



PUBLIC MEETING

Project Location: Interstate 29 from exit 114 (Flandreau) to three miles north of exit 133 (Brookings)

Project Number: CR 0294(74)114 PCN 080D

Date: Thursday, April 11, 2024 – 5:30 p.m. A short presentation will be given around 5:45 p.m.

Dave Huft, South Dakota
Department of Transportation
(SDDOT)
ITS Program Manager

Josh Larson, McLaury Engineering
Project Manager

Jake Folkeringa, Bolton & Menk
ITS Engineer

MISSION



**To efficiently provide a safe and effective
public transportation system.**

<https://dot.sd.gov/>

PURPOSE OF THE MEETING

Involve the public in the planning and design process

Provide a project overview

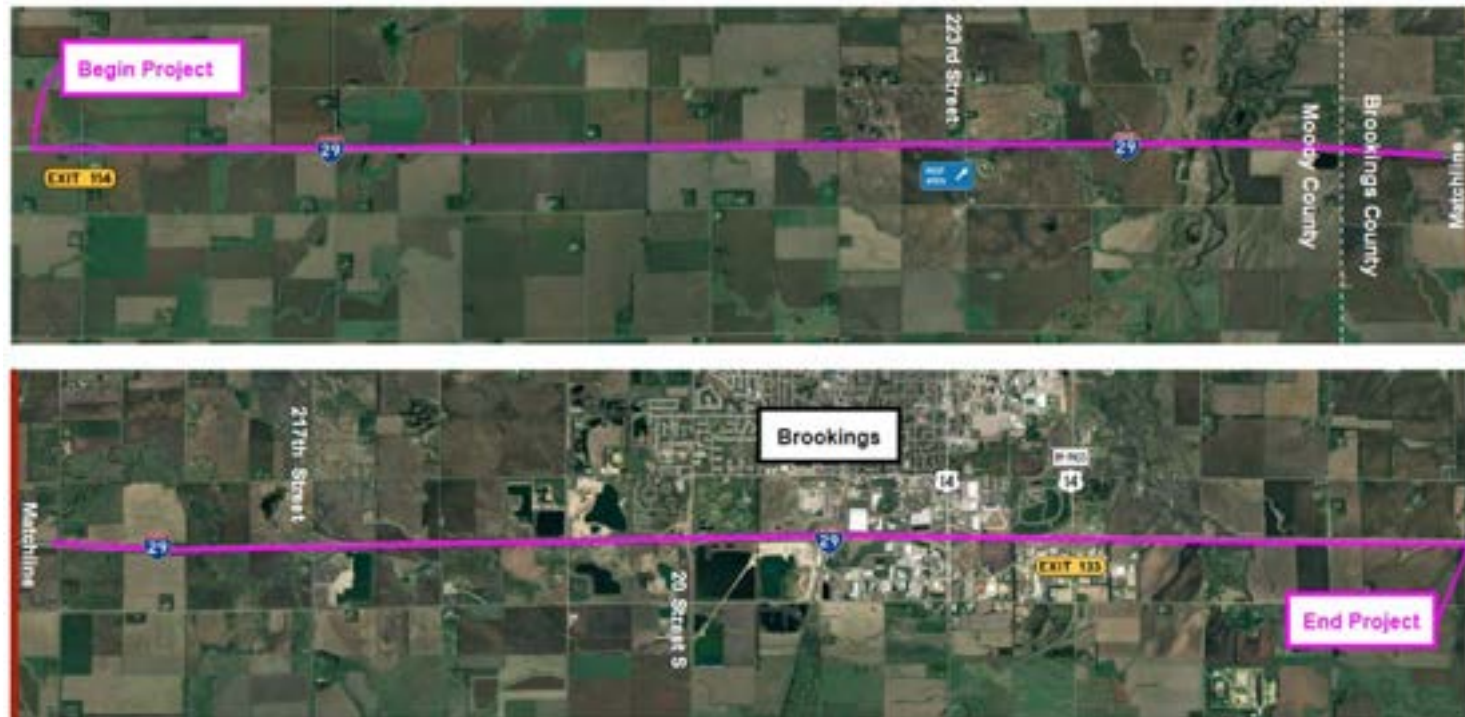
Gather input and comments



- ✓ Background information
- ✓ Proposed project
- ✓ Project schedule



PROJECT LIMITS



BACKGROUND INFORMATION



The Challenge

- I-29 often experiences severe winter weather resulting in injuries, deaths, secondary collisions, delays, closures, and travel time unreliability.

Potential Countermeasures

- The variable speed limit (VSL) system is designed to lower the regulatory speed limit when appropriate, based on real-time roadway and travel conditions.
- The supporting intelligent transportation system (ITS) deployments may include queue warning systems, road closure gates, and signing enhancements.



2022 Statistics

2

Fatalities

32

Crashes During
Winter Weather

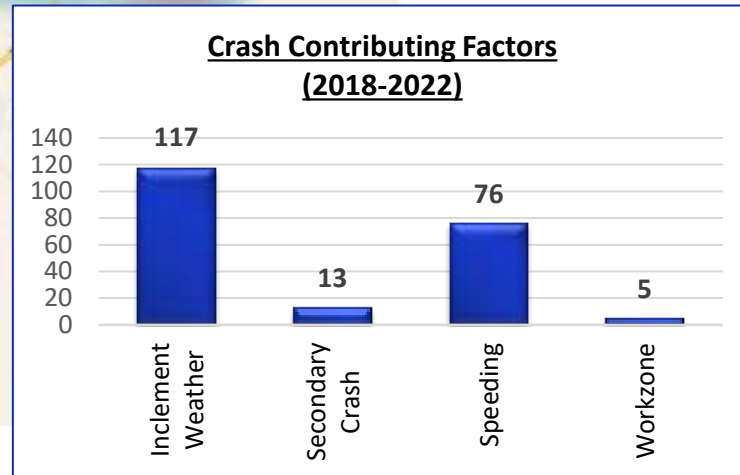
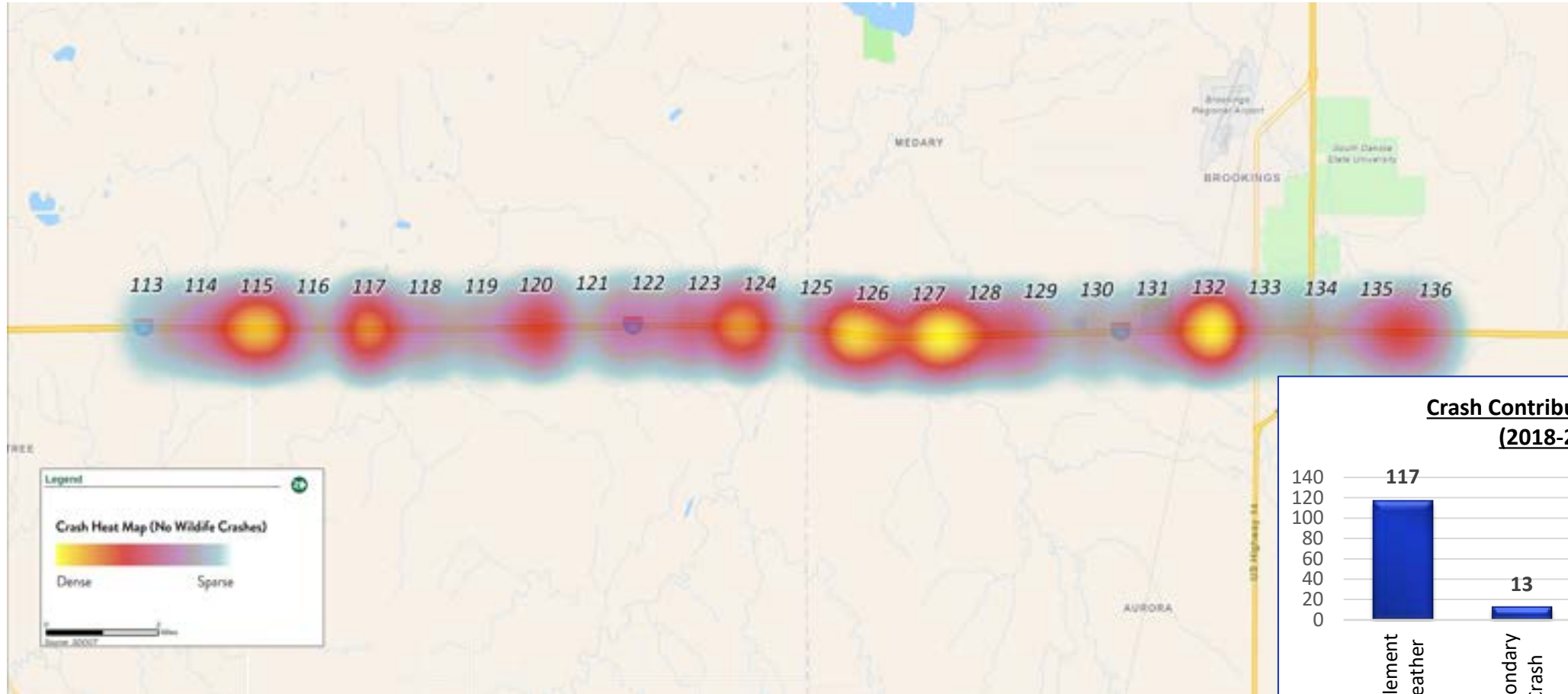
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Winter Weather Full
Roadway Closures
(‘22 - ‘23 Winter Season)

9

SDSU Home Football
Games Leading To
Traffic Congestion

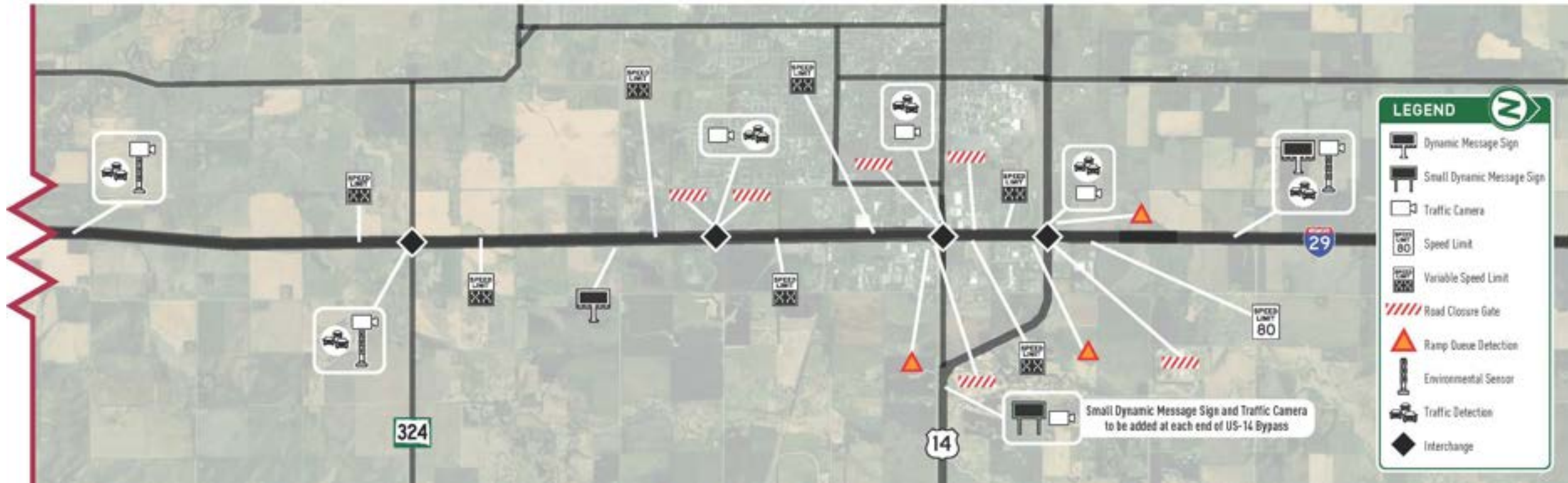
SAFETY CHALLENGES



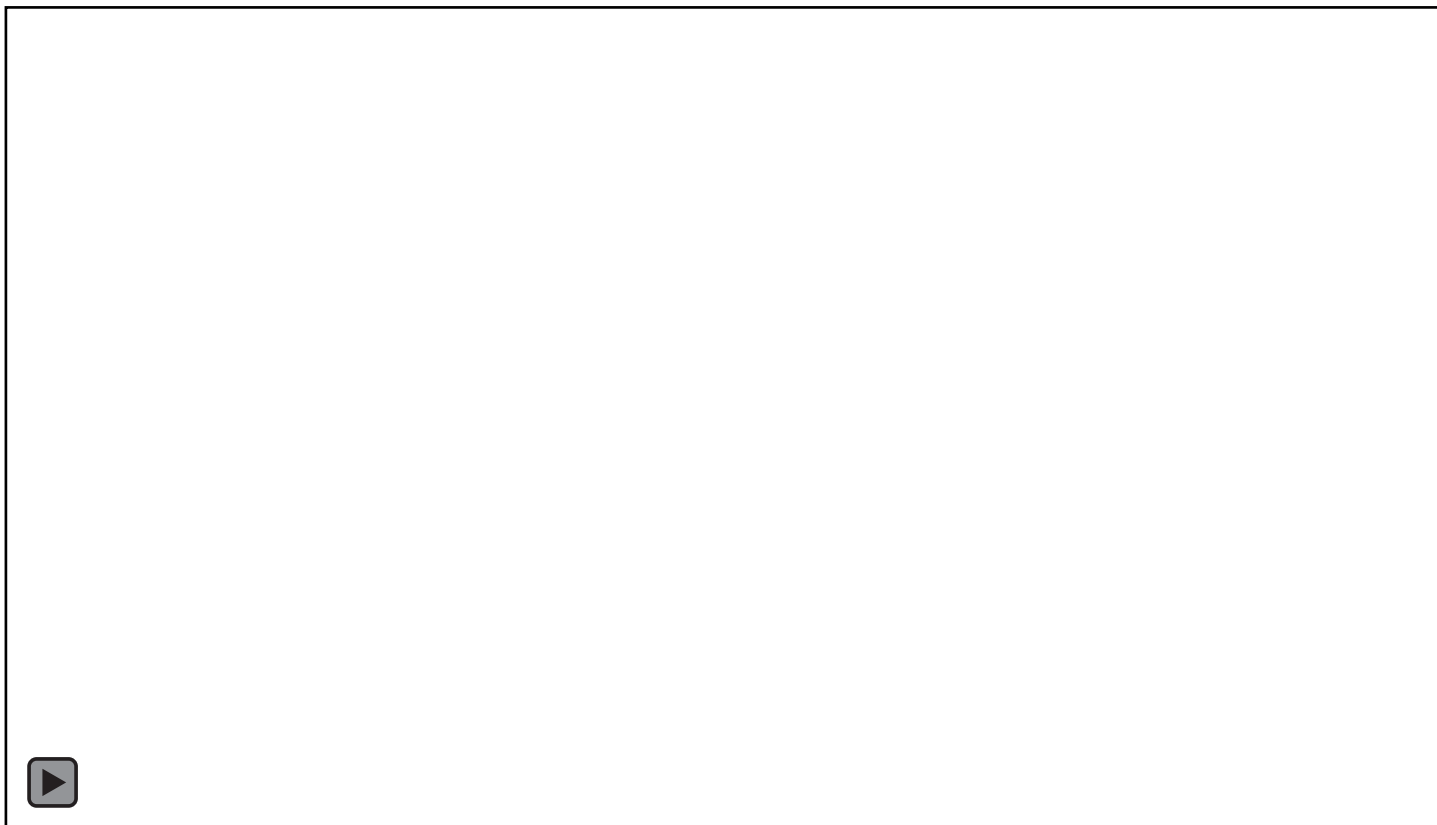
PROPOSED IMPROVEMENTS



PROPOSED IMPROVEMENTS



VARIABLE SPEED LIMITS



VARIABLE SPEED LIMIT BENEFITS



VSL can reduce crashes on Interstates up to:

- 34% for total crashes
- 65% for rear-end crashes
- 51% for fatal and injury crashes

Benefit/cost ratios range between 9:1 – 40:1

Reduce Interstate closures by 33%

States currently using VSL include:

- Alabama, Colorado, Indiana, Michigan, Ohio, Oregon, Pennsylvania, Virginia, Washington, and Wyoming

States planning/considering VSL include:

- Minnesota, North Dakota, and Texas



WHAT THE SYSTEM IS NOT



It is NOT a winter speed trap.

It is NOT a way to reduce speeds during normal driving conditions.

It is NOT a way to capture your photo or personal information.

SYSTEM COMPONENTS

CORE SYSTEM COMPONENTS



VSL Signs



Environmental Sensors



Traffic Detection



Traffic Cameras



SUPPORTING DEVICES



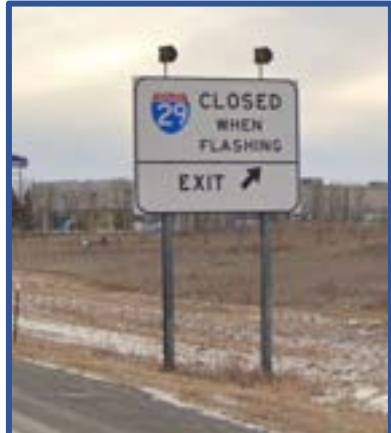
Dynamic Message Signs



Ramp Queue Detection

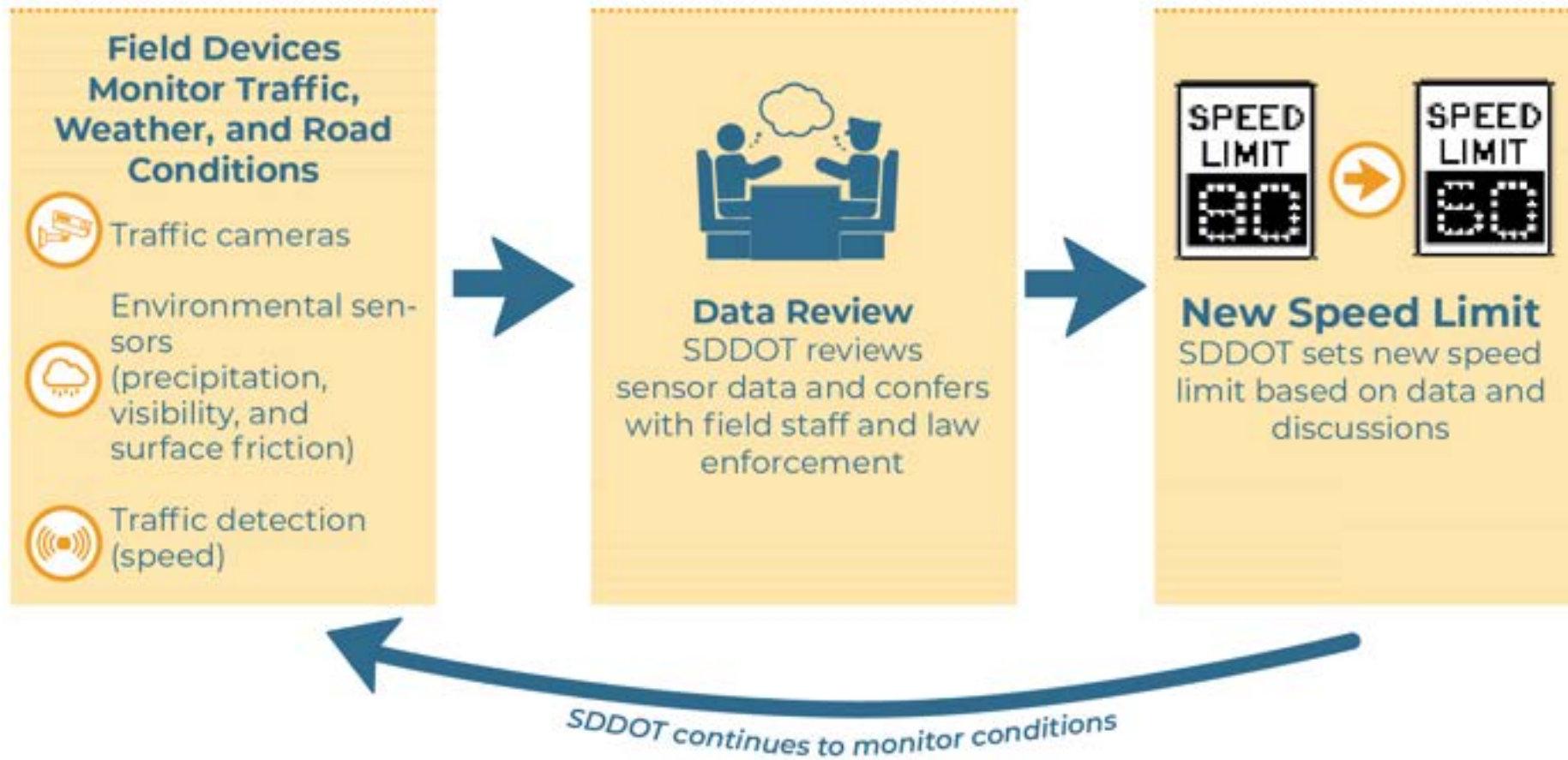


Road Closure Gates



Road Closure Gate Signs

HOW IT WORKS



USE CASES



Primary Uses



Normal Operations



Severe Weather Event

Secondary Uses



Traffic Incident



Construction



Special Event

TENTATIVE PROJECT SCHEDULE



Planning and
Preliminary Design

Construction

Winter 2023-2024

Spring 2024

Summer 2025

Winter 2025-2026

Final
Design

Begin
VSL Operations



QUESTIONS OR COMMENTS

DEADLINE:

Friday, April 26th, 2024

SUBMIT TO:

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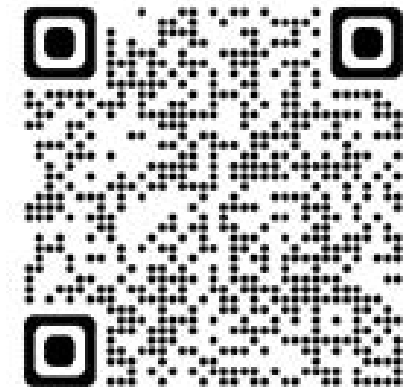
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WEBSITE:

https://dot.sd.gov/projects-studies/projects/public-meetings#listItemLink_1980



THANK YOU



SCAN ME