Mobility Needs Index

- There is no generally accepted, low-cost methodology for accurately measuring the mobility needs in a community. Often communities rely on community surveys, focus groups, or similar methods.

- Previous research developed in North Dakota created a Mobility Needs Index to identify counties with the greatest need for transit services. Subsequent studies added zip codes.

- This methodology was an attempt to measure needs associated with identifiable demographic groups and did not suggest that all related transit needs are unmet.

- In fact, many areas may have systems and services in place that satisfy many residents’ mobility needs.
Factors

The factors deemed important for determining mobility needs were:

- Total population,
- Population aged 65 or older,
- Population with a disability,
- Population below the poverty line, and
- Households without access to a vehicle.

Index values were calculated at both the county level and zip code level.
Methodology

• First, population densities were calculated for each of the five factors.

• Second, the geographic areas were ranked from highest population densities to lowest population densities and grouped into five equally sized classes, using quintile values, for each of the five factors.

• Geographic areas in the lowest 20% were given a value equal to 1, the next 20% were given a value equal to 2, and so on, while the highest 20% were given a value of 5.

• In the last step, the five values were averaged for each geographic area to produce its Mobility Needs Index. The indices for counties and zip codes were then ranked, with higher values identifying areas with greater mobility needs.
Population per Square Mile for Zip Codes: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Population per Square Mile for Zip Codes: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Population Aged 65 Years or Older per Square Mile: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Population with a Disability as a Percent of Total Population: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Households with no Vehicle Available as a Percent of Total Households: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Population Below Poverty per Square Mile: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Population Aged 65 Years or Older per Square Mile for Zip Codes: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Population with a Disability per Square Mile for Zip Codes:
2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Average Quintile Ranking for Mobility Needs Index for Zip Codes: 2010-2014

Source: U.S. Census Bureau, 2010-2014 American Community Survey
Prepared by: UNO Center for Public Affairs Research, July 2016
Conclusion

- This index is an attempt to measure concentrations of mobility needs that can be updated on a regular basis.
- It is not a complete measure of unmet needs.
- Comparing these calculated indices with the actual level of transit services in each county, zip code, or community may provide information on where there is a potential for unmet need for service.
- In Douglas, Lancaster, and Sarpy Counties, this same methodology also could be applied to census tracts to measure concentrations of mobility needs.
Areas with Available Transit in Nebraska