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Issue

Early during the COVID-19 pandemic, many parks and recreational spaces in Los Angeles closed to help control the spread of the virus. As a result, residents were left without ample opportunities for outdoor activity. As a remedy, the Los Angeles Department of Transportation initiated the Slow Streets program on May 15, 2020, with the intention of prioritizing slower modes of travel like walking and biking, and establishing spaces within neighborhood streets for outdoor recreation.

The program initially used simple, low-cost signage and barricades to demarcate Slow Street segments. As these materials wore out, LADOT received direction from the City Council in November 2020 to upgrade to a new set of trafficcalming measures, or countermeasures, on some of its Slow Streets using more durable materials such as signs, striping, and bollards. This was known as Phase 2 of the Slow Streets program.

Reducing speeds is critical to the success of the program, as studies suggest that drivers tend to underestimate the speed and overestimate the safety of their driving, which places vulnerable street users such as pedestrians and bicyclists at an increased risk of collision. The researcher evaluated the effectiveness of the new countermeasures and the effectiveness of the program in general at reducing speeds by comparing average vehicle speeds on Slow Street segments before and after the implementation of new countermeasures.

Methods

The researcher analyzed StreetLight speed data before and after the installation of countermeasures for each of the 12 Slow Streets locations. The "after" analysis was separated into two separate time periods: one month after the installation date and the most recent three-month period available (October to December 2022). The researcher then compared speed data results between street segments within the same Slow Street location to study the effectiveness of each individual countermeasure at reducing speeds.

Findings

 Nearly half of all Slow Streets segments analyzed showed increases in average speeds between 1 to 2 mph after countermeasures were installed, with some experiencing much greater increases of up to 8 mph (Figure 1). Additionally, among the segments that experienced speed increases, a greater percentage of trips exceeded LADOT's recommended speed of 15 mph along Slow Streets after the installation of the countermeasures.

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	Street Segment	Change in Average Speed (MPH)	
Location		1 Month After Installation	October - December 2022
1. Historic South Central	Wall St	3	4
I. HISTORIC SOUTH Central	Woodlawn Ave	-1	2
	Leeward Ave	1	4
	Francis Ave	8	0
2. MacArthur Park	Magnolia Ave (S)	0	0
	Coronado St	0	1
	4th St	-1	-1
a and the table	lnez St	2	-9
3. Boyle Heights	Evergreen Ave	1	5
4 14 1 1 1 1 1 1	Van Tress Ave	2	0
4. Wilmington Ave	Frigate Ave	-2	2
	Hobart Blvd	0	1
5. Koreatown KIWA	Catalina St	1	0
	N St Andrews Pl	0	1
	Lemon Grove Ave	0	-1
6. Hollywood	Oxford Ave	-2	-1
	N Serrano Ave	-1	-1
	Sierra Vista Ave (E)	-2	-1
	Graham Ave	1	0
	105th St	2	0
	106th St	0	2
7. Watts	107th St (E)	-1	2
	107th St (W)	0	0
	Santa Ana Blvd	0	2
	Hobart Blvd	0	2
9. Koreatown Berendo	Berendo St	2	2
	New Hampshire Ave	-1	2
	22nd St	1	2
10. Adams-Normandie	23rd St	-2	-2
	25th St	-1	-1
	29th St	1	7
11. Jefferson Park	31st St	-2	-1
	Mentone Ave	0	0
12. Palms	Vinton Ave	1	0
	Tabor St	1	0

Figure 1. Change in average speed on Slow Street segments.

- Countermeasures may have lacked sufficient aggressiveness in their design. As they were designed, they likely did not change street geometries enough to significantly alter driver behaviors and reduce speeds. For example, LADOT used painted medians to slow speeds by reducing lane widths. However, these countermeasures only reduce lane widths at the points they are located, whereas the rest of the segment remains wide and vulnerable to speeding.
- Speeds everywhere have increased. Risky driving behaviors, including speeding, have become more commonplace during the pandemic and have persisted

even after Los Angeles's stay-at-home orders were lifted. The new countermeasures on Slow Streets may not have done enough to reverse this trend of more frequent speeding.

Conclusions

Based on these findings, the researcher recommends that LADOT:

- Continue installing countermeasures that work.
 Prioritize the installation of treatments at or near intersections that have shown to be most effective, including centerline gateway treatments, traffic circles, signal gateway treatments, and intersection tightening.
- Extend lane width reductions to cover entire streets, not just certain points. Lane-width reductions have the potential to reduce speeds by increasing the perceived risk of speeding. Shrinking lane widths across entire street segments may help reduce speeding for multiple blocks.
- Reconsider the necessity of design constraints. LADOT's criteria for countermeasure installation may be too restrictive. Alternative designs and materials could improve the program's ability to slow speeds by increasing the number of places where countermeasures may be installed.
- Obtain necessary qualitative data, such as observations of driver behavior and interviews with drivers and local residents. This data could provide a more holistic view of the effectiveness and popularity of the Slow Streets program.

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