Chapter 6

Appendix

Traffic drums in the service yard of Traffic Services in Allentown
Public involvement is a vital component of the transportation planning process. Providing full disclosure of plans and programs, not only during the development phase, but also after the adoption of these plans and programs, allows the general public the opportunity to be involved, comment on and influence the development process. Everyone, regardless of race, religion, ethnicity, gender, disability or socio-economic status should have the opportunity to take part in and influence the transportation planning process. Public participation in the transportation field is emphasized and mandated by Federal Transportation Legislation, the Civil Rights Act, the Americans with Disabilities Act and other Federal Justice requirements.

The federal regulations for Metropolitan Planning, 23 CFR Part 450, require that the metropolitan transportation planning process include a proactive public involvement process that provides complete information, timely public notice and full public access to key technical and policy decisions. The regulations support early and continuing involvement of the public in developing Long Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs). In addition, FHWA and FTA jointly issued guidance for planning partners’ use in implementing authorizing acts for federal transportation field is emphasized and mandated by Federal Transportation Legislation, the Civil Rights Act, the Americans with Disabilities Act and other Federal Justice requirements. This was the first time such proactive steps were taken to come before the LVTS Technical Committee with projects considered for inclusion in the LRTP. In addition to the standard LVTS public outreach process, this was the first time such proactive steps were taken to reach all municipalities and provide a public platform for consideration. In all, 87 project pitches were entertained over the two-day period, totaling over $400,000,000 in funding requests.

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Environmental Justice (EJ) Analysis

Chapter 6 - Appendix

Executive Order 12898 of February 11, 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, states "Each Federal agency shall make environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority and low-income populations."

Environmental Justice (EJ) builds on the foundation of Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin. In 1997, the Department of Transportation (DOT) issued its Order to Address Environmental Justice in Minority Populations and Low-Income Populations to summarize and expand upon the requirements of Executive Order 12898 on EJ.

EJ contains three main objectives:

1. To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects on minority and low-income populations; and
2. To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process;
3. To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

The analysis described in this chapter relates to the first of the three EJ objectives listed above. Specifically, it looks at the projects in LVTS’ LRTP have a disproportionate adverse effect on minority and low-income populations.

The accessibility tool for the LVPC regional travel demand model was used for this analysis. For each of the last three LRTP plan years (2025, 2030, and 2040), two accessibility measures were developed at the Traffic Analysis Zone (TAZ) level for both a Base (Existing plus Committed) Scenario and a Level for both a Base (Existing plus Committed) Scenario and a Scenario. The two measures are:

- Making better transportation decisions that meet the needs of the people;
- Designing transportation facilities that fit more harmoniously into communities;
- Enhancing the public involvement process, strengthening community-based partnerships, and providing minority and low-income populations with opportunities to learn about and improve the quality and usefulness of transportation in their lives;
- Improving data collection, monitoring and analysis tools that assess the needs of, and analyze the potential impacts on, minority and low-income populations; and
- Partnering with other public and private programs to leverage transportation agency resources to achieve a common vision for communities;
- Avoiding disproportionately high and adverse impacts on minority and low-income populations; and
- Minimizing and/or mitigating unavoidable impacts by identifying concerns early in the planning phase and providing offsetting initiatives and enhancement measures to benefit affected communities and neighborhoods.

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2. To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process;
3. To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

EJ improves the transportation decision-making process. Its principles, when properly implemented, improve all levels of transportation decision making by:

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1. Highway Accessibility – the number of jobs within the LVPC region that can be reached from a TAZ by car within 20 minutes of peak period driving time; and
2. Transit Accessibility – the number of jobs within the LVPC region that can be reached from a TAZ by peak period transit service within 40 minutes.

The 473 TAZs in the LVPC region were classified into three groups, based on the number of "degrees of disadvantage" that apply, as follows:

- Zero degree of disadvantage – 296 TAZs fall into this category (see map below).
- One degree of disadvantage – Either the percentage of the TAZ population that are members of disadvantaged minority groups is greater than the regional average percentage OR the percentage of TAZ households that are below the poverty line is greater than the regional average. 107 TAZs fall into this category (see map below).
- Two degrees of disadvantage – The percentage of the TAZ population that are members of disadvantaged minority groups is greater than the regional average percentage AND the percentage of TAZ households that are below the poverty line is greater than the regional average. 70 TAZs fall into this category (see map below).

For each group of TAZs, average values of the accessibility measures (weight-averaged based on TAZ population in households) were computed for each of the last three LRTP plan years for each scenario (Base and LRTP). Region-wide averages were also computed.

For each of the three analysis years, there was no difference between the Base and LRTP transit accessibility measures, since there are no projects included in the LRTP that change the LANTA system in any way that would affect accessibility. Highway accessibility is different, however, between the Base and LRTP scenarios because the LRTP contains a number of regionally significant projects.

The tables below show the highway accessibilities for each analysis year and related statistics. The columns in the tables are as follows:

<table>
<thead>
<tr>
<th>DD_EJ</th>
<th>ZONES</th>
<th>NB_HWYACC</th>
<th>PL_HWYACC</th>
<th>PCT_CHNG_HWY</th>
<th>STD_ERR_HWY</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a number, Number of Degrees of Disadvantage. &quot;ALL&quot; refers to all 473 TAZs in the LVPC region.</td>
<td>Number of zones with the corresponding number of Degrees of Disadvantage.</td>
<td>The weighted-average number of jobs within the LVPC region that can be reached by car within 20 minutes of peak period driving time in the Base Scenario from the TAZs with a particular number of Degrees of Disadvantage.</td>
<td>The weighted-average number of jobs within the LVPC region that can be reached by car within 20 minutes of peak period driving time in the LRTP Scenario from the TAZs with a particular number of Degrees of Disadvantage.</td>
<td>The percentage change in the averaged highway accessibility measure between the Base and LRTP scenarios.</td>
<td>The standard error of the percent changes in the averaged highway accessibility measure for the TAZs with a particular number of Degrees of Disadvantage.</td>
</tr>
</tbody>
</table>

For the year 2025, the changes in the averaged accessibility measures are slightly negative for TAZs with zero, one and two Degrees of Disadvantage. There is no significant correlation, however, between the amounts of the average changes and the number of Degrees of Disadvantage.

For the years 2035 and 2040, all TAZ groups benefit from an increase in average accessibility. Therefore, based upon these measures, there is no disproportionate adverse effect of the LRTP on minority or low-income populations.
Chapter 6 - Appendix

HIGHWAY ACCESSIBILITIES AND RELATED STATISTICS FOR EACH ANALYSIS YEAR

<table>
<thead>
<tr>
<th>DD_EJ</th>
<th>ZONES</th>
<th>NB_HWYACC</th>
<th>PL_HWYACC</th>
<th>PCT_CHNG_HWY</th>
<th>STD_ERR_HWY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>296</td>
<td>163,949</td>
<td>163,887</td>
<td>-0.04%</td>
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<tr>
<td>1</td>
<td>107</td>
<td>183,503</td>
<td>183,027</td>
<td>-0.26%</td>
<td>0.46%</td>
</tr>
<tr>
<td>2</td>
<td>70</td>
<td>272,203</td>
<td>271,999</td>
<td>-0.10%</td>
<td>0.56%</td>
</tr>
<tr>
<td>ALL</td>
<td>473</td>
<td>195,367</td>
<td>195,150</td>
<td>-0.11%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DD_EJ</th>
<th>ZONES</th>
<th>NB_HWYACC</th>
<th>PL_HWYACC</th>
<th>PCT_CHNG_HWY</th>
<th>STD_ERR_HWY</th>
</tr>
</thead>
<tbody>
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<td>0</td>
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<tr>
<td>1</td>
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<td>2</td>
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<tr>
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<td>195,454</td>
<td>2.84%</td>
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<th>DD_EJ</th>
<th>ZONES</th>
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<th>PCT_CHNG_HWY</th>
<th>STD_ERR_HWY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>296</td>
<td>156,506</td>
<td>163,045</td>
<td>4.18%</td>
<td>0.26%</td>
</tr>
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<td>0.42%</td>
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<td>286,254</td>
<td>4.06%</td>
<td>0.46%</td>
</tr>
<tr>
<td>ALL</td>
<td>473</td>
<td>189,100</td>
<td>197,055</td>
<td>4.21%</td>
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</tbody>
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