

Lombard Crooked Street Neighborhood Transportation Plan

Citizens Advisory Committee
Agenda Item 11



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

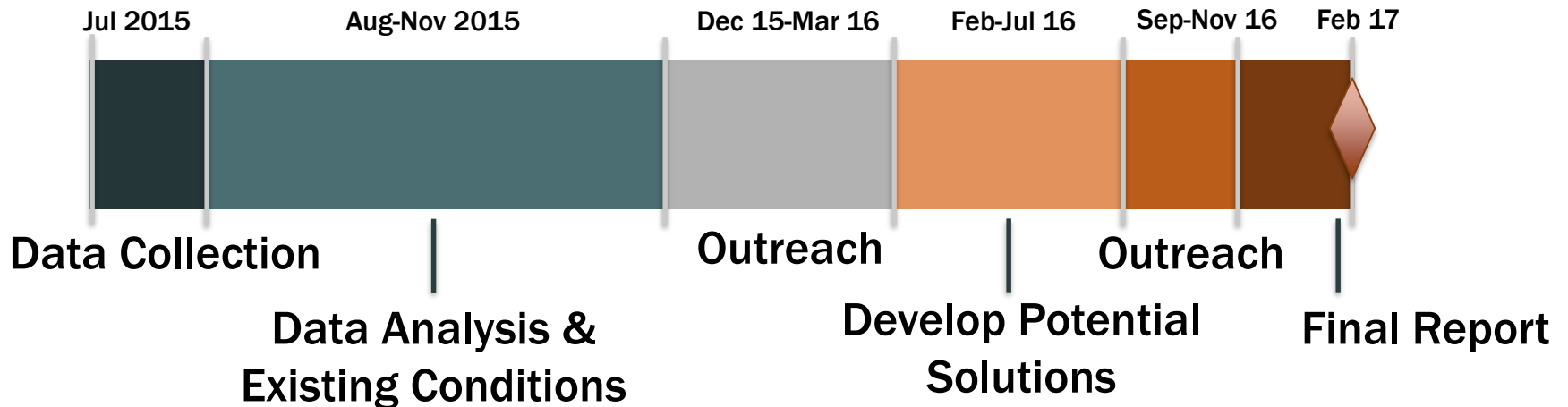
February 22, 2017

Schedule



SCHEDULE >

► Discussion and Adoption of Final Report



Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > FRAMEWORK

Draft Existing Conditions Report

- ▶ **Review of Previous Studies**
- ▶ **Resident Interviews**
- ▶ **Partner Agency Interviews**
- ▶ **New Data Collection**
 - ▶ **Transportation Performance: Pedestrian and vehicle volumes, vehicle origins, queue length, pedestrian crowding and spillover, etc.**
 - ▶ **Visitor Preferences: On-site visitor survey exploring travel behavior and preferences.**

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > PREVIOUS STUDIES

Crooked Street Task Force, August 2000

- ▶ **Analyzed Traffic and Pedestrian Volumes; License Plate, Collision, and Blockage Data; Air Quality Along Queue and Mid-Block; Tour Bus Restriction Violations**
- ▶ **Findings:**
 - ▶ **1,500 vehicles per day on average**
 - ▶ **Vehicle delays of 35-40 minutes**
 - ▶ **13% of vehicles from SF, 41% from Bay Area, 40% outside Bay Area, 6% rentals**
 - ▶ **Carbon Monoxide levels well below California health standards at 1 part per million**

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > PREVIOUS STUDIES

Lombard Street Temporary Closure, Summer 2014

► **Benefits:**

- **Fewer vehicles on the Crooked St and no queue on Lombard**
- **Intersection of Lombard and Van Ness, Polk, Larkin cleared**
- **Less crowded sidewalks on the Crooked Block**
- **Fewer vehicle/pedestrian conflicts**

► **Drawbacks:**

- **Dispersion of traffic throughout neighborhood**
- **Higher street parking utilization; challenging circulation for residents**
- **Increased visitation before and after closure times**
- **Potential to become a self-fulfilling attraction**

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > PEDESTRIAN CONGESTION

- ▶ **Pedestrian volumes on the Crooked block result in crowding and congestion more common to a downtown area**
 - ▶ **Data validates 2m visitors per year, or 6,000/day on average, twice the yearly visitors of Muir Woods.**
 - ▶ **July 2015 data collection reflected ~17,000/day during peak summer weekends, in line with Fisherman's Wharf's daily average**
- ▶ **Congestion levels are inconsistent – many peaks and valleys in number of visitors arriving at any time**
 - ▶ **Observed peaks to do not consistently align with observed arrivals of tour groups**
 - ▶ **50% of visitors access crooked block by foot, and 50% of those walked from their previous point**

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > PEDESTRIAN CONGESTION

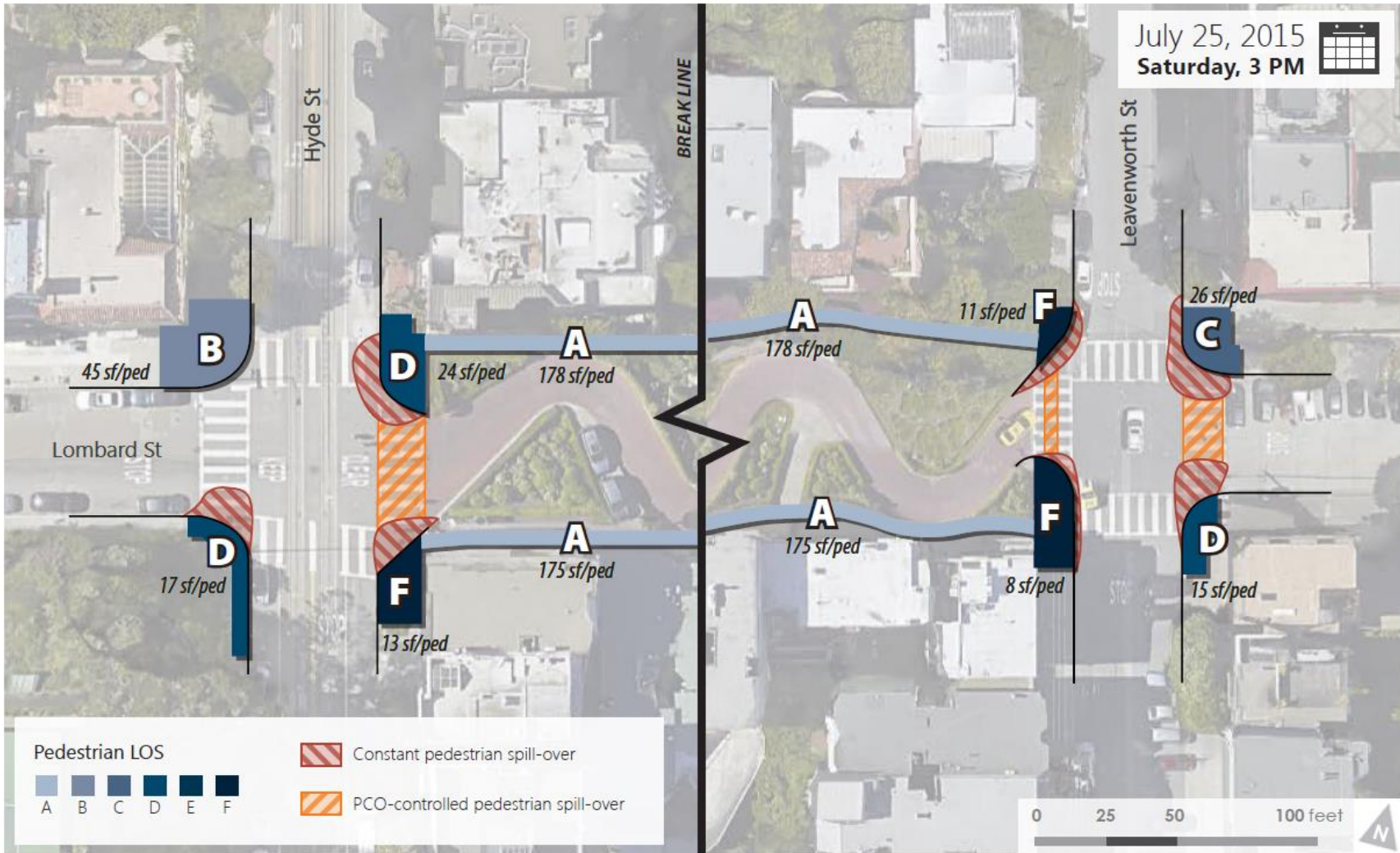
- ▶ **During peak periods (10am-6pm), pedestrian congestion results in crowding and spillover into adjacent streets and crosswalks, particularly at Lombard/Leavenworth**
- ▶ **Ambassadors note that about 50% of their interactions with visitors include keeping people off of the street**



Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > PEDESTRIAN CONGESTION > CROWDING CONDITIONS

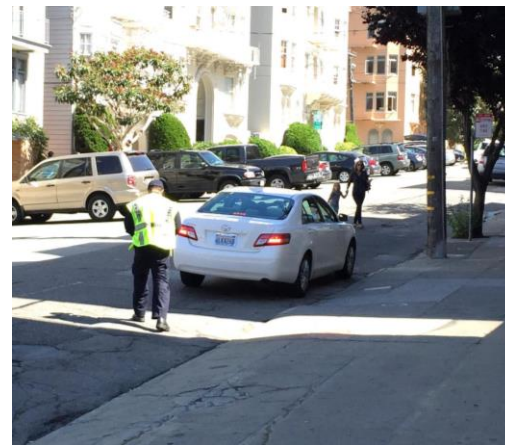


Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > AUTO CONGESTION

- ▶ **During peak periods, significant queue forms for cars to access the Crooked Block**
 - ▶ **Affects circulation and access on blocks with queue, including Lombard, Larkin, Polk, and Van Ness**
- ▶ **Vehicle loading and parking activity blocks access and circulation at top and bottom of block**
 - ▶ **Ambassador program noted 830 incidents of double-parking or blocking driveways over the September-October period.**



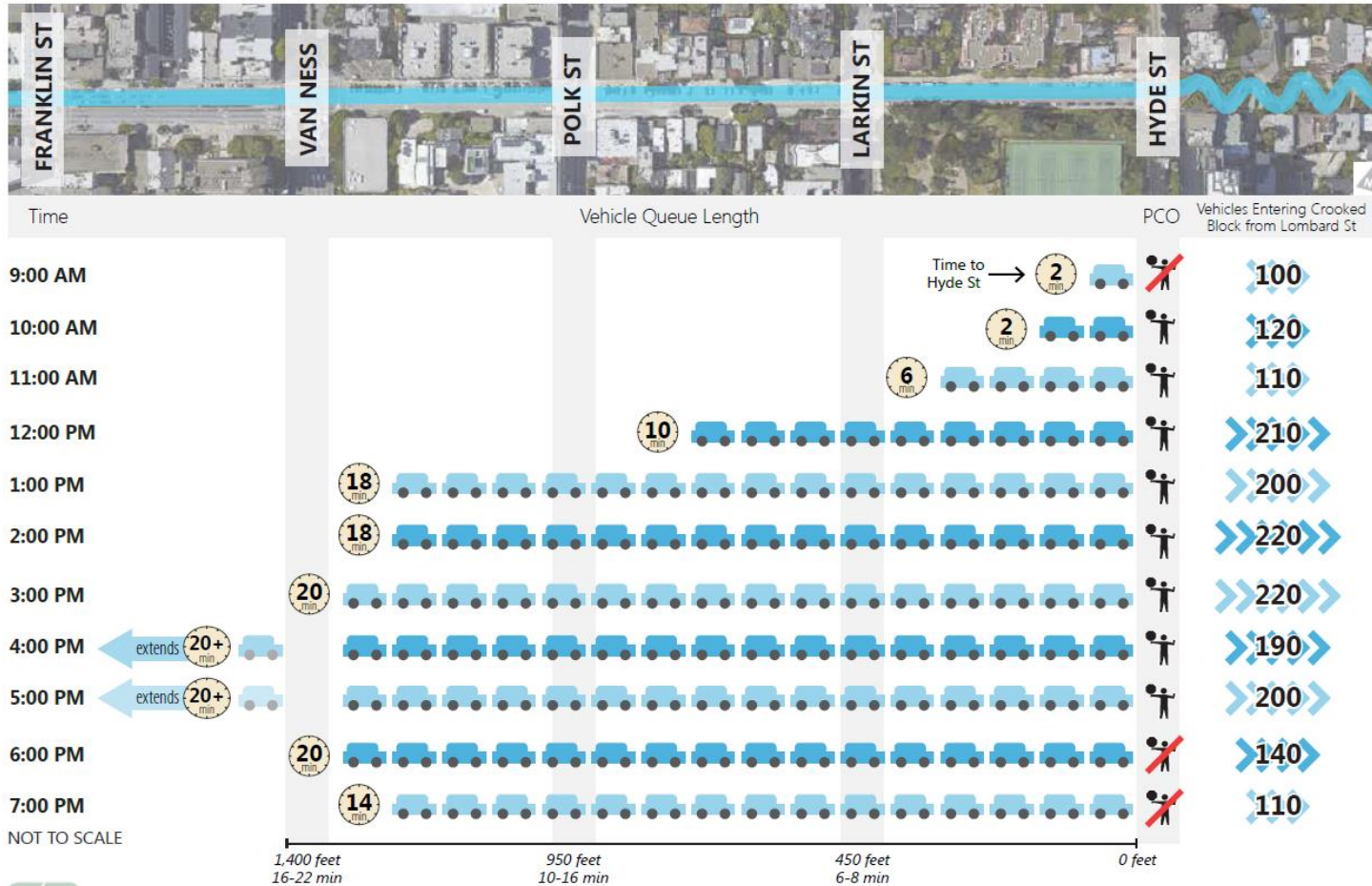
Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > AUTO CONGESTION > QUEUE LENGTH

Lombard Street

July 25, 2015
Saturday



Note: From 5 PM to 7 PM queues were observed to extend one block north on Polk St, one block south on Larkin St, one block north on Hyde St, and two blocks on Chestnut St east of Larkin St.

Average Vehicle Queue Length on Lombard Street
West of Crooked Block - Saturday

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > MAINTAINING ACCESS

- ▶ **Access has improved for residents of the Crooked Block**
 - ▶ **PCOs enforce no right turn from NB Hyde for all but residents, allowing queue bypass even at congested times**
 - ▶ **3.4% of vehicles (266 vehicles) were delayed when entering the Crooked Street at Lombard & Hyde because of tourists standing in the roadway**
 - ▶ **At Lombard & Leavenworth, 1.5% of vehicles (120 vehicles) were delayed from exiting the Crooked Street**
- ▶ **Queue blocks driveways on neighboring blocks**
- ▶ **Lack of designated loading zones contributes to parked and loading vehicles blocking driveways**

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > LIVABILITY

▶ **Transportation Issues:**

- ▶ **Pedestrian crowding creates circulation issues**
- ▶ **Vehicle loading/unloading creates circulation and potential safety issues**

▶ **Crowd Management Issues:**

- ▶ **Visitor behavior is a top concern of residents**

Early evaluation of the Ambassador program indicates success in curbing inappropriate activity by visitors
Ambassadors recorded over 12,000 contacts from Aug 29 – Oct 31, 2015

- ▶ **Ambassadors may be in position to assist with transportation issues including double parking and pedestrian crowding**

Existing Conditions Summary



EXISTING CONDITIONS SUMMARY > MAINTAIN TOURISM WITHIN CAPACITY

- ▶ **Volume of visitors to Lombard Street comparable to other regional attractions**
- ▶ **Other attractions have a single management institution and dedicated parking or other traffic management initiatives in place**

Location	Visitors
Fisherman's Wharf	12m/year
Lombard Crooked Block	2m/year
Muir Woods	1m/year
Coit Tower	200,000/year

Alternative Screening



ALTERNATIVE SCREENING > GOALS

Goals Focused Analysis

- ▶ **Manage Pedestrian Congestion**
- ▶ **Manage Auto Congestion**
- ▶ **Ensure Traffic Safety**
- ▶ **Maintain Access to the Crooked Street Block**
- ▶ **Maintain Livability of the Surrounding Neighborhood**
- ▶ **Preserve Tourism**
- ▶ **Implement a Financially Self-Sustaining Solution**

Alternative Screening



ALTERNATIVE SCREENING > FRAMEWORK

Alternative Screening Framework

- ▶ **Collect Wide Range of Potential Improvements**
 - ▶ Includes over 40 options across 4 different goal areas
- ▶ **Qualitative Assessment of Effectiveness by Goal Area**
 - ▶ Based on findings of Existing Conditions
- ▶ **Preliminary Recommendation to Advance for Further Development**

Outreach



OUTREACH >

- ▶ **Two Open Houses**

- ▶ **September and November 2016**

- ▶ **Feedback in-person and online**

- ▶ **Over 600 responses**

- ▶ **One-on-one meetings with Neighborhood**

- Groups**

- ▶ **LHIA**

- ▶ **RHIA**

- ▶ **RHNA**



Recommendations



RECOMMENDATIONS > ENFORCEMENT

- ▶ **Increased Enforcement of Existing Regulations**
 - ▶ **Expand the use of PCOs to more intersections and across more hours**
 - ▶ **Conduct targeted enforcement of tour-group violations**
 - ▶ **Pilot Sworn SFPD office presence during peak hours**
 - ▶ **Continue and Enhance the Ambassador Program**



Recommendations



RECOMMENDATIONS > ENGAGEMENT OF TOURISM INDUSTRY

▶ Engage Tour Industry & Hospitality Providers as Partners

▶ Convene Community & Tourism Working Group

Provide a forum to discuss and resolve the issues related to tourism and its impact on the surrounding neighborhood

▶ Education Campaign

Partner with SF Travel to educate member organizations and the public about how and when to access the Crooked Street, including highlighting transit options

▶ Outreach to Tourism Vendors

Identify and engage tourism vendors most relevant to the Crooked Street and reach out to them with information that they can pass on to their customers

Recommendations



RECOMMENDATIONS > ENGINEERING IMPROVEMENTS

▶ Engineering Improvements

▶ Pedestrian Crowding

Pilot increases in pedestrian space and Lombard/Hyde and Lombard/Leavenworth, with monitoring and evaluation

▶ Vehicle Congestion & Routing

Wayfinding signage plan to route vehicles to major streets (Bay, Union) to join the back of the queue

▶ Make Resident-Only Access from Hyde to 1000 Block of Lombard Permanent

▶ Re-stripe centerline on 1100 and 1200 block of Lombard

Recommendations



RECOMMENDATIONS > ENGINEERING IMPROVEMENTS > PEDESTRIAN CROWDING



Note: Approximate dimensions, not to scale.

 Sidewalk Extension

Recommendations



RECOMMENDATIONS > ENGINEERING IMPROVEMENTS

▶ **Engineering Improvements**

▶ Pedestrian Crowding

Pilot increases in pedestrian space and Lombard/Hyde and Lombard/Leavenworth, with monitoring and evaluation

▶ **Vehicle Congestion & Routing**

Wayfinding signage plan to route vehicles to major streets (Bay, Union) to join the back of the queue

▶ Make Resident-Only Access from Hyde to 1000 Block of Lombard Permanent

▶ Re-stripe centerline on 1100 and 1200 block of Lombard

Recommendations



RECOMMENDATIONS > ENGINEERING IMPROVEMENTS > VEHICLE ROUTING



- Primary Access Route 1
- Primary Access Route 2
- Secondary Access Route
- Vehicle Wayfinding Signage
- Critical Signage
- Supplemental Signage
- RT** Right Turn
- LT** Left Turn
- TH** Through

Vehicle Routes to Access the Crooked Street



Recommendations



RECOMMENDATIONS > ENGINEERING IMPROVEMENTS

► **Engineering Improvements**

► Pedestrian Crowding

Conceptual designs for pedestrian bulb-outs and/or pedestrian viewing area at Lombard/Hyde and Lombard/Leavenworth

► Vehicle Congestion & Routing – Modified Based on Feedback

Wayfinding signage plan to route vehicles to major streets (Bay, Union) to join the back of the queue

► **Make Resident-Only Access from Hyde to 1000 Block of Lombard Permanent**

► **Re-stripe centerline on 1100 and 1200 block of Lombard**

Recommendations



RECOMMENDATIONS > ENGINEERING IMPROVEMENTS



Recommendations



RECOMMENDATIONS > MANAGING & SHAPING DEMAND

▶ Pricing Access to the Crooked Street

▶ System Design Feasibility

All-electronic (FastTrak, license plate) system could be installed with minimal visual disruption

State legislation would be required before implementation

▶ Functionality

Vehicles could be asked to register in advance, with a limited number of “slots” per time period sold

Unregistered vehicles could be charged a higher rate, as posted

▶ Price

Additional studies needed to determine pre-register and higher rate price, but can be adjusted based on demand (with proper notice)

Recommendations



RECOMMENDATIONS > MANAGING & SHAPING DEMAND

▶ Pricing Access to the Crooked Street

- ▶ **Create or Designate an Authority to Manage System & All Aspects of Crooked Street as a Residential Neighborhood and Tourist Attraction**
- ▶ **Pursue a Reservations and Admission Fee Pricing System as Preferred Way to Manage Vehicle Congestion on the Crooked Street**
- ▶ **Initiate a Follow-On Study**

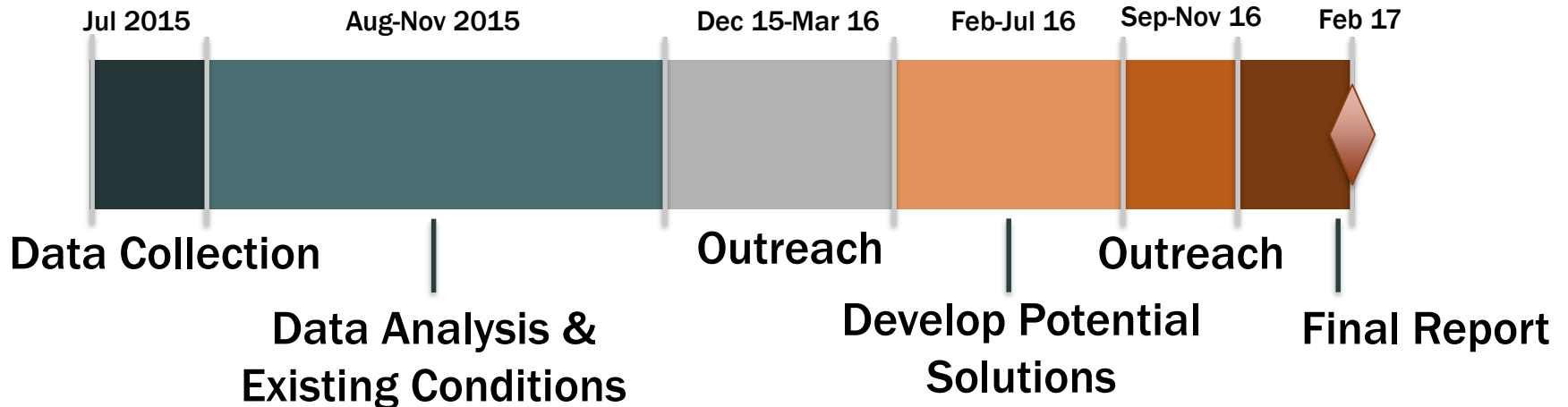
Additional studies will advance work on system design and operational questions

Next Steps



SCHEDULE UPDATE >

- ▶ **Recommended Alternatives**
 - ▶ **Adopt Recommendations through SFCTA Board**
 - ▶ **Implementing Agencies Proceed with Next Steps**



Questions?

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