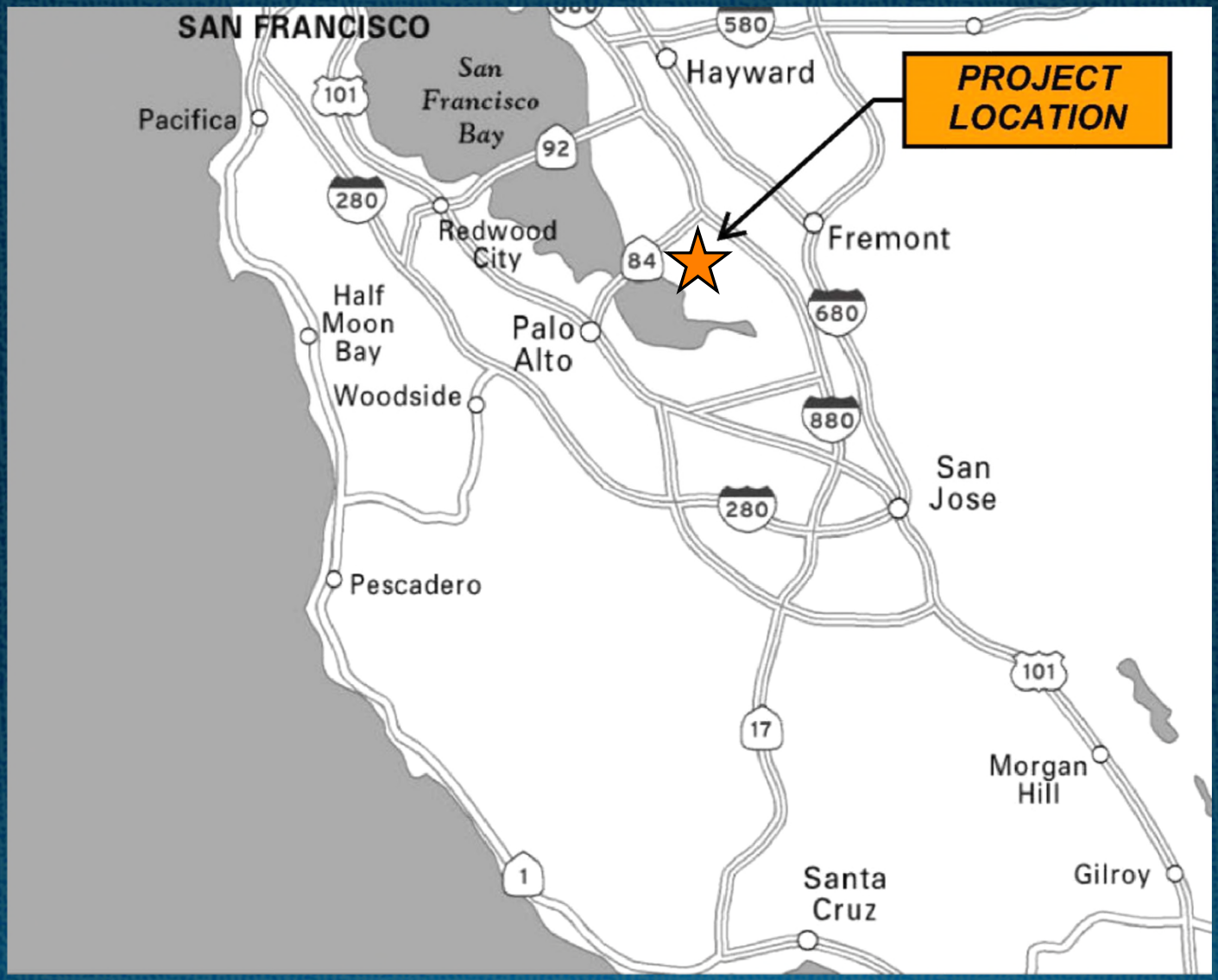
ENTERPRISE DRIVE
COMPLETE STREETS & ROAD DIET

Presented by: Jayson Imai, Assistant City Engineer
City of Newark Public Works Department

Air Quality Conformity Task Force Meeting
December 1, 2016

CITY OF NEWARK



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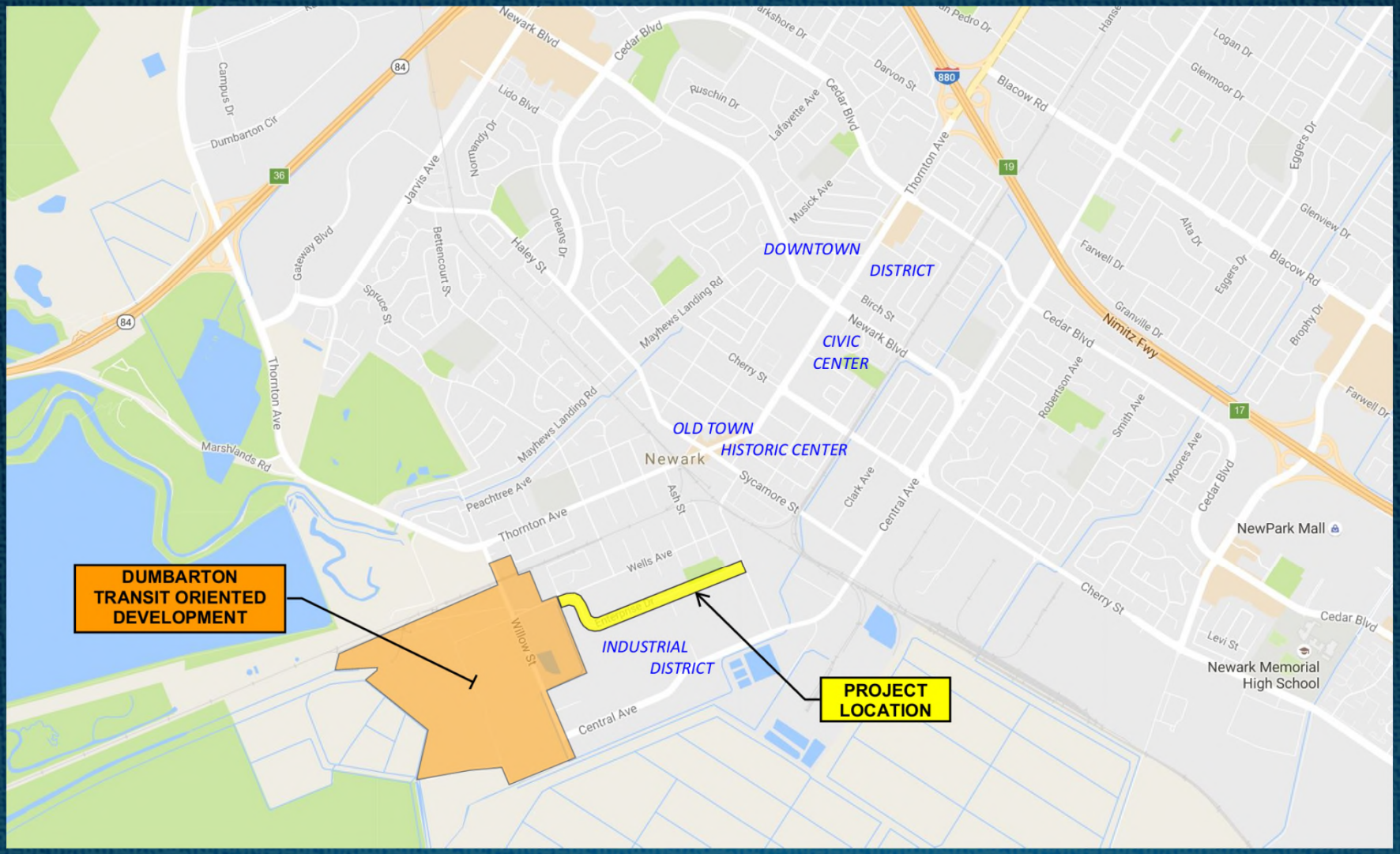

PROJECT LOCATION

CITY OF NEWARK

PROJECT VICINITY

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- 4-Lane undivided collector street
- Lack of Bicycle Facilities
- Pavement Rehabilitation

PCI = 55

EXISTING CONDITIONS & PROJECT NEED

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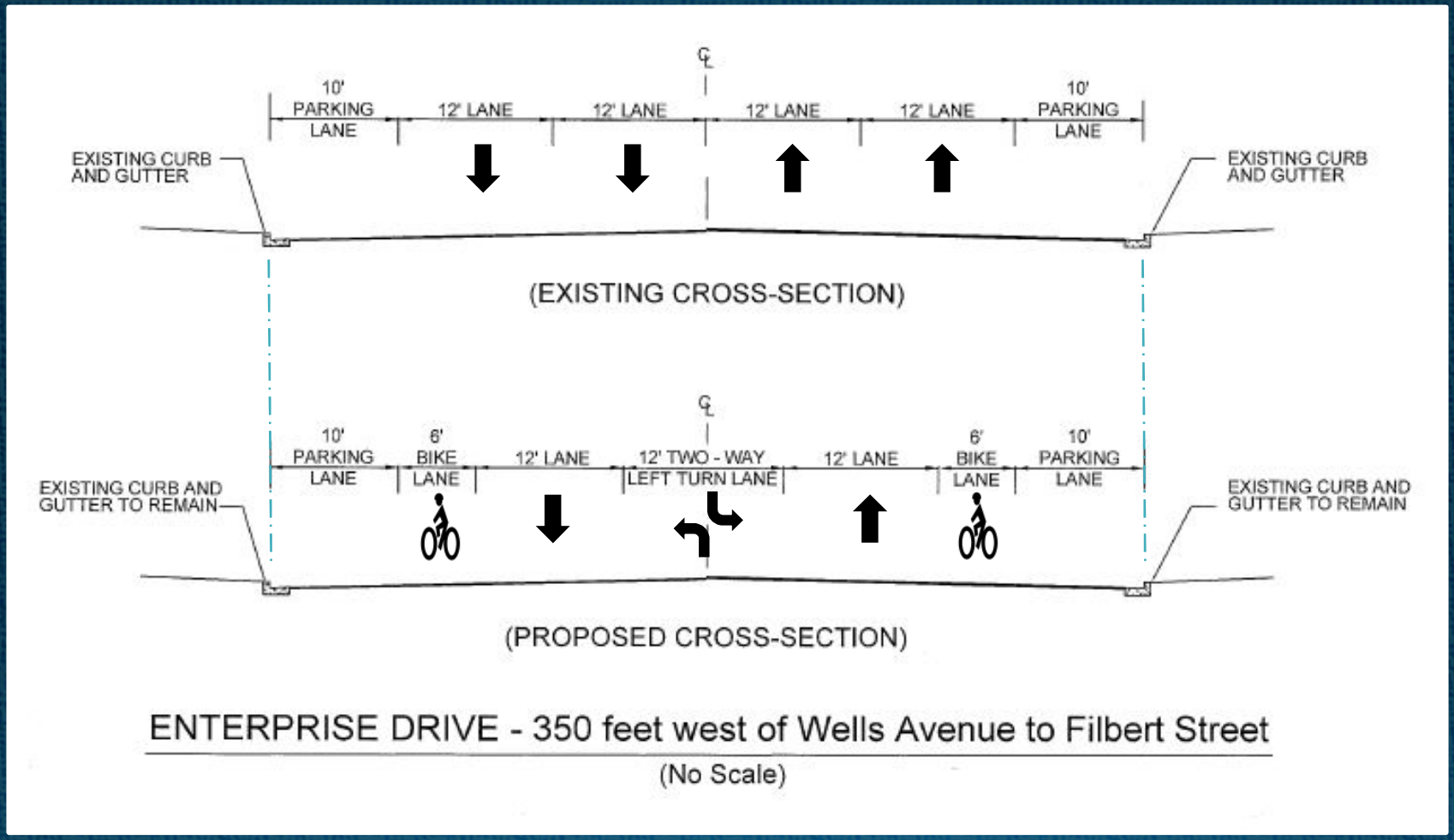

PROJECT DESCRIPTION

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- Road Diet & Complete Streets
- Class II bike lanes
- ADA compliant curb ramps
- Multi-modal connection to Dumbarton Transit Oriented Development
- Preservation of on-street parking
- Pavement rehabilitation

PROJECT BENEFITS

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YEAR	PEAK HOUR VOLUME		ADT	LEVEL OF SERVICE		DIESEL VEHICLES	
	AM	PM		4-Lanes	3-Lanes	%	ADT
2016	532	565	5,485	LOS C or Better	LOS C or Better	5%	274
2040	580	677	6,285	LOS C or Better	LOS C or Better	5%	314

ASSUMPTIONS

- No increase in traffic volumes between Build and No-Build scenarios
- LOS analysis based on FDOT 2013 Quality/Level of Service Handbook
- No redistribution of traffic due to project

TRAFFIC STUDY

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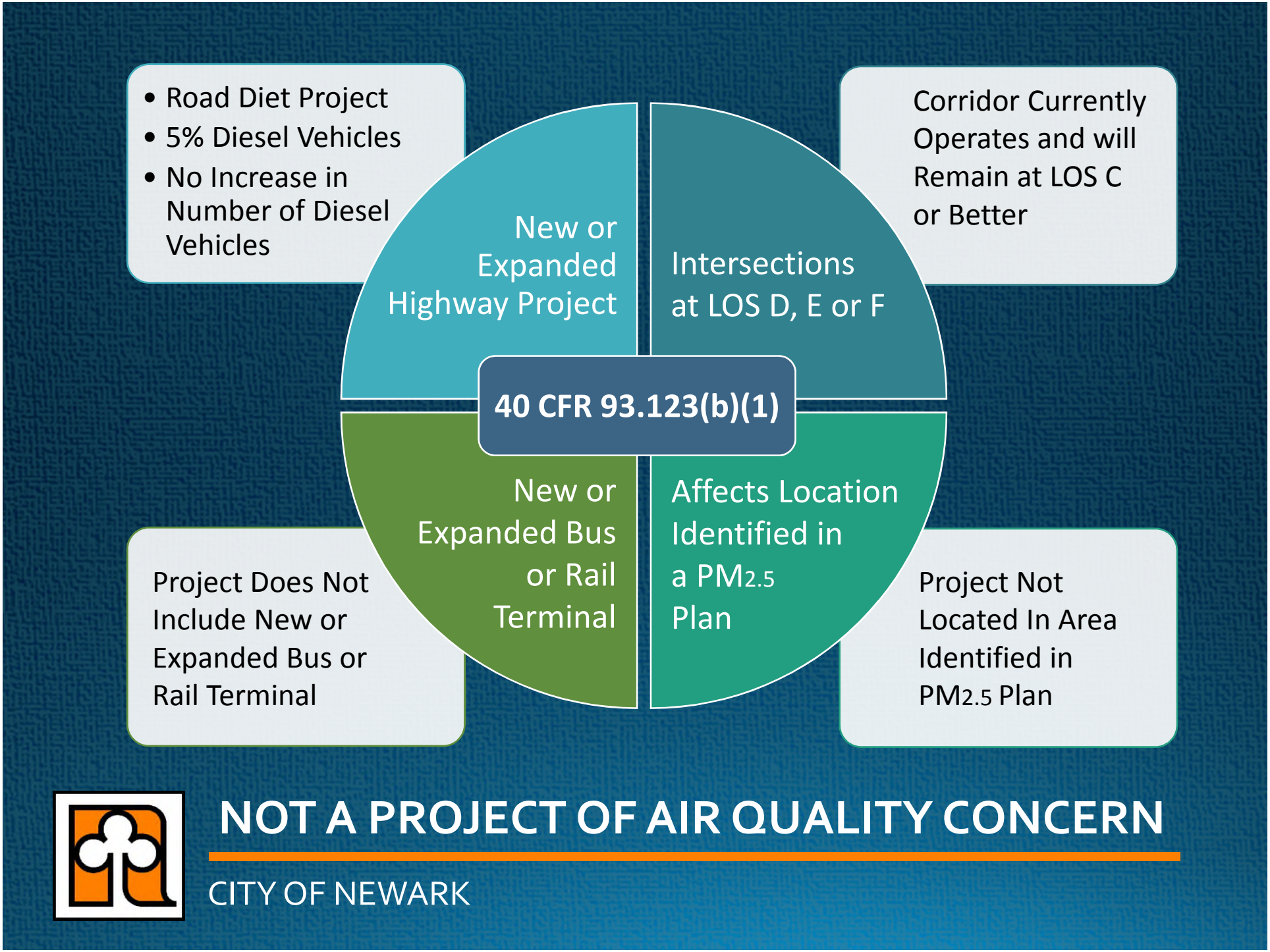


NOT A PROJECT OF AIR QUALITY CONCERN

CITY OF NEWARK

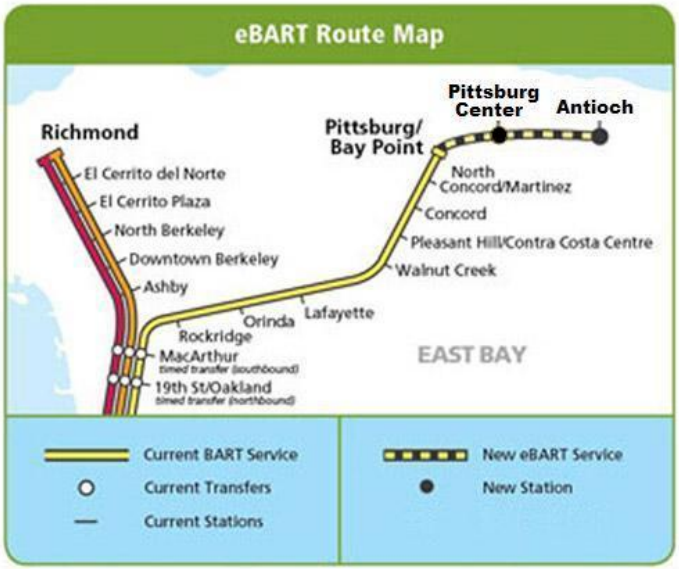
City of Pittsburg – BART Multimodal Transfer Facility

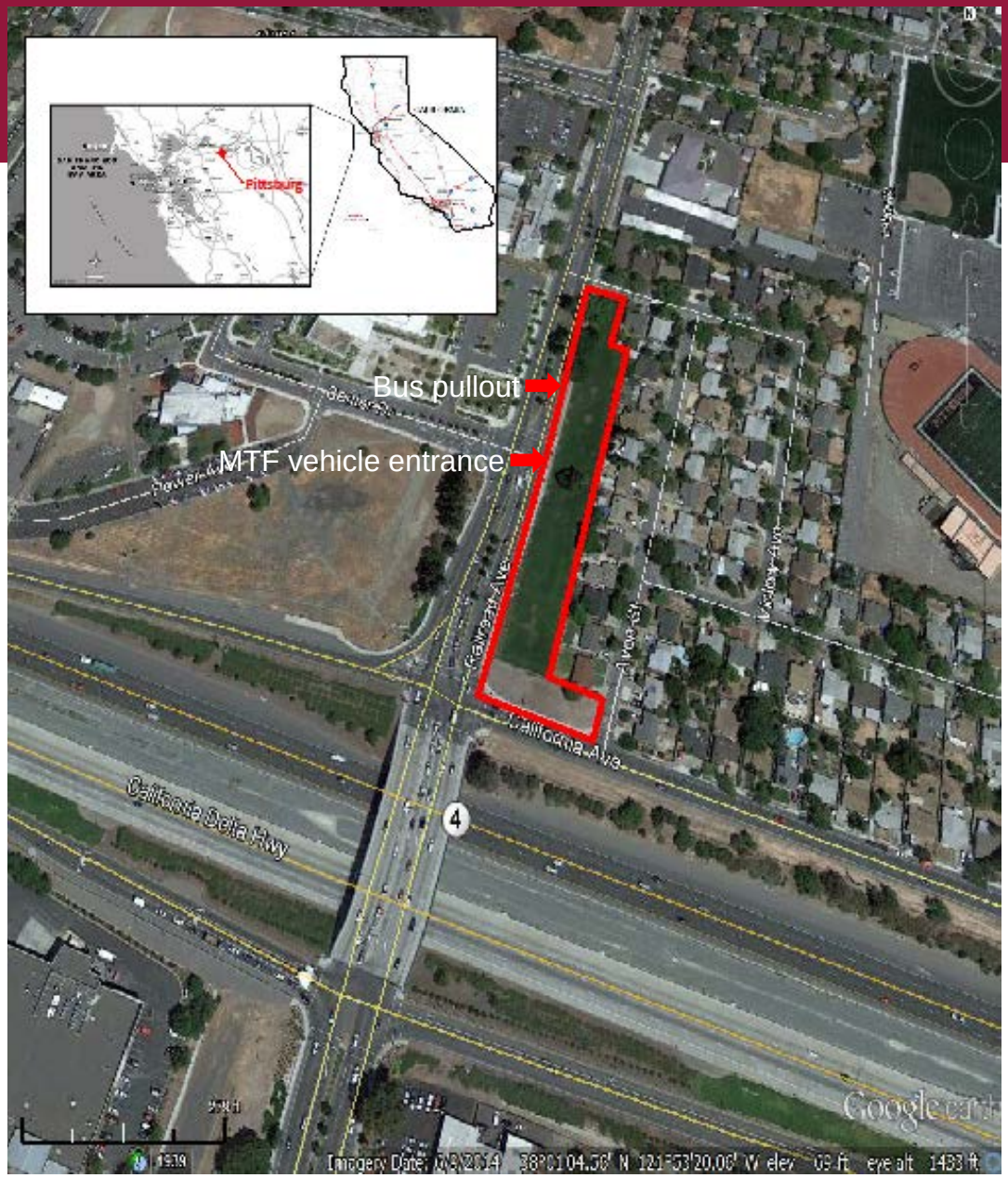
MTC Air Quality Conformity
Task Force 12/1/16

TranSystems

City of Pittsburg

Project Location





Project Description – The Multimodal Transfer Facility

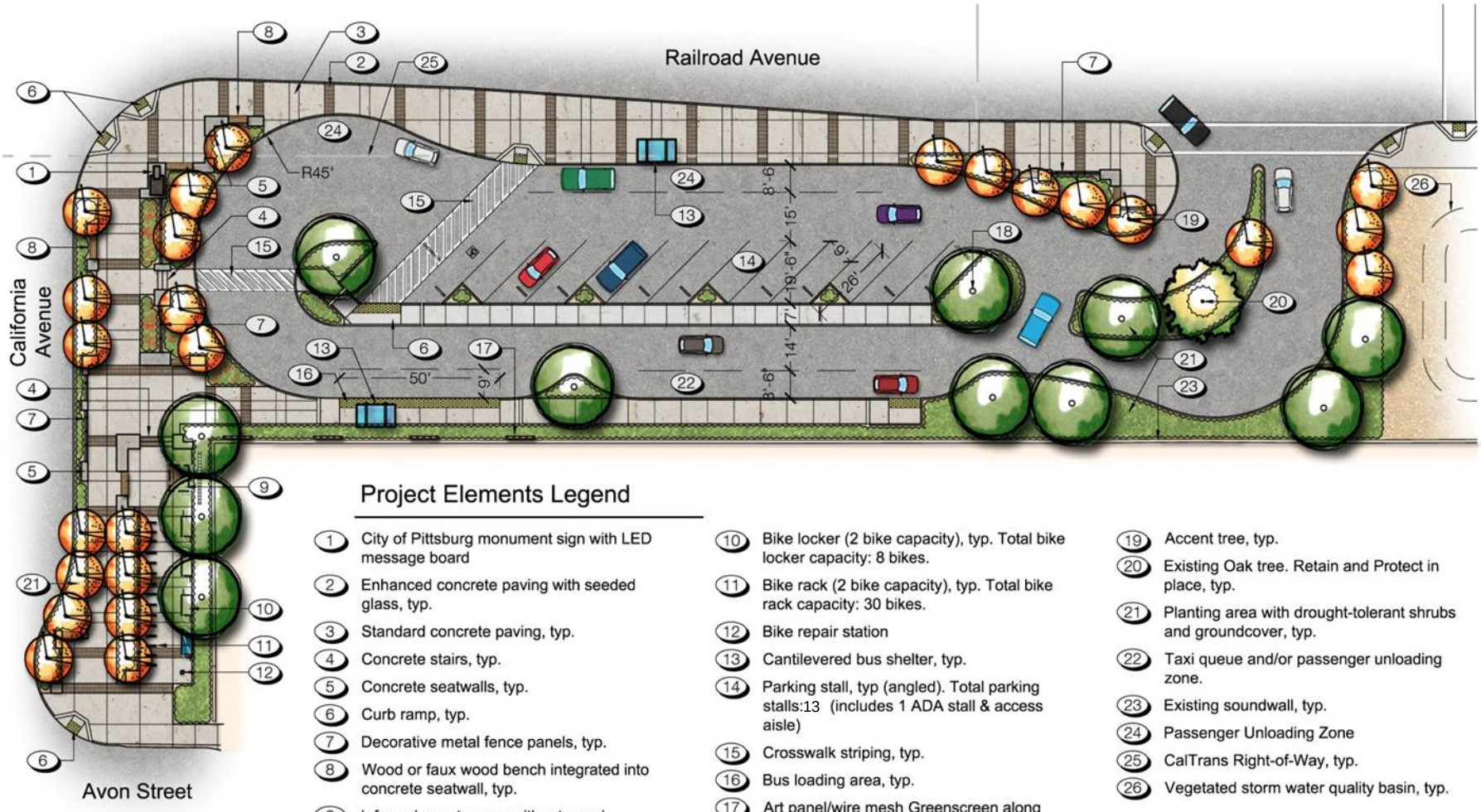
- MTF proposed at the NE corner of Railroad Avenue and California Ave, just north of the planned BART station.

- The Facility
  - 13 temporary parking spots
  - passenger drop-off and pick-up
  - bike racks and lockers
  - transfer to local bus service and paratransit buses
- Off site improvements
  - Two turn lanes
  - Bus stop on Railroad Avenue
  - Paved Class I trail adjacent to state right-of-way

TranSystems

City of Pittsburg

Detailed Project Elements



Project Elements Legend

1. City of Pittsburg monument sign with LED message board
2. Enhanced concrete paving with seeded glass, typ.
3. Standard concrete paving, typ.
4. Concrete stairs, typ.
5. Concrete seatwalls, typ.
6. Curb ramp, typ.
7. Decorative metal fence panels, typ.
8. Wood or faux wood bench integrated into concrete seatwall, typ.
9. Informal event space with art panel "backdrop" and portable coffee or food kiosk area (with utility connections - electrical, water, sewer etc.)
10. Bike locker (2 bike capacity), typ. Total bike locker capacity: 8 bikes.
11. Bike rack (2 bike capacity), typ. Total bike rack capacity: 30 bikes.
12. Bike repair station
13. Cantilevered bus shelter, typ.
14. Parking stall, typ (angled). Total parking stalls:13 (includes 1 ADA stall & access aisle)
15. Crosswalk striping, typ.
16. Bus loading area, typ.
17. Art panel/wire mesh Greenscreen along wall, typ. of 4.
18. Shade tree, typ.
19. Accent tree, typ.
20. Existing Oak tree. Retain and Protect in place, typ.
21. Planting area with drought-tolerant shrubs and groundcover, typ.
22. Taxi queue and/or passenger unloading zone.
23. Existing soundwall, typ.
24. Passenger Unloading Zone
25. CalTrans Right-of-Way, typ.
26. Vegetated storm water quality basin, typ.

Intermodal Transfer Facility Vehicles

- Primarily gasoline-powered passenger vehicles will use kiss-n-ride
- Approximately 5-10 paratransit buses per day
  - Paratransit buses currently use gasoline, to be converted to propane
- No diesel buses operating within project site
- 3 current, and 4 future bus routes on Railroad Ave,
  - These will occur under both Build and No build
- Bus pullout on Railroad Ave to be used by Tri Delta bus service
  - Tri Delta buses currently are diesel, with plans for 4-6 electrified buses

CO Emissions

- MTF is located in a carbon monoxide (CO) maintenance area, a localized hot-spot analysis is required for CO.
- MTF screens out at Level 7 of the flow chart in CO Protocol, and there would be no causing violation of the NAAQS for CO.
- MTF will not result in high percentage of vehicles operating in cold start mode, since a majority of vehicles will use loading zone for 30-60 seconds.
- BART Extension EIR predicted 8-hour CO of 2.3 ppm in 2015 and 2.1 - 2.3 ppm in 2030 at nearby intersections

Level of Service Summary for the Pittsburg BART MTF Project

Intersection	Existing AM Peak		Existing PM Peak		Proposed AM Peak		Proposed PM Peak	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Railroad Avenue/ Center Drive	A	4.5	A	5.2	C	22.6	B	13.5
Railroad Avenue/ SR-4 WB Ramps-California Avenue	D	37.1	D	35.4	D	47.9	C	27.7

Particulate Matter

- Project is not increasing number of buses or rail trips to the Pittsburg Center station
- Project should not be considered a POAQC because
  - Project is not on roadway that serves significant number of diesel vehicles
  - Project will not affect a congested intersection with a significant number of diesel vehicles related to the project
  - BART MTF will not significantly increase the number of diesel vehicles
  - Project will generate primarily gasoline-powered traffic.
- **No net increase in diesel** buses or trucks on roadways or intersections.

Current and Design Year (2040) AADT
[Fehr & Peers 2016]

Scenario	AADT	Truck %	Truck AADT
No Build	21,170	3%	640
Build	22,730	3%	640
Design Year No Build	26,460	3%	790
Design Year Build	28,020	3%	790

Project Conclusions

- ✓ By providing transit, pedestrian, and bicycle improvement, project plans to reduce auto travel.
- ✓ Localized hot spot analysis potentially required because located in area that is nonattainment/maintenance for $PM_{2.5}$ and CO.
- ✓ Both signalized intersections will operate at LOS D or better – no CO modeling required.
- ✓ Vehicles entering project will be passenger vehicles and gasoline paratransit
- ✓ Screens out at Level 7 of CO Protocol flow chart, and no further analysis of CO is required.
- ✓ Project will not increase the number of buses on Railroad Avenue.

TranSystems

City of Pittsburg

19th Street BART to Lake Merritt Urban Greenway ATPL-5012(144)

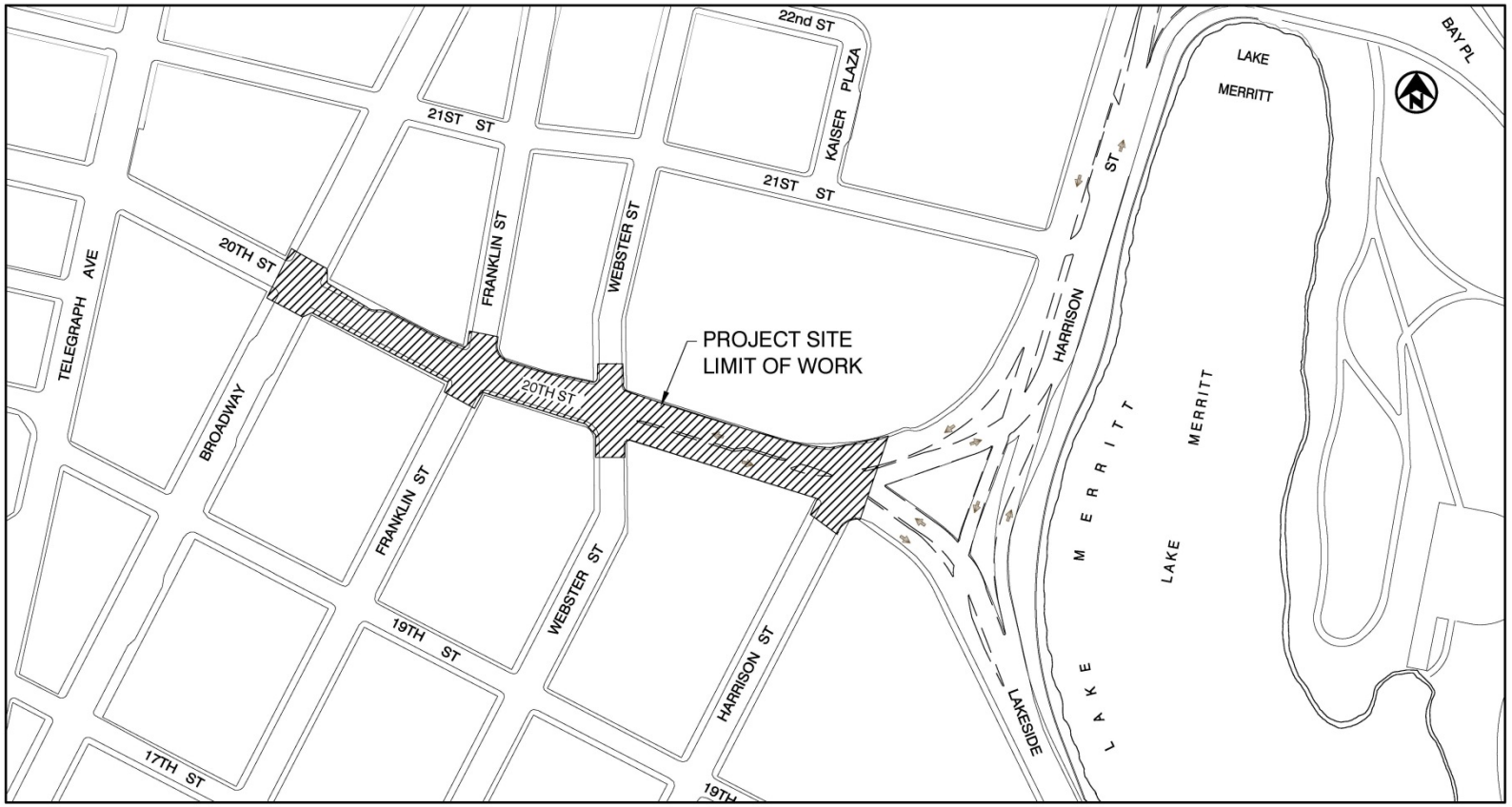
For the

Air Quality Conformity Task Force

Presented by
Edmond Siu, Civil Engineer
Department of Transportation
City of Oakland

Project Description

- Active Transportation Program (ATP) project located on 20th Street between Broadway and Harrison Street.
- Project will implement a road diet and reduce one travel lane in each direction. Project will install Class II bicycle lanes in both directions, raised medians, and sidewalk extensions.
- Project fills a key gap from the regional transit system and Downtown Oakland to the regional parks/trails system via Lake Merritt.
- Project will enhance bicycle and pedestrian features in the area.
- Project will facilitate access for walking and biking and thereby encourage more people to use alternative methods of travel.



LOCATION MAP

NOT TO SCALE

LIMITS OF WORK

CITY OF OAKLAND
BUREAU OF ENGINEERING AND CONSTRUCTION
250 FRANK H. OGAWA PLAZA
SUITE 4314 OAKLAND, CA 94612
(510) 238-3437, FAX (510) 238-7227

20TH STREET PROJECT, HARRISON ST TO BROADWAY
STREETSCAPE PROJECT

VICINITY MAP

Project Description

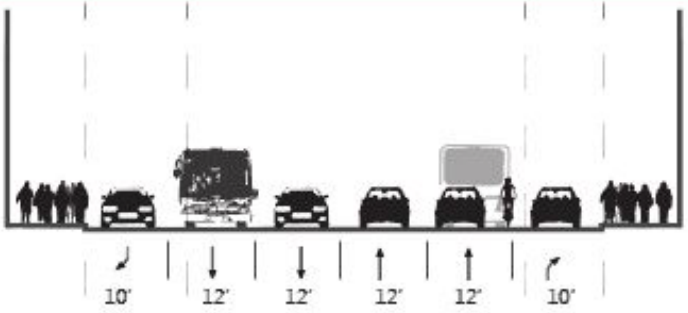
- Project will NOT increase traffic volume;
- Project will NOT worsen intersection Level of Service (LOS) to unacceptable level;
- Project will NOT widen or create additional automobile travel lanes;
- Project will NOT increase truck traffic.

Road Diet Cross Sections

Broadway to Harrison Street

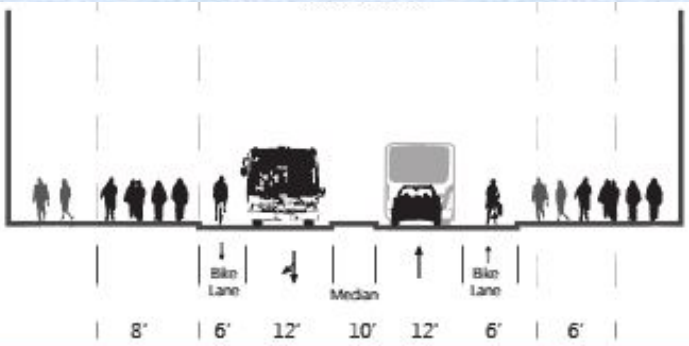
ex

4 Travel Lanes +
Narrow Sidewalks



2

2 Travel Lanes +
Median +
Class II Bicycle Lanes +
Widened Sidewalks



Specific Design Elements

1. Lane reduction (“road diet”) from Broadway to Harrison Street to provide bicycle lanes, medians, and left-turn pockets
2. Sidewalk widening, raised curb extensions, median refuge islands, and improving all ADA curb ramps in project area
3. Bus boarding islands in travel lane
4. Signal modifications
5. Striping and parking separated bicycle lanes
6. Pavement repair and resurfacing

Traffic

- Traffic data has been assessed for opening and horizon years, for both build and no-build conditions as part of the 20th Street Complete Streets Study.
- Traffic analysis show that the project will not result in an increased traffic based on the opening or horizon year models.
- The Annual Average Daily Traffic (AADT) on Telegraph Avenue is expected to be 12,000 in Year 2020 based on the Alameda Countywide model.
- The truck volume is maximum 3.2% of total intersection volume within project area during peak hour traffic and is expected to be unchanged in the opening year (2020) and in the horizon year.
- 20th Street is not a truck route and Harrison Street north of 20th Street is prohibited to trucks; the only appreciable reason for truck traffic is for retail deliveries.
- The existing intersection LOS is between A and C. Two intersections drop to a level D from C within the projection period, attributed to projected growth and trips associated with a Kaiser project in the project area, and not the proposed project.
- Transit boarding islands are intended to ease transit boarding, thereby enhancing transit operations and leading to increased mode share for transit overall.

Traffic Data

Opening Year: 2020
AADT: 12,028, 3.2% (385) Trucks

Location	No Build (LOS)	Build (LOS)
20th/Broadway	B	B
20th/Franklin	B	B
20th/Webster	C	C
20th/Harrison	B	C

Design Year: 2030
AADT: 10,404, 3.2% (333) Trucks

Location	No Build (LOS)	Build (LOS)
20th/Broadway	C	C
20th/Franklin	B	B
20th/Webster	C	D
20th/Harrison	D	D

Alameda County Transportation Commission, Countywide Travel Demand Model and 20th St Complete Streets Study Analysis

LOS shown is intersection, not segment LOS, during peak hour.

Not a Project of Air Quality Concern

- Project will enhance the corridor by constructing bicycle and pedestrian facilities, and providing safety improvements for all modes of transportation.
- Project will promote alternative modes of non-vehicle travel with the installation of new facilities.
- Project will improve connection between Broadway/ 19th Street BART and Lake Merritt, and provide better access to businesses along the corridor which will have positive impact on the economy of the area.
- Project has no direct impact on motor vehicle traffic or truck traffic.

Claremont Avenue

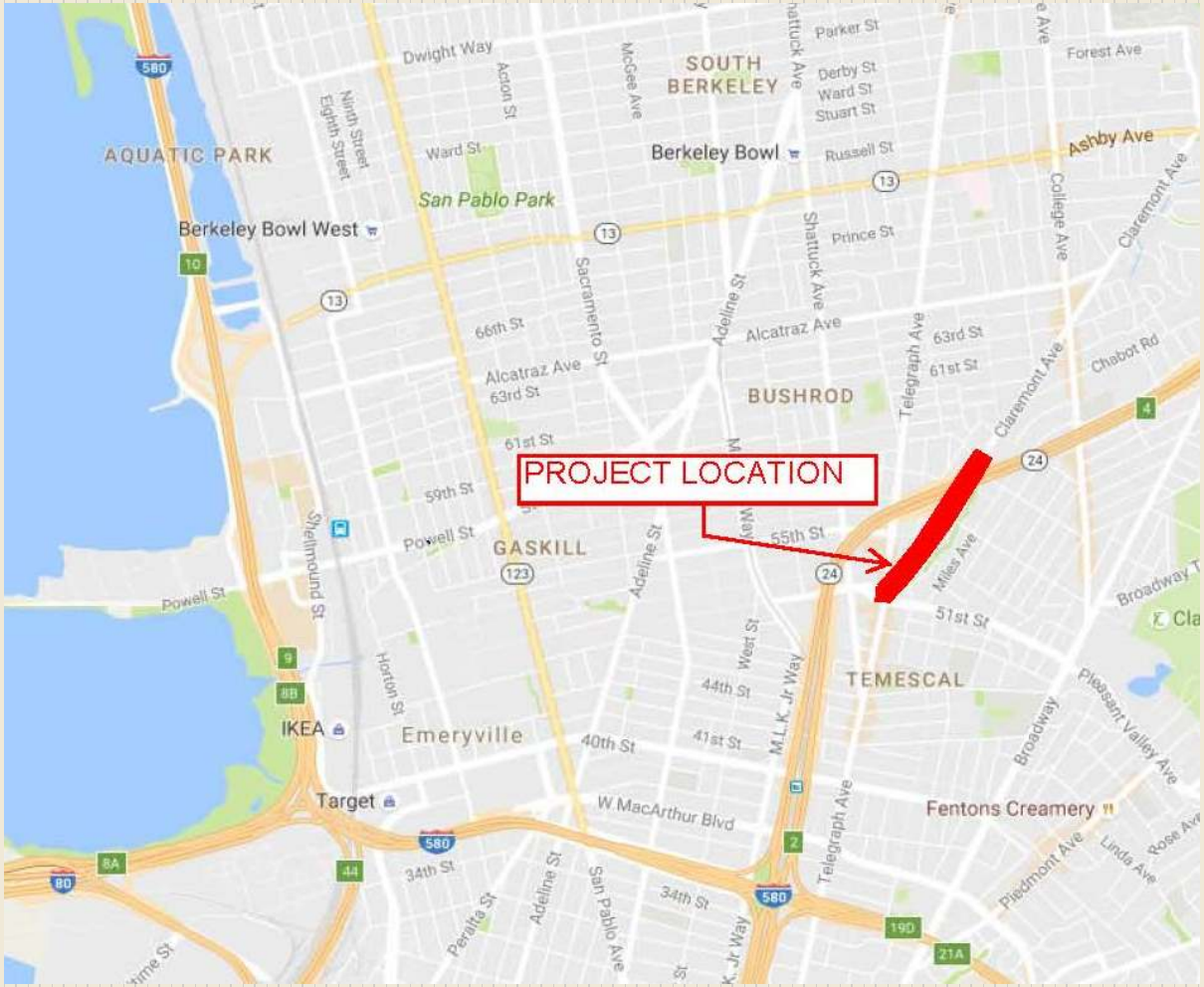
For the

Air Quality Conformity Task Force

Presented by

Linda DeBolt, Transportation Engineer
Department of Transportation
City of Oakland

Claremont Avenue



- HSIPL-5012(140): Telegraph to Martin Street

LEGEND

Study Intersection

Project Area

Project Description

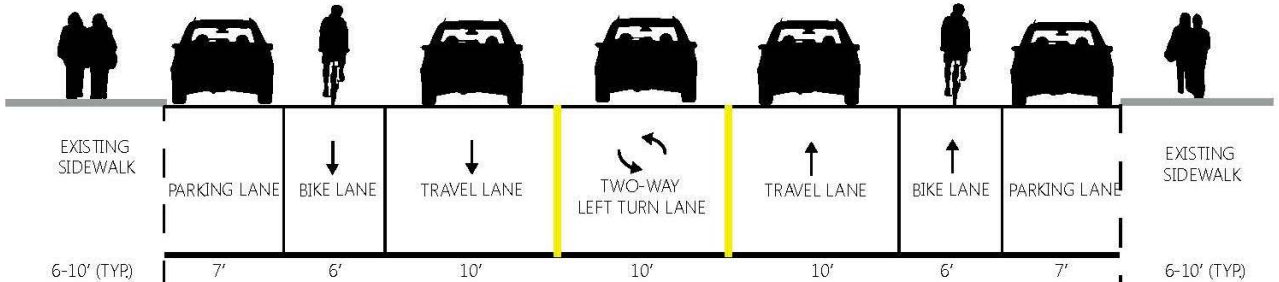
- Lane reduction ("road diet") on Claremont Avenue from Telegraph Avenue to Martin Street:
  - **From Telegraph Avenue to Clifton Street -** The road diet consists of reducing two travel lanes in each direction to one travel lane and Class 2 dedicated bike lane in each direction with two-way left turn lane.
  - **From Clifton Street to Hudson Street –** The southbound direction will be reduced from two travel lanes to one travel lane with Class 2 dedicated bike lane and striped buffers to separate the bike lane from the travel lane and parking lane.
  - **From Hudson Street to Martin Street –** The southbound direction will be reduced from two through travel lanes to one through lane and one right turn lane. This transition block is necessary in order to eliminate one through lane for the receiving approach.
- Project will eliminate one slip-right turn at intersection of Claremont Ave/Telegraph Avenue
- Project will construct pedestrian amenities such as sidewalk extensions, bulb-outs, median refuges, high-visibility crosswalks, ADA ramps, pedestrian flashers and signal modifications.

Road Diet Cross Sections

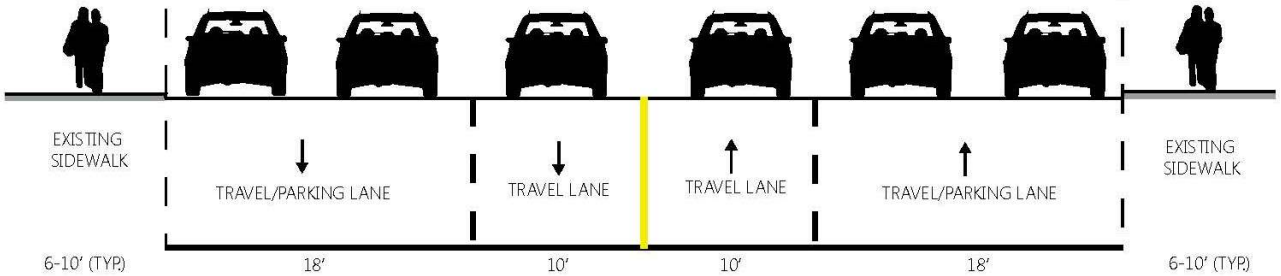
PROPOSED ROAD DIET IMPROVEMENTS

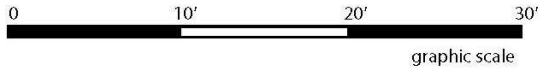
Telegraph Avenue to Clifton Street

NOTE: REFLECTS CM3 ROAD DIET



EXISTING





CLAREMONT AVENUE ROAD DIET PROPOSED CROSS-SECTION

Project Description

- Project will NOT increase traffic volume;
- Project will NOT worsen intersection Level of Service (LOS) to unacceptable level;
- Project will NOT widen or create additional automobile travel lanes;
- Project will NOT increase truck traffic.

Traffic

- Traffic data has been assessed for opening and horizon years, for both build and no-build conditions.
- Traffic analysis show that the project will not result in an increased traffic based on the opening or horizon year models.
- The Annual Average Daily Traffic (AADT) on Claremont Avenue is expected to be 7,000 in Year 2020, and 9,500 in Year 2040.
- The truck volume is 3% of the peak hour traffic and is expected to be unchanged in the opening year and in the horizon year. (The average daily truck volume is 1.3%). Claremont Avenue is not a truck route; the only appreciable reason for truck traffic is for retail deliveries.
- The existing intersection LOS is between B and C and it is expected to be in the same range with project conditions.

Traffic Data

	Avg AADT	Avg Trucks

Intersection	Peak Hour	Existing	Existing + Project	2020	2020 + Project	2040	2040 + Project
1. Claremont Avenue/Telegraph Avenue	AM PM	B C	B C	B C	B C	C C	C C
2. Claremont Avenue/Clifton Street/SR 24 off-ramp	AM PM	B B	B B	B B	B B	B B	B C
3. Claremont Avenue/Hudson Street/SR 24 on-ramp	AM PM	B B	B B	B B	B B	C C	C C

	Avg AADT	Avg Trucks
Existing (2016)	6,620	88
Build year (2020)	7,026	93
RTP Build Horizon Year (2040)	9,463	125

*Growth rate projection of 1.5%/year

	Existing (2016)	Build Year (2020)	Horizon Year (2040)
Bicycles	185	196	249
Pedestrians	363	385	489

*Growth rate projection of 1.5%/year

Not a Project of Air Quality Concern

- Project will enhance the corridor by constructing bicycle and pedestrian facilities, and providing safety improvements for all modes of transportation.
- Project will improve connection between Temescal neighborhoods and Claremont business district, and provide better access to businesses along the corridor which will have positive impact on the economy of the area.
- Project has no direct impact on motor vehicle traffic or truck traffic.