The following freeway MOEs were compared for the 2045 Build Alternative and 2045 No-Build Alternative at the end of the AM and PM peak hours:

- Total vehicle miles traveled (miles)
- Average speed (mph)
- Travel delay per vehicle-mile (mins/veh-mile)
- Travel time per vehicle-mile (mins/veh-mile)

**Tables 13** and **14** summarize the Design Year (2045) peak hour and peak period MOEs for the No-Build and the Build Alternative. The results show that the MOEs are improved with Build Alternative compared to No-Build Alternative. The percentage increase in total vehicle miles traveled in Build conditions ranges between 31 percent and 54 percent during peak hours compared to No-Build conditions. The percentage increase in average speed in Build conditions ranges between 54 percent and 59 percent during peak hours compared to No-Build conditions. Simultaneously, the percentage reduction in delay per vehicle-mile ranges between 57 percent and 60 percent during peak hours compared to No-Build conditions. The percentage reduction in travel time per vehicle-mile ranges between 35 percent and 37 percent during peak hours compared to No-Build conditions.

**Table 13: Design Year (2045) Peak Hour MOE Summary**

| MOEs | Peak Period | 2045 No-Build | 2045 Build | Percent Change |
|---|---|---|---|---|
| Vehicle Miles Traveled (VMT) | AM | 355798 | 465122 | 31% |
| | PM | 299522 | 462513 | 54% |
| Average Speed (MPH) | AM | 19.8 | 31.5 | 59% |
| | PM | 23.6 | 36.3 | 54% |
| Delay per Vehicle-Mile (mins/veh-mi) | AM | 1.99 | 0.86 | -57% |
| | PM | 1.51 | 0.61 | -60% |
| Travel Time per Vehicle-Mile (mins/veh-mi) | AM | 3.03 | 1.91 | -37% |
| | PM | 2.55 | 1.65 | -35% |

**Table 14: Design Year (2045) Peak Period MOE Summary**

| MOEs | Peak Period | 2045 No-Build | 2045 Build | Percent Change |
|---|---|---|---|---|
| Vehicle Miles Traveled (VMT) | AM | 1309651 | 1583300 | 21% |
| | PM | 1229926 | 1679848 | 37% |
| Average Speed (MPH) | AM | 24.7 | 35.3 | 43% |
| | PM | 27.6 | 38.2 | 38% |
| Delay per Vehicle-Mile (mins/veh-mi) | AM | 1.39 | 0.65 | -53% |
| | PM | 1.14 | 0.53 | -54% |
| Travel Time per Vehicle-Mile (mins/veh-mi) | AM | 2.43 | 1.70 | -30% |
| | PM | 2.17 | 1.57 | -28% |

In addition to the overall system MOEs during the AM and PM peak hour and peak period, the latent demand at the end of the peak period simulation along the freeway facility entering the study area from I-275 northbound, I-275 southbound, Veterans Expressway southbound, SR 60 eastbound, George Bean Parkway southbound, I-4 westbound and Selmon Expressway ramp was also analyzed for evaluating the performance of the Build Alternative compared to the No-Build Alternative. **Table 15** shows the latent demand and the percentage change of the Build Alternative compared to the No-Build Alternative. The results show a decrease in latent demand for the Build Alternative compared to No-Build Alternative. The latent demand is reduced by 95 percent or higher by the Build Alternative for I-275 northbound and southbound in the PM peak hour, Veterans Expressway southbound in both AM and PM peak hours, George J. Bean Parkway southbound in the AM peak hour, and I-4 westbound in AM peak hour. The reductions in latent demand in Build conditions at major entry locations indicate an improved operation compared to No-Build Conditions.

**Table 15: Design Year (2045) Latent Demand Summary along Freeway Facility**

| Location | Peak Period | 2045 No-Build | | 2045 Build | | Percent Change |
|---|---|---|---|---|---|---|
| | | Latent Demand | Percent Latent Demand | Latent Demand | Percent Latent Demand | |
| I-275 Northbound | AM | 14160 | 0% | 7284 | 27% | -49% |
| | PM | 15248 | 100% | 243 | 1% | -98% |
| I-275 Southbound | AM | 9118 | 23% | 7805 | 20% | -14% |
| | PM | 920 | 3% | 41 | 0% | -96% |
| Veterans Expressway Southbound | AM | 9831 | 29% | 75 | 0% | -99% |
| | PM | 12052 | 38% | 74 | 0% | -99% |
| SR 60 Eastbound | AM | 5 | 0% | 4 | 0% | -20% |
| | PM | 9 | 0% | 6 | 0% | -33% |
| George J. Bean Parkway Southbound | AM | 1350 | 7% | 8 | 0% | -99% |
| | PM | 9902 | 37% | 3298 | 13% | -67% |
| I-4 Westbound | AM | 5423 | 17% | 132 | 0% | -98% |
| | PM | 28753 | 71% | 10709 | 26% | -63% |
| NB Selmon Expressway Ramp to WB I-4 | AM | 2789 | 33% | 2080 | 24% | -25% |
| | PM | 8983 | 69% | 6688 | 51% | -26% |