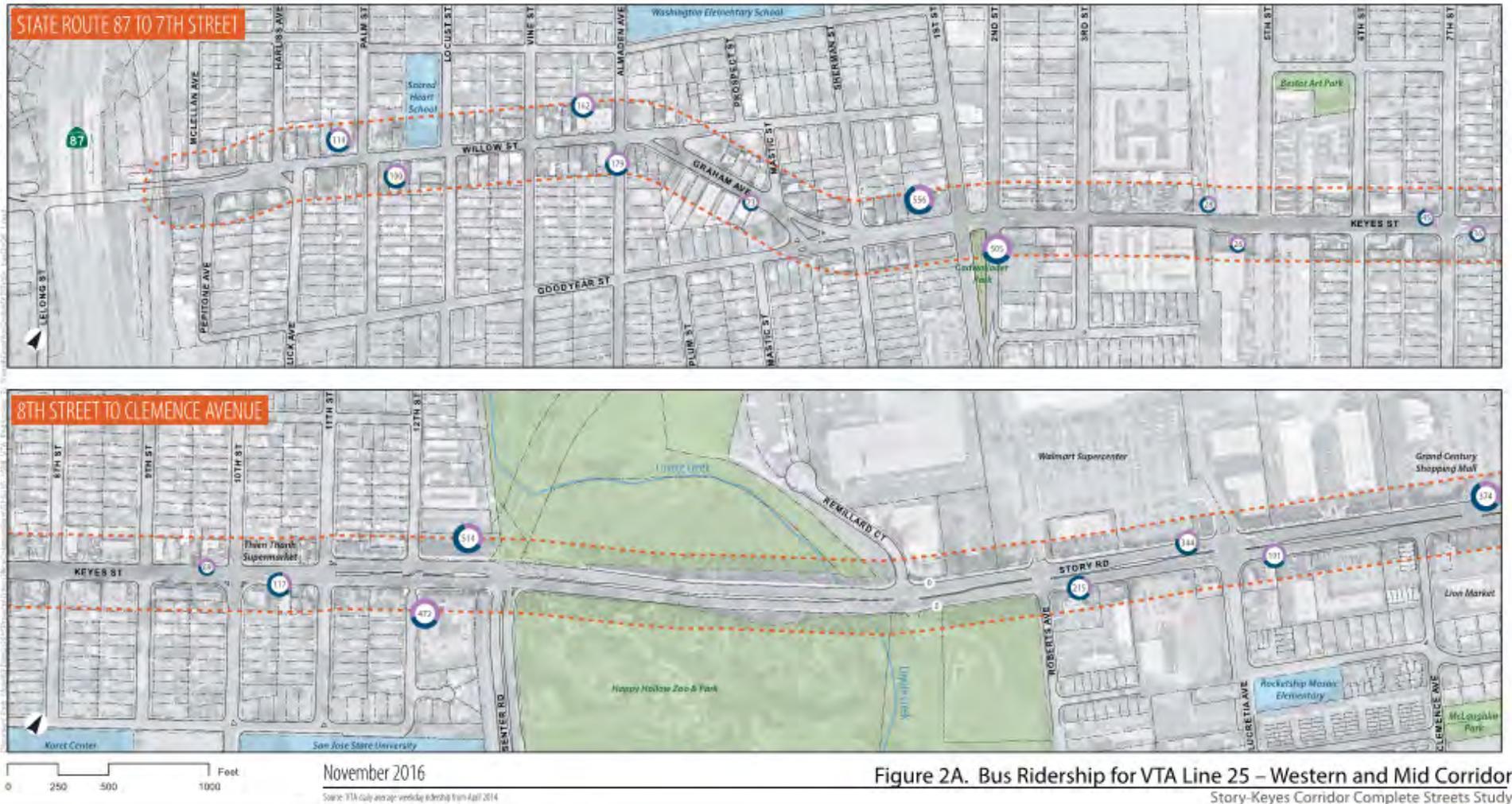
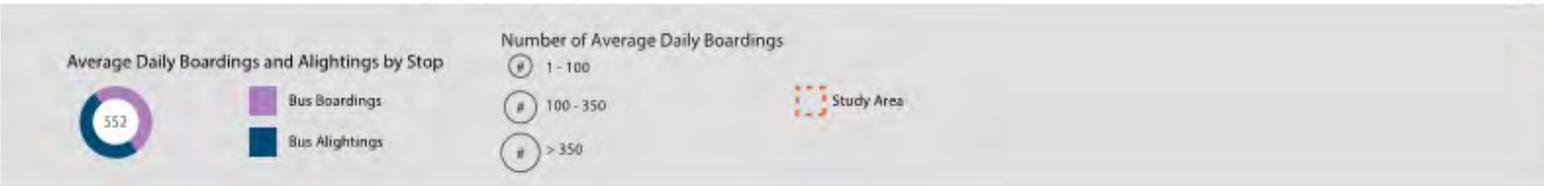


Figure 2A. Bus Ridership for VTA Line 25 – Western and Mid Corridor  
Story-Keys Corridor Complete Streets Study





November 2016

Source: VTA daily average vehicle identifications from April 2014

Figure 2B. Bus Ridership for VTA Line 25 – Mid and Eastern Corridor  
 Story-Keys Corridor Complete Streets Study

Average Daily Boardings and Alightings by Stop



- Bus Boardings
- Bus Alightings

Number of Average Daily Boardings

- 1 - 100
- 100 - 350
- > 350

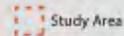
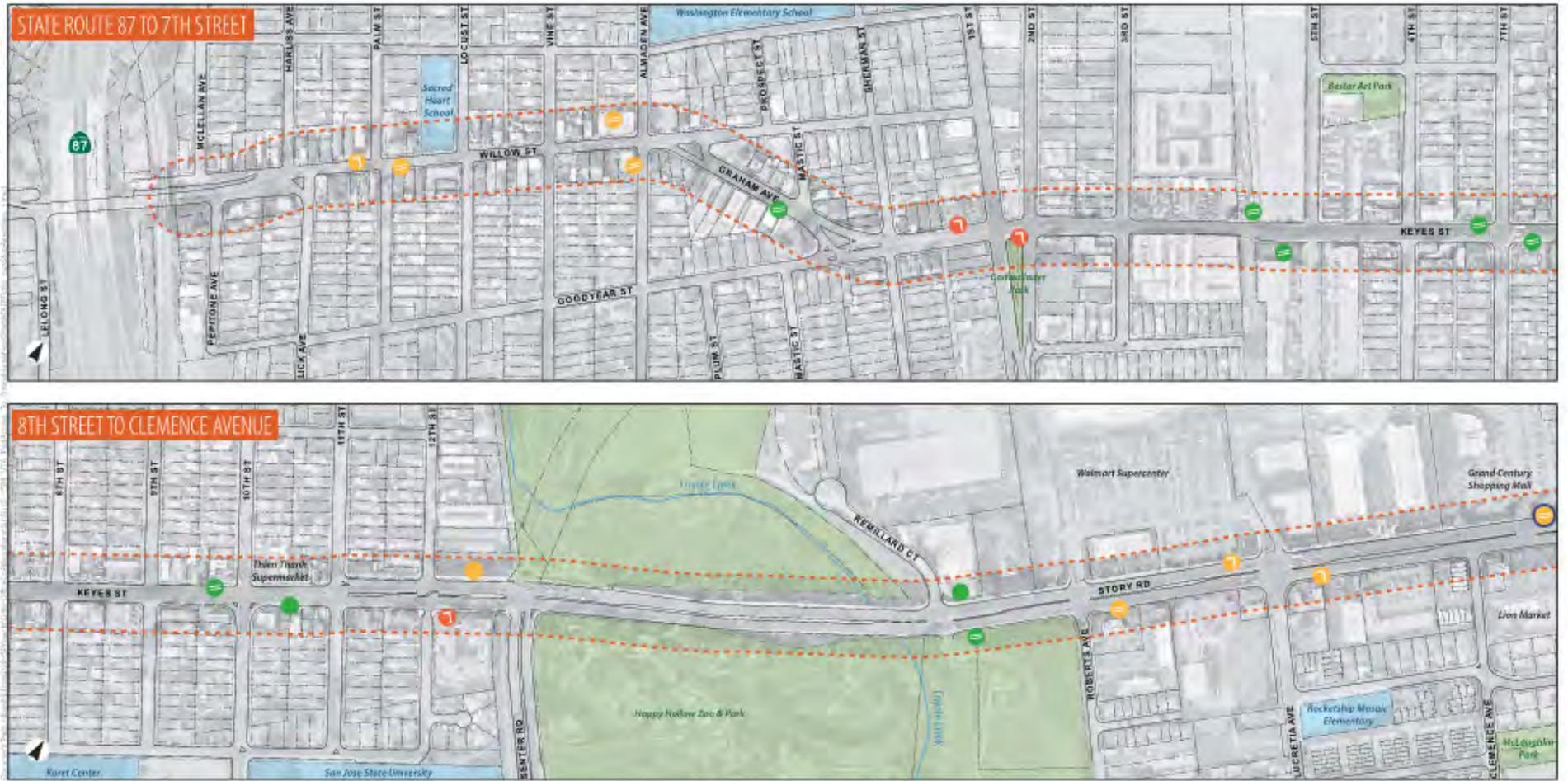


Figure 3 Bus Stop Amenities



0 250 500 1000 Feet  
November 2016  
Source: VTA 2016

Figure 3A. Bus Stop Amenities for VTA Line 25 – Western and Mid Corridor  
Story-Keys Corridor Complete Streets Study

<p><b>VTA Transit Passenger Environment Plan Type*</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">●</span> Basic Stop (&lt; 40 Daily Boardings)</li> <li><span style="color: orange;">●</span> Core Stop (40 - 200 Daily Boardings)</li> <li><span style="color: red;">●</span> Major Stop (&gt; 200 Daily Boardings)</li> </ul>		<p><b>Bus Stop Amenity Type**</b></p> <ul style="list-style-type: none"> <li><span style="border: 1px solid grey; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span> No Amenity Present</li> <li><span style="border: 1px solid white; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span> Bus Bench Present</li> <li><span style="border: 1px solid blue; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span> Bus Shelter Present</li> <li><span style="border: 1px solid blue; border-radius: 50%; width: 10px; height: 10px; display: inline-block; position: relative; top: -2px;">+</span> Accessibility Enhancement Needed</li> </ul>		<p><span style="border: 2px dashed orange; width: 20px; height: 10px; display: inline-block;"></span> Study Area</p> <p>* Per VTA Transit Passenger Enhancement Plan</p> <p>** Per VTA Line 25 Bus Stop Inventory</p>
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Valley Transportation Authority  
CITY OF SAN JOSE  
FEHR + PEERS  
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November 2016  
Scale: 1/4" = 100'

Figure 3B. Bus Stop Amenities for VTA Line 25 – Mid and Eastern Corridor  
Story-Keys Corridor Complete Streets Study

<b>VTA Transit Passenger Environment Plan Type*</b>		<b>Bus Stop Amenity Type**</b>		Study Area * Per VTA Transit Passenger Enhancement Plan ** Per VTA Line 25 Bus Stop Inventory
Basic Stop (< 40 Daily Boardings) Core Stop (40 - 200 Daily Boardings) Major Stop (> 200 Daily Boardings)	No Amenity Present Bus Bench Present Bus Shelter Present Accessibility Enhancement Needed			

