

West Oakland On-Road Diesel Truck Survey

Project Kickoff Meeting
September 26, 2007

Presented by:

Phil Martien
CARE Program Manager

Stephen Reid
Sonoma Technology, Inc.

Agenda

1. Welcome, Introductions 1:00 – 1:15 PM
BAAQMD
2. Project Background, Objectives, Scope 1:15 – 1:30 PM
BAAQMD, Sonoma Technology
3. Review of Roadway Maps 1:30 – 1:45 PM
Sonoma Technology
4. Discussion 1:45 – 2:50 PM
 - a) *Identification of resources*
 - b) *Community participation*
 - c) *Possible locations for vehicle counts*
 - d) *Data collection methods*
 - e) *Schedule*
5. Next Steps 2:50 – 3:00 PM
BAAQMD

Background (1 of 3)

BAAQMD, ARB, and the Port of Oakland are conducting a 3-part evaluation of health risks from diesel exhaust in West Oakland:

1. The Maritime Port of Oakland
2. The Union Pacific Railyard
3. Emission sources in West Oakland not associated with 1 and 2.



Background (2 of 3)

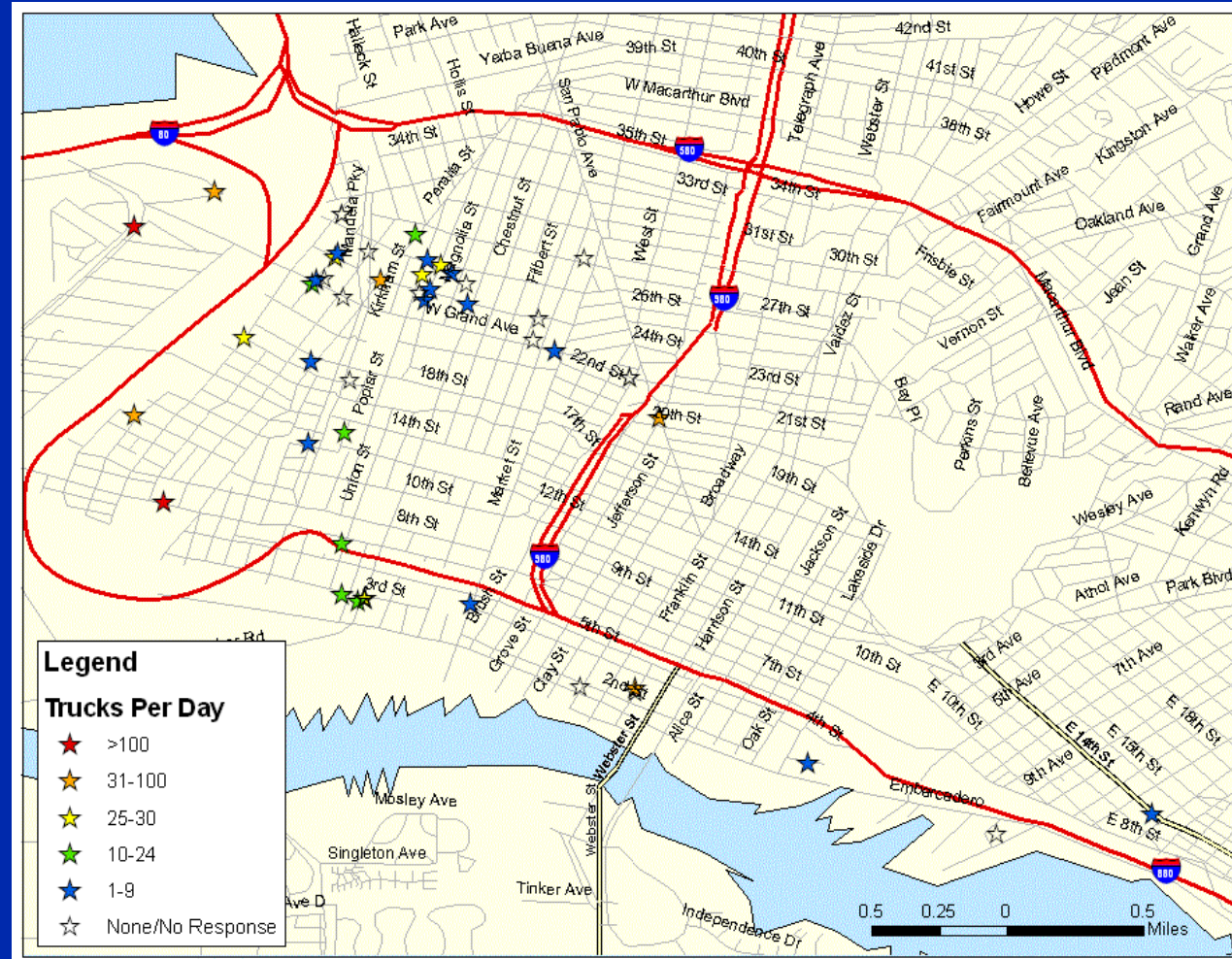
For Part 3 of the HRA, Sonoma Technology, Inc. (STI) worked with BAAQMD staff to:

- Identify **truck-based businesses** in West Oakland that operate diesel trucks or off-road equipment
- Identify **construction projects** that were active in West Oakland during 2005
- Gather activity data (trucks per day, truck idling times, construction equipment types, hours of operation, etc.)
- Estimate year-2005 emissions
- Prepare emission inputs for the CALPUFF model

Background (3 of 3)

Project Findings:

- Identified **52** truck-based businesses
- Estimated **2,937** truck trips per day
- Estimated an average idling time of **10** minutes
- Recommended further investigation into truck traffic patterns and idling activity



Scope of Work

Task 1: Produce a project protocol

Task 2: Produce a roadway network map

Task 3: Estimate traffic volumes and speeds

Task 4: Identify truck idling locations; estimate idling times

Task 5: Collect truck license data

Task 6: Format truck activity data

Task 7: Produce documentation

Estimating Traffic Volumes and Speeds (Task 3)

Freeways:

- Utilize existing data, such as Freeway Performance Measurement System (PeMS) data

Major Roadways and Minor Streets

- Analyze existing data sources
- Perform automated vehicle classification counts at up to six locations (24 hours/day; Thursday-Monday)
- Perform manual counts at up to six additional locations (peak hour counts; Thursday-Monday)



Estimate Truck Idling Activities (Task 4)

- Identify truck idling locations based on previous studies and input from community groups
- Interview personnel at truck-based businesses to gather information on idling times
- Ground-truth reported idling times with observations

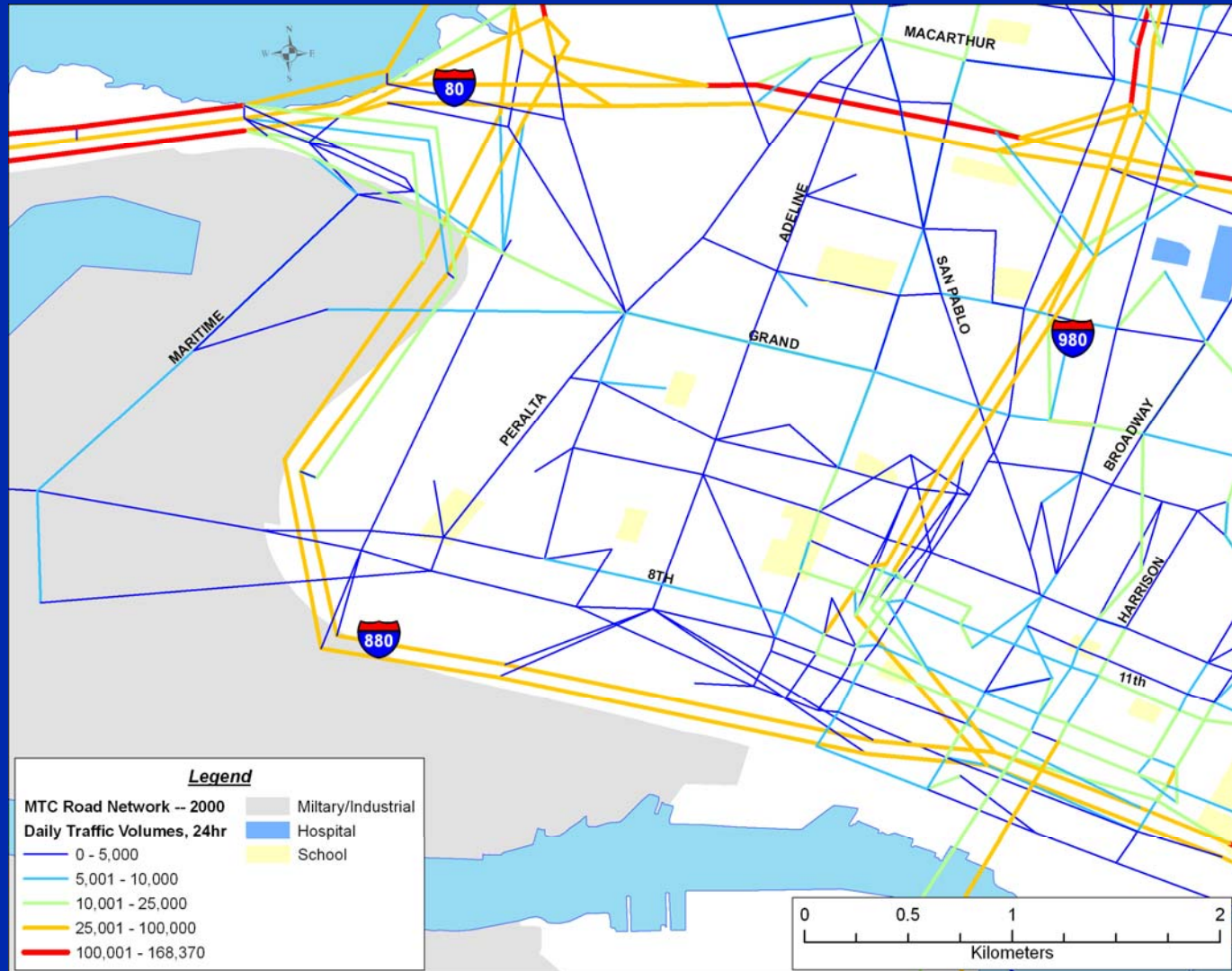


Collect License Data (Task 5)

- Purpose is to develop an age distribution for trucks operating in West Oakland
- Previous license plate data collection efforts undertaken at the Port of Oakland and OMSS lot
- Current effort will likely involve data collection at parking areas and on roadways
- Methods will likely include a combination of manual and video capture of license plate information

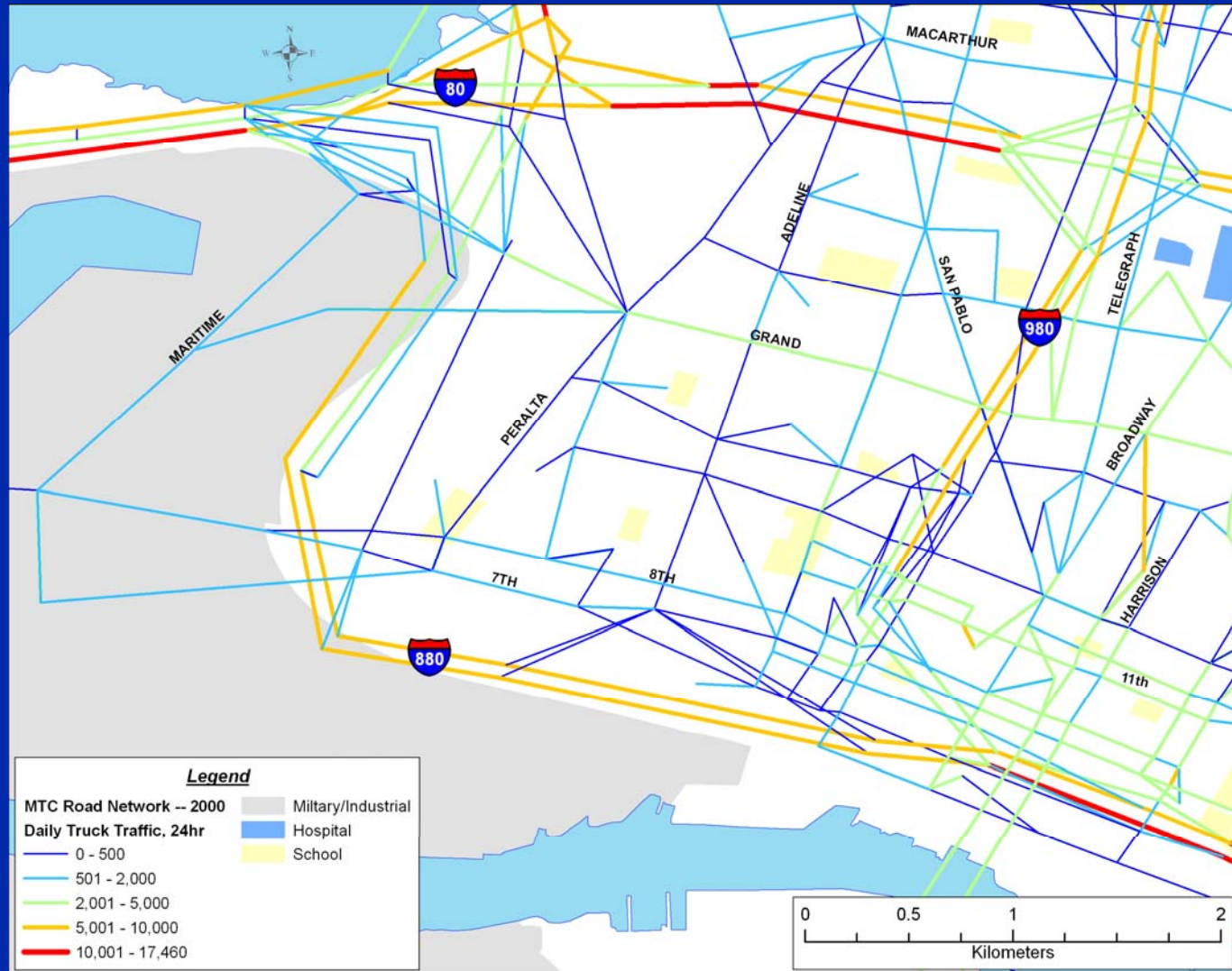
Roadway Maps (1 of 5)

MTC roadway network with total traffic volumes



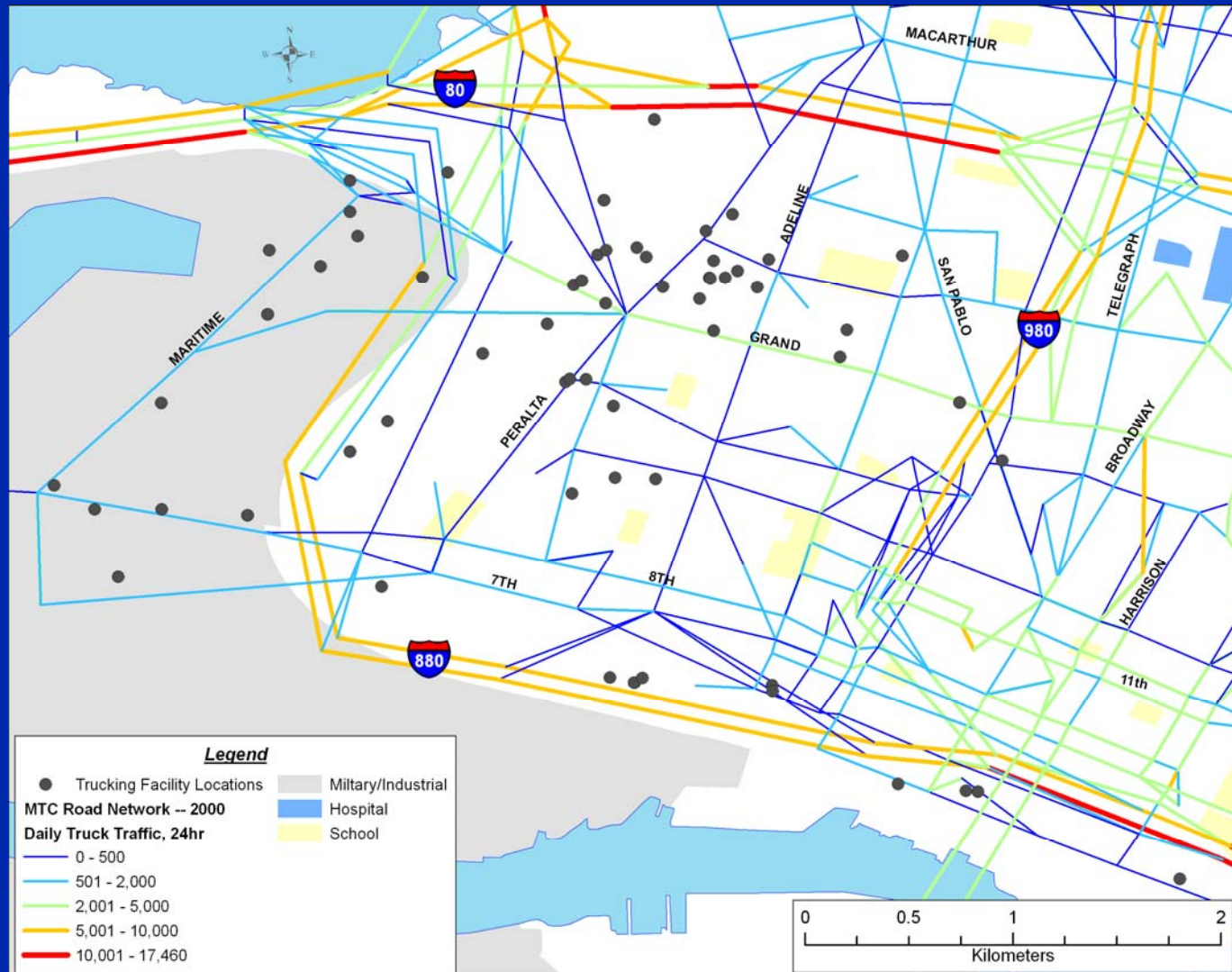
Roadway Maps (2 of 5)

MTC roadway network with truck-only traffic volumes

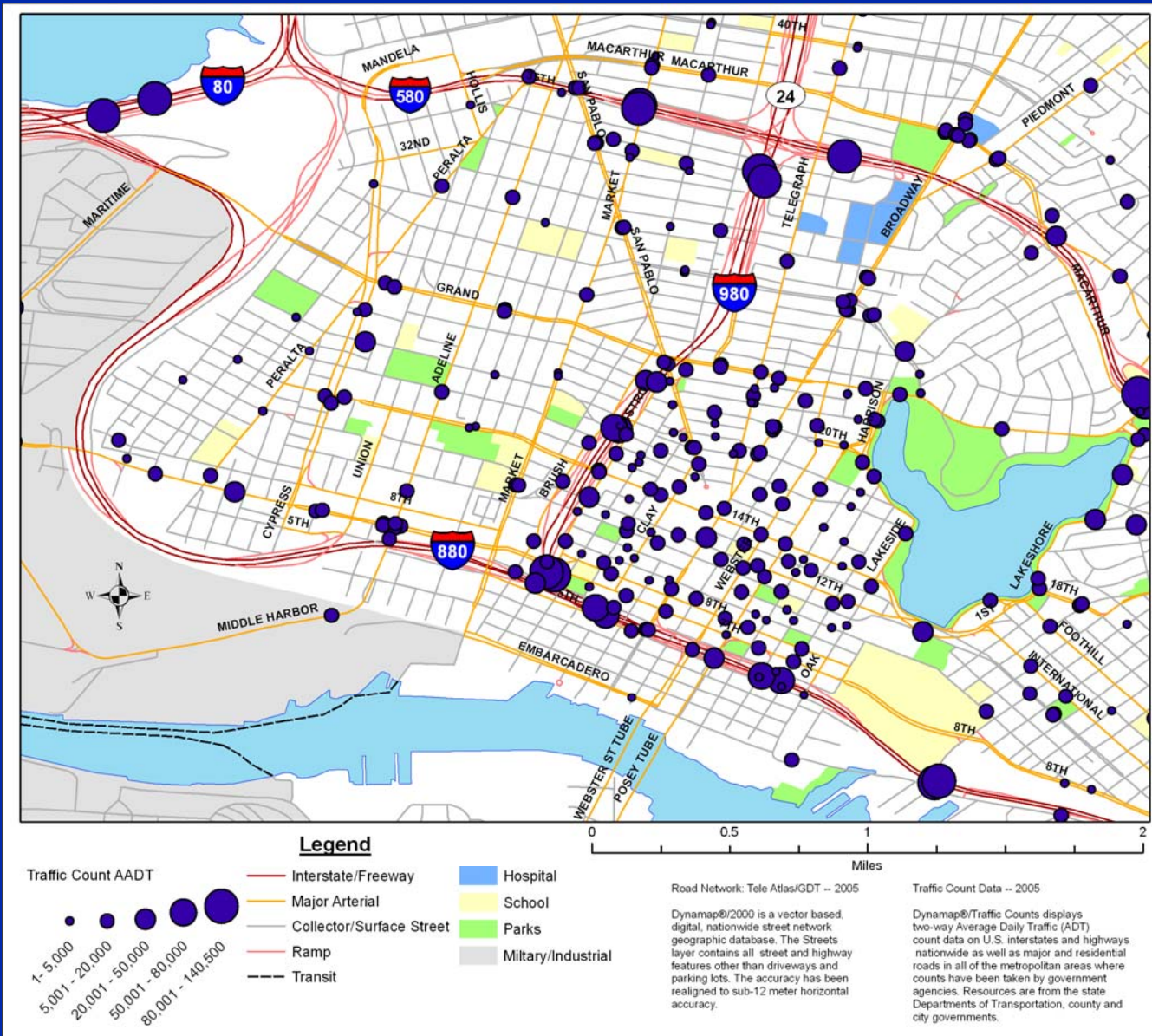


Roadway Maps (3 of 5)

MTC roadway network with truck-only traffic volumes and locations of truck-based businesses

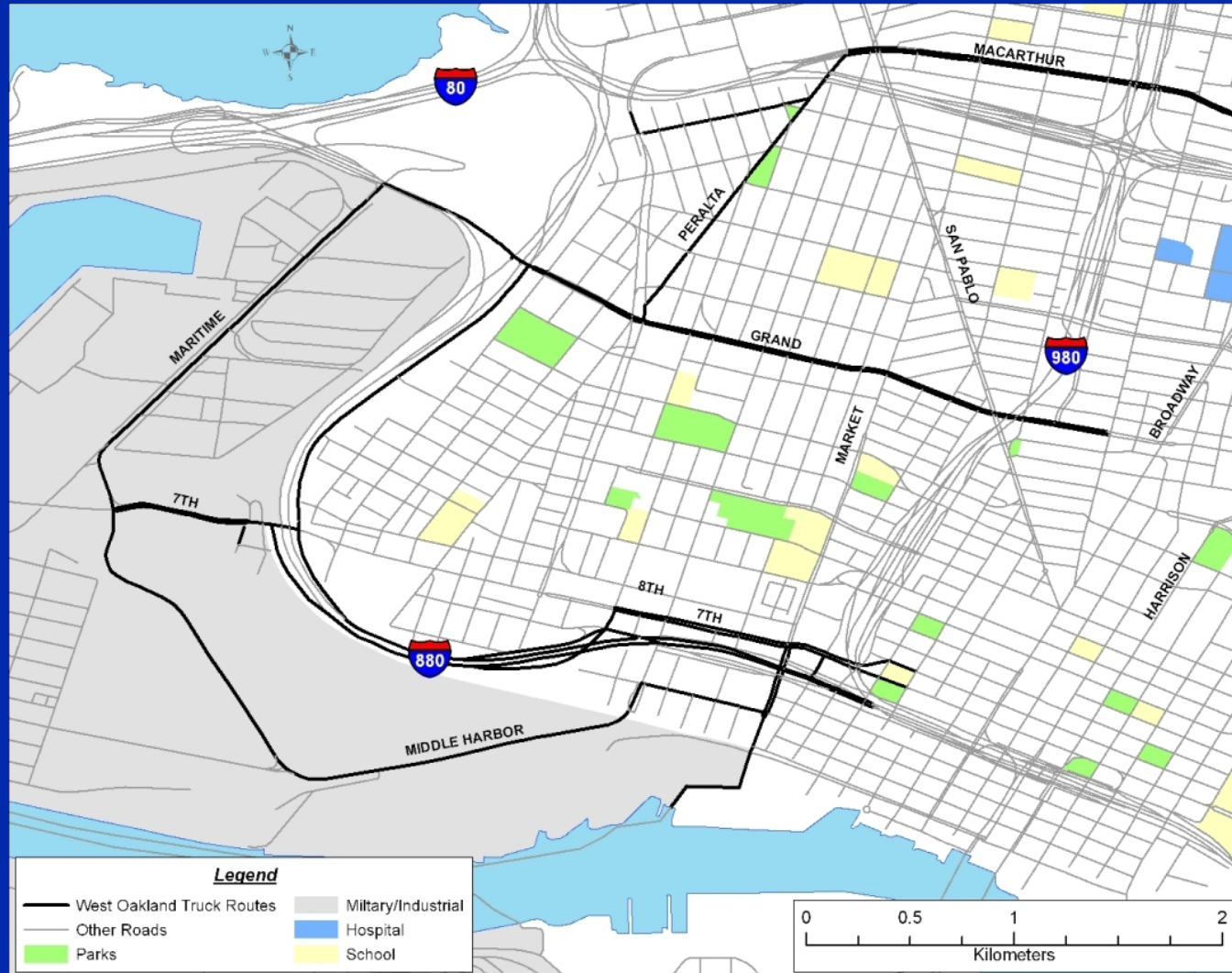


Roadway Maps (4 of 5)



Roadway Maps (5 of 5)

Designated truck routes in West Oakland (as defined by the City of Oakland)



Discussion

- a) Identification of resources
- b) Community participation
- c) Possible locations for vehicle counts
- d) Data collection methods
- e) Project schedule