CRASH DATA CONSORTIUM, ANYONE?!
DRCOG has processed regional crash data for several years

Data is available on the Regional Data Catalog
OVERVIEW OF DRCOG PROCESSING

PREP SCHEMA
- Insert data
- Populate city & county
- Create geometries

STEP 01

STEP 02

STEP 03

STEP 04

STEP 05

STEP 06

COMBINE
- Combine on-system and off-system geocoded records

LINK FIELD
- Move points on link field
- Snap points to nearest road

FINISH
- Recalculate fields
- Export table

GEOCODE
- Geocode off-system
- Rematch QC

FLAG
- Flag high priority
- Delete outside
- Final QC
DRCOG USES OF CRASH DATA

DRCOG Regional Vision Zero Map
DRCOG USES OF CRASH DATA

- High injury network
- Critical corridors
- Bicycle and pedestrian analysis
Duplication of efforts

Lack of consistency of data sources leads to discrepancies

DRCOG data may not provide enough accuracy for local use

Crash prevention counter measures are cross-jurisdictional and jurisdictions may use different data
PROBLEM #1

Geospatial Open Data

Boulder County Admin
Boulder County

Summary
Boulder County crashes mapped from CDOT data.

Dataset
Feature Layer

September 2, 2020
Info Updated

December 8, 2020
Data Updated

November 30, 2020
Published Date

101,288 Records
View data table

Public
Anyone can see this content

Custom License
View license details
PROBLEM #2

Crash data comparison performed by DRCOG GIS team in November 2020

Case study of Jefferson County data

DRCOG 2018 vs DiExSys 2018
4,503 off-system records were spatially compared to determine the distance between points from each data source. The serial id was used to join the datasets, and a PostGIS function was used to determine distances.
CASE STUDY – STUDY AREA 1

- 29 crashes with at least 100 ft between DRCOG and DiExSys
- DiExSys correctly located 24
- DRCOG correctly located 4
- DiExSys and DRCOG tied for 1 location
CASE STUDY – STUDY AREA 2

- 57 crashes with at least 100 ft between DRCOG and DiExSys
- DiExSys correctly located 42
- DRCOG correctly located 8
- Neither correctly located 7
## CASE STUDY – JEFFERSON COUNTY

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Fatalities</th>
<th>Serious Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crashes</td>
<td>People</td>
</tr>
<tr>
<td>DiExSys</td>
<td>37</td>
<td>39</td>
</tr>
<tr>
<td>DRCOG</td>
<td>36</td>
<td>37</td>
</tr>
</tbody>
</table>
CASE STUDY – JEFFERSON COUNTY

CDOT on-system records were spatially identical between the 2 data sources.

Of the 4,503, DRCOG and DiExSys matched records 3,262 (72%) are within 100 ft from each other.

DRCOG manually checks all high priority records (fatality, serious injury, bike and pedestrian involved).

Improving the address used in geocoding could improve DRCOG results significantly.
GOING BACK TO THE PROBLEM

Duplication of efforts

Lack of consistency of data sources leads to discrepancies

DRCOG data may not provide enough accuracy for local use

Crash prevention counter measures can be cross-jurisdictional and jurisdictions may use different data
WHAT’S THE SOLUTION?!

- “A **consortium** is an association of two or more individuals, companies, organizations or governments with the objective of participating in a common activity or pooling their resources for achieving a common goal.”
  - Wikipedia

- Local governments and partners to pledge time and funding to be part of group that supports a regional crash dataset
## BENEFITS OF A CRASH CONSORTIUM

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular meetings about improving crash data</td>
<td>Better understand uses and sources from each jurisdiction</td>
</tr>
<tr>
<td>Determine best methods for creating a regional crash dataset</td>
<td>Develop standard schemas</td>
</tr>
<tr>
<td>Develop standard queries</td>
<td>Consortium data purchases and grant opportunities</td>
</tr>
</tbody>
</table>
DRAWBACKS OF A CONSORTIUM

- Needs to be a critical mass
- Routine and consistent contribution of effort by members
- May include funding contributions
- Agree to use same data source and/or contribute data
- Coordinate timelines
- Heavy lift for DRCOG
WHAT DOES THIS MEAN FOR YOU?

If you are already processing crash data (or using vendor data), you contribute that data and it becomes authoritative.

You will be asked to attend meetings and contribute to the dialogue.

If you are not processing data now, could have access to more accurate data.

If you are using DRCOG data, you could use better data.

You may be asked to contribute funding.

You may be asked to process crash data for your jurisdiction.
WHAT COULD THIS LOOK LIKE?

- Research and inventory
- Identify solutions
- Build stakeholder relationships
- Determine funding and commitments
- Regular meetings
- Trainings
- Schema work
PLEASE FILL OUT THIS SURVEY!

CRASH CONSORTIUM SURVEY

Gauge interest in furthering regional conversations about crash data

Please fill out this survey and send to others in your organization that may be interested

Responses due 8/15
THANK YOU!

QUESTIONS?

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