

Transforming, Connecting & Revitalizing University Avenue

2019 ACEC-IA + Iowa DOT + FHWA Iowa Transportation Conference
September 11, 2019



Objectives

Planning & ROI

Engaging the Public

Innovative Design

Corridor History

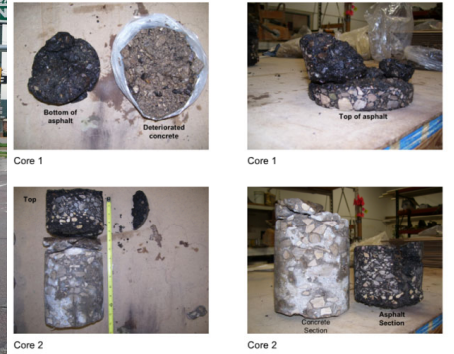
2 Miles

6 Lanes

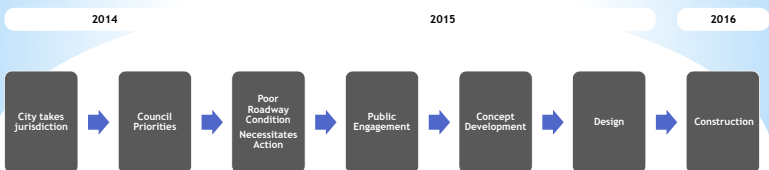
20,000 ADT



Corridor History



Planning Process



Project Priorities

- ① A design that is safe & efficiently moves traffic
- ② Design of new roadway: \$4 million
- ③ 4 lanes and utility relocation
- ④ Efficient roadway connections to private property, minimize ROW need
- ⑤ Construct safe pedestrian/bike links and corridors
- ⑥ Master corridor landscaping plan
- ⑦ Include Complete Street structural elements where safe, efficient and cost effective
- ⑧ On road bike lanes

Valuation of Corridor Alternatives

7


Council Priorities

ROI

Cost

Alternatives

8

Alternative	A	B	C
	All Signals	Signals + RAB	RAB + Signals
Hwy 58 Interchange	SPUI	SPUI	Teardrop
Hwy 58 to Boulder	4 lanes w/ turn lanes	4 lanes w/ turn lanes	4-lanes
	8	6	2
	0	2	6



Benefits/ROI

9

- a Traffic Signal Maintenance Costs
- b Travel time
- c Gas Savings
- d Vehicle emissions
- e Safety
- f Level of Service

Alternatives Comparison

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Alternative	A	2C	4C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000



Travel Time Savings

11





Alternatives Comparison

12

Alternative	A	B	C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000
b. Travel Time Savings	\$0	\$483,678	\$1,085,184



Alternatives Comparison

13

Alternative	A	B	C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000
b. Travel Time Savings	\$0	\$483,678	\$1,085,184
c. Gas Savings	\$0	\$10,318	\$23,151



Alternatives Comparison

14

Alternative	A	B	C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000
b. Travel Time Savings	\$0	\$483,678	\$1,085,184
c. Gas Savings	\$0	\$10,318	\$23,151
d. Vehicle Emissions	\$0	\$1,872	\$4,173



Alternatives Comparison

15

Alternative	A	B	C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000
b. Travel Time Savings	\$0	\$483,678	\$1,085,184
c. Gas Savings	\$0	\$10,318	\$23,151
d. Vehicle Emissions	\$0	\$1,872	\$4,173
e. Safety: Reduced Crashes	\$0	\$2,263,711	\$4,369,706



Alternatives Comparison

16

Alternative	A	B	C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000
b. Travel Time Savings	\$0	\$483,678	\$1,085,184
c. Gas Savings	\$0	\$10,318	\$23,151
d. Vehicle Emissions	\$0	\$1,872	\$4,173
e. Safety: Reduced Crashes	\$0	\$2,263,711	\$4,369,706
f. Level of Service	D/C B/B	C/C B/B	C/C B/A

Alternatives Comparison

17

Alternative	A	B	C
	8	6	2
	0	2	6
a. Traffic Signal Maintenance Costs Savings	\$0	\$17,000	\$51,000
b. Travel Time Savings	\$0	\$483,678	\$1,085,184
c. Gas Savings	\$0	\$10,318	\$23,151
d. Vehicle Emissions	\$0	\$1,872	\$4,173
e. Safety: Reduced Crashes	\$0	\$2,263,711	\$4,369,706
f. Level of Service	D/C B/B	C/C B/B	C/C B/A
Preliminary Cost Estimate (\$M)	\$33.15	\$33.99	\$32.47

Alternatives Comparison

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Recommended Alternative C

Least Expensive and Safest
Efficiently Moves all Forms of Traffic
Least Operating Cost to Traveling Public (time, gas, emissions)
Meets goals of City's long-range planning (2020 Strategic Plan & Comprehensive Plan)
Best Value for Overall Cost

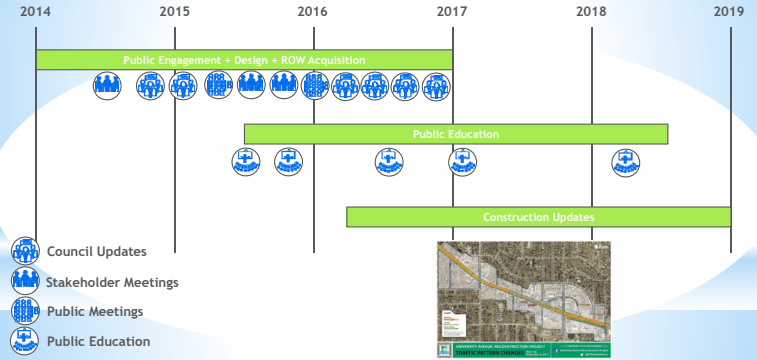
Preferred Project Alternative

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Public Engagement & Education

20



Engaging the Public

21

5

Public Meetings

Project Website

3

Direct Mailers

Facebook & Twitter

100+

E-mail Blast Updates

Extensive Media Coverage

50+

Individual Stakeholder Meetings

Stakeholder Survey

3

Press Releases

10

Council Update Meetings

Public Engagement Activities

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Roundabout Driving Event



Farmers Market



Cedar Falls Library

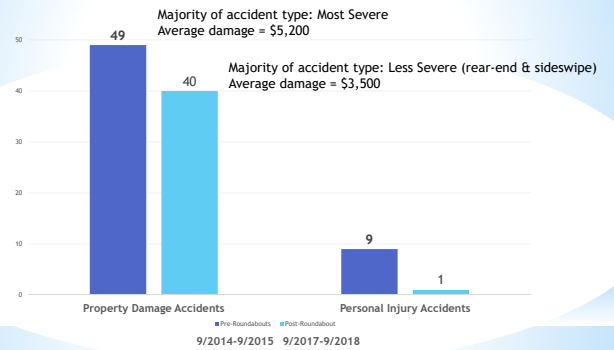


Community Engagement



Roundabouts – Are They Working?

24



Roundabouts – Are They Working?

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In the 1st year post-roundabouts.....

18%

Reduction in property damage only accidents

33%

Reduction in damages

89%

Reduction in Personal Injury Accidents

