



LET'S OAKLAND

2019 OAKLAND BIKE PLAN



City of
Oakland

Department of
Transportation

LET'S OAKLAND

ACKNOWLEDGMENTS

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01

THE VISION

p. 1

Vision statement, the equity framework, and policies and goals

02

BIKING IN OAKLAND TODAY

p. 17

Who bikes now, who wants to bike more, and what are the barriers to biking?

03

COMMUNITY VOICE

p. 41

What we heard and OakDOT's collaboration with 6 community partners



04

RECOMMENDED BICYCLE PROGRAMS

p. 61

Developing
and supporting
programs that invest
in Oaklanders

05

RECOMMENDED BICYCLE PROJECTS

p. 77

Creating a local,
comfortable, and
connected bicycle
network

06

NEXT STEPS

p. 123

OakDOT's strategy
for carrying out the
Bike Plan

APPENDIX + GLOSSARY

p. 143

[Community Survey](#)

[Public Outreach
Summary](#)

[Proposed Project List](#)

[Online Map Tool Input](#)



Photo: Clane Gessel Photography





01

The Vision

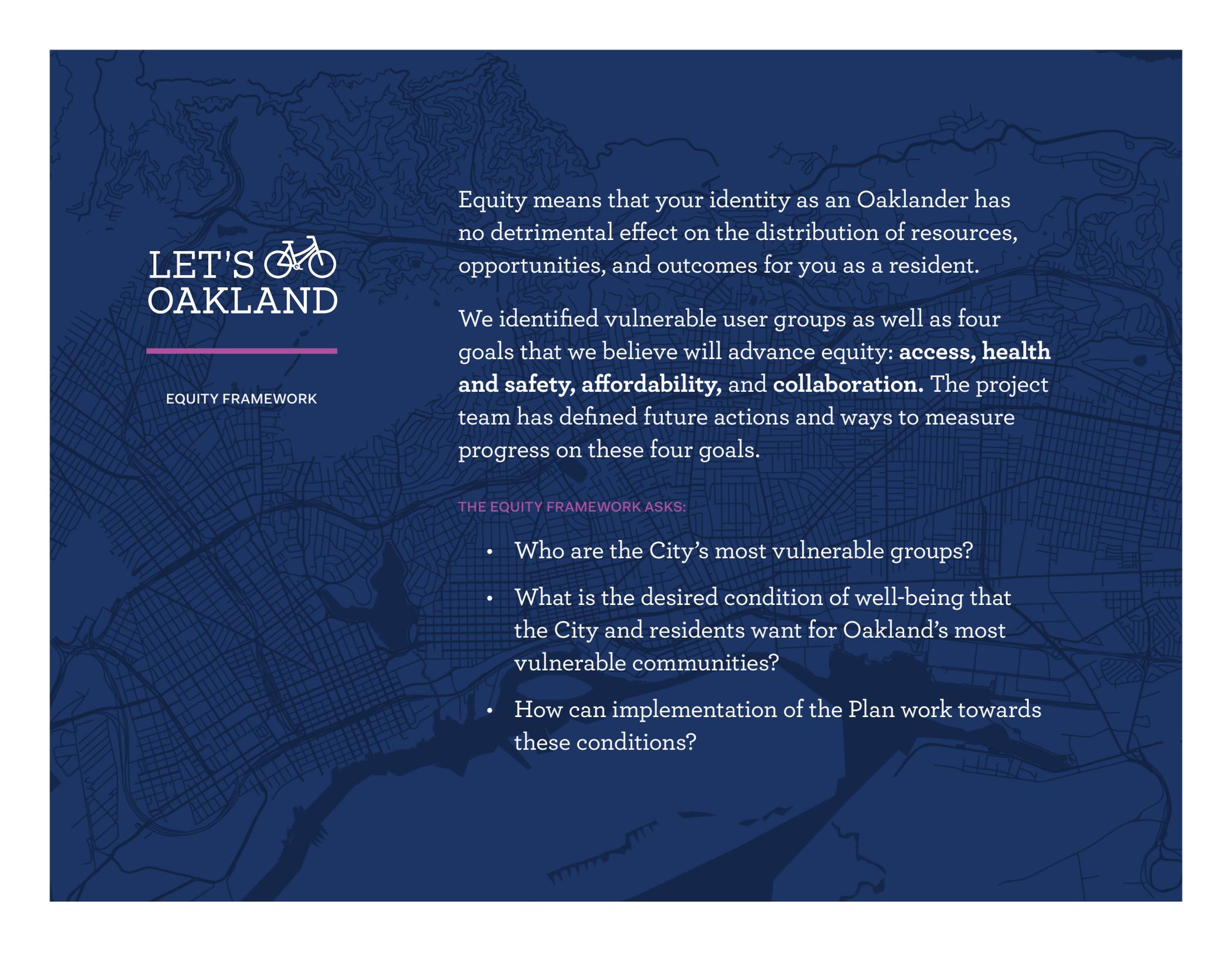
Oakland will be a bicycle-friendly city where bicycling provides **affordable, safe, and healthy mobility** for all Oaklanders.

New projects and programs will work to enhance existing communities and their mobility needs.



This Plan's New Approach

- **A representative survey** to learn about Oaklanders' experience biking
- **An Equity Framework** to guide plan analysis, plan recommendations and engagement
- **New engagement strategies** including partnering with community-based organizations to reach underrepresented Oaklanders, host community workshops, and help guide the plan recommendations
- **New outreach strategies** including the use of digital engagement tools and in-person mobile workshops to meet people where they're at, across the city



LET'S OAKLAND

EQUITY FRAMEWORK

Equity means that your identity as an Oaklander has no detrimental effect on the distribution of resources, opportunities, and outcomes for you as a resident.

We identified vulnerable user groups as well as four goals that we believe will advance equity: **access, health and safety, affordability, and collaboration**. The project team has defined future actions and ways to measure progress on these four goals.

THE EQUITY FRAMEWORK ASKS:

- Who are the City's most vulnerable groups?
- What is the desired condition of well-being that the City and residents want for Oakland's most vulnerable communities?
- How can implementation of the Plan work towards these conditions?



Focusing on Disadvantaged Groups

Some groups of Oaklanders face greater vulnerabilities and disparities in the transportation system.

The more groups a person identifies with, the greater the disparity.

These groups include:

- People of color
- Women
- People of no- and low-income
- People with limited English proficiency
- People with disabilities
- Children and seniors
- Single parents
- People who don't own cars or do not drive



“

Bicycling is about more than just commuting. It has a wide array of uses and benefits.”

OUTDOOR AFRO LISTENING
SESSION PARTICIPANT



GOAL

Access

Let's Bike Oakland will support increased access to neighborhood destinations such as grocery stores, libraries, schools, recreation centers, bus stops and BART.

ASKING THE RIGHT QUESTIONS

- Does the Plan prioritize the needs and trip patterns of vulnerable users?
- Does the Plan address barriers so that vulnerable populations can take part in or enjoy the improvements?
- Does the Plan help support and not impede public transit service?
- Does the Plan serve people with disabilities?

HOW DO WE MEASURE PROGRESS?

- Increase the density of low-stress bikeways so that 90% or more of Oakland lives within 1/4 mile of a low stress bikeway
- Double the overall share of bicycle commuters from 5% to 10%
- Increase share of women bicycle commuters to at least 50% of all bicycle commuters





OBJECTIVE

ACTIONS

A Increase access to jobs, education, retail, parks and libraries, schools, recreational centers, transit, and other neighborhood destinations

- 1 Build low-stress bicycle facilities that provide access to local destinations in every neighborhood in Oakland.
- 2 Increase the supply of bicycle parking at neighborhood destinations like schools, medical centers, grocery stores, and government offices.
- 3 Evaluate the potential to combine transportation-impact fees for new developments within the same neighborhood to provide continuous, high-quality bicycle facilities.

B Address barriers so that vulnerable populations can take part in the improvements

- 1 Work to increase local bicycle businesses owned by people of color in underserved neighborhoods, consistent with the City's [Economic Development Strategy \(2018-2020\)](#).
- 2 Provide fix-it and hydration stations at all OPL branches.
- 3 Provide free basic bicycle maintenance training and bicycle tool lending at Oakland Public Library (OPL) branches to empower Oaklanders to fix bicycle issues for minimal cost.
- 4 Make OPL branches neighborhood bike shops by adding staff positions as bike mechanics. OPL will act as a small business incubator to provide skills and job experience.

C Support public transit service

- 1 Design bikeways that provide first and last mile connections to transit.
- 2 Work with AC Transit to increase the percentage of its fleet with racks that accommodate three bicycles.
- 3 Install more secure, long-term bicycle parking at Oakland's BART stations, Amtrak stations, transit center, and ferry terminal.

D Reduce travel times for low-income households

- 1 Increase the overall mileage of the low-stress bicycle network in low-income neighborhoods by 25% by 2025.

E Prioritize the needs and trip patterns of vulnerable populations

- 1 Prioritize the construction of bikeways that address disparities and close gaps in the bicycle network between neighborhoods.

F Serve people with disabilities

- 1 Ensure that bikeway designs do not create additional barriers for people with disabilities.
- 2 Expand bike share opportunities for people with physical disabilities.



GOAL

Health & Safety

Let's Bike Oakland will empower Oaklanders to live a more active lifestyle by providing a network of safe and comfortable bikeways for everyone to enjoy.

ASKING THE RIGHT QUESTIONS

- Will the Plan help reduce crashes and fatalities while increasing opportunities for physical activity among vulnerable populations?
- Will the Plan help address discrimination or racially-biased policing?
- Does the Plan help reduce air pollution, asthma rates, and greenhouse gas emissions within vulnerable populations?

HOW DO WE MEASURE PROGRESS?

- Eliminate severe and fatal bicyclist injuries on Oakland streets
- Increase percentage of K-12 students receiving bicycling education
- Increase outreach and education events in disadvantaged neighborhoods by 20%
- Decrease police stops for people biking in Oakland and percentage of stops of people of color by 50%





OBJECTIVE

ACTIONS

A Reduce bicycle crashes through safe and comfortable bikeways

- 1 Prioritize quick implementation of bicycle facilities on Oakland's high-injury network to rapidly address known safety issues.
- 2 Adopt bikeway design guidelines that guide planners and engineers in designing streets with separation between bicyclists and drivers.
- 3 Fund safety education programs for both people driving and people biking that encourage safe behaviors.
- 4 Adopt a City Council resolution authorizing school zone speed limits as low as 15 MPH.

B Promote an active lifestyle that includes bicycling

- 1 Dedicate City staff to develop an open streets program, such as Oaklavia, that encourage Oaklanders to walk and bike together on city streets.
- 2 Fund programs that incorporate bicycling into physical education programs at Oakland Unified School District schools.

C Reduce air pollution, asthma rates, and greenhouse gas emissions

- 1 Build a bicycle network that encourages Oaklanders to chose modes of transportation other than driving by providing low-stress facilities and integrating bikes with transit.
- 2 Achieve a 20% reduction in vehicle miles traveled annually as residents, workers, and visitors meet daily needs by walking, bicycling, and using transit, consistent with the City's [Energy and Climate Action Plan \(2018\)](#).

D Eliminate discrimination or racially-biased policing of bicyclists

- 1 Continue annual release of police stop data and break out police stops by mode: motor vehicle, bicycle, and pedestrian. Include stop data in all annual bicycling reports, reporting disparities in stops by race and sex.
- 2 Analyze police stop data with added reasons that stops were made. Adopt changes to operational policies that help reduce disparities in who is stopped by Oakland Police while biking.
- 3 Convene conversations about bicycle stops with the Oakland Police Department, Department of Race and Equity, Bicycle and Pedestrian Advisory Commission (BPAC) policing subcommittee, and community partners, based on annual police stop data. Explore racial biased metrics for officers to be used in performance reviews and non-punitive approaches to safety enforcement.
- 4 Configure Oak311 to allow residents to report non-emergency bicycle collisions and near misses for instances that do not need immediate Police attention.



GOAL

Affordability

Let's Bike Oakland will work to reduce the burden of household transportation costs.

ASKING THE RIGHT QUESTIONS

- Does the Plan help reduce the burden of transportation costs?
- Is it likely to reduce transportation costs in the long run (e.g. by reducing the need for vehicle ownership or for parking in new developments)?

HOW DO WE MEASURE PROGRESS?

- Increase the density of low-stress bikeways so that 90% or more of Oakland lives within 1/4 mile of a low stress bikeway
- Household transportation costs for Oaklanders decreases or remains stable
- All major transit stops are connected by bicycle facilities





OBJECTIVE

ACTIONS

A Reduce the overall household costs for all Oaklanders

- 1 Build a bicycle network that provides low-stress bicycle facilities for people in low-income neighborhoods, encouraging the use of bicycling as low-cost transportation.
- 2 Build bikeways that provide first and last mile connections to public transit stations and major bus stops.

B Reduce long-term transportation costs by reducing the need for vehicle ownership or for parking in new developments

- 1 Update the Oakland Planning Code to eliminate parking minimums.
- 2 Revise menu of Transportation Demand Management options to include bike share passes, fix-it stations, and hydration stations.
- 3 Update Oakland's Bicycle Parking Ordinance to determine whether they reflect the type and quantity of parking needed in new developments and major renovations.
- 4 Update the Oakland Planning Code to require end-of-trip-facilities, such as showers and changing rooms, in major non-residential developments.
- 5 Revise menu for affordable housing developer options to include discounts for bike sharing or bike purchase from local bike shops.



GOAL

Collaboration

Let's Bike Oakland will foster an increased role for the community in the planning process and improve trust that the City will fulfill its promises.

ASKING THE RIGHT QUESTIONS

- Do vulnerable people have confidence that the government will build what they ask?
- Does government follow through?
- Do vulnerable populations feel like they have adequately participated in the City's plans?
- Were community members consulted from the beginning and throughout the planning process?

HOW DO WE MEASURE PROGRESS?

- City follows outreach guidelines for every major implementation project
- Increase outreach and education events in disadvantaged neighborhoods by 20%
- Conduct and publish results of citywide bicycling survey and all project specific studies





OBJECTIVE

ACTIONS

A Increase the participation of vulnerable groups through the planning process

- 1 Work with community-based organizations to host more outreach events and interact with more people as part of future planning processes.
- 2 Ensure project-based outreach for any Plan recommendations follows inclusive public engagement practices and that all project and program materials are translated.
- 3 Track demographic information at education and outreach events and compare with the demographics of Oakland as a whole.

B Government follows through on project commitments

- 1 Dedicate a percentage of the transportation impact fee program to the implementation of bikeway projects.
- 2 Coordinate the implementation of bicycle facilities with the City's paving program to deliver bicycle enhancements cost effectively and improve roadway condition.
- 3 Develop a maintenance plan that specifies timeline for repainting of roadway markings, sweeping equipment and schedule, specifications for vertical elements, and opportunities for coordination with paving projects.
- 4 Pursue funding for additional staff resources to follow through with community projects.

C Oaklanders believe the City will build what they ask for

- 1 Implement short-term, high visibility bicycle projects in collaboration with community-based organizations that can be applied throughout the Town.
- 2 Prioritize long-term capital investment in vulnerable communities.
- 3 Increase funding for Paint the Town program that includes the community in the design and implementation of pedestrian and bicycle facilities.
- 4 Implement statistically significant citywide survey on a regular basis and study the effectiveness of each program and major bicycle infrastructure projects.



How does transportation infrastructure impact affordability?

In the past, the City has not invested in bike infrastructure in East Oakland at the same rate as other parts of the City. As part of this plan, OakDOT intends to correct the disparity of bike investments in disadvantaged communities. The investment of bike infrastructure in East Oakland is happening as housing unaffordability continues to put pressure on Oaklanders. We heard some Oaklanders voice concerns that investments in bike lanes will contribute to displacement, gentrification, and housing unaffordability. We also heard that improved bike networks can help reduce transportation costs as cost of living in Oakland increases. This plan attempts to be sensitive to these concerns and to promote a transparent and collaborative decision making process.

COMMUNITY CONVERSATIONS



Oakland Bike Plan community partners helped facilitate conversations with Oakland residents around creating an authentic processes of engaging residents, so that bike lanes and other investments in the community serve existing residents and their mobility needs.

More than any other area, half of survey respondents in West Oakland felt that new bike lanes are a sign that a neighborhood is about to get less affordable.

How will this plan respond to this concern:

- 1. Serve the mobility needs of existing and long-term residents*
- 2. Create processes for community-led design that develops projects and programs that are tailored to neighborhood needs*
- 3. Help the City pursue a comprehensive approach to housing and transportation affordability*



“

Seeing other women bike around Oakland is one of the best visual cues that can encourage other women to start biking.”

OAKLAND RESIDENT, OUTDOOR AFRO
LISTENING SESSION





Biking today in Oakland is fun, it's brave, it's necessary, and a lot of people want to bicycle more often.

02

Biking in Oakland Today



Who bikes in Oakland?

The City surveyed a random sample of Oaklanders to learn about their behaviors and perceptions of bicycling. 1,688 residents took the survey, statistically representative of Oakland demographics, with at least 100 interviews collected in each of 8 geographic zones.



The U.S. Census and BART Station Profile Study tells us that 5% of Oaklanders bike to work regularly. The data from the survey conducted for this Plan confirms that 5% of Oaklanders consider the bicycle their main form of transportation and 6% consider it an additional form of transportation. The survey also shows us that many more Oaklanders (around 20%) bike at least once a month for their transportation needs, including but not limited to commuting to work.



HOW ARE WE USING THIS DATA?

The statistically representative sample of Oaklanders surveyed helped us get a more well-rounded understanding of who is bicycling in Oakland today, and their perceptions of bicycling. At the same time, we understand relying solely on quantitative data over the knowledge and experiences of marginalized communities can lead to incomplete decision-making. We worked closely with community partners through this planning process to clarify, dispute, and enhance the data from this survey in order to prioritize the knowledge and contribution of community residents.



What Oaklanders say about biking...

20%

TYPICALLY
RIDE A BIKE

..... to get to



WORK,
SCHOOL,
AND OTHER PLACES

72%

..... feel biking would



REDUCE THE
AMOUNT OF
MONEY

THEY SPEND ON
TRANSPORTATION



ACROSS ALL
CATEGORIES OF RACE
AND ETHNICITY,

..... the

MAJORITY OF
OAKLANDERS

..... see

PEOPLE SIMILAR
TO THEM BIKING
IN OAKLAND

29%

BIKED
IN THE PAST



57%

..... would like to



RIDE A BIKE
MORE

THAN THEY DO NOW

ACROSS ALL
CATEGORIES OF RACE
AND ETHNICITY,

..... Oaklanders believe

THEIR NEIGHBORHOODS
WOULD BE BETTER PLACES
TO LIVE

..... if

MORE PEOPLE
RODE BICYCLES



Types of Bicyclists in Oakland

To better understand the demand for bicycling in Oakland, we've generally classified Oaklanders into groups based both on their current bicycling behavior and their bicycling comfort level on different roadway conditions. This allows us to see who is biking and their current comfort level so we can tailor new bike facilities to encourage more people to ride.

2%
STRONG AND FEARLESS

9%
EXCITED AND CONFIDENT

44%
CURRENTLY NOT INTERESTED

45%
INTERESTED BUT CONCERNED



STRONG AND FEARLESS

This group is willing to ride a bicycle on any roadway regardless of traffic conditions. Comfortable taking the lane and riding in a vehicular manner on major streets without designated bicycle facilities.



EXCITED AND CONFIDENT

This group consists of people riding bicycles who are confident riding in most roadway situations but prefer to have a designated facility. Comfortable riding on major streets with a bike lane.



INTERESTED BUT CONCERNED

This group is more cautious and has some inclination towards bicycling, but is held back by concern over sharing the road with cars. Not very comfortable on major streets, even with a striped bike lane, and prefer separated pathways or low traffic neighborhood streets.



CURRENTLY NOT INTERESTED

This group comprises residents who currently are not interested at all in bicycling, may be physically unable or don't know how to ride a bicycle, and they are currently unlikely to adopt bicycling in any way.



“

Programs, especially in ‘underserved’ areas need to be built with the community not just for the community. We do not want handouts. We want programs that bring long-term benefits to the community. We want ownership.”

OAKLAND RESIDENT,
EAST OAKLAND COLLECTIVE WORKSHOP



Bicycle Facility Types

Existing bikeways in Oakland provide a base from which the City can propose a low stress bikeway network. Read about the low stress bike facilities that this Plan centers on page 80.



Shared Use Path

- Paths shared by people walking and biking completely separated from motor vehicle traffic
- Comfortable for people of all ages and abilities
- Typically located within or along parks, roadway medians, rail corridors, or bodies of water
- Oakland refers to this as Class 1 Bikeway



Protected Bike Lane

- On-street bike lane separated from motor vehicle traffic by curb, median, planters, parking, or other physical barrier
- Oakland refers to this as Class 4 Bikeway



Buffered Bicycle Lane

- Dedicated lane for bicycle travel separated from traffic by a painted buffer
- Adding a buffer provides additional comfort and space from motor vehicles and/or parking
- Oakland refers to this as Class 2B Bikeway



Bike Lane

- Dedicated lane for bicycle travel adjacent to traffic
- Oakland refers to this as a Class 2 Bikeway



Neighborhood Bike Route

- Calm local streets where bicyclists have priority, but share roadway space with automobiles.
- Includes shared roadway bicycle markings on pavement and additional traffic calming measures like speed humps or traffic diverters to keep streets comfortable for bicyclists
- Comfortable for bicyclists with wider range of comfort levels
- Oakland refers to this as Class 3B Bikeway



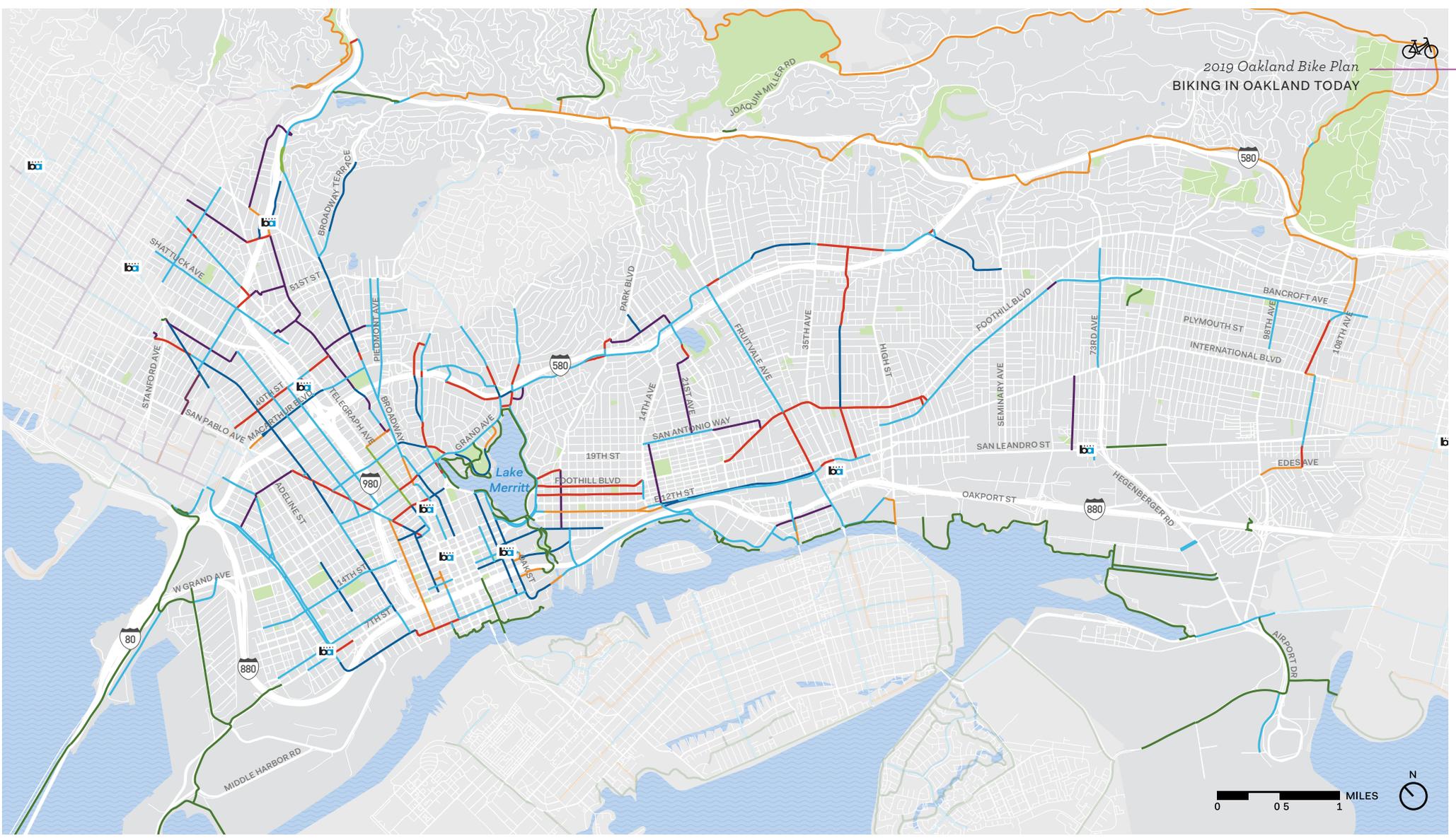
Bike Route

- Signed bike route, sharing the roadway with motor vehicles
- Can include pavement markings
- Comfortable for more confident people biking
- Used when space for bike lane may not be feasible
- Oakland refers to this as a Class 3 Bikeway



Arterial Bike Route

Arterial Bike Routes, which require bicyclists to share lanes with cars on busy streets, will no longer be proposed.



2019 Existing Bicycle Network

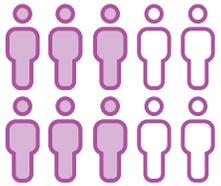
- Path
- Protected Bike Lane
- Buffered Bike Lane
- Bike Lane
- Neighborhood Bike Route
- Bike Route
- Arterial Bike Route
- Park
- Oakland City Limits
- b BART Station



Who wants to bike more?

Whether it is for work, errands, or recreation, **Oaklanders want to bicycle more than they do now.**

The survey asked participants if they were interested in traveling by bike for their daily commute, errands, and other activities more than they do now. People in the flat areas of Oakland were more likely to respond yes.

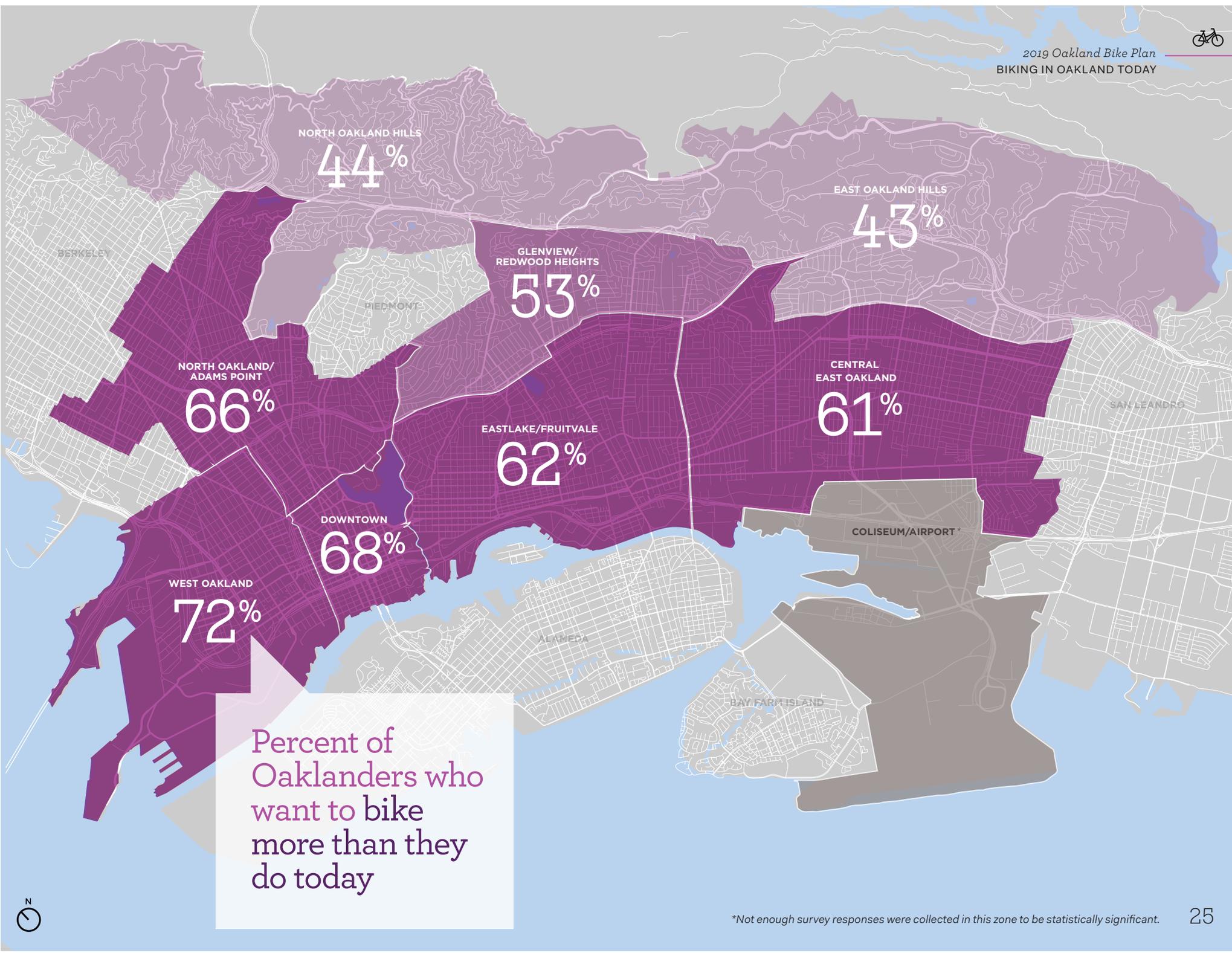


6 in 10 OAKLAND RESIDENTS

..... indicated that

**THEY WOULD LIKE TO
BIKE MORE
THAN THEY DO TODAY**





Percent of Oaklanders who want to bike more than they do today



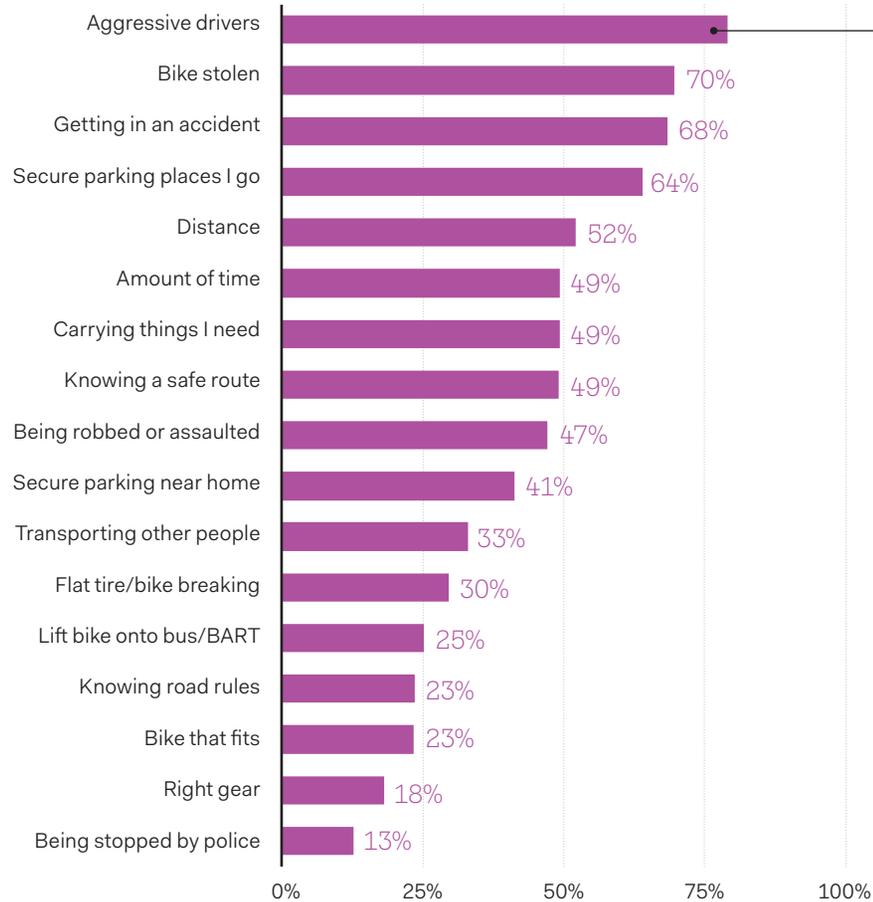
*Not enough survey responses were collected in this zone to be statistically significant.



Why are people not biking more today?

Feeling unsafe on the road, bike theft, and distance were all top concerns to biking today in Oakland.

BIGGEST CHALLENGES FOR PEOPLE BIKING AROUND OAKLAND



79%

of Oaklanders cited
AGGRESSIVE DRIVERS
as a
major concern



“Safety is the biggest issue.”

OUTDOOR AFRO LISTENING SESSION

“Fix potholes! There are so many everywhere. I’ve been thrown off my bike before because of potholes.”

OAKLAND RESIDENT, OAKLAND FIRST FRIDAYS

“I stopped biking because people driving were running stop signs and signals.”

OAKLAND RESIDENT, GRAND LAKE FARMERS MARKET.

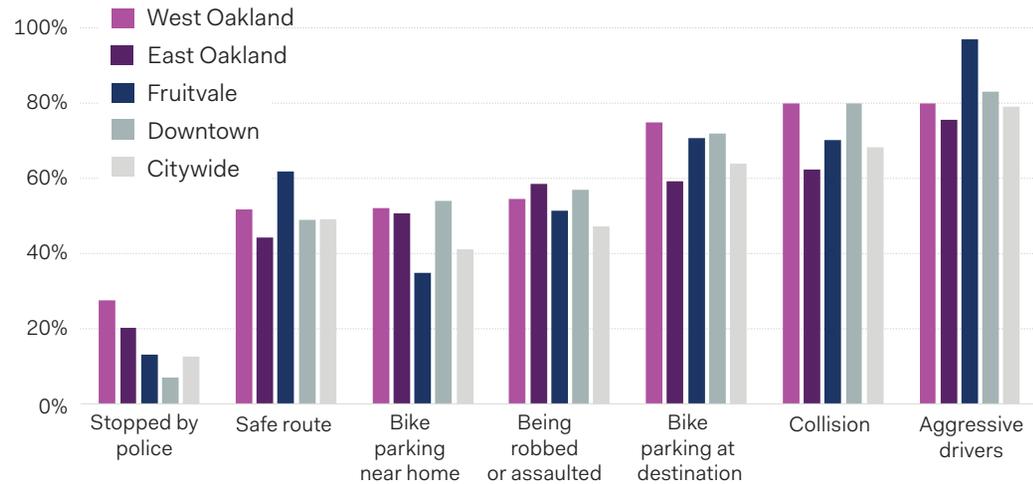


What other barriers do Oaklanders face when bicycling?

There are socioeconomic, cultural, and discriminatory barriers people face to access bicycling, and public spaces more generally.

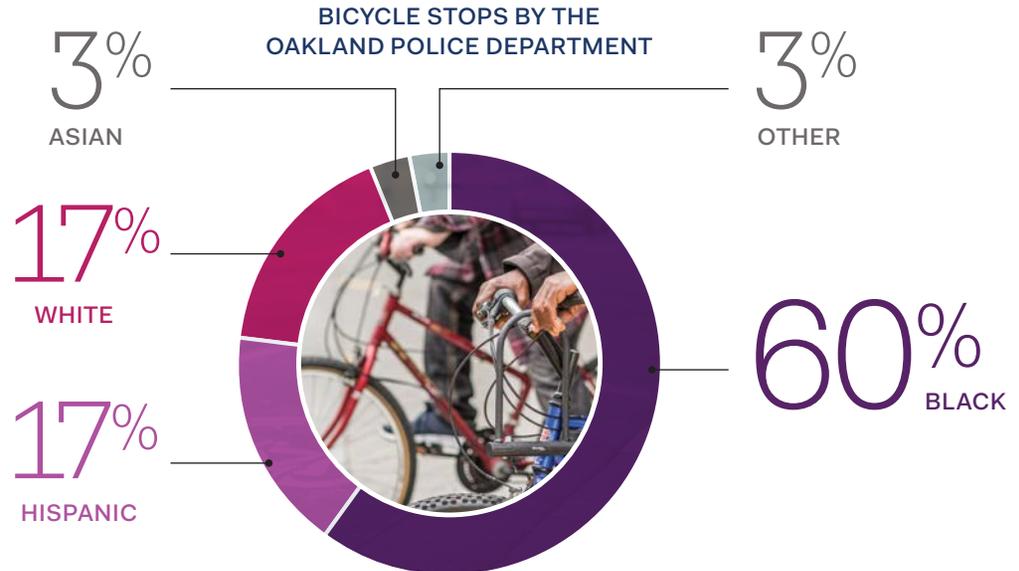
For people of color in Oakland, barriers mostly track to the citywide averages. Those listed here stood out more than 10%.

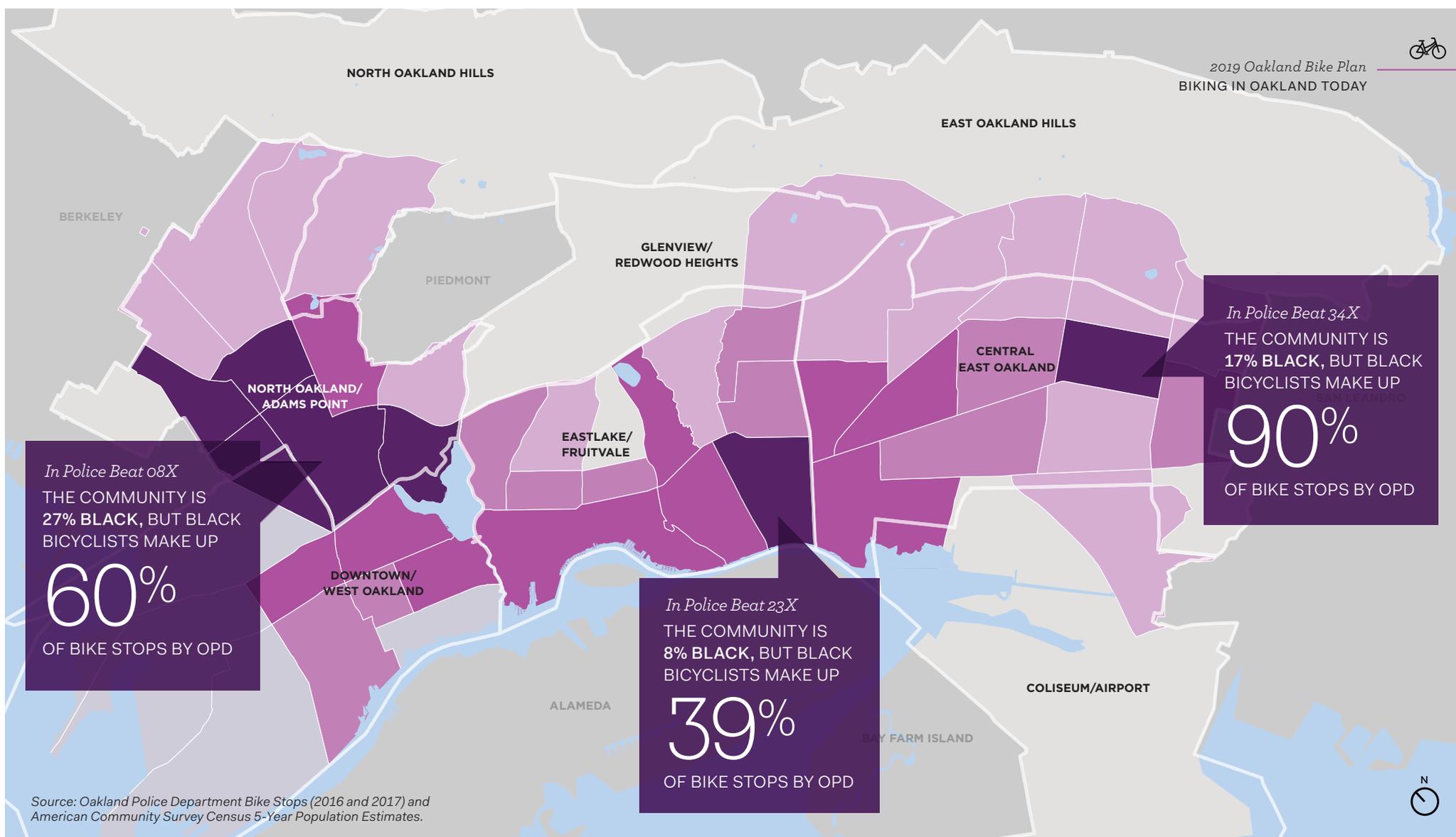
MAJOR CONCERNS ABOUT BIKING
People of Color by Neighborhood Compared to Citywide



Who is being stopped on bikes and where?

African Americans make up a quarter of Oaklanders. Data on bicyclist stops by the Oakland Police Department (OPD) between 2016-2017 shows that Black individuals were the most likely to be stopped while biking than any other group.





In 2016 and 2017, Oakland Police Department stopped over 550 people on bicycles.

All over Oakland, Black bicyclists are being stopped by the Police Department at higher rates than other racial groups. For policy recommendations, see Health & Safety Objective D on Page 9.

TOTAL BICYCLE STOPS PER SQUARE MILE
by Oakland Community Police Beat (2016-2017)

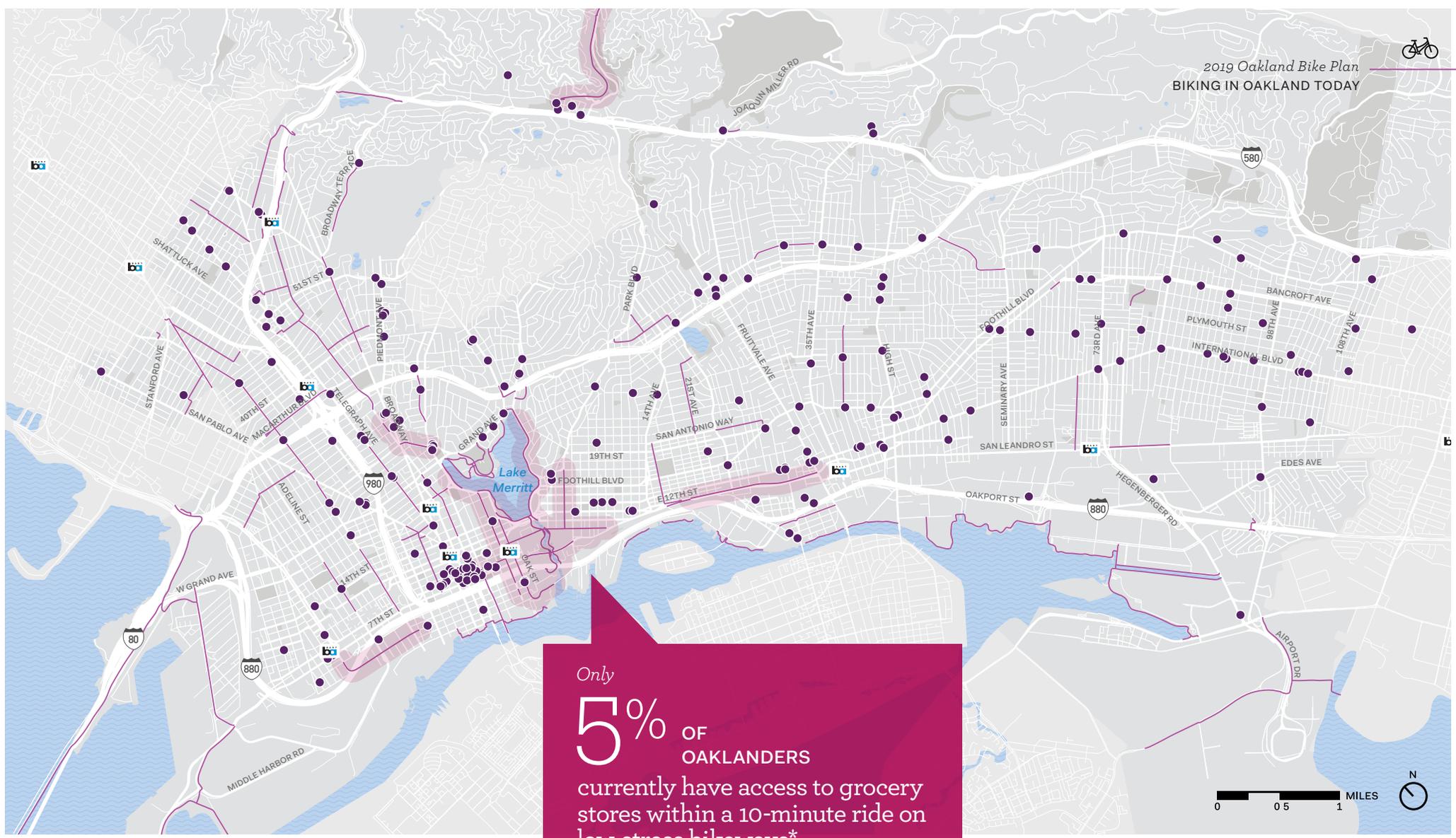
- Less than 10 Stops
- 10 - 20 Stops
- 20 - 40 Stops
- 40 - 102 Stops



How many people can use a bicycle to access key needs?

Not every bike trip is for commuting to work, and residents need to access local destinations, such as grocery stores, libraries, parks, recreation centers, and schools, via bike. We looked at how Oaklanders, specifically those living in disadvantaged communities, can access key needs on a low-stress bike route.





Only
5% OF
 OAKLANDERS
 currently have access to grocery
 stores within a 10-minute ride on
 low-stress bikeways*

ACCESS TO KEY NEEDS

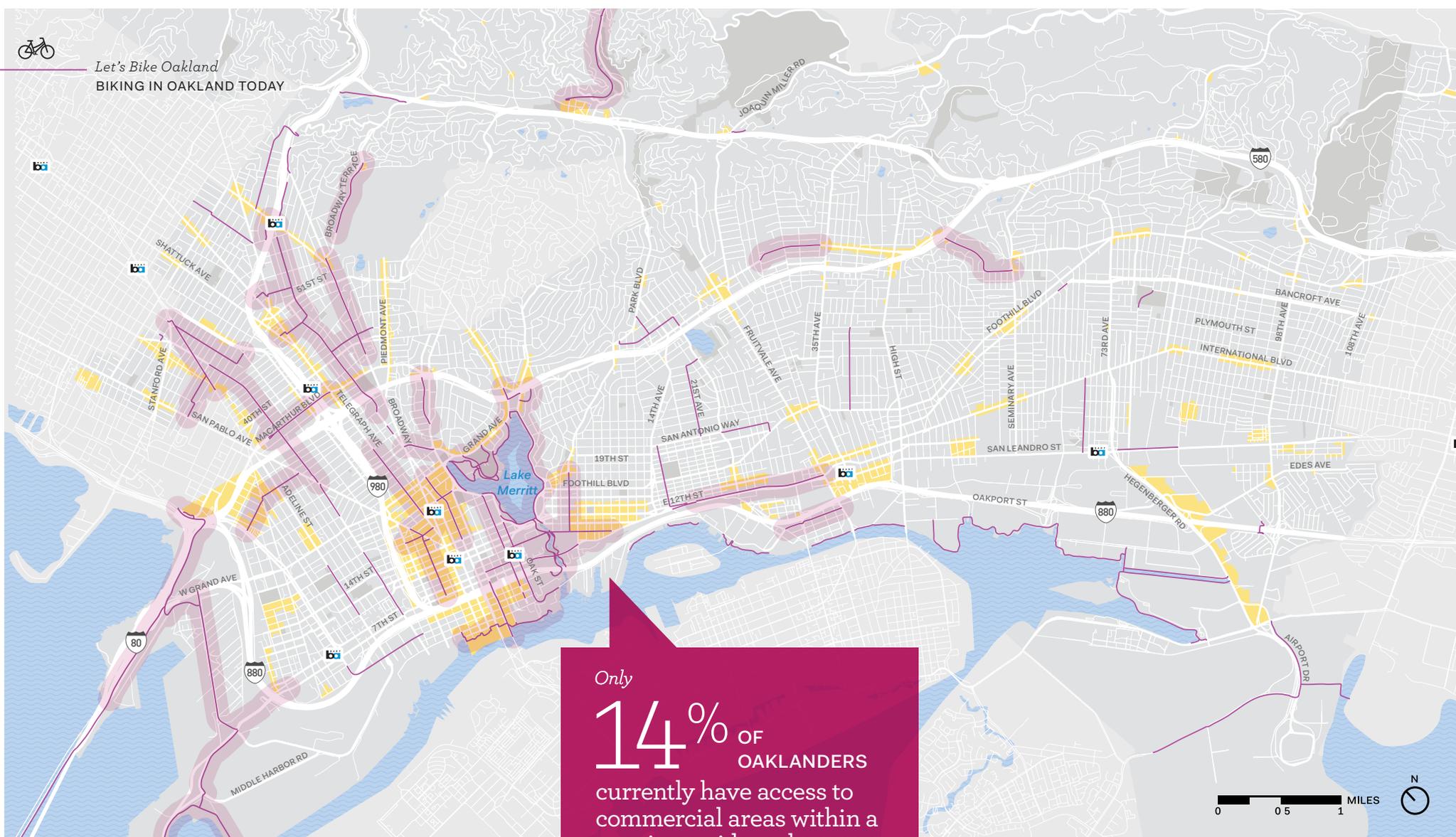
Grocery Stores

6% of Oaklanders within disadvantaged communities have access to grocery stores within a 10-minute ride on low-stress bikeways

Source: City of Oakland, Department of Economic Development.
Note: Convenience stores were not included in this analysis.

- Access within 10 minute bike ride
- Existing Low-Stress Bicycle Network
- Grocery Store
- BART Station

*For the purposes of this analysis, low-stress bikeways include trails, protected bike lanes, and bike lanes with painted buffers where a majority of Oaklanders report feeling more comfortable biking.



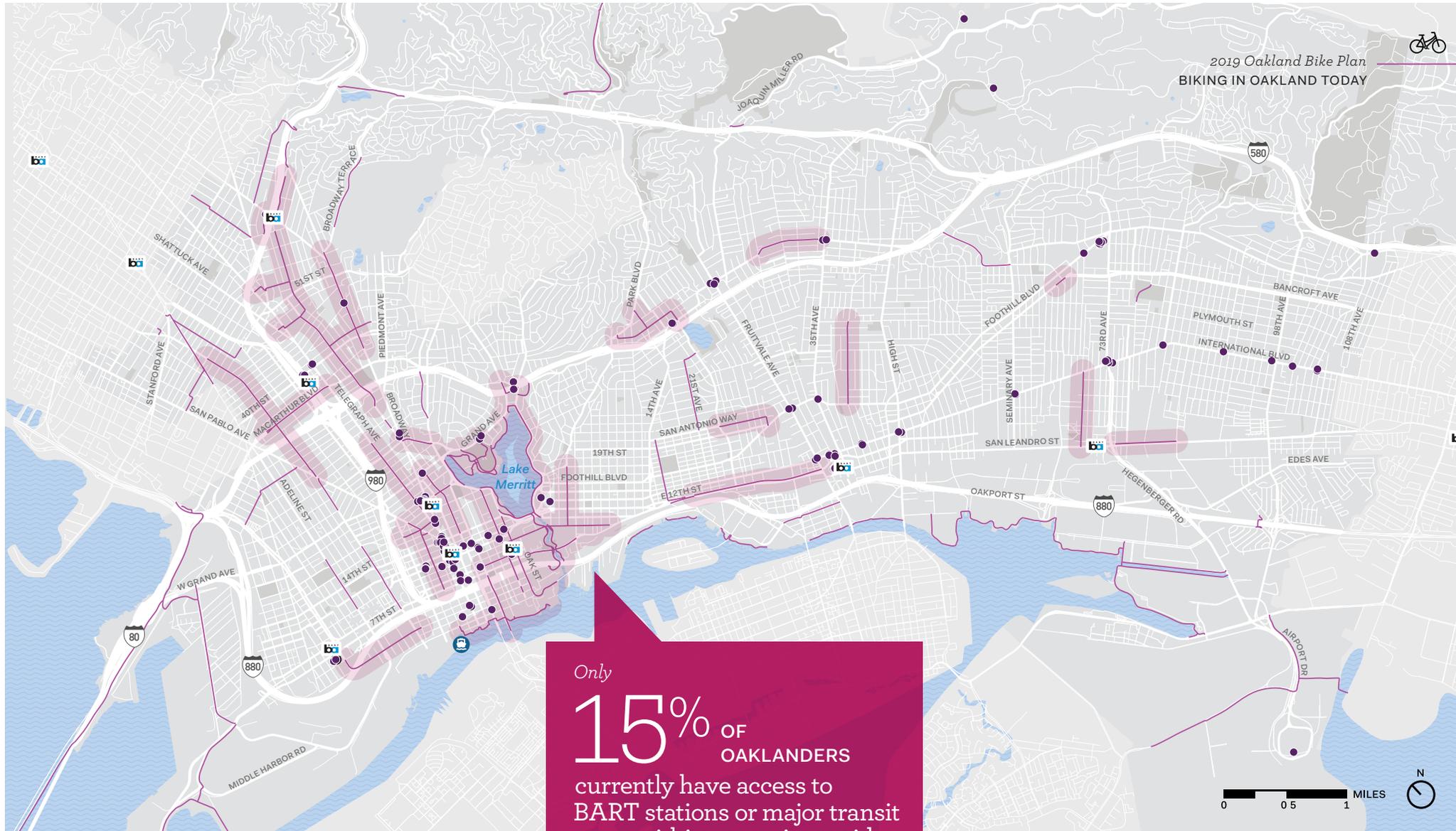
ACCESS TO KEY NEEDS

Commercial Areas

9% of Oaklanders within disadvantaged communities have access to commercial areas within a 10-minute ride on low-stress bikeways

- Access within 10 minute bike ride
- Commercial Areas
- Existing Low-Stress Bicycle Network
- BART Station



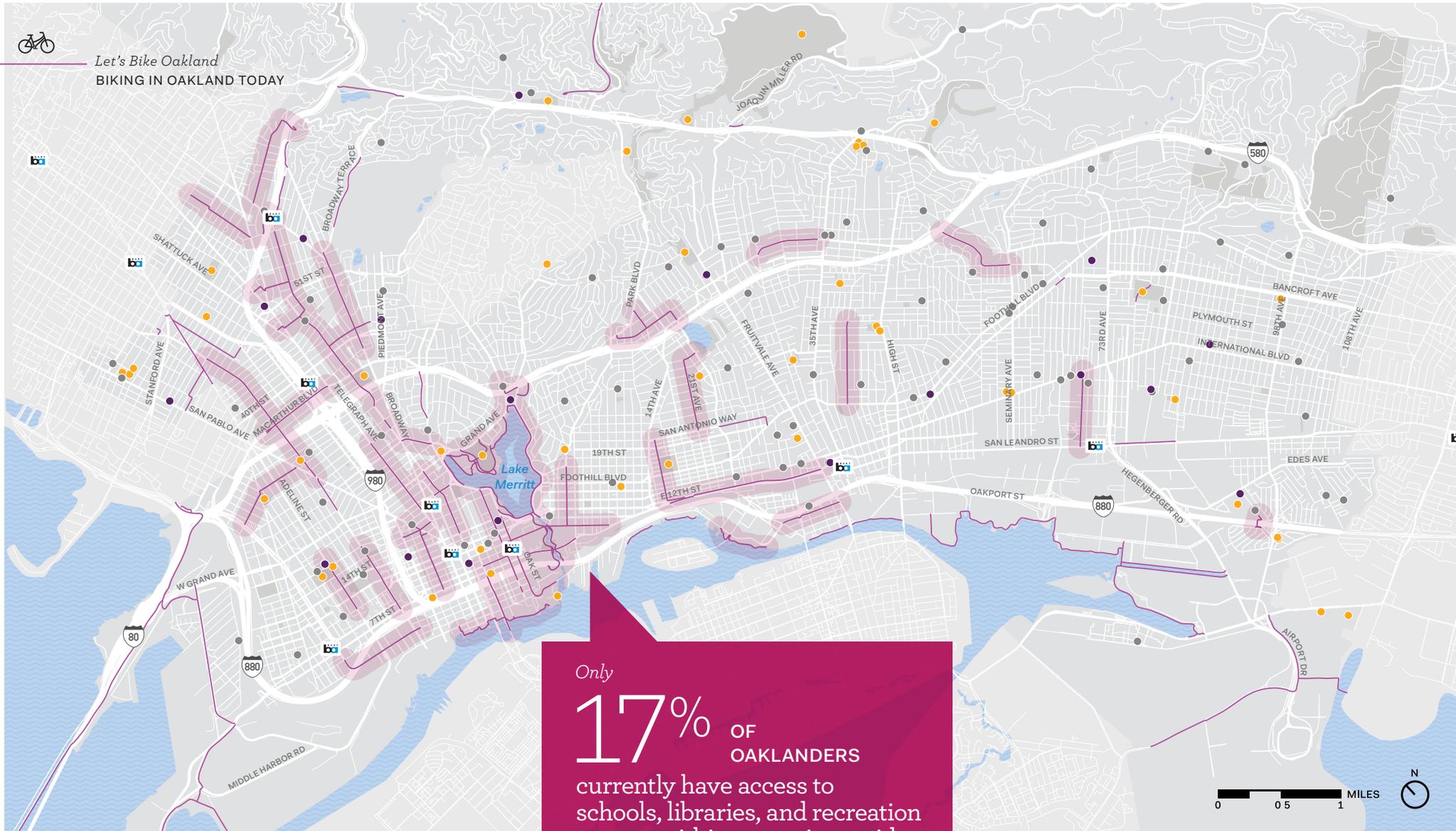


ACCESS TO KEY NEEDS

Transit

15% of Oaklanders within disadvantaged communities have access to BART stations or AC Transit bus stops with more than 300 daily boardings within a 10-minute ride on low-stress bikeways

-  Access within 10 minute bike ride
-  Existing Low-Stress Bicycle Network
-  Ferry
-  BART Station
-  Major Transit Stop
AC Transit bus stops with more than 300 daily boardings



Only
17% OF
 OAKLANDERS
 currently have access to
 schools, libraries, and recreation
 centers within a 10-minute ride
 on low-stress bikeways

ACCESS TO KEY NEEDS

Schools, Libraries, Recreation Centers

17% of Oaklanders within disadvantaged communities have access to schools, libraries, and recreation centers within a 10-minute ride on low-stress bikeways

- Access within 10 minute bike ride
- Existing Low-Stress Bicycle Network
- School
- Library
- Recreation Center
- BART Station





“

Biking is a very important part of my life. I ride a lot with my kids and I've been teaching my kids how to ride. I'm trying to replace driving with riding.”

OAKLAND RESIDENT, PEDALFEST 2018



Where should we prioritize safety?

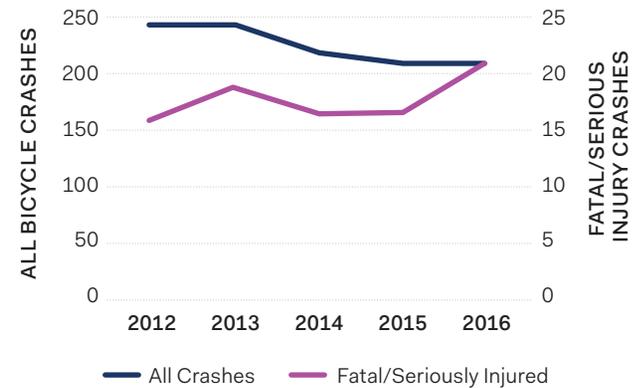
Is biking in Oakland getting safer?
Where are most of the collisions happening today?

The number of collisions has decreased recently, but the number of fatal and serious injury collisions is on the rise. The locations of collisions largely track to locations where there are more people biking and higher bike ridership.

PROJECTS SHOULD FOCUS ON:

- 1 Designing for safety in all bikeway projects across the city
- 2 Educational opportunities for all road users and all ages
- 3 Ensuring all High Injury Network corridors have an action plan

BIKE CRASHES
BY YEAR & SEVERITY

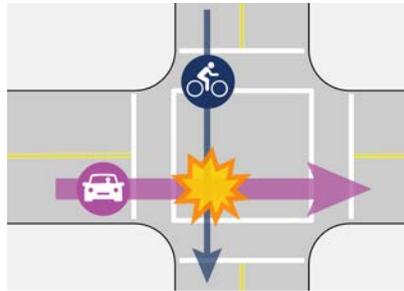




MOST COMMON BIKE CRASH TYPES IN OAKLAND

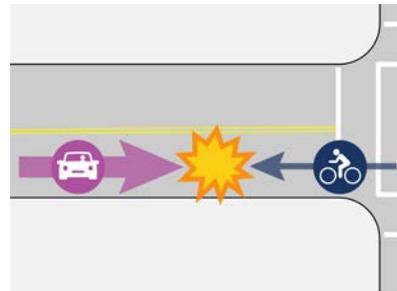
The following crash types account for more than half of all bike crashes in Oakland.

Broadside



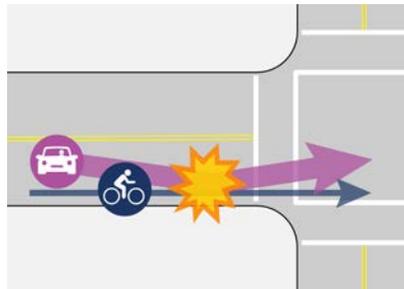
22%
of Oakland
bike crashes

Wrong-Way Biking



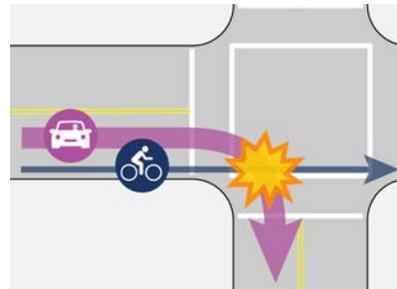
8%
of Oakland
bike crashes

Sideswipe



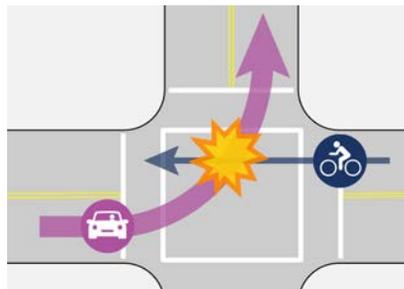
10%
of Oakland
bike crashes

Right Hook



6%
of Oakland
bike crashes

Left Hook



8%
of Oakland
bike crashes

Left-Turn Broadside



6%
of Oakland
bike crashes

*Bikes may be coming from left or right

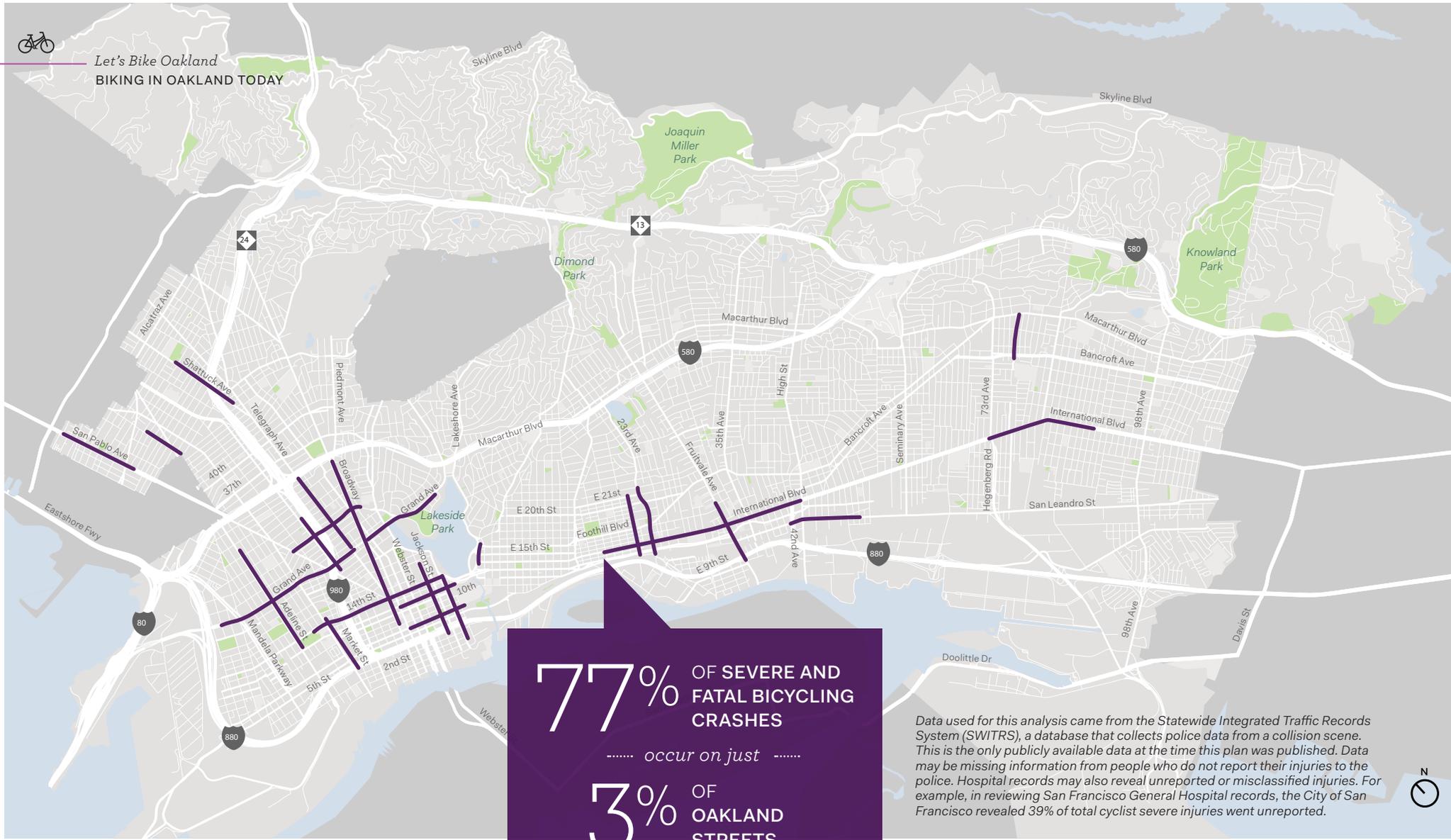
DESIGNING FOR SAFETY

Bike crashes are preventable through strategies intended to improve safety and increase bicycle ridership. They include engineering, education, enforcement, evaluation, and policy measures, which form a holistic approach to reducing bicycle crashes. Specific street design treatments that address the most common bike crashes in Oakland include:

- Protected bikeways and intersections
- Extending bike lanes through intersections
- Slowing vehicle speeds
- Signal installation and signal timing changes
- Bike boxes



Let's Bike Oakland
BIKING IN OAKLAND TODAY



77% OF SEVERE AND FATAL BICYCLING CRASHES
..... occur on just
3% OF OAKLAND STREETS

Data used for this analysis came from the Statewide Integrated Traffic Records System (SWITRS), a database that collects police data from a collision scene. This is the only publicly available data at the time this plan was published. Data may be missing information from people who do not report their injuries to the police. Hospital records may also reveal unreported or misclassified injuries. For example, in reviewing San Francisco General Hospital records, the City of San Francisco revealed 39% of total cyclist severe injuries went unreported.

HIGH INJURY CORRIDORS

The high injury corridors are identified by weighting all reported bike crashes by their severity and their frequency on Oakland's roadways. Identifying high injury corridors can identify the streets and intersections where improvements can have the most impact in reducing fatalities and serious injuries for people biking. Focusing on corridors helps reveal the broader patterns underlying road safety challenges, and prevents more crashes than a focus on individual intersections alone.

-  2018 High Injury Corridors
-  School, Library or Community Center
-  Park
-  City of Oakland



Summary

PROGRESS MADE SINCE 2007

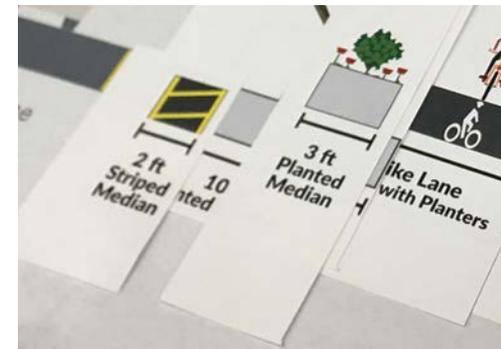
- The bicycle network grew by 58%, from 104 miles to 164 miles,
- Adoption of a Complete Streets Policy in 2013, with over 3 out of 4 implemented road projects now including bicycle facilities,
- A tripling of publicly available bike parking spaces, including two attended bike stations that can serve 366 bicyclists daily.

Overall,

- **Bikeways are disconnected.** Just 14% of Oakland's streets have designated bicycle facilities, only 6% have bike routes that aren't stressful for most people ("low stress bikeways"), and many of these bikeways don't connect to other low stress bikeways.
- **Biking can be stressful.** 79% of Oaklanders said aggressive drivers are a major concern, and 70% are concerned about getting their bike stolen. Dodging potholes is a problem, too--71% of Oaklanders said the streets in their neighborhood have potholes and are badly in need of repairs.
- **The network is not equally distributed.** Most of Oakland's low stress routes are in Downtown, North Oakland/Adams Point, and West Oakland. Around 2% of streets in Central/East Oakland are low stress bikeways, compared to 25% of Downtown streets.

And:

- **People want to bike more.** Across the flats, most people (61-72%) said they'd like to bike more than they do now. Most Oaklanders feel biking would reduce the amount of money they spend on transportation (72%) and that their neighborhood would be a better place if more people rode bicycles (51%).
- **Oakland is a great place to bike.** Oakland is mostly flat, we have nice weather, and our street network is a grid in the areas where most people live and where education and community centers, jobs, grocery stores and connections to transit are concentrated.
- **Good design works.** While only 5% of Oaklanders feel comfortable biking on roads without bike lanes, 67% feel comfortable biking on roads with protected bike lanes.





03

Community Voice

Oakland Department of Transportation teamed up with a number of local organizations to help identify and give voice to the mobility needs of different communities in Oakland.



COMMUNITY PARTNERS



Community Voice

The Oakland Bicycle Plan is part of a wider effort by the City to strive for more equitable City investment in our transportation system. To work towards this, the Oakland Department of Transportation (OakDOT) teamed up with a number of community organizations to help identify and give voice to the mobility needs of disadvantaged communities in East and West Oakland.

The Plan gathered input from communities and residents throughout the City about their priorities for and concerns about biking and overall mobility in their

neighborhoods. Community input guided the City in developing a citywide plan that prioritizes bicycle needs and projects over the next several years.

OakDOT sees these partnerships as a part of a longer process: a process to build trust, improve communication and collaboration, and foster a common vocabulary and mobility agenda across different neighborhoods and communities in Oakland.

With input from City Council, OakDOT contracted with five community-based organizations that

work with Oakland adults and youth, particularly communities of color within East and West Oakland.

The Community Partners included:

- Bikes4Life
- Cycles of Change
- East Oakland Collective
- The Original Scraper Bike Team
- Outdoor Afro



“

Biking and bike infrastructure is different for various communities and neighborhoods — what works for one neighborhood may not work for another. It is crucial to involve resident input in any type of City planning.”

EAST OAKLAND COLLECTIVE



MEET THE COMMUNITY PARTNERS

BIKES 4 LIFE



The Bikes 4 Life mission is to inspire residents to create positive change in the community by biking as an alternative to other transportation. We utilize political education and building a base of committed advocates for change to empower communities to live healthier lives one bike at a time.

? What has been your role within the Oakland Bike Plan and what do you consider the most important outcome of your involvement?

Our role within the Bike Plan has been to provide outreach to our community in the Lower Bottom neighborhood of West Oakland and educate them about the Plan. We hosted an evening community meeting and invited those interested, mostly cyclists, to attend.

More neighbors in our community are aware of the Bike Plan and feel more included in the process being invited to provide their feedback. The Bike Plan's effort to include the community has inspired many to continue civic engagement in Oakland.

? What is a message you would like to convey to the City about biking in Oakland and/or the Bike Plan?

Our message to the City of Oakland is for them to continue to put community and residents first. The City should continue to listen to their needs and critiques as a way to make things better and a smoother ride for all.



WWW.BIKES4LIFE.COM



MEET THE COMMUNITY PARTNERS

THE EAST OAKLAND COLLECTIVE



WWW.EASTOAKLANDCOLLECTIVE.COM

The East Oakland Collective (EOC) is a member-based community organizing group invested in serving the communities of deep East Oakland by working towards racial and economic equity. With programming in economic development, civic engagement and leadership, and homeless services and solutions, we help amplify underserved communities from the ground up. We are committed to driving impact in the landscape, politics and economic climate of deep East Oakland.

? What has been your role within the Oakland Bike Plan and what do you consider the most important outcome of your involvement?

EOC organized three community workshops in East Oakland to engage residents in the update of the Bike Plan and to make sure community input was voiced and heard.

Thinking of creative ways to engage the East Oakland community in the Bike Plan update and work with the entire planning team to adjust to community needs and inputs. Advocating for neighborhood equity from bike infrastructure to funding opportunities that center youth in the update of the Plan.

? What is a message you would like to convey to the City about biking in Oakland and/or the Bike Plan?

Biking and bike infrastructure is different for various communities and neighborhoods— what works for one neighborhood, may not work for another. It is crucial to involve resident input in any type of City planning. East Oakland has a rich history of bicycling and it should be implemented in the Plan— from creative bike culture, skills in bike repair, to a wealth of knowledge in bike education. In the Bike Plan update we want to see increased funding for these opportunities in East Oakland.



MEET THE COMMUNITY PARTNERS

CYCLES OF CHANGE



WWW.CYCLESOFCHANGE.ORG

Cycles of Change works to improve the health and sustainability of our neighborhoods by increasing the access and use of bicycles. We are a collectively-run, People Of Color led organization that has been empowering Oakland youth through bikes since 1998. We provide the much-loved, after school Bike Clubs, in-school PE bicycle safety classes, Upcycle bike commuter and mechanics workshops, watershed education, high school mentorship, and youth job-training.

? What has been your role within the Oakland Bike Plan and what do you consider the most important outcome of your involvement?

We hosted a community listening session, providing valuable feedback to the planning team for the Bike Plan update. Cycles has a longstanding history in Oakland. Our relationships and integrity in the community have made it possible to engage under-represented voices in sharing important, experience-based recommendations. This feedback regarding neighborhood-specific needs for infrastructural improvements, as well as programming and education needs, helped affirm our work, and holds us accountable to seeing this feedback impact the updated Bike Plan.

? What is a message you would like to convey to the City about biking in Oakland and/or the Bike Plan?

Representation is important, it's to ensure the inclusion and steady support of vital community-based organizations, who represent and serve residents best. But residents feel that addressing larger, urgent challenges, such as gentrification, affordable housing, living-wage jobs, better education, and more programs for youth, cannot be ignored in the conversation. How can the Bike Plan prioritize and incorporate larger solutions for Oakland's longtime residents? While infrastructure may contribute to aspects of a more bikeable city, it's hard for some not to feel even further left out. Addressing inequity and prioritizing dignity and security for all residents needs to be a crucial part of the process as well.



“Regular community-based rides, low cost or free resources, accessible mechanics workshops, and diversified bike safety education curriculum for youth and adults enable communities to better access bikes as a powerful form of transportation and wellness, and are a necessary part of a successful, inclusive bike plan.”

CYCLES OF CHANGE



MEET THE COMMUNITY PARTNERS

SCRAPER BIKE TEAM



The Scraper Bike Team empowers urban youth living in underserved communities through self-expression and creativity. We encourage youth entrepreneurship and promote healthy, sustainable living for all. The Scraper Bike Team will use each work-of-bicycle-art to impact social justice and global change.

? **What has been your role within the Oakland Bike Plan and what do you consider the most important outcome of your involvement?**

The Scraper Bike Team's role in the Oakland Bike Plan is to bring awareness of East Oakland's crumbling bike infrastructure and to identify new bikeways that should be considered for the Bike Plan. The most important outcome from our involvement in the Bike Plan was advocating for a center running bike lane on 90th Street in East Oakland. Listening to community's concerns and being able to answer some questions validated our network, that the Bike Plan is indeed listening and considering the people's ideas.

? **What is a message you would like to convey to the City about biking in Oakland and/or the Bike Plan?**

The Scraper Bike Team would like to open up the conversation about creating another center-running bike lane on Bancroft, from 106th to 68th Ave. The Scraper Bike Team is just getting started and we plan on making East Oakland a more bike-friendly community for existing East Oaklanders while capturing and highlighting the true culture.



WWW.SCRAPERBIKETEAM.ORG



MEET THE COMMUNITY PARTNERS

OUTDOOR AFRO



Founded in Oakland, Outdoor Afro is the nation's leading, cutting edge network that celebrates and inspires African American connections and leadership in nature. With nearly 80 leaders in 30 states from around the country, we connect thousands of people to outdoor experiences, who are changing the face of conservation.

? What has been your role within the Oakland Bike Plan and what do you consider the most important outcome of your involvement?

Outdoor Afro hosted opportunities for the community to discuss and ride along the pathways of consideration - among a wide variety of rider ability - to groundtruth us to appropriate and accessible bike lanes that connect neighborhoods to community events, cultural centers, commerce, nature, and each other. We were proud of the ways we were able to use this discussion and experiential opportunity to highlight and elevate African American contribution and culture in Oakland where that community is increasingly displaced and unseen.

? What is a message you would like to convey to the City about biking in Oakland and/or the Bike Plan?

It is important that the most diverse constituents be represented in plans that effect their neighborhood. We want access to safe biking alternatives, but only with input from the communities that live near them will there be relevant sharing and engagement with inclusion for all. Increasingly, as people move into urban centers like Oakland, it will be important for people to have multiple and accessible ways to move about. It is essential that we include as many voices as we can that represent the city of Oakland and its beautiful economic and diversity.



WWW.OUTDOORAFRO.COM



JANUARY - APRIL 2018

Public Engagement and Existing Conditions

MAY - DECEMBER 2018

Proposed Bicycle Network and Priority Projects

SEPTEMBER 2017 - JANUARY 2018

Project Initiation

SEP 2017 OCT NOV DEC JAN 2018 FEB MAR APR MAY JUN JUL

Cycles of Change Listening Session

Outdoor Afro West Oakland Bike Tour

MOBILE WORKSHOPS



Oakland Resident Survey



Bike Plan TAC Meetings



Outdoor Afro-hosted Workshop
East Oakland Collective-hosted Workshop
Bikes4Life-hosted Workshop



Let's Bike Oakland Design Lab



Scrapers Bike Ride - Part I

PROJECT TIMELINE



Left: Bikes4Life-hosted Workshop doorhanger; Right: Outdoor Afro-hosted Workshop



Scrapers Bike Ride - Part 1



MAY 2019

Final Bicycle Plan

Outdoor Afro West Oakland Bike Tour



Oakland Bike Plan
TAC Meetings

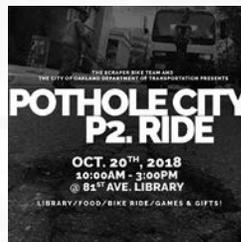
AUG SEP OCT NOV DEC JAN 2019 FEB MAR APR MAY

MOBILE WORKSHOPS



Let's Bike Oakland Design Lab

Scrapper Bike Ride -
Part II



Scrapper Bike Ride Flyer

DECEMBER 2018 - MARCH 2019

Draft Bicycle Plan

Oakland Bike Plan
TAC Meetings

Cycles of Change
Working Session

East Oakland Collective-
hosted workshop

West Oakland Mobile
Workshop with Bikes4Life



60

COMMUNITY MEETINGS or EVENTS

By the Numbers

We connected with Oaklanders in many ways: through Bike Plan events hosted by our community partners, Bike Plan "mobile workshops" at existing community events, and web-based input tools.



3,644

PEOPLE ENGAGED

... in ...

PERSON



1,351

SUBSCRIBERS

..... to the

OAKLAND BIKE PLAN MAILING LIST



576

OAKLAND DOT STAFF HOURS

..... in the

COMMUNITY



Over
2,300
COMMENTS

... on ...

BIKE PLAN WEB MAPS

Outreach Process

“What is needed to make a more bike-friendly Oakland that serves you?”

The outreach process looked to facilitate conversations around that question and to build ownership of the Plan from community groups and Oaklanders at large. To do that, the process centered on partnerships with five community partner organizations - established community groups that have trusted reputation in communities of color in East and West Oakland.

The outreach process was broken into three stages: listen, collaborate, and refine that aimed to build a common understanding of existing conditions and recommendations that started with listening, was strengthened by partnerships, and fine tuned with feedback.





1

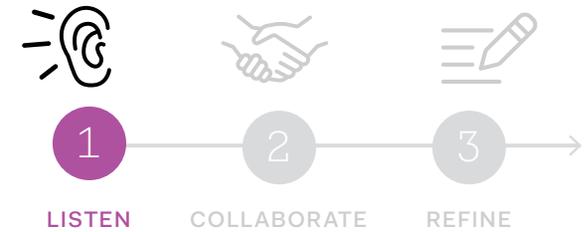
PHASE 1

Listen

Within the first phase, each community partner hosted listening sessions with the intent to hear the ideas and concerns of residents. The goals of the first phase included:

- **Hear from residents** about what community ownership of the Bike Plan development process would look like
- **Inform residents** on the Bike Plan process

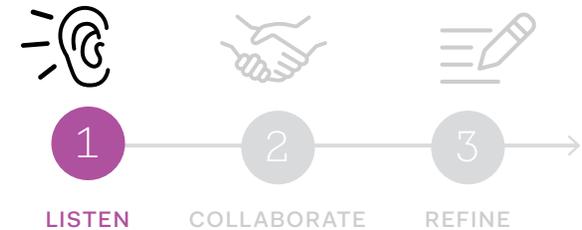
- **Solicit feedback from community members** in East and West Oakland who typically have barriers to participating in planning processes
- **Understand the unique bicycling and overall mobility needs** of East and West Oaklanders
- **Have East and West Oaklanders inform the City and its Project Team** on how to prioritize projects, programs, and policies in the Bike Plan and funding for bicycle infrastructure in the Bike Plan



LISTENING SESSIONS



The Community Partners shaped the discussion questions and invited their constituents. The engagement of the Plan was able to benefit from the existing relationships and trust these organizations have within their community, and offered a space for those attending to share experience-based recommendations.



MOBILE WORKSHOPS



Across the project, the Project Team has shared information and received feedback at over 25 mobile workshops. Mobile Workshops allowed us to set up a table and bring bike plan updates while receiving feedback from Oaklanders at highly frequented locations and events around Oakland. The Mobile Workshops aimed to reach those that may not be able to attend more formal workshops to intercept them in their daily lives at places such as festivals, transit stations, libraries, and grocery stores.

WHAT DID WE HEAR?

Enforcement Policy

Policing practices disproportionately target people of color riding bicycles, and this deters people in Oakland from bicycling.

Separated Bikeways

Separated bike lanes in Oakland are welcomed, but much more caution, care, and community input needs to be put into the design of these facilities.

Support Existing Bike Cultures

Many people in Oakland already bike, and existing POC and youth bicycling culture should be recognized and enhanced by the Bike Plan recommendations.

Fix it First

Many of Oakland's streets have potholes and declining infrastructure. Focusing on improving pavement quality in underserved areas on neighborhood streets would greatly increase bikeability.

Shape the Future of Bikeshare

Many people expressed dislike of the current form of bikeshare and expressed that future iterations should be community-owned and expanded into East Oakland.

Prioritize Youth

City investment around bicycling should prioritize and serve Oakland youth.

Transparent Process

People want to see how their input in the Bike Plan is shaping the program and network recommendations.

Programs to Encourage Biking

Programs should focus on highlighting the benefits of biking to encourage more people to try this mode.



2



PHASE 2

Collaborate

From the start of the process, participants have asked: "how will my ideas be used to shape the priorities and recommendations of the Bike Plan?" These questions pushed the project team to work towards a more transparent process of developing bikeway and bike program recommendations.

DESIGN LAB

As part of the Collaborate Phase, the Project Team and East Oakland Collective hosted a Design Lab, an all day event where Oakland residents could provide their input on the Bike Plan recommendations. The goal of the event was to let residents draw their preferred bike routes on the map, develop roadway concepts and help shape bike programs and policies within Oakland through small group discussion around enforcement policies, the future of bikeshare, and the process for making infrastructure decisions.



WHAT DID WE HEAR?

To watch interviews with Design Lab participants, follow this link:
<https://youtu.be/w10gds8r-zk>



“For our people of color and for our young bikers of color, I want to see more fair enforcement of the laws and also safer spaces for them to ride their bikes.”

OAKLAND RESIDENT AND DESIGN LAB PARTICIPANT



Residents submitted ideas for new neighborhood bike route pavement markings to better reflect their unique neighborhoods.

Design Lab Make Your Mark(ing)

LET'S OAKLAND



Wayfinding or directional signage is something every city can customize to their specific design requirements. Oakland already has a network of bicycle-focused wayfinding signs. Help design the next generation of Oakland-themed signs.

MAKE A HUGE BIKE Symbol



Design Lab Make Your Mark(ing)

LET'S OAKLAND



Wayfinding or directional signage is something every city can customize to their specific design requirements. Oakland already has a network of bicycle-focused wayfinding signs. Help design the next generation of Oakland-themed signs.





3

PHASE 3

Refine

Within the final phase of outreach, the project team hoped to edit, vet and refine the Programs, Policies and Network developed throughout the process. In other words, it was an opportunity for the project team to say “did we get it right?” and “is there anything we missed?”

We did this in a variety of ways including:

- A Scrapper Bike Team-hosted ride of proposed bikeways in East Oakland
- Receiving online comments on the proposed bikeway network through the online web tool
- Community workshops and meetings hosted by Bikes 4 Life, East Oakland Collective, and Cycles of Change



BIKE PLAN BIKE RIDES



Group bike rides provided valuable feedback on proposed bikeways in Oakland. The Original Scrapper Bike Team hosted a ride in Fall 2018 to test out some of the proposed bikeways in East Oakland. The Scrapper Bike Team’s bike shed, and home base, is located in East Oakland at the MLK Library on International Boulevard. The Bike Team brought ride participants on a proposed network of low volume bike boulevards that connected to libraries, parks, and schools. The ride highlighted some of the pavement quality and pothole issues, and challenging intersections that future bike infrastructure will have to address.



ONLINE WEB TOOL



Oaklanders could provide feedback on the proposed bikeway network through an online web tool that allowed people to “like,” “dislike,” and add comments. This tool gathered over 2,300 comments and nearly 6,500 votes.

WHAT DID WE HEAR?

14th Street

People identified 14th Street as an important Downtown-West Oakland connector. Currently people commented that biking this street can feel harrowing, and cars do not give people biking adequate space.

Telegraph Avenue

While support for Telegraph Avenue is mixed, there were many comments to continue bike facilities on Telegraph Avenue, citing how challenging it is that the bike lane currently drops off suddenly.

Foothill Boulevard

Foothill Boulevard is seen as an important long-distance biking corridor from East Oakland to Downtown. People riding this segment would like to see more separation from speeding and aggressive drivers.

Grand Avenue

People would like to see more protected bicycle facilities on Grand Avenue, especially as cars enter and exit Hwy-580.

Access to Shoreline

In East Oakland, people want to see more bike connections to the shoreline, both to the Bay Trail and San Leandro Creek Trail.

Fruitvale BART/ Fruitvale Avenue

People want to see better bike connections to Fruitvale BART, including better wayfinding and signage. There is a desire for more protected facilities on Fruitvale Avenue.



Photo courtesy of Red, Bike, and Green



Creating a more bicycle friendly Oakland means investing not only in new infrastructure, but also community-led ongoing programs that encourage bicycling.

04

Recommended Bicycle Programs



Bicycle Programs

Oakland is home to a wealth of nonprofit bicycle advocacy organizations, grassroots groups, and community bike shops that for decades have been removing barriers to biking -- barriers that go beyond the lack of safe places to ride. This plan honors their long standing work that has paved the way for so many to choose biking despite the real challenges community members face as detailed in previous chapters.

On its own, access to the bike network is not enough to increase

bicycle ridership in Oakland. Building new bike infrastructure without providing residents culturally-competent bike education on how to use it can feel like an intrusion to a community that does not regularly bike. Our community bike leaders stress the even more crucial step of encouragement in biking. This requires removing real and perceived social barriers -- the fears of being stopped by the police, discomfort riding alongside aggressive vehicle traffic, the fear of riding at night, concerns of theft, lack of knowledge

of bicycle rules and routes, lack of proper bicycle maintenance skills -- all of which can significantly deter new bicyclists.

Bicycle programs offered by nonprofit organizations have played a large role in fostering safe bicycling behavior in Oakland, especially among youth and people of color, at low or no cost. In addition to teaching bike riding and bike maintenance skills, these organizations also provide safe places for youth and nontraditional biking groups to find community and

express themselves through biking. These nonprofit organizations are proud to offer a multitude of services and programs that cater to youth, adults (including formerly incarcerated and older adults), and other groups less likely to bike and teach them how to be confident on the road.

Bicycle promotion has primarily focused on reducing traffic collisions, but often overlooked are other safety concerns felt by marginalized communities related to race, gender, and income. Marginalized groups, including women and gender non-conforming individuals, are more likely to be harassed on the street than non-marginalized groups, which can discourage them from biking. Men of color, especially Black men, are also disproportionately policed in public spaces. In low income communities, theft is a larger concern where there are few safe places to store bicycles.¹ These concerns need to also be addressed to encourage bicycling among non-traditional groups.



The City recognizes the role and contributions made by bike nonprofit organizations that have preceded the city's efforts and will work to support their ongoing programs. OakDOT staff will seek funding and partnerships to support these ongoing community-generated programs and broaden their reach so that more Oaklanders can take advantage of biking in the city.

OakDOT has principally been engaged in delivering infrastructure, and acknowledges that funding and delivery of bicycle programs has largely been left to others and often on a completely volunteer basis. The plan recognizes that funding bicycle programs is equally as important as funding bicycle infrastructure in creating a safe biking environment.

¹ McCullough, S. R, Lugo, A., & Stokkum, R. V. (2019). *Making Bicycling Equitable: Lessons from Sociocultural Research*. UC Davis: Institute of Transportation Studies. <http://dx.doi.org/10.7922/G22R3PWK> Retrieved from <https://escholarship.org/uc/item/37s8b56q>

HOW WILL BICYCLE PROGRAMS ACHIEVE OUR GOALS?



ACCESS

Bicycle programs should expand the reach of the bicycle network with information and support facilities that make bicycling the preferred travel option for more trips.



HEALTH & SAFETY

Bicycle programs should both support safe bicycling behaviors and address unsafe driving behaviors. Programs should encourage physical activity for oaklanders.



AFFORDABILITY

Bicycle programs should be designed to reduce the cost of bicycling and encourage Oaklanders to bicycle more, reducing their transportation costs.



COLLABORATION

Bicycle programs should be rooted in best practices and community needs, build trust in the city and encourage meaningful participation in governance.



Existing Programs

The following bicycle programs already exist in Oakland to teach and support new and continuing bicyclists. Most have the desire to broaden their reach by hosting more regular programming or to expand to new program models.





Cycles of Change Bike Club

EXISTING PROGRAM

COMMUNITY RIDES / BIKE CLUBS

Community rides help build both community and physical skills among new and continuing riders. They provide a guided pathway for new bicyclists to gain confidence riding and navigating the city on a bike for the first time. Regular rides foster community among riders, especially youth who are often looking for physical and creative outlets outside of school. During school, nonprofit organizations also lead bike clubs at middle and high schools, where staff provide bikes and safety gear and take students on group adventure rides. Community rides can be offered to the entire community or geared to female, queer-identifying, and other demographic groups less likely to bike who can learn bicycle skills in a safe space that celebrates

and empowers rider identity. For example Red, Bike and Green is a collective of urban cyclists with an eleven-year legacy that leads bike rides for Black cyclists in Oakland with the goals of addressing health, economic, and environmental disparities in the community.

TARGET AUDIENCE

General public

ORGANIZATIONS OFFERING SERVICES

[Scrapper Bikes](#), [Cycles of Change](#), [Red, Bike and Green](#), [Bay Area Outreach & Recreation Program \(BORP\)](#), [Bike East Bay](#), [Walk Oakland Bike Oakland \(WOBO\)](#), [Bikes4Life](#)



The Bikery

EXISTING PROGRAM

COMMUNITY-BASED BIKE SHOPS / SHEDS

Community-based bike shops provide a space and tools for do-it-yourself repairs with staff available to assist and teach basic mechanics. Depending on the mission of the host organization these community bike shops attract different demographics to a safe and comfortable space. For examples, Spokeland sets aside specific times for women and gender nonconforming individuals to come in; and the Scrapper Bike Shed at the MLK Jr. Library is a safe place for many youth who are looking for places to hang outside of school.

TARGET AUDIENCE

General public, youth

ORGANIZATIONS OFFERING SERVICES

[Cycles of Change](#), [Spokeland](#), [Scrapper Bikes](#), [Bikes4Life](#), [The Crucible](#), [Hard Knox Bikes](#)

Above photo: The Bikery is the Cycles of Change collectively run, not-for-profit community bike shop in East Oakland



ADULT BIKE SAFETY CLASSES

Adults can learn riding skills, rules of the road, crash avoidance, theft prevention, how to ride at night, and how to use bike safety equipment in these classes. Bike East Bay offers a two-part course that includes both an in-class and an on-road lesson.

TARGET AUDIENCE

Adults

ORGANIZATIONS OFFERING SERVICES

[Bike East Bay](#), [Cycles of Change](#)

Photo courtesy of Bike East Bay: Oakland Adult Learn-to-Ride Class offered by Bike East Bay

EXISTING PROGRAM

BIKE EDUCATION CLASSES

Bike education classes are anywhere between one to multiple sessions that teach riders bike safety, bike mechanics, theft prevention, and other useful skills. The following are a few examples of the variety of different bicycle classes offered by nonprofit organizations.

YOUTH BIKE RODEOS

Cycles of Change visits schools on request to set up mock-infra-structure to simulate real-life situations, where instructors can teach students good safety, communication, and decision-making skills. This is part of Alameda County Safe Routes to School program.

TARGET AUDIENCE

Youth

ORGANIZATIONS OFFERING SERVICES

[Bike East Bay](#), [Cycles of Change](#)

BIKE MECHANICS CLASSES

These one-hour workshops are designed to teach basic bike maintenance skills and how to use different tools. Red, Bike and Green offers various workshops and trainings to teach bicyclists new skills.

TARGET AUDIENCE

Adults

ORGANIZATIONS OFFERING SERVICES

[Bike East Bay](#), [Cycles of Change](#), [Red, Bike, Green](#)

FAMILY BIKING WORKSHOPS

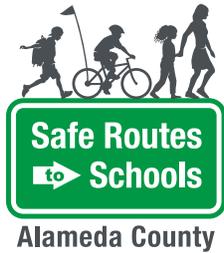
Bike East Bay offers family bike workshops that teach parents with kids with their own bikes and helmets how to ride together safely on a designed course.

TARGET AUDIENCE

Adults with Children

ORGANIZATIONS OFFERING SERVICES

[Bike East Bay](#)

**EXISTING PROGRAM**

SAFE ROUTES TO SCHOOL (SR2S)

Safe Routes to School is a national program dedicated to promoting walking, biking, and taking transit to get to school. Alameda County has one of the most robust Safe Routes to School programs in the nation, which serves Oakland schools with free programming including bicycle rodeos, bicycle repairs, school site safety assessments, and other education and encouragement activities to engage students to use alternative modes to school. The program is administered by the Alameda County Transportation Commission and includes a number

of Oakland-based organizations delivering services. However, less than fifty percent of Oakland Unified Schools currently participate in the SR2S program.

TARGET AUDIENCE
Youth

ORGANIZATIONS OFFERING SERVICES
[Cycles of Change](#), [Alameda CTC](#), [TransForm](#), [Alameda County Bike Mobile](#)

EXISTING PROGRAM

EARN-A-BIKE PROGRAMS

Nonprofits have also been providing youth and low-income adults free bikes following completion of a bike training and/or eligibility based on income. In past years, Cycles of Change's Upcycle program has collaborated with the International Rescue Committee (IRC) and the Society of St. Vincent de Paul to provide bicycles to low-income participants, so that they have transportation to reach jobs, services, and transit lines.

TARGET AUDIENCE
Youth, eligible adults

ORGANIZATIONS OFFERING SERVICES
[Cycles of Change](#), [Spokeland](#), [Scraper Bikes](#), [The Crucible](#)

EXISTING PROGRAM

YOUTH BICYCLE INTERNSHIPS

Some bike nonprofits with available funding offer internships to young bike enthusiasts to provide them bike mechanic and youth educator skills which ultimately contributes to work experience that can create pathways to careers. The Cycles of Change Bikery offers youth internships to develop their bike mechanic and leadership skills.

TARGET AUDIENCE
Youth

ORGANIZATIONS OFFERING SERVICES
[Cycles of Change](#)



Photo: David Meza

EXISTING PROGRAM

BIKE TO WORK DAY

Bike East Bay annually coordinates Bike to Work Day in the East Bay region, a day-wide campaign encouraging everyone to try commuting by bicycle for the first time and celebrate those who ride regularly. For the 2019 Bike to Work Day, there were 21 “energizer stations” around the city - small booths run by volunteers along major biking routes where people riding to work can stop to get refreshments and giveaways. This event becomes a community-wide effort as companies, organizations, and individuals support Bike to Work Day each year by hosting one or more of the energizer stations. Walk Oakland Bike Oakland (WOBO) hosts the largest energizer station in the East Bay - a free pancake breakfast for 1,000 people at Frank Ogawa Plaza. On the morning of Bike to Work Day, WOBO volunteers help lead bike rides across Oakland where residents can bike to the pancake breakfast alongside their City Councilmembers. The City of Oakland is a sponsor of Bike to Work Day.



Photo: Bike East Bay



Photo: Bike East Bay

EXISTING PROGRAM

PEDALFEST

Pedalfest is a free annual festival in Jack London Square, put together by Bike East Bay, that brings together over 20,000 people to learn about and celebrate biking and bike-friendly communities. The event is touted as a celebration of bikes, cycling, food, and family and includes activities such as a pedal-powered stage, amphibious bike race, a BMX bike stunt stage, and many booths for local bike businesses and organizations. The City of Oakland is a sponsor of PedalFest.



Photo: Bike East Bay



Recommended Bicycle Programs

Creating a more bicycle friendly Oakland means investing not only in new infrastructure, but also ongoing programs that will encourage and support more people who choose to make bicycling part of their transportation. Envisioning new initiatives and supporting existing ones is an important way for the City of Oakland to invest in the people they hope will benefit from this plan. This section walks through what the Project Team heard, the program

ideas that were developed and vetted at Bike Plan and community events, and first steps toward implementing these ideas.

The Bike Plan recommends three community priorities:

- Promote Hometown Efforts
- Support the Local Bicycling Economy
- Provide Shared Resources



Photo: Scrapper Bike Team at the Shed (Martin Luther King Jr. Library)



“

I don't even know what fixie bikes are, but I would be really interested in having students teach adults more about these bikes and the way they ride. Let's flip the script and have youth teach adults about biking.”

OAKLAND BIKE PLAN
LISTENING SESSION PARTICIPANT



COMMUNITY PRIORITY

PROMOTE HOMETOWN EFFORTS



WHAT WE HEARD

Integrating biking into the culture of the community must come from people living in their own neighborhoods. By supporting and expanding cultures of biking, adults and youth can be exposed to all the benefits of biking and build community around social events and bike rides. The youth of Oakland are essential to developing a successful plan and must be included in planning for the future. There are also opportunities for youth development and empowerment by providing skills training, safety education, and recreational opportunities.



WHAT WE'VE PROPOSED

Existing organizations and groups already lead rides through Oakland (East Bay Bike Party, Scraper Bike Rides) bringing people together around different benefits of riding. One participant noted that the Safe Routes to School program run by Alameda County is currently “opt-in”—providing a gap in bicycle education for students in schools without a Safe Routes to School program. This Plan proposes OakDOT work with local nonprofits and funders to expand the reach of bicycle education and encouragement programs.

Proposed Initiatives:

- Create program to support community bike rides
- Create annual open streets program
- Augment bike education at Oakland Unified School District (OUSD) schools
- Continue to partner with Alameda County Transportation Commission to deliver Safe Routes to School assessments and programs

FIRST STEPS

OakDOT will work with Alameda County Transportation Commission to identify how to increase capacity of Oakland schools to receive Safe Routes to School programs through existing programming.



COMMUNITY PRIORITY

SUPPORT THE LOCAL BICYCLING ECONOMY



WHAT WE HEARD

Overall there was a concern that there was a lack of bike shops (both non-profit and for profit) in East Oakland. Many people want to see more bike services run by or rooted in people of color and family-owned bike shops. In addition, many felt that bike programs should provide employment opportunities for low to no-income Oaklanders that already have technical skills or are interested in job training.



WHAT WE'VE PROPOSED

The City of Oakland is interested in supporting a bicycling economy that supports Oakland-based entrepreneurs, and extends into East Oakland. There is an opportunity financially support bike mechanic job training, and League Cycling Instructor training, which is often a necessity for being hired to lead group rides.

Proposed Initiatives:

- Create stipend program for unhoused people to get job training as mechanics at bike shops
- Create stipend program for League Cycling Instructor (LCI) training
- Encourage small local bike shops and businesses to be recognized as Bicycle Friendly Businesses through the League of American Bicyclists
- Work to increase local bicycle businesses owned by people of color in underserved neighborhoods, consistent with the City's Economic Development Strategy (2018-2020)

FIRST STEPS

OakDOT will explore other agencies and organizations to partner with to develop a plan for the proposed programming.



COMMUNITY PRIORITY

PROVIDE SHARED RESOURCES



WHAT WE HEARD

People felt that bike maintenance was one of the greatest deterrents to riding more, and access to free and low-cost bike repair would allow more people to ride bikes. Community members want bike maintenance resources to be more available, affordable and community owned to decrease barriers to biking and to empower community ownership. In addition, there was an interest in “pit stops” on corners where people can fix their tire, get a sip of water, and hang out without having to lock up their bike. Libraries, community spaces, and social groups can provide these resources.



WHAT WE'VE PROPOSED

Providing bike repair, maintenance, and education through the Oakland Public Library branches is a strategy to provide concrete locations for services (distributed throughout Oakland) that are free of charge and accessible to the entire public.

Proposed Initiatives:

- Add two full-time staff positions to OPL as bike mechanics. Site mechanics should be trained to work on a range of bicycles used by people of all ages and abilities.
- Add fix-it and hydration stations to all OPL branches
- Add bike tool lending library to all OPL branches
- Funding purchase of bike books, DVDs at OPL branches
- Provide bikes as incentives for OPL summer reading program

FIRST STEPS

- OakDOT and the Oakland Public Libraries will discuss funding, timeline and training necessary to add full-time bike mechanic staff to chosen Oakland Public Library branches.
- OakDOT will research best practices for the design and location of installing fix-it stations

LYFTUP EAST OAKLAND

In 2019, Lyft is partnering with Oakland-based transportation advocacy group TransForm to partially fund \$1 million dollars of projects that will extend mobility options in East Oakland. These projects were developed from ideas we heard from residents at Bike Plan events about how bike share and shared mobility could better meet residents needs while expanding access into East Oakland.

Mobility4All Partnership

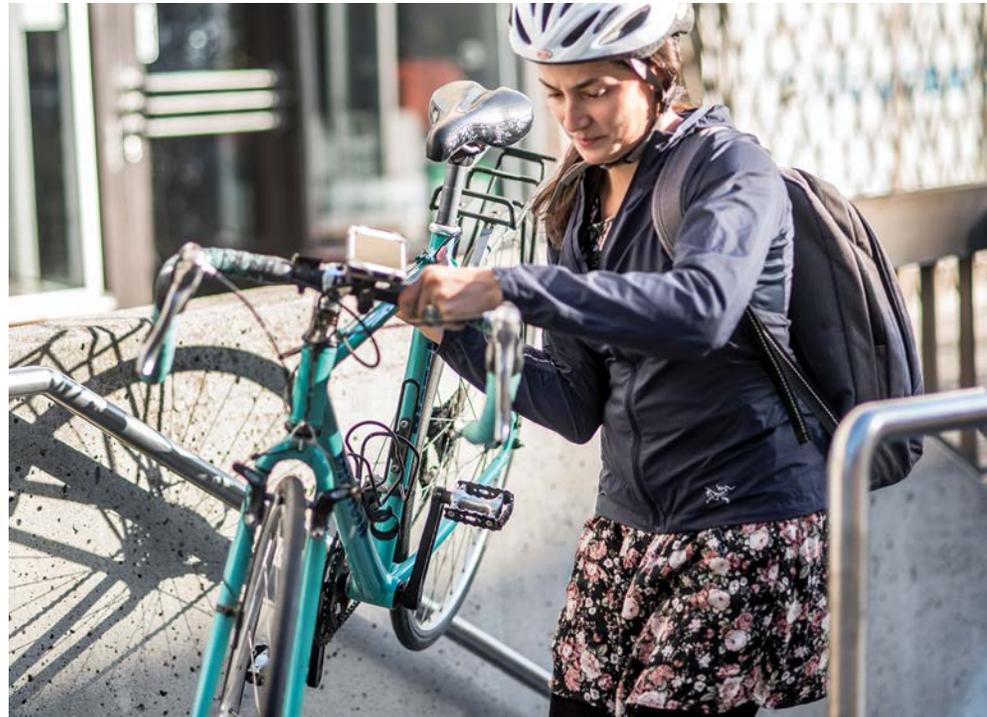
Lyft and TransForm will fund the East Oakland Collective to pilot a community free ride program for underserved populations. Qualifying participants will have access to subsidized AC Transit Passes, Lyft ridesharing and Lyft's \$5/month community pass, which enables unlimited 30 minute rides on Lyft's electric scooters and unlimited 60 minute rides on GoBikes.

The Shed Bike Library

Lyft and TransForm will work with the Scraper Bike Team to establish a community-run bike lending library at The Scraper Bike's Shed. The Bike Library will allow residents to borrow bikes free of charge on a daily and weekly basis. A portion of the bikes will be made available for month-long lending, including bikes that serve the needs of families with young children.

Community-Driven Bike Station Activation (Parklets)

TransForm will convene a network of East Oakland organizations to help guide a creative design process for future bike share stations in East Oakland. Bike share station installation will focus on placemaking, building community ownership, and stabilizing local businesses, including the creation of three parklets integrated with future bike share stations.





“

I want to ride here, I just want it to be safer.”

FRUITVALE RESIDENT

05

Recommended Bicycle Projects



The Bicycle Network

In 2007, at the time Oakland adopted its last Bicycle Plan, the City had 104 miles of bikeways. Today, there are over 164 miles of bikeways in Oakland, with an increasing focus on bikeway types that provide greater protection for bike riders from vehicles.

Chapter Five introduces the different types of bikeways and supporting amenities that OakDOT will be installing, and the overall strategy the project team employed in deciding where and what kind of facilities should be recommended- guided by the community input we heard.



WHAT WE HEARD

Bicycling is uncomfortable because of all the potholes and stressful because cars drive too fast.

Any investment in bikeways should first serve local neighborhood destinations and meet the transportation needs of existing residents.

Bikeways are only useful if they are connected. Gaps as short as crossing an intersection or as long as several miles can keep more people from bicycling more often.



WHAT WE'VE PROPOSED

Three strategies to guide future bikeway investments

Make it Comfortable

- Move streets that share a bikeway recommendation to the front of the line in Oakland's repaving schedule.
- Involve the community in bikeway design process early and often to help weigh the benefits and tradeoffs that may be needed to create as much separation from moving vehicles as possible.

Make it Local

- Prioritize bikeways that connect residents within established neighborhoods to destinations like grocery stores, schools, parks, libraries, recreation centers, commercial districts, and popular bus stops.
- Find opportunities for bikeway designs and wayfinding to reflect the existing local culture within Oakland's neighborhoods.

Make it Connected

- Build continuous cross-town corridors that help people bicycle safely to Lake Merritt and downtown from as many parts of Oakland as possible.
- Evaluate design changes at intersections so that crossing a street is not a barrier to bicycling.
- Continue to provide directional signs to help bicyclists find their way and secure bicycle parking to protect their property once they reach their destination.



<p>HOW WILL BICYCLE NETWORK RECOMMENDATIONS ACHIEVE OUR GOALS?</p>				
	<p>ACCESS</p>	<p>HEALTH & SAFETY</p>	<p>AFFORDABILITY</p>	<p>COLLABORATION</p>
	<p>Bicycle network recommendations create continuous routes throughout the City, connecting neighborhoods to major destinations and to one another.</p>	<p>Bicycle network recommendations should address the most critical safety issues and prioritize improvements at high-injury corridors and intersections.</p>	<p>Bicycle network recommendations should provide affordable travel options for low-income neighborhoods.</p>	<p>The Plan should prioritize bicycle network recommendations desired by the community and should include realistic cost estimates that keep the City accountable for project delivery.</p>

PROGRESS UPDATE SINCE 2007 BIKE PLAN

Oakland has made great strides in developing a more bikeable city since the last Bike Master Plan was adopted in 2007. A few accomplishments include:

- Creation of a citywide Department of Transportation (OakDOT) with direction to “reimagine how city streets are used, with a focus on serving people, rather than simply moving vehicles”
- The bicycle network grew by 58%, from 104 miles to 164 miles
- Improvement to the comfort of the bikeway network with low-stress bikeway mileage raising from 18.2 miles to 55.7 miles; a growth of 206%
- Adoption of a Complete Streets Policy in 2013, with over 3 out of 4 implemented road projects now including bicycle facilities
- A tripling of publicly available bike parking spaces, including two attended bike stations that can serve 366 bicyclists daily
- Roll-out of regionwide bikeshare program adding 850 bikes within Oakland and offering a \$5 annual membership for low income residents
- Increase in grant funding secured for protected bike lanes, specifically \$28 million dollars in grant funding between 2015 and 2018
- Recognized national leader in coordinating bikeway implementation with routine resurfacing projects, allowing the recent majority of Oakland’s bikeway mileage to be delivered through paving projects
- Recognition as a Bicycle Friendly Community (BFC) by the League of American Bicyclists since 2010 and recognition as a Gold Level BFC since 2018 (one of only 34 cities nationwide to carry this distinction)





Bikeways Toolbox

Different types of bikeways are better suited for different roadways, based on considerations such as how fast and how frequently vehicles use the road, the roadway width, and other types of transportation using the space. The following bikeways and bike amenities are part of Oakland Department of Transportation's bikeway "toolbox."

LOW-STRESS BIKeways



Shared Use Path

- Paths shared by people walking and biking completely separated from motor vehicle traffic
- Comfortable for people of all ages and abilities
- Typically located within or along parks, roadway medians, rail corridors, or bodies of water
- Oakland refers to this as Class 1 Bikeway



Protected Bike Lane

- On-street bike lane separated from motor vehicle traffic by curb, median, planters, parking, or other physical barrier
- Oakland refers to this as Class 4 Bikeway



Buffered Bicycle Lane

- Dedicated lane for bicycle travel separated from traffic by a painted buffer
- Adding a buffer provides additional comfort and space from motor vehicles and/or parking
- Oakland refers to this as Class 2B Bikeway



Neighborhood Bike Route

- Calm local streets where bicyclists have priority, but share roadway space with automobiles.
- Includes shared roadway bicycle markings on pavement and additional traffic calming measures like speed humps or traffic diverters to keep streets comfortable for bicyclists
- Comfortable for bicyclists with wider range of comfort levels
- Oakland refers to this as Class 3B Bikeway



Bike Lane

- Dedicated lane for bicycle travel adjacent to traffic
- Oakland refers to this as a Class 2 Bikeway



Bike Route

- Signed bike route, sharing the roadway with motor vehicles
- Can include pavement markings
- Comfortable for more confident people biking
- Used when space for bike lane may not be feasible
- Oakland refers to this as a Class 3 Bikeway



BIKE AMENITIES



Bike Parking

- Includes curbside and sidewalk racks, corrals, bike lockers or bike stations
- Racks provide short-term dedicated parking outdoors
- Lockers provide long-term secure parking at high demand locations
- Stations provide long-term indoor parking typically near transit and can be staffed or self-serve



Bicycle-Friendly Intersections

- Intersections designed to provide additional separation, comfort, and safety for people biking and walking
- May include bike boxes, signal priority, curb extensions, or islands to separate bicyclists from turning motorists
- Ideal for locations with conflicts between people driving, walking, and biking



Bike Share

- Self-serve bike pickup, either at designated stations or dockless
- Ideal for short point-to-point trips and connections to and from transit stations
- Provides access to bikes for people who may not own a personal bicycle or not have storage space for a bike



Bike Repair/ Hydration Stations

- Self-serve bike repair with tools and stand
- Allows access to tools for basic do-it-yourself bike repair
- Ideal locations along trails and at community facilities





Neighborhood Bike Routes

More than any other type of bikeway, this plan is focusing on designating neighborhood bike routes (over 60 miles recommended in total). Also known as bicycle boulevards, these type of bikeways resonated with people we talked to as facilities that provide continuous, comfortable bicycle routes on the local street network instead of busy arterials. Neighborhood Bike Routes include directional marking and wayfinding signage to provide users with coherent routing, but also importantly focus on traffic calming that decrease cars speeds and limit motorist volumes to prioritize people biking. Streets designated as neighborhood bike routes, OakDOT will focus on the following actions:

IMPROVING MAJOR STREET CROSSINGS

A person's comfort biking on a low volume neighborhood street can be impacted when crossing of a high volume arterial. OakDOT will focus on improving these intersections with treatments such as protected intersections, bike boxes, traffic signals, or curb extensions to improve the visibility and safety of bicyclists at major crossings.

REDUCING OR PREVENTING SPEEDING

Research shows that the severity of an injury of a bicyclist in a collision is related to the speed of the vehicle. Neighborhood Bike Routes are recommended for bikeways with posted speeds of 25 MPH

or below. Some nearby cities and neighborhoods within Oakland are choosing to reduce speeds through traffic calming measures (speed humps, chicanes, curb extensions) and reduced posted speeds to create a more bicycle friendly street.

PREVENTING HIGH CAR VOLUMES

The number of cars passing someone biking on the street affects the comfort of a bicyclist, particularly when sharing a lane with motor vehicles. We can look at the average numbers of vehicles per day as a proxy for comfort. For example, at 3,000 vehicles a day, a car passes a bicycle every 46 seconds. For Neighborhood Bike Routes, having 2,000 vehicles per day is preferred

and 3,000 vehicles per day is acceptable. For roadways with higher volumes, traffic diversion methods should be considered.

INCREASING PAVEMENT QUALITY

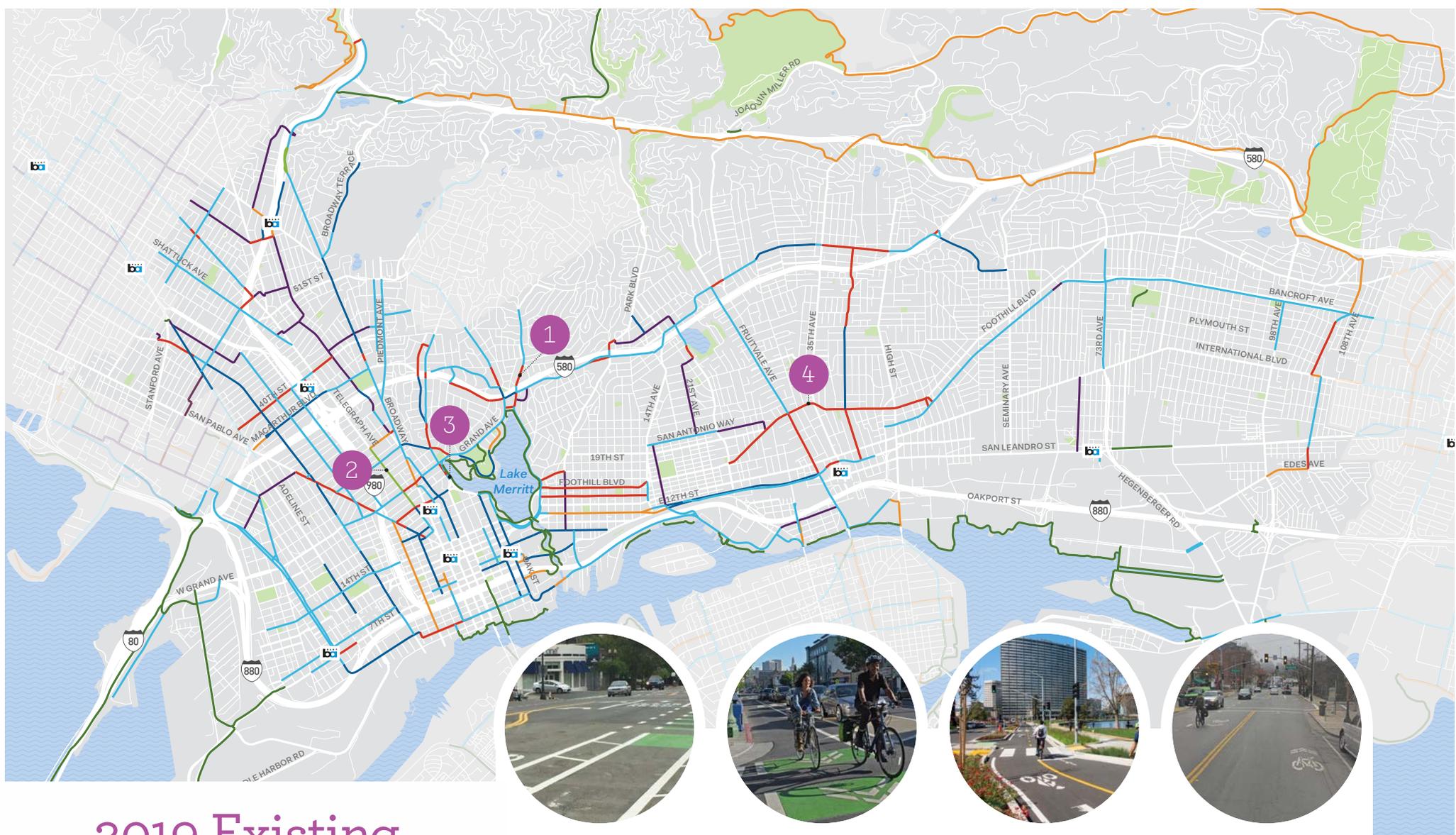
Many of the streets designated as Neighborhood Bike Routes through this plan currently have low pavement quality. Cracks, potholes, and bumps can make riding these streets uncomfortable. OakDOT is working to repave these streets by prioritizing them in their internal paving schedule.



“

I use back streets, not main streets when biking to stay away from speeding cars. I grew up in Oakland so I don't need a map, I just know the roads.”

OAKLAND BIKE PLAN LISTENING
SESSION PARTICIPANT



2019 Existing Bicycle Network

- Path
- Protected Bike Lane
- Buffered Bike Lane
- Bike Lane
- Neighborhood Bike Route
- Bike Route
- Arterial Bike Route
- Park
- Oakland City Limits
- BART Station



1 The City's focus on lane conversion projects that reduce the number of travel lanes, such as on Grand Avenue, is a strategy to make room for bikeways while providing traffic calming benefits to the roadway.



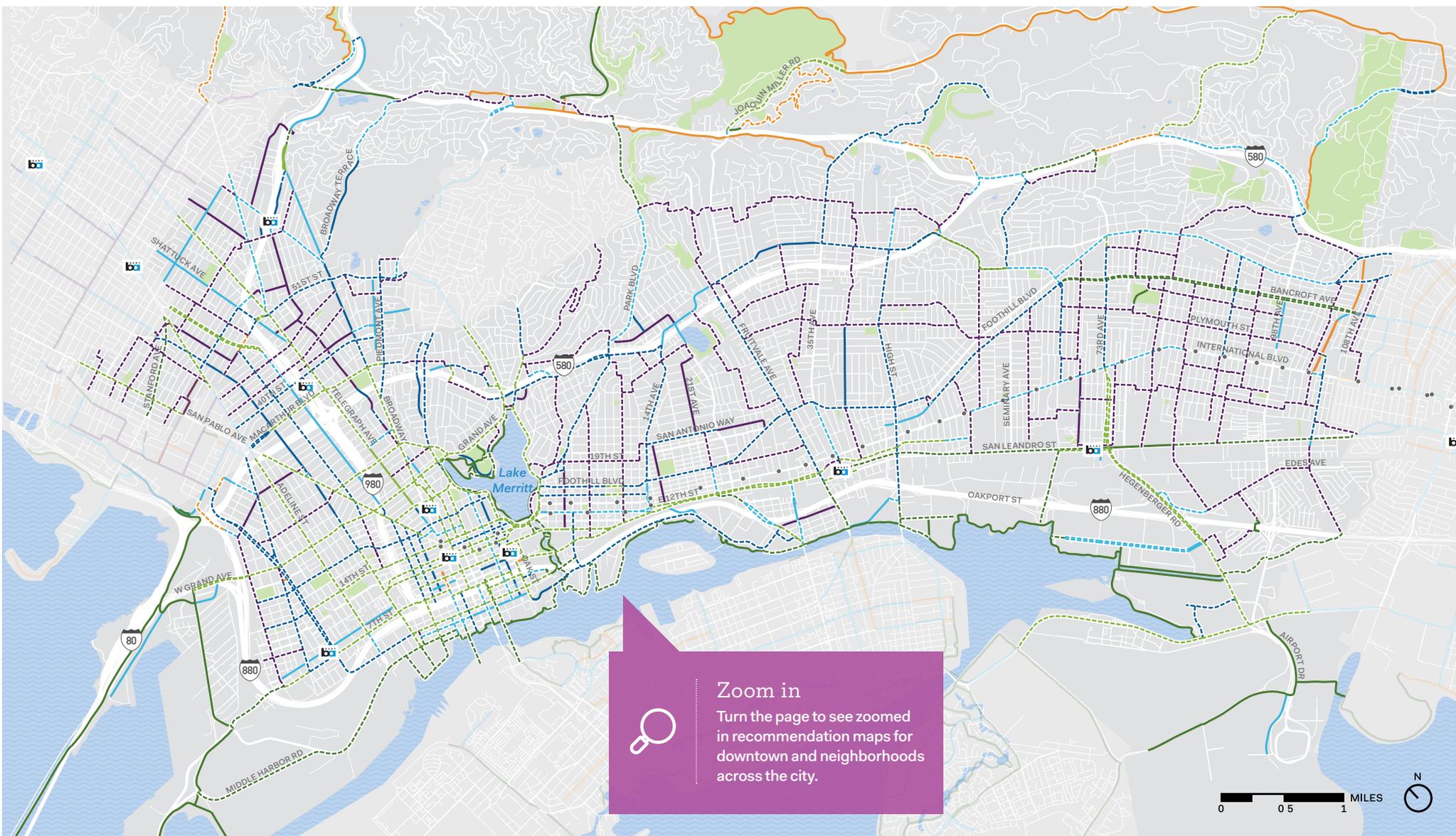
2 Oakland's first parking protected bikeway on Telegraph Ave has illustrated the safety benefits of increased separation - with a 40% reduction in collisions measured after installation.



3 Projects like the Lakeside Green Streets project next to Lake Merritt are providing high quality, separated experiences of Oakland's assets.

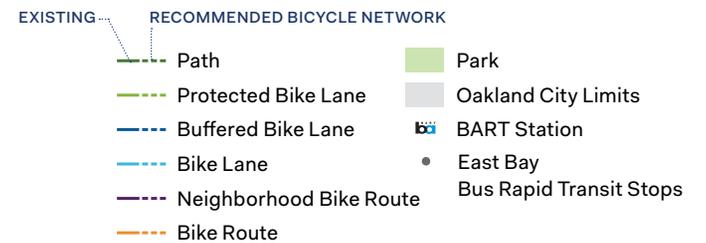


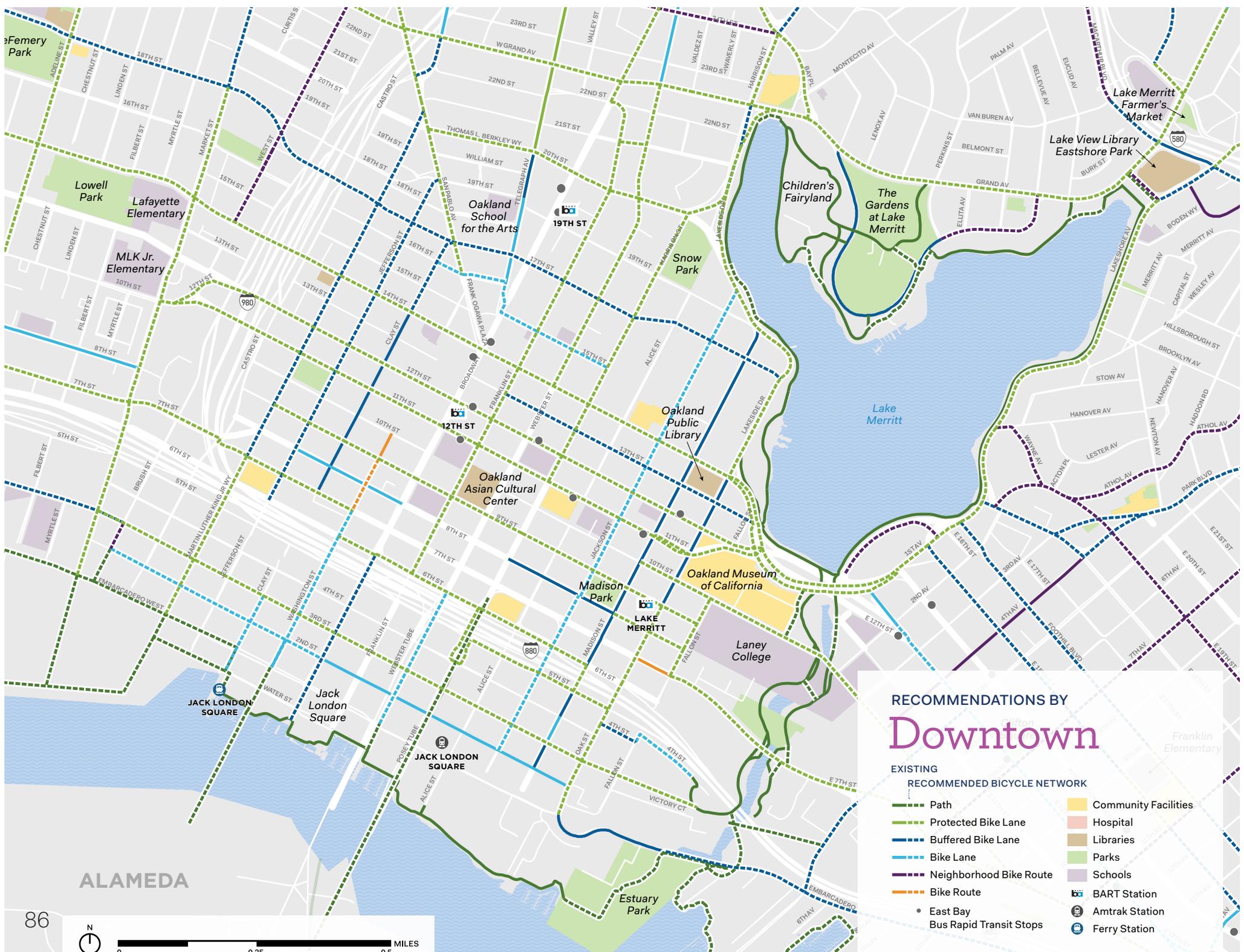
4 Arterial Bike Routes, which require bicyclists to share lanes with cars on busy streets, will no longer be proposed. The 14 miles of existing routes are proposed for more comfortable bikeway types.



Citywide Recommendations

This map identifies Oakland's existing 164-mile bike network and the 219 miles of proposed upgraded and new bikeways.



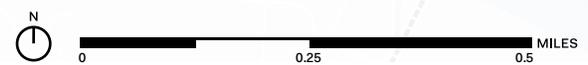


RECOMMENDATIONS BY Downtown

- EXISTING**
- Path
 - Protected Bike Lane
 - Buffered Bike Lane
 - Bike Lane
 - Neighborhood Bike Route
 - Bike Route
 - East Bay Bus Rapid Transit Stops
- RECOMMENDED BICYCLE NETWORK**
- Community Facilities
 - Hospital
 - Libraries
 - Parks
 - Schools
 - BART Station
 - Amtrak Station
 - Ferry Station

ALAMEDA

86

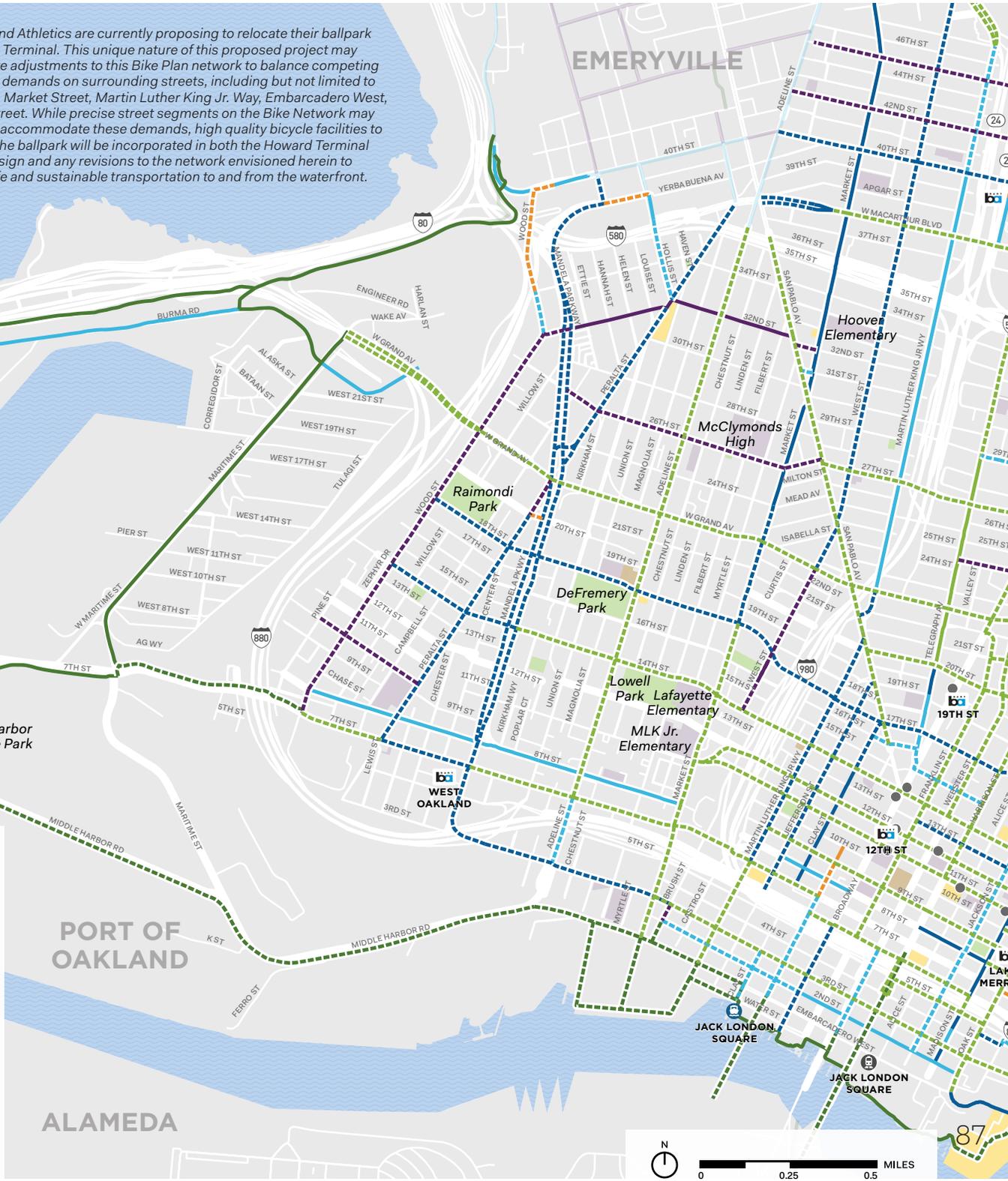


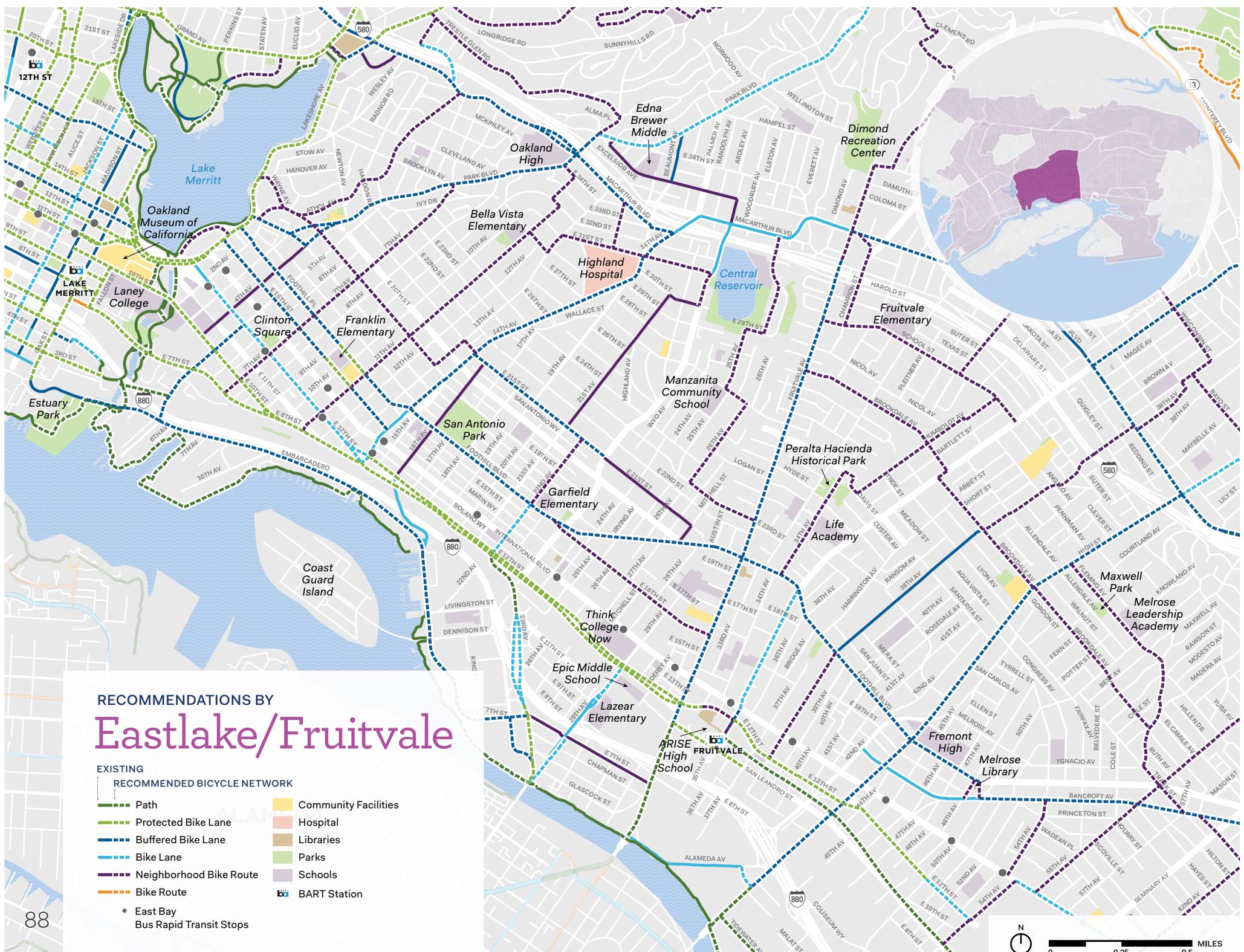
The Oakland Athletics are currently proposing to relocate their ballpark to Howard Terminal. This unique nature of this proposed project may necessitate adjustments to this Bike Plan network to balance competing game-day demands on surrounding streets, including but not limited to Broadway, Market Street, Martin Luther King Jr. Way, Embarcadero West, and 3rd Street. While precise street segments on the Bike Network may change to accommodate these demands, high quality bicycle facilities and from the ballpark will be incorporated in both the Howard Terminal project design and any revisions to the network envisioned herein to ensure safe and sustainable transportation to and from the waterfront.



RECOMMENDATIONS BY West Oakland

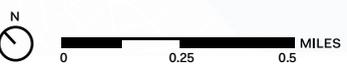
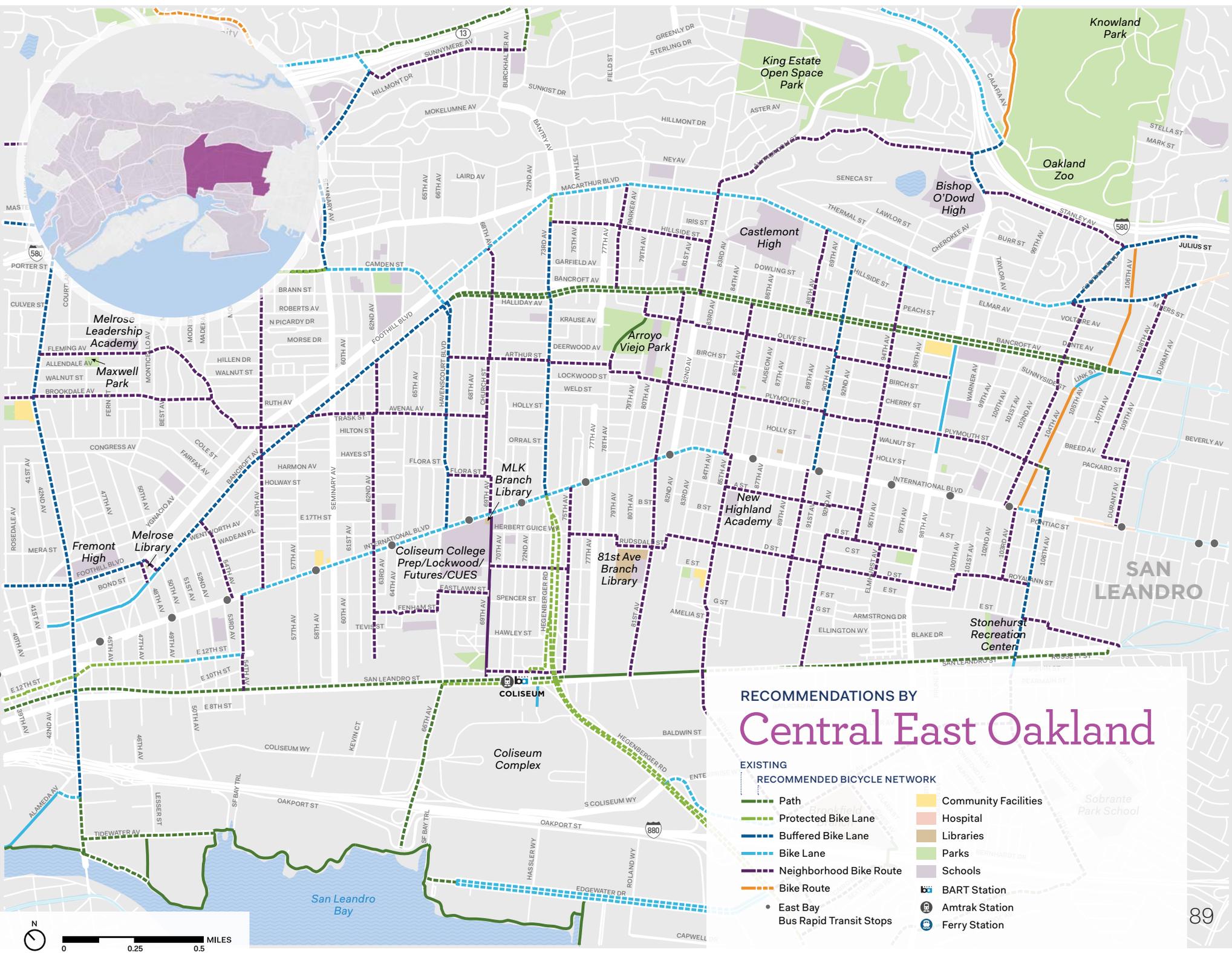
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| EXISTING | |
| RECOMMENDED BICYCLE NETWORK | |
| | Path |
| | Protected Bike Lane |
| | Buffered Bike Lane |
| | Bike Lane |
| | Neighborhood Bike Route |
| | Bike Route |
| | Community Facilities |
| | Hospital |
| | Libraries |
| | Parks |
| | Schools |
| | BART Station |
| | Amtrak Station |
| | Ferry Station |
| | East Bay Bus Rapid Transit Stops |





RECOMMENDATIONS BY
Eastlake/Fruitvale

- EXISTING**
- RECOMMENDED BICYCLE NETWORK
 - Path
 - Protected Bike Lane
 - Buffered Bike Lane
 - Bike Lane
 - Neighborhood Bike Route
 - Bike Route
 - Community Facilities
 - Hospital
 - Libraries
 - Parks
 - Schools
 - BART Station
 - East Bay Bus Rapid Transit Stops





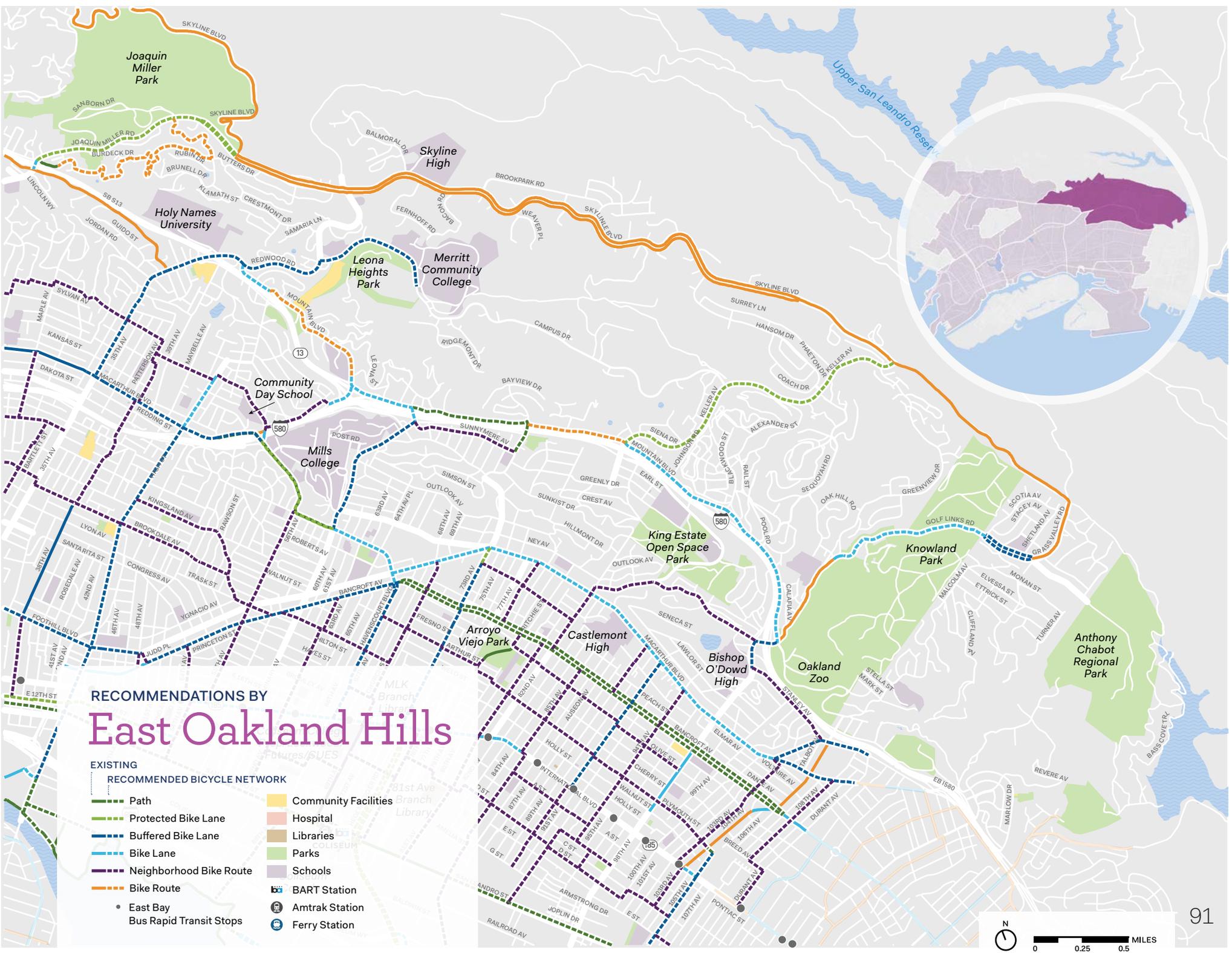
RECOMMENDATIONS BY

Coliseum/Airport

EXISTING

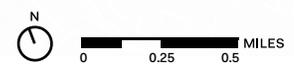
RECOMMENDED BICYCLE NETWORK

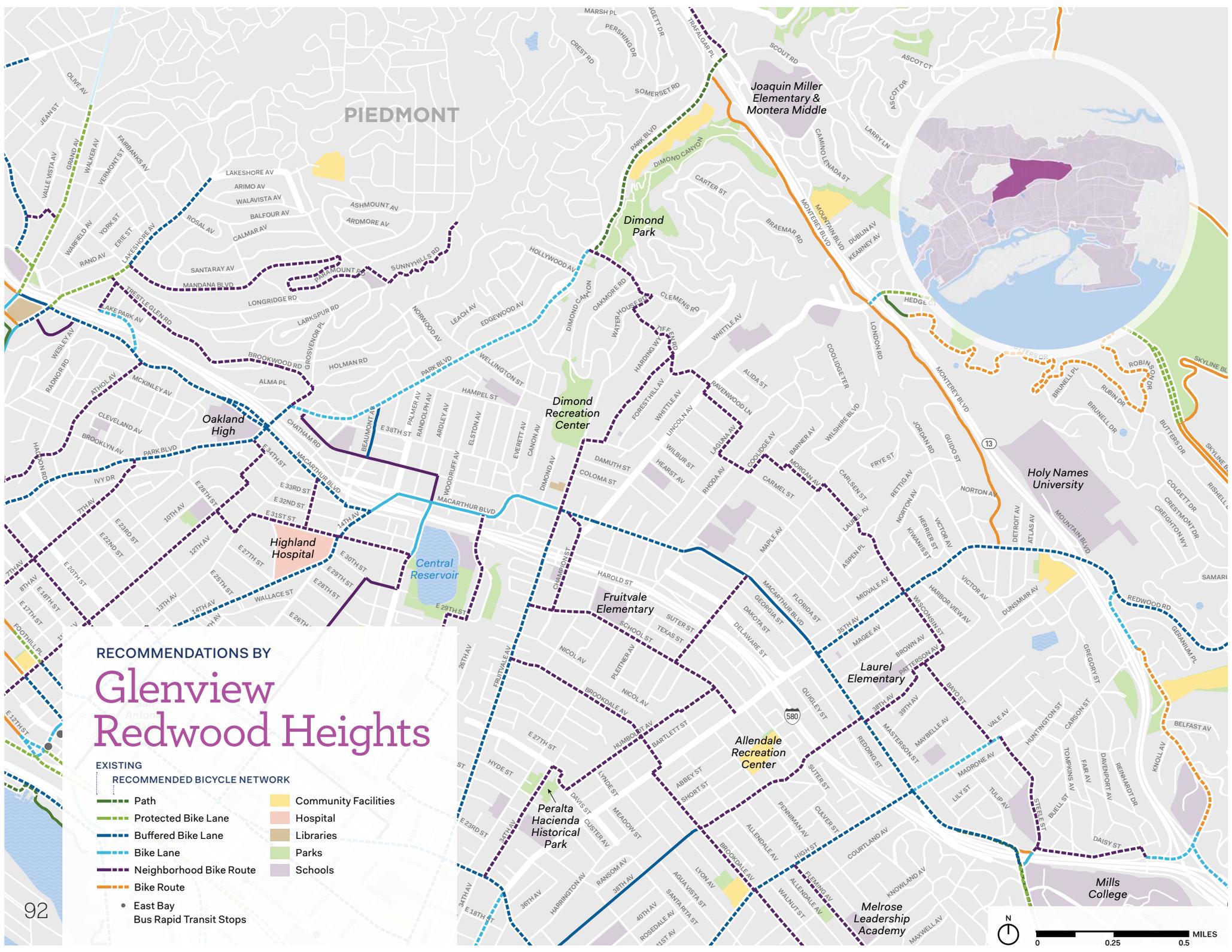
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| Path | Community Facilities |
| Protected Bike Lane | Hospital |
| Buffered Bike Lane | Libraries |
| Bike Lane | Parks |
| Neighborhood Bike Route | Schools |
| Bike Route | BART Station |
| East Bay Bus Rapid Transit Stops | Amtrak Station |
| | Ferry Station |



RECOMMENDATIONS BY
East Oakland Hills

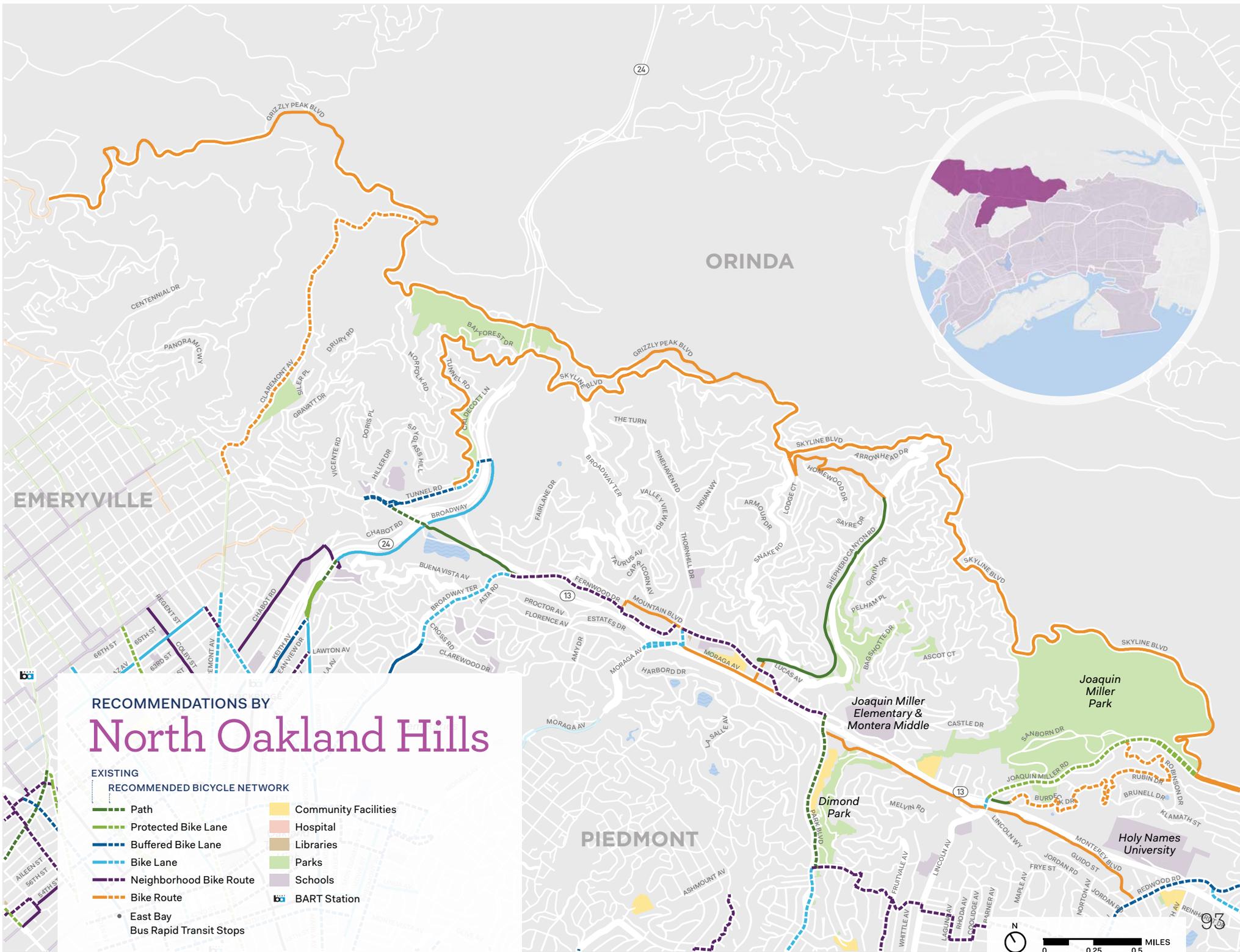
- EXISTING**
- RECOMMENDED BICYCLE NETWORK
 - Path
 - Protected Bike Lane
 - Buffered Bike Lane
 - Bike Lane
 - Neighborhood Bike Route
 - Bike Route
 - Community Facilities
 - Hospital
 - Libraries
 - Parks
 - Schools
 - BART Station
 - Amtrak Station
 - Ferry Station
 - East Bay Bus Rapid Transit Stops





RECOMMENDATIONS BY
Glenview
Redwood Heights

- EXISTING**
- East Bay Bus Rapid Transit Stops
- RECOMMENDED BICYCLE NETWORK**
- Path
 - Protected Bike Lane
 - Buffered Bike Lane
 - Bike Lane
 - Neighborhood Bike Route
 - Bike Route
 - Community Facilities
 - Hospital
 - Libraries
 - Parks
 - Schools

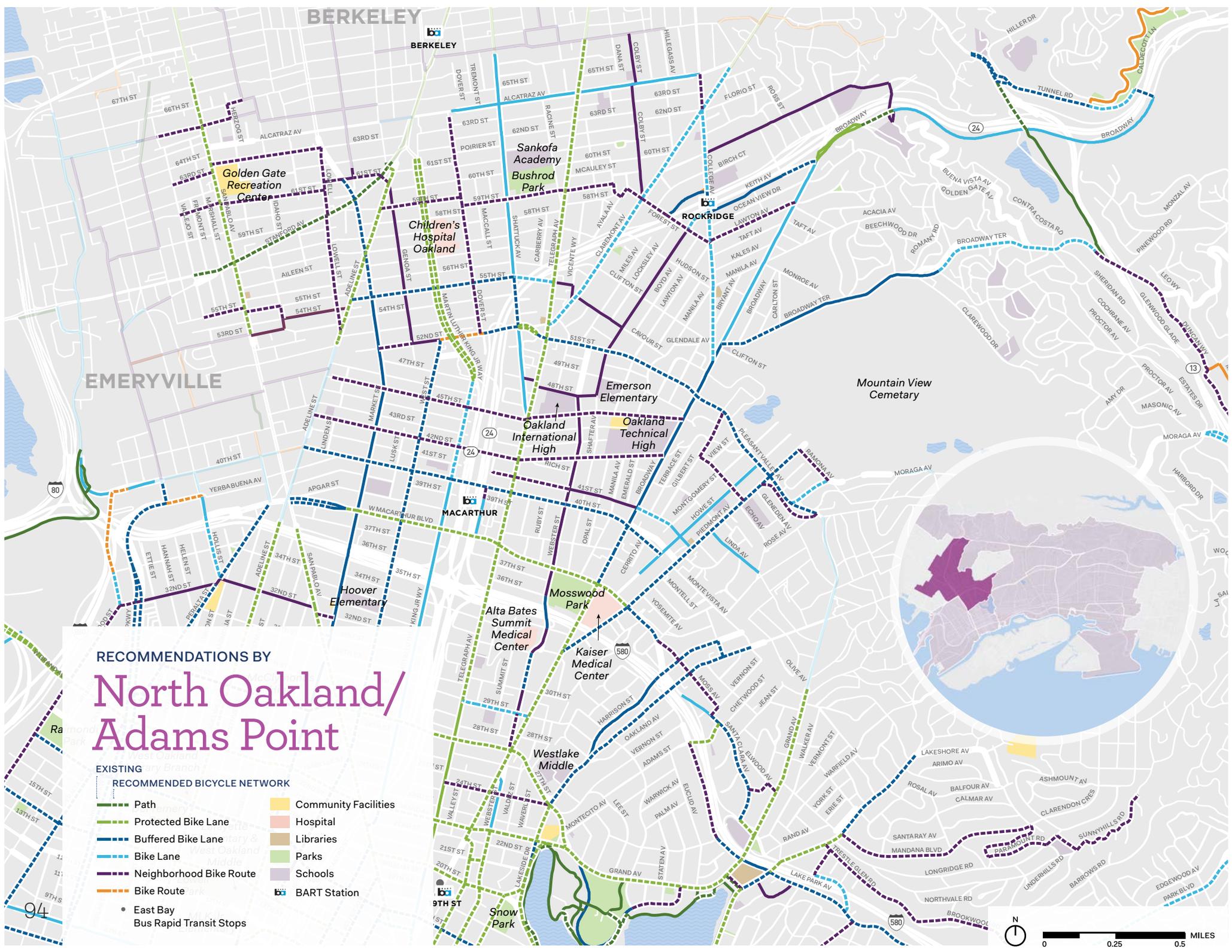


RECOMMENDATIONS BY North Oakland Hills

- EXISTING**
- RECOMMENDED BICYCLE NETWORK**
- Path
 - - - Protected Bike Lane
 - - - Buffered Bike Lane
 - . . . Bike Lane
 - - - Neighborhood Bike Route
 - - - Bike Route
 - Community Facilities
 - Hospital
 - Libraries
 - Parks
 - Schools
 - BART Station
 - East Bay Bus Rapid Transit Stops



BERKELEY

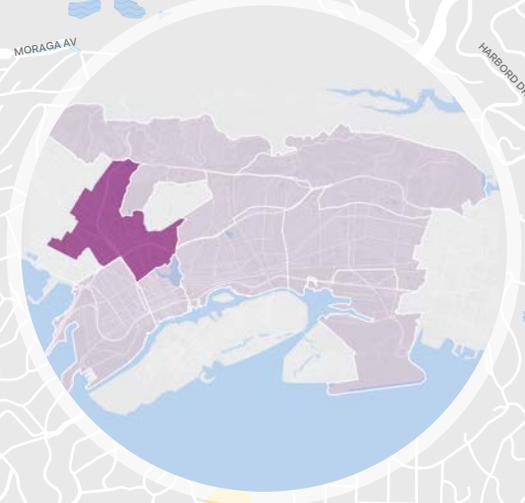


RECOMMENDATIONS BY

North Oakland/ Adams Point

EXISTING
RECOMMENDED BICYCLE NETWORK

- Path
- Protected Bike Lane
- Buffered Bike Lane
- Bike Lane
- Neighborhood Bike Route
- Bike Route
- Community Facilities
- Hospital
- Libraries
- Parks
- Schools
- BART Station
- East Bay Bus Rapid Transit Stops

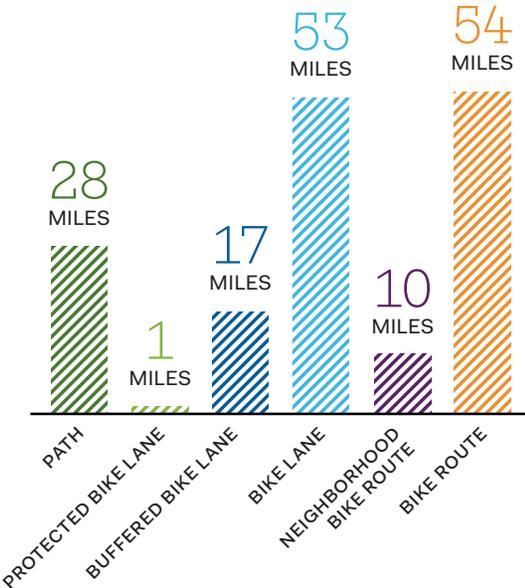




By the Miles

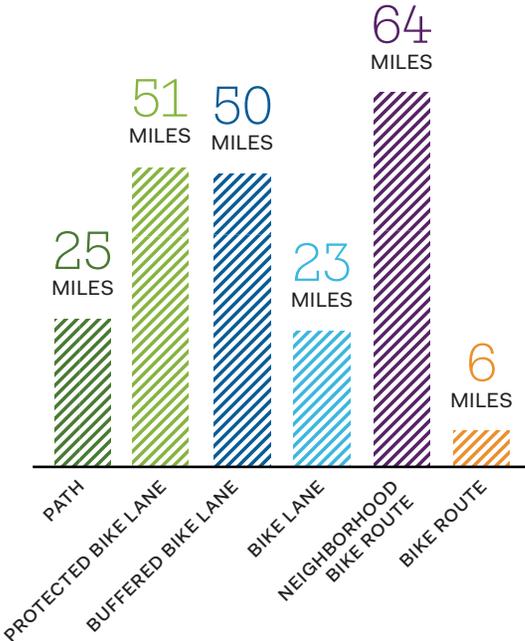
164
MILES

BIKE NETWORK TODAY



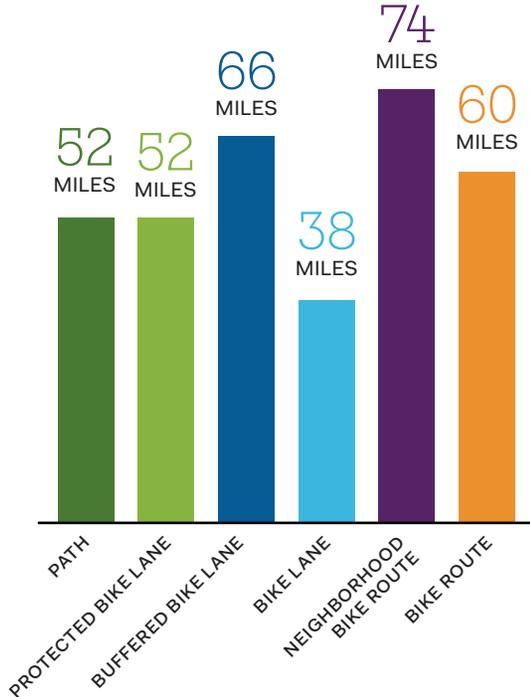
219
MILES

PROPOSED NEW & UPGRADED BIKEWAYS



343
MILES

COMPLETE NETWORK





How Did we Develop the Recommended Network?

What steps did the project team take to develop the recommended bikeway network that supports a comfortable, local, and connected network?

- **Public Input**

Demand for new and improved bikeways was recorded through Bike Plan workshops and listening sessions, the online community input map, and mobile workshop events. Roadways and areas that were mentioned across different outreach methods were examined for inclusion in the bikeway network.

Example: Public interest for a bikeway on High Street resulted in a Vision Network project on that corridor.

- **2007 Bike Plan Recommendations**

The project team identified completed projects and upgraded remaining recommendations to current low-stress bikeway standards, where possible.

- **Local Destination Connectivity**

The project team identified bikeways to better connect users to parks, community centers and libraries, transit centers, and local middle and high schools.

Example: The proposed neighborhood bike routes on Rudsdale Street and 81st Avenue will provide new connections to the 81st Ave Library.

- **Network Coverage**

Research shows that coverage and density of bikeways is an important factor to encourage bike ridership. The project team identified bikeways that would increase the density of the bikeways, especially in East Oakland where there are few existing bikeways.

Example: The proposed network of neighborhood bike routes in Central East Oakland fills in coverage of East-West and North-South bikeways in that area.

- **Gap Closure**

The project team looked at where new facilities were needed to close the gap in the existing network. These were often more challenging projects that were precluded from past planning efforts because of design constraints.

Example: the proposed continuation of bike facilities on Telegraph Avenue will provide connections to existing bikeways through downtown and North Oakland.

- **Projects and Plans Under Development**

The project team incorporated bikeway projects that were part of recent or undergoing planning efforts.

Example: Bikeway recommendations from Oakland-based planning efforts such as the Downtown Oakland Specific Plan are included, as are multi-jurisdictional efforts such as the Stanford Bike Path and the East Bay Greenway.

- **Upgrading Existing Bikeways**

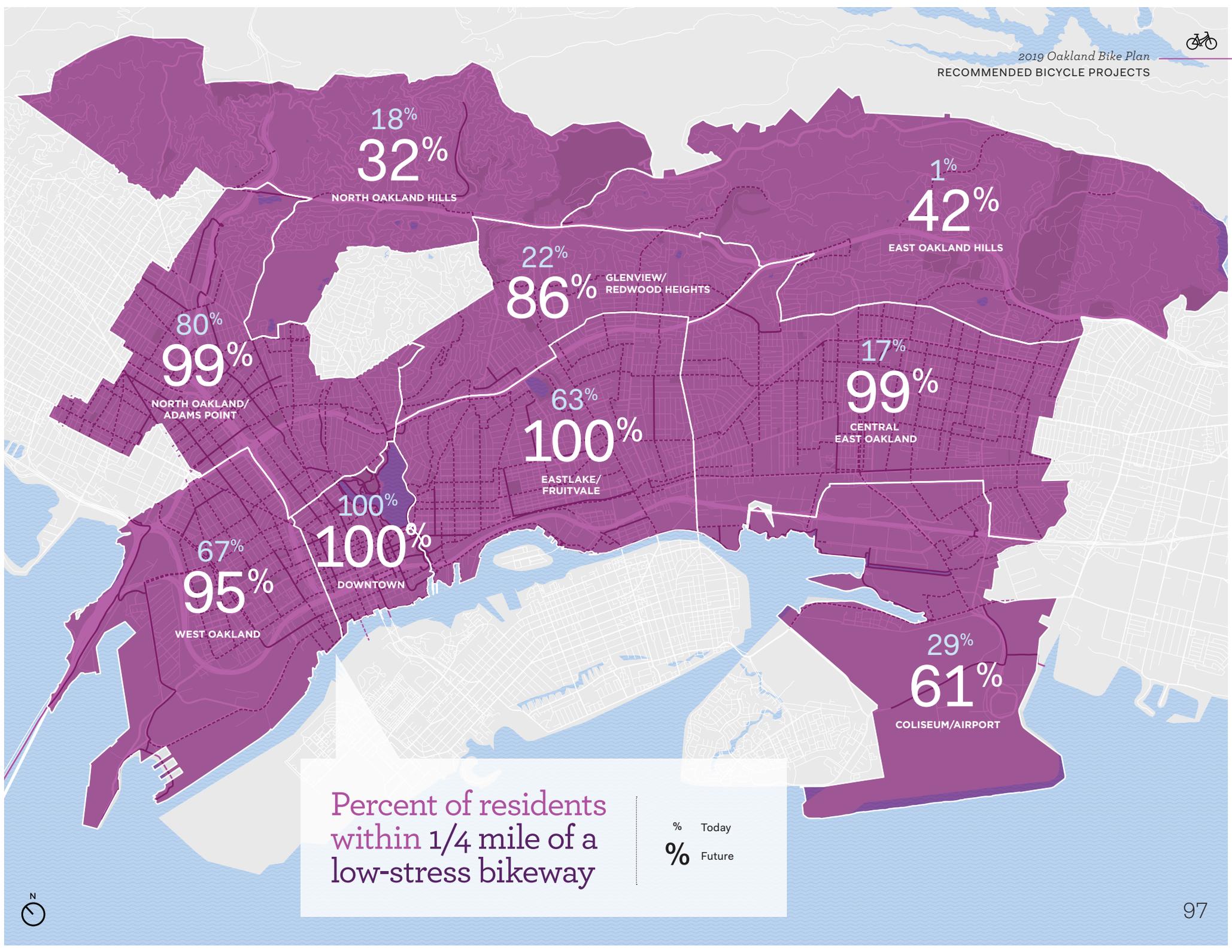
The project team look at which existing bikeways could be upgraded to provide a more comfortable connection.

Example: Recommendations on Grand Avenue, Adeline Street, and many of the east-west cross streets through Downtown upgrade existing bicycle lanes.

- **OakDOT Staff Recommendations**

The project team incorporated projects proposed by OakDOT staff that have been generated since the adoption of the 2007 Oakland Bicycle Plan.

Example: OakDOT staff identified the challenges with the current 104th-106th Ave bikeways, and project team staff proposed an alternative bike boulevard route on 108th Avenue, Breed Avenue, and Durant Avenue.



Percent of residents within 1/4 mile of a low-stress bikeway

% Today
% Future





REALITY CHECK

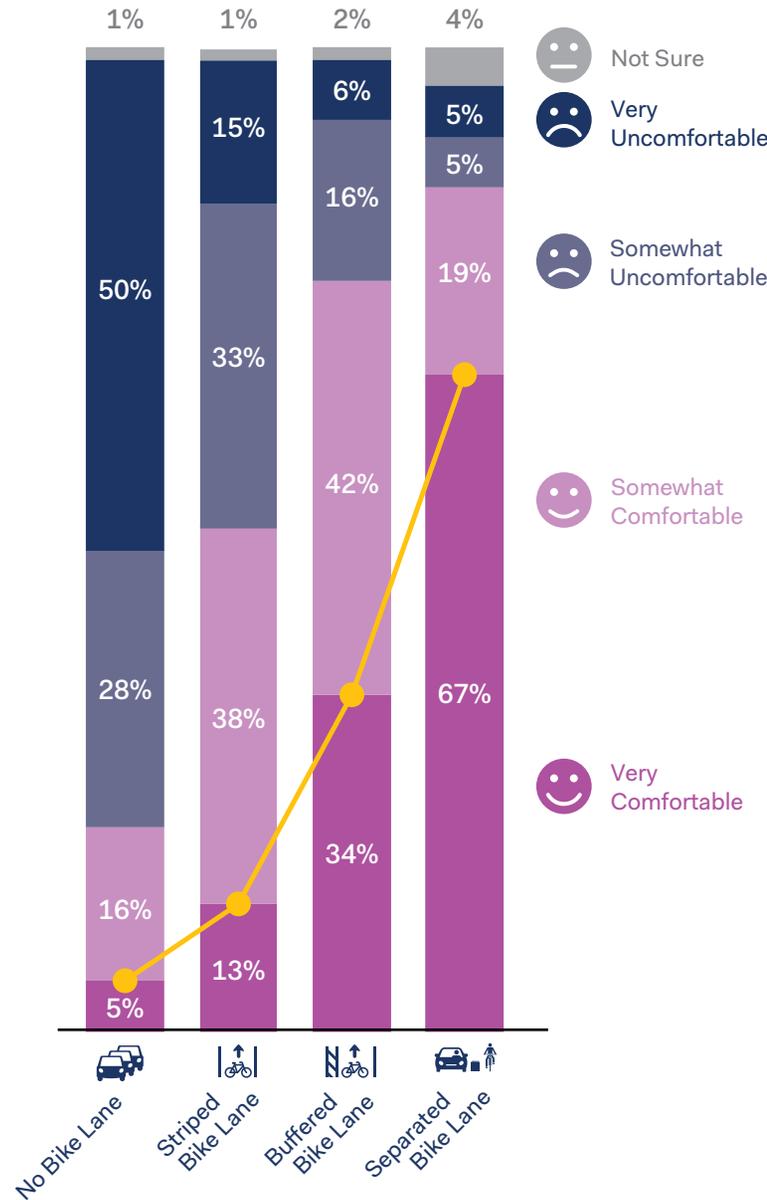
How are Oakland's three strategies to make bicycling more comfortable, local, and connected reflected in the proposed network?

STRATEGY 1

Make it Comfortable

Nearly half of Oaklanders who bike prefer not to share the road with cars, and prefer to bike on low volume streets or streets with separated bikeways. The proposed bikeway network should provide low-stress routes that allow for families and those that are interested but concerned to reach their destinations.

To do that, the project team tried to designate low-stress bikeways (see Bikeways Toolbox section), wherever possible, to provide riders with more protection from moving vehicles.



LOW-STRESS BIKEWAYS

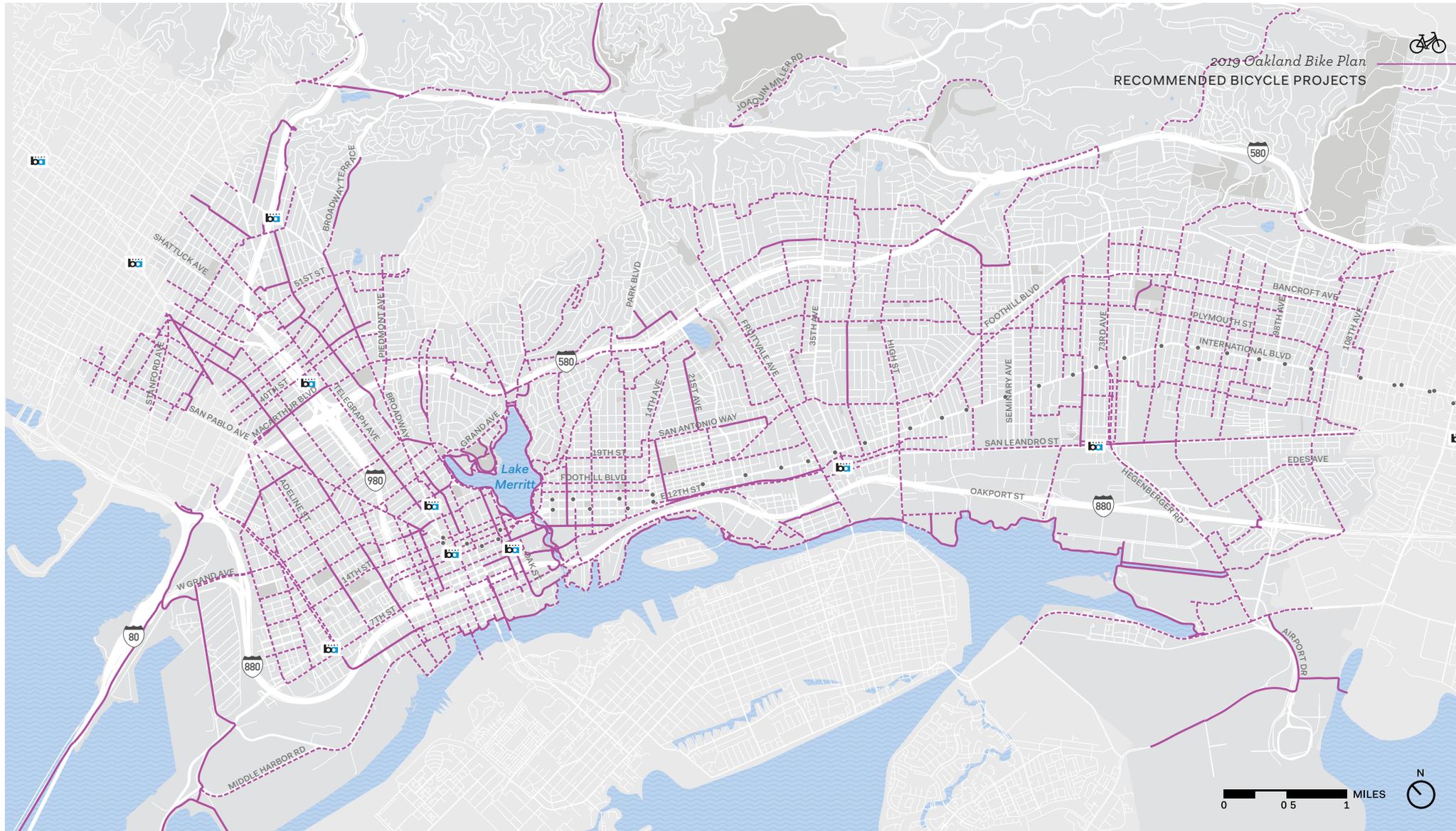
Providing low-stress bikeways can be an important strategy for people to feel more comfortable or safer biking to their destinations. Bikeways are considered low-stress if they involve very little traffic interaction by nature of the roadway's vehicle speeds and volumes (e.g., a shared low-traffic neighborhood street) or if greater degrees of physical separation are placed between the bikeway and traffic lane on roadways with higher traffic volumes and speeds.



Neighborhood Bike Route on Shafter Ave



Protected Bike Lane on Telegraph Photo courtesy of Bike East Bay



Low-Stress Bikeways

More than 80% of the recommended new or upgraded bikeway miles will provide low-stress options that appeal to more Oaklanders.

- Existing
- - - Recommended
- Park
- Oakland City Limits
- BART Station
- East Bay Bus Rapid Transit Stops



STRATEGY 2

Make it Local

Not every bike trip is for commuting to work, and residents need to be able to access local destinations, such as grocery stores, libraries, parks, and schools, via bike. The proposed bikeway network should designate bikeways that provide good connections within neighborhoods.

To do that, the project team looked at how new bikeways could better connect people to BART stations, frequented bus stops, middle and high schools, libraries and parks, and grocery stores, among others destinations.





CLOSER LOOK

To make sure the network connects residents with as many local neighborhood destinations as possible, OakDOT measured how many people can access schools, parks, recreation centers, grocery stores, and transit within a **ten minute bike ride** using low-stress bikeways. Existing access to local destinations was then compared to how many more people will gain access when the full set of recommended bikeways are built. The following pages display the results of this analysis.



Let's Bike Oakland

RECOMMENDED BICYCLE PROJECTS



Only **5%** OF OAKLANDERS CURRENTLY HAVE ACCESS TO GROCERY STORES *within a 10-minute ride on low-stress bikeways*

67% OF OAKLANDERS WILL HAVE ACCESS AFTER INSTALLING THE RECOMMENDED BIKEWAYS

82% of Oaklanders within disadvantaged communities will have access to grocery stores within a 10-minute ride on low-stress bikeways

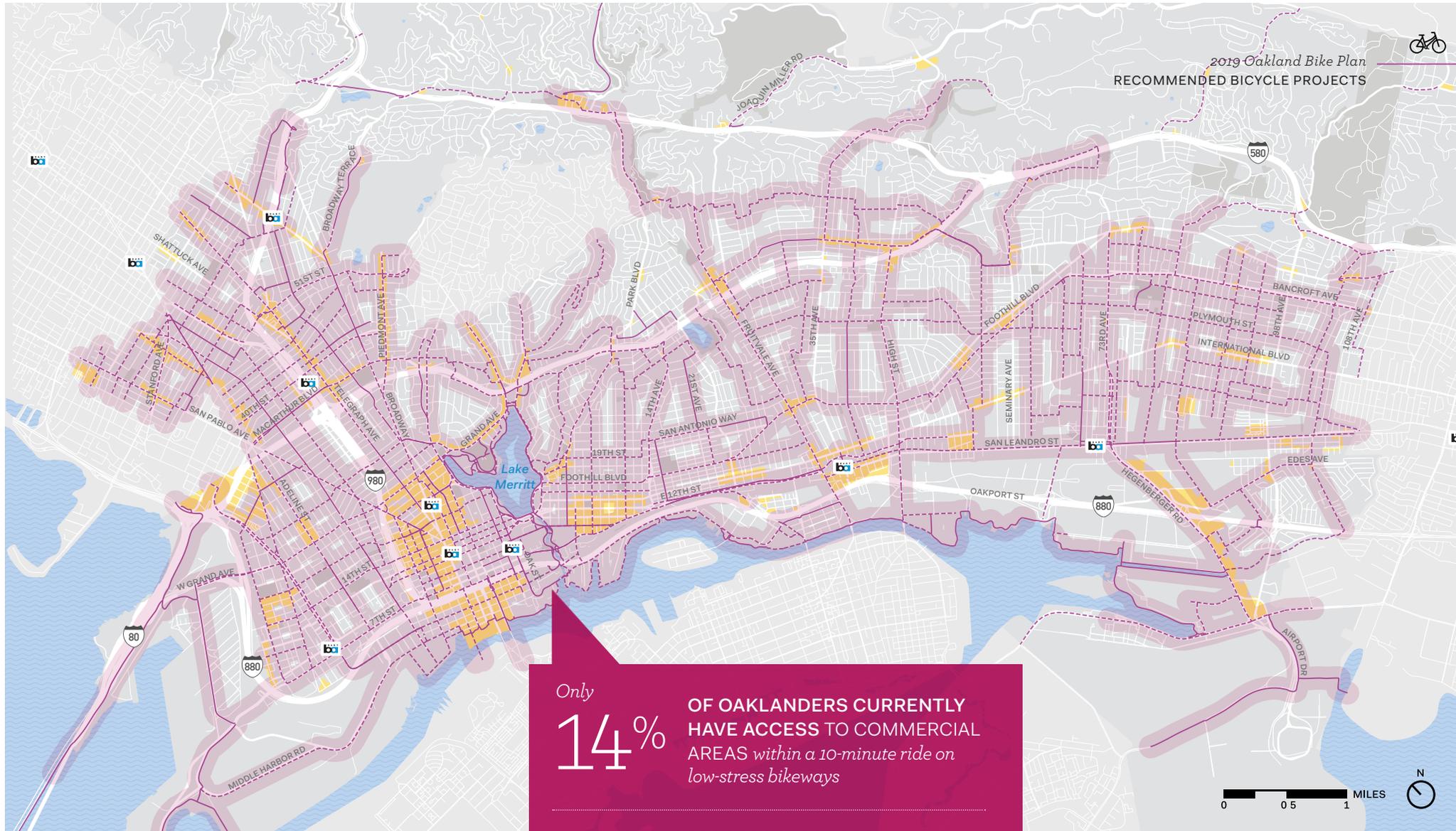
RECOMMENDED BICYCLE NETWORK

Access to Grocery Stores

Source: City of Oakland, Department of Economic Development. Note: Convenience stores were not included in this analysis.

- Access within 10 minute bike ride
- Existing Low-Stress Bicycle Network
- Recommended Low-Stress Bicycle Network
- Grocery Store
- BART Station





Only **14%** OF OAKLANDERS CURRENTLY HAVE ACCESS TO COMMERCIAL AREAS *within a 10-minute ride on low-stress bikeways*

65% OF OAKLANDERS WILL HAVE ACCESS AFTER INSTALLING THE RECOMMENDED BIKEWAYS

79% of Oaklanders within disadvantaged communities will have access to commercial areas within a 10-minute ride on low-stress bikeways.

RECOMMENDED BICYCLE NETWORK

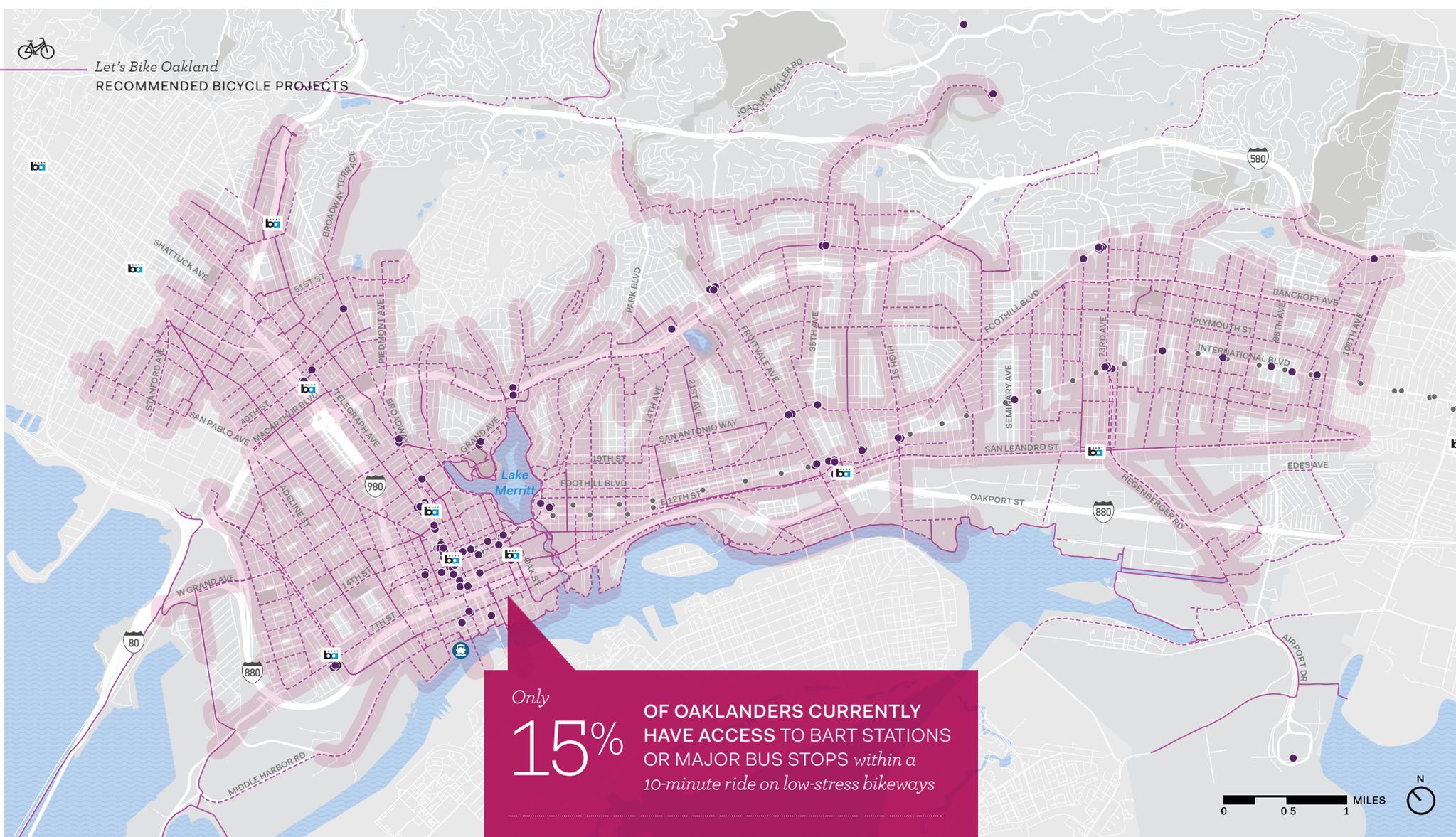
Access to Commercial Areas

- Access within 10 minute bike ride
- Commercial Areas
- Existing Low-Stress Bicycle Network
- Recommended Low-Stress Bicycle Network
- BART Station



Let's Bike Oakland

RECOMMENDED BICYCLE PROJECTS



Only **15%** OF OAKLANDERS CURRENTLY HAVE ACCESS TO BART STATIONS OR MAJOR BUS STOPS *within a 10-minute ride on low-stress bikeways*

69% OF OAKLANDERS WILL HAVE ACCESS AFTER INSTALLING THE RECOMMENDED BIKEWAYS

RECOMMENDED BICYCLE NETWORK

Access to Transit

82% of Oaklanders within disadvantaged communities will have access to BART stations or major bus stops within a 10-minute ride on low-stress bikeways.

- Access within 10 minute bike ride
- Existing Low-Stress Bicycle Network
- Recommended Low-Stress Bicycle Network
- Ferry
- BART Station
- East Bay Bus Rapid Transit Stops
- Major Transit Stop
Future Bus Rapid Transit stops and AC Transit bus stops with more than 300 daily boardings



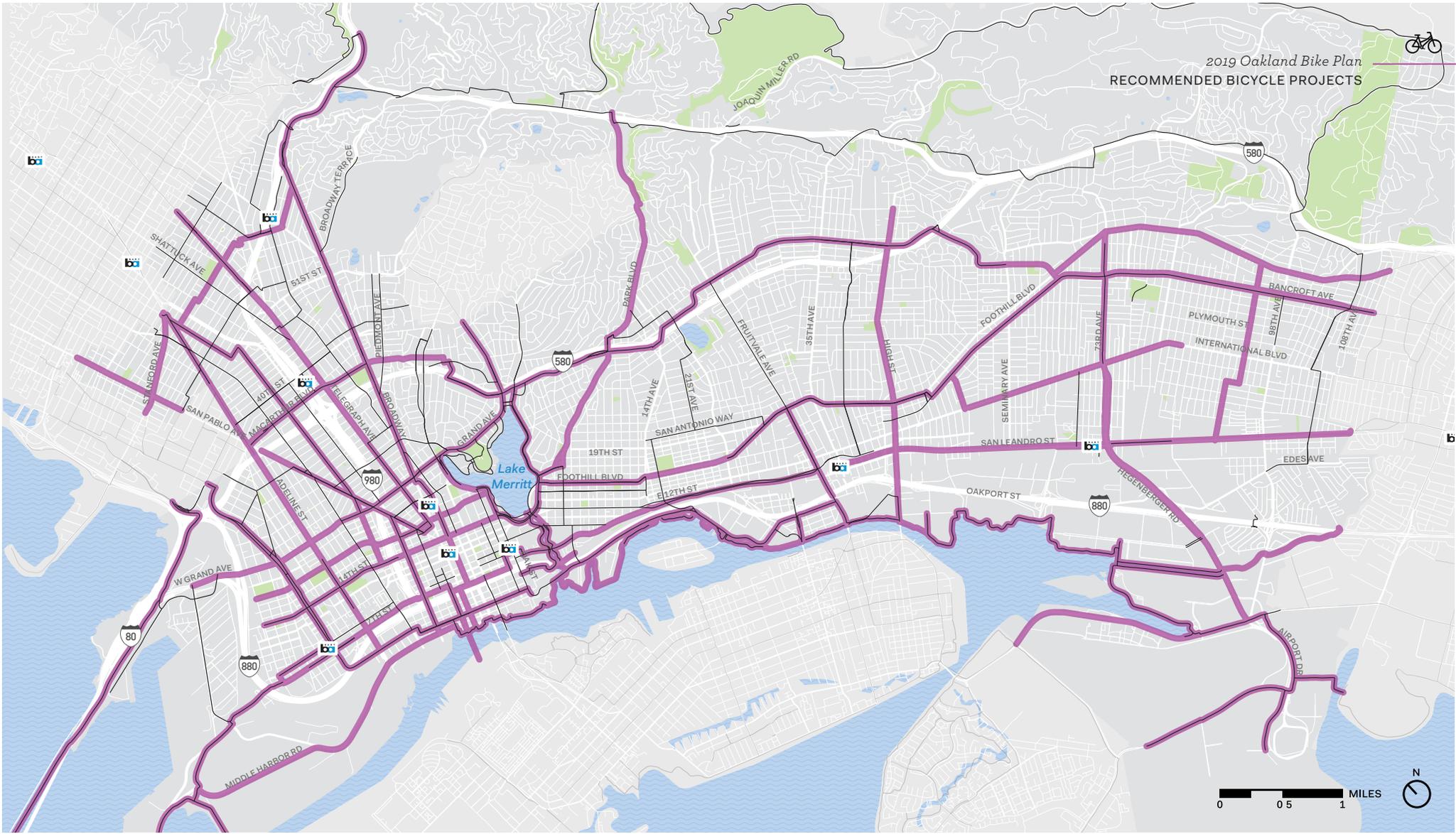
STRATEGY 3

Make it Connected

The proposed bikeway network closes gaps in the existing bikeway network to help people biking reach their destinations across town. This strategy will look to add bikeways where bike lanes currently end, and focus on longer corridors to serve as the bike network backbone .

To do that, OakDOT is also looking at long distance corridors in the City, such as Broadway, Telegraph Avenue, Foothill Boulevard, and Bancroft Avenue that can provide meaningful connections across different neighborhoods.





STRATEGY 3: MAKE IT CONNECTED

Long-Distance Corridors

These corridors will provide a continuous travel experience for those who need to move beyond their immediate neighborhood.

- Existing Bikeways
- Long-Distance Corridors
- Park
- Oakland City Limits
- b BART Station



Bike Share

BACKGROUND

In July, 2017 bike share launched in Oakland. It is part of the regional bike share system that includes Berkeley, Emeryville, San Francisco and San Jose. Bike sharing systems allow members to rent bikes for short trips. Oakland has 80 bike sharing stations with about 900 bikes , including 400 electric-assist "E-bikes". Bike sharing can help reduce barriers to bicycling, such as repair costs, availability of a bicycle and fear of having a bike stolen. In 2018, Oakland's 1,600 bike share members who took 250,000 trips.

However, bike sharing systems have their own barriers that include credit card requirements, up-front costs, cell phone access, a lack of stations in underserved communities and a lack of familiarity with how the system works.

In order to address some of those barriers, Oakland's bike sharing system offers a discounted



membership to anyone who qualifies for CalFresh or PG&E's CARE service. Known as Bike Share for All, this program costs \$5 for the first year and \$5 per month afterwards. Members can pay using cash at the Oakland Public Library Main Branch.

OakDOT staff worked with TransForm, Bike East Bay, the Scraper Bike Team and Cycles of Change to sign up hundreds of Oaklanders for Bike Share for All. These efforts helped to introduce bike sharing to the community. As of early 2019, Oakland has 350 Bike Share for All members, about 20% of the total.



WHAT WE HEARD

Many people at mobile workshops and listening sessions expressed dislike of the current form of bikeshare and expressed that future iterations should be community-owned and expanded into East Oakland. Concerns also included station design, corporate branding and the age limit for use (18).

Participants in the Design Lab provided ideas on how to make bike share better. They suggested that bike share systems should:

- Offer technical support
- Fund a community owned bike share system (such as a bike library)
- Support and partner with community groups
- Offer a more accessible pricing structure
- Offer bikes for kids
- Expand service to East Oakland
- Make bike share accessible to people with physical disabilities



WHAT WE'VE PROPOSED

Community-led Bike Share Expansion

Mobility4All Partnership Expansion

Fund a pilot free ride program for underserved populations.

The Shed Bike Library

Establish a bike lending library at the Scraper Bike's Shed.

Community-Driven Bike Station Activation (Parklets)

Work with community members to design bike stations that better serve and reflect the culture and businesses in East Oakland.

See page 75 for more information on how we are working towards addressing these issues in the future expansion of the system to meet the needs of Oaklanders and support our unique bike culture.

Expand Adaptive Bike Share Pilot

Adaptive bikes are cycles that are modified to meet the needs of the individual rider, making it possible for anyone to ride, regardless of physical ability. In partnership with Oakland's ADA Programs Division, Ford GoBike, and the Bay Area Outreach and Recreation Program (BORP) Oakland's adaptive bike share pilot program will provide hand cycles, recumbent trikes, and side-by-side tandems for people with disabilities.

Six adaptive bikes will be available twice a week at a "pop-up" location near bike routes that includes off-street trail, such as the Lake Merritt Trail or the Bay Trail. The "pop-up" will also be near regular bike share stations. Staff from BORP, the region's leading provider of accessible sports and recreation opportunities for people with disabilities, will be on-hand to fit,

train and assist riders on how to use the adaptive bikes.

After this six-month pilot, OakDOT will gather data and survey riders to determine how to permanently increase the accessibility of the bike share program.



Photo: Clane Gessel Photography



NOT JUST FOR BICYCLES

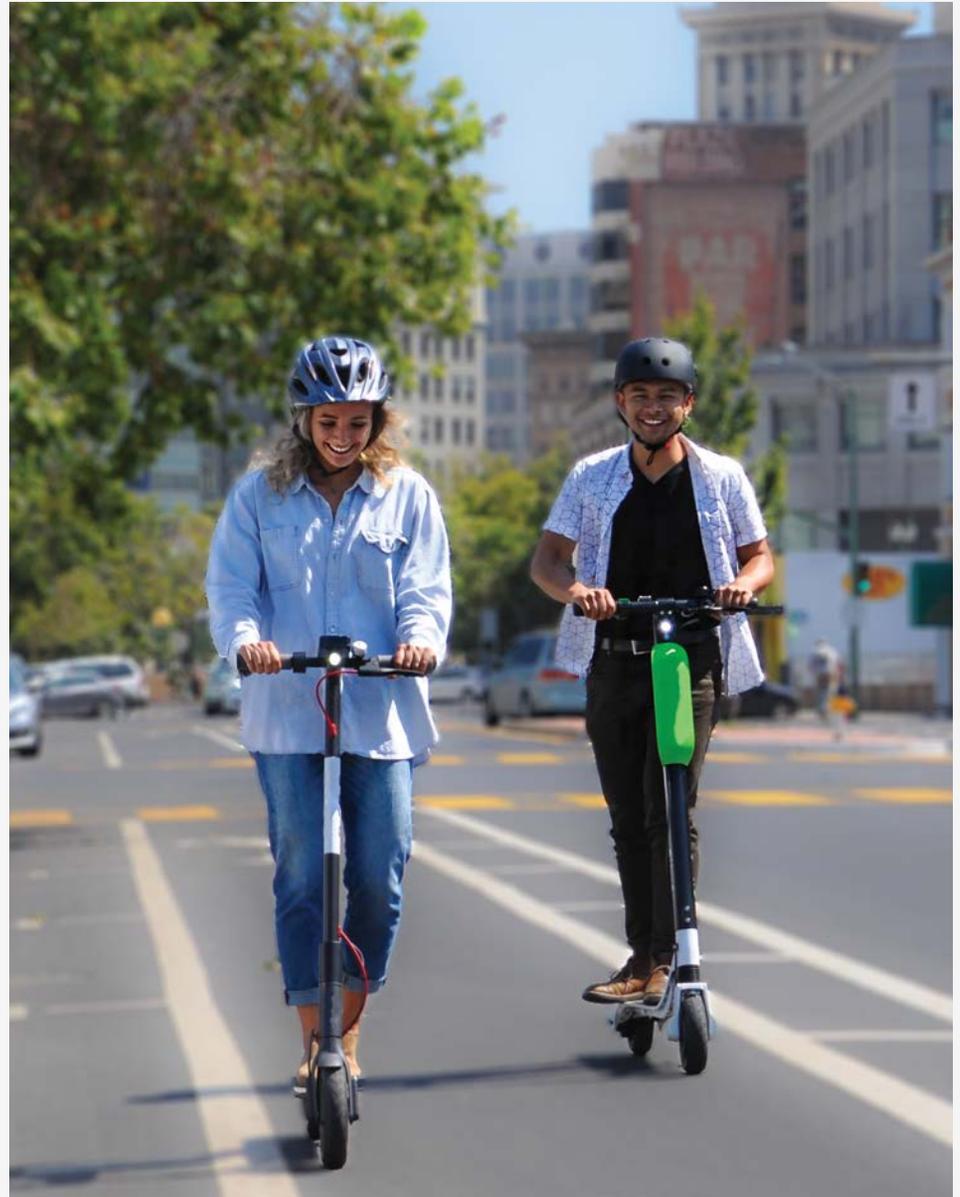
Bike lanes aren't only used by people riding bikes, and have long been used by people on small-wheeled devices such as mobility scooters, skateboards, roller skates, and tricycles. Shared electric scooter, or "E-scooter" sharing companies arrived in Oakland in 2018 offering two-wheeled, battery powered vehicles for short term rental throughout Oakland. Since Fall 2018, riders in Oakland took nearly one million scooter trips covering 1.2 million miles.

Public input

OakDOT held five community listening sessions to learn about Oaklanders experience and inform our E-scooter permitting program. Participants asks included the need for the City to fix potholes and design streets to make riding safer.

What's next?

Electric scooters have greatly increased the number of Oaklanders using bike lanes, and we expect this trend to continue. Small electric vehicles are rapidly evolving into new forms, helping to meet the needs of a wider range of users. While the future of e-scooters is unknown, one thing is clear: small electric vehicles will be rolling though Oakland's bike lanes for years to come.



Supporting Infrastructure

Building a network of connected and low-stress bikeways is the first step in supporting existing bicyclists and attracting more people to bicycle in Oakland. To ensure an enjoyable trip from beginning to end, supporting infrastructure is needed at intersections to make crossing easier, wayfinding signs along the way to help reach your destination, and secure parking once you reach your destination to store your bicycle.

TYPES OF SUPPORTING INFRASTRUCTURE

- **Intersection Enhancements**

A bike network is not complete without looking at how people cross challenging intersections and reduce conflicts between people driving, walking, and biking. New treatments can be added to retrofit intersections to better serve bicyclists moving through or turning across intersections. Consideration must also be given when designing bike infrastructure adjacent to accessible parking.
- **Bike Parking**

Knowing you have a secure place to store your bike at your destination is an important part of making a bike trip feasible. The City has thousands of bicycle parking locations, however it is not distributed across the City.
- **Wayfinding**

The City continues to work on providing wayfinding that directs people to nearby destinations on the safest route and reflect the local bicycling culture and context of each neighborhood.





SUPPORTING INFRASTRUCTURE

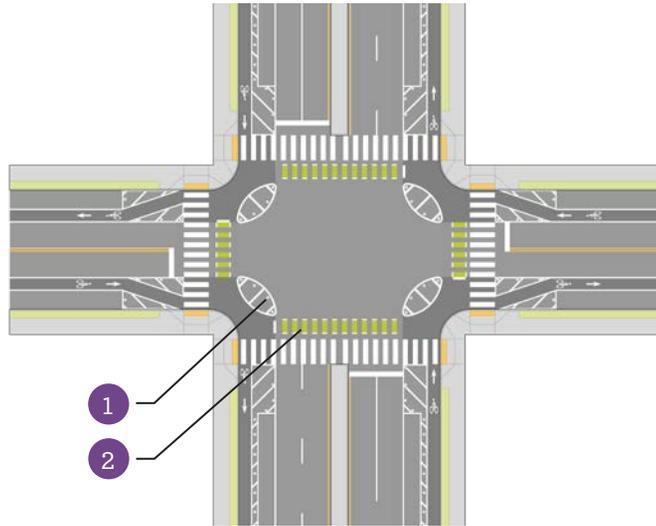
TYPICAL INTERSECTION TREATMENTS

Street intersections create conflict points between different modes of travel. Intersection design is important because it affects how pedestrians, bicycles, and motor vehicles interact. There is no single intersection design that can be applied everywhere. Variations in each location's context need different design features. The best approach is to create predictable interactions between pedestrians, bicycles, and motor vehicles. This increases safety and comfort for everyone. The following graphics illustrate some common design methods.

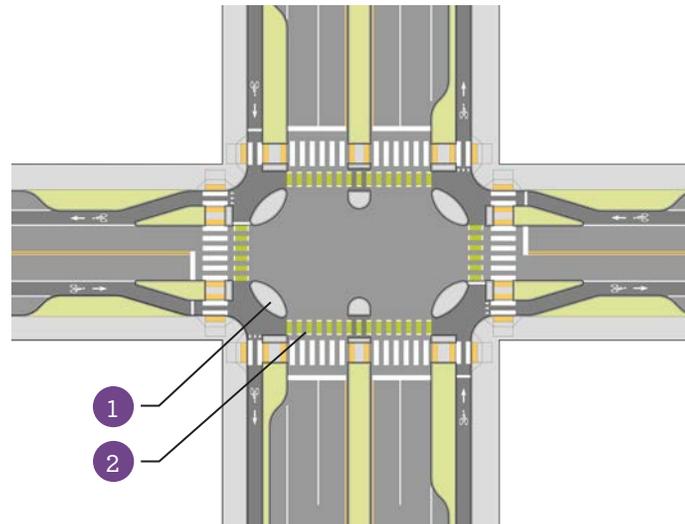
OakDOT consults the NACTO Urban Bikeway Design Guide, AASHTO Guide for the Development of Bicycle Facilities, California Manual on Uniform Traffic Control Devices (MUTCD), Caltrans Highway Design Manual (HDM), AC Transit Multimodal Corridor Guidelines, City standards, and engineering judgment to make context sensitive design decisions.

Protected intersections minimize exposure to conflicts, reduce speeds at conflicts points, increase sight distance, and clarify right-of-way priority.

PROTECTED INTERSECTION Short Term/Lower Cost



PROTECTED INTERSECTION - Long Term/Higher Cost



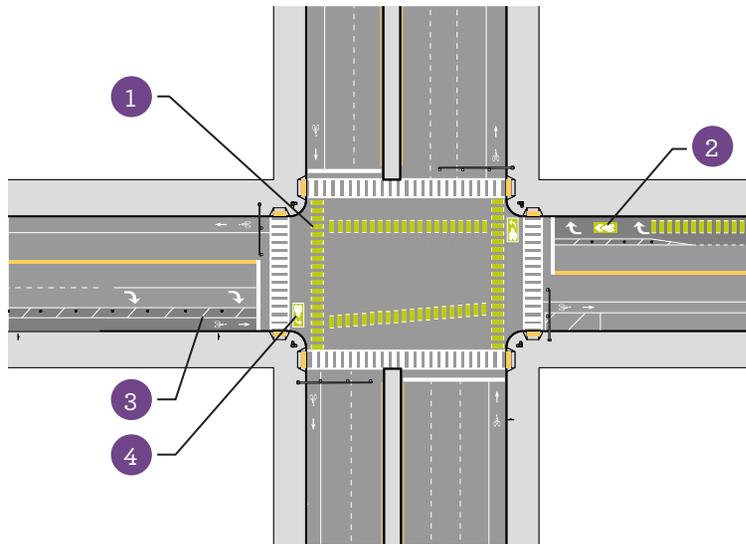
Key Features:

- 1 **Bike lane buffer** – install bike lane buffer treatments that extend into the intersection and include protection islands at corners. The extension of the protection buffer provides a safer and more intuitive crossing through the intersection, and allows bicycles to wait for red lights in a position that is more visible to motor vehicle traffic.
- 2 **Marked bicycle crossings** – install to enhance awareness of bicycles crossing roadway and define dedicated space to make those crossings.

Optional Features:

- **Buffers** – can be semi-permanent (e.g., flex posts, painted buffer) or permanent (e.g., raised curb)
- **Bicycle signals** – use for separate bicycle-specific signal phasing.
- **Pedestrian and median refuge islands** – can provide additional safety for pedestrians crossing arterial roadway.

BIKE LANES CROSSING AN ARTERIAL INTERSECTION



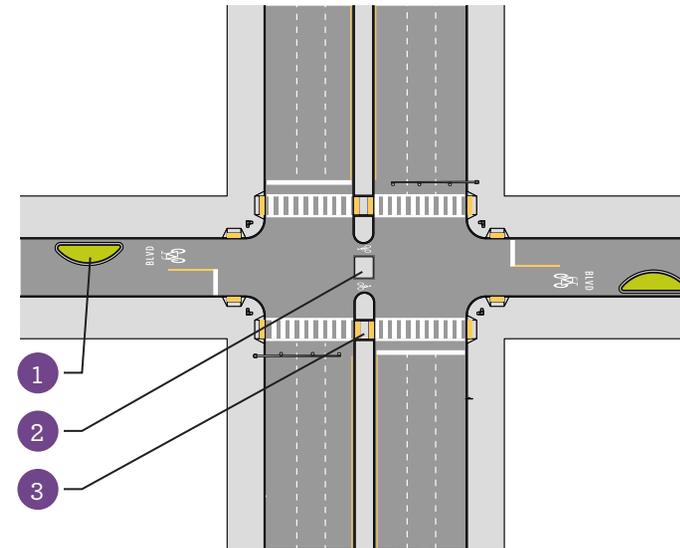
Key Features:

- 1 **Marked bicycle crossings** – install to enhance awareness of bicycles crossing roadway and define dedicated space to make those crossings.
- 2 **Right-turn channelization** – install to define locations for bicycles and right turning vehicular traffic at the intersection with pavement markings, flexible posts, and possible signalization.
- 3 **Bike lane buffer** – continue buffered area adjacent to bike lane up to the to intersection where possible.
- 4 **Two-stage green turn boxes** – identify space for left-turning bicycles to make a two-stage left turn.

Optional Features:

- **Bicycle signals** – use for separate bicycle-specific signal phasing

NEIGHBORHOOD BIKE STREET CROSSING AN ARTERIAL



Key Features:

- 1 **Traffic calming** – install features on neighborhood bike streets to reduce traffic speeds, such as the chicanes shown above. Other options include speed humps, curb bulbs, traffic circles, etc.
- 2 **Traffic Diverters** – can reduce non-neighborhood cut-through traffic along bike boulevard.
- 3 **Median refuge islands** – can provide additional safety for pedestrians crossing arterial roadway.

Optional Features:

- **Signalization** – use rectangular rapid flashing beacons (RRFB) or full signalization for pedestrians and bicycles.



ADA ACCESS NEXT TO SEPARATED BIKE LANES

At separated bike lanes, ADA accessible parking and transit stops need clear, accessible pedestrian crossings of the bike lane that indicate that pedestrians have the right-of-way.

The City of Oakland reserves 4% on-street parking spaces on a block perimeter to have blue curbs. An accessible crossing (with curb

“

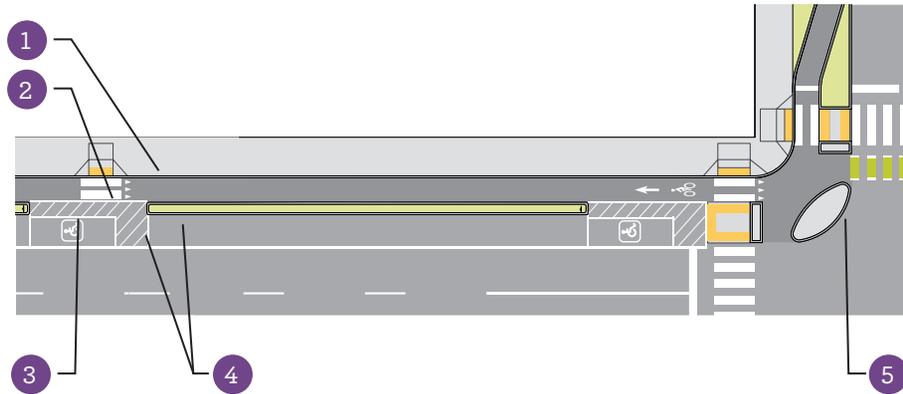
We need streets that feel safer for everyone.”

OAKLAND RESIDENT,
LAUREL STREETFAIR

ramp) across the bike lane shall be provided at a minimum every 150 feet. Locations for accessible spaces are typically selected based on access to key destinations, engineering considerations, and distance to intersections. Sometimes accessible parking spaces are located next to separated bike lanes, as shown below.



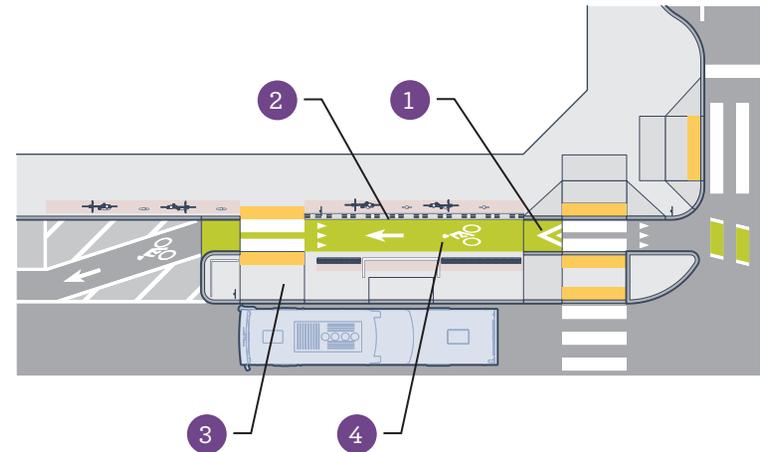
ACCESSIBLE PARKING SPACE ALONG A SEPARATED BIKE LANE



Key Features

- 1 **Curb ramp** – provide a curb ramp at a minimum of 150' from the intersection to connect between street/bike lane and sidewalk grades, if bike lane is at street grade.
- 2 **Access aisle** – provide a 5' minimum wide access aisle, extending the full length of the parking space, to allow a clear path to the curb ramp and sidewalk.
- 3 **Accessible parking signs** –place RESERVED PARKING (R7-8) and, if applicable, VAN ACCESSIBLE (R7-8P) sign at the head of each accessible parking space.
- 4 **Accessible parking space dimensions** – minimum parking space size shall be 8' x 20'. 5' deep rear clear access area connecting the rear and drivers side of the vehicle to the access aisle is recommended.
- 5 **Corner refuge island** – separate the bike lane up to the intersection corner with a refuge island that helps control potential conflicts with turning vehicles.

ACCESSIBLE TRANSIT ISLAND ALONG A SEPARATED BIKE LANE



Key Features

- 1 **Sidewalk-grade bike lane and bike ramp** – bring bike lanes up to sidewalk and transit island grade to provide level pedestrian access between sidewalk and transit island.
- 2 **Vertical railing** – direct pedestrians to the designated crossing areas.
- 3 **Accessible landing zone** - provide a clear area with space for wheelchairs to turn and for bus ramp/lift to deploy.
- 4 **Green paint** - highlight the bike lane.



SUPPORTING INFRASTRUCTURE

BIKE PARKING

Bicyclists expect a safe, convenient place to secure their bicycle when they reach their destination. This may be short-term parking of 2 hours or less, or long-term parking for employees, students, residents, and commuters.

29

CORRALS

..... can hold

400

BICYCLES

13

LOCKER LOCATIONS
IN OAKLAND

..... can hold

440

BICYCLES





TYPES OF BICYCLE PARKING



Bike Racks

Bike racks provide short-term bicycle parking and is meant to accommodate visitors, customers, and others expected to depart within two hours. It should be an approved standard rack, appropriate location and placement, and weather protection. As of January 2019, over 1,900 locations in Oakland have bicycle racks.



On-street Bike Corrals

Bike corrals consist of bicycle racks grouped together in a common area within the street traditionally used for automobile parking. Each motor vehicle parking space can be replaced with approximately 6-10 bicycle parking spaces. Corrals may be prioritized for installation where demand for bike parking is higher than can be accommodated on the sidewalk. Corrals will be installed in response to requests from businesses or business improvement districts and require a signed maintenance agreement from the applicant.



Bicycle Lockers

Bicycle lockers are intended to provide long-term bicycle storage for employees, students, residents, commuters, and others expected to park more than two hours. Long-term facilities protect the entire bicycle, its components and accessories against theft and against inclement weather, including snow and wind-driven rain. Renting an Oakland eLocker costs five cents an hour, and the first five hours of each rental are free.



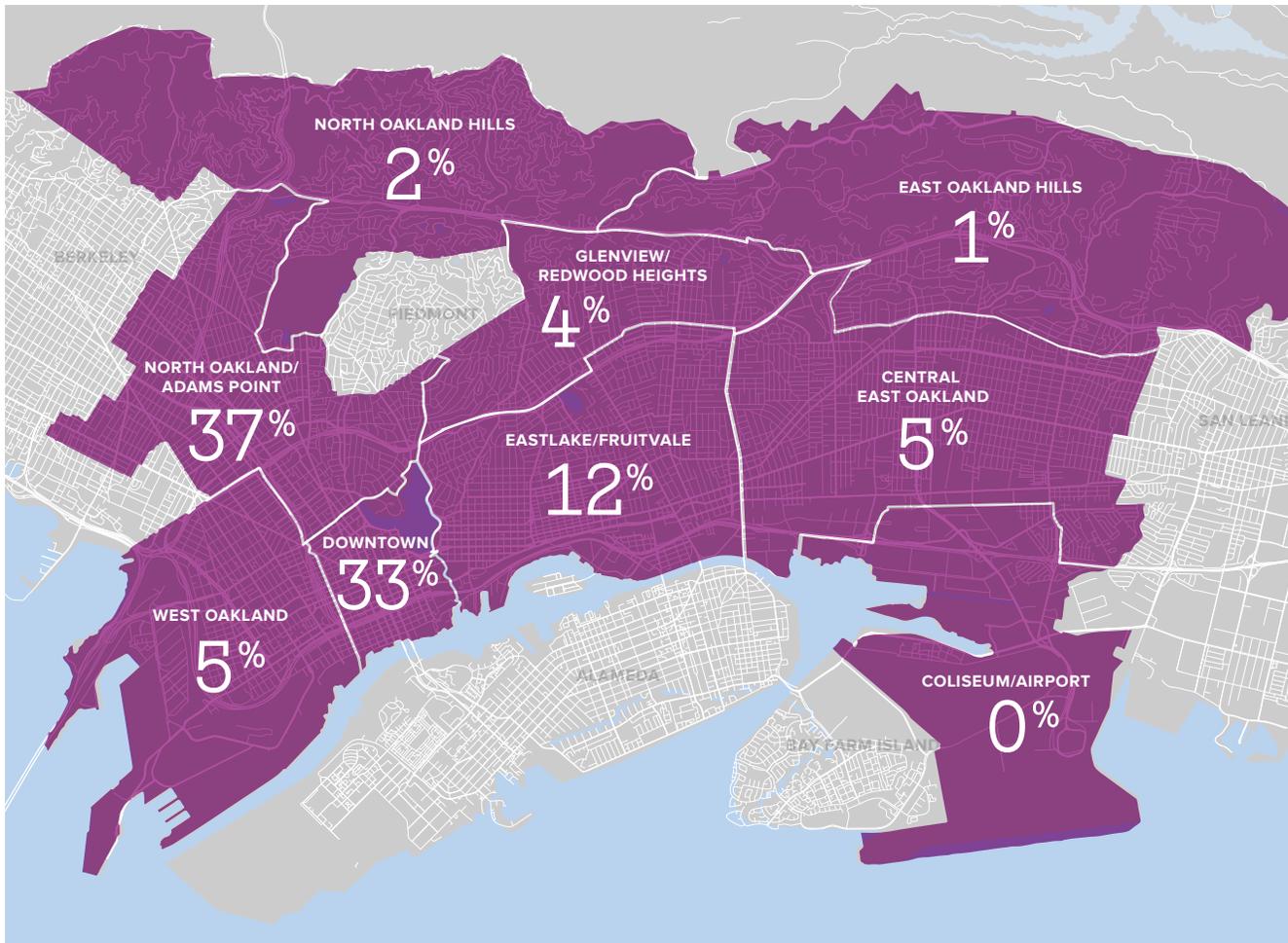
Secure Parking Area

A Secure Parking Area for bicycles, also known as a Bike Station, is a semi-enclosed space that offers a higher level of security than ordinary bike racks. Bike Stations provide high-capacity parking for 10 to 300 or more bicycles. Increased security measures create an additional transportation option for those whose biggest concern is theft and vulnerability. Oakland's two Bike Stations are located at Fruitvale and 19th Street BART stations where valet parking is free during the day. Two additional Bike Stations are in development for MacArthur and Rockridge BART stations.

Bike parking should consider spacing and rack type to accommodate adaptive bicycles.



DISTRIBUTION OF BIKE PARKING CURRENTLY AVAILABLE



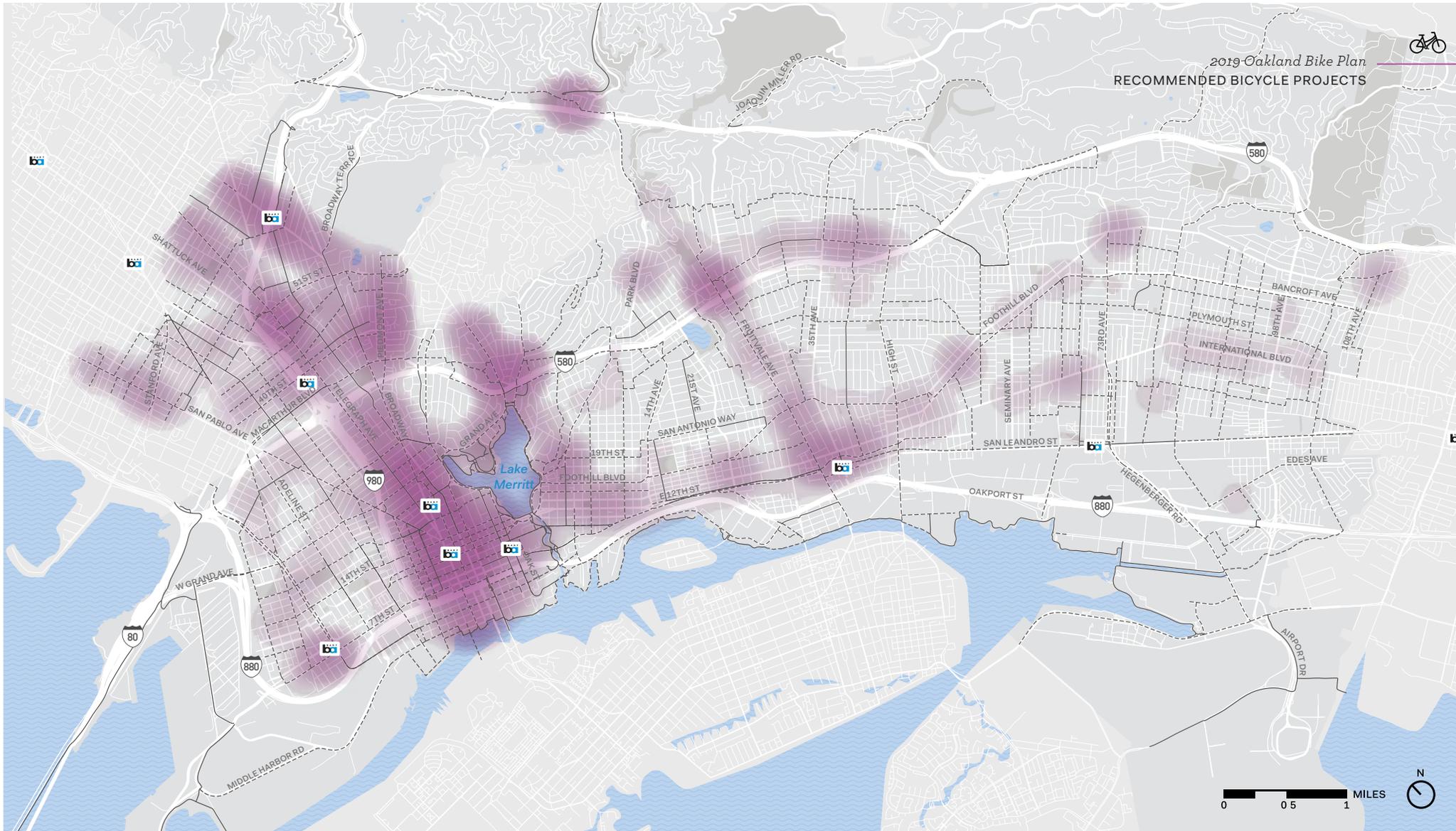
Bike Parking Recommendation #1:

While some bicycle parking is required as part of new development, the majority of parking is installed by the City in the public right of way via the by-request CityRacks Program (now in its 20th year). Many key destinations without bike parking are on private property. The City should continue to work with schools and private property owners to site bike parking at locations outside the scope of the by-request program. Locations in the flatlands should be prioritized. For more information on bike parking or to request a rack, go to <https://www.oaklandca.gov/topics/bicycle-parking>



Bike Parking Recommendation #2:

Install more customized bicycle parking designs that are both functional and reflect the neighborhood in which they are located. Bike parking can be part of a larger placemaking and public art initiative.



Bike Parking Density

-  Low Density
-  High Density
-  Existing Bikeways
-  Recommended Bikeways
-  Park
-  Oakland City Limits
-  BART Station



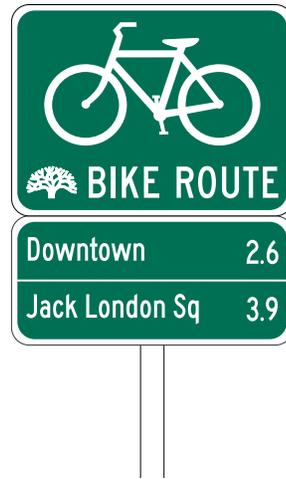
SUPPORTING INFRASTRUCTURE

WAYFINDING

The Department of Transportation has made great strides to provide direction to people bicycling. Currently, over 130 lane miles of Oakland's bikeway network have wayfinding signs with destinations, distances, and directions.

What we heard from community groups is that there is a desire to customize wayfinding elements so that they reflect different cultures of biking and reflect people of different ages and abilities biking in Oakland. Efforts like this are already happening through Oakland's Paint the Town pilot program where community members can paint temporary street murals on Oakland's roads.

CURRENT WAYFINDING SIGN TYPES



Confirmation Sign



Turn Sign



Decision Sign



Branded street signs on Berkeley's Bicycle Boulevards support a broader wayfinding approach.



Wayfinding Recommendation #1

OakDOT will engage communities in a collaborative design process to develop placemaking signage for Neighborhood Bike Routes. The signs will complement bicycle wayfinding signage by depicting neighborhood identities.

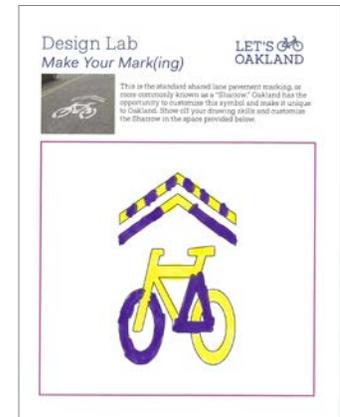


OakDOT's Paint the Town program allows communities to paint temporary murals on Oakland's streets. The program adds playfulness and art to the street in the spirit of bringing communities together. The mural in the image above is located on Arthur Street between Dashwood and 78th Avenue. The program could serve as a model for designing wayfinding signs for Neighborhood Bike Routes.



Wayfinding Recommendation #2

To provide a low-stress experience, sometimes bike facilities are shifted off of high stress roads onto parallel routes. We heard that it's not always clear when bikeways change designation how to navigate to the nearest route. OakDOT will continue to evaluate wayfinding needs where low-stress bikeways end and install wayfinding to parallel routes where available.



Residents submitted ideas for new neighborhood bike route pavement markings to better reflect their unique neighborhoods.





“

The Plan should be implemented equitably. We pay taxes, we want the same benefits as downtown.”

EAST OAKLAND COLLECTIVE
WORKSHOP PARTICIPANT

06

Next Steps



An artistic rendering for future bicycle and pedestrian safety improvements on Foothill Boulevard in front of Franklin Elementary School.

Implementing the Bike Plan

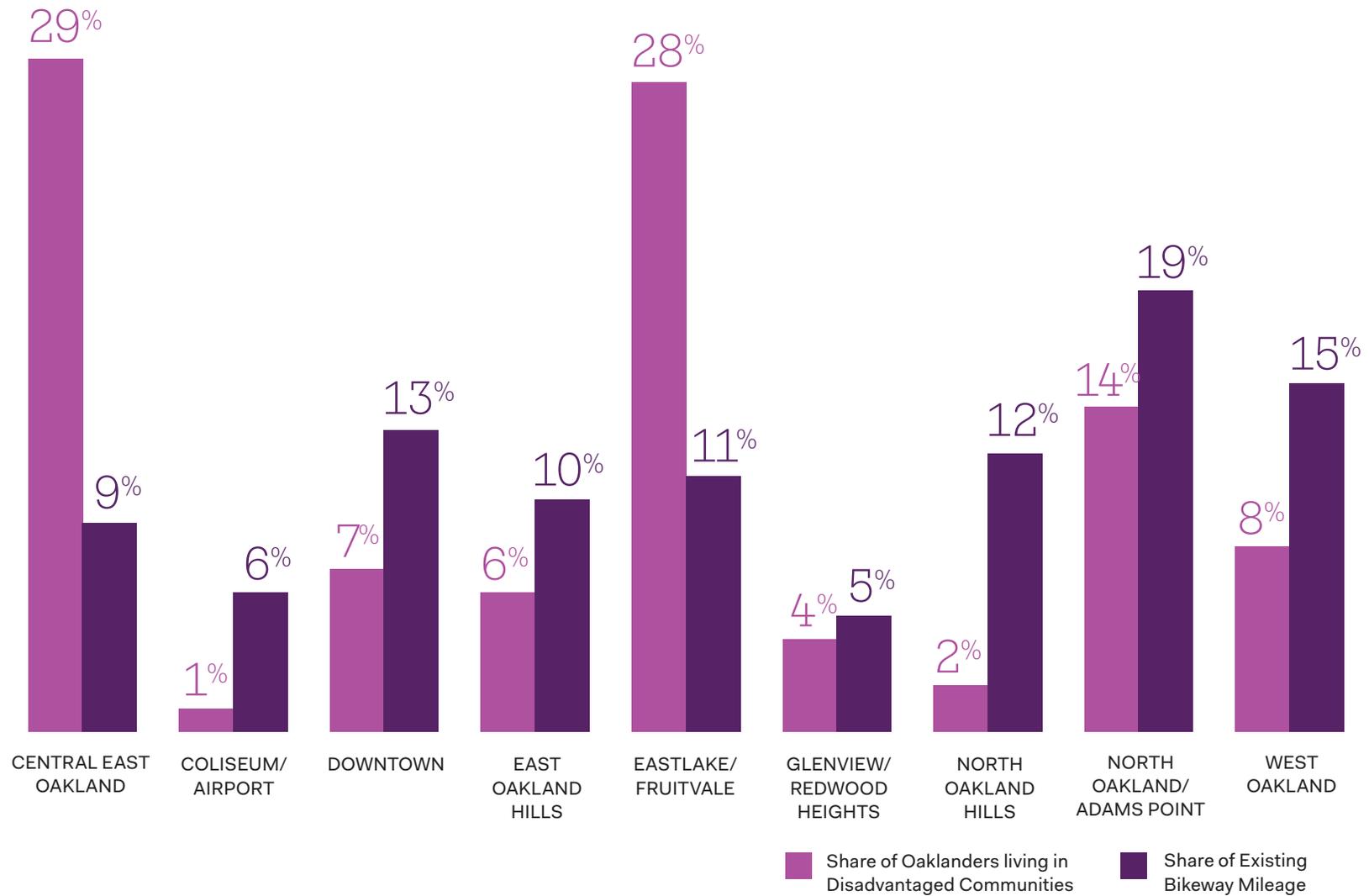
With limited funding, OakDOT has to decide where to prioritize building over 200 miles of bikeways. Some of the projects proposed on this network can be completed more quickly. For instance, projects with minimal trade-offs and community support can be installed as part of a street repaving project. We describe and refer to these projects as **short-term projects** within this chapter. Other projects will be longer-term or "vision" projects

that still need to go through a community design process to evaluate trade-offs, undertake additional study, or require multi-agency coordination. We describe and refer to those as **vision projects** within this chapter.

Chapter Six lays out OakDOT's strategy to invest in an equitable bike network. To do that, the department has determined which projects (both short-term and vision projects) across the nine planning

areas should be prioritized for receiving the most staff resources, funding, and attention. These are referred to in the plan as **priority projects**. Based on the high share of residents living within disadvantaged communities, and low existing bikeway mileage, OakDOT will be focusing most heavily on the Central East Oakland and Eastlake/Fruitvale areas.

SHARE OF EXISTING BIKEWAYS AND
 DISADVANTAGED POPULATION BY ZONE





Principles of Community Collaboration

OakDOT is committed to sustaining the inclusive engagement that went into this Plan as bikeways move from ideas into engineering designs and eventually built infrastructure. OakDOT will consult the following community engagement process when making major bicycle infrastructure decisions:

STEP

1

Prepare an Engagement Plan that identifies desired outcomes and measures for engagement efforts

- ✓ Follow guidelines in the Department of Race and Equity's Inclusive Public Engagement Planning Guide and Operationalizing Equity Worksheet
- ✓ Identify and contact existing residents, employees, business and property owners, neighbors, and other stakeholders
- ✓ Engage the City's Race and Equity Department to review and provide feedback on the proposed plan

STEP

2

Partner with a community-based organization that has experience working with community members in the proposed project area

- ✓ Compensate partnering organization for their time and energy on the project, and for their local expertise
- ✓ Work with partnering organization early in the process to shape the engagement efforts and build shared understanding, accountability, and a sense of value in the project outcomes

STEP

3

Implement an inclusive outreach process

- ✓ Use a variety of outreach methods including pop-up or mobile workshops, design charrettes, regular standing Community-Based Organization meetings, focus groups, and online engagement tools
- ✓ Collect demographic data of outreach participants related to the geographic area, policy, program, or project to understand who is not being reached and tailor remaining engagement accordingly
- ✓ Designate an OakDOT staff member that will act as a community liaison to regularly update stakeholders on the project pipeline as part of their work plan

STEP

4

Evaluate the impact of engagement efforts during and after the process

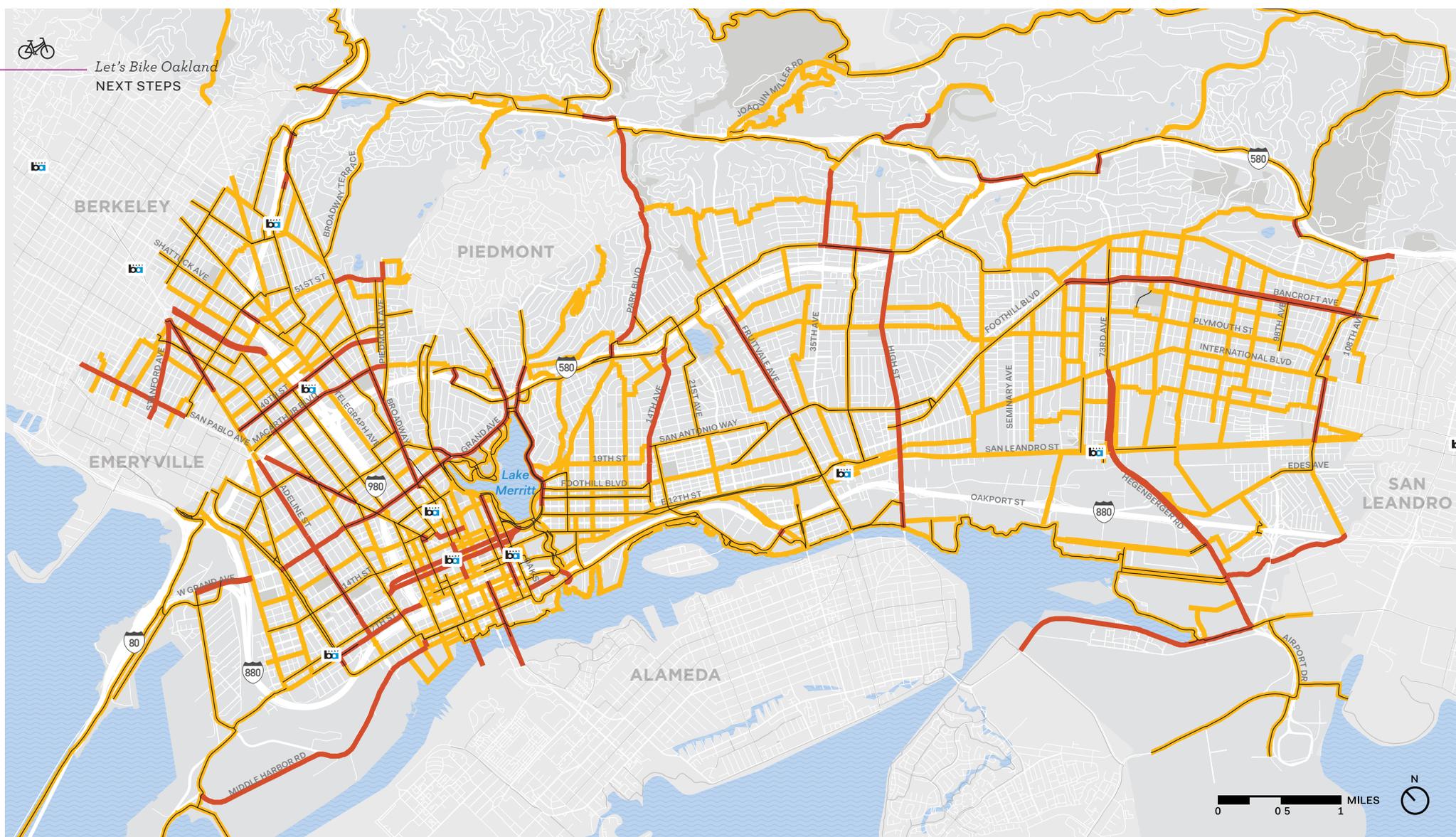
- ✓ Share and learn from the results



“

Building new bicycle facilities is fine, but we need ownership from the start.”

EAST OAKLAND COLLECTIVE
WORKSHOP PARTICIPANT



Let's Bike Oakland
NEXT STEPS

Short Term & Vision Networks

Short term projects, in orange, can be implemented more quickly, and vision projects, in red, are more complicated and require greater collaboration and time.

- Existing Bikeways
- Short Term Network
- Vision Network
- Park
- Oakland City Limits
- BART Station



SHORT TERM PROJECTS

Short term projects are projects that OakDOT strives to build in the next 5-10 years. A few examples include:



1 Bikeways on E 15th Street and Foothill Boulevard in the East Lake Area have a simpler design, and the removal of a travel lane on these lower volume roads will allow for a new bikeway without removing residential parking.



2 The Scrapperway, a proposal for a center-running multi-use lane on 90th Avenue, will be installed more quickly because of established community desire for the project and completed design

VISION PROJECTS

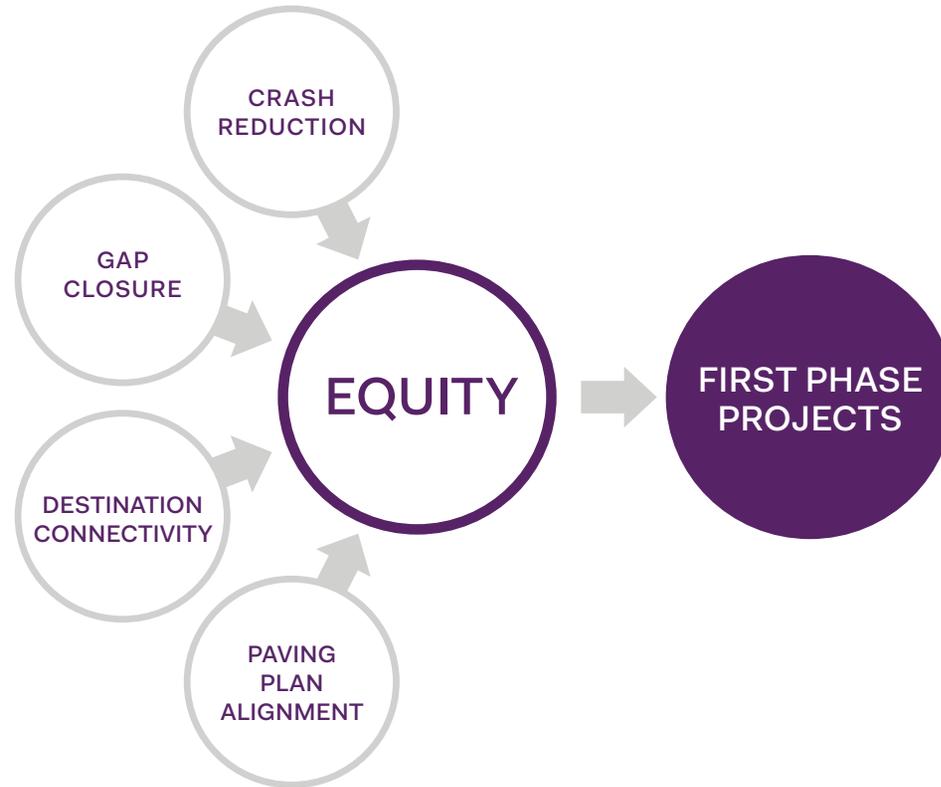
Vision projects are projects that require further study, coordination with stakeholders outside of Oakland, and/or need to be vetted through a community-based design process. A few examples include:



3 The East Bay Greenway which will connect Lake Merritt BART, Fruitvale BART, and Coliseum BART in Oakland is a large, complex mutli-agency project led by Alameda County Transportation Commission.



4 Creating a separated bikeway on San Pablo Avenue could connect people biking in Oakland to Emeryville, Berkeley, and Albany, but will be challenging to design with so many other competing roadway uses and limited space for dedicated bike lanes.



How do we start implementing the Plan?

Through this Plan, OakDOT selected just over 80 miles of bikeway projects (both short-term projects and vision projects) to prioritize within the next 5-10 years. Prioritizing projects helps OakDOT staff best use their time and resources to meet the City's goals. This plan prioritizes projects based on their strategic

impacts and their ability to meet the needs of underserved communities. The prioritization includes projects delineated as short-term and vision projects, as both require near term attention by staff, whether it is planning and implementation, or study and community consensus-building.

HIGH BENEFIT

The first step of the prioritization process identified projects that would provide the greatest benefit to Oaklanders and align with current City goals. Selection criteria included:

Crash Reduction Projects

These projects improve bicycling safety on the High Injury Corridors (or on parallel routes that provide alternatives to a High Injury Corridor)

Destination Connectivity Projects

These projects provide direct bikeway connections to local destinations

including schools, libraries, recreation centers, and major transit stations

Gap Closure Projects

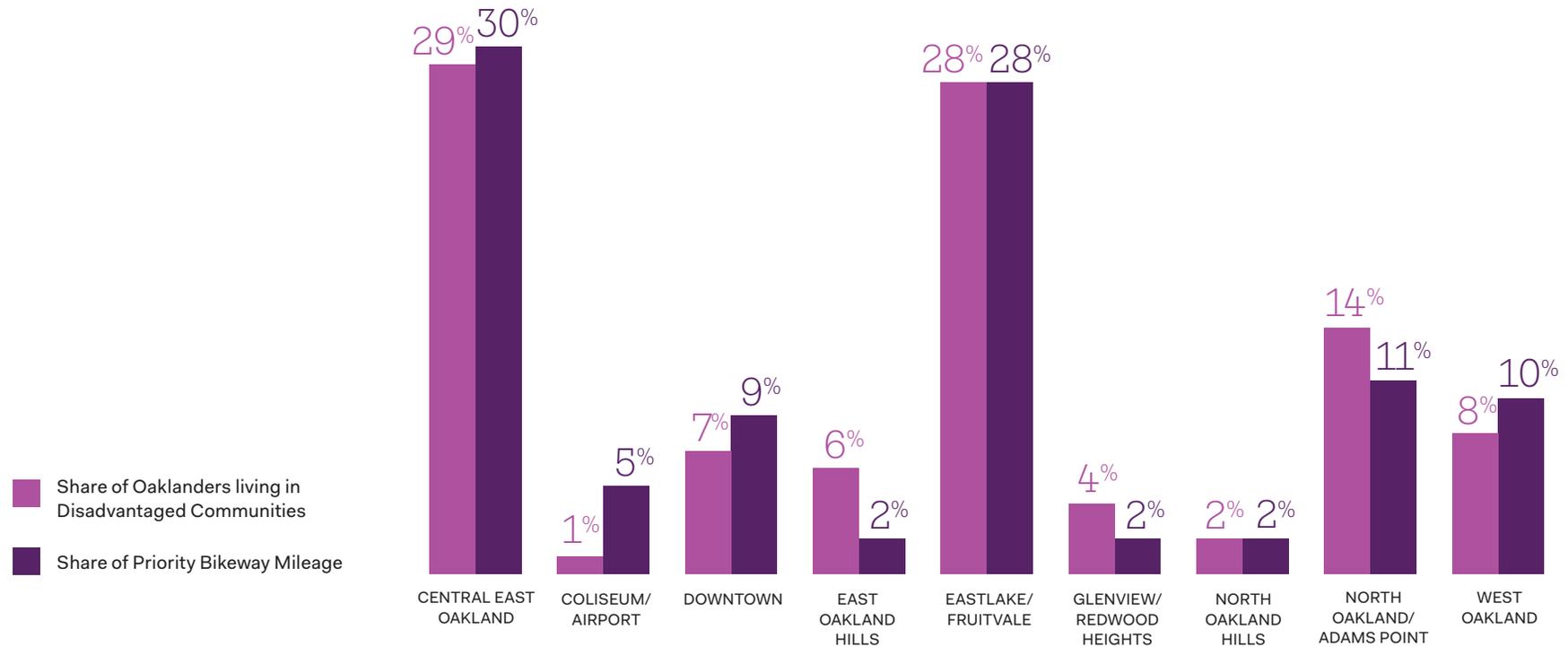
These projects close gaps in the existing bike network

Cost-Savings Projects

These projects align with street segments identified by Oakland's 2019 Three Year Pavement Prioritization Plan

Priority was given to projects that met two or more criteria in terms of safety, access, gap closure, and cost-savings.

DISTRIBUTION OF PRIORITY PROJECTS BY ZONE



EQUITY

OakDOT is working to implement bike projects more equitably by focusing on projects in areas with a greater share of disadvantaged communities. The second step in project prioritization filtered projects so that the share of priority bikeway miles across each zone more closely aligns with the percent of people living in disadvantaged communities. This process centers the mobility needs of vulnerable individuals by

providing these users with greater access to low-stress bikeways. The graph shows the percent of mileage of prioritized projects per planning area, as compared to the area's share of underserved population.

Some areas within Oakland have the highest number of underserved community members as well as the fewest number of miles of existing bikeways. Central East Oakland, for example, has nearly a third of

all Oakland residents living in disadvantaged communities, yet has only 9% of the existing bike network. East Lake/ Fruitvale is another planning area that has a high number of underserved community members and is similarly underserved by Oakland's bikeways. As the graph shows, the City will prioritize bicycle infrastructure in these neighborhoods, with nearly a third of priority bike projects in each of these areas.



“

The network needs to be visionary, to capture projects that will not be able to be implemented in the short term.”

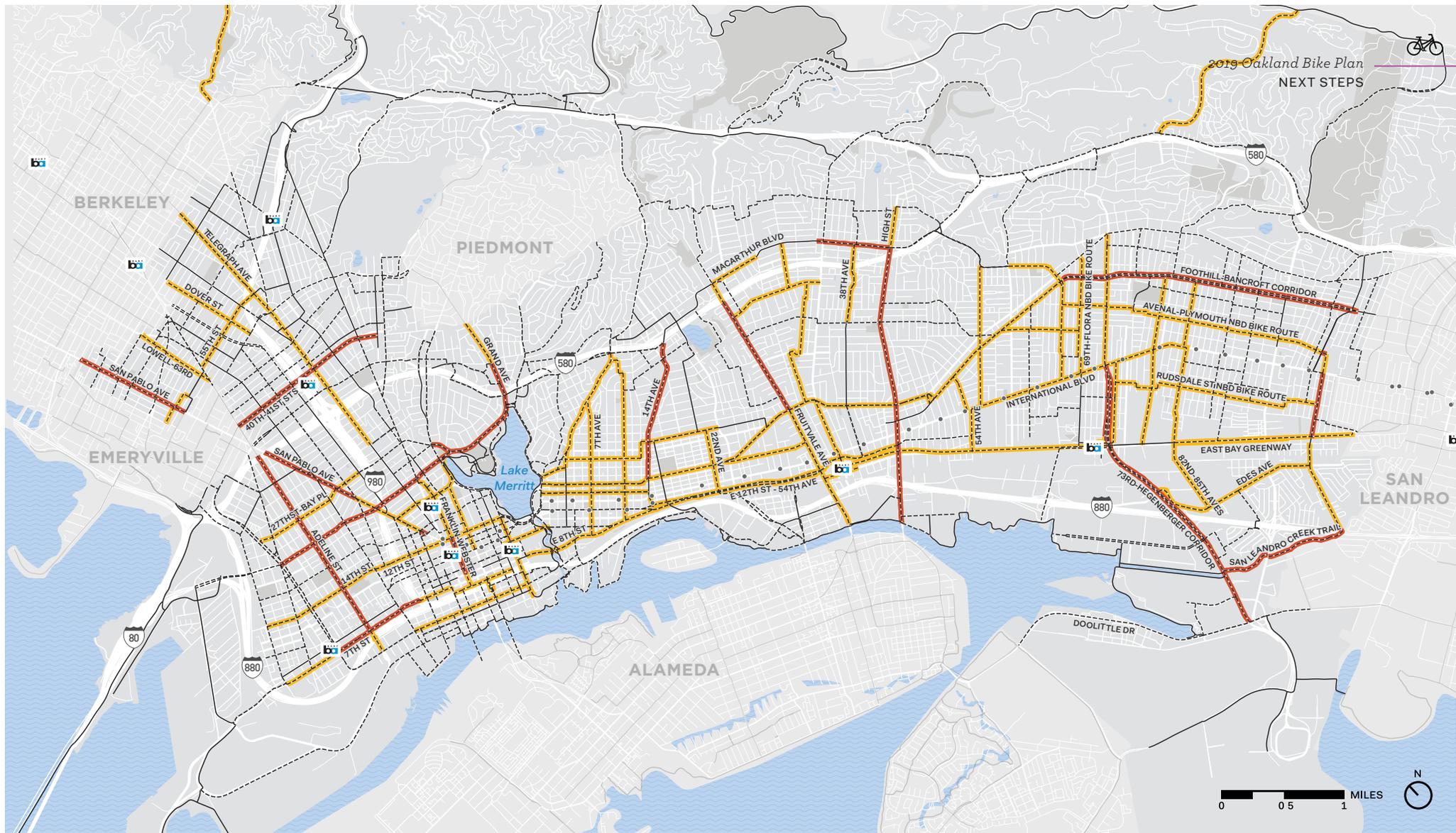
BIKE PLAN
COMMUNITY ADVISORY
COMMITTEE MEMBER



Prioritized projects connect Oaklanders on bikeways to neighborhood destinations, address safety concerns, close gaps in the bike network, and align with the City's 3-year Street Paving Plan.

Prioritizing a project means dedicating staff and City resources, time, and funding towards planning and implementing these projects. For a complete list of prioritized projects, see the Appendix.

Note: Projects that have already received partial or full funding may move forward independent of this prioritization process.



Priority Corridors

Just over 80 miles of bikeway projects have been prioritized to improve connectivity, reduce collisions, close gaps in the network, and leverage the City's investments in road repaving. 58% of priority bikeway miles are located in Eastlake/Fruitvale and Central East Oakland.

- Existing Bikeways
- - - Recommended Bikeways
- Short Term Priority Projects
- Vision Priority Projects
- Park
- Oakland City Limits
- 🚇 BART Station
- East Bay Bus Rapid Transit Stops



“

[The Bike Plan] needs to really focus on intersections and the transitions where there are no bike lanes to get people through.”

WEST OAKLAND RESIDENT



Intersection Prioritization

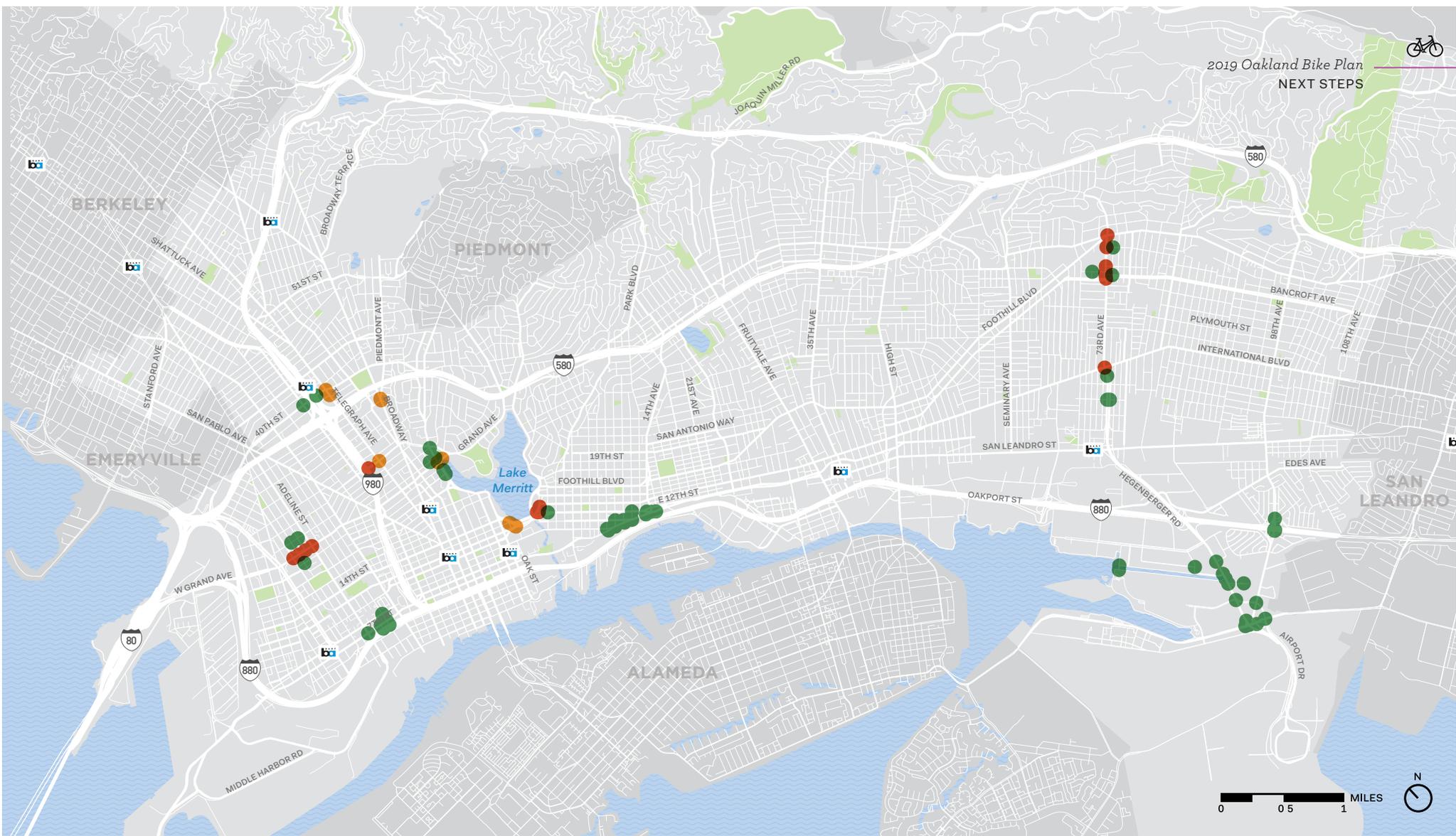
OakDOT evaluated and prioritized intersections in Oakland that would benefit the most from intersection enhancements discussed previously in Chapter 5. Intersections were evaluated based on their relative comfort and safety for bicyclists, and if they are located in a vulnerable community.

There are 88 intersections in the City that scored the highest in

terms of stress for bicyclists (high traffic speeds on a multilane street where bicyclists typically must mix with traffic). Of these high stress intersections, 11 are also on the bicycle High Injury Corridors where the highest prevalence for severe and fatal injuries has taken place. To see a map of the High Injury Corridors turn to Chapter 2.

Finally, 15 are also located within disadvantaged communities. All intersections merit evaluation for improvement as bikeways are upgraded or developed, however these intersections deserve priority attention in order to resolve barriers to low-stress travel.

Priority intersections are shown on the following page and listed in the Appendix.



Priority Intersections

88 intersections have been prioritized for additional engineering analysis and improvement based on high rates of bicycle collisions, level of traffic stress, and location within a disadvantaged community.

- Highest Priority
- Higher Priority
- High Priority
- Park
- Oakland City Limits
- b BART Station



Costs

This Plan recommends at least \$46 million in bicycle projects and programs to help Oakland achieve its vision of becoming a bicycle-friendly city.

Costs estimates are provided in 2019. Due to annual inflation, cost estimates will increase in the future.

 PROGRAM TYPE	\$\$\$ COST ESTIMATE (LOW)	\$\$\$ COST ESTIMATE (HIGH)
Support the Local Bicycling Economy	\$135,000	\$375,000
Provide Shared Resources	\$425,000	\$650,000
Promote Hometown Efforts	\$1,650,000	\$4,650,000
TOTAL	\$2,210,000	\$5,675,000

 BIKEWAY TYPE	 RECOMMENDED MILEAGE	\$\$\$ COST ESTIMATE (LOW)	\$\$\$ COST ESTIMATE (HIGH)
Path	24.8	\$17,360,000	\$24,800,000
Protected Bike Lane	48.8	\$12,200,000	\$48,800,000
Buffered Bike Lane	50.3	\$6,539,000	\$21,276,900
Bike Lane	23.1	\$1,848,000	\$9,771,300
Neighborhood Bike Route	64.6	\$4,845,000	\$9,044,000
Bike Route	5.8	\$1,450,000	\$1,450,000
TOTAL	217.4	\$44,242,000	\$115,142,200



Funding Strategies

On average, 12% of Oakland's annual transportation budget is spent on bicycle projects.

The City of Oakland's Capital Improvement Program allocates over \$1.7 million per year in dedicated funding for bicycle plan implementation.

A variety of sources exist to fund bicycle infrastructure projects, programs, and studies. Local and regional funding sources that can be used for construction or maintenance of bicycle or pedestrian improvements, along with competitive grant programs, are described here.

Local and regional funding sources include:

- **Measure KK**
A \$600 million infrastructure and affordable housing bond. Measure KK funds infrastructure projects including roadway maintenance and repaving, sidewalk repair, and bicycle and pedestrian safety improvements.
- **Measure B and Measure BB**
Both measures are one-half cent sales tax in Alameda County to fund transportation projects including active transportation projects, transit, and other local road projects. A portion of funds is set aside to fund innovative bike programming efforts.
- **Private Development**
As new developments continue to make their way through the planning and review process, part of the public benefits package can include payments into accounts that can fund bicycle and pedestrian improvements.
- **Other funding sources** such as the Transportation Funds for Clean Air, Bicycle Facilities Grant Program, and One Bay Area Grant provide regional funding sources for active transportation projects.

State and federal competitive grants provide another opportunity to support the study, design and construction of large bikeway projects and programs. The City has been successful in winning grant funding through these sources in the past, including:

- **California's Active Transportation Program (ATP)**
Funds infrastructure and programmatic projects that support the program goals of shifting trips to walking and bicycling, reducing greenhouse gas emissions, and improving public health.
- **Caltrans Sustainable Transportation Planning Grants**
are available to communities for planning, study, and design work to identify and evaluate projects, including conducting outreach or implementing pilot projects.
- **Caltrans Highway Safety Improvement Program (HSIP) Grants**
Funds projects on any publicly owned road or active transportation facility, including bicycle and pedestrian improvements.

ON AVERAGE,
12%
OF OAKLAND'S
ANNUAL
TRANSPORTATION
BUDGET

..... is spent on



**BICYCLE
PROJECTS**



Maintenance

The City of Oakland maintains the city's bicycle infrastructure to strive to keep designated bikeways comfortable and free of hazards. This includes ensuring smooth pavement and the removal of debris and encroaching vegetation along bikeways, as well as the maintenance of traffic control devices, striping, and signage that facilitate bike travel.

The City has a number of systems in place to ensure proactive maintenance of bikeways, as well as response to maintenance requests by local residents.

- Local residents can submit requests through the OAK311 platform to report issues that may affect bicycling such as illegal dumping, potholes, and street light outages.
- The City of Oakland Public Works Agency maintains the CityWorks program that routes reported issues internally to the correct department.
- The Bicycle & Pedestrian Program maintains databases for City-installed bike parking and signage, and these databases include information on the maintenance of these assets.

The Bike Plan also proposes strategies to incorporate maintenance concerns as part of planning and design, and collaborate across City of Oakland departments:

- Incorporate maintenance needs into the design of protected bikeways to ensure proper maintenance after construction
- Include other operational issues such as parking, traffic enforcement, and traffic operations during the design of protected bikeways and intersections to ensure the proper operation and maintenance.
- Continue to coordinate planning efforts of the Neighborhood Bike Routes and other low-stress bikeways that coincide with the 3-year Paving Plan to ensure that

an enhanced pavement quality can be attained.

- Identify and regularly update annual maintenance costs for bikeways to ensure proper funding levels and ensure proper funding levels for routine bicycle-related maintenance costs.



“

We already bike.
Just fix the potholes!”

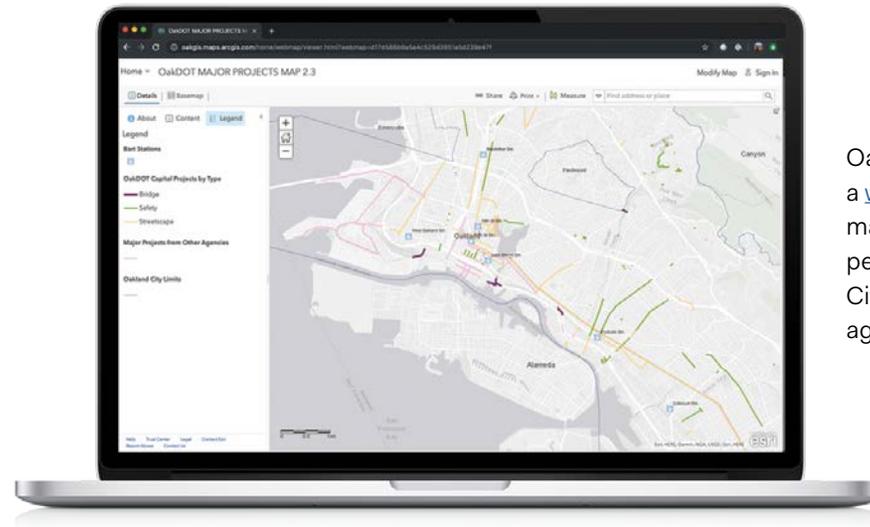
OAKLAND RESIDENT,
SCRAPER BIKE TOUR



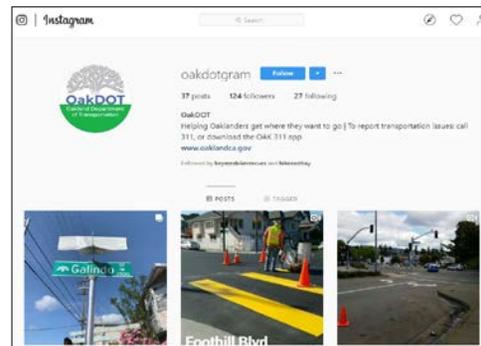
Monitoring and Evaluation

Sustaining community dialogue is critical to achieve the goals of this Plan. Currently, OakDOT has a number of different channels to keep people informed of progress, such as "I (bike) Oakland," a newsletter published twice a year and available in English, Spanish, Chinese, and Vietnamese. OakDOT also maintains an interactive online map detailing major transportation projects citywide. OakDOT also communicates via social media.

We recommend several other activities to understand the implementation progress, and continually evaluate the community benefits and impacts of any infrastructure and programmatic additions.



OakDOT maintains a [webmap](#) showing major active bicycle and pedestrian projects, both City-led and by other agencies.





RECOMMENDATIONS

- 1 Conduct citywide statistically valid survey on a regular basis to track bicycling behavior and issues
- 2 Keep [OakDOT Active Projects Map](#) up to date
- 3 Continue to conduct pre- and post-implementation evaluation of all large bicycle infrastructure projects to understand change in use and community benefits and impacts
- 4 Evaluate the effectiveness of program investments every three years
- 5 Report survey and study results along with plan implementation progress to the Bicycle and Pedestrian Advisory Commission on a regular basis
- 6 Share information publicly on OakDOT's department website, "I (bike) Oakland" newsletter, press releases, and through social media channels

OakDOT's Bicycle and Pedestrian program publishes "[I \(bike\) Oakland](#)" twice a year and is available in English, Spanish, Chinese, and Vietnamese. Visit www.OaklandBikes.info to subscribe by email.

OakDOT has recently released two post implementation studies that evaluated the effectiveness of bikeway projects.

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Here you will find background materials we referenced throughout this report. The glossary contains definitions to a few not-so well known terms.

Glossary + Appendix





Glossary

ACCESS

The ability to reach your desired destination, such as grocery stores, libraries, schools, recreation centers, bus stops and BART by bicycle on a continuous bikeway

DISADVANTAGED COMMUNITY

Populations that could be considered disadvantaged, underserved, or vulnerable in terms of both current conditions and potential impacts of future growth. A disadvantaged community in this Plan is synonymous with the regional definition for a Community of Concern, developed by the Metropolitan Transportation Commission (MTC). This data set represents the census tracts selected as Communities of Concern for 2018. For more information, visit: <https://www.planbayarea.org/2040-plan/plan-details/equity-analysis>

HIGH INJURY CORRIDORS

A subset of the city's streets where the density of fatal and severe bicycle crashes is highest

LOW-STRESS BIKEWAY

Corridors where most bicyclists, including young and cautious riders, would feel very comfortable as reported in the representative community survey. These bikeway designations include:

- Shared Use Path
- Protected Bikeway
- Buffered Bike Lane
- Neighborhood Bike Route

MAJOR TRANSIT STOP

For the purposes of this Plan, bicycle access was measured to BART stations, the Jack London Ferry Terminal, and AC Transit bus stops with more than 300 daily boardings. Analysis that included proposed bikeways also included East Bay Bus Rapid Transit Stops (under construction at the time this Plan was prepared).



Appendix

COMMUNITY SURVEY

In 2017, the City of Oakland hired EMC Research, Inc. to conduct a random sample of Oakland residents to learn about their behaviors and perceptions of bicycling. 1,688 residents took the survey, statistically representative of Oakland's demographics, with at least 100 interviews collected in each of 8 geographic zones. A summary of the results is available for review.

PUBLIC OUTREACH SUMMARY

The City of Oakland teamed up with five community organizations to help identify and give voice to the mobility needs of disadvantaged communities in East and West Oakland. These community-based organizations hosted workshops, listening sessions, and bike rides through the plan process. The Public Outreach Summaries provide a description of and key themes from these events.

PROPOSED PROJECT LIST

Today there are over 164 miles of bikeways in Oakland. The Let's Bike Oakland process identified 219 miles of upgraded and new bikeways and 88 intersection improvements across the city. A table listing project details is available for download and can be filtered by roadway and project type to see what different types of bikeways and prioritized intersections are proposed through this plan.

ONLINE MAP TOOL INPUT

An online map tool collected feedback from Oaklanders on where they currently bike and where they would like to be able to bike in the future. Google Earth data (KML) is available for download to see where people have identified barriers to biking, and what routes people currently use.

To download Google Earth for free, click here: <https://www.google.com/earth/versions/>

LET'S 
OAKLAND

2019 BIKE PLAN