

The Union Pacific Railroad bridge (top) was completed in 2019; more progress was made on the East System Interchange (middle), opening more lanes to traffic; and bridge construction in the East System Interchange (bottom).

ON THE COVER: In 2019, the West System Interchange was fully opened to traffic.

BACK COVER: The I-80/I-29 West System Interchange from overhead. (left); completed I-80 eastbound lanes as drivers enter Council Bluffs, Iowa (right).



COUNCIL BLUFFS INTERSTATE SYSTEM







PROGRAM OVERVIEW



The Iowa Department of Transportation 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. We are committed to completing interstate improvements with minimal public inconvenience and keeping the traveling public informed of changes that impact travel.



In late 2019, traffic was shifted to the new I-29 northbound alignment.

		TOTAL PLANNED	COMPLETE TO DATE
	BRIDGES		
X	INTERCHANGES		
	INTERSTATE CENTERLINE MILES (represents roadway length from a given starting point to end point)		
	HIGHWAY LANE MILES		94

PROGRAM GOALS



Modernize and improve 14 miles of interstate.



Accommodate planned developments along transportation corridors.



Reduce traffic congestion.



Improve the visual landscape.







2019 ACTIVE PROJECTS

Construction projects are prioritized based on the potential traffic management benefits, improved safety, and increased capacity to move vehicles in the urban area of the interstate system as well as the number of vehicles that are already moving through that area. The Council Bluffs Interstate System Improvement Program has identified several future projects that are necessary to satisfy the overall mission of the program.

The numbered dots on the map correspond to project information on pages 4–5.

	Projects	Winter	Spring	Summer	Fall
1	Union Pacific Railroad Bridge over I-29				
2	Nebraska Department of Transportation, 13th Street to I-480				
3	East System Interchange, Phase III				
4	I-80/I-29 Dual, Divided Freeway, Phase III				
5	Nebraska Avenue Interchange				
6	I-29/I-480/West Broadway Final Design				
7	Madison Avenue Interchange				
	Construction		Desi	gn	

PROGRAM OVERVIEW

	1	2	3	4		
	Union Pacific Railroad Bridge	Nebraska Department of Transportation (NDOT),	East System Interchange, Phase III	I-80/I-29 Dual, Divided Freeway, Phase III		
>>> ;;;;;	2019 highlights: The north half of the railroad bridge was reconstructed. The contractor completed all projects activities in August 2019.	13th Street to I-480* 2019 highlights: The contractor completed construction activities on I-80 in Omaha between 13th Street and I-480 in June 2019. *Designed and let by NDOT and constructed under an NDOT contract.	 2019 highlights: The contractor completed ramps in early 2019 to allow for the westbound dual, divided freeway to open in March 2019. The eastbound I-80 viaduct opened in September 2019. The contractor also worked on I-29 northbound between U.S. 275/ lowa 92 and I-80. New I-29 mainline opened in late 2019. Looking ahead: The contractor will complete construction of the East System Interchange, Phase III in early 2020. 	2019 highlights: This project began in summer 2019 The contractor focused efforts on the South Expressway on-ramp and removal of the old I-29 southbound/I-80 eastbound ramps. Geotechnical investigations in the East System Interchange for the future I-29 southbound/I-80 eastbound to I-80 eastbound ramp were also completed in 2019. Looking ahead: The existing I-29 southbound/I-80 eastbound bridge over South Expressway will be demolished and a new bridge will be constructed. Contractors will also work on grading and paving the future mainline interstate between South Expressway and the East System Interchange.		
	Actual cost: \$18M	Actual cost: \$74M	Cost: \$107M Spent-to-date: \$102M	Cost: \$62M Spent-to-date: \$15M		
	Completed on time: August 2019	Completed on time: June 2019	Duration: 2 years, 11 months Time spent-to-date: 2 years, 2 months	Duration: 1 year, 10 months Time spent-to-date: 5 months		
	Schedule: 09/2017 - 08/2019	Schedule: 08/2017 - 06/2019	Schedule: 11/2017 – 06/2020	Schedule: 08/2019 – 06/2021		



Nebraska Avenue Interchange		I-29/I-480/West Broadway Preliminary/Final Design		Madison Avenue Interchange		
 2019 highlights: Design efforts. Bid letting was delayed to fall 2020. Looking ahead: Begin construction, grading, and paving in fall 2020. 		 2019 highlights: Design efforts, right-of-way acquisition, and utility relocations. Looking ahead: Complete final design. 		2019 highlights: Design efforts. Looking ahead: Complete final design.		
Ø	Estimated cost: \$35M	Ø	Estimated cost: \$189M	Ø	Estimate cost: \$86M	
	Estimated duration: 1 year, 11 months		Estimated duration: 3 years, 9 months		Estimated duration: 2 years, 6 months	
	Schedule: 09/2020 – 08/2022		Schedule: 11/2020 – 08/2024		Schedule: 11/2021 – 05/2024	

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PROJECT SPOTLIGHT

Union Pacific Railroad Bridge reconstruction

Reconstruction of the Union Pacific Railroad Bridge began in September 2017 and was completed August 2019. Bridge reconstruction was necessary to allow for increased capacity on I-29. Partnering with Union Pacific Railroad, Iowa DOT rebuilt the existing bridge from five tracks to three tracks due to improvements made to the local yard operations. Bridge design was optimized so the roadway grade did not need to be altered during construction. Iowa DOT also worked with the City of Council Bluffs during design to extend the bridge span to allow for a possible, future, local street on the west side of I-29.

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PROJECT SPOTLIGHT

I-80/I-29 dual, divided freeway

After more than a decade of construction along the overlapping segments of Interstates 80 and 29 through Council Bluffs, motorists were finally able to travel the I-80 westbound/I-29 northbound portion of the dual, divided freeway in March 2019. The concept was designed to improve traffic flow and motorist safety along a three-mile corridor through Council Bluffs.

The dual, divided freeway, the first in the region, separates Interstate through-traffic from local traffic. Motorists on the three local northbound/westbound lanes are able to exit for food, services; and other locations in Council Bluffs at South Expressway and 24th Street; vehicles on the three westbound express lanes do not have exits in the three-mile corridor.

The dual, divided freeway was designed to reduce crashes caused in part by traffic that previously had to merge between tightly spaced interchanges. Anytime a crash does occur and traffic begins to back up, authorities will be able to open special gates and allow vehicles to move from the freeway into the local lanes.

Much of the eastbound/southbound dual, divided freeway also opened in late summer 2019 providing motorists traveling in all directions with additional lanes, fewer conflicts, and added safety benefits.

Each of these traffic shifts occurred approximately a full construction season, or more, ahead of the original construction schedule. This was accomplished, in part, due to optimized construction staging during multiple project phases and improved project delivery. Ultimately, these efforts have allowed the Iowa DOT to provide a better interstate system, ahead of schedule, with fewer impacts to the traveling public.





GETTING YOU THERE

Speed limit increase

As part of re-design efforts, the interstate is now able to accommodate an increased speed limit, further supporting swift travel through the area. Speeds through Council Bluffs have been posted at 55 MPH, which is typical for work zone areas. Construction activities within the I-80 westbound/I-29 northbound portion of the dual, divided freeway are ahead of schedule and work that impacts westbound lanes has ceased. As a result, the Iowa DOT increased the speed limit to the planned, permanent, posted speed of 65 MPH in late 2019. Increasing the speed limit helps minimize vehicles traveling at different speeds and ultimately, crashes.



Traffic Incident Management

The Council Bluffs Interstate System Improvement Program works to promote, develop, and sustain multidisciplinary, multi-jurisdictional efforts to achieve enhanced responder safety; safe, quick traffic incident clearance; and prompt, reliable, interoperable communications.

Working group meetings with responders are held on a regular basis in the Omaha-Council Bluffs metropolitan area. Responders include state and local transportation agencies, law enforcement, fire and rescue, emergency communications, tow operators, and emergency managers.

This group continues to build relationships and partnerships to improve traffic incident management (TIM) through media training, public information officer partnerships, construction coordination, safety and technology equipment, and ongoing TIM training.



Dual, divided freeway signage

Color dynamic message signs (DMS) are being added to the area to improve communication with drivers through tailored messages that match highway signs and shields. This was especially important during flood detours that impacted the area beginning in March 2019. Color DMS provided drivers with clear directions on how to avoid floodimpacted areas.

Following the opening of the dual, divided freeway, traveler and area stakeholder feedback revealed that express and local designations on overhead signage was not intuitive to drivers. In early 2020, Iowa DOT will update overhead signs coming into Council Bluffs giving drivers a clear understanding of which roadway would take them to services like fuel, food, lodging and which roadway would allow them to travel swiftly through the area.





GETTING YOU THERE



2019 Flood impacts

In March 2019, widespread flooding impacted the Missouri River. Interstates. highways, and local roads north and south of Council Bluffs were overtopped and damaged due to the high flow rate of flood waters. Flooding caused approximately 63 miles of I-29 to close in southwest Iowa. On May 23, 2019, mobility had been restored. However, on May 31, 2019, a combination of weakened and breached levees, heavy rainfall, and increased releases from upstream dams resulted in all roadways becoming overtopped with water once again. The Iowa Department of Transportation, along with federal, state, and local agencies, continues to advance recovery and resiliency efforts throughout the region.

Council Bluffs Interstate System Impacts

While contractors and district forces worked together to restore mobility, the Program made ongoing changes to detour routes, made adjustments in work zones to accommodate increased traffic due to closed roads, evaluated project schedules, and monitored fluctuating water levels. The Program also continued to provide communication to area stakeholders and the traveling public regarding closed roads due to construction activity and flooding. While the magnitude of the flood event was far reaching and long lasting, only one project, the Nebraska Avenue Interchange, was ultimately delayed.

Resiliency measures on I-29

Impacts from flood events interrupted travel on I-29 multiple times between March and October. As a result, the existing pavement was raised between 14 and 28 inches in fall 2019. While the grade raise will not flood-proof the roadway, it will limit future flood impacts by allowing us to keep roads open longer and re-open flooded areas quicker, increasing overall resiliency of the transportation network. Additionally, we completed improvements to I-29, just north of the Avenue G Interchange in Council Bluffs. The age of existing pavement led to an uneven roadway and pavement degradation in this area. As a result, contractors overlaid I-29 lanes and ramps at 25th Street with new asphalt. Construction began in October 2019 and was completed in November 2019.

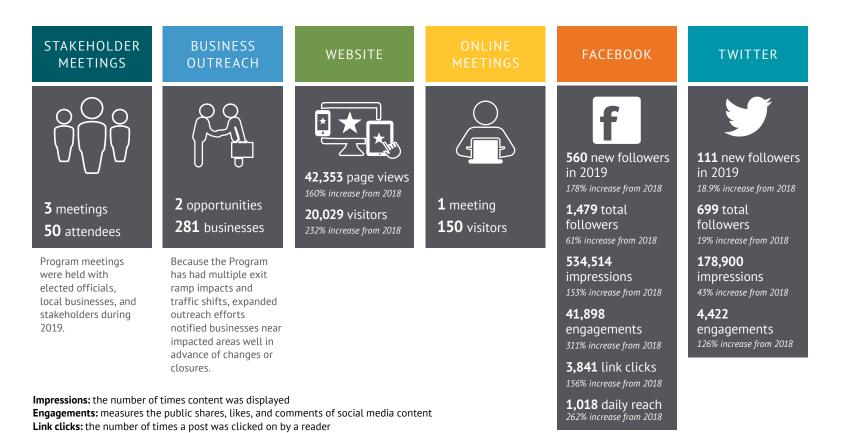


PUBLIC OUTREACH



2019 COMMUNICATIONS

Since 2014, the Program has been providing informative, timely, and concise communications to stakeholders and the traveling public throughout the region. The public engagement approach capitalizes on opportunities that communicate the thoughtful planning and execution of taxpayer dollars. Program, traffic, and construction-related information is shared with the public through a variety of in-person and online platforms. In 2019, a communications campaign began in February to communicate major traffic shifts to stakeholders and the public. Additional campaigns occurred in summer and early fall for further construction impacts to the business corridor near South Expressway.



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PUBLIC OUTREACH

TOP 2019 FACEBOOK MESSAGES

BIG NEWS: Drivers in Council Bluffs will have more options for travel. New lanes of the I-80 EB Express/I-29 SB segment of the Dual, Divided Freeway are opening soon! Follow us here for updates and check 511 before you go.

KNOW BEFORE YOU GO

Coming August 19th

TBOUND

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Very soon drivers in Council Bluffs will have more options for travel. Learn how to navigate the eastbound Dual, Divided Freeway before you arrive.



August 6

14,534

impressions

1,738 total

engagements

251 reactions
66 comments

140 shares

1,281 message clicks

August 17 41,095 impressions

5,552 total engagements

- 635 reactions
- 368 comments

362 shares

4,187 message clicks

Omaha World-Herald Sponsored Content

Get ready, motorists: a new type of freeway is coming your way in Council Bluffs



The Iowa DOT sponsored story was featured on February 19, 2019 in the Omaha World-Herald. On the first day of posting, the story achieved 19,946 page views. This was a first day record for views of a sponsored content story on *Omaha.com*! Standard, sponsored content stories typically achieve an average of 1200-2000 first day page views.



816,017 impressions

19,946 Omaha World-Herald page views on the first day, setting a record

44,681 total page views

2,263 Daily Nonpareil page views



75 comments on social media **334** shares

629 reactions

Source: Omaha World Herald, February 19, 2019. https://www.omaha.com/sponsored/get-ready-motorists-a-new-type-offreeway-is-coming/article_a341bcd4-985e-53cb-8274-df362eb8194e.html?utm_ medium=social&utm_source=email&utm_campaign=user-share

PROGRAM STATUS



DOLLARS ALLOCATED PER FISCAL YEAR

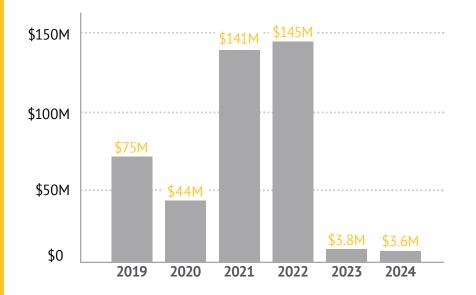
Approved by the Transportation Commission, June 2019

INVESTING IN INFRASTRUCTURE

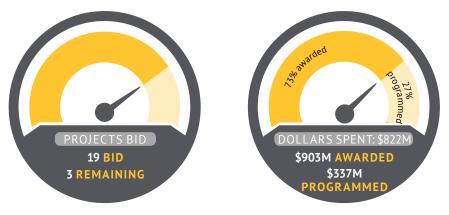
The Iowa Transportation Commission and Iowa DOT recognize that the Council Bluffs Interstate System Improvement Program is a significant investment in the state's transportation infrastructure. We continue to look for opportunities to effectively and efficiently manage the successful delivery of highway improvement projects.

Long-Term Strategy

Program construction started in 2008 and is expected to continue through 2024. Approximately 67% of Program construction has been completed. Projects are being grouped strategically to maximize improvements while minimizing construction impacts to Council Bluffs residents and the traveling public.



Status Through December 2019





Linear feet of pipe 48,200 to-date



Linear feet of conduit 80,000 to-date

A4 New tower & street lights

Bridge deck construction in spring 2019.

The eastbound viaduct in the East System Interchange was opened in summer 2019.



Linear feet of retaining wall 8,400 to-date



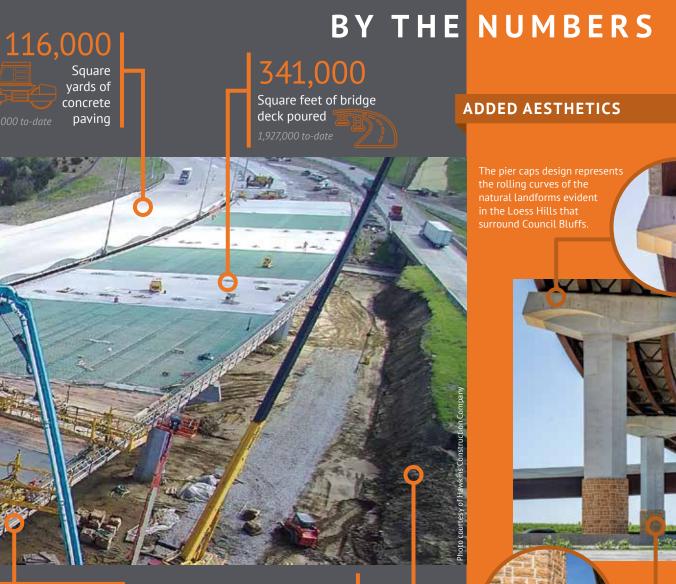


Cubic yards of concrete poured 450,000 to-date

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Tons of structural steel for bridges

588,000 Cubic yards of earthwork moved

The base element of bridge piers are designed to replicate the look of natural stone.



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Needs assessment

1997

In 1997, the City of Council Bluffs and Metropolitan Area Planning Agency conducted a study of the interstate system in Council Bluffs. The Council Bluffs Interstate System Needs Study, completed in 1999, indicated that many interstate features were outdated and did not meet today's design standards, guidelines, or operational criteria. Additionally, the system did not provide adequate travel capacity for future traffic. 2002

Environmental studies and preliminary design

In 2002, the Iowa DOT initiated the Council Bluffs Interstate System Improvement Program to address the issues raised by the 1997 Council Bluffs Interstate System Needs Study and developed solutions for improving the interstate system in the Council Bluffs metro area.

Initial construction project

In 2006, the Iowa DOT constructed an interim project on the overlapping section of I-80/I-29 to add a third lane in the eastbound direction to ease congestion that occurs when eastbound I-80 and southbound I-29 merge onto one roadway. The interim project was a short-term solution to congestion problems.

2006

In 2008, the 24th Street Bridge replacement was the first completed project in a series of projects to improve the capacity of the Council Bluffs Interstate System. A project of this magnitude is typically constructed over two consecutive construction seasons. but due to the critical location of this interchange, traffic restrictions on 24th Street needed to be limited to a single season. The interchange serves major attractions, hotels and shopping outlets in Council Bluffs. To serve the heavy daily traffic created by these nearby businesses, 24th Street and I-80/I-29 remained open during construction of the new bridge.

PROGRAM TIMELINE

2020

The Council Bluffs Interstate System was originally constructed in the 1960s and was developed to the design standards of that time.

Although routine maintenance projects were completed in the 1980s and 1990s, significant changes had not been made to the Council Bluffs Interstate System since its original construction.

2013



Dual, divided freeway opens

2016

Program construction complete

2024

Interchange construction begins at West Broadway and Nebraska Avenue

Program funding and acceleration

In late 2013, the Iowa DOT Transportation Commission committed to funding the Program for the full build out of all improvements. Since then, 70 projects were consolidated into 13 contract packages for efficiency and to encourage more competitive bidding. The overall project schedule was accelerated, reducing the design and construction schedule from over 20 years to 16 years. Additionally, the Iowa DOT was able to incorporate I-29/I-480/West Broadway improvements without significant impacts to other project schedules. After more than a decade of construction along the overlapping segments of Interstates 80 and 29 through Council Bluffs, motorists were finally able to use the dual, divided freeway in 2019. The concept was designed to improve traffic flow and motorist safety along a three-mile corridor through Council Bluffs.

2019

Construction in the I-29/I-480/West Broadway System Interchange area will address capacity needs, improve safety, and correct functional design issues at this location and at adjacent interchanges. The project will provide direct access to West Broadway from I-29 via one-way frontage roads to offer better access to destinations in Council Bluffs from I-29.

The Railroad relocation project consolidated the CBEC Railway and BNSF Railway railroad operations into a new common corridor west of Mosquito Creek under I-29 and Iowa 92. Construction occurred between 2015 and 2016. Rail consolidation will improve operations at the South Expressway Interchange and greatly reduce roadway/railway conflicts. This effort has eliminated numerous at-grade rail crossings and the CBEC Railway corridor that previously bisected Lewis Central High School.





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