

CARTS Crash Tool



DOTD Highway Safety



Introduction

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- @ Highway Safety since 2015

Agenda

- Introduction
- Initialization
- Crash Querying
- Site Analysis
- Quality Assurance
- Benefit-Cost

CARTS Crash Tool

- Not an everything tool
- Statistics & SHSP Dashboards >
CARTS.LSU.edu > Data Reports
- Focused on project development
- Most modules finished
 - Crash Query
 - Quality Assurance
 - Site Analysis
 - Benefit-Cost
- More Training in the near future



HSIP

<https://highways.dot.gov/safety/hsip>

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

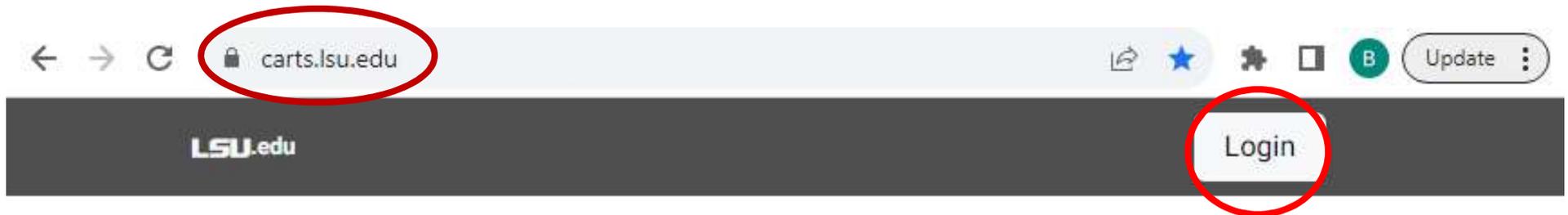
The HSIP is legislated under Section 148 of Title 23, *United States Code* (23 U.S.C. 148) and regulated under Part 924 of Title 23, Code of Federal Regulations (23 CFR Part 924). The HSIP consists of three main components, the Strategic Highway Safety Plan (SHSP), State HSIP or program of highway safety improvement projects and the Railway-Highway Crossing Program (RHCP). In addition, some states also have a High Risk Rural Roads (HRRR) program if they had increasing fatality rate on rural roads.

New Crash Report 2022

- New Collision Manner
 - Right-overtake
 - Left against flow
 - Backing x3
 - Unknown
- More details
 - Non-Motorists
 - Commercial Motor Vehicles
 - Intersections
- Cyclists are Non-Motorists

Gaining Access

Send Access requests to <Bryan.Costello@LA.gov>



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Gaining Access

 **CARTS** Authentication Service

Login

Choose how to login

Louisiana
eCrash

Login with
CAS
(LAeCrash)



CARTS

Gaining Access

← → ↻ carts.lsu.edu/home 🔒 📄 ☆ ⚙️ 🗄️ B Update ⋮

LSU.edu

bryan.costello 👤

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Gaining Access

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AdHoc Query Tool



Application that allows the user to write queries against the data warehouse and find results that match those queries.

Open

CARTS User Administration



Manage individual users and their access, Organizations and Sub-Organizations.

Open

Crash Query Tool



Provides DOTD engineers with a toolset to more easily identify and analyze problematic roadway areas by crash volume, severity, and other factors.

Open

Gaining Access

This crash data tool has been developed by the Office of Planning, Highway Safety Section of DOTD for crash analysis purposes. The data contained herein is prepared solely for the purpose of identifying, evaluating, and planning safety enhancements and/or strategies of crash sites. This is pursuant to Section 148 of Title 23 of the United States Code and was implemented utilizing federal-aid highway funds. Therefore, the data is not subject to discovery nor may be admitted into evidence in a Federal or State court proceeding or considered in any action against DOTD or the state of Louisiana.

DOTD makes no representation as to the accuracy, adequacy, reliability, availability or completeness of the Law Enforcement Agency crash reports or the data collected from them. DOTD is not responsible for any errors or omissions in such reports or data. DOTD is not liable for any loss or damage incurred by any party as a result of the use of the crash reports or data collected from them.

The data contained herein is not the official report of the circumstances of a particular crash. The crash report and data contained within is owned and maintained by the investigating agency. To obtain an official copy of a crash report, contact the state or local law enforcement agency that created it.

Pursuant to Louisiana Revised Statute 32:398, unless specifically authorized by the State of Louisiana, third parties shall not sell or distribute any compiled data owned by the state of Louisiana.

Questions or concerns, should be directed to the DOTD Highway Safety Section at dotd-highwaysafety@la.gov or by calling (225) 379-1214.

ACCEPT

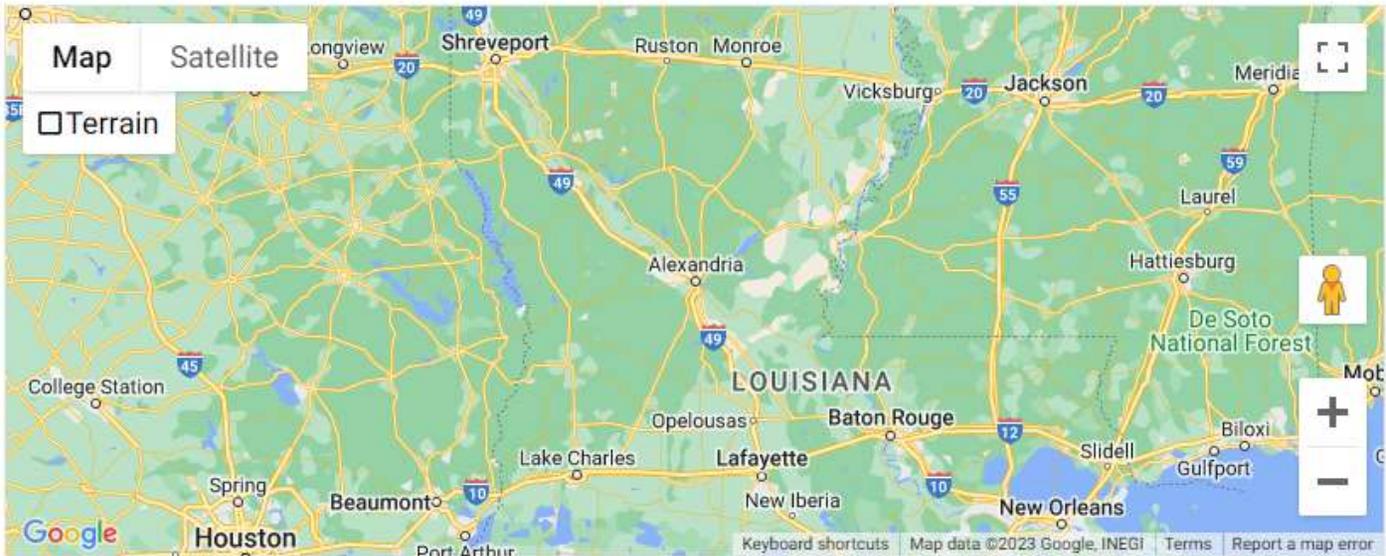
DECLINE

Orientation

Total Crashes: 0 Fatal Injury Crashes: 0 Injury Crashes: 0 Property Damage Only Crashes: 0 **bryan.costello** 

Crash Query Tool

- > Query
- > Summary
- > Tools
- > View
- > Project
- > Help

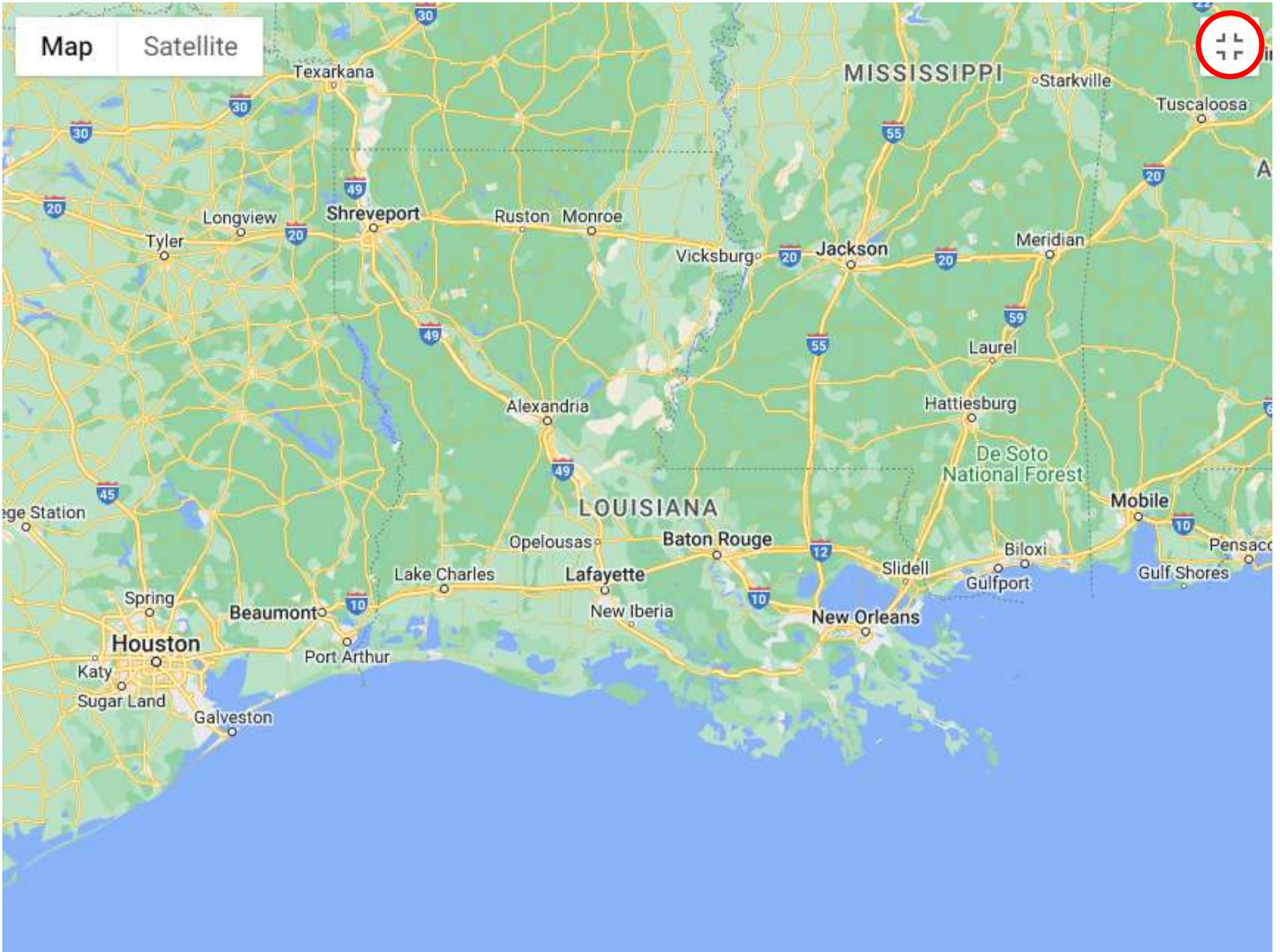


0 mapped out of 0

MAP ICON LEGEND

	Mapped 	Crash Number 	Year 	Severity 	Manner of Collision 	Control Section
	(All) 			(All) 	(All) 	

No data



Orientation

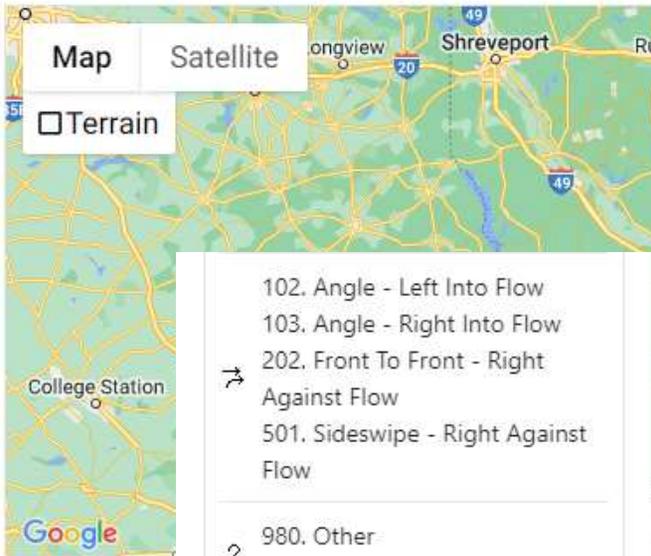
Total Crashes: 0 Fatal Injury Crashes: 0 Injury Crashes: 0 Property Damage Only Crashes: 0 bryan.costello

Crash Query Tool

Date Range Location Route Control Section

- > Query
- > Summary
- > Tools
- > View
- > Project
- > Help

Map Satellite Terrain



0 mapped out

Clear Filters

Manner of Collision

- 101. Angle - Left Across Flow
- 105. Angle - Perpendicular/Other Angle
- 201. Front To Front - Left Against Flow
- 500. Sideswipe - Left Against Flow
- 102. Angle - Left Into Flow
- 103. Angle - Right Into Flow
- 202. Front To Front - Right Against Flow
- 501. Sideswipe - Right Against Flow
- 980. Other
- 999. Unknown
- 100. Angle - Left Overtake
- 104. Angle - Right Overtake
- 300. Front To Rear - Rear End
- 400. Backing - Rear To Front
- 401. Backing - Rear To Rear
- 402. Backing - Rear To Side
- 503. Sideswipe - Left Overtake
- 504. Sideswipe - Right Overtake
- 505. Sideswipe - With Flow
- 200. Front To Front - Head On
- 502. Sideswipe - Against Flow
- 000. Not a Collision Between Two Motor Vehicles

Severity

- Not Reported
- Property Damage-Only
- Possible Injury
- Suspected Minor Injury
- Suspected Serious Injury
- Fatal Injury

Manner of Collision

- 101. Angle - Left Across Flow
- 105. Angle - Perpendicular/Other Angle
- 201. Front To Front - Left Against Flow
- 500. Sideswipe - Left Against Flow
- 100. Angle - Left Overtake
- 104. Angle - Right Overtake
- 300. Front To Rear - Rear End
- 400. Backing - Rear To Front
- 401. Backing - Rear To Rear
- 402. Backing - Rear To Side
- 503. Sideswipe - Left Overtake
- 504. Sideswipe - Right Overtake
- 505. Sideswipe - With Flow
- 200. Front To Front - Head On
- 502. Sideswipe - Against Flow
- 000. Not a Collision Between Two Motor Vehicles

MAP ICON LEGEND

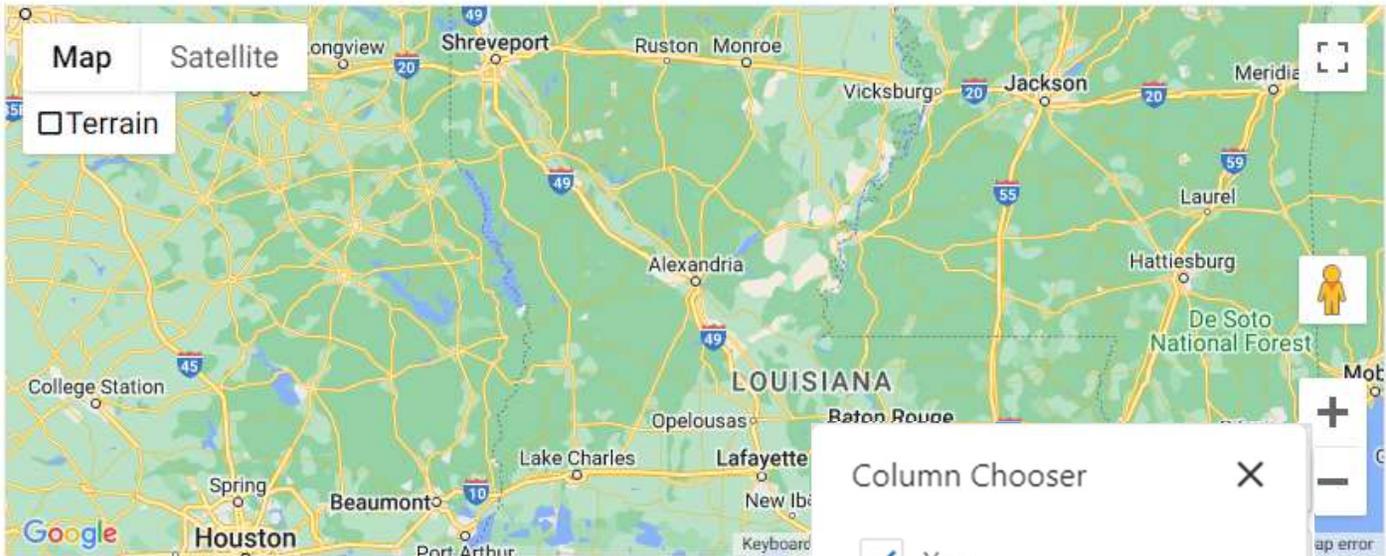
No data

Orientation

Total Crashes: 0 Fatal Injury Crashes: 0 Injury Crashes: 0 Property Damage Only Crashes: 0 bryan.costello 

Crash Query Tool

- > Query
- > Summary
- > Tools
- > View
- > Project
- > Help



0 mapped out of 0

	Mapped 	Crash Number 	Year 	Sev 
	(All) 			(All) 

No data

Column Chooser ✕

- Year
- Severity
- Manner of Collision
- Control Section
- Log Mile
- Roadway Departure

Orientation

Total Crashes: 0 Fatal Injury Crashes: 0 Injury Crashes: 0 Property Damage Only Crashes: 0 bryan.costello

Crash Query Tool

- > Query
- > Summary
- > Tools
- > View

- > Project

- Help**
 - Contact Us
 - Feedback
 - Status
 - Documentation**
 - eCrashManual
 - Release Notes

Map Satellite

0 mapped out of 0

MAP ICON LEGEND

Mapped	Crash Number	Year	Severity	Manner of Collision	Control Section
(All) ▼			(All) ▼	(All) ▼	

No data

Documentation

The screenshot shows a web browser window with the URL crashquerytool.lsu.edu/help/intro/ circled in red. The page title is "Crash Query Tool" and it features a search bar and a navigation menu on the left. The main content area displays the "Overview Video" section, which includes a video player with the title "Running a Query" and a list of time stamps for sections.

crashquerytool.lsu.edu/help/intro/

Crash Query Tool

Overview Video

Login

Loading Crashes >

Map >

Grid >

Projects >

Crash Report >

Narrative & Diagram >

Summaries >

Analysis >

Overview Video

Overview Video

Running a Query

- basic
- spatial

0:00 / 7:38

Time Stamps for Sections

- 0:00 - Running a query
- 1:10 - Map Options
- 2:28 - Narrative/Crash Report

eCrash Manual

Tools LA_Unifo...1f55289 Share

Intersection Geometry

The general geometry of the intersection. An intersection consists of two or more roadways that intersect at the same level.

Code	Name	Description
100	Angled / skewed	An intersection of roads where the angle between the roads is significantly more or less than 90°.
		 
101	Roundabout / traffic circle	Circular traffic patterns in which yield control uses all entries, circulating vehicles have right of way, pedestrian access only allow across the legs of the roundabout behind the yield line and circulation is counter-clockwise and passes to the right of the central island. Intersections where vehicles must travel around a circle to continue on the same road or leave on any intersecting road.
		 
102	Perpendicular	An intersection of roads where the angle between the roads is almost nearly 90°.
		 
970	Not applicable	Not applicable.

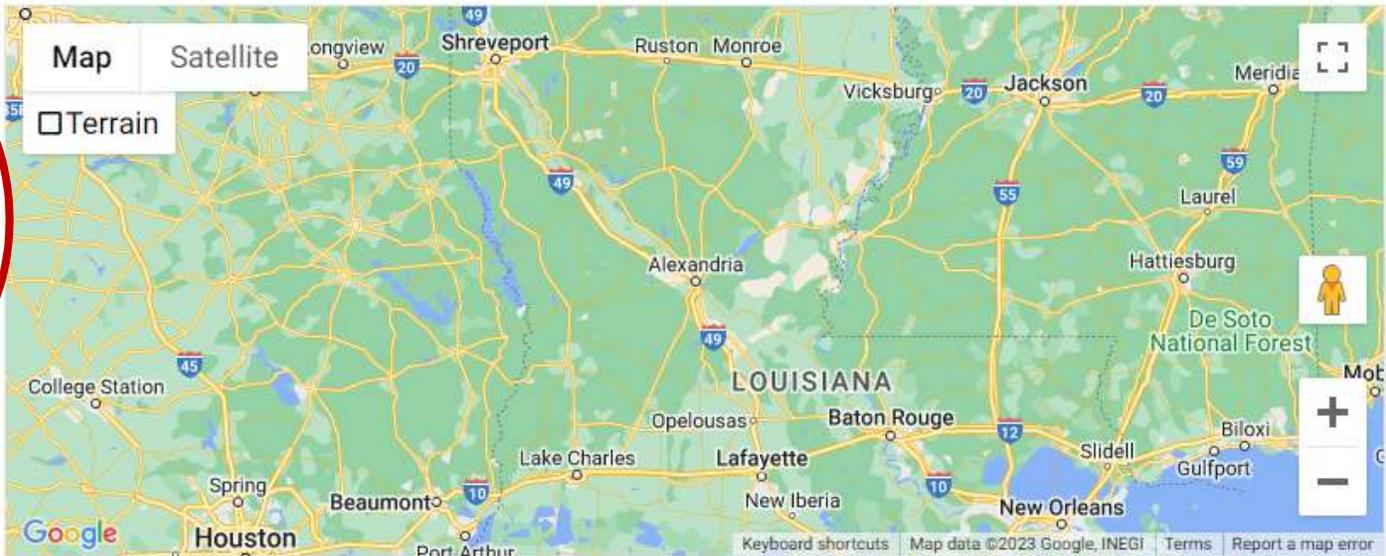
75 435

Orientation

Total Crashes: 0 Fatal Injury Crashes: 0 Injury Crashes: 0 Property Damage Only Crashes: 0 bryan.costello 

Crash Query Tool

- > Query
- > Summary**
- > Tools
- > View
- > Project
- > Help



0 mapped out of 0

MAP ICON LEGEND

Mapped	Crash Number	Year	Severity	Manner of Collision	Control Section
(All)			(All)	(All)	

No data

Agenda

- ✓ Introduction
- ✓ Initialization
 - Crash Querying
 - Site Analysis
 - Quality Assurance
 - Benefit-Cost

Limits - Time

- Most recent: 6 to 18 months ago
- Minimum: 3 years
- Preferred: 5 years
- Consistency
 - Similar operations
 - No major construction

Limits - Segments

➤ Considerations

- Too small may be too close to randomness
- Too large may be too close to average

➤ Suggested limits

(miles)	Urban	Rural	Class
Minimum	0.4	0.6	Highways
Maximum	2	8	
Best	Between interchanges		Freeways

- If an end-point is at an intersection, trim it to avoid the intersection's functional area

Limits - Intersections

- Considerations
 - Too small, may not capture all crashes
 - Too large, may perform extra QA
- Minimum: 150 feet*
- *but do not include other intersections
- Include all of the turn-lanes & taper*
- If too close to another intersection, consider splitting the distance between intersections

Limits - All

- Insufficient Crashes
 - Intersections: <5 crashes / year
 - Segments: <5 crashes / year / mile
- Remedy
 - Increase geographic span
 - Increase time span

Crash Analysis Process

- Crash Query
- Quality Assurance
- Site Analysis
- Benefit-Cost Analysis
- Publish Results

Crash Querying

Crash Query Tool

Date Range Location Route Control Section Load Crashes Reset

BY YEAR BY DATE

Start Year: 2018

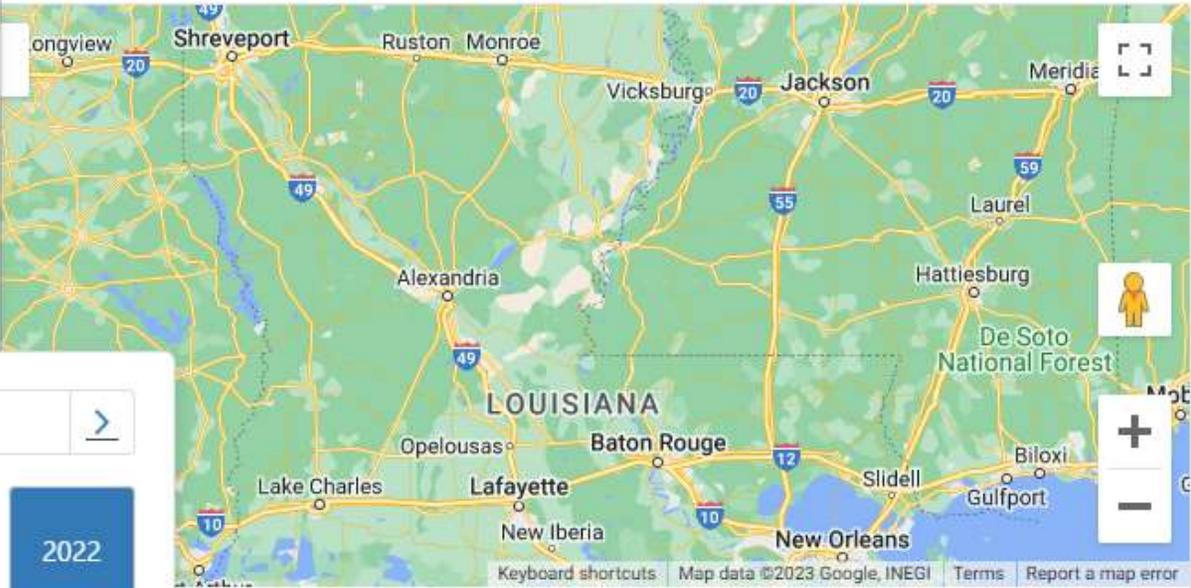
End Year: 2022

2020-2029

2019 2020 2021 **2022**

2023 2024 2025 2026

2027 2028 2029 2030



MAP ICON LEGEND

Crash Number	Year	Severity	Manner of Collision	Control Section
		(All)	(All)	

No data

Crash Querying

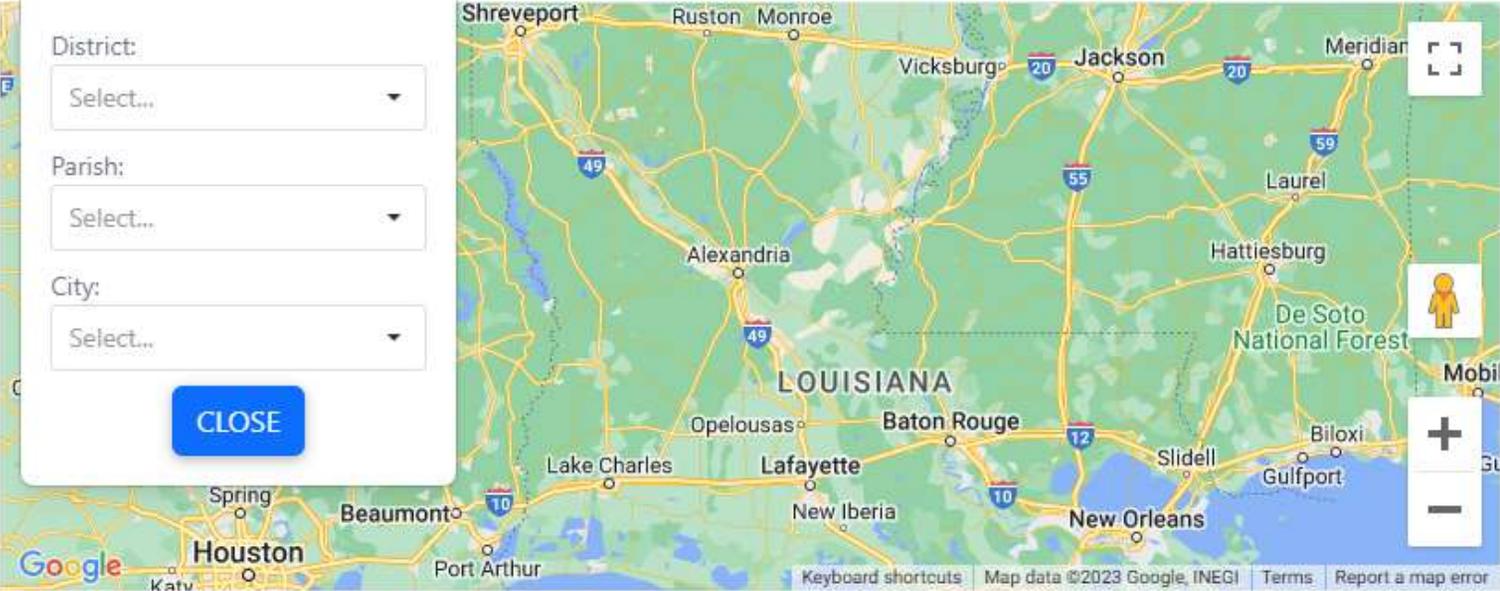
Crash Query Tool

> Query
 > Summary
 > Tools
 > View
 > Project
 > Help

District:
Select... ▼

Parish:
Select... ▼

City:
Select... ▼



0 mapped out of 0

	Mapped ▼	Crash Number ▼	Year ▼	Severity ▼	Manner of Collision ▼	Control Section
	(All) ▼			(All) ▼	(All) ▼	

No data

Crash Querying

Crash Query Tool

- > Query
- > Summary
- > Tools
- > View
- > Project
- > Help

Map



0 mapped c

Highway Type:
Select...

Highway Number:
Select...

Milepoint From:
0

Milepoint To:
0

LRS ID:
Select...



MAP ICON LEGEND

Clear Filters

Mapped	Crash Number	Month	Year	Day of Week	Severity	Log Mile
(All)					(All)	

No data

Crash Querying

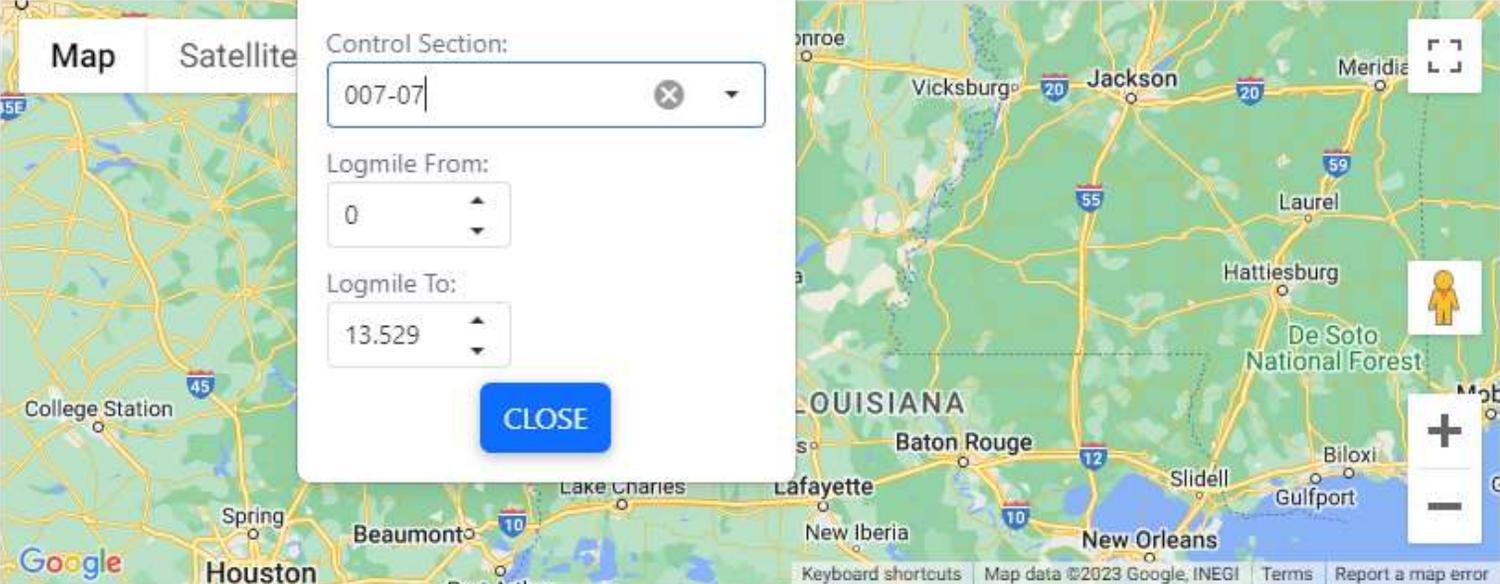
Crash Query Tool

> Query
 > Summary
 > Tools
 > View
 > Project
 > Help

Control Section:

Logmile From:

Logmile To:



0 mapped out of 0

	Mapped ▼	Crash Number ▼	Year ▼	Severity ▼	Manner of Collision ▼	Control Section
	(All) ▼			(All) ▼	(All) ▼	
No data						

Crash Querying

Crash Query Tool

> Query
 > Summary
 > Tools
 > View
 > Project
 > Help

Map | Satellite

Control Section: 450-05

Logmile From: 2

Logmile To: 3

0 mapped out of 0

MAP ICON LEGEND

Mapped	Crash Number	Year	Severity	Manner of Collision	Control Section
(All)			(All)	(All)	

No data

Crash Querying

Total Crashes: 55 Fatal Injury Crashes: 0 Injury Crashes: 19 Property Damage Only Crashes: 36 bryan.costello

Crash Query Tool

Date Range Location Route Control Section Update **Reset**

> Query
 > Summary
 > Tools
 > View
 > Project
 > Help

55 mapped out of 55

MAP ICON LEGEND

Clear Filters

	Mapped	Year	Severity	Manner of Collision	Cont
	(All)		(All)	(All)	
	<input checked="" type="checkbox"/>	2018	104-(O) PROPERTY DAMAGE ONLY	505-SIDESWIPE - SAME DIRECTION	450-
	<input checked="" type="checkbox"/>	2018	104-(O) PROPERTY DAMAGE ONLY	505-SIDESWIPE - SAME DIRECTION	450-
	<input checked="" type="checkbox"/>	2018	104-(O) PROPERTY DAMAGE ONLY	300-FRONT TO REAR - REAR END	450-

Crash Querying

Total Crashes: 0 Fatal Injury Crashes: 0 Injury Crashes: 0 Property Damage Only Crashes: 0 bryan.costello 

Crash Query Tool

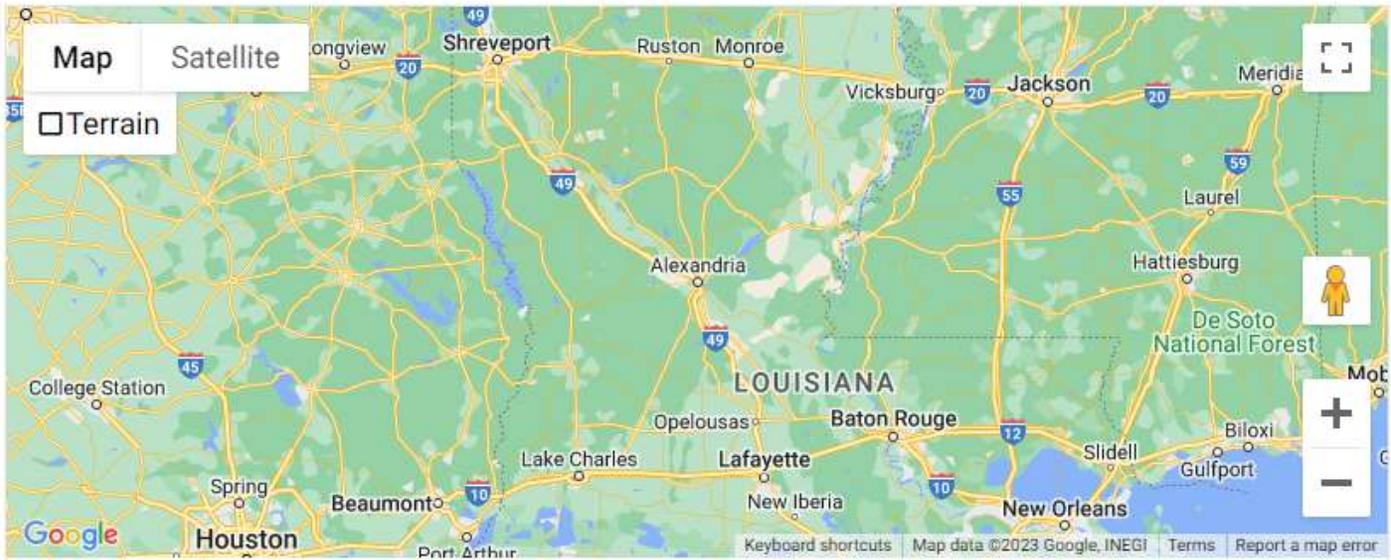
- > Query
- > Summary
- > Tools
- > View
- > Project
- > Help

Map

Satellite

Terrain





Keyboard shortcuts Map data ©2023 Google, INEGI Terms Report a map error

0 mapped out of 0 MAP ICON LEGEND

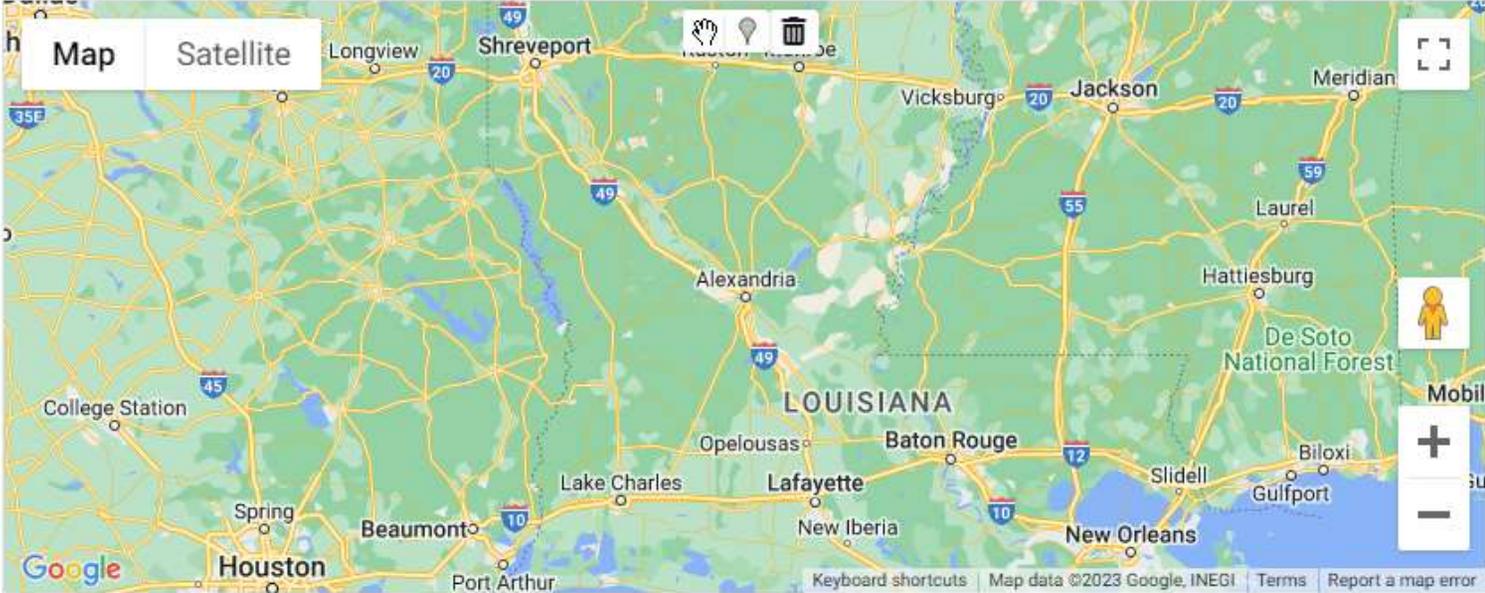
 

	Mapped 	Crash Number 	Year 	Severity 	Manner of Collision 	Control Section
	(All) 			(All) 	(All) 	
No data						

Crash Querying

Crash Query Tool

- ▼ Query
 - Basic
 - ▼ Spatial
 - By Search Area
 - By Point**
 - > Summary
 - > Tools
 - > View
- > Project
- > Help



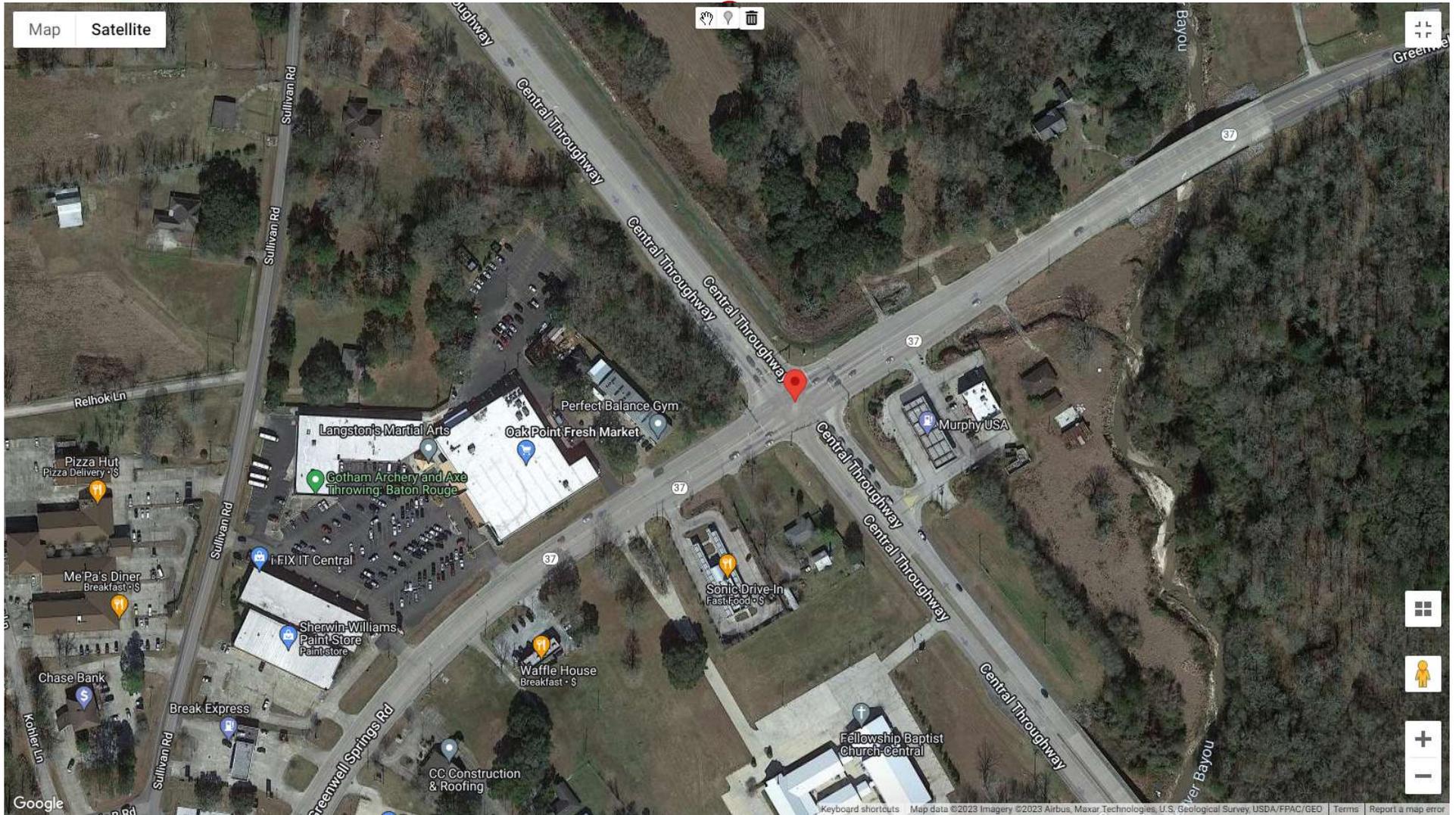
0 mapped out of 0

MAP ICON LEGEND

	Mapped ▼	Year ▼	Severity	Manner of Collision ▼	Cont
	(All) ▼	🔍	(All) ▼	(All) ▼	🔍

No data

Crash Querying



Crash Querying

Crash Query Tool

▼ Query

Basic

▼ Spatial

By Search Area

By Point

> Summary

> Tools

> View

> Project

> Help

Lat/Long:

Within:
 feet



0 mapped out of 0

MAP ICON LEGEND

Mapped	Year	Severity	Manner of Collision	Cont
(All)	🔍	(All)	(All)	🔍

No data

Crash Querying

Total Crashes: 126 Fatal Injury Crashes: 1 Injury Crashes: 33 Property Damage Only Crashes: 92 bryan.costello

Crash Query Tool

Date Range Location Route Control Section Reset

- Query
 - Basic
 - Spatial
 - By Search Area
 - By Point
 - Summary**
 - Tools
 - View
 - Project
 - Help

126 mapped out of 126

MAP ICON LEGEND

	Mapped	Year	Severity	Manner of Collision	Cont
	(All)		(All)	(All)	
	✓	2022	104-(O) PROPERTY DAMAGE ONLY	505-SIDESWIPE - SAME DIRECTION	-1
	✓	2018	103-(C) POSSIBLE INJURY	200-FRONT TO FRONT - HEAD ON	254-
	✓	2018	104-(O) PROPERTY DAMAGE ONLY	101-ANGLE - LEFT OPPOSITE DIREC...	254-

Crash Querying

Total Crashes: 126 Fatal Injury Crashes: 1 Injury Crashes: 33 Property Damage Only Crashes: 92

bryan.costello 

Crash Query Tool

▼ Query

Basic

Within 200 feet of latitude 30.514872, longitude -91.026334

▼ Spatial

2018-1-1 to 2022-12-31

By Search
Area



By Point

▼ Summary

Alcohol

Control
Section

Day of Week

Hour

Intersection
Crash

Parish

Pedestrian

Relation To
Roadway

Route

Type of
Collision

Work Zone

Hour	Tot Acc	Fatal Acc	Injury Acc	PDO Acc	Num Fatalities	Num Severe Injuries(B)	Num Moderate I
0	3	0	1	2	0	0	
1	1	0	0	1	0	0	
5	2	0	1	1	0	0	
6	7	0	4	3	0	0	
7	9	0	1	8	0	0	
8	9	0	2	7	0	0	
9	6	0	0	6	0	0	
10	2	0	1	1	0	0	
11	12	0	2	10	0	0	
12	4	0	0	4	0	0	
13	7	0	3	4	0	0	
14	4	0	2	2	0	1	
15	14	0	3	11	0	0	

Crash Querying

Total Crashes: 126 Fatal Injury Crashes: 1 Injury Crashes: 33 Property Damage Only Crashes: 92 bryan.costello 

Crash Query Tool

✓ Query
 Basic
 ✓ Spatial
 By Search Area
 By Point

Within 200 feet of latitude 30.514872, longitude -91.026334
2018-1-1 to 2022-12-31



	Hour	Tot Acc	Fatal Acc	Injury Acc	PDO Acc	Num Fatalities	Num Severe Injuries(B)	Num Moderate I
> Summary	0	3	0	1	2	0	0	
> Tools	1	1	0	0	1	0	0	
✓ View	5	2	0	1	1	0	0	
Query	6	7	0	4	3	0	0	
	7	9	0	1	8	0	0	
> Project	8	9	0	2	7	0	0	
	9	6	0	0	6	0	0	
> Help	10	2	0	1	1	0	0	
	11	12	0	2	10	0	0	
	12	4	0	0	4	0	0	
	13	7	0	3	4	0	0	
	14	4	0	2	2	0	1	
	15	14	0	3	11	0	0	

Crash Querying

Total Crashes: 126 Fatal Injury Crashes: 1 Injury Crashes: 33 Property Damage Only Crashes: 92 bryan.costello

Crash Query Tool

Date Range Location Route Control Section Reset

Query

- Basic
- Spatial
 - By Search Area
 - By Point
- Summary
- Tools
- View
- Project
- Help

126 mapped out of 126

MAP ICON LEGEND

	Mapped	Year	Severity	Manner of Collision	Cont
	(All)		(All)	(All)	
	✓	2022	104-(O) PROPERTY DAMAGE ONLY	505-SIDESWIPE - SAME DIRECTION	-1
	✓	2018	103-(C) POSSIBLE INJURY	200-FRONT TO FRONT - HEAD ON	254-
	✓	2018	104-(O) PROPERTY DAMAGE ONLY	101-ANGLE - LEFT OPPOSITE DIREC...	254-

Crash - Tools

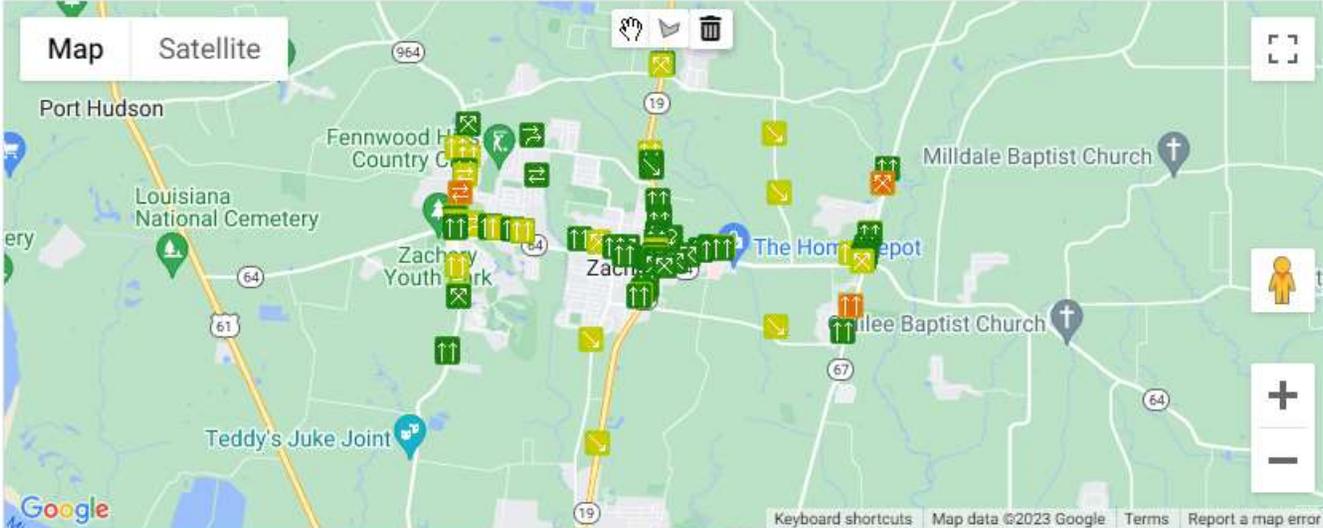
- Query: 2020 & Zachary
- Filter: Severity: A, B; C (No K or O)

Total Crashes: 409 Fatal Injury Crashes: 0 Injury Crashes: 108 Property Damage Only Crashes: 301 bryan.costello

Crash Query Tool

Date Range Location Route Control Section Update Reset

> Query
 > Summary
 Tools
 Cluster Crashes OFF
 Heat Map OFF
 > View
 > Project
 > Help



108 mapped out of 108

MAP ICON LEGEND

Clear Filters

Mapped	Crash Number	Year	Severity	Manner of Collision
(All)	Q	Q	(All)	(All)

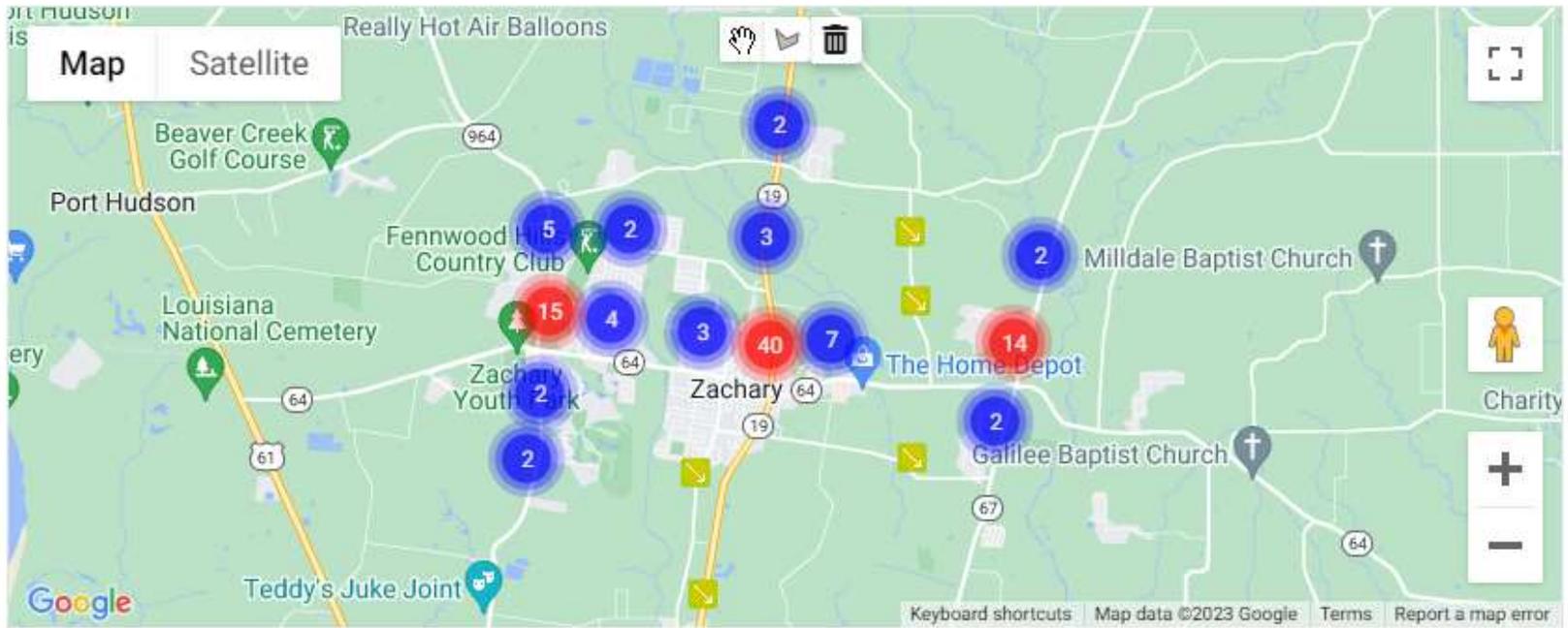
Crash - Tools

Total Crashes: 409 Fatal Injury Crashes: 0 Injury Crashes: 108 Property Damage Only Crashes: 301

bryan.costello

Crash Query Tool

- > Query
- > Summary
- Tools
 - Cluster Crashes
 - Heat Map
- > View
- > Project
- > Help



108 mapped out of 108

MAP ICON LEGEND

Crash - Tools

Total Crashes: 409 Fatal Injury Crashes: 0 Injury Crashes: 108 Property Damage Only Crashes: 301

bryan.costello 

Crash Query Tool

Date Range

Location

Route

Control Section

Update

Reset

> Query

> Summary

Tools

Cluster Crashes

OFF

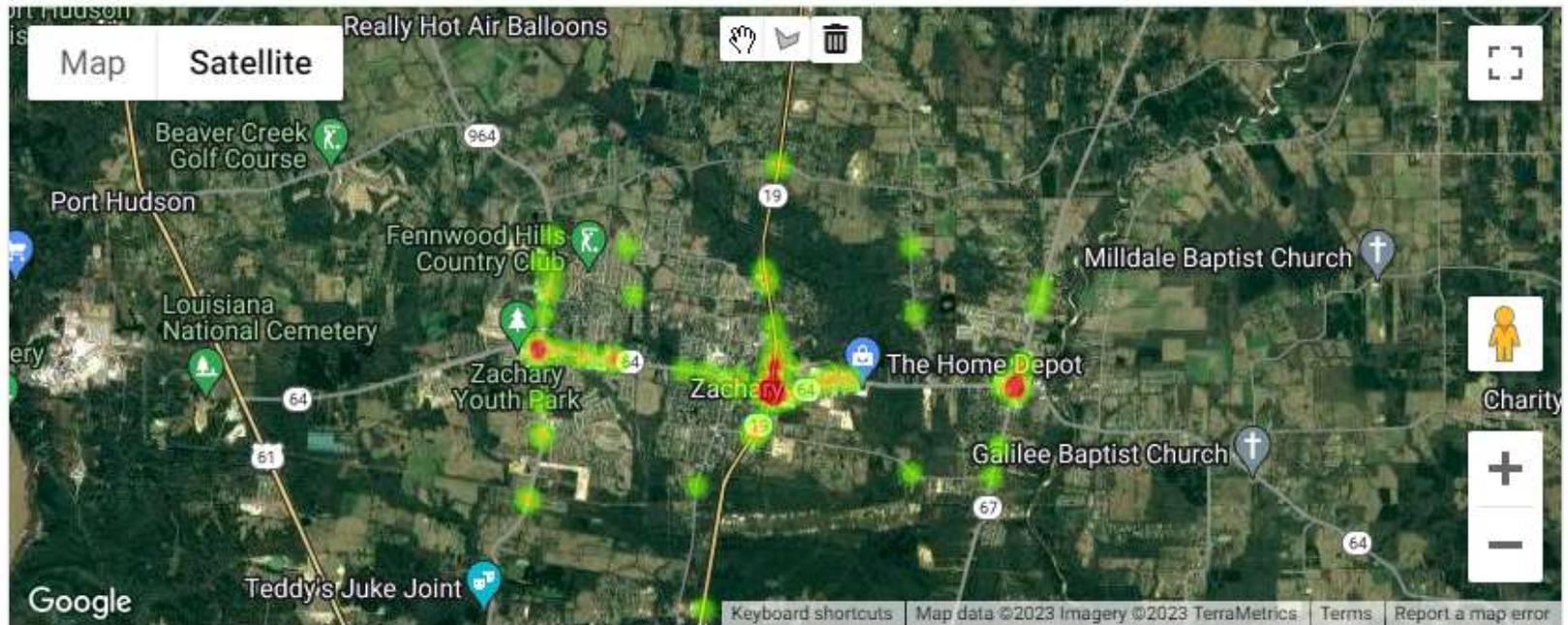
Heat Map

ON

> View

> Project

> Help



108 mapped out of 108

MAP ICON LEGEND

Clear Filters



Agenda

- ✓ Introduction
- ✓ Initialization
- ✓ Crash Querying
 - Site Analysis
 - Quality Assurance
 - Benefit-Cost

Create Project

Crash Query Tool

Query

Basic

Spatial

By Search Area

By Point

Summary

Tools

View

Project

Create Project

My Projects

Help



128 mapped out of 128

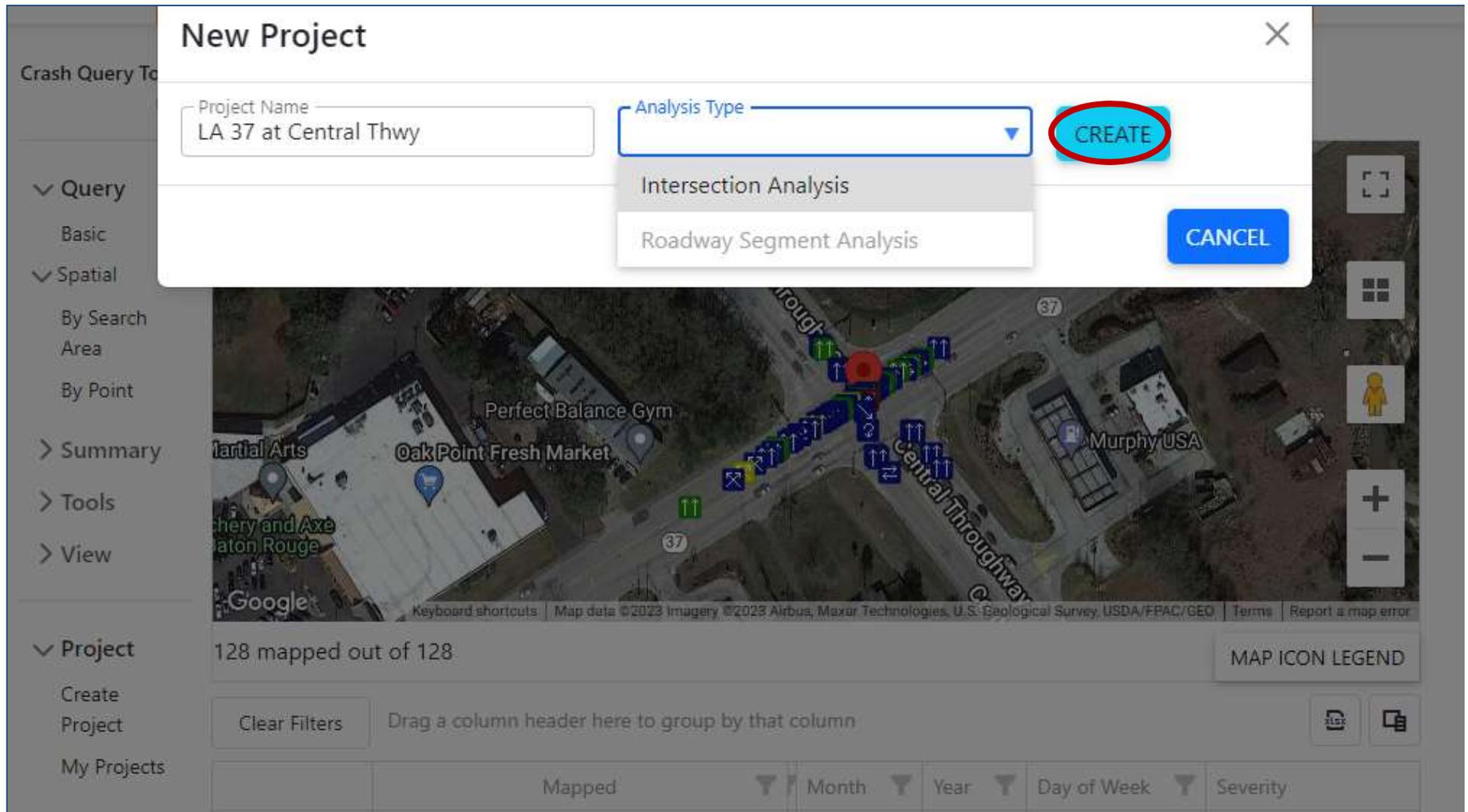
MAP ICON LEGEND

Clear Filters

Drag a column header here to group by that column

	Mapped	Crash Number	Month	Year	Day of Week	Severity
(All)	▼	🔍	🔍	🔍	🔍	(All)

Create Project



New Project [X]

Project Name: LA 37 at Central Thwy

Analysis Type: [Dropdown Menu]

- Intersection Analysis
- Roadway Segment Analysis

CREATE (circled in red)

CANCEL

Map Interface Elements:
Sidebar: Query, Summary, Tools, View, Project (128 mapped out of 128)
Map: Street view of an intersection with markers and labels (Perfect Balance Gym, Oak Point Fresh Market, Murphy USA, Central Thoroughway, LA 37).
Map Controls: Zoom in (+), Zoom out (-), Full screen, Map icon legend, Print, Copy.

My Projects

Crash Query Tool

Date Range

Location

Route

Control Section

Reset

Query

Basic

Spatial

By Search Area

By Point

Summary

Tools

View

Project

Create Project

My Projects

Help



128 mapped out of 128

MAP ICON LEGEND

Clear Filters

Drag a column header here to group by that column

Mapped	Crash Number	Month	Year	Day of Week	Severity
(All)	🔍	🔍	🔍	🔍	(All)

My Projects

New Project
✕

Project Name	Analysis Type	Created By	Created On	Date Modified	
LA 37 at Central Thwy	Intersection Analysis	bryan.costello	10/31/2023	10/31/2023	Load Delete

5 10 20
1 2 3

CANCEL

128 mapped out of 128 MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column

Mapped	Month	Year	Day of Week	Severity
(All)	🔍	🔍	🔍	(All)

Crash Analysis

Crash Query Tool

- > Query
- > Summary
- > Tools
- ▼ View
 - Query
- > Project
- ▼ Analysis
 - Intersection
- > Help



110 mapped out of 110

MAP ICON LEGEND

Clear Filters	Load Saved Filter	Save Filter	Drag a column header here to group by that column	
	Reviewed ▼	Mapped ▼	Manner of Collision ▼	Severity
	(All) ▼	(All) ▼	(All) ▼	(All)
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	101-ANGLE - LEFT OPPOSITE DIRECTION	102-(B) SUSPECTED MIN

Intersection Analysis

Crash Query Tool

Pattern Recognition Analysis - Intersection

> Query

> Summary

> Tools

▼ View

Query

> Project

▼ Analysis

Intersection

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Project Name

LA 37 at Central Thwy

Analysis Date

11/1/2023



NEXT STEP

Intersection Analysis

> Query 1 Project Name 2 Inputs 3 Parameters 4 Review

> Summary

> Tools

▼ View
Query

> Project

▼ Analysis
Intersection

> Help

Date Range

Start Date
1/1/2018

End Date
12/31/2022

Rural/Urban

Rural

Urban

Number of Lanes

2

4

6

Divided/Undivided

Divided

Undivided

Signalized/Unsignalized

Signalized

Unsignalized

Number of Legs

3

4

PREVIOUS STEP **NEXT STEP**

gov

Intersection Analysis

Crash Query Tool

Pattern Recognition Analysis - Intersection

> Query

> Summary

> Tools

∨ View

Query

> Project

∨ Analysis

Intersection

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Aadt Major
Select...

GREENWELL SPRINGS - NaN
LA 37 - 20524
CENTRAL - 10217
LA 37 - 20521
CENTRAL - 10217

PREVIOUS STEP

NEXT STEP

Intersection Analysis

Crash Query Tool

Pattern Recognition Analysis - Intersection

> Query

> Summary

> Tools

✓ View

Query

> Project

✓ Analysis

Intersection

> Help

1 Project Name ————— 2 Inputs ————— 3 Parameters ————— 4 Review

Aadt Major
LA 37 - 20524

Aadt Minor
CENTRAL - 10217

Percent Limit
0.901

Include BCA:

PREVIOUS STEP

NEXT STEP

Intersection Analysis

Crash Query Tool

Pattern Recognition Analysis - Intersection

> Query

> Summary

> Tools

∨ View

Query

> Project

∨ Analysis

Intersection

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Inputs

Project Name
LA 37 at Central Thwy

Analysis Date
11/1/2023

Urban
Urban

Divided
Divided

Num Legs
4

End Date
12/31/2022

Num Lanes
4

Signalized
Signalized

Start Date
1/1/2018

Parameters

AADT Major
20524

Percent Limit
0.901

AADT Minor
10217

Include BCA:

Run Analysis

PREVIOUS STEP

Intersection Analysis

Crash Query Tool
Pre-Production

Pattern Recognition Analysis

Success - Catscan Calculation finished successfully.

> Query

> Summary

> Tools

▼ View

Query

> Project

▼ Analysis

Intersection

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Inputs

Project Name
LA 37 at Central Thwy

Analysis Date
11/1/2023

Urban
Urban

Num Lanes
4

Divided
Divided

Signalized
Signalized

Num Legs
4

Start Date
1/1/2018

End Date
12/31/2022

Parameters

AADT Major
20524

AADT Minor
10217

Percent Limit
0.901

Include BCA:

Run Analysis

PREVIOUS STEP

VIEW RESULTS

Outputs – Filters

- Filters-out crashes that does not meet the below criteria
- **Segment**
 - Within Grid
 - Intersection = No
- **Intersection**
 - Within Grid
 - (Rural) Intersection = Yes

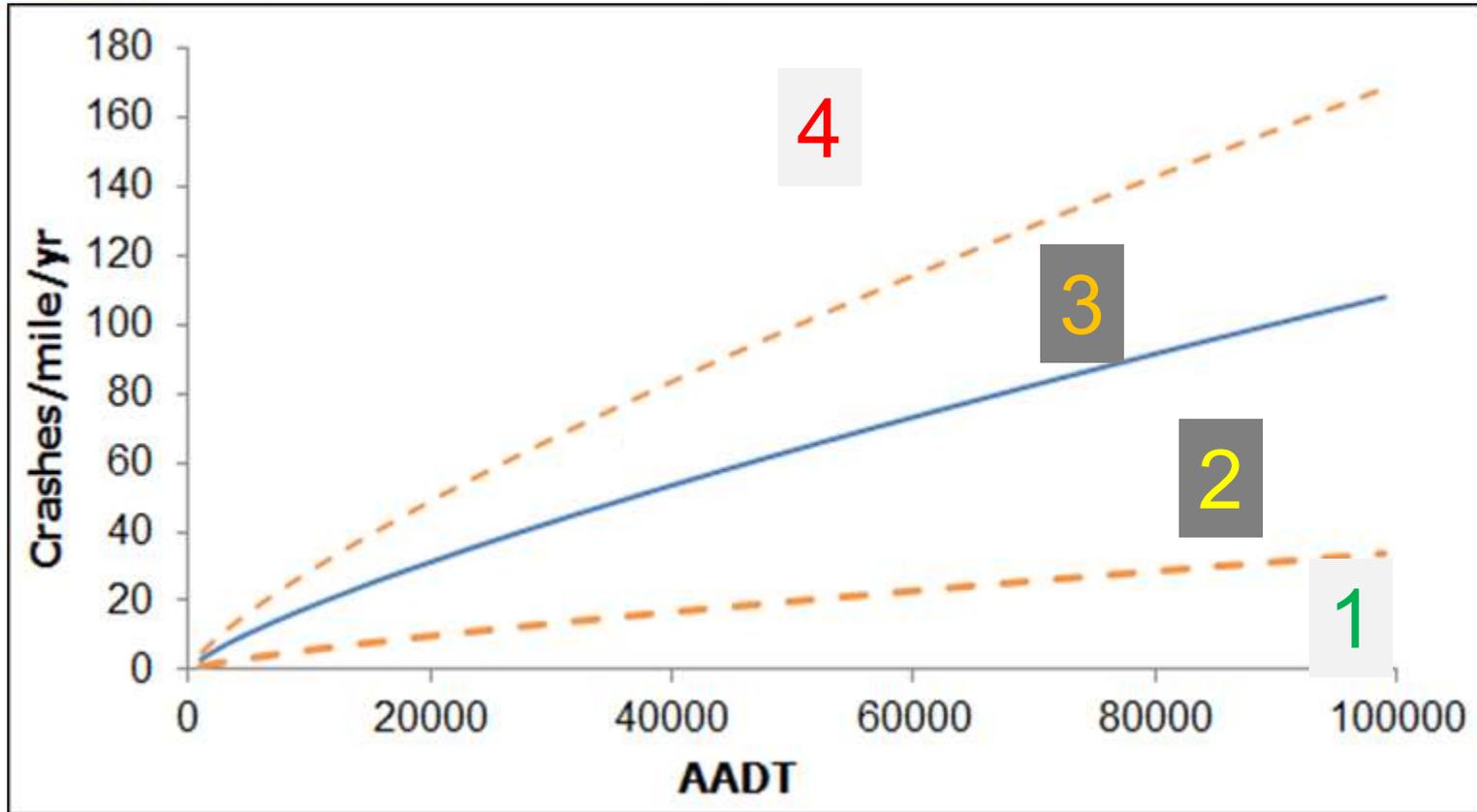
Pattern Recognition Analysis

➤ Crash attribute as Binomial Trial

➤
$$P(X \leq x) = B(x, n; p) = \sum_{i=0}^x \frac{n!}{(n-i)! i!} p^i (1-p)^{n-i}$$

➤ Each trial compares: subject % v. class %

Safety Service Level



LOSS = Level of Service of Safety ~ Safety Level

LOSS 4	: High potential for safety improvements
LOSS 3	: Moderate potential for safety improvements
LOSS 2	: Low potential for safety improvements
LOSS 1	: Negligible potential for safety improvements

Intersection Analysis

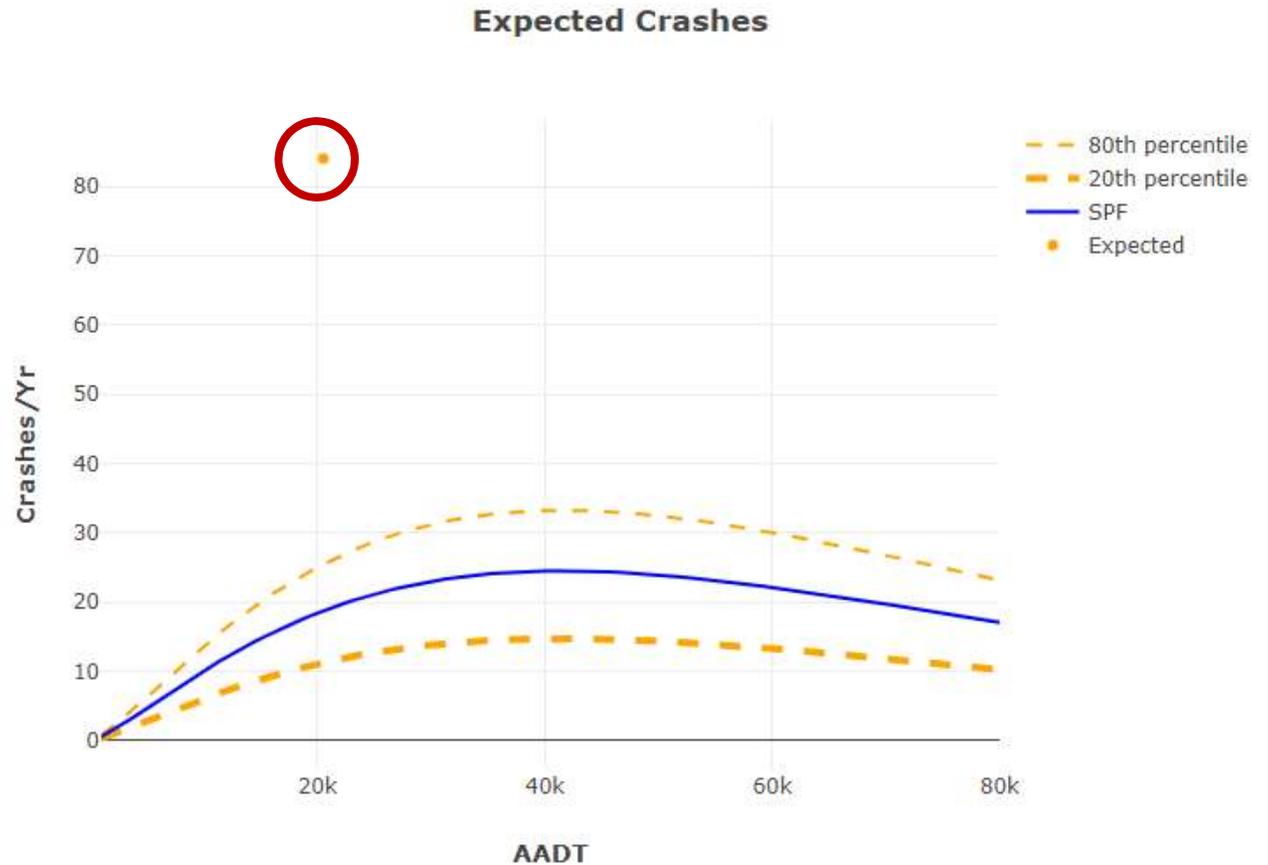
Analysis Results	Code	Category	Obs %	State %	>PRT	Code	Category	Obs %	State %	>PRT
<ul style="list-style-type: none"> > Project ▼ Analysis Intersection > Help 	A	Pedestrian	0%	0.59%	No	A	Non Coll	5%	3.31%	No
	B	Pedalcycle	0%	0.42%	No	B	Rear End	41%	45.66%	No
	C	Atv	0%	0.03%	No	C	Head On	2%	0.93%	Yes
	D	Motorcycle	0%	0.75%	No	D	Rt Angle	5%	14.91%	No
	E	Parked	1%	0.89%	No	E	Left Turn-e	0%	2.32%	No
	F	Not Fixed	1%	0.25%	No	F	Left Turn-f	34%	8.26%	Yes
	G	Vertical Fixed	1%	1.02%	No	G	Left Turn-g	1%	2.04%	No
	H	Structures	0%	0.1%	No	H	Right Turn-h	7%	2.73%	Yes
	J	Train	0%	0.02%	No	I	Right Turn-i	0%	0.43%	No
	K	Other Veh	0%	1.22%	No	J	S Swipe(sd)	4%	12.59%	No
	M	Bus	0%	0.74%	No	K	S Swipe(od)	1%	0.51%	No
	N	Animal	0%	0.13%	No	Z	Other	0%	6.31%	No
	P	Other Fixed	1%	0.74%	No					
	Q	Transport	8%	4.52%	Yes					
	R	3+ Vehicles	4%	5.95%	No					
	S	Small Veh	52%	59.57%	No					
	T	Miscellaneous	0%	0.3%	No					
	U	Medium Veh	28%	21.94%	Yes					
	X	Error	4%	0.82%	Yes					

Safety Comparison

Intersection Analysis

Safety Comparison

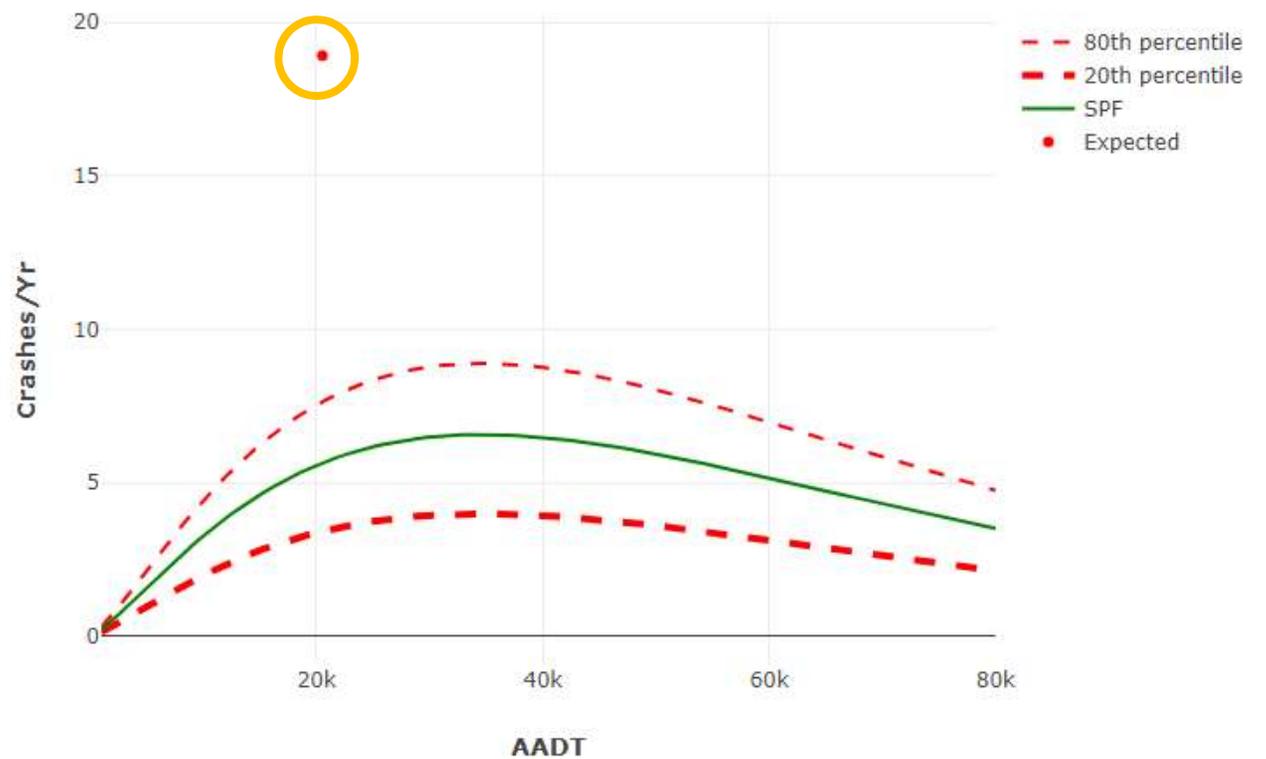
Observed:	100.0	Crashes/yr
Predicted (SPF):	18.76	Crashes/yr
Over-dispersion:	4.59	
Weighted Adjustment:	0.2	
Observed:	100.0	Crashes/mile/yr
Expected (SPF+EB):	84.03	Crashes/mile/yr
Safety Service Level:	LOSS 4	
Expected Percentile:	100.0%	
80th Percentile:	25.46	Crashes/mile/yr
Predicted (SPF):	18.76	Crashes/mile/yr
20th Percentile:	11.29	Crashes/mile/yr



Intersection Analysis

Expected Crashes with Injuries

Observed:	30.0	Crashes/yr
Predicted (SPF):	5.64	Crashes/yr
Over-dispersion:	4.72	
Weighted Adjustment:	0.46	
Observed:	30.0	Crashes/mile/yr
Expected (SPF+EB):	18.91	Crashes/mile/yr
Safety Service Level:	LOSS 4	
Expected Percentile:	99.97%	
80th Percentile:	7.64	Crashes/mile/yr
Predicted (SPF):	5.64	Crashes/mile/yr
20th Percentile:	3.43	Crashes/mile/yr



Segment Analysis

➤ Query:

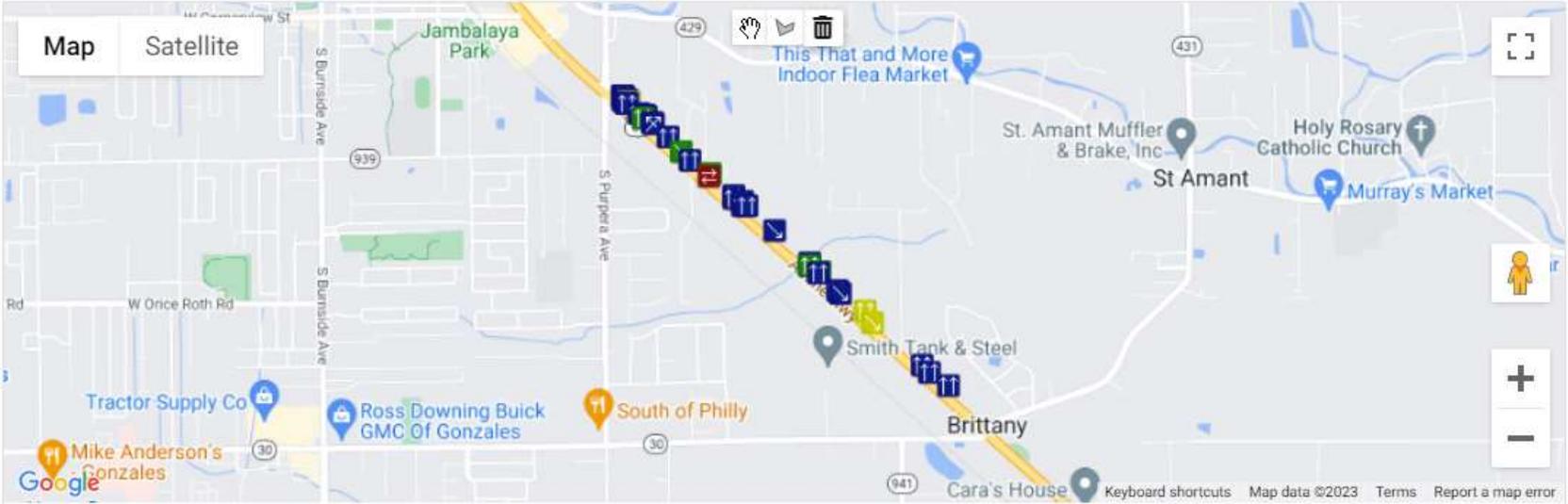
- 2018 to 2022
- US 61 C-S 007-07 from LM 2.3 to 3.9

Total Crashes: 39 Fatal Injury Crashes: 1 Injury Crashes: 9 Property Damage Only Crashes: 29 bryan.costello

Crash Query Tool

Date Range Location Route Control Section Load Crashes Reset

- Query
- Summary
- Tools
- View
- ▼ Project
 - Create Project**
 - My Projects
- Analysis
- Help



39 mapped out of 39

MAP ICON LEGEND

Clear Filters Load Saved Filter Save Filter Drag a column header here to group by that column

Reviewed	Manned	Intersection	Manner of Collision	Severity
----------	--------	--------------	---------------------	----------

Segment Analysis

Total Crashes: 39

bryan.costello

New Project

Project Name: test US 61 C-S 007-07 from LM 2.3 to

Analysis Type: CREATE

Intersection Analysis

Roadway Segment Analysis

CANCEL

Crash Query Tool

Date Range

Map

39 mapped out of 39

Clear Filters

Drag a column header here to group by that column

Mapped	Intersection	Manner of Collision	Severity	Control Section	Log Mile	Roadwa
(All)	Q	(All)	(All)	Q	Q	(All)
✓	NO	000-NOT A COLLISION BETWEEN TWO ...	104-(O) PROPERTY DAMAGE ONLY	007-07	3.867	

Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Date Range

Location

Route

Control Section

Load Crashes

Reset

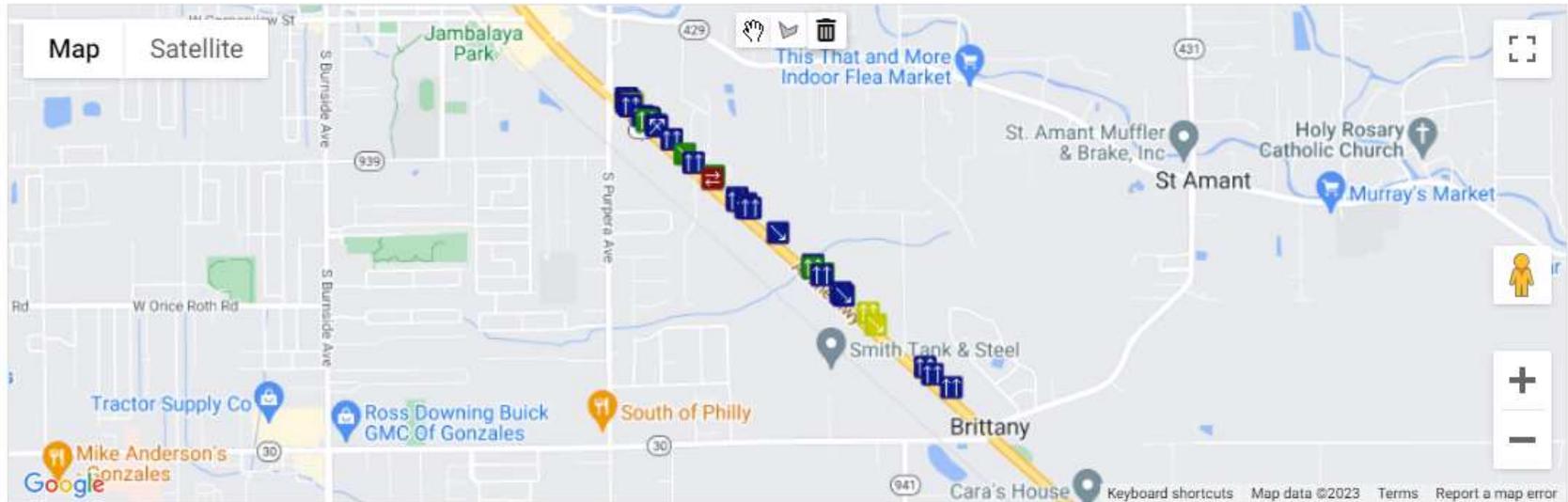
- > Query
- > Summary
- > Tools
- > View

Project

- Create Project
- My Projects

Analysis

- Roadway Segment



39 mapped out of 39

MAP ICON LEGEND

Help

Clear Filters

Load Saved Filter

Save Filter

Drag a column header here to group by that column



Reviewed	Mapped	Intersection	Manner of Collision	Severity
(All) ▼	(All) ▼	🔍	(All) ▼	(All)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NO	300-FRONT TO REAR - REAR END	104-(O) PROPERTY DAMAGE ON

Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Pattern Recognition Analysis - Roadway

> Query

> Summary

> Tools

> View

∨ Project

Create
Project

My Projects

∨ Analysis

Roadway
Segment

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Project Name
test US 61 C-S 007-07 from LM 2.3 to 3.9

Analysis Date
11/7/2023 

NEXT STEP

Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Pattern Recognition Analysis - Roadway

> Query

> Summary

> Tools

> View

▼ Project

Create Project

My Projects

▼ Analysis

Roadway

Segment

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Route
US 61

Control Section *
007-07

Logmile From
2.3

Logmile To
3.9

Highway Class *
Urban 4-Lane Divided

Start Date
1/1/2018

End Date
12/31/2023

PREVIOUS STEP

NEXT STEP

Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Pattern Recognition Analysis - Roadway

> Query

> Summary

> Tools

> View

Project

Create Project

My Projects

Analysis

Roadway

Segment

> Help

1 Project Name — 2 Inputs — 3 Parameters — 4 Review

Aadt
18,378

Delta
0.6

Sigma
0.02

Percent Limit
0.9

Include BCA:

PREVIOUS STEP

NEXT STEP

Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Pattern Recognition Analysis - Roadway

 Success - Catscan Calculation finished successfully.

- > Query
- > Summary
- > Tools
- > View

▼ Project

- Create Project
- My Projects

▼ Analysis

- Roadway
- Segment

> Help

1 Project Name ————— 2 Inputs ————— 3 Parameters ————— 4 Review

Inputs

Project Name test US 61 C-S 007-07 from LM 2.3 to 3.9	
Analysis Date 11/7/2023	
Route US 61	Control Section * 007-07
Logmile From 2.3	Logmile To 3.9
Highway Class * Urban 4-Lane Divided	
Start Date 1/1/2018	End Date 12/31/2023

Parameters

AADT 18378	Delta 0.6
Sigma 0.02	Percent Limit 0.9
Include BCA: <input type="checkbox"/>	

Run Analysis

PREVIOUS STEP

VIEW RESULTS



Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Pattern Recognition Analysis

[Export to PDF](#)

- > Query
- > Summary
- > Tools
- > View

Project

Create Project

My Projects

Analysis

Roadway Segment

Help

Control Section:	007-07	Δ:	0.6 miles
Log-mile from:	2.3	δ:	0.02 miles
Logmile-to:	3.9	Percent Limit:	0.9
AADT:	18378	Possible Δs:	50
Highway Class:	Urban 4-Lane Divided	AADT Group:	low
Period:	2018 - 2023		

Code	Crash Type	Obs %	State %	Deltas > Percent Limit	
A	Pedestrian	2.63%	0.89%	0	0%
B	Pedalcycle	0%	0.38%	0	0%
C	Atv	0%	0.05%	0	0%
D	Motorcycle	2.63%	0.93%	0	0%
E	Parked	2.63%	1.7%	0	0%
F	Not Fixed	0%	1.04%	0	0%
G	Vertical Fixed	7.89%	2.85%	20	40%
H	Structures	2.63%	0.57%	0	0%
J	Train	0%	0.05%	0	0%
K	Other Veh	0%	1.15%	0	0%

Code	Other Factors	Obs %	State %	Deltas > Percent Limit	
A	Non Coll	28.95%	13.12%	50	100%
B	Rear End	39.47%	41.63%	0	0%
C	Head On	2.63%	0.98%	0	0%
D	Rt Angle	0%	6.12%	0	0%
E	Left Turn-e	2.63%	2.38%	0	0%
F	Left Turn-f	5.26%	2.99%	1	2%
G	Left Turn-g	0%	2.68%	0	0%
H	Right Turn-h	0%	2.13%	0	0%
I	Right Turn-i	0%	0.32%	0	0%
J	S Swipe(sd)	21.05%	20.62%	20	40%



Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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My Projects

Analysis

Roadway Segment

Help

Code	Crash Type	Obs %	State %	Deltas > Percent Limit	
A	Pedestrian	2.63%	0.89%	0	0%
B	Pedalcycle	0%	0.38%	0	0%
C	Atv	0%	0.05%	0	0%
D	Motorcycle	2.63%	0.93%	0	0%
E	Parked	2.63%	1.7%	0	0%
F	Not Fixed	0%	1.04%	0	0%
G	Vertical Fixed	7.89%	2.85%	20	40%
H	Structures	2.63%	0.57%	0	0%
J	Train	0%	0.05%	0	0%
K	Other Veh	0%	1.15%	0	0%
M	Bus	0%	0.38%	0	0%
N	Animal	0%	2.15%	0	0%
P	Other Fixed	5.26%	2.95%	15	30%
Q	Transport	5.26%	5.83%	15	30%
R	3+ Vehicles	2.63%	5.46%	0	0%
T	Miscellaneous	5.26%	1.72%	0	0%

Code	Other Factors	Obs %	State %	Deltas > Percent Limit	
A	Non Coll	28.95%	13.12%	50	100%
B	Rear End	39.47%	41.63%	0	0%
C	Head On	2.63%	0.98%	0	0%
D	Rt Angle	0%	6.12%	0	0%
E	Left Turn-e	2.63%	2.38%	0	0%
F	Left Turn-f	5.26%	2.99%	1	2%
G	Left Turn-g	0%	2.68%	0	0%
H	Right Turn-h	0%	2.13%	0	0%
I	Right Turn-i	0%	0.32%	0	0%
J	S Swipe(sd)	21.05%	20.62%	20	40%
K	S Swipe(od)	0%	0.48%	0	0%
Z	Other	0%	6.53%	0	0%
RD	Road Depart.	28.95%	14.98%	50	100%
LC	Dark w/o Lights	23.68%	7.46%	50	100%
Alc	Alcohol	15.79%	2.7%	44	88%
Wet	Wet Surface	13.16%	15.91%	0	0%

Crash Type

Crash Factor

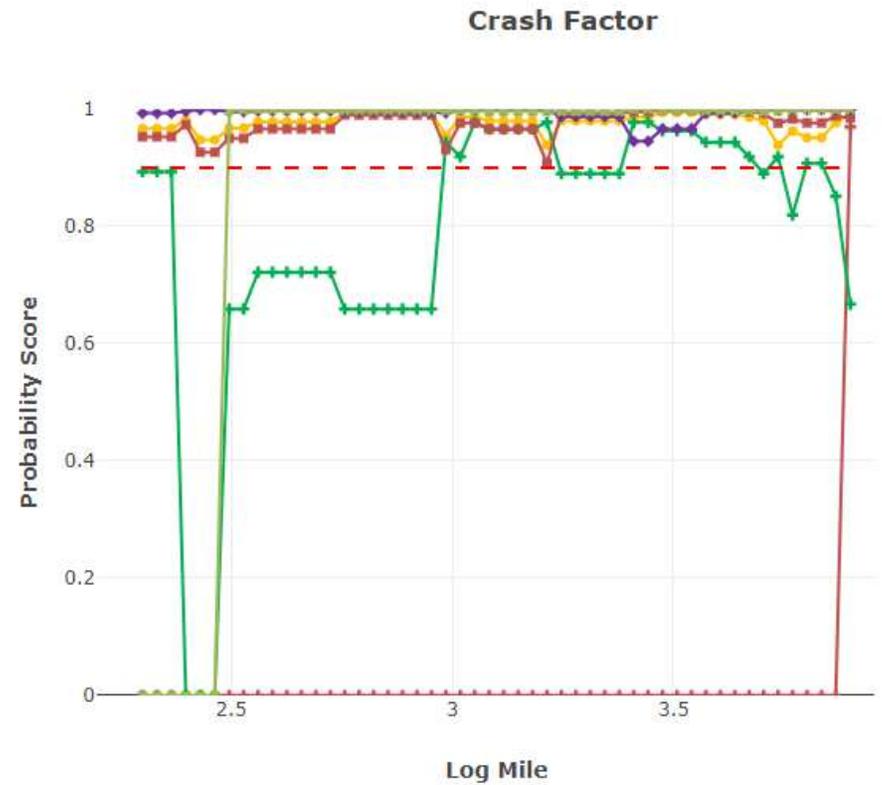
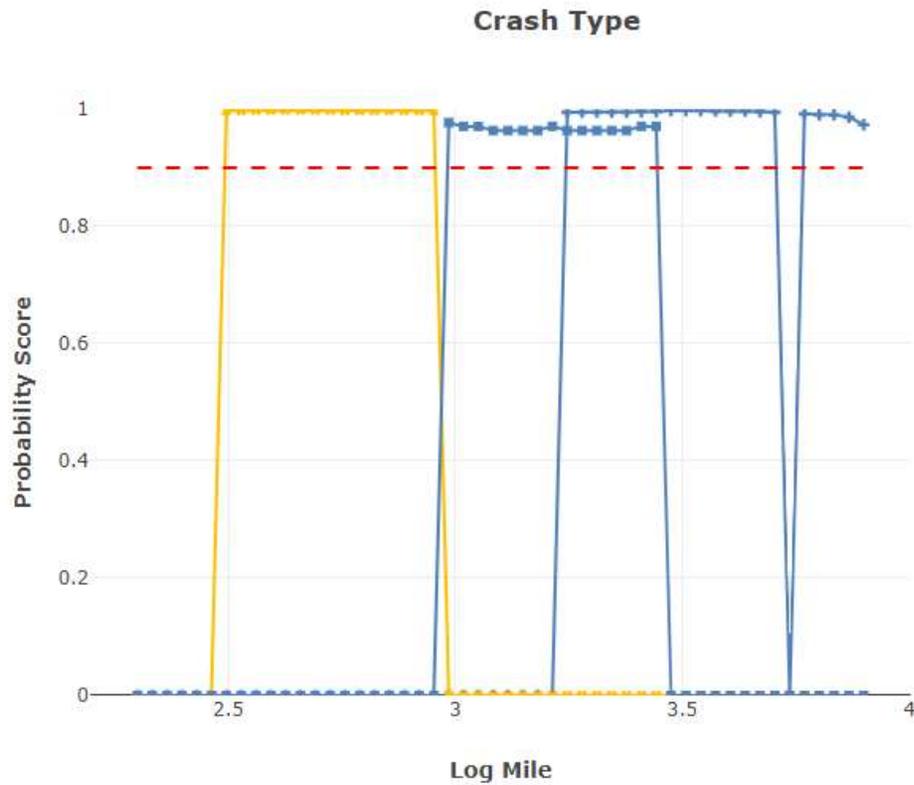
Segment Analysis

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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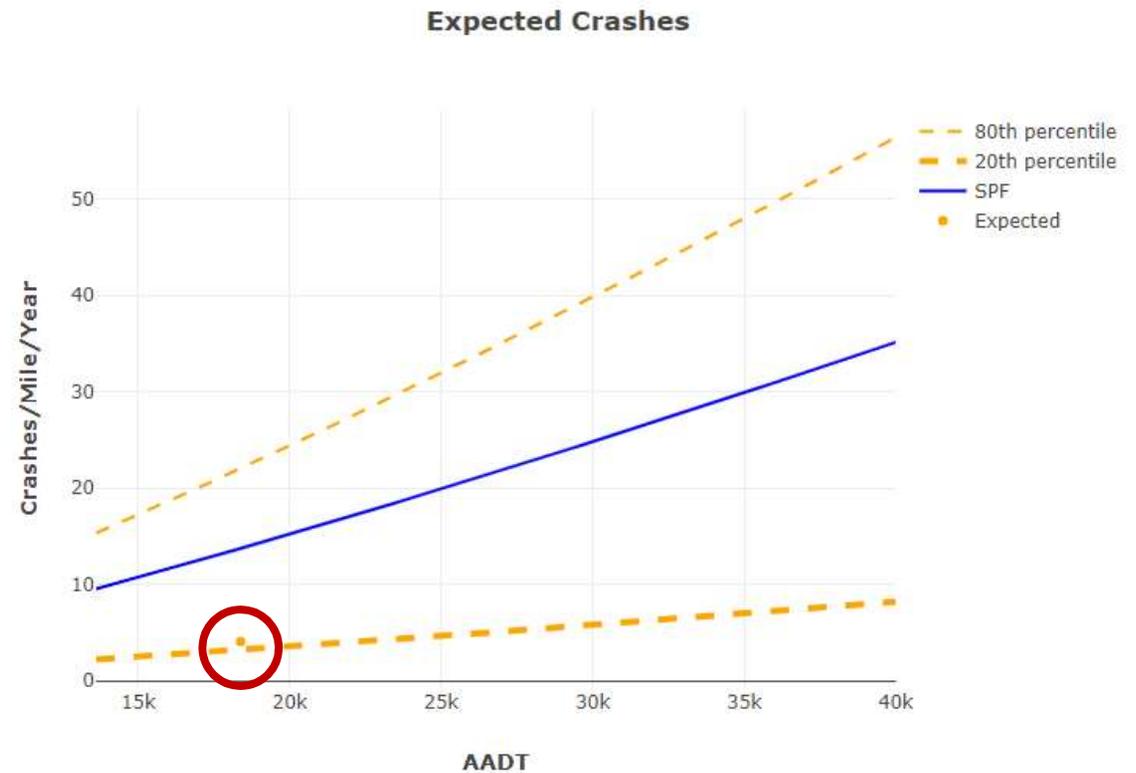


Safety Comparison

Segment Analysis

Safety Comparison

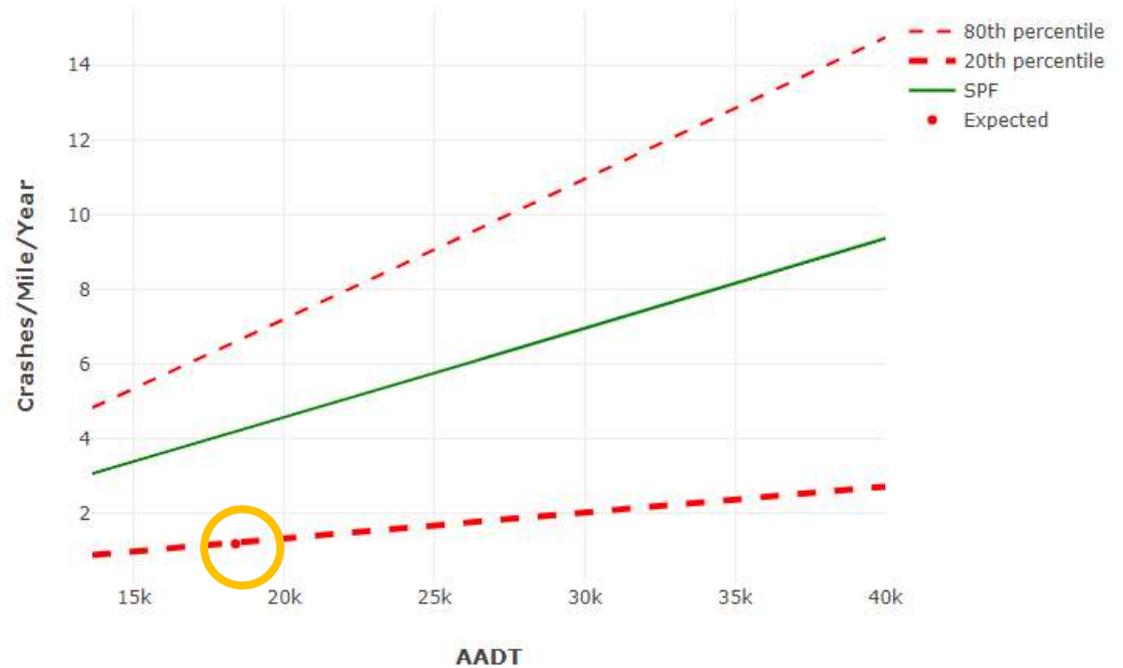
Observed:	6.33	Crashes/yr
Predicted (SPF):	21.98	Crashes/yr
Over-dispersion:	1.04	
Weighted Adjustment:	0.01	
Observed:	3.96	Crashes/mile/yr
Expected (SPF+EB):	4.08	Crashes/mile/yr
Safety Service Level:	LOSS 2	
Expected Percentile:	24.86%	
80th Percentile:	22.04	Crashes/mile/yr
Predicted (SPF):	13.74	Crashes/mile/yr
20th Percentile:	3.21	Crashes/mile/yr



Segment Analysis

Expected Crashes with Injuries

Observed:	1.67	Crashes/yr
Predicted (SPF):	6.7	Crashes/yr
Over-dispersion:	1.28	
Weighted Adjustment:	0.05	
Observed:	1.04	Crashes/mile/yr
Expected (SPF+EB):	1.19	Crashes/mile/yr
Safety Service Level:	LOSS 1	
Expected Percentile:	19.55%	
80th Percentile:	6.59	Crashes/mile/yr
Predicted (SPF):	4.19	Crashes/mile/yr
20th Percentile:	1.22	Crashes/mile/yr



Segment Analysis

Total Crashes: 39

Fatal Injury Crashes: 1

Injury Crashes: 9

Property Damage Only Crashes: 29

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Crash Query Tool

Pattern Recognition Analysis

[Export to PDF](#)

> Query

> Summary

> Tools

▼ View

Query

Analysis
Results

▼ Project

Create
Project

My Projects

▼ Analysis

Roadway
Segment

> Help

Control Section:	007-07	Δ:	0.6 miles
Log-mile from:	2.3	δ:	0.02 miles
Logmile-to:	3.9	Percent Limit:	0.9
AADT:	18378	Possible Δs:	50
Highway Class:	Urban 4-Lane Divided	AADT Group:	low
Period:	2018 - 2023		

Code	Crash Type	Obs %	State %	Deltas > Percent Limit	
A	Pedestrian	2.63%	0.89%	0	0%
B	Pedalcycle	0%	0.38%	0	0%
C	Atv	0%	0.05%	0	0%
D	Motorcycle	2.63%	0.93%	0	0%
E	Parked	2.63%	1.7%	0	0%
F	Not Fixed	0%	1.04%	0	0%
G	Vertical Fixed	7.89%	2.85%	20	40%
H	Structures	2.63%	0.57%	0	0%
J	Train	0%	0.05%	0	0%
K	Other Veh	0%	1.15%	0	0%

Code	Other Factors	Obs %	State %	Deltas > Percent Limit	
A	Non Coll	28.95%	13.12%	50	100%
B	Rear End	39.47%	41.63%	0	0%
C	Head On	2.63%	0.98%	0	0%
D	Rt Angle	0%	6.12%	0	0%
E	Left Turn-e	2.63%	2.38%	0	0%
F	Left Turn-f	5.26%	2.99%	1	2%
G	Left Turn-g	0%	2.68%	0	0%
H	Right Turn-h	0%	2.13%	0	0%
I	Right Turn-i	0%	0.32%	0	0%
J	S Swipe(sd)	21.05%	20.62%	20	40%

Agenda

- ✓ Introduction
- ✓ Initialization
- ✓ Crash Querying
- ✓ Site Analysis
- Quality Assurance
- Benefit-Cost

Quality Assurance

Recommendations if LOSS-3 or LOSS-4:

- Collision Manner
 - Other
 - Over-represented
- Non-Motorist over-represented
 - Pedestrians
 - Pedalcycle aka Bicycle
- Severity
 - K: Fatal
 - A: Serious
- Intersection
 - True & not geographically at intersection
 - False & geographically at intersection

Why investigate?

Most data elements from LEOs

~70% - 80% accurate

- Collision Manner – 76%
- Location at 0.05 mile threshold – 75%

➤ Without Quality Assurance

– Analysis \approx **Maybe True**

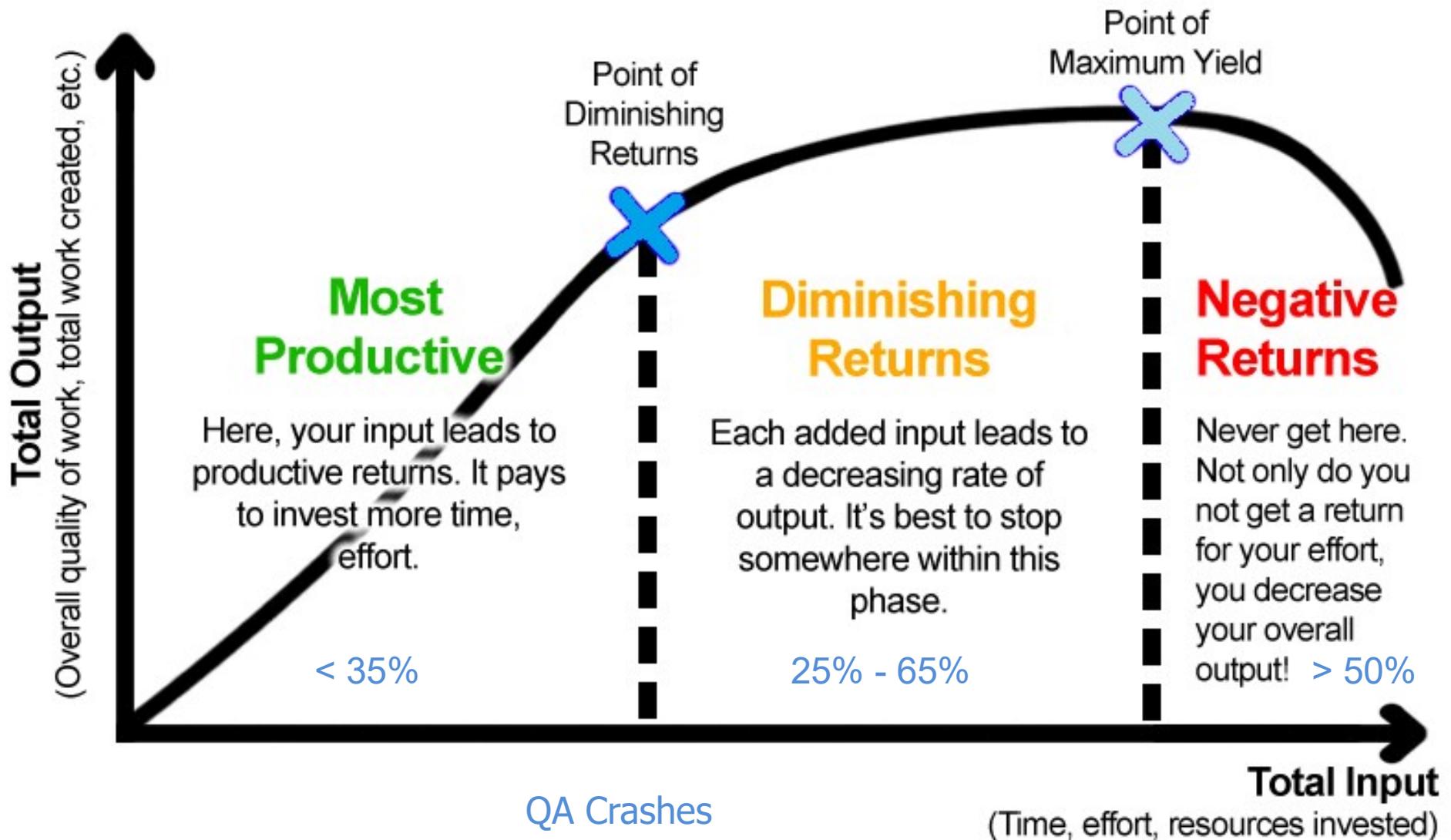
➤ With Quality Assurance

– Analysis \approx **Likely True**

Why partial investigation?

- No need to review
 - error free crashes
 - not road's fault crashes
 - not over-represented crashes
- Determining mitigation strategies – theory of diminishing returns

Why partial investigation?



Quality Assurance

- Area
- By Point
- > Summary
- > Tools
- > View
- ▼ Project
 - Create Project
 - My Projects
 - > Analysis
 - > Help

128 mapped out of 128 MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column

Action	Pedestrian	Lat	Long	Manner of Collision	Roadway Departure
	(All)	Q	Q	(All)	(All)
<input type="checkbox"/>		30.514831	-91.026382	505-SIDESWIPE - SAME DIRECTION	<input type="checkbox"/>
<input type="checkbox"/>		30.514865	-91.026319	101-ANGLE - LEFT OPPOSITE DIRECTION	<input type="checkbox"/>
<input type="checkbox"/>		30.514865	-91.026319	200-FRONT TO FRONT - HEAD ON	<input type="checkbox"/>
<input type="checkbox"/>		30.514865	-91.026319	101-ANGLE - LEFT OPPOSITE DIRECTION	<input type="checkbox"/>
<input type="checkbox"/>		30.514865	-91.026319	300-FRONT TO REAR - REAR END	<input type="checkbox"/>

5 10 20
Page 1 of 26 (128 items)
1 2 3 4 5 ... 26

Quality Assurance

- By Point
- > Summary
- > Tools
- > View

- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help



128 mapped out of 128 MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter

Drag a column header here to group by that column
📄
📄

Location	Pedestrian		Lat	Long	M	Roadway Departure
	(All)	🔍	🔍	((All)
	<input type="checkbox"/>		30.514831	-91.026382	5	<input type="checkbox"/>
	<input type="checkbox"/>		30.514865	-91.026319	1	<input type="checkbox"/>
	<input type="checkbox"/>		30.514865	-91.026319	2	<input type="checkbox"/>
	<input type="checkbox"/>		30.514865	-91.026319	1	<input type="checkbox"/>
	<input type="checkbox"/>		30.514865	-91.026319	3	<input type="checkbox"/>

5 10 20

2 3 4 5 ... 26

200-FRONT TO FRONT ...
 300-FRONT TO REAR - ...
 501-ANGLE - RIGHT AC...
 505-SIDESWIPE - SAME...
 980-OTHER

OK
Cancel

Quality Assurance

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View
- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map

Satellite







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4 mapped out of 4 MAP ICON LEGEND

Clear Filters

Load Saved Filter

Save Filter

Drag a column header here to group by that column




on	Pedestrian	Lat	Long	Manner of Collision	Roadway Departure	Parish
	(All) ▼	🔍	🔍	(All) ▼	(All) ▼	🔍
<input type="checkbox"/>		30.514865	-91.026319	980-OTHER	<input type="checkbox"/>	EAST BATON RO
<input type="checkbox"/>		30.514874	-91.026303	980-OTHER	<input checked="" type="checkbox"/>	EAST BATON RO
<input type="checkbox"/>		30.514849	-91.026349	980-OTHER	<input type="checkbox"/>	EAST BATON RO
<input type="checkbox"/>		30.514754	-91.0263	980-OTHER	<input type="checkbox"/>	EAST BATON RO

Quality Assurance

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View

- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map Satellite







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4 mapped out of 4
MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column
📄
📄

	Mapped	Month	Year	Day of Week	Severity
(All)	▼	🔍	🔍	🔍	(All)
  	✓	MAY	2019	MONDAY	104-(O) PROPERTY DA
   Narrative & Diagram	✓	JANUARY	2021	WEDNESDAY	104-(O) PROPERTY DA
  	✓	NOVEMBER	2018	MONDAY	104-(O) PROPERTY DA
  	✓	JANUARY	2018	THURSDAY	104-(O) PROPERTY DA

Quality Assurance

The screenshot displays a software interface for Quality Assurance. On the left is a sidebar with the following menu items: Query (Basic, Spatial), Summary, Tools, View, Project (Create Project, My Projects), Analysis, and Help. The main window shows a road network with labels for 'GREENWELL SPRINGS RD/HWY 37' and 'CENTRAL THWY'. A blue rectangular area is labeled 'MURPHY USA GAS STATION'. A truck icon is positioned at the intersection of the roads. A 'CLOSE' button is located in the bottom right corner of the main window.

Edit Data

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View
- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map Satellite





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4 mapped out of 4
MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column
📄
📄

	Mapped	Month	Year	Day of Week	Severity
	(All)	🔍	🔍	🔍	(All)
  	✓	MAY	2019	MONDAY	104-(O) PROPERTY DA
  	✓	JANUARY	2021	WEDNESDAY	104-(O) PROPERTY DA
  	✓	NOVEMBER	2018	MONDAY	104-(O) PROPERTY DA
  	✓	JANUARY	2018	THURSDAY	104-(O) PROPERTY DA

Edit Data

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View

- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map Satellite







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4 mapped out of 4 MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column

Control Section	Pedestrian	Lat	Long	Manner of Collision	Roadway Departure	Parish
(All)	(All)	Q	Q	(All)	(All)	Q
-02	<input type="checkbox"/>	30.514865	-91.026319	980-OTHER	<input type="checkbox"/>	EAST B
-02	<input checked="" type="checkbox"/>	30.514874	-91.026300	000-NOT A COLLIS	<input checked="" type="checkbox"/>	EAST B
-02	<input type="checkbox"/>	30.514849	-91.026349	980-OTHER	<input type="checkbox"/>	EAST B
	<input type="checkbox"/>	30.514754	-91.0263	980-OTHER	<input type="checkbox"/>	EAST B

Edit Data

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View
- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map Satellite





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4 mapped out of 4
MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column

	Mapped	Month	Year	Day of Week	Severity
	(All)	🔍	🔍	🔍	(All)
	✓	MAY	2019	MONDAY	104-(O) PROPERTY DA
	✓	JANUARY	2021	WEDNESDAY	104-(O) PROPERTY DA
	✓	NOVEMBER	2018	MONDAY	104-(O) PROPERTY DA
	✓	JANUARY	2018	THURSDAY	104-(O) PROPERTY DA

Quality Assurance

Crash Query Tool

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View

- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help



2 mapped out of 2 MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column
Print
Export

	Month	Year	Day of Week	Severity	Log Mile	Intersection
▼	🔍	🔍	🔍	(All)	🔍	🔍
	APRIL	2019	THURSDAY	101-(A) SUSPECTED SERIOUS INJURY	4.522	YES
	APRIL	2022	FRIDAY	100-(K) FATAL INJURY	3.653	YES

Quality Assurance

Crash Query Tool

- ▼ Query
 - Basic
 - ▼ Spatial
 - By Search Area
 - By Point
 - > Summary
 - > Tools
 - > View
- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map
Satellite

🖱️
🔍
🗑️



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2 mapped out of 2 MAP ICON LEGEND

Clear Filters
Load Saved Filter
Save Filter
Drag a column header here to group by that column
🗄️
📄

	Mapped	Month	Year	Day of Week	Severity
	(All)	🔍	🔍	🔍	(All)
🔍 📄 🗑️	☑️	APRIL	2019	THURSDAY	101-(A) SUSPECTED SE
🔍 📄 🗑️	☑️	APRIL	2022	FRIDAY	100-(K) FATAL INJURY

Quality Assurance

- ▼ Query
 - Basic
- ▼ Spatial
 - By Search Area
 - By Point
- > Summary
- > Tools
- > View
- ▼ Project
 - Create Project
 - My Projects
- > Analysis
- > Help

Map

Satellite

25 mapped out of 25 MAP ICON LEGEND

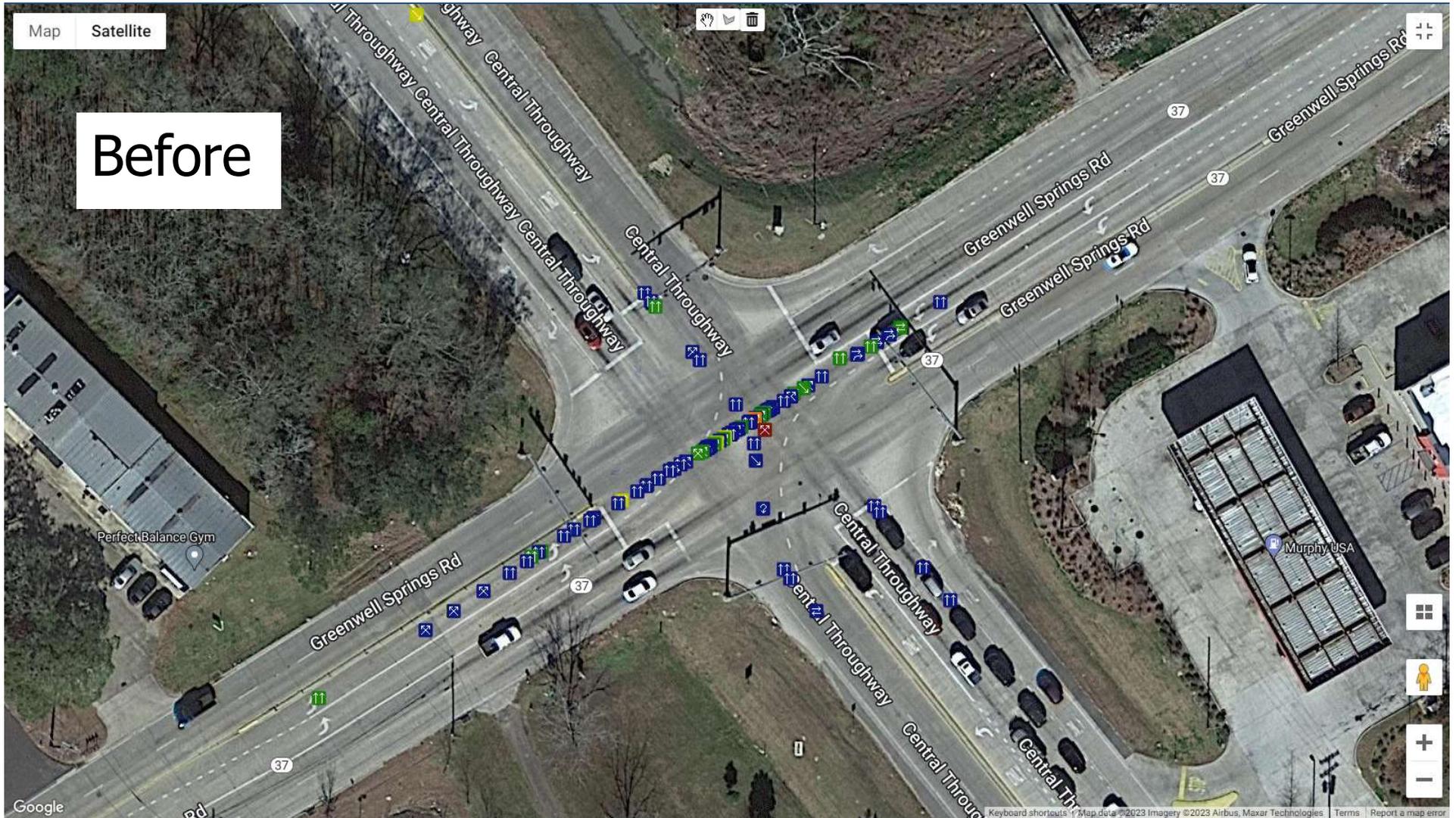
Clear Filters
Load Saved Filter
Save Filter

Drag a column header here to group by that column

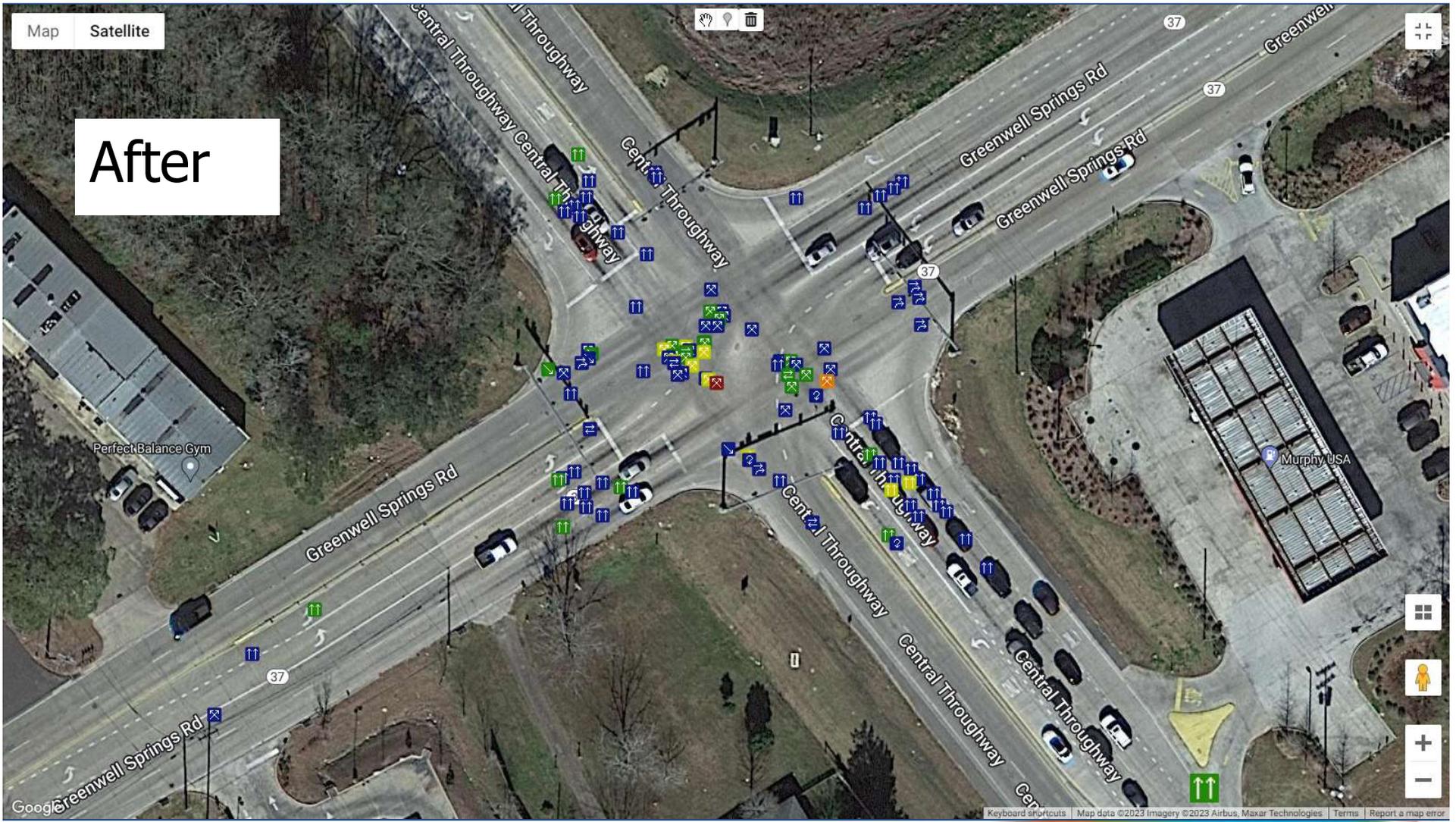
Severity	▼	▼	Log Mile	Intersection	▼	Control Section	▼	Pedestrian	▼	▼	Lat	▼
(All)	▼	Q		Q	▼		Q	(All)	▼	Q	Q	Q
104-(O) PROPERTY DAMAGE ONLY			0	NO		-1		<input type="checkbox"/>		30.514831	-91.0	
104-(O) PROPERTY DAMAGE ONLY			4.522	NO		254-02		<input type="checkbox"/>		30.514865	-91.0	
104-(O) PROPERTY DAMAGE ONLY			4.522	NO		254-02		<input type="checkbox"/>		30.514865	-91.0	
103-(C) POSSIBLE INJURY			4.522	NO		254-02		<input checked="" type="checkbox"/>		30.514865	-91.0	
104-(O) PROPERTY DAMAGE ONLY			4.522	NO		254-02		<input type="checkbox"/>		30.514865	-91.0	

OV

Quality Assurance



Quality Assurance



Agenda

- ✓ Introduction
- ✓ Initialization
- ✓ Crash Querying
- ✓ Site Analysis
- ✓ Quality Assurance
- Benefit-Cost

Benefit-Cost

Total Crashes: 126

Fatal Injury Crashes: 1

Injury Crashes: 33

Property Damage Only Crashes: 92

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Crash Query Tool

- > Query
- > Summary
- > Tools
- > View

Project

- Create Project
- My Projects

Analysis

- Intersection

- > Help

Pattern Recognition Analysis - Intersection

1 Project Name — 2 Inputs — 3 Parameters — 4 BCA Inputs — 5 Review

Aadt Major
LA 37 - 20520

Aadt Minor
CENTRAL - 10217

Percent Limit
0.9024

Include BCA:

PREVIOUS STEP

NEXT STEP

Benefit-Cost

Total Crashes: 126

Fatal Injury Crashes: 1

Injury Crashes: 33

Property Damage Only Crashes: 92

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Crash Query Tool

Pattern Recognition Analysis - Intersection

- > Query
- > Summary
- > Tools
- > View

- ▼ Project
 - Create Project
 - My Projects
- ▼ Analysis
 - Intersection
- > Help

1 Project Name — 2 Inputs — 3 Parameters — 4 BCA Inputs — 5 Review

CMF

Cost

[CMF Clearinghouse](#)

CMF for Severity-Fatal Injury
0.75

CMF for Severity-Suspected Serious Injury
0.75

CMF for Severity-Suspected Minor Injury
0.75

CMF for Severity-Possible Injury
0.75

CMF for Severity-Property Damage-Only
0.75

Service Life
20

Construction Cost
10,000

Engineering Cost
0

Right-of-Way Cost
0

Utilities Cost
0

Inflation
3%

PREVIOUS STEP

NEXT STEP

Benefit-Cost

Pattern Recognition Analysis - Intersection

Benefit-Cost Analysis

[Export to PDF](#)

Project Name: test LA 37 at Central Thwy

Major AADT: 20520

Minor AADT: 10217

Intersection Cl...: Urban 4-Lane 4-Leg [CMF Clearinghouse](#)

Period: 2018 - 2022

Duration: 5 years

Benefit: \$4,704,723.00

Cost: \$10,000.00

Benefit-Cost Ratio: 470.47

Code	Category	Obs %	State %	>PRT
A	Pedestrian	0%	0.59%	No
B	Pedalcycle	0%	0.42%	No
C	Atv	0%	0.03%	No
D	Motorcycle	0%	0.75%	No
E	Parked	0.81%	0.89%	No
F	Not Fixed	0.81%	0.25%	No
G	Vertical Fixed	0.81%	1.02%	No
H	Structures	0%	0.1%	No
J	Train	0%	0.02%	No
K	Other Veh	0%	1.22%	No
M	Bus	0%	0.74%	No
N	Animal	0%	0.13%	No

Code	Category	Obs %	State %	>PRT
A	Non Coll	4.03%	3.31%	No
B	Rear End	41.13%	45.66%	No
C	Head On	4.84%	0.93%	Yes
D	Rt Angle	5.65%	14.91%	No
E	Left Turn-e	0%	2.32%	No
F	Left Turn-f	25%	8.26%	Yes
G	Left Turn-g	0.81%	2.04%	No
H	Right Turn-h	5.65%	2.73%	Yes
I	Right Turn-i	0.81%	0.43%	No
J	S Swipe(sd)	11.29%	12.59%	No
K	S Swipe(od)	0%	0.51%	No
Z	Other	0.81%	6.31%	No

Agenda

- ✓ Introduction
- ✓ Initialization
- ✓ Crash Querying
- ✓ Site Analysis
- ✓ Quality Assurance
- ✓ Benefit-Cost



Demo

Questions



Bryan.Costello@LA.gov