Alameda-Contra Costa Transit District

Report No: 17-059
Meeting Date: March 8, 2017

STAFF REPORT

TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager
SUBJECT: Telegraph Avenue Complete Streets Impact Report

BRIEFING ITEM

RECOMMENDED ACTION(S):

Consider receiving a report on the impacts associated with implementation of the first phase of the City of Oakland's Telegraph Avenue Complete Streets Plan.

BACKGROUND/RATIONALE:

In April 2016, the City of Oakland (The City) completed implementation of the first phase of the Telegraph Avenue Complete Streets Plan (The Plan). The Plan made significant changes to the layout of Telegraph Avenue between 20th and 29th Streets, most notably the installation of parking-protected bike lanes and a reduction of travel lanes from four to three - one in each direction and a single left-turn lane.

The District previously expressed concerns to the City that the Plan as implemented would decrease transit speeds and adversely affect reliability (SR 14-230). Reducing the number of travel lanes to one in each direction means all vehicles, whether cars traveling through, cars parking, delivery trucks, or buses now operate in a single lane of traffic. The new configuration also forces buses to travel farther from the lane of travel to the curb, increasing the time it takes to pull into and out of bus stops. The single travel lane further impacts stop pull-out time, as operators have to wait longer for an opening in traffic when traffic volumes are high.

While there have been some operational improvements, including the relocation of bus stops from the near side of intersections to the far side, the implementation of turning pockets and the separation of bike and bus traffic, these changes have not been sufficient enough to mitigate the project's negative impact on transit speeds.

Staff analyzed transit speed and delay through the project area using Automatic Passenger Counter (APC) data from before (Fall 2015) and after (Fall 2016) implementation. The data reveal that while overall daily average speeds have changed little, peak period speeds have decreased upwards of 15 percent.

Figure 1 shows average northbound speeds through the project area have decreased across all peak periods between 2015 and 2016, most significantly in the PM peak (12 percent to 14 percent).

Figure 1: Average Bus in Traffic Speeds through Project Corridor (Northbound)

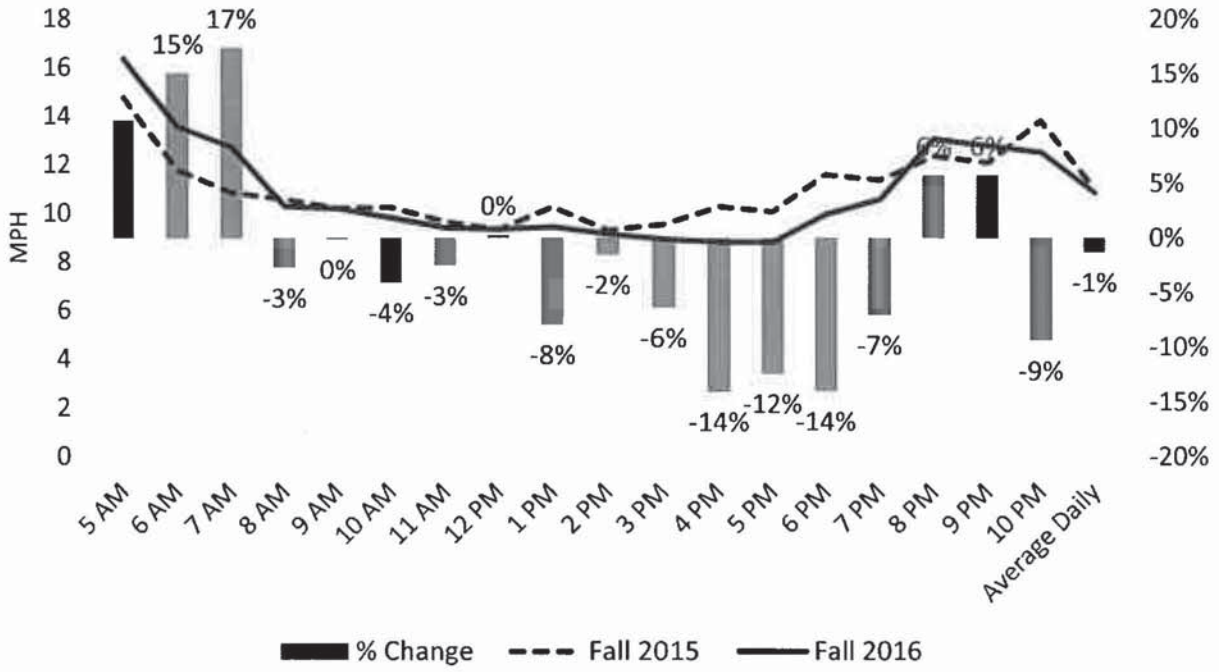
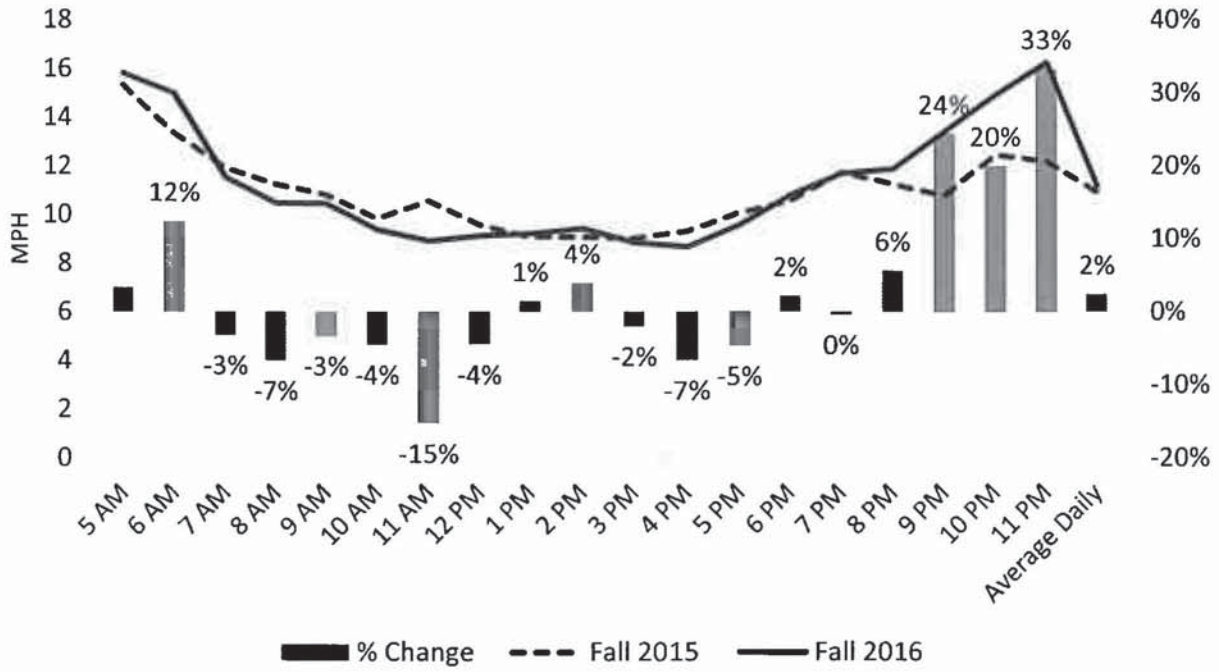


Figure 2 shows average southbound speeds through the project area have also decreased across all peak periods, most significantly in the AM peak and midday (3 percent to 15 percent).

Figure 2: Average Bus in Traffic Speeds through Project Corridor (Southbound)

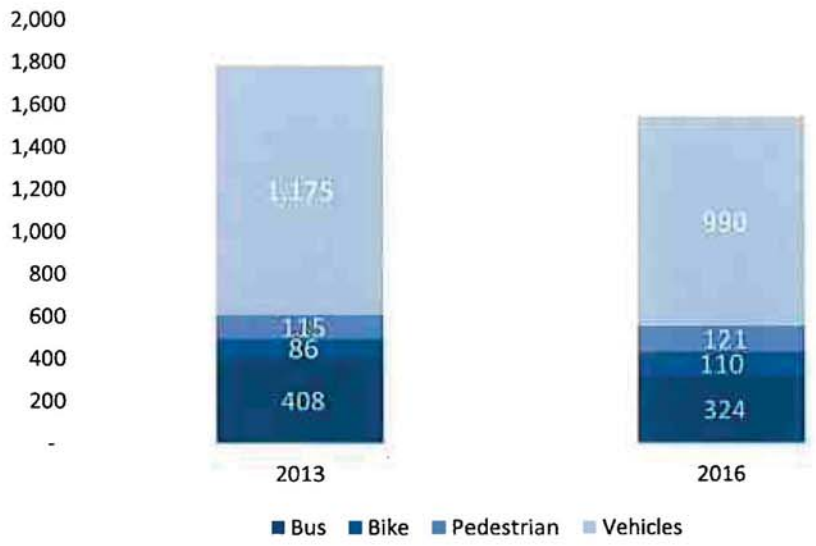


Speeds calculated from Fall 2015 and Fall 2016 APC data using time points covering the project area: 14th Street and Broadway to Telegraph and 40th Street. Staff removed passenger dwell time to control variations in stop boarding delay such that speeds represent the time the bus is moving in traffic.

The data confirm staff's concerns that reduction to a single travel lane on Telegraph without transit supportive improvements (e.g. bus boarding islands, queue jumps) would reduce travel speeds. Average speeds that previously hovered around an already slow ten mph now drop below nine mph for large portions of the day. This is especially true in the peak direction of travel: southbound AM peak speeds and northbound PM peak speeds show the largest percentage decrease year over year. This trend is especially concerning, as the impacts to travel speeds are highest in the directions of travel and times of day when the majority of passengers are traveling (off-peak periods, by contrast, saw an increase in travel speeds).

Despite a recent decrease in transit ridership on Telegraph Avenue, due in large part to the splitting of Line 1 in downtown Oakland and the elimination of Line 1R (but possibly also due to the increase in travel time noted above), bus passengers still make up the majority (17 percent) of non-auto through-trips on the corridor compared to cyclists (7 percent) and pedestrians (9 percent). Auto trips make up the remaining 71 percent of traffic through the corridor. Peak hour bus trips are nearly triple bike or pedestrian trips (Figure 3).[1]

Figure 3: PM Peak Hour Volumes (Telegraph and 27th Street)



However, the gains of the project are not being shared equally. In the recently released Telegraph Avenue Progress Report (Appendix A), the City cites a 40-percent decrease in collisions (vehicle, pedestrian, and bicycle) between 2016 and the 2012-2015 average; a 78-percent increase in peak hour bike trips between 2013 and 2016; a 100-percent increase in peak hour walking trips over the same period; and a 29 percent decrease in the incidence of

[1] Pedestrian, Bicycle, and Auto data from "Telegraph Avenue Complete Streets Phase 1 – After Implementation Performance Summary" Memorandum dated January 17, 2017 (Fehr and Peers).

cars traveling over the 25 mph posted speed limit in the northbound direction and 12 percent southbound.

While these results are laudable if not completely attributable to the Plan itself, and have clearly improved conditions for pedestrians and bicyclists (some of whom are transit riders) on the nine blocks of the project area, the Complete Streets Plan falls short of improving conditions for transit users while waiting for or riding on the bus. This is not surprising, as the Plan's goals and infrastructure investments have focused on improving conditions for pedestrians and bicyclists. Transit performance improvements are needed to ensure benefits accrue to the majority of non-auto users.

One original element of the plan – noted in the 2014 document as a "Key Design Element" – which has not yet been implemented but would make major strides to mitigate the impacts on transit users is the implementation of bus boarding islands at all bus stops. These islands would allow the bus to remain in the lane of travel while creating a safe space for passengers to board. Delay due to pulling in and out of bus stops would essentially be eliminated. In addition, buses and cyclists would remain separated throughout the entire corridor. The lack of separation today has led to at least one collision between bike and bus.

In its Progress Report, the City indicates that it has dedicated funding for bus boarding islands on Telegraph Avenue, but will need at least two years to refine the design and begin construction. The District should continue to work with the City to support this solution. Until then, transit performance will not improve, resulting in slower buses and less reliability.

BUDGETARY/FISCAL IMPACT:

There is no direct budgetary/fiscal impact. However, continued degradation of transit speeds means the District will have to spend more to maintain the same level of service.

ADVANTAGES/DISADVANTAGES:

This item is an update, there are no advantages/disadvantages associated with it.

ALTERNATIVES ANALYSIS:

There is no alternatives analysis associated with this report.

PRIOR RELEVANT BOARD ACTION/POLICIES:

14-230 – Service Expansion Plan Adoption

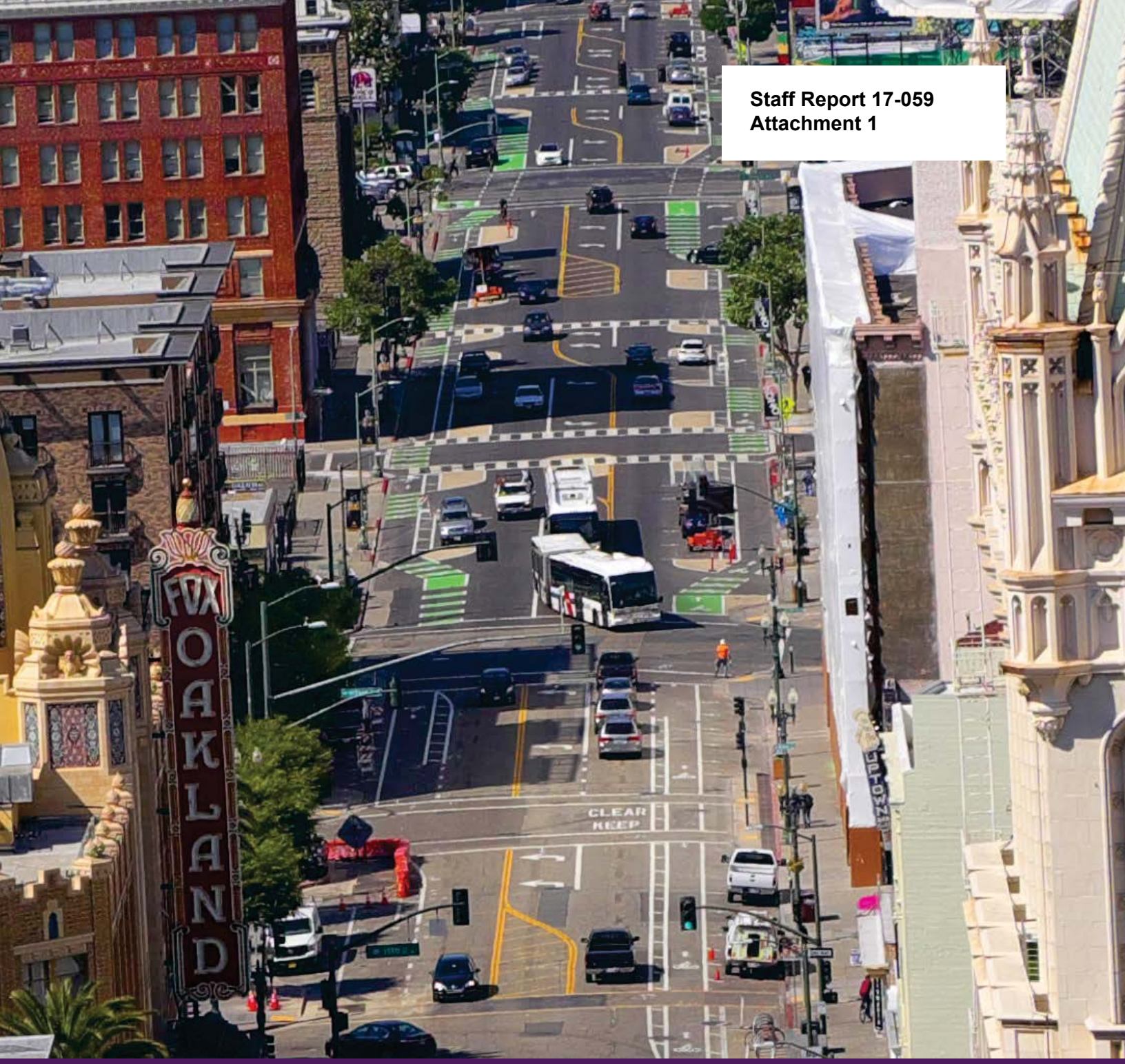
ATTACHMENTS:

1. City of Oakland Telegraph Avenue Progress Report.

Approved by: Ramakrishna Pochiraju, Acting Executive Director of Planning & Engineering

Reviewed by: Robert del Rosario, Director of Service Development and Planning
Michael Eshleman, Manager, Service Planning
James Pachan, Chief Operating Officer
Denise Standridge, General Counsel

Prepared by: John Urgo, Transportation Planner, Service Planning



Telegraph Avenue
Progress Report

Oakland Department of Transportation
January 2017

City of Oakland

Telegraph Avenue Complete Streets:
A Very Recent History

In April 2016, OakDOT made changes to the layout of Telegraph Avenue between 20th Street and 29th Street. These changes included 8 high-visibility pedestrian crosswalks and 9 blocks of parking-protected bike lanes made possible by repurposing one vehicle travel lane in each direction. Previously, Telegraph Avenue had no dedicated bicycle facility, despite being a key bicycle corridor between Oakland and Berkeley. Telegraph Avenue is also a "high injury corridor," meaning that it is among the streets in Oakland where the most people are injured walking and biking.

2014

The City of Oakland begins a planning project to develop concepts for Telegraph Avenue.

2015

Oakland City Council approves the Telegraph Complete Streets Plan.

The City of Oakland succesfully applies for funding to implement the Plan.

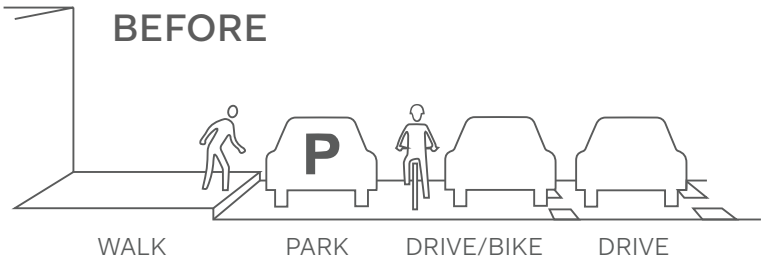
2016

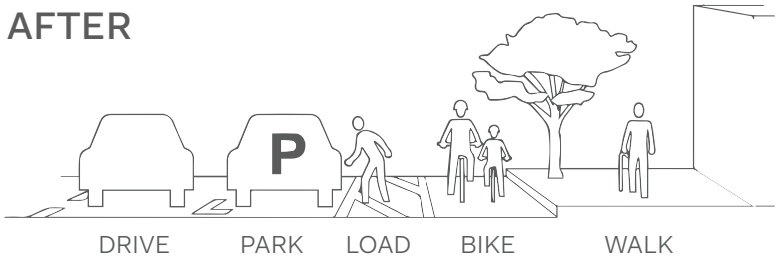
Telegraph named one of "America's Best New Bike Lanes of 2016" (People for Bikes)

Telegraph nominated for "Best Street Transformations of 2016" (Streetsblog)

Today

The City of Oakland implements a paint-only pilot of the protected bikeway project approved in the Telegraph Complete Streets Plan.





Progress Report
Telegraph Avenue Complete Streets

This Progress Report assesses the recent changes to Telegraph Avenue using metrics derived from the project's key goals of safety, multimodal use, and neighborhood vitality.

GOALS

Improve safety and accessibility for all users

Make the street more comfortable and enjoyable for people walking and biking

Balance the needs and convenience of all users

STRATEGIES

Design safer streets to provide safe and attractive options for all street users

Build great streets to create economic value and neighborhood vitality.

Reduce delay and speeding to allow for faster, safer travel.

METRICS

Crashes and injuries for motorists, pedestrians, and bicyclists

Volume of vehicles, bus passengers, bicycle riders, and pedestrians

Traffic speed, including median speeds and percentage speeding

Economic vitality, including growth in retail activity

User satisfaction, including perceptions of safety and comfort

Designing safer streets

Safe and attractive options for all users

Planning a safe street means helping pedestrians, bicyclists, drivers, and bus riders coexist safely so that everyone gets where they need to go. On Telegraph, changes like dedicated lanes for bicyclists and clearly demarcated pedestrian crossings separate the different streams of traffic and make the ride more comfortable for everyone. As a result, we're seeing promising trends: fewer collisions for everyone, and increased perception of safety among our most vulnerable users of the street.

No pedestrian crosswalk collisions reported for the first time in 5 years

79% of bicyclists and **63%** of pedestrians say they feel safer on Telegraph now

Pedestrian collisions on Telegraph Avenue (2012-2017)
Telegraph Avenue Intercept Survey (2016) (n=118, 40)
Sources: OPD, OakDOT

40% decrease in collisions

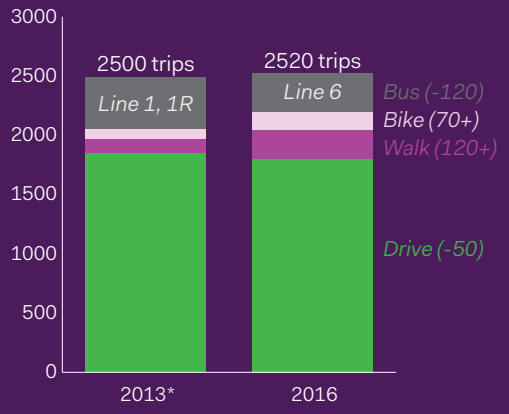
All collisions (vehicle, pedestrian, bicycle) on Telegraph Avenue (2016 vs average of 2012-2015)
Source: OPD

Building great streets

Economic value and neighborhood vitality

Perhaps most known for "First Fridays," the Koreatown-Northgate District is home to restaurants, bars, and art galleries, as well as neighborhood retail and services. Although not directly attributable to the changes on the street, the KONO District has seen a 9% increase in retail sales and the addition of 5 new businesses since the Telegraph Avenue project went in. Another trend in the right direction: we saw a 78% increase in people biking and a 100% increase in people walking during peak hours. And, despite significant transit service changes, we saw the peak hour share of people biking, walking, and taking the bus on Telegraph climb to almost 30%.

People Trips During the Peak Hour (Average)



Telegraph Avenue - After Implementation Performance Summary (2016)
*AC Transit Quarterly Ridership Summary, *Fall 2015 & Fall 2016 (2016)*
Sources: AC Transit, OakDOT

9% increase in retail sales

Sales tax revenues, Koreatown CBD, 3Q 2016 vs 3Q 2015
Source: Oakland Economic & Workforce Development Department

Reducing delay and speeding

Faster, safer travel

Not too fast, not too slow: since the change, we've seen a significant decrease in cars and trucks speeding and and little change in median speed. Now traffic flows more consistently and more consistently at a safe speed. Why reduced speeding matters: 9 out of 10 pedestrians survive being hit by a vehicle traveling 20mph, but just 5 out of 10 survive if the vehicle is going 30mph. At 40mph, only 1 out of 10 pedestrians will survive.

45% decrease in southbound speeding

27% decrease in northbound speeding

Median speeds are now **the speed limit**

Telegraph Avenue - After Implementation Performance Summary (Fall 2016)
Source: OakDOT

52% of bicyclists on Telegraph say they travel the corridor more frequently now

Telegraph Avenue Intercept Survey (2016), n=118
Source: OakDOT

What We've Heard
Areas for Improvement

There's no denying it. Of all the changes on Telegraph, the new parking configuration and the new "mysterious light-brown zones" have been the single greatest source of confusion. We are the first to admit that these zones are not working quite right, despite being key pieces of the Telegraph changes.

"Cars routinely park in the mysterious light-brown zones."

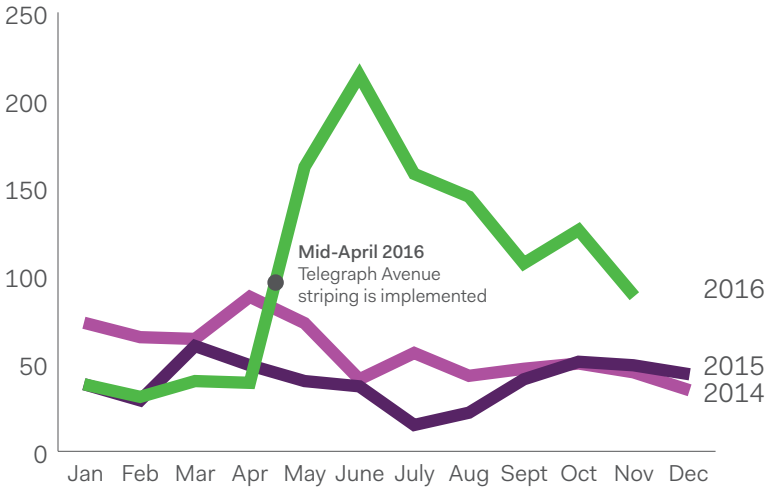
The new parking configuration does double duty: it provides visitors a place to park and it also forms the physical separation that protects bicyclists from moving vehicles.

The beige zones also have a specific safety function: kept clear, they provide appropriate sight lines for bicyclists and pedestrians crossing at intersections. When they're not kept clear, we're not happy either!

"Cars are parking in the bike lanes with impunity"

We also heard from community members who wondered whether the City has been ticketing people who are "parking dirty" on Telegraph. The answer: most definitely. Since May 2016, Oakland's Parking Enforcement officers have issued **double** the number of monthly citations along Telegraph.

Parking Citations By Month Along Telegraph
January 2014 to November 2016



While we're proud of the good work of our parking enforcement officers, it's never our preference to enforce our way to a good design. Plus, we don't want people to think of Telegraph as just a place to get a parking ticket! So we'll be introducing some new visual and physical cues to get the message across about where to drive, park, and bike.

"Communicate clearly!"

We hear you! We'll try to do better. This Progress Report is part of our effort. Head to our project website (http://www2.oaklandnet.com/Government/o/PWA/o/EC/s/TelegraphAvenue/) and sign up for our mailing list to stay connected.

What We're Doing Next
Upcoming Changes

In the coming months, we'll be rolling out additional changes on Telegraph Avenue to respond to your feedback and help make things even smoother. Below are some of the things you can look for on the street.

Adding new vertical separators and new signage

Without additional physical barriers, we think drivers will continue to park in the beige zones and in the bike lanes. So we'll be adding new separators. These will be added in places where it's needed--in the beige zones and at the beginning of the bike lane on key segments.

To reduce confusion further, we're also developing new permanent signs to explain where exactly to park. These will be used on Telegraph and any other corridor where we implement parking protected bkeways.

Soon we'll be installing vertical separators like these, seen in Chicago.

Painting the "mysterious light-brown zones"

We'll be adding some new separators to the beige zones soon. But we're also working with neighborhood partners to think about adding some color to the beige zones. Stay tuned!

We think there might be an opportunity to paint the beige zones, and we're looking for your ideas.

Adding concrete curbs and bus boarding islands

During Phase II, we'll be adding curbs in the beige areas. We'll also be implementing bus boarding islands to help get bus riders onto the bus faster. We have dedicated funding for these improvements that can't be spent anywhere else, but it will still take a bit of time to perform final refinements and construct them. Expect to see these major changes in the next 2 years.

Initiating a project mailing list

We've initiated a project mailing list to better communicate with folks who want all the details. Subscribe from the link on the Telegraph project website (http://bit.ly/1PRpqv5) and stay up to date with all the transportation-related Telegraph news.

Read the 2014 adopted plan for Telegraph to learn more about what's in store in the long run.

Stay Connected

We encourage you to stay connected with the Telegraph Avenue Complete Streets project by signing up for our mailing list (http://bit.ly/2kCTVfx) . We'll only use this list to share updates about the Telegraph project and to solicit feedback.

Sources
Head to our website for reports and data:
http://bit.ly/1PRpqv5

Photo Credits
Bike East Bay
Rafael Perez Martinez
People for Bikes
Jef Poskanzer
Sergio Ruiz

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The mission of the Oakland Department of Transportation is to envision, plan, build, operate, and maintain a transportation system for the City of Oakland—in partnership with local transit providers and other agencies—and to assure safe, equitable, and sustainable access and mobility for residents, businesses, and visitors.