

Where can station accessibility improvements have the greatest impact for wheelchair users? View data showing destinations reachable via rail by wheelchair users as compared to all users.

Goal

The goal of the wheelchair accessibility analysis was to allow for the prioritization of wheelchair accessibility improvements at rail stations in places that would improve transit connectivity for wheelchair users and persons with mobility assistance needs.

Data Sources and Preparation

This analysis relied on DVRPC's regional travel model, TIM 2.3. Additionally, transit agencies provided information about which rail stations are currently wheelchair (as of 2018) accessible and which are programmed for wheelchair accessibility improvements in the future.

Methodology

The transit accessibility analysis sought to highlight places with the greatest disparity between what wheelchair users and all other users can access via transit. TIM 2.3 was used to calculate the ride time between zones throughout the region. Analysts identified which zones were reachable via rail within 60 minutes during the morning peak hour from each zone in the region. The number of jobs and essential services in the reachable zones were then aggregated to determine the number of destinations reachable via rail from each zone. Essential services include parks/trails, activity centers, grocery stores, healthcare facilities, and schools/universities. The locations of these services are from a variety of sources including Co-Star, NETS, HRSA, DVRPC, and NCES.

Several key assumptions were necessary for this analysis. Buses are generally wheelchair accessible. Therefore, buses were excluded, helping to reduce noise and ensure that useful rail results are not lost in the results. Due to data limitations, this is not an analysis of whether or not a wheelchair user can get to a rail station. It is assumed that all passengers are able to get to the station.

The results of this analysis are relative. All inaccessible stations were eliminated together in an attempt to most accurately represent the rail system as experienced by wheelchair users. Therefore, one is not able to determine exactly how many destinations are unreachable due to a single wheelchair inaccessible rail station using these maps.

Results

The results are provided in a series of maps symbolized by TAZ.

- **Destinations Currently Reachable by Non-Wheelchair Users:** This map serve as the baseline. It shows the number of destinations reachable via rail from each zone for passengers that do not need mobility assistance. The darker the color, the more essential service destinations are reachable from that TAZ via rail.
- **Destinations Currently Reachable by Wheelchair Users:** This map shows the destinations reachable by wheelchair users and persons who can only use wheelchair accessible stations. The darker the color, the more essential service destinations are reachable from that TAZ via rail.
- **Current Destination Disparity for Wheelchair Users in Comparison with Non-Wheelchair Users:** This map highlights the differences between the baseline map and the wheelchair accessible map. The darker the color, the greater the disparity for wheelchair users and persons with mobility impairments in comparison with all users.
- **Destinations Reachable in the Future by Wheelchair Users:** This map considers which stations are programmed for wheelchair accessibility and mobility assistance improvements or have improvements in progress. It includes stations that are currently accessible and those that are programmed for improvement. Again, the darker the color, the more essential service destinations are reachable via rail from that zone.
- **Remaining Future Destination Disparity for Wheelchair Users in Comparison with Non-wheelchair Users (Programmed Improvements Included):** This map compares the previous map to the baseline map. It shows where the disparity remains after the programmed wheelchair accessibility and mobility assistance improvements. These are the places that should be the focus of the next batch of wheelchair accessibility and mobility assistance improvements at rail stations.