

## **ENVIRONMENTAL JUSTICE**

The projects in this plan must meet the principles of Executive Order 12898 relating to environmental justice (EJ). Specifically, the plan must identify and address any disproportionately high and adverse human health or environmental effects of its programs and policies on minority populations and low-income populations.

The process undertaken in analyzing that the principles of Executive Order 12898 included mapping the areas of impoverished and minority population concentrations. These concentrations were overlaid with the LRTP's projects and subjected to a visual analysis of potential impacts.

Analysis of potential impacts center on three potential major areas of concern:

1. Disproportionally high adverse impact to impoverished and minority areas
2. Minimizing/blocking access of low income areas and minority areas to the transportation system
3. Neglect of the transportation system in low-income areas and minority areas.

### **Identification of Minority Groups Utilizing 2010 Census Data**

Minority population groups identified in this study included individuals who self-identified as being part of a minority racial or ethnic group in the 2010 U.S. Census. These figures were taken from the 2010 Census-Profile of General Population and Housing Characteristics. For this analysis, individuals belonging to a minority group were grouped into one category: minority. These aforementioned groups include individuals who self-identified as:

#### Race (Not Hispanic or Latino)

- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Some other Race

#### Hispanic or Latino (Of Any Race)

- Cuban
- Mexican
- Puerto Rican
- South or Central America
- Other Spanish culture or origin

The analysis performed utilized a methodology developed by the Michigan Department of Transportation (MDOT) which, unlike methods performed in the past, compares a local community with a reference community such as the state. In past analysis, concentrations of minority or impoverished communities were determined as a simple ratio of the local communities' population. The state's methodology utilizes

the **Location Quotient (LQ)** statistical technique, which strives to show if a local economy has a greater share than expected of a given economy, using the average of the local economy against the average of the larger economy.

The statistical notation for LQ is:

$$EJ\ Zone = \frac{\text{No. of Minority Group in a Census Tract}}{\text{Total Pop. in that Census Tract}} / \frac{\text{Total No. of that Minority Group in the State}}{\text{Total Pop. in the State}}$$

The method of interpreting the resulting calculated values are as follows:

**LQ < 1.0:** Such census tracts are considered Non-EJ zones. This implies that such census tracts having values less than one (1) have insufficient minority population in the state as such will not be considered an EJ zone.

**LQ = 1.0:** Such census tracts have populations that are just sufficient for their constituents, or are exactly comparable to the state's concentration of these groups.

**LQ > 1.0:** Places with LQ greater than one (1) provides evidence that these groups have racial populations greater than their expected EJ populations. These census tracts would represent the selection set considered being EJ zones.

#### **Identification of Impoverished Populations Utilizing 2013 American Community Survey Data**

The analysis performed to identify impoverished groups followed the same general methodology as the methodology used to determine LQ for minority populations. Impoverished populations were identified based on 2013 American Community Survey 5-year Estimates of poverty status for a 12 month period of time. The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. Official poverty thresholds do not vary geographically, though they are updated for inflation using Consumer Price Index (CPI-U). (United States Census Bureau) No grouping was necessary for this analysis as totals were available for the population living below the poverty level.

The statistical notation used to determine Location Quotient (LQ) for impoverished populations is as follows:

$$EJ\ Zone = \frac{\text{Impoverished Population in a Census Tract}}{\text{Total Pop. in that Census Tract}} / \frac{\text{Total Impoverished Population in the State}}{\text{Total Pop. in the State}}$$

The method of interpreting the resulting calculated values are as follows:

**LQ < 1.0:** Such census tracts are considered Non-EJ zones. This implies that such census tracts having values less than one (1) have insufficient impoverished populations in the state as such will not be considered an EJ zone.

**LQ = 1.0:** Such census tracts have populations that are just sufficient for their constituents, or are exactly comparable to the state's concentration of these groups.

**LQ > 1.0:** Places with LQ greater than one (1) provides evidence that these groups have impoverished populations greater than their expected EJ populations. These census tracts would represent the selection set considered being EJ zones.

## **Analysis**

Analysis of potential impacts center on three potential major areas of concern:

1. Disproportionately high adverse impact to low income areas and minority areas
2. Minimizing/blocking access of low income areas and minority areas to the transportation system
3. Neglect of the transportation system in low-income areas and minority areas.

Of the identified improve and expand projects contained in the WestPlan 2045 Long-Range Transportation Plan, only one of the projects is contained in or near the low income areas. Also none of the projects are contained in or near minority areas.

### ***Neglect of the transportation system in low income areas,***

WestPlan staff reviewed the transit service areas to determine if coverage of low income areas are being served. The two public transit providers in the MPO are Harbor Transit, which covers northern Ottawa County with a call/demand service and Muskegon Area Transit System which primarily offers fixed route service. Maps included in this chapter show that the majority of fixed routes and call/demand systems within the MPO cover minority and low income communities.

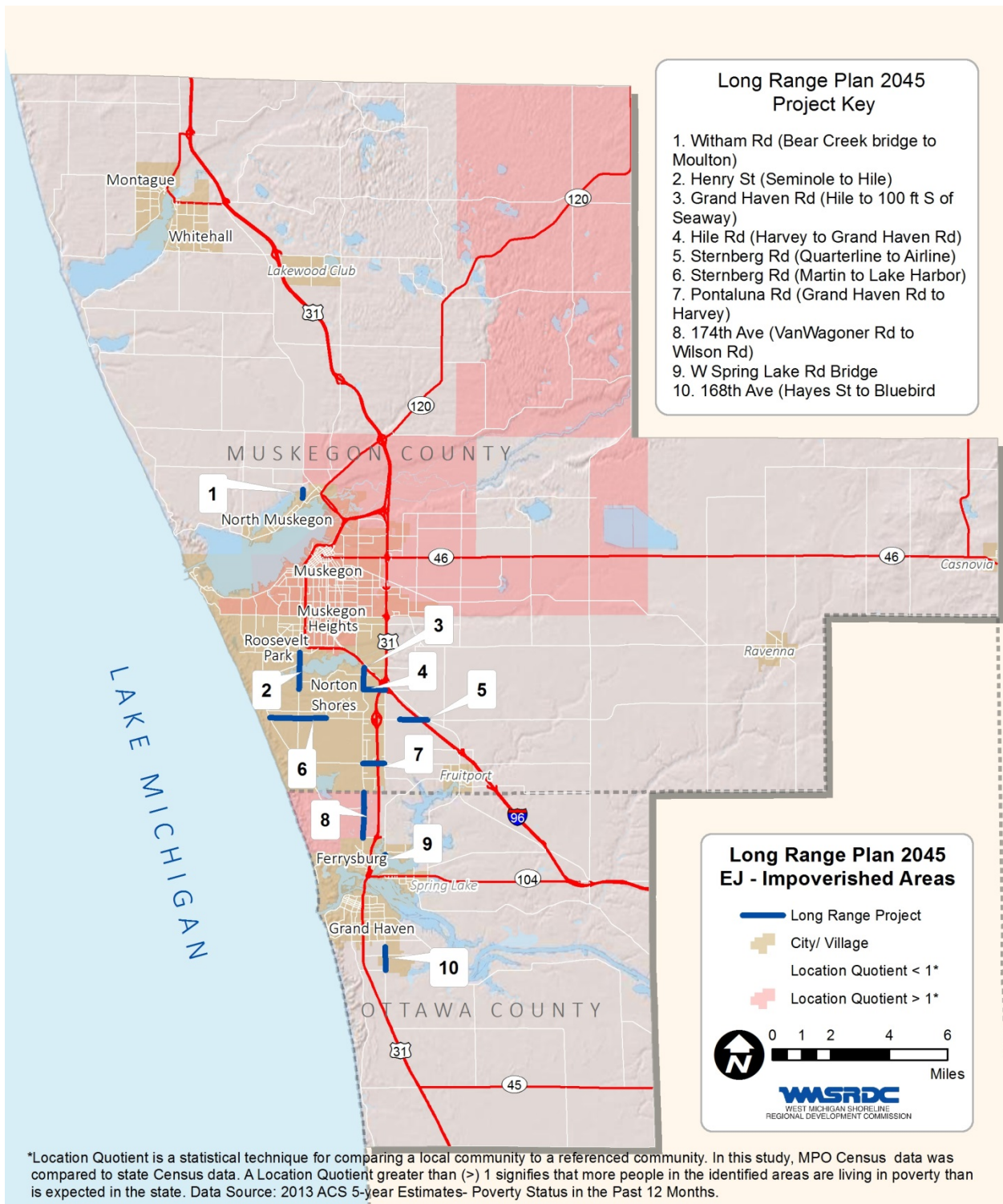
The expansion projects listed in the Long Range Plan address deficiencies or expansion in the system. At this point in time there are very few deficiencies in the system within the low income areas of the WestPlan MPO.

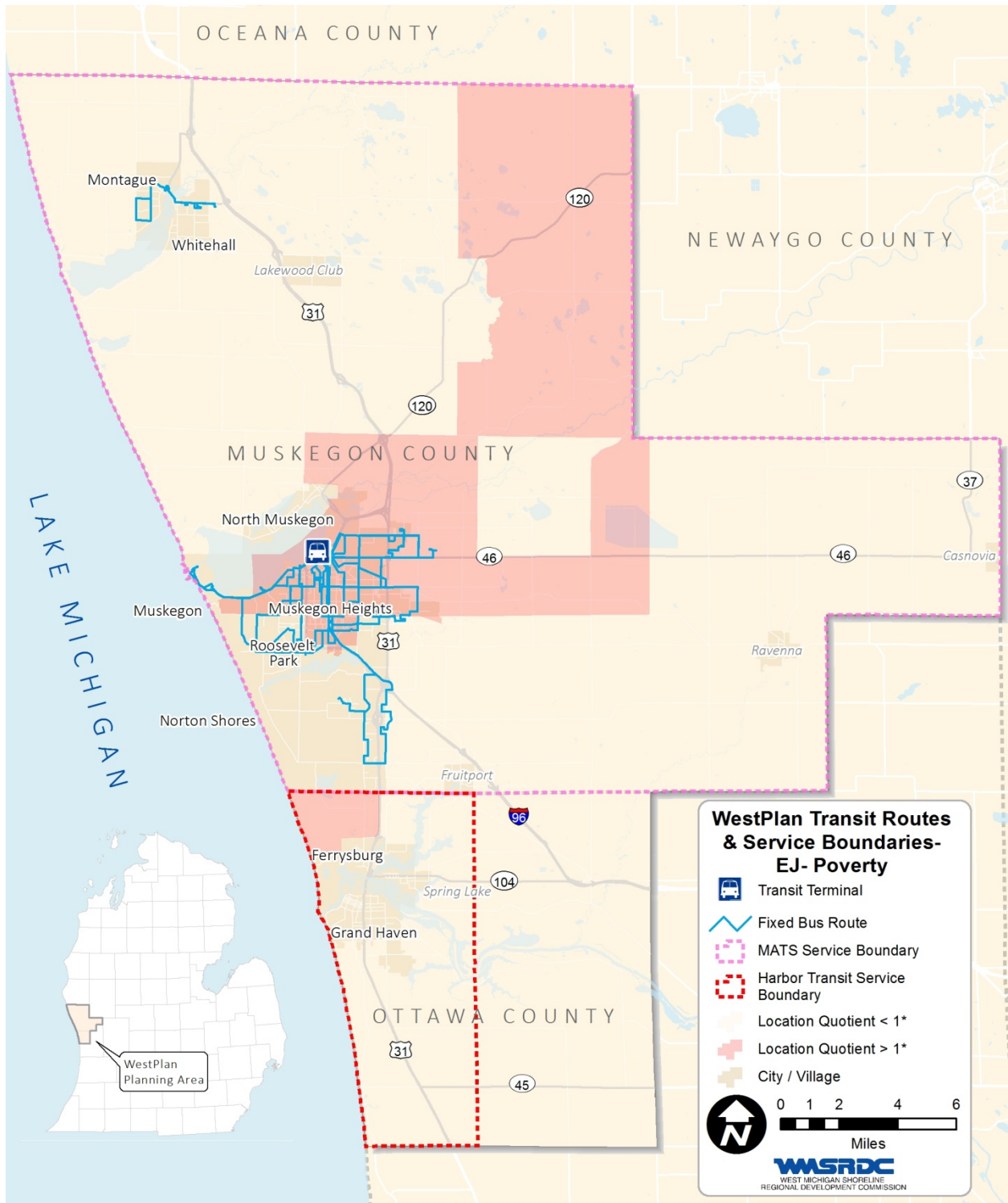
### ***Minimizing/blocking access of low-income areas to the transportation system:***

Minimizing access can be characterized as closing of streets or eliminating access to transit. None of the expansion projects identified in the plan will block access to the transportation system.

### ***Disproportionately high adverse impact to low income areas***

Of the identified projects contained in the WestPlan 2045 Long-Range Transportation Plan, there is one project located in low income areas. After staff review it has been determined that there will be no negative impacts from noise, right of way acquisition, or pollution.





OCEANA COUNTY

NEWAYGO COUNTY

MUSKEGON COUNTY

OTTAWA COUNTY

LAKE MICHIGAN

Montague

Whitehall

Lakewood Club

31

120

120

37

North Muskegon

46

46

46

Muskegon

Muskegon Heights

31

Ravenna

Norton Shores

Fruitport

Ferrysburg

104

Grand Haven

Spring Lake

45

WestPlan  
Planning Area

### *Neglect of the transportation system in minority areas*

WestPlan staff reviewed the transit service areas to determine if coverage of minority and low income areas are being served. The two public transit providers in the MPO are Harbor Transit, which covers northern Ottawa County with a call/demand service and Muskegon Area Transit System which primarily offers fixed route service. Maps included in this chapter show that the majority of fixed routes and call/demand systems within the MPO cover minority and low income communities.

The expansion projects listed in the Long Range Plan address deficiencies or expansion in the system. At this point in time there are very few deficiencies in the system within the minority areas of the WestPlan MPO.

### *Disproportionately high adverse impact to minority areas*

As previously stated, there are no identified expansion projects located in minority areas. The projects listed in the Long Range Plan address deficiencies or expansion in the system. The areas within the WestPlan MPO with a higher percentage of minority population tend to be within urbanized areas which are essentially built out and do not have capacity deficiencies. Since none of these projects are located in minority areas, there will be no negative impacts from noise, right of way acquisition, or pollution.

Also an analysis of the areas covered by transit was overlain with the identified minority areas. This analysis shows that all of the identified minority areas are covered by the existing transit coverage areas.

### *Minimizing/blocking access of minority areas to the transportation system*

Minimizing access can be characterized as closing of streets or eliminating access to transit. None of the identified capacity projects are located within minority areas. Therefore there will be no blocking of access to the transportation system.

## **Conclusions**

In conclusion, this analysis finds that the proposed roadway and transit projects do not result in violations of Executive Order 12898. Furthermore, to supplement the analysis done here, WestPlan's continuing public participation process undertaken during the design of the WestPlan 2045 Long-Range Transportation Plan made a concerted effort to reach out to traditionally disadvantaged populations to ascertain the potential effects and or impacts of the proposed projects.

