### **Public Meeting**

Interstate 229 Exit 6 (10<sup>th</sup> Street) Interchange and Mainline Interstate 229
PL0194(98)P; PCN 07P7

Interchange Study, Environmental Study, and Design

Phil Gundvaldson, PE
Public Involvement Coordinator

Tuesday, March 12, 2024 at 5:30 PM



SCAN HERE TO ACCESS THE STUDY WEBSITE AND PROVIDE COMMENTS!















## Purpose of the Meeting

Team

 Introductions and Contact Info

**Project Limits / Schedule** 

Study Area

**Alternatives Evaluated and Recommended Alternatives** 

I-229

Interchange and 10<sup>th</sup> Street

**Traffic Analysis** 

I-229

Interchange and 10<sup>th</sup> Street

**Environmental Screening** Report

I-229

Interchange

**Gather Input and Comments** 

https://www.i229Exit6.com/













### **Project Team**

Phil Gundvaldson



HRGreen<sub>®</sub>

SEH

### **Project Limits**



I-229 Exit 6 (10th Street) Interchange and Mainline I-229













## **Tentative Project Schedule**

TASKS	2020		2021			2022			2023				2024							
TASK 1: PLANNING STUDY																				
TASK 2: ENVIRONMENTAL STUDY																				
TASK 3: TOPOGRAPHIC SURVEY																				
TASK 4: UTILITY COORDINATION AND LOCATING																				

#### **Dependent on Phasing and Funding**









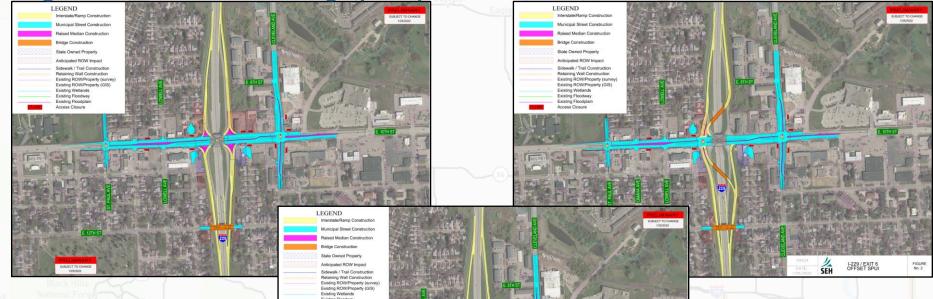




# Study Alternatives -

10th St. Interchange

Single Point Urban Interchange (SPUI) **Offset SPU** 



**Diverging Diamond** Interchange (DDI)















# **Recommended Alternative** 10th Street Interchange

Single Point Urban Interchange (with ramp improvements)











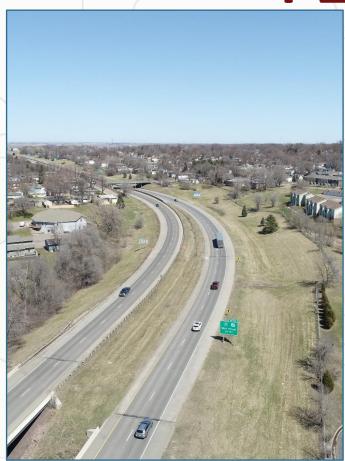








# **Study Alternatives -I-229 Mainline**



Implement curve improvements

No curve improvements

Widen inside shoulder

No widening to inside shoulder







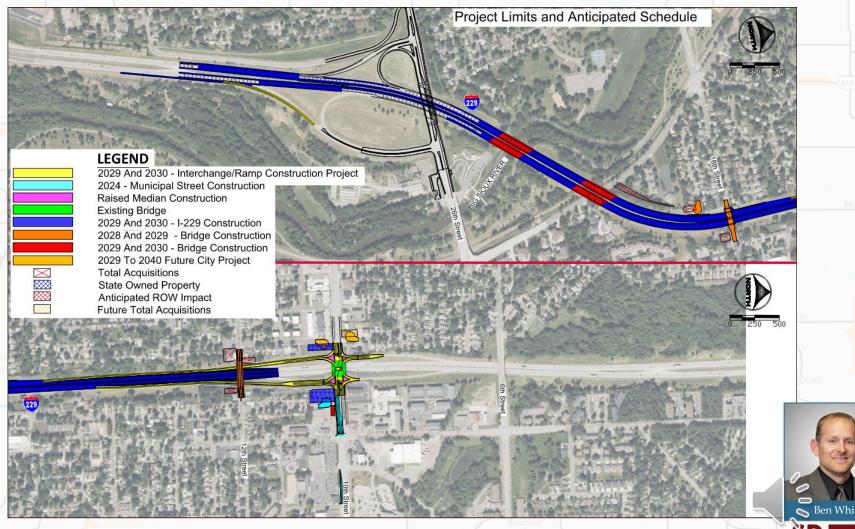






### Recommended Alternative I-229

Add travel lanes, implement curve improvements, and widen inside shoulders











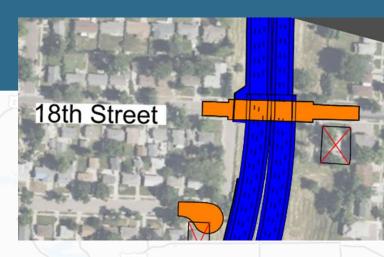




### **Pedestrian Impacts**







- East 12th Street & East 18th Street bridge crossings are planned to be reconstructed and pedestrian accommodations implemented
- No changes to existing crossings at E. 6th Street or **Southeastern Avenue**
- No changes to existing trail system along the Big Sioux River
- No changes to existing pedestrian facilities on E 10th Street









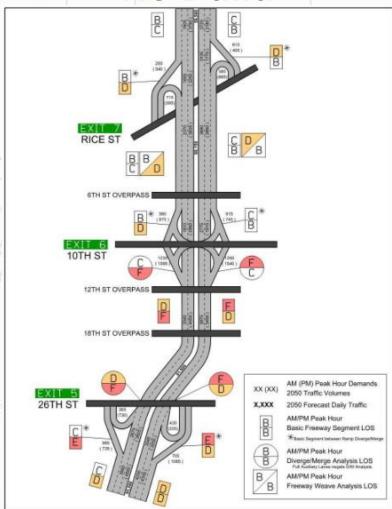




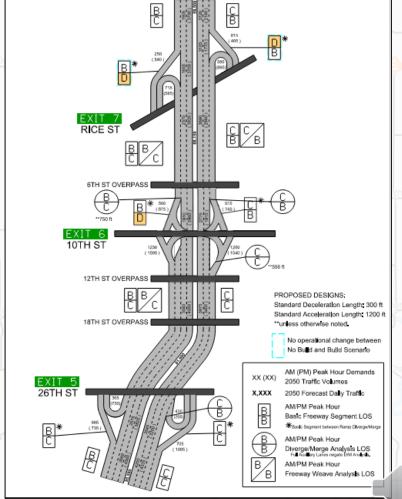


### **Traffic Analysis – Mainline**

### No Build



### Build















### **Traffic Analysis - Interchange**

#### No Build

Vehicle Queues NB Ramp: 1,325'

SB Ramp: 1,430'



				Al	M Peak	Hour		PM Peak Hour						
Major Roadway	Intersecting Roadway	Control Type		Appr	oach		INT.		INT.					
		134-5	В	WB	NB	SB	ž	EB	WB	NB	SB	INT.		
Rice Street	I-229 SB Ramp Terminal	Signal	В*	В	NA	Е	C-*	č	O	NΑ	D*	C*		
Rice Street	I-229 NB Ramp Terminal	Signal	F	F	F*	E*	F	F	D	F*	F*	F		
10th Street	Jessica Avenue	Signal	Α	Α	С	NA	Α	В	Α	D	NA	В		
10th Street	Lowell Avenue	Signal	Α	В	E	Е	В	D	C*	D	F	D-*		
10th Street	Conklin Avenue	RI/RO			D	D	D			F	С	F		
10th Street	I-229 SPUI	Signal	F	D	F	D	F	E	D	D	F	E-		
10th Street	Blaine Avenue	RI/RO			С	NA	С			Е	NA	E		
10th Street	Cleveland Avenue	Signal	D*	F	F*	F	F	B*	F	F*	F*	F		
10th Street	Hy-Vee Entrance	Signal	A*	В	Е	F	B-*	A*	В	E*	E*	B*		
26th Street	I-229 SB Ramp Terminal	Signal	В	Α	В	NA	В	С	Α	В	NA	В		
26th Street	I-229 NB Ramp Terminal	Signal	С	В	В	NA	В	В	Α	F	NA	E-		

#### Build

Vehicle Queues NB Ramp: 625'

SB Ramp: 570'



				Al	M Peak	Hour			PI	/ Peak	Hour	
Major Roadway	Major Intersecting Roadway	Control Type		Appr	oach		10.00					
		5	EB	WB	NB	SB	INT.	ЕВ	WB	NB	SB	INT.
Rice Street	I-229 SB Ramp Terminal	Signal	B*	В	NA	E	C-*	C*	C	NA	D*	C*
Rice Street	I-229 NB Ramp Terminal	Signal	F	F	F*	E*	F	F	D	F*	F*	F
10th Street	Jessica Avenue	Signal	Α	Α	E*	NA	A*	Α	Α	F*	NA	A*
10th Street	Lowell Avenue	Signal	Α	Α	D	Е	В	Е	D	D	F	E
10th Street	Conklin Avenue	RI/RO			D	D	D			F	С	F
10th Street	I-229 SPUI	Signal	С	В	D*	Е	С	С	B*	D-*	F*	D-*
10th Street	Blaine Avenue	-										
10th Street	Cleveland Avenue	Signal	D-*	F	F*	F	F*	D-*	F	F*	F*	F*
10th Street	Hy-Vee Entrance	Signal	A*	В	E	Е	B-*	A*	В	E*	E*	B*
26th Street	I-229 SB Ramp Terminal	Signal	В	Α	В	NA	В	С	Α	В	NA	В
26th Street	I-229 NB Ramp Terminal	Signal	С	В	В	NA	В	В	Α	F	NA	E-















### **Safety Analysis - Mainline**

Facility Type	Crash Type	No Build	Build
Freeway Segment -	Fatal/Injury	168	144
	Property Only	369	280
	Fatal/Injury	42	60
Areas	Property Only	102	136
	Fatal/Injury	210	204
ALTERNATIVE	Property Only	471	416
TOTALS	TOTAL	681	620
	% Reduction	-	9.00%















### Safety Analysis - Interchange

Facility Type	Crash Type	No Build	Build SPUI
Arterial Corridor &	Fatal/Injury	403	385
Intersections	Property Only	692	667
Down Connections	Fatal/Injury	32	41
Ramp Connections	Property Only	30	42
	Fatal/Injury	436	426
ALTERNATIVE	Property Only	722	709
TOTALS	TOTAL	1,158	1,135
	% Reduction	-	2.1%

















This project is being developed in accordance with applicable State and Federal environmental regulations.



**National Environmental Policy Act of** 1969 (NEPA), as amended. Coordination has been initiated with **State & Federal resource agencies.** 



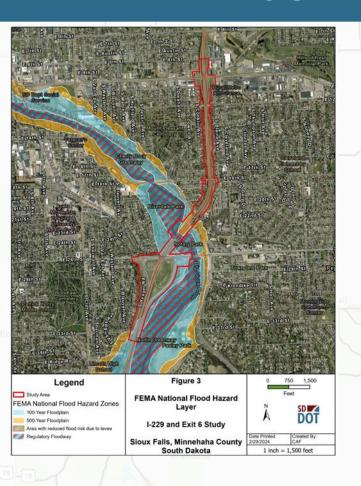












### **Environmental Screening** Report

- Evaluate resources
- Help early design decisions
- Guide future NEPA documentation















#### **Notable Identified Resources**

- Big Sioux River and wetlands
- Cultural and historic resources
- Potentially contaminated properties
- State and local parks and trail networks
- Right of way and property acquisitions
- Additional noise evaluations





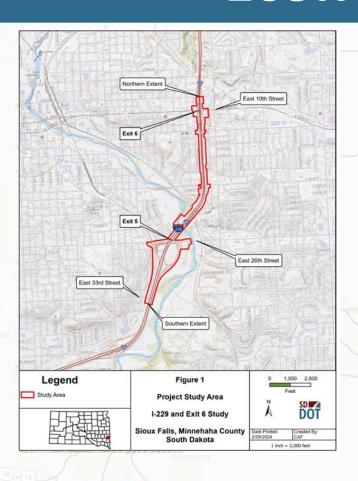












#### **Future NEPA Documentation**

- Guide alternative selection and design
- Determine NEPA documentation type
- Identify state and federal agency permit coordination needs













### **Tentative Project Schedule**

**Dependent on Phasing and Funding** 

#### Study Phase Schedule:

TASKS	2020		2021			2022			2023			2024						
TASK 1: PLANNING STUDY																		
TASK 2: ENVIRONMENTAL STUDY																		<b>(3)</b>
TASK 3: TOPOGRAPHIC SURVEY																		
TASK 4: UTILITY COORDINATION AND LOCATING																		

#### Construction Schedule:

2024 - Municipal Street Construction

2028 & 2029 – 12th St. & 18th St. Bridge Construction

2029 & 2030 - I-229 Construction

2029 & 2030 – Interchange/Ramp Construction

2030 – 2040 – Future Municipal Street Construction















### **Public Input**

Submit Questions and/or Comments:

by:

Friday, April 19, 2024



to:

Phil Gundvaldson, PE InfrastructureDG 116 W. 69<sup>th</sup> St., Suite 200 Sioux Falls, SD 57108 PhilG@InfrastructureDG.com

Public meeting and additional contact information can be found at: <a href="https://www.i229exit6.com/">https://www.i229exit6.com/</a>













