



Fremont Boulevard Safe and Smart Corridor Project

**Community Meeting
July 18, 2019**

Agenda

- Introductions
- City Efforts
- Project Scope and Schedule
- Project Goals
- Existing Conditions
- Project Concepts
- Open House Stations
- Next Steps



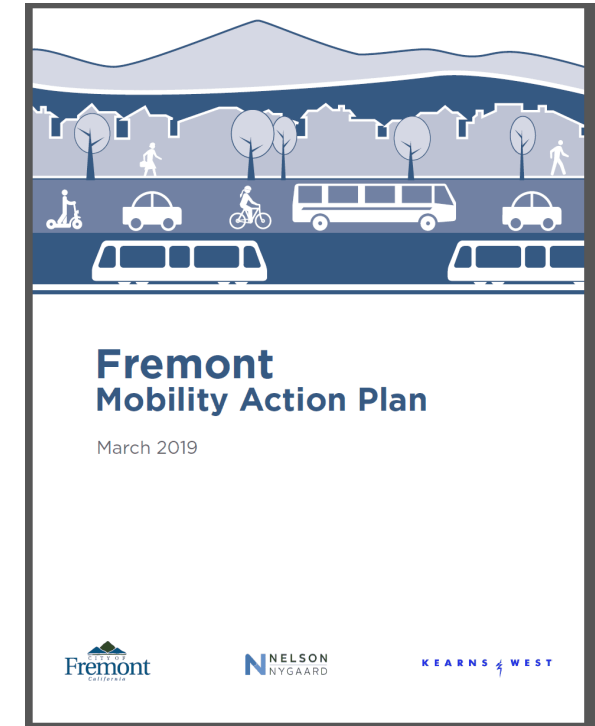
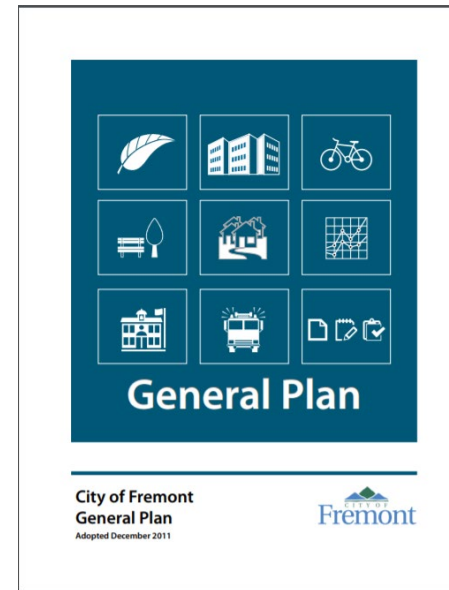
Funding for the work is granted from Measure BB, approved by Alameda County voters in 2014 and administered by the Alameda County Transportation Commission.

Project Team

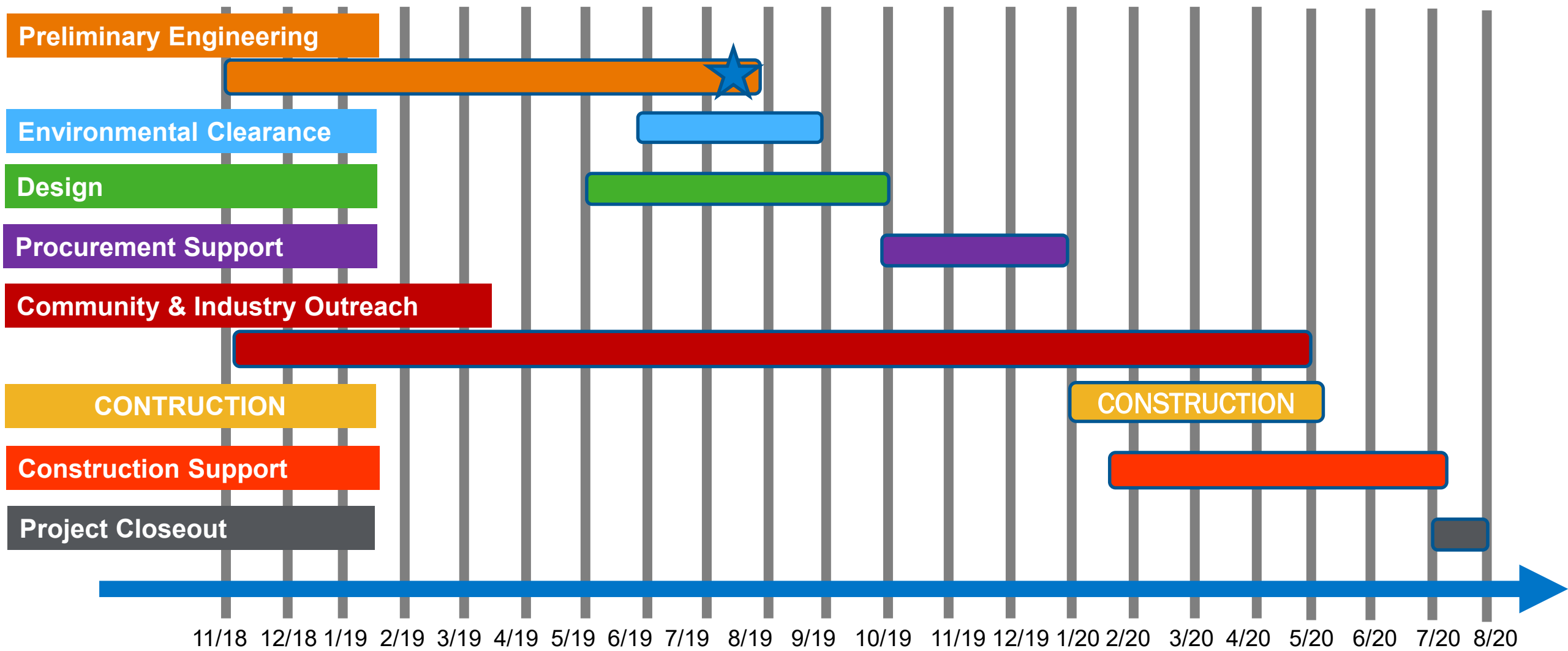
• Hans Larsen	Director of Public Works	City of Fremont
• Sheila Marquises	Snr. Transportation Engineer	City of Fremont
• Victoria Walker	Transportation Engineer	City of Fremont
• Daniel Miller	Transportation Engineer	City of Fremont
• Derek Pines	Vice President	Parsons
• Allen Chen	Senior Project Manager	Parsons
• Danny Murphy	Senior Engineer/Planner	Fehr & Peers
• Charlie Knox	Principal	PlaceWorks
• Janet Chang	Associate	PlaceWorks

Current City Plans & Efforts

- General Plan
- Vision Zero Action Plan
- Mobility Action Plan
- Climate Action Plan
- Safe Routes to School Plans
- Systematic Safety Analysis Report
- Multimodal Arterial Plan (Alameda County)
- Bicycle Master Plan
- Pedestrian Master Plan



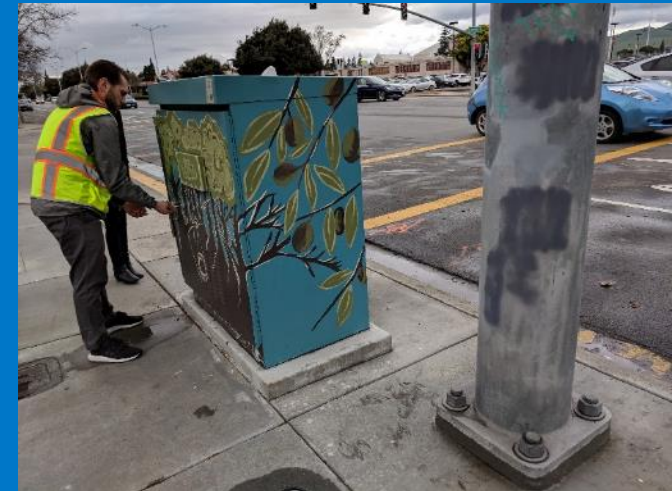
Project Scope and Schedule



Project Goals

- Improve **safety and mobility** for all modes
- Align with relevant **safety and transportation plans** and contribute to the City's **sustainability goals**
- Integrate **project communication and management systems** with similar City systems (e.g., FPD, IT)
- Provide accommodations for planned **AC Transit and Alameda CTC projects** along the corridor
- **Engage** with the community and stakeholders
- Ensure **operations and maintenance needs** are a key consideration when developing projects
- Make Fremont Boulevard an **innovative “testbed”**

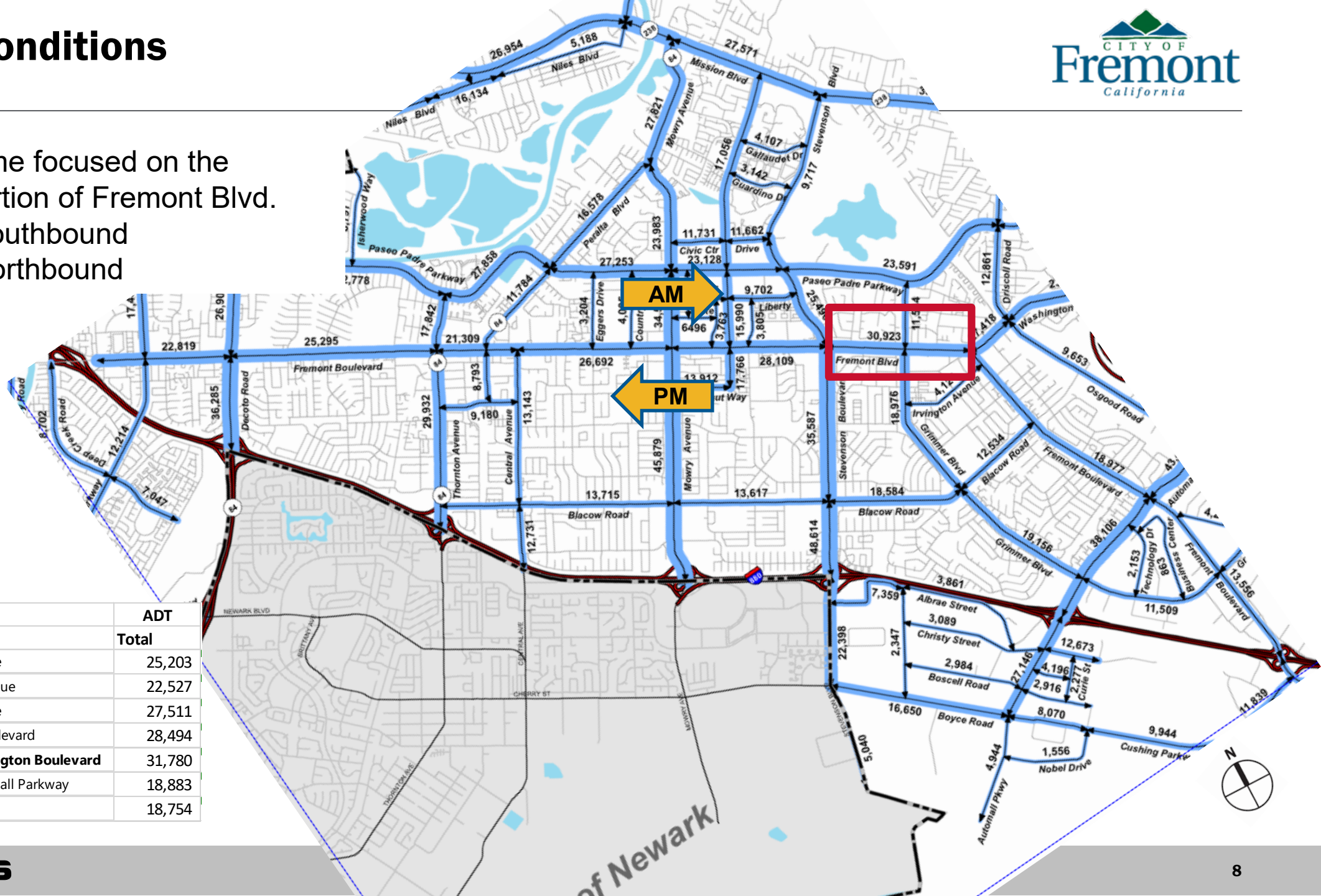
Existing Conditions



Existing Conditions

Traffic

- Traffic volume focused on the northern portion of Fremont Blvd.
- AM traffic southbound
- PM traffic northbound



	ADT
	Total
Decoto Road to Thornton Avenue	25,203
Peralta Boulevard to Central Avenue	22,527
Central Avenue to Mowry Avenue	27,511
Mowry Avenue to Stevenson Boulevard	28,494
Stevenson Boulevard to Washington Boulevard	31,780
Washington Boulevard to Auto Mall Parkway	18,883
Auto Mall Parkway to I-880	18,754

Existing Conditions

Transit / Rail



- Six AC Transit routes and “Flex” service to Union City BART
- Stanford Marguerite shuttle
- Fremont Centerville Amtrak/ACE station



Existing Conditions

Pedestrians

- Significant pedestrian activity (observed)
 - Four large schools
 - Many businesses
- Sidewalks (mostly) exist
- Crossings (mostly) controlled
- Many push buttons do not have Accessible Pedestrian Signals (APS)



Existing Conditions

Bicyclists

- Mostly Class II, some Class III bicycle facilities
- Some of Fremont Blvd. has bicycle detection
- 0.5% of trips citywide
- Planned for mostly Class IV separated bikeways



Class II Buffered Bike Lane



Class IV Separated Bikeway

Existing Conditions

Collisions

- 510 collisions from 2013-2018
 - Highest number of pedestrian collisions citywide
- 7% resulted in fatal or severe injuries
- 20% involved a pedestrian or bicyclist
 - 19% of bicyclist collisions were due to “Improper Turning or Traffic Signals and Signs” at a controlled intersection
- Primary collision factors for intersection collisions were:
 - Traffic Signals and Signs (26%)
 - Unsafe Speed (16%)
 - Auto ROW Violation (10%)
- Pedestrian collisions occurred most at intersections
 - Leading collision factors were “Pedestrian Violations” and “Pedestrian ROW Violations”

Pedestrian Collisions (2009-2015)

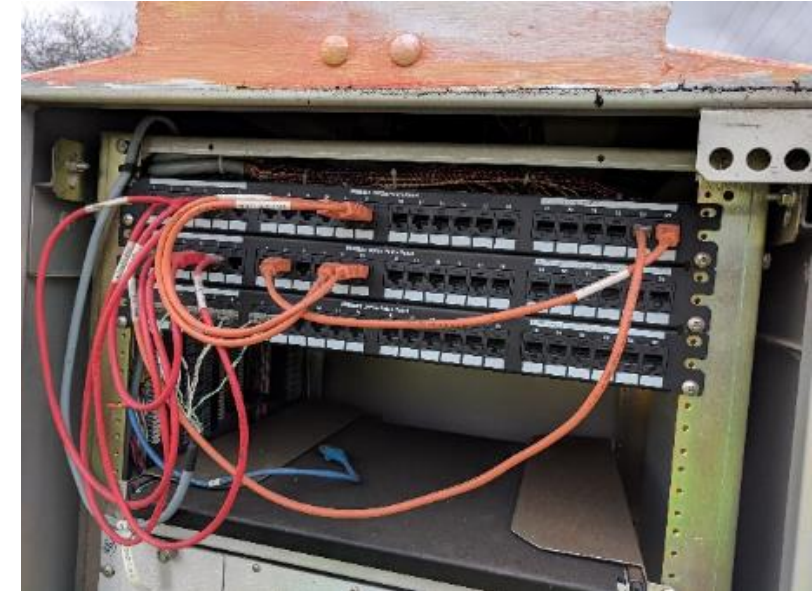
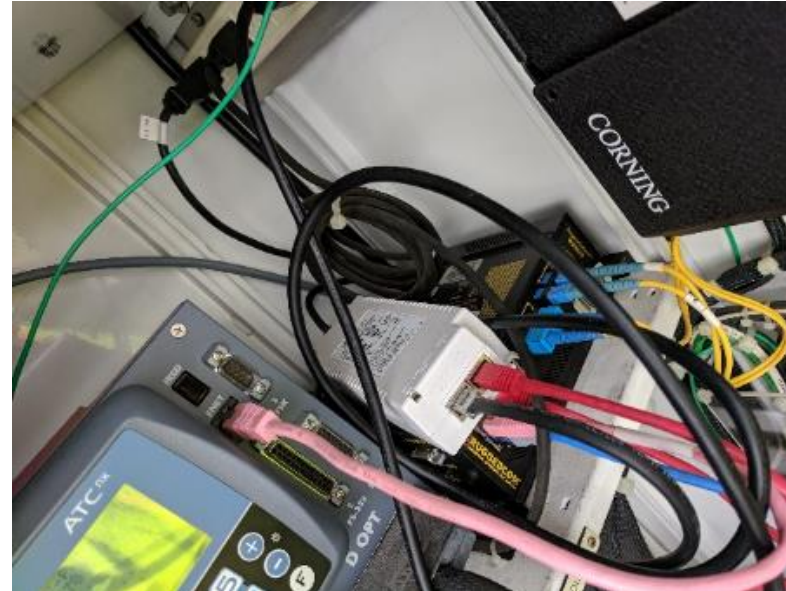
Intersection	Collisions
Fremont Blvd. & Mowry Avenue	7
Fremont Blvd. & Chapel Way	7
Central Ave. & Dusterberry Way	6
Fremont Blvd. & Parish Way	4
Civic Center Dr. & Mowry Ave.	4



Existing Conditions

Data Communications

- Dept. of Information Technology Services manages hardware and software for traffic signal data communications
- City documents existing traffic signal communications equipment and interconnect



Project Concepts

Project Concepts

- 34 initial project concepts
- Meets one or more Vision Zero actions
- Meets one or more Project Objectives
 - Mobility
 - Innovation
 - Safety
 - Sustainability
- Prioritized as high, medium, or low
 - Benefit
 - Complexity
 - Cost
- Prioritization of locations
 - Areas of high speeds and collisions
 - Sensitive groups
 - Existing infrastructure



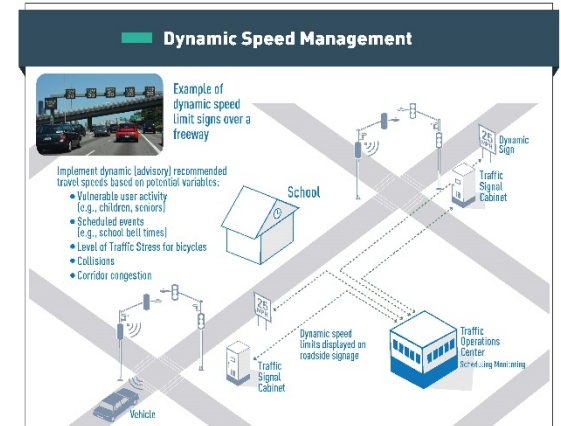
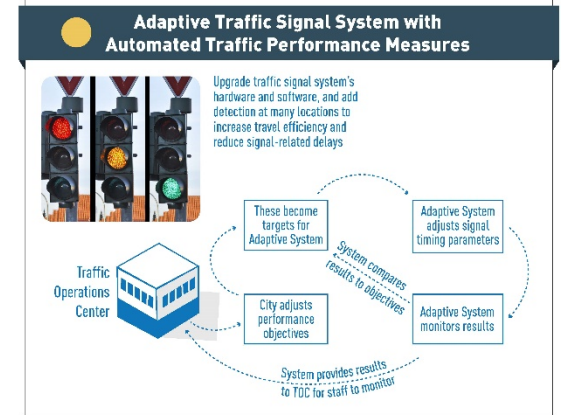
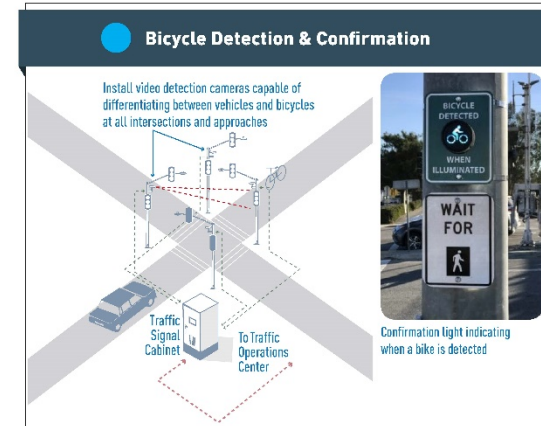
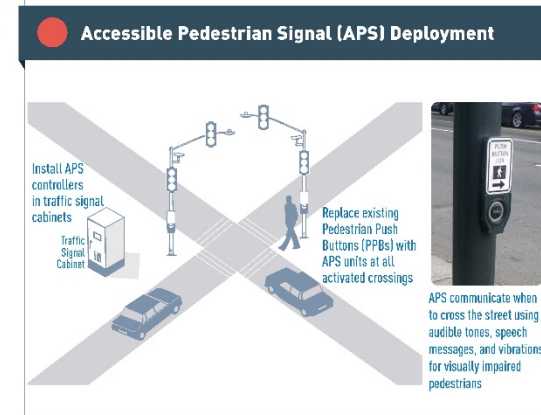
MOBILITY



FREMONT BOULEVARD SMART & SAFE CORRIDOR

INTERSECTIONS	
Fremont Blvd	
Paseo Padre Pkwy	
Darwin Dr	
Ferry Ln	
Decoto Rd	
Tamayo St	
Nicolet Ave	
Gibraltar Dr	
Alder Ave	
Thornton Ave	
Bonde Wy	
Peralta Blvd	
Parish Ave	
Central Ave	
Norris Rd	
Mattos Dr	
Eggers Dr	
County Dr	
Mowry Ave	
Capitol Ave	
Beacon Ave	
Sundale Dr	
Bidwell Dr	
Stevenson Blvd	
Mission View Dr	
Margery Dr	
Grimmer Blvd	
Clough Ave	
Eugene St	
Chapel Wy	
Washington Blvd/Bay St	
Irvington Ave	
Carol Ave	
Blackow Rd	
Michael Ave	
Delaware Dr	
Crestwood St	
Doane St	
Auto Mall Pkwy	
Ice House Ter	
S. Grimmer Blvd	
Old Warm Springs Blvd	
Industrial Dr	
I-880 NB Offramp	
I-880 SB Offramp	
Cushing Pkwy	

Tier 1 (or high priority locations) shown above.



High Priority Project Concepts

Project Objectives:

Safety

- Passive Pedestrian Detection at Traffic Signals
- Speed Monitoring and Feedback
- Leading Pedestrian Intervals
- Supplemental Crosswalk Lighting

Mobility

- Bicycle Detection & Confirmation
- Dynamic Speed Management
- Adaptive Traffic Signal System with Automated Traffic Performance Measures
- Accessible Pedestrian Signal Deployment

Innovation & Sustainability

- Automated Video Analysis
- Adaptive Street Lighting
- Arterial Management/Decision Support Software
- Modernized Data Communications Network

Project Objectives

Safety

- Incentivize **safer auto speeds**, give City tools to monitor / address specific speed-related issues
- **Enhance controlled and uncontrolled pedestrian crossings** with safety-focused technologies
- Enable enhanced monitoring of pedestrian activity and behavior, allowing the City to **target enhancements as specific locations**

Mobility

- Deploy technologies to **assist mobility-impaired users** in the corridor
- **Modernize the traffic signal system** to achieve efficiency gains, reduce signal-related delay and enhance mobility for all modes on the corridor
- Allow for **transit reliability** improvements being considered by AC Transit
- Expand Centerville Parking system with technology that will allow for **dynamic pricing**
- Provide **dynamic wayfinding** to available parking supply at Centerville station, allow for future possibility of on-line reservation
- Consider **dynamic curb space management** system for the on-street parking and loading that exists on the corridor.

Innovation & Sustainability

- Look into opportunities provided by **license agreements with wireless carriers**
- **Standardize data communications** on the corridor, allowing for current and future bandwidth needs
- **Communicate signal system data in a format consistent with ITS standards, and with existing City protocols**

Actions

Safety / Vision Zero	1	Provide incentives for safer auto speeds, provide the City with enhanced tools to monitor and address specific speed-related issues on the corridor
Safety / Vision Zero	2	Enhance controlled and uncontrolled pedestrian crossings with safety-focused technologies, while considering low-cost traditional enhancements as well.
Safety / Vision Zero	3	Enable enhanced monitoring of pedestrian activity and behavior, allowing the City to target enhancements as specific locations.
Mobility	4	Deploy technologies (traditional and innovative) to assist mobility-impaired users in the corridor
Mobility	5	Modernize the traffic signal system (detection and control) to achieve efficiency gains, reduce signal-related delay and enhance mobility for all modes on the corridor
Mobility	6	Allow for transit reliability improvements being considered by AC Transit
Parking	7	Expand beyond the planned paid parking and monitoring system at Centerville Station with technology that will allow for dynamic pricing
Parking	8	Provide dynamic wayfinding to available parking supply at Centerville station, allow for future possibility of on-line reservation
Parking	9	Consider dynamic curb space management system for the on-street parking and loading that exists on the corridor.
Data Communications	10	If possible, take advantage of license agreements with wireless carriers
Data Communications	11	Standardize data communications on the corridor, allowing for current and future bandwidth needs
Data Communications	12	Communicate signal system data in a format consistent with ITS standards, and with data communication standards for other City departments

Next Steps

- Project concepts report
- More outreach
- Design

Visit project website at:
www.fremontsmartcorridor.org