CITY OF OAKLAND

AGENDA REPORT

TO: Sabrina B. Landreth
City Administrator

FROM: Ryan Russo
Director, Transportation

SUBJECT: Improvements to Telegraph Avenue from 20th Street to 29th Street

DATE: April 17, 2019

City Administrator Approval _____ Date: 5/29/19

RECOMMENDATION

Staff Recommends That The City Council Adopt A Resolution To Implement Improvements To Telegraph Avenue From 20th Street to 29th Street To Address Identified Issues.

EXECUTIVE SUMMARY

This resolution establishes improvements to Telegraph Avenue in the Koreatown Northgate neighborhood pursuant to the implementation of the Telegraph Complete Streets Project in 2016. Following Oakland City Council direction in December 2018, staff has designed improvements to address identified issues with the Telegraph Complete Streets Project for implementation in 2019. Improvements address the key issues identified through meetings and community engagement, and will be delivered in late Summer or early Fall of 2019.

BACKGROUND / LEGISLATIVE HISTORY

Telegraph Avenue between 20th and 29th Streets serves an important transportation function for all modes, and includes several neighborhood commercial districts. The Land Use and Transportation Element of the Oakland General Plan (LUTE) states the importance of Telegraph Avenue within Oakland:

- Telegraph Avenue is a designated "Key Corridor" envisioned for pedestrian-focused commercial activity, and connects two Transit-Oriented Districts (19th Street BART and MacArthur BART) as well as several Neighborhood Activity Centers (e.g., Temescal, Pill Hill).
- "Oakland Walks!," the City's Pedestrian Plan, part of the LUTE, identifies Telegraph Avenue as a High Injury Corridor, just 2% of city streets where 36% of pedestrian injuries and fatalities concentrate, despite being located in a "walkers paradise," with

excellent access to goods and services within walking distance using the WalkScore® index. "Oakland Walks!" was adopted in 2017.

- The Oakland Bicycle Plan, part of the LUTE, includes Telegraph Avenue within the Proposed Bikeway Network as a designated primary bikeway and priority project. The plan was originally adopted in 1999, comprehensively updated in 2007, and reaffirmed by City Council in 2012.

In 2013, the City of Oakland received a grant from the Alameda County Transportation Commission to study "complete street" improvements to the Telegraph Avenue corridor (20th Street to 57th Street) to make the street safer and more comfortable for all modes of travel.

Project Initiation
In December 2014, the Oakland City Council adopted a Telegraph Avenue Complete Street Plan, and directed staff to incorporate protected bicycle lanes between 20th and 29th Streets. This design was selected due to the commercial nature of Telegraph Ave and the need to separate parking and loading needs from the bicycle travel lane.

Following Oakland City Council support, the City was awarded a grant to implement the planned protected bicycle lane with concrete separation and raised islands. This grant is currently in progress and expected to be implemented in 2021.

In early 2016 the City identified an opportunity to implement an interim version of the protected bicycle lanes in coordination with a repaving project.

Project Challenges
Telegraph Complete Streets Phase 1 was the first "quick build" protected bicycle lane in Oakland. As such, a lot has been learned regarding design challenges and strategies to address those challenges.

The project was designed as a low-cost improvement using only paint and signage and didn't include any changes to parking stalls and meters or the installation of vertical posts. Without vertical elements separating the bicycle and parking lanes and the novelty of the design, the project was not easily understood by drivers resulting in vehicles parking in the bicycle lane and frustration for people bicycling and driving alike. In addition, the lack of vertical elements in the painted safety zones resulted in people parking in this prohibited area, which impacted sight lines.

While protected for most of the corridor, the bicycle lanes and bus stops were initially shared spaces or "mixing zones," resulting in discomfort for people bicycling and bus operators. The average speed of bicyclists and buses is often similar, resulting in frequent weaving around one another when the bus pulls in and out of curbside stops.

In 2017 and 2018 OakDOT staff implemented a series of improvements to address concerns, including:

- Proactive education with windshield postcards and posters along the corridor to educate drivers as to proper parking locations
- The installation of soft-hit posts in the pedestrian safety areas to reinforce the beige painted pedestrian zones

- The addition of traffic-grade planters to further demarcate the painted pedestrian zones
- The installation of modular bus boarding islands to prevent weaving between buses and bicyclists

Some of these improvements have worked to improve the design, while others created ambiguity for certain users, and other strategies weren't implemented due to fiscal and logistical limitations. Unexpectedly, people drove into traffic-grade planters and moved them out of place. Because the planters weren't bolted into the ground, they ended up blocking the bike lane, crosswalks, and vehicle travel lanes. Soft hit posts weren't durable enough to endure the number of times they were hit and were eventually broken. The lack of vertical separation between the bicycle and parking lanes continued to result in non-compliance and confusion, and while staff was interested in installing vertical separators between the bicycle and parking lanes, the City first had to obtain a small street sweeper that meets State zero emissions standards and could be used to maintain the bicycle lane. That sweeper has been identified and is currently being purchased for maintenance of this project and other protected bicycle lane projects.

Project Benefits
Despite the challenges enumerated above, the project has resulted in many successes (see Attachment A for complete quantitative evaluation findings), including the following:

- **Speeds slowed by 29%** in the Northbound direction and 12% in the Southbound direction after implementation, demonstrating a reduced likelihood for a severe and/or fatal crashes along the corridor
- **Yielding to pedestrians in crosswalks increased over 300%** from 22% before and 67% after implementation, preventing severe and fatal failure-to-yield pedestrian injuries, one of the most common crash types in Oakland
- **More people walking (100% increase) and biking (78% increase) along the street,** suggesting that the infrastructure is supporting mode shift to more sustainable transportation
- **Perceptions of traffic safety** significantly improved for **bicyclists (78% believe it's safer)** and **pedestrians (63% believe it's safer)** based on qualitative intercept surveys (additional information on qualitative surveys in the "Public Outreach / Interest" section below)

Solutions Moving Forward
In December 2018, when approving Resolution No. 87484 C.M.S., City Council approved a motion to direct staff to bring a plan to Public Works for approval to fix identified problems in the KONO area. Since December 2018, staff have been designing a comprehensive project to improve the KONO protected bicycle lanes to be delivered late summer/early fall 2019. This is in addition to a $3,677,000 investment in competitive grant funds to be delivered in 2021. The improvements are outlined in the following section, "Analysis and Policy Alternatives."

ANALYSIS AND POLICY ALTERNATIVES

Overall, the results from the interim evaluation of Telegraph Complete Streets Phase 1 demonstrates that the project is successful in advancing safety and preventing injuries for people walking and bicycling along the corridor. However, there are additional opportunities to strengthen the project.

Staff have documented concerns through community engagement and public meetings described in the "Public Outreach / Interest" section below, and are addressing these concerns through a set of proposed improvements to Telegraph Avenue from 20th Street to 29th Street in the KONO Neighborhood:

- Provide greater clarity of the parking area and prevent parking in the bicycle lane by:
  - Adding large, durable bollards that are difficult to drive over, destruct and dislodge along the buffer between the bicycle lane and parking lane, and around the pedestrian safety areas and bus boarding islands
  - Installing multiple bollards at the start and end of each intersection and driveway to ensure that the entry/exits to bicycle lanes are too narrow for automobiles to drive through
- Improve safety and visibility at crosswalks and intersections by:
  - Reinforcing pedestrian safety areas with durable bollards and concrete wheel stops bolted into the ground to prevent parking in the pedestrian areas, which blocks sight lines and visibility between all modes
  - Upgrading all crosswalks to high-visibility crosswalks to improve yielding
- Provide greater visibility of the Bus Boarding Islands by:
  - Installing large white reflective posts on the four corners of the bus boarding islands to increase visibility during daylight and nighttime hours
  - Painting reflective traffic paint around the islands

In addition to the improvements identified in this report, staff will continue to evaluate the project, and expand the evaluation to ensure that concerns are being addressed. The evaluation will include quantitative measures of behaviors that indicate the potential for severe and fatal traffic crashes, and qualitative data measuring the experience of roadway users, businesses and neighbors. This data would be used to inform the permanent improvements along the corridor and future similar improvements across the City of Oakland.

Staff is developing a permanent project to be delivered in 2021 that will further address concerns and enhance safety. While the grant to deliver the project and the lane conversion have already been approved and accepted by City Council, staff are highlighting the benefits of the permanent project as a matter of public interest. Improvements on this segment of Telegraph Avenue to be delivered in 2021 include:

- Transforming painted safety zones and the buffer area between parking and bicycle lanes into concrete islands, further preventing parking in pedestrian refuge areas and bicycle lanes
- Increasing the size of the pedestrian safety areas to enhance visibility of people walking
- Increasing visibility by applying best practice sight lines for protected bicycle lanes of 40 feet before intersections, 30 feet after intersections, and 20 feet on either side of driveways to improve visibility between people driving and people bicycling

- Incorporating speed humps around pedestrian safety areas to further slow turning vehicles to improve yielding to people biking and walking along Telegraph Avenue
- Increasing the width of the parking area by one foot to allow more space between moving vehicles and people exiting parked vehicles
- Painting a solid line along the parking area to channelize moving vehicles in the travel lane and reinforce the extra space for people exiting vehicles
- Comprehensively upgrading curb uses, such as passenger loading (white curbs), commercial loading (yellow curbs), and short term parking (green curbs) based on input received during merchant outreach conducted in late 2017 (summarized in Public Outreach / Interest section below), at a community meeting held on March 6, 2019, and in response to mailers sent to all properties within 300 feet of the project area in late February 2019; painting the curb color in the parking area, in addition to the concrete curb, to ensure that parking spaces are easily legible for people driving

FISCAL IMPACT

The estimated cost to install the identified temporary improvements is $455,000. The project will be delivered through a combination of on-call contractors and in-house crews to ensure the most cost-effective project in the abbreviated timeframe. Funds are available in fund 2211 (Measure B) project 1001512 (grant matching funds), or other bicycle and pedestrian plan implementation CIP funds, as available, re-programmed for this purpose to be transferred to project 1004902.

PUBLIC OUTREACH / INTEREST

Outreach has been conducted along the Telegraph Avenue corridor for many years. Since the implementation of the Telegraph Complete Street Phase 1 project, staff conducted outreach with roadway users, merchants, and neighbors.

In 2016, staff conducted a bicyclist and pedestrian survey after the implementation of the Telegraph Complete Streets Phase 1 project. Staff found that since the project, 52% of people on bikes ride Telegraph more frequently and 79% feel safer. Pedestrians reported 55% increase in crossing and intersection safety, and 63% of pedestrians reported increased perceptions of overall walking safety. However, bicyclists noted the challenges identified above, especially common issues of parking in the bicycle lane and in the painted safety zones, and the resulting intersection visibility challenges. One limitation of this survey was that people driving weren't surveyed (though they may have captured in the pedestrian surveys) and merchants weren't surveyed.

In 2017, staff conducted merchant-specific outreach to understand loading experiences in the context of the new street configuration. OakDOT successfully engaged 43 businesses along the project corridor from 20th Street to 29th Street. There were 16 additional establishments without on-street loading needs that were not contacted and 14 businesses that were either no longer in operation, unclear if they were still in operation, or not open during standard business hours. Data collected were used to analyze how, when, and where merchants currently perform loading to provide recommendations for future improvements. Staff also noted qualitative

comments to better understand how the street configuration is impacting merchants, residents, and users. The identified challenges and suggested improvement strategies are enumerated in the "Analysis and Policy Alternatives" section above, and as noted above curb changes to reflect merchant needs will be a component of the final project.

In 2019, to inform the development of this project, staff emailed over 700 people subscribed to the Department's Telegraph Avenue Complete Streets email list and sent out mailers to residents along the corridor from 20th Street to MacArthur to invite residents, merchants and users to share input on the Telegraph Avenue Complete Streets project and participate in a public meeting. A community meeting, hosted by Northgate Neighbors, was attended by approximately 40 people who contributed feedback on the proposed improvements in KONO. In addition, staff reached out to merchants from 20th Street to MacArthur to gather more recent information on commercial loading and curbside needs that can be incorporated in either the interim or permanent KONO projects.

COORDINATION

The Office of the City Attorney and Budget Bureau were consulted in the preparation of this report. Staff coordinated with AC Transit's Planning & Operations Division to ensure the improvements are coordinated with AC Transit operations.

SUSTAINABLE OPPORTUNITIES

Economic: Vibrant pedestrian and bicycle friendly streets are good for business. Evaluations of similar projects find that people on foot and bicycle shop more frequently and spend more money overall at local businesses after investments in pedestrian and bicycle safety are made.

Environmental: Safe places to walk and bicycle can help reduce environmental impacts associated with transportation by helping shift the mode split from single occupancy vehicles to walking, bicycling and transit.

Social Equity: Enhanced safety along protected bikeways are a key tool to reduce severe and fatal injury crashes by reducing speeding, and in Oakland, severe and fatal traffic crash victims are predominantly people of color, and people of color are more likely to live in zero-car households and thus more dependent on walking, bicycling and transit to get around.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends That The City Council Adopt A Resolution To Implement Improvements To Telegraph Avenue In The KONO Neighborhood To Address Identified Issues.

For questions regarding this report, please contact Nicole Ferrara, Assistant to the Director on Policy and Intergovernmental Affairs, at (510) 238-4720.

Respectfully submitted,

RYAN RUSSO
Director, Department of Transportation

Reviewed by:
Wladimir Wlassowsky, P.E.,
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Prepared by:
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Attachments (2):

A: Telegraph Avenue Complete Streets Phase 1 – After Implementation Performance Summary
B: Telegraph Ave Roadway Improvement Designs

Item: _____
Public Works Committee
June 11, 2019

FEHR & PEERS

MEMORANDUM

Date: January 17, 2017

To: Peter Chun, City of Oakland

From: Ryan McClain and Teresa Peterson

Subject: Telegraph Avenue Complete Streets Phase 1 – After Implementation Performance Summary

OK15-0049.09

This memorandum summarizes data collected before and after implementation of the first phase of the Telegraph Avenue Complete Streets project. Phase 1 of the project included reduction of vehicle through lanes from two to one in each direction and installation of parking protected bicycle lanes on Telegraph Avenue between 29th Street and 20th Street/Thomas L Berkeley Way in the Koreatown Northgate neighborhood of Oakland. The improvements were implemented as part of roadway resurfacing project and therefore consisted primarily of striping and signing elements. This included green pavement for bicycle lanes and conflict zones, epoxy treatment to define median islands, and vertical delineators at key locations to discourage vehicles from turning into the protected bicycle lanes. Data collected includes pedestrian, bicycle, and vehicle counts, vehicle speeds, and driver yielding rates at crosswalks. Previously, data was collected in the Fall of 2013 for the Telegraph Avenue Complete Streets study and presented in the Existing Conditions Report (CD+A, December 17, 2013)[1]. Data was collected again in the Fall of 2016 after implementation of the project.

Average Daily Volume Results

Hourly traffic data was collected for five 24-hour periods at two locations on Telegraph Avenue. The days of data collection for each location are listed below.

[1] The Existing Conditions Report of the Telegraph Avenue Complete Streets Study can be found at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak044666.pdf

- 27th Street and Sycamore Street
  - Wednesday, September 28th 2016
  - Thursday, September 29th 2016
  - Friday, September 30th 2016
  - Saturday, October 22nd 2016
  - Sunday, October 9th 2016
- 40th Street and 41st Street
  - Wednesday, September 28th 2016
  - Thursday, October 21th 2016
  - Friday, October 21st 2016
  - Saturday, October 22nd 2016
  - Sunday, October 2nd 2016

Table 1 summarizes the data collected for all modes along Telegraph Avenue after implementation of the project.

TABLE 1: 2016 TELEGRAPH VOLUME DATA

Location	Mode	Daily Volume					Average Volume	
		Wednesday	Thursday	Friday	Saturday	Sunday	Weekday	Weekend
Between 27th Street and Sycamore Street	Bike	1,371	1,279	1,255	1,024	823	1,302	924
	Pedestrians	1,560	1,578	2,041	1,813	1,324	1,726	1,569
	Vehicles	13,268	13,550	14,902	13,247	10,835	13,907	12,041
Between 40th Street and 41st Street	Bike	1,379	1,263	1,235	924	823	1,292	874
	Pedestrians	3,428	3,349	3,497	2,765	2,401	3,425	2,583
	Vehicles	18,033	18,762	19,308	15,971	14,459	18,701	15,215

Source: Fehr & Peers, 2016

Bicycle volumes collected on Telegraph Avenue at 40th Street (outside of the project area) in April 2013 showed an average of 1,203 bicycles on weekdays and 679 bicycles on weekends[2]. When comparing the April 2013 volumes to those shown in **Table 1,** from after implementation of the project, the average daily weekday volumes increased by 7% and the average daily weekend volumes increased by 28% at 40th Street. Daily bicycle volumes were not collected in 2013 within the Phase 1 project area.

[2] Data from before installation of the project can be found in the Existing Conditions Report of the Telegraph Avenue Complete Streets Study:
http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak044666.pdf

Intersection Turning Movement Counts

Intersection peak period turning movement counts for vehicles, bicycles, and pedestrians were collected at each of the signalized intersections along the corridor before and after the Phase 1 project was implemented. Data was collected before the project was implemented[3] on Thursday, October 17, 2013 from 7:00 to 9:00 AM and 4:00 to 6:00 PM and again after implementation on Thursday, September 29, 2016 from 7:30 to 9:30 AM and 4:00 to 6:00 PM. Turning movement vehicle counts for the AM and PM peak hours (8:00 to 9:00 AM and 5:00 to 6:00 PM, respectively) are shown on **Figure 1**. Bicycle and pedestrian volumes for the same AM and PM peak hours are shown on **Figure 2**. Vehicle volumes for the major movements on Telegraph Avenue decreased by between 0 and 40 percent in the AM and between 6 and 44 percent in the PM. Bicycle volumes traveling through on Telegraph Avenue increased by between 81 and 186 percent in the southbound direction for the AM peak hour and by between 48 and 190 percent for the northbound direction in the PM peak hour. Pedestrian volumes also increased throughout the corridor, with the highest increase experienced at the south end of the project at 20th street. The total number of pedestrians crossing at the Telegraph Avenue/20th Street intersection increased from 139 to 497 in the AM peak hour and from 150 to 531 in the PM peak hour. The difference in peak hour vehicle, bicycle, and pedestrian intersection volumes for four signalized intersections along the corridor is shown in **Table 2.**

TABLE 2: INTERSECTION PEAK HOUR VOLUME CHANGE BEFORE AND AFTER PROJECT

Intersection	Peak Hour	Vehicles			Bicycles			Pedestrians		
		2013	2016	% Change	2013	2016	% Change	2013	2016	% Change
Telegraph & 29th	AM	1241	1157	-7%	61	120	97%	28	69	146%
	PM	1648	1419	-14%	100	139	39%	119	106	-11%
Telegraph & 27th	AM	1887	1847	-2%	116	158	36%	68	88	29%
	PM	2495	2423	-3%	128	192	50%	115	149	30%
Telegraph & Grand	AM	2128	2316	9%	59	174	195%	131	143	9%
	PM	2676	2845	6%	101	191	89%	185	314	70%
Telegraph & 20th	AM	1165	1070	-8%	55	158	187%	139	497	258%
	PM	1537	1326	-14%	67	151	125%	150	531	254%

Source: Fehr & Peers, 2016

[3] Data from before installation of the project can be found in the Existing Conditions Report of the Telegraph Avenue Complete Streets Study:
http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak044666.pdf

Speed Survey Results

Speed data was collected on Telegraph Avenue on July 29, 2014 from 10:00 AM to 11:00 AM and on Thursday, September 29, 2016 from 10:00 AM to 2:00 PM using a calibrated radar speed gun in both the northbound and southbound directions. Speed surveys were conducted at two locations; in the project area between Sycamore Street and 27th Street and north of the project area between 34th Street and 36th Street. The surveys were conducted on a typical weekday to capture average vehicle speeds during off-peak hours while the roadway is in free flow conditions. **Table 3** presents the 85th percentile speed and median speed at the two survey locations. The 85th percentile speed is the speed at which 85 percent of vehicles are traveling less than or equal to.

TABLE 3: SPEED SURVEY RESULTS

Location	Direction	2014			2016		
		Median Speed	85th Percentile	% Traveling Over Speed Limit	Median Speed	85th Percentile	% Traveling Over Speed Limit
Between Sycamore St and 27th St	Northbound	27	30	64%	25	27	35%
	Southbound	25	29	44%	24	27	32%
Between 34th St and 36th St	Northbound	30	34	83%	29	34	84%
	Southbound	31	35	92%	32	37	87%

Source: Fehr & Peers, 2016

The posted speed limit on Telegraph Avenue in the project area is 25 mph. In the project area (between Sycamore Street and 27th Street), from 2014 to 2016, the percent of vehicles traveling over the 25 mph posted speed limit decreased by 29 percent in the northbound direction and 12 percent in the southbound direction. The 85th percentile speed decreased in the northbound and southbound directions by 3 and 2 mph, respectively. Outside of the project implementation area (between 34th and 36th Street), the percent of vehicles traveling over the speed limit stayed relatively constant.

Pedestrian Yield Rate

Data was collected on the yielding behavior of drivers approaching unsignalized crosswalks when a pedestrian indicated intent to cross the street. For the purposes of this study a pedestrian intending to cross the street was defined as standing at the edge of the curb visibly looking for a gap in cross traffic, stepping off the curb into the parking, travel or bicycle lane, or otherwise entering the marked crosswalk. Pedestrian activity and driver behavior was observed at

uncontrolled crosswalks in the project area before and after the project was implemented. Uncontrolled crosswalks located at 24th Street and 21st Street were observed on Thursday, September 29th, 2016 during the AM and PM peak hours (7:45 AM to 8:45 AM and 5:00 PM to 6:00 PM). On Wednesday, November 6, 2013, the same data was collected at the 24th Street uncontrolled crosswalk only[4]. At each crosswalk observed, the number of cars failing to yield the right-of-way to pedestrians was recorded for each pedestrian crossing event. **Table 4** presents the number of pedestrians observed crossing at each location during the AM and PM peak hours.

TABLE 4: PEDESTRIANS USING THE CROSSWALK DURING THE PEAK HOUR

Location	Year	Peak Hour Pedestrian Volume	
		AM	PM
24th St	2013	20	30
	2016	35	62
21st St	2016	54	67

Source: Fehr & Peers, 2016

The percentage of vehicles that will yield to a pedestrian is an important metric for understanding driver behavior and pedestrian comfort. This percentage indicates the percentage of drivers that will yield to a pedestrian waiting at the curb to cross a crosswalk or that has entered a crosswalk and started to cross. For example, "20 percent of drivers yielded to pedestrians in the crosswalk." The calculation consists of:

$$\frac{total\ number\ of\ cars\ that\ yielded\ to\ pedestrians}{total\ number\ of\ cars\ that\ yielded\ to\ pedestrians\ +\ total\ number\ of\ cars\ that\ did\ not\ yield\ to\ pedestrians}$$

The pedestrian yield rates for the two locations on Telegraph Avenue are shown in **Table 5.**

[4] Data from before installation of the project can be found in the Existing Conditions Report of the Telegraph Avenue Complete Streets Study:
http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak044666.pdf

TABLE 5: PEDESTRIAN YIELD RATES			
Location	Year	Pedestrian Yield Rates (Veh Yield/Veh* (Yield+Not Yield)	
		AM	PM
24th St	2013	20%	22%
	2016	40%	67%
21st St	2016	33%	50%

Source: Fehr & Peers, 2016

The results show that the crosswalk at 24th Street experienced more pedestrian crossings and a higher rate of vehicles yielding after the project was implemented. Another key metric for understanding driver behavior at uncontrolled crosswalks is the average number of cars failing to yield per pedestrian. This metric indicates the average number of cars that will fail to yield to a pedestrian that is waiting at the curb or has entered the crosswalk. For example, in 2013 at 24th Street, on average during the study period, a pedestrian would wait for more than four cars to pass before a car would stop to let them cross.

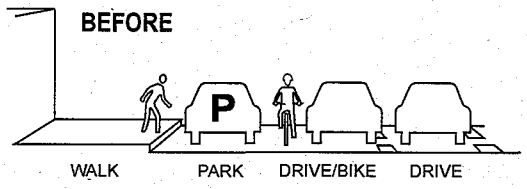
Table 6 shows the average number of cars that fail to yield per pedestrian crossing event.

TABLE 6: AVERAGE NUMBER OF CARS FAILING TO YIELD PER PEDESTRIAN			
Location	Year	Average Cars Failing to Yield per Pedestrian	
		AM	PM
24th St	2013	4.05	4.8
	2016	1.10	0.95
21st St	2016	1.76	1.26

This table shows that after the project was implemented, pedestrians waiting to cross will experience less drivers that pass them, failing to yield, and a shorter wait time before a car stops and allows them to cross.

Please contact Ryan McClain or Teresa Peterson with any questions.

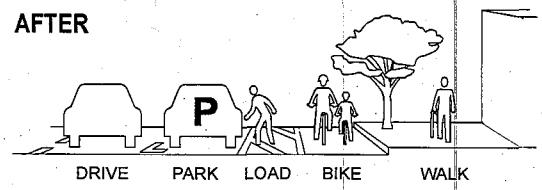
Attachment A



TELEGRAPH AVE

COMPLETE STREETS PROJECT

BEFORE & AFTER EVALUATION, 20TH TO 29TH STREET



The City of Oakland is working to improve transportation safety and comfort on Telegraph Avenue between 20th Street and 57th Street for all modes of travel. The first phase of this project, from 20th Street to 29th Street, was installed in May 2016.

CITY OF OAKLAND

Telegraph Avenue redesign is guided by the following goals: improve safety and accessibility of all modes; make the street more comfortable and enjoyable for walking and bicycling; and balance the needs and convenience of all users, including transit and motor vehicles. This fact sheet summarizes conditions before and after the installation.

Peak Hour Traffic
AT TELEGRAPH &
NORTH OF GRAND AVENUE

Key: *AM Peak | PM Peak*

2013		2016
816	Drivers	758 ↓
1,101		961 ↓
131	Total Intersection Pedestrian	143 ↑
185		292 ↑
44	Bicyclists	111 ↑
74		129 ↑

Pedestrian Crossings
AT TELEGRAPH &
24TH STREET

	2013		2016
AM	20	Peak Hour Pedestrian Crossing Volume	35 ↑
PM	30		62 ↑
AM	1/5	Drivers Yielding to Pedestrians	2/5 ↑
PM	2/9		2/3 ↑

Safety & Speeds
BETWEEN
SYCAMORE & 27th ST

SPEED LIMIT 25

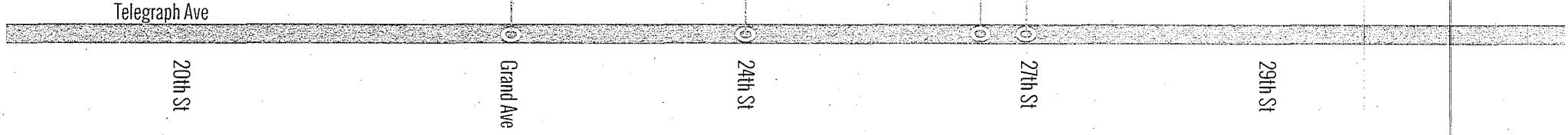
Key: *Northbound | Southbound*

2014		2016
64%	% Speeding Drivers	35% ↓
44%		32% ↓
30 mph	85th Percentile Speed	27 mph ↓
29 mph		27 mph ↓

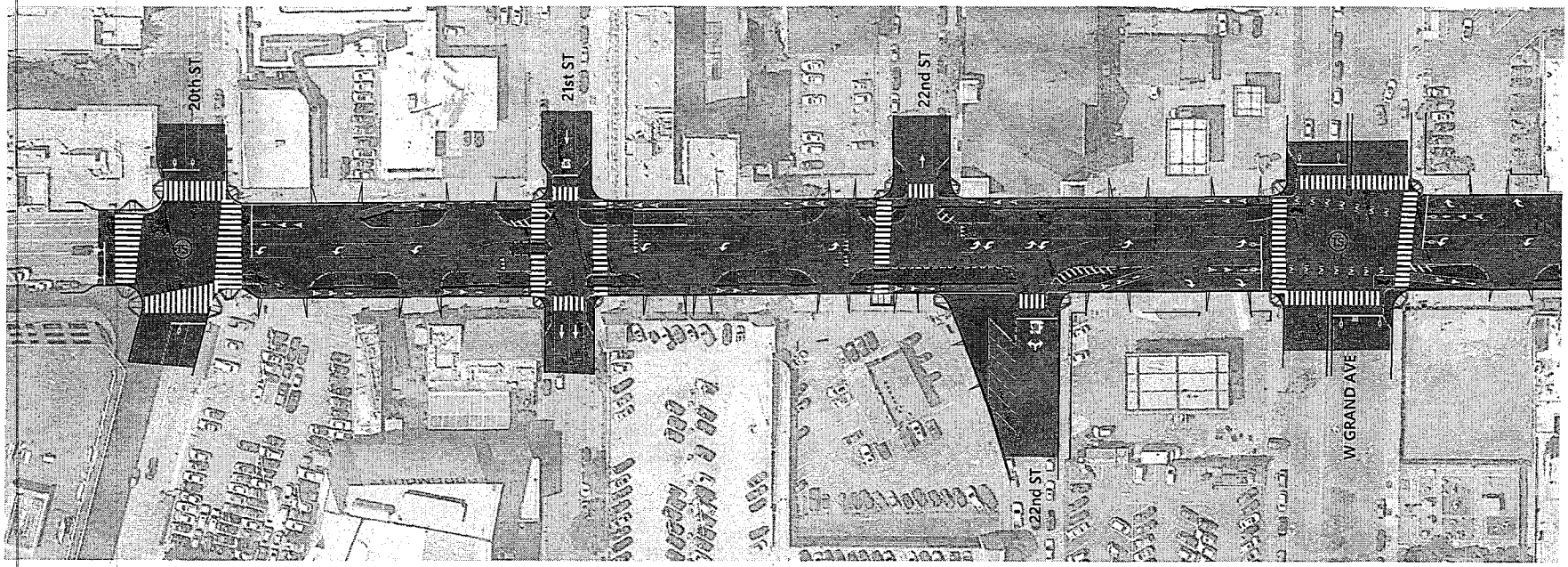
Peak Hour Traffic
AT TELEGRAPH &
SOUTH OF 27th STREET

Key: *AM Peak | PM Peak*

2013		2016
845	Drivers	690 ↓
1,175		990 ↓
68	Total Intersection Pedestrian	88 ↑
115		121 ↑
68	Bicyclists	128 ↑
86		110 ↑



Attachment B



LEGEND:

- PROPOSED PAINTED PEDESTRIAN SAFETY ZONE
- PROPOSED K-71 POST
- PROPOSED BUS STOP AREA
- RED CURB SPACE
- YELLOW CURB (COMMERCIAL LOADING ZONE)

CONSTRUCTION NOTES

1. BIKE LANE AND SCOOTER SYMBOLS, AND ARROW
   Install bike lane symbol and bike lane arrow markings 20 feet after curb return (as measured from base of symbol) and/or as noted. Space symbol and arrow 6 feet apart. See Detail 'A' Sheet SS-4.
2. WORD PAVEMENT MARKING
   Install pavement markings per Caltrans Standard Plans (2018) A24D and A24E.
3. PARKING METER
   Coordinate with City on parking meter installation.
4. PURPLE THERMOPLASTIC MARKING
   Install purple thermoplastic marking as shown on plans. See specifications for further information.
5. K-71 Post, space 6' max. as show on plans within purple marking area. 12" Offset unless otherwise noted.
6. K-71 Post, space 5' offset from center of parking tee within buffered bike zone adjacent to parking.
7. YIELD LINE MARKING
   Install yield pavement marking per Caltrans Standard plans (2018) A24F.
8. RUBBER SPEED BUMP
9. 12" RED STRIPE
   Install 6" white letter to reinforce parking prohibition.
10. WHITE BULB-OUT STRIPING
    Install (2) 4-inch white striping with 3" gap between them.
11. YELLOW MEDIAN STRIPING
    Install (2) 4-inch yellow striping with 3" gap between them.
12. PARKING TEE
    Install short stem toward curb, distance measured from center of cross. Spacing between tees to be determined by engineer. See Detail, Sheet D-06.
13. HIGH VISIBILITY CROSSWALK
    Install 2 foot stripes spaced 2 feet apart. White unless otherwise noted. See Caltrans Standard Plan A24F.
14. BIKE LANE EXTENSION THROUGH INTERSECTION
    See City Marking Details M-8.
15. EXISTING BUS LOADING ZONE PLATFORM.
16. WHITE BUFFER STRIPING
    Install 6-inch white striping every 15 feet at 45 degree angle, or as noted.

CITY OF OAKLAND
BUREAU OF ENGINEERING AND CONSTRUCTION
250 FRANK H. OGAWA PLAZA, SUITE 4344 * OAKLAND, CA 94612
(510) 238-3467 * FAX (510) 238-7415

TELEGRAPH AVENUE
CITY OF OAKLAND

PRELIMINARY
NOT FOR
CONSTRUCTION

FEHR & PEERS
2201 Broadway Suite 602 Oakland, CA 94612 (510) 834-3200

CHECKED BY	CM
DESIGNED BY	CM
DRAWN BY	DD/TN

No.	BY	DATE	REFERENCE

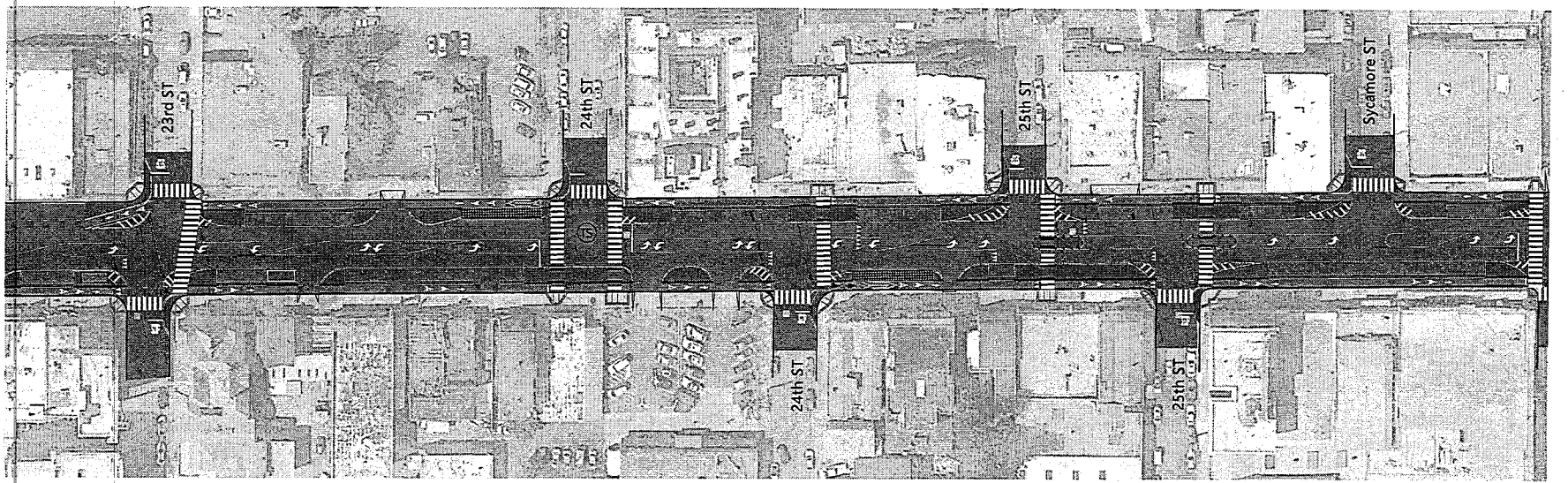
DRAFT CONCEPT PLANS
ADDITIONAL ENGINEERING AND ANALYSIS REQUIRED
NOT FOR CONSTRUCTION

SCALE: AS SHOWN
DATE: APRIL 18, 2019

SHEET NO. ___ OF 4

DRAWING NAME: H:\Projects\2018\0618-0281.02_Telegraph_Ave_20th_to_52nd_St_Ped\CAD\Graphics\0281.02_Telegraph_20th-29th_INTERIM_with-sep-path-alternative.dwg
PLOTTED BY: tnguyen

Attachment B



LEGEND:

- PROPOSED PAINTED PEDESTRIAN SAFETY ZONE
- PROPOSED K-71 POST
- PROPOSED BUS STOP AREA
- RED CURB SPACE
- YELLOW CURB (COMMERCIAL LOADING ZONE)

CONSTRUCTION NOTES

1. BIKE LANE AND SCOOTER SYMBOLS, AND ARROW
   Install bike lane symbol and bike lane arrow markings 20 feet after curb return (as measured from base of symbol) and/or as noted. Space symbol and arrow 6 feet apart. See Detail 'A' Sheet SS-4.
2. WORD PAVEMENT MARKING
   Install pavement markings per Caltrans Standard Plans (2018) A24D and A24E.
3. PARKING METER
   Coordinate with City on parking meter installation.
4. PURPLE THERMOPLASTIC MARKING
   Install purple thermoplastic marking as shown on plans. See specifications for further information.
5. K-71 Post, space 6' max. as show on plans within purple marking area. 12" Offset unless otherwise noted.
6. K-71 Post, space 5' offset from center of parking tee within buffered bike zone adjacent to parking.
7. YIELD LINE MARKING
   Install yield pavement marking per Caltrans Standard plans (2018) A24F.
8. RUBBER SPEED BUMP
9. 12" RED STRIPE
   Install 6" white letter to reinforce parking prohibition.
10. WHITE BULB-OUT STRIPING
    Install (2) 4-inch white striping with 3' gap between them.
11. YELLOW MEDIAN STRIPING
    Install (2) 4-inch yellow striping with 3' gap between them.
12. PARKING TEE
    Install short stem toward curb, distance measured from center of cross. Spacing between tees to be determined by engineer. See Detail, Sheet D-06.
13. HIGH VISIBILITY CROSSWALK
    Install 2 foot stripes spaced 2 feet apart. White unless otherwise noted. See Caltrans Standard Plan A24F.
14. BIKE LANE EXTENSION THROUGH INTERSECTION
    See City Marking Details M-8.
15. EXISTING BUS LOADING ZONE PLATFORM.
- WHITE BUFFER STRIPING
  Install 6-inch white striping every 15 feet at 45 degree angle, or as noted.

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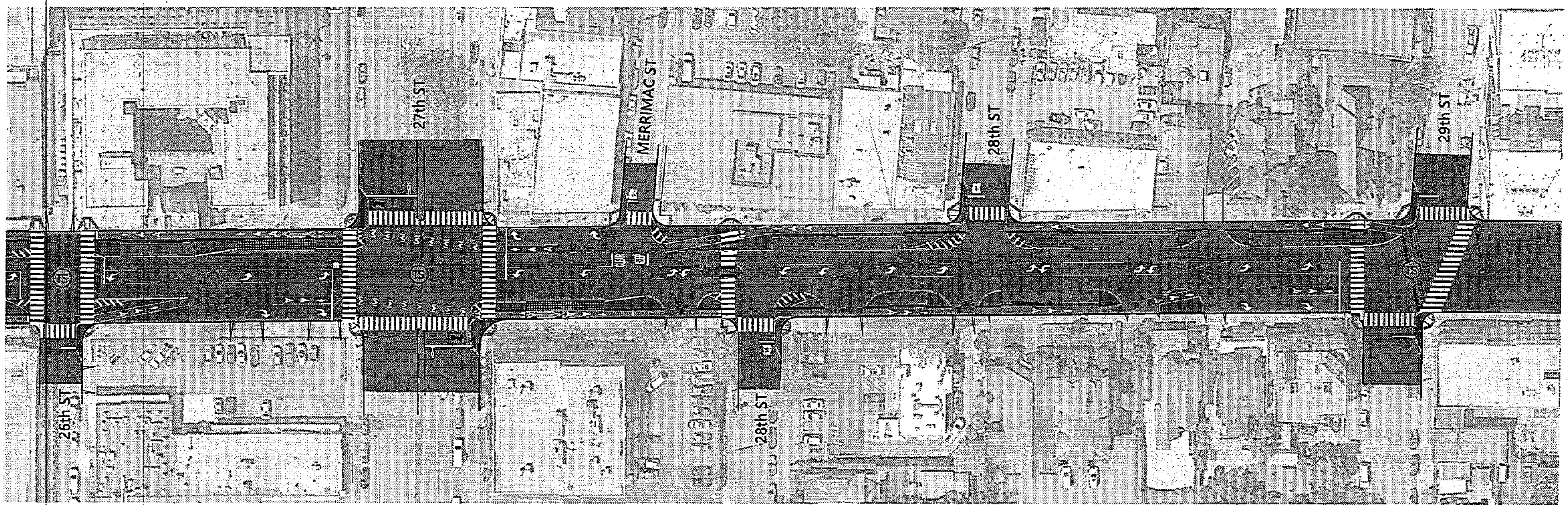

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SHEET NO. ___ OF 4

Approved as to Form and Legality

DRAFT

City Attorney

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2019 MAY 30 PM 2:54

OAKLAND CITY COUNCIL

RESOLUTION NO._____C.M.S.

Introduced by Councilmember _____

RESOLUTION TO IMPLEMENT IMPROVEMENTS TO TELEGRAPH AVENUE FROM 20TH STREET TO 29TH STREET TO ADDRESS IDENTIFIED ISSUES

WHEREAS, the City of Oakland's Bicycle Plan was adopted by City Council on December 7, 2007 as part of the Land Use and Transportation Element of the City's General Plan and reaffirmed by City Council on December 4, 2012; and

WHEREAS, the City of Oakland's Bicycle Plan calls for the implementation of a citywide network of bikeways to connect downtown, transit stations, commercial districts, neighborhoods, and the waterfront; and

WHEREAS, a 2017 representative survey of Oaklanders found that 67% of people who bike would feel very comfortable on a protected bicycle lane, compared to 34% in a buffered bicycle lane and 13% in a standard bicycle lane; and

WHEREAS, a 2017 qualitative survey of people walking and bicycling on Telegraph Avenue protected bicycle lanes found that as a result of the 2016 improvements, 79% of bicyclists and 63% of pedestrians feel safer bicycling and walking on Telegraph Avenue now; and

WHEREAS, the Telegraph Avenue Complete Streets Plan was approved by City Council in 2014, and upon approval, directed staff to include protected bicycle lanes on Telegraph in the Koreatown Northgate neighborhood; and

WHEREAS, North American studies of protected bicycle lanes have shown significant reduction in injury risk as compared to standard bicycle lanes; and

WHEREAS, the current protected bicycle lane on Telegraph Avenue from 20th Street to 29th Street has demonstrated significant safety benefits, including a 300% increase in vehicles yielding to pedestrians in crosswalks and a 12-27% reduction in speeding, both key indicators in the prevention of severe and fatal traffic crashes; and

WHEREAS, the proposed revision to the existing project enhances users understanding of critical project features, including where to park, preventing vehicles from parking in bicycle lanes and painted safety areas, improves sight lines at intersections so people driving, walking and bicycling can better see one another, and slows turning movements to further enhance safety; and

WHEREAS, California Vehicle Code section 21207 (a) provides the City with the authority, by ordinance or resolution, to establish bicycle lanes within the City of Oakland; and

WHEREAS, on June 18, 2019, the City Council considered the proposed Project; now, therefore, be it

RESOLVED: That the City Council approves the installation of improvements to the Telegraph Avenue protected bicycle lanes from 20th Street to 29th Street; and be it

FURTHER RESOLVED: that the City Council hereby consents to the use of up to four hundred fifty-five thousand dollars ($455,000.00) in funds for project implementation from fund 2211 (Measure B) project 1001512 (grant matching funds), or other bicycle and pedestrian plan implementation CIP funds, as available, re-programmed for this purpose to be transferred to project 1004902.

IN COUNCIL, OAKLAND, CALIFORNIA, _____

PASSED BY THE FOLLOWING VOTE:

AYES – FORTUNATO BAS, GALLO, GIBSON MCELHANEY, KALB, REID, TAYLOR, THAO and PRESIDENT KAPLAN

NOES -

ABSENT -

ABSTENTION -

ATTEST: _____
LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California