

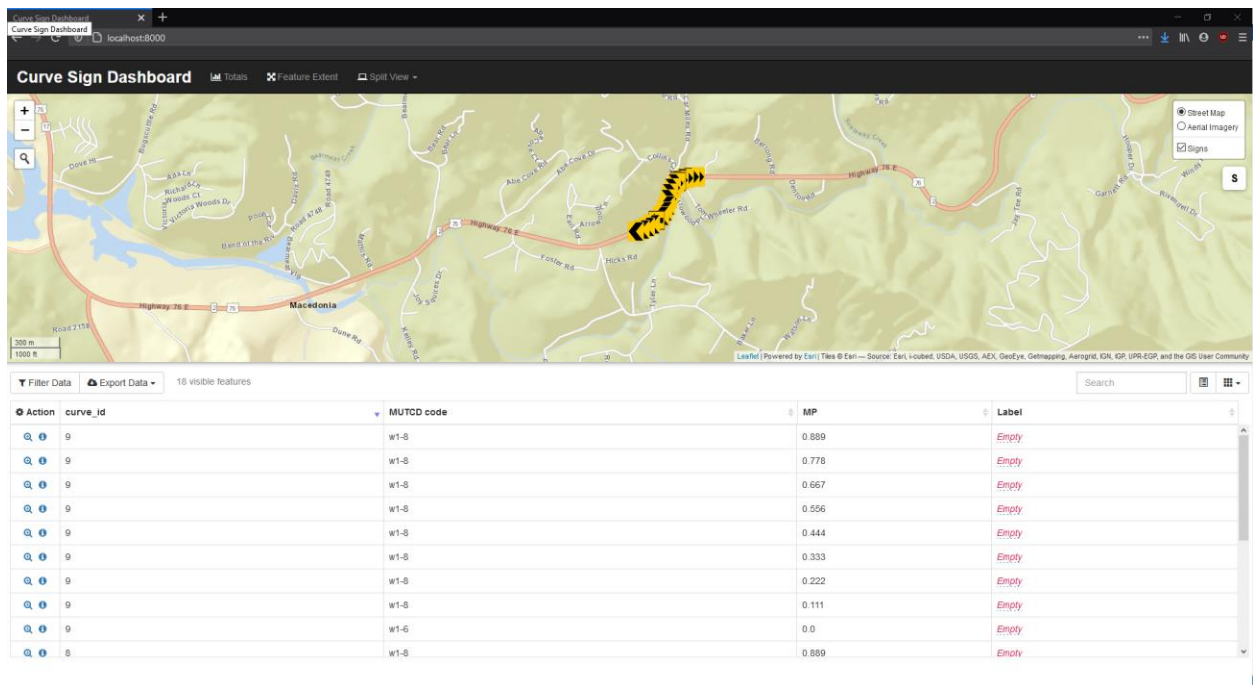
Curve Sign Dashboard

Smart City Infrastructure VIP

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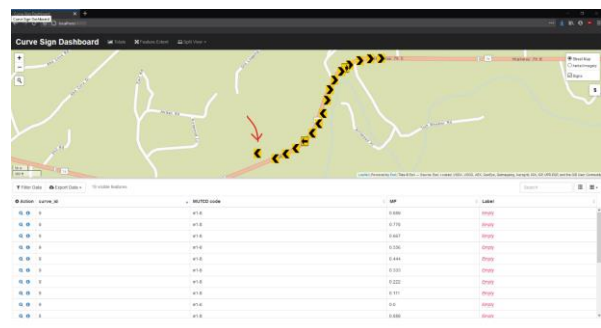
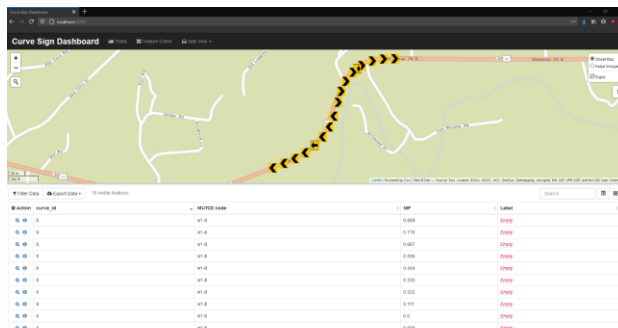
Code: <https://github.gatech.edu/tsai-research/curve-sign-dashboard.git>

Data used to test is in the data folder.

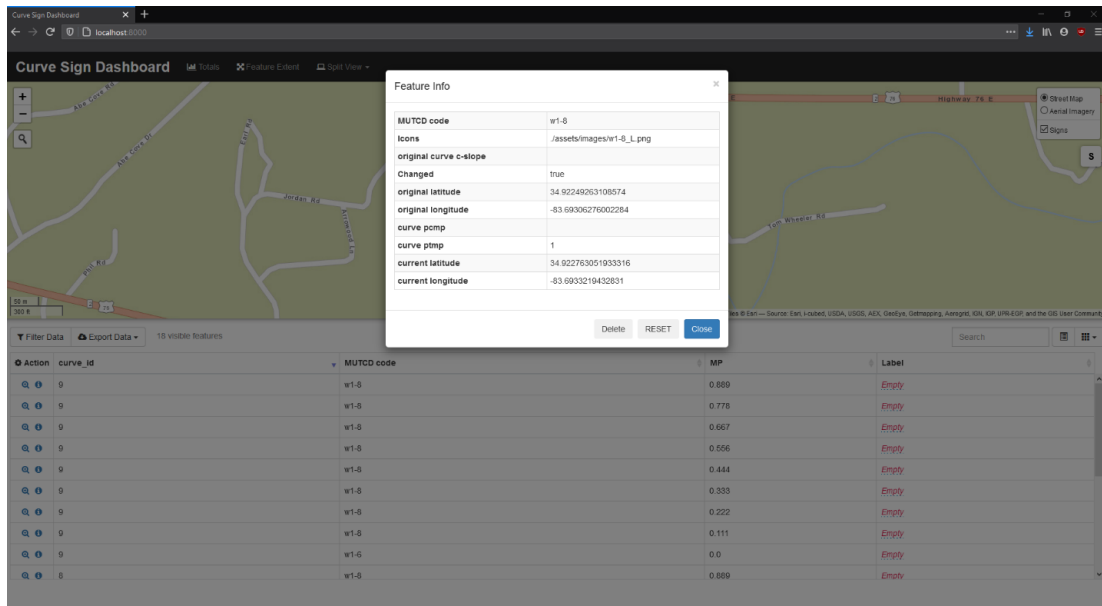


Features:

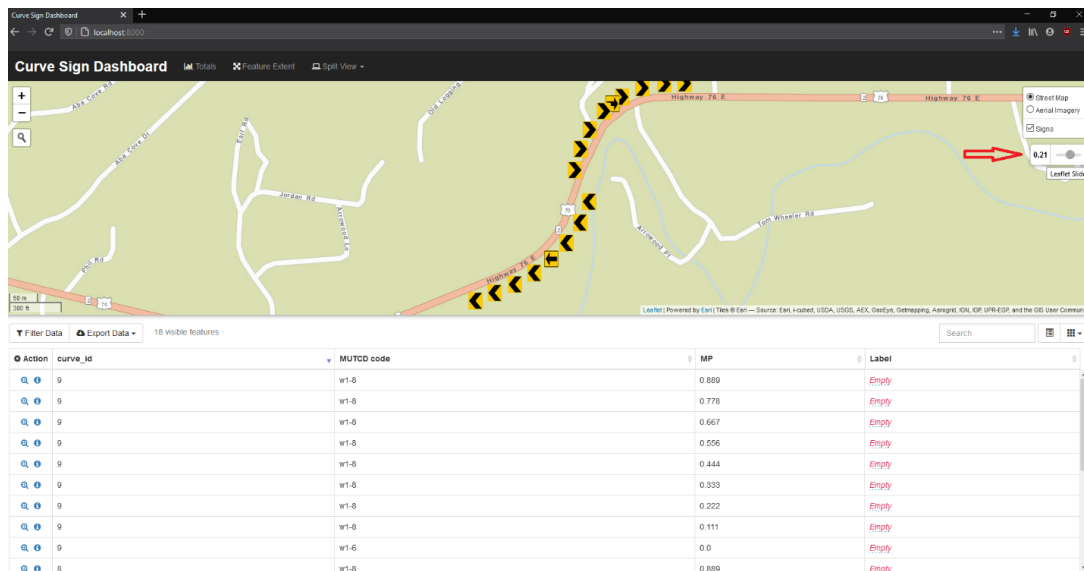
- Individual marker level
 - Can click and drag to edit position



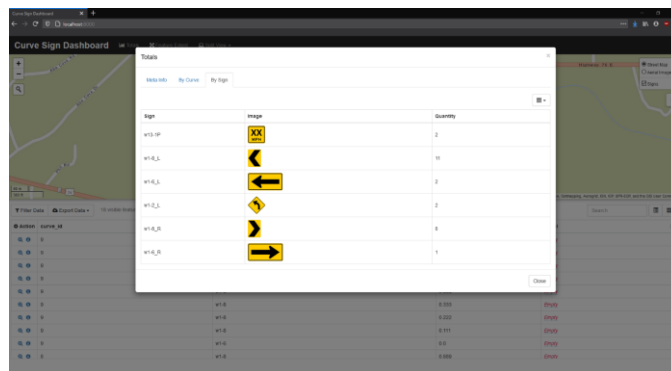
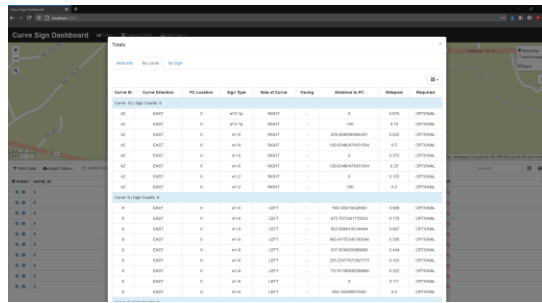
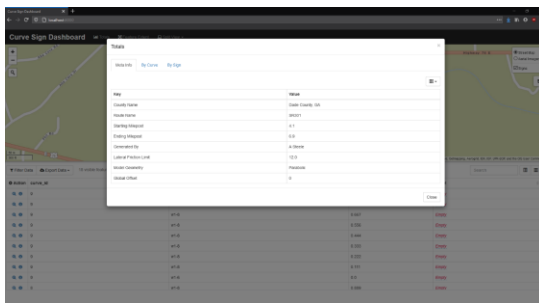
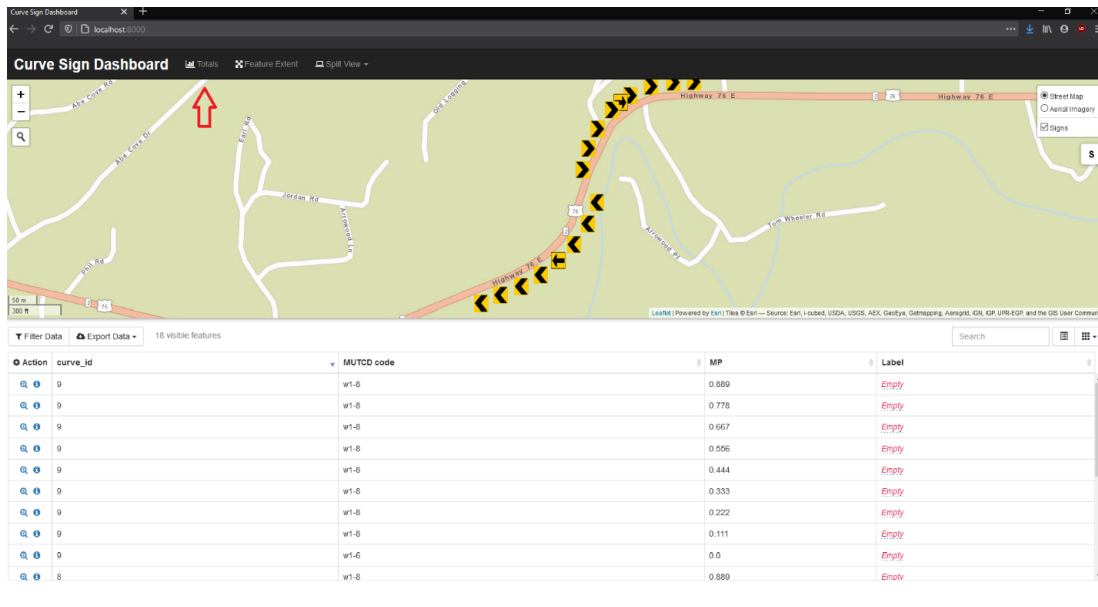
2. Can click to get individual details, reset marker, or delete.



- Global level
 - Offset slider to offset the signs from the road



2. Totals tab for meta-info, curve by curve info, and global sign inventory



The screenshot displays the Curve Sign Dashboard application. The top half features a map view showing a road network with yellow curve sign markers along Highway 76 E. The bottom half is a data table with the following columns: Action, cur, MUTCD code, MP, and Label. A red arrow points to the 'cur' column, which lists values like 9 and 8. The table shows 15 visible features. The interface includes a search bar, filter options, and a legend.

Action	cur	MUTCD code	MP	Label
	9	w1-8	0.889	Empty
	9	w1-8	0.778	Empty
	9	w1-8	0.667	Empty
	9	w1-8	0.506	Empty
	9	w1-8	0.444	Empty
	9	w1-8	0.333	Empty
	9	w1-8	0.222	Empty
	9	w1-8	0.111	Empty
	9	w1-6	0.0	Empty
	8	w1-8	0.889	Empty

[illegible]

The screenshot shows the QGIS interface with a project named 'Census'. The main map area displays a satellite image of a forested area with a yellow line representing a transect. A table on the right lists the data for the transect segments.

Segment	Start Date	End Date	Distance (m)	Area (m²)	Volume (m³)
1	2017-01-01	2017-01-01	100	10000	100000
2	2017-01-01	2017-01-01	100	10000	100000
3	2017-01-01	2017-01-01	100	10000	100000
4	2017-01-01	2017-01-01	100	10000	100000
5	2017-01-01	2017-01-01	100	10000	100000
6	2017-01-01	2017-01-01	100	10000	100000
7	2017-01-01	2017-01-01	100	10000	100000
8	2017-01-01	2017-01-01	100	10000	100000

Curve Sign Analysis Report
Georgia Institute of Technology

Metadata

Property	Value
Project Name	State College 104
Date Taken	201010
Camera Resolution	4.0
Camera Framerate	6.0
Camera ID	10000000
Location Pathname	1010
Signal Inventory	10000000
Signal Offset	0

Total Sign Inventory

Sign	Image	Quantity
W11.10		10
W11.11		10
W11.12		2
W11.13		2
W11.14		2
W11.15		2
W11.16		2

The screenshot shows the QGIS application window. The top panel displays a table with 8 rows of point data. The columns are: ID, Date/Time, Tag Type, Date of Capture, Observer ID, and Sex/Status. The data is as follows:

ID	Date/Time	Tag Type	Date of Capture	Observer ID	Sex/Status
1	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
2	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
3	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
4	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
5	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
6	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
7	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL
8	03/01	WFLG	03/01/2015 11:04	0001	SPF/MAL

The bottom panel shows a map view of a forested area. A yellow line with circular markers indicates the path of the points, showing a clear linear trend through the forest.

Future Work

Add more features to make it a more complete tools for transportation governments / professionals. The features in mind can be found in the github readme.

Some features include a toolbar on the side to allow addition of signs, history feature to revert to previous versions, implementing sign placement interval, and more.