Easing Sherman Oaks Traffic (Long-Haul GPS Throughput on Local Roads)



Sherman Oaks Neighborhood Council October 14, 2019

Defining the Problem - Why We Have It

- AM peak hour traffic congestion in Sherman Oaks is caused by excessive vehicular volume from multi directional input sources—routes that exponentially branch out.
 - If traffic passing through Sherman Oaks was to/from Encino/Sherman Oaks/Van Nuys/Studio City/etc, instead of regions more than 10-20 miles away, congestion would be eased.
 - \circ At present, most Sherman Oaks AM traffic is of the cut-through variety.*
- According to RAND Corporation regarding LA traffic:^
 - Congestion results from an imbalance in the supply of and demand for road space;
 - Managing demand for roadways during peak hours offers the greatest prospects for reducing congestion.
- *LADOT 2017 traffic study
- ^Reducing Traffic Congestion in Los Angeles: Rand Corporation, 2008. As of 9/2019, https://www.rand.org/pubs/research_briefs/RB9385.html



Defining the Problem - What to Do?

- In order to fix the problem, we must look at the source of it.
 - The source of the Sherman Oaks surface street bottleneck is <u>not local to</u> <u>the Southern San Fernando Valley</u>.
 - Like a gardner managing an overgrown tree to relieve pressure and
 encourage breathability, we must be amenable to pruning our traffic tree.
- This means removing North-South cut-through traffic that originates from a distance significantly away from Sherman Oaks.
 - But it is important to prune only those not tangentially affected by a local decision.
 - We <u>do not</u> want to affect the travel of local or local-adjacent:
 - Residents
 - Workers
 - Parents/Students
 - Guests



A Key Event Brought This Upon Us

- The way Sherman Oaks traffic used to be: Manageable.
 - Make no mistake, there will <u>always</u> be traffic.
 - The goal of this program is simply to reduce congestion to a more manageable level.
- But at some point within the past 10-15 years, something changed.
- The advent of GPS and other electronic navigational aids brought travellers from outside the region with the express purpose of utilizing locally-classified roads for highway-volume travel.
- In order to restore traffic volume to a level appropriate for locally-classified roads, we must attempt to rectify this event.
 - Because GPS was the impetus in creating an unsustainable situation, we should look to similar technology for redress.



Choosing the Right Map

In order to create a more manageable situation for Sherman Oaks, with minimal impact to those with points of origin or destination in the Greater Sherman Oaks Area, our most viable strategy is to discourage routing from long distance-origin drivers onto the non-arterial surface streets of Sherman Oaks.



* The Greater Sherman Oaks Area includes Sherman Oaks, Encino, Van Nuys, Bel Air, and other surrounding South Valley communities.

How the GPS Companies Operate

- The electronic GPS/navigation companies are motivated by one ultimate goal:
 - To have as many users download an app or access a website as possible.
 - Why?
 - \$\$\$.
- For this reason, these companies are disincentivized to work with cities to reduce congestion because a "responsible" navigation app risks losing market share by closing roads off to its users.
- Accordingly, we cannot expect the apps to fix the problem voluntarily.
- Instead, cities must use legal remedies to force change.
- But that doesn't necessarily mean the vagueness of a lawsuit without direction.
 - Apps are bound by road signs, such as turn restrictions, one-way designations, etc.
 - Apps are **NOT** bound by volume/capacity rules, for they are not CVC law—items found in traffic engineering manuals, but not physically posted as signs on the roads, <u>mean nothing</u> to apps.

How to Use GPS for Benefit?

- Since the apps pay attention only to posted regulatory signs, we must embrace a solution that incorporates this remedy.
- We will install **ONE** morning turn restriction sign while standardizing our restrictions network. That's it.
- Why only one?
 - Doing too much at one time can lead to further problems as the complexity of multiple simultaneous actions produces unintended consequences.
 - One change minimizes the variables at work, which provides a more manageable and tenable solution.

Regulatory Signs



<u>Time-Based Turn Restriction Analysis (AM TBTRs in Place)</u>							
	Turn	From	То	To Dir	From-To FCs	Hillside	
_	Left	Valley Vista	Woodcliff	S	Ave III-Collector		
	Left & Right	Valley Vista	Noble	S	Ave III-Local	Woodcliff	
	Left & Right	Valley Vista	Del Gado	W	Ave III-Local	Corridor	
	Right	Stone Canyon	Pacheco	W	Collector-Local		
	Left & Right	Valley Vista	Stoneybrook	S	Ave III-Local		
	Thru	Crisp Canyon	-	S	Local-Local		
	Right	Lacota	Madelia	S	Local-Local		
	Right	Valley Vista	Madelia	S	Ave III-Local	Beverly Glen	
	Right	Valley Vista	Knobhill	S	Ave III-Local	Corridor	
	Left & Right	Bev Glen	Dickens	E/W	Ave II-Collector		
	Left & Right	Greenleaf	Alley [to Roblar]	S	Local-Alley		
	Left	Valley Vista	Camino de la Cumbre	S	Ave III-Local	Camino de la Cumbre	
	Left	Valley Vista	Dickens	E	Ave III-Local		
	Left	Valley Vista	Greenleaf	E	Ave III-Local	Coldwater (West)	
	Left	Van Noord	Dickens	E	Local-Local	Corridor	

Problem - Unstandardized Regulatory Signage

- Timing of regulatory signage is inconsistent. Some regulatory signage concludes at 9am while others conclude at 10am.
- This has led to congestioninducing broken traffic patterns.



- Solution: Standardize all times to 10am.
- Rationale: Morning peak times do not conclude at 9am, but 10am.....or later.* **LADOT considers AM peak to be 7-10am pursuant to Traffic Study SOP.*

Time-Based Turn Restriction Analysis (AM TBTRs in Place) SuprVntra

Turn	From	То	To Dir	From-To FCs		
Left	Moorpark	Sepulveda	S	Collector-Blvd II	Kester-Sepulveda	
Right	Kester	Camarillo	W	Ave II-Collector	Kester-Sepulveda Van Nuys-Ventura (short right) Van Nuys-Ventura	
Right	Van Nuys	Hortense	W	Blvd II-Collector		
Right	Van Nuys	Moorpark	W	Blvd II-Collector		
Left & Right	Ventura	Alley [b/w Bev Glen & Calhoun, to Dickens]	S	Blvd II-Alley	(short right) Ventura-Bev Gler	
Left & Right	Dixie Canyon	Alley n/o Ventura	E/W	Collector-Alley	Dixie Canvon-Ventura	

(bypass)

Why it Works - How GPS Apps Pick Long-Haul Routes

- In general, DOT road hierarchy principles (local => collector => arterial => collector => local) <u>do not apply</u> on apps' shorter routes (eg *Galleria* to [School on Mulholland]).
- But for <u>longer</u> drives, the GPS routing servers cannot or will not dedicate processing power to seek out all potential routes—there are too many roads for the computer to handle.
- According to **CBenson** on Waze, a process called "route pruning" occurs at this point wherein the computer eliminates consideration of local streets at a distance of about 6-9 miles to/from the origin and destination, and eliminates collectors (primary streets) at 9-18 miles away.
- Essentially, nav apps are ready to trim the branches for us!



Visualizing the Route Pruning Concept - Local Origin



No pruning will occur on that portion of the route that is within the circles centered around the origin and destination.

For this route from Van Nuys to Century City, there will be no route pruning and local roads may be suggested by GPS.

Visualizing the Route Pruning Concept - Long-Haul



Pruning **will** occur on that portion of the route that is outside of the prune circle.*

For this route from Sylmar/San Fernando to Century City, there will be route pruning in the middle of the journey.

* With an exception for certain lower-rated arterial routes.

Visualization Exercise: Pruning as a Function of Zoom



Routes subject to pruning are much less likely to suggest surface streets.

Exercise: Have you ever tried zooming out on a map so that you can see the entirety of the state and then zoomed in so that you can see your house?

At first only the freeways are visible, then the major roads, and finally the locals come into view₁₄

Google Maps Experimented with AM Closures

Reserve Encino Municip Burba Urbank Blvd Golf Course -Chan W.Ma Sperma Van f Castle Pa sherm Recr Cer Ventura Bivd 0 entura Rive Mand St iall Cultural Center

Google Experiment

Strategic surface road closures in Sherman Oaks correlated with decreased surface street traffic, even for roads NOT closed.

A proxy for this is turn restrictions.



The GPS App Problem - CalTrans' CRS Doesn't Match LA City



LA City-Designated N/S Arterials in Greater Sherman Oaks

• This is what the 2016-adopted map looks like for the Sherman Oaks area.



Revisiting CalTrans - N/S Arterials on Conflicting CRS



Fixing CalTrans' CRS Alone Isn't a Sufficient Solution

- The navigation apps imported basemap using CalTrans' CRS data over 10 years ago and used inaccurate functional classification data in conflict with City of LA's designations unchecked for years.
- This is why Sherman Oaks has excessive traffic volume from drivers well out of the area who are solely cutting through: Bad CRS data => GPS treating surface streets as highways => Excess routing.
- Apps have started fixing the problem and downgrading certain surface roads on their own, in part, because of the CalTrans inaccuracy compared to LA City's FC.
- The process with CalTrans itself is...significantly slower.
- Years of inaccurate routing has created a history of functional routes that overpower FC changes alone.
- In order to combat the problem, the routing mechanism itself must be jounced. There is one way to do this...

Defining LADOT-Intended Routes from Valley to "South"



The Loophole GPS Uses to Send Drivers Through Sherman Oaks



How One Sign Can Help Our Entire Community

- What this proposal is:
 - This proposal seeks to ease congestion and improve access to the hillside for <u>all</u> Sherman Oaks, Van Nuys, and neighboring community locals, first responders, staff, and guests, including those with final destinations on the West Side & Mulholland schools.
 - One sign does this by eliminating a significant traffic flow interruption while...
 - ...specifically targeting <u>long-haul commuters</u> from significantly out of and without business in or nearby our community by taking advantage of a <u>technological algorithm</u> in use by GPS apps that only affects <u>them</u>.
- What this proposal is NOT:
 - This proposal does **not** seek to close a road to the public.
 - This proposal does **not** seek to prevent anyone from accessing anything.

A Response to a Common Concern

- Anytime a restriction is posted or a change to the road system is proposed, a common concern for policymakers is "what happens to the diverted traffic?"
 - Prevailing logic indicates that when traffic is displaced, it simply shifts to another road, thus moving congestion from one road to another.
- As stated earlier, the nav app pruning effect for long-haul drivers combined with closing the left turn from Arterial Valley Vista Blvd will actually *reduce* out-of-area cut through traffic volume on the streets of Sherman Oaks.
 - Closing *all* Southerly-adjacent turns (by adding the no left to Saugus) from Arterial VV to a local will reduce route suggestions for long-haul drivers onto SO surface streets such that the diversion of traffic will <u>NOT</u> harm another substandard SO surface street, since the long-haul drivers won't enter the substandard SO road network to begin with.
- In other words...
 - **Electronic Benefit**: This one sign will make apps much less likely to put long-haul veh on SO streets. Period.
 - Physical Benefit: This sign fixes an intersection gridlock to create a smoother flow of traffic in multiple directions by restricting a turn onto a road which is already "severely" over capacity.* *Per LADOT

How One Sign Can Help Our Entire Community

- Installing one sign in a strategic location closes an existing loophole in GPS routing that affects electronic long-haul nav-aid users by discouraging the surface streets of Sherman Oaks while not affecting local travelers' routes.
- Why a Left Turn Restriction?

From <u>LADOT with LAFD</u>:

"This entire neighborhood is also designated as a 'Very High Fire Hazard Severity Zone' by the Los Angeles Fire Department, so maintaining accessibility for both emergency vehicles as well as for evacuation routes is critical."

From <u>LAPD Commercial Enforcement</u>: "**This area is one** of the worst as far as volume of traffic and commercial traffic in a residential neighborhood that I've seen."

From <u>Councilmember David Ryu</u>: "[**Traffic] has** completely inundated the Sherman Oaks Hills."

*LADOT reported 83% local support for mitigation.

What a Three-Input Scheme Does During AM Congestion



During times of congestion, intersection throughput increases and traffic flow improves when direction of travel is maintained.

When one vehicle turns from a given road onto another road of lower functional classification, which is experiencing a severe overcapacity event, this results in added gridlock and increased travel times for *all* directions of travel.

This, in turn, produces added gridlock radiating from the trouble intersection—in this case, north toward Sutton.

By a minimal yet consistent adjustment to turn behavior, we can ease gridlock.

This proposal is simple yet strategic

- The following pertains to one—and only one—proposed "No Left Turn" sign from 7-10 AM, weekdays, at Valley Vista (westbound) & Saugus Ave (southbound) while standardizing restriction signage throughout Sherman Oaks.
- Why is this being proposed?
 - When CD4 approved the installation of time-based turn restriction signage in this area, it left one and only one local-classed road (with a roadway width less than the minimum per LA City's plan) without any AM restrictions: Saugus.
 - This effectively encourages GPS routing to bypass every other AM restriction in the immediate area by sending vehicles via Valley Vista to turn left onto Saugus.
- This plan—by implementing just one sign—is designed to IMPROVE traffic flow for those whose points of origin include Sherman Oaks/Van Nuys and nearby communities by encouraging LOCAL access while discouraging unsafe long-haul interruptions. This means a FASTER route on Woodcliff for VNSO locals!

Fighting Traffic Electronically

- Remember RAND Institute's findings...
 - Managing demand for roadways during peak hours offers the greatest prospects for reducing congestion.
- By adding this one sign to turn off the faucet at the prune-immune arterial road of Valley Vista, this makes Sherman Oaks less attractive to GPS routing <u>for drivers</u> whose origin and destination points are significantly outside the area.
- This approach, thus, directly addresses RAND's conclusion thusly.
 - Demand is managed by <u>removing long-haul drivers</u> from the local system during peak hours.
 - Shorter-route drivers are still afforded the opportunity to navigate the area with one additional turn restriction easily bypassed through alternate routes.

	Tim <u>e-B</u> ase	d T <u>urn Res</u>	stricti <u>on</u> Ana	lysis	(AM TBTRs in	Place)
	Turn	From	То	To Dir	From-To FCs	Lilloido
	Left	Valley Vista	Woodcliff	S	Ave III-Collector	пшыие
\Rightarrow						Woodcliff
	Left & Right	Valley Vista	Noble	S	Ave III-Local	Corridor
	Left & Right	Valley Vista	Del Gado	W	Ave III-Local	
	Right	Stone Canyon	Pacheco	W	Collector-Local	
	Left & Right	Valley Vista	Stoneybrook	S	Ave III-Local	
	Thru	Crisp Canyon	-	S	Local-Local	
	Right	Lacota	Madelia	S	Local-Local	Bowerly Clop
	Right	Valley Vista	Madelia	S	Ave III-Local	Corridor
	Right	Valley Vista	Knobhill	S	Ave III-Local	
	Left & Right	Bev Glen	Dickens	E/W	Ave II-Collector	
	Left & Right	Greenleaf	Alley [to Roblar]	S	Local-Alley	
	Left	Valley Vista	C de la Cumbre	S	Ave III-Local	C de la Cumbre
	Left	Valley Vista	Dickens	E	Ave III-Local	
	Left	Valley Vista	Greenleaf	E	Ave III-Local	Coldwater
	Left	Van Noord	Dickens	E	Local-Local	Corridor2

Time-Base	d Turn Res	striction Ana	lysis	(AM TBTRs in	Place)	
Turn	From	То	To Dir	From-To FCs	Lilloido	
Left	Valley Vista	Woodcliff	S	Ave III-Collector	ппізіце	
Left	Valley Vista	Saugus	S	Ave III-Local	Woodcliff	
Left & Right	Valley Vista	Noble	S	Ave III-Local	Corridor	
Left & Right	Valley Vista	Del Gado	W	Ave III-Local		
Right	Stone Canyon	Pacheco	W	Collector-Local		
Left & Right	Valley Vista	Stoneybrook	S	Ave III-Local		
Thru	Crisp Canyon	-	S	Local-Local		
Right	Lacota	Madelia	S	Local-Local	Deverly Clan	
Right	Valley Vista	Madelia	S	Ave III-Local	Corridor	
Right	Valley Vista	Knobhill	S	Ave III-Local	Connuor	
Left & Right	Bev Glen	Dickens	E/W	Ave II-Collector		
Left & Right	Greenleaf	Alley [to Roblar]	S	Local-Alley		
Left	Valley Vista	C de la Cumbre	S	Ave III-Local	C de la Cumbre	
Left	Valley Vista	Dickens	E	Ave III-Local		
Left	Valley Vista	Greenleaf	E	Ave III-Local	Coldwater	
Left	Van Noord	Dickens	E	Local-Local	Corridor 2	

Closing the GPS Loophole to Long-Haul Routes



The Sherman Oaks Neighborhood Council recommends that Council District 4 directs the Los Angeles Department of Transportation install a No Left Turn sign, 7-10am, Monday-Friday, on Valley Vista, westbound, at its intersection with Saugus, and recommends the standardization of morning peak hour restrictions along the Valley Vista corridor, to a consistent end time of 10am.

$\bullet \bullet \bullet$

Motion

Sherman Oaks Neighborhood Council Traffic & Transportation Committee

Easing Sherman Oaks Traffic (Long-Haul GPS Throughput on Local Roads)

Sherman Oaks Neighborhood Council Traffic & Transportation Committee

Appendix

Definitions Page - Setting the Groundwork for a Traffic Plan

- Functional Classification (FC) The class or group of roads to which the road belongs
- Three main FCs for urban areas.
 - Arterials
 - Collectors
 - \circ Local
- LADOT has a classification for FCs that appears as follows:
 - Arterials (Freeway, Boulevard, Avenue)
 - Collectors (Collector)
 - Local (Local)
 - City of LA uses the term "Street Designation" for FC.



Federal Highway Administration - US Department of Transportation

LADOT/LA City's Use of Functional Classification

- LA City's Mobility 2035 Plan (Produced by LA Department of City Planning & adopted by City Council on September 7, 2016) reclassified every road in Los Angeles to specify intended usage for each.
- This extensive plan relied on the following groups: Mayor, City Council, City Planning, LADOT, Public Works, and a Task Force comprised of 45 entities.
 - **Task Force included...**
 - Caltrans
 - LaCo Public Health
 - LA DOT
 - LAUSD Health & Safety
 - Metro
 - SoCal Air Quality Mgmt
 - Transit Coalition
 - UCLA



Mobility Plan 2035

Adopted by City Council: September 7, 2016 Council File No. 15-0719-S15

LA City Street Classifications Arterials: Large Volume of Regional through traffic not handled by FWY

- Boulevard I
 - Roadway Width: 100 ft.
 - Right-of-Way Width: 136 ft.
 - Typical # Lanes: 3-4 in each direction

• Boulevard II (Sepulveda [north part])

- Roadway Width: 80 ft.
- Right-of-Way Width: 110 ft.
- \circ Typical # of Lanes: 1-2 in each direction

Boulevard I (Major Highway Class I)

- Roadway Width: 100 ft.
- Right-of-Way Width: 136 ft.
- Typical Number of Lanes: 3-4 lanes in each direction
- Typical Sidewalk/Border Width: 18 ft.
- Target Operating Speed: 35 mph





Boulevard II (Major Highway Class II) Roadway Width: 80 ft. Right-of-Way Width: 110 ft.

Typical Number of Lanes: 2-3 lanes in each direction

Typical Sidewalk/Border Width: 15 ft. Target Operating Speed: 35 mph





LA City Street Classifications Arterial (Cont'd)

- Avenue I
 - Roadway Width: 70 ft.
 - Right-of-Way Width: 100 ft.
 - Typical # Lanes: 1-2 in each direction
- Avenue II (Beverly Glen, Coldwater, Laurel)
 - Roadway Width: 56 ft.
 - Right-of-Way Width: 86 ft.
 - Typical # of Lanes: 1-2 in each direction
- Avenue III (Valley Vista)
 - Roadway Width: 46 ft.
 - Right-of-Way Width: 72 ft.
 - Typical Number of Lanes: 1-2 [Total]

Avenue I (Secondary Highway)

Roadway Width: 70 ft.

Right-of-Way Width: 100 ft.

Typical Number of Lanes: 1-2 lanes in each direction

Typical Sidewalk/Border Width: 15 ft. Target Operating Speed: 35 mph





Avenue II (Secondary Highway)

Roadway Width: 56 ft.

Right-of-Way Width: 86 ft.

Typical Number of Lanes: 1-2 lanes in each direction

Typical Sidewalk/Border Width: 15 ft. Target Operating Speed: 30 mph





LA City Designates Arterials Between Valley & "South"

- Mobility Plan 2035 includes the following Arterial FC-equivalent street designations that connect Valley to Mulholland and beyond, listed from West to East:
 - Mulholland Dr (@ Valley Circle)
 - Topanga Canyon (SR-27)
 - Canoga Avenue
 - Reseda Blvd
 - Sepulveda Blvd
 - I-405
 - Beverly Glen Blvd
 - Coldwater Canyon Blvd
 - Laurel Canyon Blvd
 - Ventura/Cahuenga (@ US-101)



LA City-Designated N/S Arterials in Greater Sherman Oaks

• This is what the 2016-adopted map looks like for the Sherman Oaks area.



LA City Street Classifications Non-Arterials: Connect travelers to Local residential neighborhoods

- Collector (Noble, Dickens, Camarillo)
 - Roadway Width: 40 ft.
 - Right-of-Way Width: 66 ft.
 - Typical # Lanes: 1 in each direction

- Local Street Standard (Most neighborhood roads)
 - Roadway Width: 36 ft.
 - Right-of-Way Width: 60 ft.
 - \circ Typical # of Lanes: 1 lane in each direction

Collector

Collector streets are generally located in residential neighborhoods. They provide access to and from arterial streets for local traffic and are not intended for cut-through traffic.

Roadway Width: 40 ft.

Right-of- Way Width: 66 ft.

Typical Number of Lanes: 1 lane each direction

Typical Sidewalk/Border Width: 13 ft.

Target Operating Speed: 25 mph





Local Street Standard

Local streets are intended to accommodate lower volumes of vehicle traffic. Local streets have one lane in each direction and have parking on both sides of the street.

Roadway Width: 36 ft.

Right-of-Way Width: 60 ft.

Typical Number of Lanes: 1 lane in each direction Typical Sidewalk/Border Width: 12 ft.

Target Operating Speed: 20 mph





LA City Street Classification Map for South Sherman Oaks

• This is what the 2016-adopted map looks like for the Sherman Oaks area.



WEST SHERMAN OAKS HILLS NEIGHBORHOOD LIVABILITY PROJECT

Remembering LADOT's West Sherman Oaks Hills Studies

NOTE: All Roads Are Local Class (36' designation)





Roadway Widths

...the roads Don't meet the Minimum width Requirement. **Deficient for Anything More** Than Local



TRAFFIC DATA -ROADWAY WIDTH SURVEY

- MEASURED ROADWAY WIDTHS ARE LESS THAN 36 FT MINIMUM DESIGN WIDTH FOR LOCAL HILLSIDE RD
- DESIRED WIDTH FOR FIRE TRUCK TO PASS A CAR + PARKED VEHICLE IS 27 FT
- SAMPLE WIDTHS
 - o Del Gado, Encanto < 23 ft
 - Pacheco, Cody, Scadlock, Woodcliff S/O Deerhorn bet. 23 ft and 26 ft
 - Longbow, Saugus, Rayneta bet. 27 33 ft
 - Woodcliff Rd N/O Deerhorn 35 ft







LADOT Records Data That Verifies A Problem

THERE IS A TRAFFIC PROBLEM IN OUR NEIGHBORHOOD - What we have heard from the community and verified through data

- BLOCKED STREETS EVERY MORNING
 - Several streets more than 600 cars/hour
 - Long back ups of stopped cars
 - Vehicles cannot get by in the opposite direction, due to narrow roads
- CANNOT GET IN OR OUT OF DRIVEWAYS
 - One car every 5 seconds for some streets
 - o Late for work
 - o Late for school
- SPEEDING VEHICLES ON CURVY ROADS
- STREETS HAVE BECOME UNSAFE
 - Unable to walk dogs or visit neighbors
 - o Parked cars, mailboxes, fences getting hit
- EMERGENCY VEHICLE ACCESS IS BLOCKED
- TRAFFIC CONGESTION AND FRUSTRATED DRIVERS CREATING NOISE AND ROAD RAGE





- LADOT MEASURED TRAFFIC VOLUMES IN AM PEAK HOURS (7-10 AM)
- MOST ROADWAY VOLUMES ARE AT, OR OVER DESIGN VOLUMES FOR THE ROADWAY CLASS (yellow and red on diagram are over capacity)
- SEVERE OVER CAPACITY
 - WOODCLIFF S/O MULHOLLAND DRIVE, 11.3 cars/minute
 - SAUGUS S/O VALLEY VISTA, 10.4 cars/minute
 - ALSO RAYNETA, CODY, SCADLOCK, DEERHORN, WOODCLIFF
- ONE CAR EVERY 5 SECONDS

LOCATION	VEH /HR	VEH /MI N	CLASS	CAPACITY (green ≤ 100%, yellow 100% -200%, red ≥ 200%)
Rayneta W/BLT @ Cody	290	4.8	Local	88668 -
Woodcliff S/B S/o Valley Vista	447	7.A	Collector	
Woodcliff 5/B @ Cody	379	6.3	Local	AAAAAA
Cody W/B LT @ Woodcliff	297	5.0	Local	
Woodcliff S/B @ Mulholland	679	11.3	Local	
ValleyVista W/BLT @ Noble	96	1.6	Local	AA
Saugus S/B @Valley Vista	627	10.4	Local	-
Valley Vista W/B @ Woodcliff	812	13.5	Avenue III	
Scadlock E/B RT @ Longbow	385	6 <i>A</i>	Local	-
Woodcliff S/B @ Deerhorn	797	13.3	Collector	
Deerhorn S/B S/O Woodcliff	435	7.2	Local	
Woodcliff S/B S/O Deerhorn	362	5.0	Local	8886888





Travel Time Study - Does Woodcliff Really Save Time?

- Study done May 4, 2017 from 8 AM to 9 AM, with no 405 FWY incidents
- Two runs per route
- Started at Valley Vista Bl, end at Mulholland Dr
- Average of all trips is 7.9 minutes
- Average Times
 - Woodcliff...... 10 min
 - Beverly Glen..... 8 min
 - 405 Fwy..... 8 min
 - Sepulveda..... 5.5 min





