Level of Service (LOS). LOS standards can be determined for various public facilities. Within the urbanized area, level of service measurements are maintained for the automobile, however the Miami-Dade Long Range Transportation Plan for the Year 2040 also places special emphasis on meeting multimodal transportation needs. Therefore, the TPO's Long Range Transportation Plan (LRTP) conducted an inventory of existing conditions for all roads within the TPO's long range street network, including those in the City of South Miami.

Automobile Level of Service. *The Traffic Engineering Handbook* (Institute of Transportation Engineers, 2009) defines level of service for roadways (based upon the motorist's perspective) as:

"A qualitative measure that characterizes operational conditions within a traffic stream and perception of these conditions by motorists and passengers. The descriptions of individual levels of service characterize these conditions in terms of factors such as speed and travel time, freedom to maneuver, traffic interruptions and comfort and convenience."

This definition can be further simplified as the ratio of traffic volume to roadway capacity. The six different levels of service are described below:

LOS A – Represents free-flow conditions. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to drivers is excellent.

LOS B – Allows speeds at or near free-flow speeds, but the presence of other users begins to be noticeable. Freedom to select speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream relative to LOS A.

LOS C – Has speeds at or near free-flow speeds, but the freedom to maneuver is noticeably restricted (lane changes require careful attention on the part of drivers). The general level of comfort and convenience declines significantly at this level. Disruptions in the traffic stream, such as an incident (for example, vehicular crash or disablement), can result in significant queue formation and vehicular delay. In contrast, the effects of incidents at LOS A or LOS B are minimal, with only minor delay in the immediate vicinity of the event.

LOS D – Represents the conditions where speed begins to decline slightly with increasing flow. The freedom to maneuver become more restricted and drivers experience reductions in in physical and psychological comfort. Incidents can generate lengthy queues because the higher density associated with the LOS provides little or no space to absorb disruptions in traffic flow.

LOS E – Represents operating conditions at or near the roadway's capacity/ Even minor disruptions to the traffic stream, such as vehicles entering from a ramp or vehicles changing lanes, can cause delays as other vehicles give way to allow such maneuvers. In general, maneuverability is extremely limited, and drivers experience considerable physical and psychological discomfort.

LOS F – Describes a breakdown in vehicular flow. Queues form quickly behind points in the roadway where the arrival flow rate temporarily exceeds the departure rate, as determined by the roadway's capacity. Such points occur at incidents and on- and off-ramps, where incoming traffic results in capacity being exceeded. Vehicles typically operate at low speeds under conditions and are often required to come to a complete stop, usually in a cyclic fashion. The cyclic formation and dissipation of queues is a key characterization of LOS F. It should also be noted that while LOS F is defined by HCM, many practitioners, researchers and academics do not refer to LOS F as an actual level of service. Often it is characterized as "condition F" because, effectively, it offers no service.