

City of Oakland Bicycle and Pedestrian Advisory Committee

**MINUTES**

Thursday, April, 19, 2012

5:30 – 7:30 pm

***Attendees:***

Brian Toy, Carol Levine, Chris Hwang, Jason Patton, Jennifer Stanley, Kendahsi Haley, Liza Pratt, Midori Tabata, Rebecca Saltzman, Robert Prinz, David Colburn, Nicole Foletta, Matthew Ridgeway, Wlad Wlassowsky, Jim Dexter, Robin White, Jim Cunradi

**Item 1:**

Meeting called to order at 5:35 by vice-chair, Rebecca Saltzman

Attendees:

**Item 2:**

Approval of meeting minutes: Minutes approved.

**Item 3: Oakland Neighborhood Traffic Calming Program**

Matthew Ridgeway and Nicole Foletta from Fehr & Peers came to present their progress on this Program. They are in draft form that has been developed through meetings with a stakeholder group. Engineering options (speed humps, traffic circles) are the focus of this study. Two phases are anticipated – Phase 1 Traffic Calming Manual and Phase 2: Framework Plan. Phase 1 has been the focus of their work so far. This project is focused on residential street treatments and is not intended to be used for arterials. And is focused on reducing speeds rather than shifting traffic to other streets.

Phase 1: Process includes 4 steps (this is resident responsive-reactive)

1. Plan initiation – initiated by resident, reviewed by city staff to determine project eligibility and project area definition. Requests processed on 1<sup>st</sup> come-1<sup>st</sup> served.
2. Plan development – city staff will conduct data collection; meet with neighborhood; develop plan with input from residents and review by stakeholders.
3. Plan support – Resident support will be solicited by petition or survey depending upon size of project area (by # households). Approval rate of 67% is required for project to move forward. Houses in front of device will be informed; city will make effort to revise for residents who do not wish to have device in front of their home.
4. Plan implementation – city will notify relevant public agencies and construct devices.

Toolbox includes

Vertical devices: speed hump, speed lump, raised crosswalk, speed table, raised intersection

Horizontal devices: traffic circle, roundabout, realigned intersection

Narrowing: bulbouts, pedestrian islands

Non-physical devices: speed feedback sign, edgeline striping, signage, speed legend, optical speed bar, high visibility crosswalks

Volume control measures: (focus of traffic calming for this study is to reduce speeds and not divert traffic to other streets-These devices are included as informational but likely wouldn't be

used in the context of this traffic calming plan) full closure, partial closure, diagonal diverter, forced-turn island, turn movement restrictions.

#### Framework Plan

This is coming. The following steps will be done. This will be city-initiated process (proactive).

1. Identify traffic calming neighborhood boundaries – based upon physical barriers, location of ex/pro bike boulevards, etc
2. Develop neighborhood prioritization methodology – neighborhood with greatest need for traffic calming.
3. Establish measures of effectiveness

Some BPAC comments/concerns – Is there budget and staffing to accommodate all the requests? F&P has worked on over 50 of these plans and has not been aware of a problem with overwhelming requests at any of these cities.

Why is approval rate so high? Won't this be difficult to achieve? If there is not a majority of support than there is something wrong with the project and may require a revision of the project. Will residents have input before being asked to approve? Yes, a meeting will be held with neighborhood to describe potential improvements and get feedback on why devices may have neighborhood support.

Wouldn't it make sense to identify residents who do not want device in front of their house before design? Yes

Suggestion to include aesthetic treatments which also can slow traffic down such as pavement treatments, painted intersections.

Does Oakland have a definition for bike boulevard? Yes but it is not volume-based. The overall traffic calming program is a great opportunity to implement a bike boulevard program for the city.

What is the balance of spending between neighborhood-requested and city-initiated improvements? Funding is separate and would not be a competition between these different type of projects and may even allow city to be more competitive for grant funds if projects are combined.

Need to consider the needs of pedestrians as well as bicyclists when designing these treatments.

#### **Item 4: AC Transit BRT Project Update**

Jim Cunradi of AC Transit is the Project Manager of BRT project. Coming to end of environmental review and now looking for EIR approval. Wants to share on how BRT can improve conditions for both pedestrians and bicycles. There have been many changes in project since we saw it last more than one year ago. Chief feature of BRT system is dedicated lanes which is the basis for those who don't like it but also is reason that BRT functions somewhat as traffic calming. Meant to be walked or bicycled to and how far can project be stretched to improve road conditions for everyone. Vehicles will provide tactile pavement markings for low vision passengers and will include on-board bike storage. There will be no bike parking on the platform-space would not accommodate it

The goal is to create a universally accessible bus system with BRT. BRT will include curb ramps, upgraded crosswalks, bulbouts, new paving, new signals with ped countdowns, some bike signals, new pedestrian-only signals, landscaped medians and refuge islands, and bike lanes. Improving neighborhood safety with lighting, etc. is an important element and hopefully can be

extended into the neighborhoods beyond the BRT corridor. BRT will remove almost half the stops; only about 7.5% will have an increase in distance. Stations were also carefully located to serve key attractors for the senior or disabled populations that are most affected by increasing distance to stations. A shorter version of the project is being considered for funding considerations on International, E. 12<sup>th</sup>, and Broadway from Downtown Oakland to San Leandro BART (9.5 miles). Dual-sided (doors on both sides) buses are being used to accommodate both outside and center platform boardings. Bike lanes will be included as part of the BRT project on E. 12<sup>th</sup> St, (parallel route) to 54<sup>th</sup> Ave; then onto International between 54<sup>th</sup> Avenue to 82<sup>nd</sup> Avenue. There will be a NextBus type system. There is no barrier to separate the bus-only lane. There is the expectation that there may be double-parking because many businesses have no other place to load, etc. so cars will be able to use bus-only lane to get around obstructions. It was commented that bike lanes being proposed as part of this project are only 5' next to parked cars. That is the minimum acceptable width so it was suggested to keep in mind to squeeze whatever extra width to increase bike lane width even if only a few inches and to have no 'black-out' period for bicycles. Bike area on bus will not have seats and will be dedicated for bikes but will have handholds so they may be filled with standees. It was commented that wider sidewalks are more important than medians and trees on sidewalks are better than median plantings. Also don't cut off cross-street access by new medians.

Timeline: completing FEIR (public hearing April 25 at 2pm until late) now with detailed design in next two years hoping to open in 2016.

#### **Item 5: Annual projects status update**

Highlights: Have revised design completion % to better reflect what work has actually been done. Time was limited so Jason will bring this back next month but... 27 striping projects are now fully designed; most will be implemented in 2012. This includes 20.7 miles ready for implementation. Four bikeway signage projects were also completely designed and are ready to go. This is almost 14 miles!

Meeting adjourned at 7:30pm

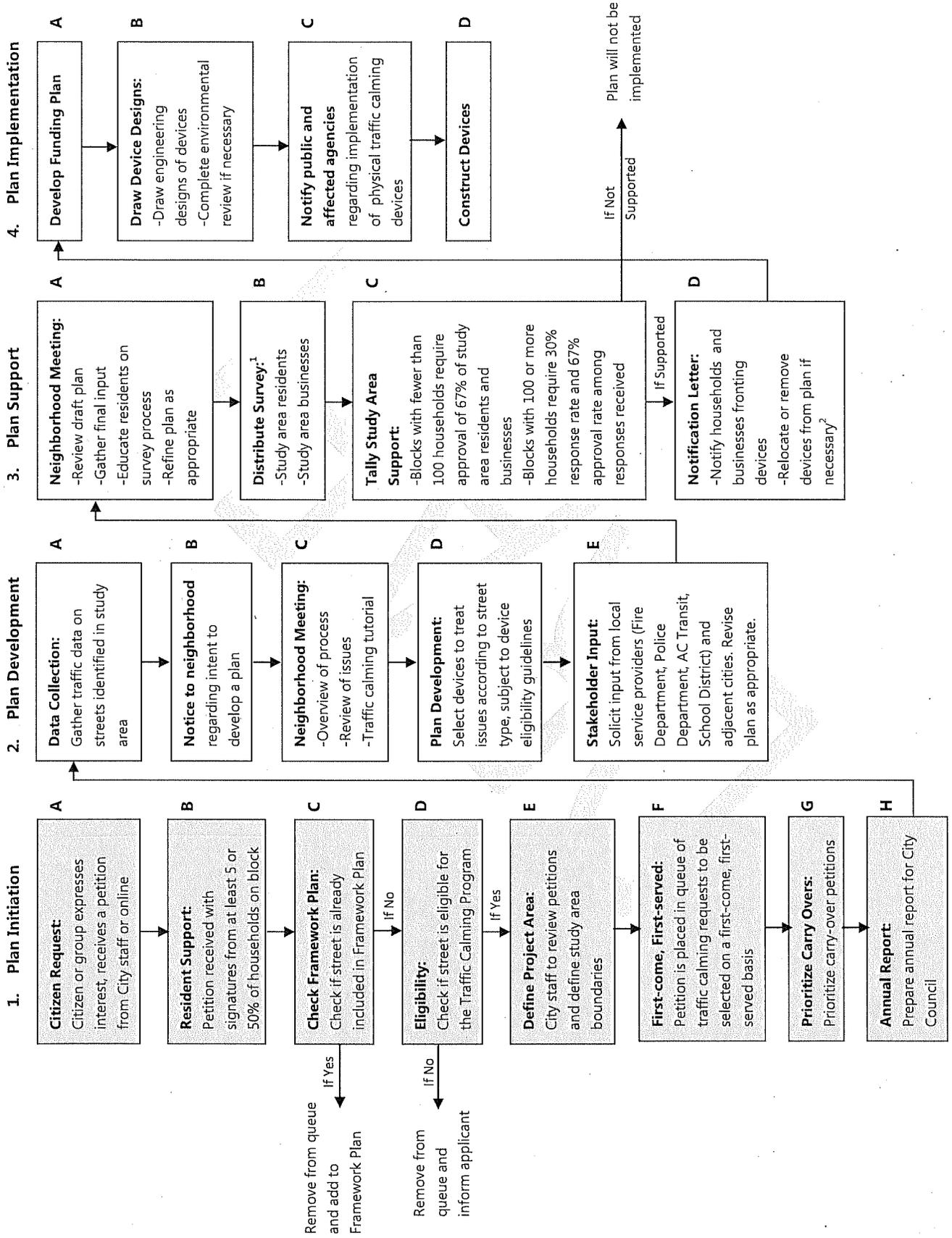
Minutes submitted by Carol Levine

#### ***Attachments***

Presentation and handout: Neighborhood Traffic Calming Program

Presentation: AC Transit BRT Project

Annual bike projects status update matrix and map



1. If block has fewer than 100 households residents will solicit feedback through door-to-door petition. If block has 100 or more households, City staff will mail out survey with response postcard.  
 2. If more than 33% of households and businesses fronting devices respond negatively to the notice, attempt to relocate devices. If no suitable location exists, remove device from the plan.

City of Oakland  
Traffic Calming Program



April 2012

FEHR PEERS

### Oakland Traffic Calming

**Agenda:**

- Introduction to Traffic Calming
- Work plan for Oakland
- Traffic Calming Process
- Toolbox of Devices
- Framework Plan
- Integration with Bicycle Boulevards

### What is Traffic Calming?

*...traffic calming involves changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes.*

### Work Plan for Oakland

**Phase I: Traffic Calming Manual**

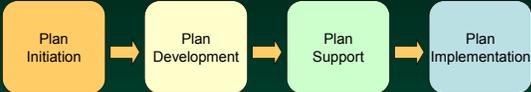
1. Develop traffic calming process
2. Develop traffic calming toolbox
3. Create draft Traffic Calming Manual

**Phase II: Framework Plan**

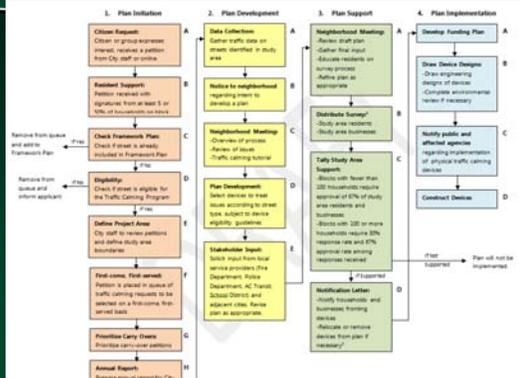
1. Identify traffic calming neighborhood boundaries
2. Develop neighborhood prioritization methodology
3. Establish measures of effectiveness

### Traffic Calming Process

**Four Steps:**



### Traffic Calming Process



### Step 1: Plan Initiation

<b>Who starts process?</b>	Individual Residents	Support required from at least 5 residents
<b>What streets are eligible?</b>	Local Streets	If not local must have less than 3,000 ADT and ≤ 25 MPH speed limit
<b>How is the project area defined?</b>	Defined by City Staff	May include adjacent blocks affected by the same issues
<b>How are applications processed?</b>	First-Come, First-Served	Prioritization process to be developed for carry-over petitions

### Step 2: Plan Development

<b>Data Collection</b>	<ul style="list-style-type: none"> <li>Traffic Speeds</li> <li>Traffic Volumes</li> <li>Collision History</li> </ul>
<b>Neighborhood Meeting</b>	<ul style="list-style-type: none"> <li>Review Issues</li> <li>Establish Goals</li> <li>Discuss Devices</li> </ul>
<b>Plan Development</b>	Determine specific number and location of devices
<b>Stakeholder Input</b>	<ul style="list-style-type: none"> <li>Fire Department</li> <li>Police Department</li> <li>AC Transit</li> <li>School District</li> </ul>

### Step 3: Plan Support

<b>Determine Plan Support</b>	<p>Blocks with fewer than 100 households:</p> <ul style="list-style-type: none"> <li>Distribute petition</li> <li>67% approval required</li> </ul>	<p>Blocks with 100 or more households:</p> <ul style="list-style-type: none"> <li>Mail survey</li> <li>30% response rate, 67% approval rate required</li> </ul>
<b>Plan Notification</b>	Notification letter sent to households and businesses fronting devices	Devices can be relocated or removed if necessary

### Step 4: Plan Implementation

Notify Public Agencies

Construct Devices



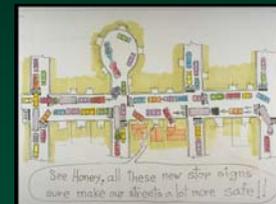
### Traffic Calming Toolbox

- Menu of commonly used traffic calming devices
- Each device has an **appropriate use**
- Devices vary in terms of effectiveness:
  - **Speed** reduction
  - **Volume** reduction
  - **Collision** reduction
  - Affects on emergency response vehicles



### A Matter of Choosing the Right Tools

1. Identifying the nature and extent of traffic-related problems on a given street or in given area
2. Selecting and implementing cost-effective measures for solving identified problems
3. Designing the device appropriately
4. Tool types: speed control measures and volume control measures



## Speed Control Measures

### Vertical Devices:



Speed Hump



Speed Lump



Raised Crosswalk



Speed Table



Raised Intersection

## Speed Control Measures

### Horizontal Devices:



Traffic circle



Roundabout (single-lane)



Realigned intersection

## Speed Control Measures

### Narrowing:



Bulbouts



Pedestrian island

## Speed Control Measures

### Non-physical devices:



Speed Feedback Sign



Edgeline Lane Striping



Signage



Speed Legend



Optical Speed Bar



High Visibility Crosswalks

## Volume Control Measures



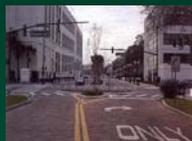
Full closure



Partial closure



Diagonal diverter



Forced-turn island



Turn-movement restrictions

## Framework Plan

### 1. Identify Traffic Calming Neighborhood Boundaries

- Traffic Patterns
- Physical Barriers
  - Freeways
  - Arterials
  - Parks
  - Water
- No more than 1 square mile



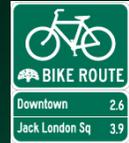
## Integration with Bicycle Boulevards



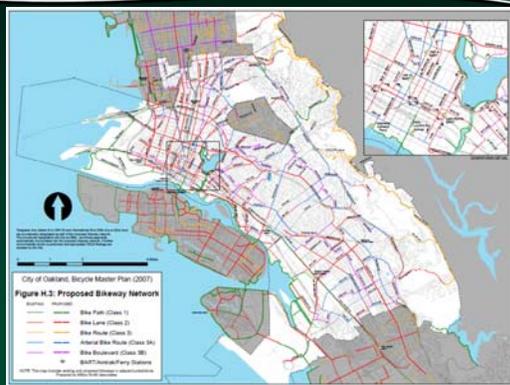
## Integration with Bicycle Boulevards

### Oakland Bicycle Boulevard Definition:

- A subset of bicycle routes
- Located on residential streets
- Prioritize through trips for bicyclists
- Reduce delay for bicyclists
- Incorporate traffic calming measures
- Bicycle actuation at traffic signals
- Marked with “sharrows” and signage



## Integration with Bicycle Boulevards



## Framework Plan

### 2. Develop Neighborhood Prioritization Methodology

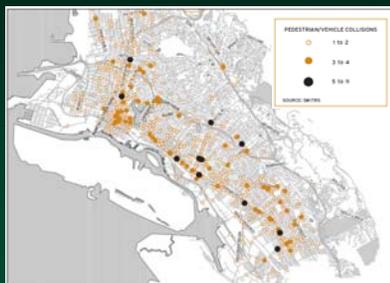
- Determine neighborhoods with greatest need for traffic calming
- Compile data
- Rank by extent of traffic issues



## Framework Plan

### 3. Establish Measures of Effectiveness

- Speed
- Volume
- Collisions

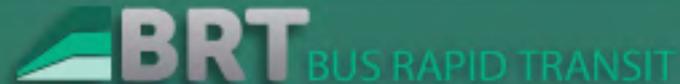


*Thank you!*

*Questions?*

# Bus Rapid Transit Update

Presented by AC Transit to Oakland Bicycle & Pedestrian  
Advisory Committee  
April 19, 2012



# BRT – CREATING A UNIVERSALLY ACCESSIBLE BUS SYSTEM

## What is BRT?

1. Dedicated lanes for buses and emergency vehicles (86% of route)
2. Stations with a rail-like appearance & function
3. Frequent service (every 5 minutes)
4. Stop spacing every 1/3 mile (closer than current Rapid)
5. Improvements to pedestrian environment, landscaping and safety



# BRT – CREATING A UNIVERSALLY ACCESSIBLE BUS SYSTEM

## Why BRT?

1. Improves riders' experience—safety, security, frequency, reliability, and accessibility
2. Improves street environment for all—landscaping, pedestrian & bicycle improvements, curb ramps, lighting
3. Improves passengers' ride —less congestion equals faster travel time
4. Improves financial sustainability—congestion costs money in to maintain the same level of service, and increased fares from more riders improves the bottom line!



# BRT – CREATING A UNIVERSALLY ACCESSIBLE BUS SYSTEM

## BRT Improves Transit Accessibility & Safety

1. Level Boarding between station platform & bus floor
2. All BRT stations ADA-compliant
3. Standard tactile pavement for safe circulation at stations
4. On board bike storage (3-4)



# BRT Level Boarding & Precision Docking



**Clockwise: Las Vegas, Netherlands, Cleveland, France**



# BRT – CREATING A UNIVERSALLY ACCESSIBLE BUS SYSTEM

## BRT Improves Safe Routes to Transit

1. Install new curb ramps at all street corners on corridor
2. Upgrade crosswalks at all minor intersections to high visibility
3. Install ≈80 pedestrian bulbs & 19 new pedestrian/bus bulbs
4. Repave roadway for smoother travel for all
5. Add new landscaped medians and pedestrian refuges
6. Install 25 new traffic signals
7. Install 15 new pedestrian-only signals
8. Upgrade all traffic signals with pedestrian countdowns
9. Install planned bike lanes as part of project (Telegraph, E. 12<sup>th</sup> & International)



# BRT – CREATING A UNIVERSALLY ACCESSIBLE BUS SYSTEM

## BRT Improves Neighborhood Safety

1. Monitored security cameras at all BRT stations
2. Emergency phones provided at all BRT stations
3. New high quality lighting installed at all BRT stations and adjacent sidewalks and crosswalks
4. Working with city to expand lighting to entire corridor



# BRT – CREATING A UNIVERSALLY ACCESSIBLE BUS SYSTEM

## BRT Improves Reliability and Saves Time for All Passengers

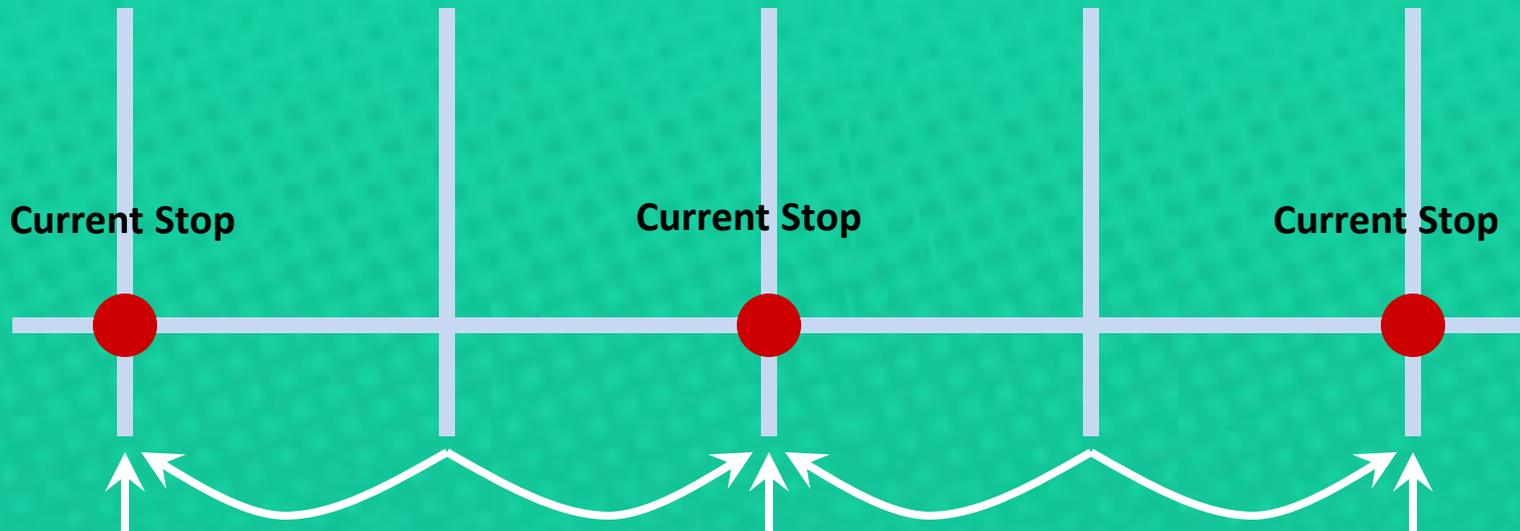
1. When buses run more reliably, it promotes a less rushed boarding experience for passengers
2. Buses do not speed, but spend less time stopped in congestion due to the dedicated lanes
3. Off-board fare payment facilitates boarding
4. Efficient station locations accommodates the most passengers while minimizing inconvenience to current passengers



# Stop Spacing

Existing

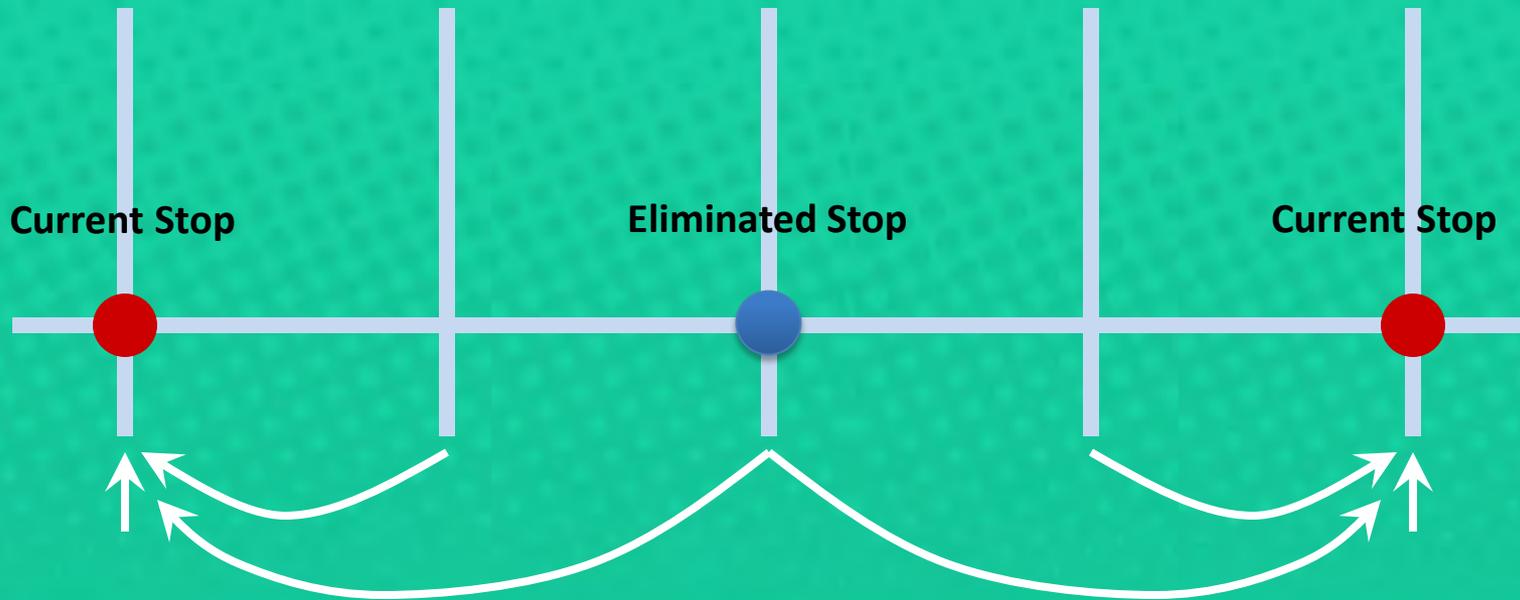
Stop every  $1/6^{\text{th}}$  mile (900 feet)



# Stop Spacing

BRT

Station every 0.3 mile (1,600 feet)



# Stop Spacing

**Some local bus stops removed with BRT**

**BRT Stations carefully located (land use, transit connections, ridership patterns)**

**85% of riders unaffected**

**They walk to the same station as today**

**15% of riders would need to go to a different station**

**Some passengers have no increase in walk distance**

**Some passengers walk further but, the walk distance is on average only one additional block**

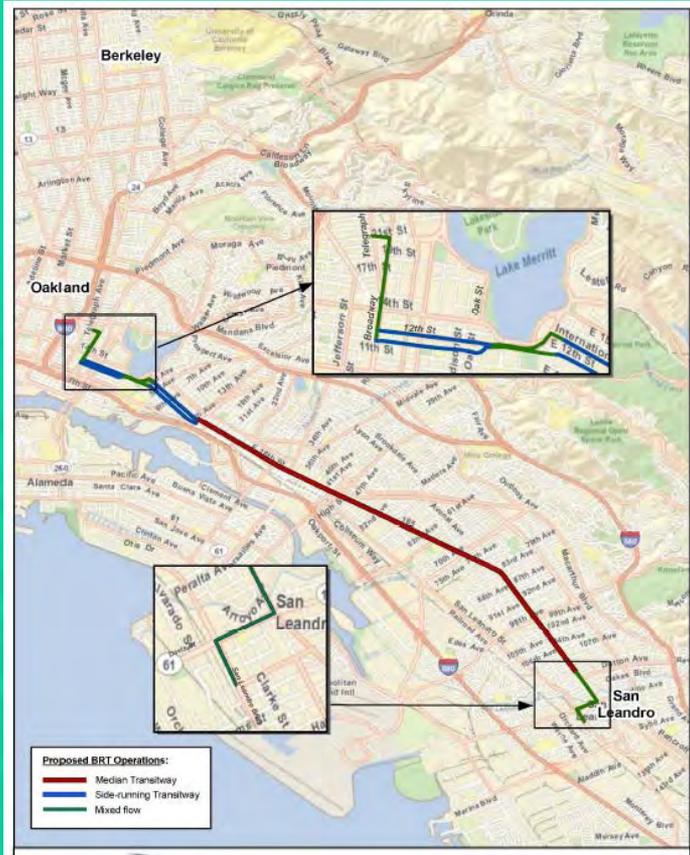


# Project Refinements Since 2010 City Action

- Inclusion of Downtown Oakland to San Leandro Alternative
- Use of dual sided door buses
  - Allows single center platform in median running BRT segments
  - Less parking displacement (approx. 135 fewer spaces displaced)
  - Increase amount of landscaped median
  - Retention of almost all existing median (both length and width)
- Less impact to traffic operations (by incorporating roadway modifications at several major intersections)



# Project Description – Downtown Oakland-San Leandro (DOSL) Alternative



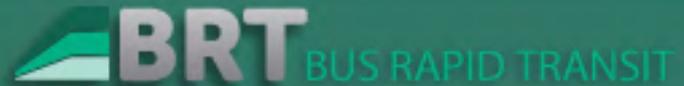
- 9.5 miles in Oakland and San Leandro
- Signal priority, off-board fare payment, level passenger boarding, air conditioning, safety and security features, pedestrian access improvements
- Dedicated bus lanes (81% of corridor)
- ≈\$158 million capital cost



# BRT with Dual Sided Buses



# 11<sup>th</sup> St and Harrison St





11TH STREET @ HARRISON STREET  
OAKLAND

EXISTING CONDITIONS



**BRT** BUS RAPID TRANSIT



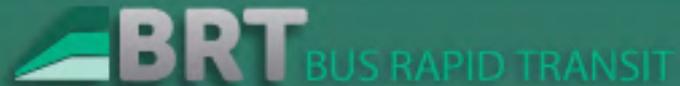
11th STREET @ HARRISON STREET  
OAKLAND

PROPOSED CURBSIDE STATION  
CANOPY OPTION C



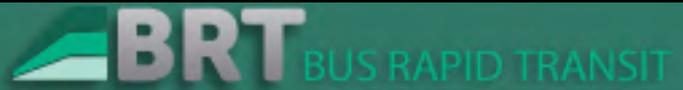
 **BRT** BUS RAPID TRANSIT

# International Blvd and 34<sup>th</sup> Ave





INTERNATIONAL BLVD @ 34TH AVE - OAKLAND LOOKING SOUTHWEST  
EXISTING





INTERNATIONAL BLVD @ 34TH AVE - OAKLAND LOOKING SOUTHWEST



**BRT** BUS RAPID TRANSIT

# International and 82nd





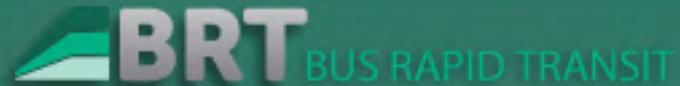
INTERNATIONAL BLVD @ 82ND AVE - OAKLAND LOOKING NORTHWEST  
EXISTING





INTERNATIONAL BLVD @ 82ND AVE - OAKLAND LOOKING NORTHWEST

# International Blvd and 99<sup>th</sup> Ave





INTERNATIONAL BLVD @ 99TH AVE -MITIGATED OAKLAND LOOKING NORTHWEST  
EXISTING



 **BRT** BUS RAPID TRANSIT



INTERNATIONAL BLVD @ 99TH AVE -MITIGATED OAKLAND LOOKING NORTHWEST



# International Blvd and Durant Ave





INTERNATIONAL BLVD @ DURANT AVE - OAKLAND LOOKING SOUTHWEST  
EXISTING



 **BRT** BUS RAPID TRANSIT



INTERNATIONAL BLVD @ DURANT AVE - OAKLAND LOOKING SOUTHWEST



 **BRT** BUS RAPID TRANSIT

# BRT Timeline

2014-2016, Construction & Operations

2012-2014, Detailed Design

2012, Final Environmental Study

2008-2011, Refine LPA

2003-2007, Draft Environmental Study

2001, Major Investment Study – LPA Adopted

*We Are Here*



City of Oakland Bicycle and Pedestrian Facilities Program  
Bikeway Striping Projects Tracking

Street	From	To	Length (miles)	Bikeway Type	Project Type	Design (% complete)	Feasibility	BPAC Review	AC Transit review	Community Outreach	Environmental clearance	City Council approval	Fund Source	Paving	Caltrans permit	Implementation
104th Ave	International Blvd	Link St	0.4	3A	new	100%	✓	x	✓	✓	✓	✓	2212	no	n/a	2012
105th Ave-2	Russett St	International Blvd	0.5	2	new	100%	✓	✓	✓	✓	✓	✓	pave	overlay	n/a	2012
12th St	Oak St	2nd Ave	0.4	2	new	100%	✓	x	✓	✓	✓	✓	5320	reconst	n/a	2012
14th St	Mandela Pkwy	Brush St	0.7	2	new	100%	✓	x	✓	✓		✓	pave	overlay	n/a	2012
16th Ave	E 12th St	Embarcadero	0.3	2	new	100%	✓	x	n/a	✓	✓	✓	2162	no	✓	2012
16th/Ardley Aves	23rd Ave	E 12th St	2.3	2/3B	new	100%	✓	x	✓	✓	✓	✓	2162	no	n/a	2012
32nd St/Hollis St	San Pablo Ave	Emeryville	1.0	2/3B	new	100%	✓	✓	✓	✓	✓	✓	2212	no	✓	2012
4th Ave	E 18th St	E 10th St	0.5	3B	new	100%	✓	x	n/a	✓	✓	✓	2212	no	n/a	2012
53rd St/54th St	San Pablo Ave	Adeline St	0.5	3B	new	100%	✓	x	n/a	✓	✓	✓	2609	no	n/a	2012
55th/Vicente/ Cavour	Telegraph Ave	Shafter Ave	0.3	3B	new	100%	✓	x	n/a	✓	✓	✓	2609	no	n/a	2012
69th Ave	International Blvd	San Leandro St	0.6	3B	new	100%	✓	x	n/a	✓	✓	✓	street	no	n/a	
Alameda Ave	Fruitvale Ave	Howard St	0.5	2	restripe	100%	n/a	x	n/a	n/a	n/a	n/a	pave	slurry	n/a	2012
Broadway-1	22nd St	I-580 overpass	1.0	2/3A	restripe	100%	n/a	x	✓	n/a	n/a	n/a	pave	slurry	✓	2012
Calaveras/Buell	MacArthur Blvd	MacArthur Blvd	0.2	2/3A	new	100%	✓	x	✓	✓	✓	✓	pave	yes	✓	2012
E 18th St	Lakeshore Ave	Park Blvd	0.2	3A	new	100%	✓	x	✓	✓	✓	✓	street	no	n/a	2012
Embarcadero Bridge Detour	2nd St / Oak St	Embarcadero/ 5th Ave	1.4	2/3A	new	100%	✓	x	n/a			✓	2211	no	pending	2014
Foothill Blvd-2	23rd Ave	Fremont Wy	1.9	3A	new	100%	✓	x	✓	✓	✓	✓	pave	slurry	n/a	2012
Genoa/52nd Sts	Adeline St	West St	0.7	3B	new	100%	✓	x	n/a	✓	✓	✓	2212	no	n/a	2012
Lakeshore Ave	MacArthur Blvd	Mandana Blvd	0.3	2/3A	new	100%	✓	x	✓	✓	✓	✓	2214	yes	✓	2013
Link St	Bancroft Ave	Sunnyside St	0.2	2	new	100%	✓	x	✓	✓	✓	✓	pave	overlay	n/a	2012
MacArthur Blvd	High St	Enos Ave	0.3	2/3A	new	100%	✓	✓	✓	✓	✓	✓	pave	yes	n/a	2012
MacArthur Blvd-5	Midvale Ave	High St	0.6	3A	new	100%	✓	x	✓	✓	✓	✓	2609	no	n/a	2012
MacArthur/ Excelsior	Park Blvd	Ardley Ave	1.1	2/3A	new	100%	✓	✓	✓	✓	✓	✓	2140	overlay	n/a	2012

KEY

[check] = completed | n/a = not applicable | BPAC = Bicycle Pedestrian Advisory Committee | x = pending BPAC request | Bikeway Type = 2 (bike lane), 3A/3B (sharrows)

City of Oakland Bicycle and Pedestrian Facilities Program  
Bikeway Striping Projects Tracking

Street	From	To	Length (miles)	Bikeway Type	Project Type	Design (% complete)	Feasibility	BPAC Review	AC Transit review	Community Outreach	Environmental clearance	City Council approval	Fund Source	Paving	Caltrans permit	Implementation
Piedmont Ave	MacArthur Blvd	Pleasant Valley Ave	0.7	2/3A	new	100%	✓	x	✓	✓		✓	pave	overlay	n/a	2013
San Pablo Ave	16th St	32nd St	1.2	3A	new	100%	✓	x	✓	✓	✓	✓	pave	slurry	✓	2012
Telegraph Ave-1	16th St	20th St	0.2	2/3A	new	100%	✓	✓	n/a	✓	✓	✓	street	no	n/a	
Webster/ Shafter	29th St	Berkeley	2.7	3B	new	100%	✓	x	n/a	✓	✓	✓	2609	no	✓	2012
105th Ave-1	Edes Ave	Russett St	0.3	2/3A	new	90%	✓	x	✓	✓	✓	✓		no	n/a	
10th St	Oak St-Kaiser	4th Ave-5th Ave	0.3	2	new	90%	✓	x	✓	✓		✓	2212	no	n/a	2013
40th St	Emeryville border	Webster St	0.8	3A	new	90%	✓	prelim	prelim	prelim		✓	2163	spot AC	n/a	2013
Ardley/23rd Ave	MacArthur Blvd	E 30th St	0.3	2/3A	new	90%	✓	x	✓	✓	✓	✓	2162	no	pending	2012
Harrison St	Grand Ave	Fairmount Ave	0.3	3A	new	90%	✓	x		✓	✓	✓	2162	no	n/a	2012
MacArthur Blvd	Telegraph Ave	Broadway	0.4	2/3A	new	90%	✓	x	n/a	✓	✓	✓	2163	no	n/a	2012
Shattuck Ave	45th St	55th St	0.5	2/3A	new	90%	✓	x	✓	✓	✓	✓	2212	no	✓	2013
Shattuck Ave	55th St	Woolsey St	0.8	2	new	90%	✓	x	✓	✓	✓	✓	pave	no	n/a	2013
10th St	Kaiser Drive	4th Ave	0.3	2	new	65%	✓	x	✓	✓		✓	2212	no	n/a	
Adeline St	47th St	61st St	0.7	2	new	65%	✓	x	n/a					no	n/a	
Alcatraz Ave	Dover St	College Ave	0.9	2/3A	new	65%	✓	x	n/a	✓		✓	2116	no	n/a	2013
Broadway	38th St	Broadway Ter	0.9	2/3A	new	65%	✓	x	pending	✓			pave	no	n/a	2013
College Ave	Berkeley	Broadway	1.0	3A	new	65%	✓	x	✓			✓		no		
E 12th St-2	14th Ave	Fruitvale Ave	1.4	2/3A	new	65%	✓	✓	pending	✓			2163	no	n/a	2013
Harrison/ Lakeside	Grand Ave	Madison St	0.4	2	new	65%	✓	✓			✓		5320		n/a	
MacArthur Blvd	Millsview Ave	Seminary Ave	0.3	2	new	65%	✓	x		✓			pave	yes	n/a	2013
10th St	Madison St	Oak St	0.1	2	new	35%		x						no	n/a	
8th St	Harrison St	Fallon St	0.4	2	new	35%		x							n/a	
9th St	Harrison St	Fallon St	0.4	2	new	35%		x							n/a	
Broadway	Broadway Ter	Keith Ave	0.8	2/3A	new	35%	✓	x		prelim				no		
Broadway/Caldecott/Tunnel	Brookside Ave	Berkeley	1.9	2	new	35%	✓	x		prelim		✓	2140	no		

KEY

[check] = completed | n/a = not applicable | BPAC = Bicycle Pedestrian Advisory Committee | x = pending BPAC request | Bikeway Type = 2 (bike lane), 3A/3B (sharrows)

Street	From	To	Length (miles)	Bikeway Type	Project Type	Design (% complete)	Feasibility	BPAC Review	AC Transit review	Community Outreach	Environmental clearance	City Council approval	Fund Source	Paving	Caltrans permit	Implementation
Harrison/Oakland	Hamilton Pl	Piedmont	1.1	2/3A	new	35%	✓	x		✓	✓	✓	2162	no		2013
Madison St	Lakeside Dr	4th St	0.8	2	new	35%		x								
Oak St	14th St	4th St	0.5	2	new	35%		x								
20th St	San Pablo Ave	Harrison St	0.5	2/3A	new	15%	✓	x				✓			n/a	
48th St	Shattuck Ave	Webster St	0.2	3B	new	15%	✓	x	n/a	✓		✓	2212	no	n/a	2013
Adeline St	3rd St	36th St	1.9	2	new	15%		x								
Grand Ave	Jean St	El Embarcadero	0.7	2/3A	new	15%	✓	x				✓				
W Grand Ave	Mandela Pkwy	Market St	0.6	2	new	15%		x							n/a	
Park Blvd	E 18th St	Excelsior Ave	1.1	2	new	0%		x								

**Design Completed (100%):** 20.7 roadway miles  
**Design in Progress (15% - 90%):** 19.5 roadway miles  
**Total:** 40.2 roadway miles

**Funding**  
 2116 US Department of Transportation  
 2140 Caltrans (BTA, SR2S, or Caldecott settlement)  
 2162 TDA Article 3  
 2163 MTC (SR2T or paving)  
 2166 BAAQMD  
 2212 Measure B Ped/Bike Local (ACTIA)  
 2214 Measure B Ped/Bike Grant (ACTIA)  
 2609 Federal Stimulus - EECBG (DOE)  
 5320 Measure DD  
 pave Included in paving project  
 street Included in streetscape project

**Design Completion**

100%	Plans packaged for construction
90%	Review (field, internal, external)
65%	Markings and details
35%	Lane configuration
15%	Project set-up (limits, viewports, street widths)

**Color Coding**

 Pending task  
 Priority task

**KEY**

[check] = completed | n/a = not applicable | BPAC = Bicycle Pedestrian Advisory Committee | x = pending BPAC request | Bikeway Type = 2 (bike lane), 3A/3B (sharrows)

Corridor	From	To	Length	Design	BPAC Review	Community Outreach	Funding Source	Cost Estimate	Implementation
16th/Ardley Aves	Embarcadero	MacArthur Blvd	2.8	100%	x	✓	2162	\$ 15,680	2012
27th/Bay/Hollis/32nd/San Pablo	Grand Ave/Bay Pl &	Emeryville	3.2	100%	x	n/a	2212/2162	\$ 17,920	2012
Broadway Corridor	14th St	41st St	2.4	100%	x	✓	2166	\$ 13,440	2012
MacArthur Blvd	Lakeshore Ave	Buell St	5.3	100%	x	n/a	2166	\$ 29,680	2012
Bay Trail (on-street)	Horton St	High St	7.4	90%	x	n/a	2162	\$ 41,440	2012
Grand Ave	Market St	El Embarcadero	1.9	75%	x	n/a		\$ 10,640	2013
Foothill/Bancroft	Lakeshore Ave	San Leandro	7.5	55%	x	n/a		\$ 42,000	2013
Shattuck Ave/48th St	Berkeley	Telegraph/Webster	1.6	55%	x	✓		\$ 8,960	2013
Harrison/Oakland	Piedmont border	Grand Ave	1.8	15%	x	✓		\$ 10,080	2013

**Design Completed (100%):** 13.7 roadway miles  
**Design in Progress (> 0%):** 20.2 roadway miles  
**Total (> 0%):** 33.9 roadway miles

**Color Coding**  
 Pending task  
 Priority task

**Design Status Work Completed**

100%	Final work order
90%	Final project map and installation locations
75%	Field verification
55%	Revised project map and field review sheet
35%	Preliminary project map (sign locations, sign messages)
15%	Overview map (project boundaries, supported destinations)

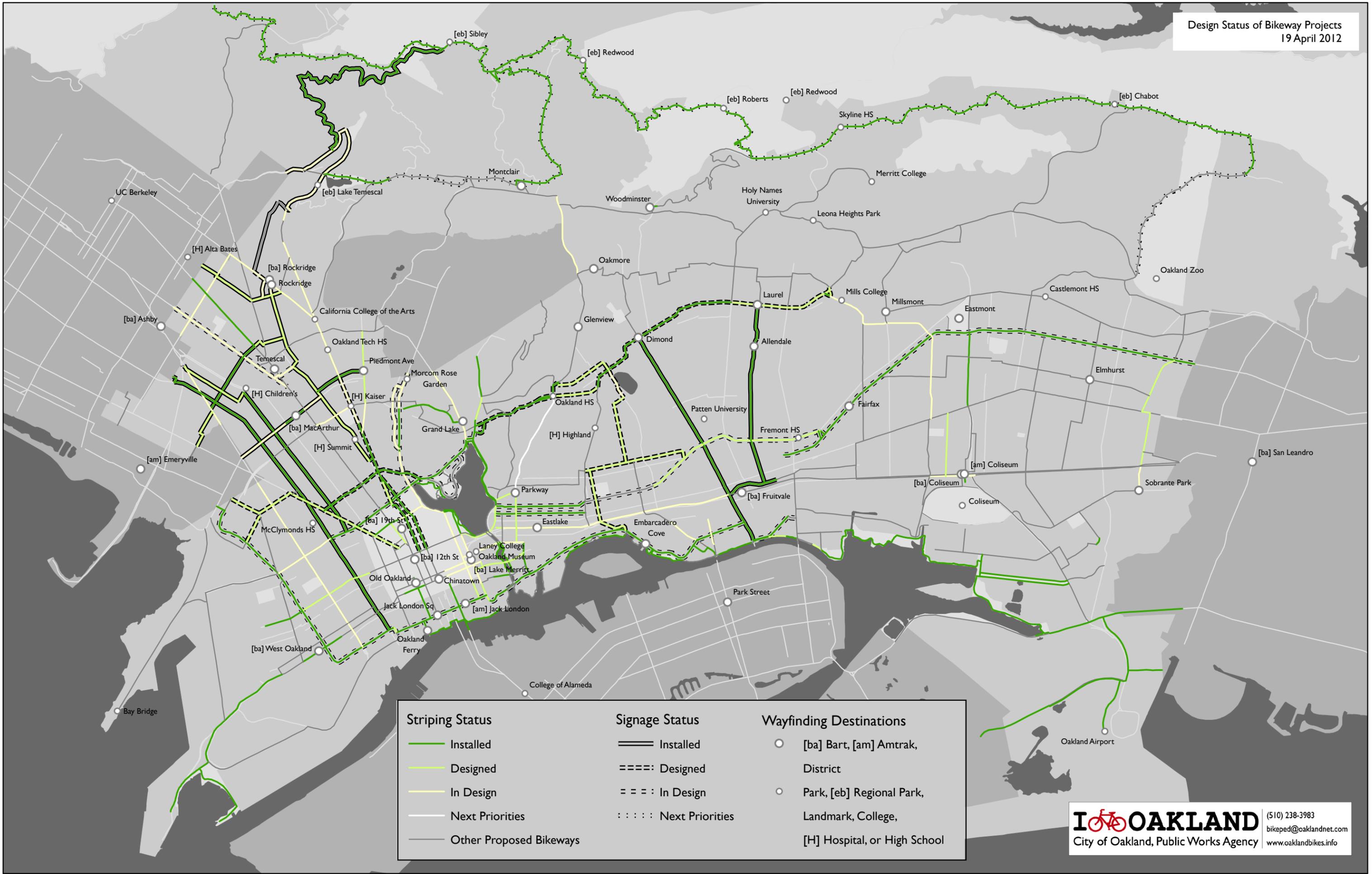
**Funding**

2140	Caltrans (BTA)
2162	TDA Article 3
2163	Safe Routes to Transit (MTC)
2166	BAAQMD
2212	Measure B Ped/Bike Local (ACTIA)
2230	State Gas Tax (CIP)
2609	Federal Stimulus (DOE)

Future Projects (in priority order)									
Grizzly Peak / Skyline / Golf Links	Berkeley	Mountain Blvd	15.3	0%				\$ 85,680	
Mountain/Shepherd Canyon	Broadway	Skyline Blvd	4.4	0%				\$ 24,640	
Lakeshore/Lake Merritt Blvd (formerly)	Piedmont border	Oak St	2.4	0%				\$ 13,440	
E 18th St/4th/5th Aves	Lakeshore Ave	Embarcadero	1.1	0%				\$ 6,160	
14th St	Wood St	1st Ave	2.1	0%				\$ 11,760	

**KEY**

Design = % completed | [checkmark] = completed | n/a = not applicable  
 prelim = preliminary | BPAC = Bicycle Pedestrian Advisory Committee | x = pending BPAC request



Striping Status	Signage Status	Wayfinding Destinations
Installed	Installed	[ba] Bart, [am] Amtrak, District
Designed	Designed	Park, [eb] Regional Park, Landmark, College, [H] Hospital, or High School
In Design	In Design	
Next Priorities	Next Priorities	
Other Proposed Bikeways		