Equity Assessment:
FFY 2012-2015 Transportation Improvement Program

An assessment of the distribution of project funding in the Capitol Region prepared in accordance with CRCOG’s policy on Environmental Justice.

Presented to the Connecticut Coalition for Environmental Justice: January 5, 2012
To be considered for approval by the CRCOG Policy Board: January 25, 2012
This equity assessment is prepared in accordance with CRCOG’s Environmental Justice Policy. The assessment of the Transportation Improvement Program (TIP)\(^1\) is just one of several different assessments that CRCOG conducts to determine whether minority and low-income communities are receiving a fair share of funding and/or benefits from our transportation programs. **The basic conclusion of this assessment is that there does not appear to be any bias in the distribution of transportation funds and projects in the TIP.**

The assessment technique we use for the TIP is a simplified methodology that reflects the short-term nature of the TIP. Because it is a 4-year programming document, the list of projects varies significantly from year to year. Changes occur because new projects are added, old projects are deleted, projects enter new phases (design, ROW, construction), and project schedules are modified. This variability means that any single TIP assessment might not yield a good picture of how benefits will be distributed over the longer term. It ignores many major projects that are planned but not yet programmed. It also ignores projects that are already completed - even if they were completed just one or two years earlier.

Given the TIP's variability, the geographic distribution of projects also varies significantly from year to year. Thus, the basic TIP assessment only provides a single 'snap shot' in time of how investments are distributed between target and non-target areas. Since we are more concerned about the distribution of investments over the longer term, we also monitor trends in the TIP over a multi-year period. This monitoring allows us to determine trends in how the balance of funding shifts over time between target and non-target areas.

There is a risk that some might see the TIP assessment process as guaranteeing a minimum funding level for target areas. This is not the intention. Our goal in measuring investments is not to guarantee proportional funding for target areas, nor to create a sense of entitlement to that funding. Rather, our goal is to assure an equitable process that does not result in a distribution of benefits that is discriminatory.

**Definitions**

For this equity assessment, we identified neighborhoods where there are large concentrations of low-income or minority populations. These are referred to as ‘target areas’ for purposes of the analysis. The criteria for defining the target areas were approved by CRCOG’s Environmental Justice Advisory Board (EJAB) in November 2003.\(^2\) The EJAB was formed in 2002 as a steering group for CRCOG’s Environmental Justice Challenge Grant. Work undertaken with the grant included reaching out to minority and low income residents and resulted in the development of an EJ Action Plan to assure that EJ concerns and issues are considered throughout the Capitol Region transportation planning process. The target areas are defined below.

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1 The Transportation Improvement Program, or TIP, is the list of projects expected to be funded in the next four years. It is one of several important transportation planning documents such as the long-range Regional Transportation Plan, corridor studies, and major investment studies.

2 The EJAB was formed in 2002 as a steering group for CRCOG's Environmental Justice Challenge Grant. Work undertaken with the grant included reaching out to minority and low income residents and resulted in the development of an EJ Action Plan to assure that EJ concerns and issues are considered throughout the Capitol Region transportation planning process. The EJAB eventually gave way to similar work with the Connecticut Coalition for Environmental Justice.
**Primary target area:**

The primary target area is composed of neighborhoods where at least 50 percent of the population is a member of a minority group.

**Secondary target area:**

The secondary target area is composed of neighborhoods where at least 20 percent of the population is classified as low-income.

The original target areas were mapped using 2000 census data. A new map was prepared this year using the same target area definitions, but using 2010 census data. The map is shown in Figure 3.

**Combined target area:**

For purposes of the TIP assessment the primary and secondary target areas are combined into a single target area.

**Funding share guideline:** 28.8 percent

Approximately 28.8 percent of the region’s population lives inside the target area (compared to 26.5 percent in 2000). This proportion serves as a general benchmark or guideline for the equity assessment. If 28.8 percent of the region’s population lives in the target area, then we expect that about 28.8 percent of the region’s transportation funds are spent in the target area. While this might not be the case for any single TIP, we expect that over the long term the distribution of funds should be roughly proportionate to the distribution of the population.

**Assessment Method**

**Highway Projects.** The first step in the assessment is to map the projects in the TIP using the regional GIS or geographic information system. The results of the mapping process are presented in Figure 4 at the end of this report.

Once the projects are mapped, the GIS system can be used to determine which projects are located within the target area (and what proportion of a project is within a target area) and which projects are outside a target area. Since we know how much each project costs, we can then calculate the total funds to be invested in the target area and the total outside the target area. Doing this for highway projects, we determined that 47.3 percent of highway funds in this TIP are being spent in target areas.

**Transit Projects.** For most transit projects, a slightly different method is used. The method still uses the regional GIS system to assess the distribution of funds, but is based on the known service areas of the different transit systems. For example, about 38 percent of the CT Transit services are within the target area, so we attribute 38 percent of the CT Transit costs to the target area. We do a similar estimate for other service providers such as the Greater Hartford

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3 Local routes: Local route comprise 82 percent of all CT Transit route miles. About 46.5 percent of these local routes are within the target area. Commuter routes: Commuter routes comprise the other 18 percent of the CT Transit route miles. Since the commuter routes primarily serve areas outside the target area, we assumed that zero percent (0%) of the commuter routes are inside the target area. Total Share inside Target Area: To calculate the total share of the CT Transit system serving the target area.
Transit District, and apply the respective percentages to the various projects listed in the TIP. Using a similar analysis for all transit projects, we estimate the percentage of all transit projects and services that fall within the target areas is 51.1 percent.

**Statewide Projects.** The Capitol Region TIP also contains numerous projects that are statewide and largely fall outside our region. These projects represent a total of about $347.28 million in the FFY2012-2015 TIP, which is about 26.8 percent of the total. There is no way to assess the distribution of these projects since their locations are often unknown and our target areas are defined only for our region. Therefore, these projects are excluded from the analysis.

**Conclusion for this TIP:**

*No bias in distribution of funds*

Based on the results of the equity assessment, there does not appear to be any bias in distribution of transportation funds and projects in the TIP. As detailed in Table 1 and illustrated in Figure 1, about 47.3% of highway funds and 51.1% of transit funds are being invested in the target areas, whereas only 28.8% of the region’s population live in the target areas. We are investing a higher proportion of our transportation funds in the target areas than would be expected based on the size of the population in those areas.

![Figure 1: % of TIP Funds in Target Areas](image)

**Table 1:** Equity Assessment for FY2012-2015 TIP

<table>
<thead>
<tr>
<th></th>
<th>A. Highway Projects</th>
<th>B. Transit Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fund Committed</td>
<td>% of Funds</td>
</tr>
<tr>
<td>Inside Target Area</td>
<td>$58,613,800</td>
<td>47.3%</td>
</tr>
<tr>
<td>Inside Target Area</td>
<td>$65,356,000</td>
<td>52.7%</td>
</tr>
<tr>
<td>Inside Target Area</td>
<td>$123,969,800</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

|                      | Fund Committed      | % of Funds          | % of Pop            |
| Inside Target Area   | $343,965,945        | 51.1%               | 28.8%               |
| Inside Target Area   | $328,909,989        | 48.9%               |                     |
| Inside Target Area   | $672,875,934        | 100.0%              |                     |

area, we multiplied the local route share of route miles (82%) times the share of local routes with the target area (46.5%). The estimated share of CT Transit services within the target area is 38 percent.
### C. Highway & Transit Projects

<table>
<thead>
<tr>
<th>Fund Committed</th>
<th>% of Funds</th>
<th>% of Pop</th>
<th>Inside Target Area</th>
<th>Outside Target Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$402,579,745</td>
<td>50.5%</td>
<td>28.8%</td>
<td>Inside Target Area</td>
<td></td>
</tr>
<tr>
<td>$394,265,989</td>
<td>49.5%</td>
<td></td>
<td></td>
<td>Outside Target Area</td>
</tr>
<tr>
<td><strong>$796,845,734</strong></td>
<td><strong>100.0%</strong></td>
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<td></td>
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</tbody>
</table>

As mentioned above, $347.28 million of statewide funded projects were eliminated from this analysis due to the difficulty in locating and then assessing those projects. However, two projects are worth noting, since the environmental justice community has expressed a particular interest in projects of this type in the past. Using Congestion Mitigation and Air Quality (CMAQ) Improvement funds over the next four years, the State plans to spend more than $4.4 million on the Connecticut Clean Fuels project; this project reimburses public agencies for the incremental cost of purchasing alternative fuel/clean fuel vehicles and for the full cost of diesel retrofit technology emission control devises. Similarly, the State plans to spend almost $16 million in CMAQ funds for the purchase of advanced technology (hybrid electric) buses. These funds are available to the Greater CT Moderate Area shown on the map to the right, and while the benefits from these expenditures cannot be assigned to target or non-target areas, it can safely be assumed that minority and low-income residents will benefit from the cleaner air associated with these alternative fuel and advanced technology vehicles.

### Conclusion about Longer Term Trend

As mentioned above, the 4-year TIP is only a snap shot of projects programmed for a specific time period. An added difficulty in analyzing trends is apparent when the base line (28.8% of residents living within the target areas in 2010 vs. 26% in 2000) is modified and when the time periods overlap. But when viewed as a whole, a leveling of the numbers is becoming apparent as shown in Figure 2 on the following page. In the new TIP, the highway “share” dropped to 47.3% while the transit “share” increased to 51.1%. Over the long term, there continues to be no bias in the distribution of transportation funds and projects listed in the TIP.

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4 The target area share for the highway program in the FFY2010-2013 TIP showed a dramatic increase from 33.8% in FY2005 to 62.9%. This was explained in our previous analysis as a change “due largely to an ongoing ConnDOT initiative to reprogram highway projects to address state funding problems. Until that initiative is completed and decisions regarding reprogramming are finalized, we do not know if the higher share for the target area will continue. While the change is favorable for target areas, it is too early to call this a long-term trend.” This is a perfect example of how individual projects can significantly influence one TIP to the next.
Figure 2: Trend in % of Funds in Target Areas

- Hwy
- Transit
- Total

FY05TIP: 28.3%, Transit 34.7%, Total 39.7%
FY07TIP: 33.8%, Transit 39.0%, Total 41.1%
FY10TIP: 46.0%, Transit 49.2%, Total 62.9%
FY12TIP: 47.3%, Transit 51.1%, Total 50.5%

26% = pop in target areas (2000 Census)
28.8% = pop in target areas (2010 Census)
Figure 3: Environmental Justice Target Areas

* Primary includes any block group that had at least 50% minority population according to the 2010 Census.
** Secondary includes additional Census Tracts that had at least 20% low-income population (household income 150% or below the Census poverty threshold, by family size) according to the ACS 2005-09 estimate.
Figure 4: TIP Projects Mapped