

RAPID CITY COUNCIL MEETING

October 15, 2012

Removal of On-Street Parking on Public R.O.W.

US16 – Mount Rushmore Road

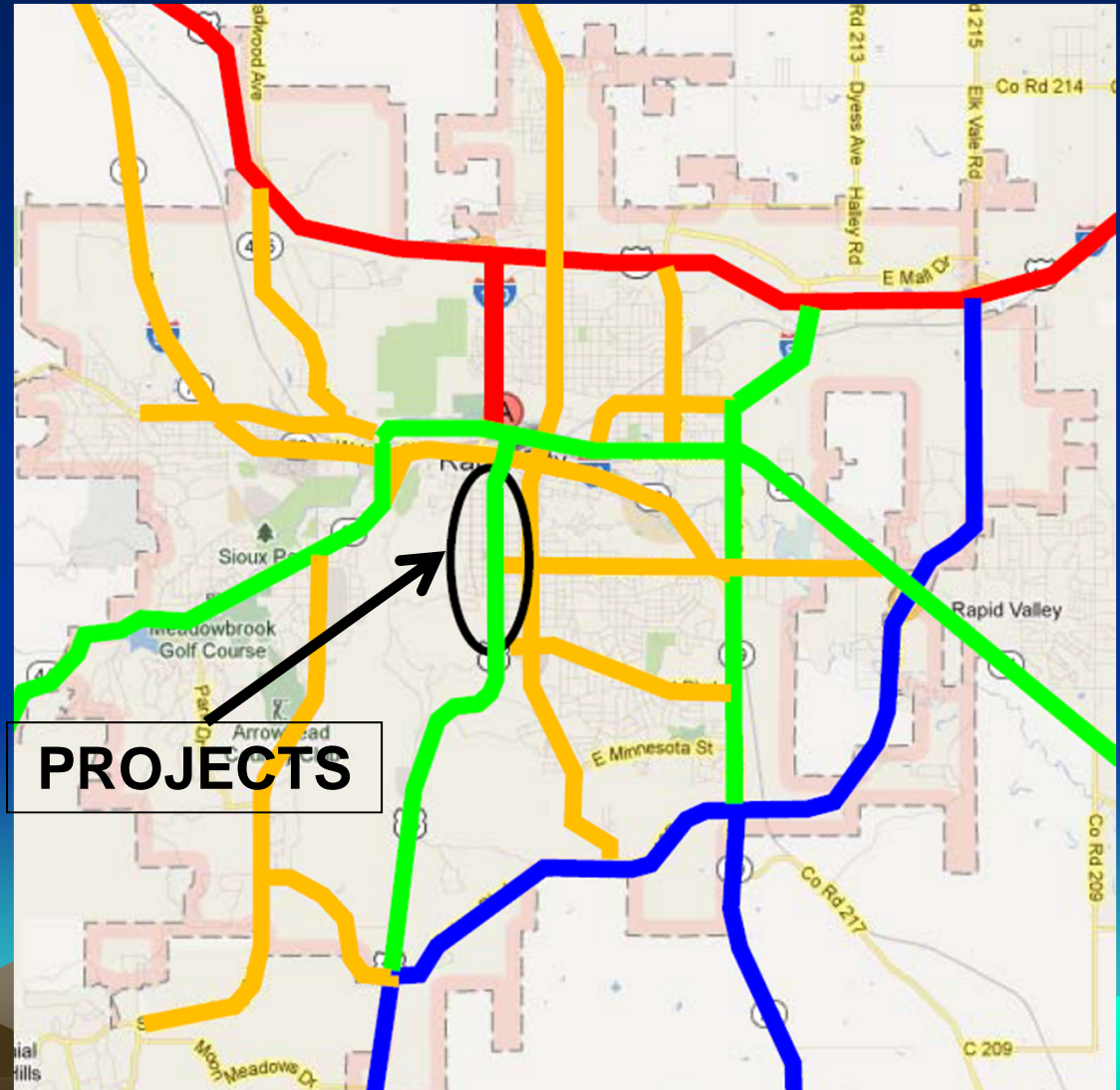
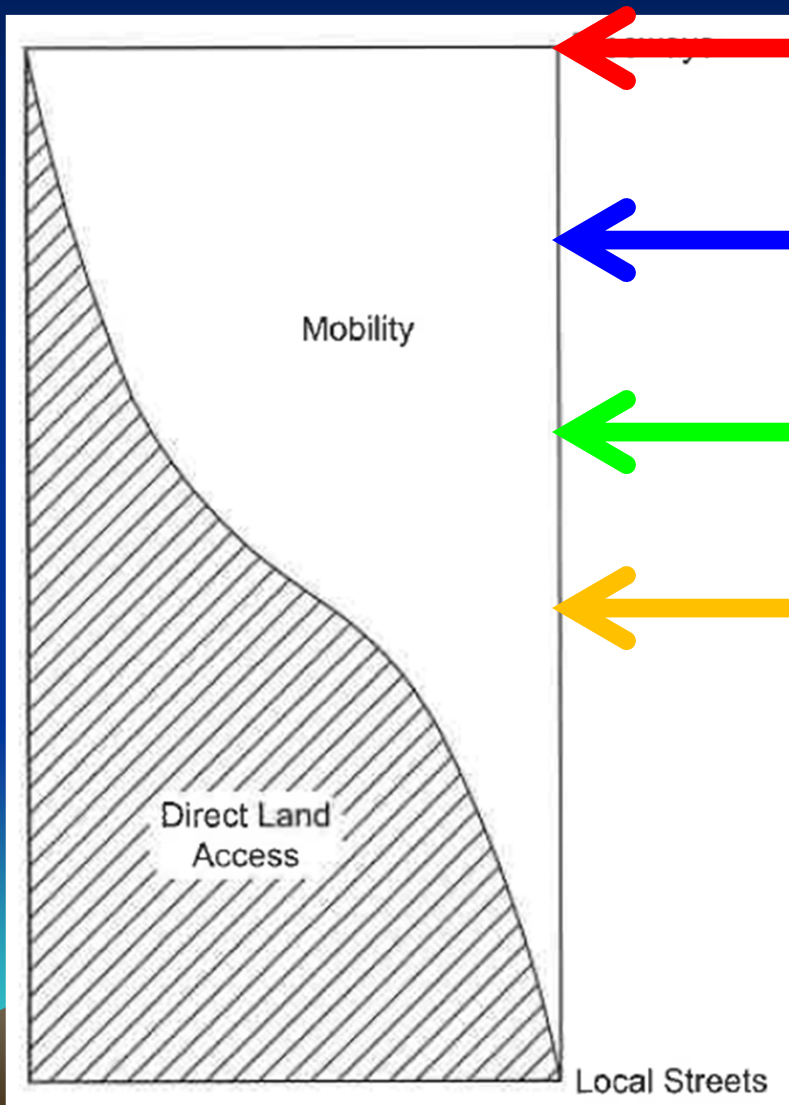
**Mark Leiferman
Chief Road Design Engineer
SDDOT**

AGENDA

- Project Background
- Proposed Projects
- Medians
- Removal of On-Street Parking



FUNCTIONAL SYSTEM CHARACTERISTICS



PROJECT LOCATION

Phase 1 (PCN01TH): 2014
Tower Road to
Saint Andrew Street

Phase 2 (PCN027C): 2015
Saint Andrew Street to
Kansas City Street



WORK COMPLETED TO DATE

- Mount Rushmore Road Corridor Development Plan – Final Report June 2010
- SDDOT Started Design on Phase 1 – November 2011
(Utilizing Final Report as adopted by RC City Council)

	Phase 1	Phase 2
Public Meeting	08/16/2012	08/16/2012
Landowners Meeting	Fall 2012	Spring 2013
Final Design	Nov 2012	May 2013
Land Appraisal/Negotiation	2013	2013/2014
Construction	2014	2015
Estimated Construction Cost	\$7.170 Million	\$5.525 Million

BACKGROUND INFORMATION

- Originally constructed in 1958
- Pavement repairs made in 1998
- Pavement is in poor condition throughout



BACKGROUND INFORMATION

	Current Traffic (2011)	Projected Traffic (2031)	Truck Traffic
Phase 1	22,309 vehicles/day	25,767 vehicles/day	6.1%
Phase 2	23,450 Vehicles/day	27,084 vehicles/day	1.3%

ACCIDENT HISTORY

(2009 – 2011)

	Fatal Accidents	Injury Accidents	Property Damage	Accident Rate
Phase 1	0	26	50	5.2
Phase 2	0	27	45	4.9

Statewide Accident Rate (Urban Principal Arterial)
2.23 accidents per million vehicle miles of travel



PROJECT IMPROVEMENTS

- Grading (changing from 10' to 11' lanes)
- Storm Sewer
- Curb & Gutter
- Sidewalks (Boulevard – Color Concrete or Grass)
- Roadway Lighting and Traffic Signals
- PCCP Surfacing
- Landscaping
- City Utilities - Water and Sanitary Sewer
– Underground Power Lines



PROPOSED DESIGN

Typical Section

General Considerations

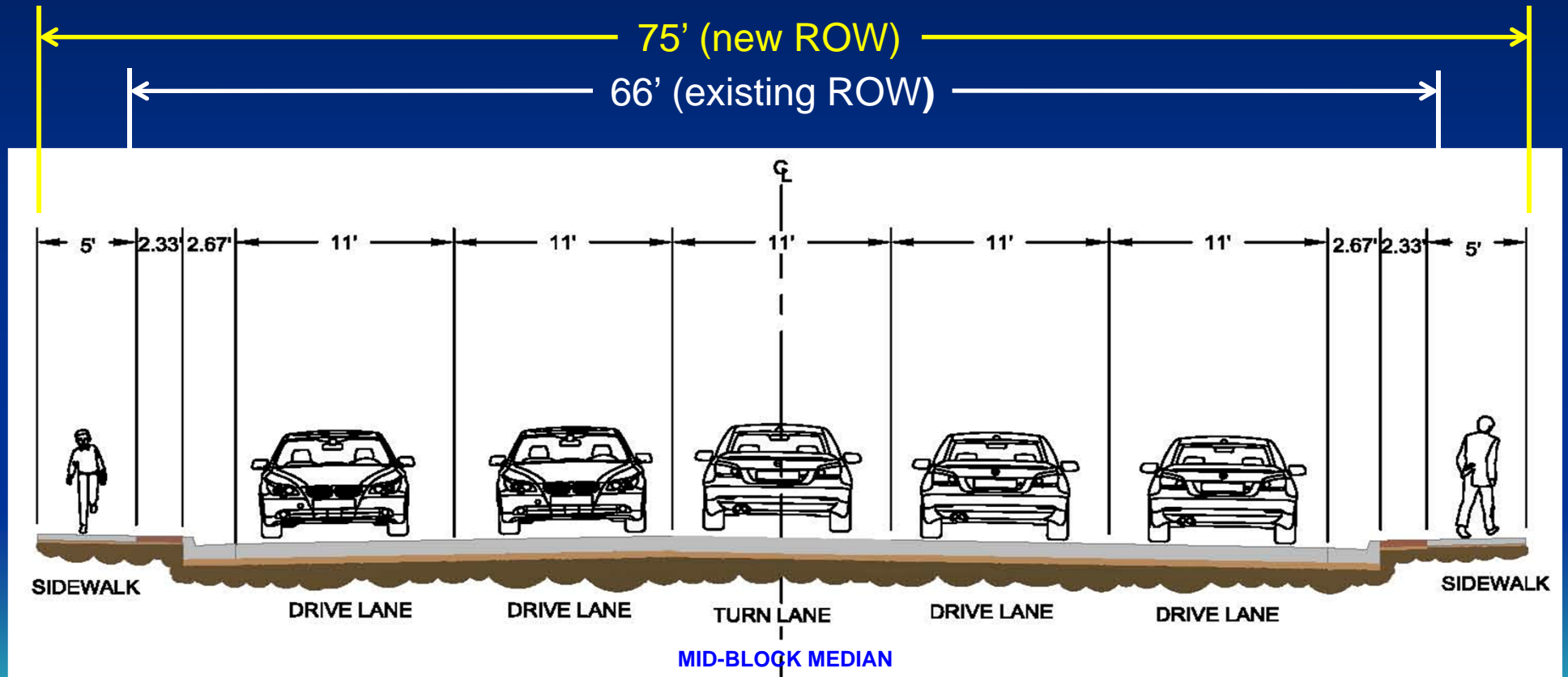
- Raised medians to be installed where queue lengths allow
- Mid-block Pedestrian crossings to be incorporated
- Transit pullouts to be incorporated as needed
- Removal of on-street parking



PROPOSED DESIGN

Typical Section – Phase 1

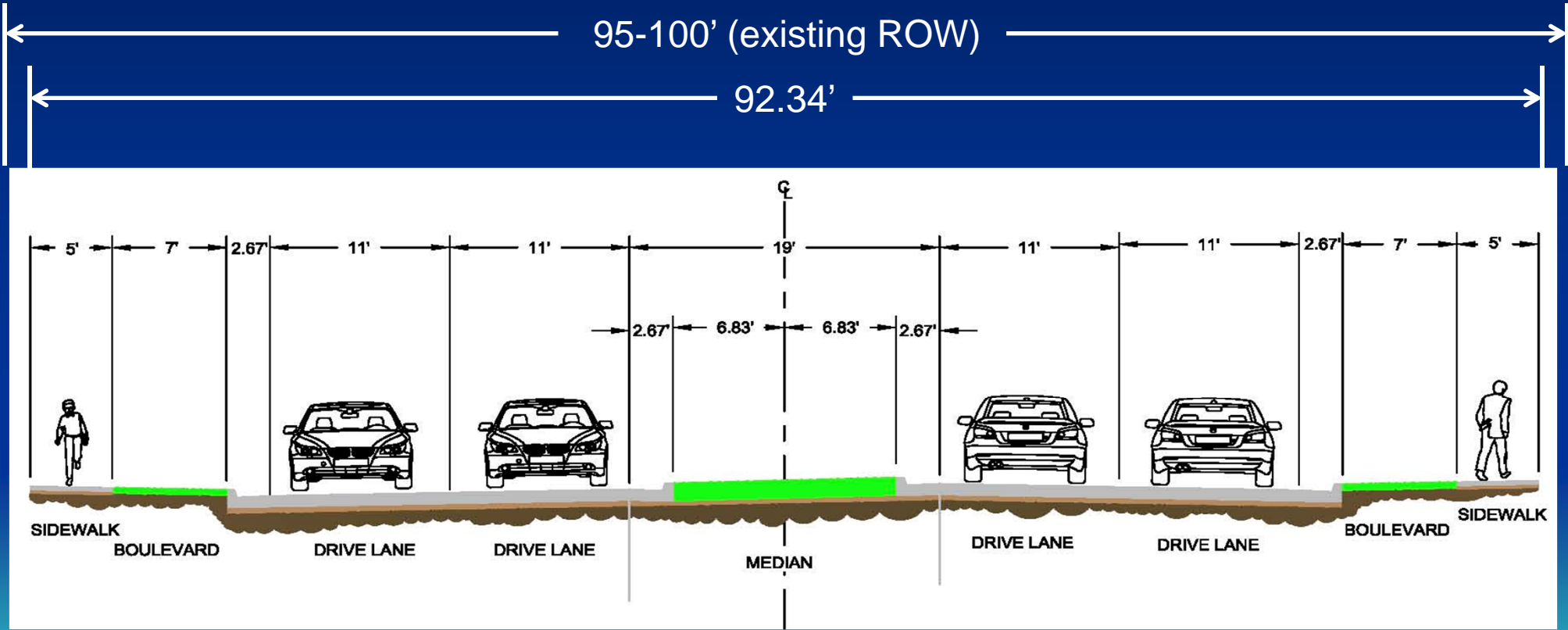
Tower Road to Saint Andrew St.



PROPOSED DESIGN

Typical Section – Phase 2

Saint Andrew St to Kansas City St



PROPOSED DESIGN

Mid-Block Pedestrian Crossings



SUMMARY OF WRITTEN COMMENTS

PUBLIC MEETING - AUGUST 16, 2012

32 Written Comments Received

- 1/2 Against Median
- Several Support Median
- Several Against Removal of Parking
- Many Support Beautification

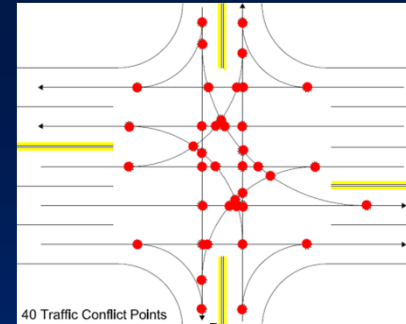
MEDIANS

- Impact on Safety
- Impact on Capacity
- Impact on Economy



MEDIAN

Impact on Safety



5 Lane Configuration (2 through lanes with center two-way left turn lane)

of Minor Street or Driveway Conflict Points = 11

MINOR SIDE STREET or DRIVEWAY

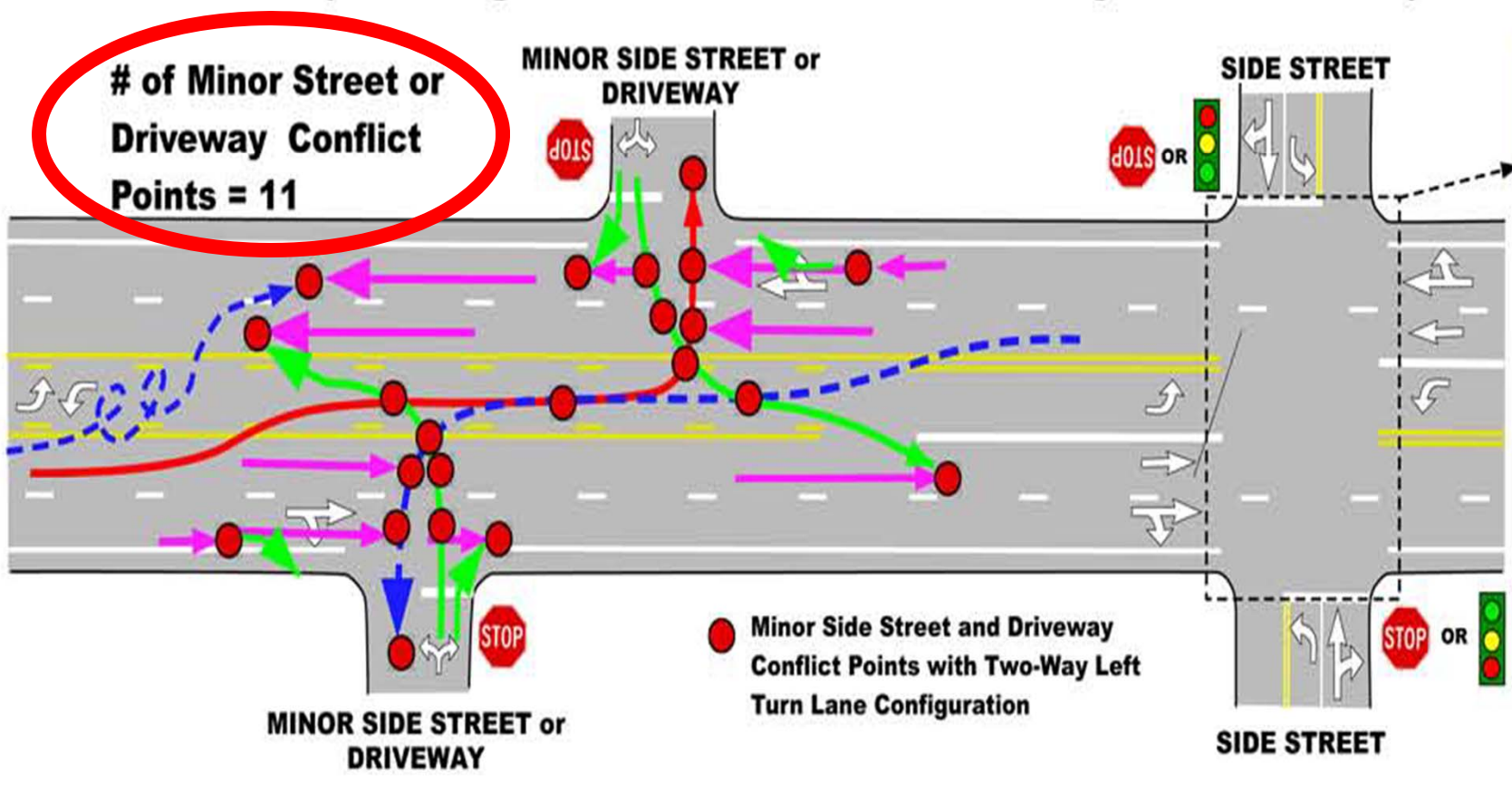
SIDE STREET

of Intersection Conflict Points = 40

MINOR SIDE STREET or DRIVEWAY

SIDE STREET

● Minor Side Street and Driveway Conflict Points with Two-Way Left Turn Lane Configuration

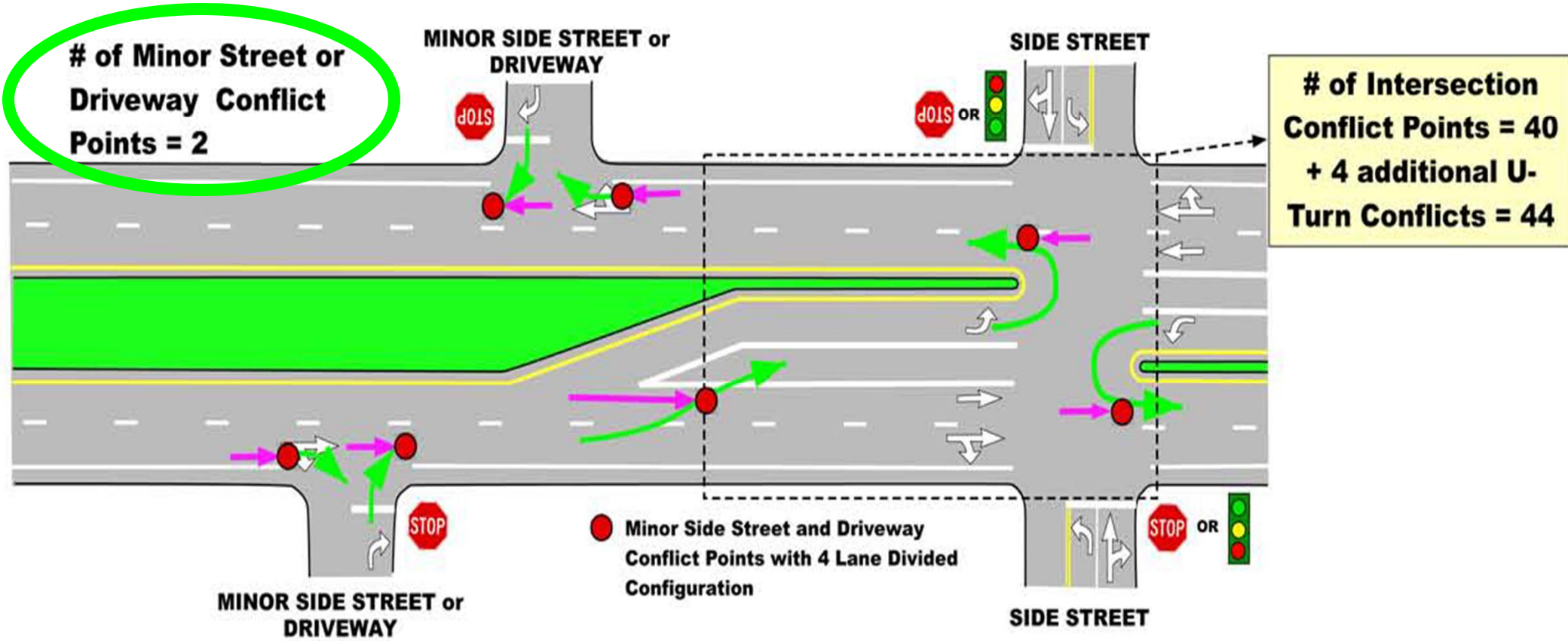


MEDIAN

Impact on Safety

4 Lane Divided Highway

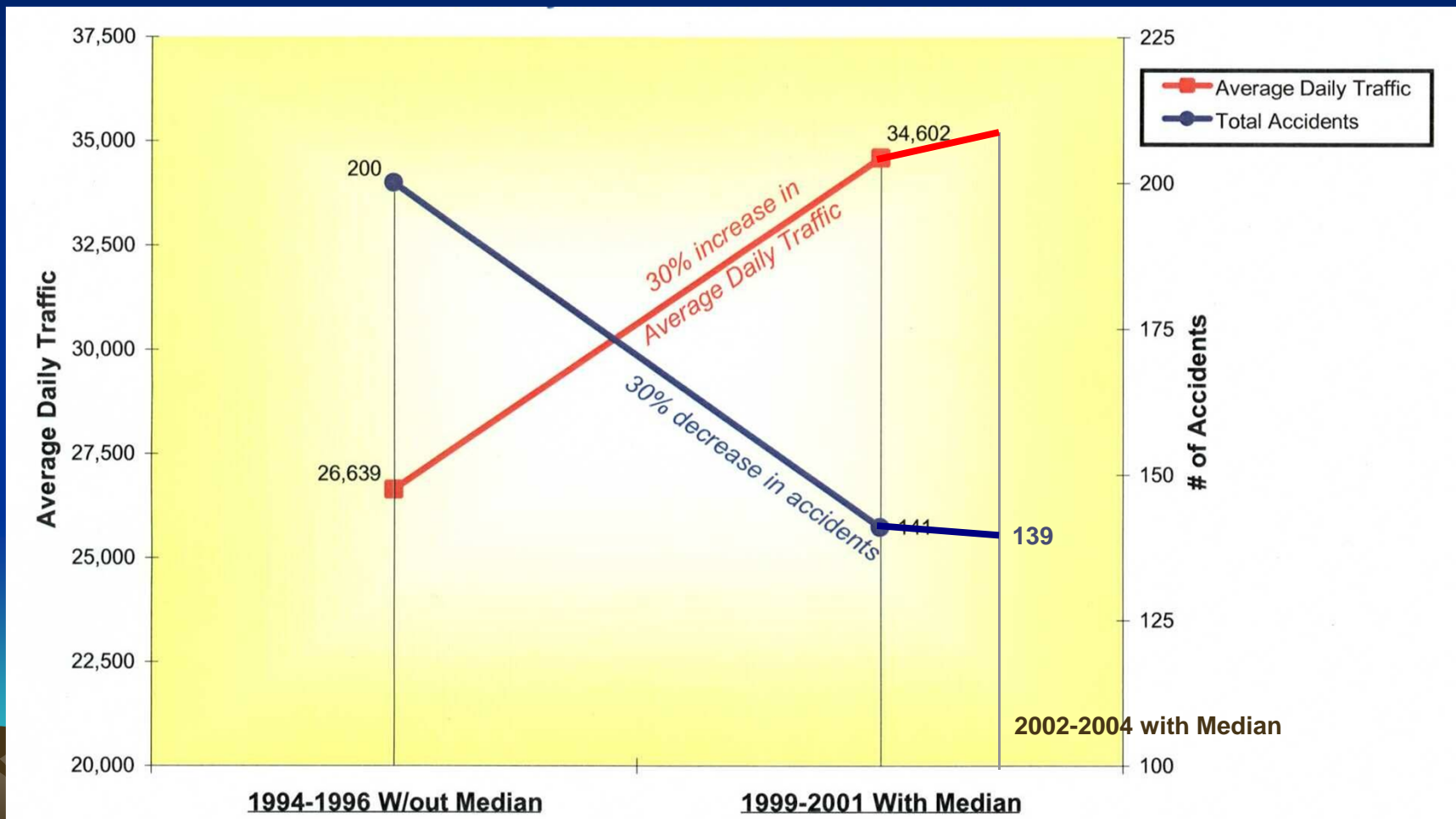
(2 through lanes, center non-traversable median, median openings at intersections)



MEDIAN

Impact on Safety

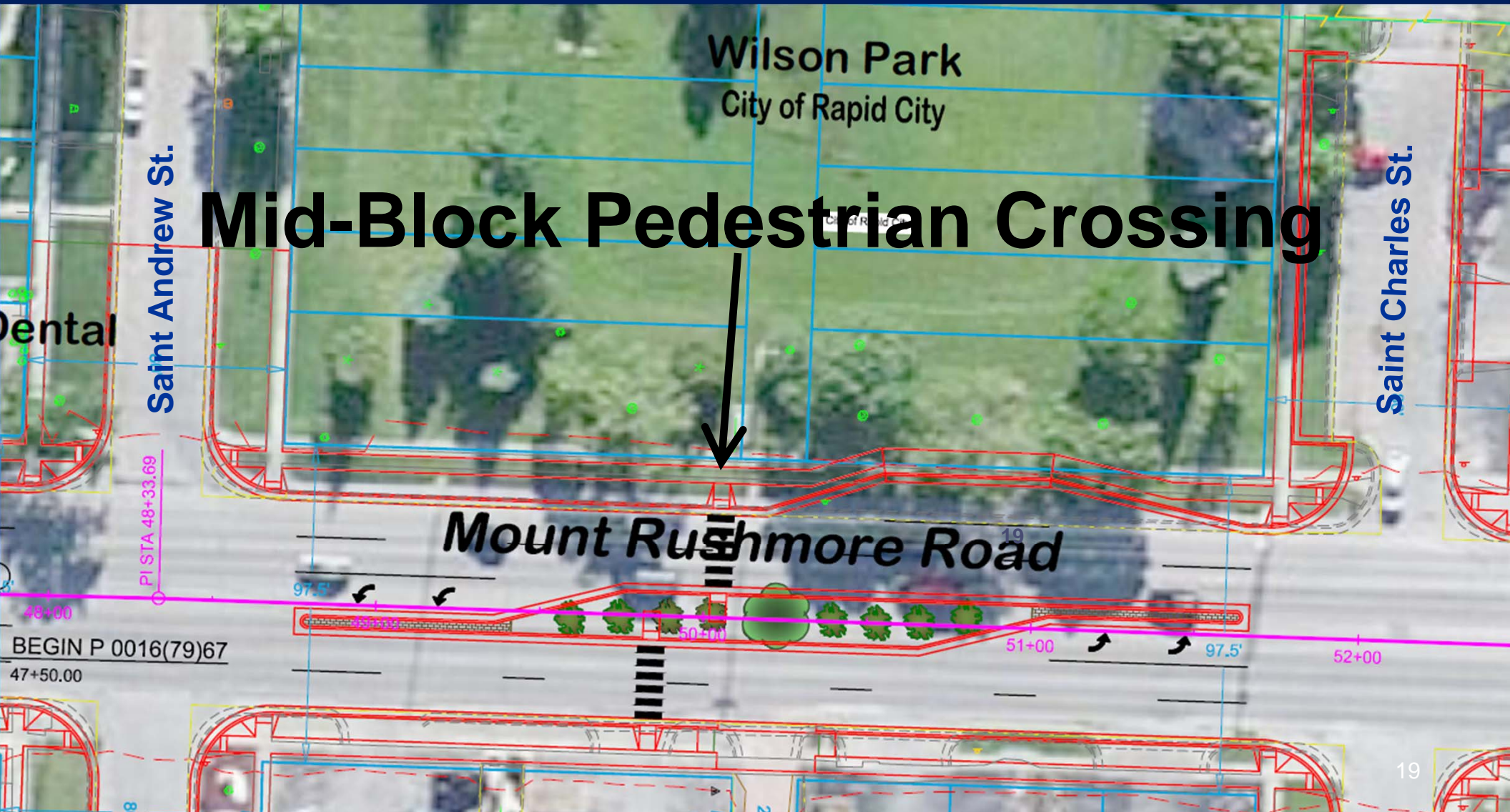
SD42(12th St) - Lyons to Kiwanis in SFalls



MEDIAN

Impact on Safety

Mid-Block Pedestrian Crossing



MEDIAN

Impact on Capacity

Traffic Analysis for Mt Rushmore Road (2032)

	Without Median	With Median
Density (vpmpl)	29.0 (D)	21.8 (C)
Avg Speed (mph)	18.8mph (D)	26.9mph (C)

Density

LOS D = >26-35

LOS C = >18-26

Avg Speed

LOS D = >17-22

LOS C = >22-28

MEDIAN

Research on Impact on Business

Determining Economic Impacts

□ Texas Transportation Institute & TXDOT

- Assessment of Economic Impacts
- 4-Year Research Project
- Interviewed Businesses and Customers

MEDIAN

Research on Impact on Business

Question #1

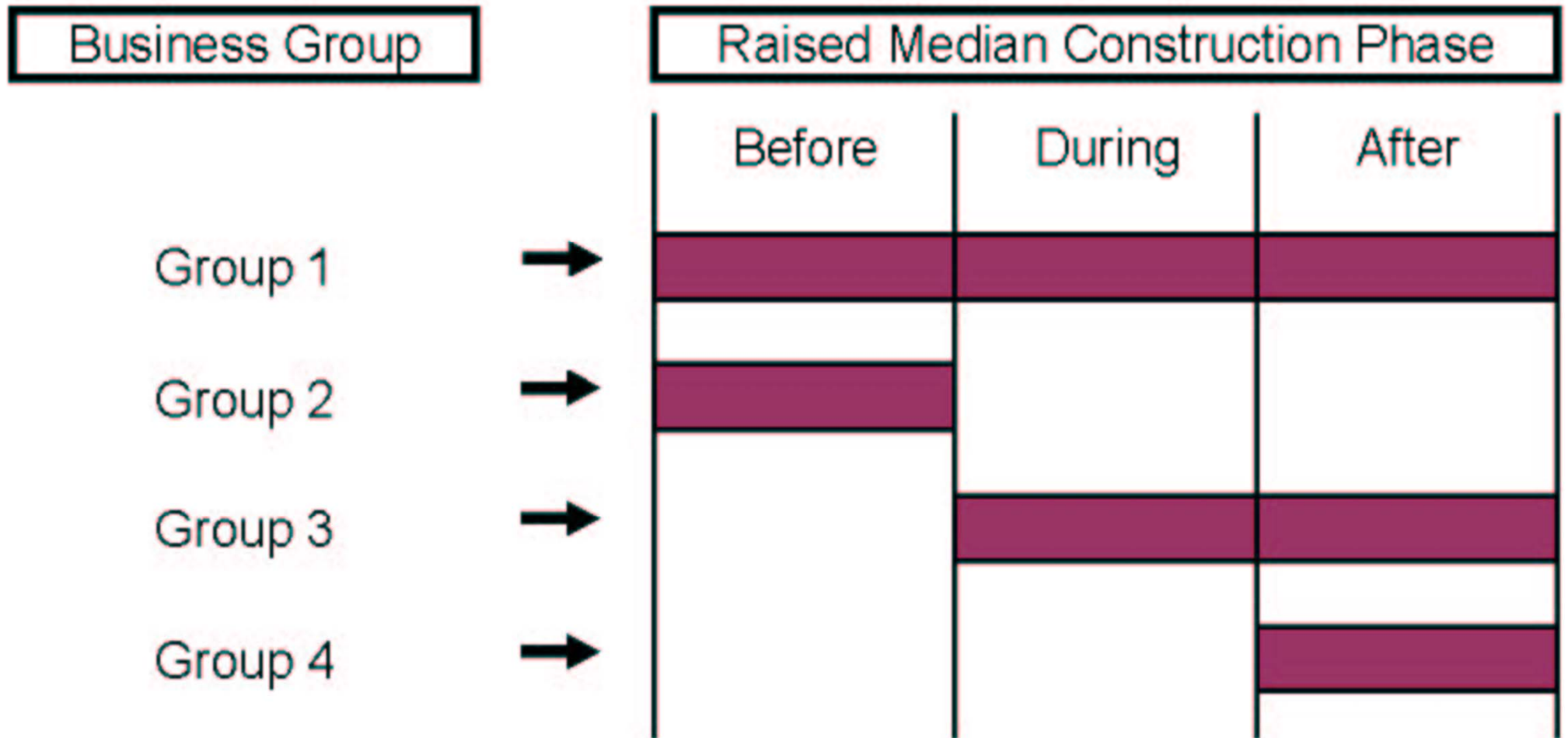
Importance of Access to Customers

1. Customer Service
2. Product Quality
3. Product Price
4. Accessibility to Store

One Gas Station Ranked Accessibility #2

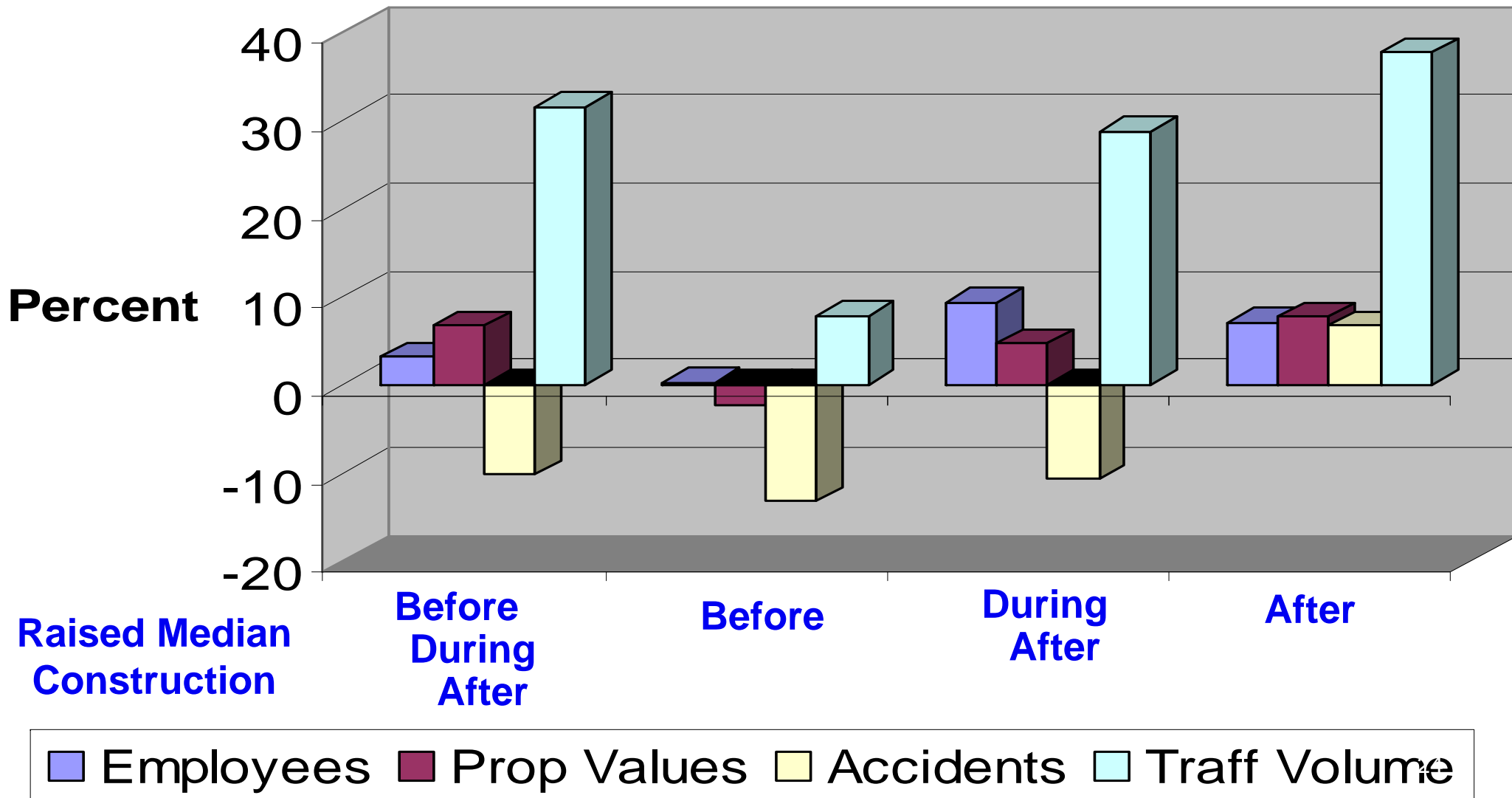
MEDIAN

Research on Impact on Business



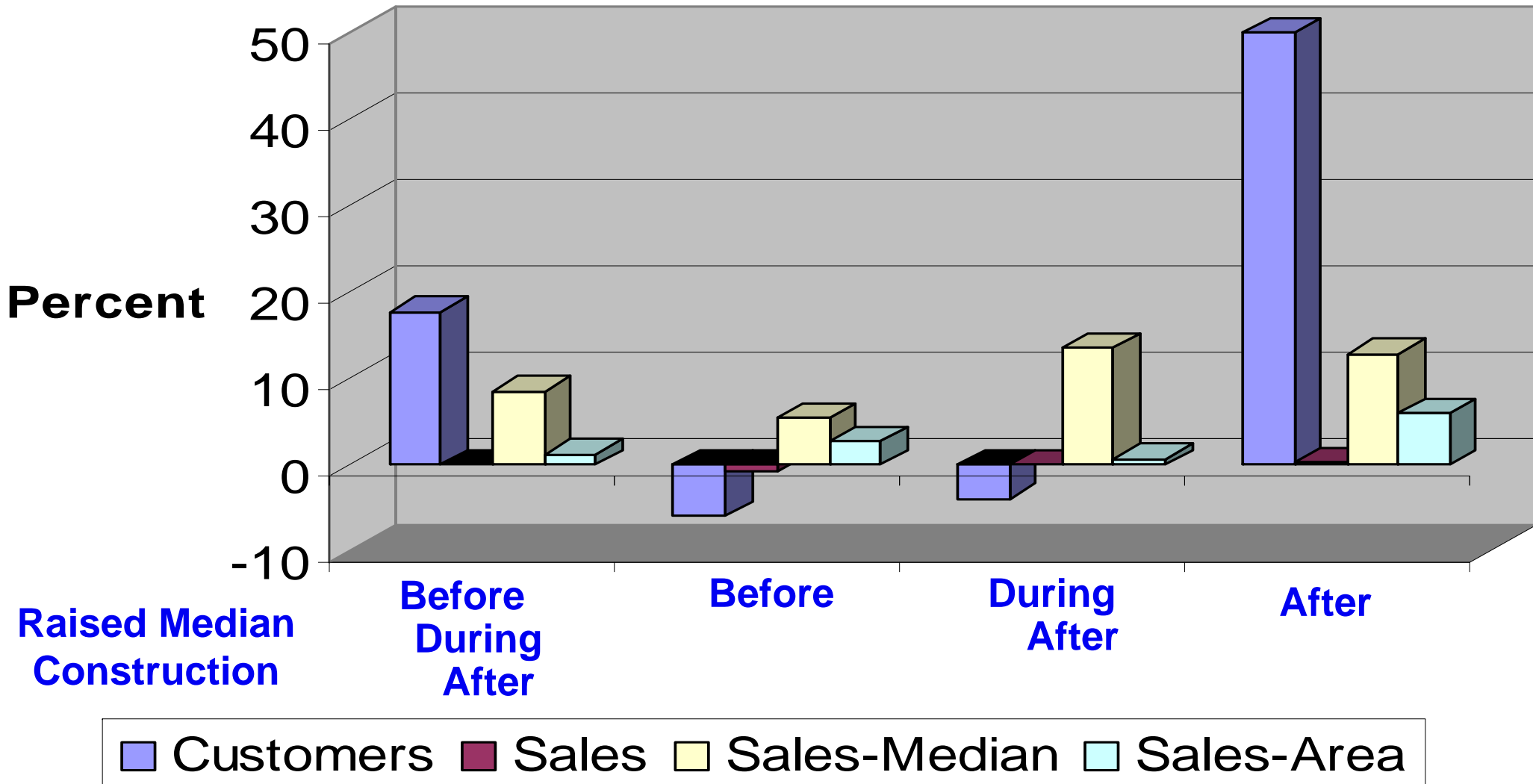
MEDIAN

Research on Impact on Business



MEDIAN

Research on Impact on Business



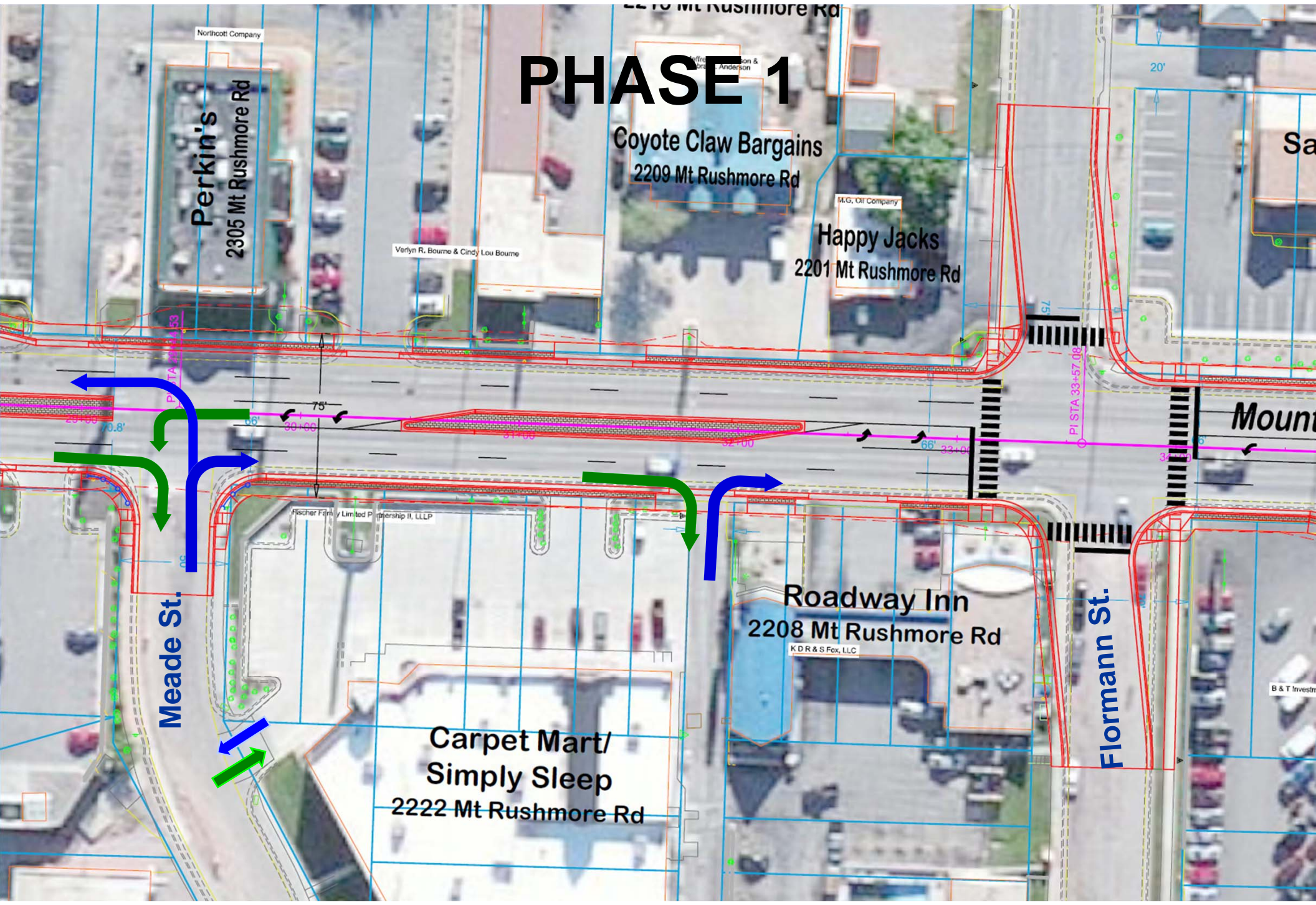
MEDIAN

Impact on Economy

SD42/12th St – Marion to Lyons in SF

	2004-2005 w/o Median	2007-2008 w/ Median	2011 w/ Median
Taxable Sales	\$26.6M	\$35.3M	\$24.1M
ADT	26-35k	27-37k	29-36k

PHASE 1



Perkin's
2305 Mt Rushmore Rd

Coyote Claw Bargains
2209 Mt Rushmore Rd

Happy Jacks
2201 Mt Rushmore Rd

Roadway Inn
2208 Mt Rushmore Rd

Carpet Mart/
Simply Sleep
2222 Mt Rushmore Rd

Meade St.

Flormann St.

Moun

Northcott Company

Verlyn R. Bourne & Cindy Lou Bourne

M.G. Oil Company

Fischer Firm / Limited Partnership II, LLLP

KDR & S Fox, LLC

B & T Investm

PI STA 31+53

PI STA 33+57.08

75'

75'

30+00

66'

32+00

30+00

70.8'

20'

PHASE 2

Pak N Mail
1601 Mt Rushmore Rd
Quilt Tiques
1601 Mt Rushmore Rd
Budget Optical
1601 Mt Rushmore Rd
Little Caesar's
1601 Mt Rushmore Rd

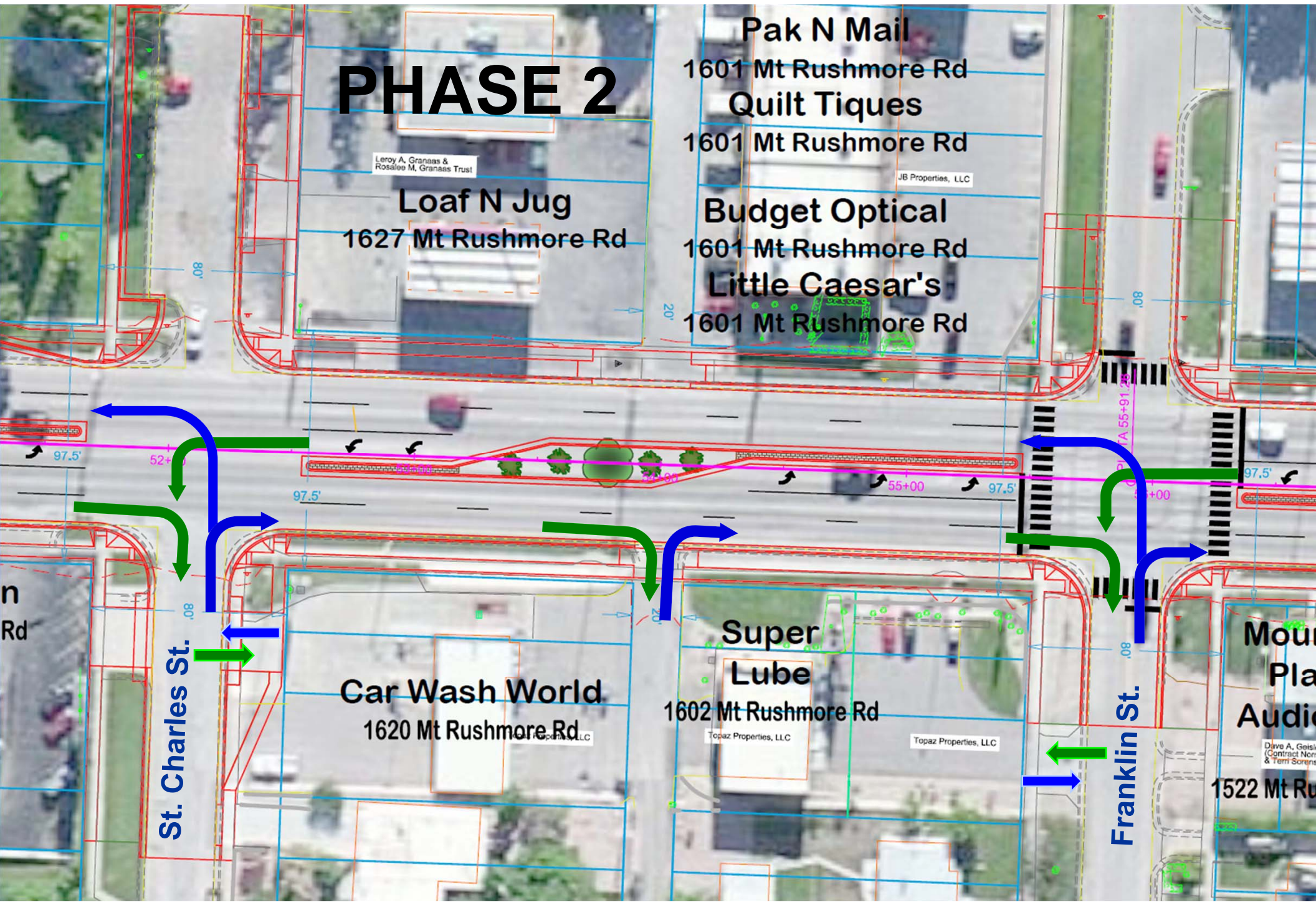
Leroy A. Granaas &
Rosalee M. Granaas Trust
Loaf N Jug
1627 Mt Rushmore Rd

Car Wash World
1620 Mt Rushmore Rd

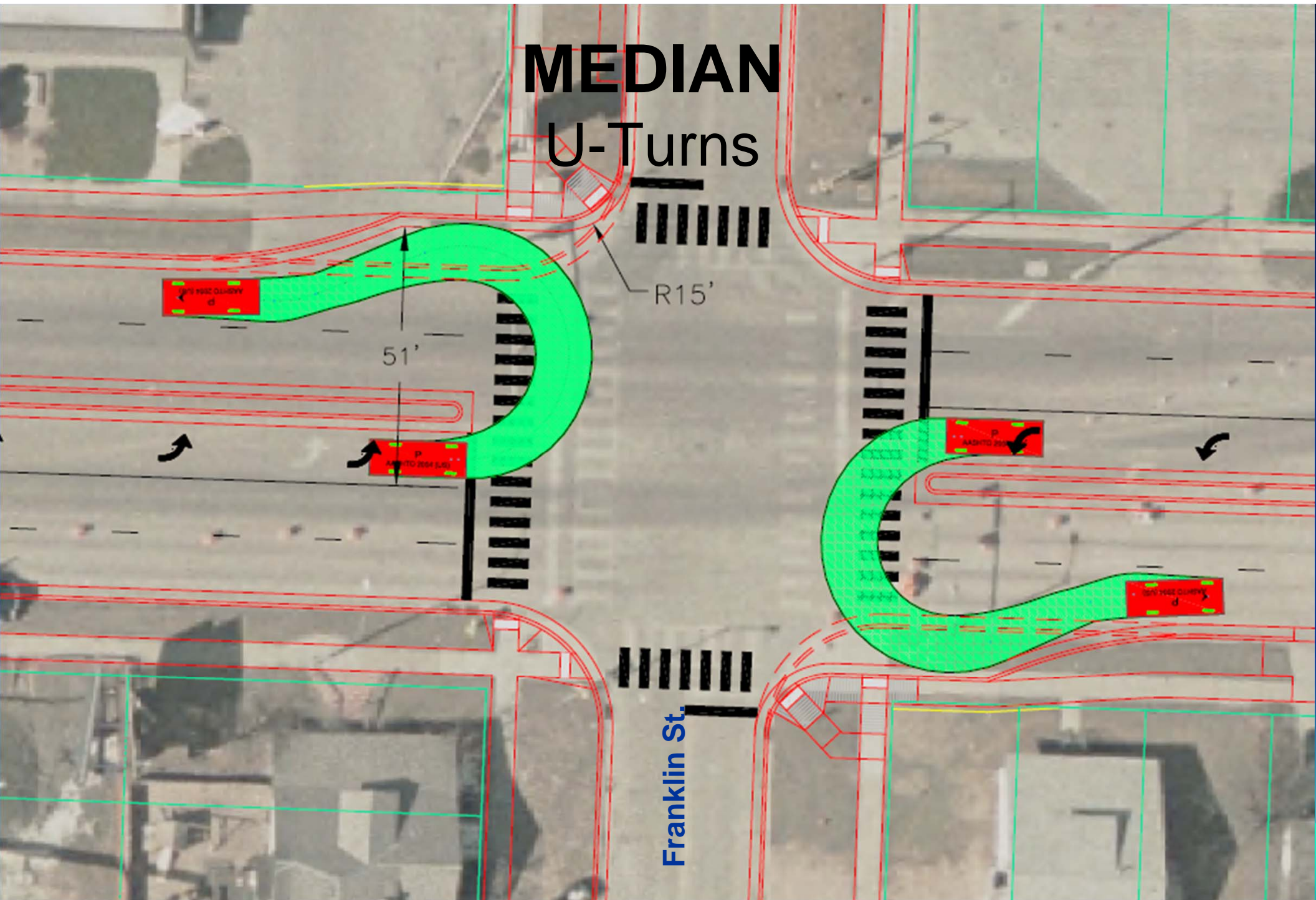
Super Lube
1602 Mt Rushmore Rd

St. Charles St.

Franklin St.



MEDIAN U-Turns



REVIEW OF ON-STREET PARKING

- Request for Approval
- Parking Study
- Impact on Safety and Capacity
- Impact on Streetscaping

REMOVAL OF ON-STREET PARKING

State Law Requirement

32-30-23. Removal of parking from municipal street--Approval of municipality and transportation commission. Notwithstanding the provisions of §§ 31-4-14, 31-32-13, and 32-30-2.4, **no parking may be removed from a municipal street in a municipality with a population in excess of sixty thousand which is part of the state trunk highway system until that removal of parking has been approved by both the governing body of the municipality and the transportation commission.** The governing body of the municipality and the transportation commission shall each provide an opportunity for a public hearing on the removal before approval is given.

Source: SL 1982, ch 219.



ON-STREET PARKING

Study by City of RC

- Study conducted over 6 days
 - 9/05/12 to 9/13/12
 - Wed, Thurs, Sat, Tues, Wed, Thurs
- 6 times observed each day
 - 7:30 am
 - 10:30 am
 - 12:30 pm
 - 2:30 pm
 - 4:30 pm
 - 6:30 pm
- Therefore 36 separate observations were made

Parking Usage – St. Patrick St. to Franklin St.

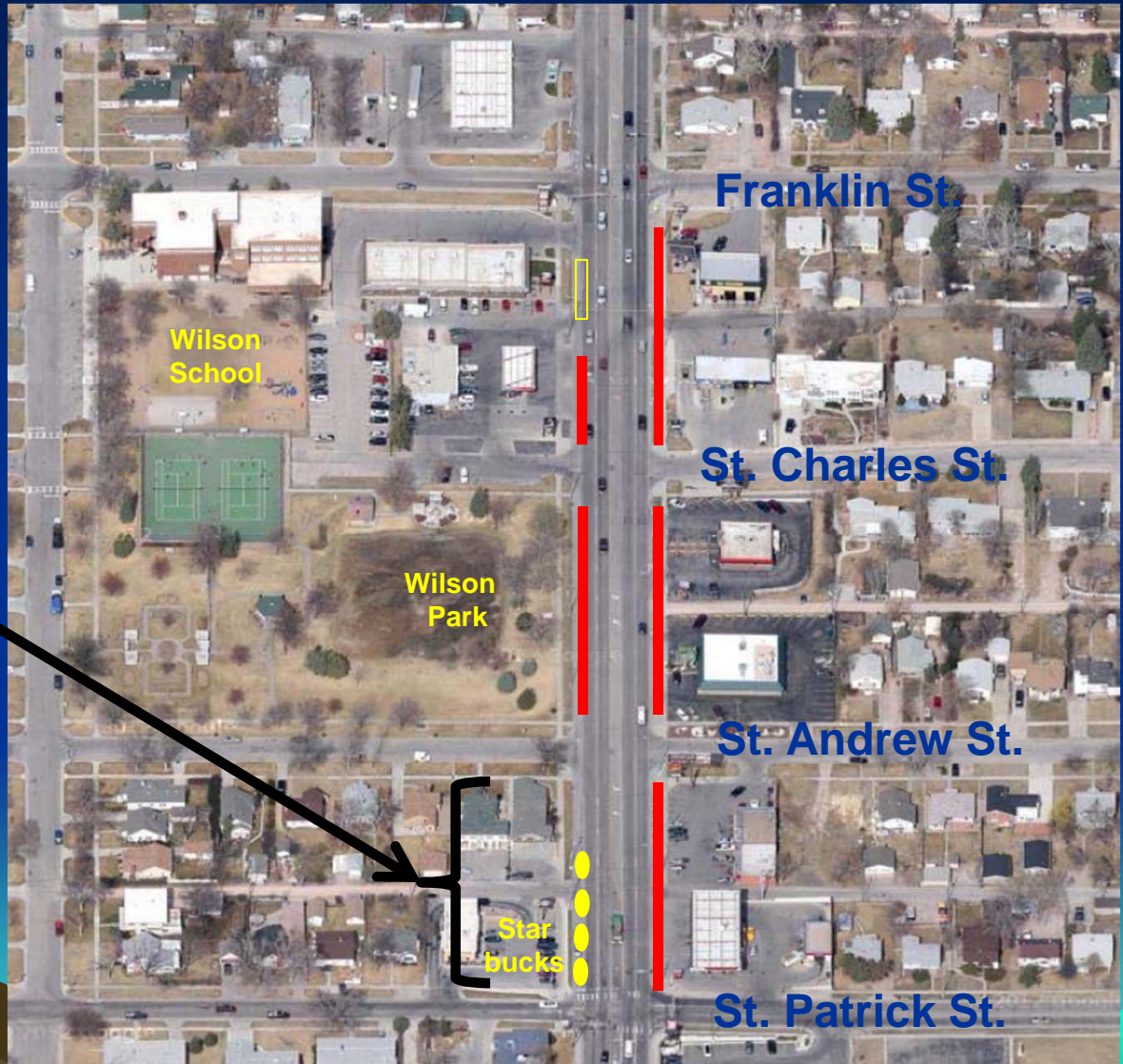
 No parking allowed

St. Patrick St. to St. Andrew St.
West side – 7 stalls available.

Of 36 observations:

- 4 cars present - 2 times
- 3 cars present - 3 times
- 2 cars present - 7 times
- 1 car present – 11 times
- 0 cars present – 13 times

Overall: 17% usage of stalls



Parking Usage – St. Patrick St. to Franklin St.

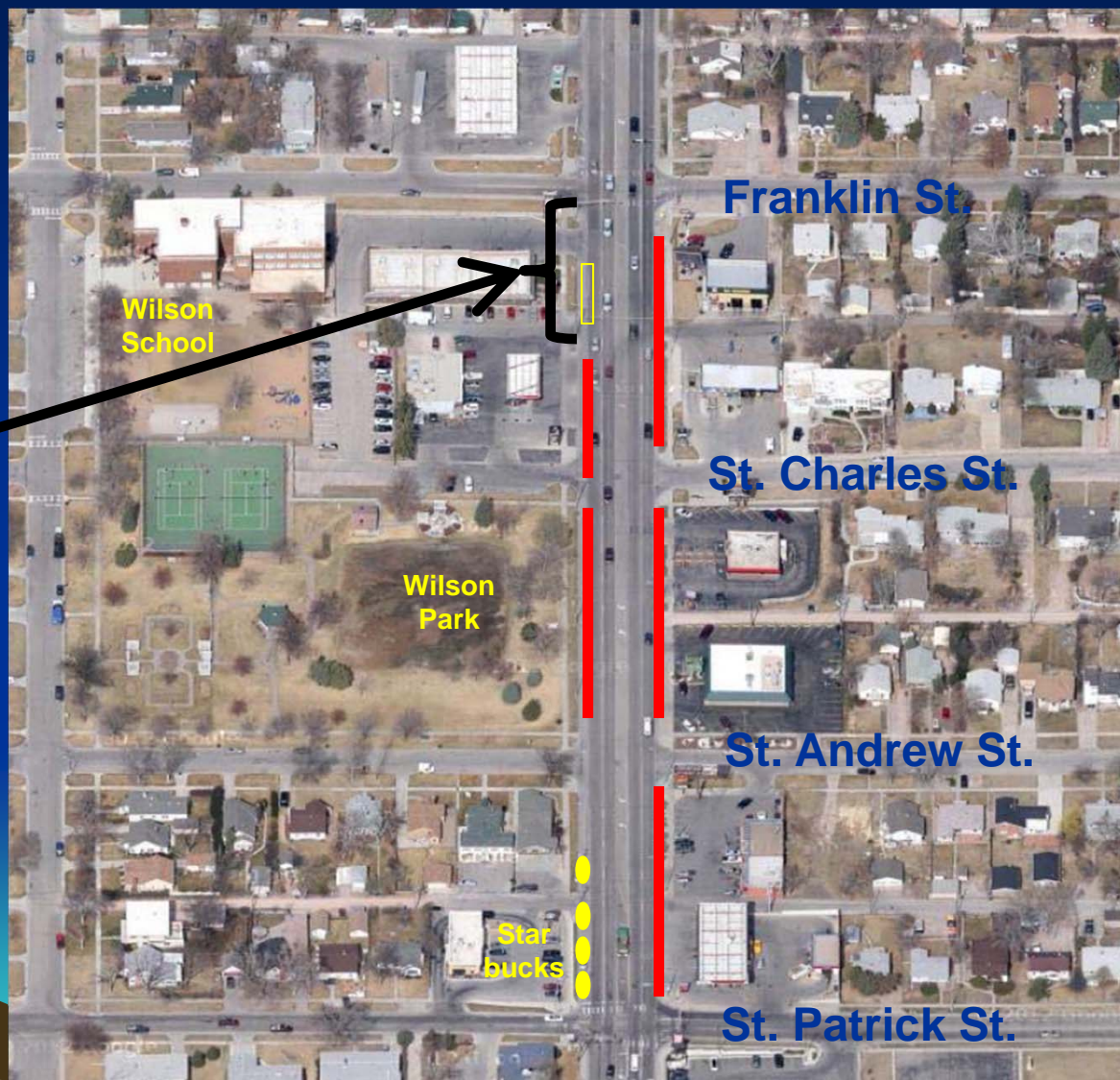
— No parking allowed

**St. Charles St. to Franklin St.
West side – 2 stalls available.**

Of 36 observations:

- **0 cars present – 36 times**

Overall: 0% usage of stalls



Parking Usage – Franklin St. to Fairview St.

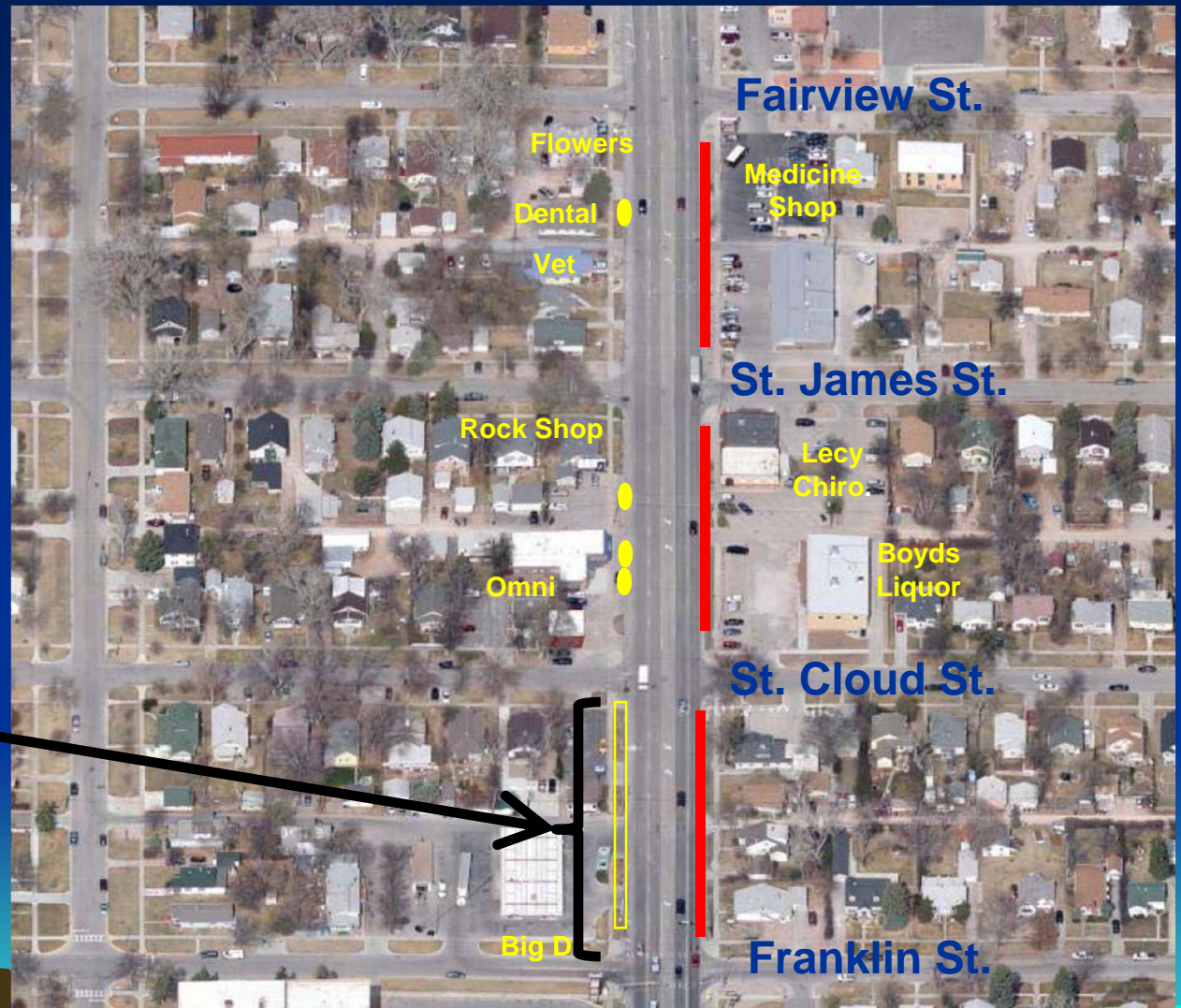
 No parking allowed

Franklin St. to St. Cloud St.
West side – 3 stalls available.

Of 36 observations:

- 0 cars present – 36 times

Overall: 0% usage of stalls



Parking Usage – Franklin St. to Fairview St.

— No parking allowed

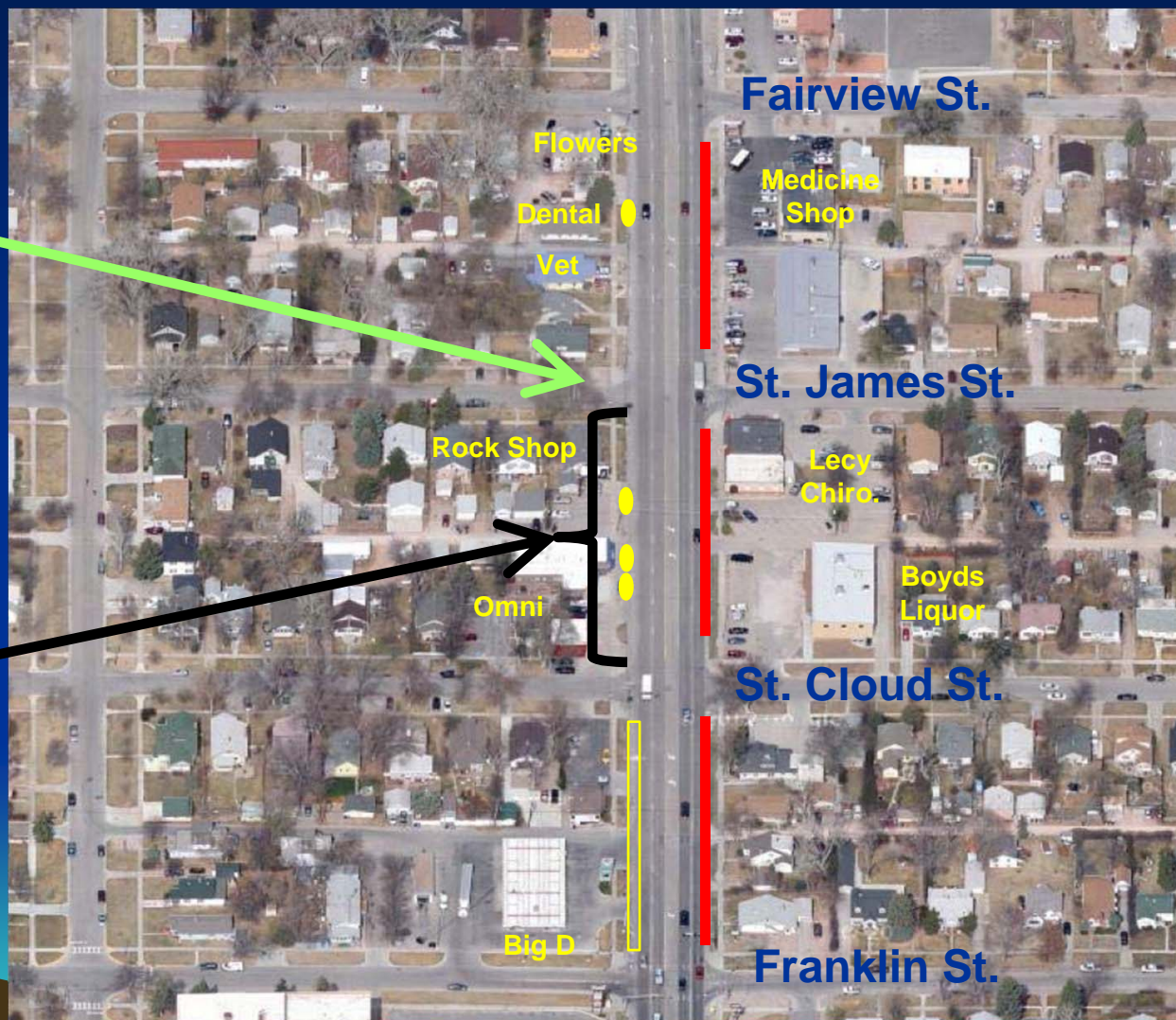
Potential development of off-street parking – 4 stalls (gravel now)

St. Cloud St. to St. James St. West side – 7 stalls available.

Of 36 observations:

- 3 cars present – 2 times
- 2 cars present - 2 times
- 1 car present - 11 times
- 0 cars present - 21

Overall: 8% usage of stalls



Parking Usage – Fairview St. to South St.



— No parking allowed

Fairview St. to Clark St.
East side – 5 stalls available.

Of 36 observations:

- 1 car present - 4 times
- 0 cars present - 32 times

Overall: 2% usage of stalls

Parking Usage – Fairview St. to South St.



No parking allowed

Potential development of 6 additional off-street parking stalls (grass now)

**Clark St. to South St.
East side – 22 stalls available.**

Of 36 observations:

- 11 cars present - 1 time
- 9 cars present – 1 time
- 7 cars present – 2 times
- 6 cars present – 1 time
- 5 cars present - 5 times
- 4 cars present – 10 times
- 3 cars present - 10 times
- 2 cars present – 1 time
- 0 cars present - 5 times

Overall: 17% usage of stalls

Parking Usage – South St. to Kansas City St.



— No parking allowed

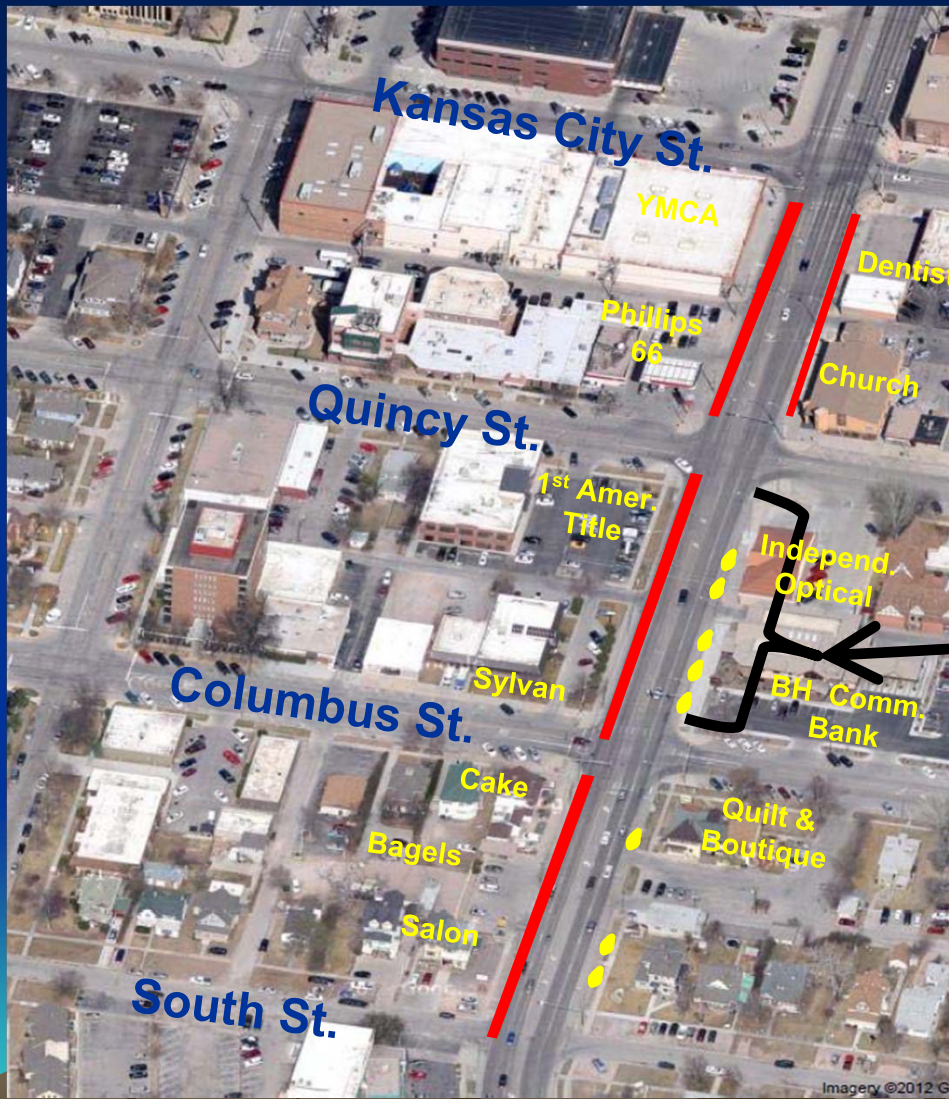
**South St. to Columbus St.
East side – 8 stalls available.**

Of 36 observations:

- 3 cars present – 1 time
- 2 cars present - 10 times
- 1 car present - 4 times
- 0 cars present - 21 times

Overall: 9% usage of stalls

Parking Usage – South St. to Kansas City St.



— No parking allowed

**Columbus St. to Quincy St.
East side – 10 stalls available.**

Of 36 observations:

- 5 cars present – 1 time
- 4 cars present – 5 times
- 3 cars present – 2 times
- 2 cars present - 3 times
- 1 car present - 10 times
- 0 cars present - 15 times

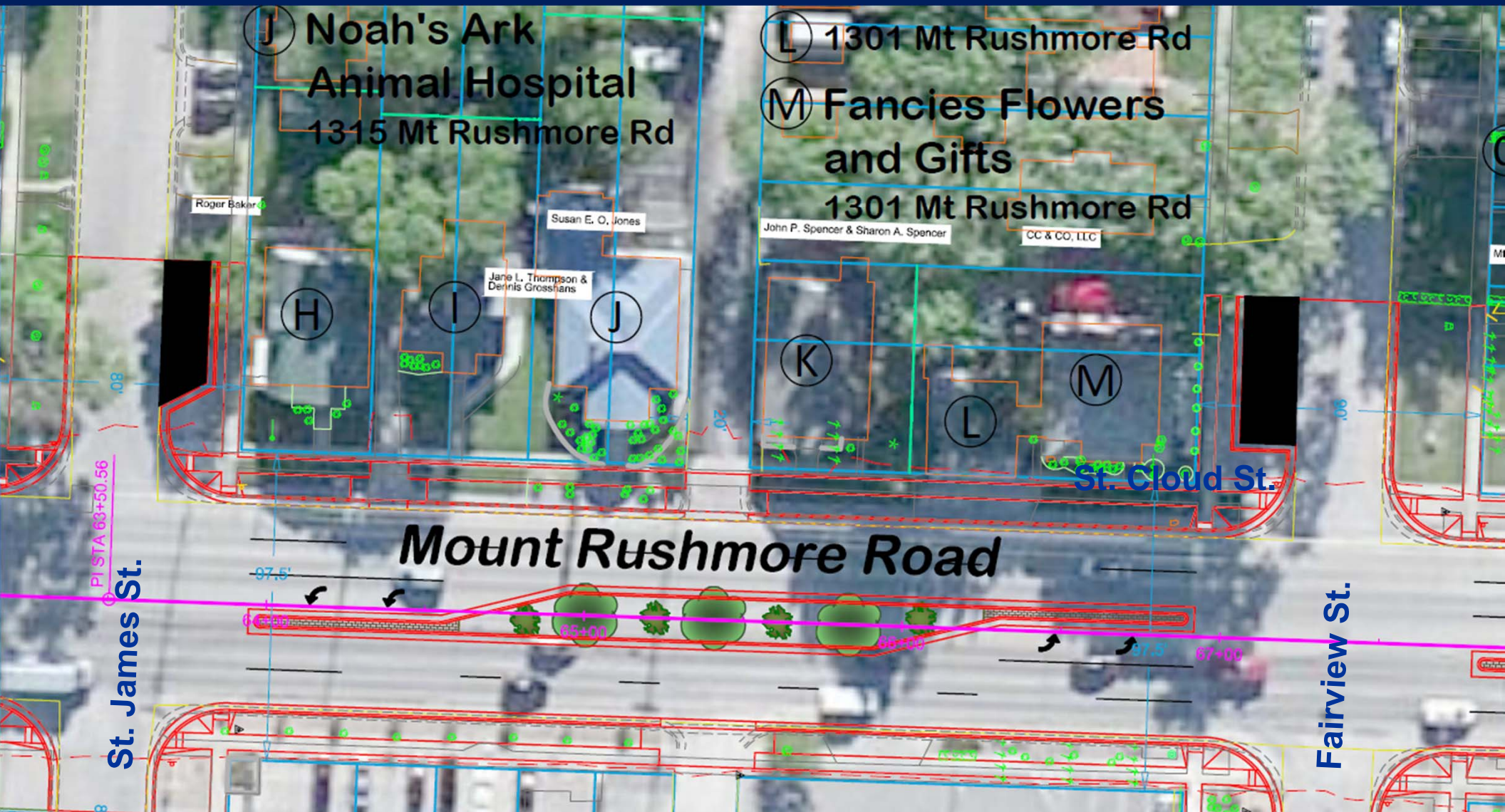
Overall: 16% usage of stalls

SUMMARY OF PARKING USAGE

- St Patrick Street to Quincy Street
 - 10 Block Area
 - One Side of Street only - except Wilson Park
- 74 Total Stalls
- Approximately 11% usage

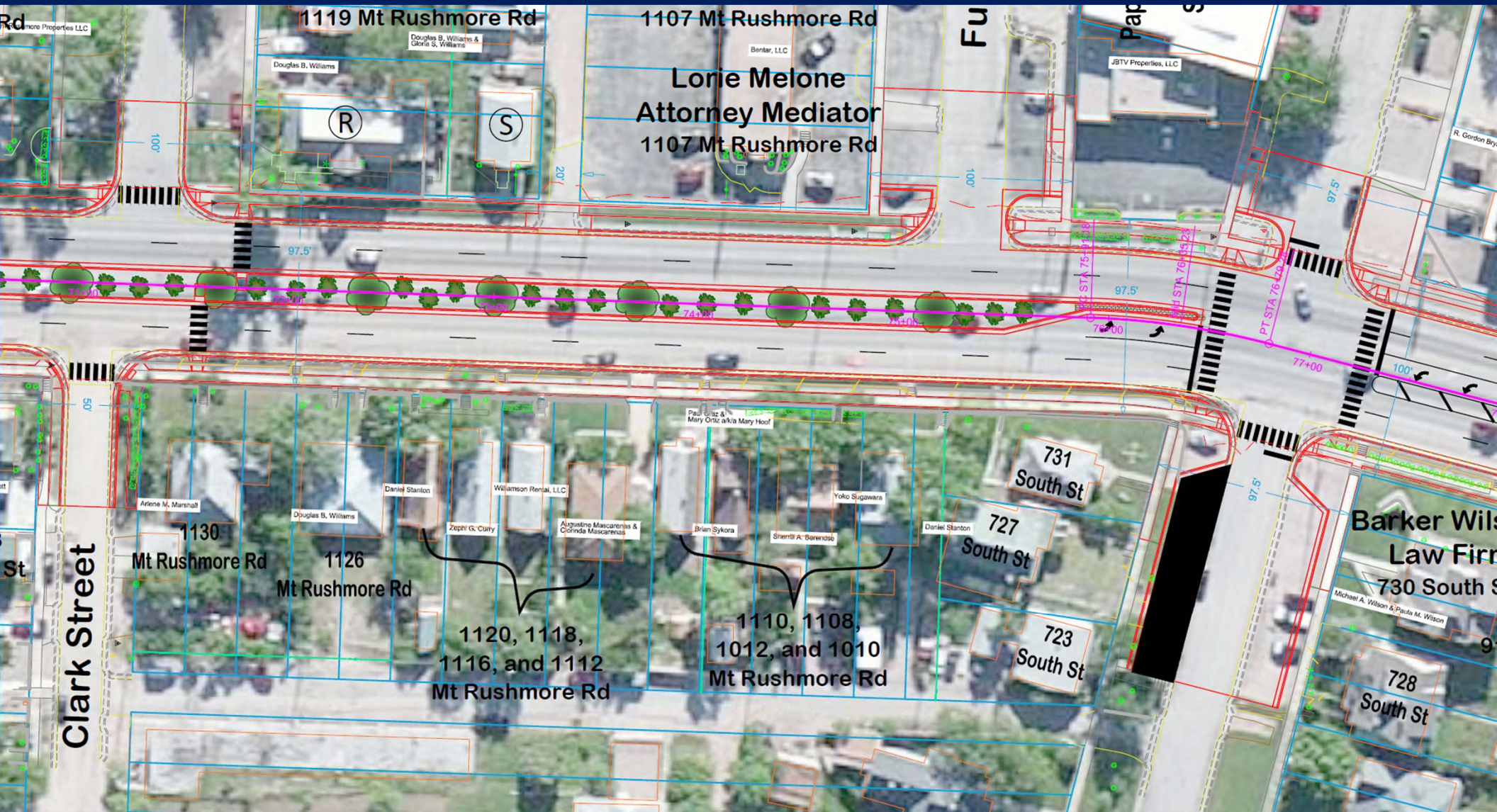


SIDE-STREET PARKING Improvement



SIDE-STREET PARKING

Additional



On-Street Parking Design Standards

National Design Standards recognize that on-street parking may sometimes be needed but also caution:

- *On-street parking generally decreases through-traffic capacity, impedes traffic flow, and increases crash potential.*

- AASHTO – Section 4.20



REVIEW OF ON-STREET PARKING

Impact on Safety



Intersection of Flormann St. and Mt. Rushmore Rd.
Looking north

Sight Distance is not limited
where no on-street parking

REVIEW OF ON-STREET PARKING

Impact on Safety

Departing from alley between Columbus St. and Quincy St. – driving west

Sight Distance is limited
with on-street parking

10/04/2012

REVIEW OF ON-STREET PARKING

Off-street parking often not utilized

On-street parking used and
Off-street parking available

Parking lot near intersection of Columbus St. and Mt.
Rushmore Rd. - looking west



REVIEW OF ON-STREET PARKING

Off-street parking often not utilized

On-street parking used and
Off-street parking available



Intersection of Quincy St. and Mt. Rushmore Rd.
Looking southeast

REVIEW OF ON-STREET PARKING

Impact on Streetscaping

Lose the ability
to landscape the
boulevards

QUESTIONS?

