Our Transportation System is in Crisis – 258

Today I focus on infrastructural solutions to transportation issues within countries in the Caribbean. Their internal transportation is predominantly road-based. Infrastructure is sometimes defined as the fixed, long-lived structures that facilitate the production of goods and services, both physical and institutional.

The transportation issues have been identified as follows:

- Monitoring the transport system: tracking the use and state of its infrastructure;
- Setting national goals, priorities and targets;
- Introducing a national policy statement;
- Establishing standards for auditing transportation strategies and programmes
- Collaboration between agencies and other Ministries and organizations;
- Examining institutional arrangements: several independent yet related units within the Ministry; individuals are responsible for the private sector approval process; no public access to State development policies and plans;
- Examining regulatory requirements: statutory requirements for PPP in planning, design and construction;
- Professional development programmes: collaboration across disciplines; training; mentorship; sub-professionals;
- Funding allocation and assessment procedures: traditional focus on road building and widening, and maintenance;
- The public has limited opportunities to genuinely influence decisions in the sector;
- Disaster transit evacuation and traffic management;
- New technology: how transport systems can adapt quickly to take advantage of new technologies to address many of the key issues;
- Truck impacts on the transport system;
- Improving energy efficiency and reducing carbon dioxide emissions;
- Coastal cities are vulnerable to sea level rise due to the impact of climate change; and,
- Aging population growth: reduction of the workforce tax base, resulting in increased pressures on the public funds available for providing infrastructure and other public services.

Every new Government Administration complains that they do not have enough time to begin implementing infrastructure improvement projects, and so planning studies, data collection, and detailed designing are often considered to be delays to the process of implementation. Information on the use and state of the infrastructure is never collected comprehensively and regularly, but is generally on an *ad hoc* basis. Therefore there is an urgent need to create a statutory requirement for annual data collection programme for measuring the use and state of transport infrastructure.

What data do we need? The following examples for monitoring the transport system have been adapted from New Zealand Ministry of Transport:

1. Transport volume: vehicle kilometres travelled by vehicle type; in major urban areas; by road type; by engine size; by fuel type;
2. Network reliability in minutes delay per km;
3. Freight tonne-km by mode share;
4. Access to the Transport System: Affordability of transport; Number of households with access to nil, one, two or three motor vehicles;
5. Travel Patterns: public transport mode share of total trips; Mode share of journeys to work; Mode share of journeys to school;
6. Road Safety: No. of deaths on roads per 100,000 population; per 100 million veh-km travelled (VKT); No. of deaths on roads with alcohol as a contributing factor; No. of deaths on roads with speed as a contributing factor;
7. Public Health: Percentage of residential population that is exposed to excess road traffic noise; Percentage of total population residing in areas where air quality emissions exceed guidelines;
8. Environmental: tonnes of Carbon Dioxide equivalent emitted per veh-km; per capita; land devoted to transport facilities per capita; Stormwater runoff quality; Sector energy use per veh-km travelled; per capita; Percentage of vehicles recycled; Volume of road waste to landfill.

There is also need for a statutory requirement for national transportation planning, through the establishment of an Infrastructure Authority. New Zealand recently established a similar agency. They established two bodies, which when combined represent my suggested infrastructure authority: (a) National Infrastructure Unit, and (b) National Infrastructure Advisory Board. The National Infrastructure Unit is responsible for the following:

- Formulating and monitoring progress on a 20-year National Infrastructure Plan;
- Establishing robust and reliable cross-government frameworks for infrastructure project appraisal and capital asset management, and monitoring the implementation and use of those frameworks;
- Providing advice and support to the Minister for Infrastructure;
- Providing advice to the public sector on infrastructure procurement

methods including public-private partnerships, and

- Providing support to, and acting as a secretariat for, the National Infrastructure Advisory Board.

The National Infrastructure Advisory Board was established to advise the National Infrastructure Unit and the Minister for Infrastructure. It consists of experienced practitioners from the private sector and academia. The Board provides both the Minister and the Unit with advice and perspectives on infrastructure project appraisal, capital asset management issues and the development of the National Infrastructure Plan. A key role is to engage with the private sector, Government and other stakeholders.

Concluded next week.

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