# **Appendix J**

## Interactive Tool USER MANUAL

This user manual provides guidance on the use of the interactive tool developed for *Louisiana's Alcohol-Impaired Driving Problem: An Analysis of Crash and Cultural Factors*. This tool offers features of visualizing the data on parish or U.S. census block group level, and the survey results.

### **Tool Link**

The tool is deployed on https://ladotd.shinyapps.io/LA Alcohol Tool.

### Interface

Figure 1 shows the interface of the introduction page of the interactive tool. This page includes a brief introduction of this project, the components of the tool, and basic steps of using the tool.

Introduction	Parish	U.S. Census Block Group	Survey Results				
ouisiana	's Alcoh	ol-Impaired Dri	ving Problem: An A	Analysis of Cr	ash and Cultu	ural Factors	
			-	-			
o synthesize and	d document e	existing resources that agen	nfluential cultural factors that co cies can use to assess alcohol-im o provide a final detailed report v	paired driving, identify	/ influential individual, c	community, and cultural factors	
Select optio	ons from drop	o-down panels	k Group, and Survey Results). 1	The users need to follow	w some steps to make th	e tool interactive:	
Select varia		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
<ul> <li>Click Refres</li> <li>Zoom in/out</li> </ul>		take some time to load the	nap) or Plot				
		ved crash points					
<ul> <li>View survey</li> </ul>		i i i i i i i i i i i i i i i i i i i					
Acknowledg	gments						
he project was f	funded by Lo	uisiana Department of Tran	sportation and Development (La	DOTD).			
TTI project team	members Dr.		Institute (TTI) and the University h Das. Questions about the tool du.				
	DENT OF		s A&M portation ute				
Last updated: Au	gust 14, 2020	i.					

Figure 1. Interface of the interactive tool opening page

The tool interface has four different tabs:

- Introduction (the interface shown in Figure 1)
- Parish
- U.S. Census Block Group
- Survey Results

### Visualization

This section describes the basic steps needed to visualize the map from parish or U.S. census block group level, and survey results.

#### Parish

Figure 2 shows the interface of the Parish tab. This page contains two components: the parish-level map (on the left side), and drop-down selection panel (on the right side).

The parish-level map tool has the following features:

- Variable Selection: from drop-down panel
- **Plot:** "Refresh Map" button under the drop-down panel
- **Overlaying Alcohol-Involved Crash Points**: check box "Show Alcohol-Involved Crashes" under button "Refresh Map"
- **Zoom in/out:** plus/minus button on the map
- **Popup Information:** hovering on a parish



Figure 2. Parish level map tool

Steps to plot parish-level map:

- Select a variable (e.g., Alcohol-Involved Crash Count, Population 2020) from the drop-down panel
- Click "Refresh Map"
- Zoom in/out on map using the plus/minus button
- Check or uncheck "Show Alcohol-Involved Crashes" to show or hide alcoholinvolved crash scatter points
- When the cursor is hovering on a parish, the related information of the parish will pop up on the map. An example is shown in Figure 3.



Figure 3. Example of popup information on parish-level map

#### U.S. Census Block Group

Figure 4 shows the interface of the U.S. Census Block Group tab. This page is quite similar to that of Parish. It contains two components: the block group-level map (on the left side), and drop-down selection panel (on the right side).

The block group-level map tool also has the following features:

- Variable Selection: from drop-down panel
- **Plot:** "Refresh Map" button under the drop-down panel
- **Overlaying Alcohol-Involved Crash Points**: check box "Show Alcohol-Involved Crashes" under button "Refresh Map"
- **Zoom in/out:** plus/minus button on the map
- **Popup Information:** hovering on a block group



Figure 4. U.S. census block group level map tool

Steps to plot block group-level map:

- Select a variable (e.g., Alcohol-Involved Fatal and Serious Crashes, Risk Score) from the drop-down panel
- Click "Refresh Map"
- Zoom in/out on map using the plus/minus button
- Check or uncheck "Show Alcohol-Involved Crashes" to show or hide alcohol-involved crash scatter points
- When the cursor is hovering on a block group, the related information of the block group will pop up on the map.

#### Survey Results

Figure 4 shows the interface of the Survey Results tab. This page contains three components: the survey result plot (on the top left), drop-down selection panel (on the top right), and survey result in table format (on the bottom).

The survey results tool has the following features:

- Variable Selection: from drop-down panel
- **Cross Plot by Gender:** check the box "Cross Plot by Gender" above button "Plot"
- **Plot:** "Plot" button under the drop-down panel
- **Download Plot:** "Download Plot" button under the drop-down panel (right side of "Plot")
- **Download Table:** "Download Table" button under the drop-down panel (right side of "Download Plot")



Figure 5. Survey results

Steps to plot survey results:

- Select a variable (e.g., Age, Gender, Age by Gender) from the drop-down panel
- Click "Plot"
- To cross plot the selected variable by gender, check the box "Cross Plot by Gender," then click "Plot" (Note that Cross Plot Gender by Gender is not available.)
- The table below the plot also shows the survey results for the selected variable
- To download the plot as a PNG file, click "Download Plot"
- To download the table as a csv file, click "Download Table"