ATTACHMENT C

South Orange County Multimodal Transportation Study Initial Alternative Strategies

The following initial set of alternative strategies will be evaluated as part of the South Orange County Multimodal Transportation Study. They are not intended to be cumulative and are not necessarily multimodal in nature at this point of the study. Reflecting the exploratory nature of these alternative strategies, they are labeled as scenarios. For the purposes of initial screening, the intent is to understand how the specific improvements and strategies identified within each scenario would affect travel in south Orange County and address the study's Purpose and Need Statement. The results of the initial screening will be used to create multimodal alternative strategies for more detailed evaluation in subsequent study tasks.

- Maximize Rail and Transit. This scenario emphasizes investments in the local and regional transportation system that could maximize rail and transit mobility and accessibility both within and through south Orange County. Local investments could include first/last-mile connections, mobility hubs, and expansion of on-demand/microtransit services. Regional investments could include track improvements to increase passenger rail service frequencies. The intent of this scenario is to examine how the increased availability and convenience of transit could attract new passengers, encourage greater use of non-single occupant vehicle travel modes, and enhance overall transportation system performance.

- Revise Roadway System Operations. This includes operational improvements that maximize the efficiency of the roadway system and manage congestion without building new capacity. This may control traffic flows in real time and optimize operations of the full transportation system. The intent is to examine how strategies to revise roadway system operations, such as dynamic ramp metering and integrated corridor management, could help manage travel demand and increase travel reliability in south Orange County.

- Eliminate Roadway Bottlenecks. Improvements specifically focused on eliminating key bottlenecks in the transportation system might include the addition of auxiliary lanes and elimination of lane drops on freeways. This scenario will examine to what extent the elimination of bottlenecks improves travel in south Orange County.

- Repurpose Road Space - Enhance Transit/Active Transportation. This scenario considers repurposing road space to enhance opportunities for transit and active transportation, such as Complete Streets treatment on select arterials. It could also consider targeted Master Plan of Arterial Highways build-out for greater implementation of transit and active transportation improvements on the roadway and creation of transit lanes on highways.

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- Demand Management - Support Tele-Everything. This scenario considers policies or improvements aimed at managing travel demand by expanding the capability to "tele-everything" within south Orange County. This includes use of roadway right of way for fiber/communications lines, and work-from-home support/ guidance for employers.

- Demand Management - Emphasize User Pricing and Managed Lanes. This scenario focuses on using pricing strategies and managed lanes as the primary means of either reducing the number of vehicles on the roadway or redistributing trips to underutilized roads or to less congested periods of the day, with the ultimate goal of relieving traffic congestion. This could include policies such as congestion pricing or high-occupancy toll lanes on study area highways. This scenario considers how the implementation of user pricing strategies would change travel behaviors and affect travel demand in south Orange County.

- Demand Management - Subsidize Mode Shift. While the above scenario uses pricing strategies to manage travel demand, this scenario focuses on incentives to change travel behaviors and encourage a shift in travel modes. This could include strategies such as employer subsidies for transit or subsidies for micro-mobility and ridesharing. This scenario considers how the use of subsidies and incentives would change travel behaviors and affect travel demand in south Orange County.

- Maximize Emerging Technologies. This scenario considers investments in technologies such as autonomous/connected vehicles. The improvements and actions are focused on accommodating and better adapting to upcoming changes and trends in transportation technology, in addition to addressing human-error safety concerns. The intent is to examine the impact of emerging technologies on mobility in south Orange County.