

6.0 EVALUATION OF THE ALTERNATIVE PEDESTRIAN SCHEMES

Table 6-1 presents a summary of the summary matrix used in the evaluation of each of the thirteen alternative pedestrian schemes outlined in Section 5.0 of this report. The following paragraphs provide a description of each of the categories/criteria reviewed with respect to each alternative pedestrian scheme, as well as the evaluation notations:

- ADA Accessibility Issues

ADA accessibility issues relate to the difficulties of the construction of ADA wheelchair ramps due to existing El Molino Avenue curb heights and grades, the potential requirement for obtaining a sidewalk easement from the Pasadena Playhouse and reconstruction of the concrete plaza stairs, requirement for the construction of vertical circulation components (e.g., stairs, elevators), etc. *Appendix F* contains copies of the reference documents used in part in the evaluation of this category. This category was evaluated with a “Yes” or “No” notation.

- Potential Significant Impacts to Existing Historical Landmarks (i.e., the Pasadena Playhouse)

This category addresses potential significant impacts to the Pasadena Playhouse, a designated historical landmark, either with the construction of vertical circulation features on both public and/or private rights-of-way, aesthetic views of the Pasadena Playhouse, etc. This category was evaluated with a “Yes” or “No” notation.

- Pedestrian Environmental Quality Index (PEQI) Comparison

Refer to Section 3.7 of this report for further discussion of the application of the PEQI analysis technique to be used as a tool in studies of this nature. In brief, the PEQI consists of 21 street segment and 8 intersection factors associated with pedestrian environmental quality and safety, classified into five major categories; Intersection Safety (under the “Intersections” assessment category), and Traffic, Street Design, Land Use and Perceived Safety (all under the “Street Segment” assessment category). *Appendix H* contains a summary of the PEQI indicator, domain, and overall street segment score values used in this analysis.

Due to the nature of the indicator categories and scoring for each subcategory listed within three of the four “Street Segment” assessment categories (i.e., under Street Design, Land Use, and Perceived Safety), the PEQI score for these subcategories remains the same between the existing conditions and with each alternative crossing scheme condition. As an example, since the existing sidewalks along both the east and west sides of El Molino Avenue are currently 13 feet in width, no change in PEQI score will result for this indicator category with any of the proposed alternatives that provide a greater sidewalk width (e.g., through roadway narrowing or partial or full lanes closures) as the maximum score is obtained for any sidewalk width of greater than 12 feet (as measured from the curb face to a physical barrier such as a building). Differences in PEQI rating scores are only evident for the street segment indicator category referenced as “Traffic”. *Table 5-1* (third column) shows the relative differences in PEQI scores for each of the

13 alternative pedestrian crossing schemes considered as part of this study. Therefore, the evaluation matrix identifies changes in PEQI scores that would result due to a combination of factors including fewer through travel lanes or roadway closures, lower opposing vehicular traffic volumes, lower vehicle speeds and one-way versus two-way traffic.

Appendix H also contains copies of the PEQI analysis scoring worksheets for the existing conditions (refer to *Appendix Table H-1*). The PEQI scores for the existing conditions along the east and west sides of El Molino Avenue are 81 and 91, respectively, which falls within a range considered to be of highest quality (i.e., many important pedestrian conditions present). The PEQI analysis scoring worksheets for the conditions expected with the existing with project scenario, the mid-block crossing alternatives, pedestrian tunnel or overpass alternatives, partial lane closure of El Molino Avenue alternatives (either northbound or southbound lane closures), as well as with the full mid-block lane closures of El Molino Avenue, are shown in *Appendix Tables H-2* through *H-6*, respectively.

- Potential Significant Secondary Traffic Impacts at Off-Site Intersections

This category highlights the pedestrian crossing alternatives that are expected to result in potential significant secondary traffic impacts due to redistribution of existing and future vehicle trips to the surrounding street system. The six intersections closest in proximity to the study segment were formally analyzed as part of this study. Two locations to the west (i.e., at the Madison Avenue intersections with Colorado Boulevard and Green Street), two locations on El Molino Avenue (i.e., at the intersections with Colorado Boulevard and Green Street), as well as two locations to the east (i.e., at the Oak Knoll Avenue intersections with Colorado Boulevard and Green Street) were analyzed for potential secondary impacts. *Appendix I* contains copies of the Intersection Capacity Utilization (ICU) worksheets for the appropriate alternative pedestrian schemes. Specifically, the results for the impact analysis for Alternative 6 (Partial Northbound Closure of El Molino Avenue), Alternative 7 (Partial Southbound Closure), Alternative 8-F (Full Closure of El Molino Avenue, full-time) and Alternative 8-P (Full Closure of El Molino Avenue, part-time) are summarized in *Appendix Tables I-1* through *I-4*, respectively.

It is important to note that the intersection of El Molino Avenue and Colorado Boulevard was previously forecast to be significantly impacted by the IDS Playhouse Project in the prior traffic study and corresponding environmental impact report. Therefore, this category in the evaluation matrix (i.e., summarized in the fourth column as “Potential Significant Impacts at Off-site Intersections”) was evaluated with a “Yes” or “No” notation. A “Yes” notation reflects that locations other than the intersection of El Molino Avenue and Colorado Boulevard (which was determined to be significantly impacted by the IDS Playhouse Plaza project) are forecast to be significantly impacted. In addition, a low (“L”), medium (“M”) or high (“H”) notation was added to represent the finding that at least one, two or three or more additional locations are anticipated to be significantly impacted, respectively, when compared to the IDS Playhouse Plaza Project EIR. While a total of six intersections were selected for analysis so as to provide a comparison of impacts between the pedestrian crossing alternatives, it is not the intent of this

rating category to represent that the findings are all inclusive. In other words, additional intersection or street segment impacts beyond the most immediate vicinity could potentially occur.

- Opinions of Probable Costs

This category addresses the opinions of probable costs associated with each of the alternative pedestrian schemes for comparison purposes based on input received from the City's Department of Public Works. *Appendix J* contains copies of the information as provided by City staff. This category was evaluated based on the varying levels of the anticipated opinions of probable costs, ranging from low to high.

- Relocation of the Existing El Molino Avenue Valet Operation

This category highlights whether or not the existing valet operation provided along the west side of El Molino Avenue (i.e., along the frontage of the Elements Kitchen Restaurant and the Pasadena Playhouse) would require relocation. This category was evaluated with a "Yes", "No", or "Likely" notation.

- Removal of El Molino Avenue On-Street Parking

This category highlights whether or not the existing on-street parking spaces along the west side of El Molino Avenue would require relocation. This category was evaluated with a "Yes", "No", or "Likely" notation.

- Signalization Within 300 Feet of Another Signalized Intersection

This category highlights, for those alternatives that consider signalization, whether the proposed locations would be within 300 feet of an existing signalized intersection (i.e., to either Colorado Boulevard and/or Green Street). It is LLG's recommendation that signalization not occur within 300 feet of an existing signalized intersection so as to introduce a safety issue in terms of motorist confusion for multiple signal indications in too close of proximity. This category was evaluated with a "Yes" or "No" notation.

- Pedestrian Volumes Warrant High Cost?

For those alternatives that were designated to represent a high comparative opinion of probable cost, this category rates in professional opinion whether these costs are warranted based on the existing and future anticipated pedestrian volumes. This category was evaluated with a "Yes" or "No" notation.

- Consistency With Adopted City of Pasadena Plans and Policies

This category highlights whether or not the alternative is deemed to be consistent with adopted City of Pasadena plans and policies, as they relate to the pedestrian environment and pedestrian circulation. This category was evaluated with a “Yes” or “No” notation.

- El Molino Avenue Average Daily Traffic (ADT) Volume (Whether the Alternative Warrants Further Consideration)

For those alternatives that were designated to represent a high comparative opinion of probable cost, this category rates whether these costs are warranted based on the existing and future average daily traffic volumes along El Molino Avenue, a designated de-emphasized street in the City’s Mobility Element of the General Plan. This category was evaluated with a “Yes” or “No” notation.

- Potential for Pedestrian Violations

This category highlights whether or not the potential for pedestrian violations is anticipated to occur given a review of the opposing traffic volumes along El Molino Avenue, the presence of adequate gaps in opposing flows, speeds, among others. This category was evaluated with a “Yes” or “No” notation.

The results of the evaluation matrix presented in *Table 6-1* were used in the formulation of the recommended alternatives for further consideration, as summarized in Section 7.0.