COUNCIL AGENDA: 6/

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

## Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL FROM: Jim Ortbal

SUBJECT: LINCOLN AVENUE ROADWAY

**DATE:** June 6, 2016

Date

**CONFIGURATION PILOT PROJECT** 

Approved D.DS4C

6/17/16

**COUNCIL DISTRICT: 6** 

#### **RECOMMENDATION**

Accept the Lincoln Avenue Pilot Project Report, and support the plan to pave and stripe Lincoln Avenue in the current pilot configuration, implement minor traffic signal improvements at the Minnesota/Lincoln intersection, and traffic calming improvements in adjacent neighborhoods.

#### **OUTCOME**

This will result in a scheduled pavement maintenance treatment on Lincoln Avenue in the summer of 2016 in the current pilot roadway configuration, improved traffic flow at the Minnesota/Lincoln intersection and in the Lincoln Avenue corridor, and other minor traffic calming improvements to protect adjacent neighborhoods from adverse traffic impacts.

#### **BACKGROUND**

Lincoln Avenue is a major street running north and south between Park Avenue and Almaden Expressway through the Willow Glen community and neighborhood business district. The Lincoln Avenue pilot project centered on the business district between Coe and Minnesota Avenues (see Figure 1 on the next page).

The concept of modifying Lincoln Avenue through the business district has been discussed by Willow Glen community members for years. Following a community meeting on the topic in the fall of 2014, members of the Willow Glen Business Association (WGBA), Willow Glen Neighborhood Association (WGNA), and the Willow Glen Elementary PTA formed a Working Group to explore the possibility of a new roadway configuration in the business district portion of Lincoln Avenue. In an effort to understand the technical feasibility of implementing a new roadway configuration, the Working Group requested the participation of the Department of Transportation (DOT) in a series of meetings. In early 2015, as a result of these discussions, Councilmember Oliverio requested that DOT consider a new roadway configuration on a pilot basis prior to a planned pavement maintenance treatment in October 2015 to gain actual

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experience on how the corridor would function in a new configuration. In February 2015, the pilot roadway test concept was presented to the community, and installed on February 27, 2015.

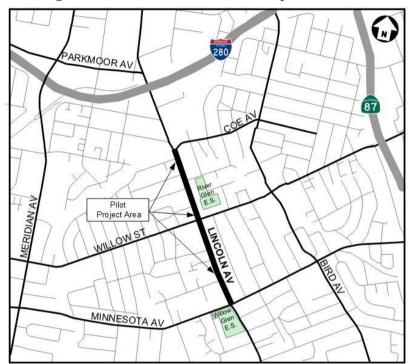


Figure 1 – Lincoln Avenue Pilot Project Location

The Lincoln Avenue Roadway Configuration pilot is commonly referred to as a "4-to-3 Lane Conversion" because it reduces the vehicle travel lanes from two in each direction (4 lanes) to one in each direction, with a two-way center left-turn lane (3 lanes), and marked bike lanes. Sample before and after roadway cross-sections are shown in Figure 2 below:

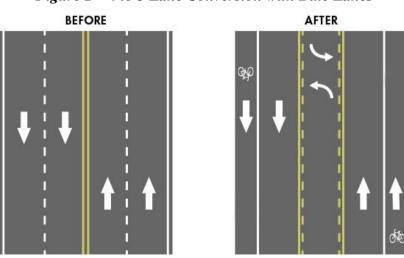


Figure 2 – 4 to 3 Lane Conversion with Bike Lanes

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In the spring of 2015, a test of the pilot roadway configuration was conducted that included extensive "before" and "after" traffic data collection. In June 2015, DOT issued a traffic Data Collection Report on the pilot project and held a community meeting in Willow Glen to discuss the findings of the report and to receive community feedback. In addition, the WGBA, WGNA, and the Willow Glen Elementary PTA took formal positions on the pilot project. Furthermore, the Working Group, made up of representatives of the organizations noted above, made a recommendation that the pilot project be continued, and that further improvements be made.

In September 2015, the Rules Committee accepted a memorandum by Councilmember Oliverio (<a href="http://sanjose.granicus.com/MetaViewer.php?meta\_id=534782">http://sanjose.granicus.com/MetaViewer.php?meta\_id=534782</a>) recommending that paving Lincoln Avenue be deferred until the summer of 2016, the pilot roadway configuration be extended to the spring of 2016, and that various improvements be explored and implemented as appropriate to improve the functionality of the pilot roadway configuration, including issuance of a final report for City Council consideration.

#### **ANALYSIS**

The rationale to modify Lincoln Avenue was based upon local community interest in the project, previous City experience with other roadway modifications, and the City's adopted policy framework that provides guidance to emphasize complete streets and a balanced transportation system in roadway design and street network development.

Numerous roadway projects have been implemented in San José to provide for more complete streets for all modes of travel. They include San Fernando Street, Hedding Street, and most recently in 2015, Moorpark Avenue (4-to-3 vehicle lane configurations with added bike lanes); and Almaden Boulevard, 3<sup>rd</sup> & 4<sup>th</sup>, and 10<sup>th</sup> & 11<sup>th</sup> Streets (3-to-2 lane configurations, with added bike lanes). These modified roadways are consistent with and support the goals of various City Council adopted plans and strategies, including:

- *Envision San José 2040 General Plan*, which calls for a balanced transportation network, including 15% of trips made by bicycle by the year 2040.
- *Bike Plan 2020*, which calls for a 400-mile on-street bicycle network, including Lincoln Avenue.
- *Vision Zero San José*, which aims to eliminate all traffic fatalities and reduce severe injury crashes, with a significant focus on protecting the most vulnerable roadway users (pedestrians and bicyclists).

The next section of the report summarizes the following elements of the pilot project: Pilot Project Purpose and Process, Traffic Data Collection and Findings, Traffic Improvements Implemented during the Pilot Project, and Economic Effects of the Pilot Project.

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#### A. Pilot Project Purpose and Process

As mentioned previously, members of the WGBA, WGNA, and the Willow Glen Elementary PTA requested that DOT participate in a series of meetings to explore the feasibility of a new roadway configuration on Lincoln Avenue. During that process, a number of purposes for the pilot project were discussed with the following being the primary focus for the pilot:

- Improving safety for all roadway users
- Creating a calmer traffic environment along Lincoln Avenue
- Enhancing travel for people walking and biking

Although not specifically identified, other factors were considered for the pilot project, including analyzing potential neighborhood traffic impacts, addressing excessive congestion and/or travel times on Lincoln Avenue, avoiding impacts to street parking on Lincoln Avenue, and assessing the potential economic and sales tax impacts. Accordingly, a comprehensive traffic data collection effort was completed, and sales tax information was collected and evaluated as part of the pilot project.

#### **B.** Traffic Data Collection and Findings

For many years, the business district section of Lincoln Avenue has had a posted speed limit of 25 mph, four vehicle travel lanes (two in each direction), on-street parking on both sides of the street, and a daily traffic volume between 15,000 and 16,000 vehicles. Lincoln Avenue did not have dedicated left turn lanes or marked bike lanes prior to the pilot project.

Concurrent with the roadway design, DOT developed a comprehensive "before" and "after" traffic study to evaluate potential impacts that might result from the modified roadway. The "before" traffic data was collected between Tuesday February 3, 2015 and Thursday February 5, 2015. On February 27, 2015, the modified roadway configuration was installed. Identical "after" traffic data was collected between Tuesday April 7, 2015 and Thursday April 9, 2015, with the modified roadway configuration in effect for about five weeks. With the decision to extend the pilot project until the spring of 2016, a second set of identical "after" data was collected between Tuesday, February 2, 2016 and Thursday, February 4, 2016, one year after the pilot project had been in effect. Attachment A provides a map of the greater Willow Glen area centered around Lincoln Avenue and identifies the 45 locations where traffic volume and speed data was collected.

Five types of traffic data were collected and analyzed as part of the Lincoln Avenue pilot project for the "before" period and the "after" period:

<sup>&</sup>lt;sup>1</sup> A report entitled, "<u>Lincoln Avenue Road Diet Trial – Data Collection Report</u>" was released June 1, 2015 comparing data from February 2015 before the pilot project was initiated to data collected in April 2015 about five weeks after the trial was initiated.

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- 1. Traffic Volume and Speed
- 2. Travel Times in the Lincoln Avenue Corridor
- 3. Intersection Level of Service
- 4. Bicycle and Pedestrian Volume
- 5. Reported Crashes

The data collection process followed standard and accepted methodologies and practices commonly used by public agencies across the nation. In some cases, traffic data collection efforts exceeded what public agencies normally collect, to ensure further confidence in the data.

#### 1. Traffic Volume and Speed Data

Automatic recorder counts of traffic volume and speed were taken at 45 locations on and around Lincoln Avenue in the Willow Glen area. With the loss of through vehicle travel lanes, it was expected that some level of traffic volume would leave the Lincoln corridor. The single largest concern about the pilot project was the potential for traffic diversion from Lincoln Avenue onto adjacent neighborhood streets. In addition to monitoring volume and speed on Lincoln Avenue, the locations of other traffic counts were strategically placed to track potential diversion of Lincoln Avenue traffic, especially onto neighborhood streets. Twenty-three (23) of the data collection locations were on adjacent neighborhood streets, while twenty-two (22) were on major and collector roadways, including six locations on Lincoln Avenue. Attachments B, C, and D display the detailed traffic volume and speed data tables for the 45 locations.

#### 1a. Lincoln Avenue Traffic Volume and Speed Findings

• Traffic volumes within the Lincoln Avenue business district (Coe to Minnesota) declined by 307 to 1,835 vehicles per day (-2% to -12% of the 15,500+ vpd) one year after the modified roadway configuration was installed. That represented a small return of traffic volume compared to the counts taken in April 2015, five weeks after the pilot was initiated.

Traffic volumes on Lincoln Avenue outside the business district, where the lane configuration was not changed, declined 34 to 665 vehicles per day (0% to -5%) one year after the change was implemented. Vehicles no longer traveling on Lincoln Avenue are likely using regional roadways and major streets, such as Highway 87, Almaden Expy and Monterey Road, as nearby roads had no notable volume increases.

• Motor vehicle speeds declined modestly between 0.5 and 2.4 mph within the Lincoln Avenue business district and increased slightly (0.1 to 1.0 mph) north and south of the business district. The number of vehicles traveling 10+ mph over the posted speed limit within the business district declined significantly, especially in the segment between Willow and Coe Avenues, with 984 less speeding vehicles per day, a reduction of 61%.

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#### 1b. Neighborhood Street Traffic Volume and Speed Findings

- Most neighborhood streets experienced similar traffic volumes before and after the modified roadway configuration was installed. Nearly half of the neighborhood streets (10 of 23 streets) experienced inconsequential volume changes, up or down less than 75 vehicles per day (vpd). This level of daily variation is typical for neighborhood streets. Nine (9) streets experienced declines in traffic of 100 to 463 vpd. Four (4) streets (Kotenberg, Glen Eyrie, Newport and Paula) experienced increases in traffic of 101 to 157 vpd, with each of these streets still carrying less than 2,000 vpd, well within the typical 1,000 to 3,000 vpd expected on neighborhood streets. Glen Eyrie Avenue and some of the north-south streets to the west of Lincoln Avenue are experiencing modest cut-through traffic in the west and south bound directions during the PM peak period. Staff has been evaluating potential measures to mitigate the cut-through activity.
- Speeds on 17 of 23 neighborhood streets were similar before and after the modified roadway configuration (speed variation +/- 1.0 mph or less). Three streets showed declines in speed of 1.2, 1.5 and 3.1 mph (Iris, Garfield and El Abra, respectively), Kotenberg saw an increase in speed of 1.1 mph.
- Two (2) of 23 neighborhood streets saw increases in speeds that exceed the threshold established as being adverse in the City's Traffic Calming Policy (an 85<sup>th</sup> percentile speed of 33 mph or more on a 25 mph residential street). Hicks Avenue (south of Dry Creek) had an increase in speeds of 1.6 mph (from 32.9 to 34.5 mph). Conversely, the connecting adjacent segment of Hicks Avenue (north of Minnesota) saw a decrease in speeds of 0.6 mph (from 33.1 to 32.5 mph), and no longer exceeds the 33 mph adverse speed threshold. Camino Ramon (south of Willow) had an increase in speeds of 2.1 mph (from 31.8 to 33.9 mph). Staff has been evaluating various measures to reduce speeds on these two streets, including the recent installation of edge lines to narrow the travel lanes in an effort to moderate vehicle speeds below the level considered adverse (33 mph).

#### 1c. Major Street Traffic Volume and Speed Findings

- Daily traffic volumes at eight (8) of 16 locations on major streets (other than Lincoln) had normal day-to-day variations of 3% or less. Bird Avenue north of Willow Street saw traffic increase 7% (783 vpd), while the connecting adjacent segment of Bird Avenue south of Willow Street saw a drop of 8% (833 vpd). Four additional streets had declines in traffic of 8% to 12% (673 to 949 vpd). Minnesota Avenue saw increases of 6% west of Lincoln (620 vpd) and 4% east of Lincoln (420 vpd), with that specific traffic likely flowing west to Meridian Avenue or east to Highway 87 or Monterey Road.
- Speeds on 14 of 16 major streets before and after the modified roadway configuration was installed saw a speed variation +/- 2.0 mph or less. Two streets, Pine Avenue and Minnesota Avenue, saw increases in the 85<sup>th</sup> percentile speed of 2.6 and 3.2 mph respectively. Also on Minnesota, east of Lincoln Avenue, the number of motorists

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traveling at 10+ mph over the posted speed limit increased from 0.8% to 3.9% of traffic (89 to 433 vpd out of 11,000+ vpd). On Bird Avenue south of Willow Street, even though the volume of traffic dropped by 8% during the pilot, the number of motorists traveling at 10+ mph over the posted speed limit increased from 6.2% to 9.8% of traffic (635 to 925 vpd). Staff has been evaluating various measures to moderate speeds on these three streets, including the recent installation of radar speed feedback signs on Pine Avenue at Coastland, and on Bird Avenue, north and south of Willow Street, in an effort to moderate vehicle speeds. Evaluation of Minnesota Avenue is currently underway.

### 2. Travel Times in the Lincoln Avenue Corridor

The modified lane configuration converted four vehicle travel lanes (two in each direction, with no center turn lane) to two travel lanes (one in each direction), one center turn lane, and bicycle lanes in each direction between Coe and Minnesota Avenues. With the apparent loss of half the vehicle travel capacity in this segment of Lincoln Avenue, valid concerns were raised about the potential for severe congestion and significantly longer travel times.

To evaluate the impacts of the modified lane configuration and any subsequent traffic improvements, travel time runs were conducted along the entire length of Lincoln Avenue, between Curtner Avenue in the south and San Carlos Street in the north (a 2.64 mile segment), during the AM and PM peak periods and at mid-day. For each period (AM, PM, mid-day), six travel runs were conducted every 20 minutes, in each direction, for multiple days, both before and after the modified lane configuration was implemented. Peak period (2-hour) and peak hour travel times were reviewed. Attachment E displays the travel time data tables for the peak one and two hour periods.

The table below displays the travel time runs for the most significant directions and periods of travel. The data indicates that travel times were slightly longer during the AM and PM peak hours, by about ½ minute during the PM peak and by 1 ½ minutes during the AM peak. Travel times during the mid-day peak hour experienced a decrease of 1 ½ minutes in the southbound direction and 2 ¼ minutes in the northbound direction.

Travel Times Lincoln Avenue Corridor (Peak Hour)								
Segment	Feb 2015 (min:sec)	Feb 2016 (min:sec)	Change (min:sec)	Change (%)				
Curtner to San Carlos (Northbound AM)	9:07	10:40	+1:33	+17%				
San Carlos to Curtner (Southbound PM)	10:16	10:43	+0:27	+4%				
Curtner to San Carlos (Northbound Mid-day)	11:23	9:08	-2:15	-20%				
San Carlos to Curtner (Southbound Mid-day)	9:46	8:23	-1:33	-14%				

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More detailed review of individual segments within the Lincoln Avenue corridor reveals a number of relevant findings and further opportunities for travel time improvement. First, the minor modification to the Lincoln/Willow traffic signal in October 2015 resulted in significant operational improvement of the intersection. Specifically the travel times of every approaching segment to Lincoln/Willow at all times of the day saw improvement from February 2015 to February 2016. Prior to the pilot project, the traffic signal operation required the left turns and through movements to occur in one direction, and then alternated the phase in the opposite direction. That type of operation was required because insufficient roadway space existed for dedicated left turn lanes due to the number of through lanes. The pilot project configuration and the signal modification provided concurrent left turn movements, and then provided concurrent through movements, significantly improving the efficiency of the intersection.

Second, the Lincoln/Minnesota intersection and traffic signal remains configured in the same way as the Lincoln/Willow traffic signal was prior to October 2015. Much of the increased travel time in the Lincoln corridor can be traced to the approaching segments to the Lincoln/Minnesota traffic signal. Staff has determined that a similar minor modification to the Lincoln/Minnesota traffic signal would achieve similar benefits as the Lincoln/Willow modification and would likely result in overall reduced travel times in the corridor when compared to the February 2015 "before" data.

#### 3. <u>Intersection Level of Service</u>

Intersection Level of Service (LOS) was calculated at seven signalized intersections on Lincoln Avenue using turning movement counts for the AM and PM peak hours. This analysis calculates the average delay for all vehicles entering an intersection during the peak hour. LOS ranges from "A" (< 10 second avg. delay) to "F" (> 80 second avg. delay). Attachment F displays the detailed LOS analysis by intersection.

The LOS summary findings are as follows:

- No LOS impacts were identified under the California Environmental Quality Act.
- None of the measured intersections had a significant impact to their LOS, which is defined in City Council Policy 5-3: Transportation Level of Service as decreasing from LOS D or better to LOS E or F.
- There was only one change in the LOS in the morning or afternoon peak hour at any of the seven intersections evaluated. The LOS at the Lincoln/Coe intersection degraded from B to C in the morning peak hour.

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#### 4. Bicycle and Pedestrian Volumes

Bicycle and pedestrian counts were taken at various locations in the Lincoln Avenue business district during the AM and PM peak periods (2 hours in the AM and PM) on February 3, 2015 before the modified roadway configuration added bicycle lanes in each direction of travel, and on February 10, 2016 about one year after the installation of bike lanes. Attachment G displays the detailed bicycle and pedestrian counts by location.

The bicycle and pedestrian count summary findings are as follows:

- Increased bicycle and pedestrian activity was observed at all six of the locations counts were taken
- Bicycle activity on Lincoln Avenue increased from 113 to 207
- Pedestrian activity on Lincoln Avenue increased from 506 to 607.

#### 5. Reported Crashes

Traffic crash activity on Lincoln Avenue in the year following the new roadway configuration was reviewed, and compared to historical crash records. Between March 2015 and February 2016, there were a total of 22 crashes that occurred between Paula Street and California Avenue, representing a slight reduction from the average annual number of crashes in the immediately preceding five years. In the year prior to the pilot project, there were a total of eight crashes between Paula Street and California Avenue. This was the lowest number of crashes in the prior 10 years, during which this corridor had an average of 34 crashes per year.

Fifteen of the 22 crashes resulted in an injury, with a majority of the injuries being classified by the responding police officer as minor (injury crashes are categorized by severity of the injury: minor, moderate, major, or fatal). There were no fatalities or severe injuries associated with any of the 22 crashes. There was a fatal or severe injury crash in four of the five prior years in this segment of Lincoln Avenue. Four of the 14 injury crashes occurred when a turning vehicle collided with another vehicle. Four were rear-end vehicle crashes. None of the injury crashes involved a pedestrian, six involved bicyclists. Four of the bicycle crashes involved vehicles turning right; one involved a parked vehicle opening a door into the bicyclist; and one involved a bicyclist traveling intoxicated and a left turning vehicle. There was one DUI vehicle crash in the early morning hours. A majority (15) of the 22 crashes occurred during the initial seven months of the pilot project (prior to the improvements summarized on the following page), with seven crashes occurring in the latter five months. Attachment H summarizes the crash activity for the pilot project and the previous five years.

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#### C. Traffic Improvements Implemented During the Pilot Project

The pilot project design and installation was completed in a highly condensed time period with limited resources to make any substantial improvements prior to the planned paving work in 2015. With one-time funding allocated to District 6 traffic improvements in the Mayor's 2015-16 Budget Message, and the extension of the pilot project into 2016, the opportunity existed to evaluate and implement numerous operational improvements identified in Councilmember Oliverio's September 2015 Rules Committee memo.

The following is a summary of improvements implemented to date:

- Lincoln/Willow signal modification, dedicated left turn phases and concurrent through phases on Lincoln Avenue, significantly improving the capacity of the intersection and traffic flow in this part of the corridor.
- Repaired signal detection malfunctions and signal timing throughout the Lincoln corridor to facilitate more reliable traffic flow.
- Right turn movement from Lincoln Avenue onto eastbound Minnesota Avenue improved during peak periods by prohibiting parking for a few under used parking spaces on Lincoln Avenue near Michigan Avenue.
- Consolidated two VTA bus stops into one stop in the center of business district to improve bus schedule performance, reduce traffic impacts of more frequent merging buses, and provided additional parking spaces and freight loading zones.
- Installed parking space tips on Lincoln Avenue near Minnesota Avenue to reduce backing into parking spaces, which caused traffic back-ups on Lincoln Avenue.
- Installed green bike lanes to delineate conflict zones between bicyclists and motorists.
- Installed arrows in the two-way left turn lane to inform motorists it is not a thru lane.
- Installed pedestrian pylons and striping at midblock crosswalks to deter vehicles from using the two-way left turn lane as a lane to the Willow and Minnesota left turn pockets, providing safety enhancements for pedestrians crossing Lincoln Avenue.
- Relocated westbound Willow bus stop at Lincoln (from far side to near side of
  intersection) to eliminate bottleneck west of intersection providing for a wider right
  turn/bike lane.
- Private investment by the Garden Theater parking lot owner modified the Lincoln driveway parking lot entrance to an exit, going from three entrances and one exit, to two entrances and two exits for the busiest parking lot in the business district. This improvement helped reduce congestion at the Lincoln/Willow intersection.
- Installed travel lane edge lines on Camino Ramon, and Hicks and Pine Avenues to narrow the travel lanes and create a calmer, more orderly flow of traffic in an effort to address elevated levels of speed on these neighborhood collector streets.
- Installed three radar speed display signs on Bird and Pine Avenues in an effort to address elevated levels of speeding on these streets.

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Although these improvements have had significant operational, and travel time improvements, not all of the concerns or potentially related impacts have been fully addressed. The items below represent additional areas of further evaluation and improvements that can be made on Lincoln Avenue and the surrounding streets that are experiencing some level of traffic related impact, whether from the pilot project or partially related to pre-existing conditions. Those areas and potential improvements include:

- Lincoln/Minnesota traffic signal modification similar to Lincoln/Willow improvements
- Additional radar speed display signs on Camino Ramon, Bird, Pine and Hicks
- LED Streetlight retrofit on Lincoln corridor and near Willow Glen Elementary to improve visibility during the evening
- Left turn lanes on Lincoln at Malone to provide queuing capacity
- Further evaluation and identification of potential improvements to address cut-through traffic in the PM peak period on Glen Eyrie (westbound) and Camino Ramon (southbound).

#### D. Economic Effects of the Pilot Project

To evaluate business performance before and after the pilot roadway configuration was initiated, the Office of Economic Development examined sales tax receipts for the Downtown Willow Glen Business District. This dataset is the best available indicator of economic activity in the project area. However, it does not reflect business activity that is not subject to sales tax, such as personal services or business services.

#### 1. Background on Sales Tax Dataset

The City of San Jose currently has access to three quarters of sales tax data (Q2, Q3 and Q4 2015) since the pilot project was implemented on February 27, 2015. The dataset covers all businesses on Lincoln Avenue between Lonus and Minnesota Avenues, as well as businesses on Minnesota Avenue approximately one block to either side of Lincoln Avenue, roughly between Blewett Avenue and Iris Court. This area corresponds closely to the portion of Lincoln Avenue affected by the pilot roadway configuration.<sup>2</sup>

The bar chart below provides a visual comparison of sales tax receipts for the past three years, encompassing two years before and one year after implementation of the pilot project. The table lists the numerical data represented in the chart, and indicates the percent change between 2014 and 2015 for the Downtown Willow Glen Business District.

#### 2. Key Findings

Below are key findings from this analysis:

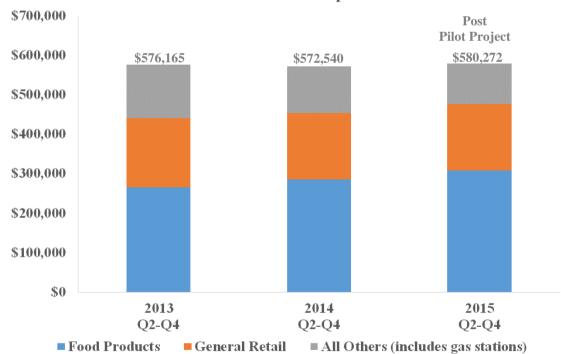
<sup>&</sup>lt;sup>2</sup> The specific addresses included in the dataset are 845-1399 Lincoln Ave and 1035-1147 Minnesota Ave.

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- Total sales tax receipts in the three quarters of 2015 since the pilot was implemented are slightly higher than in the same quarters of 2013 and 2014 prior to the pilot.
- "Food Products," a category that includes restaurants, grocery stores, specialty food stores and liquor stores, are the largest contributor to sales tax in the Business District, accounting for approximately half of total sales tax receipts.
- Sales tax receipts in the Food Products category have been increasing in the Business District over the past three years. Downtown Willow Glen Food Products tax receipts for Q2-Q4 2015 are 7.9% higher than the same period of 2014.
- "General Retail" sales tax receipts remained constant from Q2-Q4 2014 to Q2-Q4 2015. This category includes apparel, sporting goods, furniture, drug stores, jewelers, gift shops and other miscellaneous retail.
- Q2-Q4 sales tax receipts for "All Others" decreased 12.5% from 2014 to 2015. This decline is due to the regional and statewide drop in gas prices; the average price of gas in the San Francisco Bay Area over the Q2-Q4 period declined 15.8% from 2014 and 2015.<sup>3</sup> Service stations account for approximately 50% of "All Others" receipts in the Downtown Willow Glen Business District.





<sup>&</sup>lt;sup>3</sup> Source: Bureau of Labor Statistics. The Q2-Q4 averages for 2014 and 2015 were calculated using monthly average price data for gasoline for April through December of each year.

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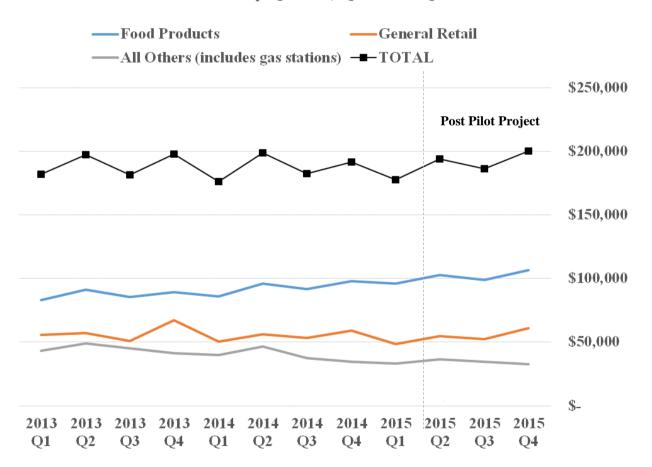
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	2013 Q2-Q4	2014 Q2-Q4	2015 Q2-Q4	Change from <b>2014-2015</b>
Food Products	\$266,074	\$285,450	\$308,120	7.9%
General Retail	\$174,823	\$168,561	\$168,482	0.0%
All Others	\$135,268	\$118,529	\$103,670	-12.5%
TOTAL	\$576,165	\$572,540	\$580,272	1.4%

The historical line chart below provides another representation of the same dataset, showing quarterly sales tax amounts over the past two years. While this graph shows seasonal variation in sales tax from quarter to quarter, it is consistent with the conclusion that there has not been a decline in total sales tax receipts in the Business District over the past three quarters since the pilot roadway configuration was implemented.

### Downtown Willow Glen Business District Sales Tax By Quarter, Q1 2013 - Q4 2015



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#### **EVALUATION AND FOLLOW-UP**

This report represents the final evaluation of the Lincoln Avenue Pilot Project. As indicated earlier in this report, there are a number of specific improvements that DOT will be taking to complete the project. In conjunction with the 2016 pavement program, Lincoln Avenue will receive a pavement treatment this summer. As part of that project, new roadway striping will be installed. The plan is to modify the Lincoln/Minnesota traffic signal concurrent with the paving to provide for more efficient operations and better travel times in the corridor, similar to the modification that was implemented at Lincoln/Willow. In addition, a series of further mitigations will be explored and the appropriate ones implemented to address streets that have been adversely affected as defined in the City's Traffic Calming Policy.

#### **POLICY ALTERNATIVES**

Alternative: Council could choose to not support the plan to maintain the current pilot roadway configuration as part of the scheduled pavement maintenance on Lincoln Avenue this summer. **Pros**: Lincoln Avenue would be restriped to provide two travel lanes in each direction providing additional roadway capacity for vehicles. The additional vehicle capacity may lead to a potential modest decrease in traffic diversion to, and/or reduction in traffic speed on some major and neighborhood streets. Additionally, the Lincoln/Minnesota traffic signal would not be modified, at a savings approximately \$65,000.

Cons: Returning Lincoln Avenue to a four-lane roadway would require removal of the bike lanes; and modification of the Lincoln/Willow traffic signal to remove the dedicated left turn phases and concurrent through phases on Lincoln Avenue at a cost of approximately \$15,000. Returning Lincoln Avenue to the pre-pilot roadway configuration will remove the mobility and safety accommodations that have been made for bicyclists and pedestrians, which may lead to a reduction in bicycle and pedestrian activity in the business district.

**Reason for not recommending:** The pilot roadway configuration has provided a calmer traffic environment on Lincoln Avenue, and improved accommodations for bicyclists and pedestrians. Travel times improved mid-day through the corridor. The planned signal modification at Lincoln/Minnesota is anticipated to improve travel conditions during the AM and PM peak periods when compared to the pre-pilot roadway configuration, similar to the improvements that occurred at the Lincoln/Willow intersections. The new roadway configuration supports *Envision San José* 2040, *Bike Plan 2020, and Vision Zero San José*.

#### PUBLIC OUTREACH/INTEREST

The Lincoln Avenue Pilot Project has generated significant community interest and included extensive public outreach and input. After an initial community meeting on November 20, 2014, members of WGBA, WGNA and the Willow Glen Elementary PTA formed a stakeholder based Working Group to explore the possibility of a new roadway configuration on Lincoln Avenue. One of the main purposes of the Working Group was to provide input from and

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disseminate information to stakeholders and members of the community. The Working Group provided input to DOT on the design of the new lane configuration and the traffic data collection prior to implementation in February 2015.

DOT, the Working Group, and Councilmember Oliverio conducted broad-based community meetings on the Lincoln Avenue Pilot as follows:

- **February 12, 2015** To discuss the pilot project concept, purpose and process, and to receive public comments. The meeting was attended by over 200 community members, with a variety of perspectives and opinions expressed about the pilot project; including support, concern and opposition to the project.
- June 18, 2015 To discuss DOT's Lincoln Avenue Traffic Data Collection Report findings and to receive public comments. The meeting was attended by over 400 community members, including over 60 speakers during the comments period, with a variety of perspectives and opinions expressed about the pilot project; including opposition, concern and support for the project.

From March to June 2015, the Working Group disseminated information and solicited feedback on their website (<a href="www.willowglenroaddiet.com">www.willowglenroaddiet.com</a>) about the pilot project. In addition, literally thousands of residents, businesses, school parents, and interested stakeholders sent e-mails, signed petitions, responded to surveys, and commented on various on-line forums about their experience and opinions about the pilot project. Although not scientific, the primary recognized stakeholder organizations most closely associated with Lincoln Avenue (WGBA, WGNA, the Working Group and Councilmember Oliverio's Office) each conducted surveys with results indicating a high level of interest and divergence in community opinion as to whether to make the new configuration permanent or to revert Lincoln Avenue back to its pre-pilot configuration.

Formal positions and letters were submitted by the following stakeholder organizations:

- June 23, 2015 WGBA Board of Directors voted 10-4 against making the pilot roadway configuration permanent (Attachment I).
- July 13, 2015 WGNA Board of Directors voted 9-0-1 strongly supporting making the pilot roadway configuration permanent (Attachment J).
- July 14, 2015 Working Group requested that the pilot project be extended to allow for implementation of certain improvements and that 8 of the 9 members were willing assist in implementing the measures (Attachment K).
- August 2, 2015 Willow Glen Elementary PTA Board of Directors (11 members) unanimously supported the pilot project and further indicated support to delay the paving on Lincoln Avenue to allow for a longer trial and to make short-term improvements to satisfy the needs of the entire community (Attachment L).
- August 10, 2015 SPUR submitted a letter in support of the Lincoln Avenue Pilot Project (Attachment M).

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#### **Bicycle and Pedestrian Advisory Committee**

At the request of the Bicycle Pedestrian Advisory Committee, the Lincoln Avenue Pilot Project was placed on their August 2015 meeting agenda. The Committee voted 4-2-0 to support the pilot project and to prepare a letter to the City stating their support (Attachment N). The 11 member Committee had a quorum of six members for the August meeting.

This memorandum will be posted on the City's Council Agenda website for the June 28, 2016 City Council Meeting.

#### **COORDINATION**

This report was coordinated with the City Attorney's Office and the Office of Economic Development.

#### **FISCAL/POLICY ALIGNMENT**

Implementation of the modified roadway configuration on Lincoln Avenue is consistent with the goals of the Envision San José 2040 General Plan, Bike Plan 2020, and Vision Zero San José.

#### **COST SUMMARY/IMPLICATIONS**

The traffic signal modification at the Lincoln/Minnesota intersection and further traffic calming measures on neighborhood streets will be funded from the 2015-16 Approved Operating Budget allocation to District 6 as described in the Analysis, Section C.

#### **CONCLUSION**

The following purpose was established for the new roadway configuration:

- Improving safety for all roadway users
- Creating a calmer traffic environment on Lincoln Avenue
- Enhancing travel for people walking and biking

<u>Improved Safety</u>: Based on the one year of "after" collision data, it is inconclusive whether the modified lane configuration has had a measurable long-term impact on traffic safety. Although the number of crashes is slightly below the annual average of the previous five years, the total number of crashes was higher than the year prior to the pilot project. It is important to note that the Federal Highway Administration (FHWA) indicates "strong research support for achieving safety benefits through converting four-lane undivided streets to three-lane cross sections [with two-way-left-turn-lanes]." Research also indicates that the provision of a separate space for the

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exclusive use of bicyclists improves safety over a shared travel lane alternative. Similarly, research indicates a reduction in pedestrian crash risk when crossing two- and three-lane roads compared to roads with four or more lanes. Further research also indicates that reducing travel speeds helps to reduce the severity of crashes if they occur. As summarized below, traffic speed and the number of vehicles traveling excessively over the posted speed limit declined within the Lincoln Avenue business district.

<u>Calmer Traffic Environment</u>: The traffic analysis shows that motor vehicle speeds decreased on Lincoln Avenue as a result of the new roadway configuration, with a significant reduction in the number of vehicles (984 vpd) traveling 10+ mph over the posted speed limit within the business district. The predominant feedback from pedestrians is that they feel safer crossing Lincoln Avenue with the reduction in travel lanes, and many bicyclists feel more comfortable traveling through the corridor.

<u>Enhanced Travel for Pedestrians and Bicyclists</u>: The pilot roadway configuration has provided improved accommodations for bicyclists with dedicated bike lanes, and for pedestrians with fewer travel lanes to cross. The number of bicyclists has increased 83% in the year since the road diet was implemented. Pedestrian volumes have increased 20%.

A summary of the other factors considered include:

Neighborhood Traffic Impacts: There was minimal diversion of traffic onto a majority of the neighborhood streets, with only four streets having an increase in traffic of 100 to 150 vpd. Similarly, there was minimal change in traffic speeds on a majority of neighborhood streets. Two streets now have speed levels that exceed the threshold identified in the City's Traffic Calming Policy as "adverse". In addition to measures that have already been implemented on streets that have experienced some level of impacts, staff is evaluating potential additional improvements.

Congestion/Travel Times: Motor vehicle travel time has increased in the peak direction by 1.25 minutes in the AM peak period and 0.5 minutes in the PM peak period over the 2.64-mile length of the Lincoln Avenue corridor (San Carlos Street to Lincoln Avenue). Travel times are significantly less mid-day in both directions compared to what they were before the trial. Similar to the improvements with the Lincoln/Willow signal modification, improvements to the Lincoln/Minnesota traffic signal are expected to further improve traffic flow on the corridor.

<u>On-Street Parking</u>: There has been no negative impact to the supply of street parking. The presence of the bike lanes has facilitated easier access to the parking spaces.

Economic Effects: Overall, the new roadway configuration has been neutral in terms of its economic impact on the Willow Glen Business District based upon sales tax comparisons. There has been a slight increase in total sales tax receipts over the three quarters since the pilot was implemented. Sales tax receipts in the "Food Product" category (restaurants, food markets and liquor stores), accounting for approximately half of total sales tax receipts in the Business

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District, increased 7.9%. With the exception of service stations that were impacted by falling gasoline prices, all other sectors have remained generally consistent or slightly above in their sales tax receipts.

DOT recommends that Council support maintaining the current pilot lane configuration when Lincoln Avenue receives a scheduled pavement maintenance treatment this summer. Improvements to the Lincoln/Minnesota signal would occur concurrent with the pavement activities. DOT would coordinate selection and implementation of other traffic measures with Councilmember Oliverio.

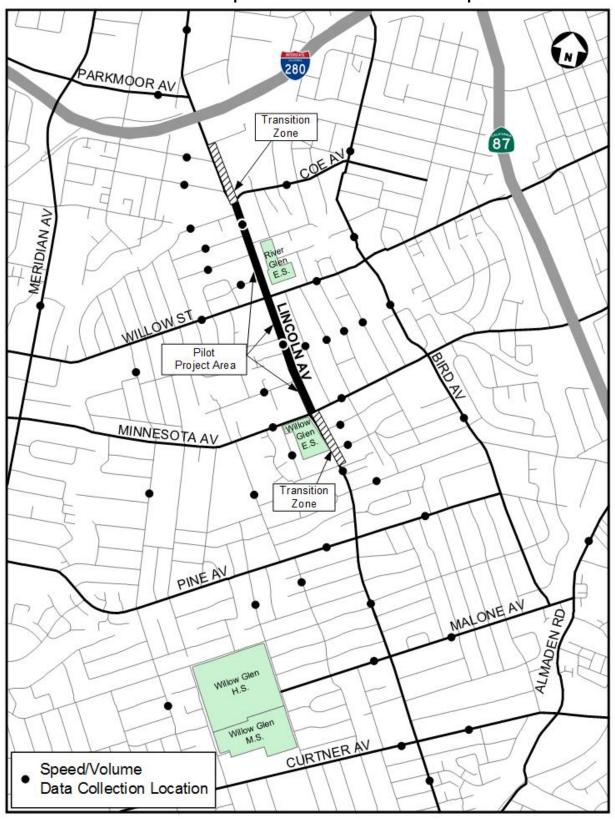
#### **CEQA**

Exempt, Section 15301(c) Existing Facilities and Section 15304(h) Minor Alterations to Land, File No. PP16-063.

/s/ JIM ORTBAL Director of Transportation

For questions, please contact Jim Ortbal, Director of Transportation, at (408) 535-3845. Attachments

ATTACHMENT A
Volume and Speed Data Collection Location Map



# ATTACHMENT B Lincoln Avenue Volume & Speed Summary

	Street	Volume		Volume C	hange	85 <sup>th</sup> %*	10+ mpł speed	
	(posted speed limit)		(ADT)	Vehicles	%	(mph)	Vehicles	%
	LINCOLN s/o CURTNER	BEFORE	13,261	24	0%	40.9	521	3.9%
	(35 MPH)	AFTER	13,227	-34	0%	41.7	765	5.8%
	LINCOLN s/o CLARK	BEFORE	16,319	-665	40/	38.3	223	1.4%
	(35 MPH)	AFTER	15,654	-005	-4%	39.3	333	2.1%
	LINCOLN s/o NEVADA	BEFORE	14,818	-267	20/	38.0	174	1.2%
	(35 MPH)	AFTER	14,551		-2%	38.1	175	1.2%
t	LINCOLN s/o MEREDITH	BEFORE	15,889	4 005	100/	27.7	147	0.9%
Pilot Project Segment	(25 MPH)	AFTER	14,054	-1,835	-12%	27.2	115	0.8%
lot P Segr	LINCOLN s/o GLEN EYRIE	BEFORE	15,555	207	20/	33.6	1,608	10.3%
<u>i</u> 07	(25 MPH)	AFTER	15,248	-307	-2%	31.2	624	4.1%
	LINCOLN n/o PARKMOOR	BEFORE	10,382	<b>5.10</b>	<b>5</b> 0/	38.5	161	1.6%
	(35 MPH)	AFTER	9,839	-543	-5%	39.2	227	2.3%

<sup>\*</sup>  $85^{th}$  % is the speed at which 85% of all vehicles travel at or below.

# ATTACHMENT C Neighborhood Streets Volume and Speed Summary

Street		Volume	Volur Chan		85 <sup>th</sup> %	10+ n over spe	
(25 mph, unless noted)		(ADT)	Vehicles	%	(mph)	Vehicles	%
BLEWETT s/o Willow	BEFORE	1,144	-11	-1%	25.1	4	0.3%
BLEVVETT S/O VVIIIOW	AFTER	1,133	-11	-170	25.0	2	0.1%
BRACE e/o Coolidge	BEFORE	1,812	-346	-19%	25.3	3	0.2%
BRACE e/o Coolidge	AFTER	1,466	-340	-1970	26.0	3	0.2%
CALIFORNIA e/o Lincoln	BEFORE	1,101	-463	-42%	25.3	4	0.4%
Of the Oftition	AFTER	638	100	1270	26.3	2	0.3%
CAMINO RAMON s/o Willow	BEFORE	3,461	-19	-1%	31.8	140	4.0%
	AFTER	3,442			33.9	376	10.9%
COTTLE s/o Pine	BEFORE	3,831	-117	-3%	31.5	171	4.5%
	AFTER	3,714			32.5	253	6.8%
CURTISS s/o Willow	BEFORE	659	-72	-11%	22.6	1	0.2%
	AFTER BEFORE	587			23.0 25.5	1 2	0.1% 0.4%
EL ABRA w/o Lincoln	AFTER	402 410	8	2%	23.5	0	0.4%
	BEFORE 561			26.6	4	0.6%	
GARFIELD w/o Lincoln	AFTER	2 10%		0%	25.1	3	0.5%
	BEFORE 1,784 400 000			26.8	13	0.7%	
GLEN EYRIE w/o Lincoln	AFTER	1,920	136	8%	26.9	9	0.5%
	BEFORE	4,932			33.1	398	8.1%
HICKS s/o Cherry Valley	AFTER	4,941	9	0%	32.5	330	6.7%
	BEFORE	5,429	_,	407	32.9	325	6.0%
HICKS s/o Callecita	AFTER	5,378	-51	-1%	34.5	712	13.2%
IRIS s/o Minnesota	BEFORE	736	-298	400/	23.0	7	1.0%
(20 MPH)	AFTER	438	-298	-40%	21.8	3	0.6%
KOTENBURG a/a Willow	BEFORE	618	101	16%	28.2	5	0.8%
KOTENBURG s/o Willow	AFTER	719	101	10%	29.3	11	1.6%
LESTER w/o Lincoln	BEFORE	640	-121	-19%	24.2	2	0.2%
EESTER W/O EIIICOIII	AFTER	519	-121	-1970	24.2	2	0.3%
MALONE w/o Lincoln	BEFORE	2,557	-100	-4%	26.4	14	0.5%
WAEGIVE W/O EINGOIT	AFTER	2,457	-100	-470	26.1	10	0.4%
MALONE e/o Harmil	BEFORE	4,295	-58	-1%	34.7	82	1.9%
	AFTER	4,237			35.2	100	2.4%
MICHIGAN e/o Lincoln	BEFORE	309	-7	-2%	24.2	1	0.3%
	AFTER	302			23.3	0	0.0%
NEWPORT s/o Fairview	BEFORE	1,617	156	10%	26.8	8	0.5%
	AFTER	1,773			27.7	17	0.9%
NEWPORT s/o Minnesota	BEFORE	3,145	-117	-4%	31.8	156	5.0%
	AFTER	3,028 1.402			31.9	149	4.9%
PAULA w/o Lincoln	BEFORE AFTER	, -	157	11%	30.0	33	2.3%
	BEFORE	1,559 3,227			30.4 30.4	52 96	3.3%
PEDRO w/o Lincoln	AFTER	3,027	-200	-6%	31.1	106	3.5%
	BEFORE	523			25.7	3	0.6%
SETTLE s/o Willow	AFTER	470	-53	-10%	25.7	2	0.6%
	BEFORE				28.2	9	0.4%
WILLOW GLEN w/o Hill		968	-136	-14%			
THE COLUMN TIME	AFTER	832	.00	. 170	28.5	12	1.4%

# ATTACHMENT D Major Streets Volume & Speed Summary

Street		Volume	Volume C	hange	85 <sup>th</sup> %	10+ m	
(posted speed limit)		(ADT)	Vehicles	%	(mph)	Vehicles	%
ALMADEN RD n/o Malone	BEFORE	6,344	167	3%	38.9	110	1.7%
(35 MPH)	AFTER	6,511	107	3%	39.3	129	2.0%
BIRD s/o Willow Glen Way	BEFORE	11,995	740	60/	37.4	100	0.8%
(35 MPH)	AFTER	11,253	-742	-6%	37.0	68	0.6%
BIRD s/o Willow	BEFORE	10,307	022	-8%	32.7	635	6.2%
(25 MPH)	AFTER	9,474	-833	-8%	33.8	925	9.8%
BIRD n/o Willow	BEFORE	12,019	700	70/	31.1	357	3.0%
(25 MPH)	AFTER	12,802	783	7%	31.6	529	4.1%
BIRD n/o Coe	BEFORE	16,022	004	00/	38.0	222	1.4%
(35 MPH)	AFTER	16,283	261	2%	38.5	288	1.8%
COE e/o Riverside	BEFORE	5,782	440	00/	33.3	58	1.0%
(30 MPH)	(30 MPH) AFTER 5,924	142	2%	35.3	170	2.9%	
CURTNER e/o Lincoln	BEFORE	16,846	2.4	00/	41.2	767	4.6%
(35 MPH)	AFTER	16,880	34	0%	39.4	515	3.1%
CURTNER w/o Lincoln	BEFORE	17,794	074	00/	38.5	286	1.6%
(35 MPH)	AFTER	18,065	271	2%	39.7	448	2.5%
MERIDIAN n/o Willow	BEFORE	33,421	054	4.0/	38.0	446	1.3%
(35 MPH)	AFTER	33,170	-251	-1%	39.5	1,062	3.2%
MINNESOTA w/o Lincoln	BEFORE	11,156	640	60/	36.5	528	4.7%
(30 MPH)	AFTER	11,774	618	6%	36.8	624	5.3%
MINNESOTA e/o Lincoln	BEFORE	10,772	446	40/	32.7	89	0.8%
(30 MPH)	AFTER	11,188	416	4%	35.9	433	3.9%
PARKMOOR w/o Lincoln	BEFORE	7,855	-949	120/	34.2	150	1.9%
(30 MPH)	AFTER	6,906	-949	-12%	32.3	51	0.7%
PINE e/o Lincoln	BEFORE	4,620	00	20/	30.4	106	2.3%
(25 MPH)	AFTER	4,700	80	2%	33.0	349	7.4%
PINE w/o Lincoln	BEFORE	7,763	00	40/	32.0	40	0.5%
(25 MPH)	AFTER	7,831	68	1%	32.6	59	0.7%
WILLOW w/o Lincoln	BEFORE	8,778	670	00/	34.2	123	1.4%
(30 MPH)	AFTER	8,105	-673	-8%	35.4	214	2.6%
WILLOW e/o Lincoln	BEFORE	12,103	000	00/	32.2	93	0.8%
(30 MPH)	AFTER	11,177	-926	-8%	32.9	121	1.1%

ATTACHMENT E Lincoln Avenue Travel Time Peak Hour Summary

		_	ner – Carlos	Curtr Pir			e – esota		esota – Ilow		ow – oe		e – moor		noor – Carlos
(in	min:sec)	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
	Before	9:07	9:18	2:03	1:23	2:21	2:00	1:23	1:40	0:50	1:26	0:46	1:06	1:43	1:41
AM	After	10:40	8:31	1:50	1:31	4:08	1:38	1:19	2:13	0:57	0:55	0:43	0:52	1:44	1:23
	Change	17%	-8%	-10%	9%	76%	-19%	-5%	33%	12%	-36%	-6%	-21%	1%	-18%
	Before	11:23	9:46	1:34	1:04	3:39	1:19	2:58	3:26	1:02	1:09	0:49	1:00	1:20	1:48
Midday	After	9:08	8:23	1:34	1:35	2:41	1:06	1:53	2:13	0:46	1:02	0:44	1:04	1:31	1:23
2	Change	-20%	-14%	0%	51%	-26%	-16%	-36%	-36%	-27%	-10%	-12%	6%	13%	-23%
	Before	10:34	10:16	1:32	1:52	1:30	1:07	2:30	1:29	1:43	2:25	1:03	1:42	2:17	1:41
PM	After	11:08	10:43	2:34	1:58	2:44	1:01	1:54	3:08	0:53	2:09	0:53	1:11	2:10	1:16
	Change	5%	4%	67%	5%	82%	-8%	-24%	111%	-48%	-11%	-17%	-30%	-5%	-25%

Pilot Project Segment

### **Lincoln Avenue Travel Time 2-Hour Summary**

			ner – Carlos	Curtr Pir			ie – esota		esota– low	Willo	ow – oe		e – moor		noor – Carlos
(in	min:sec)	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
	Before	8:40	8:53	2:02	1:19	1:59	1:53	1:23	1:40	0:49	1:21	0:47	1:09	1:41	1:37
AM	After	9:55	8:32	1:53	1:38	3:20	1:32	1:24	2:09	0:56	0:58	0:43	0:50	1:39	1:25
	Change	14%	-4%	-8%	25%	68%	-18%	2%	30%	15%	-28%	-7%	-21%	-2%	-13%
>	Before	10:51	9:28	1:37	1:05	2:59	1:16	2:59	3:14	1:04	1:09	0:50	0:57	1:21	1:48
Midday	After	8:47	8:03	1:34	1:34	2:18	1:05	1:51	2:02	0:49	0:57	0:46	1:09	1:30	1:22
2	Change	-19%	-15%	-4%	45%	-23%	-14%	-38%	-37%	-24%	-17%	-9%	10%	11%	-24%
	Before	10:24	9:35	1:31	1:52	1:40	1:10	2:17	1:29	1:40	1:58	0:59	1:26	2:17	1:40
PM	After	10:56	10:11	2:23	1:56	2:49	1:03	1:52	2:52	0:55	1:54	0:53	1:03	2:05	1:23
	Change	5%	6%	59%	4%	69%	-9%	-19%	93%	-45%	-4%	-11%	-27%	-9%	-17%

Pilot Project Segment

ATTACHMENT F
Lincoln Avenue Intersection Level of Service Summary

Intersection	Peak Hour	Time Frame	Avg. Delay (sec.)	LOS
	AM	Before	38.0	D
Lincoln/	Alvi	After	38.6	D
Curtner	PM	Before	34.2	С
	FIVI	After	27.7	С
	AM	Before	12.8	В
Lincoln/	Alvi	After	10.1	В
Malone	PM	Before	9.5	Α
	FIVI	After	9.5	Α
	AM	Before	31.5	С
Lincoln/	Alvi	After	37.1	С
Pine	PM	Before	44.1	D
	FIVI	After	43.3	D
	AM	Before	38.5	D
Lincoln/	Alvi	After	42.8	D
Minnesota	PM	Before	45.5	D
	FIVI	After	47.0	D
	AM	Before	2.2	Α
Lincoln/	Alvi	After	2.5	Α
Financial Square	PM	Before	5.0	Α
	FIVI	After	4.1	Α
	AM	Before	51.2	D
Lincoln/	Alvi	After	45.1	D
Willow	PM	Before	54.0	D
	I IVI	After	45.1	D
	AM	Before	19.1	В
Lincoln/	\(\triangle \)	After	22.2	С
Coe	PM	Before	17.6	В
	i IVI	After	17.9	В

## ATTACHMENT G Bicycle and Pedestrian Counts

### **Peak Period Lincoln Ave Bicycle Counts**

(2 Hour AM + 2 Hour PM)

Bicycles traveling on Lincoln Ave

· · · · · · · · · · · · · · · · · · ·	2015	2016	Change	%
				Change
South of Coe	58	83	25	43%
South of Willow	21	51	30	143%
South of Financial Square	23	54	31	135%
North of Minnesota	11	19	8	73%
Total	113	207	94	83%

Count dates: 2/3/15 and 2/10/16.

#### **Peak Period Lincoln Ave Pedestrian Counts**

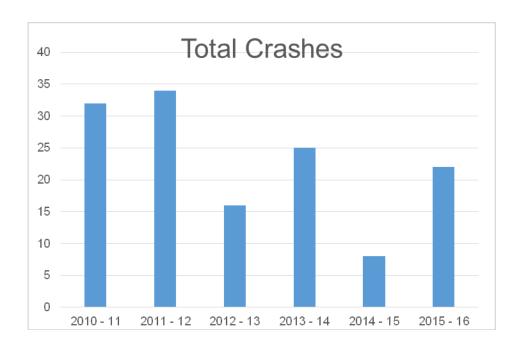
(2 Hour AM + 2 Hour PM)

Pedestrians traveling on Lincoln Ave

Total	506	607	101	20%
East side of Lincoln	242	251	9	4%
West side of Lincoln	264	356	92	35%
At Financial Square				
	2015	2016	Change	% Chang

Count dates: 2/3/15 and 2/10/16.

# ATTACHMENT H 5-Year Crash History in Pilot Project Corridor



Year (Mar - Feb)	Total Crashes	Bike/Ped Crashes	Injury Crashes
2010 - 11	32	6	13
2011 - 12	34	7	17
2012 - 13	16	4	5
2013 - 14	25	6	6
2014 - 15	8	2	4
2015 - 16	22	7	15

2010 - 15 (average)	23.0	5.0	9.0
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### ATTACHMENT I Letter from WGBA Board of Directors

From: Valerie Merklin < valerie@downtownwillowglen.org >

Date: Tue, Jun 23, 2015 at 10:31 AM

Subject: board vote results about road diet recommendation

**Dear Board Members:** 

Thank you all so much for all the careful consideration you have given to the road diet trial issue, and for reading through the large amount of material I've been forwarding to you. I know you all took this decision seriously. And I know you are anxious to know the results of the vote taken by ballot at today's meeting about what the WGBA will recommend to the DOT with regard to moving forward with the road diet or not.

We have sixteen board members. Fourteen board members were present at today's meeting and everyone present voted. Two board members were absent so did not vote. I sealed the envelope with the 14 ballots and all members of the executive committee were present for counting the ballots. **Ten (10)** board members voted to recommend that the Dept. of Transportation **NOT** move forward with making the road diet permanent. **Four (4)** board members voted to recommend that the Dept. of Transportation move forward with making the road diet permanent.

We will let the DOT and our councilmember know about this board decision today.

Please feel free to email or call me if any questions.

Thanks again,

Valerie

Valerie Merklin

Executive Director

Willow Glen Business Association

### ATTACHMENT J Letter from WGNA Board of Directors



Willow Glen Naighborhood Association P.O. Box 8467 San Jose, CA 95155 www.WGNA.net www.facebook.com/WillowGlenNA

July 13, 2015

VIA E-MAIL: Jim.Orthal@sanjoseca.gov

Mr. Jim Orthal Interim Director of Transportation City of San Jose 200 B. Santa Clara St. San Jose, CA 95113

Re: Letter in Support of the Lincoln Avenue Road Diet Trial

Mr. Orthal:

Prior to the start of the Lincoln Avenue Road Diet Trial ("Road Diet Trial"), the City of San Jose asked for the Willow Glen Business Association ("WGBA") and the Willow Glen Reighborhood Association ("WGNA") to each submit a position on the project following the first three months of the trial. While we understand that the WGBA Board of Directors voted last month to oppose the Road Diet Trial, we wish to complete our duty to the community process and submit to you our position at this time.

Our focus, as the Willow Glen Neighborhood Association, was to reach out to people who live and work in Willow Glen, schools, and parents, and to measure the overall pulse of the community. Earlier this week, the WGNA Board of Directors took a vote and decided 9-0-1 to communicate to you and the City of San Jose our strong support for making the Road Diet Trial permanent.

We believe that the Road Diet Trial is an innovative, forward-thinking concept that has instantly made our most traveled thoroughfare safer for pedestrians, bikers, and vehicles alike. Our neighborhood association has supported traffic calming efforts for over four decades, and we are pleased with the improvements to the Lincoln Avenue experience that this trial has provided. As you may also be aware, the demographics of Willow Glen are changing, with more and more young families moving into the area, and this Road Diet Trial is a clear step forward for the safety of our families, our seniors, and our children.

Over the last eight months, there has been an abundance of community feedback and data that support making the Road Diet Trial permanent – please see as follows:

\*An anti-road diet petition via Change.org was created on or around April 1. That petition has collected 363 signatures to date. A pro-road diet petition via Change.org was created on or around May 16. That petition has collected 729 signatures to date.

\*WGNA conducted its own non-scientific survey in June that aimed to gauge the overall pulse of the community on this issue. That survey netted 1,131 respondents, with 50.39% in support of making the road diet permanent and 45.09% opposing such, with the remaining respondents having no opinion. Those survey results can be found here:

http://www.wgna.net/road\_diet\_survey\_results

- \*As of June 18, the total number of emails (for/against/concerns/questions) received by the Road Diet Working Group via the email address <a href="mailto:lincohroaddiet@gmail.com">lincohroaddiet@gmail.com</a> resulted in the following feedback: 282 emails clearly in support, 206 emails clearly opposed, 144 undecided/had concerns, 35 suggestions, 20 questions.
- \*WGNA Board Members have participated in all three community meetings on the Road Diet Trial in November 2014, February 2015, and June 2015 each of them attended by 150-300 people. At these meetings, we were able to hear hundreds of comments and gather further feedback from our neighbors.
- \*Additionally, the City of San Jose's **final traffic report** on the Road Diet Trial showed no significant, widespread evidence of safety decreasing on Lincoln Avenue or on our neighborhood streets. We will note however that there are ongoing areas of concern involving vehicle traffic and/or speeds on Bird, Hicks, and Glen Eyrie, which we hope will be addressed by the City of San Jose in the near future.
- \* On June 23, the Board of Directors of the Willow Glen Business Association voted 10-4 against supporting the Road Diet Trial. While we do not take their position lightly, we have collectively observed a vibrant Lincoln Avenue that is bustling with people on a daily basis, and we are also aware that many businesses on and along Lincoln Avenue are in strong support of the Road Diet Trial. We believe that making Lincoln Avenue safer and more livable will have a long-term positive impact on local business in our community.

Finally, we would like to clarify our ability to take a position on divisive issues pursuant to our bylaws. To better understand the intent of our bylaws, we have reached out to many current and former board members and former Presidents of WGNA. It has become clear that the intent of this language was to prevent issues outside the acope of our neighborhood from polarizing our membership and weakening our ability to represent our neighborhood. Given that we are a neighborhood association focused solely on local issues and given that there is plenty of precedent, we believe it is appropriate, and even our duty, to collectively take a position on the Road Diet Trial.

The data that we have in front of us is clear, and the increased feeling of safety on Lincoln Avenue is clear. We urge the City of San Jose to make the Road Diet Trial permanent.

Thank you.

ChrRt

Chris Roth

President, Willow Glen Neighborhood Association

cc: Mayor Sam Liccardo & Members of the San Jose City Council

## ATTACHMENT K Letter from Working Group

#### VIA E-MAIL

July 14, 2015

Councilmember Pierluigi Oliverio, District 6 Jim Ortbal, Interim Director, DOT, City of San Jose

RE: Road Diet Working Group Request to Continue the Test

Dear Councilmember Oliverio and Director Ortbal:

As you both know, the Road Diet Working Group (RDWG), composed of nine volunteers from the Willow Glen business, residential and school communities, was formed as an impartial body in late 2014 to serve as the "conduit" between the San Jose Department of Transportation (DOT) and the businesses and residents of Willow Glen by collecting feedback and suggesting modifications concerning the road diet test for Lincoln Avenue.

Pursuant to DOT guidance, decisions made by the Willow Glen Business Association (WGBA) and the Willow Glen Neighborhood Association (WGNA) would determine if DOT would recommend permanent installation of the road diet. In other words, if either entity decided against the road diet, DOT would not recommend its implementation to the San Jose City Council. However, that guidance also noted the importance for both entities to consider the "big picture" and not just how it affected businesses or residents, but the long-term benefits and impacts to the entire Willow Glen (and larger San Jose) community.

Throughout the whole evaluation process, the RDWG and DOT have had an excellent working relationship and we were both effective and timely in responding to the community's input. We are very thankful for DOT's efforts to:

- Move the red zone northbound on Lincoln Avenue to the eastern corner at Willow Street to allow for better traffic flow for those making right hand turns onto eastbound Willow.
- Improve signage and lane dividers on Lincoln Avenue between Wells Fargo and Bank of America.
- Improve signage and lanes northbound on Lincoln Avenue at Minnesota within the first few days of the trial.

On June 23, 2015, WGBA voted against the road diet and we determined that our job was completed; however, after considering the importance of this test for Willow Glen, we, as individuals, feel WGBA's decision was premature and narrowly focused considering that they only responded to vociferous, negative input from a handful of businesses - in fact only 32% of 422 businesses responded pro or con to the WGBA mailed survey. Additionally, we don't feel the road diet test was given enough time considering the number of further "fixes" we suggested that were unable to be implemented by DOT owing to the insufficient length of the test period and budget issues (some of which we understand have now been alleviated somewhat).

As individuals, we continue to receive feedback from businesses and residents who are in favor of the road diet, urging us to petition the DOT and Council to push for more time to do this test right. Therefore, we respectfully request that the road diet test time-frame be extended to allow for implementation of the following improvements:

- Install signal timing/phasing and dedicated turn signal improvements at Lincoln and Willow, both northbound and southbound directions (now in the budget).
- Approve the driveway reconfiguration proposed on the properties along the southwest corner of Willow and Lincoln, allowing an additional exit next to Unleashed/Petco (currently an entrance from Lincoln).
- Allow for a "Keep Clear" painted section at the Willow exit at 1122 Willow Street, which
  could potentially allow for left/ right turns onto Willow Street.
- Remove a left turn lane northbound Lincoln at Minnesota to create space for the school, bikers, and buses and for those turning southbound onto Lincoln from eastbound Minnesota.
- Add signage prohibiting right turns at certain hours southbound from Lincoln Avenue onto Glen Eyrie, Lester and/or Garfield
- Install "Keep Clear" signage painted on northbound Lincoln Avenue immediately adjacent to the entrance to the Willow Glen Town Square (between Crepevine and Jamba Juice)
- Add "parking tips" to better utilize spaces along Lincoln Avenue for more efficient ingress/egress and traffic flow

City Staff and RDWG members put hundreds of hours into the road diet test and we feel strongly that more time is required to fine-tune the configuration. However, since the RDWG has completed its original "charter", eight of the nine members are more than willing to do whatever we can to assist DOT in taking the above measures and others that DOT might recommend.

The conversation about Lincoln Avenue safety and lanes has gone on for decades; we need more time so we don't shortchange our first and best opportunity to find some answers.

Thank you for your consideration. We look forward to hearing from you.

Sincerely,

Peter Allen, Resident, Treasurer, WGNA
Bill Cardoza, Resident
Stacey Houghton, Business owner
Jim Lightbody, Resident
Eric Nelson, Business owner and Resident
Chris Roth, Resident, President, WGNA
Maren Sederquist, Resident, President, Willow Glen Elementary PTA
Tom Trudell, ex-RDWG Chair, ex-WGBA Board Member

cc: Mayor Sam Liccardo and Members of the San Jose City Council

### ATTACHMENT L Letter from Willow Glen Elementary School PTA



#### WILLOW GLEN ELEMENTARY PTA

August 2, 2015

Sam Liccardo Mayor of San Jose

Pierluigi Oliverio
District 6 Councilmember
City of San Jose

Jim Ortbal Interim Director of Transportation City of San Jose

Dear Mayor Liccardo, Councilmember Oliverio and Mr. Ortbal,

Willow Glen Elementary PTA would like to express our formal position for the Road Diet on Lincoln Avenue:

- 1. We support the idea of a Road Diet for Lincoln Avenue, because fewer lanes of traffic and slower speeds, as well as the addition of bike lanes, will be calmer and safer for all of our students and their families.
- 2. We appeal to the City of San Jose to delay resurfacing Lincoln Avenue by an additional year, to allow for a longer trial of the Road Diet.
- 3. We ask that the DOT continue working with the WGE community and the larger community of Willow Glen to make improvements to the Road Diet to try to satisfy the needs of the entire community.

We are deeply appreciative of your responsiveness to our requests, and hope that you will continue to work with us to ensure the safety of the students at Willow Glen Elementary.

Sincerely,

Maren Sederquist

WGE PTA President Emeritus maren@wgepta.org

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### ATTACHMENT M Letter from SPUR



San Francisco | San Jose | Oakland

August 14, 2015

Hon. Sam Liccardo Mayor City of San Jose 200 E. Santa Clara St. San Jose, CA 95113

Councilmember Pierluigi Oliverio District 6 City of San Jose 200 E. Santa Clara St. San Jose, CA 95113

Re: Letter in Support of the Lincoln Avenue Road Diet

Dear Mayor Liccardo and Councilmember Oliverio,

Street design is an important element of creating a walkable, people-oriented place. We applaud the efforts made to date in San Jose to design an urban transportation system that works well for walking, biking, and transit. We support the Lincoln Avenue Road Diet because we believe it furthers San Jose's stated policy goals towards creating a city designed for people. Making the new street configuration permanent demonstrates San Jose's commitment to creating and sustaining the distinctive neighborhood centers —like Willow Glen—that make San Jose walkable and livable.

In recent years, San Jose has adopted numerous sustainable transportation policies. The *Envision 2040* General Plan includes robust mode-shift goals that decrease driving alone, from 80% to 40%, by increasing walking, bicycling and transit use. The General Plan also transitions to a more urban form by implementing Urban Villages, which are envisioned as higher-density, mixed use urban districts that promote transit use and walkable neighborhoods. The San Jose Bike Plan 2020 identifies streets, including Lincoln Avenue, that comprise a cornetwork of connections near downtown, strengthening the fabric of central San Jose. Most recently, San Jose adopted Vision Zero, a commitment to making San Jose's streets safer for all users.

The Department of Transportation collected information from 45 locations on Lincoln Avenue and nearby streets to monitor the impact of the pilot. The results indicated that there were lower traffic speeds overall and fewer cars traveling at 10+mph above speed limit. However, we understand that there are lingering concerns about the diversion of high speed vehicle travel onto other streets. Where increases in speed did occur, they occurred primarily on major roads. The results of the study also found that there were minor travel delays during the morning and

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evening commute times—particularly the evening southbound commutes. We believe that, with appropriate signal modifications, these delays may be substantially reduced.

While we understand the concerns about the road diet trial, we do believe that the overall benefits of implementing a road diet outweigh the adjustments that are required in the short-term. Streetscape improvements like the Lincoln Avenue road diet are a means to achieving San Jose's stated goals because they re-allocate street space to encourage mode shift and minimize conflicts for walkers, cyclists, transit vehicles and motorists. In addition to providing circulation space, streets (which we define as the roadway and the sidewalks) are important public and civic spaces. In the right locations, allocating more space to these functions can support local businesses and create or strengthen memorable places. So-called "4-3 conversion" road diets of the kind being piloted for Lincoln Avenue are a commonplace, well-researched and proven solution nationwide. What follows is a list of the benefits of road diets and a number of examples.

- Road diets can support and sustain thriving neighborhood business districts like Lincoln Avenue in Willow Glen. One of the most well-known examples of how complete streets can support thriving local business districts is on Castro Street in Mountain View. In the 1980s, Castro Street was put on a road diet with the goal of revitalizing downtown Mountain View. The road diet narrowed the street from a four through-lane road to two lanes plus a center turning lane with parallel parking and wider sidewalks. Today, Castro Street is a thriving, walkable district with a healthy mix of retail and restaurants.
- Businesses can benefit from streetscape improvements. Several studies have found that streetscape improvements, including bike lanes and vehicle lane reductions, can have positive economic impacts on local business sales tax receipts. A study of eight streets in San Francisco found that, two years after construction, businesses on reconfigured streets had tax revenues 4.4-6.3 percentage points higher than those that had not been improved. Similarly, New York City's Department of Transportation found that all four reconfigured street corridors that it studied saw an increase in sales tax revenue and outperformed most nearby comparison streets. These studies show that better-designed streets can have positive economic benefits for businesses, albeit over time.
- Road diets support walkable, livable communities. Walkability is an excellent shorthand for good urban design. For a city to encourage walking, it must have a dense mixture of uses, open space and streets, all designed for people. Long Beach, California has implemented a number of road diets on its streets under the direction of

<sup>&</sup>lt;sup>1</sup> Latterman, David C. and Jesse Anttila-Hughes. 2014. Using retail tax revenue data and other business metrics to determine the effect of streetscape improvements on business and business corridors in San Francisco.

New York City Department of Transportation. 2013. The Economic Benefits of Sustainable Streets. http://www.nyc.gov/html/doi/downloads/pdf/dot-economic-benefits-of-sustainable-streets.pdf

the city's Livable Communities agenda, which has broad support from the city's elected officials. This agenda emphasizes the role of placemaking and walkability in attracting employers and workers, and the importance of pedestrian infrastructure in achieving them.

- Road diets improve safety for pedestrians. The proportion of pedestrians that can survive a vehicle collision drastically increases when vehicle speeds are reduced.
   Narrower lanes help to slow traffic, creating safer speeds for pedestrians. For example, a road diet in Vancouver, Washington helped reduce the number of pedestrian collisions from six to zero collisions per year.<sup>3</sup>
- Road diets improve safety for drivers. According to the Federal Highway Administration and the National Association of City Transportation Officials, fourlane configurations have been shown to increase rear-end, blind-side left turn, and sideswipe vehicle crashes. Busy main streets can have frequent turns and people entering and exiting parking spaces. Several case studies illustrate the positive effects of road diets on driver safety. A road diet in Santa Monica, California resulted in a 65% reduction in collisions. A 2010 FHWA study found that road diet measures reduced vehicle collisions by about 25% in five Bay Area cities and Sacramento.<sup>4</sup>
- Road diets can improve traffic. Road diets can improve traffic flow by reducing
  conflicts between vehicles. On many four-lane roads, the left lane does double-duty as
  a through-lane and left-turn lane. This means that through traffic cannot move when a
  left-car is waiting to turn left safely. A road configuration with turning lanes and
  pockets channel turning vehicles out of through-lanes, which allows for through traffic
  to flow.
- Roads diets are a smart use of transportation dollars. It is inefficient to build systems for the peak auto demand, which may be only a few hours per week. Designing roads for peak vehicle demand can lead to overbuilt streets, which can be expensive to construct and maintain, and degrade the pedestrian environment. Building for the peak can also induce demand; this is why widening roads so often leads to more driving and, consequently, more traffic. Instead, it is more efficient to build roads that offer comfortable and convenient options for walking, cycling and transit use. When more people can safely choose other modes, this takes cars off the road and reffectively reduces traffic.

San Jose should be designing streets for all travel modes while creating places that support thriving neighborhoods. That's the type of complete transportation system that will support a more urban, livable central San Jose. We support making the Lincoln Avenue Road Diet

Federal Highway Administration. 2015. Road Diet Case Studies. http://safety.fhwa.dot.gov/road\_diets/case\_studies/roaddlet\_cs.pdf

<sup>&</sup>lt;sup>3</sup> Jennifer Rosales. Road Diet Handbook: Setting Trends for Livable Streets. Parsons Brinckerhoff. http://www.seattle.gov/fransportation/docs/nickerson/Road Diet Rosales Overview.pdf

permanent coupled with signal modifications. We encourage the Department of Transportation to monitor the effects of those modifications on travel times and traffic volume. If the Road Diet cannot be made permanent at this time, we strongly recommend that the road diet pilot be extended for a period of 2-3 years with signal modifications. We also recommend monitoring the impacts of the road diet on neighboring streets and on businesses.

Sincerely,

Laura Tolkoff San Jose Policy Director

Cc: Jim Ortbal, SJDOT

### ATTACHMENT N Letter from Bicycle Pedestrian Advisory Committee



#### BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

#### 09/21/2015

To: Honorable Mayor Sam Liccardo and City Council

cc: Interim Director of Transportation Jim Ortbal

Re: Lincoln Avenue Road Diet trial

In keeping with City of San Jose Bicycle and Pedestrian Advisory Committee (SJ BPAC) Bylaws, the status of the Lincoln Avenue Road Diet trial was brought to our attention in August and was included on the published agenda for discussion at our public meeting 8/10/2015. Per our bylaws, our duties include:

- --To help shape policies and procedures that govern bicycle and pedestrian facility planning, design, access, use, and enforcement.
- --To promote bicycle and pedestrian safety education for cyclists, pedestrians, and drivers, and to encourage the safe use of shared facilities.

SJ BPAC advocates that retaining the dramatic safety and livability elements of the Lincoln Avenue Road Diet trial are important steps toward achieving Vision Zero San Jose, General Plan Mode Shift, and Bike Plan 2020 goals of increasing active transportation rates and decreasing collisions and deaths. We urge the City of San Jose to move forward to improve on the progress that this effort has demonstrated.

Many SJ BPAC members have driven, walked and biked in Downtown Willow Glen before and after implementation of the Road Diet. Prior to the trial, the 4 lanes of Lincoln Avenue often put bicyclists and pedestrians into conflict on congested sidewalks, and made it hard to see if all lanes were going to stop at crosswalks. Subsequently, 3 lanes of traffic have made it much safer for those in cars to parallel park and turn left in and out of driveways, for those walking to cross the street, and for all users to interact more smoothly and safely. Downtown Willow Glen has become more livable and family friendly, with children now riding with parents in the bike lanes, as promoted by the City's bicycle facility goal of access for 8 to 80 year olds. Overall, shopping has become calmer and more pleasurable.

SJ BPAC is dismayed that this effort was presented as an either/or trial. We urge all involved in this highly charged atmosphere to collaboratively determine what further changes will improve automobile access to and from business destinations, without sacrificing all the progress that has been achieved in safety and livability.

#### Richard B Coolman

Chairperson, City of San Jose Bicycle and Pedestrian Advisory Committee (SJ BPAC)