

2021-2025

Highway Program

Development

Overview

Discuss 2021-2025 available Highway Program funding

Discuss 2021-2025 Highway Program Options

Determine 2021-2025 Highway Program Objectives

Commission Program Development Schedule (2021-2025)

March 26, 2020

- Discuss 2021-2025 available Highway Program funding

- Discuss 2021-2025 Highway Program Options

- Determine 2021-2025 Highway Program Objectives

April 2020

- Develop the Draft 2021-2025 Highway Program

- Action Item: 2021-2025 Highway Program Objectives**

May 2020

- Present the Draft 2021-2025 Iowa Transportation Improvement Program to the public
(including all previous program approvals and draft 2021–2025 Highway Program)

June 2020

- Action Item: Approve the 2021–2025 Iowa Transportation Improvement Program**

Decision Points

1. Should projects in the 2021-2024 program continue to be programmed with cost/schedule updates?
2. How should the Program be balanced and what projects should be added to the Program?

Federal Funding Recommendation Highway Bridge Program (HBP)

- Based on Commission allocation of federal formula funds, the March 10 funding recommendation allocated approximately 70 percent of FFY 2020 HBP funds to DOT
 - DOT: \$29.6 m
 - Local: \$13.2 m
- Iowa County Engineers Association objected
 - Not consistent with FFY 2019 Commission allocation of HBP
 - HBP funding allocation to Iowa primarily based on condition of local bridges
- **Recommendation:** Balancing the historic allocation of federal formula funding with the recognition that there are significant bridge needs on the local system, modify the allocation of FFY 2020 HBP funds to 50 percent DOT and 50 percent local
 - DOT: \$21.4 m
 - Local: \$21.4 m

State Funding Recommendation

- State funding forecast presented March 10
- Forecast does not reflect any potential impacts resulting from COVID-19 situation
 - Reduced travel will reduce state fuel tax revenue
 - Reduced vehicle sales will reduce Fee for New Registration revenue
 - Delayed annual vehicle registration renewals will delay Annual Vehicle Registration receipts
- AASHTO has requested Congress consider a \$16.7 billion appropriation to states to cover lost state revenue. Iowa DOT has supported this effort in communication to Iowa's Congressional delegation
- **Recommendation:** Continue to utilize state funding recommendation presented March 10 but monitor funding status very closely and be prepared to make adjustments throughout the year as necessary.

2021-2030 Highway Program Analysis

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

as presented March 10, 2020

- Changes to Projected Funds
- FY 2020 Projects Rescheduled
- Rescheduling and cost changes of projects programmed in years 2021 to 2024, add 2025

Proposed Highway Program

Extended Highway Program

2021 2022 2023 2024 2025 | 2026 2027 2028 2029 2030

Projected Funds as of March 2020	834.5	675.2	700.7	693.8	686.2	686.2	686.2	686.2	686.2	686.2
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Highway Program Components

Interstate Stewardship	242.4	184.7	144.8	128.7	165.0	170.0	175.0	180.0	185.0	190.0
Interstate Stewardship	(0.3)	(2.7)	1.4	24.1	12.3					
Non-Interstate Pavement Modernization	105.0	115.0	140.0	145.0	150.0	155.0	165.0	175.0	185.0	190.0
Non-Interstate Pavement Modernization	0.7									
Non-Interstate Bridge Modernization	63.9	64.7	101.0	110.0	125.0	140.0	155.0	170.0	185.0	190.0
Non-Interstate Bridge Modernization	0.2	0.3	0.3	(0.5)	0.9					
Safety Specific	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Safety Specific	0.6									
Non-Interstate Capacity/System Enhancement	147.9	91.2	202.4	204.1	102.7					
Non-Interstate Capacity/System Enhancement*	(7.8)	74.5	5.5	9.0	3.6					
US 61 Des Moines N of Mediapolis to N of IA 78						24.8	0.1			
US 30 Missouri Valley bypass						12.6	27.0			
US 61 1 mi N of IA 78 to 2 mi S of IA 92							49.3			
US 63 NW Oskaloosa bypass						12.3	0.3			
Major Interstate Capacity/System Enhancement	279.3	194.7	106.1	83.1	258.8					
Major Interstate Capacity/System Enhancement	0.8	5.8	5.7	(14.2)	(133.4)					
I-35 Polk/Story						2.0	1.0			
I-80 Dallas						0.2				
I-80 Cedar (scaled back to just include replacement of Sugar Creek bridges)										
I-80 Scott Mississippi River Bridge						50.0	50.0			

Highway Program Balance	(23.2)	(78.0)	(31.5)	(20.5)	(23.7)	94.3	38.5	136.2	106.2	91.2
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- Non-Interstate Capacity/System Enhancement changes include:
 - Advance Iowa 17 Boone by two years
 - Advance US 75 Plymouth by one year to 2021

Should projects in the 2021-2024 program continue to be programmed with cost/schedule updates?

Black: Previous discussion

(): Indicates Highway Program is over-programmed

Green: Changes since previous discussion

2021-2030 Highway Program Analysis

March 26, 2020

For Highway Planning Purposes Only (x \$1,000,000)

- Changes to Projected Funds
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Highway Program Components

Interstate Stewardship	242.1	182.0	146.2	152.8	177.3	170.0	175.0	180.0	185.0	190.0
Non-Interstate Pavement Modernization	105.7	115.0	140.0	145.0	150.0	155.0	165.0	175.0	185.0	190.0
Non-Interstate Bridge Modernization	64.1	65.0	101.3	109.5	125.9	140.0	155.0	170.0	185.0	190.0
Safety Specific	25.6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Non-Interstate Capacity/System Enhancement	140.1	165.7	207.9	213.1	106.3					
US 61 Des Moines N of Mediapolis to N of IA 78						24.8	0.1			
US 30 Missouri Valley bypass						12.6	27.0			
US 61 1 mi N of IA 78 to 2 mi S of IA 92							49.3			
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Highway Program Balance	(23.2)	(78.0)	(31.5)	(20.5)	(23.7)	94.3	38.5	136.2	106.2	91.2
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Should projects in the 2021-2024 program continue to be programmed with cost/schedule updates?

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2021-2030 Highway Program Analysis

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

Proposed Highway Program					Extended Highway Program				
<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>

Highway Program Components

Interstate Stewardship	242.1	182.0	146.2	152.8	177.3	170.0	175.0	180.0	185.0	190.0
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- Funds in years 2026 and beyond are placeholders (not programmed yet)
- Projects in 2021-2025 are specifically identified in the highway program
- Identified projects are 38% roadway reconstruction, 20% pavement resurfacing and maintenance, 21% bridge replacements, 10% bridge repairs or overlays, 5% rest area improvements and maintenance, 7% other (traffic signs, erosion control, lighting, etc.)
- Major projects continuing in the current program include:
 - Johnson I-80/380/US 218 Interchange reconstruction in 2021-2023
 - Johnson I-80 1st Ave Interchange reconstruction in Coralville beginning in 2024
 - Linn I-380 Boyson Rd Interchange reconstruction in Hiawatha recommended to move from 2024 to 2025
 - Polk I-35/80/235 Northeast mixmaster improvements recommended to move from 2022-2023 to 2023-2024
 - Poweshiek I-80/IA 146 Interchange reconstruction at Grinnell in 2021-2022
 - Warren I-35 reconstruction at various locations between IA 92 and IA 5 in 2021-2025
 - Woodbury I-29/IA 141 Interchange reconstruction in 2023
- There are four rest area building replacements:
 - Mills NB I-29 in 2021 is currently programmed *but recommend moving to 2022 – no impact in 4R funding balance*
 - Iowa EB I-80 in 2022 is currently programmed *but recommend moving to 2021 – no impact in 4R funding balance*
 - Linn SB I-380 in 2023 is to be considered for programming
 - Polk EB I-80 in 2024 is currently programmed but is recommended to remove from Program
 - Pottawattamie WB I-80 in 2025 is to be considered for programming
- Major projects for consideration to add to the program this year include:
 - Polk I-35/80 Hickman interchange is to be considered for programming beginning in 2025

2021-2030 Highway Program Analysis

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

as presented March 10, 2020

Proposed Highway Program

Extended Highway Program

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

Highway Program Components

Non-Interstate Pavement Modernization	105.7	115.0	140.0	145.0	150.0	155.0	165.0	175.0	185.0	190.0
<ul style="list-style-type: none"> - Funds in Years 2022 and beyond are placeholders (no specific projects identified) - Projects in 2021 will be specifically identified in the highway program (to be handed out in April) - 2021 draft projects are 93% pavement resurfacing, 6% pavement widening, and 1% other 										
Non-Interstate Bridge Modernization	64.1	65.0	101.3	109.5	125.9	140.0	155.0	170.0	185.0	190.0
<ul style="list-style-type: none"> - Funds in years 2026 and beyond are placeholders (not programmed yet) - Projects in 2021-2025 will be specifically identified in the highway program (to be handed out in April) - Draft projects are 61% bridge replacements, 36% bridge repairs or overlays, 2% culvert repairs or replacements, 1% other 										
Safety Specific	25.6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
<ul style="list-style-type: none"> - Funds in Years 2022 and beyond are mostly placeholders (few specific projects identified) - Projects in 2021 will be specifically identified in the highway program (to be handed out in April) - 2021 draft projects are 86% shoulder paving and widening, 8% interstate median guardrail, 6% other 										

2021-2030 Highway Program Analysis

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

as presented March 10, 2020

Proposed Highway Program

Extended Highway Program

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

Highway Program Components

Non-Interstate Capacity/System

Enhancement

140.1

165.7

207.9

213.1

106.3

49.7

76.7

- Funds in Years 2026 and beyond are project completion costs for projects already in Program
- Includes advancing the Iowa 17 Boone County project by two years to meet earmark deadlines
- Includes advancing US 75 Plymouth County pavement reconstruction from 2022 to 2021 to help reduce 2022 overprogrammed amount

Major Interstate Capacity/System

Enhancement

280.1

200.5

111.8

68.9

125.4

52.2

51.0

- Funds in years 2026 and beyond are project completion costs for projects already in Program
- Includes Interstate project changes consistent with Iowa Interstate Investment Plan recommendations discussed at December 2019 workshop. This includes the following changes
 - Scale back I-80 Cedar County to just include replacement of Sugar Creek bridges
 - Add in I-80 Dallas County from Grand Prairie Parkway to Jordan Creek Parkway
 - Does not add in I-380 Penn Street Interchange area

Project Reschedule Scenario

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>Beyond</u>
<u>Non-Interstate Capacity/System Enhancement (NR funds)</u>							
Stewardship							
US 75 Plymouth: N of Maple St in Hinton to S of 2 nd St in Merrill (SB)	20.2						
US 75 Plymouth: N of Maple St in Hinton to S of 2 nd St in Merrill (SB)			22.1				
Iowa 27 Black Hawk: US 20 to Ridgeway Ave in Cedar Falls (NB&SB)		5.1					
Iowa 27 Black Hawk: US 20 to Ridgeway Ave in Cedar Falls (NB&SB)			5.3				
Iowa 1 Jefferson: S of Libertyville Rd to Fillmore Ave in Fairfield		3.5					
Iowa 1 Jefferson: S of Libertyville Rd to Fillmore Ave in Fairfield			3.7				
Iowa 92 Keokuk: Iowa 21 and Co Rd V33 Intersections		6.0					
Iowa 92 Keokuk: Iowa 21 and Co Rd V33 Intersections			6.3				
US 30 Story: 0.5 MI E of I-35 to E of 590 th Ave	14.1	9.9	0.4				
US 30 Story: 0.5 MI E of I-35 to E of 590 th Ave		14.5	10.3	0.4			
Capacity							
US 61 Louisa: 0.5 MI N of Iowa 78 to 2.0 MI S of Iowa 92				5.8	41.0		
US 61 Louisa: 0.5 MI N of Iowa 78 to 2.0 MI S of Iowa 92					5.8	42.9	51.5

Options of Projects to add to the Highway Program

For Highway Planning Purposes Only (x \$1,000,000)

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>Beyond</u>	<u>Total</u>	<u>Score</u>	<u>Rank</u>
<u>Major Interstate Capacity/System Enhancement (MI funds)</u>													
I-35 Story: N of IA 210 to E 13 th St in Ames						4.9	30.7	39.3	67.6	1.2	143.7	47	4
I-80 Polk: Hickman Rd Interchange (4R)*					28.0	38.4	10.0				76.4	37	1
I-80 Scott: Mississippi River Bridge**					50.0	50.0	50.0				150.0	38	2
I-380 Johnson: Segment 1 N of Forevergreen Rd to N of Penn St								9.9	12.5	13.0	35.4	49	6
I-380 Johnson: Segment 2 N of Penn St to N of Iowa River					38.6	44.6	26.1				109.3	48	5
I-380 Johnson: Segment 3 N of Iowa River to N of 120 th St NW								16.6	9.5		26.1	49	6
I-380 Linn: Segment 4 N of 120 th St NW to US 30					32.4	18.6					51.0	38	2
I-380 Linn: Blairs Ferry Road to County Home Rd (add lanes)						14.8		12.4			27.2	56	8
Stewardship (Shelf-Ready) Projects		100.0	100.0	100.0	100.0	100.0					500.0		

* Included in the 4R category recommendation

** Included in the Major Interstate Capacity/System Enhancement category recommendation

Options of Projects to add to the Highway Program

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>Beyond</u>	<u>Score</u>	<u>Score</u> <u>Rank</u>
<u>Non-Interstate Capacity/System Enhancement (NR funds)</u>									
Stewardship									
IA 2 Fremont: Missouri River Overflow to Horse Creek Bridges	2.0*							63	6
US 6 Polk: NW 128 th St in Clive/Urbandale	0.5							61	5
IA 12 Woodbury: Gordon Drive bridge in Sioux City							TBD	41	1
IA 21 Iowa: South of Belle Plaine					5.0			83	10
US 34 Mills: Resiliency improvements (could be ER)	TBD							79	8
US 34 Wapello: Wildwood Dr to US 63 in Ottumwa						30.8		44	2
US 65 Polk: SB turn lane at exit ramp to IA 163 in Pleasant Hill	0.3							58	4
US 67 Scott: Mississippi River Bridge							110.0	50	3
US 75 Sioux: N of Sioux Center to US 18					10.0			71	7
US 218 Lee: NB On Ramp to IA 27		0.3						80	9
Polk: Traffic Incident Management (TIM) Training Center				TBD	TBD				
ITS (multiple locations statewide)			0.1		0.3				
Culverts (multiple locations statewide)	1.4	0.3		0.4					
Slide Repairs (multiple locations statewide)	0.9	0.2	1.3						

Options of Projects to add to the Highway Program

For Highway Planning Purposes Only (x \$1,000,000)

March 26, 2020

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>Beyond</u>	Priority <u>Corridor</u>	Score <u>Score</u>	Score <u>Rank</u>
<u>Non-Interstate Capacity/System Enhancement (NR funds)</u>											
Capacity											
US 18 Hancock: E Branch Iowa River to Country Club Dr (Super-2)					3.0				N	71	1
US 30 Cedar/Clinton: ECL Lisbon to ECL Mechanicsville (Super-2)					0.4	17.0			Y	75	2
US 63 Tama: Toledo to Co Rd E29 (Super-2)					9.0				N	80	3
<u>Potential Transfer of Jurisdictions (NR funds)</u>											
US 6 Pottawattamie: 6 th St in Council Bluffs east to I-80											
IA 78 Henry: Olds to Louisa County											
IA 78 Louisa: Henry County to US 61											

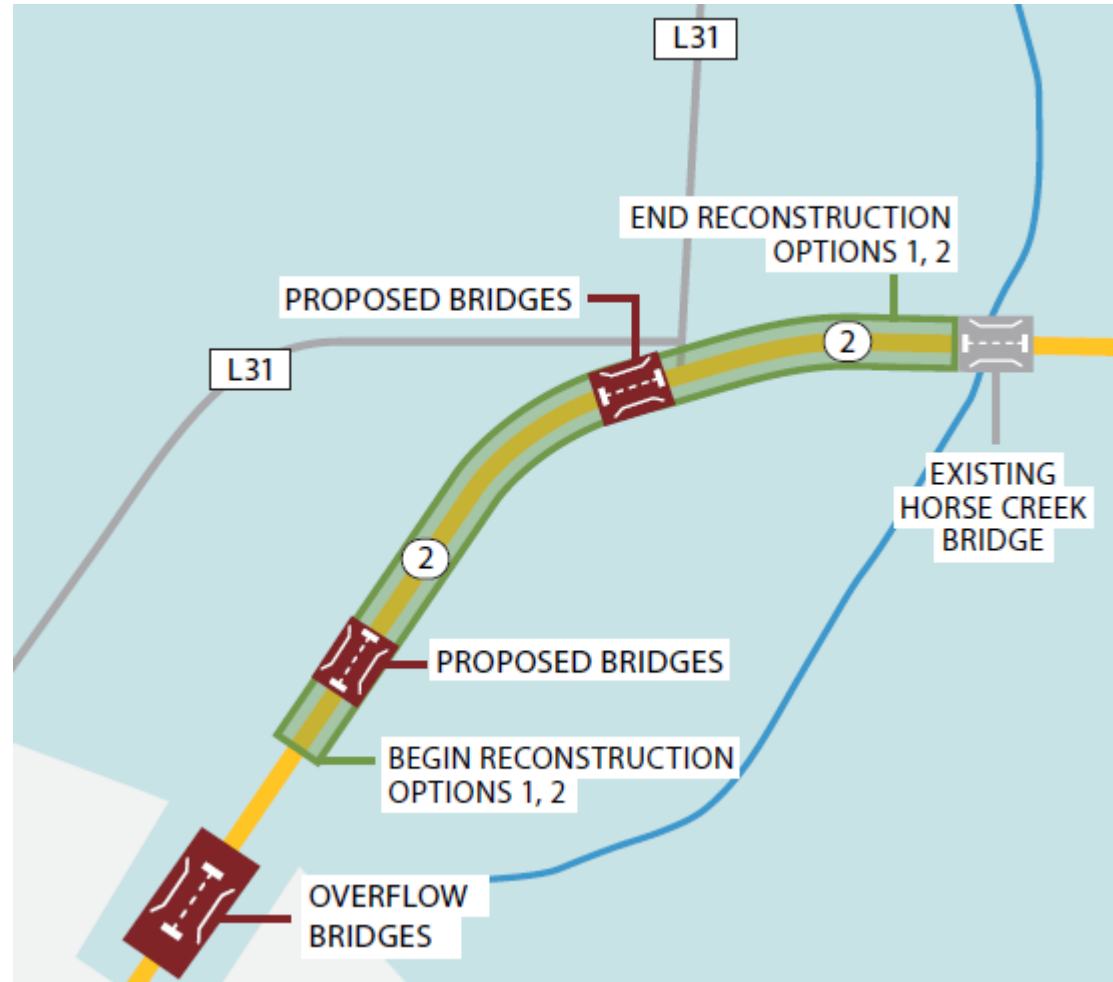
Iowa 2 Fremont: Missouri River Overflow to Horse Creek Bridges

Reconstruct Iowa 2 to a higher elevation.

Add two sets of bridges to convey water under Iowa 2.

Total cost is approximately \$10 million but it has been determined to be eligible for FHWA Emergency Relief funding. Therefore, the Program cost is \$2.0 million.

Discussion continuing on Phase II from Horse Creek Bridges to I-29

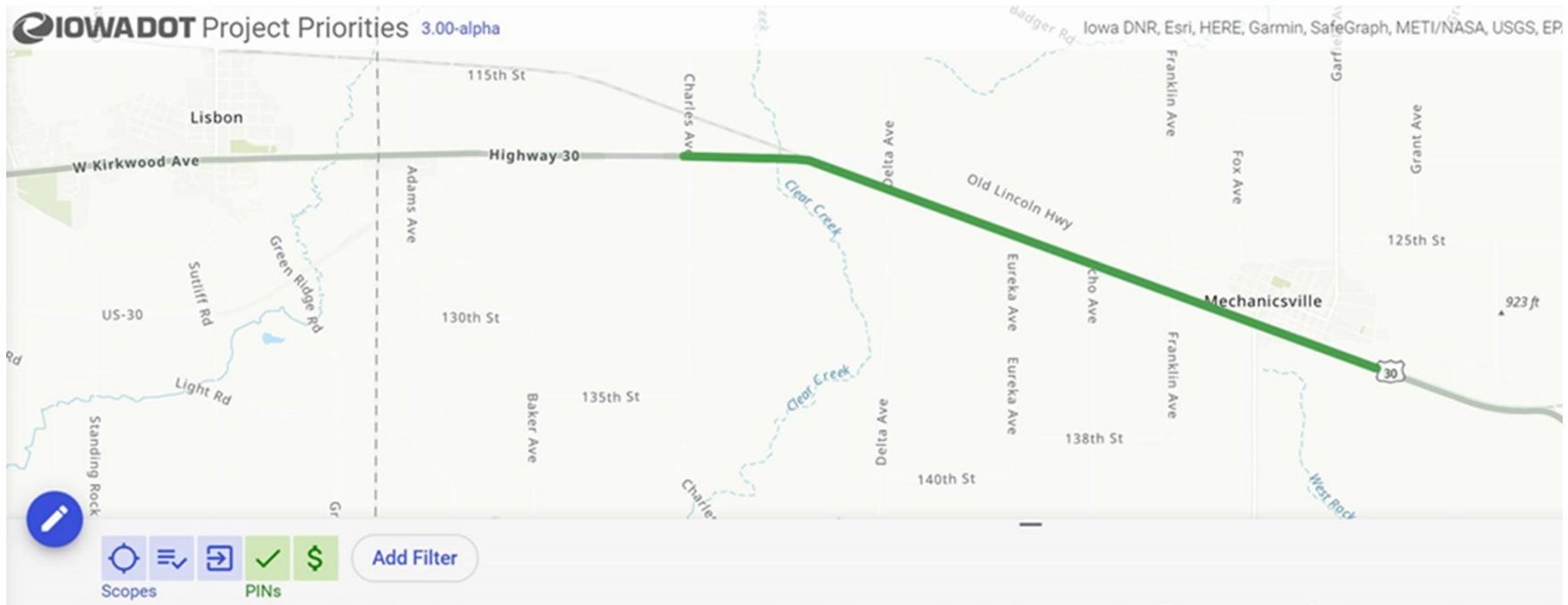


Iowa 2 Fremont: Missouri River Overflow to Horse Creek Bridges

<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>Beyond</u>	<u>Total</u>	<u>Score</u>	<u>Rank</u>
(x \$1,000,000)									
2.0							2.0	63	6

US 30 Cedar/Clinton: ECL Lisbon to ECL Mechanicsville (Super-2)

March 26, 2020



- Highest priority section in Lisbon to De Witt Corridor
- Part of a Commission designated Priority Corridor
- Super-2 Concept based on Planning and Environmental Linkages Study
- Includes passing lanes to improve opportunities to safely pass slower moving vehicles
- Does not include bypasses

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>Beyond</u>	<u>Total</u>	<u>Score</u>	<u>Rank</u>
	(x \$1,000,000)									
US 30 Cedar/Clinton: ECL Lisbon to ECL Mechanicsville (Super-2)					0.4	17.0		17.4	75	2

- Changes to Projected Funds
- FY 2020 Projects Rescheduled
- Rescheduling and cost changes of projects programmed in years 2021 to 2024, add 2025

2021-2030 Highway Program Analysis

March 26, 2020

For Highway Planning Purposes Only (x \$1,000,000)

- Adjusted federal funding forecast
- Added highlighted projects
- Additional project schedule changes

	Proposed Highway Program					Extended Highway Program				
	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
Projected Funds as of March 2020	834.5	675.2	700.7	693.8	686.2	686.2	686.2	686.2	686.2	686.2
Reduction in federal funding recommendation	(8.2)									
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Highway Program Components										
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US 61 1 mi N of IA 78 to 2 mi S of IA 92							49.3			
US 63 NW Oskaloosa bypass						12.3	0.3			
Highlighted new projects from Options List	5.1	0.8	1.4	0.4	3.7					
Project Reschedule Scenario	(20.2)	(28.7)	17.4	4.1	(7.9)	42.9	(49.3)	51.5		
Major Interstate Capacity/System Enhancement	280.1	200.5	111.8	68.9	125.4					
I-35 Polk/Story						2.0	1.0			
I-80 Dallas						0.2				
I-80 Cedar (scaled back to just include replacement of Sugar Creek bridges)										
I-80 Scott Mississippi River Bridge						50.0	50.0			
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Highway Program Balance	(16.3)	(50.1)	(50.3)	(25.0)	(19.5)	137.2	(10.8)	187.7	106.2	91.2

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Green: Changes since previous discussion

Decision Points

1. Should projects in the 2021-2024 program continue to be programmed with cost/schedule updates?
2. How should the Program be balanced and what projects should be added to the Program?

FY 2020-2024 Highway Program Objectives

- Projects in the 2020-2023 Highway Program will continue to be programmed with cost and schedule updates
- **Investment Area: Stewardship through maintaining a state of good repair**
 1. Maintain increasing Interstate funding levels for pavement reconstruction, modernization, bridges, pavement patching/maintenance, rest areas, and other miscellaneous projects
 2. Maintain increasing funding levels for non-interstate pavement modernization
 3. Maintain increasing funding levels for non-interstate bridge modernization
 4. Maintain funding levels for safety
 5. Invest in additional stewardship projects
- **Investment Area: Modification through rightsizing the system**
 1. Transfer of jurisdiction for portions of primary roadways to cities and counties
- **Investment Area: Optimization through improving operational efficiency and resiliency**
 1. Invest in intelligent transportation systems infrastructure
 2. Invest in Super-2 improvements
- **Investment Area: Transformation through increasing mobility and travel choices**
 1. Invest in bypasses and corridor improvements

Potential FY 2021-2025 Highway Program Objectives

- Projects in the 2021-2024 Highway Program will continue to be programmed with cost and schedule updates
- **Investment Area: Stewardship through maintaining a state of good repair**
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 2. Maintain increasing funding levels for non-interstate pavement modernization
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- **Investment Area: Modification through rightsizing the system**
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- **Investment Area: Optimization through improving operational efficiency and resiliency**
 1. Invest in intelligent transportation systems infrastructure
 2. Invest in Super-2 improvements
- **Investment Area: Transformation through increasing mobility and travel choices**
 1. Invest in ~~bypasses and~~ corridor improvements

Next Steps

- Develop the Draft 2021-2025 Highway Program
- **Action Item: 2021-2025 Highway Program Objectives**