



Mobility of Older Adults and People with Disabilities in North Dakota

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Overview

North Dakota surveys

- AARP survey
- Survey of people with disabilities

Impact of age, disability, and geography on mobility and transportation problems.

Transportation as a limiting factor for making trips.

AARP Survey

North Dakota AARP members surveyed

- Fall 2008
- Mailed to 2,000 members
- 1,042 responses received (52% response rate)
 - Age range: 50-97
 - Median age: 66
 - 17% identified themselves as having a disability or being homebound
 - Respondents distributed evenly throughout the state
- Includes section on transportation, as well as health care and economic security.

Do you currently drive?

| | Yes (%) | No (%) |
|-----------------------------------|--------------------|-------------------|
| Total | 96 | 4 |
| People with a physical disability | 89 | 11 |
| Age | | |
| 50-59 | 99 | 1 |
| 60-69 | 98 | 2 |
| 70-79 | 97 | 3 |
| 80+ | 88 | 12 |

Do you avoid driving during any of the following times?

| | Winter (%) | Rain (%) | Dark out (%) |
|---------|-------------------|-----------------|---------------------|
| Total | 14 | 6 | 24 |
| Females | 17 | 8 | 27 |
| Age | | | |
| 50-59 | 8 | 4 | 12 |
| 60-69 | 10 | 3 | 20 |
| 70-79 | 14 | 6 | 27 |
| 80+ | 24 | 15 | 36 |

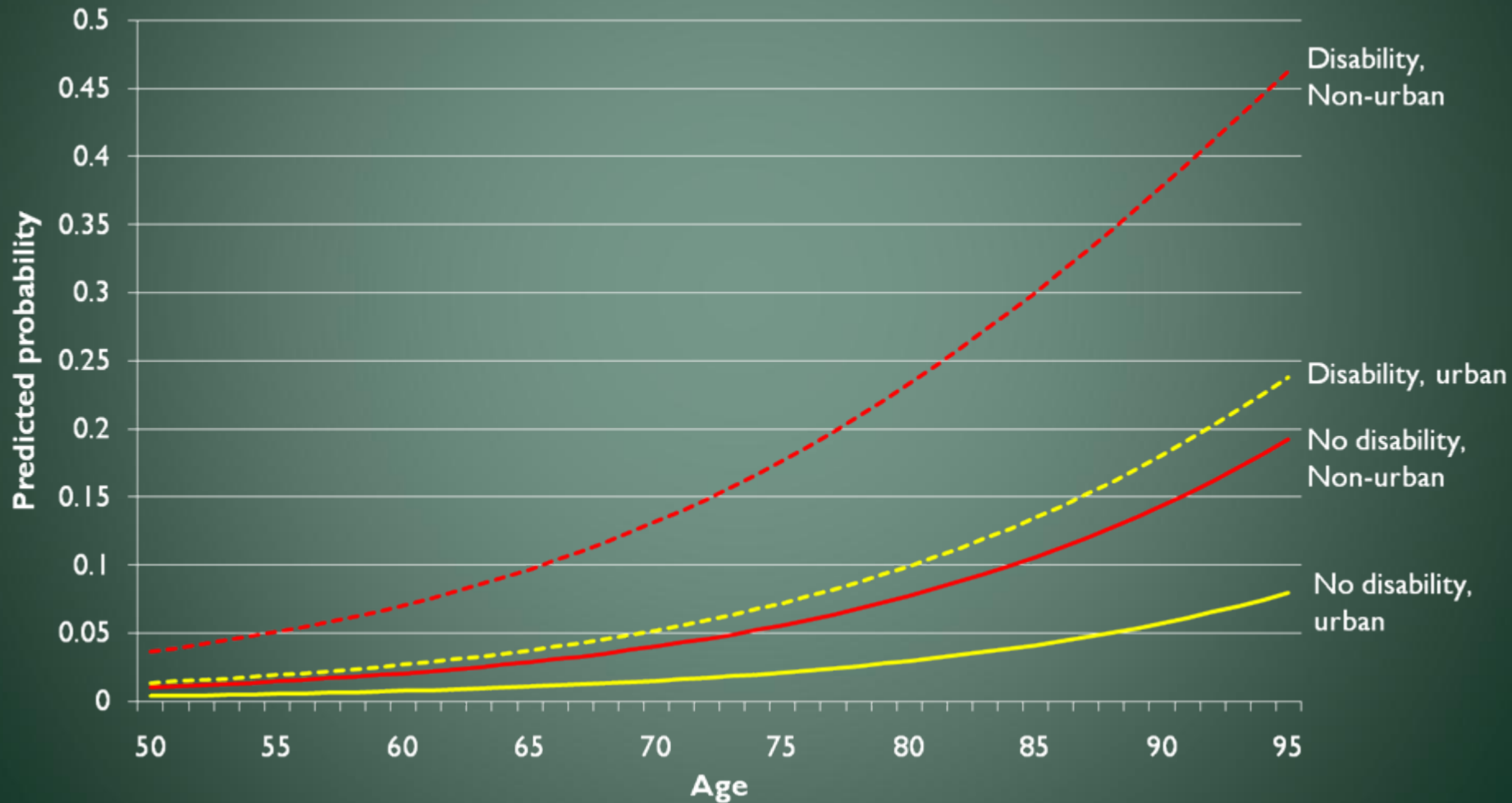
Do you believe there are adequate transportation options for people in your community?

| | | Yes (%) | No (%) | Not sure (%) |
|------------------------------------------|--------------------|----------------|---------------|---------------------|
| Total | | 47 | 22 | 31 |
| People with physical disabilities | | 37 | 28 | 35 |
| Distance from most frequent destinations | | | | |
| | Less than 1 mile | 53 | 17 | 31 |
| | 1-5 miles | 52 | 18 | 31 |
| | 6-10 miles | 41 | 28 | 31 |
| | 11-20 miles | 35 | 30 | 35 |
| | More than 20 miles | 29 | 34 | 37 |
| Urban vs. Rural | | | | |
| | Urban (>50,000) | 52 | 16 | 33 |
| | Small cities | 54 | 20 | 27 |
| | Rural (<5000) | 40 | 29 | 31 |

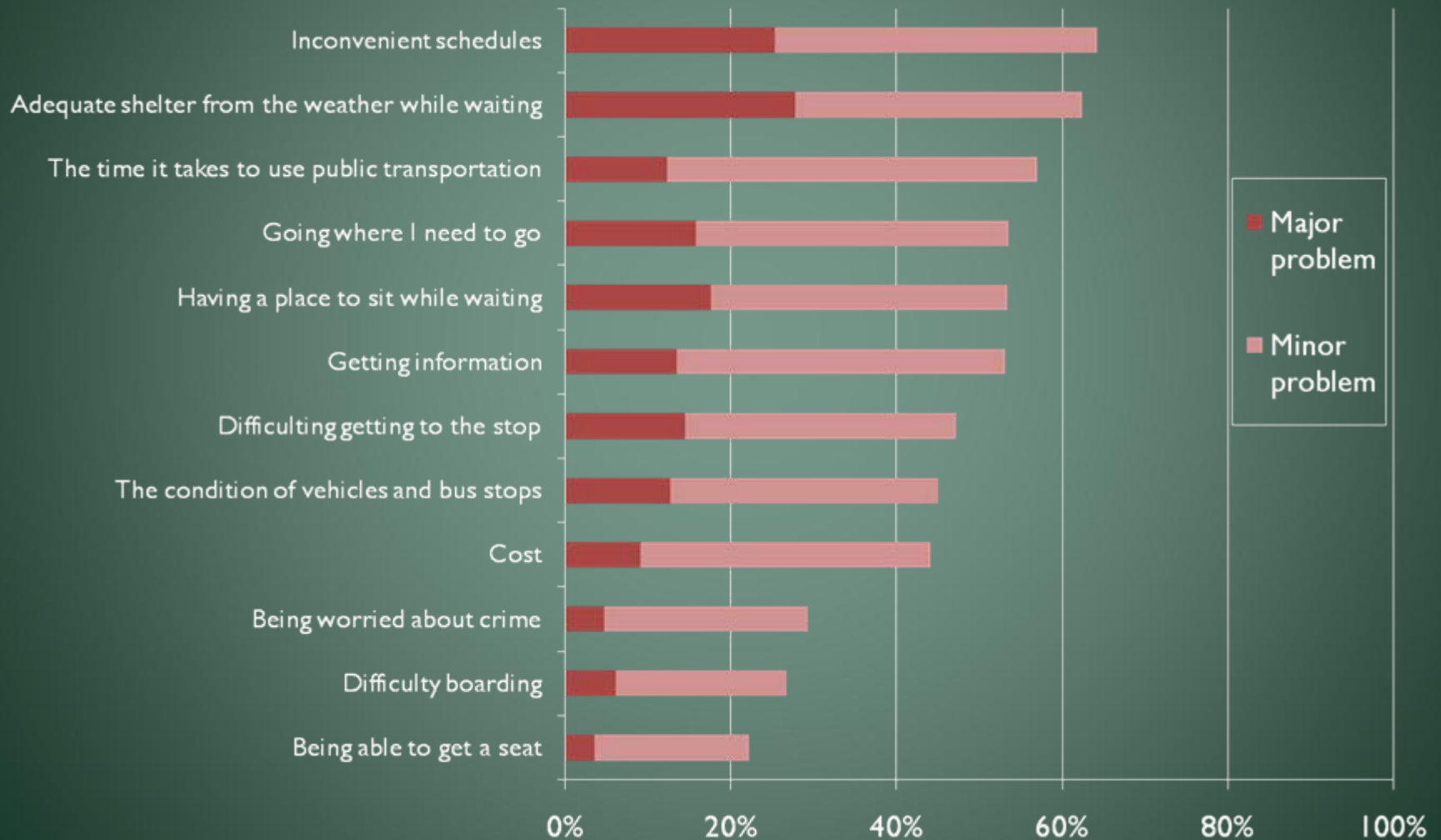
Percentage of respondents who say transportation is a limiting factor

| | | Medical (%) | Shopping (%) | Social (%) |
|--------------------------|-----------------|--------------------|---------------------|-------------------|
| Total | | 4.5 | 2.9 | 5.5 |
| People with disabilities | | 14.3 | 6.5 | 14.9 |
| Age | | | | |
| | 50-59 | 1.6 | 1.2 | 2.9 |
| | 60-69 | 3.2 | 1.8 | 4.6 |
| | 70-79 | 3.8 | 3.4 | 7.7 |
| | 80+ | 14.0 | 7.3 | 9.5 |
| Urban vs. Rural | | | | |
| | Urban (>50,000) | 2.8 | 2.4 | 3.9 |
| | Small cities | 6.4 | 4.5 | 5.6 |
| | Rural (<5,000) | 5.8 | 3.0 | 7.5 |

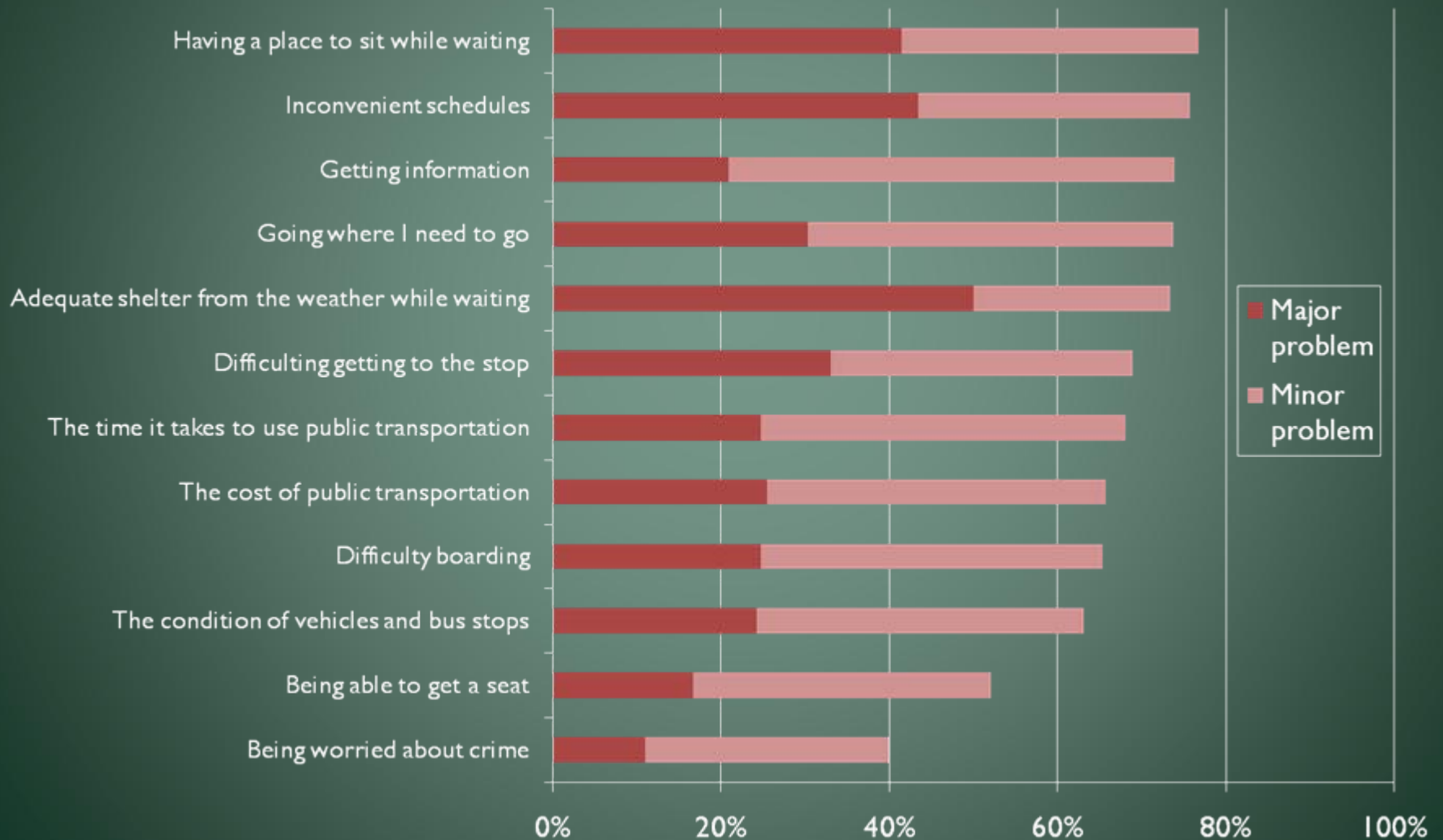
Predicted Probability of Transportation being a Limiting Factor for Medical Trips, by Age, Disability, and Geography



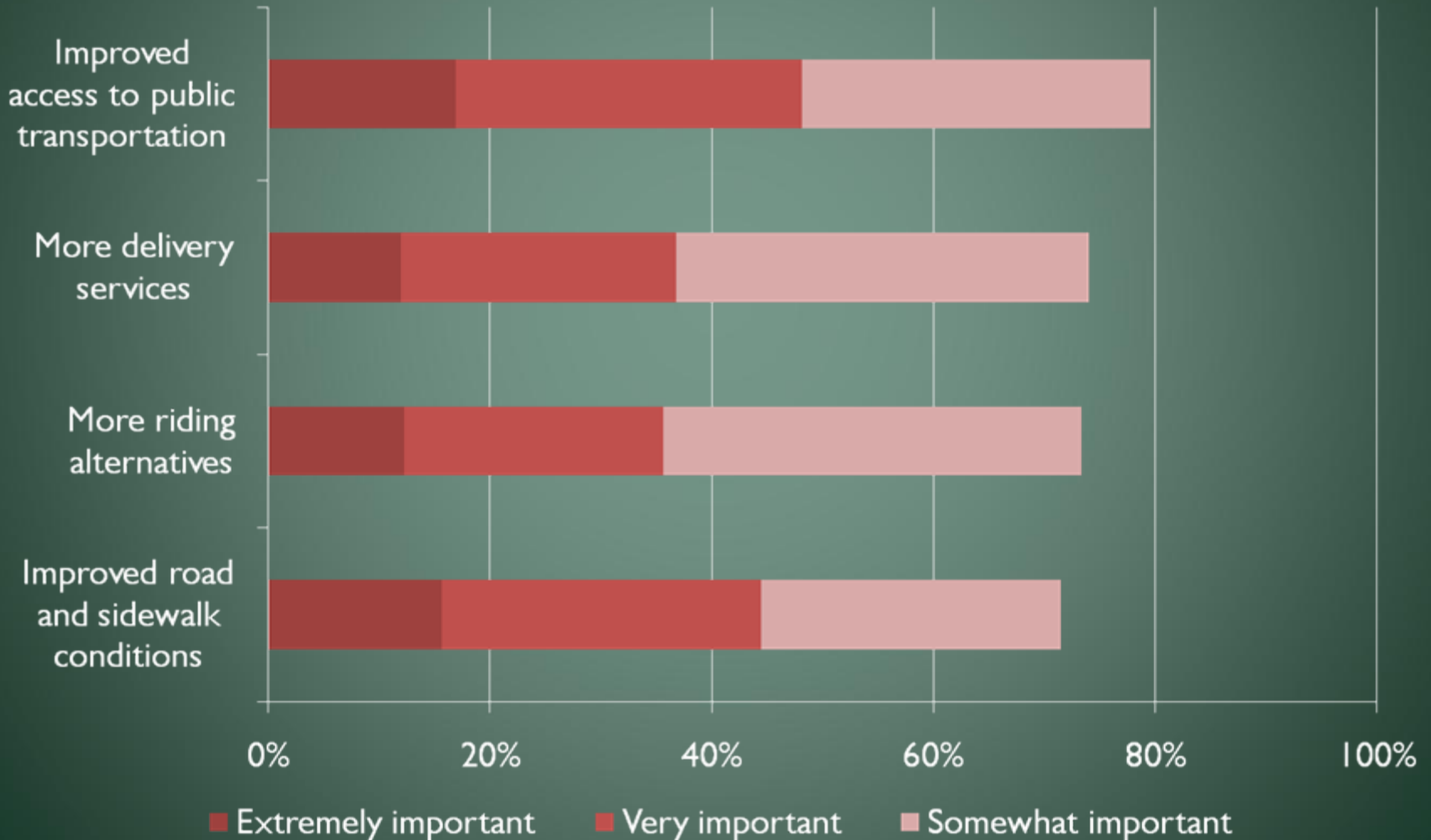
Problems Using Public Transportation



Problems Using Public Transportation for People with Disabilities



Importance of Potential Improvements to Enable Older Adults to Stay in their Neighborhood as they Age



Conclusions from AARP Survey

Gender

- Women less likely to drive than men and more likely to ride with someone else or take transit.

Age

- Significant impact
- Transportation is more likely to be a limiting factor as age increases.
- Older adults are more likely to desire more trips, avoid driving during certain conditions, and use transit.
- Older adults make more medical trips but also more likely to desire more trips than currently making.
- Important issue with aging population.

Conclusions from AARP Survey

Disability

- People with disabilities are:
 - Less likely than others to drive themselves
 - More likely to use transit
 - More likely to desire more trips
 - More likely to say transportation is a limiting factor
 - More likely to report problems with using public transportation
- An aging population could mean an increase in the number of people with disabilities.



Conclusions from AARP Survey

Travel distance

- People who must travel longer distances are less likely than others to believe there are adequate transportation options available.

Urban vs. Rural

- Rural residents are less likely to think they have adequate transportation options.
- Rural residents more likely to say that transportation is a limiting factor.
- Rural population tends to be older.



Survey of People with Disabilities in North Dakota

Conducted by web, mail, and phone,
Dec 2009-Feb 2010

131 surveys received

Characteristics of Respondents

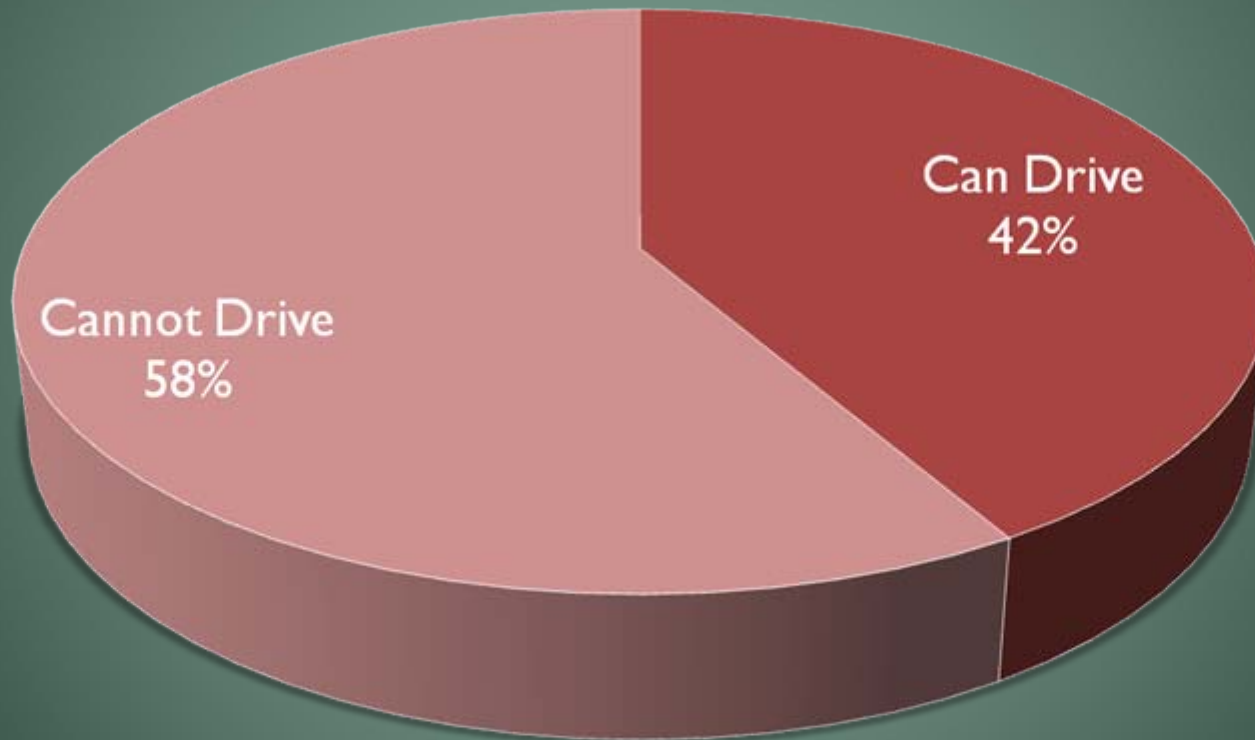
Types of disabilities

- Physical disability: 64 respondents
- Sensory disability: 36 respondents
- Cognitive disability: 29 respondents
- Emotional disability: 22 respondents
- Other: 6 respondents
- Not specified: 31 respondents

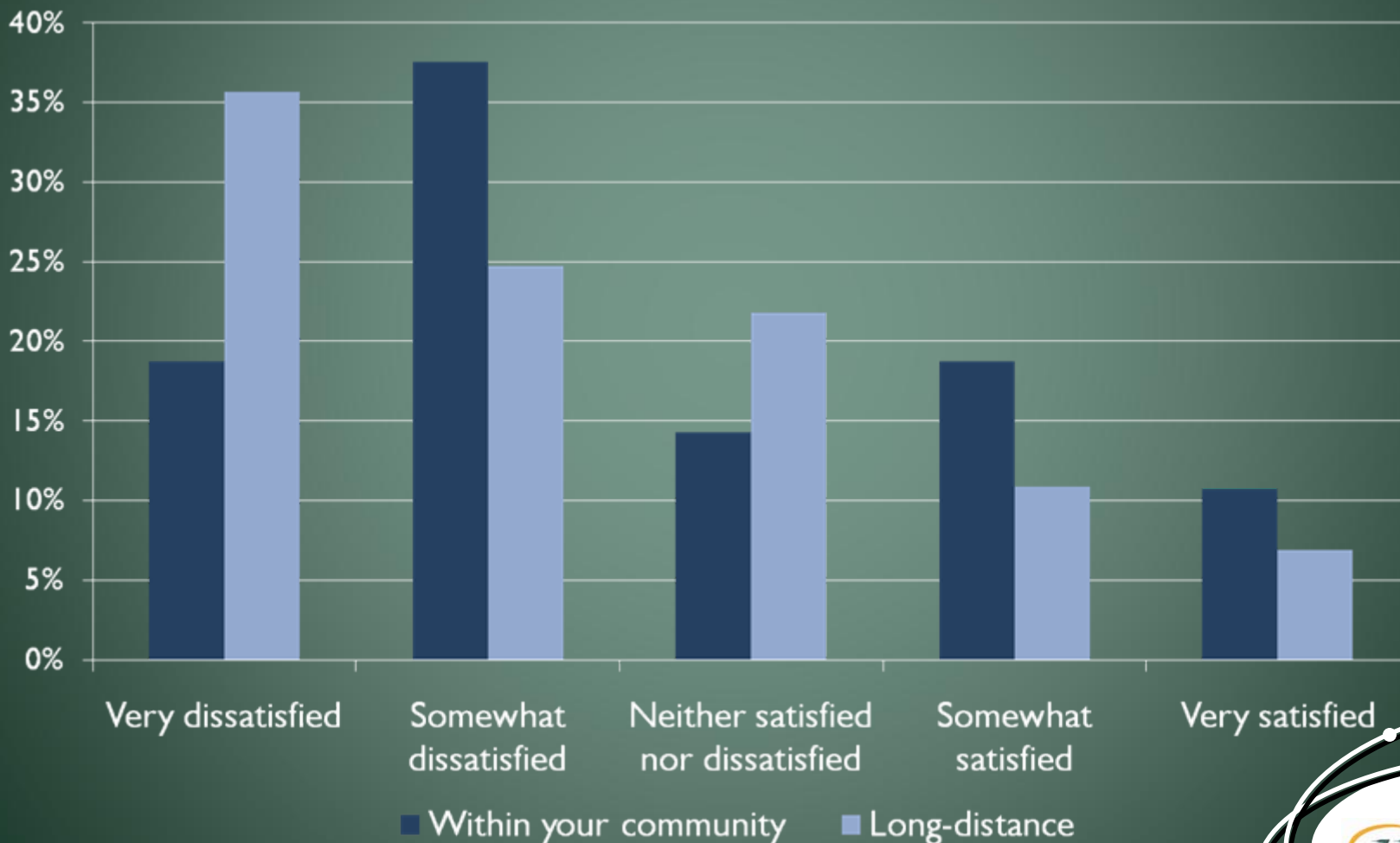
Severity of disabilities

- Mild: 27%
- Moderate: 41%
- Severe: 32%

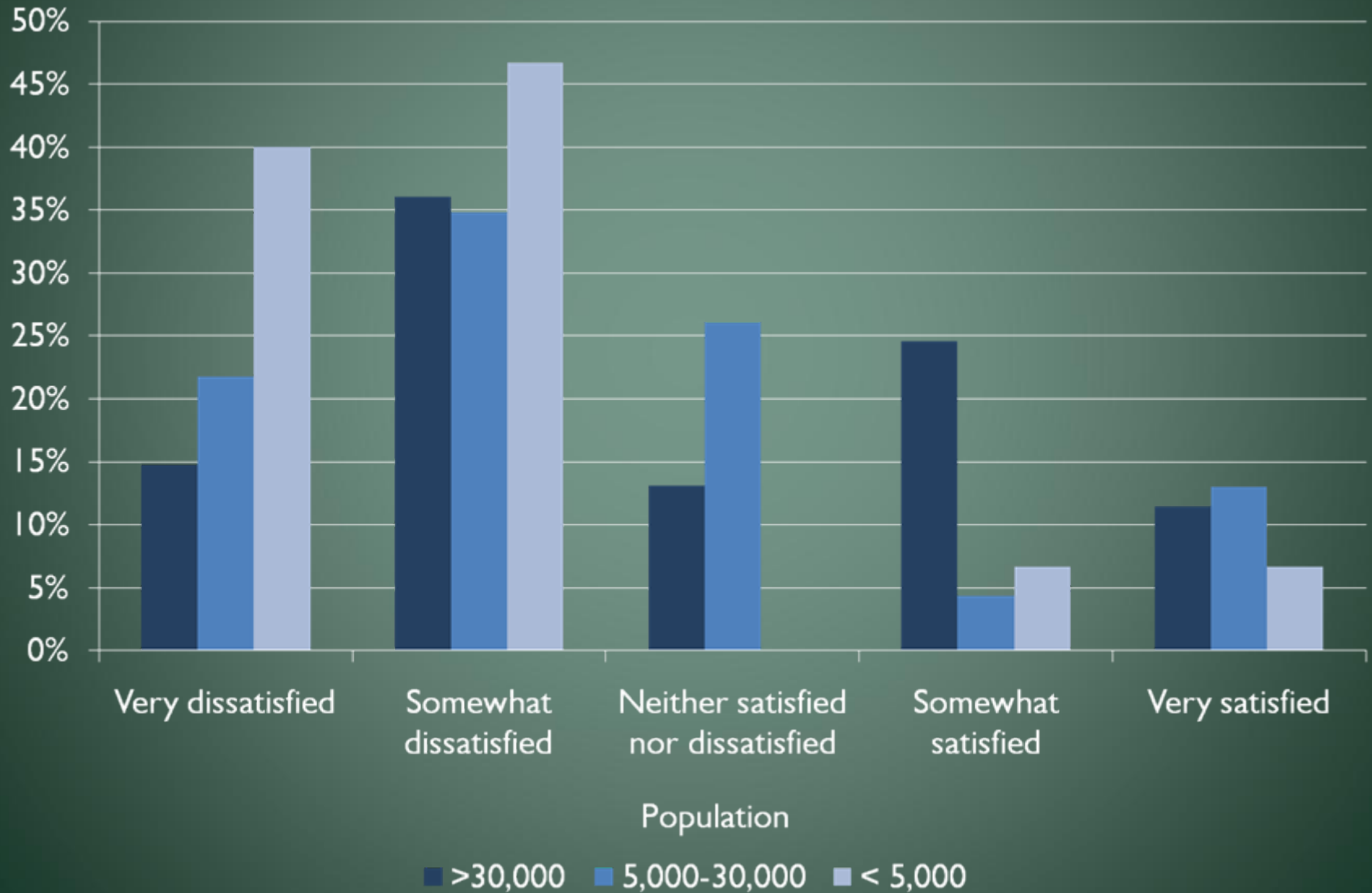
Ability to Operate an Automobile



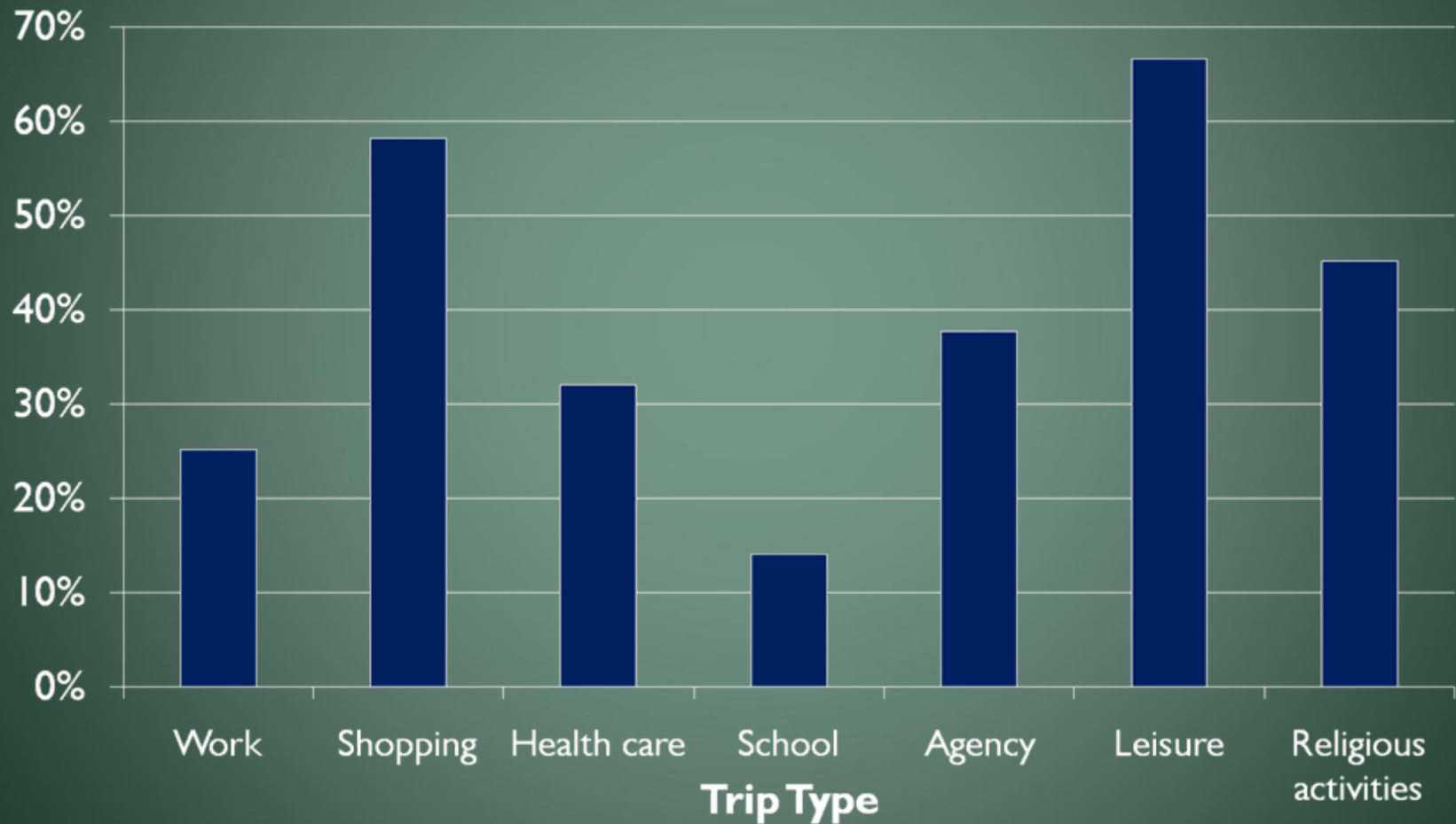
Satisfaction with Transportation Options



Satisfaction with Transportation Options Available in Your Community, by Community Size



Percentage of Respondents who Take Fewer Trips Due to Lack of Transportation



Characteristics Explaining the Likelihood that Fewer Trips are Taken Due to a Lack of Transportation, by Trip Type: Results from Logit Model

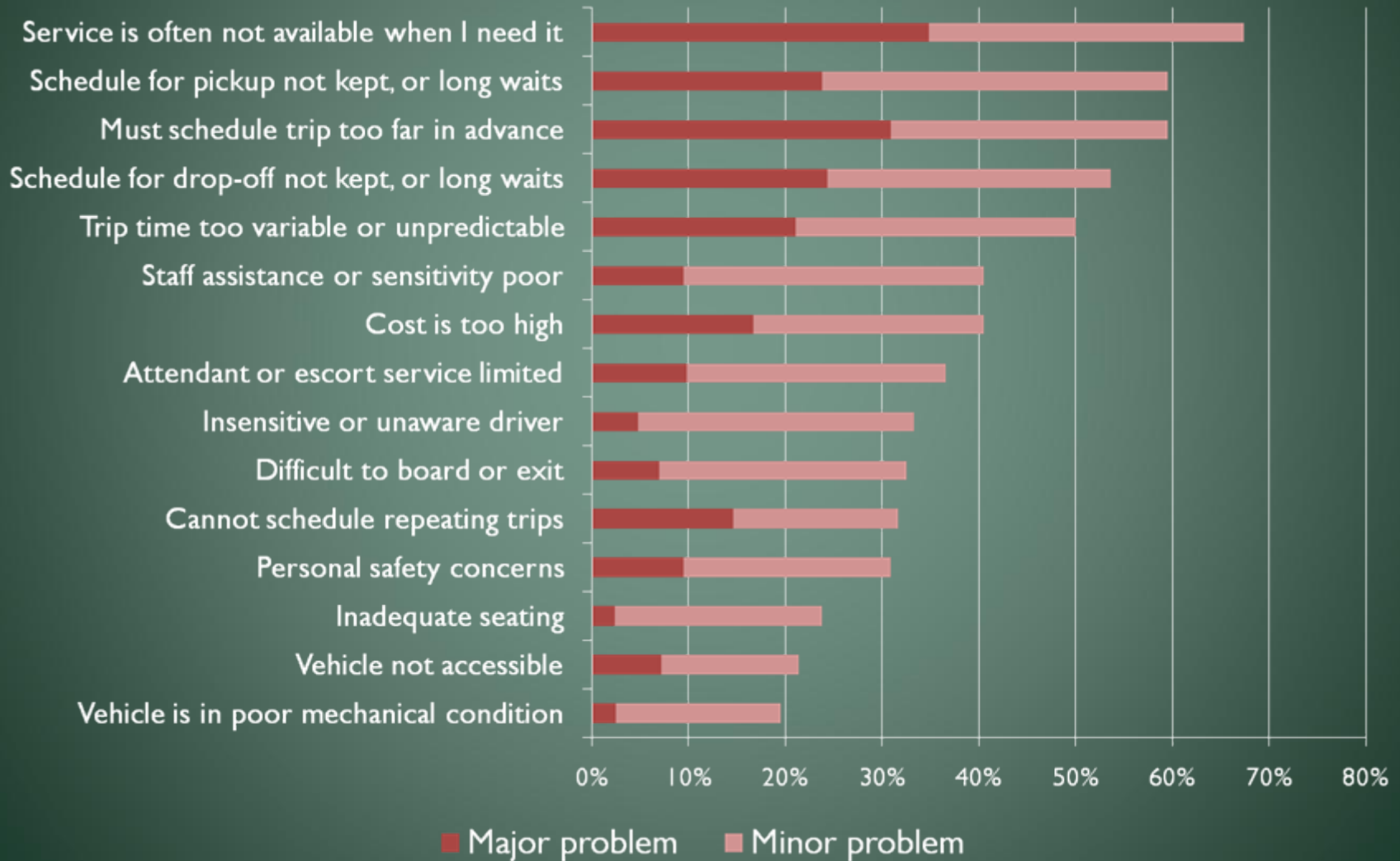
| Independent Variables | Work | Shopping | Health care | School | Agency | Leisure activities | Religious activities |
|-------------------------------------------------------------------------|-----------------------|----------|-------------|----------|--------|--------------------|----------------------|
| | -----Odds Ratios----- | | | | | | |
| Age | | 0.65** | | 0.32** | 0.61** | | |
| Low Income | 3.22* | | | | | | |
| Pop >30,000 | | | 0.16** | 0.08* | | 0.12* | |
| Distance | 2.39** | | | | | 3.79** | 1.83* |
| Severity | 2.47** | 1.87* | 2.46** | 14.01*** | 2.41** | 2.25* | |
| Can Drive | | | | | | 0.22** | 0.36* |
| Observations | 75 | 86 | 85 | 63 | 76 | 84 | 82 |
| *denotes significance at 10% level, ** at 5% level, and *** at 1% level | | | | | | | |

Thoughts on Public Transportation

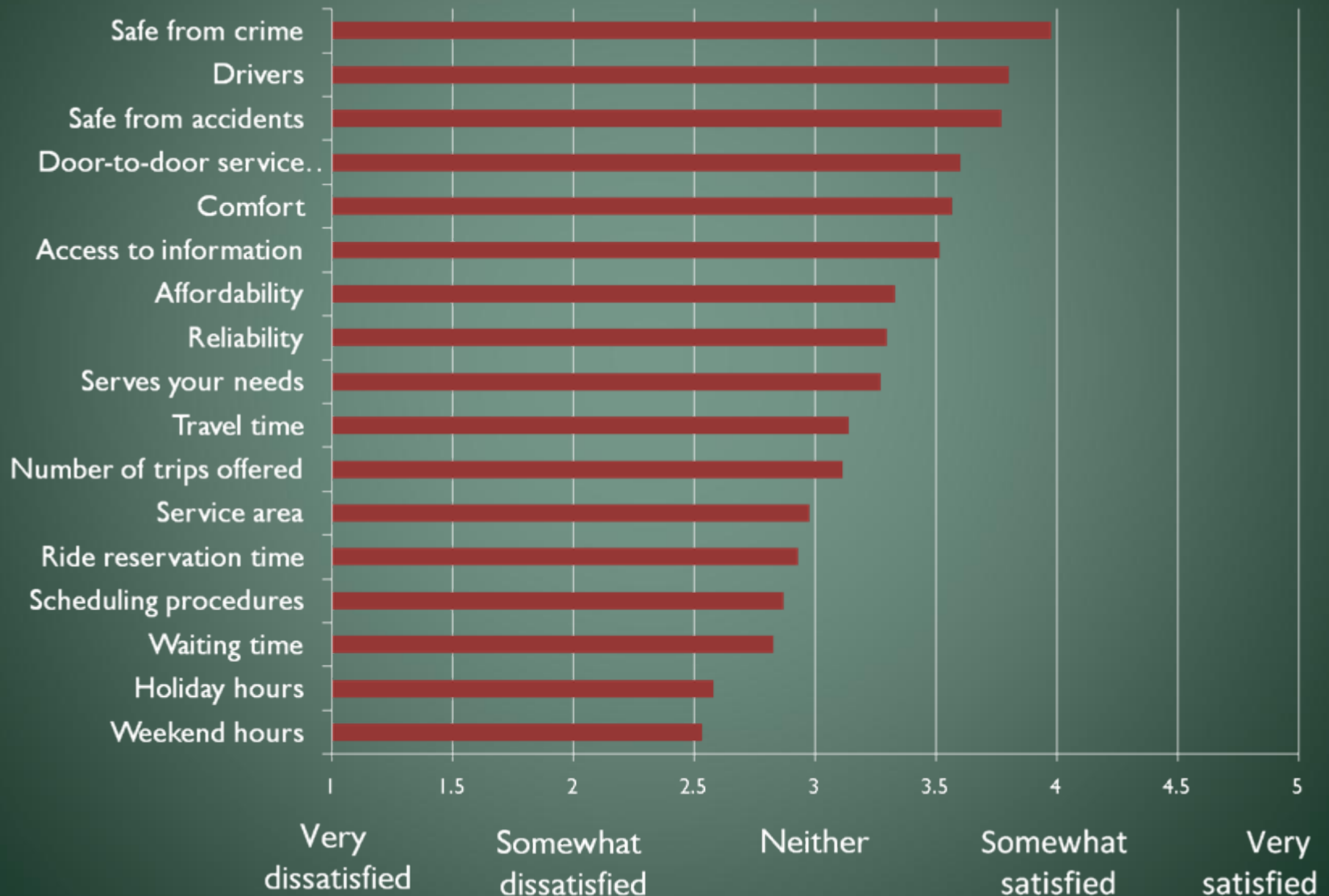
| | Total (n=110) | Use public transportation (n=59) | Have used in past but not anymore (n=34) | Have never used public transportation (n=13) |
|------------------------------------------------------------|--------------------------|-------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------|
| | -----Percentage----- | | | |
| Do not need it. | 6 | 3 | 12 | 0 |
| Service is not available. | 23 | 10* | 32* | 46* |
| Does not go where I need to go. | 28 | 31 | 35 | 8 |
| Does not go when I need to go. | 43 | 51 | 44 | 15 |
| Do not have enough information about available services | 13 | 5 | 21* | 31 |
| Not capable of riding/too challenging. | 16 | 10* | 21 | 31 |
| Fearful of riding. | 5 | 2 | 9 | 8 |
| Too costly. | 25 | 27 | 29 | 15 |

* denotes percentage is statistically different from that of other groups at the 5% level of significance.

Problems Using Paratransit



Level of Satisfaction with Public Transportation Service Qualities, Average Response





Conclusions from Survey of People with Disabilities

Large percentage of respondents were transit-dependent or dependent on others for rides.

A significant percentage of respondents desire more trips, and lack of transportation appears to be the main limiting factor.

Unmet demand was greatest for leisure, recreation, and social trips.

The survey revealed significant dissatisfaction with available transportation option.

Conclusions from Survey of People with Disabilities

The most significant concerns with public transportation were regarding service availability.

It is not lack of need that keeps some people with disabilities from using public transportation.

Many of the improvements that people with disabilities desire would benefit not just them but all people who use public transportation.

Changing demographics could intensify the need for improved transportation options.

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