



NHTSA

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Data Analyses and Engagement Strategies

*Public Participation and Engagement
Part 2*

Presenters: Rita Hill, Rod Chu, and Shannon Hughes

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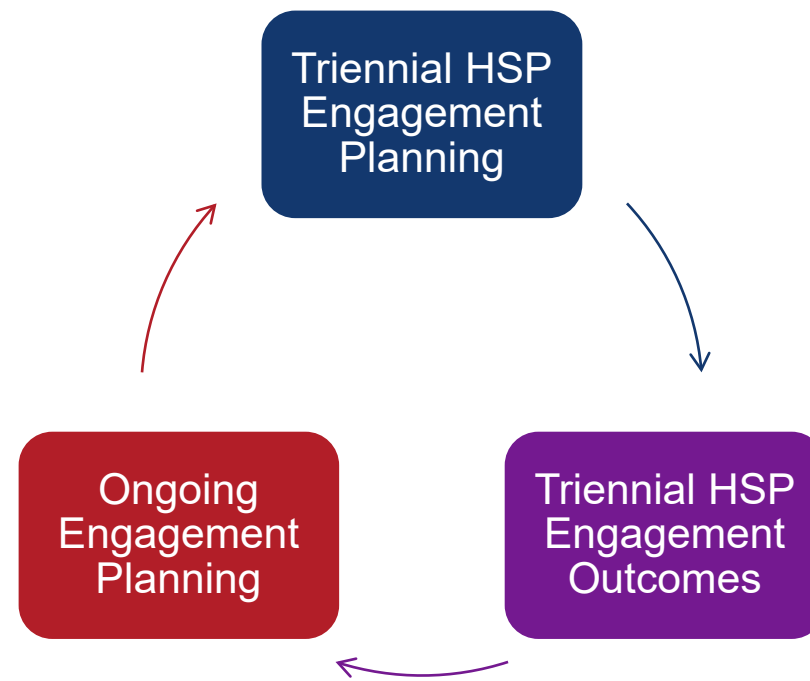
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Triennial HSP Requirements & Actions Toward Public Engagement



Objectives

- Understand new and/or refine existing techniques used for data analysis
- Expand knowledge of data sources for demographic data
- Explore factors for consideration when choosing engagement strategies
- Improve understanding of potential engagement strategies to reach communities

What is Meaningful Public Engagement

Public Participation and Engagement- is a process that proactively seeks full representation from communities, considers public comments and feedback, and incorporates that feedback into a project, program, or plan when possible.



Public Engagement Spectrum

Figure 2 – PE Spectrum Activities



Outreach to Meaningful Engagement



to



Meaningful Public Engagement



Practitioners should meaningfully engage a broad spectrum of representatives from the community affected by traffic safety issues to:

- Understand concerns
- Identify new opportunities
- Explore alternatives
- Collaboratively create a vision for the future



Meaningful public engagement lays the groundwork for ongoing engagement well beyond the initial touchpoint with affected communities.

Full Representation



To ensure traffic safety programs reflect community needs, agencies need community representation reflective of the community's demographics during the decision-making process.



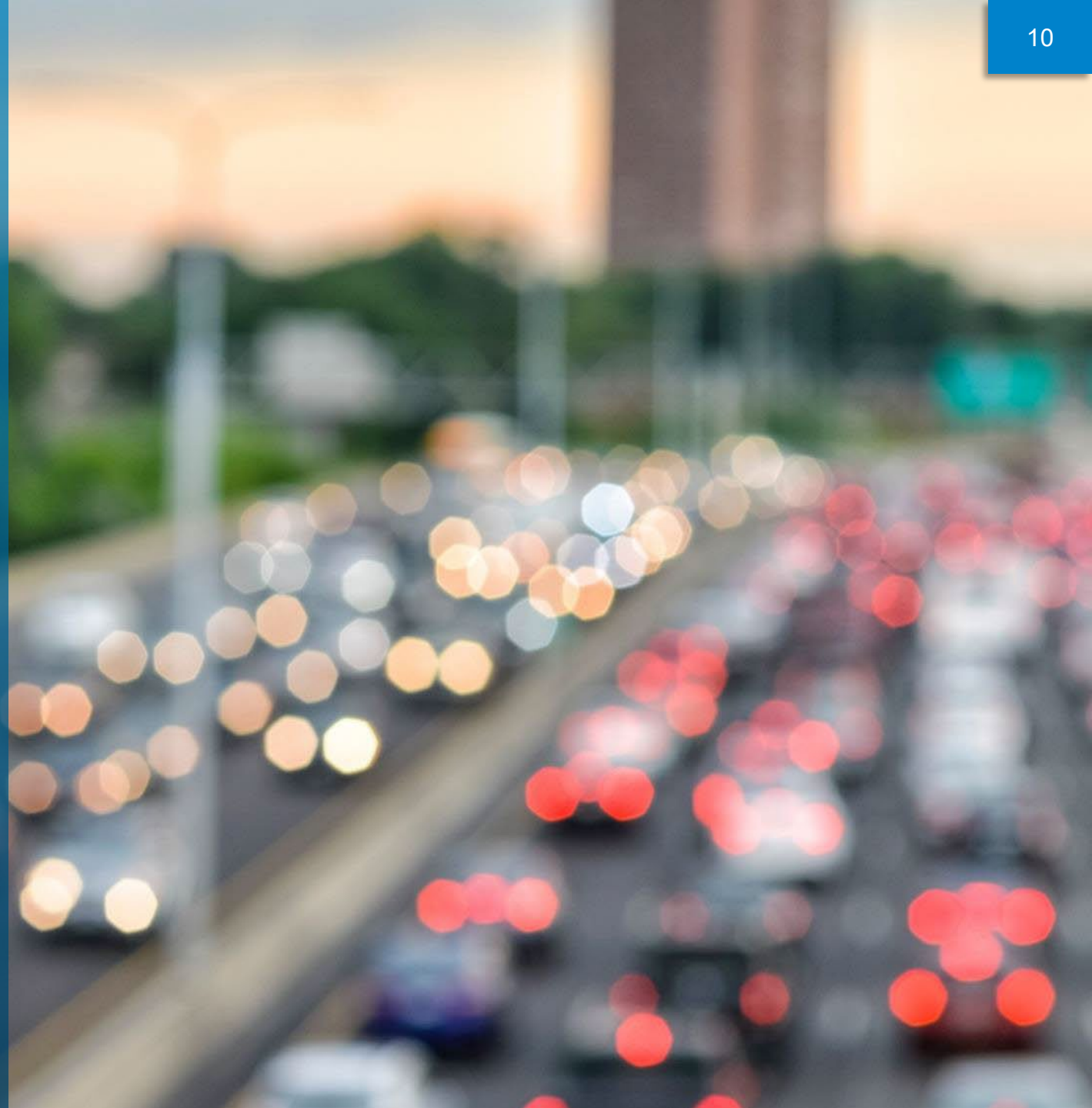
Full representation treats community members as experts of their experiences and as a critical source to improve transportation programs.



How to incorporate full representation? Where to start? --> **Understand community characteristics through data analysis**

Data Analysis

Rod Chu



Where To Begin? Data Sources

U.S. Census Bureau

data.census.gov

- Race & Ethnicity (DP05 – ACS Demographics & Housing Estimates)
- Language (S1601 – Language Spoken at Home)
- Poverty (S1701 – Poverty Status in the Past 12 Months)
- Disability (S1810 – Disability Characteristics)
- Means of Transportation (B08141 – Means of Transportation to Work By Vehicles Available)

Where To Begin? Data Sources

National Roadway Safety Strategy

Our Nation's Roadway Safety Crisis (ArcGIS Story Map)

- <https://storymaps.arcgis.com/stories/9e0e6b7397734c1387172bbc001f29b>

U.S. Census Bureau – Community Resilience Estimates

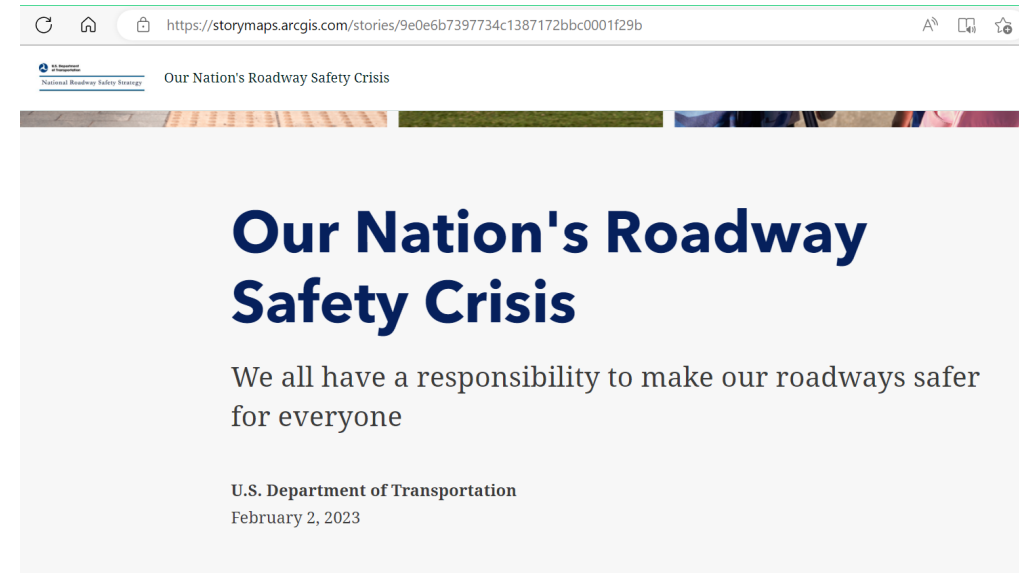
- <https://experience.arcgis.com/experience/b0341fa9b237456c9a9f1758c15cde8d/>

NCSA's Fatality and Injury Reporting System Tool (FIRST)

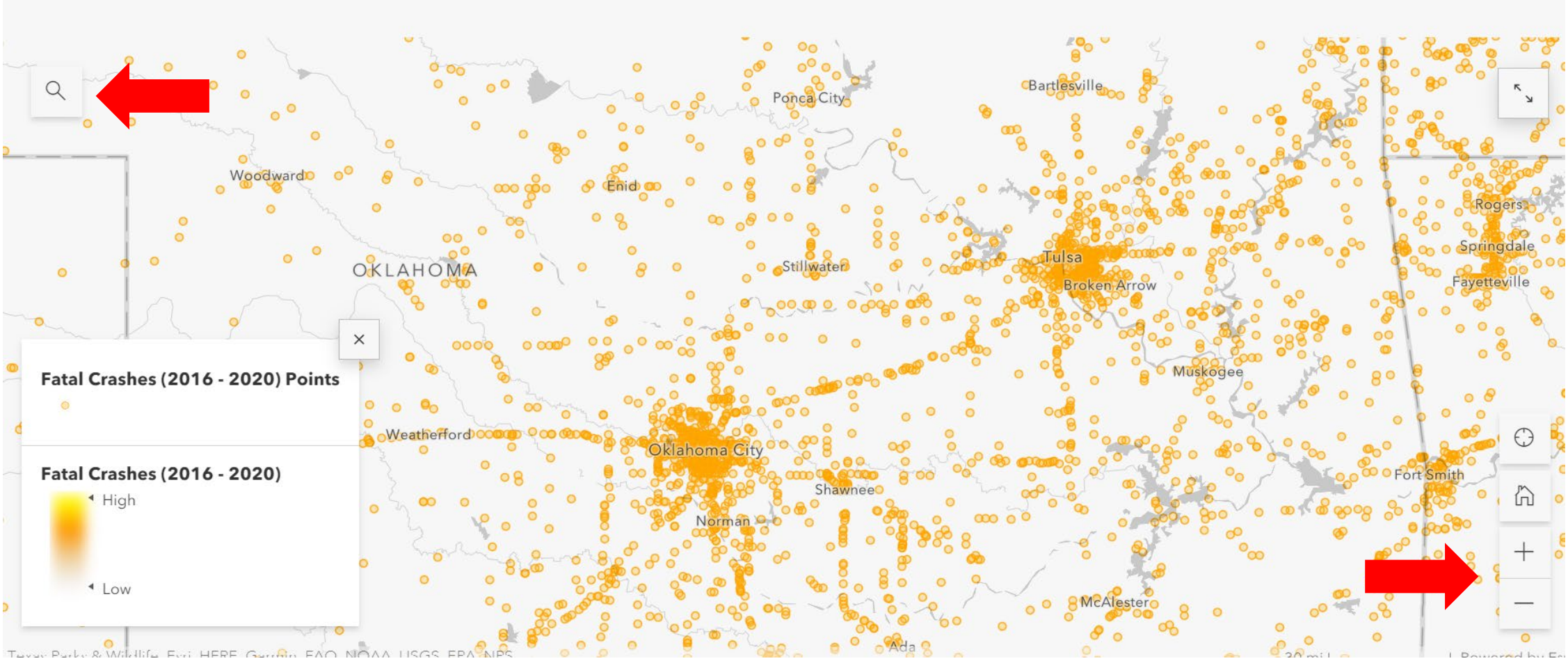
- <https://cdan.nhtsa.gov/>

National Roadway Safety Strategy - ArcGIS Story Map

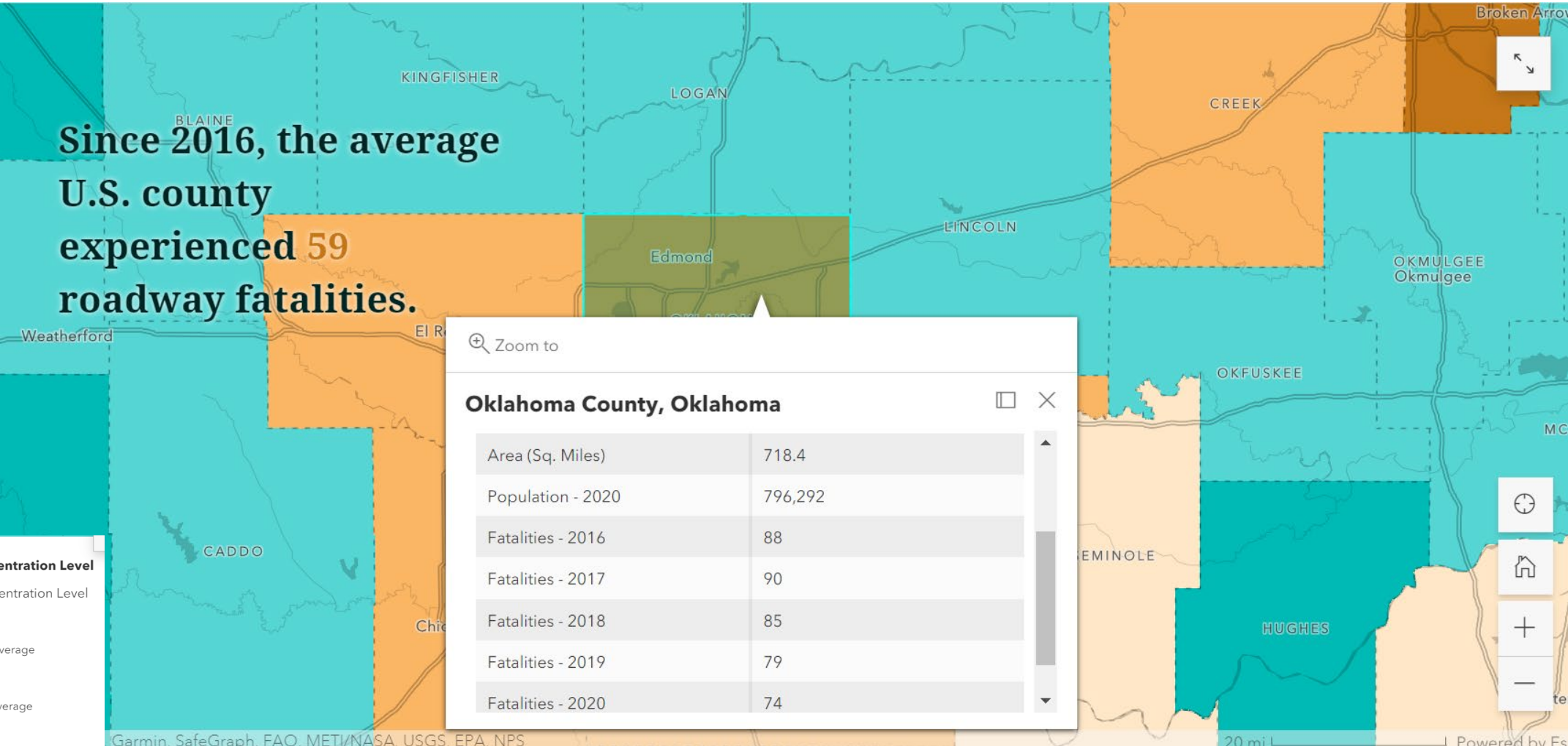
- Hot spot-focused analysis of fatal motor vehicle crashes
- Distribution of roadway fatalities compared to national average
- Look at the relationship between population, fatality rates and population size
- Visualize historically disadvantaged communities and fatalities at the neighborhood level
- Visualize progress towards Vision Zero goals



National Roadway Safety Strategy - ArcGIS Story Map



National Roadway Safety Strategy - ArcGIS Story Map

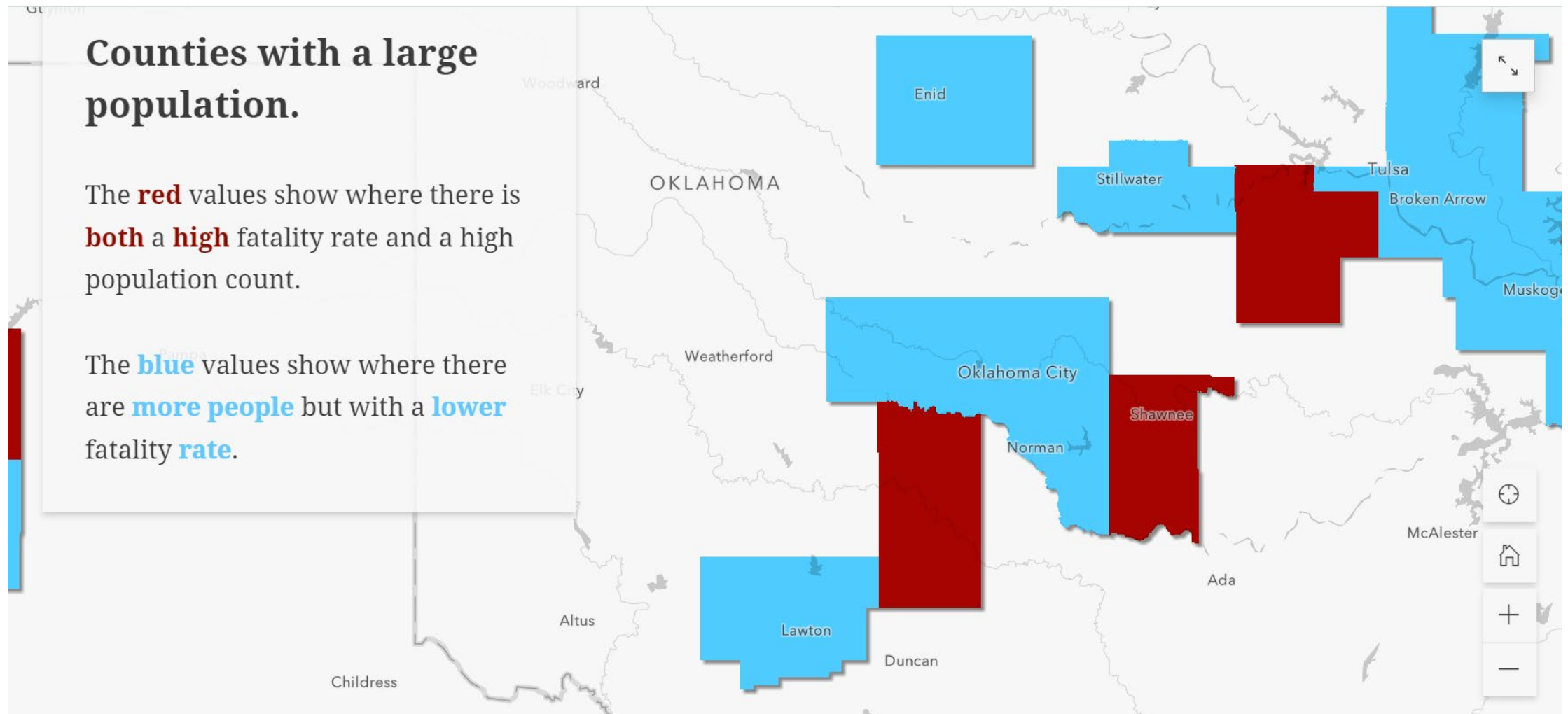


Fatality Concentration Level

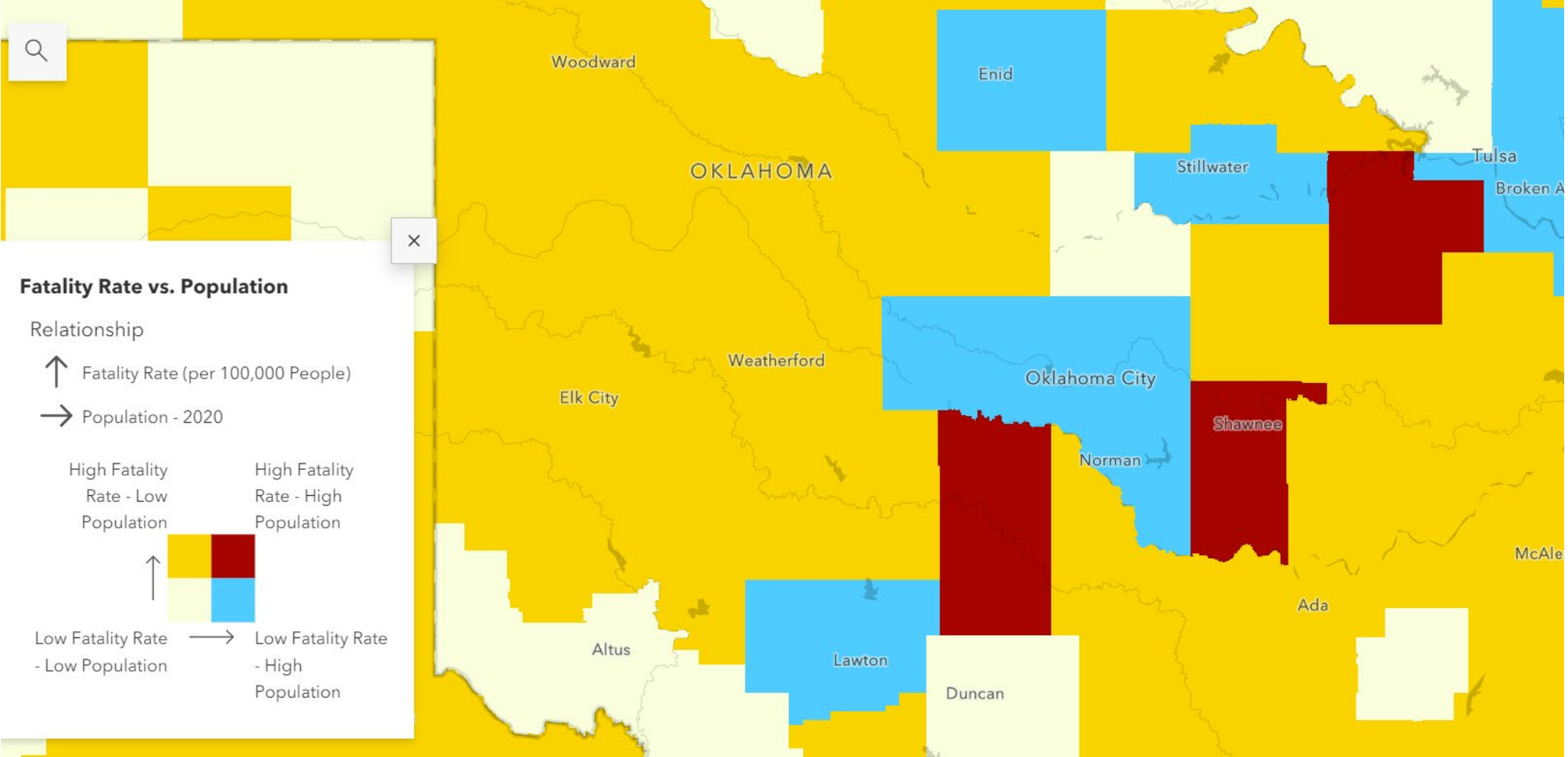
Fatality Concentration Level

- High
- Above Average
- Average
- Below Average
- Low
- No Fatalities

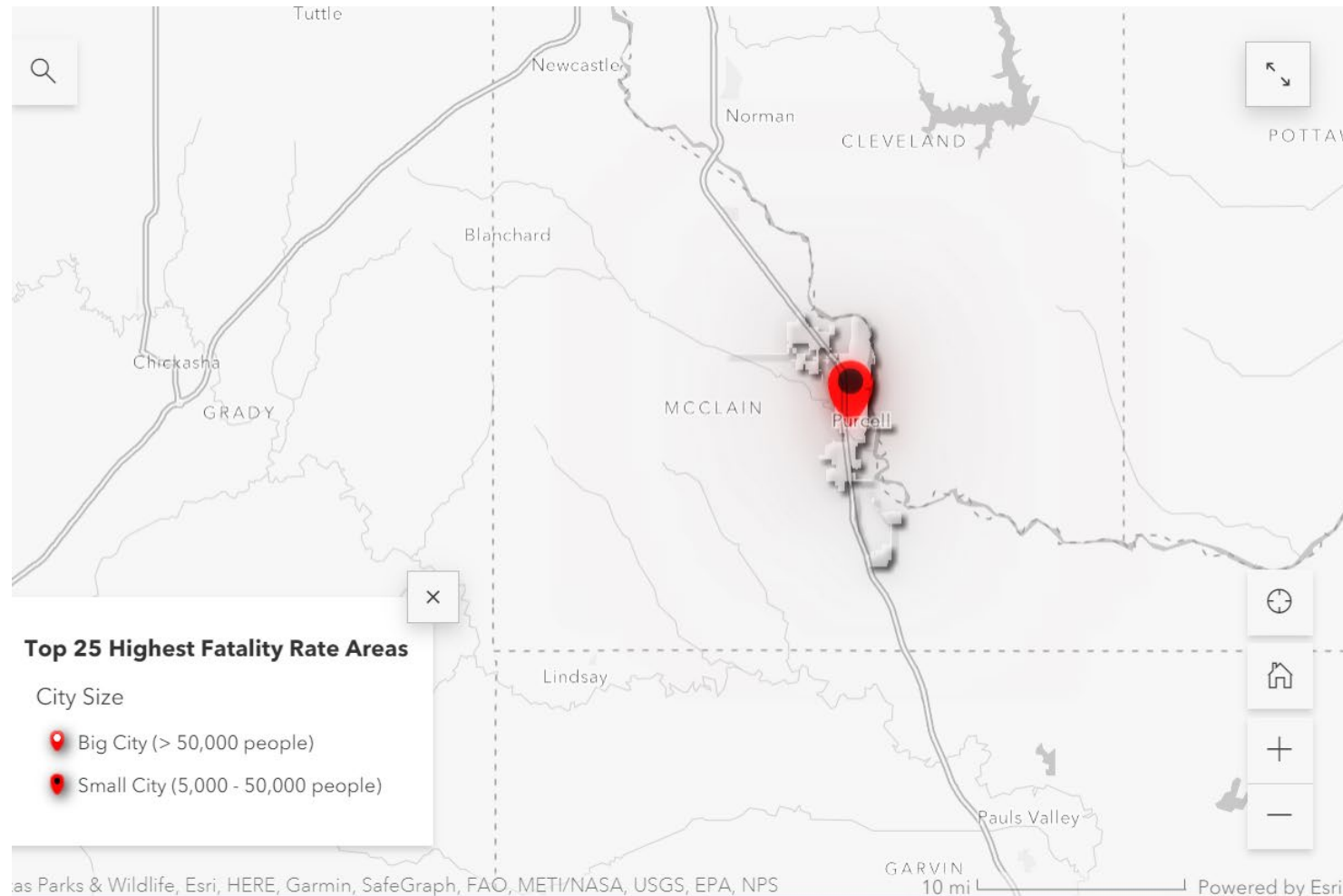
National Roadway Safety Strategy - ArcGIS Story Map



National Roadway Safety Strategy - ArcGIS Story Map



National Roadway Safety Strategy - ArcGIS Story Map



Use the buttons below to show the **top 25** big and small cities with the **highest** and **lowest** fatality rates.

Highest Fatality Rates

Lowest Fatality Rates

About **14% of all small cities** (population of 5,000 - 50,000 people) have **zero fatalities**.

Zero Fatalities

National Roadway Safety Strategy - ArcGIS Story Map

🔗 Exploring Fatalities and Equity

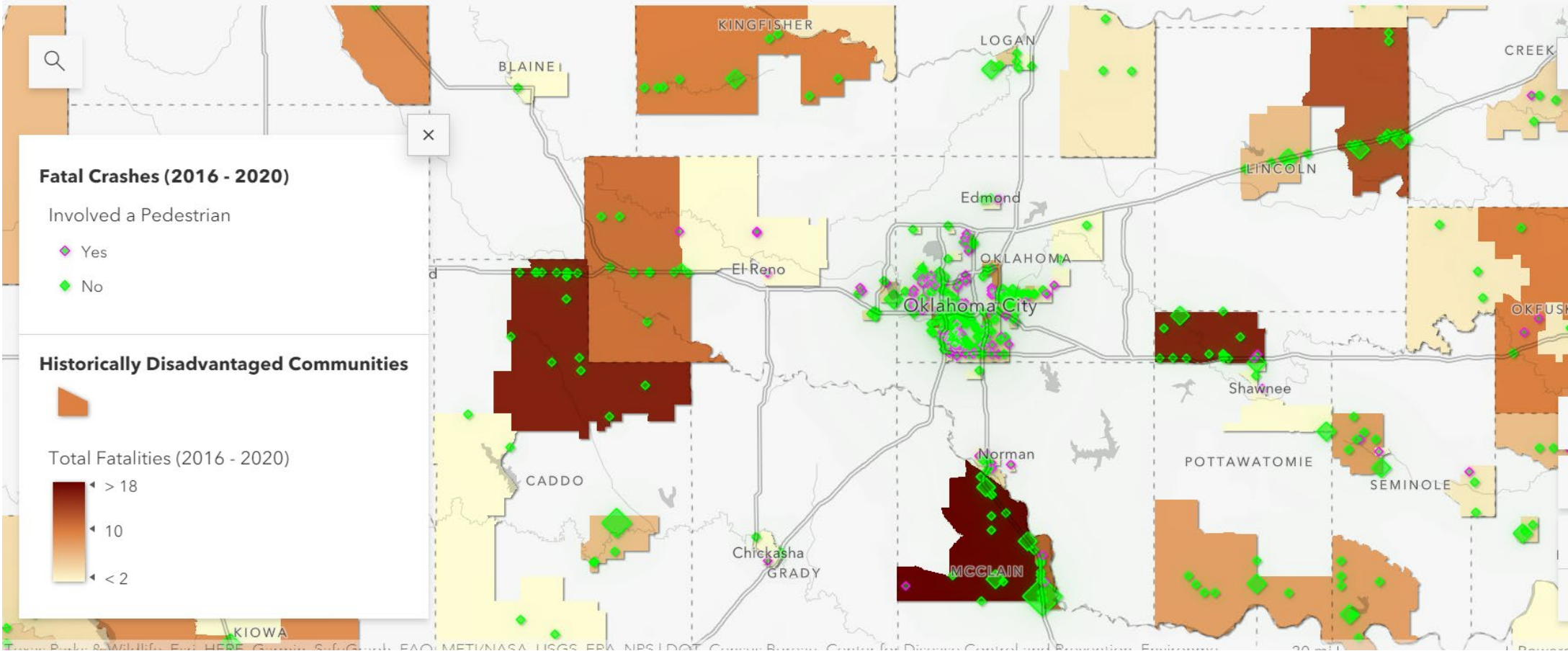
Of the communities in the top 20% of roadway fatalities, nearly half (43%) are Historically Disadvantaged.



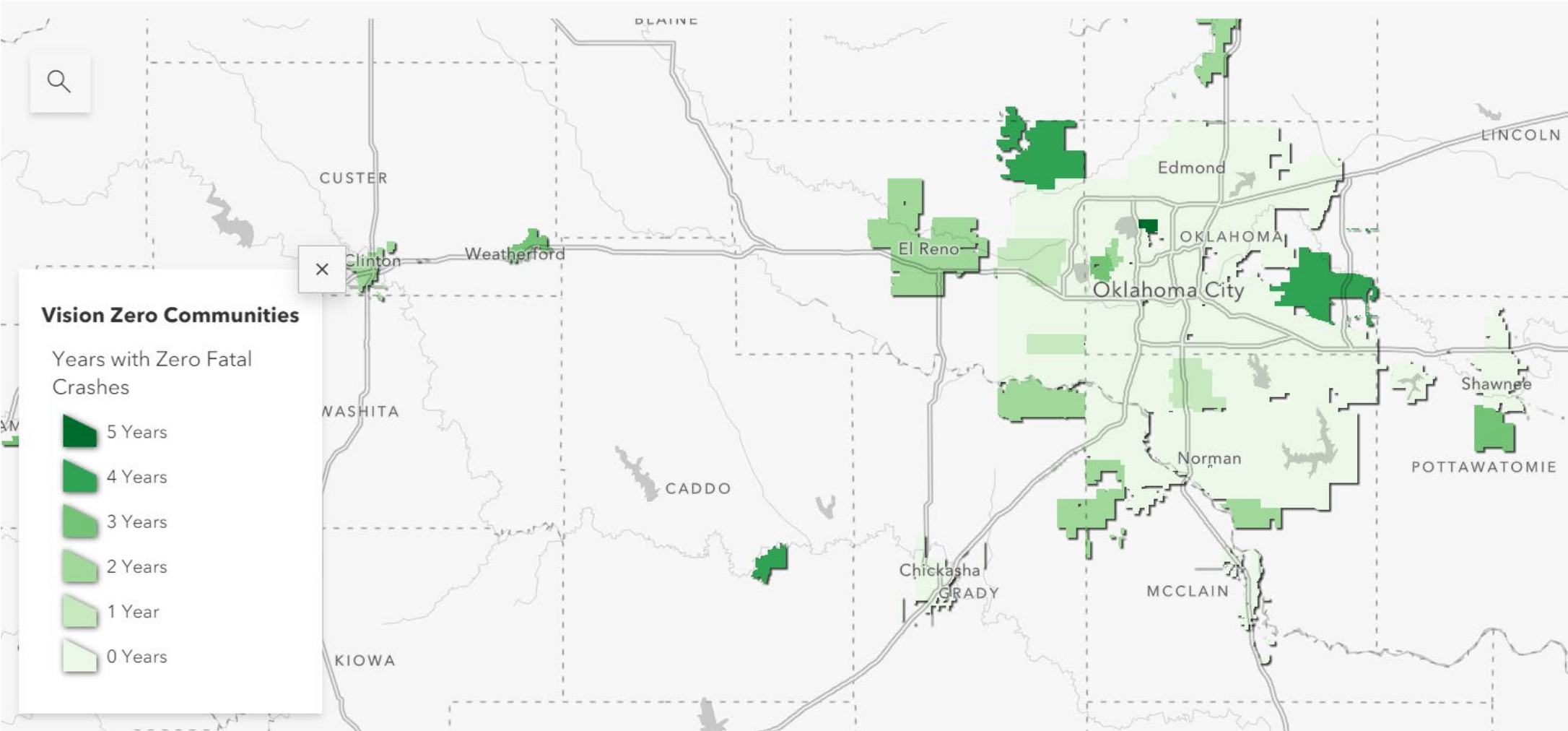
26% of all **fatal crashes** in **Disadvantaged Communities** resulted in the **death** of a **pedestrian**.

There are 72,842 census tracts in the U.S. This map shows the Historically Disadvantaged Community census tracts (N = 16,514) with at least one roadway fatality reported between 2016 and 2020. A census tract is usually between 3,800 to 4,600 number of people, on average.

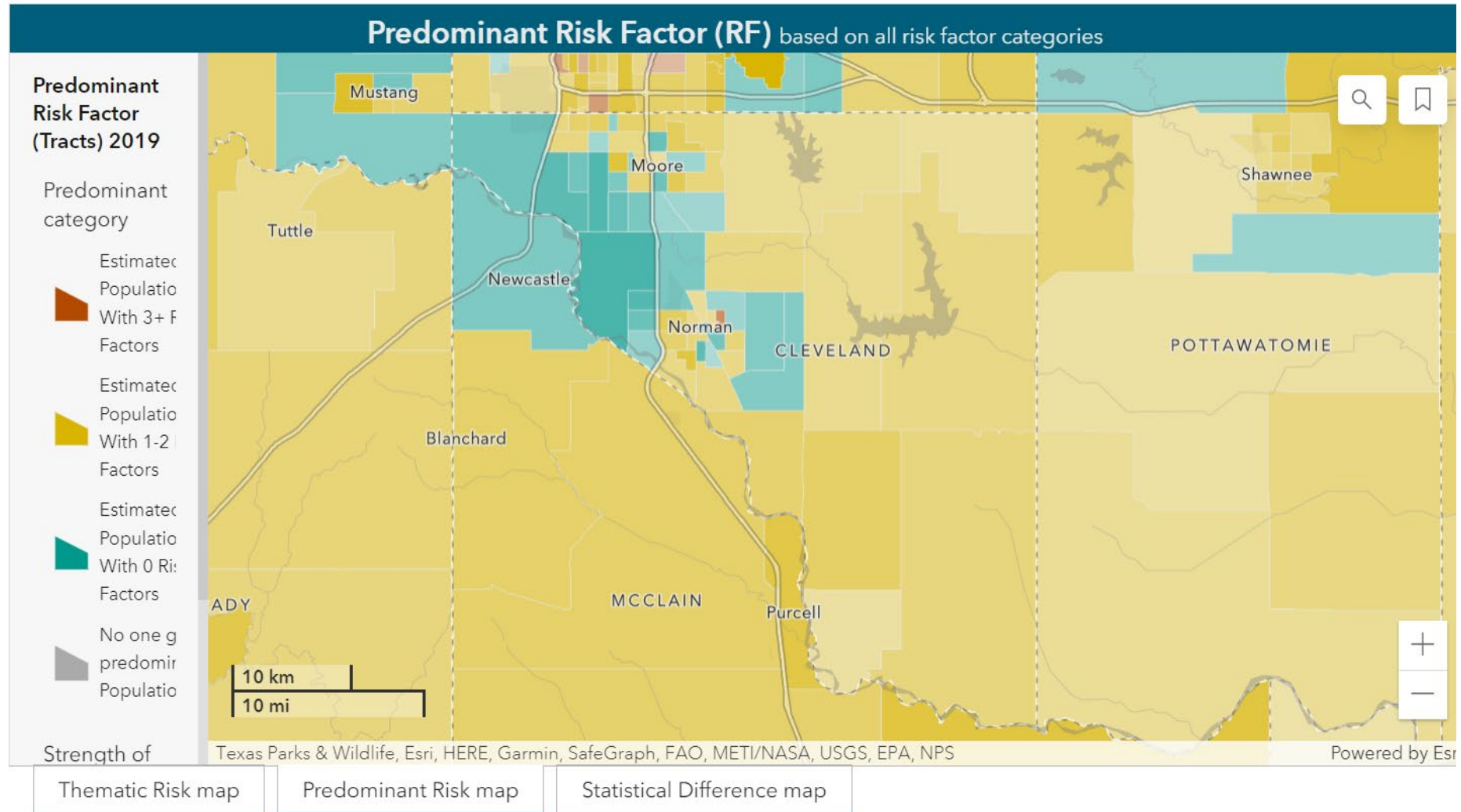
National Roadway Safety Strategy - ArcGIS Story Map



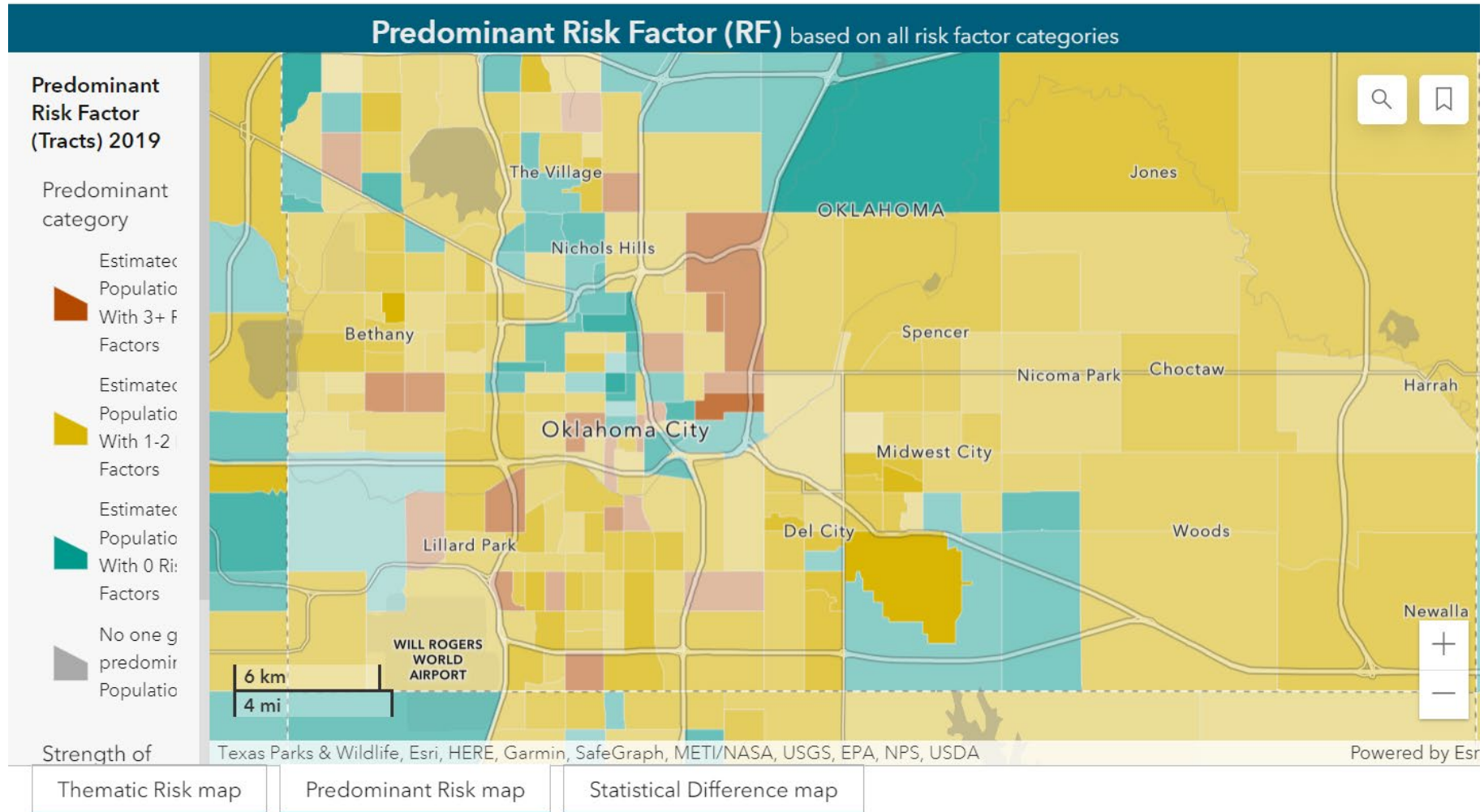
National Roadway Safety Strategy - ArcGIS Story Map



U.S. Census Bureau – Community Resilience Estimates



U.S. Census Bureau – Community Resilience Estimates



U.S. Census Bureau – Advanced Search for Census Tract

The screenshot shows the U.S. Census Bureau's Advanced Search for Census Tract interface. The browser address bar displays the URL: https://data.census.gov/map?g=1400000US40109102800&layer=VT_2021_140_00_PY_D1&mode=selection&loc=43.3751,-...

The page features the United States Census Bureau logo and a search bar with a microphone icon and a magnifying glass icon. Below the search bar, there are tabs for "All", "Tables", "Maps", and "Pages". The "Maps" tab is selected.

On the left side, there is a "Filters" panel with a "1 Filter" indicator. The filter is "Census Tract 1028, Oklahoma County, Oklahoma". Below the filter, there is a "Clear all filters" button. The "Geography" category is selected in the left sidebar.

The main content area shows a breadcrumb trail: "Census Tract / Oklahoma / Oklahoma County, Oklahoma / Select Census Tract". Below this, there is a search bar for "Search Census Tract" and a list of census tracts in Oklahoma County, Oklahoma. The "Census Tract 1028, Oklahoma County, Oklahoma" is selected with a checkmark.

On the right side, there is a "2628 Results" section with a "View: 10 | 25 | 50" dropdown and a "Download Table Data" link. Below this is a "SELECTION MAP" section with a map of the selected census tract. The map shows the census tract boundaries and a 10-mile scale bar.

The "SELECTION MAP" section lists several data products:

- Decennial Census **P1** | RACE
View All 2 Products
- American Community Survey **DPO5** | ACS DEMOGRAPHIC AND HOUSING ESTIMATES
View All 10 Products
- American Community Survey **S0101** | AGE AND SEX
View All 10 Products
- American Community Survey **S0601** | SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES
View All 10 Products
- American Community Survey **S0701** | GEOGRAPHIC MOBILITY BY SELECTED CHARACTERISTICS IN THE UNITED STATES

U.S. Census Bureau – Advanced Search for Census Tract

Census Tract

Census Tract 1028, Oklahoma County, Oklahoma

Census Tract 1028, Oklahoma County, Oklahoma is a Census Tract located in [Oklahoma County, Oklahoma](#)

[Share Profile](#)



There is no map available right now

Unfortunately, this section cannot display a map right now.
Visit our [FAQ](#) for more information.

// [United States](#) / [Oklahoma County, Oklahoma](#) / [Census Tract 1028, Oklahoma County, Oklahoma](#)



Income and Poverty

Median Household Income

\$25,210

[S1901](#) | 2019 American Community Survey 5-Year Estimates



Employment

Employment Rate

28.7%

[DP03](#) | 2019 American Community Survey 5-Year Estimates



Families and Living Arrangements

Total Households

1,323



Education

Bachelor's Degree or Higher

9.2%

[S1501](#) | 2019 American Community Survey 5-Year Estimates



Health

Without Health Care Coverage

16.6%

[S2701](#) | 2019 American Community Survey 5-Year Estimates

NHTSA's Fatality and Injury Reporting System Tool (FIRST)

Fatality and Injury Reporting System Tool (FIRST)



This query tool allows a user to construct customized queries from the [Fatality Analysis Reporting System \(FARS\)](#) and from the [Crash Report Sampling System \(CRSS\)](#) . To view a list of crash Data Elements used on this site [click here](#). To review and open the opening splash screen content [click here](#).

[Click here](#) to find out how U.S. DOT is implementing the **National Roadway Safety Strategy (NRSS)**.

- Crashes
- Vehicles
- People
- Drivers
- Occupants
- Pedestrians
- Pedalcyclists

Select Fatality and/or Injury -

- Fatal Motor Vehicle Crashes
- Estimated Injury Only Motor Vehicle Crashes
- Estimated Property-Damage-Only (PDO) Motor Vehicle Crashes
- Estimated Injury and PDO Non-Fatal Motor Vehicle Crashes
- All Motor Vehicle Crashes

* No Region, State, County or City is available for Injury, PDO, and All crashes data.

Select Time Frame +

Select State or Region +

Filter Your Selection +

Build Your Report +

Query Criteria Selected

Crashes ▶ Fatal Motor Vehicle Crashes ▶ Years: 2016-2020 ▶ Report Type: Table > Rows (Crash Date (Year)); Columns (Crash Date (Month))

Sample Queries -

Build your own query or setup the panels on the left by clicking any of the **122** queries below and clicking the Submit button at the bottom of Current Criteria section to run it. To search by Query number, use “#” before number (i.e. #200) in Search areas.

Search Crashes X Search all Topics X

- [Region 6 Speeding-related Fatal Crashes by Year; 2011-2020 \(#109\)](#)
- [Chicago Fatal Crashes by Year and Month; 2011-2020 \(#110\)](#)
- [Number of Fatal Crashes by Year; 2006-2020 \(#111\)](#)
- [Fatal Crashes by Time of Day and Day of Week; 2020 \(#112\)](#)
- [Fatal Crashes per Hour, by Time of Day, Weekdays and Weekends; 2020 \(#113\)](#)
- [Fatal Crashes by First Harmful Event and Manner of Collision; 2016-2020 \(#114\)](#)

NHTSA's Fatality and Injury Reporting System Tool (FIRST)

National Highway Traffic Safety Administration (NHTSA) Motor Vehicle Crash Data Querying and Reporting

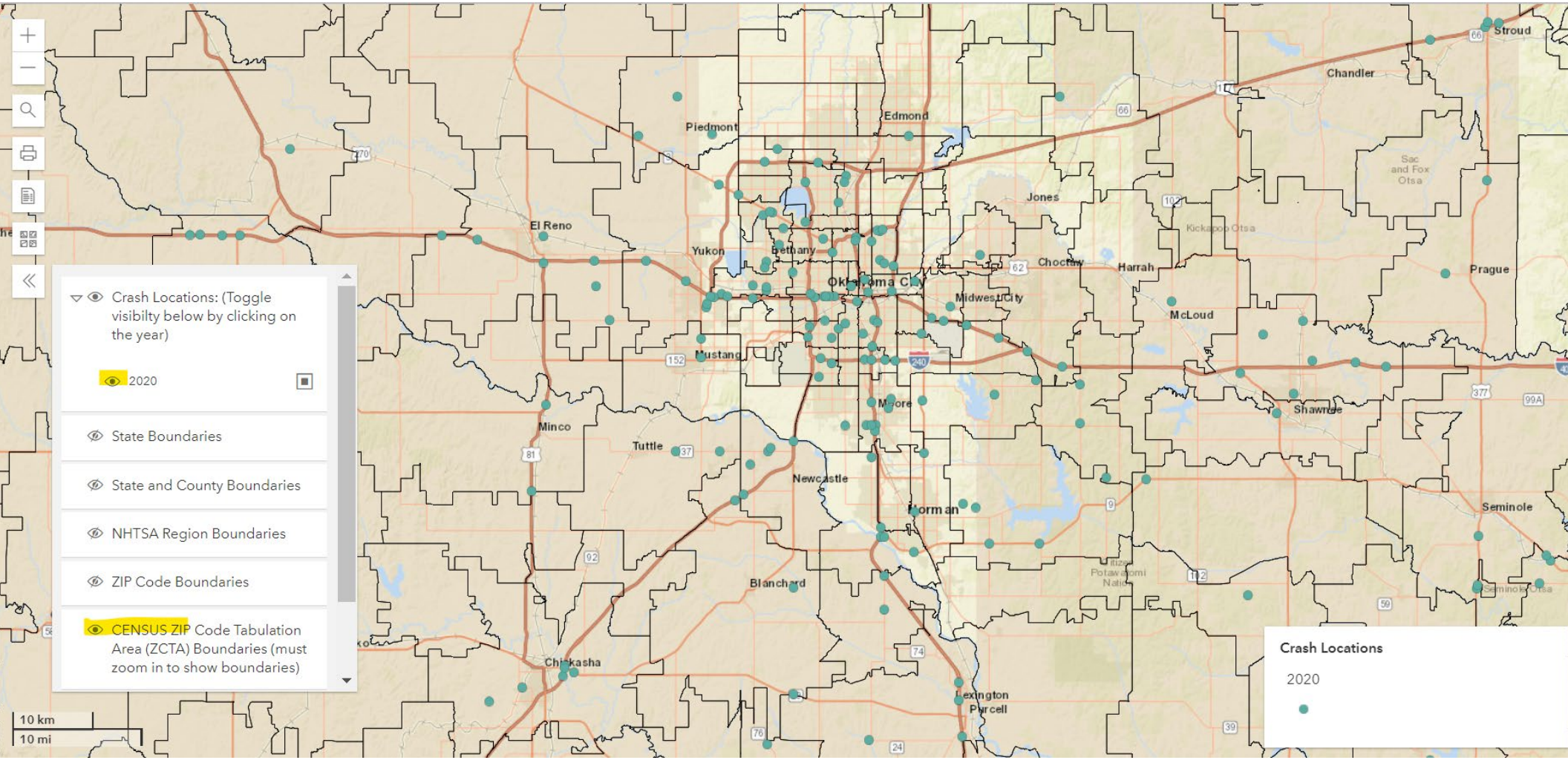
Fatal Motor Vehicle Crashes
Years: 2020

Fatal Motor Vehicle Crashes¹

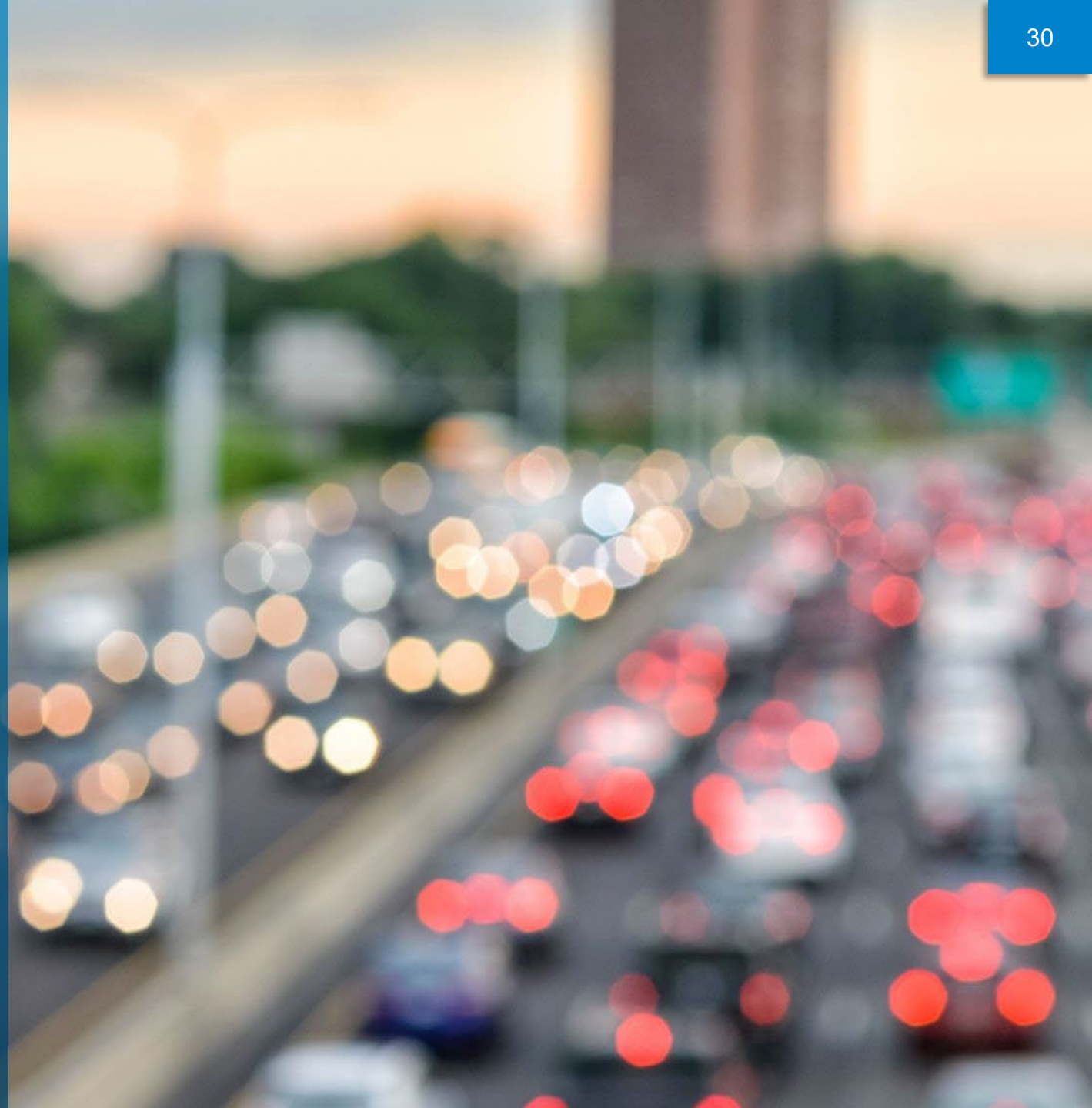
Note: Click the link within a table cell to view those records on a web map

State	Crash Date (Month)												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Alabama	52	69	67	48	69	76	82	71	66	79	93	80	852
Alaska	3	5	3	0	3	8	5	7	9	3	3	4	53
Arizona	67	97	59	53	89	72	82	85	97	93	91	82	967
Arkansas	39	33	35	55	38	65	67	52	54	61	46	40	585
California	290	277	241	201	277	268	324	324	343	353	342	318	3,558
Colorado	36	37	37	33	52	62	67	63	49	50	47	41	574
Connecticut	23	21	19	22	19	31	26	26	20	21	31	20	279
Delaware	10	7	5	4	8	9	11	11	17	7	7	8	104
District of Columbia	4	2	0	2	3	4	2	6	4	4	2	1	34
Florida	275	254	259	197	266	265	215	235	257	288	289	298	3,098
Georgia	94	108	128	81	112	108	136	145	154	175	147	134	1,522
Hawaii	11	4	4	5	5	10	8	7	4	6	6	11	81
Idaho	6	15	8	9	18	19	24	25	16	15	12	21	188
Illinois	66	68	51	62	78	122	109	100	117	131	98	85	1,087
Indiana	46	39	48	38	72	100	86	75	83	99	63	66	815
Iowa	22	15	13	16	20	22	39	43	39	23	24	28	304
Kansas	28	34	31	20	23	48	35	39	33	28	34	29	382
Kentucky	42	39	45	47	52	69	81	94	52	67	58	63	709

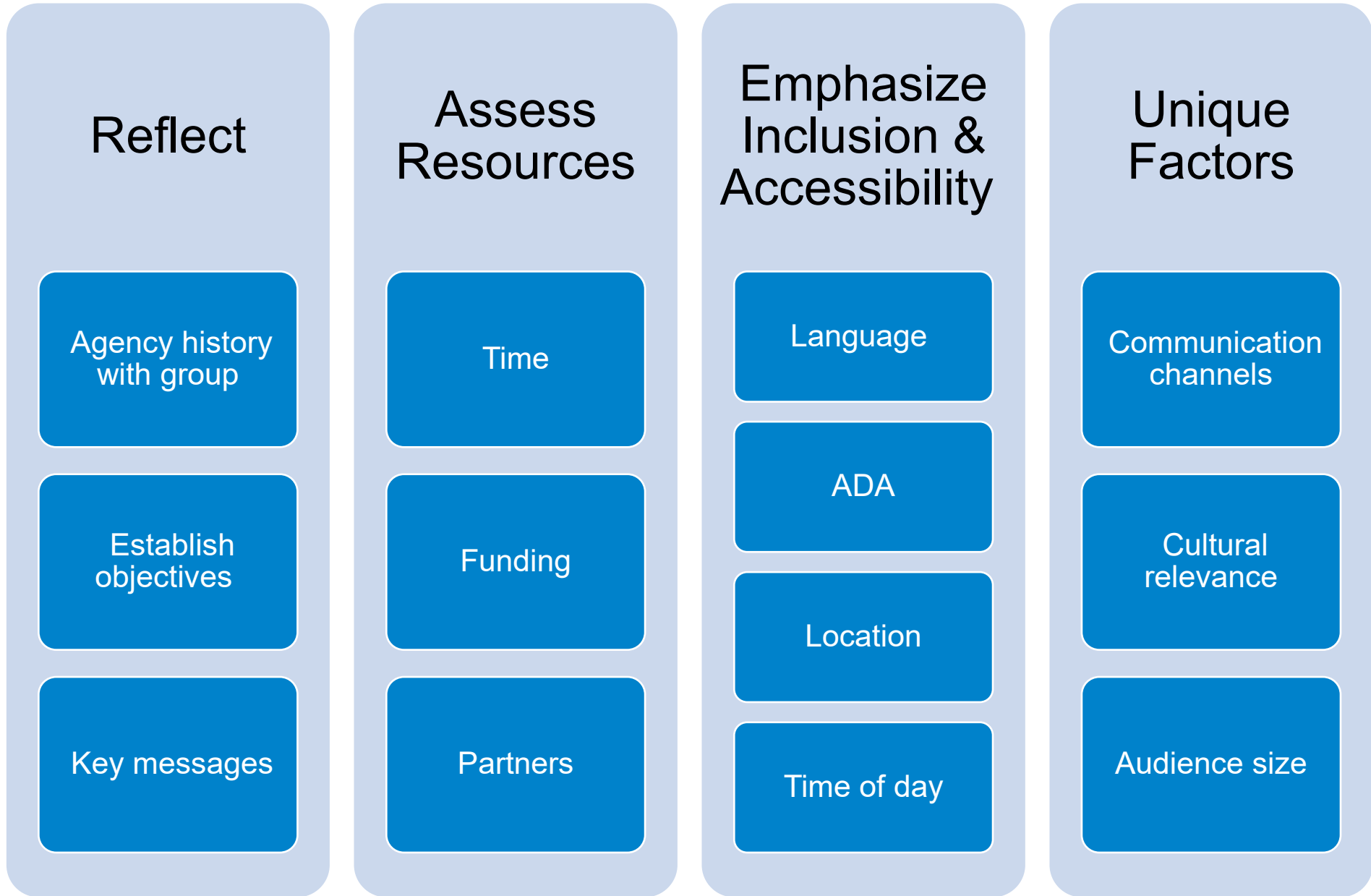
NHTSA's Fatality and Injury Reporting System Tool (FIRST)



Considerations for Selecting Engagement Strategies



Community Engagement Strategies – where to begin



Considerations for Selecting Techniques

Reflect:

- Who is/are the priority audience(s)?
- What factors may impact how the how our information is communicated and received?
- What has our level of engagement been with this community previously? Was it a positive interaction?

Resources:

- What is the engagement timeline, and can thorough outreach be done in that timeframe?
- Is the budget adequate for the breadth and depth of the outreach goals?
- Are there trusted community partners we can connect with to implement this strategy?

Considerations for Selecting Techniques

Inclusion & Accessibility:

- Are specific accommodations needed for the audience, including literacy levels, interpreters, captioning, ADA compliant spaces?
- Do members of the public primarily use languages other than English?
- Does the community need American Sign Language (ASL), other sign language, or large print/braille
- Can we incorporate in-person and virtual opportunities?
- Is the audience in a remote area? Will the audience be able to access reliable services (internet, transportation, etc.)?

Unique factors:

- Is this strategy culturally relevant to this audience? How can we convey issues in ways that are meaningful to this group?
- How can our agency bridge racial, cultural, and economic barriers that affect participation?
- What are the best channels to communicate and promote activities?
- How large or small might the audience be? How to structure interaction to maximize input?

Limited English Proficiency (LEP)

Programs and activities receiving Federal funding assistance must take reasonable steps to ensure that people with LEP have meaningful access.

- Plan ahead
- Types of services (interpretation, captions)
- Content (easy to read/plain language; translated)



Including people with disabilities

Effective practices to ensure participation by people with disabilities include:

- Providing accessible engagement opportunities whenever possible, not only when required
- Consultation with individuals or organizations that represent people with disabilities
- Plan for accessibility for people with various disabilities





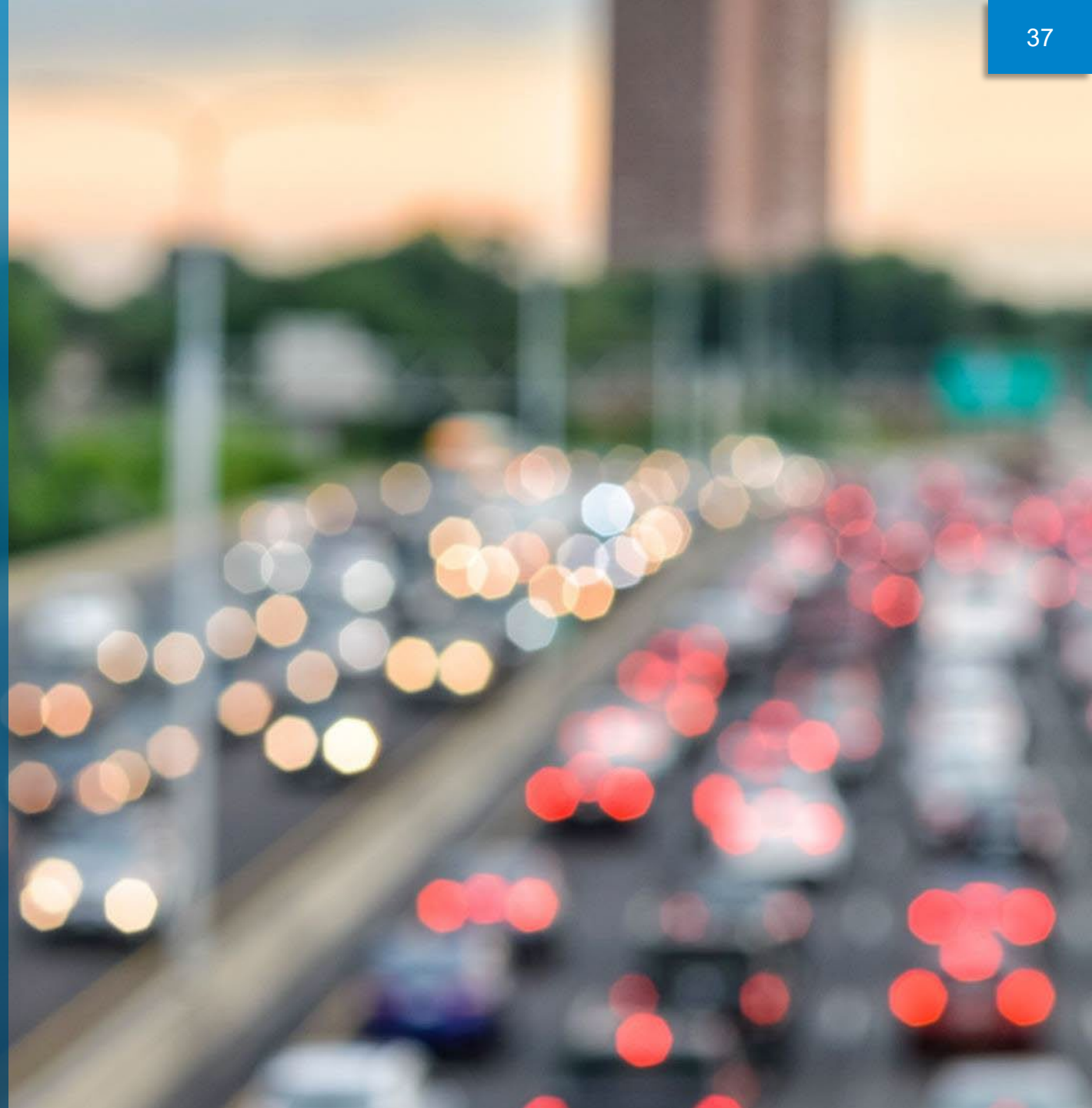
An Opportunity to Address Critical Gaps

Meaningful public engagement reinforces the creation and implementation of equitable programs and plans.

This is achieved by:

- Not relying on one-size-fits-all or “we’ve always done it this way” methods of community engagement
- Diverse and inclusive communications and outreach tools
- Engaging the public early and often
- Ensuring individuals and communities have an equitable voice in program development

Planning Tools



Develop Metrics

Output:

- How many people attended?
- Who participated/provided comments?
- Was your intended community reached?
- Presence of Community Leaders at each event?
- Accessibility measures implemented

Outcomes:

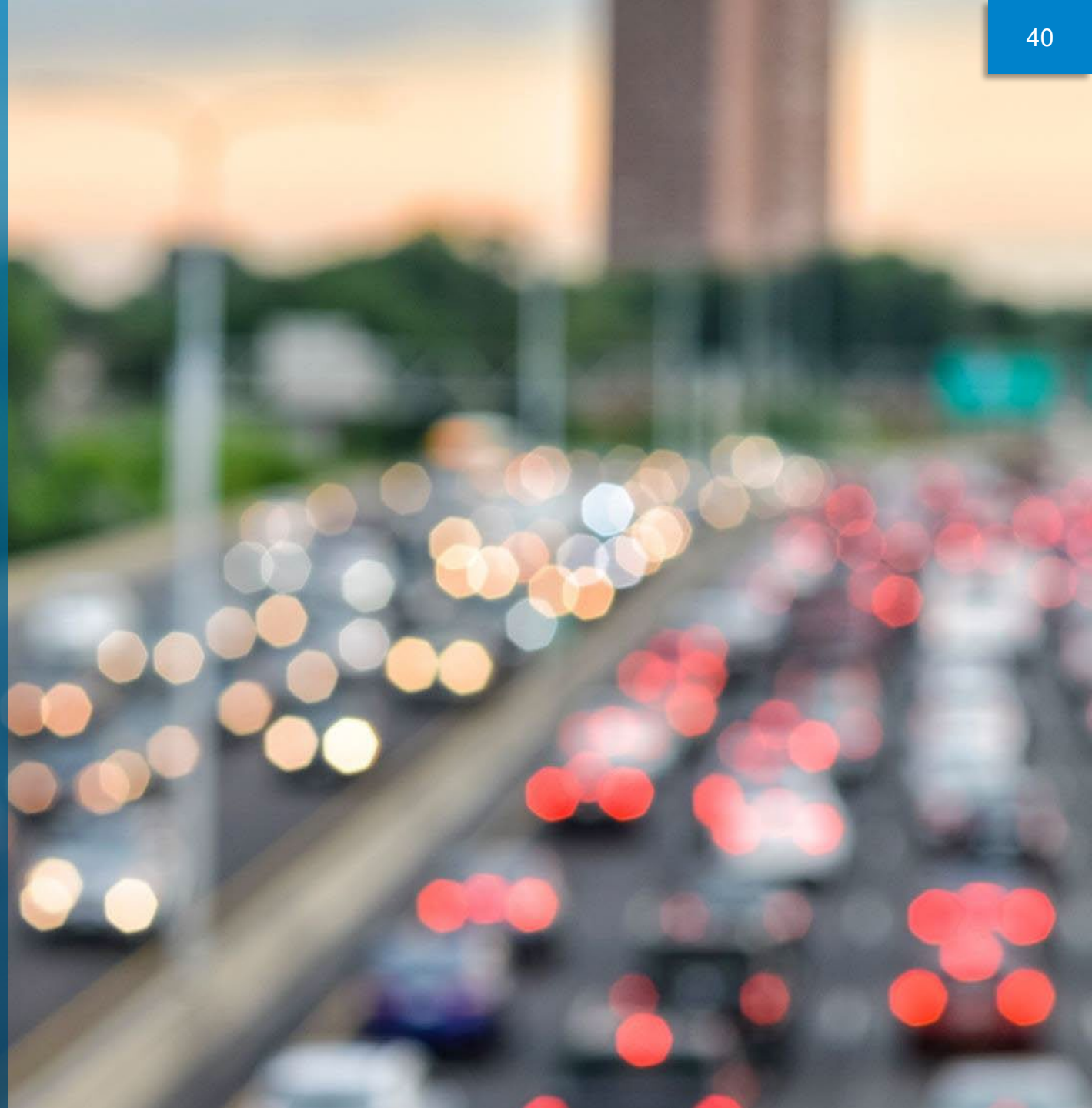
- What info did you receive?
- How did that info inform your HSP planning process?
- Did the participants feel they had adequate notice of the public engagement activity?
- Did they think the location, time, and/or primary language used were accessible?
- How did the engagement activity help meet your PP&E goals?

- Clear purpose of why engaging with this specific group
- Established objectives and metrics to measure outputs and outcomes
- Promoted activity through various communication channels
- Thoughtfully picked applicable engagement technique(s)
- Accessibility measures taken
- Resources and materials are culturally relevant and accessible
- Assessed timeline, schedule, and cost
- Established means for recording, reporting and reflecting stakeholder input
- Have ideas/plans for ongoing engagement with community
- Included partner organizations (when applicable)

Engagement Checklist

Tool when planning engagement sessions

Strategies and Scenarios



Examples of Engagement Opportunities



Scenario: The HSO is funding a new statewide task force to reduce distracted driving crashes, and wants to be sure to engage residents from neighborhoods with a large number of crashes. Over the course of a year, the HSO works with its existing Community Traffic Safety Projects to host a series of public meetings (in-person and virtual) joining task force representatives and community members in dialogue, where attendees asked questions and suggested ideas for the task force. Community comments were also captured in a poll.

Public Meetings/Open Forums

- Public meetings/open houses **share information**, and provide a setting for **public discussion**
- Open house = less formal event. People **learn at their own pace**, asking questions as they arise
- Good first approach to provide insight into additional engagement techniques

Scenario: The HSO tasked a local grantee to commission a survey to learn opinions and obtain feedback on a local speed management initiative that would involve automated speed enforcement, outdoor advertising and traffic law enforcement. They used the results of this survey to ensure public buy-in for the strategies selected in terms of their safety benefits, learn related safety needs of their constituents, and gauge whether the local community had experienced trust issues with their local police department.



Community Surveys

- Used to **assess widespread public opinion** from a representative sample
- Snapshot of community perceptions and preferences; can reach wide audience not typically associated with traffic safety issues
- Can **test public permission** for project
- Versatile distribution methods - mailings, emails, online ads, local news media, at events, via CBOs
- **Include people most likely to be affected by the decisions made**



Scenario: As part of its Pedestrian Safety Awareness Month campaign, the HSO is planning one week to focus on Disability Awareness, to remind drivers how to safely navigate near people using mobility assistance devices, including e-bikes and e-scooters. They host a series of focus groups including people with disabilities and drivers to determine which messages resonate with drivers and reflect the lived experiences and safety needs of people with disabilities.

Focus Groups

- Small group conversation led by facilitator to gauge public opinion and **listen to concerns, needs, wants, and expectations**
- Assess potential public reaction and acquire deeper understanding of people's viewpoints
- Used to identify concerns and issues prior to implementing a broader media or outreach strategy



Scenario: As part of a local bicycle safety campaign focused on delivery bikers, a Community Traffic Safety Project manager started a highly visible 6-month long campaign for sharing the road with cyclists in a business district where lots of bicycle deliveries occur. The project manager sets up a table near a plaza where food carts and a coffee house serve local business employees to solicit feedback on the campaign's impact.



Drop-in Centers

- Non-traditional meeting locations that offer **neutral and informal space** for community members to get project information, ask questions, and make comments
- Provides **on-going, in-person feedback**, gauging receptivity from inception to completion
- Where applicable, grantee sites may serve as drop in centers (e.g. local health departments, non-profit organizations, schools)

Scenario: After having made a positive introductory connection with leadership from the Seneca Nation several months ago, the HSO equity coordinator attended the annual Seneca Casino Veteran's Pow Wow to learn more about the important role members of the nation played in United States conflicts.

As part of the HSO manager's time spent at the Pow Wow, they were able to raise awareness of highway safety funding opportunities and get feedback for making an upcoming seat belt campaign culturally relevant. They offered program flyers and brochures, and spoke to at least 140 community members about the life-saving potential of seat belt usage.

Non-Traditional Events

- Meetings and experiences **not held in typical government settings**
- Led by communities and people who attend. Offer opportunity for staff to share hands-on materials.
- Demonstrates **authentic interest in the community** by tailoring engagement to a local event
- Attending multiple events, or consistently attending recurring events during a multi-year project, creates an ongoing presence in the community

Other notable strategies

- Charrettes
- Games and Contests
- Site visits
- Partner or community hosted meetings





Poll

.....

Considering the challenges you face in your community, which of these strategies would you find helpful to begin addressing them?

Useful tools within engagement techniques

- Websites
- Videos
- Public Information Materials (brochures, posters, fact sheets, radio ads)
- Social media pages (note: *understand community consumption*)
- Virtual Presentations and Simulations
- Geographic Information Systems (GIS)

Questions to consider

What resources do you need assistance with regarding public engagement? What do you need from NHTSA to make this a successful process?

What are your agency's opportunities to implement meaningful public engagement?

Are there specific communities with which you would like assistance reaching through your engagement efforts?

What data sources is your state already using?

Questions



Email:

nhtsaropdprogramquestions@dot.gov