Determination of Low-Income Households @ 200% of the Federal Poverty Level, and the Ten-Factor Equity Analysis for Benton County and its Communities

A. Determination of Low-Income Households Meeting STIF Threshold of 200% of Federal Poverty Level

At the 2018 Oregon Public Transit Conference, held in Bend October 28-31, a seminar was provided on methodologies for determining the number and percentage of low-income households, by community (city or county) or by census block, meeting the STIF threshold of 200% of the Federal poverty level (FPL). Two methodologies were provided, that yield the required data at either of the above-stated levels. Both methodologies utilize US Census Bureau data accessed through their American Fact Finder online web portal.

A manual computation of this statistic is required, because while tabulated census data for 200% of the FPL is available for individuals and for families, it is not available for households (which are statistically different than “families”, and families may not be substituted for households.)

In staff’s view, these methodologies provide the STIF Advisory Committee the opportunity to use the low-income data for several purposes:

1) To assist the Committee in developing a definition for communities with a high percentage of low-income households, as required by statute and under Committee bylaws;

2) To potentially utilize the information as one evaluation factor, among others, for the STIF funding sub-allocation methodology which the Committee is charged to develop; and

3) To assist Public Transportation Providers with developing projects (i.e. routes and service areas) which target areas with a high percentage of low-income households, as emphasized under the STIF rules.

Staff undertook an analysis of Benton County low-income households by community, using Method 1: Average Household Size, which yields information suitable for purposes nos. 1 and 2, above. The other Method 2: Low Income Population Ratio, yields census block-level information suitable for purpose no. 3 above, and is probably best suited for a GIS-based application. This will be undertaken by staff at a later date in our process. There are a couple software tools available for this latter effort, including Remix, a transit route planning application, and ArcGIS’ Business Analyst application.

The Method 1 analysis essentially uses the equation:

\[ \text{Low income households} = \text{Total Households} \times \frac{\text{Low income population}}{\text{Total population}} \]

The Method 1 analysis of Benton County communities yielded the following information:
## 2016 Estimated Households @ 200% of the Federal Poverty Level

<table>
<thead>
<tr>
<th>City/County</th>
<th>Total Households</th>
<th>Avg. Household Size</th>
<th>Individuals @ 200% FPL</th>
<th>Est. Households @ 200% FPL</th>
<th>Percent of Total Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adair Village</td>
<td>284</td>
<td>3.29</td>
<td>255</td>
<td>78</td>
<td>27.3%</td>
</tr>
<tr>
<td>Corvallis</td>
<td>21,981</td>
<td>2.29</td>
<td>22,365</td>
<td>9,766</td>
<td>44.4%</td>
</tr>
<tr>
<td>Monroe</td>
<td>277</td>
<td>2.36</td>
<td>325</td>
<td>138</td>
<td>49.7%</td>
</tr>
<tr>
<td>North Albany</td>
<td>3,282</td>
<td>2.69</td>
<td>1,611</td>
<td>599</td>
<td>18.2%</td>
</tr>
<tr>
<td>Philomath</td>
<td>1,820</td>
<td>2.51</td>
<td>1,744</td>
<td>695</td>
<td>38.2%</td>
</tr>
<tr>
<td>Unincorporated Benton Co.</td>
<td>6,549</td>
<td>2.39</td>
<td>3,979</td>
<td>1,665</td>
<td>25.4%</td>
</tr>
<tr>
<td>Total Benton County</td>
<td>34,193</td>
<td>2.39</td>
<td>30,279</td>
<td>12,669</td>
<td>37.1%</td>
</tr>
</tbody>
</table>

## B. Ten-Factor Equity Analysis

At the October Public Transit Conference and earlier, throughout the STIF development process, agencies have been encouraged to look beyond simply the 200% of FPL in the definition of communities at risk and in need of improved transportation services. Two prominent examples of this mentioned repeated at conference and training sessions have been the existing **OPAL Environmental Justice Oregon model**, and the **Ten-Factor Equity Analysis** model developed by TriMet’s Department of Diversity and Transit Equity.

For example, in Benton County, the City of Corvallis might be said to have two types of low-income neighborhoods. One type would be traditional low-income neighborhoods where there are accompanying indicators of unmet economic needs and social barriers related to education, health care, low-wage-earning family care-takers, limited English proficiency households, and other factors. A second type of low-income neighborhood may be found around the OSU campus area, and are comprised largely of college students living and working in the area while completing their years of academic coursework.

While the measure of low income might be equally applicable to both types of neighborhoods, there is an inherent assumption that while the higher “poverty” level of the campus neighborhoods themselves may be static, the economic status of the individuals within those neighborhoods is transient, and long-term upwardly mobile. This is not the case with the more traditional low-income neighborhoods.

In an effort to take a broader look at the social and transportation needs of Benton County in conjunction with the STIF program, staff undertook to look at additional factors which might help define communities with not only a high percentage of low-income households, but other factors which taken as a whole, help define communities within Benton County which have the greatest need for improved transportation services.

Staff chose the TriMet/Metro **Ten-Factor Equity Analysis** model to use, for several reasons: First, it was developed specifically for public transit use and has been refined by TriMet for use in the STIF program. Second, the data factors (except for one) are generally available online through the US Census Bureau’s American Fact Finder online portal. Third, because TriMet developed it for this
purpose, the factors also lend themselves to use in a GIS format for planning and mapping of transit routes.

The ten factors used to develop the Equity Analysis indices we used for the Benton County analysis are:

1. Non-White Population
2. Households with Income Below 200% of the FPL
3. Limited English Proficiency / English as a Second Language Households
4. Senior Population over 60 Years of Age
5. Households with Children under 18
6. Population of Individuals with Disabilities (all types)
7. Limited Vehicle Access Households (no vehicles or 1 vehicle per household)
8. Households with Low and Medium Wage Jobs
9. Affordable Housing Index by community
10. Households Receiving SNAP and/or Public Assistance Benefits

These are the same factors as used in TriMet’s analysis, with the exception of No. 10. TriMet used a different tenth factor related to access to key retail, human, and social services, which came from a separate database developed for the Portland area, not available comprehensively for Benton County. We substituted households receiving SNAP (food stamps) and/or public assistance benefits for the tenth factor, as it appeared relevant to the analysis and the data is available for Benton County, by community.

While the factors are substantially the same as in TriMet’s equity analysis, our own analysis was arguably a little more complicated in at least a few ways. TriMet was dealing with one contiguous service area, albeit an enormous one, whereas Benton County is divided into separate legal jurisdictions, so in our case we have not one equity analysis to complete, but essentially seven. Moreover, data for the unincorporated portion of the County needed to be calculated or imputed in most cases, since “unincorporated area” does not exist as a geographic entity in the Census database.

The results of the Ten-Factor Analysis are summarized in the attached table. A Composite Equity Index for each community averages all ten individual indices. Staff then developed a sub-allocation methodology table as one Option for the Committee’s consideration, as well as incorporating the Equity Index into a Four-Factor Mean Option which also includes the business-related factors which the Committee has previously reviewed.

Respectfully submitted,

Lee K. Lazaro
Staff to the Committee
November 4, 2018