Overview:

- Signal Four Analytics is a statewide interactive, web-based geospatial crash analytical tool.

- Developed by and hosted at the University of Florida, Geoplan Center.

- Application site: S4Analytics (signal4analytics.com)

- Informational site: Signal Four Analytics (ufl.edu)
Target Audience:

- Developed for Florida Government Agencies: Law Enforcement, Traffic Engineering, Transportation Planning, School Transportation, Injury Prevention, Universities, Other Organizations related to Traffic Safety. For questions on access, you can refer to the information website and request account section.

- Private Contractors/Consultants that are contracted by Florida public agencies.
Support and Funding:

- Funded by the State of Florida-Florida Traffic Records Coordinating Committee (TRCC)

- TRCC’s mission is to improve traffic information systems in the state.

- TRCC manages federal funds available.

Florida Traffic Records Coordinating Committee (fltrafficrecords.com)
Support and Funding:

TRCC Representatives Include:

- Department of Transportation
- Department of Health
- Department of Highway Safety and Motor Vehicles
- Agency for Health Care Administration
- Florida Highway Patrol
Signal Four Analytics Focus:

- Accessibility
- Timeliness
- Utilization
- Geospatial Analytics
Signal Four Analytics Database Records:

- Crash Records nearly 7 million from 2011 to date, received nightly from FLHSMV.
- Citation Records over 35 million from 2011 to date, received nightly from the FCCC.
GIS Roadway Database:

- **GIS Streets:**
  - Navteq Florida, Unified Basemap

- **Crash Mapping**
  - Law Enforcement Officers on site (30%)
  - The rest:
    - UF Batch Automatic Geocoding
    - Editor Mapping
      - UF editor mapping (Orange, Osceola, Seminole)
      - Alachua county (in house staff)
      - Other
S4 Features-New Application Launched Dec 2020:

A. Main Features
   1. Public Facing Dashboard
   2. Record Search
   3. Standard Reports
   4. Event Analysis

B. Data Dictionary

C. Data Download

D. Future Features
A. Main Features:

1. Florida Traffic Safety Dashboard

Public facing, no login required. Works on modern browsers.
A. Main Features:

2. Record Search

Ability to search records by HSMV or Agency Report Number, map/charts/download available.
A. Main Features:

3. Standard Reports

Ability to pull quick stats for concept papers/LEL Challenges, option to download.
A. Main Features:
4. Event Analysis

Ability to search by new query/Emphasis Area query, download and expanded filter options.
4. Event Analysis Features:
Ability to filter by either a new query option or Emphasis area option.
4. Event Analysis Features:

- New Query-Expanded Filter Options by category of:
  - Circumstances, Participants, Vehicles
- Emphasis Area Query- Emphasis Area and Crash Severity filter options.
- Common to both:
  - Expanded download, multiple legend options, expanded time period, street/intersection/custom network options, custom draw tool, map visualization, multiple basemap options.
B. Data Dictionary Available

- Table of Contents
- Signal Four Analytics Data Dictionary
- Glossary of Terms
- Appendix
- Table of Index

S4_Data_Dictionary.pdf (signal4analytics.com)
B. Data Dictionary

Data Dictionary: Data Flow

Figure 1. Diagram of S4 Data Flow

S4_Data_Dictionary.pdf (signal4analytics.com)
B. Data Dictionary

Data Dictionary: ER Diagram

![ER Diagram Image]

S4 Data Dictionary.pdf (signal4analytics.com)
B. Data Dictionary

Data Dictionary: Sample Page

### E11. City Code

**Definition:**
Florida Department of Highway Safety and Motor Vehicles code which identifies, when used in conjunction with the County Code, the city in which the crash occurred.

**Attributes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Valid</td>
</tr>
<tr>
<td>0</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

**Data Source:**
Florida Department of Highway Safety and Motor Vehicles

**Author:**
Florida Law Enforcement Agency

**Comments:**
The code consists of 2 digits (See Appendix: City Code).
C. Data Download

Data Download: Options to select tables separately, mapped crashes and crash reports.

Select Data to Download

- Crash Tables in CSV format (max 800,000 records per table)
  - Events (61 records)
  - Drivers (118 records)
  - Non-motorists (1 records)
  - Passengers (21 records)
  - Vehicles (129 records)
  - Violations (49 records)
  - Pedestrian Typing (0 records)
  - Bicycle Typing (0 records)
- Mapped Crashes in GIS file geodatabase format (max 800,000 crashes)
  - Mapped Crashes (49 records)
- Police Crash Report in PDF format (max 300 reports)
  - Crash Reports (61 records)

Download Job 3754

- Crash Tables in CSV format
  - Events (61 records)
  - Drivers (118 records)
  - Non-motorists (1 records)
  - Passengers (21 records)
  - Vehicles (129 records)
  - Violations (49 records)
- Mapped Crashes in GIS file geodatabase format
  - Mapped Crashes (49 crashes)
- Police Crash Report in PDF format
  - Crash Reports (61 records)

We have scheduled your request as Job #3754. You will receive an email shortly at msnow@dcp.ufl.edu with the data download link. If you do not receive the email within 2 hours, please email us at s4-support@ufl.edu and include the Job#. Please add s4-support@ufl.edu to your address book to ensure email delivery.
C. Data Download

Data Download: Sent to email on file.

The crash data you requested on 9/8/2021 1:42 PM from Signal Four Analytics (job# 3754) is now available for download. The compressed file size is 7.62 MB.

This file will be available for download for 3 days till 9/11/2021 1:42:30 PM. If you miss downloading the file by then, you will have to put in a new data download request in Signal Four Analytics.

Click here to download the data

Please contact us at s4-support@ufl.edu for any issues regarding this download and reference the download job# 3754.

Best regards,
Signal Four Analytics Team
GeoPlan Center
University of Florida
s4-support@ufl.edu
This folder contains data downloaded from Signal Four Analytics (signal4analytics.com) by user Michele Snow, username msnow, on 9/8/2021 1:42:33 PM. This document explains the folder structure, the query parameters selected, and the files selected for download including the number of records returned by the query in each file.

DATA FOLDERS
The downloaded data is provided in three folders.

- **Crash Tables** contains the crash data in csv format including events, drivers, non-motorists, passengers, vehicles, violations, bicycle typing and pedestrian typing.
- **Mapped Crashes** contains a GIS file with only the crash records that have been mapped. The unmapped crashes are not included in this file.
- **Crash Reports** contains individual police crash reports in PDF format.

QUERY PARAMETERS

```json
dateTime:
  
    
    startDateTime: 9/1/2021,
    endDate: 9/7/2021

reportingAgency:

    Gainesville Police Department
```

FILES DOWNLOADED

```plaintext
- Events (61 records)
- Drivers (118 records)
- Non-Motorist (1 record)
- Passengers (21 records)
- Vehicles (129 records)
- Violations (49 records)
- Mapped Crashes (49 crashes)
- Crash Reports (61 reports)
```
D. Future Features

- Network Analysis
- Citations
- Saved and Shared Queries
- Improvements to User Management Functionality
- Additional Analytical Features (Power Users)

- Integration of DOT’s CAR functionality
Training Link:

https://ufl.zoom.us/rec/share/7_Tiry7g7JXlnRXxh7KKpvXw-FilyQhQZLUMuWC0HlIbZ5PW7J4UiA6iO77jtA37S.UW2Xgy3bj6dMEyV?startTime=1638988533000
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