



# UNIVERSITY AVENUE MOBILITY PLAN

## 5.0 INTRODUCTION

The University Avenue Mobility Plan is a vision for the future of University Avenue and the community of Greater North Park. It would be short sighted to consider only the immediate impacts of the Preferred Concept Plan as it relates to traffic, transit, pedestrians and bicycles. The land uses along University Avenue are diverse and changing. Projects such as the theater revitalization project and numerous mixed use and residential projects along the corridor will change the face of University Avenue and Greater North Park in the years to come. Therefore, this chapter focuses on the conditions in the study area assuming that no physical roadway modifications to University Avenue occur.

In conjunction with the City of San Diego, SANDAG recently updated the traffic model for the region. This traffic model uses existing and planned land uses as well as existing and planned roadway capacity and speeds to forecast the flow of traffic throughout the region. The traffic model integrates all modes of transportation including passenger vehicle and transit vehicle operations.

Although 2030 may seem like the distant future, a minimum of 20 years is the regional standard by which roads and highways are designed and is the basis for the traffic model. This chapter presents the methodology for forecasting the year 2030 traffic volumes. The traffic and transit operations for the year 2030 based on the 2030 planned land uses and street network (2030 No Build) will also be evaluated in this chapter. To look at the interim conditions, a 2010 analysis was conducted. These traffic volumes were derived based on a growth factor. The 2010 analysis is intended to represent the short-term with project conditions.

## 5.1 FUTURE LAND USE ALONG CORRIDOR

The San Diego Association of Governments (SANDAG) regional traffic model utilizes land use, demographic data, roadway capacity, speed limits and capacity constraints such as traffic signals and stop signs to forecast traffic volumes and transit ridership in year 2030. The model breaks the region into traffic analysis zones (TAZ). The TAZ's for North Park are illustrated in Exhibit 5-1. Each TAZ includes land use data for all the land included within the TAZ boundary. This land use data is then used to forecast future traffic volumes that are subsequently distributed onto the roadway network using the traffic model. The City recently provided SANDAG with detailed updated land use information for the entire City. For this project, the City further examined the street network and land uses in the study area to ensure that they were consistent with the relevant community plan land uses and planned roadway improvements. The exception to this is based on the proposed Transit First Showcase Project. The Showcase Project proposes to convert two of the six lanes on El Cajon Boulevard to transit only lanes.



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Exhibit 5-1 TAZ Map



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A total of 24 TAZs are located in the study area, which extends from approximately El Cajon Boulevard to the north, Upas Street to the south, Park Boulevard to the west and Boundary Street to the east. A review of the TAZs directly adjacent to University Avenue in the study area indicates a significant increase in multi-family units is projected (approximately 3,263 units in 2030 versus 1,168 existing units). The number of single family homes and the acreage allocated to retail, restaurant, office, and church uses are expected to remain relatively consistent with existing conditions. The breakdown of land uses along University Avenue by the year 2030 include:

- ❖ 155 Single Family Homes
- ❖ 3,263 Multi-Family Units – Apartments and Condominiums Included
- ❖ 22.2 acres of Commercial Retail and/or Restaurant Uses
- ❖ 1.8 acres of Office
- ❖ 1.3 acres of Church or Religious Uses

A complete comparison of land uses for each TAZ in the study area is provided in the Appendix at the end of this report. Each TAZ summary compares the number of units and/or total acreage allocated for individual land use types for existing and 2030 conditions.

## 5.2 TRAFFIC FORECAST METHODOLOGY

The SANDAG 2030 traffic model was used as a basis for the future year technical analysis. The SANDAG traffic model provides forecast average daily traffic (ADT) volumes on regional roadways based on future land use and roadway classification assumptions contained in the various community and City plans, including the Greater North Park Community Plan.

To evaluate the shift in traffic volume along University Avenue as it relates to the Preferred Concept Plan, the City worked closely with SANDAG to conduct two 2030 model runs:

- ❖ A regional 2030 network including the Greater North Park Community Plan Circulation element and Transit First Showcase Project.
- ❖ A regional 2030 network including the Greater North Park Community Plan Circulation Element, Transit First Showcase Project and the Preferred Concept Plan.

In addition to the ADT volume reports for each model run, several select link model runs were conducted. A select link model run traces vehicles as they disperse themselves on the roadway network. This model run illustrates the vehicle destinations and routes from the selected link. For this project, the select link model run was used to compare the with and without Preferred Concept Plan to determine how vehicle routes change with the implementation of the Preferred Concept Plan.



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## 5.3 TRANSIT FORECAST METHODOLOGY

Transit ridership forecasts were developed for the year 2030 by using transit ridership and person-trip data supplied by SANDAG. The transit ridership data was generated using the transit component of SANDAG Series 10 Regional Transportation Model. Person-trip data was generated using the trip generation component of that model. Based on this data, SANDAG anticipates an increase in the ridership for both Route 7 and Route 908.

## 5.4 FUTURE PEDESTRIAN AND BICYCLE ACTIVITY ON CORRIDOR

Pedestrian and bicycle future forecast volumes are based upon future forecast transit ridership and the planned changes in land use within Greater North Park. As the trend toward live/work and mixed-use development continues, pedestrian activity is also anticipated to increase. Increased pedestrian activity will result in more frequent pedestrian actuations at signalized intersections, the need for wider sidewalks, and the need for additional capacity and amenities at transit stops.

As the community of Greater North Park continues to age, wider sidewalks will be needed to accommodate wheelchairs and mobility scooters along the corridor. Pedestrian ramps at all intersections will be needed to help improve the walkability and accessibility of the corridor in the future.

Bicycle activity on the corridor will also be a function of how bicycle friendly the corridor becomes in the future. Under the existing conditions, bicycles are required to share the travel way with passenger vehicles, trucks and transit vehicles. With the forecast increase in traffic reported by the 2030 SANDAG model, it is unlikely that bicycle activity will change. However, if a transit lane is provided (without tracks to accommodate the Historic Streetcar), it is anticipated that bicycle activity will increase. It is anticipated that bicycle activity through the study area will increase over the next 30 years. However, whether the bicycles use University Avenue or parallel routes such as North Park Way or Lincoln Avenue will be determined by the lane designations along University Avenue.

## 5.5 PLANNED ROADWAY IMPROVEMENTS ALONG CORRIDOR

### Signal Modifications

Signal operation improvements have recently been made at the intersection of University Avenue/30<sup>th</sup> Street. The signal operations have been upgraded to provide for protected/permitted left turn phasing on University Avenue. Previously, the University Avenue left turns were controlled by permitted operations.

### New Traffic Signals

The intersection of Boundary Street/I-805 SB Ramps was assumed to be signalized in the 2030 SANDAG model. Since existing and future traffic volumes satisfy peak hour volume warrants and given that the



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intersection currently operates at LOS F in the p.m. peak hour, the intersection was assumed to be signalized by the year 2010.

## Roadway Improvements

At the time the University Avenue Mobility Plan project moved forward, El Cajon Boulevard was undergoing a similar analysis. El Cajon Boulevard is currently a six lane arterial with a raised center median and on-street parking. Along El Cajon Boulevard, a raised median and transit only lanes are planned through the study area (Park Boulevard to I-805). The traffic modeling efforts for the University Avenue Mobility Plan includes the reduction in capacity associated with the transit only lanes on El Cajon Boulevard.

University Avenue and Lincoln Avenue at one time were designed to operate as a couplet per the Greater North Park Community Plan. Lincoln Avenue was intended to have two westbound through lanes and one eastbound through lane. University Avenue was intended to have two eastbound through lanes and one westbound through lane. Currently University Avenue is constructed and striped for the proposed design. Lincoln Avenue, although widened, was not striped in the couplet configuration due to opposition from residents. For the analysis of the corridor, it is assumed that the couplet design will not be implemented. The configuration of Lincoln Avenue is assumed to remain the same as the existing condition for this analysis.

## 5.6 PLANNED CHANGES IN TRANSIT SERVICE ALONG CORRIDOR

### Route 7 and 908 – 2030

SANDAG anticipates a nine percent increase in ridership by the year 2030 for Routes 7 and 908. Route 7 is currently the systems' most productive transit route and operates at six to ten minute headways during peak hours. However, the travel speeds are low and schedule reliability is poor, due to congestion along the corridor and the length of the route. Improvements to the travel speed that can be achieved by transit lanes, signal priority, and physical improvements to speed the boarding process would allow for better schedule reliability and higher ridership growth. Such improvements may also conserve resources that could then be applied to either a higher route frequency or other service enhancements in the Mid-City area.

### Transit First Showcase Route

The Transit First SDSU to Downtown-Showcase Project is intended to be operational by 2007. A portion of this route's alignment is on Park Boulevard. Although the proposed Showcase alignment is out of the current project study area, the Showcase Project does share the same alignment as Route 7 along Park Boulevard south of University Avenue. In the future, Route 7 could take advantage of the priority treatments being implemented for the Showcase Project along Park Boulevard south of University Avenue.



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## North Park Village Project

SANDAG is currently reviewing the possibility of express transit service on University Avenue. This study, The North Park Village Project, analyzes the existing and future transit needs of University Avenue residents and workers, and will present additional options for improving the speed and quality of service along this corridor. Chapter 11 provides this analysis.

## 5.7 PLANNED CHANGES IN PEDESTRIAN AND BICYCLE FACILITIES

University Avenue is not included in the City of San Diego Bicycle Master Plan. Therefore, this analysis assumes no planned improvements along University Avenue to accommodate bicycles in the 2030 No Build scenario.

Community Development Block Grant Allocations for Fiscal Year 2005 indicate that approximately \$60,000 has been allocated to North Park Main Street for Pedestrian & Signage Improvements in the community of North Park.

A District 3 Sidewalk Study was initiated in 2003 that evaluated the need for sidewalk improvements within the communities located within this district. The results of this study, prepared by a consultant to the City, will prioritize improvements and develop plans for implementing the improvements.

North Park Main Street was granted funds to improve sidewalks through North Park west of 30<sup>th</sup> Street. The Streetscape project final design was completed in early 2003, however funding related issues have stalled the project. When constructed, the streetscape project would provide for additional curb extensions (bulb-outs) at intersections, sidewalk improvements and crosswalk improvements.

## 5.8 FUTURE FORECAST TRAFFIC VOLUMES

The future year traffic volumes were estimated based on the SANDAG 2030 traffic model. The 2030 daily traffic volumes reported by the SANDAG model were compared to existing ADT volumes collected specifically for this study. Where the 2030 traffic model volumes exhibit a growth in excess of 20 percent over existing traffic volumes, the model volumes were used directly from the model. For roadway segments exhibiting growth of less than 20 percent, model volumes were adjusted upward to reflect a 20 percent increase over existing conditions. This minimum growth (20 percent) equates to approximately 0.75 percent per year between existing and 2030 conditions.

Peak hour turning movement volumes for Horizon Year 2030 were developed by applying a growth factor to each approach based on the forecast increase in traffic volume from the existing ground count and the modeled 2030 conditions. The a.m. and p.m. peak hour volumes were then balanced between intersections along the entire corridor. Balancing was necessary in cases where adjacent intersection



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volumes were found to vary due to the applied growth factor. The lower volume approach or departure was adjusted upward to balance with the higher adjacent approach or departure.

The Year 2010 analysis determined the near-term operating conditions along the corridor. Based on the Implementation Plan, presented in Chapter 9 of this document, it would be reasonable to assume that the University Avenue Mobility Plan would be implemented within 5 to 6 years. Therefore, the year 2010 was assumed as the project completion date. 2010 No Build traffic volumes were developed by interpolating the growth between existing and 2030 traffic volumes.

Year 2010 peak hour turning movement volumes were developed by applying a growth rate to all intersections determined by comparing overall corridor growth between existing and 2030 conditions and interpolating to 2010.

Year 2010 No Build daily traffic volumes and Horizon Year 2030 No Build daily traffic volumes are shown in Exhibits 5-2 and 5-3, respectively. Peak hour intersection volumes are provided in Exhibits 5-4 and 5-5 for 2010 and 2030 No Build conditions, respectively.

## 5.9 2010 No Build Operational Analysis

### Roadway Segments

To evaluate the 2010 No Build operating conditions of the roadways within the study area, the forecast daily traffic volumes were compared to the capacity thresholds identified by the City of San Diego for the appropriate classification of roadway. A level of service was assigned to each roadway segment based on the capacity thresholds.

The 2010 No Build roadway segment level of service analysis for the study area is summarized in Table 5-1. As shown in the table, University Avenue is expected to operate at LOS F from Florida Street to 32<sup>nd</sup> Street and from Boundary Street to Wabash Avenue by the year 2010 if existing intersection and roadway geometry remain unchanged. University Avenue from Centre Street to Florida Street and 30<sup>th</sup> Street to 32<sup>nd</sup> Street is forecast to operate at LOS D. The City of San Diego defines LOS D as the threshold for acceptable operating conditions for roadway segments.



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Exhibit 5-2 2010 No Build ADTs



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Exhibit 5-3 2030 No Build ADT s



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Exhibit 5-4 2010 No Build Peak Hour Volume



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Exhibit 5-5 2030 No Build Peak Hour Volume



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**Table 5-1**  
**Horizon Year 2010 No Build Conditions**  
**Roadway Segment Level of Service Analysis**

Street	Limit	Class (Lanes)	Capacity	Existing			2010 No Build			Change in...	
				ADT	LOS	V/C	ADT	LOS	V/C	ADT	V/C
University Avenue	Centre to Park	C+LTL (4)	30,000	21,580	D	0.72	22,700	D	0.76	1,120	0.04
	Park to Florida	C+LTL (4)	30,000	20,040	D	0.67	21,100	D	0.70	1,060	0.03
	Florida to Texas	Collector (4)	15,000	<b>20,402</b>	<b>F</b>	<b>1.36</b>	<b>21,800</b>	<b>F</b>	<b>1.45</b>	1,398	<b>0.09</b>
	Texas to Utah	Collector (4)	15,000	<b>20,192</b>	<b>F</b>	<b>1.35</b>	<b>22,000</b>	<b>F</b>	<b>1.47</b>	1,808	<b>0.12</b>
	Utah to 30 <sup>th</sup>	Collector (4)	15,000	<b>20,684</b>	<b>F</b>	<b>1.38</b>	<b>22,000</b>	<b>F</b>	<b>1.47</b>	1,316	<b>0.09</b>
	30 <sup>th</sup> to 32 <sup>nd</sup>	Collector (3)	12,000	<b>22,020</b>	<b>F</b>	<b>1.84</b>	<b>24,300</b>	<b>F</b>	<b>2.03</b>	2,280	<b>0.19</b>
	32 <sup>nd</sup> to Boundary	C+LTL (4)	30,000	22,348	D	0.74	24,600	D	0.82	2,252	0.08
Boundary to Wabash	Collector (4)	15,000	<b>23,962</b>	<b>F</b>	<b>1.60</b>	<b>26,200</b>	<b>F</b>	<b>1.75</b>	2,238	<b>0.15</b>	
Lincoln Avenue	Louisiana to Texas	Collector (2)	8,000	2,740	B	0.34	2,900	B	0.36	160	0.02
	Texas to Utah	Collector (2)	8,000	2,341	A	0.29	3,000	B	0.38	659	0.09
	Utah to 30 <sup>th</sup>	C + TWLTL (2)	15,000	4,790	A	0.32	5,300	B	0.35	510	0.03
	30 <sup>th</sup> to Boundary	C + TWLTL (2)	15,000	5,288	B	0.35	5,900	B	0.39	612	0.04
	Boundary to Wabash	C + TWLTL (2)	15,000	4,290	A	0.29	5,300	B	0.35	1,010	0.06

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**Table 5-1**  
**Horizon Year 2010 No Build Conditions**  
**Roadway Segment Level of Service Analysis**

Street	Limit	Class (Lanes)	Capacity	Existing			2010 No Build			Change in...	
				ADT	LOS	V/C	ADT	LOS	V/C	ADT	V/C
North Park Way	Utah to 30 <sup>th</sup>	Collector (2)	8,000	2,200	A	0.28	2,500	A	0.31	300	0.03
	30 <sup>th</sup> to 32 <sup>nd</sup>	Collector (2)	8,000	6,420	D	0.80	<b>6,900</b>	<b>E</b>	<b>0.86</b>	480	<b>0.06</b>
	32 <sup>nd</sup> to Boundary	Collector (2)	8,000	<b>8,050</b>	<b>F</b>	<b>1.01</b>	<b>8,500</b>	<b>F</b>	<b>1.06</b>	450	<b>0.05</b>
Park Boulevard	Lincoln to University	Major (4)	40,000	14,690	A	0.37	15,500	B	0.39	810	0.02
	University to Essex	Major (4)	40,000	14,380	A	0.36	16,100	B	0.40	1,720	0.04
Texas Street	Lincoln to University	C + TWLTL (2)	15,000	8,830	C	0.59	9,400	C	0.63	570	0.04
	University to Wightman	Collector (2)	8,000	4,140	C	0.52	4,400	C	0.55	260	0.03
Utah Street	Lincoln to University	Collector (2)	8,000	2,830	B	0.35	3,400	B	0.43	570	0.08
	University to North Park	Collector (2)	8,000	3,600	C	0.45	3,800	C	0.48	200	0.03
30 <sup>th</sup> Street	Lincoln to University	C + TWLTL (2)	15,000	<b>13,017</b>	<b>E</b>	<b>0.87</b>	<b>13,700</b>	<b>E</b>	<b>0.91</b>	683	<b>0.04</b>
	University to North Park	C + TWLTL (2)	15,000	12,960	D	0.86	<b>13,800</b>	<b>E</b>	<b>0.92</b>	840	<b>0.06</b>
32 <sup>nd</sup> Street	Lincoln to University	Collector (2)	8,000	3,550	C	0.44	3,900	C	0.49	350	0.05
	University to North Park	Collector (2)	8,000	<b>8,660</b>	<b>F</b>	<b>1.08</b>	<b>9,100</b>	<b>F</b>	<b>1.14</b>	440	<b>0.06</b>
Boundary Street	Lincoln to University	Collector (2)	8,000	1,682	A	0.21	1,800	A	0.23	118	0.02
	University to North Park	Collector (2)	8,000	<b>13,110</b>	<b>F</b>	<b>1.64</b>	<b>13,700</b>	<b>F</b>	<b>1.71</b>	590	<b>0.07</b>

**Note:** C+TWLTL = Collector with Two-Way Left Turn Lane.  
 C+LTL = Collector with Left Turn Lanes.



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The segment of North Park Way, between 30<sup>th</sup> Street and 32<sup>nd</sup> Street, is forecast to operate at LOS E conditions under 2010 No Build. From 32<sup>nd</sup> Street to Boundary Street, North Park Way currently operates at LOS F and is forecast to continue to operate at LOS F in the year 2010 No Build scenario.

30<sup>th</sup> Street would continue to operate unacceptably north of University Avenue. The segment currently operates at LOS E and is forecast to operate at LOS E in 2010. The segment of 30<sup>th</sup> Street, south of University Avenue, would also operate at LOS E in the 2010 No Build scenario. Additionally, the segments of 32<sup>nd</sup> Street, south of University Avenue, and Boundary Street, south of University Avenue, both currently operate and would continue to operate at LOS F conditions in the 2010 No Build scenario.

## Intersections

Tables 5-2 and 5-3 summarize the results of the Year 2010 No Build HCM intersection level of service analysis for signalized and unsignalized intersections, respectively. HCM analysis worksheets are provided in the Appendix at the end of this report. As shown in Table 5-2, the intersection of University Avenue/Park Boulevard currently operates at LOS F in the p.m. peak hour. Based on the analysis, the intersection of Boundary Street/I-805 SB Ramps would operate acceptably with the addition of a traffic signal at that location.

Table 5-3 shows that three of the 18 stop-controlled approaches to University Avenue would operate unacceptably at either LOS E or F in the p.m. peak hour by the year 2010. Analysis of the 2010 No Build scenario indicate that the following approaches are forecast to experience significant delays (LOS E or F) in the p.m. peak hour:

- ❖ Alabama Street
- ❖ Louisiana Street
- ❖ 29<sup>th</sup> Street

The typical cause for failing operating conditions on the side streets under the 2010 No Build conditions is the delay imposed on the northbound or southbound left turning vehicles. These vehicles attempt to cross University Avenue and merge into the flow of traffic. Due to the forecast increase in through traffic along University Avenue by the year 2010, delays to vehicles on the side streets are forecast to exceed acceptable levels of delay.



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**Table 5-2**  
**2010 No Build Signalized Study Intersection LOS**

Study Intersection	Existing		2010 No Build		Change in Delay	
	AM Delay – LOS	PM Delay – LOS	AM Delay – LOS	PM Delay – LOS	AM	PM
University Avenue/Park Boulevard	22.4 – C	<b>127.6 – F</b>	27.3 – C	<b>156.2 – F</b>	4.9	<b>28.6</b>
University Avenue/Florida Street	10.0 – A	18.9 – B	8.5 – A	18.5 – B	-1.5	-0.4
University Avenue/Mississippi Street	8.9 – A	9.0 – A	8.9 – A	8.2 – A	0.0	-0.8
University Avenue/Texas Street	21.5 – C	28.5 – C	22.7 – C	35.3 – D	1.2	6.8
University Avenue/Utah Street	11.7 – B	15.6 – B	11.7 – B	16.3 – B	0.0	0.7
University Avenue/30 <sup>th</sup> Street	13.9 – B	24.2 – C	17.0 – B	35.7 – D	3.1	11.5
University Avenue/Ohio Street	4.4 – A	7.5 – A	4.4 – A	8.1 – A	0.0	0.6
University Avenue/Grim Street	3.5 – A	4.6 – A	3.7 – A	3.7 – A	0.2	-0.9
University Avenue/Illinois Street	3.6 – A	6.3 – A	4.0 – A	5.1 – A	0.4	-1.2
University Avenue/32 <sup>nd</sup> Street	23.0 – C	13.2 – B	14.0 – B	24.1 – C	-9.0	10.9
University Avenue/Boundary Street	22.1 – C	35.8 – D	19.9 – B	23.3 – C	-2.2	-12.5
University Avenue/Wabash Street	21.9 – C	51.6 – D	19.6 – B	39.1 – D	-2.3	-12.5
Lincoln Avenue/Wabash Street	13.2 – B	12.7 – B	12.9 – B	12.2 – B	-0.3	-0.5
Boundary Street/I-805 SB Ramps <sup>1</sup>	20.4 – C	<b>94.8 – F</b>	16.5 – B	17.1 – B	-3.9	-77.7

**Note:** Deficient intersection operations shown in bold.

<sup>1</sup> All-way stop control under existing conditions.



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**Table 5-3  
2010 No Build Unsignalized Study Intersection LOS**

Study Intersection	Minor Approach Delay – LOS (Overall Delay)					
	Existing		2010 No Build		Change in Delay	
	AM	PM	AM	PM	AM	PM
University Avenue/Alabama Street (NB)	16.3 – C (1.6)	<b>67.7 – F (3.1)</b>	17.1 – C (1.7)	<b>107.7 – F (4.5)</b>	0.8 (0.1)	40.0 (1.4)
University Avenue/Alabama Street (SB)	13.4 – B (0.4)	16.4 – C (0.6)	14.9 – B (0.5)	16.2 – C (0.4)	1.5 (0.1)	-0.2 (-0.2)
University Avenue/Louisiana Street	16.8 – C (1.1)	29.6 – D (1.2)	18.9 – C (1.2)	<b>35.5 – E (1.4)</b>	2.1 (0.1)	5.9 (0.2)
University Avenue/Arizona Street (NB)	12.2 – B (0.6)	17.4 – C (0.5)	13.9 – B (0.6)	21.5 – C (0.5)	1.7 (0.0)	4.1 (0.0)
University Avenue/Arizona Street (SB)	12.7 – B (0.8)	15.9 – C (0.7)	13.7 – C (0.7)	18.3 – C (0.8)	1.0 (-0.1)	2.4 (0.1)
University Avenue/Arnold Street	15.7 – C (1.2)	23.9 – C (1.4)	17.6 – C (1.3)	33.5 – D (1.8)	1.9 (0.1)	9.6 (0.4)
University Avenue/Hamilton Street	12.2 – B (0.6)	17.9 – C (0.8)	13.1 – B (0.6)	20.5 – C (0.9)	0.9 (0.0)	2.6 (0.1)
University Avenue/Oregon Street	16.0 – C (0.3)	21.9 – C (1.0)	17.9 – C (0.4)	26.3 – D (1.1)	1.9 (0.1)	4.4 (0.1)
University Avenue/Idaho Street	12.2 – B (0.6)	18.8 – C (1.3)	12.8 – B (0.6)	21.1 – C (1.4)	0.6 (0.0)	2.3 (0.1)
University Avenue/28 <sup>th</sup> Street	12.4 – B (0.6)	17.2 – C (0.3)	13.3 – B (0.6)	18.7 – C (0.4)	0.9 (0.0)	1.5 (0.1)
University Avenue/Granada Street	10.4 – B (0.5)	14.3 – B (1.1)	10.8 – B (0.5)	28.5 – D (0.5)	0.4 (0.0)	14.2 (-0.6)
University Avenue/Kansas Street	13.0 – B (0.9)	21.7 – C (1.2)	13.9 – B (1.0)	27.4 – D (1.5)	0.9 (0.1)	5.7 (0.3)
University Avenue/29 <sup>th</sup> Street	11.3 – B (0.5)	25.9 – D (1.5)	11.9 – B (0.5)	<b>35.5 – E (2.1)</b>	0.6 (0.0)	9.6 (0.6)
University Avenue/31 <sup>st</sup> Street	10.4 – B (0.4)	14.1 – B (0.7)	10.6 – B (0.4)	15.1 – C (0.7)	0.2 (0.0)	1.0 (0.0)
University Avenue/Iowa Street	18.0 – C (0.7)	24.0 – C (1.0)	21.0 – C (0.8)	28.1 – D (1.1)	3.0 (0.1)	4.1 (0.1)
University Avenue/Herman Avenue	10.2 – B (0.2)	12.0 – B (0.1)	10.4 – B (0.2)	12.3 – B (0.1)	0.2 (0.0)	0.3 (0.0)
University Avenue/Bancroft Street	12.4 – B (1.1)	13.8 – B (1.1)	13.3 – B (1.2)	14.9 – B (1.2)	0.9 (0.1)	1.1 (0.1)
Boundary Street/Lincoln Avenue	12.1 – B (2.3)	10.7 – B (0.6)	12.6 – B (2.4)	13.7 – B (2.6)	0.5 (0.1)	3.0 (2.0)

Note: Deficient intersection operation shown in bold.



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## 5.10 2030 No Build Operational Analysis

### Roadway Segments

The 2030 No Build roadway segment level of service analysis for the study area is summarized in Table 5-4. As shown in the table, University Avenue is expected to operate at LOS E from Centre Street to Park Boulevard and LOS F from Florida Street to Wabash Avenue by the year 2030 if existing intersection and roadway geometry remain unchanged. University Avenue from Park Boulevard to Florida Street is forecast to operate at LOS D. The City of San Diego defines LOS D as the threshold for acceptable operating conditions for roadway segments.

The segment of North Park Way, between 30<sup>th</sup> Street and 32<sup>nd</sup> Street, is forecast to operate at LOS F conditions under 2030 No Build. From 32<sup>nd</sup> Street to Boundary Street, North Park Way currently operates at LOS F and is forecast to continue to operate at LOS F in the year 2030 No Build scenario.

30<sup>th</sup> Street would continue to operate unacceptably north of University Avenue. The segment currently operates at LOS E and is forecast to operate at LOS F in 2030. The segment of 30<sup>th</sup> Street, south of University Avenue, would also operate at LOS F in the 2030 No Build scenario. Additionally, the segments of 32<sup>nd</sup> Street, south of University Avenue, and Boundary Street, south of University Avenue, both currently operate and would continue to operate at LOS F conditions in the 2030 No Build scenario.

### Intersections

Tables 5-5 and 5-6 present the 2030 No Build scenario delays and levels of service at the signalized and unsignalized study intersections, respectively, based on the HCM methodology. HCM analysis worksheets are provided in the Appendix at the end of this report.

As shown in Table 5-5, the intersection of University Avenue/Park Boulevard currently operates and is forecast to continue to operate at LOS F in the p.m. peak hour. Additionally, the intersections of University Avenue/30<sup>th</sup> Street, University Avenue/Boundary Street, and University Avenue/Wabash Street are forecast to operate unacceptably at LOS E in the p.m. peak hour. Based on the analysis, the intersection of Boundary Street/I-805 SB Ramps would operate acceptably with the addition of a traffic signal at that location.



# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-4**  
**Horizon Year 2030 No Build Conditions**  
**Roadway Segment Level of Service Analysis**

Street	Limit	Class (Lanes)	Capacity	Existing			2030 No Build			Change in...	
				ADT	LOS	V/C	ADT	LOS	V/C	ADT	V/C
University Avenue	Centre to Park	C+LTL (4)	30,000	21,580	D	0.72	<b>25,900</b>	E	<b>0.86</b>	4,320	0.14
	Park to Florida	C+LTL (4)	30,000	20,040	D	0.67	24,100	D	0.80	4,060	0.13
	Florida to Texas	Collector (4)	15,000	<b>20,402</b>	F	<b>1.36</b>	<b>27,500</b>	F	<b>1.83</b>	7,098	<b>0.47</b>
	Texas to Utah	Collector (4)	15,000	<b>20,192</b>	F	<b>1.35</b>	<b>27,400</b>	F	<b>1.83</b>	7,208	<b>0.48</b>
	Utah to 30 <sup>th</sup>	Collector (4)	15,000	<b>20,684</b>	F	<b>1.38</b>	<b>28,200</b>	F	<b>1.88</b>	7,516	<b>0.50</b>
	30 <sup>th</sup> to 32 <sup>nd</sup>	Collector (3)	12,000	<b>22,020</b>	F	<b>1.84</b>	<b>30,600</b>	F	<b>2.55</b>	8,580	<b>0.71</b>
	32 <sup>nd</sup> to Boundary	C+LTL (4)	30,000	22,348	D	0.74	<b>31,000</b>	F	<b>1.03</b>	8,652	<b>0.29</b>
	Boundary to Wabash	Collector (4)	15,000	<b>23,962</b>	F	<b>1.60</b>	<b>32,300</b>	F	<b>2.15</b>	8,338	<b>0.55</b>
Lincoln Avenue	Louisiana to Texas	Collector (2)	8,000	2,740	B	0.34	3,300	B	0.41	560	0.07
	Texas to Utah	Collector (2)	8,000	2,341	A	0.29	4,700	C	0.59	2,359	0.30
	Utah to 30 <sup>th</sup>	C + TWLTL (2)	15,000	4,790	A	0.32	6,700	B	0.45	1,910	0.13
	30 <sup>th</sup> to Boundary	C + TWLTL (2)	15,000	5,288	B	0.35	7,500	C	0.50	2,212	0.15
	Boundary to Wabash	C + TWLTL (2)	15,000	4,290	A	0.29	7,900	C	0.53	3,610	0.24
North Park Way	Utah to 30 <sup>th</sup>	Collector (2)	8,000	2,200	A	0.28	3,300	B	0.41	1,100	0.13
	30 <sup>th</sup> to 32 <sup>nd</sup>	Collector (2)	8,000	6,420	D	0.80	<b>8,300</b>	F	<b>1.04</b>	1,880	<b>0.24</b>
	32 <sup>nd</sup> to Boundary	Collector (2)	8,000	<b>8,050</b>	F	<b>1.01</b>	<b>9,700</b>	F	<b>1.21</b>	1,650	<b>0.20</b>

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# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-4  
Horizon Year 2030 No Build Conditions  
Roadway Segment Level of Service Analysis**

Street	Limit	Class (Lanes)	Capacity	Existing			2030 No Build			Change in...	
				ADT	LOS	V/C	ADT	LOS	V/C	ADT	V/C
Park Boulevard	Lincoln to University	Major (4)	40,000	14,690	A	0.37	17,700	B	0.44	3,010	0.07
	University to Essex	Major (4)	40,000	14,380	A	0.36	21,000	B	0.53	6,620	0.17
Texas Street	Lincoln to University	C + TWLTL (2)	15,000	8,830	C	0.59	11,000	D	0.73	2,170	0.14
	University to Wightman	Collector (2)	8,000	4,140	C	0.52	5,000	C	0.63	860	0.11
Utah Street	Lincoln to University	Collector (2)	8,000	2,830	B	0.35	4,700	C	0.59	1,870	0.24
	University to North Park	Collector (2)	8,000	3,600	C	0.45	4,400	C	0.55	800	0.10
30 <sup>th</sup> Street	Lincoln to University	C + TWLTL (2)	15,000	<b>13,017</b>	<b>E</b>	<b>0.87</b>	<b>15,700</b>	<b>F</b>	<b>1.05</b>	2,683	<b>0.18</b>
	University to North Park	C + TWLTL (2)	15,000	12,960	D	0.86	<b>16,200</b>	<b>F</b>	<b>1.08</b>	3,240	<b>0.22</b>
32 <sup>nd</sup> Street	Lincoln to University	Collector (2)	8,000	3,550	C	0.44	4,700	C	0.59	1,150	0.15
	University to North Park	Collector (2)	8,000	<b>8,660</b>	<b>F</b>	<b>1.08</b>	<b>10,400</b>	<b>F</b>	<b>1.30</b>	1,740	<b>0.22</b>
Boundary Street	Lincoln to University	Collector (2)	8,000	1,682	A	0.21	2,100	A	0.26	418	0.05
	University to North Park	Collector (2)	8,000	<b>13,110</b>	<b>F</b>	<b>1.64</b>	<b>15,300</b>	<b>F</b>	<b>1.91</b>	2,190	<b>0.27</b>

**Note:** C+TWLTL = Collector with Two-Way Left Turn Lane HCM Intersection Level of Service  
 C+LTL = Collector with Left Turn Lanes  
 ADT = Average Daily Traffic  
 LOS = Level of Service  
 V/C = Volume to Capacity Ratio

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# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-5  
2030 No Build Signalized Study Intersection LOS**

Study Intersection	Existing		2030 No Build		Change in Delay	
	AM Delay – LOS	PM Delay – LOS	AM Delay – LOS	PM Delay – LOS	AM	PM
University Avenue/Park Boulevard	22.4 – C	<b>127.6 – F</b>	33.4 – C	<b>223.7 – F</b>	11.0	<b>96.1</b>
University Avenue/Florida Street	10.0 – A	18.9 – B	10.0 – A	30.8 – C	0.0	11.9
University Avenue/Mississippi Street	8.9 – A	9.0 – A	9.2 – A	11.5 – B	0.3	2.5
University Avenue/Texas Street	21.5 – C	28.5 – C	30.1 – C	46.8 – D	8.6	18.3
University Avenue/Utah Street	11.7 – B	15.6 – B	13.0 – B	22.0 – C	1.3	6.4
University Avenue/30 <sup>th</sup> Street	13.9 – B	24.2 – C	18.6 – B	<b>71.9 – E</b>	4.7	<b>47.7</b>
University Avenue/Ohio Street	4.4 – A	7.5 – A	5.0 – A	12.2 – B	0.6	4.7
University Avenue/Grim Street	3.5 – A	4.6 – A	3.9 – A	4.3 – A	0.4	-0.3
University Avenue/Illinois Street	3.6 – A	6.3 – A	4.8 – A	7.1 – A	1.2	0.8
University Avenue/32 <sup>nd</sup> Street	23.0 – C	13.2 – B	15.4 – B	34.9 – C	-7.6	21.7
University Avenue/Boundary Street	22.1 – C	35.8 – D	24.9 – C	<b>61.7 – E</b>	2.8	<b>25.9</b>
University Avenue/Wabash Street	21.9 – C	51.6 – D	23.8 – C	<b>73.6 – E</b>	1.9	<b>22.0</b>
Lincoln Avenue/Wabash Street	13.2 – B	12.7 – B	12.1 – B	13.3 – B	-1.1	0.6
Boundary Street/I-805 SB Ramps <sup>1</sup>	20.4 – C	<b>94.8 – F</b>	16.6 – B	20.8 – C	-3.8	-74.0

**Note:** Deficient intersection operation shown in bold.

<sup>1</sup> All-way stop control under existing conditions.



# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-6**  
**2030 No Build Unsignalized Study Intersection LOS**

Study Intersection	Minor Approach Delay – LOS (Overall Delay)					
	Existing		2030 No Build		Change in Delay	
	AM	PM	AM	PM	AM	PM
University Avenue/Alabama Street (NB)	16.3 – C (1.6)	<b>67.7 – F (3.1)</b>	26.8 – D (2.2)	<b>&gt;1200 – F (24.5)</b>	<b>10.5 (0.6)</b>	52.3 (21.4)
University Avenue/Alabama Street (SB)	13.4 – B (0.4)	16.4 – C (0.6)	19.0 – C (0.5)	33.1 – D (0.8)	5.6 (0.1)	16.7 (0.2)
University Avenue/Louisiana Street	16.8 – C (1.1)	29.6 – D (1.2)	26.9 – D (1.6)	<b>90.6 – F (3.9)</b>	10.1 (0.5)	61.0 (2.7)
University Avenue/Arizona Street (NB)	12.2 – B (0.6)	17.4 – C (0.5)	13.5 – B (0.8)	<b>58.8 – F (1.2)</b>	1.3 (0.2)	41.4 (0.7)
University Avenue/Arizona Street (SB)	12.7 – B (0.8)	15.9 – C (0.7)	18.6 – C (1.2)	<b>36.7 – E (1.7)</b>	5.9 (0.4)	20.8 (1.0)
University Avenue/Arnold Street	15.7 – C (1.2)	23.9 – C (1.4)	19.8 – C (1.7)	<b>&gt;1200 – F (10.4)</b>	4.1 (0.5)	96.1 (9.0)
University Avenue/Hamilton Street	12.2 – B (0.6)	17.9 – C (0.8)	16.2 – C (0.8)	<b>49.4 – E (1.5)</b>	4.0 (0.2)	31.5 (0.7)
University Avenue/Oregon Street	16.0 – C (0.3)	21.9 – C (1.0)	24.6 – C (0.5)	<b>88.9 – F (3.5)</b>	8.6 (0.2)	67.0 (2.5)
University Avenue/Idaho Street	12.2 – B (0.6)	18.8 – C (1.3)	17.1 – C (0.8)	<b>40.9 – E (2.3)</b>	4.9 (0.2)	22.1 (1.0)
University Avenue/28 <sup>th</sup> Street	12.4 – B (0.6)	17.2 – C (0.3)	15.0 – C (0.8)	26.7 – D (0.6)	2.6 (0.2)	9.5 (0.3)
University Avenue/Granada Street	10.4 – B (0.5)	14.3 – B (1.1)	11.4 – B (0.5)	31.3 – D (2.2)	10.0 (0.0)	17.0 (1.1)
University Avenue/Kansas Street	13.0 – B (0.9)	21.7 – C (1.2)	16.9 – C (1.1)	<b>55.1 – F (2.8)</b>	3.9 (0.2)	33.4 (1.6)
University Avenue/29 <sup>th</sup> Street	11.3 – B (0.5)	25.9 – D (1.5)	12.4 – B (0.7)	<b>&gt;1200 – F (7.7)</b>	1.1 (0.2)	94.1 (6.2)
University Avenue/31 <sup>st</sup> Street	10.4 – B (0.4)	14.1 – B (0.7)	11.0 – B (0.4)	20.0 – C (0.8)	0.6 (0.0)	5.9 (0.1)
University Avenue/Iowa Street	18.0 – C (0.7)	24.0 – C (1.0)	34.1 – D (1.1)	<b>49.1 – E (1.6)</b>	16.1 (0.4)	25.1 (0.6)
University Avenue/Herman Avenue	10.2 – B (0.2)	12.0 – B (0.1)	11.2 – B (0.2)	14.2 – B (0.1)	1.0 (0.0)	2.2 (0.0)
University Avenue/Bancroft Street	12.4 – B (1.1)	13.8 – B (1.1)	16.2 – C (1.4)	20.9 – C (1.4)	3.8 (0.3)	7.1 (0.3)
Boundary Street/Lincoln Avenue	12.1 – B (2.3)	10.7 – B (0.6)	13.3 – B (2.6)	10.7 – B (0.6)	1.2 (0.3)	0.0 (0.0)

**Note:** Deficient intersection operation shown in bold.



# UNIVERSITY AVENUE MOBILITY PLAN

Table 5-6 shows that 11 of the 18 stop-controlled approaches to University Avenue would operate unacceptably at either LOS E or F in the p.m. peak hour by the year 2030. Analysis of the 2030 No Build scenario indicate that the following approaches are forecast to experience significant delays (LOS E or F) in the p.m. peak hour:

- ❖ Alabama Street
- ❖ Louisiana Street
- ❖ Arizona Street (North & South)
- ❖ Arnold Avenue
- ❖ Hamilton Street
- ❖ Oregon Street
- ❖ Idaho Street
- ❖ Kansas Street
- ❖ 29<sup>th</sup> Street
- ❖ Iowa Street

The typical cause for failing operating conditions on the side streets under the 2030 No Build conditions is the delay imposed on the northbound or southbound left turning vehicles. These vehicles attempt to cross University Avenue and merge into the flow of traffic. Due to the forecast increase in through traffic along University Avenue by the year 2030, delays to vehicles on the side streets are forecast to exceed acceptable levels of delay.

## 5.11 VISSIM DELAY SUMMARY

VISSIM was also used to evaluate the 2030 No Build scenario travel times, delays and operating conditions along the corridor. Table 5-7 summarizes the results of the a.m. and p.m. peak hour delay summary for the corridor as a whole and for the individual intersections along the corridor. Table 5-8 presents the travel time and stops per vehicle data calculated by VISSIM.

The results of the VISSIM analysis demonstrate an increase in delay for all signalized intersections over existing conditions. In the p.m. peak hour, the travel time along the study corridor in the eastbound direction is projected to increase from approximately 7.0 minutes under existing conditions to roughly 15.1 minutes under 2030 No Build conditions. A smaller increase is anticipated in the westbound direction, where travel time is estimated to increase from approximately 7.1 minutes to 9.7 minutes in the p.m. peak hour.



# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-7  
2030 No Build Conditions**

**VISSIM Measures of Effectiveness Delay Summary**

Study Intersection	Existing				2030				Change in Delay			
	Total Delay <sup>1</sup>		Concurrent Delay <sup>2</sup>		Total Delay <sup>1</sup>		Concurrent Delay <sup>2</sup>		Total Delay <sup>1</sup>		Concurrent Delay <sup>2</sup>	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
University Avenue/Park Avenue	28.5	41.4	27.1	43.7	33.0	113.5	32.5	111.4	4.5	72.1	5.4	67.7
University Avenue/Florida Street	10.4	17.6	9.2	13.2	15.0	93.6	12.0	89.1	4.6	76.0	2.8	75.9
University Avenue/Mississippi Street	6.6	11.5	4.3	9.6	9.2	68.9	7.1	70.8	2.6	57.4	2.8	61.2
University Avenue/Texas Street	20.7	35.4	18.5	33.2	28.4	77.1	26.3	77.3	7.7	41.7	7.8	44.1
University Avenue/Utah Street	14.0	26.5	12.4	24.4	16.5	43.1	14.6	40.9	2.5	16.6	2.2	16.5
University Avenue/30 <sup>th</sup> Street	15.2	25.6	12.5	22.3	19.9	47.7	15.6	36.9	4.7	22.1	3.1	14.6
University Avenue/Ohio Street	3.3	12.8	0.8	6.7	4.9	21.0	1.7	3.9	1.6	8.2	0.9	-2.8
University Avenue/Grim Street	3.0	6.4	1.7	5.1	5.0	6.1	3.4	3.3	2.0	-0.3	1.7	-1.8
University Avenue/Illinois Street	5.0	8.6	4.3	7.3	5.5	12.1	4.5	9.9	0.5	3.5	0.2	2.6
University Avenue/32 <sup>nd</sup> Street	15.0	18.1	14.2	17.7	28.2	35.8	29.0	37.0	13.2	17.7	14.8	19.3
University Avenue/Boundary Street	15.4	21.6	15.3	19.6	55.7	55.6	57.6	56.9	40.3	34.0	42.3	37.3
University Avenue/Wabash Street	25.0	45.7	23.7	54.7	37.2	35.6	33.5	33.3	12.2	-10.1	9.8	-21.4

1 Intersection Delay = Average delay for all movements at the intersection (sec/vh).

2 Concurrent Delay = Delay imposed to eastbound & westbound vehicles along University Avenue (sec/vh).

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# UNIVERSITY AVENUE MOBILITY PLAN

Table 5-7 (continued)  
2030 No Build Conditions

## VISSIM Measures of Effectiveness Delay Summary

Study Intersection	Existing				2030				Change in Delay			
	Conflicting Delay <sup>3</sup>		Person Delay <sup>4</sup>		Conflicting Delay <sup>3</sup>		Person Delay <sup>4</sup>		Conflicting Delay <sup>3</sup>		Person Delay <sup>4</sup>	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
University Avenue/Park Avenue	30.6	38.7	33.3	44.4	33.8	115.6	37.4	113.7	3.2	76.9	4.1	69.3
University Avenue/Florida Street	16.7	35.1	10.8	16.9	27.8	106.1	14.6	93.1	11.1	71.0	3.8	76.2
University Avenue/Mississippi Street	24.0	28.3	7.6	12.2	27.5	57.1	9.9	67.2	3.5	28.8	2.3	55.0
University Avenue/Texas Street	27.0	41.7	21.0	36.0	33.6	76.6	28.7	77.9	6.6	34.9	7.7	41.9
University Avenue/Utah Street	22.1	37.2	15.9	30.7	26.3	53.2	18.8	45.8	4.2	16.0	2.9	15.1
University Avenue/30 <sup>th</sup> Street	20.2	31.0	16.7	26.4	29.4	65.0	21.8	49.5	9.2	34.0	5.1	23.1
University Avenue/Ohio Street	5.5	5.3	3.2	12.2	5.6	10.1	4.8	19.5	0.1	4.8	1.6	7.3
University Avenue/Grim Street	19.2	25.7	4.3	6.6	27.2	51.8	6.2	5.6	8.0	26.1	1.9	-1.0
University Avenue/Illinois Street	17.8	25.5	5.7	8.9	26.6	43.7	5.7	12.0	8.8	18.2	0.0	3.1
University Avenue/32 <sup>nd</sup> Street	17.3	20.1	15.5	19.6	24.9	29.6	28.3	36.8	7.6	9.5	12.8	17.2
University Avenue/Boundary Street	16.7	29.5	15.3	21.0	45.6	49.7	52.6	55.4	28.9	20.2	37.3	34.4
University Avenue/Wabash Street	26.9	28.6	27.1	49.0	42.4	40.3	37.5	36.0	15.5	11.7	10.4	-13.0

<sup>3</sup> Conflicting Delay = Delay imposed to northbound & southbound vehicles entering or crossing University Avenue (sec/vch)

<sup>4</sup> Seconds per person.



# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-8  
2030 No Build Conditions  
Travel Time /Stops (I-805 to Park Boulevard)**

Direction	Travel Time						Stops <sup>1</sup>					
	Existing		2030		Change		Existing		2030		Change	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Westbound Interstate 805 to Park Boulevard	5.9	7.1	6.5	9.7	0.6	2.6	4.0	5.9	4.8	7.9	0.8	2.0
Eastbound Park Boulevard to Interstate 805	5.6	7.0	7.1	15.1	1.5	8.1	3.8	5.1	5.8	13.1	2.0	8.0

<sup>1</sup> Stops per vehicle.

## 5.12 FUTURE TRANSIT ACTIVITY AND OPERATIONS

Based on the Series 10 regional model, SANDAG has also estimated that by 2030 transit ridership will increase by nine percent (9%) over the 2003 figure. This would be an increase of approximately 700 daily passengers within the corridor. Current transit vehicles are running at less than capacity. Therefore, it is anticipated that this level of increase will not have a significant effect on the overall travel time or service needs for Route 7 or the 908. Existing capacity with the existing service will be sufficient to meet the forecast increase in demand. Table 5-9 summarizes the forecast transit ridership information provide by SANDAG for use in this analysis.

The 2030 No Build transit vehicle travel time along the corridor was determined by combining the dwell times at the transit stops with the average travel speed of the transit vehicles between the stops when exiting the project study area from Interstate 805 to Park Boulevard. The travel time, as reported by the VISSIM analysis, for both routes in the a.m. and p.m. peak hour is summarized in Table 5-10.



# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-9  
2030 No Build Conditions  
Transit Ridership Forecast**

Westbound Station Locations	Existing Conditions			2030 No Build Conditions			
	Route 7	Route 908	Total	Route 7	Route 908	Total	RANK
Bancroft Street	126	64	190	137	70	207	10
Iowa Street	149	43	192	162	47	209	9
Illinois Street	177	43	220	193	47	240	7
30th Street	758	383	1141	826	416	1242	1
Utah Street	178	63	241	194	68	262	4
Oregon Street	141	69	210	154	75	229	8
Arizona Street	190	64	254	207	70	277	3
Louisiana Street	167	61	228	182	66	248	6
Alabama Street	153	87	240	167	95	262	5
Florida Street	74	40	114	81	43	124	11
Park Boulevard	805	224	1029	877	243	1120	2
Eastbound Station Locations	Route 7	Route 908	Total	Route 7	Route 908	Total	RANK
Park Boulevard	629	193	822	686	210	896	2
Florida Street	75	51	126	82	55	137	11
Alabama Street	117	47	164	128	51	179	8
Louisiana Street	191	76	267	208	83	291	5
Texas Street	122	49	171	133	53	186	7
Arnold Avenue	76	27	103	83	29	112	10
Pershing Avenue	96	43	139	105	47	152	9
Utah Street	179	42	221	195	46	241	6
30th Street	803	360	1163	875	391	1266	1
Grim Street	104	57	161	245	62	307	4
Herman Avenue	228	79	307	249	86	335	3
Boundary Street	39	58	97	43	63	106	12

**Note:** 2030 No Build assumes a 9% increase over existing ridership  
Ridership measured in number of passengers on transit vehicle between stops.



# UNIVERSITY AVENUE MOBILITY PLAN

**Table 5-10  
2030 No Build Conditions  
Transit Travel Times (I-805 to Park Boulevard)**

Route / Direction	Existing		2030		Change	
	AM	PM	AM	PM	AM	PM
<b>Route 7</b>						
Westbound Interstate 805 to Park Boulevard	9.5	10.2	10.4	12.3	0.9	2.1
Eastbound Park Boulevard to Interstate 805	7.6	10.1	8.8	17.8	1.2	7.7
<b>Route 908</b>						
Westbound Interstate 805 to Park Boulevard	8.1	10.1	8.8	11.8	0.7	1.7
Eastbound Park Boulevard to Interstate 805	7.4	10.9	8.3	17.9	0.9	7.0

## 5.13 SUMMARY OF FUTURE NO BUILD CONDITIONS

The SANDAG traffic model was used to forecast the Horizon Year 2030 No Build Conditions for University Avenue and other roadways within the study area. Average daily traffic volumes and transit ridership data were calculated by the SANDAG model and post-processed to evaluate the operating conditions along the corridor if no physical conditions were changed on University Avenue by the year 2030. Improvements to El Cajon Boulevard, planned signal improvements along the corridor, and transit improvement projects in the study area were taken into consideration when the Horizon Year 2030 No Build ADT volumes were forecast using the traffic model. Since the City of San Diego does not maintain interim year traffic models, Year 2010 volumes were forecast by calculating a growth rate factor based on existing and 2030 ADT volumes. Year 2010 conditions reflect the project’s opening year.

The No Build operational analysis shows that traffic volumes will continue to increase throughout the Greater North Park community. The majority of University Avenue is forecast to operate at deficient LOS based on roadway segment capacity thresholds established by the City of San Diego.

Under the No Build scenario, passenger vehicle travel times are anticipated to increase for both passenger vehicles and transit vehicles along the corridor when compared to the existing travel time. Due to the forecast increase in traffic along University Avenue based on the SANDAG traffic model, unsignalized intersection operations are forecast to experience the greatest increase in delay. Of the 18 unsignalized



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intersections along the corridor, three are forecast to operate deficiently along the side streets in 2010. By 2030, the number of deficient unsignalized intersections increases to 11 intersections. This is typically due to the delay imposed to vehicles attempting to turn left or go through from the side streets onto or across University Avenue.

Due to the overall increase in traffic volumes along the corridor, transit travel times are projected to increase. Ridership is forecast to increase by approximately nine percent by 2030. No increase in service is currently programmed by SANDAG for the corridor. Existing capacity on the system is sufficient to meet the forecast demand by the year 2030.

As land uses along University Avenue intensify and integrate mixed-use type projects, pedestrian demands along the corridor will increase. Improvements to the sidewalks along University Avenue will be necessary to both accommodate and encourage pedestrian activity. The widths of sidewalks and amenities at the transit stops will need to be evaluated to ensure that adequate space is provided for existing and future transit users.

Bicycle traffic along University Avenue is currently very light, with less than 15 bicycles on the corridor during the peak hours. Bicycle ridership along University Avenue is not anticipated to significantly increase in the No Build scenarios due to the constrained capacity, and undesirable conditions along the corridor. Recreational bicyclists will continue to use parallel routes such as North Park Way and Lincoln Avenue unless bicycle facilities are provided along University Avenue in the future.