

The performance of the transportation system has several characteristics, including, in no order of priority:

- Vehicle ownership and usage;
- Mobility in terms of (a) Transport intensity, such as passenger-km per population and freight tonne-km per population; and (b) Transport growth, such as passenger-km per GDP and freight tonne-km per GDP;
- Modal share, such as percentage of passenger-km by mode;
- Energy consumption, such as of per capita fuel consumption;
- Air quality, such as of Carbon Dioxide emission;
- Safety, such as number of road fatalities;
- Economics, such as per capita congestion costs, and expenditures on transport;
- Land devoted to transportation facilities, such as sq.km; and,
- Accessibility to destinations.

The two most important characteristics are mobility and accessibility, and these terms need careful appreciation. Mobility refers to how frequently you travel, and is commonly measured as the product of the number of persons or vehicles and their distances travelled. Accessibility refers to how easily you travel between activities, or the overall difficulty in getting from an origin to a destination. While both terms are important, the latter estimates land-use-transportation connectivity and so is a more important measure in determining transportation policy, and is discussed in the rest of this article.

Accessibility is generally quantified as an aggregate measure of the land-use activity and closeness of land-use activity opportunities of a given type to a particular location. Mathematically,

accessibility of a zone i for a specific activity is the summation of the product of the attraction of zone j and the deterrence expression due to the cost of travel between zones i and j . Attraction in zone j is typically the measure of activity in zone j , such as the number of jobs, or people, etc. Cost of travel is usually the travel time between zones i and j .

Work trip accessibility was computed by using zones comprising the Administrative areas in Trinidad and Tobago, and an attractiveness index of employment from the Central Statistical Office (CSO) data. Administrative areas consist of two city corporations, three borough corporations and nine regional corporations in the case of Trinidad, and seven parishes for Tobago.

The work trip accessibility rank for Trinidad was determined as follows:

1. Tunapuna / Piarco
2. City of Port of Spain,
3. San Juan / Laventille
4. Couva / Tabaquite / Talparo
5. City of San Fernando
6. Borough of Chaguanas
7. Diego Martin,
8. Princes Town
9. Penal / Debe
10. Siparia
11. Sangre Grande
12. Borough of Arima
13. Mayaro / Rio Claro
14. Borough of Point Fortin

For Tobago, the rank was as follows:

1. Parish of St. Andrew
2. Parish of St. Patrick
3. Parish of St. David
4. Parish of St. John
5. Parish of St. Paul
6. Parish of St. George
7. Parish of St. Mary

The Borough of Point Fortin is the lowest ranked in Trinidad in terms of ease of connectivity to work and

travel, and so Government's considerations to improve transport linkage between Point Fortin and San Fernando through construction of a new highway as well as other ideas for public transport in the region and water taxi stops at La Brea and Point Fortin, are very important. The regions of Siparia and Penal/Debe, which are also on the lower side of the ranking, will also benefit from these transport improvements. The Government's proposed growth pole of economic development for the South West Peninsula will be of tremendous benefit for these regions.

In the case of Tobago, the Parish of St Mary is ranked the lowest, and consists of the communities of Glamorgan, Woodward and Pembroke.

The more disaggregated the zone data, the better would be the ability to describe and compute accessibility analyses at the level of community interaction.

Caroni River is a major constraint to transportation connectivity between the East west Corridor and Central/South Trinidad. There are only three roads (or ten traffic lanes, with five in each direction) crossing the Caroni River and connecting the Churchill-Roosevelt Highway with the rest of Trinidad between Port of Spain and Arima. They are Uriah Butler Highway (UBH), six lanes; Southern Main Road, two lanes; and, Golden Grove Road, two lanes. The only other connector road between the East West Corridor and all other areas south or east is the Eastern Main Road / Manzanilla-Mayaro Road in Sangre Grande. If the disaggregate zonal data were made available the accessibility of the associated communities could be formally quantified.

Likewise, the UBH and Solomon Hochoy Highway are major constraints to connectivity between the eastern and western urban areas

along these routes, such as Charlieville/ Cunupia/ Warrenville, Chaguanas, Freeport/St Mary's, Couva/Preysal/ Pt Lisas/ California, Pointe-a-Pierre/ Marabella/ Gasparillo/ Williamsville, etc. The Government's proposed growth pole of economic development for Charlieville, Chaguanas, Carapichaima and Couva will be affected by this serious constraint.

Government's investment in transportation infrastructure should take place in a balanced manner. This would ensure that the accessibility of communities does not continue to lag below certain minimum standard. The physical development programme needs to be supported by selected transportation projects which enhance the access to land-use activities.

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