

Elderly & Handicapped Transportation in 2030

Part I

Improving Elderly Transportation using the NHTS

A Step in the Development of the 2030 Regional Transportation Plan

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Presented to MPO

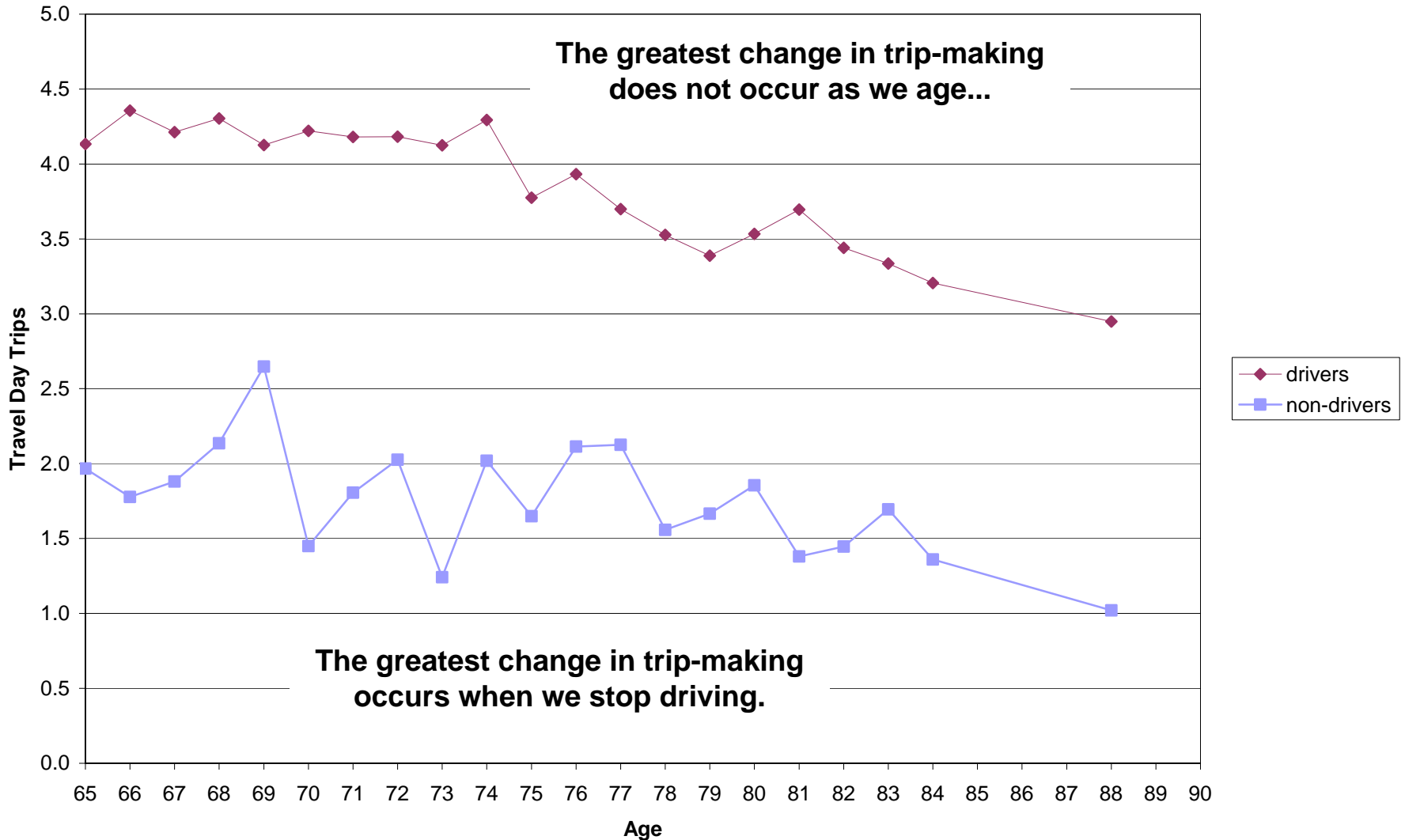
July 20, 2005



Purpose of Part I

- To determine ways to improve the mobility of Hampton Roads' elderly population in the year 2030, using the National Household Travel Survey (NHTS).
 - Is there a problem in elderly transportation?
 - If so, what can be done?

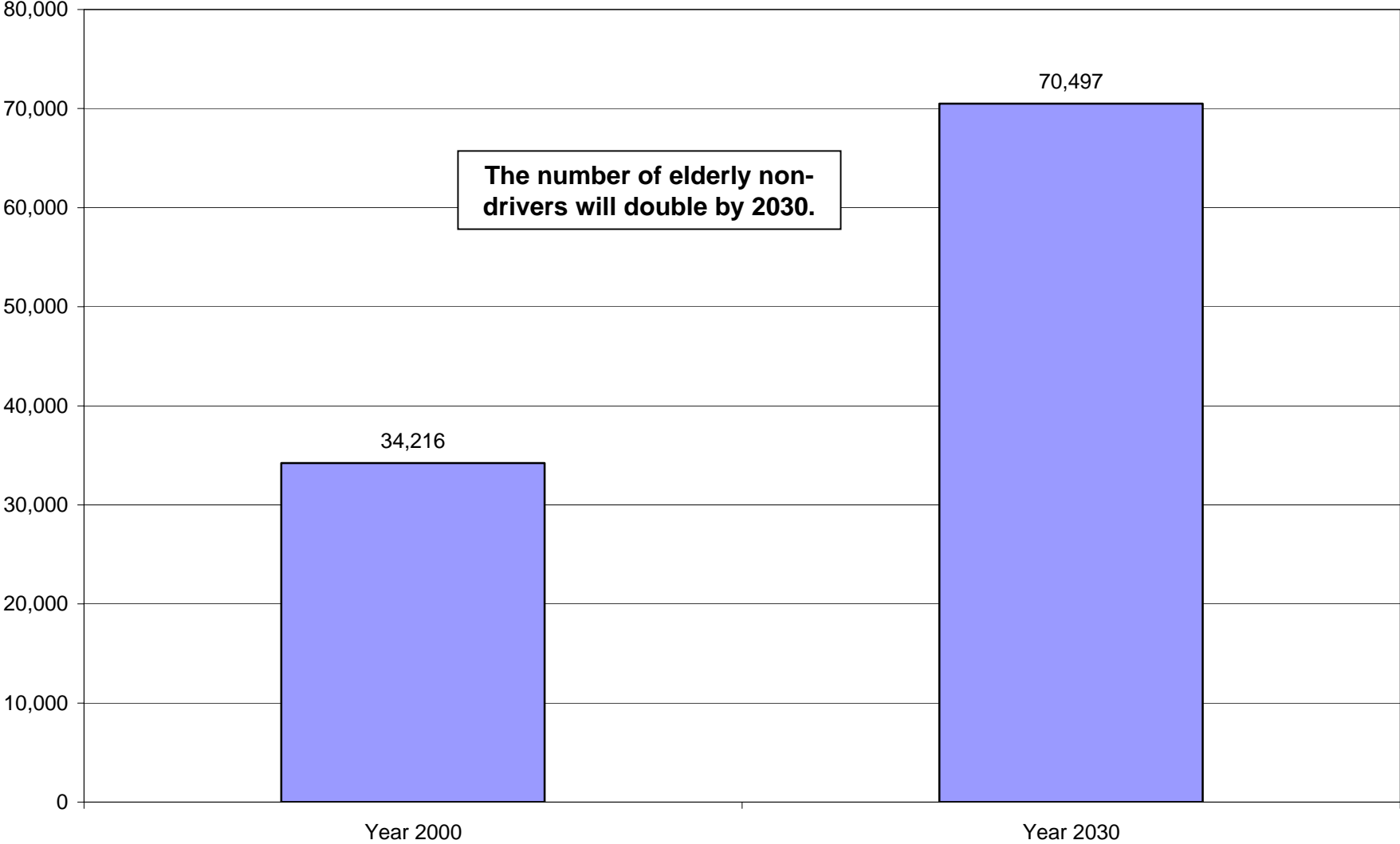
Trips per Day, 65+, NHTS, National Sample, 2001



Expected Increase in Elderly

- In 2000, 10% of Hampton Roads' population was 65 and older.
- In 2030, 19% of Hampton Roads' population will be 65 and older, *resembling regions of Florida today demographically.*

Non-drivers 65+, Hampton Roads



Research Methodology

- Quantification of improvements to elderly non-driver mobility was not found in existing research.
- Therefore, original research was conducted for this HRPDC study using data from the National Household Travel Survey (NHTS).
 - The 2001 NHTS covered 66,000 households across the U.S.

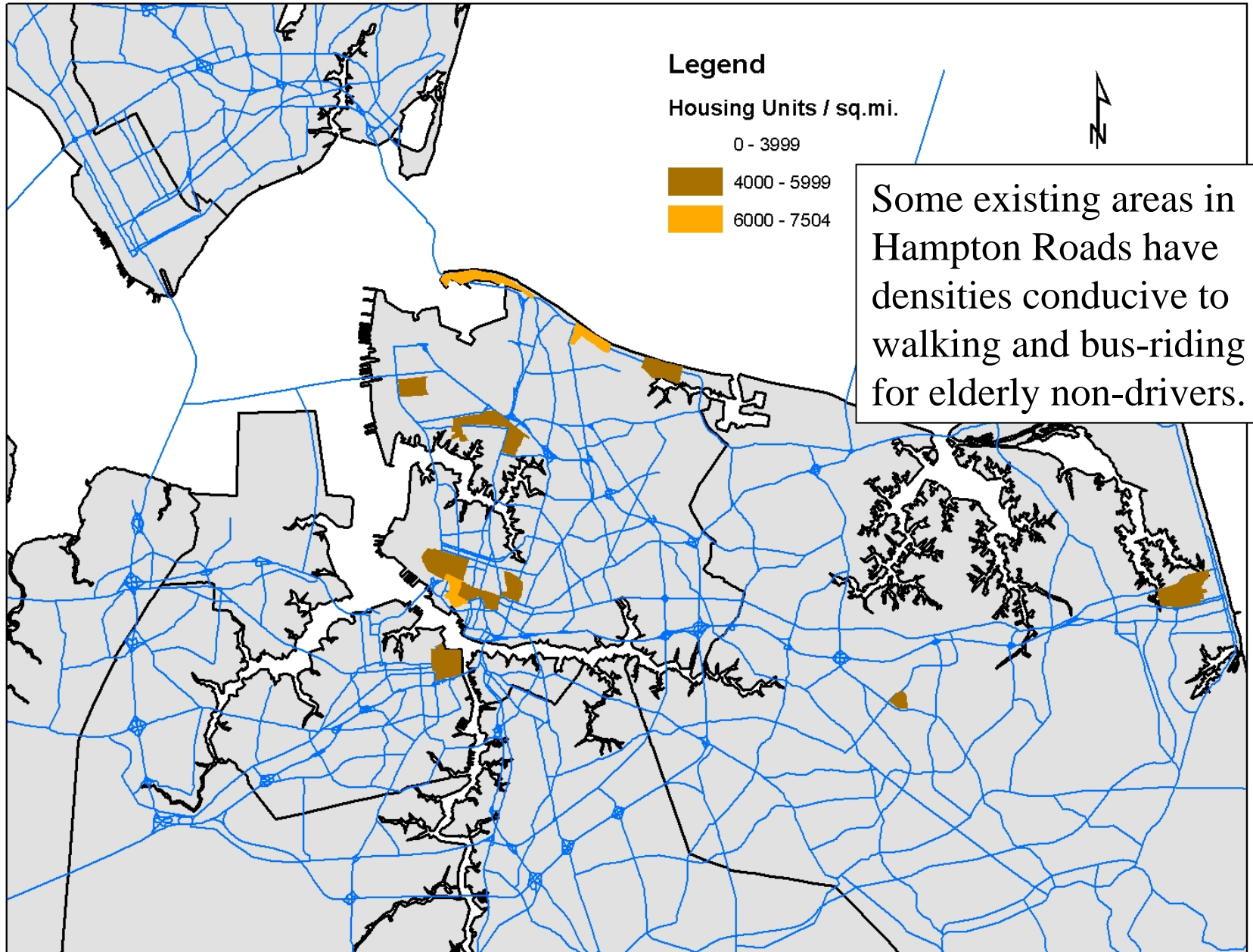
Residential Density

- Using regression techniques, 12 variables were found to be significantly related to the trip-making of the elderly non-drivers surveyed (4,000+).
- Of these 12 variables, the one over which local government has some control is **“Residential Density”**.

Threshold Densities

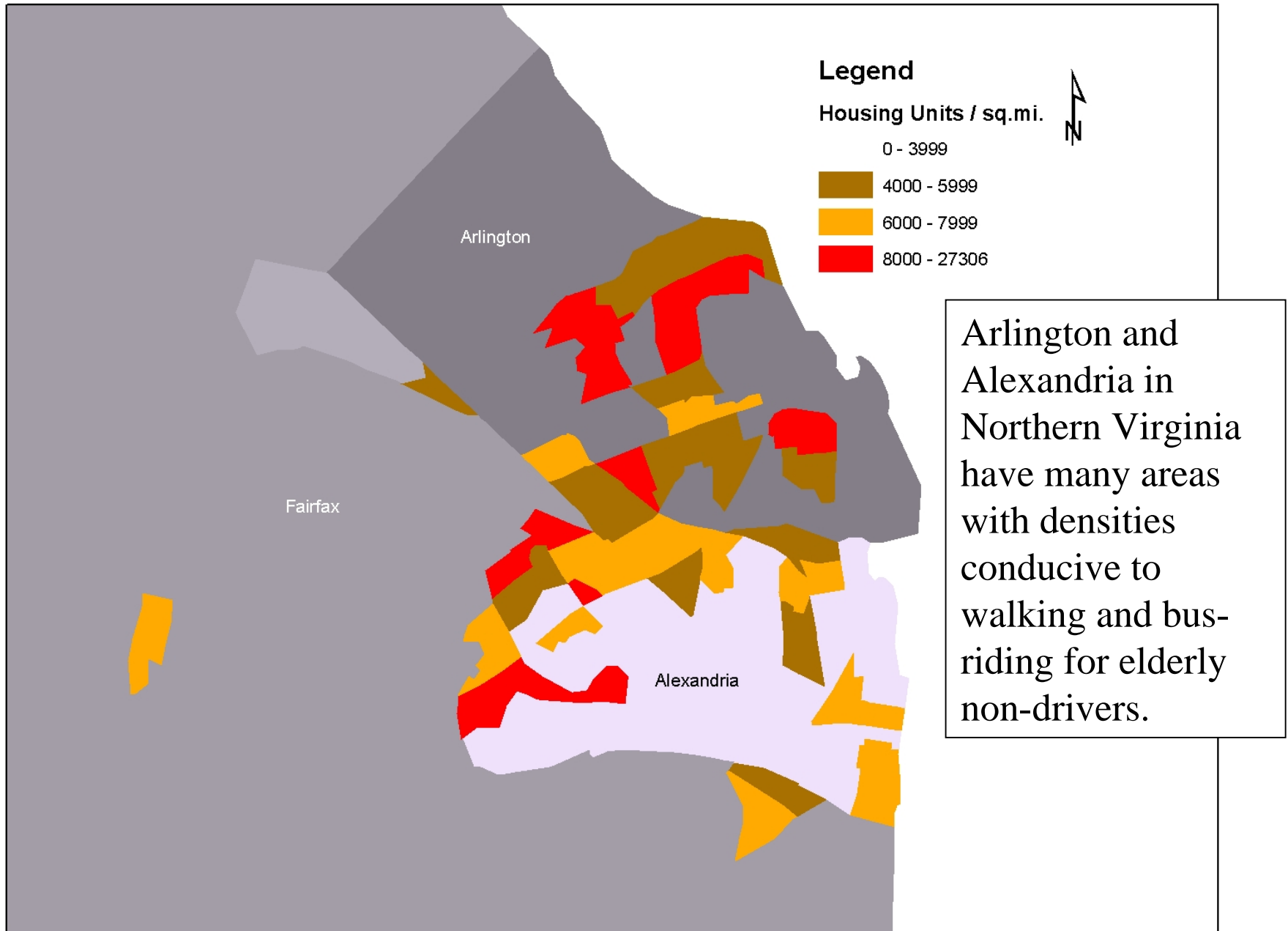
- For the elderly non-driver
 - above 4,000 housing units per sq.mi., **bus-riding** increases
 - above 6,000 housing units per sq.mi., **walking** increases
 - above 8,000 housing units per sq.mi., **total mobility** greatly increases

Housing Density, census tract, 2000

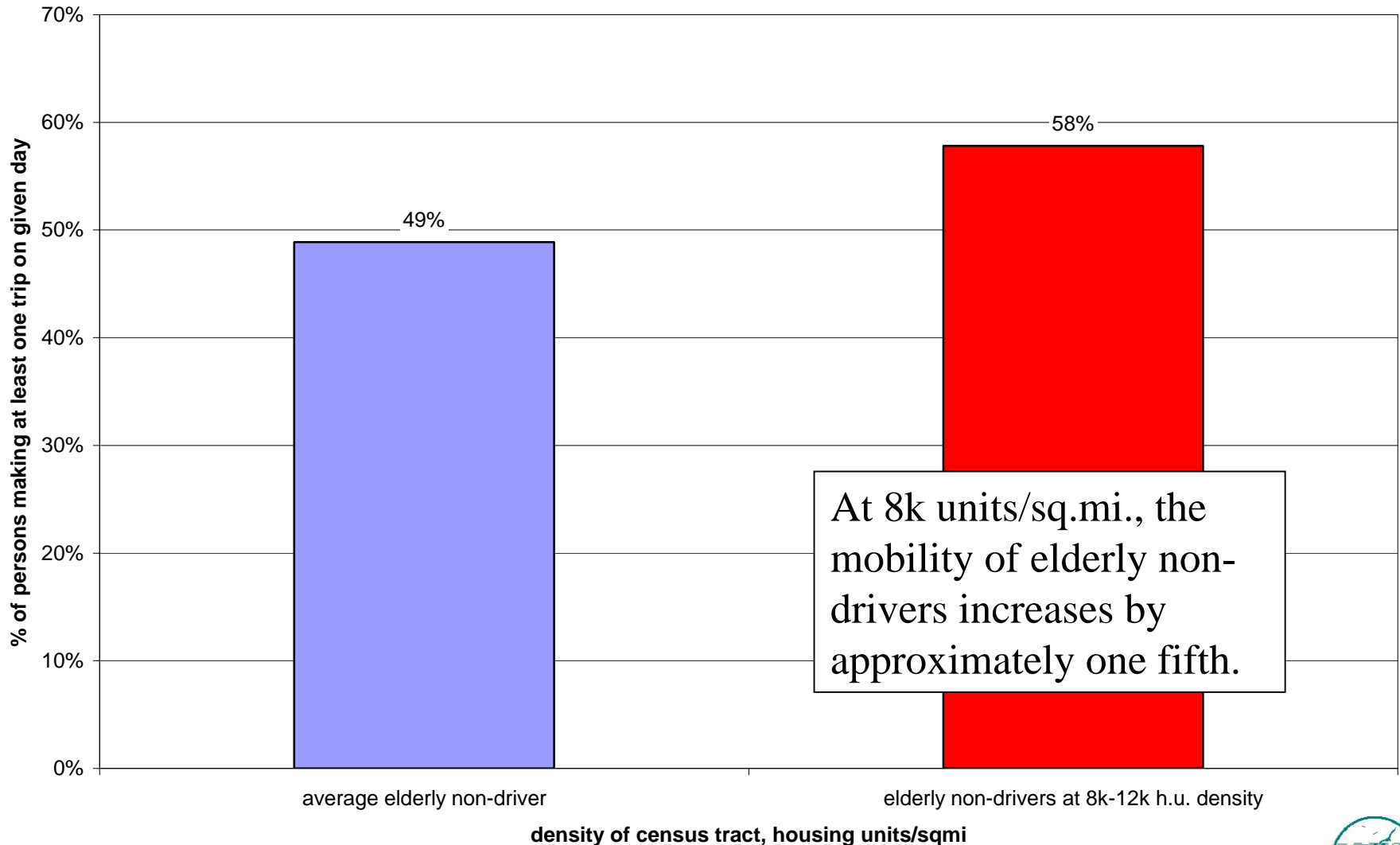


Some existing areas in Hampton Roads have densities conducive to walking and bus-riding for elderly non-drivers.

Housing Density, census tract, 2000



Density and Increased Mobility (U.S.)

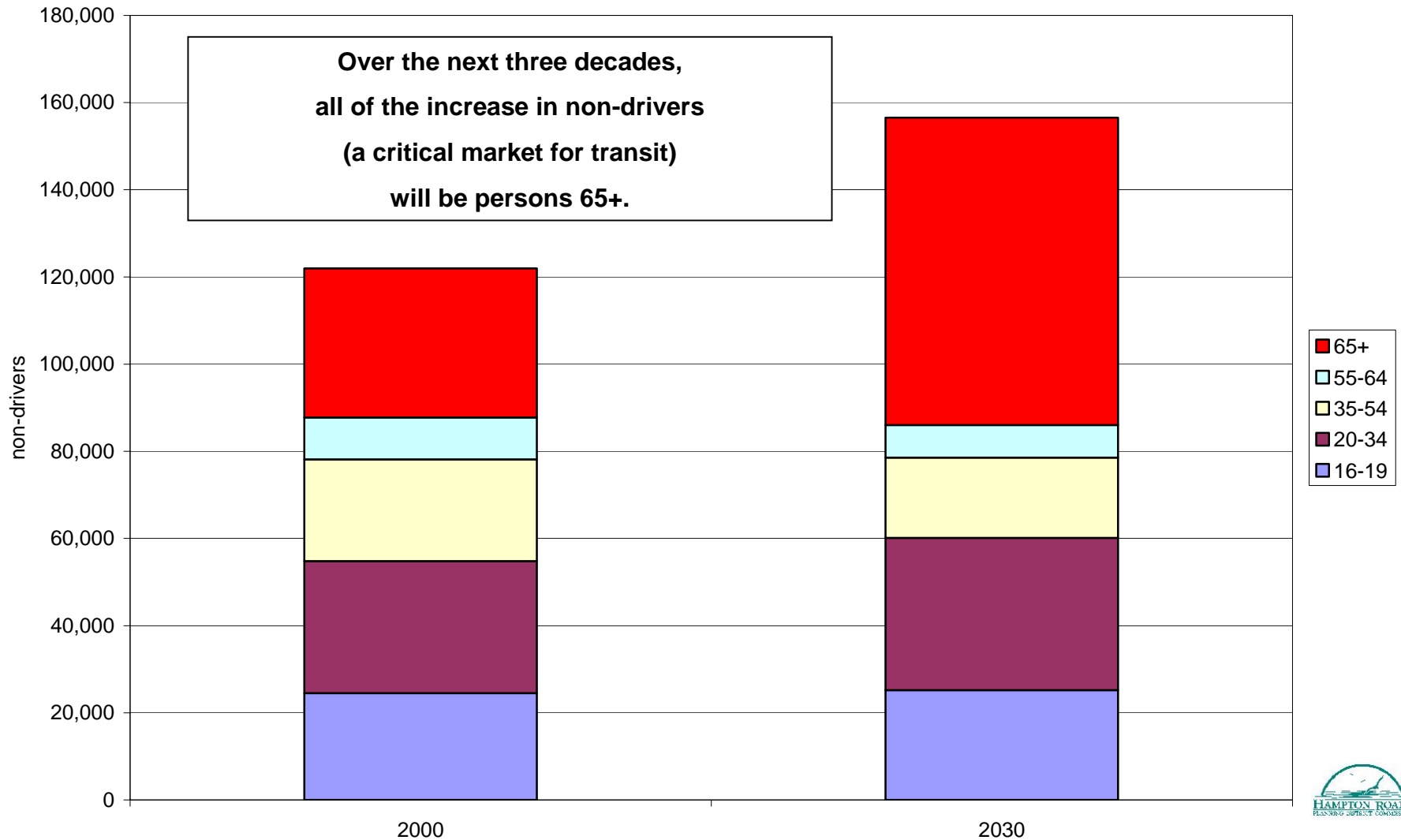


What can be done to increase mobility?

- Local government can align infrastructure and services with land use
 - Local government can ensure that adequate portions of their localities are zoned for higher densities
 - particularly areas conducive to walking and having existing or planned high levels of transit service.
 - Local government can improve pedestrian facilities (sidewalks, signal timing) and public transportation (frequency, speed, and options)
 - focusing on dense areas where walking and transit work best.
- Individuals can move to denser areas
 - For example, the downtown areas of Norfolk, Newport News, Portsmouth, and Hampton are dense and well-served by transit.

Adjusting Public Transit to Serve Elderly

Non-Drivers, Hampton Roads



Adjusting Public Transit to Serve Elderly

- Higher frequency in middle of day
- Routes designed to serve origins and destinations of elderly
- Marketing to the elderly
- Vehicles designed for the elderly
- Drivers providing assistance

Summary

- Is there a problem?
 - Yes- the elderly are more likely to be non-drivers, and non-drivers travel half as much as drivers.
- What can be done to increase the mobility of elderly non-drivers?
 - Local governments can improve pedestrian facilities and transit service,
 - focusing on dense areas.
 - Local governments can ensure that adequate portions of their localities are zoned for higher densities,
 - particularly areas conducive to walking and having existing or planned high levels of transit service.
 - Local governments can adjust transit service to accommodate the elderly.
 - time of day, drivers, route design, vehicle design, marketing

Next Steps

- HRPDC was awarded \$150,000 grant from VDOT for FY05
 1. Improving Mobility of *Handicapped* using NHTS
 2. Survey and analysis of local elderly and/or handicapped.
 3. Gaps analysis for local neighborhoods