

National Accessibility Evaluation Task Report

Task 4.1: Prepare Accessibility Reports

Prepared by the Accessibility Observatory at the
University of Minnesota

May 12, 2017



**ACCESSIBILITY
OBSERVATORY**

UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

1 Task Objectives

The goal of this task is to prepare national and partner reports that summarize the accessibility data produced in Task 3.1. The national reports will focus on the top 50 U.S. metropolitan areas (by population), providing maps, summary statistics, and rankings for each. These reports will be published by the University of Minnesota's Center for Transportation Studies and publicized nationally.

The partner reports will provide maps and summary statistics for each partner's jurisdiction, as well as for appropriate subordinate jurisdictions (such as counties and metropolitan areas). These reports will be delivered electronically to each partner.

2 Task Status

This task is complete. Links to the task deliverables are provided in Section 3.

3 Deliverables

3.1 National Reports

The following links provide access to the national reports:

- Auto: <https://s3.amazonaws.com/ao-nae-reports-2015/AccessAcrossAmerica-Auto2015.pdf>
- Transit: <https://s3.amazonaws.com/ao-nae-reports-2015/AccessAcrossAmerica-Transit2015.pdf>

The national reports are also published on the project web site (<http://access.un.edu/research/america/index.html>).

3.2 Partner Reports

The following link provides access to the reports for each project partner:

https://netfiles.umn.edu/xythoswfs/webui/_xy-e18129632_1-t_x9AwlMv9

4 Draft Report Feedback and Responses

Partner organizations received draft versions of the partner reports in order to solicit feedback to improve the final version of the reports. Feedback items and their responses are summarized below.

1. Clarify what date ranges contribute to speeds and how they are aggregated.

The methodology section was update to describe this more clearly.

2. Provide comparisons of accessibility for different days, months, etc.

TomTom's Speed Profile dataset breaks down speeds by day of week and hour of day, but not by months or weeks. Comparisons across days of the week are possible, but would add significant computation time. This can be discussed with the TAP as a possible enhancement.

3. Improve labeling on congestion impact maps to clarify what is represented

Map labels have been updated to reference congestion first and then explain the job change metric more clearly.

4. Consider removing positive change colors in congestion impact maps

The map legend was updated to only include negative change colors.

5. In future updates, include summary data for commute duration (from ACS) for counties, MPOs

This is a fairly straightforward enhancement that can be considered for future updates.

6. In future updates, include data on access to airports, seaports, rail stations

This is feasible but requires some additional consideration and decisions on data sources as well as how to calculate and represent such metrics. This should be discussed with the TAP.

7. In future updates, include pedestrian and bicycle maps/data

This enhancement is already planned for future years.

8. Summarize transit considerations like walk access, transfers, etc. in the report

The methodology section was expanded to include these items.

9. Consider mapping travel time thresholds longer than 30 minutes for transit

The current set of maps is designed for comparability across modes, though this may be useful. Additional maps could be provided as addenda or in separate files. This can be considered as an enhancement for future updates.

10. Provide maps/summaries for urbanized areas (UZAs) which contain multiple MPOs

This is fairly straightforward but will require some new data collection and tracking. It can

be considered as an enhancement for future updates.

11. Include UZA boundaries on maps

We have not incorporated UZA boundary data into our input datasets, but this is a fairly straightforward change that can be considered for future updates.

12. Include scale on maps

We are looking into this but there are some technical challenges — each map is a distinct scale to best match the boundaries of its subject state/MPO/CBSA, and we do not yet have a way to render accurate custom scales for each map. We will continue investigating how this could be accomplished.

13. Change choropleth scales to match map contents (most metro areas don't get into highest categories/colors)

Feedback in other contexts has cited consistent legend/scales across maps to be a strong benefit for comparability, and there is some effort saved by not having to make different legends for different maps. We should discuss this further.

14. Use “uncongested” rather than “free-flow” when discussing congestion impact calculations

The reports were updated to use “uncongested.”