2019-2022 Draft YAMPO TIP Environmental Justice Analysis

What is Environmental Justice?

There are three fundamental environmental justice principles:

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

Is Environmental Justice a New Requirement?

No. The recipients of Federal-aid have been required to certify and the U.S. DOT must ensure nondiscrimination under Title VI of the Civil Rights Act of 1964 and many other laws, regulations, and policies. In 1997, the Department issued its *DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations*, and updated this order in 2012. The order summarizes and expands upon the requirements of Executive Order 12898 on Environmental Justice.

YAMPO's Process for EJ Analysis of the Draft TIP

YAMPO analyzes demographic data from the American Communities Survey produced by the US Census Bureau to identify demographic groups that may be underrepresented in the planning process or may be disproportionately impacted by planning decisions. The eight groups currently identified are: households without access to a vehicle; people over the age of 18 who have less than a high school education; elderly people, or people 75 years of age and over; households with a female head of household and children under the age of 18; Limited English Speaking households; households in poverty; minorities, or people who identify as a race other than "White alone" and people who identify as Hispanic; and people with disabilities. This data is available as five-year estimates for the 322 Census block groups (BG) in York County.

What is a Census Block Group (BG)?

A geographical unit between a Census Tract and a Census Block in size. It is the smallest geographical unit for which the bureau publishes sample data, or data more detailed than a simple count.

The size of Census block groups is based on population, with each block group having a population between 600 and 3,000. The borders of Census block groups are co-incident with governmental borders. In other words, a Census block group will not overlap two or more municipalities or counties.

In each BG, the proportion of people or households in each group identified above compared to the total number of people or households in the BG may be greater or less than the county average. Each BG can contain zero to eight groups that are identified as potentially underrepresented or disproportionally impacted. The number of these groups per BG with proportions greater than the county average is referred to as the BG's Indicators of Potential Disadvantage (IPD). For example, if a BG equals or exceeds the county average for Limited English Speaking households and households without access to a vehicle, then that BG is said to have two IPDs. YAMPO categorizes BGs into three IPD groups.

BGs with zero IPDs are said to be "not potentially disadvantaged." BGs with one to four IPDs are said to be "potentially disadvantaged." BGs with five to eight IPDs are said to be "potentially more disadvantaged." Each BG is mapped to show its category of potential disadvantaged and the presence or absence of programmed TIP projects.

Analysis of the 2019-2022 Draft TIP

Table 1 summarizes the data in the map on the following page. Approximately 23% of BGs in York County are potentially more disadvantaged, 65% are potentially disadvantaged, and 12% percent identified as not potentially disadvantaged. About 36% of BGs have one or more TIP projects programmed. This is a decrease of two percentage points since the 2017 TIP.

In the BGs with a TIP project, 25% are potentially more disadvantaged, 76% are potentially disadvantaged, and 12% are not potentially disadvantaged.

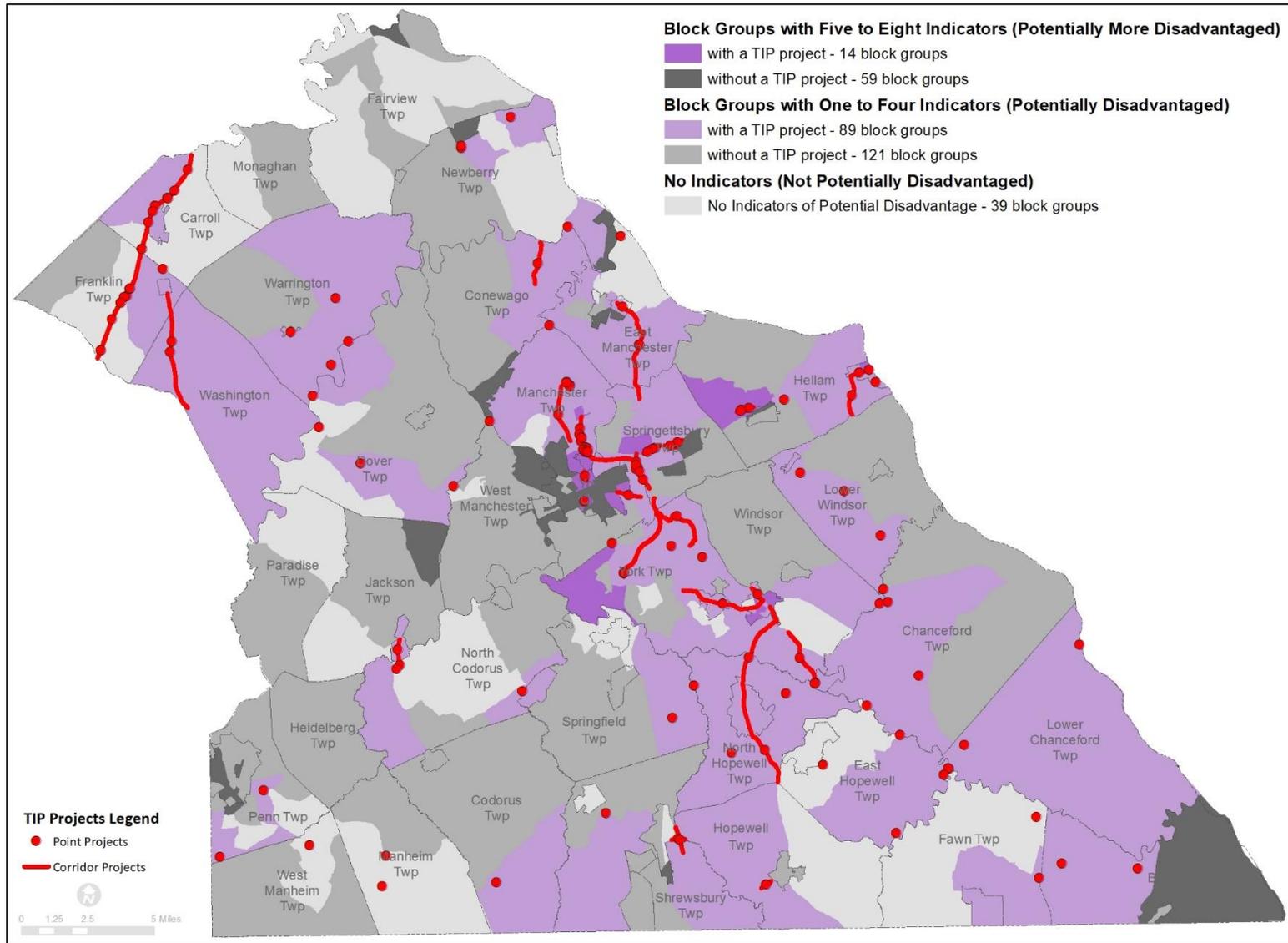*Table 1 Total Indicators of Potential Disadvantage and Presence of a TIP Project*

Census block groups in York County with…	at least one TIP project	no TIP projects	Total
five to eight indicators of potential disadvantaged (Potentially more disadvantaged)	14 (4% of all) (19% of row) (12% of TIP)	59 (18% of all) (81% of row)	73 (23% of all)
one to four indicators of potential disadvantage (Potentially disadvantaged)	89 (28% of all) (42% of row) (76% of TIP)	121 (38% of all) (58% of row)	210 (65% of all)
no indicators of potential disadvantage (Not potentially disadvantaged)	14 (4% of all) (36% of row) (12% of TIP)	25 (8% of all) (64% of row)	39 (12% of all)
Total	117 (36% of all)	205 (64% all)	322

Within the two groups of BGs with indicators of potential disadvantage (1-4 and 5-8), the split between BGs with and without a TIP project varies from the split of the entire county. Nineteen percent of BGs in the potentially more disadvantaged category and 42% of BGs in the potentially disadvantaged category have at least one TIP project. The percentage of BGs without indicators of potential disadvantage that have at least one TIP project, 36%, is the same as the percentage of BGs with a TIP project in the entire county. In the areas without indicators of potential disadvantage.

While this analysis is informative, one can make varied and opposing arguments about the proportionate or disproportionate effects of the TIP on environmental justice populations using the same data. Additionally, YAMPO recognizes that this analysis does not consider a number of important characteristics of transportation projects, including the total number of projects, the magnitude of disturbance, the type of project, or the total investment in an area. To that end, the PennDOT Planning Partners in District 8, including YAMPO, have contracted with the Voorhees Transportation Center at Rutgers University to develop a more robust and unified process to evaluate the benefits and burdens of the transportation network and transportation projects for environmental justice and other disadvantaged populations. The project team expects to complete that work in 2018 and the Planning Partners intend to use the resulting process during the development of the 2021-2024 Transportation Improvement Program.

Indicators of Potential Disadvantage and 2019 TIP Projects

Block Groups with Five to Eight Indicators (Potentially More Disadvantaged)
- with a TIP project - 14 block groups
- without a TIP project - 59 block groups

Block Groups with One to Four Indicators (Potentially Disadvantaged)
- with a TIP project - 89 block groups
- without a TIP project - 121 block groups

No Indicators (Not Potentially Disadvantaged)
- No Indicators of Potential Disadvantage - 39 block groups

TIP Projects Legend
- ● Point Projects
- ▬ Corridor Projects

0   1.25   2.5   5 Miles

Table 2 Individual Indicators of Potential Disadvantage and Presence of a TIP Project

Census block groups in York County with…	at least one TIP project	no TIP projects	Total
more than the average number of households without access to a vehicle	14	71	85
fewer than the average number of households without access to a vehicle	103	134	237
more than the average number of people who have less than a high school education	44	87	131
fewer than the average number of people who have less than a high school education	87	118	191
more than the average number of people over 75	43	78	121
fewer than the average number of people over 75	74	127	201
more than the average number of households with a female head of household and children under 18	36	77	113
fewer than the average number of households with a female head of household and children under 18	81	128	209
more than the average number of Limited English Speaking households	15	61	76
fewer than the average number of Limited English Speaking households	102	144	246
more than the average number of households at or below the poverty line	30	69	99
fewer than the average number of households at or below the poverty line	87	136	223
more than the average number of minorities	34	83	117
fewer than the average number of minorities	83	122	205
more than the average number of people with disabilities	47	96	143
fewer than the average number of people with disabilities	70	109	179
Total			**322**