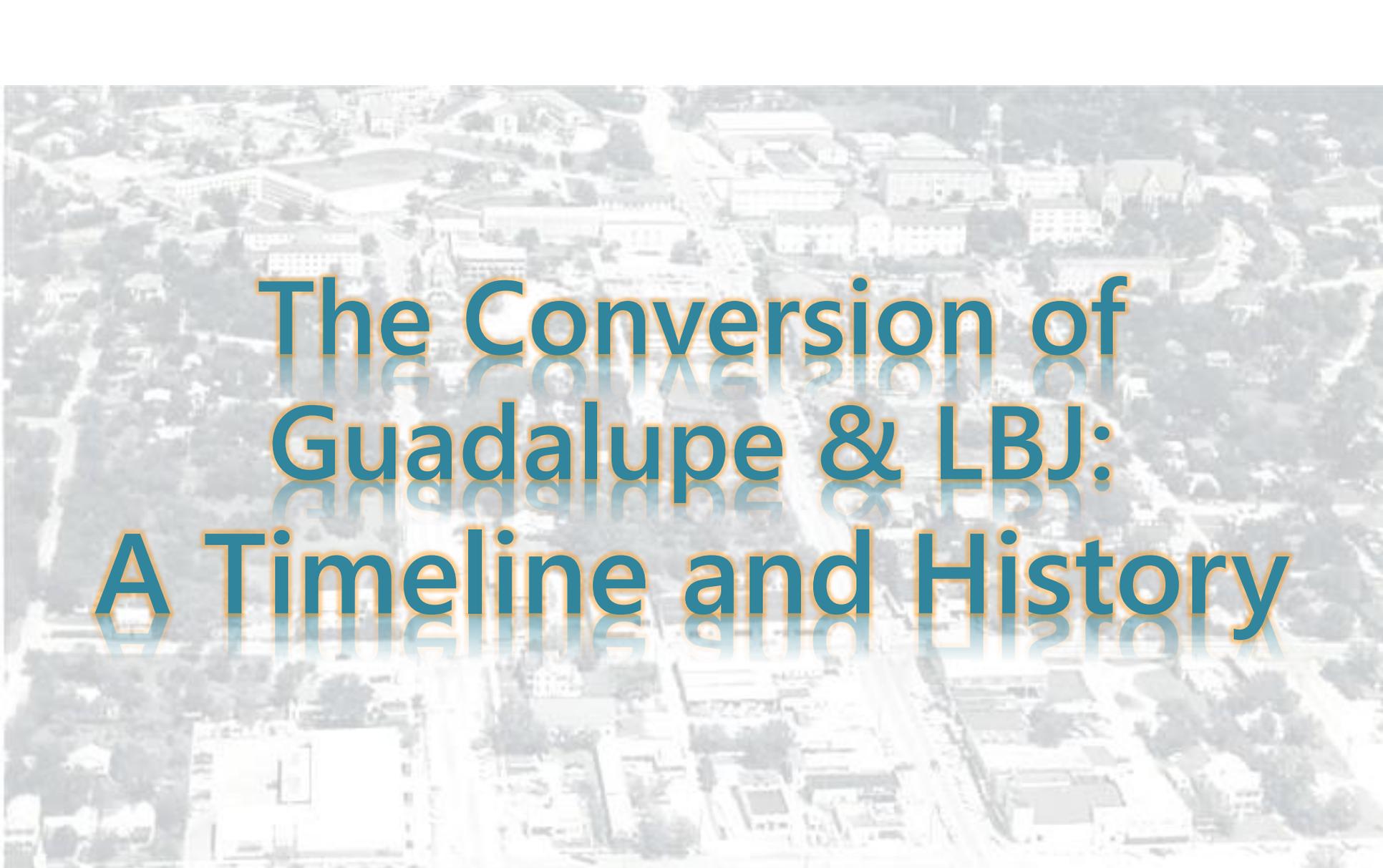




COUNCIL WORKSHOP

OCTOBER 14,
2015

GUADALUPE & LBJ TWO – WAY CONVERSION



The Conversion of Guadalupe & LBJ: A Timeline and History

GUADALUPE & LBJ CONVERSION

TWC - Southwest Texas State Univ.
Buildings - Aerial view 1962

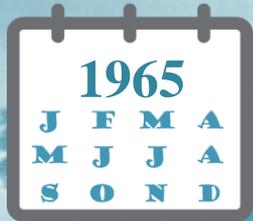
33390003092547

It is 1965, and traffic has become
a problem around the Square....

Something must be done....

And the issue is taken up at Council.

GUADALUPE & LBJ TWO – WAY CONVERSION



March 1965

Council discusses lack of traffic control around the Square. It is put forth that one-way streets may be a necessity in the future.

1967

Mayor and Council set up meeting with planning groups and officials for further discussion.

1968

Traffic engineer is hired to produce a traffic report.

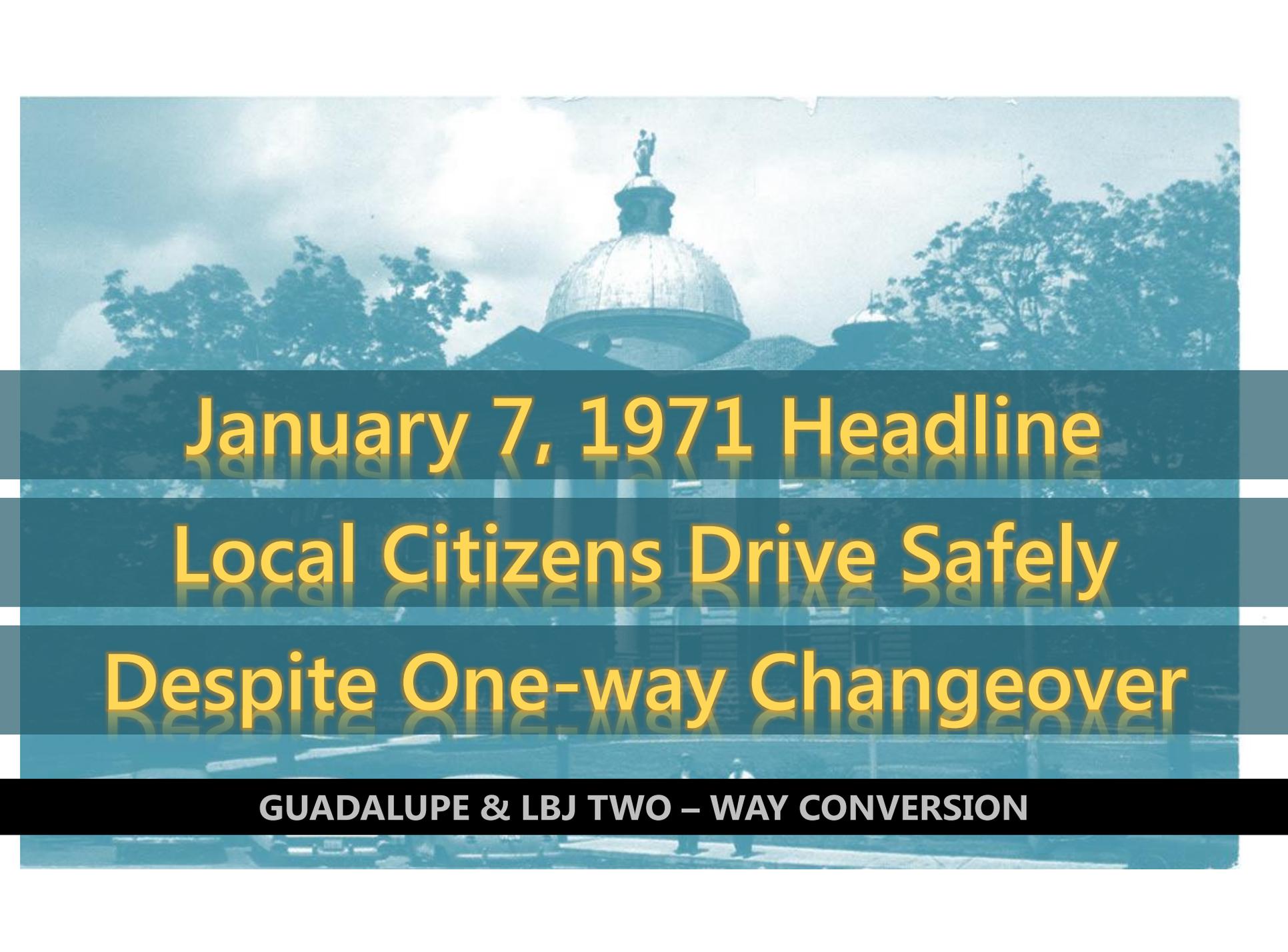
1969

Traffic study is completed and priorities are set with the option for future one-way conversion.

1970

A revised traffic report that includes one-way conversion passes unanimously and is officially adopted.

GUADALUPE & LBJ TWO – WAY CONVERSION



January 7, 1971 Headline
Local Citizens Drive Safely
Despite One-way Changeover

GUADALUPE & LBJ TWO – WAY CONVERSION



Presentation Outline

Objective

Background

**Economic
Analysis**

**Street
Options**

**Traffic
Impact**

**Parking
Impact**

**Options
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**Recommendations
Next Steps**

GUADALUPE & LBJ TWO – WAY CONVERSION

Objectives of Analysis

- Consider Vision/Goals/Objectives from Downtown Master Plan & Vision San Marcos Comprehensive Plan
- Perform Economic Analysis of Downtown San Marcos and impact of one-way/two-way.
- Collect current traffic data and evaluate traffic operations
- Develop Roadway Cross-Section Options
- Evaluate Options

GUADALUPE & LBJ TWO – WAY CONVERSION



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GUADALUPE & LBJ TWO – WAY CONVERSION



Downtown Master Plan Vision/Goals

- Support idea that Downtown is a destination.
- Direct “through-traffic” around perimeter.
- Direct visitors into Downtown.
- Make Downtown accessible to all.
- Make mobility in Downtown a priority.
- Promote a range of transportation options (pedestrian, bicycle, rail & transit)

GUADALUPE & LBJ TWO – WAY CONVERSION



Downtown Master Plan Recommendations

- Implement comprehensive wayfinding.
- Reinforce character of primary & secondary streets.
- Convert streets to two-way.
- Create parking management plan & district.
- Make streetscapes pedestrian & bicycle friendly.
- Establish gateway corridors.
- Fund/promote commuter rail stop.

GUADALUPE & LBJ TWO – WAY CONVERSION



Vision San Marcos Goals/Objectives

- Prioritize and complete infrastructure upgrades in Downtown
- Establish gateway corridors
- Develop high quality public spaces within Downtown
- A multimodal transportation network to improve accessibility and mobility
- Focus on non-vehicular transportation improvements

GUADALUPE & LBJ TWO – WAY CONVERSION



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GUADALUPE & LBJ TWO – WAY CONVERSION



Economic Analysis Report

**Context:
Recent
Growth in
San Marcos**

Overall
Trends/
Downtown
and the
Study Area

**Background:
Pros and
Cons of
Street
Conversion**

Traffic
Speeds/
Mobility

Public
Safety

Economic
Vitality

Case Studies

Lubbock

West Palm
Beach

Louisville

Charleston

Findings

Conclusion

**Appendix
One**

The Benefits
of Urbanist
Development

GUADALUPE & LBJ TWO – WAY CONVERSION

Economic Analysis

Findings

There is often a conflation between street direction and vehicular speed

- Much of the benefit is derived from the slower rate of speed associated with vehicle traffic on two-way streets.
- Slower vehicle speeds are beneficial for both pedestrian safety/ comfort as well as promoting a sense of vitality through improved storefront visibility and “good congestion” in commercial areas.
- Using measures such as signal timing to control traffic speed, San Marcos could derive the benefits of slower traffic on Guadalupe and LBJ Streets while at the same time not giving up the mobility bonus created by one-way streets during high traffic volume times of day.

GUADALUPE & LBJ TWO – WAY CONVERSION

Economic Analysis Findings

Not all streets (and communities) are equivalent

- Most of the negative impacts associated with one-way streets occur on multiple mile-long stretches of three-lane or four-lane streets with few street lights or other traffic control methods. These are streets in which the average rate of speed is high and the surrounding areas become inhospitable to pedestrians, shoppers, and residents.
- In San Marcos, the one-way pair of Guadalupe and LBJ Streets are 0.8 miles long and punctuated at each cross-street by stop lights or stop signs. Thus the greatest negative impacts of large one-way arterials are unlikely present.

GUADALUPE & LBJ TWO – WAY CONVERSION



Economic Analysis Findings

Not all streets (and communities) are equivalent (continued)

- The overall size, density, and pattern of the built environment highly influences the impacts of changes in transportation infrastructure, with greater effects in large, dense, highly urban environments.
- There is almost no information available that reports on the impact of street conversion in communities that are comparable to San Marcos in terms of size, density, role in a broader regional economy, and stage of development.
- However, it seems safe to say that the relatively small study area, lack of density, and proximity to a major employment center that is a commuter destination undercuts the magnitude of possible gains.

GUADALUPE & LBJ TWO – WAY CONVERSION



Economic Impact Findings

Street direction isn't a determinant of economic impact

- No studies found which indicated that converting streets from one-way to two-way (or vice versa) in and of itself caused significant private investment in an area, or yielded a measurable change in retail activity.
- However, a more comprehensive program of public investment in roadway-related infrastructure (including elements such as streetscaping, wayfinding, and parking improvements) has been shown in a number of cases to both increase retail activity and subsequently spur private redevelopment efforts.

GUADALUPE & LBJ TWO – WAY CONVERSION

Economic Analysis Conclusion

- Guadalupe and LBJ Streets are major arterials for traffic to flow between Texas State University and the rest of San Marcos;
- In addition to street conversion, streetscaping, wayfinding, public transportation infrastructure, and parking improvements are all fundamental parts of promoting a vibrant downtown;
- There is little to no analysis that considers the impact of the above potential improvements/tools in isolation, but a package tailored to fit this particular area in San Marcos is likely to facilitate the realization of downtown's development potential; and,
- The relative lack of density and smaller-scale built environment suggests that weight be given to mobility, at least at this stage of the community's development.

GUADALUPE & LBJ TWO – WAY CONVERSION



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GUADALUPE & LBJ TWO – WAY CONVERSION

Key Factors of "Urbanist Development"

- Providing a Sense of Community
- Creating a "Place Identity"
- Providing a Mix of Land Uses
- Creating Walkable Downtown/Neighborhoods

GUADALUPE & LBJ TWO – WAY CONVERSION



Improved Streetscapes



GUADALUPE & LBJ TWO – WAY CONVERSION



Mid-Block Paseos

Work with property owners to create mid-block paseos on the large block bounded by LBJ, MLK, Guadalupe and San Antonio Streets.



GUADALUPE & LBJ TWO – WAY CONVERSION



Parking Options



GUADALUPE & LBJ TWO – WAY CONVERSION



Safe Bicycle Movement



GUADALUPE & LBJ TWO – WAY CONVERSION



Option A

Two-Way Traffic Operations

Partial Cycle Tracks on Guadalupe, San Antonio and LBJ

Limited Multimodal Operations

Option C

Two-Way Traffic Operations

Continuous Cycle Tracks on Guadalupe & Hopkins

Partial Cycle Track on LBJ

Option E

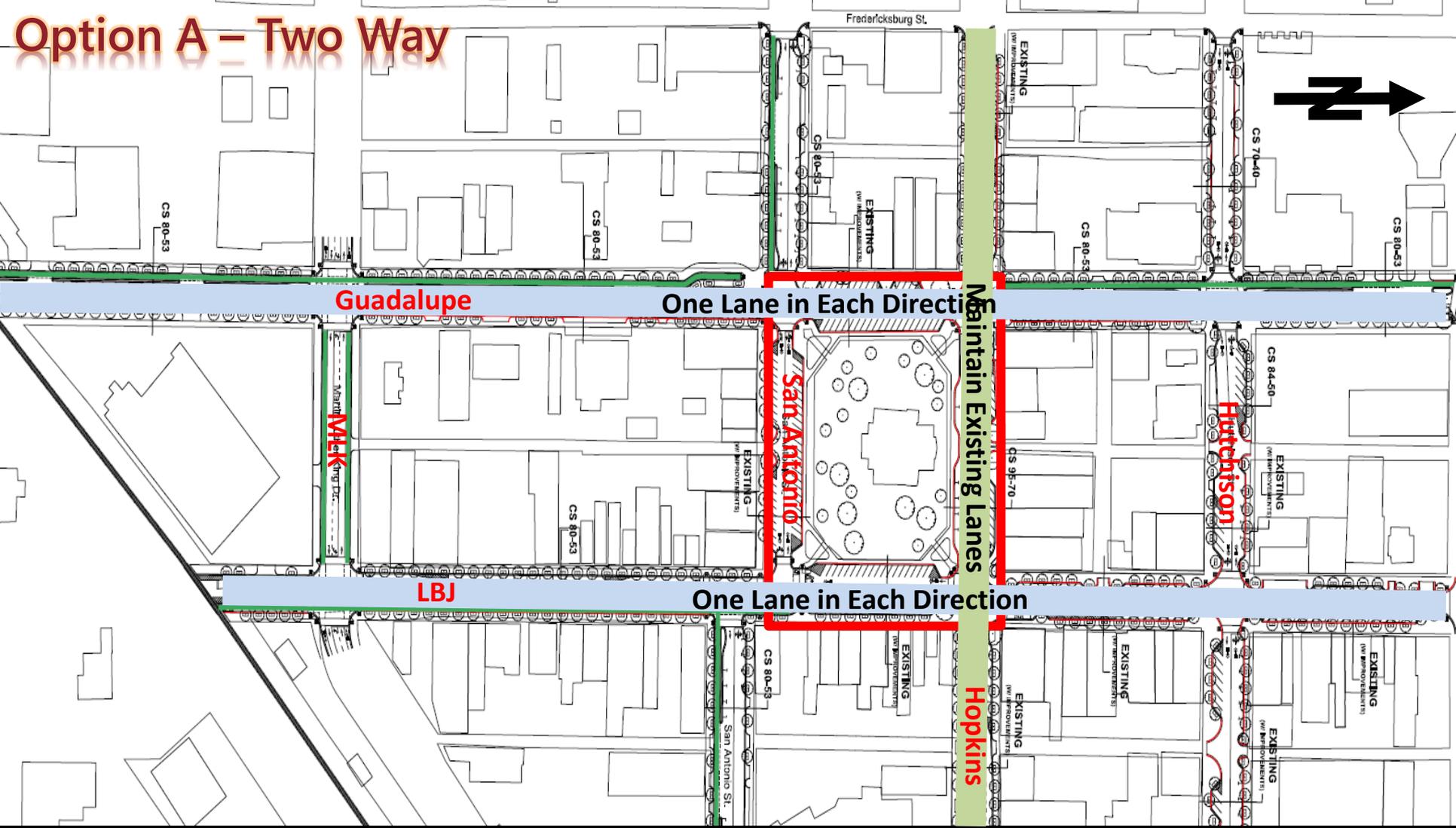
One-Way Traffic Operations

Continuous Cycle Tracks on Guadalupe & Hopkins

No Cycle Track on LBJ



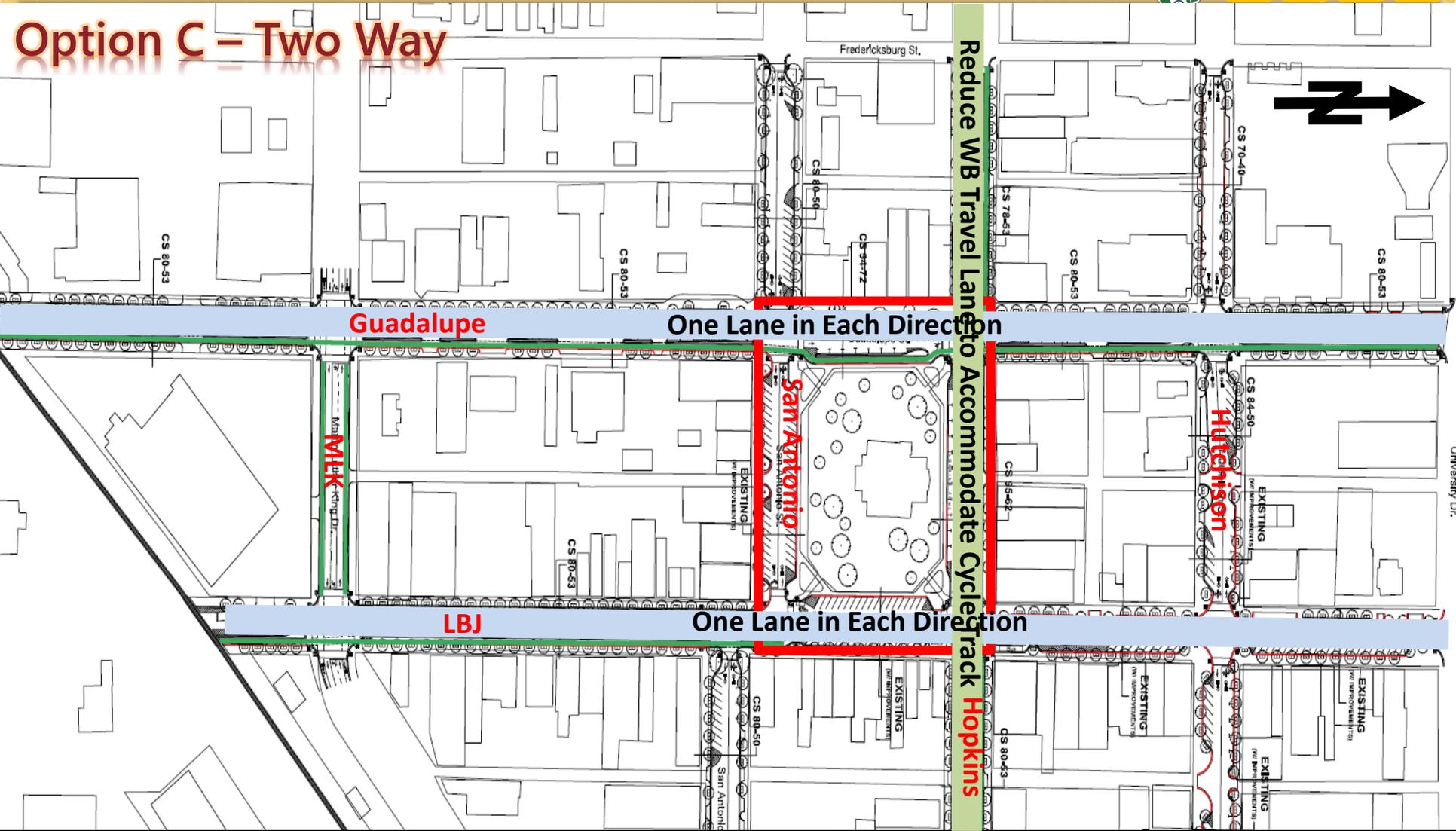
Option A – Two Way



GUADALUPE & LBJ TWO – WAY CONVERSION



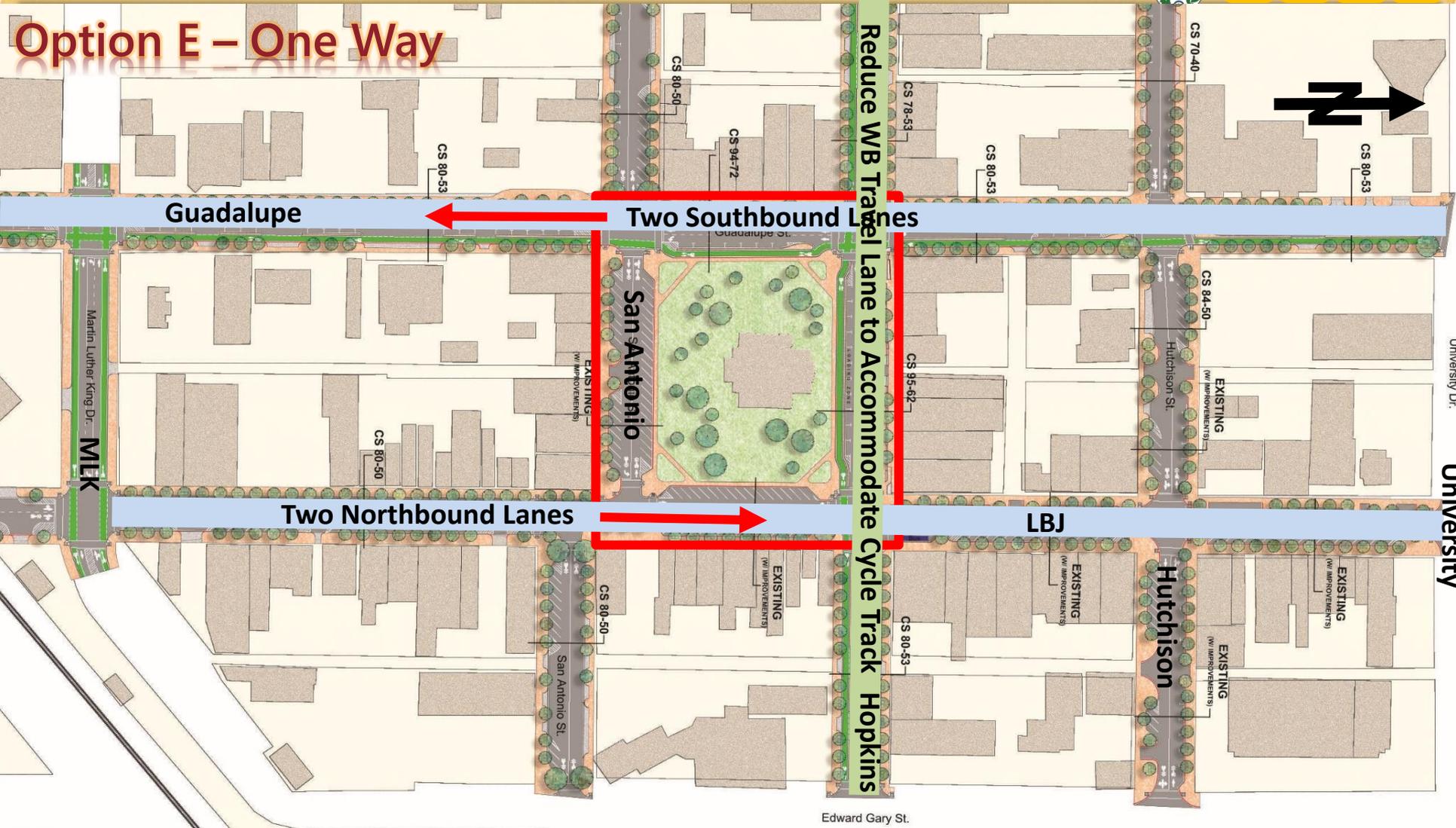
Option C – Two Way



GUADALUPE & LBJ TWO – WAY CONVERSION



Option E – One Way



GUADALUPE & LBJ TWO – WAY CONVERSION



Objective

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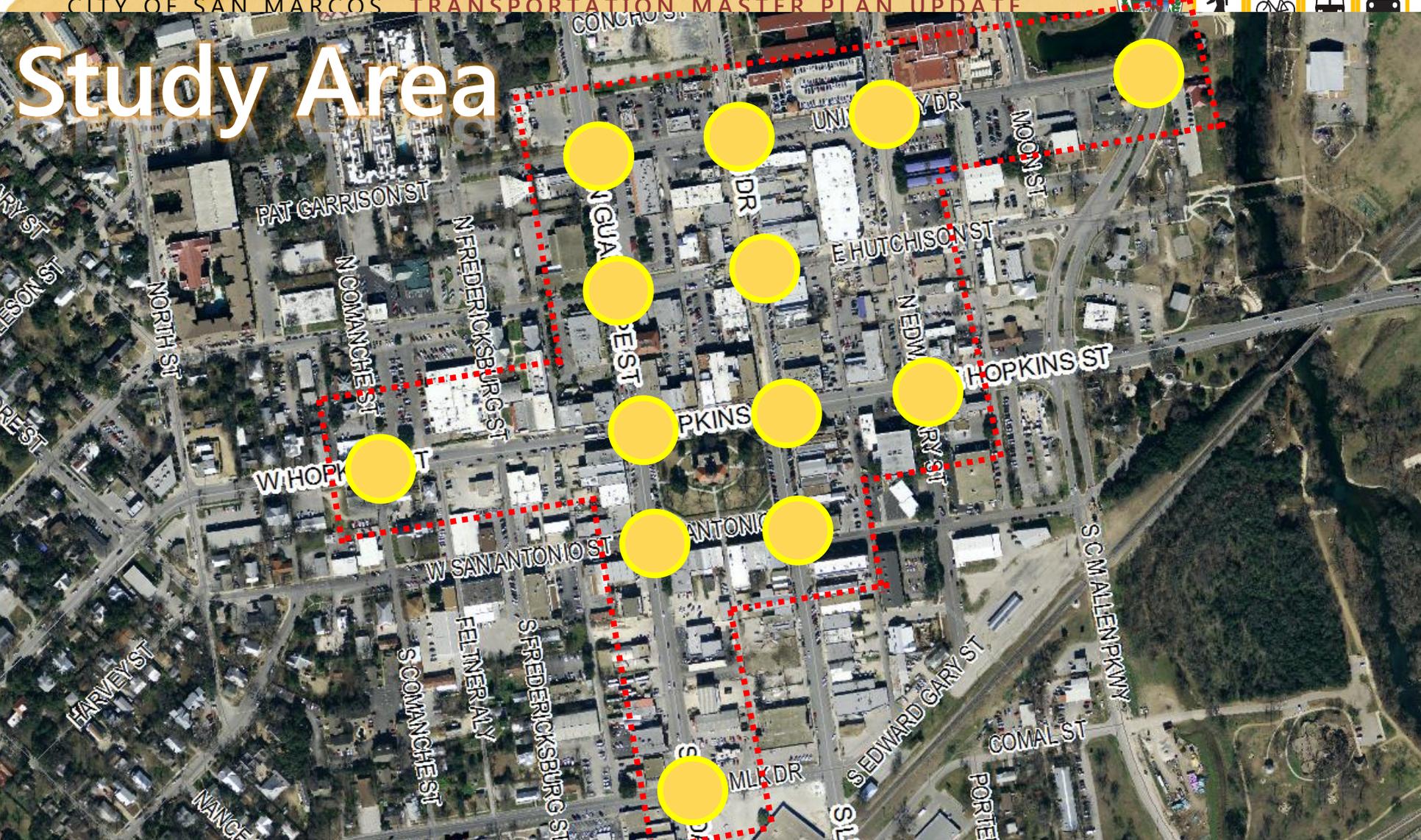
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GUADALUPE & LBJ TWO – WAY CONVERSION

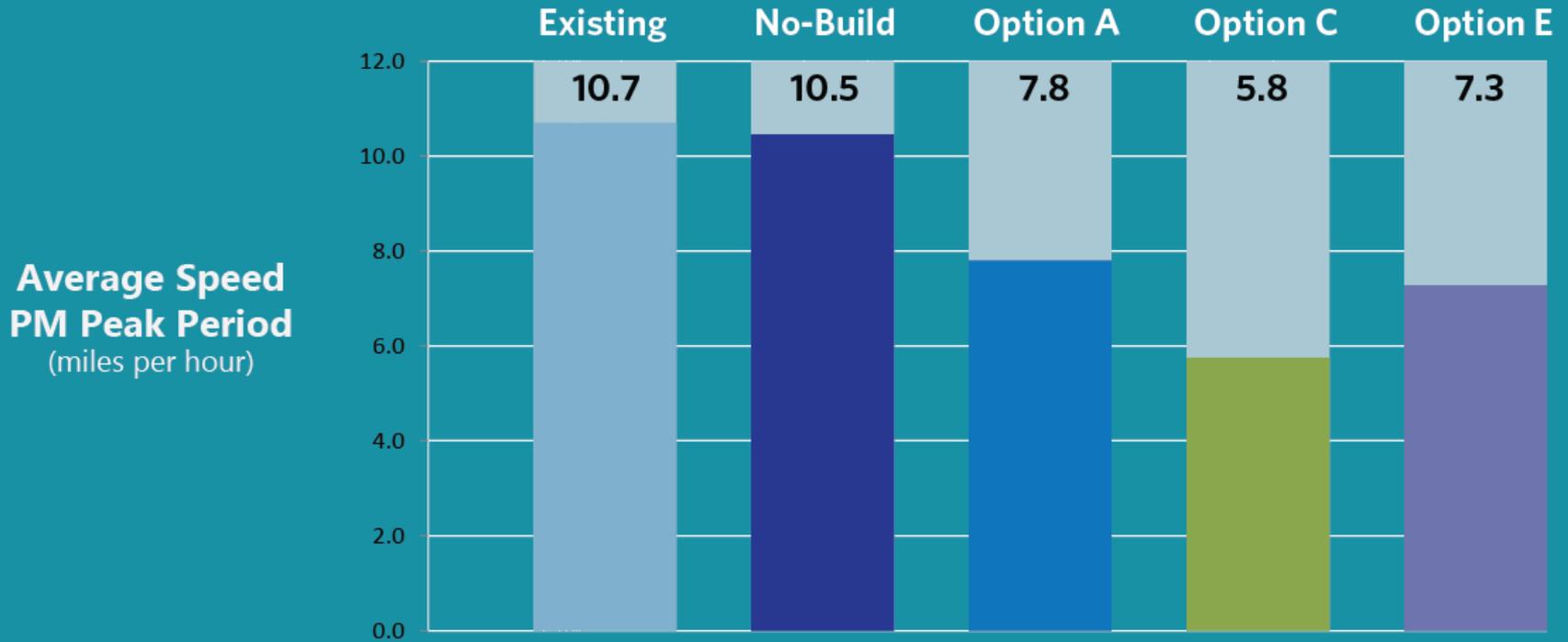
Study Area



GUADALUPE & LBJ TWO - WAY CONVERSION



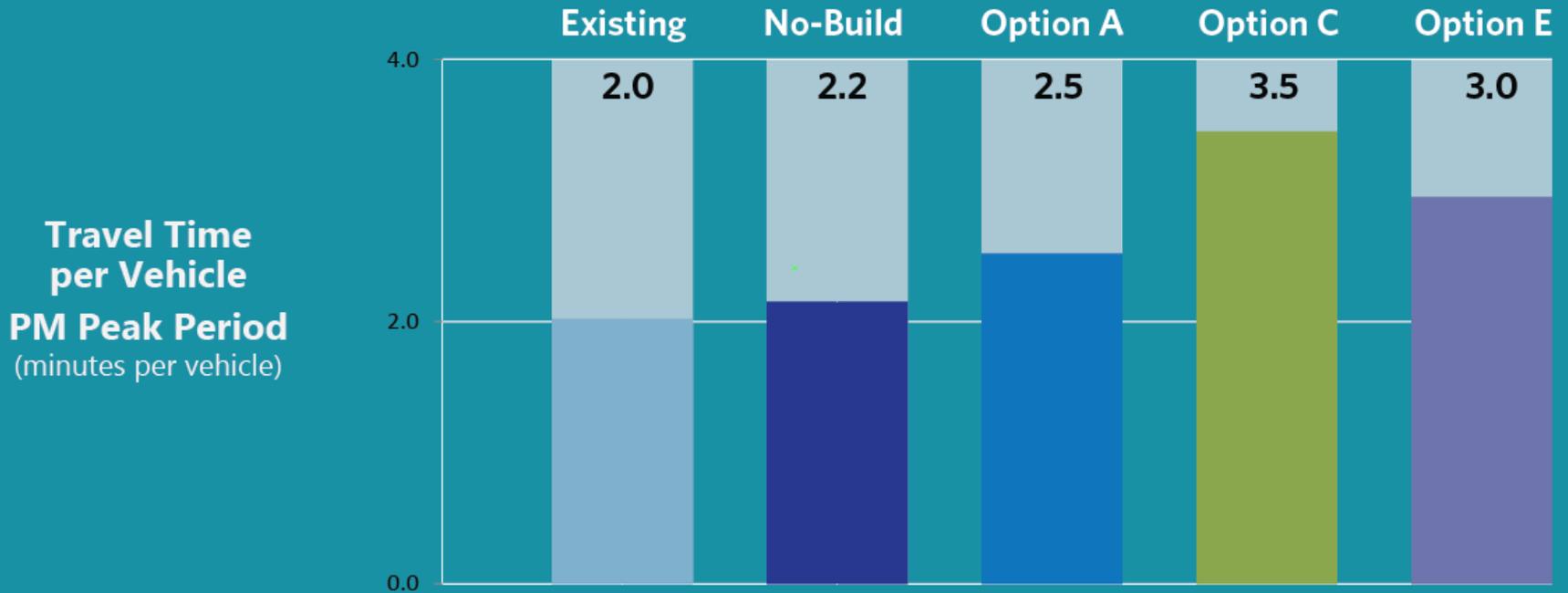
Traffic Impact - Speed



GUADALUPE & LBJ TWO – WAY CONVERSION



Traffic Impact - Travel Time



GUADALUPE & LBJ TWO – WAY CONVERSION



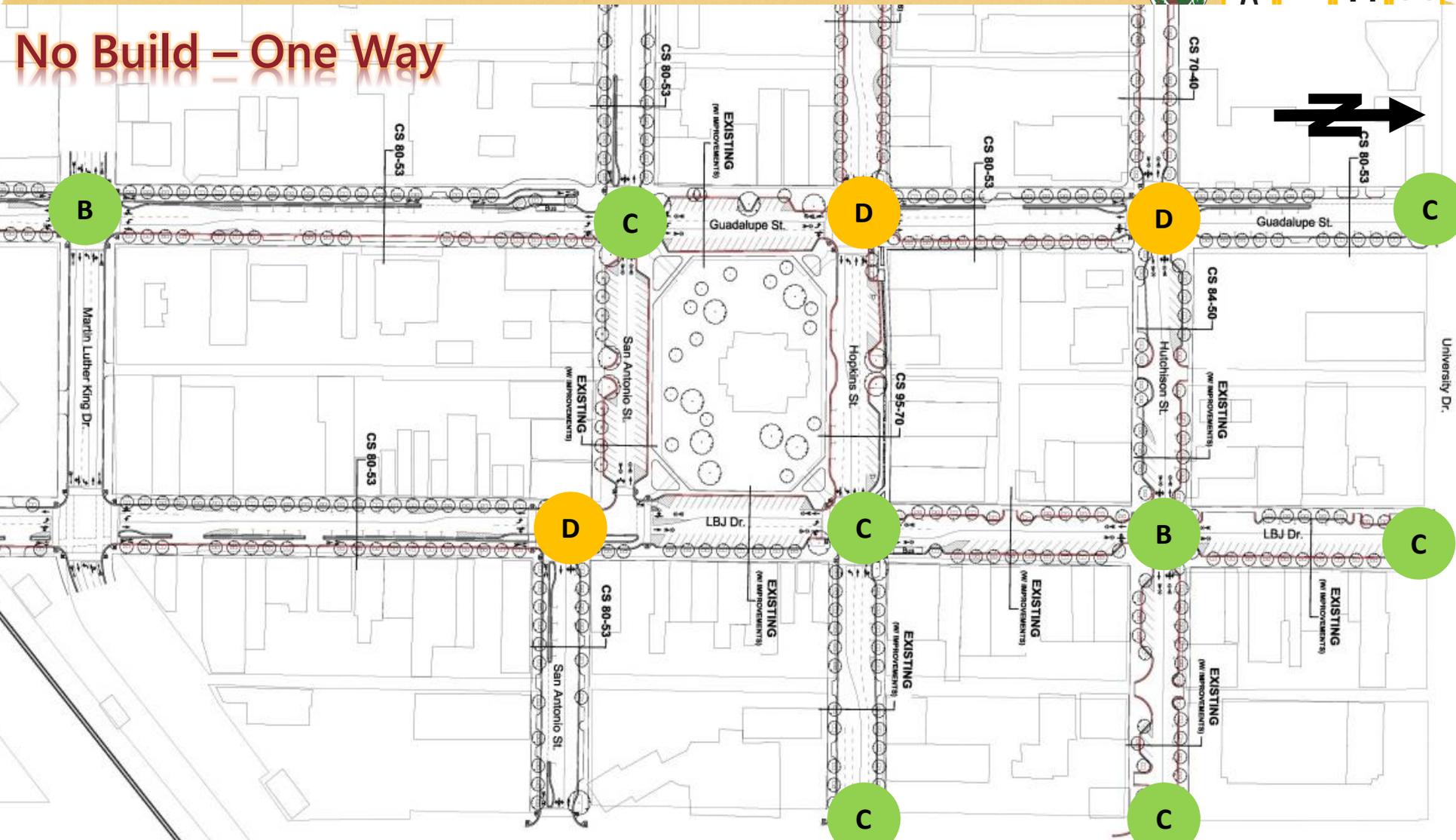
Vehicular Level of Service

Intersection	Existing	Future Conditions - 2035			
		No Build	Option A	Option C	Option E
Comanche St. and Hopkins St.(SH 80)	B	D	D	E	D
Guadalupe St. and University Dr.	B	C	B	B	C
Guadalupe St. and Hutchinson St.	C	D	D	D	E
Guadalupe St. and Hopkins St. (SH 80)	D	D	E	E	D
Guadalupe St. and San Antonio St.	C	C	D	C	C
Guadalupe St. and Martin Luther King Dr.	A	B	B	B	B
LBJ Dr. and University Dr.	B	C	C	D	C
LBJ Dr. and Hutchinson St.	C	B	D	E	B
LBJ Dr. and Hopkins St. (SH 80)	B	C	D	E	D
LBJ Dr. and San Antonio St.	C	D	D	F	E
Edward Gary St. and University Dr.	C	C	B	B	C
Edward Gary St and Hopkins St. (SH 80)	B	C	E	F	F
CM Allen Pkwy. and University Dr.	C	B	C	C	C

GUADALUPE & LBJ TWO - WAY CONVERSION



No Build – One Way



GUADALUPE & LBJ TWO – WAY CONVERSION



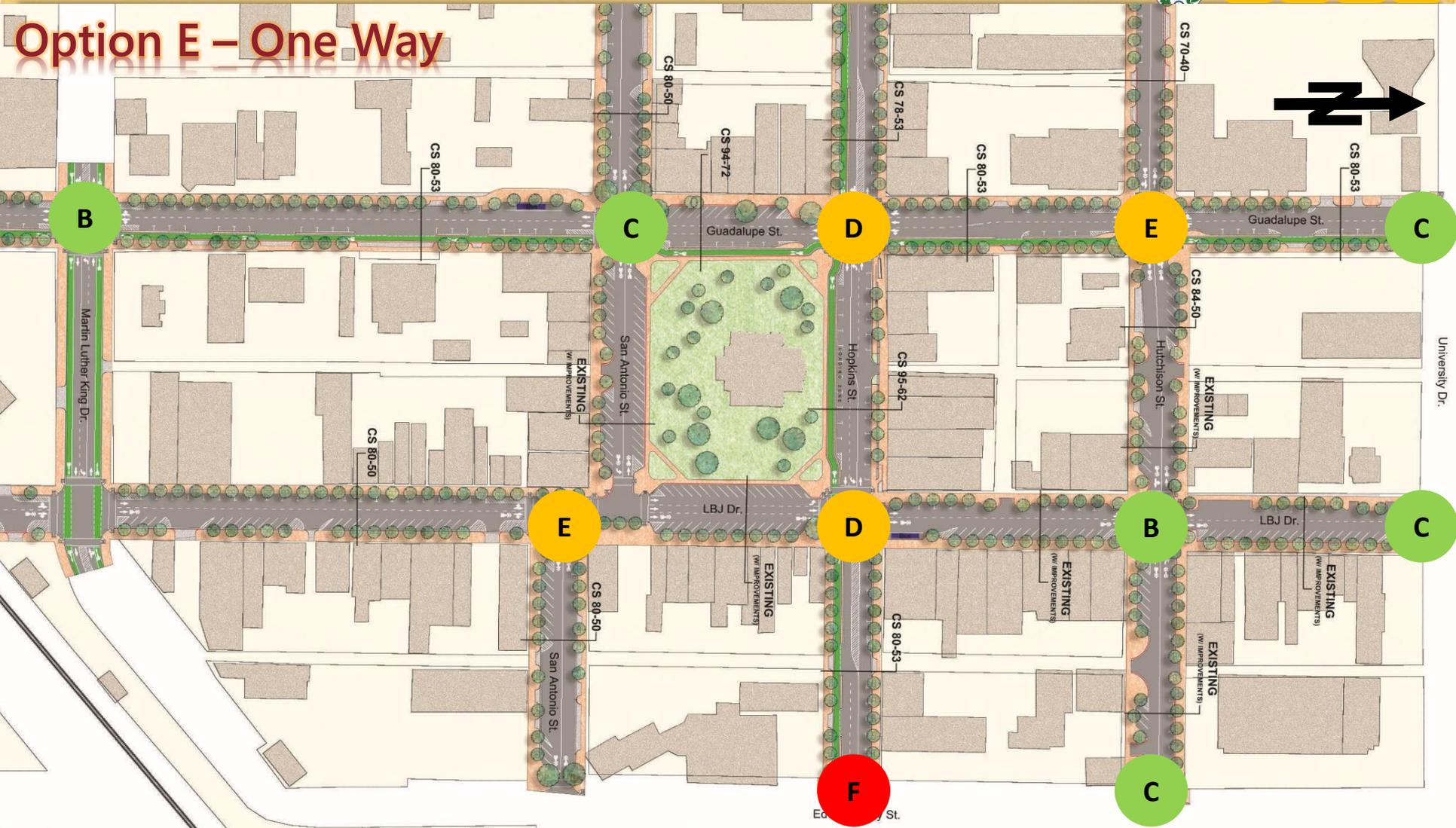
Option A – Two Way



GUADALUPE & LBJ TWO – WAY CONVERSION



Option E – One Way



GUADALUPE & LBJ TWO – WAY CONVERSION



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GUADALUPE & LBJ TWO – WAY CONVERSION



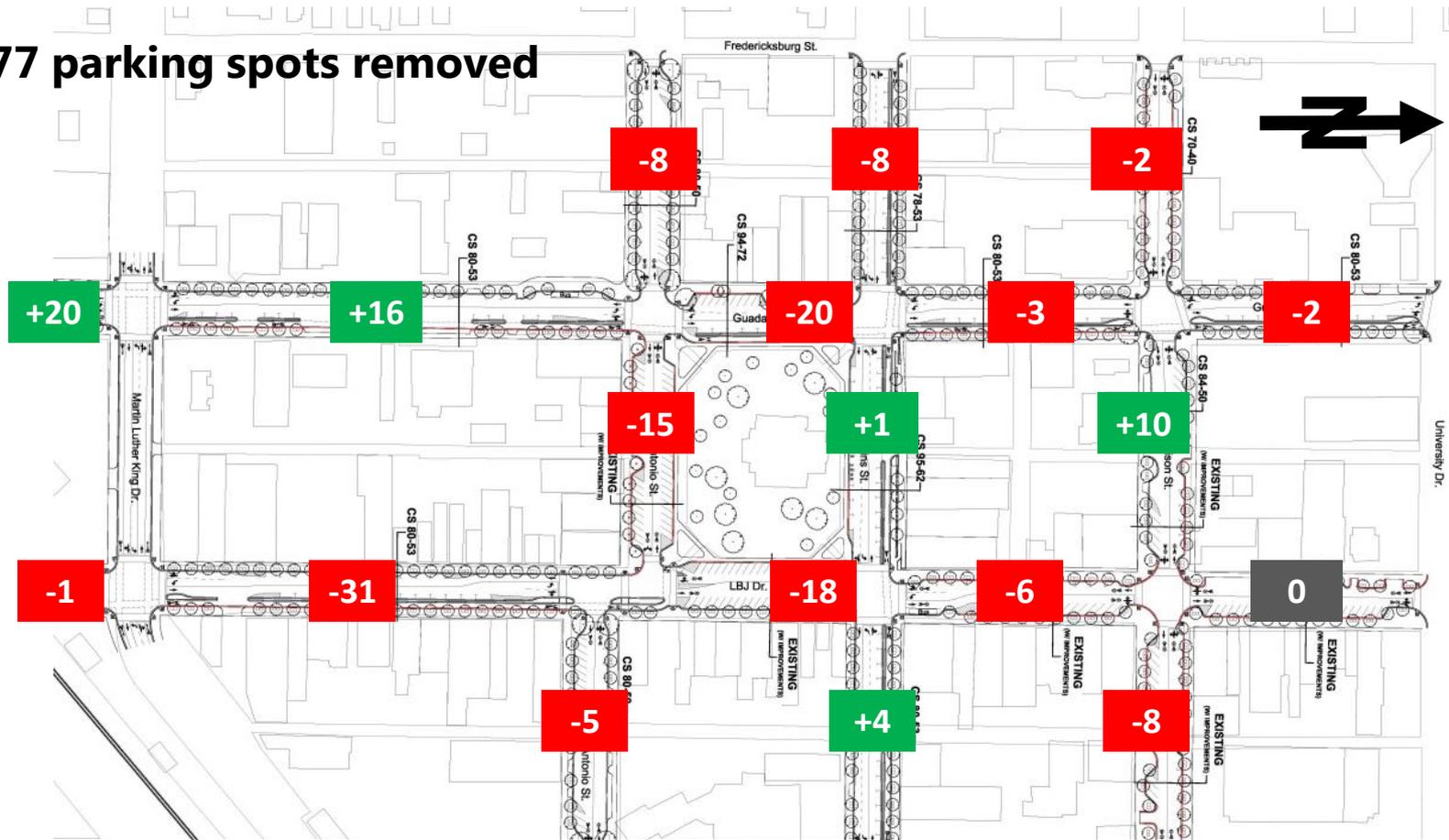
Overall

	Existing	Option A	Option C	Option E
Along Guadalupe Street	94	+5	+11	+14
Along LBJ Drive	164	-56	-56	-27
Along Hutchison Street	53	+1	0	-1
Along Hopkins Street	45	-10	-4	-2
Along San Antonio Street	97	-38	-28	-23
Total	453	-98	-77	-39

GUADALUPE & LBJ TWO – WAY CONVERSION

Parking Loss: Option C (Two – Way)

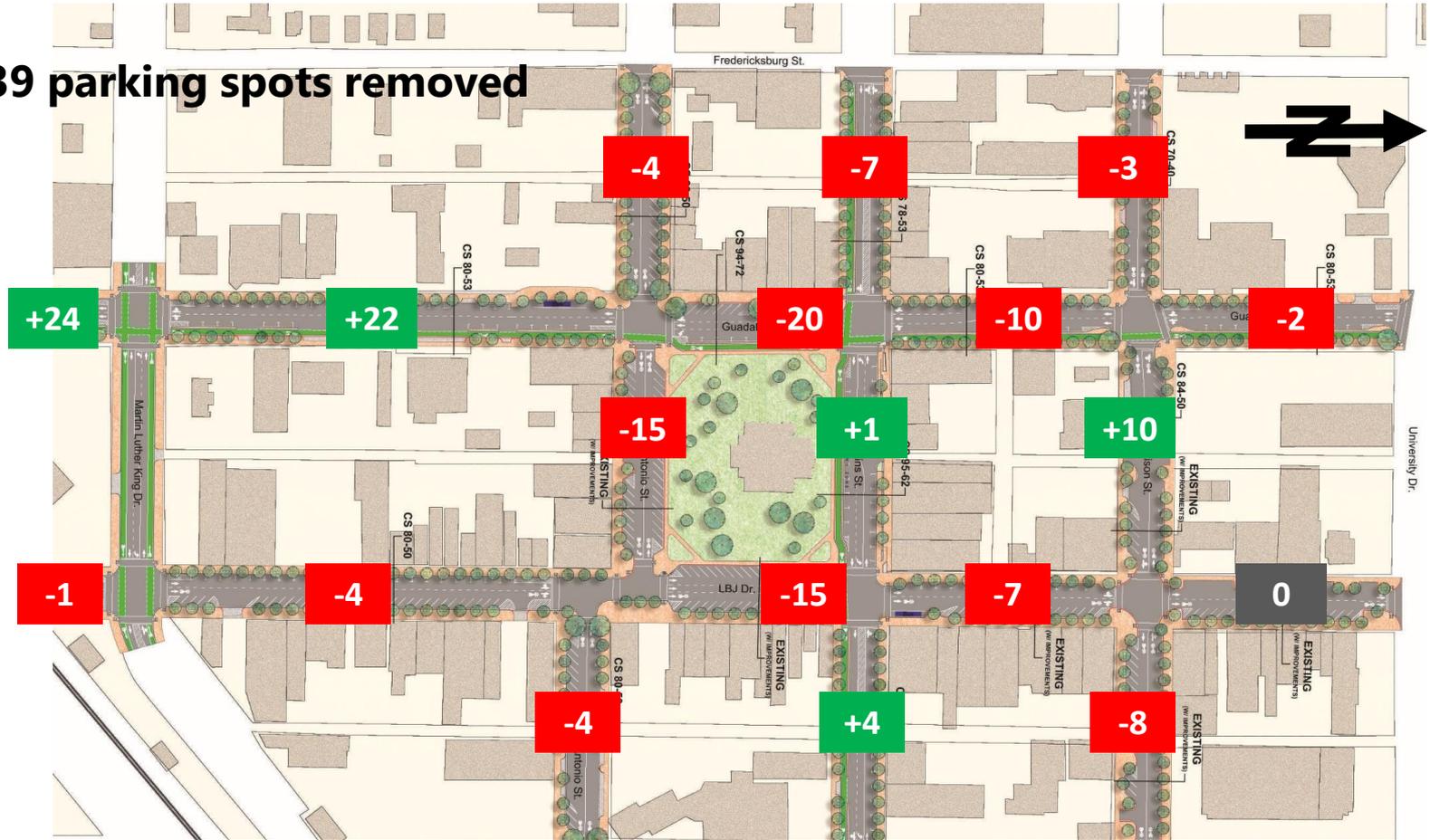
Total of 77 parking spots removed



GUADALUPE & LBJ TWO – WAY CONVERSION

Parking Loss: Option E (One – Way)

Total of 39 parking spots removed



GUADALUPE & LBJ TWO – WAY CONVERSION



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GUADALUPE & LBJ TWO – WAY CONVERSION

Option Evaluation Process

- City provided weight for each criteria: 5-most important to 1- least important.
- Consultant provided criteria performance for each option: 5 – highest to 1-lowest.
- Each option receives total score by criteria reflecting weight & performance.
- Max score = 25 points

GUADALUPE & LBJ TWO – WAY CONVERSION



Evaluation Criteria

	Evaluation Criteria	Weight
1	Traffic Operations/Travel Time	4
2	Traffic Safety	5
3	Transportation System	4
4	Parking Impact	3
5	Environmental Impact	2
6	Surrounding Land Use/Development; Business Impact	4
7	Alternative Modes; Complete Streets	3
8	Emergency Response	5
9	Construction Cost/Constructability	1

GUADALUPE & LBJ TWO – WAY CONVERSION





Options Evaluation

	Evaluation Criteria	Option A	Option C	Option E
1	Traffic Operations/Travel Time	20	12	16
2	Traffic Safety	15	20	20
3	Transportation System	12	20	16
4	Parking Impact	6	9	15
5	Environmental Impact	10	6	8
6	Surrounding Land Use/Dev; Business Impact	20	20	16
7	Alternative Modes; Complete Streets	9	15	12
8	Emergency Response	25	15	20
9	Construction Cost/Constructability	4	4	5
Total		121	121	128

GUADALUPE & LBJ TWO – WAY CONVERSION



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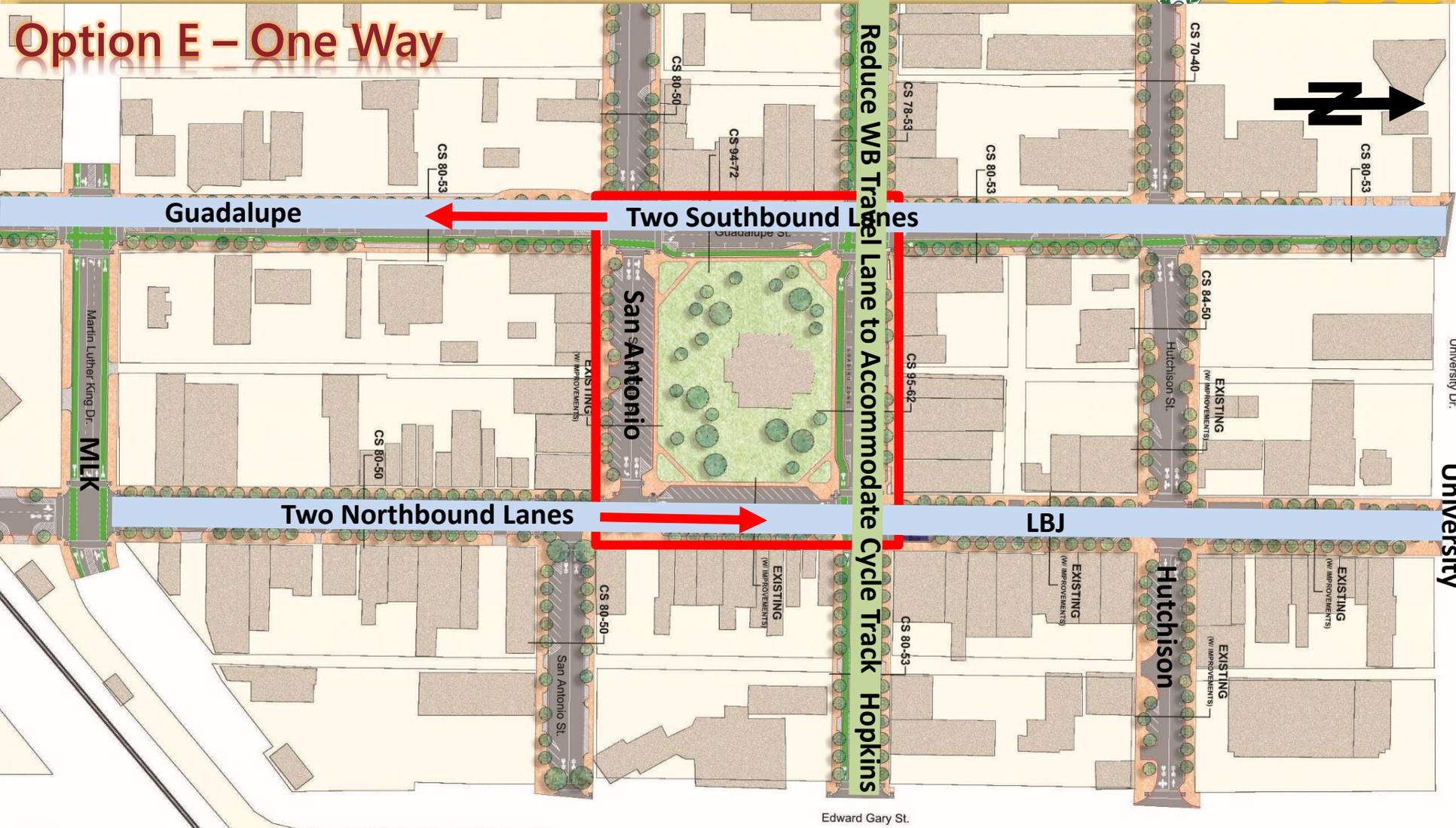
**Options
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Next Steps**

GUADALUPE & LBJ TWO – WAY CONVERSION



Option E – One Way



GUADALUPE & LBJ TWO – WAY CONVERSION

Option E

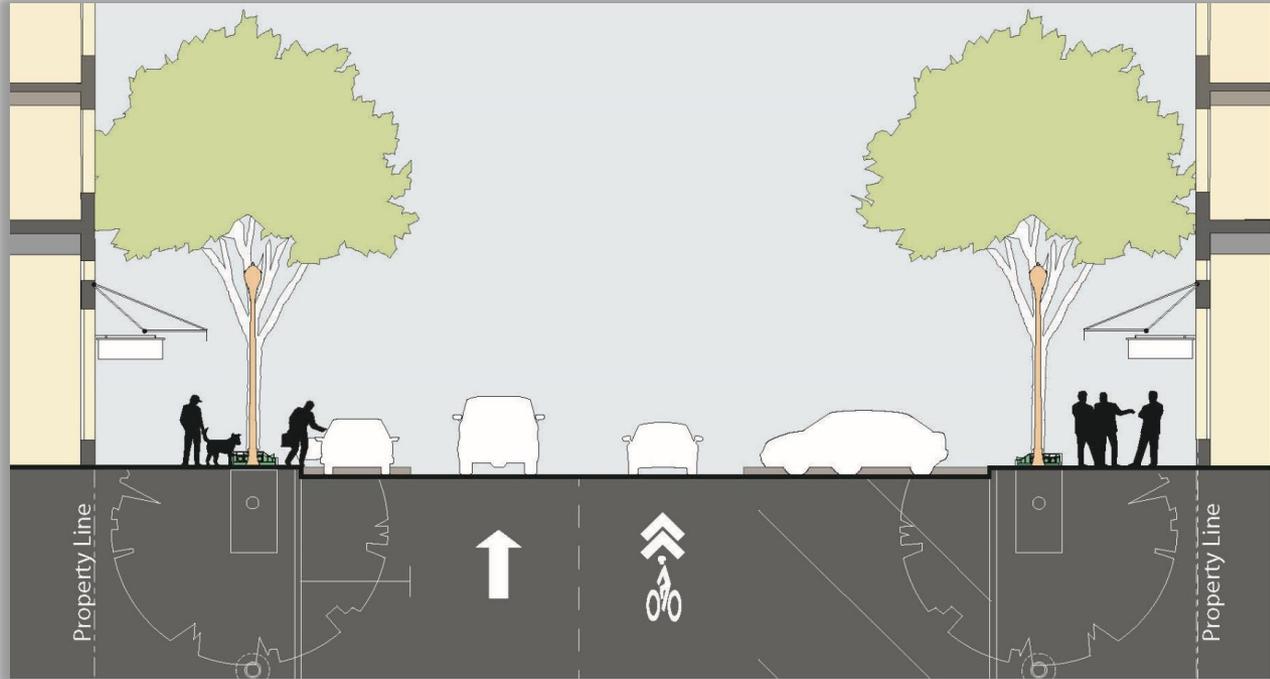


One-Way Operations

Easily convertible to two-way operations in the future

GUADALUPE & LBJ TWO – WAY CONVERSION

Cross Section: LBJ Drive Looking North

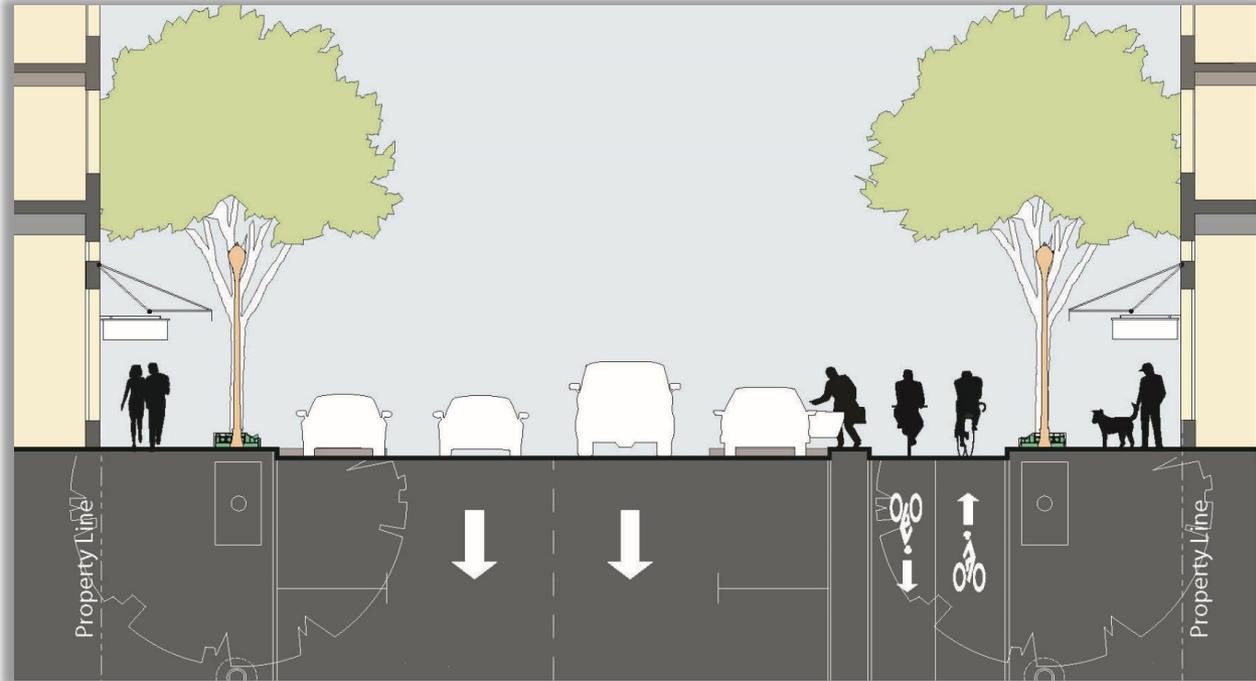
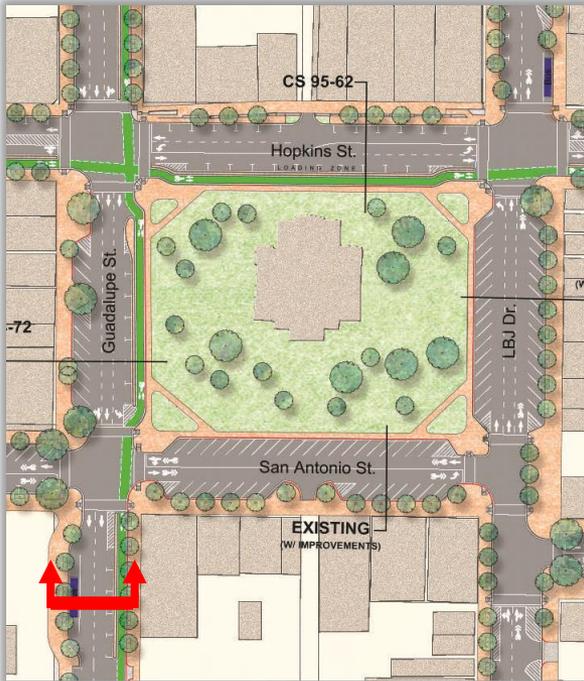


Parallel and reverse-angle parking

Sharrows with Two Northbound travel lanes

GUADALUPE & LBJ TWO – WAY CONVERSION

Cross Section: Guadalupe Looking North



Parallel parking
on both sides

Two-way cycle track

Two Southbound travel lanes

GUADALUPE & LBJ TWO – WAY CONVERSION



Downtown Improvements





Improved Streetscapes

Generous tree-lined sidewalks that enhance the destination appeal of Downtown, and that encourage “park-once” behavior.

GUADALUPE & LBJ TWO – WAY CONVERSION



Sharrows and Cycle Tracks

Create protected bikeways north-south and east-west through the Downtown core.

GUADALUPE & LBJ TWO – WAY CONVERSION



Downtown Parking Area

Develop Mid to Long
Term Parking Resources.

GUADALUPE & LBJ TWO – WAY CONVERSION



Mid-Block Paseos

Work with property owners to create a mid-block paseos on the large block bounded by LBJ, MLK, Guadalupe and San Antonio Streets.

GUADALUPE & LBJ TWO – WAY CONVERSION



Current 3-Year CIP

CIP Projects	Funding	Year
Downtown Drainage Phase II Construction	\$850K	2016
319 Hutchison Parking Lot Construction	\$85K	2016
CM Allen Reconstruction Design & Const.	\$1.8M	2016
LBJ/Guadalupe Improvements Design	\$200K	2016
Downtown Reconstruction Phase II Design	\$1.3M	2017
LBJ/Guadalupe Improvements Construction	\$2.0M	2018

GUADALUPE & LBJ TWO – WAY CONVERSION



Next Steps

- City Council Direction
- Finalize Study with High Level Cost Estimates
- Complete Back-in parking survey/Council Direction
- Identify/Modify CIP projects
- Schedule projects through 2017-2026 CIP process

GUADALUPE & LBJ TWO – WAY CONVERSION



QUESTIONS?

GUADALUPE & LBJ TWO – WAY CONVERSION