

DRIVER SYSTEM

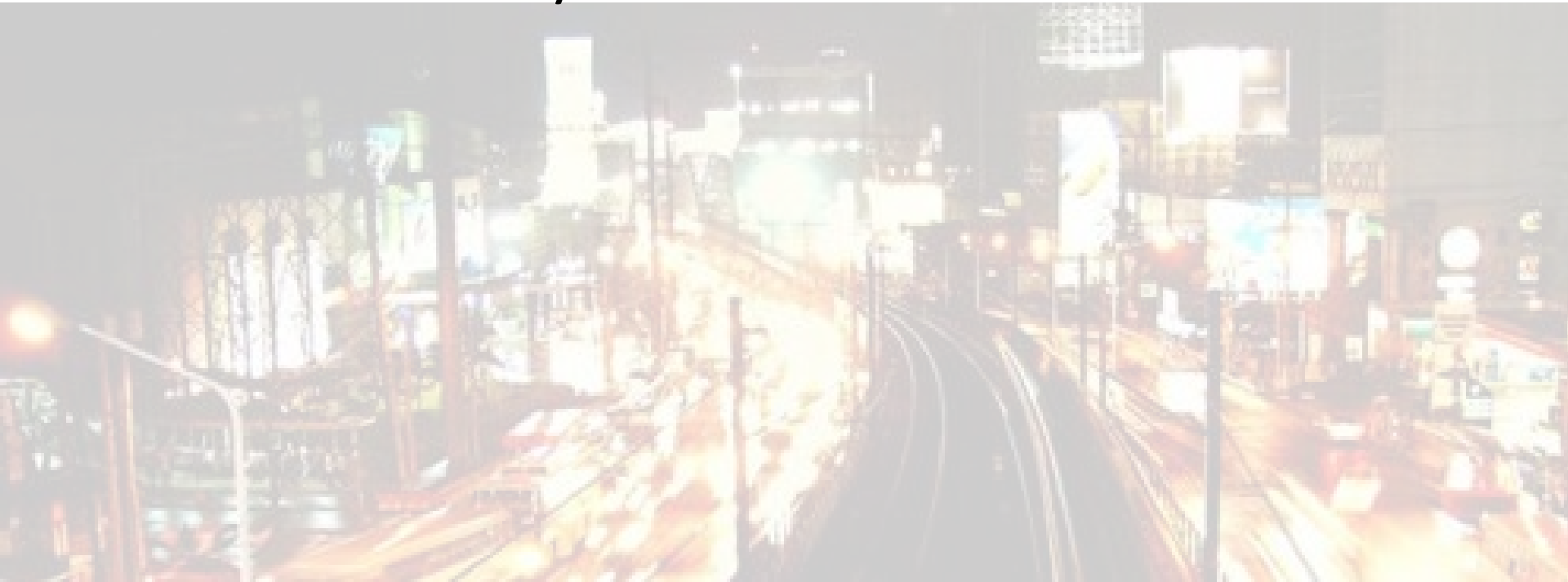
OBANDO

MAT



I. Challenges in Data Management


- Manual surveys and recording
- Costly and often involves government procurement
- Multiple and scattered data sources
- No further analysis




II. DRIVER SYSTEM

- **Open-source, web-based, centralized and nationwide** system for data collection, analysis and reporting of traffic incident data

DRIVER Dashboard ▾ Regions ▾ All ▾ faj.dotr@gmail.com ⋮



Black Spots by Severity [Analyze & filter »](#)



Incidents: Last Two Weeks [View all incidents »](#)

₱1,108,640,000

Total economic loss and societal harm: Last 90 days

950

Incidents

30 Days 90 Days 365 Days

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sun							6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon			2				6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Tue							6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Wed							6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Thu							6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Saved Filters

No filters have been saved

II. DRIVER SYSTEM

- **Multi-sectoral** approach in reporting and analyzing data

Filter by name, keyword Date Range ▾ Reporting Agency ▾ Main cause ▾ Severity ▾

DATE & TIME	SEVERITY	Reporting Agency	MAIN CAUSE	COLLISION TYPE	DESCRIPTION
2/06/2017, 21:40:08	Property	PNP ✓	Human error	Side swipe	
2/06/2017, 20:09:46	Property	Local Traffic Unit ✓	Human error	Side swipe	
2/06/2017, 19:27:30	Property	BGCEA ✓	Human error	Other (see description)	Multiple Collision
2/06/2017, 19:20:54	Property	CCTO ✓	Human error	Side swipe	
2/06/2017, 19:15:22	Property	MMDA Metrobase ✓	Human error	Side swipe	
2/06/2017, 19:06:53	Property	Dipolog City TMO ✓	Human error	Side swipe	
2/06/2017, 17:05:22	Property	Davao City TMO ✓	Human error	Side swipe	
2/06/2017, 16:46:49	Injury; Property	Other ✓	Human error	Side swipe	
2/06/2017, 16:43:35	Property		Human error	Side swipe	
2/06/2017, 16:21:36	Property		Human error	Side swipe	
2/06/2017, 15:53:17	Property		Human error	Side swipe	
2/06/2017, 15:31:53	Property		Human error	Side swipe	
2/06/2017, 14:24:48	Property		Human error	Side swipe	
2/06/2017, 14:16:16	Property		Human error	Side swipe	

II. DRIVER SYSTEM

- Three components:

- 1) Data Management
- 2) Data Analysis
- 3) Institutional Arrangement

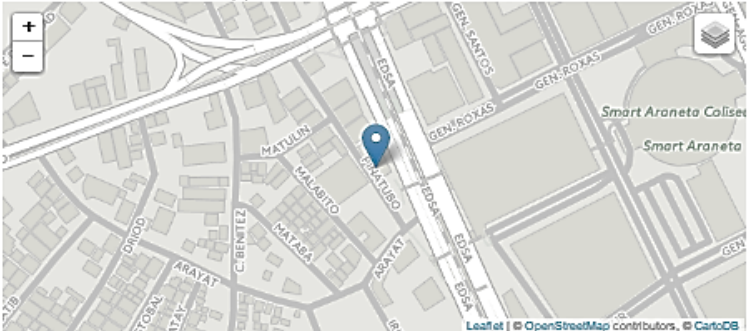
- Use of **historical data** to inform traffic management, policy-drafting and investment decision-making

Incident Details [View](#)

Incident Details

OCCURRED	CREATED
February 6, 2017, 21:40:08	February 6, 2017, 21:55:24

LOCATION
Uni Building, Pinatubo, San Martin de Porres, Cubao, District IV, Quezon City, Metro Manila, 1111, Philippines



LATITUDE
14.62013

LONGITUDE
121.05037

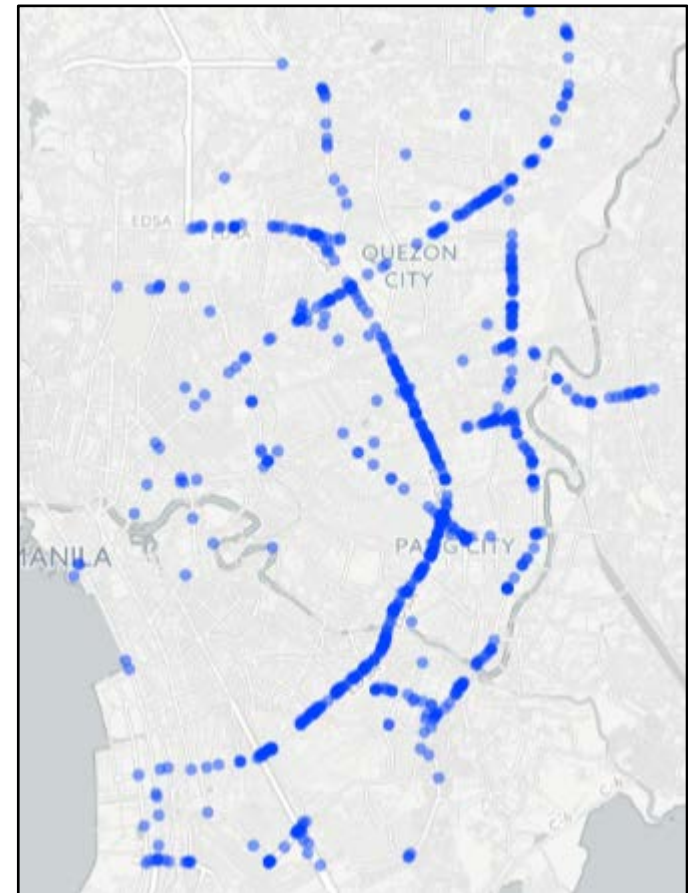
WEATHER
o Clear night
Powered by Forecast

SEVERITY
Night

MAIN CAUSE
Human error

COLLISION TYPE
Side swipe

REPORTING AGENCY
MMDA Metrobase



II. DRIVER SYSTEM

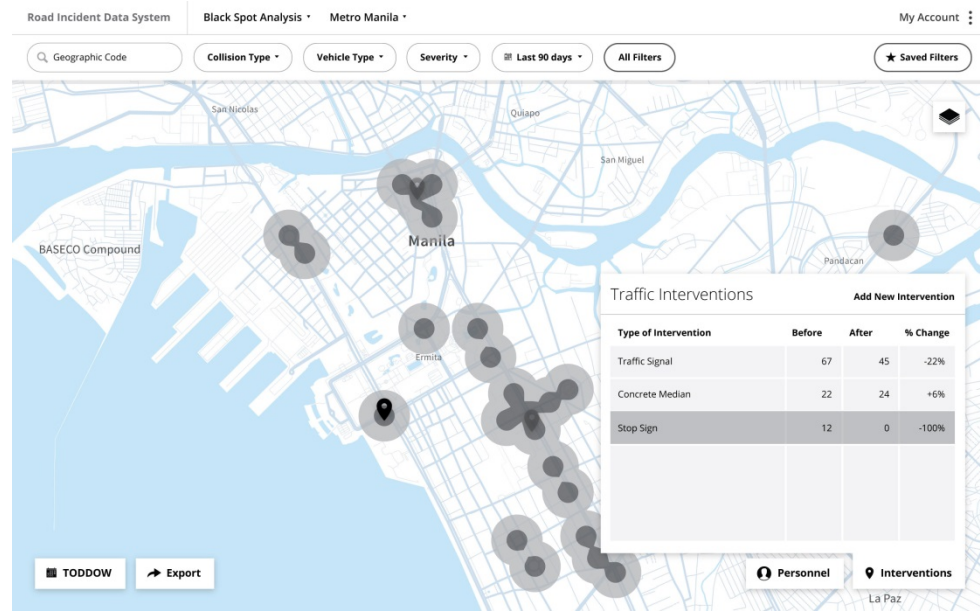
Specifications

- **Identification of black spots** with fixed and customized filters
- **Cost** of black spots/individual accidents to economy
- **Visualization of accidents** over imported shape files
- Optimization of emergency services and **enforcer resources assignment**
- **Monitoring effect** of interventions
- Mobile application to support data entry

Road Incident Data System | Incident Reports | Metro Manila | My Account

Search by name, keyword | Status | All Records | Last 90 days | + Add New Incident

REF. ID	DATE & TIME	LOCATION	STATUS	SEVERITY	
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
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0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit
0012345	01/01/2015 00:00	25th Street and 5th Avenue, Global City, Taguig, Metro Manila	Added via app	Fatal	Edit

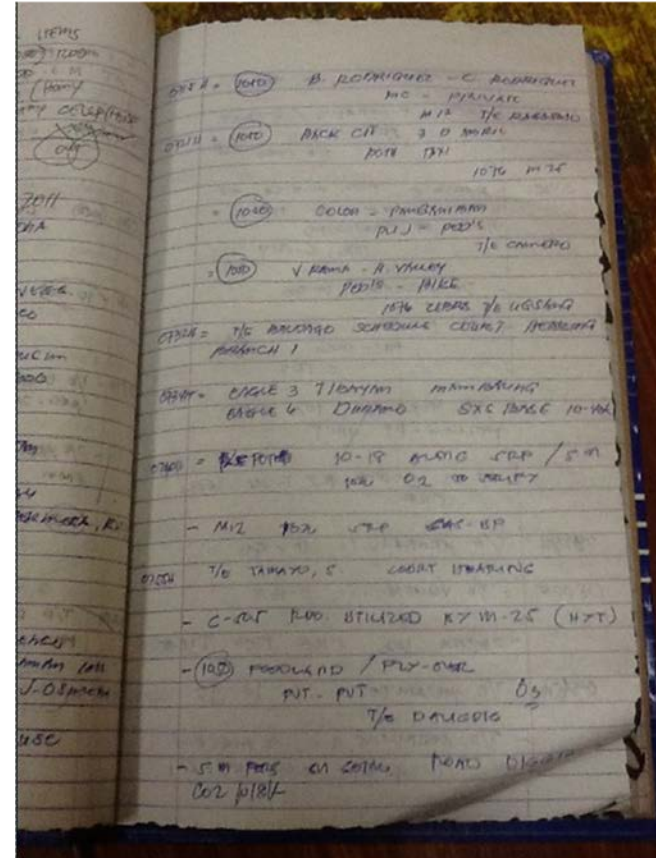


III. PILOT RUN

CEBU Initial Run of Prototype

CITOM: Recording Road Safety Data

BEFORE



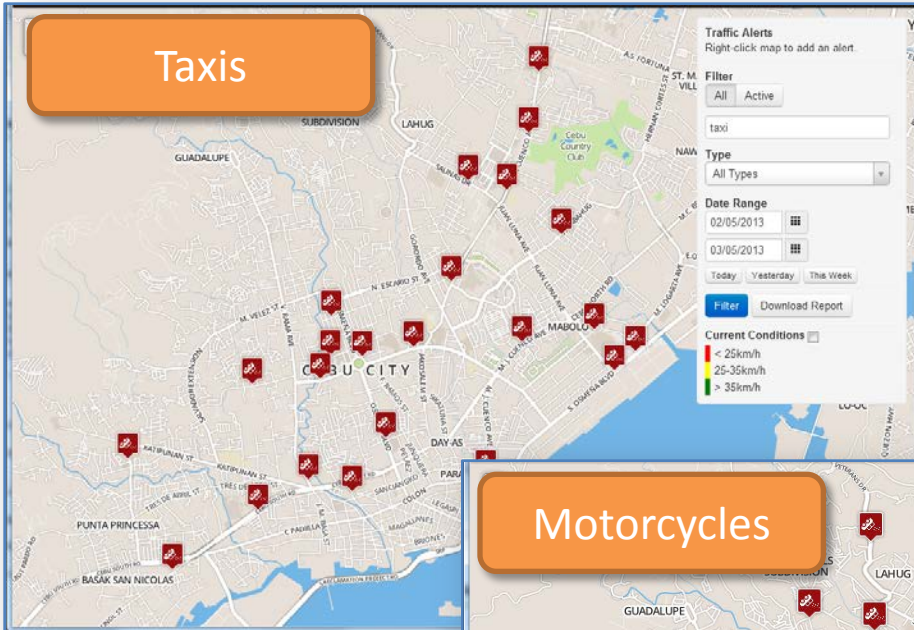
AFTER

A screenshot of a web browser displaying a map of Cebu City. The browser's address bar shows "Inventory of ... Bing Facebook (4) Facebook". The map is covered with numerous red icons representing traffic alerts. A pop-up window is open over the map, displaying the following information:

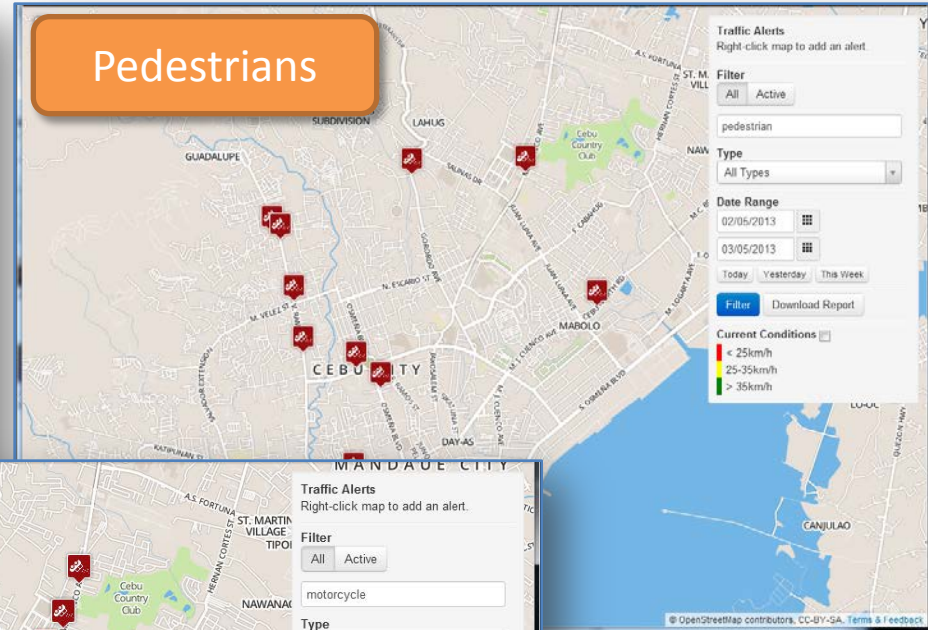
Type: Traffic Incident
Publicly Visible: No
Description: involving two Pvt. vehicles..attended by T/E Silones.
Public Description:
Active From: Wed, Feb 13 2013 4:46 AM
Active To: Wed, Feb 13 2013 4:46 AM
Messages:
Wed, Feb 13 2013 5:31 AM (ronie)
data endorsed to investigation section.vehicles involved pulled out.

Below the text is a "Message..." input field, a "Save Message" button, and an "Edit Alert" button. On the right side of the map, there is a "Traffic Alerts" panel with a "Filter" section (All, Active), a "keywords" input field, a "Type" dropdown menu (All Types), a "Date Range" section (02/13/2013, 02/27/2013, Today, Yesterday, This Week), and "Filter" and "Download Report" buttons. Below the panel is a "Current Conditions" legend with three color-coded categories: red for "< 25km/h", yellow for "25-35km/h", and green for "> 35km/h". The bottom right corner of the map area contains the text "© OpenStreetMap contributors, CC-BY-SA, Terms & Feedback".

Taxis



Pedestrians



Motorcycles

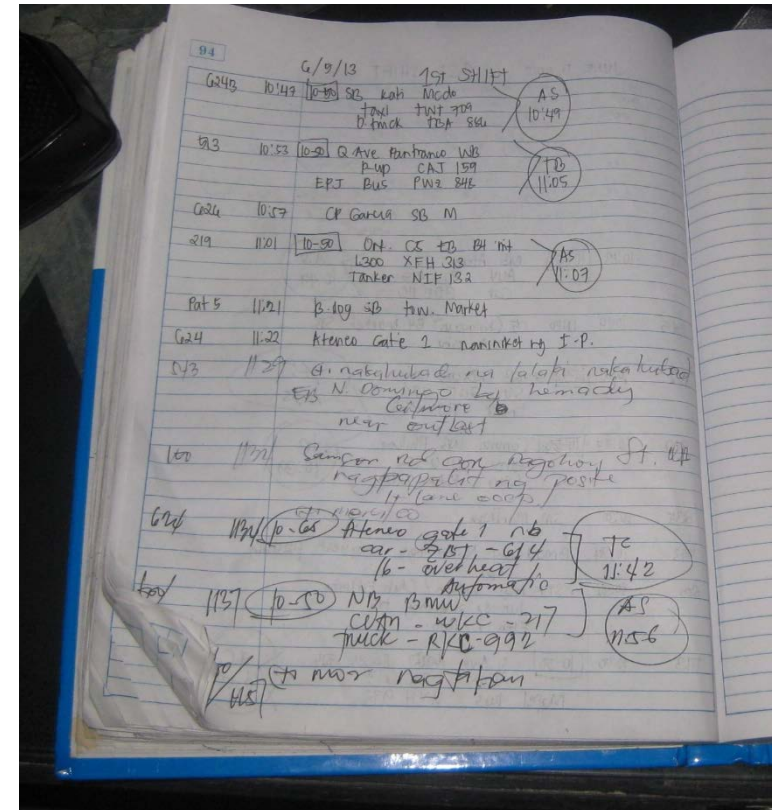
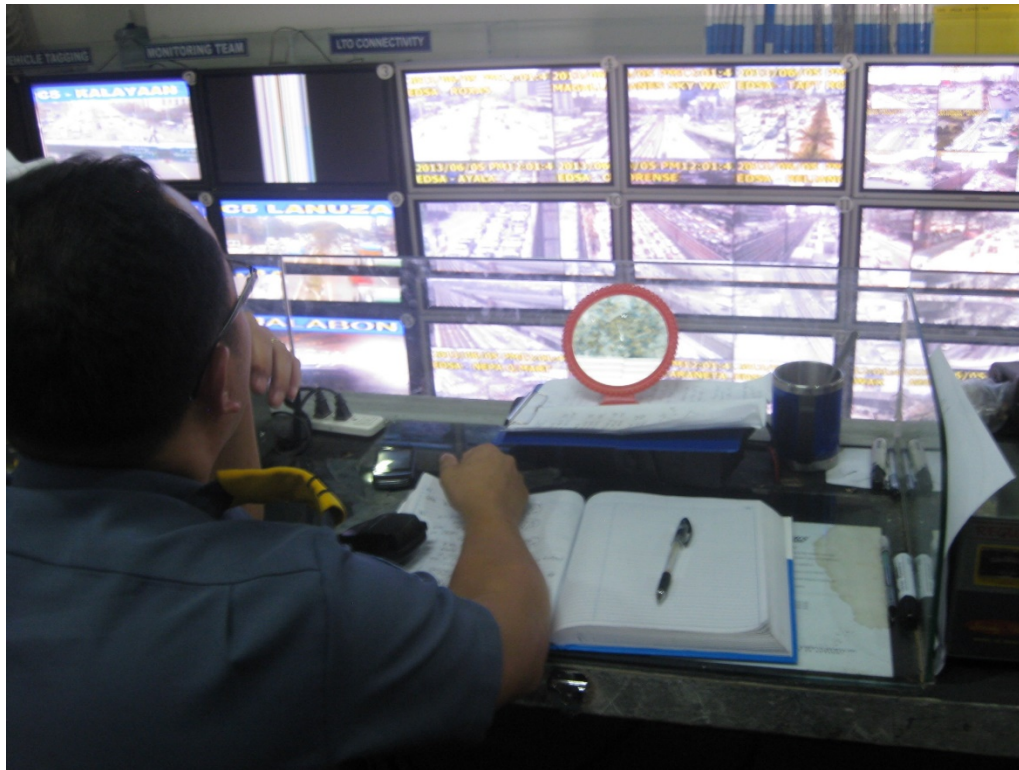


III. PILOT RUN

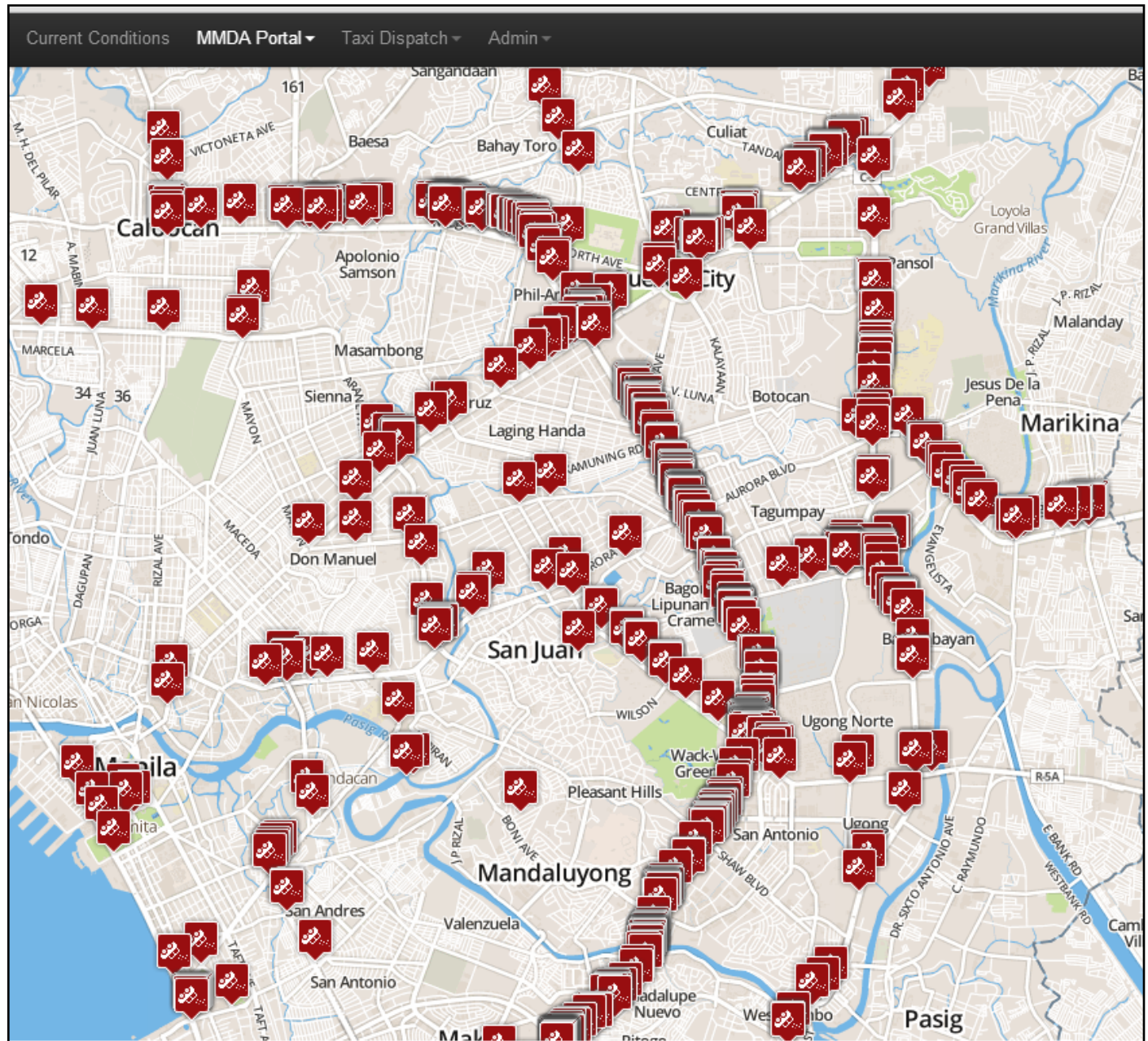
MMDA Initial Run of Prototype

MMDA METROBASE Recording Road Safety Data

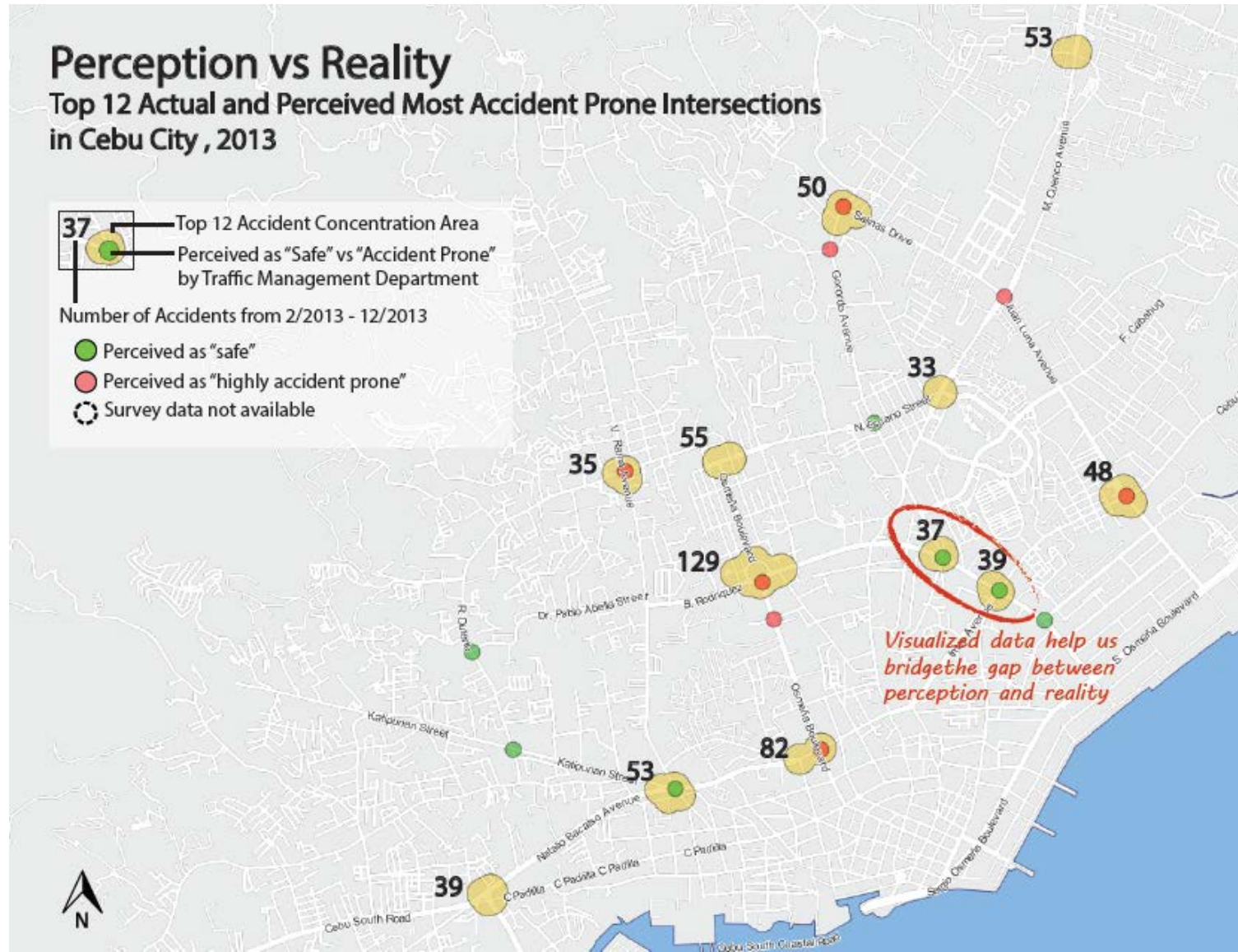
BEFORE



AFTER

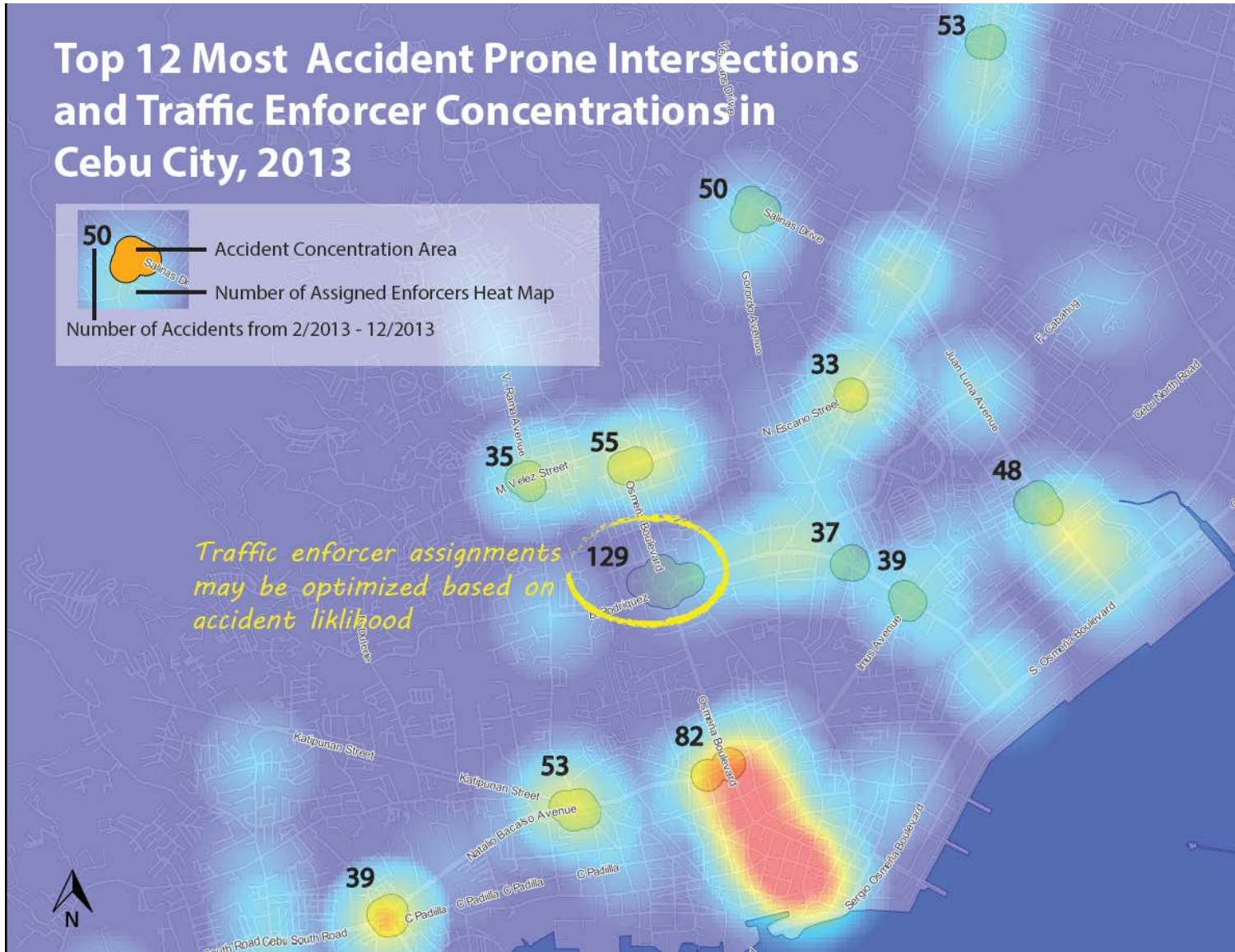
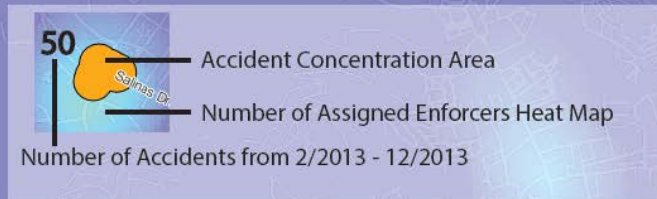


III. EVIDENCE-BASED DECISION MAKING



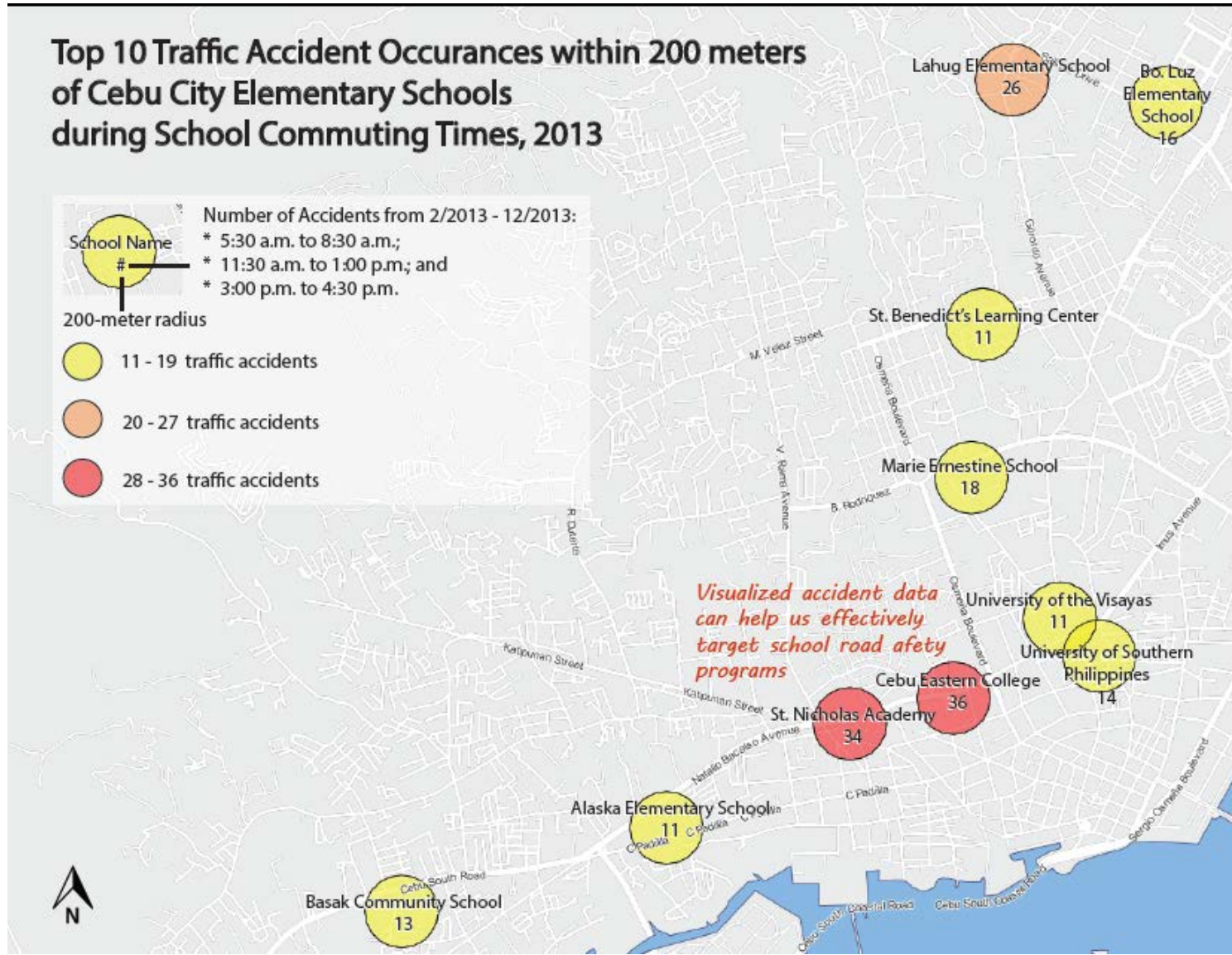
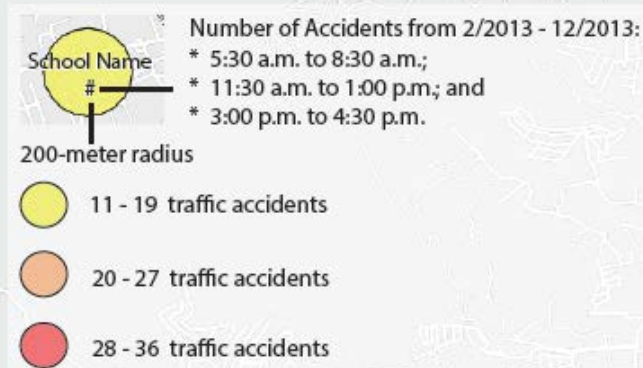
III. EVIDENCE-BASED DECISION MAKING

Top 12 Most Accident Prone Intersections and Traffic Enforcer Concentrations in Cebu City, 2013



III. EVIDENCE-BASED DECISION MAKING

Top 10 Traffic Accident Occurrences within 200 meters of Cebu City Elementary Schools during School Commuting Times, 2013



Platform website: <http://roadsafety.gov.ph>



ROAD INCIDENT DATA SYSTEM Incident Reporting

The Philippine Incident Reporting app allows for in-the-field data entry into the Road Incident Data System to capture reports.

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[Contact DOST Support](#)

