

IMPACTS TO THE DALLAS NORTH TOLLWAY

Current demand between the DNT and Mockingbird is over shadowed by activities at the DNT/Northwest Highway interchange. During both AM and PM peak periods, traffic exiting the DNT to Northwest Highway causes the DNT mainlanes to operate at LOS F. The effect of this exiting traffic on Mockingbird is complicated, because two very different situations occur: southbound speed differential and northbound failure.

As southbound DNT traffic queues north from the Northwest Highway tollbooths, the DNT is restricted to two lanes available for through traffic. A lane imbalance occurs: three lanes restricted to two lanes and opened back to three lanes. The effect is similar to placing one's thumb over a slow flowing garden hose. The flow uses all available roadway capacity and speeds increase dramatically. In both peak periods, DNT southbound mainlane speeds are consistently above the posted speed limit between the Mockingbird exit and bridge.

The northbound impacts are the opposite. As mainlane traffic exits to Northwest Highway, the queue enters the mainlanes and extends south to Lemmon Avenue and frequently beyond. DNT mainlanes slow to a crawl/stop during the peak periods. Mockingbird traffic trying to enter northbound DNT is effected. Entering traffic queues through the tollbooths and into the northbound frontage road/Mockingbird intersection. More green-time of the traffic signal phasing must be dedicated to the eastbound-to-northbound-Mockingbird-turning-traffic.

The existing situation is in a very unstable balance. With less green-time available for the southbound frontage road, queues back through the southbound tollbooths but stop short of entering the DNT southbound mainlanes on a regular basis. The mainlane per-lane-volumes under the Mockingbird bridge show signs that the southbound exit to Mockingbird is impacting mainlane flow. Because the outside lane is being used by motorist slowing to exit, the inside and middle lanes are carrying two to three times the traffic as the outside lane.

If the predictions outlined in the USDOT July Report are correct, an additional 410 vehicles (164 trips will exit to Mockingbird and 246 will enter from Mockingbird) will use the DNT/Mockingbird interchange during the peak periods. This additional traffic will require more green-time to be allocated for the critical eastbound-to-northbound-Mockingbird-turning-movement. The southbound frontage road will be delayed and queues will extend onto the DNT southbound mainlanes.

As southbound traffic queues and stops on the outside mainlane, the speed differential will become greater. This will increase the hazards to motorist using the DNT. Situations involving stopped/slow moving mainlane traffic adjacent to high speed mainlane traffic is dangerous. This type of situation occurs in a few locations in the Dallas-Fort Worth area, but it should not be considered acceptable or safe.

MITIGATION OF PARKING DEMAND

Love Field controls surface and multilevel parking facilities. These two types of facilities can accommodate 1,450 and 3,028 vehicles, respectively, for a total of 4,478 spaces. Prices range from \$5 to \$7 per day. The multilevel parking is closest to the airport terminal and frequently fills to capacity.

Within the Love Field campus, private companies lease land from Love Field and offer parking other vehicle related services: shuttles, cleaning, maintenance, etc. None of these companies use multilevel structures. Prices vary depending on the services provided. A total amount of leased-out parking is 948 spaces.

With the doubling of air traffic per the USDOT July Report, substantial changes to parking at Love Field will need to take place. There is not enough open space to construct surface parking. The additional parking needed for the increase in flights would be multilevel parking.

The cost of doubling the amount of parking at Love Field to accommodate the doubling of air traffic is estimated to be \$26.3 million. This figure does not include the leased-out parking. To double the leased-out parking would cost \$3.3 million. If there is physically enough room available at Love Field, the total cost of construction additional parking approaches \$30 million. To recover these costs, Love Field may need to double the current parking rates to \$10 to \$14 per day.