Sir Francis Drake Boulevard
Corridor Rehabilitation
Board of Supervisors Hearings
May 8, 2018
Project Goals and Objectives

- County, MMWD, TAM, and Community-Identified Goals and Objectives for the Project:
  - Repair pavement and update traffic timing.
  - Close sidewalk gaps and improve pedestrian crossing safety.
  - Improve traffic flow and reduce congestion.
  - Improve transit access.
  - Improve bicycle access and safety.
  - Replace aging MMWD infrastructure.
  - Construct an economically viable project.
Project Funding

• Current Budget: $13.5 million
  ▪ $13.2 million from TAM Measure A Rehabilitation Funds
  ▪ $340,000 from TAM Measure A Signal Coordination Grant
Project Components

- Core Improvements
  - Repaving and striping
  - ADA-required improvements
    - Curb Ramps
    - Wolfe Grade Intersection
  - MMWD pipeline replacement (separately funded)
  - Signal retiming
  - Guardrail replacement
  - Underground conduits
    - Traffic signal interconnection
    - Future telecom fiber duct
    - Future adaptive signal interconnection
Project Components

- Additional Needed Improvements
  - Developed from corridor analysis and public process input
  - Prioritized project components
    - To be constructed now with currently available funds
    - To be constructed when additional funding becomes available
    - recommended for further analysis and community discussion
Outreach Process to Date

- Three Community Workshops
- Two Community Open House Events
- Two Walking Tours
- Seven Community Advisory Committee Meetings
- Six Technical Advisory Committee Meetings
- Project Web Page, Listserv mailing list with 827 Subscribers, and dedicated project email address
- Participation in community group meetings Including: KPAB, GPOA, Safe Routes (to School) Kentfield
- EIR Scoping Session
- Board of Supervisors Draft EIR Public Hearing
- Multiple notifications sent through the project listserv, community group newsletters, NextDoor, project email responses
Alternatives Analysis

- Five alternatives analyzed with the intent of reducing environmental impacts.
  - ✓ No Project Alternative (CEQA-Required)
  - ✓ General Maintenance
  - ✓ Congestion Relief
  - ✓ Corridor Pedestrian and Bicycle Improvements
  - ✓ No Pipeline

- No Project Alternative was identified as the Environmentally Superior Alternative – but does not fulfill the project objectives.

- The Congestion Relief Alternative and Proposed Project were determined to result in similar impacts and are considered the secondary Environmentally Superior Alternatives, although the Congestion Relief Alternative does not fulfill all of the project objectives.
Key Issues Raised During Review

▪ Traffic Operations
  
  Addition of Third Lane
  
  Lane Widths
  
  Second Left Turn Lane at College Avenue - deferred

▪ Pedestrian and Bicyclist Safety
  
  At-grade Crossing at Wolfe Grade

▪ Construction Impacts
  
  Air Quality and Noise
  
  Nighttime Lighting
  
  Traffic Delays
Capacity of 11-foot vs. 12-foot Lanes

- Historic LOS methods assumed a 3% reduction in intersection lane capacity for every foot a lane was less than 12 feet wide.

- Comprehensive studies conducted in the 2000’s found that 10-, 11- and 12-foot lanes provide the same capacity at signalized intersections.

- Therefore, intersection level-of-service analysis can interchangeably assume 10-, 11- or 12-foot lanes.

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<table>
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<tr>
<th>Average Lane Width (ft)</th>
<th>Adjustment Factor ($f_w$)</th>
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<tr>
<td>&lt;10.0</td>
<td>0.96</td>
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<tr>
<td>≥10.0-12.9</td>
<td>1.00</td>
</tr>
<tr>
<td>&gt;12.9</td>
<td>1.04</td>
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Note: *Factors apply to average lane widths of 8.0 ft or more.*
Prioritized Project Components

Core Improvements

Prioritized Project Components

- To be constructed now with currently available funds
- To be constructed when additional funding becomes available
- Recommended for further analysis and community discussion
Recommended Project Components

- Core Improvements:
  - Repaving and Striping
  - ADA-required improvements, including at Wolfe Grade
  - MMWD pipeline replacement
  - Signal Retiming
  - Guardrail Replacement
  - Installation of underground conduits for traffic signal interconnection, future telecom fiber duct, and future adaptive signal interconnection
Accessible requirement: Add at grade crosswalk.
Public Comment: Lengthen left turn pockets WB and EB SFDB
MMWD Pipeline Replacement Segment 1: Ross Terrace to Manor Road

Replace pipeline with 5,300 feet of 12 inch WSP.
MMWD Pipeline Replacement Segment 2: Eliseo Drive to West of 101

Replace pipeline with 1,000 feet of 18 inch WSP.
Recommended Project Components

- Project Components to be Constructed Now:
  - Eliseo/Barry intersection reconstruction and signal rehabilitation
  - La Cuesta intersection reconstruction and signal rehabilitation
  - El Portal Drive intersection reconstruction and signal rehabilitation
  - Striping of third eastbound lane between El Portal Drive and Highway 101 south ramp
Eliseo Drive – Intersection Improvement

- Improve congestion relief through intersection improvements.
- Public Comment: Shift crosswalk north on Eliseo.
La Cuesta – Intersection Improvements

- Improve congestion relief through intersection improvements.
- Public Comment: Larger turn radius at Northeast corner
El Portal– Intersection Improvements

- Improve congestion relief through intersection improvements.
Recommended Project Components

- **Project Components to be Constructed Now:**
  - Bon Air Road intersection modifications, median realignment, and signal rehabilitation
  - Corte Comoda and Manor Road intersection and crosswalk improvements, including north side sidewalk improvements to Wolfe Grade
  - Wolfe Grade intersection reconstruction and signal rehabilitation
  - Bacich School to Laurel Grove sidewalk improvements
  - Laurel Grove Avenue intersection reconstruction and signal rehabilitation
El Portal to Bon Air Road

- Shift median and re-align lanes for future widened sidewalk on North side.
Bon Air Road

- Modify southeast and southwest corners to improve pedestrian crossings; move SFD crosswalk to west side of intersection.
Corta Comoda to Manor Road

- Public Comments:
  - Improve visibility of pedestrians
  - Provide merge area for left turns onto SFDB from Manor Rd
Bacich Frontage

- Widen Sidewalk along frontage, install trees, and create uniform vehicle lanes
- Public Comments:
  - Maintain parking along Bacich
Laurel Grove

- Improve pedestrian safety
- Public Comments:
  - Widen sidewalk on south side SFDB at Laurel Grove
  - Maintain right turn pocket onto Laurel Grove
Recommended Project Components

- Project Components to be Constructed Now:
  - McAllister Avenue (West) intersection reconstruction
  - Ash Avenue crosswalk improvements and median refuge
  - Elm Avenue westbound bus stop relocation and improvements
  - Toussin Avenue crosswalk improvements
West McAllister and Ash Avenue

- Improve pedestrian and vehicle safety
- Public Comments:
  - Provide merge area for left turn on McAllister.
  - Consider beacon at corner to alert drivers of peds crossing Ash
Elm Avenue & Toussin Avenue

Elm- Transit Stop Modification

Toussin- Lighted Crosswalk
Recommended Project Components

- Project Components to be constructed when additional funding is available:
  - Eliseo Drive to El Portal Drive multiuse pathway (north side)
  - El Portal Drive to Bon Air Road multiuse pathway (north side)
  - Bon Air Road to Bacich School sidewalk improvements and Marin Catholic driveway modifications (south side)
North Side Widened Sidewalk

Limits of Widened Sidewalk on North Side

- Marin Catholic High School
- Bon Air Shopping Center
- Larkspur Landing Shopping Center
- Creekside Park
- Marin General Hospital
- Larkspur
- Greenbrae
- Corte Madera
Widened Sidewalk: El Portal to Bon Air

**Existing**
- 14' LANE
- 14' LANE
- 3' MED.
- 13' LANE
- 13' LANE
- 7' SIDEWALK

**Proposed**
- 13' LANE
- 11' LANE
- 3' MED.
- 11' LANE
- 12.5' LANE
- 11.5' WIDENED SIDEWALK

Marin Catholic High School

COUNTY OF MARIN


Recommended Project Components

- **Project Components to Defer for Further Analysis and Community Discussion:**
  - College Avenue reconstruction and signal rehabilitation, including dual left turn lanes on to College Avenue
  - Bon Air Road to Corte Comoda sidewalk widening (north side)
College Avenue

- Install additional left turn lane
- Add tree grates
- Expand pedestrian sidewalk, install curb ramps, and restripe crosswalks
- Modify driveways
- Adjust median
Project Schedule

**SPRING 2015**
Existing Conditions
- Opportunities
- Constrains
- Public Brainstorming (May)

**FALL 2015**
Review Potential Alternatives

**WINTER 2016**
Review Refined Alternatives

**SPRING 2016**
Review Recommended Alternatives

**2016-2017**
Prepare Focused EIR

**SPRING 2018**
Certify EIR and Adopt Final Project

**2018-2019**
Final Project Design

**2019-2020**
Project Construction (two spring/summer periods)

We Are here
Traffic Analysis
Traffic Analysis

- Assessed traffic conditions along Sir Francis Drake Boulevard:
  - Weekday AM and PM peak hours
  - Intersection level-of-service (LOS) and motorist delays
  - Corridor travel times
  - Existing (2016) conditions
  - 2020 No Project and 2020 With Project conditions
  - 2040 No Project and 2040 With Project conditions
  - Future conditions assumed background traffic growth

- Evaluated collision and safety conditions
Sidewalk Edge Barrier

Existing Condition

Post and Cable