Best Practices

*Using Data to Improve Road Safety Enforcement* - Jamaica

*National Road Safety Council (NRSC)*

5 August 2019
For consideration ...

- Motorcycle fatalities a growing challenge;
- Road Safety Enforcement
  - Crash Death and Injury Data;
  - Impaired Driving;
  - Traffic Ticketing;
  - Driver Behaviour.
- Conclusion
Motorcycle Fatalities - a growing challenge

Road Fatalities per 100,000 of Population

Motorcycle (including Pillion) vs Other Fatalities

- Motorcycle
- Other
- Linear (Motorcycle)
- Linear (Other)
Motorcycle fatalities growing relative to other segments
Motorcycle fatalities
– the significant growing segment

- Blamed on influx of “cheap” bikes from China (<US$600 selling price);
- Situation reportedly not unique to Jamaica - cheap imports flooding Asia, Caribbean, Africa ... similar growth in fatalities;
- What may be unique to Jamaica:
  - Many bike drivers:
    - Not licensed nor insured;
    - Drive unlicensed bikes;
    - Do not wear helmets or other safety gear;
    - Do not obey police command to stop;
  - Police not allowed to chase because of high potential for death/injury to both bikers and police.
Road Safety Enforcement  
- Crash death and injury data

- Jamaica can easily produce road crash and fatality statistics going back at least 30 years:
  - Daily reports from the police circulated to stakeholders (including media);
  - MonaGeoinformatics Crash Map presents the fatality statistics;

- Almost no data available on injuries. We are left to guess at the impact of road crashes on the economy (2% to 5% of GDP?)
  - 2017 study by Violence Prevention Alliance estimates cost of road crashes and violence related injuries to *health care system (only)* at 1% of GDP (N.B. excludes all non-hospital costs e.g. insurance companies, loss of income, cost of care by families, rehabilitation of road infrastructure, etc).
    
Road Safety Enforcement
- Impaired driving

- Breathalyzer legislation in place since 1995;
- **Very** low rates of detection:
  - Do Jamaicans “party” less than others?
  - Are we using designated drivers when impaired?
- We seldom test drivers involved in serious crashes;
- We almost never test the blood of fatality victims;
- The true picture is woefully incomplete;
- Marijuana (“ganga”) use decriminalized in 2015:
  - RTA 2018 includes offence for driving while using;
  - What impact of “ganga” use on the statistics?
Road Safety Enforcement

- Traffic ticketing

- Speed radar in use since 1993
  - Effectiveness? oncoming drivers flash their lights warning fellow drivers to slow down; police use same locations regularly;
- Computerized ticketing system has been in place since 1990s - stopped working because of Y2K;
- New system implemented in 2010 (after failure of an earlier effort);
- Hand-held devices introduced in 2012:
  - Gave police road-side access to vehicle and driver records;
  - Immediately uploaded data into traffic ticketing database (zero errors);
  - Loved by traffic police but put on a shelf since;
- System integrates police, Courts and Traffic Authority;
Road Safety Enforcement

- Traffic ticketing (continued)

• System plagued by:
  • Courts resistant (formerly?) to electronic documents;
  • Courts not updating system with final adjudication of cases (not integrated into work processes);
  • Slow and error-prone data entry of tickets by police (=>payments not match tickets);
  • Use of system only to enhance government revenue;
  • No (very little?) analysis of data as a means of targeting driver behaviour-change and guiding enforcement efforts;
  • Apparent “resistance” to automation.
Road Safety Enforcement
- Driver behaviour

- Unpaid tickets are a major issue:
  - National Works Agency has offered to locate vehicles using traffic management ANPR cameras but police have not taken up offer;
  - Demerit points system being frustrated since 1993 introduction;
  - Provisions in 2018 Act:
    - Fix demerit point loophole (licence can now be suspended);
    - Driver will not be able to renew licence (or renew vehicle license) without paying tickets;
  - Proposal: Regulations to make it a condition of holding a driver’s licence that licence suspended for 3 unpaid tickets, and revoked if not turned in for suspension.
Concluding comments ...

• Jamaica has been making efforts to use data/best practice:
  • Updated legislation (RTA 2018 repealed/replaced 1938 Act);
  • Use of Breathalyzer since 1995;
  • Speed radar since 1993;
  • Traffic ticketing technology since mid-1990s;
  • Crash mapping since 2014;
  • Electronic enforcement provided under RTA 2018
    - initial use likely for speeding, red light running, lane violation;

• Mixed results:
  • Need to integrate ticketing system into work processes (Courts);
  • Real cost of crashes including injuries??!!
  • What impact of decriminalization of “ganga” use?
  • Need to make more effective use of the data and technology for
    policy and enforcement ... police recently formed a “Technology”
    branch;
  • NRSC seeking to engage with UWI on road traffic research.