Bridge construction for the new I-29 southbound fly-over ramp began in early 2016.

Images on the cover page, counterclockwise from the top left:

- Bridge construction for Phase II of the East System Interchange.
- New connection for BNSF Railroad was constructed in 2016.
- Construction crews working on future I-29 and I-80 mainline.
- New I-29 lanes over new city trail.
Iowa Department of Transportation (DOT) is in the process of reconstructing I-80, I-29 and I-480 in the Council Bluffs/Omaha metropolitan area. This comprehensive interstate redesign, known as the Council Bluffs Interstate System Improvement Program, will modernize the highway system and improve mobility and safety in the area.

The Council Bluffs Interstate System Improvement Program is the single largest endeavor in Iowa DOT’s five-year Transportation Improvement Program.

**PROGRAM GOALS**
- Modernize 18 miles of interstate
- Accommodate planned development along the corridors
- Reduce traffic congestion
- Improve the visual landscape

**2016 SNAPSHOT**

<table>
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<tr>
<th>BRIDGES</th>
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PROGRAM OVERVIEW

PROGRAM HIGHLIGHTS

The construction projects below were prioritized based on the highest volume of vehicles and benefits in terms of traffic management, improved safety, and increased vehicle capacity in the urban area of the interstate system.

The Council Bluffs Interstate System Improvement Program has identified several future projects that are necessary to satisfy the overall goals of the Program.

COMPLETED PROJECTS

1. Project: I-29 & U.S. 275/Iowa 92 Interchange, Phase I
   - Highlights: Completed construction and finished bank stabilization of Mosquito Creek levee.
   - Actual Cost: $94M
   - Time Spent: 1 year, 11 months

2. Project: Railroad Consolidation
   - Highlights: Completed grading, track construction of new rail corridor and removal of abandoned track.
   - Actual Cost: $14M
   - Time Spent: 1 year, 5 months

RAILROAD CONSOLIDATION

This project consolidated the CBEC and BNSF railroad operations into a new common corridor west of Mosquito Creek under I-29 and Iowa 92. This project, which began in late 2015, was substantially completed in fall 2016. The consolidation will improve traffic operations at the South Expressway Interchange. Railroad tracks and at-grade rail crossings have been eliminated so that the new bridges over South Expressway can be built shorter and ramps will have less of an incline.

The project also greatly reduces roadway/railroad conflicts by consolidating the railroad corridors and eliminating numerous at-grade rail crossings and the CBEC rail corridor that bisects Lewis Central High School. Improved railroad operations will allow select BNSF trains to bypass Council Bluffs.

ACTIVE PROJECTS

3. Project: I-29 & U.S. 275/Iowa 92 Interchange, Phase II
   - Highlights: Completed new I-29 southbound lanes, bridges for U.S. 275/Iowa 92 and rebuilt three of the four interstate ramps.
   - Cost: $79M
   - Spent-to-Date: $75M
   - Time: 1 year, 11 months
   - Time Spent: 1 year, 9 months

4. Project: West System Interchange, Phase II
   - Highlights: Completed grading and paving of future westbound express lanes, and opened new I-80 to I-29 northbound ramps.
   - Cost: $27M
   - Spent-to-Date: $24.5M
   - Time: 2 years
   - Time Spent: 1 year, 6 months

5. Project: East System Interchange, Phase IIb
   - Highlights: Began construction of 23rd Ave and South Expressway intersection and began I-80/I-29 bridge construction over South Expressway.
   - Cost: $12M
   - Spent-to-Date: $7M
   - Time: 2 years, 6 months
   - Time Spent: 1 year, 2 months

6. Project: East System Interchange, Phase IIIa
   - Highlights: Graded and paved future I-80 westbound lanes and made progress on bridge construction.
   - Cost: $205M
   - Spent-to-Date: $62.5M
   - Time: 2 years, 6 months
   - Time Spent: 1 year, 2 months
After two years of dust, ramp closures, and traffic shifts, construction of the U.S. 275/Iowa 92 interchange was nearly completed in 2016. In late fall, traffic returned to full capacity on U.S. 275/Iowa 92 and the northbound and southbound off ramp reconstruction was completed.

Construction of this interchange, which began in June 2014, involves raising I-29 and U.S. 275/Iowa 92 to accommodate the new railroad corridor for the Railroad Consolidation project. Improvements include new roadway embankments, a walking trail, and the reconstruction of six bridge structures.

During the project, Program staff are working hard to inform the public about construction impacts and partnered with local schools, churches and businesses to spread information about detours and closures. Coordination with the City of Council Bluffs and the U.S. Army Corps of Engineers has also been key in making sure the project is completed within the allotted time.

RELATED WORK
Traffic Incident Management
In the Council Bluffs/Omaha metro area, a team of professionals work together to clear traffic incidents safely and quickly. Emergency responders are the heroes of our highways and roadways, with an organized plan to keep the traveling public moving and save lives every day. This coordination is called Traffic Incident Management (TIM). A TIM working group for the area meets regularly to improve the coordination of incident management efforts and discuss related topics, share the lessons learned from reviewing past incidents, and develop improved processes. This group also collaboratively maintains and updates a TIM Plan which includes alternate routes, messaging, contacts, and roles and responsibilities of area responders. A public outreach campaign was launched in fall 2016 to increase TIM awareness and communicate the role of the traveling public. More information can be found at www.TheHighwayHeroes.org.

ACTIVE PROJECTS IN 2016

<table>
<thead>
<tr>
<th>Projects</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Fall</th>
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<tr>
<td>I-29 and U.S. 275/Iowa 92 Interchange (Phase I)</td>
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<td>I-29 and U.S. 275/Iowa 92 Interchange (Phase II)</td>
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<tr>
<td>West System Interchange (Phase II)</td>
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<tr>
<td>Railroad Consolidation</td>
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<tr>
<td>East System Interchange (Phase Ia)</td>
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<td>East System Interchange (Phase Ib)</td>
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<tr>
<td>Union Pacific Railroad Bridge over I-29</td>
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<td>I-80/I-29 Dual, Divided Freeway (Phase II)</td>
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<tr>
<td>I-29/I-480/West Broadway Preliminary Design</td>
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An elected officials briefing and public meeting was held in March to inform the community about 2016 construction activities and preliminary routes for the I-29/I-480/West Broadway Interchange.

Students enrolled in Gateway to Engineering at Saint Albert High School were given an up close look at construction for the East System Interchange.

Program meetings were held with elected officials, local businesses/stakeholders, and the general public during 2016. This included a pre-construction season public meeting at the Program office in March 2016.

The Program responded to numerous requests to speak at civic group meetings and other venues to inform interested stakeholders of the Program and answer their questions.

Students enrolled in Gateway to Engineering at Saint Albert High School were given an up close look at construction for the East System Interchange.
The Iowa Transportation Commission and Iowa DOT recognizes that the Council Bluffs Interstate System Improvement Program is the largest interstate highway funding effort in the state’s history. To successfully implement this Program, the Iowa DOT will look for all opportunities to effectively and efficiently turn this significant commitment of resources into successful delivery of highway improvement projects.

PROGRAM STATUS

DOLLARS ALLOCATED PER FISCAL YEAR

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<th>Year</th>
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LONG-TERM STRATEGY

Program construction started in 2008 and is expected to continue through 2024. Numerous projects will be constructed to complete the overall program vision. Individual projects are being grouped strategically to maximize improvements while minimizing construction impacts to Council Bluffs residents and the traveling public.

HIGHPWAY IMPROVEMENT PROJECTS

PLANNED CONSTRUCTION

- **I-29/I-480/W. Broadway**
  - 11/2019 – 11/2021
- **9th Ave Interchange**
  - 11/2019 – 11/2021
- **Avenue G**
  - 11/2019 – 11/2021
- **Kanesville Blvd**
  - 11/2019 – 11/2021
- **16th Street South**
  - 11/2019 – 11/2021
- **Expressway North**
  - 11/2019 – 11/2021
- **Nebraska Avenue**
  - 11/2019 – 11/2021
- **24th St**
  - 11/2019 – 11/2021
- **13th Street**
  - 11/2019 – 11/2021
- **Council Bluffs**
  - 11/2019 – 11/2021
- **Lake Manawa Railroad Bridge**
  - 9/2017 – 11/2019
- **Nebraska Ave Railroad Consolidation**
  - 9/2017 – 11/2019
- **I-80/I-29 Dual, Divided Freeway, Phase II**
  - 12/2016 – 5/2019
- **East System Interchange, Phase II**
  - 11/2015 – 6/2018
- **East System Interchange, Phase II**
  - 11/2015 – 6/2018
- **I-29/I-480/W. Broadway**
  - 11/2019 – 11/2023
- **East System Interchange, Phase IIa**
  - 11/2015 – 6/2018
- **Madison Avenue Interchange**
  - 11/2021 – 5/2024
- **East System Interchange, Phase II**
  - 11/2015 – 6/2018
- **I-29/I-480 West Broadway**
  - 11/2019 – 11/2023
- **East System Interchange, Phase II**
  - 11/2015 – 6/2018
- **Madison Avenue Interchange**
  - 11/2021 – 5/2024
- **East System Interchange, Phase II**
  - 11/2015 – 6/2018
- **I-80/I-29 Dual, Divided Freeway, Phase III**
  - 8/2019 – 6/2021
- **West System Interchange, Phase II**
  - 12/2016 – 5/2019
- **Railroad Consolidation**
  - 10/2015 – 1/2017
- **I-80/I-29 Dual, Divided Freeway, Phase III**
  - 8/2019 – 6/2021

MONEY SPENT $5 16M
47% awarded
15% planned
38% programmed

PROGRAMMED $4 44M
AWARDED $679M
PLANNED $5 220M
Crews work on new bridges over South Expressway.

The Council Bluffs Interstate System Improvement Program has been active since 2008. The statistics on this page give a snapshot of the magnitude of work completed in 2016.

Utility types to be cleared (removed or relocated) for highway construction.

- Electricity: 36%
- Communications: 32%
- Storm Drains: 15%
- Sanitary Sewer: 7%
- Water: 7%
- Gas (natural, petroleum): 3%
- Natural Gas: 3%
- Sanitary Sewer: 7%

- 341,409 linear feet of utilities impacted
- Over 1,600 utility conflicts
- $12.3M spent to-date by Iowa DOT to relocate utilities

- 6,200,000 Cubic yards of concrete poured
- 123,000 Square feet of bridge deck poured
- 3,000 Linear feet of pipe
- 3,100 Tons of reinforcing steel
- 7,2 Miles of railroad track laid
- 1,200,000 Cubic yards of earthwork moved
- 260,000 Square yards of concrete paving
- 3,400 Linear feet of retaining wall
- 6,500 Tons of structural steel for bridges
Construction projects are prioritized based on the highest volume of vehicles and benefits in terms of traffic management, improved safety, and increased vehicle capacity in the urban area of the interstate system.

Future projects include construction on I-29 north of the Union Pacific Railroad Bridge to a point just west of 25th Street. Currently, the plans for this project include the I-29/I-480/West Broadway System Interchange and interchanges at 41st Street, Avenue G, and Ninth Avenue. As determined in the Tier I Final Environmental Impact Statement (EIS), direct access to West Broadway from I-29 via one-way frontage roads will be provided.

Iowa DOT is currently conducting the Tier II environmental studies, which includes environmental field surveys and conceptual design. The environmental studies will identify a single preferred alternative that will be carried through design of the new interchange and interstate system. Studies and the preliminary design will be complete in early 2017. Construction is anticipated to begin in late 2019.

Another future project addressed in the Tier I Final EIS is extending I-80 improvements northeast of Madison Avenue Interchange to east of the U.S. 6/Kanesville Boulevard Interchange. Funding sources and schedule for this project have not yet been determined.

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ACTIVE PROJECTS IN 2017

- West System Interchange (Phase II)
- East System Interchange (Phase IIa)
- East System Interchange (Phase IIb)
- I-80/I-29 Dual, Divided Freeway (Phase II)
- Union Pacific Railroad Bridge
- East System Interchange (Phase III)
- I-80/I-29 Dual, Divided Freeway (Phase III)

Construction projects are prioritized based on the highest volume of vehicles and benefits in terms of traffic management, improved safety, and increased vehicle capacity in the urban area of the interstate system.

Future projects include construction on I-29 north of the Union Pacific Railroad Bridge to a point just west of 25th Street. Currently, the plans for this project include the I-29/I-480/West Broadway System Interchange and interchanges at 41st Street, Avenue G, and Ninth Avenue. As determined in the Tier I Final Environmental Impact Statement (EIS), direct access to West Broadway from I-29 via one-way frontage roads will be provided.

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ACTIVE PROJECTS IN 2017

- West System Interchange (Phase II)
- East System Interchange (Phase IIa)
- East System Interchange (Phase IIb)
- I-80/I-29 Dual, Divided Freeway (Phase II)
- Union Pacific Railroad Bridge
- East System Interchange (Phase III)
- I-80/I-29 Dual, Divided Freeway (Phase III)
2017 KEY PROJECTS

In 2017 the Council Bluffs Interstate System Improvement Program will continue making progress on reconstruction of I-80, I-29 and I-480 in the Council Bluffs/Omaha metropolitan area. Construction will potentially impact travel, as well as local businesses at interchanges that will be under construction.

The majority of the construction occurring in 2017 will be at the two system interchanges, and along the I-80/I-29 eastbound mainline.

The second phase of the West System Interchange will be completed in the spring. Construction crews expect to shift traffic at the East System Interchange late in the year when the Phase II work nears completion.

Project: West System Interchange, Phase II
Highlights: Construction of this phase will be complete in late spring 2017.

Cost: $27M
Spent-to-Date: $24.5M
Time: 2 years
Time Spent: 1 year, 6 months

Project: East System Interchange, Phase IIa
Highlights: Complete bridge construction and open to traffic in late 2017.

Cost: $105M
Spent-to-Date: $62.5M
Time: 2 years 6 months
Time Spent: 1 year, 2 months

Project: East System Interchange, Phase IIb
Highlights: Complete bridge construction.

Cost: $23M
Spent-to-Date: $7M
Time: 2 years
Time Spent: 7 months

Project: I-29 & U.S. 275/Iowa 92 Interchange, Phase II
Highlights: Complete the new I-29 southbound on-ramp and wrap up construction activities for the I-29 and U.S. 275/Iowa 92 interchange reconstruction project.

Cost: $41M
Spent-to-Date: $40,000,000
Time: 2 years 6 months
Time Spent: 1 month

Project: Dual, Divided Freeway, Phase II
System Highlights: Launch construction and begin grading and paving for future I-80 eastbound express lanes and I-80/I-29 local lanes.

Cost: $22M
Spent-to-Date: Project not let yet
Time: 2 years 2 months
Time Spent: Project not let yet

Project: Union Pacific Railroad Bridge
Highlights: Launch construction and begin railroad efficiency improvements.

Cost: $41M
Spent-to-Date: Project not let yet
Time: 2 years 6 months
Time Spent: 1 month

In Progress: Project: I-29 & U.S. 275/Iowa 92 Interchange, Phase II
Highlights: Complete new I-29 southbound on-ramp and wrap up construction activities for the I-29 and U.S. 275/Iowa 92 interchange reconstruction project.

Cost: $41M
Spent-to-Date: $40,000,000
Time: 2 years 6 months
Time Spent: 1 month

2017 PROJECT SPOTLIGHT

East System Interchange

The East System Interchange project is the largest project let to-date for the Council Bluffs Interstate System Improvement Program and the Iowa Department of Transportation. Phase IIa construction began in late 2015, and is anticipated to be complete in late 2017 or early 2018. This project has many complexities and requires coordinating with various railroads and other stakeholders.