### TRAFFIC MANAGEMENT ADVISORY COMMITTEE (TMAC)

Polk County Emergency Management Center and Zoom

Wednesday March 6, 2024



### Agenda

- 1. Call to Order
- 2. Introductions
- 3. Iowa DOT 2024 Construction Updates
  - Gary Kretlow (Iowa DOT)
- 4. Des Moines Metro 2023 Crashes Summary
  - Zhi Chen (Des Moines Area MPO)
- 5. Other Discussions and Community Announcements
- 6. Next Meeting
- 7. Adjournment

### **Introductions**

### Please briefly introduce yourself

- Name
- Organization



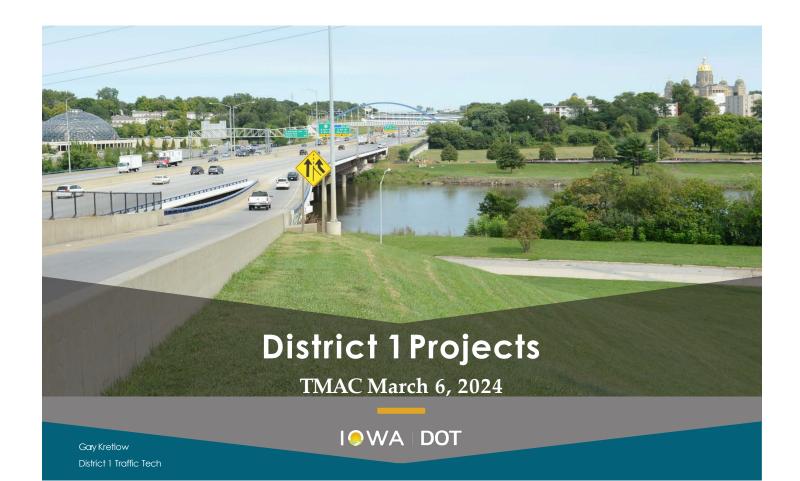


**Gary Kretlow** 

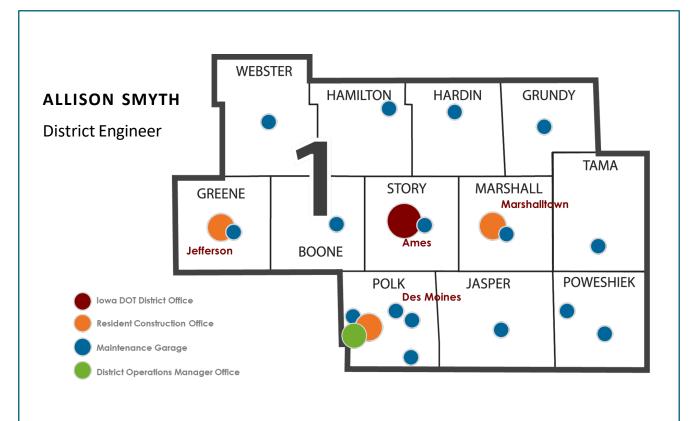
### **IOWA DOT 2024 CONSTRUCTION UPDATES**



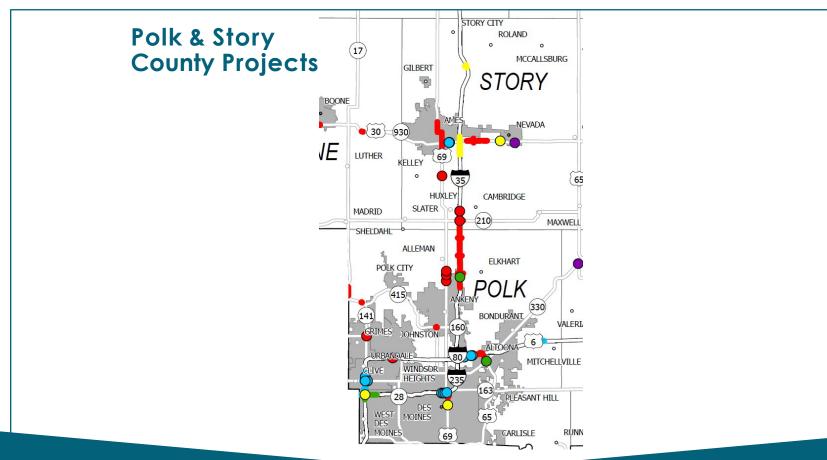












District 1 Projects





#### I-35/80/235

Northeast Mixmaster Grading/Paving/Bridges

\$ 90 Million (Awarded)

\$ 27 Million (Programmed)

2022-2025







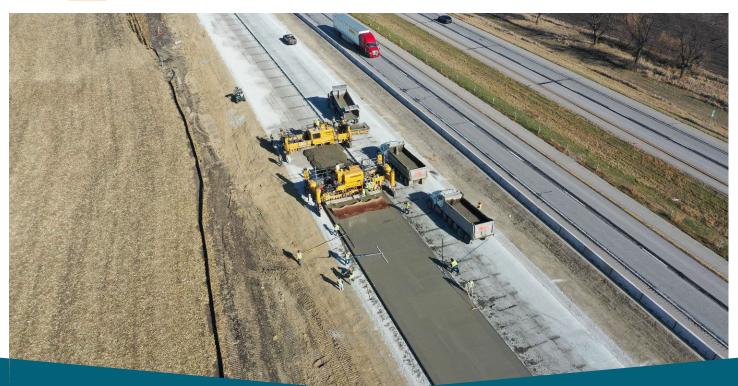
#### I-35 Capacity Improvements

Ankeny to Huxley

\$ 59.2 Million (Awarded)

\$ 104.4 Million (Programmed)

2023-2027







#### **I-35 Capacity Improvements**

Ankeny to Huxley

\$ 59.2 Million (Awarded)

\$ 104.4 Million (Programmed)

2023-2027





### **Upcoming Projects**

I-35 Ankeny to Ames Capacity Improvements

#### E-57 to North of US 30

2027 ROW

\$5.2 Million (Programmed) 2028 Grade/Pave/Signs

\$ 11.1 Million (Programmed)

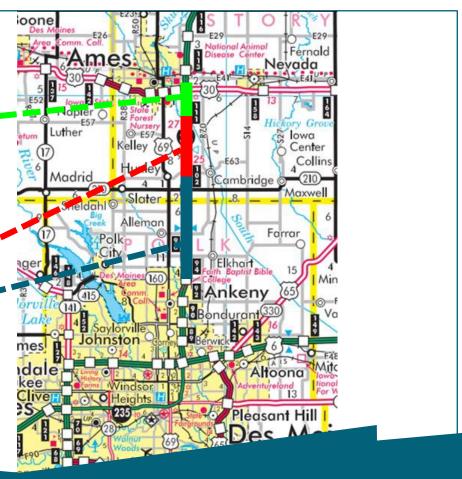
2029+ Grade/Pave/Bridge

\$57.5 Million (Unprogrammed)

**Huxley to E-57 (Unprogrammed)** 

#### **Ankeny to Huxley**

\$ 59.2 Million (Awarded) \$ 104.4 Million (Programmed) 2023-2027



District 1 Drainate





I-35/80/235 Northeast Mixmaster to US 65 Capacity Improvements \$ 76.1 Million (Programmed) 2025 - 2028





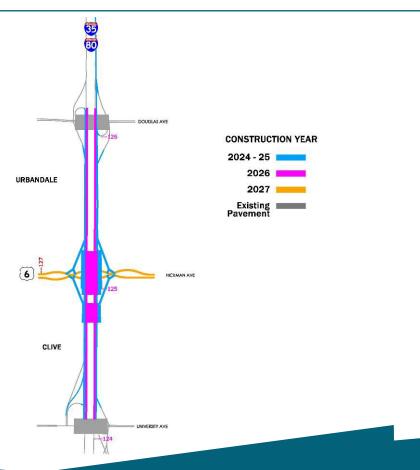
District 1 Projects



### **Upcoming Projects**

I-35/80 & US 6 (Hickman Road)
Interchange Reconstruction

From University Avenue to Douglas Ave \$ 93.8 Million (Programmed) 2025 - 2028







#### I-35/80/235 Southwest

Reconstruction

\$ 79 Million (Programmed) 2027 - 2029



District 1 Projects

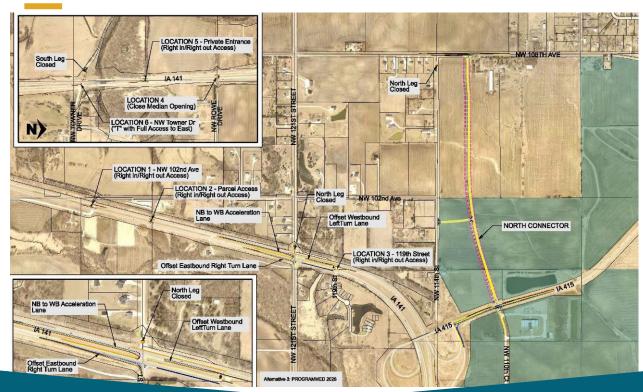


### Upcoming Projects

#### IA 141 at NW 121st Street

Safety Improvements

\$ 12.7 Million (Programmed) 2025







US 69 & Maury Street Intersection Reconstruction Bridge Replacement Road \$1.3 Million (Programmed) Bridge \$21 Million (Programmed) 2027





### Questions?



#### **Gary Kretlow**

515-239-1199

gary.kretlowjr@iowadot.us

iowadot.gov

District 1 Projects

Zhi Chen

### **DES MOINES METRO 2023 CRASHES SUMMARY**



### 2023 Crashes Summary Report

### In 2023, in the Des Moines metro area

- 11,199 total crashes
  - 38 fatalities
  - 180 serious injuries
  - 29 non-motorized fatalities and serious injuries
    - 8 fatalities
    - 21 serious injuries



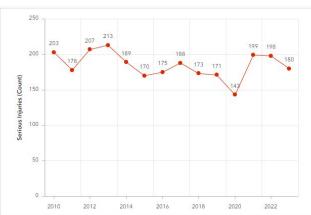




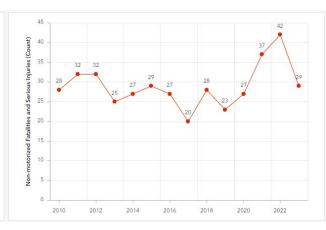
### 2023 Crashes Summary Report



#### **Serious Injuries**



#### **Non-motorized Fatalities & Serious Injuries**





### **Fatal Crashes Summary**

#### Who

- o 74.2% of drivers were male; 24.2% were female
- o 57.6% of drivers were in their 20s (21.2%), 30s (18.2%), or 60s (18.2%)
- o 28.2% of the fatalities did not use any occupant protection
- 64.1% of the fatalities were males in their 20s and 30s (43.6%) and in their 60s and 70s (20.5%)
  - The largest group for fatalities (28.2%) was males in the 20s

#### What

- 30.8% of the vehicles were passenger cars, 20.0% motorcycles, 18.5% light trucks, and 16.9% sport utility vehicles (SUVs)
- 40.5% of the fatal crashes were single vehicle non-collisions, 16.2% rear-end, 16.2% broadside, and 10.8% head-on

#### When

- o 16.2% of the fatal crashes occurred in October, 13.5% in August, 13.5% in September, and 10.8% in June
- 29.7% of the fatal crashes occurred on Saturdays and 18.9% on Wednesdays
- Fatal crashes happened most between 8 PM and 10 PM (21.6%), 2 PM and 4 PM (16.2%), 10 PM and 12 AM (13.5%), and 12 AM and 2 AM (10.8%)

#### Where

- o 35.1% of the fatal crashes occurred on the Interstate, 29.7% on municipal roads, and 21.6% on US Routes
- o 18.9% of the fatal crashes occurred at four-way intersections

#### Why

- 18.9% of the fatal crashes were caused by speeding and 10.8% caused by reckless driving
- o 24.3% of the fatal crashes involved drugs and 10.8% involved alcohol



### Serious Injury Crashes Summary

#### Who

- o 65.6% of drivers in serious injury crashes were male
- o 19.2% of drivers in serious injury crashes were in their 30s, and 19.6% of drivers were in their 40s
- 29% of the people involved in serious injury crashes did not use any occupant protection
- 68.6% of the serious injuries were males
  - Males in their 30s were the largest group of serious injuries (14.9%)

#### What

- o 32.3% of the vehicles were passenger cars, 25.8% sport utility vehicles (SUVs), 15.8% four-tire light truck (pick up), and 15.1% motorcycles
- o 36% of the serious injury crashes were single vehicle non-collisions, 20.0% broadside (front to side) collisions, and 17% were rear end (front to rear) collisions

#### When

- o 12.9% of the serious injury crashes were in July, 12.3% in September, 11.7% in April, 11.0% in August, and 9.8% in June
- o 17.8% of the serious injury crashes were on Wednesdays and 17.8% on Thursdays
- Serious injury crashes occurred mostly between 6 PM to 8 PM (17.2%) and from 4 PM to 6 PM (16.6%)

#### Where

- 57.7% of the serious injury crashes occurred on municipal roads, 13.5% on Interstates, and 12.9% on US Routes
- o 31.3% of the serious injury crashes occurred at four-way intersections

#### Why

- o 10% of the serious injury crashes were caused by losing control, 8.6% from failure to yield the right of way when making a left turn, 6.7% from exceeding the authorized speed, 6.7% from operating the vehicle recklessly, and 6.1% from running the traffic signal
- 14% of the serious injury crashes were related to alcohol, drugs, or medications



### Non-motorized Fatal and Serious Injury Crash Summary

#### Who

- o 60% of drivers were male; 23% were female
- o Drivers were between the ages of 35 and 39 (8.6%), 45 and 49 (8.6%), and 65 and 69 (8.6%).
- o 82.1% of non-motorists were pedestrians and 14.3% were pedalcyclists
- Males accounted for all the non-motorist fatalities and about 67% of the serious injuries
- Males in their 50s and 60s accounted for the largest group of non-motorized serious injuries

#### What

- o 31.4% of the vehicles were passenger cars, 25.7% sport utility vehicles (SUVs), and 25.7% four-tire light truck (pick up)
- 62.9% of vehicles were moving straight and 9% were turning left

#### When

- o Non-motorized fatal and serious injury crashes occurred most in the months of September (17.9%), July (14.3%), and November (14.3%)
- Non-motorized fatal and serious injury crashes occurred mostly on Tuesdays (21.4%) and Wednesdays (17.9%)
- Non-motorized fatal and serious injury crashes occurred mostly between 8 PM and 10 PM (28.6%), 4 AM to 6 AM (14.3%), 2 PM to 4 PM (14.3%), and 6 PM to 8 PM (14.3%)

#### Where

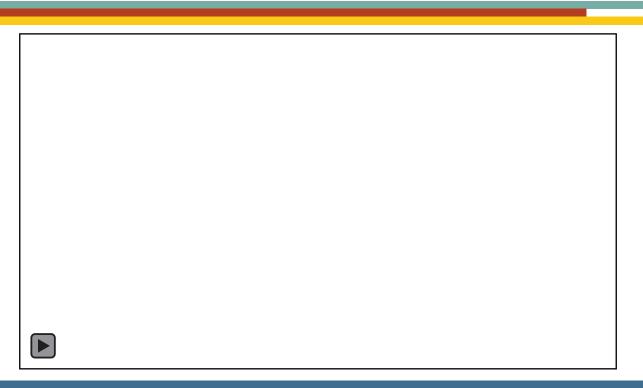
- o 53.6% of non-motorized fatality and serious injury crashes occurred on municipal roads, about 18% on US routes, and about 14% on Interstates.
- o About 18% of non-motorized fatal and non-serious injury crashes occurred at four-way intersections.

#### Why

- The major causes of the non-motorized fatal and serious injury crashes were no improper action (28.6%), unknown cause (25.0%), or other causes (17.9%)
- o Non-motorist contributing circumstances included darting/dashing (2.9%), failure to yield right-of-way (2.9%), improper crossing (2.9%), improper exit/entry from trafficway (2.9%), and not visible to driver because of dark clothing (2.9%)
- About 7% were drug related and about 4% were alcohol related



### Video of Crash at NE Mixmaster (Feb 28, 2024)





## OTHER DISCUSSIONS AND COMMUNITY ANNOUNCEMENTS



### MPO Technical Safety Committee Meeting for Safe Streets and Roads for All

MPO gathered a group of regional stakeholders for a Technical Safety Committee to develop a regional Comprehensive Safety Action Plan (CSAP) as part of the Safe Streets and Roads for All (SS4A) grant program. First meeting on Feb 8, 2024.

- City of Des Moines
- City of Pleasant Hill
- City of West Des Moines
- DART
- Des Moines Bike Collective
- FHWA lowa Division
- Iowa DOT
- Polk County
- Urban Land Institute





### Missouri Tests Coordination of Drones above Traffic Incidents

Missouri DOT (MoDOT) staff and participants from police, fire, EMS, transportation, and towing trained at the Missouri State Highway Patrol driver training track to coordinate the use of multiple (6) UAS.

- Multi-vehicle roadway crash simulation with vehicle and passenger bus, including extrication and passenger transfer
- One line of communication/frequency among all first responders
- End of exercise debriefing





Sources: FHWA EDC News and KOMU 8



### Talking TIM Webinar January 2024 Highlights

#### Arkansas TIM Advanced Training Facility

- In May 2022, Arkansas Highway Patrol and Arkansas State Police constructed a 11,000 square feet Training Facility
- 2.5 miles of paved roadways simulating diverse environments
  - 0.5 miles of Interstate roadway
- Trainings include
  - Traffic stop
  - Lane Blade Debris Removal
  - Push Bumper
  - Back of Queue
  - Cable Barrier (in development)

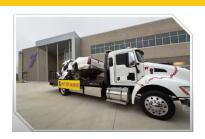




### Talking TIM Webinar January 2024 Highlights

#### Arkansas Distract Driving Outreach to High Schools

- Display of vehicle involved in Distracted Driving
- Skit performance to introduce all the responders for distracted driving crash
- Have students participate with questions about a video to demonstrate situational awareness and eyes-on-the-road
- Students text "DON'T TEXT AND DRIVE" to their friends to demonstrate the time to read and text covering a distance of 2 football fields
- Show a list of city populations to equate the number of people injured in distracted driving





 The Responders and Other Persons Connected to the Distracted Driving Crash





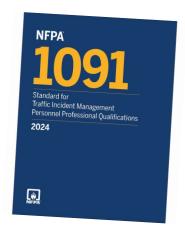
### Talking TIM Webinar January 2024 Highlights

TIM curriculum will be in incorporated into National Fire Protection Association (NFPA) 1091 – Standard for Traffic Incident Management Personnel Professional Qualifications

Supplemental TIM responder training courses will include

- Transportation Management Centers (TMCs)
- Computer-Aided Dispatch (CAD) Integration
- TIM Data and Crowdsourcing
- Unmanned Aircraft Systems (UAS)
- Connected Vehicles and Autonomous Vehicles
- Rural TIM

National TIM Training will be relicensed with CAPCE for EMS community





### Talking TIM Webinar February 2024 Highlights

Shared research on emergency responder lighting

#### **Actionable Findings from Lighting Research**

- 1. Reducing intensity at night will maintain *alerting* but allow responders to be seen more accurately (*informing* and *managing*)
- Just a little steady illumination around the vehicle will make responders much easier to see at night
- Reflective vehicle markings can sometimes be "too bright," making emergency responders more difficult to see at night
- 4. "High/low" flashing is better than "on/off" flashing for closure detection
- Synchronized lights help reduce visual chaos, and sequential lights provide visual information
- 6. Blue and red lights are rated most visible, blue and white lights most glaring



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Light and Healt

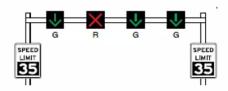


### Talking TIM Webinar February 2024 Highlights

Updates to the Manual on Uniform Traffic Control Devices (MUTCD)

#### What's New

- CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS - 61 is now 60
- Adds Guidance that TTC plans should be developed for unplanned and emergency situations where practicable. (6B.01)
- Adds the term "Rolling Roadblock" to 6N "Types of Temporary Traffic Control Zone Activities".
- Adds Active Lane Management During Incidents.





### Talking TIM Webinar February 2024 Highlights

### Updates to the Model Minimum Uniform Crash Criteria (MMUCC)

#### What's New

- · Clarified reporting for RCT
- Explains secondary crashes and provides alternativ
- Improves event-level related factors
- Adds driver factors for move over
- Improves non-motorist responder involvement
- Creates a field for Universally Unique Identifier (UUID) linkage with EMS patient care report. UUID is a 32-digit hexadecimal number that is auto-generated by EMS and can be linked after-the-fact with traffic records data integration.





### **Community Announcements**

What's happening in your community?





### Next Meeting

# Wednesday June 5, 2024 10 AM Hybrid Meeting

Please send me any meetings ideas or topics!

