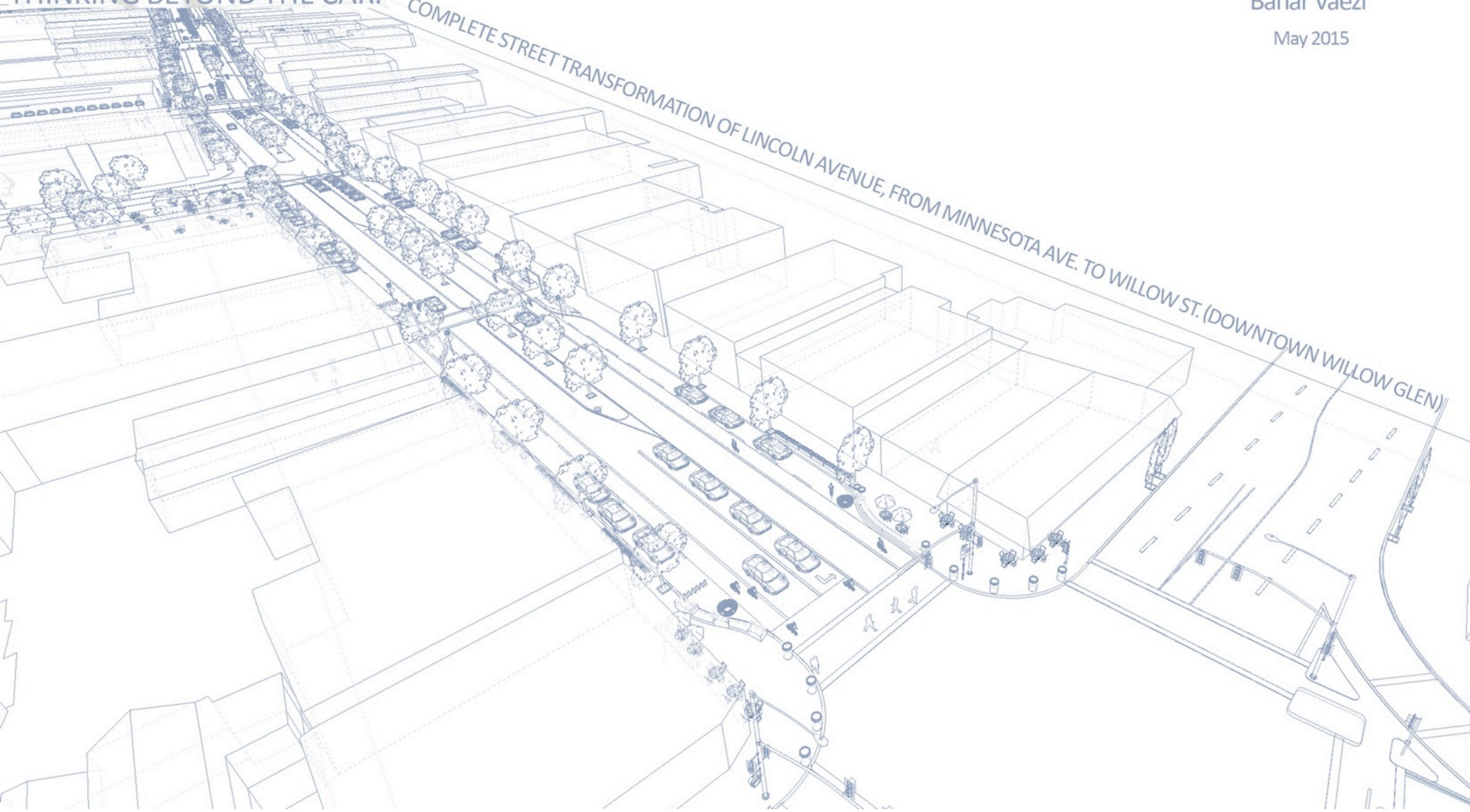
THINKING BEYOND THE CAR:

COMPLETE STREET TRANSFORMATION OF LINCOLN AVENUE, FROM MINNESOTA AVE. TO WILLOW ST. (DOWNTOWN WILLOW GLEN)

Bahar Vaezi

May 2015



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Thinking Beyond the Car:

A Complete Street Transformation of Lincoln Avenue, from Minnesota Ave. to Willow St. (Downtown Willow Glen)

A Planning Report Presented to the Faculty of the Department of

Urban and Regional Planning

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Master of Urban Planning

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List of Figures and Tables

Note: Cover design, tables and figures that do not have sources are created or taken by the author.

Chapter 1

INTRODUCTION TO THE RESEARCH

Chapter 1- Introduction To The Research

1.1 PROJECT OVERVIEW

This Study looks at redesigning Lincoln Avenue in the Downtown Willow Glen neighborhood of San Jose using complete street principles to enhance the mobility for all users and to create a convenient, safe, and aesthetically pleasing commercial corridor. More specifically, the purpose of this report is to contribute toward improving the quality and functionality of Lincoln Avenue by offering many benefits to the Willow Glen neighborhood through encouraging a multi-modal transportation system.

1.2 CONTEXT AND STUDY AREA

Willow Glen was a small town before 1936, when it joined the City of San Jose by passing a vote of 871 out of 978. Downtown Willow Glen now straddles Lincoln Ave. (from Minnesota Ave. to Willow St.), which was originally, called "El Abra," [1] and this historic downtown area forms a unique part of San Jose. It is a busy commercial center that is framed by manicured, old, low-density buildings and small parks that serve the Willow Glen Neighborhood.

Lincoln Avenue currently has two lanes in each direction from Minnesota Ave. to Willow St., and it does not include any exclusive bike paths. The principal goal of redesigning Lincoln Avenue using complete street principles would be to transform Downtown Willow Glen into a pleasant and safe corridor that would be convenient for pedestrians, cyclists, and public transit riders alike. A multimodal transportation network would potentiate a more equitable balance with the automobile traffic and use streetscaping to create attractive and enjoyable community spaces.

1 Willowglen.org Contributors, "Willow Glen History," Willow Glen, http://www.willowglen.com/History (accessed September 6, 2014).

In downtown Willow Glen, the main objective is to transform Lincoln Avenue based on complete street principles in order to emphasize expansion of convenient and safe mobility for non-motorized users. On the other hand, it is important to provide adequate automobile travel lanes and intersections to ease motorized movement and increase drivers' safety. Therefore, the design for downtown Willow Glen should consider implementing a multimodal transportation network. A multimodal transportation network refers to providing a mobility system that offers connectivity among all modes of transportations, including walking, bicycling, automobiles, and transit. Multimodal transportation offers a network of feasible alternative transportation options that are important spatially and socially; because it promotes more social interaction, it enhances economic performance, and encourages a healthy and pleasantly built environment. Because different communities have asked for streets that are safe for all users to help create a multimodal transportation network, "complete street" policies have become very common across the United States for redesigning and reconfiguring streets based on the community's priorities. The *National Complete Street Coalition* has defined a complete street as follows:

> Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations. [2]

The most important and initial step toward having a multimodal transportation network and a complete street is to provide space for mobility infrastructure for pedestrians, bicyclists, transit users, and drivers. Since Lincoln Avenue is currently sixty feet wide, it provides 4 travel lanes and 2 parking lanes in both directions, and it does not have any exclusive bike infrastructure. Consequently, the first step toward becoming a multimodal transportation path is a "Road Diet" or "Lane Reduction" that provides space for having dedicated bike lanes and an exclusive left turn lane by repurposing travel lanes. Because it is crucial to know how a road diet would affect Lincoln Avenue's operation and safety, this report's main concern is how feasible a "Road Diet" would be

2 National Complete Streets Coalition, "What are Complete Streets?" Smart Growth America, http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/complete-streets-faq (accessed September 17, 2014).

on Lincoln Avenue from Minnesota Avenue to Willow Street based on literature review and context characteristics.

1.3 OVERVIEW OF THE REPORT AND METHODOLOGY

This report, by explaining and visualizing what a "Road Diet" might offer to both motorized and non-motorized users, provides a clear image of the potential benefits that it would offer to downtown Willow Glen. To identify whether or not lane reduction would be feasible for Lincoln Avenue, a literature review is performed to explain the effects of road diet on various case studies in terms of road operation and safety. Then Lincoln Avenue's existing traffic operation for all users is explained. The current land use and mobility characteristics of downtown Willow Glen are compared with what the literature review determines to be feasible for candidate roads for lane reduction. Since road diet implementation can be done in different ways, one example of repurposing the travel lanes has been visualized to give the audience an image of how repurposing through road diet may change the appearance and functionality of downtown Willow Glen.

To clarify, the main objective of the report chapter two contains a "Road Diet" or "lane reduction" definition. This chapter describes how road diet implementation would affect roads functionality and safety according to the literature review. Chapter three contains information about street cross-section elements. Chapter four explains complete street policies, laws, and regulation that affect downtown Willow Glen. Chapter five provides explanation of existing land use, mobility infrastructure for all users, and traffic characteristics of downtown Willow Glen to guide its design to better serve all modes of transportation users. Chapter six contains community opinions about redesigning Lincoln Avenue and discusses why downtown Willow Glen should be redesigned based on complete street principles. Chapter seven contains illustrations of transformed Lincoln Avenue based on complete street principles. Finally, chapter eight contains a conclusion and recommendations.

Chapter 2

WHAT IS A ROAD DIET?

CHAPTER 2 - WHAT IS A ROAD DIET?

This chapter contains definitions of "Road Diet" or "Lane Reduction" to clarify the main objective of the report, and it also provides information about the feasibility of road diet in terms of traffic operation and safety by reviewing the pertinent literature. Moreover, this chapter includes explanation of possible cross-section elements of a repurposed travel lane road and their impact on safety and functionality of the road, respectively.

2.1 ROAD DIET DEFINITION

"Road Diet" or "Lane Reduction" is largely defined as "removing travel lanes from a roadway and utilizing the space for other uses and travel modes." [3] Road configuration may happen in different forms, but the most common reconfiguration through road diet principles is repurposing two travel lanes of a four-lane undivided roadway to one center exclusive left-turn lane and dedicated bicycle lanes. These changes facilitate movement for all modes of transportation creating a better multimodal transportation network and a complete street. The lane reduction also provides space for adding other traffic calming features such as medians and pedestrian refuge islands to enhance safety of the road. Different case studies around the United States show road diets have the potential to improve road functionality, safety, comfort, and accessibility.

2.2 THE IMPACT OF ROAD DIET ON ROAD OPERATION

To learn more about the impact of road diet on road operation different case studies in various literatures were reviewed. Fourteen different studies that contain thirty-five case studies from 1979 to 2014 in the United States were selected. (See Appendix A for before and after Road Diet impact on road operation in different case studies) They evaluated road diet implementation by comparing specific factors before and after lane reduction. Following is the summary of literature review:

[3] Jennifer Rosales, "*Road Diet Handbook: Setting Trends for Livable Streets*," Institute of Transportation Engineers (Washington, DC: Parsons Brinkerhoff, 2006).

- Both road diet evolution methods include before and after treatment comparisons, and model simulation emphasized that the feasibility of road treatment for candidate roads varies case-by case.
- Candidate roads would be expected to experience an insignificant increase in traffic volume and delay and a remarkable decrease in 85th percentile speed and crash rate.
- The literature review for twenty-two of twenty-eight case studies shows average daily traffic maintained or experienced a modest increase (less than 2 %).
- Regarding the impact of lane reduction on automobile speed, before and after documented data for speed shows a modest reduction in speed for all case studies, and 85th percentile speed lessened by an average of 1 to 3 miles per hour.
- The literature also documented percentages of vehicles that travel at excessive speeds—the number of motor vehicles that travel above posted speed limits—reduced by an average of 50%.
- It is common to see an increase in queue length after lane reduction, because road capacity is essentially reduced by half in road diet treatment.
- Longer queue consequently would increase travel time on the converted road, and it may divert the traffic off the converted road to parallel streets.
- To ensure the diversion would not happen, additional traffic calming features might need to be implemented in the neighborhood.[4]
- The three studies that used VISSIM for model simulation found the lane reduction treatment may increase Average Daily Traffic, decrease average speed, and increase delay, but the overall impact on street Level of Service is insignificant.
- Review of literature indicates implementing road diet in roads with high demand for left-turn would be feasible since it would not significantly increase queue length. [5]

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[4] City of Orlando Transportation Planning Bureau, "Edgewater Drive Before and After Re-Stripping Results," (2002), http://www.smartgrowthamerica.org/documents/cs/impl/fl-orlando-edgewater.pdf (accessed November 24, 2014).

[5] Nikiforos Stamatiadis, "Road-Diet Conversions: Where and When," 2014; Keith K. Knapp and Karen Giese, "Guideline for the Conversion of Urban four-lane undivided roadways to Three-lane two-way Left Lane Facilities," The Iowa

2.3 THE IMPACT OF ROAD DIET ON TRAFFIC SAFETY

Since the initial objective of complete streets is to have safer streets and built environments, many much of the literature evaluated traffic safety after road diet implementation. Different studies had different approaches, but generally they looked at before and after road diet treatment number of collisions, severity of crashes, or collision types. There are a few studies that also specified the impact of a specific complete street design element such as raised medians and curbs on traffic and pedestrian safety. (See Appendix B for before and after crash data in different case studies) Summary of impact of road diet on road safety based on literature review is as follows:

- Crash rate reduced by an average of 38% after the road conversion in different case studies, and this reduction largely proves that road diet has a positive impact on reducing crash rate.
- The study of the impact of lane reduction on traffic safety in California and Washington demonstrates crash frequencies after the conversion were approximately six percent lower; crash severity maintained, and there was not any significant change in crash type.[6]
- The main reason for a decreasing number of collisions after a road diet treatment is declining 85Th percentile speed.
- Reynolds et al reviewed thirty-eight studies to identify the effect of biking infrastructure on road safety that show biking infrastructure effects injury and crash risk considerably, so since road diet implementation generally includes enhancing biking facilities, it would provide safer sidewalks for pedestrians and avoid conflicts both on streets and intersections.[7]

Department of Transportation's Office of Traffic and Safety, 2001; and Keith Knapp and Jennifer A. Rosales, "Four –Lane to Three-Lane Conversions: An Update and a Case Study," 3rd Urban Street Symposium, 2007.

[6] H. Huang, J. Stewart, and C. Zegeer, "Summary Report: Evaluation of Lane Reduction and Their Effects on Crashes and Injuries," U.S. Department of Transportation: Federal Highway Administration (2004), http://www.tfhrc. gov/ (accessed November 24, 2014); Herman F. Huang, J. Richard Stewart, Charles V. Zegeer, and Carol H. Tan Esse, "How much do your lose when your road goes on a diet?" Submitted to the Urban Street Symposium, 2003.

7 Conor CO Reynolds, M Anne Harris, Kay Teschke, Peter A Cripton and Meghan Winters, "The impact of transportation infrastructure on bicycling injuries and crashes: a review of the literature," Environmental Health, 2009.

- Complete street design components such as "raised medians," "careful placement of bus stops," "curb medians," and "bike infrastructure, " would significantly reduce the number of pedestrian involved collisions [8] because "signals, curbs, median, redesigned intersections, and striping patterns work together to manage driver behavior."[9]

2.4 CONCLUSION

After implementing the road diet on Lincoln Ave., there may be a slight increase in queue and delay, such that adding an exclusive left turn lane would lesson the impact. On Lincoln Ave., reducing the number of lanes for motor vehicles would provide pedestrians and cyclists shorter cross width, which makes it easier and safer to cross the street and to some degree reduces the vehicle confliction. By adding an exclusive bike lane, bike and pedestrian travel would be safer specifically because the bike lane would play the role of a buffer between pedestrians and drivers. Furthermore, the corridor may experience lower 85th percentile speed, and accordingly, the number of collisions would decrease.

8 B.J. Campbell, Charles V. Zegeer, Herman H. Huang, and Michael J. Cynecki, "A Review of Pedestrian Safety Research in the United States and Abroad," Federal Highway Administration Publication # FHWA-RD-03-042, 2004.
9 M. King, J. Carnegie& R. Ewing, "Pedestrian Safety Through a Raised Median and Redesigned Intersections," Transportation Research Board 1828 (2003): 56-66 (2003), http://nacto.org/docs/usdg/pedestrian_safety_through_raised_median_redesigned_intersections_king.pdf (accessed November 17, 2014).

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Chapter 3

STREET CROSS-SECTION ELEMENTS

Chapter 3-Road Diet Elements

According to the *San José Downtown Streetscape Master Plan*, "The cross-section of a roadway is the view obtained in a section between the right-of-way lines cut perpendicular to the direction of travel along the road." [10] The cross-section of a repurposed travel lane road includes the following elements:

- Sidewalk
- Bicycle Facilities
- On-street Parking Lane
- Travel Lane
- Left Turn Lane
- Midblock crosswalks
- Medians
- Pedestrian refuge islands
- Bus stops in the traveled way

3.1 SIDEWALK

The sidewalk is defined as any portion from a building line to the outside of the curb that includes four distinct zones: building setback zones, building zones, pedestrian through zones, and curb zone.[11] Sidewalk design must follow all applicable state, federal, and local laws and codes. This involves accessibility codes and regulations, the Americans with Disability Act, and Title 24 of the California Building Code.

[10] Fehr & Peers Associates, INC., "San Jose Downtown Streetscape Master Plan," The Redevelopment Agency of the City of San Jose, 2003, 20-25.
[11] Ibid.

The Curb Zone "is the portion of the sidewalk closest to the roadway." [12] It usually plays the role of a safety buffer by using different elements such as trees, plants, or other elements. Depending on the curb zone dimension, it may be an appropriate space for locating benches, bike racks, bus shelters, café seating, signage, fire hydrants, kiosks, news racks, parking meters, lighting, plants, trees, traffic signal poles, and trash cans. According to the *San José Downtown Streetscape Master Plan*, "the minimum curb zone dimension for the placement of street elements is 4' from back of curb, and the maximum curb zone dimension for pedestrian-oriented streets is 5'."[13]

The pedestrian through zone "is the portion of the sidewalk dedicated to pedestrian movement and must be kept clear of all encroachment at all times as per the requirements of the Americans with disabilities Act." The minimum pedestrian through zone dimension is 5'."[14]

The building zone "is the portion of the sidewalk adjacent to the property line. Streetscape and elements relating to adjacent activities may be placed in this portion of the sidewalks." [15] It is the preferred place for locating awnings, benches, café seating, plants, and buildings signs. According to the *San José Downtown Streetscape Master Plan* "building zone elements are permitted on the sidewalk as long as a minimum 5' pedestrian through zone and 4' curb zone (5' for pedestrian oriented streets) is maintained." [16] In other words, the building zone is only permitted in sidewalks wider than 9'. The only exception is for awnings, which can be available over a narrow sidewalk, but they must have a minimum of 8' vertical clearance at all times. [17]

The building setback zone is the private area, if any, between the public right-of-way and the adjacent buildings. While setbacks are private property, they are fundamentally related to the street and, where present, "must be appropriately designed to support the quality of pedestrian

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[12] Fehr & Peers Associates, INC., "San Jose Downtown Streetscape Master Plan," The Redevelopment Agency of the City of San Jose, 2003, 20-25.
[13] Ibid.
[14] Ibid.
[15] Ibid.
[16] Ibid.
[17] Ibid.

environment." This is the preferred place for locating benches, building lights, pedestrian-scale lights, open space plazas, plants, trees, sitting areas, and vending kiosks. [18]

In sum, the sidewalk dimensions would allow for an appropriately convenient walking space that offers a "continuous network, connected with crosswalks and separated from traffic with a buffer."[19] In *San José Downtown Streetscape Master Plan* has been mentioned " the minimum side walk width of 12' with a minimum 5' pedestrian through zone" is appropriate for pedestrian oriented streets. The sidewalk also should be wide enough to offer "café tables," "sidewalk vendors," and "benches." [20]

3.2 BICYCLE FACILITIES

Studies show that "fear of bicycling" plays a crucial role in how people make choices regarding urban travel. The fear of bicycling stems from a lack of "designated bicycle facilities." People prefer "lower-volume streets and separated bikeways over on-street bicycle lanes."[21] "Bicycle facilities should encompass a system of interconnected routes, paths and on-street bicycle lanes that provide for safe and efficient bicycle travel. The width of the street and the speed and volume of adjacent traffic are the most critical factors in providing safe bicycle lanes. If adequate facilities cannot be provided, then the safety of both the bicyclist and driver is compromised." [22] *City of San José Geometric Design Guideline* contains detail guideline for designing bicycle infrastructure that is summarized in Figure 3. 1.

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[18] Fehr & Peers Associates, INC., "San Jose Downtown Streetscape Master Plan," The Redevelopment Agency of the City of San Jose, 2003, 20-25.

[19] North Carolina Department of transportation, "Complete Streets Planning and Design Guidelines," 2012, 42.

[20] Fehr & Peers Associates, INC., "San Jose Downtown Streetscape Master Plan," The Redevelopment Agency of the City of San Jose, 2003, 20-25

[21] Robert James Schneider, "Understanding Sustainable Transportation Choices: Shifting Routine Automobile Travel to Walking and Bicycling," UC Berkeley: City & Regional Planning, 2011, 44.

[22] Institute of Transportation Engineers, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach," Congress for New Urbanism, 2010, 141.

3.3 ON-STREET PARKING AND CONFIGURATION

Providing on-street parking specifically is critical for commercial corridors to support the local economic activity. On-street parking also increases the comfort for people on the sidewalk by offering a buffer between sidewalks and automobile travel lanes helping reduce vehicle splash and noise. Moreover, it helps for safer pedestrian crossing. One of the issues with on-street parking is its conflict with bicycle lanes: "The preferred width of a parallel on-street parking lane is eight feet wide on commercial thoroughfares (all types) or where there is an anticipated high turnover of parking, and seven feet wide on residential thoroughfares." [23] On-street parking is seen in three forms, including parallel parking, angled parking, and perpendicular parking. (See Table 3. 1)

Table 3. 1 Minimum Dimensions for Head-In Angled On-Street Parking

Angle	Stall Width	Stall Depth (Perpendicular to Curb)	Min. Width of Adjacent Lane	Curb Overhang
45°	8.5-9.0 feet	17 feet 8 inches	12 feet 8 inches	1 foot 9 inches
50°	8.5-9.0 feet	18 feet 3 inches	13 feet 3 inches	1 foot 11 inches
55°	8.5-9.0 feet	18 feet 8 inches	13 feet 8 inches	2 feet 1 inches
60°	8.5-9.0 feet	19 feet 0 inches	14 feet 6 inches	2 feet 2 inches
65°	8.5-9.0 feet	19 feet 2 inches	15 feet 5 inches	2 feet 3 inches
70°	8.5-9.0 feet	19 feet 3 inches	16 feet 6 inches	2 feet 4 inches
90°	8.5-9.0 feet	18 feet 0 inches	24 feet 0 inches	2 feet 6 inches

Source: Institute of Transportation Engineers, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach," Congress for New Urbanism, 2010, 141.

[23] Institute of Transportation Engineers, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach," Congress for New Urbanism, 2010, 147.

Figure 3. 1 Bicycle Geometric Design Guideline For City of San José

City of San Jose Geometric Design Guideline -2010

City Level

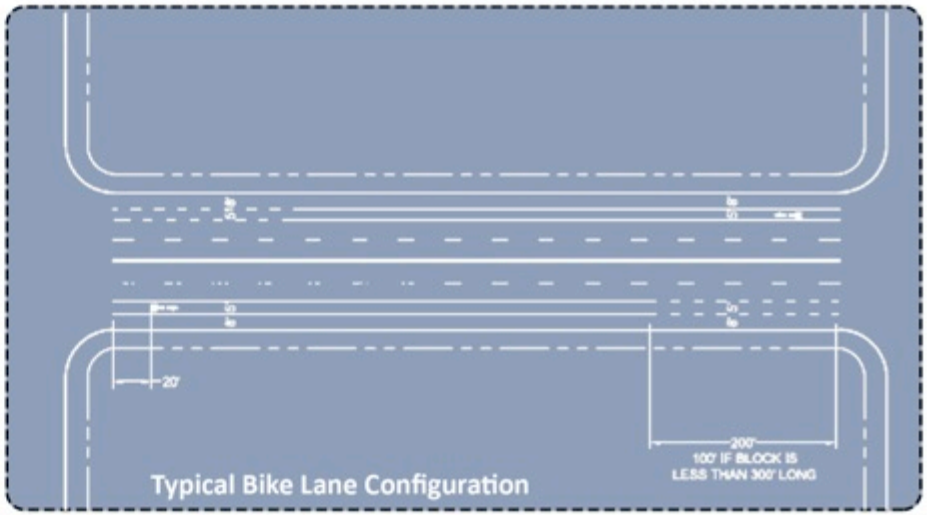
Signage

Bike lane symbol should be placed at 20-foot beyond curb return
City Standard Bike lane Symbol and Arrow shall be installed at beginning of all intersection breaks and at far side of all T-intersections and installed at 1/4 miles intervaled

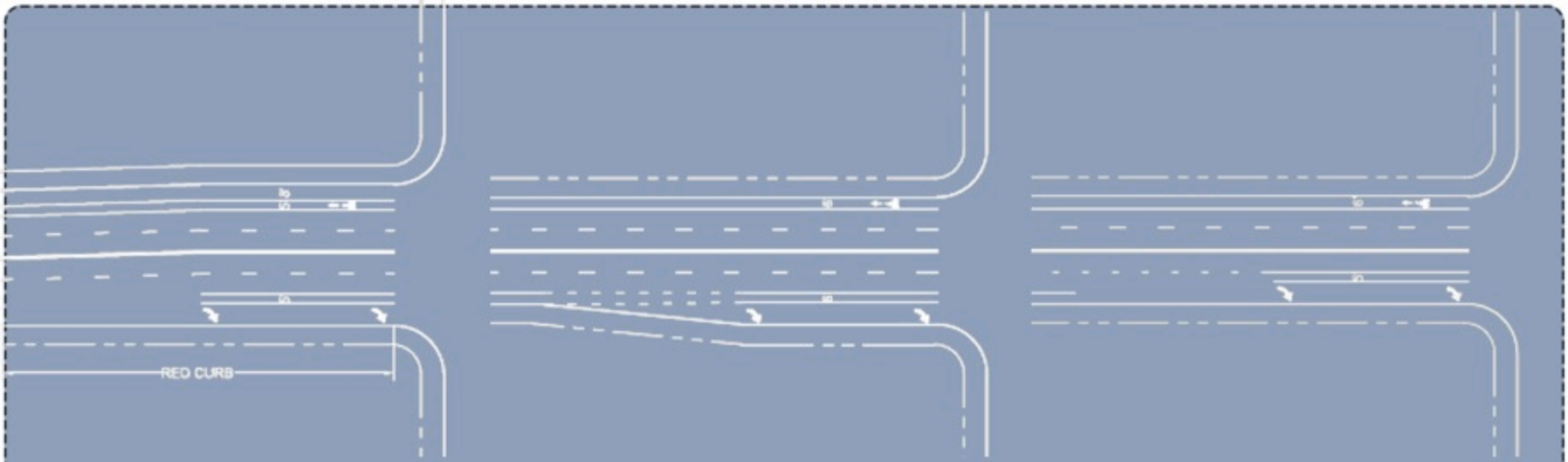
For Striping

The final 200-foot from end of return shall be detail 12 broken white
For Blocks less than 300' in lenght, final 100' should be detail broken white

Lane Width - feet		
Bike Lane	No Parking	5-6
	With Parking	5



Typical Bike Lane Configuration



Bike Lane With Parking into Right Turn Only Lane

Bike Lane Treatment at Right Turn only Lane

Right Lane Becomes Alright-Turn-only Lane

Source:City of San Jose Department of Transportation, "Geometric Design Guidelines," 2010.

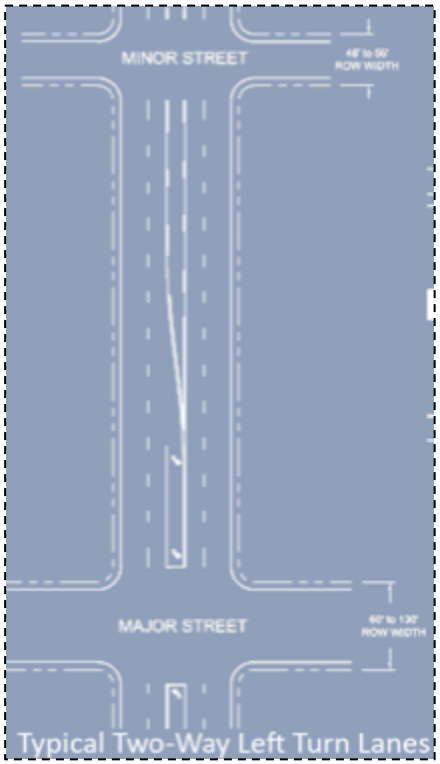
3.4 THROUGH LANE

Lane width is the most important factor for designing through lanes to "provide adequate space for safe lateral positioning of vehicles, on-street parking landscaped median, and bicycle lanes."[24] The *City of San José Geometric Design Guideline* for travel lanes is mentioned in Table 3.2.

Table 3. 2 Lane With Requirement For City of San José

Lane Width - feet		
Interior Lane	Next to Centreline	11
	Next to Curb Median	13
	Next to Painted Median	11
	One lane Next to Median Without Parking	20
	One Lane Next to Median With Parking	26
Curb Lane	No Parking With Bike Lane	16
	No Parking Without Bike Lane	14
	Part time Parking	12
	With Parking- Residential	17
	With Parking- Collector	20
Turn Lane	Left turn	10
	2-way left turn	12-16
	Left turn next to median island	11
	Double left turn lanes	10
	Right turn	12

Source:City of San Jose Department of Transportation, "Geometric Design Guidelines," 2010.



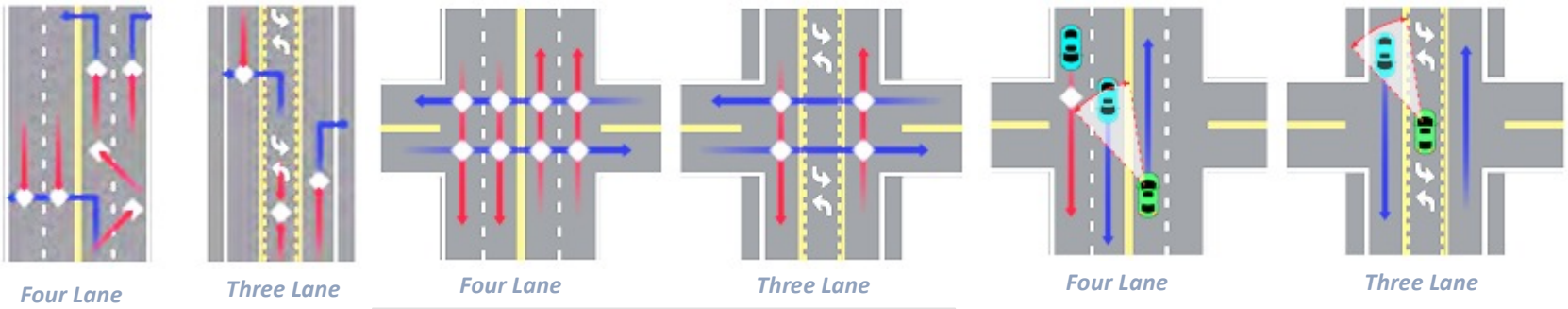
Typical Two-Way Left Turn Lanes

[24] Institute of Transportation Engineers, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach," Congress for New Urbanism, 2010, 134.

3.5 LEFT TURN LANE

As shown in Figure 3.2, adding exclusive center left-turn lanes can significantly improve safety by reducing conflict points related to turning movement. It also can reduce delay for through lane at signalized intersections: "The delays for left-turning vehicles, however, may increase because a similar through volume is now using one through lane rather than two." [25] Using appropriate traffic signal phasing can significantly reduce this delay. According to *City of San José Geometric Design Guideline* lane width for a 2-way left turn is 12-16 feet.

Figure 3. 2 Conflict Reduction after Road diet Treatment



Model 1	Model 2	Model 3
Mid-Block Conflict Points for Four-Lane Undivided Roadway and Three-Lane Cross Section (Adapted from Welch, 1999)	*Crossing and Through Traffic Conflict Points at Intersections for a Four-Lane Undivided Roadway and a Three-Lane Cross Section (Adapted from Welch, 1999)*	*Major-Street Left-Turn Sight Distance for Four-Lane Undivided Roadway and Three-Lane Cross Section (Adapted from Welch, 1999)*

Source: Keith Knapp, Brian Chandler, Jennifer Atkinson, Thomas Welch, Heather Rigdon, Richard Retting, Stacey Meekins, Eric Widstrand, and R.J. Porter, " Road Diet Informational Guide," Federal Highway Administration Office of Safety, Report No. FHWA-SA-14-028, 7-8.

[25] Keith Knapp, Brian Chandler, Jennifer Atkinson, Thomas Welch, Heather Rigdon, Richard Retting, Stacey Meekins, Eric Widstrand, and R.J. Porter, " Road Diet Informational Guide," Federal Highway Administration Office of Safety, Report No. FHWA-SA-14-028, 16.

3.6 MIDBLOCK CROSSWALKS

> Midblock crossings provide convenient locations for pedestrians to cross urban thoroughfares in areas with infrequent intersection crossings or where the nearest intersection crossing creates substantial out-of-direction travel. [26]

Designing this element is very critical for Lincoln Avenue because people frequently cross the road to commute between different destinations across the street. A proper midblock-crosswalk should be visible and marked, should have signals and detectors, should have warning signs of "AHEAD," and a "pedestrian warning sign with a downward diagonal arrow plaque" should be installed for both directions of traffic. Further, "Midblock crosswalks should be located at least 100 feet from the nearest side street or driveway so that drivers turning onto the major street have a chance to notice pedestrians and properly yield to pedestrians who are crossing the street." [27]

Principles for having mid crosswalks are as follows:

- Streets with an average daily traffic volume (ADT) of 12,000 vehicles per day or less
- Multilane streets carrying less than 15,000 ADT if a raised pedestrian refuge median is provided
- Operating speeds less than 40 mph
- A minimum pedestrian crossing volume of 25 pedestrians per hour for at least four hours of a typical day
- Adequate sight distance is available for pedestrians and motorists [28]

3.7 MEDIAN & PEDESTRIAN REFUGE ISLANDS

Medians, or the center portions of roads separate opposing directions of traffic. They are distinguishable from the travel lanes by raised curbs or painted pavement. The presence of medians can help manage access, accommodate left-turn or U-turn, provide safety, and promote

[26] Institute of Transportation Engineers, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach," Congress for New Urbanism, 2010, 150.
[27] Ibid., 152.
[28] Ibid., 153.

aesthetics. A median can operate and function not only as a safety element; it can provide a more pleasant environment for the road, if landscaped. Medians vary in width depending on available right of way and function.

According to the Institute of Transportation Engineers:

> Refuge islands provide pedestrians and bicyclists a refuge area within intersection and midblock crossings. While in walkable urban areas it is desirable that thoroughfares have short crossings, on wide thoroughfares, or where less mobile pedestrians need to cross, refuge islands provide a location for pedestrians or bicyclists to wait partially through their crossing. Refuge islands also break up crosswalks at complex multilane and multi-legged intersections into shorter and easier portions for pedestrians to cross. [29]

The presence of pedestrian refuge islands in mid-crosswalks is critical, since vehicle speed is higher than signalized intersections. Additionally, "Recommended dimensions for refuge islands are 6 feet wide by 8 feet long. In constrained situations this width can be reduced to 4 feet. Corral-style refuge islands may require additional space," and " some type of vertical element should be provided on the island, especially on the approach nose, to improve the island's visibility, but not obscure waiting pedestrians. Elements could include trees, bollards, landscape features, or signage. [30]

[29] Institute of Transportation Engineers, "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach," Congress for New Urbanism, 2010, 155.
[30] Ibid.

Chapter 4

COMPLETE STREET POLICIES

CHAPTER 4 - Complete Street Policies

The concept of complete street sounds simple, but to support the concept requires refinement and redefinition of policies. The policy should provide clarification for the community's vision for having a multimodal transportation network. It should explain the community's needs and determine a feasible procedure to implement the complete street concept. Basically, according to *Complete Street Coalition*, "strong written policies" are the fundamental stage for reconfiguring streets to offer safe and convenient movement for all users.[31] Complete street implementation not only should change the physical appearance and condition of the street, but also should assure that it would meet the need of all community members. Therefore, approaching complete street principles for a specific corridor can be attained through particular policies that must specifically be written for that context. "A policy can be successful if it considers and integrates the opinions and views of all groups, including stakeholders, transportation planners, and engineers, elected officials, transit agencies, public health department, and community members."[32] Various jurisdictions around the Unite States have adopted different types of complete street policies to approach the concept. Most of the jurisdictions adopted resolutions or ordinances, while the balance adopted specific type of policies, including "departmental directives, executive orders, plans, design guidelines, city policies, or tax levies."[33] The following section explains complete street policies affecting downtown Willow Glen.

[31] National Complete Streets Coalition, "The Best Complete Street Policies of 2014," Smart Growth America, http://www.smartgrowthamerica.org/documents/best-complete-streets-policies-of-2014.pdf (accessed January 17, 2015).
[32] Ibid.
[33] Ibid.

4.1 COMPLETE STREET POLICIES AFFECTING DOWNTOWN WILLOW GLEN

Downtown Willow Glen as a commercial corridor can qualify as a candidate to become complete, so providing an appropriate complete street design guideline identifying all policies, including Federal, State, regional, and local level that affect the corridor is critical.

At the Federal level, although the Federal Highway Administration (FHWA) does not have a certified complete streets policy, the notion is thoroughly linked with principles encouraged by the interagency corporation for sustainable communities that aims to offer "more transportation choices; support existing communities through transit oriented, mixed-use development and land recycling; and value communities by investing in healthy, safe and walkable neighborhoods." [34] Moreover, a number of laws and regulations on transportation planning encourage the promotion of complete streets, including the United States Code, Title 23, Chapter 2, Section 217 that requires having bike and pedestrian facilities where appropriate, the Federal Safe Route to School Program to encourage students from kindergarten through 8th grade to walk a or bike to school, and Context Sensitive Solutions to help ensure that streets are indeed complete based on the context and community's need. Accordingly, the U.S. Department of Transportation, Office of Safety provides a number of documents to make roads safer. For example, the Road Diet Informational Guide is one of the documents provided by U.S. DOT's Office of Safety for four-lane undivided highways, which provides detailed information of road diet from the notion of it to implementation.

Some States that adopted complete street policies, such as California, started promoting complete streets by issuing a context sensitive policy in 2001. [35] The California Department of Transportation (Caltrans) signed Deputy *Directive 64-R1* in 2008 "to ensure that travelers of all

[34] Robin Smith, Sharlene Reed, and Shana Baker, " Street Design: Part 1- Complete Streets," Public roads, U.S, Department of Transportation, Federal Highway Admiration, Publication, Public Road Vol.74.No.1, Publication Number: FHWA-HRT-10-004, July/August 2010.

[35] Federal Highway Admiration, "United States Department of Transportation Policy statement on Bicycle and Pedestrian Accommodation regulations and Recommendations," office of planning, environment, & Realty (HEP), 2010, http://www.fhwa.dot.gov/environment/bicycle_pedestrian/overview/policy_accom.cfm (accessed January 17, 2015).

ages and abilities can move safely and efficiently along and across a network of complete streets." [36] In 2008, in support of *Deputy Directive 64-R1* and to encourage high quality mobility for all users, the State of California adopted a statewide complete street act to ensure streets adequately accommodate the needs of bicyclists, pedestrians, and transit riders, as well as automobiles.[37] In 2011, the *California Complete Streets Act* required cities and counties to apply practical revisions to the "circulation element" of their generals plan and refine the plan based on complete streets principles. In 2014, after renewing *Deputy Directive 64-R2*, Complete Street Implementation Action Plan 2.0 (CSIAP 2.0) was released to help better describe and develop the California Department of Transportation (Caltrans) complete streets policy structure. The 2014 CSIAP provides information and detailed framework to monitor, report, and pass obstacles in the way of integrating complete street principles for Caltrans.

In 2013, in Complete Street Resolutions, *The One Plan Bay Area* (OBAG) required agencies to comply with complete street elements and develop the best policy that fits the complete street principles. It is expected for the next round of OBAG to require agencies to incorporate complete street sections to the circulation element in order to be eligible for the grant. For Santa Clara County, OBAG has devoted $87.3 million for both Congestion Mitigation and Air Quality (CMAQ), and Transportation Alternatives (TA). At least 70% of the candidate projects should be located in or close to the Priority Development Area (PDA) that was defined in Plan Bay Area.

On a smaller scale, the *Envision San José 2040 General Plan,* in order to ensure a balanced, multi-modal transportation network, offers different plans for streets based on their different typologies. In order to respond to Federal and State complete street requirements, both VTA

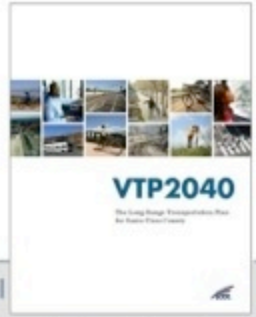
[36] Federal Highway Administration , "United States Department of Transportation Policy statement on Bicycle and Pedestrian Accommodation regulations and Recommendations," office of planning, environment, & Realty (HEP), 2010, http://www.fhwa.dot.gov/environment/bicycle_pedestrian/overview/policy_accom.cfm (accessed January 17, 2015).

[37] "California Complete Street Act" (Assembly Bill No.1358, An act to amend Sections 65040.2 and 65302 of the Government Code, approved by Governor September 30, 2008, filed with Secretary of State September 30, 2008), http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab_1351-1400/ab_1358_bill_20080930_chaptered.pdf (accessed September 20, 2014).

(Valley Transportation Authority) and the City of San José Department of Planning developed documents respectively to help clarify and implement complete street principles in Santa Clara County and the City of San José. The documents that affect Downtown Willow Glen are as follow:

- Valley Authority Plan (VAP) 2040 (Figure 4.1 is a summary of VAP programs and policies that Santa Clara pursues to fund different pedestrian, bike, automobile and transit projects.)
- San José Pedestrian Master Plan, 2008 (Figure 4.2 is a summary of all the documents that the city of San José should follow for pedestrian related projects)
- City of San José Geometric Design Guideline, 2010 (Figure 4.3, and figure 4.4 demonstrate road geometric design requirement within the city of San José.)

Figure 4. 1 Summary of VTP 2040



Valley Transportation Plan VTP 2040

County Level

VTP identifies program, projects, and policies that Santa Clara County pursues and it finds links between different projects to assign proper funds. It considers all travel modes and addresses the links between transportation, land use, air quality, energy use, and community livability. The 2040 VTP added sections that specifically address Complete Street implementation. The Multimodal Transportation Investment MTI is designed to support funding for projects that have complete street elements and help to define frameworks for local and countrywide complete street programs. MTI provide funding for Bicycle Improvements, Pedestrian Environment Improvement, Transportation Systems Operations and management program, and Community Design and Transportation, Streetscapes, and Complete Streets. A total of $250 million out of $1 billion assigned to CDT, Streetscapes and Complete Streets

Potential pedestrian-specific projects include

Transit access improvements, including first- and last-mile connections and shorten and/or improve the pedestrian experience
Safe Routes to Schools projects
Sidewalk gap closures, sidewalk improvements and upgrades
Removal of safety and access barriers
Pedestrian/Urban Design amenities such as signage

Bike Projects
Countrywide Bicycle Plan to devel-
op-me the major bike facilities
Bike Share

Real-Time Transit Information Project
Transportation Operation Strategic Plan for Santa Clara County
Silicon Valley
.Transportation System program Enhancement

San Jose Traffic Signal Communication and Synchronization Projects
Congestion Management Program and Transportation Impact Analysis Guidelines Updat
Smart Street Intersections
Multimodal Level of Service

Source:Valley Transportation Authority, "VTP 2040- The Long-Range Transportation Plan for Santa Clara County," http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Co tent/VTP2040_final_optimized.pdf, (accessed January 17, 2015)

Figure 4. 2 Summary of San José Pedestrian Master Plan

San Jose Pedestrian Master Plan, 2008

City Level

In 2006, San Jose Department of Transportation in conjunction with the ADA Transit Plan Update for Sidewalks prepared its pedestrian master plan that is a document of all San Jose standards, policies procedures and practices related to pedestrian. The document offers recommendation for improving pedestrian experiment within the city, including "expanding San Jose Traffic Accident Reduction Program", "continuing the safe street initiative to provide better lighting to enhance safety at pedestrian crossing", and "enforcing the red-light violations through a photo enforcement program". The Pedestrian Master Plan also offers some recommendations for encouraging people to walk such as, "Design and Print Walking Maps for San Jose Neighborhoods", and " Continue to Install Way finding Signage In areas With High Pedestrian Activity

The City should incorporate pedestrian design guidelines and details into the City's Standard Details. Design guidelines should be based on the following federal, state, city and neighborhood documents

1 Requirements from the Americans with Disabilities Act of 1991. See the companion document, ADA Transition Plan for Curb Ramps and Sidewalks Update for specific items that should be included

2 Best practices from the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 1st Edition, 2004

3 Standards, guidance and options from the California Manual on Uniform Traffic Control Devices 2006

4 Standard Details followed by the City of San José

5 City municipal code elements, specifically items from Title 11, Vehicles and Traffic Title 13: Streets, Sidewalks and Public Places; Title 19 Subdivisions, Chapter 19.36 Design Requirements; and Title 20 Zoning

6 General Plan policies, specifically, pedestrian-related policies from the Urban DesignGoals and Policies and the Land Use/Transportation Diagram

7 Specific plans, including, but not limited to, the Downtown Streetscape Master Plan Strong Neighborhood Initiative Plans, Diridon/Arena Strategic Plan, Evergreen Eastridge Specific Plan, and the Alviso Master Plan. Specific plans should be incorporated by reference, rather than duplicated in the design guidelines

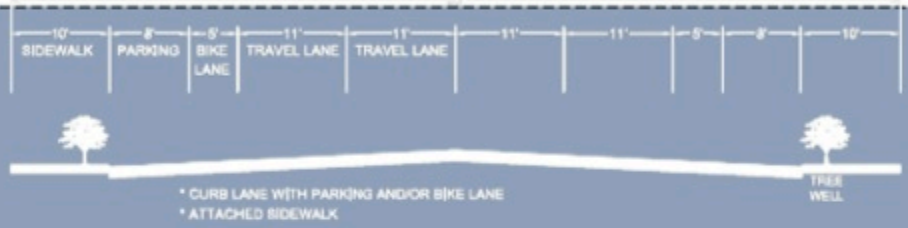
Source: Alta Planning and Design, "San Jose Pedestrian Master Plan", San Jose Department of Transportation, 2008

Figure 4. 3 **Summary of City of San José Geometric Design Guideline/ Part 1 Automobile**

City of San Jose Geometric Design Guideline -2010

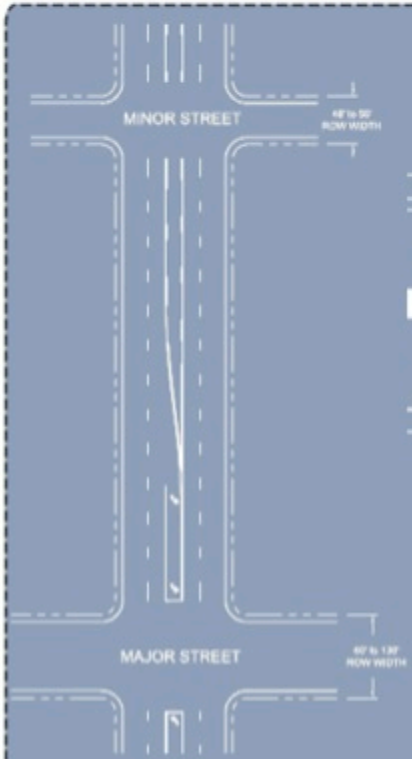
City Level

The street designation used in city of San Jose contains eight categories , including "narrow residential,two type of minor residential, two type of neighbourhood collector, major collector, minor arterial and major arterial" that Lincoln Avenue's designation is "Major Collector" or 4 lane undivided road

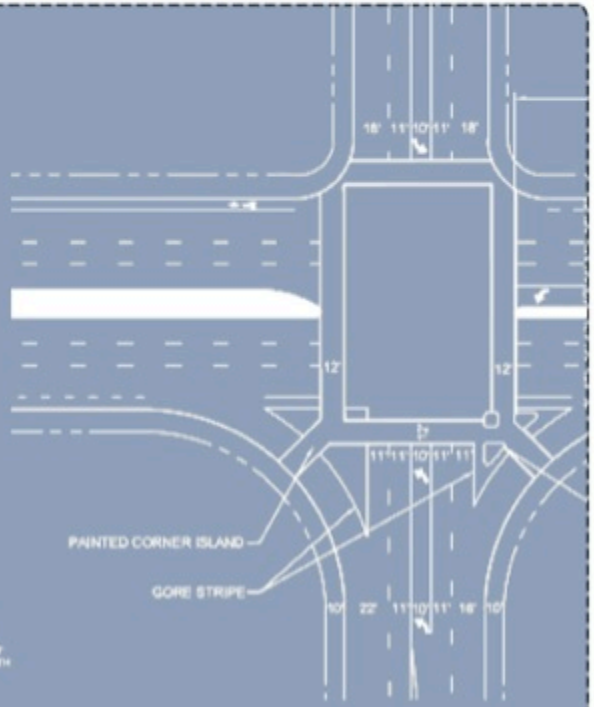


MAJOR COLLECTOR – 4 LANES UNDIVIDED
(90' ROW)

Lane Width - feet		
Interior Lane	Next to Centreline	11
	Next to Curb Median	13
	Next to Painted Median	11
	One lane Next to Median Without Parking	20
	One Lane Next to Median With Parking	26
Curb Lane	No Parking With Bike Lane	16
	No Parking Without Bike Lane	14
	Part time Parking	12
	With Parking- Residential	17
	With Parking- Collector	20
Turn Lane	Left turn	10
	2-way left turn	12-16
	Left turn next to median island	11
	Double left turn lanes	10
	Right turn	12



Typical Two-Way Left Turn Lanes



Typical Corner Island Configuration

Source:City of San Jose Department of Transportation, "Geometric Design Guidelines," 2010.

Figure 4. 4 Summary of City of San José Geometric Design Guideline/ Part 2 Bike

City of San Jose Geometric Design Guideline -2010

City Level

Signage

Bike lane symbol should be placed at 20-foot beyond curb return

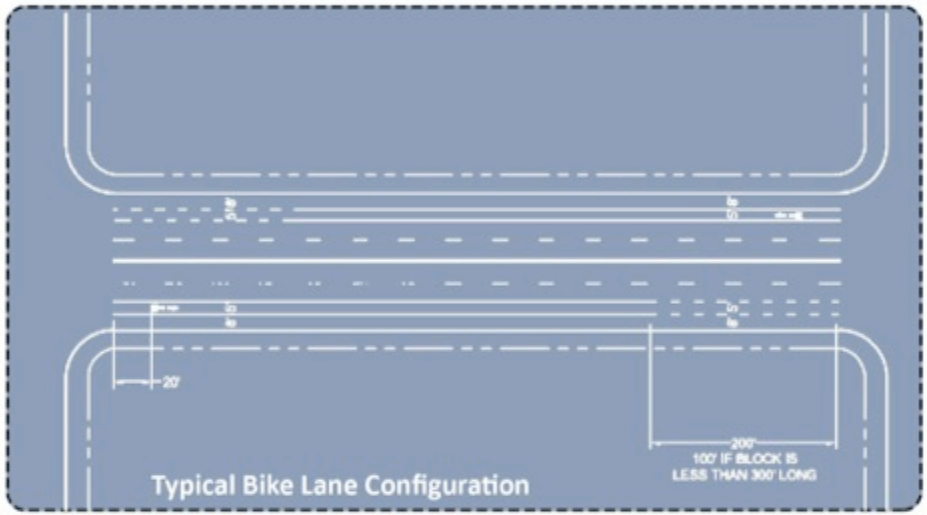
City Standard Bike lane Symbol and Arrow shall be installed at beginning of all intersection breaks and at far side of all T-intersections and installed at 1/4 miles intervaled

For Striping

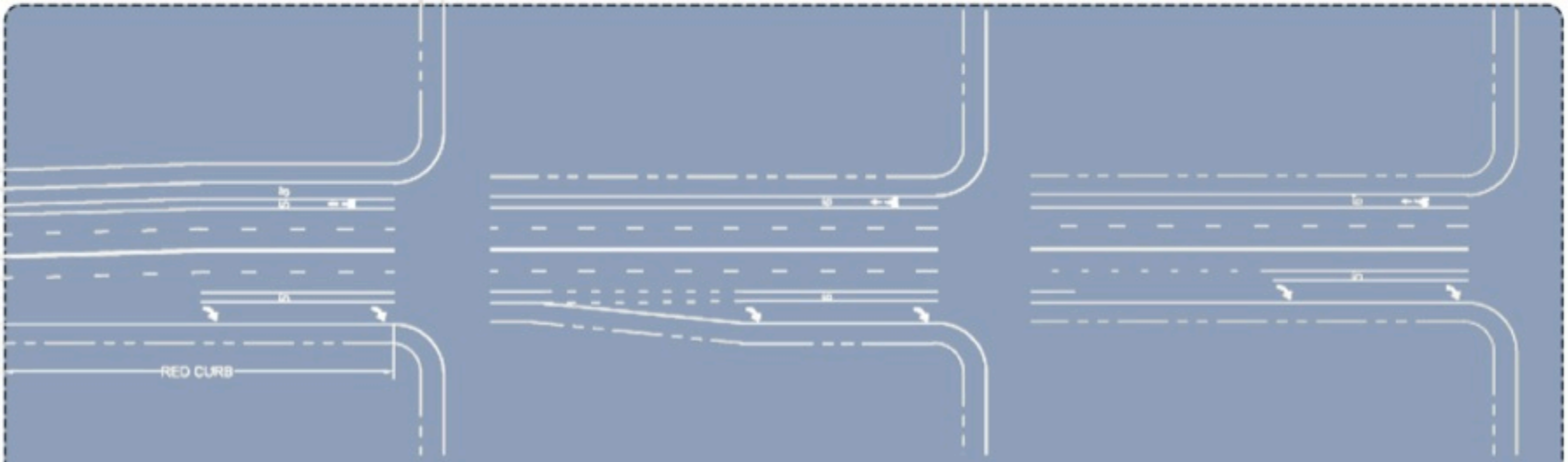
The final 200-foot from end of return shall be detail 12 broken white

For Blocks less than 300' in lenght, final 100' should be detail broken white

Lane Width - feet		
Bike Lane	No Parking	5-6
	With Parking	5



Typical Bike Lane Configuration



Bike Lane With Parking into Right Turn Only Lane

Bike Lane Treatment at Right Turn only Lane

Right Lane Becomes Alright-Turn-only Lane

Source:City of San Jose Department of Transportation, "Geometric Design Guidelines," 2010.

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Chapter 5

DOWNTOWN WILLOW GLEN LAND USE MOBILITY ASSESSMENT

Chapter 5- Downtown Willow Glen Land Use Mobility Assessment

This Chapter describes the land use and mobility infrastructure in downtown Willow Glen to find out the absence and shortage for mobility infrastructure for each mode of transportation to guide its design to better serve all modes of transportation users.

5.1 LAND USE IN DOWNTOWN WILLOW GLEN

The purpose of studying land use for this report is to study the relationship between land use and transportation. It is critical to provide a balance between the transportation network goals and its surrounding land use. From the transportation point of view, if the transportation network provides enough mobility facilities (such as parking, automobile lanes, bike lanes, crosswalks, and sidewalks) based on its surrounding land use needs, it would offer a better Level of Service for all modes of transportation.

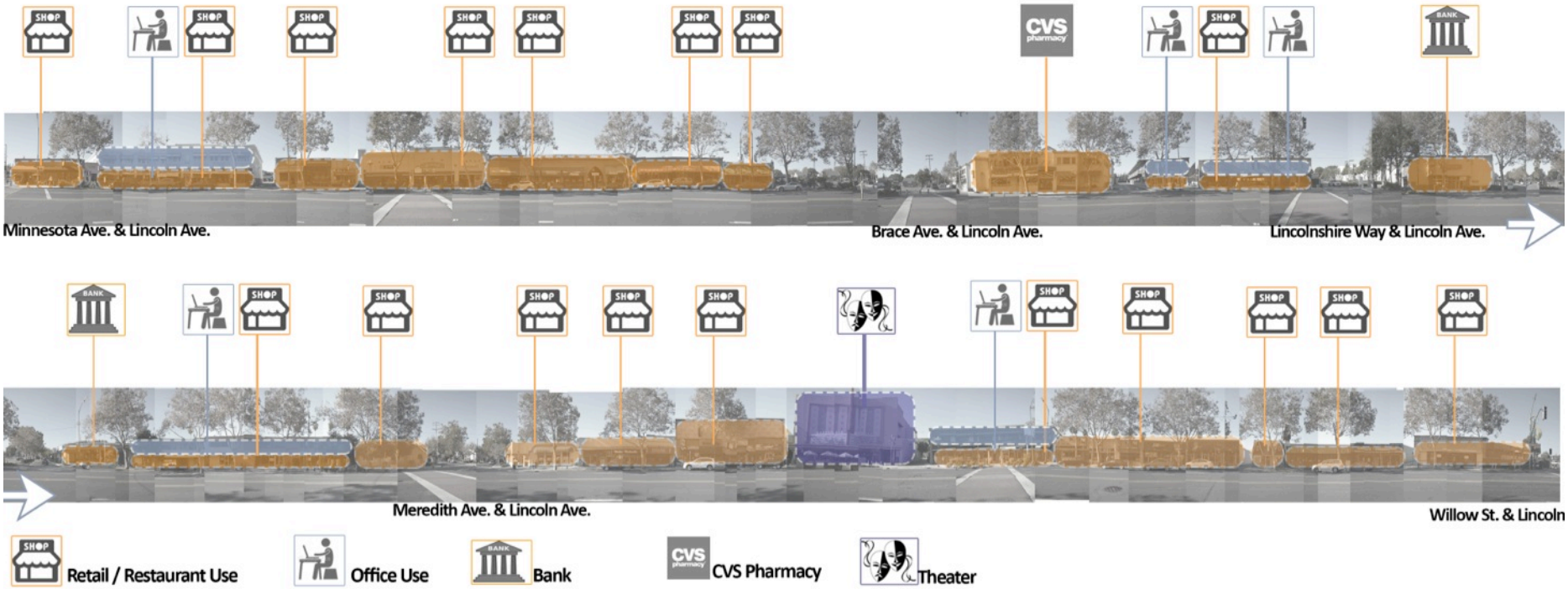
Figure 5. 1 Willow Glen Neighborhood and Downtown

Source: Google Map, "Willow Glen Neighborhood," (https://www.google.com/maps/place/Willow+Glen,+San+Jose,+CA,+USA/@37.2998968,-121.9096592,13z/data=!3m1!4b1!4m2!3m1!1s0x808e349fe9fcfa03:0x8a27b4690a4f5602, (accessed 15 Mach, 2015),

On the other hand, looking through the lens of land use, improvement to the mobility of all users increases access to land parcels. This largely would play a critical role in areas that offer commercial or mixed use of land.

Downtown Willow Glen is primary a multi-functional activity center serving the Willow Glen neighborhood and surrounding area. The downtown Willow Glen land use contains office, retail, restaurants, service, entertainment, and is distinguished from other areas of the city of San José by its concentration of local shops and its multi-functional land use pattern. Figure 5.2 and Figure 5.3 show the existing building use on panoramic photos of each side of the street in downtown Willow Glen.

Figure 5. 2 Existing Building Use in Downtown Willow Glen – West Side



Regarding the future land use for downtown Willow Glen, generally in the city of San José, the city-planning department defined the use of land in its *Zoning Ordinance* and in the *San José Envision 2040 General Plan*, respectively. The land-use category in *Zoning Ordinance* and designated land-use in *San José Envision 2040 General Plan* are totally different, because the *Zoning Ordinance* provides detailed information that defines the current allowed land-use for a specific parcel, while the *San José Envision 2040 General Plan* land-use designation shows the possible future uses of land. Zoning along Lincoln Avenue in downtown Willow Glen is mainly designated for neighborhood commercial, while it also would be surrounded with low density residential. Figure 5.3 shows zoning and general plan land use designation for downtown Willow Glen.

It is intended that downtown Willow Glen would continue to be the major commercial corridor within the city of San José, and that it may function as a location for new medium and high density mixed-use environment, which will be intensified over time. Since availability of transportation infrastructure and land use influence one-another, changes in transportation infrastructure can significantly affect local business. Therefore, redesigning Lincoln Avenue must consider preserving existing downtown Willow Glen character and supporting local businesses.

Figure 5. 3 Zoning and General Plan Land Use Designation

Source: Author Map using data from San Jose Planning Department, Building and Code Enforcement, " Land Use Map," and " Zoning Map."

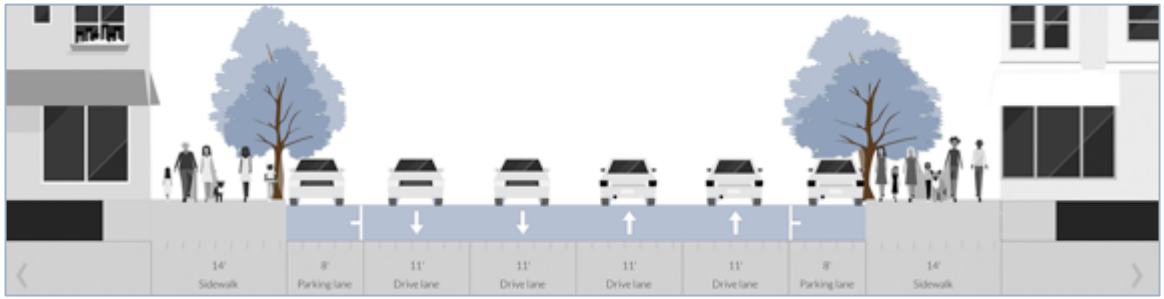
5.2 LINCOLN AVENUE EXISTING CONFIGURATION

The cross-section of a road includes elements that define its right-of-way, such as traveled lanes, parking lanes, median, bicycle facilities, pedestrian facilities, and so on. According to Context Sensitive Solution.org, elements such as configuration, volume, the presence of pedestrians and bicyclists, and "safety of the users" play a crucial role in selecting the appropriate cross-section elements. [38] Because, the main objective of this report is repurposing travel lanes, the following section explains the current Lincoln Avenue cross-section.

EXISTING CROSS-SECTION

Willow Glen has four traffic lanes: two lanes for vehicle movement in each direction. Figure 5.4 show the existing street cross-section in the Minnesota and Lincoln intersection. The average width of travel lanes on Willow Glen is eleven feet, and the street from curb to curb is approximately 55 feet wide.

Figure 5. 4 Street Cross-section at Minnesota and Lincoln Ave. Intersection- Looking North



Source: Cross- Section is Created by author

[38] Context Sensitive Solution, "Cross-Section Elements: Introduction," U.S. Department of Transportation, Federal Highway Administration, http://contextsensitivesolutions.org/content/reading/cross-section-12/ (accessed March 9, 15)

EXISTING ON-STREET and OFF-STREET PARKING

The on-street parking on either side of the street is available next to the sidewalk except for areas that are close to bus stops, and buffers from moving traffic. Most of the off-street parking lots are reserved for specific stores or places, and they are all available free on Sundays and holidays. Figure 5.5 shows the location of available off-street parking in downtown Willow Glen.

CURRENT POSTED SPEED

"Speed Limits in the United States are set by each state or territory. Speed limits are always posted in increments of five miles per hour. In California, the speed limit is at or below the 85th percentile speed." [39] The 85th percentile speed is obtained through traffic and engineering survey, and it is defined as "the speed, which no more than 15% of traffic exceeds." Since in California, the maximum speed in school zones is 25 or 15 mph, and Willow Glen Elementary School is located at the Minnesota and Lincoln Intersection, the speed limit is 25 mph on Lincoln Ave. from Minnesota Ave. to Coe Ave.

AVERAGE DAILY TRAFFIC

The Average Daily Traffic for Lincoln Avenue is 23,247, and according to the literature review, its ADA is a little bit high to be a be a qualified road candidate for lane reduction. Figure 5.6 shows the ADT at different intersections according to data available in Esri Community analyst, and gathered by Market Planning Solution. In February 2015, data for daily traffic volume along Lincoln Ave. were collected by the San *José* Department of Transportation to be available for later comparison with daily traffic after the Willow Glen road diet trial.

Source: Map by author

Figure 5. 5 Off-Street Parking Lots in Downtown Willow Glen

[39] Wikipedia, "Speed Limits in the United States by Jurisdiction," http://en.wikipedia.org/wiki/Speed_limits_in_the_United_States_by_jurisdiction (access December 1, 2014).

Figure 5. 6 ESRI Average Daily Traffic For Lincoln

Source: Map by Author using data from Community Analysis, gathered by Market Planning Solution Inc.

PEDESTRIAN MOVEMENT

Sidewalks are present on both sides of Lincoln Ave. and provide continuous access. However, sidewalk continuity is impacted by parking lot access that cuts the sidewalks. Drivers coming in and out of parking lots could possibly hit a pedestrian or bicyclist on the sidewalk. Although on – street parking provides pedestrian separation of the traffic in some segments of Lincoln Ave., sidewalks along Lincoln Avenue still suffer from lack of buffer or separation from traffic because sidewalks are immediately adjacent to the automobile lanes in areas that on-street parking is prohibited. The sidewalk width varies from 11 to 20 feet, and the width is sufficient for pedestrian activity of all ages and abilities in most areas. Therefore, the sidewalk has the potential for adding street furniture, greenery, traffic poles, pedestrian scale lighting, and outdoor eating spaces for restaurants.

Downtown Willow Glen from Minnesota Avenue to Willow Street contains seven crosswalks including 1) Minnesota Ave. and Lincoln Ave. intersection, 2) Crosswalk in front of Vin Santo Restaurant, 3) Crosswalk in Lincoln Ave. and Brace Ave., 4) Crosswalks in front of Wells Fargo Bank and Bank of America. 5) Crosswalk in Meredith Ave. and Lincoln Ave. 6) Crosswalk in front of Garden Theater, and 7) Willow Street and Lincoln Ave. intersection.

Three out of seven crosswalks in downtown Willow Glen are signalized intersections with four uncontrolled crosswalks. In the uncontrolled crosswalks, 'In-street Signs" were installed at the middle of the streets to make the crosswalks more visible and increase yielding. In addition, each uncontrolled crosswalk has an overhead sign and flashing beacons to draw additional attention to the crosswalk. The beacon is activated when a pedestrian pushes the button. Moreover, orange flag crossing is available in uncontrolled crosswalks for pedestrians to use to be more visible, specifically at night. All the crosswalks have parking restriction, and in uncontrolled crosswalks a pedestrian refuge provides more visibility. Figure 5.7 shows common locations for crosswalk and

Figure 5. 7 Crosswalk Location in downtown Willow Glen

Source: Map by Author

pedestrian scale lighting in downtown willow Glen, and Figure 5.8 shows un-signalized intersection elements.

Table 5. 1 Crosswalks Assessment

	Type	Pavement Marking	Pedestrian Scale Lighting	Pedestrian Refuge	Exclusive Pedestrian Signal	Pedestrian Phase time	Waiting time	In street Signs	Rectangular Rapid Flashing Beacon	Parking Restriction
Crosswalk 1	Signalized	Solid Red	Yes	No	Yes	20 Second	100 second	No	No	Yes
Crosswalk 2	Uncontrolled	Solid Red	Yes	Yes	No			Yes	Yes	Yes
Crosswalk 3	Uncontrolled	Solid Red	Yes	Yes	No			Yes	Yes	Yes
Crosswalk 4	Signalized	Solid Red	Yes	No	Yes	15/20 Second	Push Button	No	No	Yes
Crosswalk 5	Uncontrolled	Solid Red	Yes	Yes	No			Yes	Yes	Yes
Crosswalk 6	Uncontrolled	Solid Red	Yes	Yes	No			Yes	Yes	Yes
Crosswalk 7	Uncontrolled	Solid Red	Yes	Yes	No			Yes	Yes	Yes
Crosswalk 8	Signalized	Solid Red	Yes	No	Yes	20 Second	100 second	No	No	Yes

Table Source: Table by Author using site observation data

Figure 5. 8 Existing Uncontrolled Crosswalks and their Elements

Source: Authors Photos

Manual pedestrian-count was conducted to identify the pedestrian usage of crosswalks during the months of October and November in 2014 during both A.M. and P.M. peak times on weekdays and weekends, respectively. The pedestrian count on the A.M. weekday peak started at 8:00 at the Minnesota Ave. and Lincoln Ave. intersection for ten minutes; at 8:12 at the crosswalk in Lincoln Ave. and Brace Ave. for ten minutes; at 8:25 at the crosswalks in front of Wells Fargo Bank and Bank of America Parking for ten minutes; at 8:37 at crosswalk in Meredith Ave. and Lincoln Ave for ten minutes; and 8:50 at the Willow Street and Lincoln Ave. intersection for ten minutes. The count time for A.M peak hour was considered to be at 10:00 to 11:00 on weekends. The P.M. peak hour for both weekend and weekdays started at 4:00 to 5:00.

In each crosswalk people who were present either while walking on the sidewalks or while crossing the street were counted. To identify how many people are crossing the street, pedestrians crossing Lincoln Avenue were marked by arrows on site plan maps of that specific intersection. The result shows the maximum pedestrians who crossed Lincoln Avenue in any 10 min period was 32 individuals for morning peak at the Minnesota Avenue & Lincoln Avenue intersection where people departing from Willow Glen School at the corner of the intersection where signalized crosswalk is available. Moreover, comparing average weekend and weekdays pedestrian counts, the weekend count is higher. The following tables show the average pedestrian count on weekdays and weekends for all junctions that have a crosswalk.

Table 5. 2 Summary of Pedestrian Count Per 10 Minute period / AM Peak

	Average number of pedestrians in This Junction (Weekends)	Average Number of People Who Cross Lincoln Ave in this Junction (Weekends)	Average Number of Pedestrians in This Junction (Weekdays)	Average Number of People Who Cross Lincoln Ave in This Junction (Weekdays)
Minnesota Ave. & Lincoln Ave.	55	18	42	32
Brace Ave. and Lincoln Ave.	40	6	30	3
In front of Wells Fargo Bank	55	16	25	3
Meredith Ave. and Lincoln Ave.	50	11	17	3
Willow St. & Lincoln Ave.	38	17	13	11
27.2% of non-motorized users crossed Lincoln Avenue on weekends 39% of non-motorized users crossed Lincoln Avenue on weekdays				

Table 5. 3 Summary of Pedestrian Count Per 10 Minute period / PM Peak

	Average number of pedestrians in This Junction (Weekends)	Average Number of People Who Cross Lincoln Ave in this Junction (Weekends)	Average Number of Pedestrians in This Junction (Weekdays)	Average Number of People Who Cross Lincoln Ave in This Junction (Weekdays)
Minnesota Ave. & Lincoln Ave.	21	12	21	13
Brace Ave. and Lincoln Ave.	31	6	38	13
In front of Wells Fargo Bank	35	4	27	4
Meredith Ave. and Lincoln Ave.	48	5	25	2
Willow St. & Lincoln Ave.	40	10	32	9
20 % of non-motorized users crossed Lincoln Avenue on weekends 26.9% of non-motorized users crossed Lincoln Avenue on weekdays				

BICYCLE MOVEMENT

On Lincoln Ave. there are no dedicated bicycle lanes along the corridor street. Only Willow Street has dedicated bicycle lanes available. According to Bike Plan 2020, the city of San José's existing policies create a good foundation for improving bicycle infrastructure within the City.

Do People Ride Their Bikes on Downtown Willow Glen?

Manual bicycle-count was conducted to identify the pedestrian usage of crosswalks during the months of October and November in 2014 in both A.M. and P.M. peak time on weekdays and weekends, respectively. The bicycle count on weekday A.M. peak started at 8:00 to 9:00. The count time for A.M. peak hour was considered to be at 10:00 to 11:00 on weekends. The P.M. peak hour for both weekend and weekdays started at 4:00 to 5:00.

In each crosswalk bicycles that were present either on the sidewalks or on the street were counted. The manual bicycle count shows that although there are no bicycle lanes along Lincoln Avenue, more than 5 percent of non-motorized users are cyclists and more than 39 percent of cyclists ride on sidewalks. The following tables show average bicycle count on weekdays and weekends for five junctions.

Table 5. 4 Summary of Bicycle Count Per 10 Minutes period / AM Peak

	Average Number of Bicyclists in This Junction (Weekends)	Average Number of Bicyclists on the Sidewalk (Weekdays)	Average Number of Bicyclists in This Junction (Weekends)	Average Number of Bicyclists on the Sidewalk (Weekdays)
Minnesota Ave. & Lincoln Ave.	2	0	0	0
Brace Ave. and Lincoln Ave.	1	0	1	0
In front of Wells Fargo Bank	5	4	1	0
Meredith Ave. and Lincoln Ave.	2	2	3	2
Willow St. & Lincoln Ave.	2	0	1	0

4.8% of non-motorized users were bicyclists on weekends
50% of Bicyclists ride their bikes on the sidewalk on weekends
4.5% of non-motorized users were bicyclists on weekdays & 33% of Bicyclists ride their bikes on the sidewalk on weekdays

Table 5. 5 Summary of Bicycle Count Per 10 Minutes period / PM Peak

	Average Number of Bicyclists in This Junction (Weekends)	Average Number of Bicyclists on the Sidewalk (Weekdays)	Average Number of Bicyclists in This Junction (Weekends)	Average Number of Bicyclists on the Sidewalk (Weekdays)
Minnesota Ave. & Lincoln Ave.	1	0	0	0
Brace Ave. and Lincoln Ave.	1	0	3	0
In front of Wells Fargo Bank	3	2	2	0
Meredith Ave. and Lincoln Ave.	4	4	1	0
Willow St. & Lincoln Ave.	1	0	3	1
5.4% of non-motorized users were bicyclists on weekends 60% of Bicyclists ride their bikes on the sidewalk on weekends 5.9% of non-motorized users were bicyclist on weekdays 11% of Bicyclists ride their bikes on the sidewalk on weekdays				

Figure 5. 9 Cyclist Using Travel Lane and sidewalk

Source: Author Photos

Figure 5.10 shows Lincoln Avenue's Bike Heat Map that has been provided by STRAVA application. Basically, this map shows where people are doing activity by bike, and the "STRAVA map is a useful tool to chart the most popular bike trails." [40] Unfortunately, the map does not contain the data for bicyclists who do not have smart phones with the STRAVA application, but since the average household income and education level for the Willow Glen neighborhood is higher than the city of San José average, its bike heat map could be somewhat accurate. The resulting Lincoln Avenue Heat Map demonstrates the number of people who choose Lincoln Avenue for bicycling where it does not have dedicated bike lanes is as high as Willow Street where dedicated bike lanes do exist.

Figure 5. 10 STRAVA Bike Heat Map

Study Area

Source: Global Heat Map, " Willow Glen, San Jose, CA," http://labs.strava.com/heatmap/#6/-120.90000/38.36000/blue/bike, (accessed March 9, 2015)

[40] Dan Mallouff, "Greater Greater Washington," http://greatergreaterwashington.org/post/22842/heat-maps-show-where-people-bike-or-at-least-where-affluent-people-exercise-by-bike/ (accessed March 9, 15)

PUBLIC TRANSIT

The Santa Clara Valley Transit Authority (VTA) is responsible for providing public transit in Santa Clara County. In downtown Willow Glen, all bus stops are strategically placed along Lincoln Ave. where it is safe to stop. Currently, three bus lines including 82, 25, and 64, serve downtown Willow Glen. Bus Line 64 is the only one that has 5 stops (2 stops for southbound and 3 stops for the northbound) on different places in Lincoln Avenue from Minnesota Avenue to Willow Street, and this report's concern for transit is the quality of performing these five stops. All bus stops on Lincoln Avenue have a bus stop sign and a bench usually painted with public art features. There are not any sheltered bus stops on Lincoln Avenue, but one bus stop for bus line 25 at Lincoln & Willow intersection (on Willow street) is sheltered. Bike racks are not available close to any of the bus stops. Ramps are provided to connect the street to the sidewalk in all of the bus stops. Figure 5.11 shows available transit infrastructure on Lincoln Avenue.

Figure 5. 11 Transit Infrastructure for Lincoln Ave.

Source: Map by Author

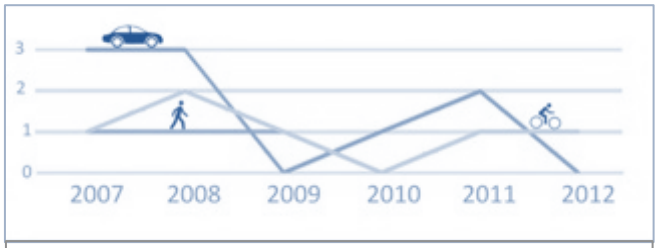
5.3 CRASH DATA

The historical crash data was obtained from Transportation Injury Mapping System (TIMS), which "has been established by researchers at the Safe Transportation Research and Education Center (SafeTREC) at the University of California, Berkeley to provide data and mapping analysis tools and information for traffic safety related research, policy and planning."[41] The Primary observations from the five years study period are as follows:

- 24 collisions were identified that have occurred on downtown Willow Glen, and of those collisions, about 45% of the crashes were between automobiles, 25% involved pedestrians, and 30% involved cyclists.

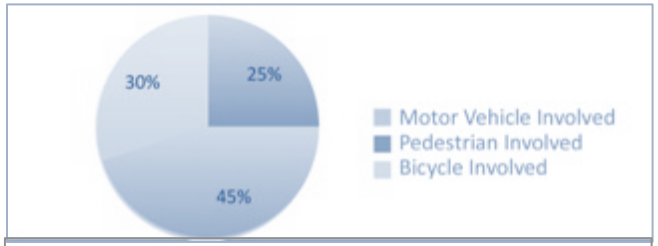
- The primary reasons recorded for these collisions include "unsafe speed" (25 percent) "pedestrian right of way" (25 Percent) and "automobile right of way" (15 percent), and 10% of these collisions were severe or fatal.[42]
- Rear end (six collisions), broadside (5 collisions), and Ped/Veh (5 collisions) were the three highest collision types.

Figure 5. 12 Number of Collisions on Lincoln Ave. 2007-2012



Source: Created by author using data from T Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).

Figure 5. 13 Percentage of Collisions on Lincoln Ave. 2007-2012

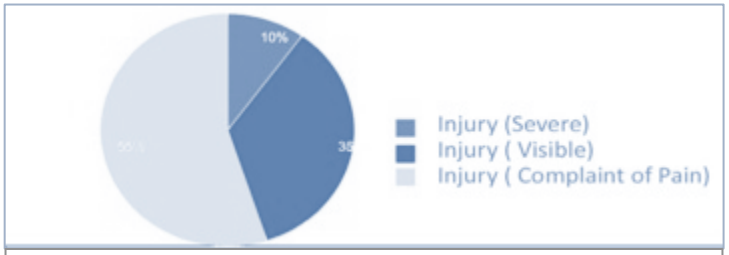


Source: Created by author using data from Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).

[41] Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).
[42] Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).

- 6 collisions were identified that involved pedestrians, and of those collisions, 5 of them occurred between a vehicle and a pedestrian because of unsafe speed (collisions) and pedestrian right of the way (4 collisions), and 16.7% of them were severe or fatal. Figure 5.15 shows the location of pedestrian involved collisions.
- 6 collisions were identified that involved bicycles, and 16.7% of them were severe or fatal. Figure 5.16 shows the location of bicycle involved collisions.

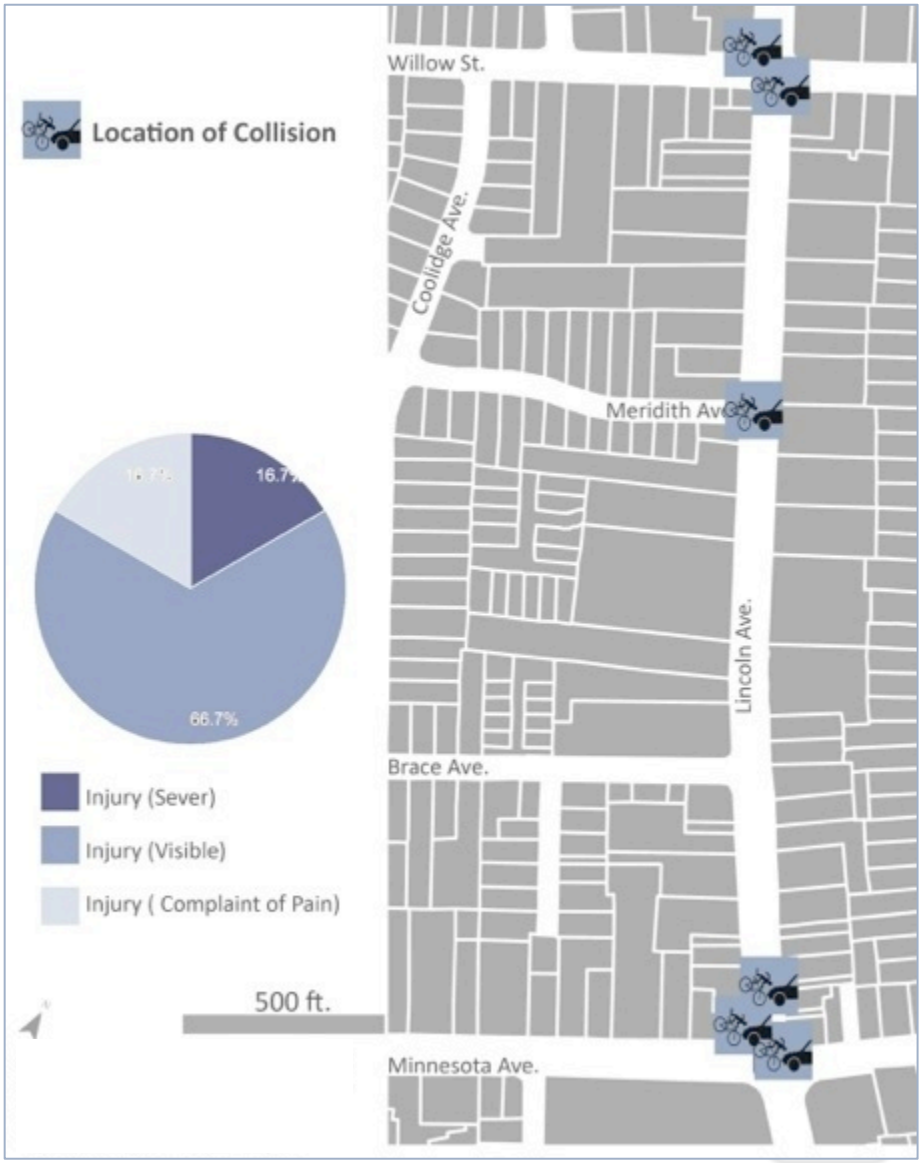
Figure 5. 14 Percentage of Collisions on Lincoln Ave. 2007-2012



Source: Created by author using data from Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).

Figure 5. 15 Pedestrian Involved Collisions 2007-2012

Figure 5. 16 Bicycle Involved Collisions 2007-2012



Source: Author's Map Using Data from Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1)

5.4 SUMMARY OF OUTCOMES

- Any changes in transportation infrastructure can significantly affect local businesses.
- The sidewalks are wide enough to have all zones, and the sidewalks have the potential to offer outdoor seating along the street.
- The lack of appropriate buffer between motorized and non-motorized users is a critical issue, specifically because the street is a major route for walking to school.
- Sidewalk physical condition regarding pavement and lighting is acceptable, but any improvement would significantly enhance the quality of walking in terms of safety and comfort.
- The Average Daily Traffic for Lincoln Avenue is 23,247, which according to the literature review, is a little bit high in ADA to be a qualified road candidate for lane reduction.
- Un-signalized intersections are equipped with pedestrian refuge islands and pedestrian scale lighting, but the crossing distance is still long, and there is lack of pedestrian scale lighting in some crosswalks.
- Although there is a demand for biking, there us not a dedicated bike lane on Lincoln Avenue.
- The existing bus stops do not have shelters, and access is not adequate.
- The number of pedestrian and bicycle involved collisions are high on Lincoln Avenue.
- Most vehicle collisions are the result of conflict between through and turning vehicles.

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CHAPTER 6

COMMUNITY OUTREACH

CHAPTER 6- Community Opinion About Redesigning Lincoln Avenue

6.1 COMMUNITY OUTREACH

Complete street principles mandate public outreach and participation to benefit and outline the community vision and reach practical solutions. The community outreach for downtown Willow Glen is based on three sources. First, all reports that are available on the *Willow Glen Road Diet Working Group* website that are summaries for all workshops that were held in the neighborhood regarding downtown Willow Glen road diet. The reports contain the community's comments, concerns, and opinions about Lincoln Avenue's road diet. Second, a part from neighborhood meetings, the *Willow Glen Road Diet Working Group* facilitates community participation through social media and via sending email to the *Willow Glen Road Diet Working Group*. The Willow Glen Neighborhood Association Facebook pages are updated regularly, and people put comments about the road diet. Third, in 2012, the *San José Silicon Valley Chamber* held its first *Business Walk* in Downtown Willow Glen and West San Carlos Street, while members visited surrounding businesses and asked them what should be done to improve the business.

6.2 WILLOW GLEN ROAD DIET WORKING GROUP WEBSITE & WILLOW GLEN NEIGHBORHOOD ASSOCIATION FACEBOOK PAGE

The *City of San José Department of Transportation* in response to the Willow Glen Community Association request for a lane reduction in downtown Willow Glen formed the *Willow Glen Road Diet Working Group* on November 2014. The *Willow Glen Road Diet Working Group* consists of residents, business and property owners, and other stakeholders that created a website to update news about the Willow Glen Road Diet and to ask for community input. On December 4, 2014 through a community meeting, a variety of community questions and concerns about Downtown Willow Glen's road diet were addressed. Another meeting was held on December 22, 2014, and the community had conversation with Hans Larsen, Director of transportation for the City of San José confirming that all the comments have been shared on Willow Glen Road Diet websites. On

February 12, 2015 the community and the San José Department of Transportation staff were presented in a town meeting at Willow Glen Elementary School. Accordingly, a three-month "road diet" trial on downtown Willow Glen was conducted beginning on March 1st, 2015 and finishing on May 31st, 2015. For this trial, downtown Willow Glen was converted from a four-lane road to two lanes with dedicated left turn lanes and bike lanes in each direction. The community's feedback on road diet trial was published on the Willow Glen Road Diet website (See Table 6.1 For Summary of Community's website in neighborhood meetings) and also there are number of road diet related posts on the Willow Glen Neighborhood Face Book page. (See Appendix C for complete Community Comments on Facebook. According to the Willow Glen Neighborhood website, "If the trial is deemed successful by the community, the road diet will be made permanent as part of repaving project in fall 2015" [43] and "If the road diet trial is deemed unsuccessful due to a negative impact on the neighborhood, the road will be returned to its current configuration and other options for improving safety will be explored."[44] This Report looks at the Willow Glen Road Diet Feasibility and alternative solutions for downtown Willow Glen based on complete street principles. Of 633 people who assessed their opinion about implementing a road diet on Lincoln Avenue, some 53% of them are not optimistic about the road diet. The reasons for being pessimistic include traffic diversion to the neighborhood and parallel streets, businesses issues, congestion, delay, increased pollution, decreasing property value, and bicycle and parking conflict. Some 48% of the comments supported road diet because of improving safety, enhancing economic performance of the local businesses, having dedicated bike lanes, and seeing fewer commuters bypassing through Lincoln Avenue.

Table 6. 1 Community Comments on Neighborhood Meeting for Road Diet

[43] Peter Allen, "Road diet Comes to Willow Glen, http://www.sanjoseinside.com/2015/02/24/road-diet-comes-to-willow-glen/ (accessed March 8, 2014)

[44] Willow Glen Neighborhood Association, "Road Diet Trial, Road Diet Trial Frequently Asked Questions," Road Diet Trail, http://www.willowglen.org/road-diet-FAQs (accessed March 8, 2014)

Date	Comments
November 21, 2014 Issues to Address	▪ Issue of delivery vehicles ▪ Issue of emergency vehicle access ▪ Signage ▪ Crosswalk improvement alternatives ▪ Traffic light timing, including on willow to address traffic congestion there ▪ Location of bus stops to prevent traffic backing up behind stopped buses ▪ Speed limit reduction and better signage ▪ Concerns regarding the planter "bump outs" affecting flow of bikes, etc.
December 4, 2014	**People Opposed The Road Diet Plan Because:** ▪ More congestion ▪ It would cause an inordinate amount of traffic challenges and frustration on the part of people coming to the downtown area ▪ Issue of delivery vehicles ▪ Issue of diversion to neighboring street ▪ Issue of emergency vehicles ▪ Commuters diversion to neighboring streets ▪ Issue of parking conflict **People Supported The Road Diet Plan Because:** ▪ It encourages cycling in the community ▪ It keeps cyclist off the sidewalks ▪ It will make Lincoln avenue more pedestrian friendly
December 22, 2014	**People Opposed The Road Diet Plan Because:**

	▪ Lincoln Avenue Average Daily Traffic is high ▪ Issue of delivery vehicles ▪ Issue of parking ▪ Pedestrian lighting

Table 6. 2 Downtown Willow Glen Road Diet Trial Community Comments on Facebook[45]

October 16, 2014 Facebook statues was as follows: *"For the purposes of traffic calming, pollution reduction and pedestrian safety, the City of San Jose is considering plans that may potentially reduce the number of lanes on Lincoln Avenue (between Willow and Minnesota) from four lanes to two lanes (with one emergency/turning lane in the center). What are your thoughts of these proposed plans? Have you experienced close calls attempting to cross Lincoln Avenue? Our Board of Directors will be considering a position on this in the near future and we would like to hear your thoughts. Thank you!"*			
Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
163	80	• Diversion to Bird Street • Diversion to the neighborhood • Businesses issue • Traffic and delay • Pollution	• Safety • Support local businesses
November 21, 2014 Facebook statues was as follows: *"Coming to the Road Diet Meeting? You can park in WG elementary front yard to save yourself from the rain! (Enter off Minnesota.)"*			
Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
4	0	Traffic and delay	
November 21, 2014 Facebook statues was as follows: *"Thanks to everyone who joined us last night to discuss the upcoming road diet trail on Lincoln Avenue. Stay turned for more ways to get involved in the process!"*			
Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
3	0	Congestion concern	

[45] Table Source: Comment Writers, Road Diet Related Statuses, Willow Glen Neighborhood Association Facebook Page, entry posted on October 16, 2014; November 21, 2014; January 8, 2015; February 6, 2015; February 13, 2015; February 18, 2015; February 25, 2015; February 27, 2015, https://www.facebook.com/WillowGlenNA?ref=br_rs (accessed March 15,2015)

January 8, 2015 Facebook statues was as follows:

The Lincoln Avenue Road diet Working Group had its third meeting on Monday, December 22, 2014. Read the minutes from this meeting on the WGNA website's special road diet blog, and stay tuned for the date of our next community meeting…

Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
4	3	• Traffic and delay	

February 13, 2015 Facebook statues was as follows:

Some Additional information, shared by San Jose DOT Hans Larsen

Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
10	9		

February 13, 2015 Facebook statues was as follows:

"Thank you to everyone who came out to last night's meeting. It was a productive (and very well attended) one! Remember to visit the site below for more information and share your comments, concerns and feedback before, during and after the trail here: Http://bit.ly/1vluRV6"

Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
1	6	Traffic and Delay	

February 18, 2015

To help residents, business owners, and the general community stay up to date on the layout, timeline, and other important information regarding the upcoming road diet trial on Lincoln Avenue, the Road Diet Working Group has created on All-in-one website.

Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
8	0		

February 25, 2015

WGNA Treasurer and Board Member Peter Allen wrote the following column for San Jose Inside That Summarizes the " Road Diet" Trial coming soon to Lincoln Avenue in Downtown Willow Glen. Nice Job, Peter!

Article Link: http://www.sanjoseinside.com/2015/02/24/road-diet-comes-to-willow-glen/

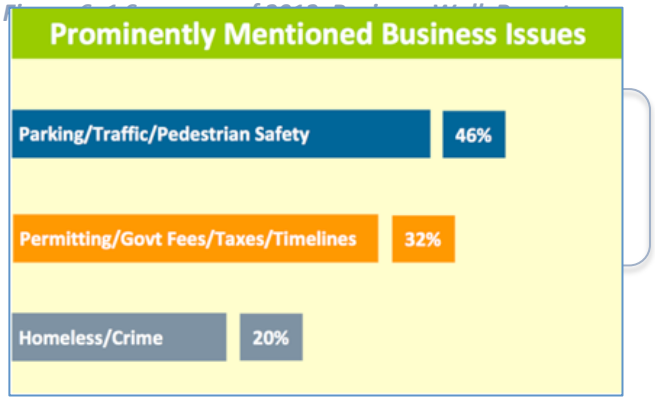
Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons

21	33	• Road diet is not solution • Property value • Traffic and delay businesses	Bike lane
February 27, 2015 *After Road Diet Trail* *"Here is a short video clip showing the new look to Lincoln Avenue in Downtown Willow Glen, now featuring two brand new bike lanes! The "road diet" trial will be in place for the next 3 months."* *Video Link: https://www.facebook.com/video.php?v=802110699872610*			
Number of People who are pessimistic about road diet	Number of people who are optimistic about road diet	Pessimist's reasons	Optimist's reasons
127	40	• Bike Lane and parking lane conflict • Traffic and delay business	• Bike lane • Seeing less commuters

6.2 THE *SAN JOSÉ SILICON VALLEY CHAMBER* HELD ITS FIRST *BUSINESS WALK*

In 2012, The *San José Silicon Valley Chamber* held its first *Business Walk* in Downtown Willow Glen and West San Carlos Street. Downtown Willow Glen responses are listed as follows in the 2012 Businesses Walk Report:

> Business in downtown Willow Glen most often complained of scarce parking. It seems many businesses tussle over who "owns" parking lots and can be territorial about them.
>
> Several businesses mentioned that the opening of recent parking structures and lots near Willow Street and Lincoln Avenue has alleviated problems, and now they would like to see similar improvements elsewhere along the avenue.
>
> Other respondents mentioned limiting Lincoln Avenue to two lanes or making it a one-way thoroughfare and making street parking diagonal to accommodate more cars and slow down traffic.



> Parking and traffic safety are serious issues that need to be dealt with. The reduction of travel lanes on Lincoln Avenue, elimination of parallel parking, and more outdoor café areas appear to need further study and analysis.[46]

Source: San Jose Silicon Valley Chamber, "2012 Business Walk Willow Glen & San Carlos Business Districts," 2012.

6.3 CONCLUSION

Refer to the Willow Glen Road Diet Working Group website and the Willow Glen Neighborhood Association Facebook page for comments from people who don't like the proposed lane reduction on Lincoln Avenue and are concerned about traffic congestion and travel delay. Since the Average Daily Traffic for Lincoln Avenue is pretty high, it is expected the delay increase after lane reduction would be higher than the typical average delay after road diet implementation. Moreover, because Downtown Willow Glen is a commercial corridor and delivery vehicles are an important element, another issue is traffic diversion to a parallel street, specifically Bird Street. People who like lane reduction in downtown Willow Glen advocate for a safer downtown, dedicated bicycle lanes, and a pedestrian oriented environment. A remarkable number of community members asked for other traffic calming solutions rather than road diet, including having narrower lanes, effective changes in signal phasing, having more signalized crosswalks, and installing speed bumps.

[46] San Jose Silicon Valley Chamber, "2012 Business Walk Willow Glen & San Carlos Business Districts," 2012.

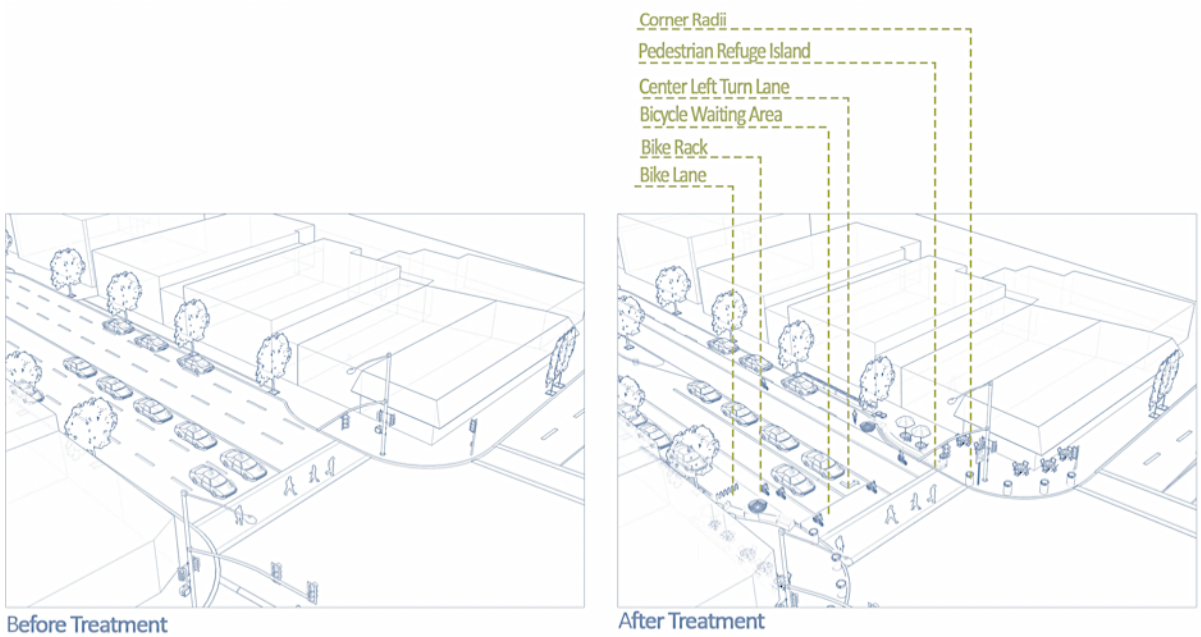
Chapter 7

REDESIGNING LINCOLN AVENUE

Chapter 7-Redesigning Lincoln Avenue

This chapter provides one example of how Lincoln Avenue could be redesigned as a complete street. The first section of the chapter summarizes key points from Chapter 5 showing the cross-section of the existing street. The next sections propose a redesigned cross-section that follows many of the recommendations from the community. Third, recommended traffic calming features and streetscape elements have been added to the proposed cross-section. Before and after treatment visualization is provided by 3d Sketchup models that picture how a road diet would change downtown Willow Glen's appearance and functionality in each crosswalk. (Figure 7.1)

Figure 7. 1 Example of Before and After Treatment Visualization



Source: Downtown Willow Glen 3d model created by author

7.2 SUMMARY OF DOWNTOWN WILLOW GLEN EXISTING MOBILITY CONDITION

A. Lincoln Avenue from Minnesota Avenue to Willow Street is a four lane undivided roadway. (See Figure 7.2)
B. It has seven crosswalks including three signalized intersections. (See Figure 7.8)

C. Figure 7.3 shows the only buffer between motorized and non-motorized movement is on-street parking that is not available everywhere, since it is prohibited to park close to bus stops according to law.
D. All the midblock crosswalks have pedestrian refuge islands with greenery and seating areas. (See Figure 7.5)
E. Pedestrian scale lighting is available in all crosswalks, but not at all the corners (See orange dots in Figure 7.8).
F. Lincoln Avenue also has lots of trees and outdoor seating places.
G. As Figure 7.4 shows the street suffers from lack of bicycle infrastructure, including dedicated bike lane and bike racks.
H. There is mostly a conflict between turning vehicles and pedestrian crossing and walking along Lincoln Avenue at Brace and Meredith Avenue and the Bank of America and Wells Fargo parking entrance.
I. As figure 7.7 shows at the Minnesota Avenue and Lincoln Avenue intersection, the pedestrian refuge island is only available for the eastern side, while there exists enough space for adding a pedestrian refuge island for the western side, as well.
J. As figure 7.6 shows at the Willow Street and Lincoln Avenue intersection, the crossing distance is very long because of lack of availability of pedestrian refuge islands on either side of the street.

Photos by author

Figure 7. 2 Lincoln Avenue is a 4 Lane Undivided Roadway

Figure 7. 3 No buffer between pedestrian and vehicles

Figure 7. 4 Bicyclist riding on the sidewalk, and lack of bike rack

Figure 7. 5 Mid-crosswalk Elements

Figure 7. 6 Long Crossing Distance at Willow Street and Lincoln Avenue Intersection

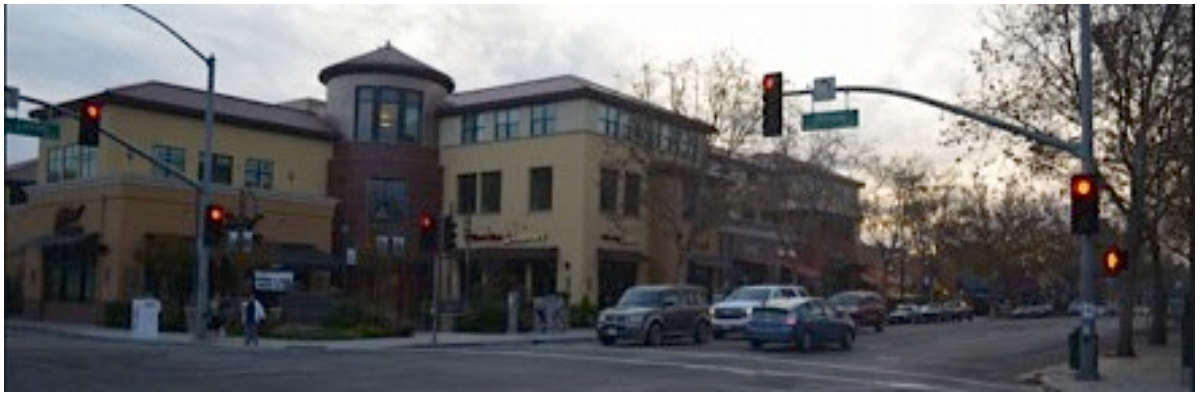


Figure 7. 7 Lack of pedestrian refuge island

Photos by authors

Figure 7. 8 Existing Site Plan For Lincoln Avenue

Source: Created by author

Figure 7. 9 Existing Lincoln Avenue Cross -Section

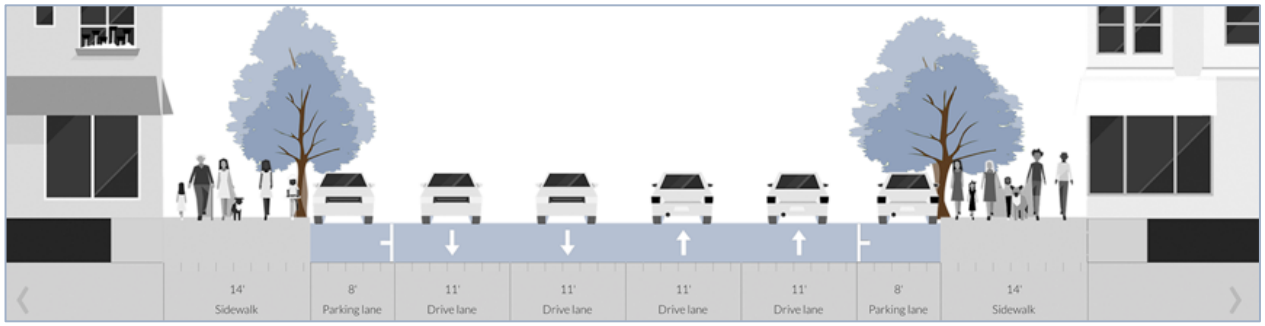
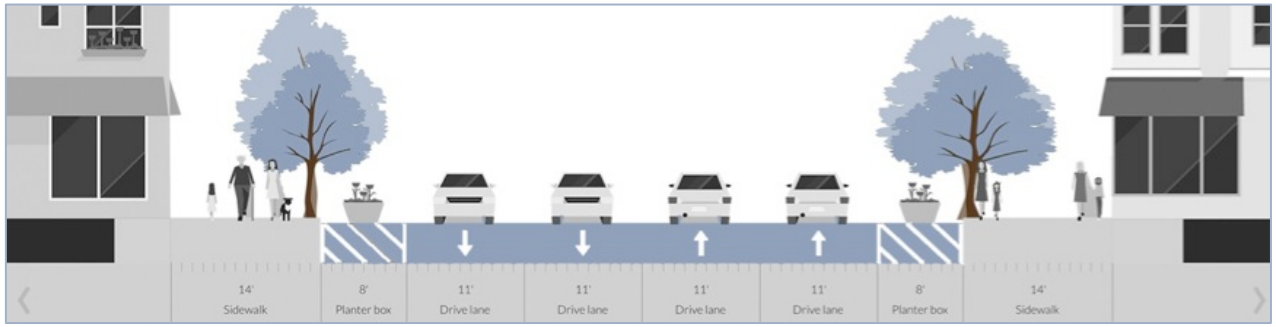


Figure 7. 10 Existing Lincoln Avenue Cross -Section (Typical for Mid-Crosswalks)



Source: Proposed Street Cross-sections created by author

7.3 SIMPLE ROAD DIET (REPURPOSING TRAVEL LANES)

To enhance safety for all modes of transportation users, Lincoln Avenue was reconfigured through reducing two travel lanes, adding exclusive center left-turn lanes, and adding bicycling paths. The proposed cross-section would improve bicycle network connectivity, would provide safer walking condition, would provide a clear safe space for turning vehicles, and would maintain the number of on-street parking spaces. Figure 7.11 and Figure 7.12 show the proposed repurposed travel lanes for downtown Willow Glen. It shows two automobile travel lanes is removed and two dedicated bike lane and a center left turn lane is added. Figure 7.13 demonstrates before and after road diet condition of the corridor.

Figure 7. 11 Lincoln Avenue Cross-Section (Typical Cross Section Along Lincoln Avenue Except for Mid-Crosswalks)

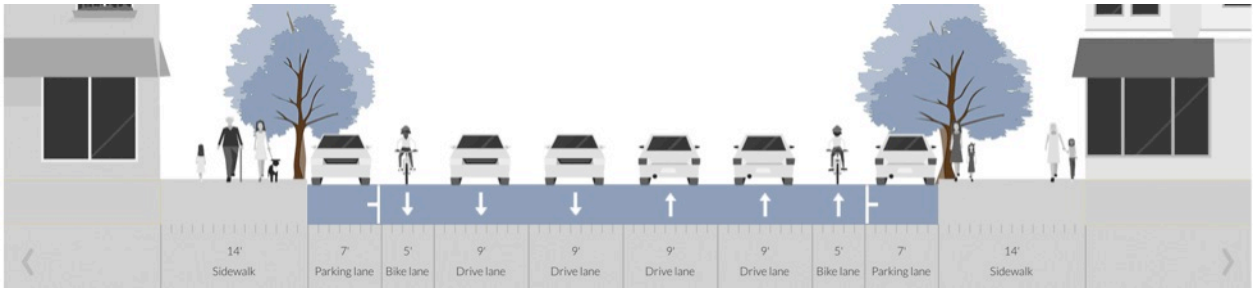
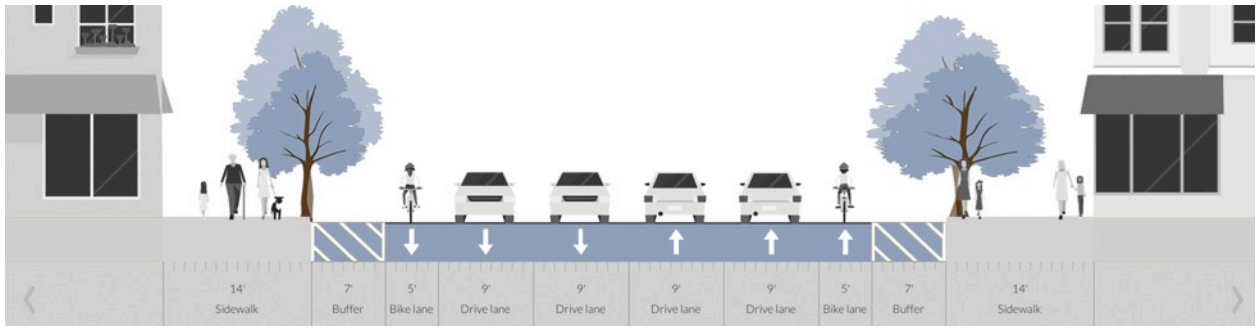


Figure 7. 12 Lincoln Avenue Cross-section (Typical for Mid-Crosswalks)

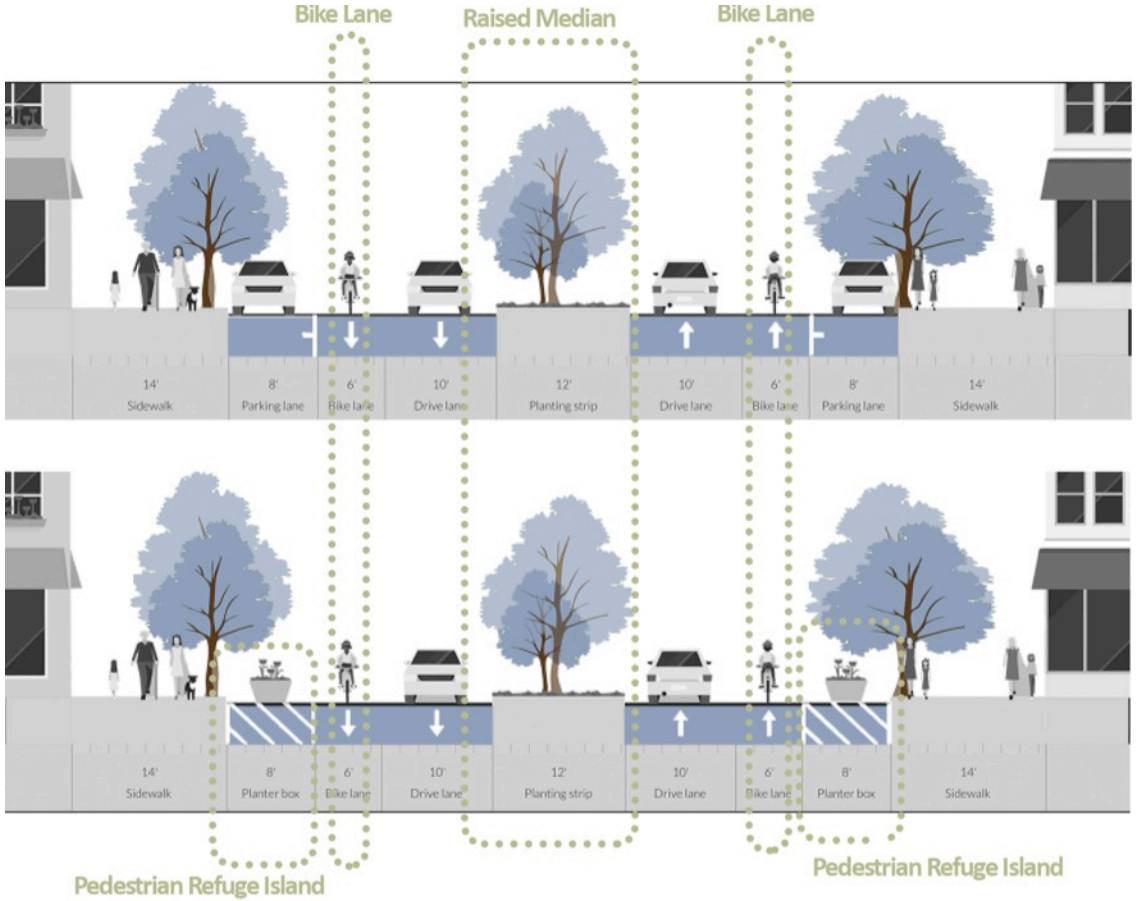


Source: Proposed Street Cross-Section Created by Author

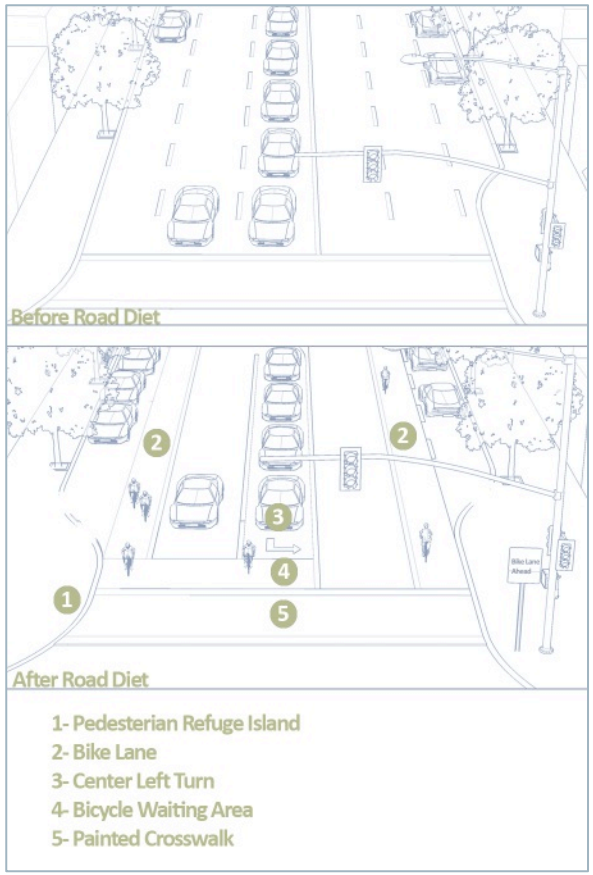
7.4 ADDING TRAFFIC CALMING FEATURES, AND STREETSCAPE ELEMENTS

Traffic calming features and access management set the stage for further improvements on the proposed road diet cross section of Lincoln Avenue. The traffic calming features that can improve the mobility experience in Lincoln Avenue includes Pedestrian refuges at intersections, tree lined medians, and streetscapes to improve the quality of movement and enhance the retail economic performance along the Lincoln Avenue corridor.

Figure 7. 13 Cross-Sections A-A (Typical Cross-Section Along Lincoln Avenue Except for Mid-Crosswalks)



Source: Proposed Street Cross-Section Created by Author



Source: Proposed and Existing 3d Sketch up Model Created by Author

Figure 7. 14 Before and After Road Diet in Minnesota Avenue and Lincoln Avenue Intersection

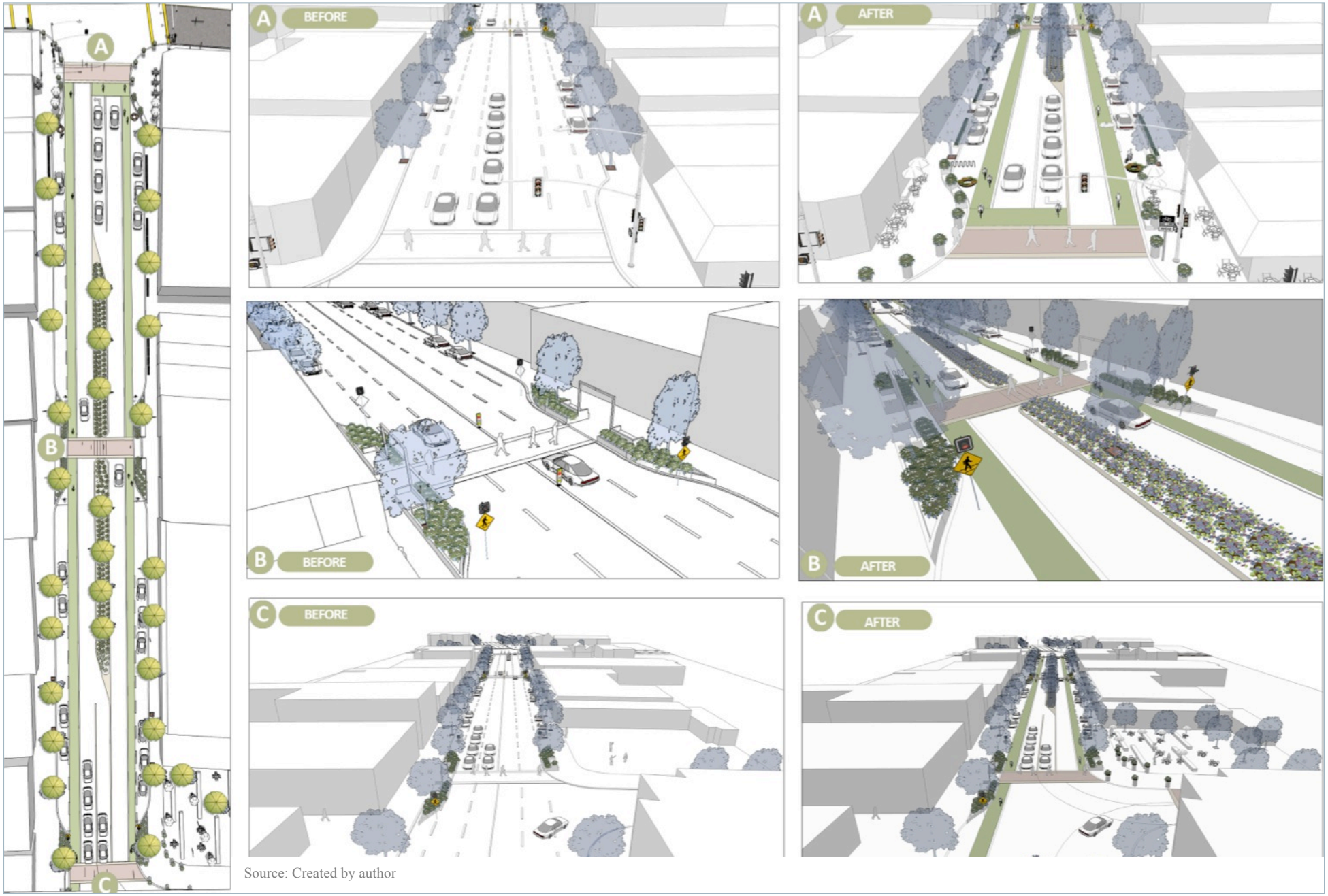
Adding Bike Lane as a part of Road Diet and Bicycle Waiting Areas:

Figure 7.15 shows changes in all crosswalks in downtown Willow Glen. It demonstrates that adding bike lanes would help maintain a strong buffer between pedestrians and vehicles. Adding dedicated bicycle waiting areas in signalized intersections would improve bicycle safety and reduce conflict with vehicles. Bicycle waiting areas offers to make bicycle movement more smoothly when there is heavy motor traffic. It placed between the pedestrian crosswalk and motorist waiting area. Figure 7.16 and Figure 7.17 also shows changes in all crosswalks at downtown Willow Glen after road diet and traffic calming treatment.

Figure 7. 15 Proposed Site Plan for redesigning Downtown Willow Glen

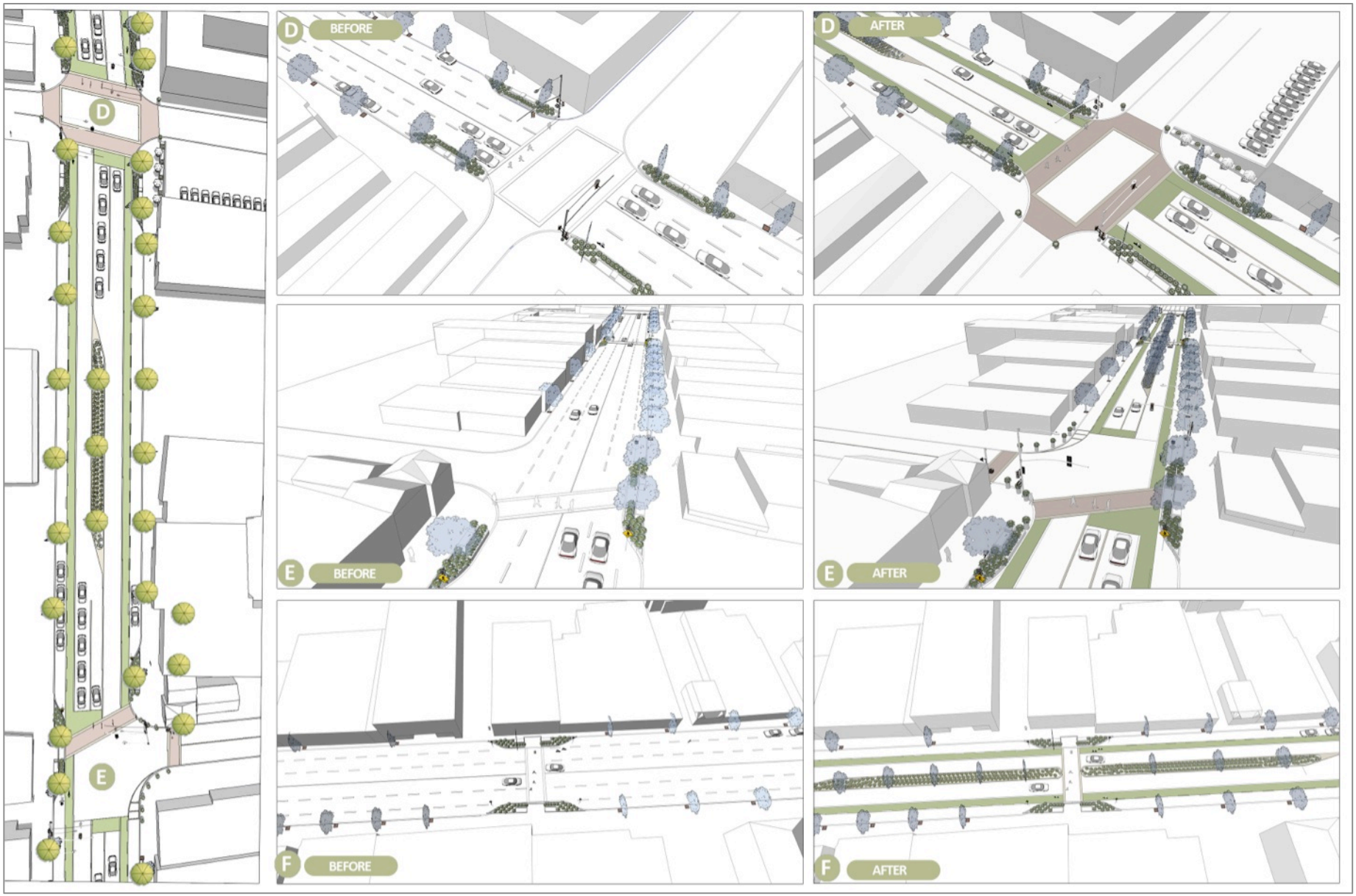
Source: Created by Author

Figure 7. 16 Before and after Road Diet and Traffic calming Treatment Comparison in Three Junction at Downtown Willow Glen



Source: Created by author

Figure 7. 17 Before and after Road Diet and Traffic calming Treatment Comparison in Three Junction at Downtown Willow Glen



Source: Created by Author

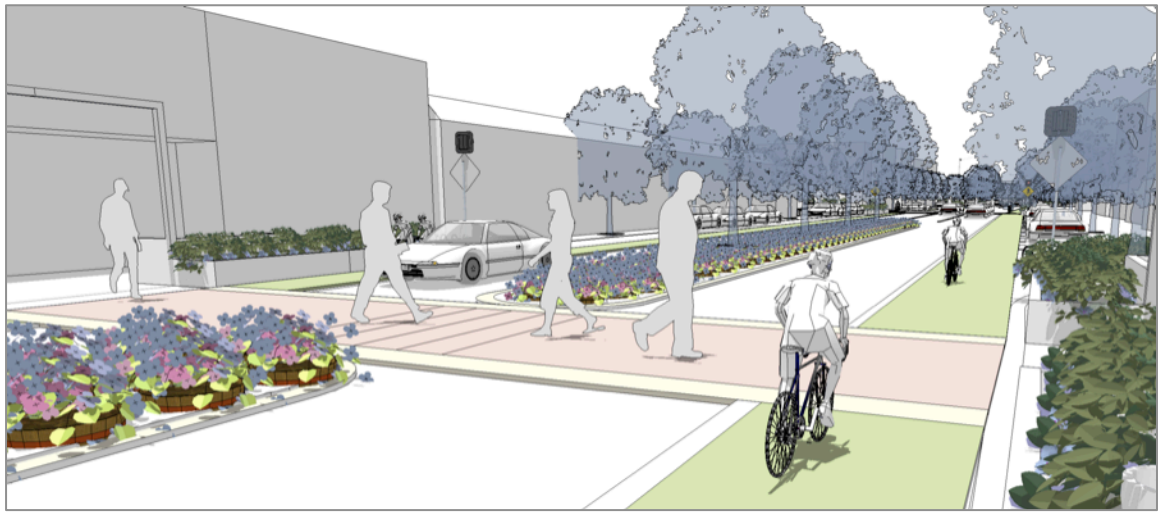
Adding Center Left Turn Lane as apart of Road Diet:

The center lane is used as a two-way left-turn lane. This lets left-turning drivers from both directions wait for a chance to turn without holding up traffic. An exclusive left turn lane would decrease motorized and non-motorized user conflict.

Adding Medians And Pedestrian Refuge Islands As Treatment For Long Crossing Distance:

A full-length, tree-lined median and pedestrian safety islands must be installed in this alternative to visually narrow the roadway where left turn would not be required. In raised medians and refuge islands, trees should be planted to create a more pleasing and pedestrian-scale environment that supports people's presence on Lincoln Avenue. As Figure 7.18 shows adding median and pedestrian refuge islands would decrease pedestrian crossing distance at the Willow and Lincoln intersection, and would create shorter, more direct crosswalks at the Minnesota and Lincoln intersection. Adding pedestrian refugee islands provides space for seating spaces and greenery.

Figure 7. 18 Street View From Proposed Mid-Crosswalks at Downtown Willow Glen



Source: Proposed 3d Sketchup Model Created by Author

Adding Streetscape Elements:

Streetscape elements would provide green spaces and seating areas. To add more greeneries traffic calming features is integrated with greeneries. For Example figure 7.19 shows the proposed corner radii's at signalized intersections.

Figure 7. 19 Proposed Corner Radii's for Redesigning Downtown Willow Glen

Source: Proposed 3d Sketchup Model Created by Author

The Issue of Delivery Vehicles:

In order to better serve the local businesses, the parking regulations would need to be changed to designate space for deliveries to local business.

Chapter 8

CONCLUSION

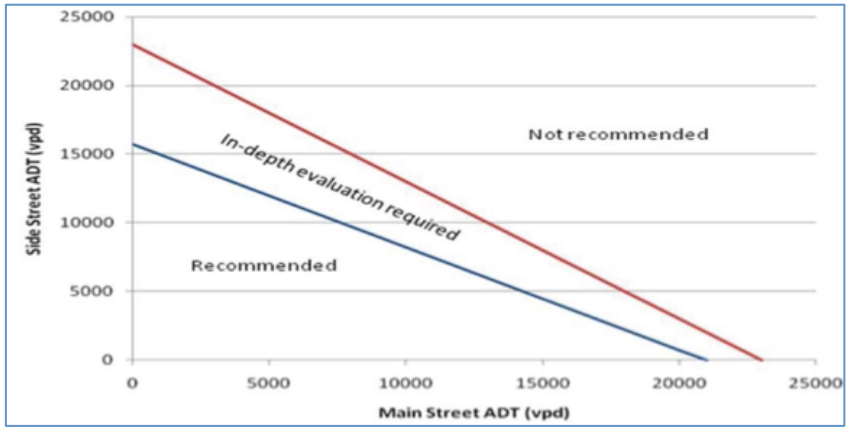
CHAPTER 8- CONCLUSION

For evaluating Willow Glen Road Diet feasibility, the following factors are used that consider Lincoln Avenue's operational aspect, safety aspect, multimodal operation aspect, access management and transition design, as well as aesthetics and beatification.

8.1 TRAFFIC OPERATION

In terms of Lincoln Avenue's operational performance after re-configuration, studies show lane reduction is feasible for roads with Average Daily Traffic less than 20,000. Since the average Daily Traffic for Lincoln Avenue is higher, "in-depth evaluation required." The Willow Glen Road diet Trial is a good approach for understanding whether or not lane reduction may fail on Lincoln Avenue. The current operational Lincoln Avenue problems expected to be solved after lane reductions include: "delay associated with left turning," "high side street delays at un-signalized intersections," and " bicycle delays." [47]

Figure 8. 1 Operational Performance Guideline for Lane Reduction



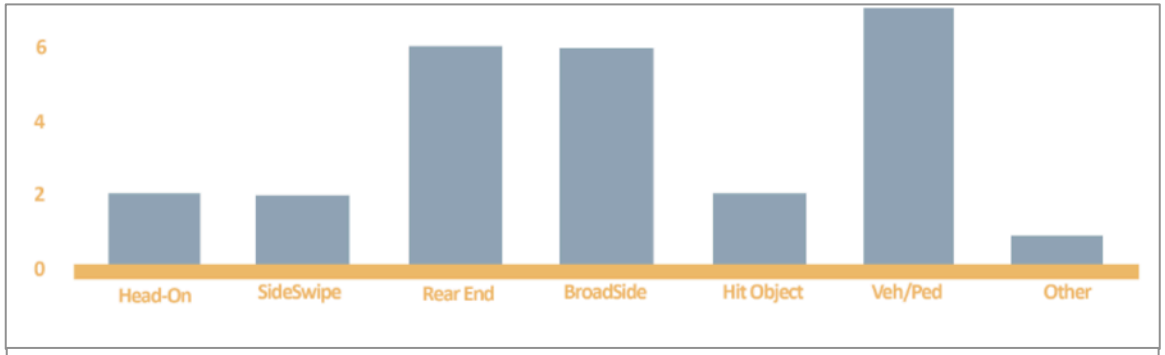
Source: Gluck, J., H. S. Levinson, and V. Stover, "Impacts of Access Management Techniques," NCHRP Report 420, Transportation Research Board, 1999.

[47] Gluck, J., H. S. Levinson, and V. Stover, "Impacts of Access Management Techniques," NCHRP Report 420, Transportation Research Board, 1999.

8.2 TRAFFIC SAFETY

In terms of safety performance, generally lane reduction significantly reduces crash rates. Because of adding exclusive left turn lanes through repurposing travel lanes on Lincoln Avenue, sideswipe crashes and rear-end crashes that are the result of changing lanes at intersections would be decreased: "A major synthesis of research on left-turn lanes demonstrated that exclusive turn lanes reduce crashes between 18 to 77 percent (50 percent average) and reduce rear-end collisions between 60 and 88 percent."[48] Rear-end crashes are the second highest collision type on Lincoln Avenue and can be addressed through having exclusive left turn lanes that remove the stop turning vehicles from the through lane. Figure 8.2 shows types of collisions in Downtown Willow Glen.

Figure 8. 2 2007-2012 Collision Type in Lincoln Ave.



Source: Created by author using data from T Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).

Table 8. 1 2007-2012 Motor Vehicle "Involved With" Collision

Motor Vehicle Involved With	Collisions	Percentage
Not Stated	1	3.8%
Pedestrian	7	26.9%
Other Motor Vehicle	9	34.6%
Parked Motor Vehicle	1	3.8%
Bicycle	6	23.1%
Fixed Object	2	7.7%

Source: Created by author using data from T Transportation Injury Mapping System, 2014, http://tims.berkeley.edu/tools/srts/main.php (accessed December 1).

[48] Gluck, J., H. S. Levinson, and V. Stover, "Impacts of Access Management Techniques," NCHRP Report 420, Transportation Research Board, 1999.

8.3 AFTER CONFIGURATION IMPACTS ON EACH MODE OF MOBILITY FOR LINCOLN AVENUES

Table 8.2 explains Lincoln Avenue's reconfiguration effect in pedestrian movement, bicycle movement, transit, automobile movement, safety and aesthetic.

Table 8. 2 Lincoln Avenue' s reconfiguration Comparison Road Diet Alternatives

	Explanation	The Impact On Pedestrian	The Impact On Bicyclist	The Impact On Transit	The Impact On Automobile	The Impact On Safety	The Impact Of Aesthetic
Alt A	• Road diet trail, • Lane reduction, • Bike lane on both side	• Shorter crossing distance	• Bicycle lane is located on both sides based on city of San José bike lane geometric standards	• No change	• More traffic congestion • Significant delay • Lower 85th percentile speed	• Lower speed • Left-turn lanes at intersections substantially reduce crashes and more specifically rear-end crashes.	• No change
Alt B	• Road diet trail, • Lane reduction, • Bike lane on both side, • Median • Streetscape elements	• Raised medians reduced pedestrian-involved crashes by and fatalities percent. • Raised median would increase pedestrian visibility, to separate pedestrians and motorist. • Pedestrians with slower walking speeds are able to cross one leg of traffic and then wait on a pedestrian refuge before crossing a second leg of traffic.	• Bicycle lane is located on both sides based on city of San José bike lane geometric standards	• Transit stops can be enhanced to better serve people specifically people with less ability of movement.	• Better access management that would improve road safety and would reduce traffic congestion • By adding median u-turn may be difficult for trucks and large vehicles.	• Adding median would reduce the crash rate about 37% and the injury rate about 48% • Better access management that would improve road safety and would reduce traffic congestion	• Medians would provide the opportunity for adding landscape and enhance the image of the area.

Although the Downtown Willow Glen Road Diet may increase congestion and divert traffic to parallel roads, looking at the problem through complete street principles reveals that multimodal transportation operation generally would improve. The Road Diet would provide a safer environment for pedestrians through offering shorter crossing distances, buffers between motorized and non-motorized users, and reducing speed. It is specifically important for Lincoln Avenue that has a school at one of the major intersections. Moreover, road diet would improve Lincoln Avenue's livability and provide a more pleasant environment that would enhance economic performance and commercial growth.

The Downtown Willow Glen Road Diet is not fail if it would be integrated with other traffic calming features and streetscape elements. The transition design and access management would significantly improve operational performance specifically for non-motorized users. Therefore, it is very critical to improve the current road diet trial of Lincoln Avenue based on complete street principles to have safer, more convenient, and pleasant mobility for all modes of transportation users.

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Appendix A: Before And After Lane Reduction Changes in Different Case Studies [49]

Street	City	State	ADA (Before)	ADA (After)	Others
Electric Ave	Lewistown	Pennsylvania	13000	14500	▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane ▪ 1980 ▪ "Adding a left turn adds as much as 30 percent to efficiency of movement." ▪ Overall trip times were unaffected.
Burcham Road	East Lansing	Michigan	11000-14000	11000-14000	▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
Grand River	East Lansing	Michigan	23000	23000	▪ Slight reduction in Speed ▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
South of 83	Kirkland	Washington	23000	25913	▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
	Kirkland	Washington	30000	N/A	▪ 4 lanes to 2 lanes +TWLTL
Near downtown	Kirkland	Washington	10000	12610	▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
120th Avenue	Bellevue	Washington	16900	16900	▪ 4 lanes to 2 lanes +TWLTL
Montana	Bellevue	Washington	18500	18500	▪4 lanes to 2 lanes +TWLTL
Greenwood Ave	Seattle	Washington	11872	12427	▪ 1995 ▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
N4th	Seattle	Washington	19421	20274	▪ 1972 ▪ 4 lanes to 2 lanes +TWLTL
8th	Seattle	Washington	10549	11858	▪ 1994 ▪ 4 lanes to 2 lanes +TWLTL+ Median

[49] Table Source: City of Orlando- Transportation Planning Bureau. "Edgewater Drive Before and After re Tripping Results," 2002, http://www.smartgrowthamerica.org/documents/cs/impl/fl-orlando-edgewater.pdf (Accessed November 2014); City of San Francisco: Department of Parking and Travel. "Valencia Street Bicycle Lanes: A One-Year Evaluation." sfmta.com. 2000. http://www.sfmta.com/ (Accessed November 2014); City of Seattle: Department of Transportation. "Stone Way N Rechannelization: Before & After Study." seattle.gov. [Online] 2010. www.seattle.gov/(Accessed November 2014); Dan Burden and Lagerway, P. Road Diets: Fixing the Big Roads. Walkable Communities, Inc. 1999. www.walkable.org/ (Accessed November 2014); Daniel Kueper, "Road Diet Treatment in Ocean City. NJ, USA." ITE, 2007.; J. Rosales, "Road Diet Handbook: Setting Trends for Livable Streets," New York, N.Y.: Parsons Brinckerhoff, 2009 ; Jonathan Williams, Matthew Ridgway, and Will Lisska, Fehr & Peers "Road Diet Case Studies," A memorandum to Chris Comeau, City of Bellingham, 2012; Jonathan Williams, Matthew Ridgway, and Will Lisska, Fehr & Peers "Road Diet Case Studies," A memorandum to Chris Comeau, City of Bellingham, 2012.
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MLKJ	Seattle	Washington	12336	13161	▪ 1994 ▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
Dexter	Seattle	Washington	13606	14949	▪ 1991 ▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
24th	Seattle	Washington	9727	9754	▪ 1995 ▪ 4 lanes to 2 lanes +TWLTL
Madison	Seattle	Washington	16969	18075	▪ 1994 ▪ 4 lanes to 2 lanes +TWLTL
Government	Seattle	Washington	12916	14286	▪ 1991 ▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
12th Ave.	Seattle	Washington	11751	12557	▪ 1995 ▪ 4 lanes to 2 lanes +TWLTL+ Bike Lane
17th [4 lanes to 3 lanes]	Billings	Montana	9200-10000	N/A	▪ 1979 ▪ No Significant increase in delay ▪ 4 lanes to 3 lanes
U.S.12	Helena	Montana	18000	N/A	▪ CORSIM
21th	Duluth	Minnesota	17000	N/A	▪ CORSIM
Rice street	Ramsey County	Minnesota	18700	16400	▪ CORSIM
Flint Drive	Storm Lake	Iowa	8500	N/A	▪ CORSIM
Clay St.	Muscatine	Iowa	N/A	N/A	▪ CORSIM
High street	Oakland	California	22000-24000	N/A	▪ CORSIM ▪ Implemented ▪ No significant change in vehicle speed. ▪ Anecdotal speed decreases and decreased in unsafe maneuvers observed. ▪ 4 lanes to 2 lanes +TWLTL
	Oakland	California	6000-12000	N/A	▪ CORSIM
	San Leandro	California	16000-193000	14000-19300	▪ CORSIM
12th from Yelser way to John St.	Seattle	Washington	11751	12557	▪ 1995 ▪ 4 lanes to 2 lanes +TWLTL
[4 lanes to 2 lanes +TWLTL]	Vancouver	Washington	12000	N/A	▪ No queuing blocking access, increased pedestrian activity improved bicycle conditions no traffic diversion impact
Fourth Plain BLV.	Vancouver	Washington	17000	N/A	▪ 2001-2002 ▪ Traffic speed decreased by 18% (29.4 to 24.2 mph) ▪ No significant changes to traffic volume, traffic diversion only about 4% ▪ 4lanes to 2 lanes + TWLTL+ Bike Lane+ ADA improvement and utility work
Baxter St	Athens-Clarke	Georgia	20000	N/A	▪ 1999 ▪ Adequate traffic operation, good mobility, more uniform traffic speeds, closer to speed limit ▪ 4 lanes to 2 lanes +TWLTL

U18	Clear Lake	Iowa	12000	N/A	▪ 2003 ▪ Aggressive speeding reduced by 52%, and ▪ Speed limit decreased 32% ▪ No traffic volume changes, no traffic diversion impacts, adequate traffic operation good mobility ▪ 4 lanes to 2 lanes +TWLTL
Stone Way N 34th to 45th	Seattle	Washington			▪ The number of motor vehicles exceeding the speed limit by 10 miles per hour or more dropped approximately 75%.
West Avenue	New Jersey	Ocean City	15000	N/A	▪ Slight reduction in Speed ▪ Two intersections operated at LOS B before and after implementation
Edgewater Drive	Orlando	Florida	20500	21000	▪ 2001 ▪ Traveling over excessive speeds reduced ▪ It experienced a temporary diversion immediately after lane reduction 4% ▪ 4lanes to 2 lanes + TWLTL+ Bike Lane+ streetscaping
Portland Ave	Burnsville	Minnesota	9200		▪ Reduction in 85th-percentile speed
	River Fall	Wisconsin	14000	Slight reduction	▪ Slight reduction in Speed
Nickerson Street	Seattle	Washington	18560	18360	▪ 2010 ▪ Reduction in 85th-percentile speed (40,6 to 33.1 mph WB, 44 to 33 EB) ▪ Traveling over excessive speeds reduced by 90%. (17% to 1.4 % WB, 38% to 1.5% EB) ▪ 4lanes to 2 lanes + TWLTL+ Climbing Bike Lane
Alabama Street	Bellingham	Washington	13000 to18700	N/A	▪
Ocean Park Blvd.	Santa Monica	California	23000	18000	▪ 2008 ▪ Reduction in 85th-percentile speed (33, and 34.3 to 27 mph) ▪ 4lanes to 2 lanes + TWLTL+ Bike Lane+ Parking+ Median
Electric Ave	Lewistown	Pennsylvania	13000	14500	▪
Plainsboro	Township	New Jersey	7296	7674	▪
West Ave.	Ocean City	New Jersey		Unchanged	▪ A Modest Reduction in Speeds ▪ 85th percentile speed and the 50th-percentile travel speed were 1 mph lower ▪ Highest travel speeds decreased ▪ Average delay per vehicle in the peak hour increased by about 3 seconds ▪ Queue lengths increased
Valencia Street	San Francisco	California	22,1888	19,979	▪ 10% drop in motor vehicle traffic, displacement onto parallel arterials. 144% increase in bicycle volume. ▪ 4 lanes to 2 lanes + TWLTL+ Bike Lane+ Median

Appendix B: Before And After Lane Reduction Changes for Crash Rate Different Case Studies[50]

Street	City	State	Crash Rate	Others
Electric Ave	Lewistown	Pennsylvania	Decreased	Dangerous maneuvers and crashes dropped to nearly zero
Greenwood Ave	Seattle	Washington	58% Reduction	
N4th	Seattle	Washington	49% Reduction	
8th	Seattle	Washington	61% Reduction	
MLKJ	Seattle	Washington	60% Reduction	
Dexter	Seattle	Washington	59% Reduction	
24th	Seattle	Washington	28% Reduction	
Madison	Seattle	Washington	28% Reduction	
Government	Seattle	Washington	Not changed	
12th Ave.	Seattle	Washington	16% Reduction	
17th	Billings	Montana	62% Reduction (20 Month Data)	
U.S.12	Helena	Montana	Decreased	
21th	Duluth	Minnesota	Decreased	
Roce street	Ramsey County	Minnesota	28% Reduction (3 years data)	
Flint Drive	Storm Lake	Iowa	Decreased	
Clay St.	Muscatine	Iowa	Decreased	
High Street	Oakland	California	17 % Reduction	
	Oakland	California	N/A	
	San Leandro	California	52 % Reduction (2 years data)	

[50] Table Sources: City of Orlando- Transportation Planning Bureau. "Edgewater Drive Before and After re Tripping Results," 2002, http://www.smartgrowthamerica.org/documents/cs/impl/fl-orlando-edgewater.pdf (Accessed November 2014); City of San Francisco: Department of Parking and Travel. "Valencia Street Bicycle Lanes: A One-Year Evaluation." sfmta.com. 2000. http://www.sfmta.com/ (Accessed November 2014); City of Seattle: Department of Transportation. "Stone Way N Rechannelization: Before & After Study." seattle.gov. [Online] 2010. www.seattle.gov/(Accessed November 2014); Dan Burden and Lagerway, P. Road Diets: Fixing the Big Roads. Walkable Communities, Inc. 1999. www.walkable.org/ (Accessed November 2014) Daniel Kueper, "Road Diet Treatment in Ocean City. NJ, USA." ITE, 2007; J. Rosales, "Road Diet Handbook: Setting Trends for Livable Streets," New York, N.Y.: Parsons Brinckerhoff, 2009; Jonathan Williams, Matthew Ridgway, and Will Lisska, Fehr & Peers "Road Diet Case Studies," A memorandum to Chris Comeau, City of Bellingham, 2012.; Jonathan Williams, Matthew Ridgway, and Will Lisska, Fehr & Peers "Road Diet Case Studies," A memorandum to Chris Comeau, City of Bellingham, 2012; Keith K. Knapp and Karen Giese, "Guideline for the Conversion of Urban four-lane undivided roadways to Three-lane two-way Left Lane Facilities," The Iowa Department of Transportation's Office of Traffic and Safety, 2001; Keith Knapp and Jennifer A. Rosales, "Four –Lane to Three-Lane Conversions: An Update and a Case Study," 3rd Urban Street Symposium, 2007; Keith Knapp, Thomas M. Welch, and John A. Witmer, "Converting Four-Lane Undivided Roadways to a Three-Lane Cross Section: Factors to Consider," 2001; Smart Growth America, "Nickerson Street Rechannelization. Before and After Report," 2010, http://www.smartgrowthamerica.org/documents/cs/impl/wa-seattle-nickerson.pdf (Accessed November 2014); Thomas A. Sohrweide, P.E., P.T.O.E., Bonnie Buck, Reid Wronski, P.E., "Arterial street Traffic Calming With three- Lane Roads," ITE; Thomas M. Welch, "The Conversion of Four Lane Undivided Urban Roadways to Three Lane Facilities," Office of Transportation Safety, Iowa DOT, 1999.

12th from Yelser way to John St.	Seattle	Washington	16% Reduction	
	Vancouver	Washington	N/A	
Fourth Plain BLV.	Vancouver	Washington	52% Reduction	
Baxter St	Athens-Clarke	Georgia	53% Reduction	
U18	Clear Lake	Iowa	65% Reduction	
Stone Way N 34th to 45th	Seattle	Washington	14% Reduction	Pedestrian collisions have been reduced 80%. Injury collisions are down 33%. Angle collisions declined 56%. Pedestrian collisions declined 80% Left turn collisions declined 25%. Parked car collisions declined 15%."
West Avenue,	New Jersey	Ocean City	Not Changed	
Edgewater Drive	Orlando	Florida	34% Reduction	Injury rate down by 68%
Portland Ave	Burnsville	Minnesota	Reduction	
	River Fall	Wisconsin	N/A	
Nickerson Street	Seattle	Washington	23% Reduction	
Alabama Street	Bellingham	Washington		
Ocean Park Blvd.	Santa Monica	California	65% Reduction	60% reduction of injury accidents
Electric Ave	Lewistown	Pennsylvania	Decreased	
Plainsboro	Township	New Jersey	Decreased	
West Ave.	Ocean City	New Jersey	Not Changed	
Valencia Street	San Francisco	California	Not Changed	15% reduction in pedestrian collisions. No statistically significant change in total number of collisions.

Appendix C Willow Glen Neighborhood Comments From Willow Glen Road Diet Website

Willow Glen Neighborhood Association (WGNA) October 16, 2014 · For the purposes of traffic calming, pollution reduction and pedestrian safety, the City of San Jose is considering plans that may potentially reduce the number of lanes on Lincoln Avenue (between Willow and Minnesota) from four lanes to two lanes (with one emergency/turning lane in the center). What are your thoughts of these proposed plans? Have you experienced close calls attempting to cross Lincoln Avenue? Our Board of Directors will be considering a position on this in the near future and we would like to hear your thoughts. Thank you! Unlike · Comment · Share · 132 138 29	
Don't Like the Road Diet Concept (42 Comments, 121 support by liking)	
1. **Bob Emerson** A very risky proposition at best. A logistical nightmare without alternate smooth flowing routes. I can't believe the word pollution reduction was even used in this proposal. Either the City is really dumb or they think we people are really dumb. Besides these type changes never deter bad drivers. More lights, speed bumps, more tickets, work on the specific issues don't reduce traffic flow to stall speeds or huge congestion problems. 2. **Bonny Mclean-haskell** Now tell the real reason. So the merchants can have more sidewalk use. Government rarely does things FOR THE PEOPLE, it is usually for BIG BUSINESS. 3. **Cate Thomassen** We live parallel to Lincoln between Lincoln and Bird and get traffic speeding along our narrow street whenever there is an event blocking Lincoln (and often when it's fully open). Our street is apparently too narrow to permit us to get speed bumps as Blewitt has. When cars are parked on the street there isn't even enough room for two way traffic. Unless there is also a plan to reduce speeding on Settle and Kotenberg, it's a recipe for disaster. 4. **Chris John Kouretas** Terrible idea, and will never happen. Lincoln whether you like it or not, is major artery connecting south SJ to downtown and north SJ....if you made it two lanes, traffic	Pollution Diversion to Bird Street Undesirable Diversion

	would divert to adjacent residential streets which would cause even more problems, what WG resident would ever support that !! Like 29	
5.	**Chris Sand** That would make access too difficult and the traffic congestion would be even worse. Bad idea! Like 1	
6.	**Christina Pecota** Omg that would be a traffic nightmare	Would Cause Traffic
7.	**Darla Castro Torres** Really? I don't even bother going downtown WG for breakfast or dinner anymore. Seems like the restaurants and their specialty alcoholic beverages brings in OP which is causing a major traffic jam. 2 hour wait at Bill's for breakfast because people are sitting there for 2 hours drinking their breakfast, RIDUCLOUS!	Automobile Concern
8.	**Debbie Bauman** It's the main thoroughfare for the neighborhood. Where else are the cars supposed to go? Down the neighboring side streets? This idea would only make things worse.	
9.	**Don Baker** No, bad idea. I assume that the people who drafted this proposal has never been to downtown WG on a Saturday. Reduce car pollution by forcing cars to sit idling in line. Silly idea. Just shut down Lincoln to all auto traffic if you want to achieve that (which, is in of itself, another bad idea).	The problem is not number of Roads but signals
10.	**Elizabeth Black** Terrible idea! The issue w/ Lincoln is that the interim crosswalks compete with a driver's natural stop and go rhythm between the lights. The driver gets through the light and isn't expecting to pause in just a few feet (unless he/she is local and doing it all the time.) one way to fix the problem and still appease business that want to still receive customers from the other side of the street is to put in some elevated bridges. Another is to have frequent lights that are well that are well timed do one only has to stop once or twice on timing. I feel it would be a VERY bad idea to reduce to one lane as it would create a traffic nightmare and invite lots of j-walking which is more dangerous. Like 9	
11.	**Gerald McGuire** No a stupid idea Like 3	
12.	**Honor Spitz** ...the concept of slowing down traffic in the shopping district of Lincoln Ave. is a laudable one; however, reducing the number of lanes is fraught with untold complications and potential for more mayhem...let's put on our thinking caps and consider other solutions. Maybe something as simple as those flashing speed monitoring signs that help all of us become more aware of how fast/slow we're driving might be useful. The crosswalks with the flags seems to help a great deal already. Like 2	
13.	**James Patterson** An honest question for everyone that thinks this is a good idea? Do you live in Willow Glen? Is this your backyard? Or are you a non resident that wants a more residential version of Santana Row where you can get your gourmet food and a buzz from the liquor that every restaurant sells? For everyone that is pro business, what do those businesses bring for the actual residents of WG. Increased traffic, less available parking, and residents avoiding their own neighborhood. How many residents can say they enjoy what Dancing on the Avenue has turned into. This is pushing Lincoln to be like those closed events all the time. Why not for once consider what the changes would do for the outlying community rather than making a more shopping friendly 3 block stretch.	Diversion to Bird Street
14.	**James Patterson** Ask any resident on Bird between Willow and Minnesota if they think adding	Delivery

	more traffic would be a good idea. A better idea I think would be to remove the pedestrian crossing in front of Peets coffee and make people use the crosswalk on Willow. Set u... Like 3	Concern
15.	**James Patterson** Campbell has 2 dedicated alternative routes for the majority of traffic to avoid downtown. Perhaps the residents on Cherry and Blewett as well as the adjacent properties would like to be on a permanent detour.	Automobile Concern
16.	**James Patterson** Won't this make traffic more congested and create a bottleneck? Also, I'm sure the residential neighborhoods on Bird, Cherry, and Hicks would welcome additional traffic avoiding said bottleneck. Like 2	Traffic Concern Traffic Concern
17.	**Kathy Dresslar** TOOO many delivery trucks we would not be able to move TERRIBLE IDEA Like 2	Parking Issue Commuter Concern
18.	**Kristin Link** Awful idea. Also unhappy that they're letting businesses take parking for tables. We're not Mtn View. There are not appropriate alternatives, including zero public transit. Make it more difficult for us to drive there and we'll stop coming. Like 5	Traffic Concern
19.	**Laurel Eby** I think it's a terrible idea! Traffic is already bad enough on Lincoln, and there won't be fewer cars trying to drive through there with just one lane in each direction; that will just cause traffic to be even worse! Like 1	
20.	**Linda E Lopez** Sounds like a traffic back up to me. Like 1	Traffic Concern
21.	**Linda Melluish I** do believe it will cause traffic congestion	
22.	**Lisa Deutsch** Harrigan As someone who travels from Rose Garden TO Willow Glen to shop, please don't. It is hard enough to get there and park as it is. Making things more congested, will just make sure I shop someplace else. Like 5	Traffic Cocern
23.	**Matt Smith** Not a good idea as it would back up forever when just one person is waiting for another or trying to parallel park. Need cops patrolling more often and writing tickets to those who speed through, run lights / crosswalks. Word getting around about tight enforcement will slow folks down and get them to pay attention when driving in congested areas.	Pollution
24.	**Michael Constantino** Urata Foolishness, chicanery and mayhem!!! It's already bad enough, does someone have to die while trying to cross Lincoln Ave. before they get it?	
25.	**Paul Batres** Quit trying to be like LG!!! You think it's bad now during the commute wait til it's 2 lanes! What do they think people will do stop for food or something instead of sitting in stopped traffic!! Have you been down Bird Ave. between willow and Minnesota in the morning? That's what Lincoln will look like!! We need more police not a fancy street!!	Automobile Concern
26.	**Pete Panos** This is a horrible idea. The traffic will become horrendous and people will avoid going to Downtown Willow Glen. This going to hurt business a lot. If you want Downtown Willow Glen to become a ghost town, then approve this measure Like 1	
27.	**Phillip Bowles** This strip is heavily traveled during the rush hours. Reducing the number of lanes will greatly handicap traffic and, I would think, would cause more pollution because of slower speeds and extended rush hours.. I do appreciate the flag campaign, but please, no more	Traffic Concern Businesses

restrictions on thru traffic. Like 6	Concern
28. **Richard Bartholomew** While It would be very nice for pedestrians it would probably hurt business. There isn't sufficient parking off street without multilayer parking behind. Also, Bird Avenue and Meridian aren't built for that much traffic. Bird and Cherry Avenues expansion was taken off was taken off the city plan in the late 70's. Conclusion, nice idea, but not a reasonable solution. Maybe speed bumps would help control things.	
29. **Samantha LoCurto** I see this potentially causing frustration for drivers and then enhancing speeding and issues. If they provide supporting case studies of other locations that this worked for that could be helpful. Like 3	Commuter Concern
30. **Sandy Erickson** NO. Bird and Meridian are already gridlocked at rush hour. Removing lanes on Lincoln will only make traffic worse on those roads. It's a good idea in theory, but the reality is that our roads already can't handle the volume of traffic. If anything, we need more lanes on all of these major thoroughfares, not less. Like 13	Traffic Concern
31. **Sara Roach** I don't like the idea of 2 lanes. It takes long enough with 4 lanes.	
32. **Sharon Hoehn** No! This will make things worse (people are still going to use Lincoln, and having fewer lanes will only make traffic worse! And cause drivers to b more apt to hurry through yellow lights, ped crossings, etc.). It will make people less likely to visit businesses in Willow Glen. I agree with Ernesto Vallecilla - this sounds like more businesses want to use the sidewalk. Like 3	Traffic Concern
33. **Sofia Senigaglia Widgren** That is a terrible idea. I , for one, would not drive down there...and that is not good for businesses. Like 2	
34. **Steve Staton** I vote No! Spend money on beefing up San Jose Police instead! Like 23	Diversion Concern
35. **Teresa DeFino Michaelis** I vote no. I have never had any problems crossing Lincoln. Just use your eyes please. And don't assume anyone is going to stop until they do. Those are my thoughts. Thanks Holly & Grag Like 1	
36. **Theresa Stratinsky** I think it may make the situation worse it's already a very busy street	
37. **Tim Mulcahy** It is not the main thoroughfare for the neighborhood. It is a main thoroughfare for commuters just passing by on their way to work in another city. You want more progress on Lincoln Ave. the road diet is a necessity to continued investment and a variety of retail choices. In time these commuters will find another route and this will be a boon for the neighborhood.	
38. **Veronica Johnson** They did this in Cupertino/ Santa Clara. It caused MORE traffic. Like 1	
39. **William Thomas Keller** Go to Livermore and look at that mess.	
40. **Yvette Spencer** By doing that will create more traffic jams and possible accidents - it is a main thoroughfare for a lot of people, especially during commute time. I don't believe this is a good idea at all.. To control the traffic speed in the area, since it is a 25mph zone, put in speed bumps like they have done on other streets. Also this will create the side streets to get the congestion and a new set of issues will arise. Take a look at the town of Los Gatos with 2 lane traffic on their main streets - a total mess. Constant congestion and frustrated drivers. Like 2	
41. **Cookie Curci** IT sounds like a good solution, but then where does all the traffic go from the lane	

you eliminated...my fear is less lanes but twice as much traffic, i hope i'm wrong because driving through W.G is even harder than walking it...always on the lookout for someone crossing somewhere, or a car turning in, or coming out at you... love if they put in over passes for pedestrians. Like 1 42. **Dan Hunter** Bad idea. This will only force more traffic onto residential streets where you have children walking or riding their bikes to school. Like 2	
Like the Road Diet Concept (27 Comments, 53 Supports)	
1. **Aby Ryan** Great idea! The safety of our community should be our first priority and anyone who hangs out in downtown Willow Glen long enough will see someone blow through a crosswalk with people in it. Downtown Willow Glen has grown into a thriving community filled with pedestrians and cyclists mingling up, down and across streets so I would love to see 2 lanes with bike lanes. Like 2 2. **Andrew Boone** Excellent idea! 2 lanes is simply safer than 4 lanes for everyone, while walking, bicycling, and driving. This should've been done a long time ago. Like 9 3. **Anna Christopoulos** When you have a wider lane, people drive faster / less cautiously. I feel that would not be good for such a pedestrian filled, down town, main street. Please have the traffic engineers review that. Like 3 4. **April Glory Funcke** Cars often do not stop even when there are pedestrians waving orange flags and blinking lights warning cars to stop for pedestrians in the crosswalk. It's very dangerous, especially for children and older folks who might take longer to cross. Riding a bicycle on Lincoln Av is hazardous to your health; there is no bike lane and those islands that jut out into the bike lane force cyclists into the traffic. The problem is that there are too many cars on a narrow street, and the traffic would have to be rerouted onto side streets, which creates a whole new set of problems. 5. **Brandi Childress** First instinct is YES! More walking and biking and side walk seating. However, I'd like to see the traffic studies to see how it effects surrounding local roads. Like 3 6. **Carlos Babcock** The tone of many posts here is that you cannot reduce roadway capacity. You have to widen roadway to easy solo occupant vehicle traffic. We've done this for 50 years and not only is it costly. It doesn't work. 7. **Chris Martinez** I say yes! Look what it did for Campbell and Los Gatos Like 7 8. **Eamonn Gormley** Cities are for living in, not speeding through. University Ave in Palo Alto is a great example of a vibrant urban downtown with thriving local businesses. Like 9 9. **Eric Zaiser** I think this is a good idea. Greenville SC reduced its Main St. from four to two lanes as part of a revitalization project and it was incredibly successful, so much so that it's considered a model for other cities http://www.greenvillesc.gov/.../DowntownRevitalization.aspx	Safety Safety Safety Safety Bike Issue More Bike More walk Traffic Concern

10. **Erinne Cohen** Can't wait!! Completely support lane/speed reduction it's way too busy of an area. We could use more cross walk flags at other Lincoln Ave. ped crossings +Willow Glen Charm. Like 2	Safety
11. **Frank R Schapairo** Willow Glen had only one lane each way with horizontal parking on both sides for many years before they removed the parking and added lanes. Reducing the lanes would slow traffic and make our town safer. Like 2	
12. **Frank W. Fuselier** Sounds good. Willow Glen should not be a commute thoroughfare.	Support Businesses
13. **Kathleen C. Nesbitt** I think it's a great idea, myself. Pedestrians, bike riders, and those who use public transportation are supporting the environment and the planet. There should also be some kind of a reward or incentive for people to leave their cars at home. Like 6	
14. **Katie Zazueta** I walk across Lincoln Ave everyday to get my kids to school. Even the Peet's light for crossing and folks just speed rt by. I have avoided being hit at least five times and yelled at cars. Please reduce the number of lanes. It will help so much. Thank you for sharing. Like 3	Safety
15. **Kelly Colleen** Very good idea. I've almost been hit several times (even using flags to cross!) It would make the street safer, and also more pleasant for diners and shoppers. I think it would help the businesses greatly. Like 2	Support Businesses
16. Like · Reply · October 16, 2014 at 9:00pm	
17. **Lisa Dali** Martin YES, YES, YES!! I was hit by a car while IN a crosswalk on Lincoln 2 years ago. 8 months of phys therapy & 2 surgeries later I will celebrate the day that happens. People who call is a thoroughfare--troubling that you are more concerned about getting to work than the safety of this community. Like 4	
18. **Maria Martinez** It's a great idea. This way cars have to drive slow. Like 1	
19. **Michalene Edwards** If it makes our little downtown more like downtown Mt. View then I am all for it.	More Walking No Commuter
20. **Nancy Steinhardt** It's a great idea!! Traffic calming would be a blessing for all shoppers/pedestrians who shop at our stores and merely want to cross the road at the crosswalks and not fear for their life. It would also support our WG neighborhood who want to ride thei.. Like 2	Support Businesses
21. **Philip Maynard** I agree with Doug 100% Having 4 lanes of traffic through Willow Glen is crazy and incredibly dangerous, it is certainly worth a try, but maybe needs more than 60 days. I saw this article about this sort of thing " Whenever some city proposes taking lanes away from a road, residents scream that they're going to create a huge traffic snarl. But the data shows that nothing truly terrible happens. The amount of traffic on the road simply readjusts and overall congestion doesn't really increase." http://www.wired.com/2014/06/wuwt-traffic-induced-demand/ Like 1	WG Preservation
22. **Robert Morrison** great idea. do it now without delay. forget the naysayers	
23. **Robin Doran** Great idea! Pedestrian-oriented areas are a counterpoint to the sprawl of the region. Good for business and local vitality. Like 6	
24. **Steve Ackert** I think that it is a GREAT idea, I am tired of people treating Lincoln like the	

Almaden Expressway and even 87. I have seen too many close calls plus it is simply unridable from a safe cycling perspective. However, I'm not sure that it is entirely workable. 25. **Suzanne Kay** As a business owner on Lincoln Ave and a local resident, we completely support this change!! Like 6 26. **XX** We must work on preserving the current character Willow Glen offers, it is unique to all of San Jose. I would look to more creative solutions with traffic mitigating solutions like additional stoplights or stop signs. Perhaps that would discourage the reckless speeding I witness every time I am on Lincoln and force people to reconsider other routes that are true major thoroughfares. Like 7 27. **Zoe McAtee** It's a really interesting idea, Campbell sure seems to have benefited by it.	
Road Diet With Bike (6 Comments, 39 Supports)	
1. **Antony Wilson** Yay for bikes!	Bike
2. **Bill Parker** I like the idea, with the addition of bike lanes. I'm more than happy to head to Meridian or Bird for my downtown needs. Currently it's terrifying to ride my bike on Lincoln or to dodge speeding drivers between Peet's and PetCo, Even with the flags.... I would also suspect that the timing at the bookend lights could be adjusted. That, in combination with the number of folks who would take alternate routes, would likely improve local access to Lincoln. One other note. It is my understanding that easy freeway access is a consideration when committing residential crimes like burglaries and auto thefts. I've read from several sources that there is a higher likelihood of criminal acts taking place in areas frequented by the perpetrators (e.g.; near home, work, and thoroughfares). Those are my thoughts. . Like 7	Bike
3. **Bob Mack** This is only a good plan if it adds bike lanes to Lincoln. This is a direct route that links WG with Caltrain, parks, schools and more. Many bikes use Lincoln Ave. If we loose traffic lanes, we need bike lanes to have space for everyone. Like 19	Bike
4. **Cori Wilser** Will there also be bike lanes on each side? We would LOVE to feel safer riding our bikes to the Ave. And yes, my kids and I cross Lincoln at Willow Glen Way every day and it can be really scary. One car stops and you can't see if the cars in the other lane are going to stop. So you have to carefully walk across to check. I am so in love with this new idea. Especially if bike lanes are included. Like 6	Bike
5. **Chad Mitchell** Bike lane needed. I have almost been hit to many times on Lincoln Ave. Like 1	Bike Bike
6. **Doug Hall** Think outside the car folks. It's a more livable city if you easily enjoy your neighborhood safely. Already we have so many close calls with drivers blatantly ignoring or driving distracted through occupied crosswalks. A more bikable city also helps to cut down on traffic congestion from autos. San Jose is such a bikable city in terms of flat terrain...you can really make a long term shift toward a sustainable city by making more pedestrian and bike investments. We will always have auto traffic. Wider streets won't fix that...only create more traffic (sounds weird but it's true!). We have a great opportunity here. Let's not blow it! Like 6	
Other Suggestion For having Better Lincoln Avenue	
1. **Anne Elise** Fink How about starting with easy and common tricks to improve traffic flow acknowledging	Signal phasing

the volume of traffic that does exist: time the lights to move traffic so cars aren't idling (want to improve the air? Don't let cars sit idle,) don't let pedestrians cross anywhere but at a light (that's right, you're endangering people by encouraging crossing anywhere while also making traffic worse!), ticket bicyclists who don't honor the lights (if they want the right to ride on the street with cars and buses, they have to honor the same rules,) and last, improve parking options so people don't screw up traffic flow waiting for a parallel parking spot.	
2. **Geoffrey M. Fink** How about coordinated traffic lights to keep both pedestrians and cars moving? A stop watch and a traffic technician would go a LONG way here. Like 10	Signal phasing More Parking
3. **Jennifer Gillingham Barry** This has been talked about for years but never implemented. If passed, I vote for the city to convert the second lane into more parking spaces on Lincoln Ave. between Willow and Minnesota. Lets support our Downtown WG businesses!	Speed bumps
4. **John Herndon** I've seem people almost hit in the crosswalk. I think speed bumps should be put in prior to each crosswalk. It would become gridlock with one lane in each direction and I for one would avoid the area. Like 2	Engineering study
5. **Joshua Adam** How is it even remotely fiscally responsible to the citizens of this neighborhood, and the city as a whole, to consider a multi-million dollar construction project before simple options have been considered? Where are your traffic engineers to counter your planners? Have you considered adjusting light timing along the corridor to favor a particular traffic movement? Have you considered simply reducing the speed limit? Have you considered the impacts this would have on the rest of the road network in the area? If traffic calming, air pollution, and pedestrians are your concerns, there are significantly cheaper alternatives to spending millions of dollars to remove lanes. Many of these cheaper alternatives not only consider the concerns listed here, but also don't punish drivers for, well, driving. If the road department has such a surplus as to consider this project an option, I urge you to expand the scope of your analysis and consider smaller solutions over a wider area to benefit a larger portion of the road network. An electrician or traffic engineer sent out to intersection controllers to implement new timings, combined with some new signs, road paint, and pedestrian walk signals, is going to have a far more positive impact than the removal of lanes on a heavily used thoroughfare without consideration of where that displaced traffic will go. Like 7	Right Turn Issue
6. **Lizabeth Reif** Right turning traffic at the intersection of Minnesota and Lincoln needs to be addressed as well. In my opinion, it should be a top priority with the school children present.	
7. **Louise Just** As a parting note, Please keep in mind Morgan Hill's model of speed humps should the road diet not work.	Narrower Lanes
8. **Mark Ivey** Why don't they do something about Minnesota (between downtown and Bird). People race down it like bats out of hell, and it's a roller coaster street with dips and valley, and lots of pedestrian traffic. A few months ago someone barreled off the road and took down a tree right before the Mojos shopping center....ran off and abandoned the car (probably drunk). Saw a kid on a bike almost get hit last week trying to cross.. Just hoping someone doesn't' get hurt but I know it's inevitable.	Right Turn Issue Speed Bumps Speed Bumps
9. **Martin Pabian** What about narrowing lanes down to 10ft wide? I also like the University Ave concept we can increase parking if we allow angled parking all while cutting down lanes. Like 4	
10. **Louise Just** This doesn't sound like a good deal at all. Yes I have seen many, many close calls. My	

thoughts are speed bumps instead just like Downtown Morgan Hill, along with reduced speeds. 11. **Stephanie Wilson** I think this will be a horrible plan. It will be like Palo Alto - University Ave and just be a cluster. I would rather see speed bumps put in then reducing the lanes. Like 14	
Willow Glen Neighborhood Association (WGNA) November 21, 2014 · Coming to the Road Diet meeting? You can park in the WG Elementary front yard to save yourself from the rain! (Enter off Minnesota.)  Like · Comment · Share · 17 6	
Don't Like the Road Diet Concept (1 Comments, 3 support)	
Naresh Ramaiya The road diet is actually a terrible idea. Let's say less cars use Lincoln but there is still traffic because it's one lane. Those cars in one lane traffic idling will cause more pollution to the neighborhood than 2 lanes zipping by. Like 3	Traffic Concern

	
Don't Like the Road Diet Concept (1 Comments, 2 support)	
Marguerite Faraco Cardinal At last night's meeting one of the guest speakers said that we don't have the traffic numbers yet for 2014 but that the 2010 numbers were in excess of 20,000 cars. I can't remember the exact number they mentioned. After reading many articles after last night's meeting on a Road Diet Google search, I question whether Lincoln even qualifies for a Road Diet. It turns out that Road Diet is a specific, defined transportation option. The articles call for LESS THAN 15-18K cars for it to be a successful solution, less than 20K is more complicated. We already exceed that number of cars daily. The articles also call for this model when there is 'excess capacity.' I doubt that anyone would say that Lincoln has excess capacity in terms of traffic except maybe in the middle of the night. Why are we even spending money on a pilot program? I think the working group needs to read the articles and then address all the questions from last night's meeting before spending one cent on this option. http://safety.fhwa.dot.gov/provencount.../fhwa_sa_12_013.cfm Like 2	ADA Concern

	
Don't Like the Road Diet Concept (2 Comments, 2 supports)	
1. **Gerald McGuire** dumb as dumb can be more traffic headaches for our community waste of time and money that can be spent elsewhere!!! Like 1 2. **Adrian Mendez** What a awful idea and waste of money Like 1	Traffic Concern
Like the Road Diet Concept (3 Comments)	
1. **Todd LaMorte** Best. Idea. Ever. 2. **Nathan Wolfson** awesome, thanks for sharing. this is such a good idea. 3. **Steve Ackert** Can't wait to see if test is effective and it should absolutely start further south. I like the concept.	

Don't Like the Road Diet Concept (2 Comments, 1 supports)	
1. **James Patterson** For a preview of the Road Diet, one needs to look no further than the construction yesterday that shut down one lane of Lincoln at Minnesota. Traffic was backed up to La Villa with people taking short cuts through the CVS parking lot to avoid the madhouse. Like 1 2. Extra 5 min is very generous. Never mind the excess traffic that will divert to surface streets from Willow to Minnesota. Lincoln is 4 lanes and during rush hour its at capacity. Cutting it in half makes no sense. Throw in the elementary school traffic and people will cut corners and speed through surface neighborhoods to avoid the mess (more then they already do). Look at the mess at Curtner and 87. Traffic clogs the main arterials trying to get away from WG. The only solution is easier access to 87 from the Willow/Alma area, which is not cost effective. WG needs to decide if courting business interests overrides the quiet neighborhood feel we are known for. Am I alone in not wanting downtown WG to feel like Santana Row?	Diversion
Like the Road Diet Concept (2 Comments)	
1. **Tim Mulcahy** Its three lanes. One turn lane. No stopping behind cars making left hand turns and cutting to the other lane in front of cars in the other lane. You don't lose 50% capacity. The two lanes are nowhere near capacity. You have one lane moving all the time. It is nothing like the roadwork on Lincoln and Minnesota. We should be happy. San Jose finally allocated money to WG to fix infrastructure. That should certainly worth an extra 5 minutes to sacrifice. 2. **David C. Machado** Tough call. I want small business to thrive yet still don't want cars taking to the	Businesses Support

outlining streets. It's a test. If it don't work we move on. No to Santana Row but yes to more space in front of stores to enjoy a meal or drink. Think Differently!	
Willow Glen Neighborhood Association (WGNA) at Willow Glen Elementary School Tigers February 13 · For reference, the #lincolnroaddiet timeline:  Like · Comment · Share · 30 16 2	
Don't Like the Road Diet Concept (8 Comments, 2 supports)	
1. **Kathy Radcliff Mathis** Very concerned about delivery vehicles Have been told they will "park" in center turn lane and cart their products across the street further blocking traffic 2. Please say this isn't so. Hope I heard this incorrectly. 3. **David C. Machado** It's not going to work. Worked on a similar plan when president of the WGBA 20 yrs ago. Such a waste of $$. It's the property owners just want the increased frontage space. Watch. Drinks on me if wrong 4. **Kathy Radcliff Mathis** So since this is not true how will deliveries be accomplished without further	Delivery vehicle Issue

blocking traffic. UPS and FedEx come when they come. Can't imagine all deliveries can be done before 7am? Just today saw several delivery trucks blocking right lanes on way home this morning? 5. **James Patterson** Next I propose we shut down bird, and make Meridian a 1 way street heading north. Which would make enough sense as this. 6. **David Asquith** Less through traffic on our residential streets? Count me in, please! Who's got the buggy whip concession? 7. **Theresa Stratinsky** I'm concerned about the outdoor seating on Lincoln Ave. not such a good idea 8. **Juliana Lukowiecki Linssen** This thing is going to be a mess! Like 2	
Like the Road Diet Concept (3 Comments, 6 supports)	
1. **Greg Barr** Seems like a bunch of folks are quite excitedly looking forward to throwing "told ya so" parties more than seeing if this serves to make Lincoln more efficient and safe for commuters passing through, the people who live in Willow Glen, and those who visit downtown. I'm cautiously optimistic, share most of the concerns that have been expressed, and can't WAIT to see how the test goes so we can base a decision on hard data and real-world observation instead of baseless guesses and pessimistic predictions. And if it doesn't work, sure scream "I TOLD YOU SO" from the mountaintop as loudly as you want. I'll congratulate you on being so damn smart as we revert to today's unsafe condition and seek a new solution. 2. **Robin Doran** I'm excited to have it. Confident it will work! Neighborhoods should be about pedestrians, not cars. 3. **Wyn Barnes** I hope it does work. I feel It will be safer for everyone Like 6	

	
Don't Like the Road Diet Concept (2 Comments)	
1. **Naresh Ramaiya** The funny thing about this is that it will cause more cars to idle on Lincoln causing more pollution! 2. **Leslie Leonetti** trying to remain open minded about this...but I still have my doubts.	Pollution
Like the Road Diet Concept (2 Comments)	
1. **Wyn Barnes** I think commuters will try different routes an find what works best. 2. **Margie Chiechi** Good luck Willow Glen and surrounding streets	No Commuters

Willow Glen Neighborhood Association (WGNA) February 13 · Edited · Thank you to everyone who came out to last night's meeting. It wa productive (and very well attended) one! Remember to visit the sit for more information and share your comments, concerns and feed before, during and after the trial here: http://bit.ly/1vIuRV6  **WG | Road Diet Trial** A road diet is coming to Willon Glen on Lincoln Avenue, starting first week 2015 WILLOWGLENROADDIET.COM | BY SQUIBER LLC Like · Comment · Share · 35 7 21	
Don't Like the Road Diet Concept (1 Comments)	
1. **Christy Garcia** I believe we do need to slow down the traffic and have room for people to ride their bikes safely but this Idea is a disaster. It not only has brought traffic to a halt on Lincoln it took me 20 min. To get 2 blocks and now the traffic has redirected to bird st. On which I live and now it takes me 15min. To just get out of my driveway and traffic has backed up for 2 hrs in front of my house so I can't even get out to run errands from 4pm to 6pm...it's very frustrating not only to me but also my neighbors	Diversion to Bird Traffic Concern
Like the Road Diet Concept (5 Comments, 1 support)	
1. **James Lucas** This will be great. I know my kids and I will love to use it. Like 1 2. **Carol Talty** I really like the idea, as it will reduce the now present and unsafe speed on Lincoln 3. **Jason Chang** Why add a suicide lane? Lincoln should emulate the alameda renovation and add a tree lined median. 4. **Mary Grace Kettmann** I think it's a great idea!!! 5. **Brent Pearse** This is the best thing since sliced bread.	

Willow Glen Neighborhood Association (WGNA) February 13 · Edited · Thank you to everyone who came out to last night's meeting. It was a productive (and very well attended) one! Remember to visit the site below for more information and share your comments, concerns and feedback before, during and after the trial here: http://bit.ly/1vIuRV6  WG | Road Diet Trial A road diet is coming to Willon Glen on Lincoln Avenue, starting first week of March 2015 WILLOWGLENROADDIET.COM | BY SQUIBER LLC	
Don't Like the Road Diet Concept (1 Comments, 3 support)	
Like the Road Diet Concept (1 Comments, 3 support)	

Willow Glen Neighborhood Association (WGNA)
February 18 at 9:00pm ·

To help residents, business owners, and the general community stay up to date on the layout, timeline, and other important information regarding the upcoming road diet trial on Lincoln Avenue, the Road Diet Working Group has created an all-in-one website.

We hope you'll visit this site today and get informed!

Road Diet Trial

A road diet is coming to Willow Glen on Lincoln Avenue, starting first week of March 2015

WILLOWGLENROADDIET.COM | BY SQUIBER LLC

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Don't Like the Road Diet Concept (4 Comments)

1. **Jan Aldama** I hope it works but I think its going to be a pain
2. **Scott Petersen** It's going to make bird and meridian a bigger mess.
3. **Heather Thole** Have a friend that will be changing both banks they use on Lincoln because of this.
4. Kimberley Hyans Deem Bicyclists will still be on the sidewalk.

Like the Road Diet Concept (4 Comments)

1. **Gary K. McCormick** If it shifts the Almaden-bound commuter traffic to different routes and the hell off of Lincoln Ave., I am all for it.
2. **John Bowen** That is cool. I can see that working well.
3. **Maryanne Reilly Mills** Let's just give it a try. Remember it's only a trial.
4. **Wyn Barnes** I hope it does work well. Keep WG a Happy place!

Willow Glen Neighborhood Association (WGNA)
February 25 at 5:01am ·

WGNA Treasurer and Board Member Peter Allen wrote the following column for San Jose Inside that summarizes the "road diet" trial coming soon to Lincoln Avenue in Downtown Willow Glen. Nice job, Peter!

'Road Diet' Comes to Willow Glen

In response to years of community requests to calm traffic and improve safety, the city of San Jose is conducting a three-month "road diet" trial on Lincoln Avenue between Minnesota and Coe avenues...

SANJOSEINSIDE.COM

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Don't Like the Road Diet Concept (8 Comments, 13 supports)

1. **James Patterson** You can't complain about the excess traffic, while courting all of the new businesses, retail development, and storefronts. Want to make pedestrian crossings safer? Install actual crosswalks with stoplights. Want less traffic on a arterial street? Provide alternative routes that connect to established highways. Short of closing the Lincoln/Almaden Expressway ramps, Lincoln will always have through traffic. Want less road congestion, quit promoting this walking mall/Santana Row feel. What really bothers me is the way our local politicians have sold out the safety of the Residential Streets to cater to the commercial interests. All the banter about Willow Glen pride, hometown feel, safe communities goes out the window when we want a Los Gatos type downtown. Think about how traffic is out there on Santa Cruz Ave., and that is nowhere near the volume of cars that use Lincoln as a connecting street. LIKE 8
2. **Cindy Santana** Wonder how long it will take WAZE to come up with alternate routes when Lincoln becomes a cluster £uck. Like 5
3. **Seth Goldstein** Bet if he lived on one of the streets that runs between willow and minnesota he'd feel much different. Just wait till these people see how this will negatively affect their property value. They'll be blowing up Pier's phone.

4. **Tina Celler** This is a terrible idea. Traffic is already backed up to Paula street with two lanes. I travel Lincoln Ave almost everyday to shop at restaurants and shops - parking is already an issue. I will find somewhere else to go to. There are other options in San Jose.
5. **Melissa Archibeque** So far, this is not working so well. Watching cars try to pull out of any of the businesses onto an extremely busy, crowded street now, is just a mess. It's completely backed up on weekends and evenings.
6. **David Jones** I would love to know what idiot thought this would be a great idea to screw up down town willow glen by turning a already congested 4 lane road down too a 2 lane nightmare i couldn't even turn on to Lincoln Ave it was so backed up. All this so a handful of bike riders can go faster down main street while hundreds of car are bottleneck trying to get through down town..... I feel sorry for all the businesses down town that will lose revenue because some idiot thought this would be a great idea..... How much did this cost the tax payers?????.
7. **Cisco Villalba** That makes no sense at all....all these ppl they have in town and u close one lane who's stupid ideas are these. They did it down 10th at and Iv seen 2 bikes in one yr go down the bike lane. Idiotic that doesn't make it safer it makes me not want to even drive down there. Or spend my money down Lincoln Ave. anymore.
8. **Georgia Ditzler** How is anyone going to visit the businesses when it takes so long to get to them. This is just crazy!

Like the Road Diet Concept (9 Comments, 25 support)

1. **Chris Roth** Let's see how the trial works before we all start screaming that the sky is falling. If this reconfiguration of Lincoln Avenue saves one life, or reduces the number of close calls between cars and pedestrians even a little, at least we will be moving in the right direction. I am a resident of Downtown Willow Glen and can't wait to see how much safer our community becomes thanks to the City's efforts. LIKE 6
2. **Andrew Tubbs** One of the comments on the article was that this was never communicated with the neighborhood. Look, the reality is that if you can't be bothered to join your neighborhood association, read it's newsletter, or even follow it on Facebook--all fairly passive things--you lose the right to say no one kept you in the loop. Meanwhile, for all the people honestly fearing new traffic loads on their streets, money and ideas talk. If traffic is too fast, the street is designed for the wrong natural speed. Talk to the DOT about bulb-outs, neck-downs, street narrowing, and closures to through traffic. Don't be passive. Engage the city with constructive ideas Like 5
3. **Ken Miller** I especially like the bike lanes. Reading through the text, I'm reminded of why extension to Curtner was considered that is several churches, a senior center and several day car centers... Let's hope that this leads to other traffic calming improvements. Like 4
4. **Mauro Hernandez** I ride my bike there all the time and people are F'n insane. Drivers don't care about speed limits or how they maneuver around bikes. So I try riding on the sidewalk to keeps self and kids safe and get all kinds of guff from people walking the sidewalk. Come on this street needs this and will be for the best. Like 2
5. **Carol Talty** I am all for it !!! Finally. Like 2

6. **Greg Barr** Nice piece. I too am concerned about the potential effect on surrounding/parallel streets too, but think the reconfigured street might carry nearly the same amount of traffic, and therefore not encourage large volumes of traffic to seek alternatives. A growing concern is the vehemently anti-test crowd that somehow magically absolutely already "knows" how bad everything is going to be will not be honest in their assessment of the test's effectiveness and impact. Frankly they're blowing their credibility at this point. : / **Like 5** 7. **Varoujan Malian** I really hope not Shelly so while I am worried about that I really want this to work out for all of WG Like 1 8. **Christy Garcia** I believe we do need to slow down the traffic and have room for people to ride their bikes safely but this Idea is a disaster. It not only has brought traffic to a halt on lincoln it took me 20 min. To get 2 blocks and now the traffic has redirected to bird st. On which I live and now it takes me 15min. To just get out of my driveway and traffic has backed up for 2 hrs in front of my house so I can't even get out to run errands from 4pm to 6pm...it's very frustrating not only to me but also my neighbors. 9. **Brandi Childress** I love my new road diet! The "new skinny" looks as if it should have always been this way. The middle lane to facilitate left and right turn lanes was sorely needed and so were the bike lanes. Set aside throughput expectations and focus on the benefits of safety, walkability and an environment with fewer cars that a slimmer Lincoln Avenue provides.	

Don't Like the Road Diet Concept (28 Comments, 99 supports)	
1. **Paul W Fingerman** Is there a lottery on how many bicyclists will be killed or injured by cars pulling into or out of parking spaces across the bike lane? Bikes should be subject to all vehicle laws, and be ridden in vehicle lanes. This is a terrible idea, which will increase carbon emissions due to waiting traffic, just to satisfy a radical tiny minority. Like 7	Bike and parking Conflict
2. **Cisco Villalba** All it's gonna do is cause traffic Like 14	Traffic
3. **David Jones** I would love to know what idiot thought this would be a great idea to screw up down town willow glen by turning a already congested 4 lane road down too a 2 lane nightmare i couldn't even turn on to Lincoln Ave it was so backed up. All this so a handful of bike riders can go faster down main street while hundreds of car are bottleneck trying to get through down town..... I feel sorry for all the businesses down town that will lose revenue because some idiot thought this would be a great idea..... How much did this cost the tax payers?????. Like 13	Traffic Traffic
4. **Brian Kamlin** As someone who lives right off Lincoln I'm not looking forward to the road diet, traffic is already impacted with the 4 lanes we had, 2 lanes means even more traffic...Like 11	Traffic Businesses Concern
5. **Denice Vaughn** HATE IT! I know how to ride my bike without a bike lane. It's just a false sense if security for unskilled rides who don't pay attention to cars. It is also hurting businesses (including my own)	Commuter Concern

by deterring customers to come down Lincoln Ave. Like 10	
6. **Yvette Spencer** This is one of the stupidest ways of spending tax payer dollars, making commute hour even more unbearable and living on the site for cars will be turning down speeding down the street possibly creating more accidents than necessary all for what reason to be like Los Gatos. We have a beautiful little town it is growing by the leaps and bounds this road did not give room for any more growth Like 10	Traffic
7. **Susan Dias** Hated the drive through Lincoln Ave this morning...took way too long!!! Like 8	
8. **Micheal Pucci** A future where transportation infrastructure does a better job of accommodating people in a variety of ways Like 5	Traffic
9. **Sergio Castro** Dumb move! Live in WG most of my life, just a matter of time that people start speeding down residential side streets. More commuters than bicyclists anyway. You need the extra lanes for getting around service trucks and people taking lefts, now I gotta look out for that, plus bikes in the middle and pedestrians with one lane? 1%ers win again! Like 5	Traffic
10. **Tina Celler** I agree with Eric. I ventured down Lincoln at 3:30 today - traffic was backed up in both directions. I found you had to be a lot more aggressive pulling out of parking lots because there was continuous traffic with Bo breaks. I did not do everything I wanted to do because I didn't want to fight the in and out. Meeting friends for dinner tonight we picked a restaurant outside of Willow Glen. By the way in the forty plus minutes on Lincoln only saw two bikes. Great decision! Like 4	Traffic
11. **Kathy Radcliff Mathis** Took 1/2 hour this am to drive from my end Curtner to Parkmoor my friends end on Lincoln. Just to pick her up???? It only takes that long for me to drive, when I am alone, all the way to work in Santa Clara from my Curner end of Lincoln. Hope this is just first day "jitters" as it were ! Like 3	Traffic
12. **Annette Lovingood Stenger** So for a handful of cyclists you changed downtown WG into a major traffic nightmare REALLY? It took 15 minutes to travel from Willow Street to Minnesota AT 2:30 in the afternoon..hate to imagine what it will be at peak hours. This is the most ill planned, short sided, business killing idea I have ever seen. NO one was using the new center lane because NO ONE would let you on Lincoln from side streets. RIDICULOUS! I will not be going to WG and I will warn everyone I know to avoid it until this fiasco is reversed. Like 2	Traffic
13. **Shehnaz Khan** The traffic lights need to be adjusted to allow more cars through. The back-up was crazy. I work on Lincoln and am not looking forward to the next three months. Like 2	Traffic Traffic
14. **Marc Ghiggeri** Trial.....thats a good laugh...why not just call it done and lets move on..... Like 2	
15. **Juliana Graef** Forget about running a quick errand on Lincoln Ave, today I was trying to get a gift card at Petroglyph (trying to support local businesses) for my daughter to take to a bday party we were on our way to and what a disaster!!!! Never again. How are the businesses supposed to thrive if now we have to AVOID Lincoln?? Was super slow it took us forever to get through coming from Minnesota. Bad bad bad! like 1	
16. **Dione D'Aunoy** Uht Just drove past Lincoln. Cars are backed up past CVS waiting for the light at Minnesota like 1	Traffic

17. **Laurie Trautwein Borgen** Terrible so far. The traffic during commute the past two days has terrible, with Bird and Lincoln backed up for blocks beyond typical in the past, cars literally sitting still during multiple light cycles because there is no where to go. Took me an extra 20 minutes to get from Curtner to Minnesota. Additionally, traffic on our street has tripled in the am - people just RACING through; it is now completely unsafe for kids to ride bikes to school - the traffic is so overwhelming and congested is scary and unsafe for them. This idea has made it completely unsafe for the neighborhood residents. This makes downtown Willow Glen Neighborhood Association (WGNA) much less of a destination, even as a resident - I will shop elsewhere. like 1	Traffic Traffic Business Concerns Traffic
18. **Christy Garcia** I believe we do need to slow down the traffic and have room for people to ride their bikes safely but this Idea is a disaster. It not only has brought traffic to a halt on lincoln it took me 20 min. To get 2 blocks and now the traffic has redirected to bird st. On which I live and now it takes me 15min. To just get out of my driveway and traffic has backed up for 2 hrs in front of my house so I can't even get out to run errands from 4pm to 6pm...it's very frustrating not only to me but also my neighbors.	Traffic
19. **Melissa Archibeque** So far this is a nightmare. Instead of taking me five minutes to get to yoga it takes nearly 10. Just to go from CVS down to Willow, you have to wait at least three light cycles. And the cars that were behind me made a U-turn and went down another route. Unless it gets better, it will keep me away from the businesses on Lincoln.	
20. **Charlene Della Maggiore** Enough room for 10 cars at a time??? Really ?!???	
21. **Yvette Spencer** one more thing there other roads it could be repaired at the what this cost us	
22. **Lissa Minkin** Brown Blech	
23. **Debbie Landi** Retail is about to go to hell with great swiftness!	
24. **Sally Rivera Marty** I deliver food I had a customer text me complaining about me being late I tried to explain that I was stuck in traffic on Lincoln. I drive on Lincoln all day delivering. This is not a good idea.	
25. **Kerry Conboy** It was a mess this morning. Eliminate street parking and deliveries and you might have something.	
26. **Melinda McDonald** So far my two ventures to Lincoln Avenue in the past several days have taken much, much longer. The traffic is a nightmare. Hello, planners, Lincoln has traffic that is traveling directly to and from the Almaden Expressway, a major artery. People are actually getting so frustrated that they use the middle turn lane to speed up and pass people. Cars pull over and wait in the bike lane for parking places so they don't block the already congested street. And everyone I know is sharing their new secret shortcut routes through what were once quiet neighborhoods. As far as shopping and dining in Willow Glen now -- why bother?	
27. **Carlos Farias** This was a very bad idea and could impact business. I was stuck in traffic mid-day yesterday and can't imagine traffic during commute time. I may avoid the whole area during this trial period.	
28. **Michael Van** Every It's terrible and unnecessary. Like it or not, Lincoln is a thoroughfare. The traffic at commute times is bad enough and no doubt this makes the internal neighborhood streets victim #1 of car traffic. All you have to do is see the Almaden Road through Downtown and Hedding Street to understand how this is bad idea. You can still have dedicated bike lanes and two lanes of traffic - this version is not a	

practical idea. Government social engineering at its worst.	
Like the Road Diet Concept (13 Comments, 27 support)	
1. **Cori Wilser** This is so wonderful. I rode my bike on the bike lanes this morning. I felt safer than I ever have before. I also rode faster than any of the car traffic. Some of you may call it traffic. I call it safer and way more fun to be shopping and eating on the Ave. I agree that the planning was terrible though. Stopping this lane reduction at Minnesota on the south side spells all kinds of residual problems for the neighborhood. This could work great if they would just push the lane reduction all the way down to Curtner. Then we could feel safe for our whole ride as well as our way to school. Like 8 2. **Lew Krumm** Nice to see this test being implemented. Looking forward to seeing how traffic adjusts over the next 90 days. Hoping that it is a win for the WG community. Like 8 3. **John Bowen** Cisco, $20.00 says it's going to be better. I've live around this area for a good 20 years and I can tell you that Lincoln was sort of a crazy street to drive. Was hard to pull out, hard to park on the street. Impossible to ride a bike.. This will give people more breathing room and over all will be a much better flow. Like 6 4. **Lindsay Vaughn-Luma** Love it! Like 3 5. **Anna Garcia** This sounds good but a one lane will be so dangerous .. It's bad enough with two lanes and impatient peeps means no more parking for business Like 2 6. **Katie Sarachelli** Why do car drivers complain about bikes in the traffic lane slowing them down, and then later complain when bikes get their own lane, and then go faster than they do? I don't get it. Like 2 7. **Louise Just** I hope it works to slow the speeders. Like 5 8. **Jo Ann Balesano** Like it. Like 1 9. **Ann Giluso** It would be great if it would get more people out of their cars. 10. **Shanna Seminara Desai** Found myself trying to get on Lincoln Ave at 6:00 pm on this Friday night. Watched cars trying to avoid it, cutting down the other side streets. Could see one of the lanes was packed as far down as I could see. At night it was mostly packed from Minnesota heading to Willow. Then there was the long line from Willow trying to cross over. Was happy to avoid it, but guilty of adding to the side street bypass traffic. Time will tell..... 11. **Philip Maynard** Love this - I rode my bike down there, much better. Lots of cars, most of them with only one person inside. Four lanes through Willow Glen was crazy. You do have to be careful with cars turning right but before the change I would have cars flying past me with inches to spare. 12. **Lisa Warren Schwartz** Great, maybe move a little west and fix the roads on Foxworthy? 13. **Adam Hernandez** Sweet!	Bike Bike No Commuters Diversion Issue Bike
1. **Honor Spitz** I am hoping that in time this new plan will prove to be effective. However, yesterday (Sat. the 28th of Feb.) it took a friend and me 16 minutes of very slow driving to go from Minnesota Ave. to Willow St. The time was close to 1PM. It will be interesting to see how long it will take to traverse that	

same distance during the weekdays when likely there will be every more traffic. like 1 2. **Eamonn Gormley** Traffic seems to be moving just fine 3. **Jason Chang** Good idea poorly executed. Don't know where to start, but left turns should be reconfigured to stop the backup at the filters. Light cycles should be updated to accommodated for the new flow of traffic. Currently it is not good, but it could be 4. **Maryanne Reilly** Mills Yay! Can't wait to try it! 3 mo. test, all. Just remember that. Let's see what happens.	

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