

## MTPO YEAR 2025 LONG RANGE TRANSPORTATION PLAN (LRTP) UPDATE EVALUATION FACTORS

The MTPO YEAR 2025 Long Range Transportation Plan (LRTP) Update will develop a list of transit, non-motorized and highway system projects that are needed by the Year 2025. Nine evaluation factors have been developed to evaluate proposals for these elements of the plan (Table 1). The calculations by which the performance of the transportation system can be measured by the nine factors are also included in Table 1. A brief explanation of each evaluation factor is presented here.

Table 1  
Evaluation Factors and Performance Measures

Evaluation Factor	Performance Measure
Provide Multiple Choices in Ways to Travel	Percent transit, non-motorized, multiple occupant, and single occupant trips by TAZ and area total.
Prevent Unequal Impacts to Low-Income and Minority Communities	Direct (taking) and indirect (number of projects by mode) that are in areas of expected concentration of low income and/or minority populations, as defined by the U.S. Census.
Better Connect Links in the Transit and Road Networks	Change in travel time from baseline system for up to 30 origin-destination pairs (selected in cooperation with MTPO Committees).
Minimize Neighborhood Disruption	Projected traffic volumes/speeds on 20 sensitive (environment, aesthetics, social) roadway segments (selected in cooperation with MTPO Committees).
Maintain Good Air Quality	CO concentrations at 20 points in the network (selected in cooperation with MTPO Committees) and consistent with noise, community cohesion, and safety factors analysis.
Minimize Purchase of Private Property to Build Transportation Facilities	Number of residential and business properties potentially taken.
Protect Open Spaces/Parks	Number of acres of public and non-public park potentially lost.
Control Noise at Sensitive Locations. (e.g., homes, schools, hospitals, etc.)	Expected “significant change” in noise due to traffic volume change at 20 points (selected in cooperation with MTPO Committees).
Maximize Safe Travel	Change in crashes compared to baseline system in vehicle miles of travel on 20 roadway segments (selected in cooperation with MTPO Committees).

Source: The Corradino Group.

Provide Multiple Choices in Ways to Travel – The different transportation elements tested to form the Year 2025 LRTP will allow shifts among modes – transit/non-motorized/roadway. The change in use will be measured to evaluate the alternatives. The weight of this factor will influence the emphasis in the LRTP of shifting highway users to other modes.

Prevent Unequal Impacts to Low-Income and Minority Communities – Federal regulations exist to minimize the disproportionate effect on the following population groups: African-Americans, Asian-Americans, American Indians, Alaskan Natives and Hispanics. Additionally, low-income households of all population groups are covered. By examining the level of transit and highway services and the extent to which public and/or private properties are used for these transportation elements in areas where these populations exist, a measure of the impact on them can be established.

Connect Links in Transit and Road Networks – Public involvement meetings in the spring of 2004 indicated some concern about the lack of “connectivity” in the transit and roadway networks. To measure

the degree to which different connections affect overall travel, the movements between thirty pairs of connected zones (origins to destinations) will be examined.

Minimize Neighborhood Displacements – The transportation network of the future will have traffic volumes on roadway links that are likely to be different from those of today based upon the use of transit, non-motorized modes (walking/bicycling) and how the roadway links are connected. To measure the effects of various transportation systems on/near neighborhood areas, the forecast volumes and speeds on 20 roadway segments will be computed.

Maintain Good Air Quality – The Gainesville Urbanized Area now maintains satisfactory levels of all mobile source pollutants defined by EPA in its National Ambient Air Quality Standards. That condition is expected to continue in the future as EPA has issued regulations on fuels and the performance of diesel engines for both on-road and non-road equipment that will only improve air quality. Nevertheless, to assess the relative performance of alternative transportation elements tested to develop the Year 2025 LRTP, concentrations will be calculated of carbon monoxide (a gas that can cause health impacts) at 20 locations along the roadway system where people congregate.

Minimize Purchase of Private Property to Build Transportation Facilities – Concepts for modifying the transit/non-motorized/roadway elements of the transportation system to develop the Year 2025 LRTP could involve property acquisition. The extent to which this could occur will be measured.

Control Noise at Sensitive Locations – Homes, schools, and hospitals are among land uses considered sensitive to noise. The expected change in noise at 20 sensitive locations will be measured.

Protect Open Space/Parks – This issue is very much like that of private property taking. The acres of potential parkland/open space possibly needed to develop various transportation elements tested for inclusion in the LRTP will be measured.

Maximize Safe Travel – Each alternative transportation system proposed will be related to the resultant vehicle miles of roadway travel (after accounting for transit and non-motorized travel). Vehicle miles of roadway travel can be related to crashes. Calculating the fatal and property damage incidents expected with each alternative will define this evaluation factor.