

MEMORANDUM

TO: SEWRPC Environmental Justice Task Force
FROM: Alex Karner, PhD, Global Institute of Sustainability, Arizona State University
DATE: May 5, 2014
RE: SEWRPC 2006 RTP Equity Analysis

The Southeastern Wisconsin Regional Planning Commission (SEWERPC) is currently engaged in the preparation of “Vision 2050” – its first long-range regional transportation planning exercise since 2006. As part of this effort, the Commission will analyze projected impacts and benefits expected to result from the plan on minority and low-income populations as they have for past planning efforts. SEWERPC’s most recent analysis was prepared as Appendix H to the 2006 regional transportation plan (RTP). Since 2006, when that document was written, substantial advances have been achieved in identifying and addressing disproportionately high and adverse effects on minority populations and low-income populations during the transportation planning process.¹ The purpose of this memorandum is to describe potential opportunities to advance the 2006 work that could be incorporated into Vision 2050’s equity analysis. The discussion below addresses three areas covered in Appendix H – roadway proximity, automobile accessibility, and transit accessibility – and some additional considerations regarding overall approaches to equity analysis.

Roadway proximity and demographics

The 2006 analysis of roadway proximity and demographics concludes that minority and low-income populations are not over-represented proximate to roads. However, the analysis mixes both absolute counts of population with census block proportions, leading to counterintuitive conclusions. For example, comparing the proportion of census blocks with above average regional concentration of minorities proximate to highways proposed to be widened with the proportion of census blocks with above average regional concentration of minorities is not appropriate (see p. 548). Many census blocks have zero population, so the proportion proximate to highways may be artificially low. The population of census blocks also varies widely, unlike tracts, so adding total numbers of blocks is not likely to reflect overall exposure of individuals. Additionally, the correct comparison from an equity standpoint is between groups: are people of color more likely to be more exposed than non-Hispanic whites? If so, is the exposure disproportionately high? Examining the overall demographics of the near-road population by tabulating census totals within buffers for racial groups would provide this information.²

Automobile accessibility

Appendix H contains an analysis of highway accessibility comparing the 2005 base year to the 2035 forecast year (p. 567). It states that,

¹ For example, see Alex Karner and Deb Niemeier, “Civil Rights Guidance and Equity Analysis Methods for Regional Transportation Plans: A Critical Review of Literature and Practice,” *Journal of Transport Geography* 33(2013); Karel Martens, Aaron Golub, and Glenn Robinson, “A Justice-Theoretic Approach to the Distribution of Transportation Benefits: Implications for Transportation Planning Practice in the United States,” *Transportation Research Part A: Policy and Practice* 46, no. 4 (2012).

² Staff undertook this analysis earlier in Appendix H, and found that at the regional level, minority populations tended to reside in closer proximity to roads than non-minority populations. Because there was no “disproportionately high” standard set in advance of the analysis, staff was able to conclude that the impacts were not significant.

without providing additional arterial street and highway system capacity, the accessibility to employment opportunities may be expected to decline significantly, including with respect to central Milwaukee County and other urbanized areas of the Region including minority and low income population areas. (p. 567)

Accessibilities are calculated for all jobs (presumably during the peak period). This metric is not necessarily relevant to the needs of low-income and minority residents of the SEWRPC region. Changes in accessibility should be assessed for particular neighborhoods or populations of concern, for actual destinations of importance (low-wage jobs, grocery stores, medical facilities, etc.), for different times of day. These results would indicate whether future accessibility changes are disproportionately borne by people of color and low-income populations.

Transit accessibility

The analysis of transit accessibility in Appendix H relies on several components: visual inspection of maps that delineate the location of transit routes, activity locations, and demographic concentrations (Maps H-29 – H-37), visual inspection of maps that delineate the location of transit routes and essential destinations as well as travel time thresholds (Maps H-40 – H-46), and maps that indicate the accessibility to all jobs by transit (Maps H-38 – H-39). These maps are provided for the base and forecast years. It is very difficult to inspect the maps and draw conclusions about how well the current network is functioning or to what degree the future network represents an improvement. Specifically, the following statement is impossible to verify,

The preliminary recommended transit plan provides substantially better accessibility during peak and midday periods for central Milwaukee County residents, including minority and low-income populations, than does the existing system. (p. 588)

Maps H-38 and H-39 summarize transit accessibility to *all jobs* during the peak period. And although the areas of improved accessibility coincide with areas of high minority population, this does not mean that accessibility has increased for those populations. In order for access to increase, transit needs to connect residential locations with destinations that matter, including jobs well-matched to the skill level of residents at convenient times of day and within reasonable travel times. “All jobs” and the peak period are likely to be poor proxies for destinations that matter to low-income and minority populations.

Additionally, regional transit operators have been experiencing reductions in their operating budgets and concomitant reductions in service.³ In order to realistically propose expansions in transit service, as the RTP does,⁴ problems with funding need to be explicitly addressed in the plan and equity analysis.⁵ The MPO’s regional coordinating role can be used here to articulate a powerful regional vision for improvements in transit service.

Overall approaches to equity

The analyses included in 2006’s Appendix H embody a particular approach to equity. Accessibility changes for total jobs are examined in the aggregate, for a base year and for the forecast year, by automobile and transit. Because accessibility is projected to increase and

³ Peggy Schulz, “More Cuts for County Transit,” *Milwaukee Journal Sentinel*, 9 October 2010; Larry Sandler, “Transit Cuts Put Jobs out of Reach of Workers without Cars,” *Milwaukee Journal Sentinel*, 25 September 2011.

⁴ As stated in the RTP, “Rapid transit service would be significantly expanded from a largely peak-period, peak direction, weekday service to an all day and evening, bi-direction, weekday and weekend service. The proposed express and local transit service would also be expanded to all day and evening, bi direction, weekday and weekend service” (p. 588).

⁵ This approach was used to define the “fiscally constrained” alternative for the 2035 RTP Review and Update.

because the increases cover geographic areas populated by high concentrations of minority and low-income individuals, the report concludes that the plan is equitable. However, this conclusion is far from certain, as the proposed additional analyses above indicate. Additionally, because of differences in the demographics of transit and automobile users, it is important to assess modal equity by directly comparing automobile and transit levels of service. This comparison should determine whether projected declines in transit service constitute a disproportionately high and adverse effect on people of color vis-à-vis projected changes in automobile levels of service. If such an effect is found, it must be avoided or mitigated.

Finally, in order to actually inform planning and programming decisions, equity analyses must feed back to the planning process. This feedback requires a normative discussion about the levels of transit access that are desirable for each area and for particular demographic groups. Should each neighborhood be able to access a grocery store or a park within a 15 minute transit or non-motorized trip? How many low-wage jobs should be accessible by transit from low-income neighborhoods? How far are existing conditions from those standards and how will the plan move the region closer to it? These are the key questions that must be addressed during public participation processes and that must be quantified during the analysis.