

CITY OF LOS ANGELES
INTER-DEPARTMENTAL MEMORANDUM

Date: November 19, 2018

To: Honorable City Council
c/o City Clerk, Room 395
Attention: Committee Chair

From: Seleta J. Reynolds,  General Manager
Department of Transportation

Subject: **Vision Zero Implementation Strategy for the Safety of the Traveling Public (CF 17-1137)**

SUMMARY

This report addresses the Vision Zero prioritization methodology, proposes 20 new Priority Corridors and 60 Priority Intersections, and provides a status update on implementation of improvements on existing Priority Corridors. Per Council direction, the Los Angeles Department of Transportation (LADOT) re-evaluated how it prioritizes safety projects on the City's High Injury Network (HIN) and proposes a new model for identifying Priority Corridors. LADOT also proposes a list of Priority Intersections consisting intersections where a high number of people have died or been seriously injured across all modes (vehicle, motorcycle, bicycle, and pedestrian).

RECOMMENDATION

LADOT recommends the Los Angeles City Council:

1. APPROVE the Vision Zero prioritization methodology.
2. APPROVE the list of new Priority Corridor locations. (Attachment 1)
3. APPROVE the list of new Priority Intersections. (Attachment 2)
4. RECEIVE AND FILE the update on Priority Corridors from 2017. (Attachment 3)

BACKGROUND

In 2015, Mayor Garcetti signed Executive Directive 10 to establish a goal of zero traffic fatalities by 2025 and included a set of policies and programs to achieve this goal. Vision Zero included the development of the City's first High Injury Network, which identified the 6% of city streets that account for 70% of deaths and serious injuries for people walking.

In January 2017, the City of Los Angeles identified 40 Priority Corridors, a subset of the High Injury Network, to focus its first round of safety improvements. LADOT identified these projects in the Vision Zero Action Plan, adopted by Council in 2017. LADOT has installed safety improvements on each of these Priority Corridors. Additional work continues for some of these original corridors.

On March 21, 2018, Council instructed LADOT to submit a report no later than December of each year with a set of proposed Vision Zero hazard mitigation projects for consideration by Council and for inclusion in the Mayor's proposed budget that seeks to achieve the following objectives:

1. Prioritize projects that address known threats to public safety, with consideration given to severity, vulnerability, social equity, and cost effectiveness.
2. Ensure the validity of the High Injury Network and Priority Corridor data.
3. Prioritize projects by greatest impact.
4. Base improvements on collision data.

DISCUSSION

New Priority Corridor Methodology

The High Injury Network (HIN) is a tool to help city departments identify areas with the greatest safety needs throughout the City of Los Angeles. Although the HIN represents only 6% of city streets, the network spans roughly 450 miles. LADOT must use an additional data analysis process to identify Priority Corridors, or streets where the City will prioritize its safety efforts to implement a full suite of safety improvements. This prioritization informs annual work plans and the allocation of resources.

The first round of Priority Corridors, identified in 2017, created a score for each intersection on the HIN. LADOT gave additional weight to intersections with a death or serious injury involving a bicycle or pedestrian, where the intersection was in a high needs community, and where crashes involved a senior or a child.

Per Council guidance, LADOT has identified a new list of Priority Corridors using a new methodology,¹ which ranks corridors on the High Injury Network simply based on the number of people who have been killed or seriously injured across all modes, without additional weighting. LADOT used an algorithm to review the most recent 5-year collision data (2013-2017) and identified the top 20 corridors on the High Injury Network that meet the following criteria:

- A minimum length of 0.5 miles
- A minimum average of 15 people killed or severely injured per mile (KSI/Mile)

¹ https://www.sfdph.org/dph/files/EHSdocs/PHES/VisionZero/Vision_Zero_High_Injury_Network_Update.pdf

LADOT applied this algorithm to the remaining corridors on the High Injury Network, with previous Priority Corridors removed, to identify the next group of corridors. This new methodology is aligned with the objectives provided in CF 17-1137.

LADOT also analyzed every intersection in the city, regardless of whether it was on the HIN, to identify intersections with the highest levels of deaths and severe injuries. LADOT recognizes that some of the city's most pressing safety challenges are in singular locations, and not along corridors. LADOT continues to look at new strategies that target high-crash locations.

Objective 1 - Prioritize Projects that Address Public Safety, with Consideration Given to Severity, Cost Effectiveness, Vulnerability, and Social Equity.

LADOT uses a three-phased project implementation approach for cost effectiveness. Phase 1 implementation includes low cost treatments, such as roadway re-striping, signs, and other lower cost measures. Some of these improvements, such as painted intersection tightenings or buffered bike lanes, are considered pilots of more permanent safety improvements. Phase 2 safety improvements include new or upgraded traffic signals that strengthen Phase 1 improvements. The City installs Phase 3 concrete treatments on streets to make improvements permanent and change the character of the street.

Half of the proposed 2019 Priority Corridors are located in communities within the top quintile of the Los Angeles Health Atlas' Community Health and Equity Index. By committing approximately half of the Vision Zero Priority Corridor resources to these communities, the 2019 Priority Corridors advance the City's social equity goals. At Council direction, LADOT can further prioritize projects within the list of 2019 Priority Corridors based on party vulnerability, severity, and social equity.

Objective 2 – Ensure the Validity of the High Injury Network and Priority Corridor Data.

Vision Zero collision data comes from the Statewide Integrated Traffic Records System (SWITRS), the California standard for traffic collision reporting. Law enforcement officials file a collision report for a crash, which they transmit to the State of California for validation and standardization. Collisions are available in SWITRS within five (5) months of the crash, which is now down from a lag time of nearly two years.

LADOT used SWITRS to establish its HIN in 2015 and then updated the HIN in early 2018. To ensure the validity of the HIN per Council direction, LADOT closely examined the underpinning data in late 2017 and made changes to the HIN as part of its analysis.

In summer 2018, LADOT applied the newly-created prioritization algorithm to streets on the HIN to identify new Priority Corridors. This prioritization process went through robust validation and quality assurance. Once satisfied with the data, LADOT cross-checked the KSI/mile data with agency partners.

Objective 3 - Prioritize Vision Zero Projects by Greatest Impact.

The 2019 Priority Corridor methodology selects street segments with the highest number of severe or fatal injury (KSI) collisions. By implementing projects on the High Injury Network, and prioritizing projects based on KSI/mile, the greatest reductions of injuries and fatalities are likely to result. The order in which we propose and implement projects, addressing the Priority Corridors first, reflects this objective.

Objective 4 - Base Vision Zero Improvements on Collision Data.

LADOT engineers and planners design roadway improvements based on collision diagrams to identify correctable collision patterns and the appropriate safety countermeasures. For example, LADOT noticed that a number of fatal collisions occurred during left-turning vehicle movements. LADOT overlaid spatial data for these types of crashes with LADOT's existing signal infrastructure and discovered that most of these collisions happened at locations without protected left turns. Where resources allow, LADOT will upgrade existing signals to include protected left turns. For reference, the Vision Zero Safety Toolkit describes many of LADOT's currently deployed safety countermeasures and the collision patterns addressed by each.²

New Priority Corridors

The table in Attachment 1 includes 23 new Priority Corridors with the highest rates of serious and fatal injuries. The California Department of Transportation (Caltrans) operates three (3) of these corridors. LADOT will share this data directly with Caltrans so they can investigate safety improvements at these locations. LADOT will focus on the remaining 20 corridors within the jurisdiction of the City of Los Angeles.

New Priority Intersections

Attachment 2 includes a list of proposed Priority Intersections. Addressing the City's highest KSI intersections, especially those not already captured within a Priority Corridor, is essential to achieving Vision Zero goals. The list excludes three (3) intersections that meet this criteria but where significant safety improvements have recently been made and the resulting safety benefit may not have been captured by the data.³

Attachment 4 displays a map of both the new Priority Corridors and the new Priority Intersections.

² Vision Zero Safety Toolkit, <http://visionzero.lacity.org/safety-toolkit/>

³ These intersections are La Tuna Canyon Rd and Route 210 E/B Off-Ramp; Hollywood Blvd and Highland Ave; and Alvarado St and Wilshire Blvd.

Work Done on Existing Priority Corridors

In 2017, LADOT began an intensive effort to install safety treatments on Priority Corridors. Safety features installed as part of Phases 1 and 2 include continental crosswalk upgrades, speed feedback signs, interim intersection tightenings, crosswalk paddle signs, leading pedestrian intervals, nighttime flashing yellow operation, flashing yellow beacons for existing crosswalks, and pedestrian scramble crosswalks.

LADOT has completed Phase 1 safety improvements on 17 of the first 40 Priority Corridors, and the Department is continuing installation of treatments on 13 additional corridors where we have already installed some treatments. The remaining ten (10) corridors are integrated with the City's Street Reconstruction Program and other Departmental workplans and projects. The table in Attachment 3 indicates LADOT's progress on Phase 1 for the first Priority Corridors. Streets are marked as either having Phase 1 treatments complete or planned, or as awaiting work on other projects.

FINANCIAL IMPACT

This memorandum does not request additional funds for implementation of these projects. LADOT will submit budget requests to address work on the new Priority Corridors and Intersections in the City's upcoming budget process.

Attachments

Attachment 1 - PROPOSED 2019 PRIORITY CORRIDORS

#	Priority Corridor Name	From Street	To Street	KSI/ Mile	Length (Miles)	Council District
1	IMPERIAL	ATHENS WAY	VERMONT AVE	21.06	0.76	8
2	LA BREA	ADAMS BLVD	COLISEUM ST	19.26	1.04	10
3	NORMANDIE	LOMITA BLVD	PACIFIC COAST FWY	18.44	0.54	15
4	HIGHLAND	FRANKLIN PL	SANTA MONICA BLVD	18.26	0.93	4,13
5	LINCOLN*	COMMONWEALTH AVE	VENICE BLVD	17.9	1.12	11
6	WOODMAN	SHERMAN WAY	SATICOY ST	17.5	0.57	2,6
7	GAFFEY	14TH ST	O'FARRELL ST	17.43	1.03	15
8	MANCHESTER	MCKINLEY PL	VERMONT AVE	17.42	1.78	8,9
9	WESTERN	LEXINGTON AVE	RUSSELL AVE	17.34	0.75	13
10	BEVERLY	NORMANDIE PL	WESTMORELAND BLVD	17.13	0.76	13
11	VERMONT	GAGE ST	79TH ST	17	1	8
12	WESTERN	3RD ST	WASHINGTON BLVD	17	2	4,10
13	HOLLYWOOD	FULLER AVE	LYMAN PL	16.35	3.61	4,13
14	LA CIENEGA	GUTHRIE AVE	WHITWORTH DR	16.35	1.16	5,10
15	SUNSET	L. RON HUBBARD WAY	SELMA AVE	16.29	4.17	4,13
16	VICTORY	FULTON AVE	WHITSETT AVE	16.17	0.99	2
17	NORMANDIE	BEVERLY BLVD	MELROSE AVE	15.97	0.5	13
18	PICO	2ND AVE	WESTERN AVE	15.88	0.57	10
19	CULVER	CENTINELA AVE	SLAUSON AVE	15.86	0.63	11
20	VERMONT	7TH ST	BEVERLY BLVD	15.78	1.14	10,13
21	LINCOLN*	BLUFF TRAIL ROAD	MANCHESTER AVE	15.67	0.51	11
22	SANTA MONICA*	BROCKTON AVE	SEPULVEDA BLVD	15.62	1.09	5,11
23	VENTURA	GARDEN GROVE AVE	WHITE OAK AVE	15.59	0.64	3,4

Data: SWITRS, 2013-2017

*Denotes that this corridor is a state highway maintained and operated by Caltrans

Attachment 2 - PROPOSED 2019 PRIORITY INTERSECTIONS

Rank	Intersection	KSI	Council District
1	Pacific Coast Hwy & Temescal Canyon Rd*	9	11
2	Gaffey St & Westmont Dr	8	15
2	Roscoe Blvd & Winnetka Ave	8	3
2	Vernon Ave & Central Ave	8	9
2	Vista Del Mar & Imperial Hwy	8	11
2	Hollywood Blvd & Western Ave	8	13
7	Tampa Ave & Roscoe Blvd	7	3
7	Burbank Blvd & Woodley Ave	7	6
7	Manchester Ave & Vermont Ave	7	8
12	La Brea Ave & Adams Blvd	6	10
12	Victory Blvd & Coldwater Canyon Ave	6	2
12	Florence Ave & Hoover St	6	8
12	Olympic Blvd & Orme Ave	6	14
12	Pacific Coast Hwy & Figueroa Pl*	6	15
12	Sherman Way & Hayvenhurst Ave	6	6
12	Sunset Blvd & Fairfax Ave	6	4
12	Victory Blvd & Wilbur Ave	6	3
12	Victory Blvd & Reseda Blvd	6	3
12	Lincoln Blvd & Washington Blvd*	6	11
12	Sepulveda Blvd & Century Blvd*	6	11
12	Foothill Blvd & Balboa Blvd	6	12
12	Wilshire Blvd & Western Ave	6	10
12	Culver Blvd & Slauson Ave	6	11
27	Burbank Blvd & Hayvenhurst Ave	5	6
27	Nordhoff St & Woodley Ave	5	12
27	Lassen St & Winnetka Ave	5	12
27	Parthenia St & Woodley Ave	5	12
27	Van Nuys Blvd & Woodman Ave	5	6
27	Highland Ave & Pat Moore Way	5	4
27	Adams Blvd & Buckingham Rd	5	10
27	Devonshire St & Balboa Blvd	5	12
27	Pacific Coast Hwy & Normandie Ave*	5	15
27	Pacific Ave & Rose Ave	5	11
27	Crenshaw Blvd & Washington Blvd	5	10
27	La Brea Ave & Rodeo Rd	5	10
27	Valley Circle Blvd & Victory Blvd	5	3
27	Seaside Ave & Navy Way	5	15
27	Mission Rd & Valley Blvd	5	1

27	Pacific Coast Hwy & Vermont Ave*	5	15
27	Culver Blvd & Jefferson Blvd	5	11
27	Sepulveda Blvd & Parthenia St	5	6
27	Sherman Way & Bellaire Ave	5	2
27	Imperial Hwy & Figueroa St	5	8
27	Arlington Ave & Martin Luther King Jr Blvd	5	8
27	Washington Blvd & Ocean Ave	5	11
27	Nordhoff St & Balboa Blvd	5	12
27	Manchester Ave & Broadway	5	8
27	Roscoe Blvd & Reseda Blvd	5	12
27	Florence Ave & Avalon Blvd	5	9
27	Topanga Canyon Blvd & Parthenia St*	5	12
27	Carson St & Normandie Ave	5	15
27	Sherman Way & Woodman Ave	5	2
27	Lankershim Blvd & Oxnard St	5	2
27	Central Ave & Imperial Hwy	5	15
27	La Brea Ave & Washington Blvd	5	10
27	Pacific Coast Hwy & Sunset Blvd*	5	11
27	Manchester Ave & Figueroa St	5	8
27	Gage Ave & Broadway	5	9
27	Sunset Blvd & Highland Ave	5	13
27	La Cienega Blvd & Olympic Blvd	5	5

Data: SWITRS, 2013-2017

*At least one intersecting street is a State Highway maintained and operated by Caltrans

Attachment 3 – 2017 PRIORITY CORRIDOR UPDATE

#	Primary Street	From Street	To Street	Miles	Council District	Phase 1 Complete	Additional Phase 1 Work Planned	Other Work Plan*
1	3RD ST	Normandie Ave	Vermont Ave	0.5	10	x		
2	6TH ST	Rampart Blvd	Beaudry Ave	1.4	1	x		
3	7TH ST	Figueroa St	Olive	0.3	14			x
4	ADAMS BLVD	Fairfax Ave	Crenshaw Blvd	1.6	10		x	
5	ALVARADO ST	6th St	7th St	0.2	1	x		
6	ANAHEIM ST	Figueroa St	Henry Ford Ave	2.2	15		x	
7	AVALON BLVD	San Pedro St	120th St	6.4	8, 9, 15			x
8	BROADWAY	MLK Blvd	Century Blvd	4.5	8, 9		x	
9	CENTRAL AVE	Jefferson Blvd	17th St	1.4	9, 14		x	
10	CRENSHAW BLVD	79th St	Pico Blvd	5.7	8, 10	x		
11	FIGUEROA ST	MLK Blvd	Imperial Hwy	5.5	8, 9		x	
12	FLETCHER DR	Riverside Dr	San Fernando Rd	0.8	13		x	
13	FLORENCE AVE	Crenshaw Blvd	Central Ave	4.3	8, 9		x	
14	HOOVER ST	Vernon Ave	Manchester Ave	3.0	8, 9	x		
15	LA BREA AVE	Adams Blvd	Pico Blvd	1.1	10	x		
16	LANKERSHIM BLVD	Chandler Blvd	Victory Blvd	1.4	2	x		
17	MAIN ST (NORTH)	6th St	7th St	0.1	14			x
18	MAIN ST (SOUTH)	MLK Blvd	Imperial Hwy	5.5	8, 9			x
19	MANCHESTER AVE	Western Ave	Vermont Ave	1.0	8	x		
20	N BROADWAY	Mission Rd	N Spring St	1.5	1	x		
21	N FIGUEROA ST	Ave 43	York Blvd	2.1	1		x	
22	NORMANDIE AVE	Vernon Ave	I-10	2.4	8, 9 (1, 10)	x		
23	PICO BLVD (EAST)	Western Ave	Union Ave	1.9	1, 10		x	
24	PICO BLVD (WEST)	Robertson Blvd	La Cienega Blvd	0.4	5	x		
25	RESEDA BLVD	Parthenia St	Victory Blvd	2.9	3, 12			x
26	ROSCOE BLVD	I-405	Woodman Ave	2.3	6			x
27	SATICOY ST	Topanga Cyn Blvd	Jordan St	0.2	3	x		

SEPULVEDA						
28	BLVD	Nordhoff St	Rinaldi St	3.0	7	x
29	SOTO ST	Wabash Ave	8th St	1.9	14	x
30	SPRING ST	Temple	9th St	1.2	14	x
31	TEMPLE ST	Beverly Blvd	Beaudry Ave	2.3	13, 1	x
VAN NUYS						
32	BLVD	Beachy Ave	San Fernando Rd	1.5	7	x
VENICE BLVD						
33	(EAST)	Arlington Ave	Figueroa St	2.8	1, 9, 10	x
VENICE BLVD						
34	(WEST)	Beethoven	Inglewood	0.8	11	x
VERMONT AVE						
35	(NORTH)	Pico Blvd	Adams Blvd	1.0	1, 8	x
VERMONT AVE						
36	(SOUTH)	Gage Ave	Vernon Ave	1.6	8, 9	x
37	VERNON AVE	Western Ave	Central Ave	3.0	8, 9	x
WASHINGTON						
38	BLVD	La Brea Ave	Vermont Ave	3.2	1, 10	x
39	WESTERN AVE	Century Blvd	Washington Blvd	6.5	8, 10	x
40	WILSHIRE BLVD	Rampart Blvd	Valencia St	0.9	1	x

***Other Work Plan** includes the Complete Streets Program, Main and Spring Forward, Safe Routes to School, or projects already underway as part of another agency's work plan.

Vision Zero

Proposed Priority Corridors and Intersections for 2019 Work Plan



