

Preliminary Traffic Impact Analyses

A preliminary TIA for the project was conducted using accepted traffic engineering methods and techniques. Existing traffic conditions were examined on area roadways and at selected intersections surrounding the site and compared with traffic conditions that could be expected with various roadway network modifications. A total of 13 alternative roadway network scenarios were analyzed for the preliminary analysis, and the impact of the changes in the roadway network was documented using Highway Capacity Software (HCS) (Ref. 1) to analyze intersections surrounding the site. The preliminary analyses did not consider the network impact of various roadway changes. Due to time constraints associated with meeting the required schedule prior to the April 13-16 design charrette, intersections surrounding the site were analyzed as isolated intersections using HCS assuming the redistribution of existing traffic volumes. The analysis completed after the design charrette, described in more detail in the following sections, considered the network impact of roadway modifications/closures as well as traffic growth associated with other area projects, the airport relocation, and general background traffic growth.

As stated previously, a total of 13 preliminary roadway network scenarios were analyzed for PM peak hour traffic conditions prior to the design charrette. The specifics for 12 of these alternatives are summarized in the Roadway Network Scenario Tables, with the first alternative being to analyze the existing roadway network. The four figures following the Tables show graphically the assumptions for each analysis scenario. In summary, access locations to the Town Lake Park from Barton Springs Road vary in Scenarios 1, 2, and 3. Scenarios 1-A, 2-A, and 3-A assume Riverside Drive remains as is, 1-B, 2-B, and 3-B assume closure of eastbound through lanes on Riverside Drive, and 1-C, 2-C, and 3-C assume closure of through lanes in both directions on Riverside Drive through the Town Lake Park. As described in the Roadway Network Scenario Tables, Scenarios 1-D, 2-D, and 3-D assume turn prohibitions from the Town Lake Park access points along Barton Springs Road to Dawson Road and Bouldin Avenue south of Barton Springs Road.

The analysis completed prior to the April 13-16 charrette indicates that it may be feasible to remove the section of Riverside Drive between South 1st Street and Lamar Boulevard. Given the significant amount of traffic using westbound Riverside Drive currently (daily volumes total 9,000 westbound, and 3,000 eastbound), WHM recommended it would be desirable to maintain westbound traffic flow on Riverside Drive in an April 8 Stakeholder meeting prior to the design charrette. It was the decision of those who worked on the design of the Park during the design charrette to remove Riverside Drive based on WHM's finding that removal of Riverside Drive is a feasible alternative, although not the most desirable one. This decision led to the detailed network analysis conducted by WHM in Phase Two of the traffic studies.