

South Bay Highway Program

Strategic Transportation Element Update

February 11, 2013

The Strategic Transportation Element

- To ensure South Bay Highway Program Goals and Objectives are met
- Components:
 - Identify Goals and Objectives of the SBHP
 - Identify Strategies to achieve Goals and Objectives
 - Identify measures to assess performance of program
 - Identify performance assessment data needs
 - Develop deployment strategy

STE – Scope & Schedule

- **Develop SBHP Operational Performance Goals and Objectives** (*completed*)
- **Assess Existing 2011 Baseline Conditions** (*completed*)
 - Freeway assessment (*completed*)
 - Highway assessment (to extent data is available) (*completed*)
 - Arterial assessment – Investigate current data availability, identify data gaps, and assess data needs (*completed*)
- **Establish Performance Benchmarks** (*completed*)
- **Assess Candidate Projects to Goals and Objectives** – (*completed*)
- **Establish Performance Targets & Monitoring Process** – *in progress (end of Feb)*
- **Draft Final STE Document** – *Draft February*
- **Final STE Document** - *April*

Deployment Strategy Contexts

- Phase 1 (previous Implementation Plan)
 - Based on projects already identified
 - Categorize projects:
 - Early Action
 - Strategic Positioning
 - Long Term Projects
- Phase 2 (current update) :
 - New candidate projects solicited
 - Consolidation:
 - Allocated projects and candidate projects
 - Develop deployment strategy

Deployment Strategy Development (1)

- Highway (Freeway):
 - Develop a project staging plan which maximizes the individual project benefits by taking into account project dependencies
 - Use simulation modeling and PEMS data to assess delay reduction specifically attributable to the proposed project
 - *Initial assessment completed and will be submitted to the SBCCOG and Metro for review 2/13*



Deployment Strategy Development (2)

- Arterial:
 - Lack of data precludes same approach as for highway project staging
 - Proximity to/nexus with freeway projects is a factor
 - Freeway interfacing project importance may be influenced by highway project staging
 - Recognition that factors other than delay improvements play a larger role in non-freeway project importance
 - *Recommendation to revisit candidate assessment criteria prior to next round of project assessment (Winter 2014)*

Recap: SBHP Strategic Goals

- Promote and develop safe and efficient transportation system through the South Bay sub-region
 - Improve Local and Regional Mobility and Access
 - Improve Travel Reliability and Incident/Event Management
 - Reduce System Demand with Multimodal Strategies
 - Deliver Projects Efficiently and Cost-Effectively

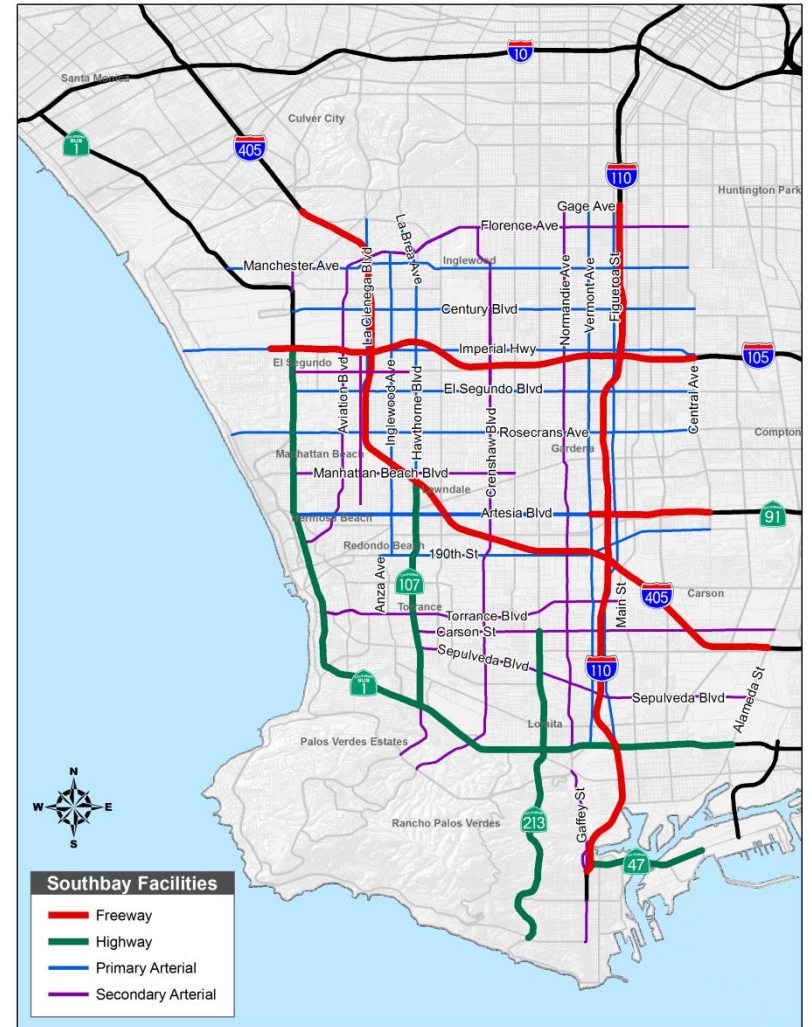


Recap: Data Needs Identified (for Evaluation & Monitoring)

- Freeway
 - Data Needs: delay, flow, speed, travel time, VHT, lost lane miles, collisions
- Highways and Arterial Corridors and Intersections
 - Data Needs: delay, flow, speed, travel time, intersection turning movement volume, collisions, signal
- Other
 - Data Needs: ITS usage logs, daily transit vehicle revenue hours, daily transit ridership, SBCCOG website access (hits) logs

A Highway Monitoring System for the South Bay

- Current Status
 - Good freeway coverage
 - Poor arterial coverage
- Actions
 - Identify potential locations
 - Identify technology approach
 - Develop implementation prioritization
- Supporting Projects
 - ITS Plan: Detection Gap Closure Project
 - LA County South Bay Detection Study



STE: Identification of HMS SB Arterial Network

■ Arterial Monitoring

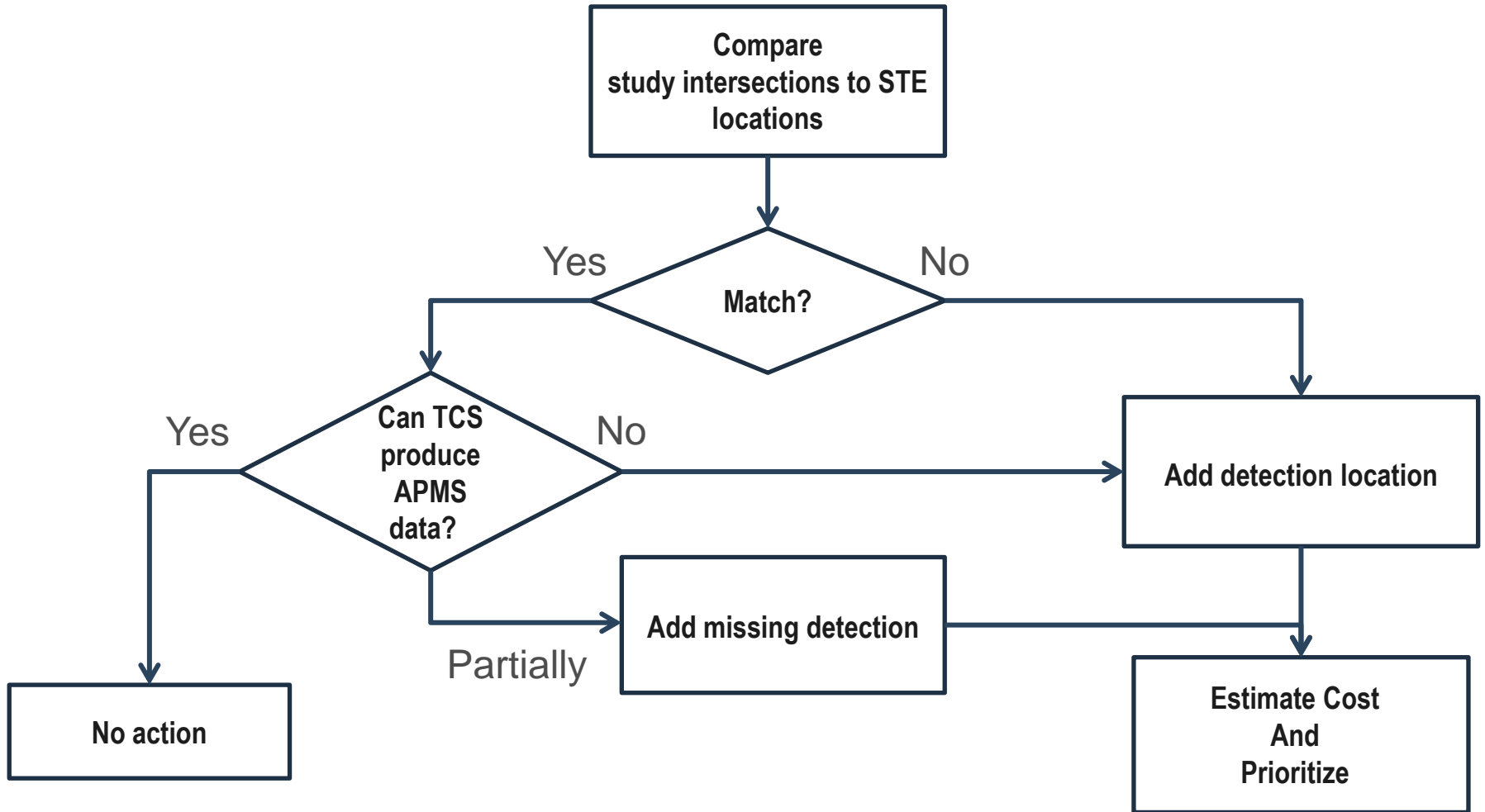
- Install I/S detection



- Install mid-block detection



LA County SB Detection Study: Work Flow



SBHP Detection Plan: LA County DPW South Bay Detection Study

- Identified Detector locations (approaches)
 - Needed for County MOE's and contributes to HMS SB : 30
 - Needed for HMS SB only 54
- Technology Assessment underway
 - Identification of viable technologies
 - Evaluation based on:
 - Suitability to task
 - Life-Cycle cost
 - Risk
 - Usability