

# County Road 26 (TH3 to Babcock Trail) Improvement Project Open House

October 8, 2024



## **Project Location**



Allen Way to Babcock Trail (4:30pm)



### **Purpose and Need**



#### • This project will

- Reconstruct and expand the roadway to accommodate developments
- Add drainage, utility extensions, and a multiuse trail
- Manage driveway and roadway access points
- Modify existing hilly profile to improve safety



![](_page_3_Picture_0.jpeg)

# Traffic Analysis

![](_page_4_Picture_0.jpeg)

CP 26-60: Allen Way to Babcock Trail Segment

### **RRSVS Summary**

- Regional Roadway System Visioning Study (RRSVS) - updated in 2022.
  - Guides future transportation improvements in northeast Eagan and northwest Inver Grove Heights for future conditions
- Recommendations for this segment of CSAH 26 include reconstruction to a 3lane facility and access management improvements

![](_page_5_Figure_4.jpeg)

![](_page_5_Picture_6.jpeg)

## **Corridor Crash and Safety Analysis**

![](_page_6_Picture_1.jpeg)

#### Crashes 2019-2023 (and Q1 2024)

![](_page_6_Figure_3.jpeg)

- The crash rate is below average, with no serious injuries or fatalities
- Rolling, substandard vertical roadway profile does not meet roadway design speed

#### CP 26-60: Allen Way to Babcock Trail Segment

### What is Access Management?

- Planning the location, spacing, design, and operation of driveways, median openings and street connections to a roadway
- Managing access helps protect public investment in roadways and improve public safety
  - Preserves mobility
  - ✓ Reduces delay
  - ✓ Minimizes crash problems

![](_page_7_Figure_7.jpeg)

![](_page_7_Picture_8.jpeg)

### Access Management

![](_page_8_Picture_1.jpeg)

Dakota County Transportation Plan Policy:

 Major access points must be 0.125 miles apart to allow for partial access and 0.25 miles apart to allow for full access

Multiple intersections in project area do not meet current County access spacing guidelines

![](_page_8_Figure_5.jpeg)

### **Types of Intersection Controls**

![](_page_9_Picture_1.jpeg)

![](_page_9_Picture_2.jpeg)

#### CP 26-60: Allen Way to Babcock Trail Segment

![](_page_10_Picture_0.jpeg)

# **Roadway Improvements**

## **Roadway Typical Section**

![](_page_11_Picture_1.jpeg)

#### **Existing Typical Section**

![](_page_11_Picture_3.jpeg)

#### Potential Roadway Typical Section

![](_page_11_Picture_5.jpeg)

\*Trail facility is being evaluated and may only be feasible on one side

- One through lane in each direction
- Rural Section (no curb and gutter) with narrow gravel shoulder
- Inconsistent turn lanes at side street intersections

One through lane in each direction

>

>

>

>

>

- Urban Section with curb and gutter
- Wider, paved shoulders
- Multi-use trail facilities
- Right and left turn lanes at city street intersections

CP 26-60: Allen Way to Babcock Trail Segment

### What is a Vertical Profile?

![](_page_12_Picture_1.jpeg)

![](_page_12_Picture_2.jpeg)

# **Vertical Profile:** Elevation change along a roadway

Sharp curves reduce visibility for drivers and lead to safety issues. They can also produce a "rolling" feeling while driving.

### **Roadway Vertical Profile Concepts**

![](_page_13_Picture_1.jpeg)

![](_page_13_Figure_2.jpeg)

#### Profile Evaluation Criteria

- > Intersection and Stopping Sight Distance
- Profile Smoothness
- > ADA and Bicycle Considerations
- Impacts to adjacent City roadway system and existing stormwater/environmental areas

- > Impacts to adjacent private property owners
- Construction cost

# **Potential Access Management Modifications**

![](_page_14_Picture_1.jpeg)

#### Two Concepts Being Considered at Arlene Ave

![](_page_14_Picture_3.jpeg)

**Right In Right Out** 

![](_page_14_Picture_5.jpeg)

Cul-De-Sac

# **Potential Access Management Modifications**

![](_page_15_Picture_1.jpeg)

#### Other Intersections at 70<sup>th</sup> Street

#### Allen Way

![](_page_15_Figure_4.jpeg)

#### Angus Ave

![](_page_15_Picture_6.jpeg)

#### Athena Way/Golf Course

![](_page_15_Picture_8.jpeg)

#### Babcock Trail

![](_page_15_Picture_10.jpeg)

## **Trail Consideration Map**

Adding a multimodal trail will:

- Connect pedestrians and cyclists to the existing trail network
- Increase access to parks and area schools
- Provide safe options for pedestrians and cyclists

![](_page_16_Figure_5.jpeg)

![](_page_16_Picture_6.jpeg)

![](_page_16_Picture_7.jpeg)

### Schedule and Next Steps

![](_page_17_Picture_1.jpeg)

![](_page_17_Figure_2.jpeg)

CP 26-60: Allen Way to Babcock Trail Segment

![](_page_18_Picture_0.jpeg)

# County Road 26 (Babcock Trail to Cahill Avenue) Improvements Project Open House

#### October 8, 2024

![](_page_18_Picture_3.jpeg)

## **Project Location**

![](_page_19_Picture_1.jpeg)

Allen Way to Babcock Trail **(4:30pm)** 

![](_page_19_Figure_3.jpeg)

### **Purpose and Need**

![](_page_20_Picture_1.jpeg)

#### • This project will

- Reduce the roadway from five lanes to three lanes
- Add multi-use trail along north side of roadway
- Manage driveway and roadway access by adding a raised, center median
- Consider intersection safety
   improvements
- Rehabilitate existing pavement
  - Pavement fully replaced last in 1992

![](_page_20_Picture_9.jpeg)

![](_page_21_Picture_0.jpeg)

# Traffic Analysis

# Traffic and Safety Analysis Components

![](_page_22_Picture_1.jpeg)

![](_page_22_Figure_2.jpeg)

#### **Existing Traffic Conditions Analysis**

![](_page_22_Figure_4.jpeg)

**Corridor Crash and Safety Analysis** 

![](_page_22_Figure_6.jpeg)

**Access Management Review** 

![](_page_22_Figure_8.jpeg)

CP 26-68: Babcock Trail to Cahill Avenue Segment

# **Existing Traffic Conditions Analysis**

![](_page_23_Picture_1.jpeg)

#### **Existing Level of Service (PM Peak)**

![](_page_23_Figure_3.jpeg)

- Level of service intersection scores are generally high, showing free traffic flow during evening peak traffic.
- A roundabout is being considered by MnDOT at the southbound ramp of TH 52

### Crash Analysis

![](_page_24_Picture_1.jpeg)

#### Crash Severity 2019-2023 (and Q1 2024)

![](_page_24_Figure_3.jpeg)

The corridor crash rate is below average, with no serious injuries or fatalities

#### CP 26-68: Babcock Trail to Cahill Avenue Segment

### What is Access Management?

- Planning of the location, spacing, design, and operation of driveways, median openings and street connections to a roadway
- Managing access helps protect public investment in roadways and improve public safety
  - ✓ Preserves mobility
  - ✓ Reduces delay
  - ✓ Minimizes crash problems

![](_page_25_Figure_7.jpeg)

![](_page_25_Picture_8.jpeg)

## **Types of Intersection Controls**

![](_page_26_Picture_1.jpeg)

#### Major Intersections

![](_page_26_Picture_3.jpeg)

#### **Minor Intersections**

![](_page_26_Picture_5.jpeg)

**Right-In Right-Out** 

![](_page_26_Picture_7.jpeg)

![](_page_26_Picture_8.jpeg)

CP 26-68: Babcock Trail to Cahill Avenue Segment

### Access Management

![](_page_27_Picture_1.jpeg)

Dakota County Transportation Plan Policy:

 Major access points must be 0.125 miles apart to allow for partial access and 0.25 miles apart to allow for full access

Multiple intersections in project area do not meet current County access spacing guidelines

![](_page_27_Picture_5.jpeg)

![](_page_28_Picture_0.jpeg)

# **Roadway Improvements**

AXLE WEIGHT LIMIT 9 TONS

45

## **Major Intersection Review**

Future MnDOT led project

![](_page_29_Picture_1.jpeg)

Babcock Trail Intersection	TH 52 Ramps	Blaine Ave Intersection	Booth Ave, Bovey Ave, and Bovey Trail	Cahill Ave Intersection
<ul> <li>All-Way Stop Warranted</li> <li>Changes to intersection traffic control not being considered</li> </ul>	<ul> <li>NB Ramp – All way stop, roundabout, and signal not warranted</li> <li>SB Ramp – Being reviewed by</li> </ul>	<ul> <li>Traffic Signal Warranted</li> <li>Roundabout option being considered</li> </ul>	Options are being evaluated that may restrict some turning movements	<ul> <li>Traffic Signal Warranted</li> <li>Roundabout option being considered</li> </ul>

![](_page_29_Picture_3.jpeg)

# **Intersection Control Modifications**

![](_page_30_Picture_1.jpeg)

#### Blaine Avenue

![](_page_30_Picture_3.jpeg)

#### **Booth Avenue**

![](_page_30_Picture_5.jpeg)

#### **Bovey Avenue**

![](_page_30_Picture_7.jpeg)

![](_page_30_Picture_8.jpeg)

#### South Valley Park

![](_page_30_Picture_10.jpeg)

![](_page_30_Picture_11.jpeg)

#### Cahill Avenue

![](_page_30_Picture_13.jpeg)

# **Through Lane Reduction**

![](_page_31_Picture_1.jpeg)

- This project proposes a lane reduction from 5 to 3 lanes. This will:
  - Match the future roadway west of Babcock Trail
  - Provide space for a multi-use trail on the north side of 70<sup>th</sup> Street
  - Right-size the roadway to current and future traffic volumes

Traffic analysis showed that all intersections and side streets will continue to operate at acceptable traffic levels

# **Through Lane Reduction**

![](_page_32_Picture_1.jpeg)

![](_page_32_Picture_2.jpeg)

#### **Benefits of a through-lane reduction:**

- Would have a minimal impact on traffic operations. A single through-lane with turn lanes at intersections would be correctly sized for future traffic volumes
- Shortens side street crossing distances at intersections, compared to a 5-lane roadway
- > Provides space for other uses such as trails
- Reduces the number of potential vehicle conflict points, leading to decreased crashes

### Lane Reduction – Level of Service

![](_page_33_Picture_1.jpeg)

![](_page_33_Figure_2.jpeg)

#### 2040 Traffic – No changes to the roadway

In 2040 the number of cars using the roadway is expected to increase, but analysis shows minimal impacts to traffic operations

#### 2040 Traffic – Assuming proposed changes

In 2040 with a through lane reduction, traffic delay does increase at some intersections, but all intersections still have an acceptable level of service

### **Roadway Typical Section**

![](_page_34_Picture_1.jpeg)

#### Existing

![](_page_34_Picture_3.jpeg)

#### Potential Roadway Typical Section

![](_page_34_Picture_5.jpeg)

#### **Proposed Changes**

- One through lane in each direction
- Turn lane improvements at City side street intersections
- Multi-use trail facility added to north side of roadway
- Raised median along entire roadway section
- Access management improvements being considered at side street intersections

## **Trail Consideration Map**

![](_page_35_Picture_1.jpeg)

- Connect pedestrians and cyclists to the existing trail network
- Increase access to parks and area schools
- Provide safe options for pedestrians and cyclists

![](_page_35_Figure_5.jpeg)

![](_page_35_Picture_6.jpeg)

### Schedule and Next Steps

![](_page_36_Picture_1.jpeg)

![](_page_36_Figure_2.jpeg)

CP 26-68: Babcock Trail to Cahill Avenue Segment