

Report No: AUS0000818

DATA FOR ROAD INCIDENT VISUALIZATION, EVALUATION, AND REPORTING

*Lowering the barriers to evidence-based road safety
management in resource-constrained countries*



May 2019

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1 BACKGROUND

1.1 CONTEXT

According to the WHO Global Status Report on Road Safety 2015, road crashes claim more than 1.2 million lives each year, most of which are in low- and middle-income countries, costing governments approximately three percent of their annual GDP. While some road crashes can be predictable and preventable, efforts to systematically reduce crashes in resource-constrained environments have been stymied by lack of accurate, geo-referenced crash and health outcome data to support targeted interventions.

To meet the UN Decade of Action goal of reducing global road fatalities by 50% by 2020, the UN emphasizes the need to improve the quality of data collection in the local, national and global levels. These activities enable governments to more effectively prioritize funding, monitor impact of investments, and strengthen cross-agency collaboration and capacity.

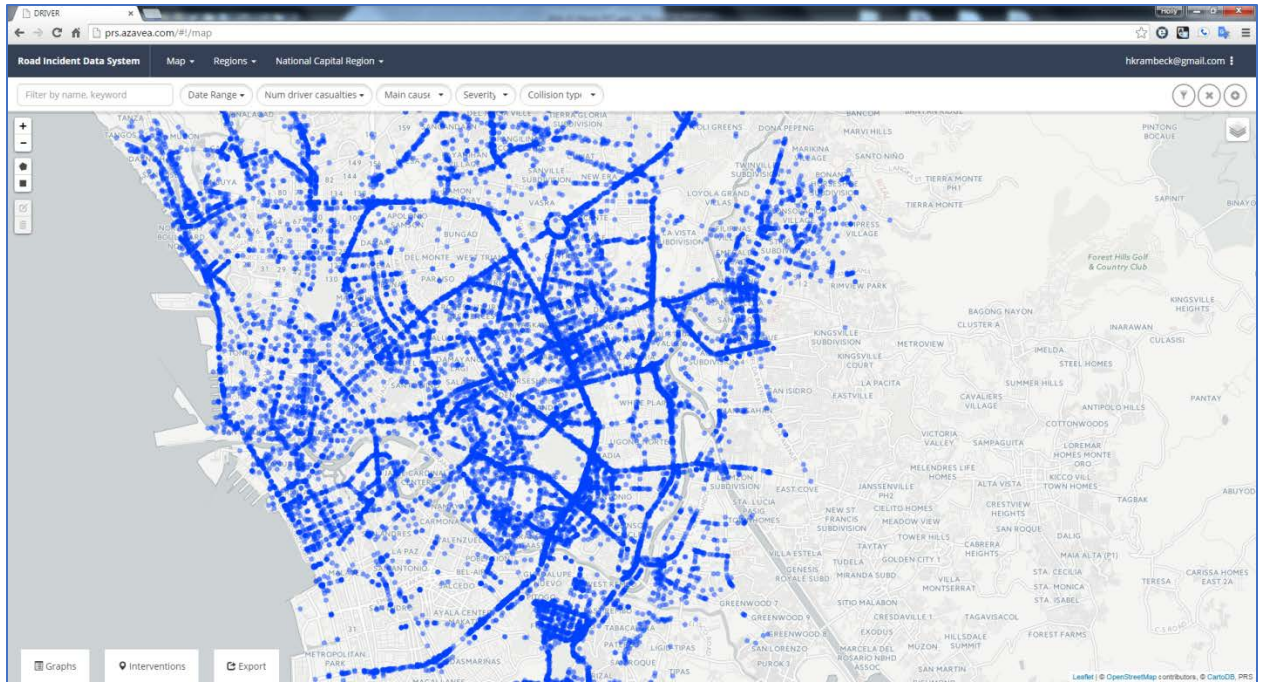
1.2 DRIVER

In response to this, the World Bank, working with the Philippines government, developed and deployed a free web-based and open-source system for geo-spatially recording and analyzing road crashes --the Data for Road Incident Visualization Evaluation and Reporting (DRIVER) system.

DRIVER links multiple agencies involved in recording road crash data (i.e., local government units, the police, and the health system), standardizes terms and definitions for reporting, and provides analytical tools to support evidence-based investments and policies and monitoring the impact of interventions.

Key platform features include:

- A web-based interface that supports multi-agency use;
- A companion Android mobile application for field data entry;
- A public-facing website and tools for downloading anonymized data for third-party analysis;
- Customizable data entry fields;
- Multi-lingual support (platform currently offered in six languages – English, Arabic, Chinese, Vietnamese, Spanish, and Portuguese);
- Analytical tools for blackspot prediction, estimating the economic costs of crashes for a selected area; and tracking efficacy of road safety interventions.



DRIVER

prs.azavea.com/#/list

Road Incident Data System

Record List

Regions - Central Luzon (Region III)

hkrambeck@gmail.com

Filter by name, keyword

Date Range

Num driver casualties

Main cause

Severity

Collision type

| DATE & TIME | SEVERITY | MAIN CAUSE | COLLISION TYPE | DESCRIPTION | | |
|-------------------|----------------------|----------------|---------------------|--------------------------|------|------|
| 8/27/13 12:00 AM | Property damage only | Human error | Side swipe | VEHICLE LOST CONTROL... | View | Edit |
| 11/10/13 12:00 AM | Serious injury | Human error | Hit pedestrian | V1 ACCIDENTALLY HIT/B... | View | Edit |
| 11/10/13 12:00 AM | Fatal | Human error | Hit object in road | V1 TRAVELING TOWARD ... | View | Edit |
| 12/9/13 12:00 AM | Minor injury | Human error | Hit object off road | VEHICLE HIT OBJECT ... | View | Edit |
| 11/9/13 12:00 AM | Serious injury | Human error | Hit pedestrian | V1 AND V2 WERE TRAVE... | View | Edit |
| 11/1/13 12:00 AM | Minor injury | Human error | Side swipe | V1 TRAVELING NORTH D... | View | Edit |
| 9/1/13 12:00 AM | Minor injury | Human error | Side swipe | V1 TRAVELING TOWARD ... | View | Edit |
| 12/9/13 12:00 AM | Fatal | Human error | Head on | V1 HEADING WEST AND ... | View | Edit |
| 12/21/13 12:00 AM | Fatal | Human error | Overtaken vehicle | V1 IN FRONT OVERTURN... | View | Edit |
| 8/29/13 12:00 AM | Minor injury | Human error | Right angle | V2 ACCIDENTALLY HIT/B... | View | Edit |
| 8/6/13 12:00 AM | Property damage only | Vehicle defect | Rear end | V2 HIT/BUMPED THE RE... | View | Edit |
| 11/13/13 12:00 AM | Property damage only | Human error | Side swipe | V1 AND V2 WERE TRAVE... | View | Edit |
| 12/5/13 12:00 AM | Fatal | Vehicle defect | Head on | V1 AND V2 WERE TRAVE... | View | Edit |
| 12/13/13 12:00 AM | Property damage only | Human error | Side swipe | V1 AND V2 WERE TRAVE... | View | Edit |
| 12/20/13 12:00 AM | Serious injury | Human error | Hit pedestrian | V1 ACCIDENTALLY HIT/B... | View | Edit |
| 12/6/13 12:00 AM | Minor injury | Human error | Side swipe | V1 AND V2 WERE TRAVE... | View | Edit |

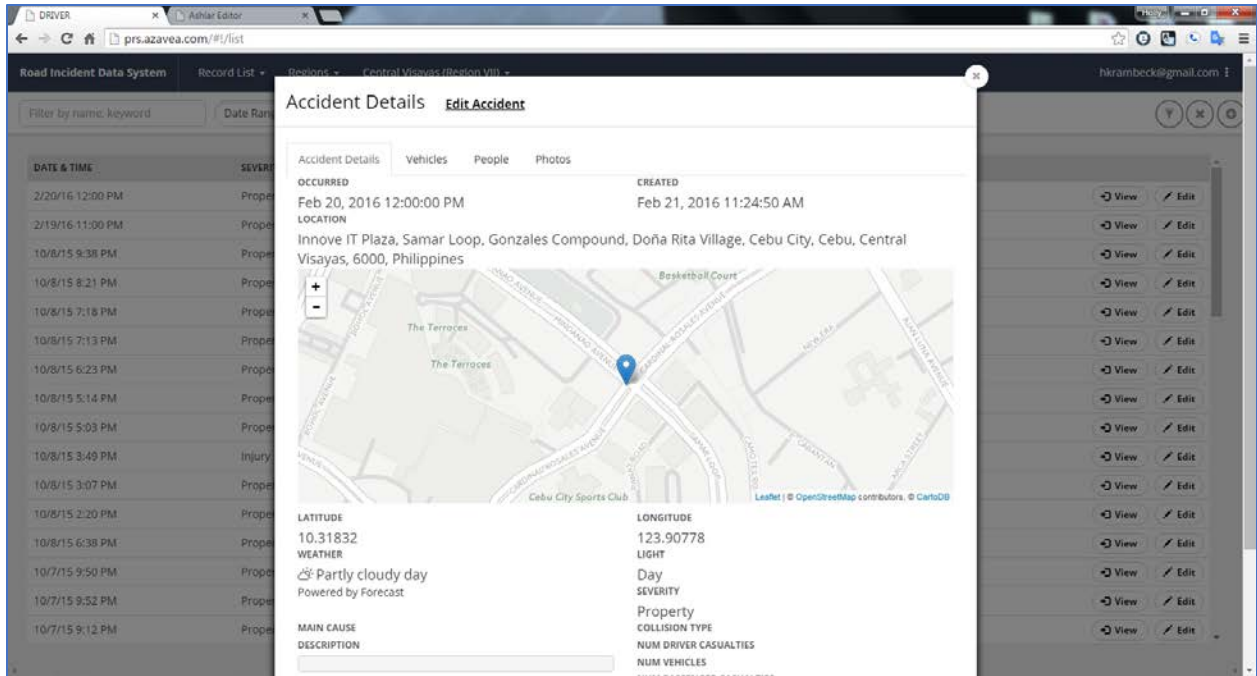


Figure 1 Philippines Deployment (<https://roadsafety.gov.ph/>)

1.3 VALUE-ADDED

The majority of World Bank counterparts, especially in low and low-middle income countries, do not have centralized, geospatial crash reporting systems, preventing governments from conducting the most basic level of analysis for blackspot identification and prioritization. Further, while there exist proprietary software packages for crash reporting, these packages have the following drawbacks, namely:

- **Barrier to Entry** – proprietary packages can cost hundreds of thousands of dollars and require annual support and maintenance fees from international consultants. When trying to scale across a country, the risks and costs escalate. With DRIVER, the software is free, and a custom demonstration instance can be set up in a day, seamlessly putting the software in the hands of counterparts to freely test and discuss before any commitments are made. If the counterparts wish to move forward with using DRIVER, then can either use in-house resources to set up, or open a competitive consultant procurement amongst local developer talent – a faster and less costly process than an international software/equipment procurement;
- **Coordination** – software vendors generally provide software but not the institutional arrangement support that is necessary to sustain a national crash reporting system, such as the value-added the Bank can provide with DRIVER;
- **Standardization** – when cities, states, and countries use their own proprietary systems for recording crash data, it is nearly impossible to support the objective of a seamless global, real-time, and georeferenced crash repository; and
- **Maintenance** – Proprietary systems can only be maintained by a single vendor, whereas open-source systems can be maintained by local developers, through competitive procurement, and to come extent, by transport agencies themselves. Further, proprietary programs generally rely on GIS shapefiles for the road base-map in lieu of the Open Street Map, which is easier and cheaper to update with unlimited frequency.

Through DRIVER, task teams can quickly demonstrate to counterparts the kind of modern, value-added engagement with the World Bank can provide. DRIVER data will form the basis of blackspot identification and prioritization work, further opening the door to training activities on how to optimally address blackspots, as well as investments in well-informed improvements and long-term monitoring of the efficacy of those improvements.

1.4 GRANT ACTIVITIES

Under the GRSF, the World Bank team was able to draw upon lessons learned from DRIVER’s pilot implementation in the Philippines to make technical improvements to the platform and to support its scaling for use in new countries. Specifically, the team:

- Set up translated demonstration instances for new countries;
- Developed and delivered a training curriculum for new countries;
- Provided technical support for the Philippines instance;
- Supported front-end improvements to the platform, to improve user experience; and
- Supported back-end improvements, to facilitate use by local developers in counterpart counties.

2 LAOS

2.1 REVIEW OF ROAD CRASH RECORDING PRACTICES AND TECHNICAL CAPACITY

Leveraging the GRSF, the Team undertook a survey of road crash reporting practices in Laos and evaluated technical capacity to implement the DRIVER web-based system.

In summary, the team found that there was no geo-referenced database of road crashes in the country at any government level. Nor was there a modern, connected electronic system for effectively collecting, storing, and/or analyzing crash data. As a result, the Team found that there was little idea or consensus on the extent of the road safety issue in Laos.

Laos Data Reporting and Recording Process.

Traffic accident data are typically recorded by district-level traffic police, using paper forms. These forms are delivered to the central police office, where they are partially transcribed onto daily paper accident report forms (e.g., the number of persons involved, number of injuries, etc.). These daily aggregate reports are then encoded into an Excel workbook. The original forms are then placed in satchels, which are periodically transferred to a warehouse on the outskirts of Vientiane for storage.

Figure 2: Example of paper form used to aggregate daily crash data in Vientiane (2017)

Data Sharing Process. There is currently no formal data sharing process between the hospitals, the Ministry of Public Works and Transportation (MPWT) and the traffic police. As a result,

hospital accident records tend to differ significantly from police-reported crash statistics, and the MPWT does not have the crash data needed to initiative road safety improvement programs and investments.

Technical Capacity. In terms of technical capacity, the Vientiane traffic police headquarters has a staffed IT room, which has two Internet-connected computers that can be used with the DRIVER cloud-based platform (the Task Team tested this on-site). The headquarters also has dedicated staff who could be responsible for the data encoding. However; the computer literacy level of these encoders was found to be low, and outside of the headquarters, police stations are not equipped with Internet-connected computers. Further, the Team learned that the majority of police responsible for crash recording are not computer-literate.

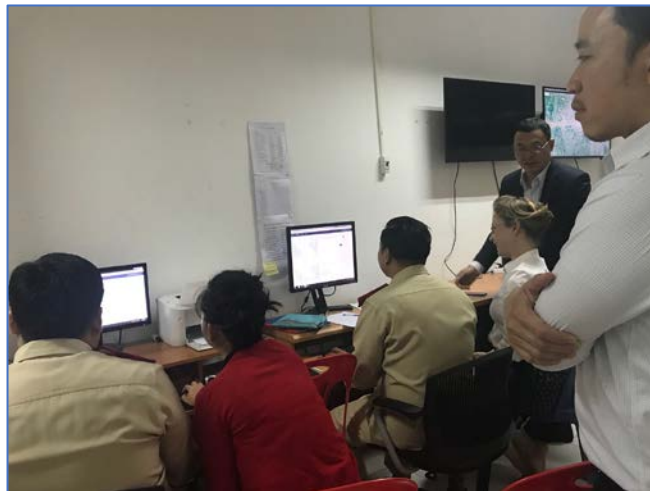


Figure 3: Initial testing of DRIVER at Vientiane police headquarters

The Ministry of Public Works and Transport (MPWT) has a modern IT department, which, based on preliminary interviews, may have the requisite technical staff and resources to manage server hosting of the DRIVER application. This capacity will be further evaluated under the next phase of program implementation, supported by the Quality Infrastructure Investment (QII) program.

2.2 PILOT DESIGN

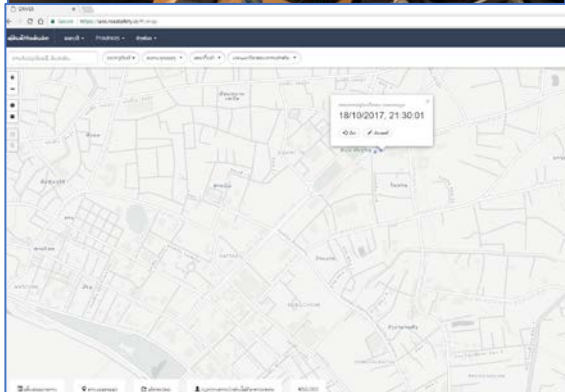


Figure 4: Laos DRIVER Demonstration Platform

Consultations. The Team organized two workshops with representatives from the Ministry of Public Works and Transportation, the Traffic Police, and the Health Department. The purpose of the first workshop, held in October 2017, was to discuss current challenges and needs in road crash reporting and analytics (especially with respect to institutional arrangements and coordination), present the DRIVER Philippines case study, to discuss feasibility of introducing DRIVER in Laos, and to reach agreement on whether to pursue a pilot. With this agreement, the second workshop, held in May 2018, focused on pilot design and implementation, initial platform training, and institutional arrangements.

During the first workshop, the MPWT, traffic police, and hospitals all expressed interest in moving forward with a DRIVER pilot. The traffic police indicated that they had been applying for a budget to support a crash database system for some years, to no avail, and based on the demonstration given during the workshop, believed DRIVER could meet their needs. Similarly, the hospital representatives supported a system that would enable their staff and police work with a common set of data.

The MPWT stated the importance of crash data to their work and offered to coordinate DRIVER's implementation and hosting – to this end, after the second workshop, MPWT assigned a dedicated staff.

Pilot Design. Based upon the workshop feedback and on-site process and capacity assessments, the following pilot design was agreed upon:

- Month 1: Task Team updates DRIVER demonstration platform (already translated into Lao in advance of the workshops) with fields from Laos traffic police forms;
- Month 2-6: Team designs multi-day training curriculum for Laos traffic police, which includes basic computer literacy training. Police select 3-5 districts to attend training;
- Month 7-13: Police pilot encoding of traffic accidents in DRIVER and provide feedback to Task Team;
- Month 14-20: Hospital records staff are trained on DRIVER and invited to begin manually appending crash records with fatality outcomes; MPWT staff are trained on how to use crash data to inform interventions.
- Month 21: MPWT hosts workshop to discuss needed platform customizations, as well as sustaining institutional arrangements and scaling up plan.
- Month 22: Conclusion of pilot activity and decision point for moving forward.

2.3 TRAINING

The MPWT, Ministry of Public Security, and the World Bank jointly organized a three-day training program for police from five districts in Vientiane on the use of Data for Road Incident Visualization, Evaluation, and Reporting (DRIVER). Taking into account feedback from the previous mission, the training began with a basic computer course, teaching police how to operate and navigate a computer, set up and use an e-mail account, and fill in a simple form. With these skills mastered, the training then covered logging into DRIVER web and mobile applications, completing crash reports, and searching for and validating crash records.

A copy of the training script may be found here: <http://bit.ly/2zjrXei>, and the course plan here: <http://bit.ly/2OViajW> (also in Annex 1 and 2).

The training was very well received by all five districts. At the conclusion of the training, more than 250 crash records were entered by police into DRIVER, and participating police requested continuation of the program. Following is a link to a short video summarizing participant feedback: https://youtu.be/pml_MaEVETM.



Figure 7: First Laos DRIVER Training Cohort

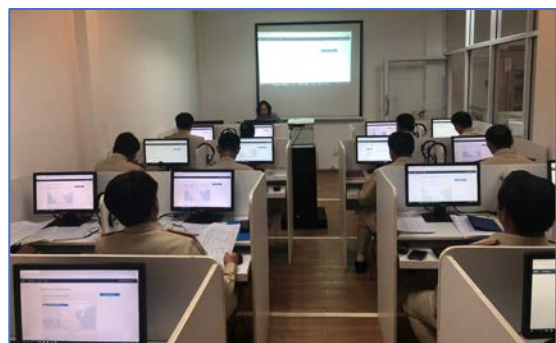


Figure 6: Laos DRIVER training delivery

Following the training, it was agreed that the police would seek support from the Ministry of Public Security and MPWT leadership to” provide computers and Wi-Fi to the five districts (already approved

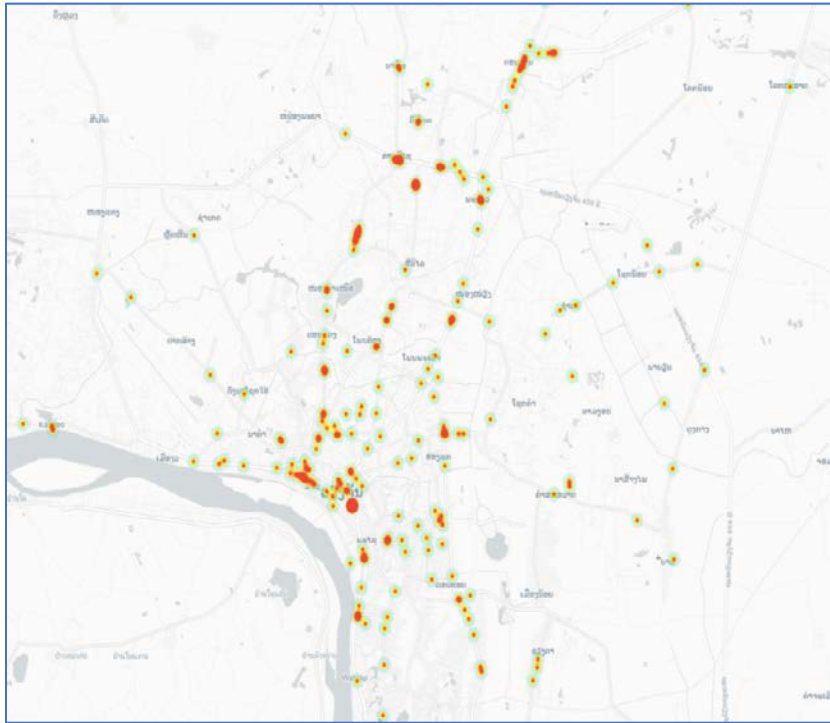


Figure 9: Heat map of more than 250 crashes entered by Laos police as of November 2018

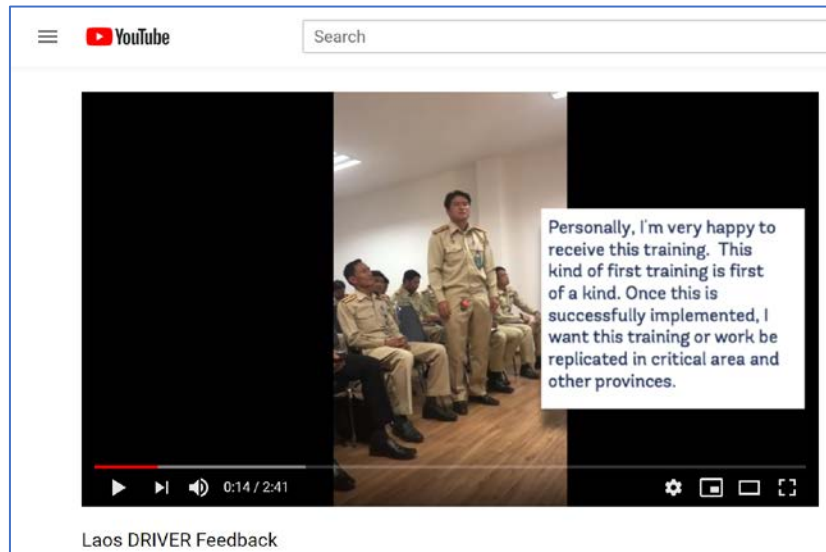


Figure 8: Police Feedback Session Video: https://youtu.be/pml_MaEVETM

and under implementation by MPWT); and while awaiting arrival of equipment, continue training activities for the five districts, focusing on: (a) Computer set up, care, and maintenance; (b) Wi-Fi management; and (c) Microsoft Office applications. Training would also include additional practice for

crash record entry, with technical support on-hand. It is envisioned that the training period would include 60 hours per participating police – about one day per week, over two months.

Upon continuation of the training program, the MPWT stated a target objective of entering archived records for all of 2018. With these data, the Task Team can train the Department of Roads and police on how to use crash data for mitigate future crashes, as well as have a foundation upon which to discuss institutional arrangements and needs for scaling the initiative.

3 PHILIPPINES

3.1 IMPLEMENTATION PHASE

Since 2017, the Philippines Department of Transportation Roads Division (DOTr), Philippines National Police Highway Patrol Group (PNP HPG), and local government units in Manila, Cebu, and Davos, and other municipalities have been successfully using and scaling use of DRIVER for road crash reporting (<https://roadsafety.gov.ph>).

With support from the GRSF, the Task Team undertook a mission to meet with the Department of Public Works and Highways (DPWH), Department of Transport Roads Division (DOTr), the Philippines National Police (PNP) Highway Patrol Group (HPG), Department of ICT (DICT), Department of Health (DoH), and Department of Interior Local Government (DILG) to: (a) check in on progress and identify technical, training, and institutional coordination issues that may need to be resolved; and (b) prepare and agree upon a work plan to ensure continued and sustainable growth of the program.



Figure 10: Philippines National Police DRIVER Control Center

Key findings and agreements are summarized below and are intended to demonstrate the breadth of institutional coordination that DRIVER implementation can facilitate in a country:

1. Department of Transportation. The DOTr has received a budget from the Road Board to hire staff to support setting up the National Road Safety Office, as well as to support the implementation of DRIVER training and operations, specifically. It was agreed that the World Bank would resend terms of reference for these hires. Most urgently, the DOTr needs to assign a point person to support data quality assurance and user management, as well as to begin organizing regular stakeholder meetings. Also, it was agreed that the DOTr would facilitate transfer of Road Board funds to PNP HPG to support training activities.
2. Philippines National Police Highway Patrol Group. The PNP HPG receives Word versions of police reports via e-mail, which their Manila-based staff then encode into DRIVER. The PNP HPG aims to have all PNP HPG districts entering data into DRIVER directly by the end of 2019. It was agreed the World Bank team would facilitate linkage with DOTr training funds to support this objective.

3. Philippines National Police. Separate from the Highway Patrol Group, PNP, which reports on crime, maintains an E-Blotter database of both crime and severe crash data (estimated to represent about ten percent of all crashes in the Philippines). It was proposed that the World Bank team re-engage the PNP ICT division to discuss export of anonymized crash records to the DRIVER database – this would be a more efficient and sustainable method to get PNP crash records into the DRIVER system.

4. Department of Health. Building on prior discussions, it was agreed that DOTr would send DoH the most recent draft of the MoA for data sharing. Upon signature, it was agreed that DoH would assign a developer to work with the World Bank team to link the databases (ONEISS is hosted on DoH servers) using the DRIVER API for downloading and uploading data.

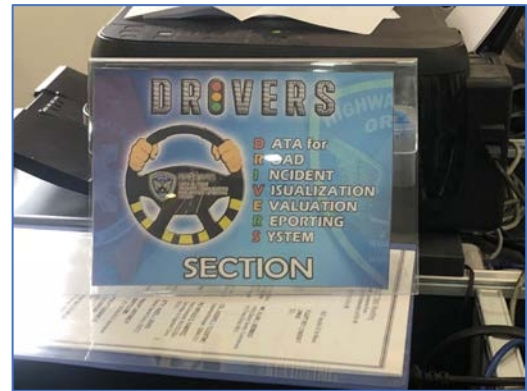


Figure 11: Philippines National Police DRIVER Control Center placard

5. Department of Information and Communications Technology. DICT is continuing to host and manage DRIVER. It was agreed the World Bank would forward the original authorization (from the previous administration) for DICT records. DICT proposed assigning an in-house developer to update linkage to forecast.io for weather information to a local weather database managed by DICT, as well as promoting DRIVER on its Gov.ph hub and in civic hack-a-thons planned for 2019. DICT also offered to support database linkage activities through provision of secure data transfer services, server storage, basic database management, and monitoring.
6. Metro Manila Development Agency – Traffic Police. While the team did not meet with MMDA this trip, it was agreed that the World Bank team would follow up with DOTr to determine whether the Road Board could support provision of Wi-Fi connectivity to the MMDA Road Safety Unit, and in parallel, approach the GM to determine whether Wi-Fi could be sustainably provided. Also, the World Bank may follow up with MMDA Metrobase, to determine how to ensure crash records are entered from 11:00 p.m. to 6:00 a.m.
7. Department of Interior Land Governance. DILG is undertaking a national road inventory program, which includes regularly updated data about road conditions. It was agreed that the World Bank would provide the DILG developer team with the DRIVER API, so that they can include crash data as a regularly updated feature in their database. It was also agreed that DILG would support introduction of DRIVER to local government partners, in collaboration with on-going training activities.
8. Department of Public Works and Highways. It was agreed that DPWH would be included in future training activities on how to use DRIVER data to identify blackspots for investigation prioritization.

4 DEMONSTRATION PLATFORMS AND TECHNICAL IMPROVEMENTS

The GRSF has been used to support the following platforms:

Table 1: GRSF-Supported DRIVER Instances

| Location | TTL | URL |
|-------------------|------------------------------|------------------------|
| Philippines | Alina Burlacu | roadsafety.gov.ph |
| Laos | Sombath Southivong | laos.roadsafety.io |
| Vietnam | Van Anh Thi Tran | vietnam.roadsafety.io |
| Thailand | Alina Burlacu | thailand.roadsafety.io |
| Fortaleza, Brazil | Juan Miguel Velasquez Torres | brazil.roadsafety.io |
| Mumbai, India | Dipan Bose | mumbai.roadsafety.io |

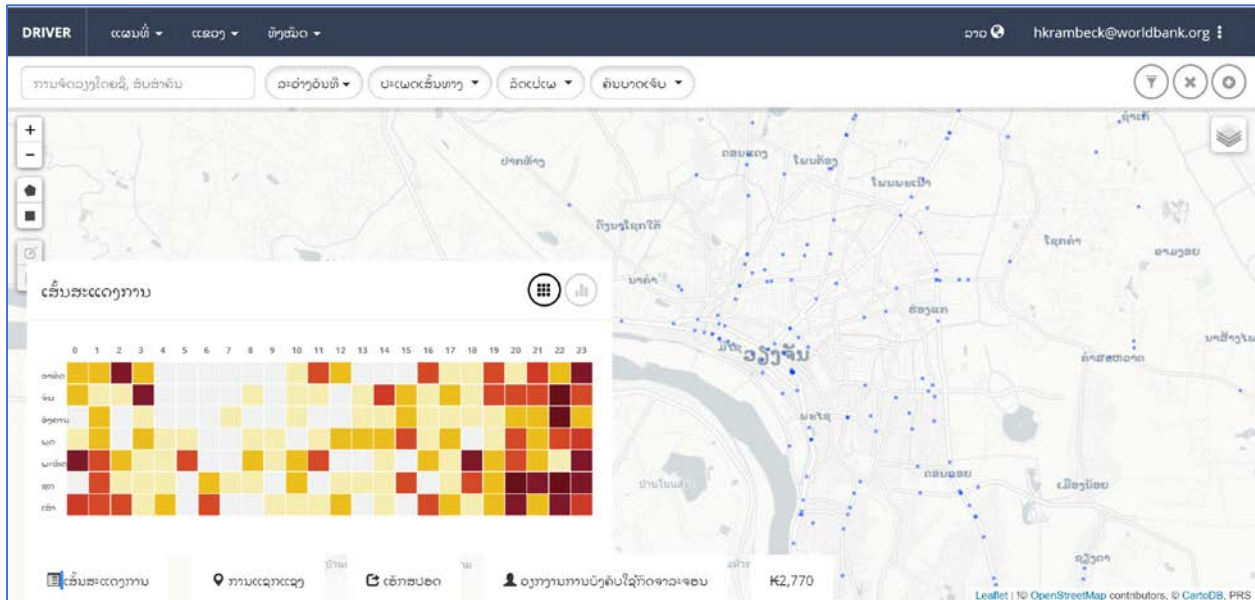


Figure 12: Laos DRIVER Instance

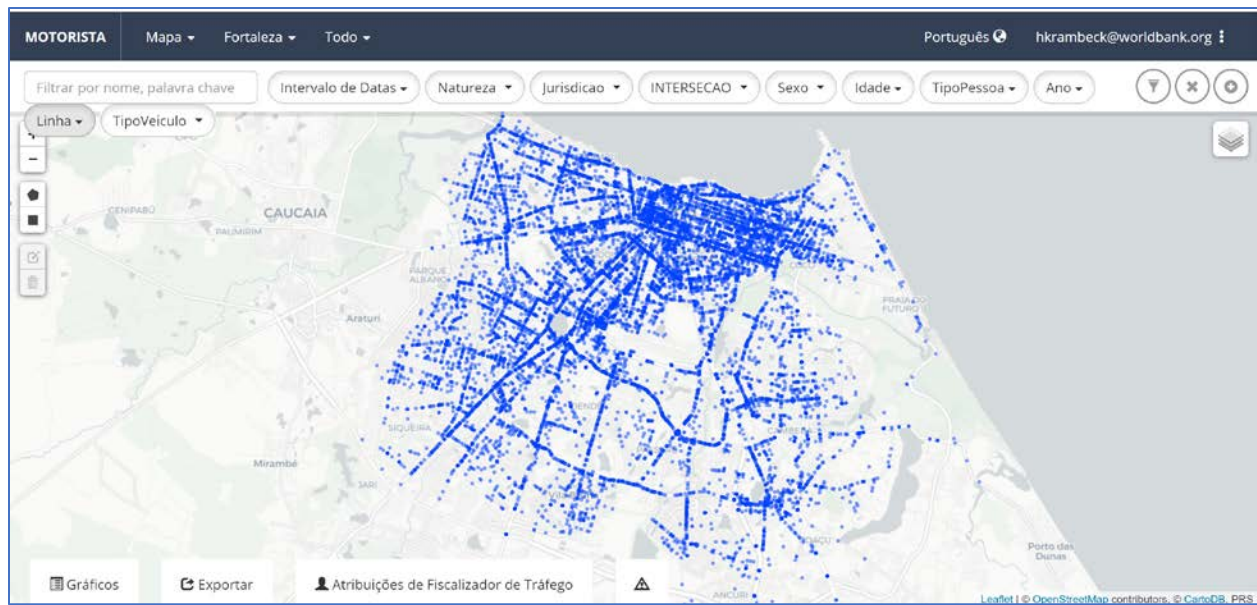


Figure 13: Fortaleza DRIVER Instance

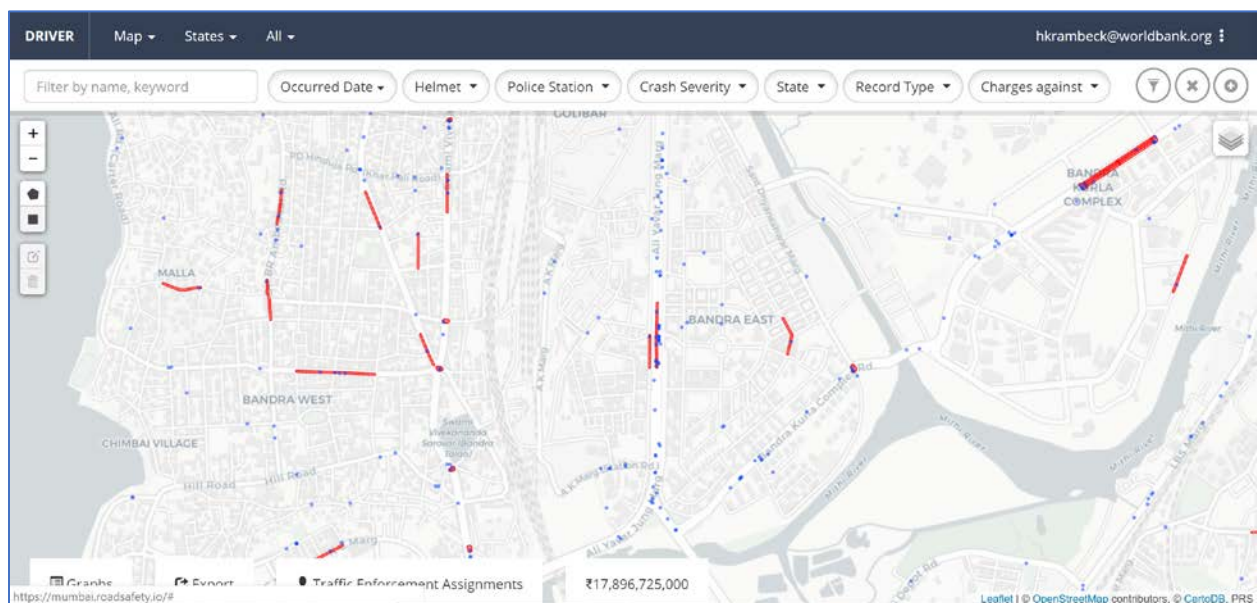


Figure 14: Mumbai DRIVER Instance (showing blackspots)

Technical improvements and advisory supported under the grant include:

- Updating of back-end infrastructure to support independent set up of DRIVER in new countries by local developers, as well as improved accompanying documentation – this new architecture has been successfully piloted in Brazil, by the Fortaleza traffic police.
- General user interface improvements, such as addition of user name and e-mail to each log entry and revising data entry form structure;
- General bug fixes – consistent exports, mobile application login, fix expired certificate, big sign-on bug, record search function fix for Laos instance, etc; and
- Technical advisory to Philippines DICT on response measures if/when servers fail.

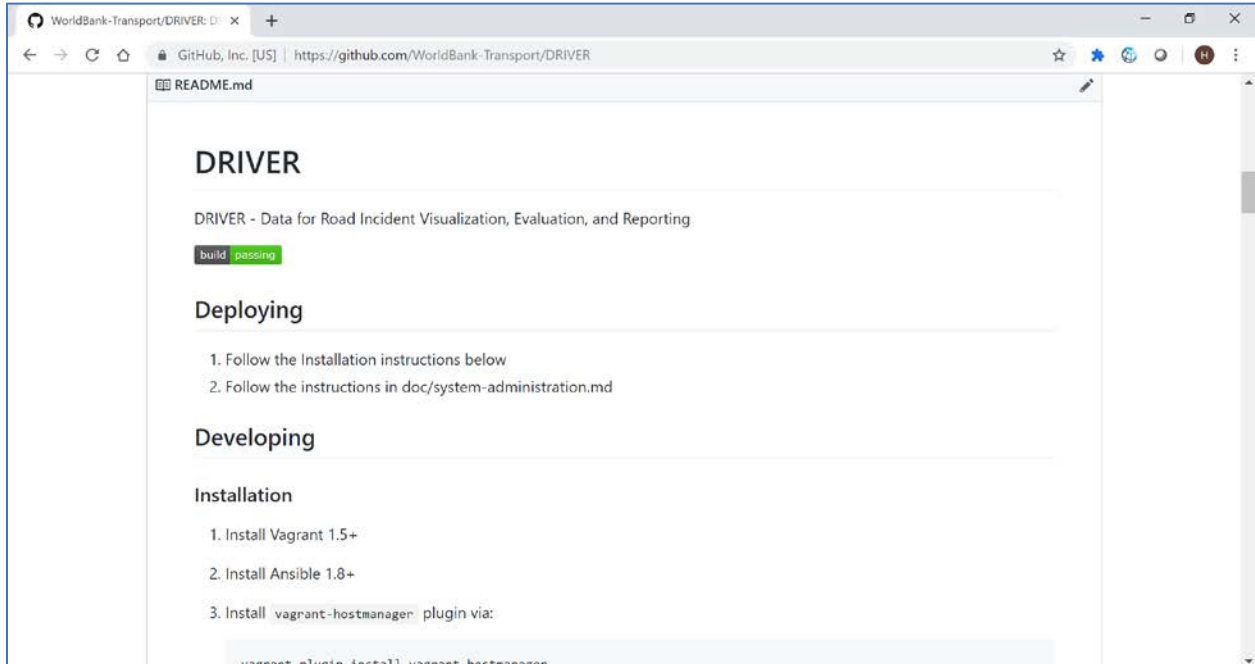


Figure 15: Screenshot of DRIVER Github Repository with New Documentation

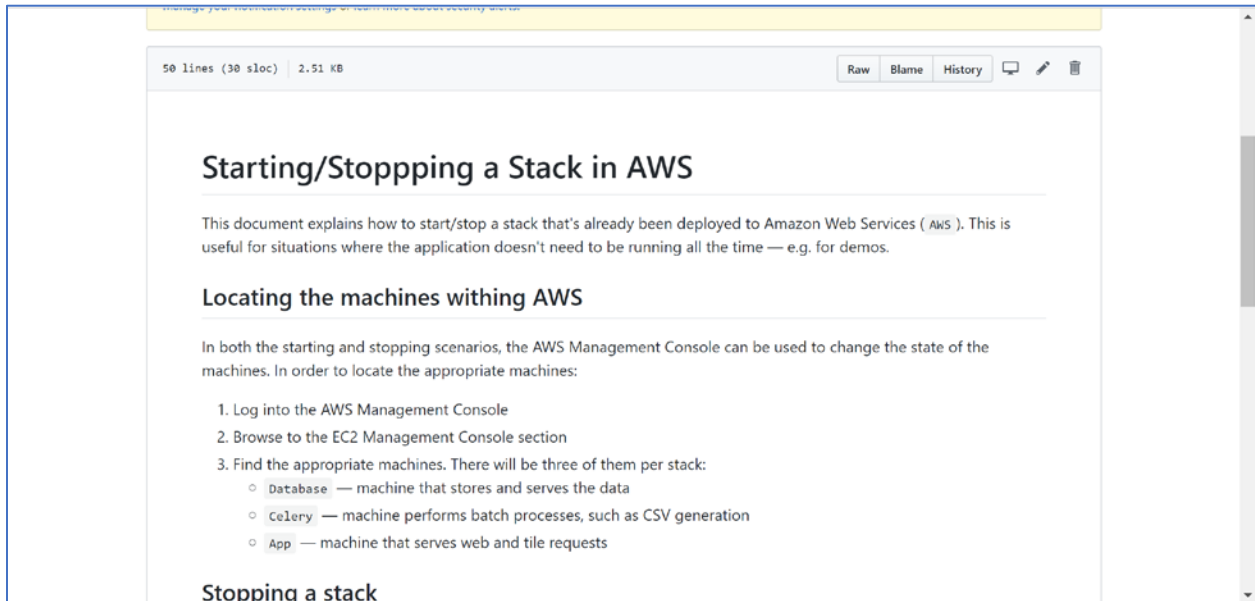


Figure 16: Screenshot of DRIVER Github Repository with New Documentation (II)

5 NEXT STEPS

With the GRSF, the World Bank has been able to play a major contributing role in the nationwide scaling up of the DRIVER platform in the Philippines, as well as for making it possible to scale the platform’s use in new countries. In addition to building a foundation for large-scale deployment in Laos and supporting

the nationwide roll-out of the system in the Philippines, support for additional demo instances and technical fixes will contribute to a better user experience (for both local developers and data management teams) in the future anywhere DRIVER is deployed.

Further work is required to develop training materials for local developers to set up and maintain instances of DRIVER, to support further scaling without the need for World Bank intervention, as well as integration of the DRIVER API for querying public crash records with a global crash data repository.

DRIVER Training Script

Police Training

1. Map – Overview (Start with Philippines: <https://roadsafety.gov.ph> (*do not give login information to participants*)
 - a. Filters (Region, Fields) – Zoom into Manila
 - b. Blue dots = record. Can click any dot to see record.
 - c. Map layers
 - i. Satellite – zoom in.
 - ii. Heatmap – Deselect satellite layer. Select heat map. Zoom out.
 - iii. Blackspots – Deselect heatmap and incidents. Zoom out. Reselect incidents.
 - iv. Region (select)
 - v. City/Province (select) – these are customizable. Can be readjusted for police district, for example.
 - d. Filters
 - i. Deselect admin boundaries. Enter “jeepney” in word field.
 - ii. Show date range and other filter drop-downs.
2. Record List
 - a. Filtering – same as on map. Try “pedestrian”
 - b. View record
3. Add a Record (Go to Laos site: <https://laos.roadsafety.io>; *do not give log in info to participants*. Leave Philippines site open)
 - a. Overview of each “section”. First section includes public details (where, when). Remaining sections are confidential details.
 - b. Enter complete address and make corrections to “pin”. Not all manually entered addresses will appear on map – depends on completeness of the Open Street Map.
 - c. Leave weather and daylight blank.
 - d. After record is complete, add, and then look for record in record list. Try a filter. View the record and note how weather and daylight were automatically completed.
4. Map – Functions (Back to Philippines site)
 - a. Graphs
 - i. Time of day / day of week heat map
 - ii. Frequency
 - iii. Clear filter and try again.
 - b. Economic Cost – based on whatever is viewable in map
 - c. Crash data selection and export
 - i. Polygon tool – select an area / road

- ii. Retry graphs and economic cost
 - iii. Export as .csv
 - iv. Export as report (Day of week as row, gender as column)
 - d. Police Assignment Tool
 - i. Clear polygon filter
 - ii. Select time + 10 staff
 - iii. Generate assignment sheet for printing
- 5. Mobile App
 - a. Download from here: <http://bit.ly/2Fd7JsA>
 - b. Practice data entry
 - c. View record on web platform
- 6. Dashboard
 - a. Review windows

Admin Training

1. All of the above, plus the following:
2. Overview of Admin Features (Lao version: <https://laos.roadsafety.io/editor/>)
 - a. Record Type (preview, edit)
 - b. Related Content – Edit
 - c. Cost aggregation
 - d. Geography Files
 - e. Manage Users
 - f. System Settings

DRIVER Training, November 12-15, 2018

Vientiane, Lao PDR

Background

To meet the UN Decade of Action goal of reducing global road fatalities by 50% by 2020, the UN emphasizes the need to improve the quality of data collection in the local, national and global levels. These activities enable governments to more effectively prioritize funding, monitor impact of investments, and strengthen cross-agency collaboration and capacity. In response to this, the World Bank, working with the Philippines government, developed and deployed a web-based and open-source system for geo-spatially recording and analyzing road crashes --the Data for Road Incident Visualization Evaluation and Reporting (DRIVER) system:

- Laos demonstration website: <https://laos.roadsafety.io>
- Detailed report about the DRIVER program: <http://bit.ly/2hV8NGg>
- DRIVER Manuals (English): <http://bit.ly/2hOuhAD>
- Open-source code: <https://github.com/WorldBank-Transport/DRIVER>

The system links multiple agencies involved in recording road crash data (i.e., local government units, the police, and the health system), standardizes terms and definitions for reporting, and provides analytical tools to support evidence-based investments and policies and monitoring the impact of interventions.

In October 2017, during a workshop held in Vientiane with representatives from the MPWT, the traffic police, and local hospitals, participants agreed to pilot the DRIVER platform. In May 2018, initial training on the platform was provided to traffic police in Vientiane. Feedback from this training has been used to develop a more formal training program.

Objective

The objective of the training program is to empower traffic police in different districts to encode crash data in the DRIVER platform, as well as to use the platform to generate crash reports and identify which locations at which time of day are most vulnerable to crashes.

Expected Output

DRIVER platform running in multiple police districts and at least one year of archived paper data encoded in the system.

Participants

Traffic police responsible for reporting and encoding crash data.
Representatives from police leadership, MPWT, DOT, and hospitals for leadership meeting.

| Day | Time | Activity | Presenter |
|------|-----------------------------|--|------------------|
| Mon | 14:00 – 16:30 | Train the Trainers (DOT, Key Traffic Police Officer) @World Bank Office | WB |
| Tues | 9:00 | Registration/ Morning Coffee break | |
| | 9:30 | Project Introduction | MPWT |
| | 10:00 | Crash Reporting Case Study: Philippines | WB |
| | 10:30 | DRIVER Introduction and Demonstration | MPWT & WB |
| | 11:30 | Lunch Break | |
| | 13:30 | Computer Basics Training <ul style="list-style-type: none"> • Turning on and logging in • Keyboard and mouse skills • Switching language inputs • Connecting to wifi • Internet navigation • Setting up gmail account • Setting up Google Drive • Opening DRIVER application • Downloading and opening DRIVER files • Setting up wifi router | Computer Trainer |
| | 15:30 (Coffee break) | | |
| | 18:00 | Group dinner | |
| Wed | 9:00 | DRIVER Hands-On Training | MPWT & WB |
| | 10:00 | Data Entry Practice (Computer & App) | MPWT & WB |
| | 12:00 | Lunch Break | |
| | 13:30 | Data Entry and Validation Practice | MPWT & WB |
| | 15:30 | Parallel Workshop on Key Topics with Leaders <ul style="list-style-type: none"> • Form Simplification • Institutional Arrangements • Police Implementation Logistics | WB |
| Thur | 9:00 | Data Entry (Coffee break will be served at 10:30 am) | MPWT & WB |
| | 12:30 | Lunch | |
| | 13:30 | Data Entry and Validation Competition (I) | MPWT & WB |
| | 16:00 | Coffee Break | |
| | 16.30 | Issuance of Course Completion Certificates, Awards (certificate and Android Phone for District) Group Photo, Announcement of Challenge | MPWT & WB |
| | 16.30 | Closing | |