Regional Transportation Committee

Meeting date: February 18, 2025

Agenda Item #: 7 (Attachment E)

Crash Data Consortium Update

Agenda item type: Discussion

Summary
An update on the regional crash data consortium and the end of the 405c grant funded period of this project.

Background
During federal fiscal years 2023 and 2024, DRCOG coordinated a regional crash data consortium effort to identify and address common issues with crash data collection, processing, and analysis in the Denver region. This work was funded through a grant from the National Highway Traffic Safety Administration known as a "405c" traffic records improvement grant. This grant has been administered through the Colorado Department of Transportation's Statewide Traffic Records Advisory Committee.

DRCOG staff has engaged with member governments, state and federal agencies, law enforcement agencies, safety advocates, software vendors and more to learn about crash data, analysis goals, and current issues and challenges with crash data in Colorado. Through this stakeholder engagement process, staff has developed a regional crash data inventory and needs assessment, which informed the creation of a final report detailing desired outcomes, specific recommendations and implementation strategies, and next steps for the consortium.

DRCOG is continuing to lead the crash data consortium as a part of its continuing Regional Vision Zero work.

Action by others
None

Previous discussion/action
None

Recommendation
None

Attachment
Staff presentation

For more information
If you need additional information, please contact Erik Braaten, Senior Safety Planner, Transportation Planning and Operations at 303-480-6711 or ebraaten@drcog.org.

Crash Data Consortium Update

Regional Transportation Committee: February 18, 2025

Crash data consortium grant and goals

- The Denver Regional Council of Governments received **405c traffic records improvement grants** for federal fiscal years 2023 and 2024 from the **National Highway Traffic Safety Administration.**

- **Investigate** and **demonstrate the value** of a regional crash data consortium to **inventory the needs** of the region.

- Work to **identify** and **address** common issues with crash data **collection, processing** and **analysis.**

- 405c grants are **not meant** to **permanently fund** projects.

We make life better!

drcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS

Timeline

- Surveys and interviews to create draft inventory and needs assessment.
- Workshop and feedback from consortium on inventory and needs assessment.
- Consortium meetings.
    - November 10, 2022.
    - May 11, 2023.
    - September 28, 2023.

- Continued stakeholder engagement.
- Remediation of inventory and needs assessment.
- End-of-year survey.
- Final report.
- Consortium meetings.
    - February 29, 2024.
    - June 20, 2024.
    - September 26, 2024.

Federal Fiscal Year 2023

October 2022 – September 2023

Federal Fiscal Year 2024

October 2023 – September 2024

3

We make life better!

Adrcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS

Key deliverables throughout the project

- Regional Crash Data Inventory.

- Regional Crash Data Needs Assessment.

- End-of-year survey.

- Regional Crash Data Consortium Final Report.

- Inventory, Needs Assessment and Final Report available on DRCOG website.

We make life better!

drcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS

Regional Crash Data Inventory

- Stakeholder engagement process.
- Data source descriptions.
- Analysis objectives.
- Issues and challenges.
- Appendices:
  - Data sources used as reported by stakeholders.
  - Data collection methodologies and other law enforcement information as reported by stakeholders.
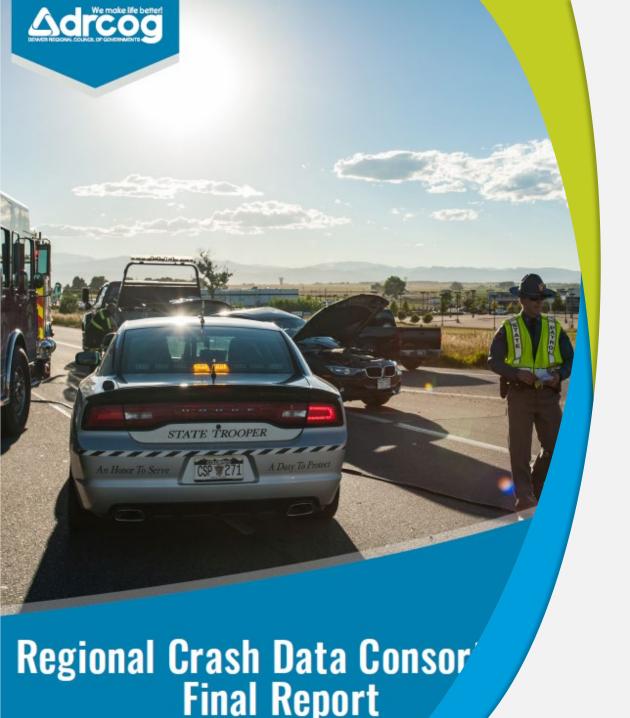
Regional Crash Data Needs Assessment

- Specific **needs** identified by the consortium.
- Potential **strategies**, **resources**, and **barriers**.
- **Cross-reference** to the inventory for each need.
- Categories of needs identified:
  - Geospatial.
  - Quality.
  - Timeliness.
  - Capacity.
  - Integration.
  - Accessibility.

End-of-year survey

- Conducted through Survey Monkey with crash data consortium stakeholders.
- Takeaways:
  - Nearly all had some familiarity with DRCOG before participating in consortium activities, but **several reported no prior familiarity**.
  - **Diverse participation among professions** represented in the consortium.
  - **All** said that the **consortium had helped them understand** better.
  - Slightly **more than half** said that they **had seen data quality improvements**.

Final Report

- Addresses primary goals:
  - **Investigate** and **demonstrate the value** of a regional crash data consortium to **inventory the needs** of the region.
  - Work to **identify** and **address** common issues with **crash data collection, processing** and **analysis.**

- Distributed through email and available on DRCOG website.

Grant performance measures

- **Completeness**: The project will help reduce the percentage of missing latitude and longitude data from 35-50% to 30% in five years.
  - Result: **16% of records missing** latitude and longitude in 2022.
- **Integration**: The project will help increase the percentage of crash records from CDOT's crash data linking to a DRCOG or CDOT linear referencing system from 0% to 25% by October 2024.
  - Result: **59% of records in 2022 crash data linked**.
- **Accessibility**: Staff will improve data and target outreach to increase downloads from DRCOG's Regional Data Catalog from 133 to 166 in a one-year period (25% increase).
  - Result: **64% increase.**

Outcomes

- **Improved data quality**.
  - More accurate latitudes and longitudes.
  - **Less missing data**.
  - Less personal identifiable information in crash narratives.
- **Improved timeliness** of data delivery.
- **Improved access** to crash data.
  - Greater understanding of available data.
  - Greater access to narratives and diagrams.
- **Increased** number and depth of **partnerships**.
  - More law enforcement partnerships.
  - Bring medical examiners, coroners, and other medical field professionals and organizations into consortium activities.

We make life better!

Adrcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS

Final report recommendations

- Improve **general statewide crash reporting** practices.
- Improve collection of **location** information.
- Improve collection of **critical data** elements.
- Improve crash data **processing** practices.
- Increase crash data **analyst access** and **competencies**.
- **Sustain** and **expand** the crash data consortium.

- Report includes **strategies to achieve each recommendation** and an estimated timeframe to accomplish the strategy.

Cascading effects of recommendation strategies

Standardize and **improve input** from law enforcement.

- Software or hardware.
- Data validation.
- Training.

Less time required to process.

- Department of Transportation.
- DRCOG.
- Local governments.
- Vendors and consultants.

Higher-quality crash data **available sooner** for analysis.

We make life better!

drcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS

Implementation strategies

- Develop or acquire **improved software** for law enforcement.
- Require **critical data elements** on all reports.
- Facilitate **training** with law enforcement agencies and other stakeholders.
- Explore and fix **data transmission issues** between law enforcement agencies and the state.
- Continue **engagement** with **law enforcement agencies** in the region to identify what is working well, what challenges exist, how to make improvements, and how to implement other crash data improvement strategies.
- Build connections with **medical field**, including medical examiners and coroner's offices, to explore and develop new ways of addressing **underreporting of impairment-related** crashes and **non-motorist** crashes.

Next steps

- Develop **implementation framework**.
  - Prioritize strategies laid out in final report.
  - Determine action leaders and supporting partners.
- **Continue** crash data consortium **meetings**.
  - Set up on-going meeting schedule.
- **Build** and **maintain relationships**.
  - Law enforcement.
  - Medical field.
  - Current consortium partnerships.

Thank you!

Erik Braaten
Senior Safety Planner
ebraaten@drcog.org

If you have difficulty using this document's content, please email access@drcog.org or call 303-455-1000. Please expect a response within 72 hours (three business days).