Transforming, Connecting & Revitalizing University Avenue

Objectives
Effectively Planning a Large Urban Corridor Reconstruction Project
Public Engagement Strategies and How Much
Construction
Roundabouts – Are They Working?

Corridor History
2 Miles
6 Lanes
20,000 ADT
City takes jurisdiction

Council Priorities

Public Engagement

Concept Development

Design

Construction

Cedar Falls Planning Process

2014

2015

2016

City Council

Priorities

Final

Reanalysis

Action

Public

Engagement

Concept

Development

Design

Construction

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

Council Priorities

Sustainability Outcomes

Cost

The Process
### Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hwy 58 Interchange</td>
<td>All Signals</td>
<td>Signals + RAB</td>
<td>RAB + Signals</td>
</tr>
<tr>
<td>Hwy 58 to Boulder</td>
<td>SPLIT</td>
<td>SPLIT</td>
<td>Teardrop</td>
</tr>
<tr>
<td>4 lanes w/ turn lanes</td>
<td>6</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>4 lanes w/ turn lanes</td>
<td>0</td>
<td>2</td>
<td>6</td>
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</table>

### Alternatives Comparison

<table>
<thead>
<tr>
<th>Alternative</th>
<th>A</th>
<th>2C</th>
<th>4C</th>
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<tbody>
<tr>
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<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
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</table>

- Traffic Signal Maintenance Costs Savings: $0, $17,000, $51,000

### Sustainability Outcomes

- Traffic Signal Maintenance Costs
- Travel Time
- Gas Savings
- Vehicle Emissions
- Safety: Reduced Crashes
- Level of Service

### Travel Time Savings

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<thead>
<tr>
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<th>Westbound</th>
<th>Eastbound</th>
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<tbody>
<tr>
<td>Peak Hour Time Savings</td>
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<td>14</td>
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<tr>
<td>Off-Peak Time Savings</td>
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</table>

Waterloo Rd
### Travel Time Savings

- Value of Travel Time (VTT): $18.00/hr
- Gasoline: $1.92/gal
- Social cost of vehicle emissions (CO2): $39/ton CO2

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<tr>
<td>a. Traffic Signal Maintenance Costs Savings</td>
<td>$0</td>
<td>$17,000</td>
<td>$51,000</td>
</tr>
<tr>
<td>b. Travel Time Savings</td>
<td>$0</td>
<td>$483,678</td>
<td>$1,085,184</td>
</tr>
<tr>
<td>c. Gas Savings</td>
<td>$0</td>
<td>$10,318</td>
<td>$23,151</td>
</tr>
<tr>
<td>d. Vehicle Emissions</td>
<td>$0</td>
<td>$1,872</td>
<td>$4,173</td>
</tr>
</tbody>
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<tbody>
<tr>
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<td>2</td>
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#### a. Traffic Signal Maintenance Costs Savings

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#### b. Travel Time Savings

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#### c. Gas Savings

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#### d. Vehicle Emissions

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#### e. Safety: Reduced Crashes

<table>
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<th>B</th>
<th>C</th>
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#### f. Level of Service

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<tbody>
<tr>
<td></td>
<td>D/C</td>
<td>B/B</td>
<td>C/C</td>
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**Preliminary Cost Estimate ($M)**

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<tbody>
<tr>
<td></td>
<td>33.15</td>
<td>33.99</td>
<td>32.47</td>
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Events

Mayor's Business Walk
Western Home Communities
Cedar Falls Currents Up Close
Good Morning Cedar Valley
Cedar Falls Rotary
Cedar Falls Lions Club
University of Northern Iowa
Downtown Farmers Market
Cedar Falls Library Walkable Roundabout
Roundabout Driving Event

Public Engagement Activities

Roundabout Driving Event
Farmers Market
Cedar Falls Library
Community Engagement

Step 1: Slow down
Step 2: Observe signs and pavement markings - Choose lane
Step 3: Yield to pedestrians
Step 4: Look to your left and yield to traffic circulating roundabout
Step 5: Stay in your lane
Step 6: Use turn signal to exit and watch for pedestrians. Do not change lanes to exit.
Always be aware and drive slowly!
Construction

3 Phases
3 Years
Maintain Traffic

Construction-Challenges

- Keeping the Public Informed
- Business Access
- Utilities
- Responding to Concerns

Roundabouts – Are They Working?

In the 1st year post-construction:

- 15% Reduction in property damage only accidents
- 33% Reduction in damages
- 86% Reduction in Personal Injury Accidents
New Construction
Building Remodel/Site Improvements

Challenges
- Aggressive Timeframe
- Level of Investment
- Public Perception
- Vocal Minority
- Politics
- Condemnations

Lesson Learned
- Set clear priorities
- Data driven decisions
- Communicate
- Be consistent
- Engagement plan
- Flexibility during construction

Q&A