

Alberta Provincial Transportation Needs Assessment

2016-2017

Persons with Disabilities
Rural and Urban Alberta



UNIVERSITY OF
ALBERTA



MARD
Medically At-Risk
Driver Centre

Alberta Provincial Transportation Needs Assessment

2016-2017

PWD RURAL & URBAN

Introduction

In 2016-2017, the Medically At-Risk Driver (MARD) Centre at the University of Alberta conducted a Provincial Transportation Needs Assessment. The overall goals were to: 1) assess the transportation needs of seniors and persons with disabilities (PWD) in the province of Alberta, and 2) make the results available to communities throughout the province in order to help them understand and better address the transportation needs of seniors and PWD in their communities.

The 5 Provincial Health Zones are: North, Edmonton, Central, Calgary, and South. If you wish to see a more detailed map of the 5 Zones, go to www.albertahealthservices.ca/ahs-map-ahs-zones.pdf.

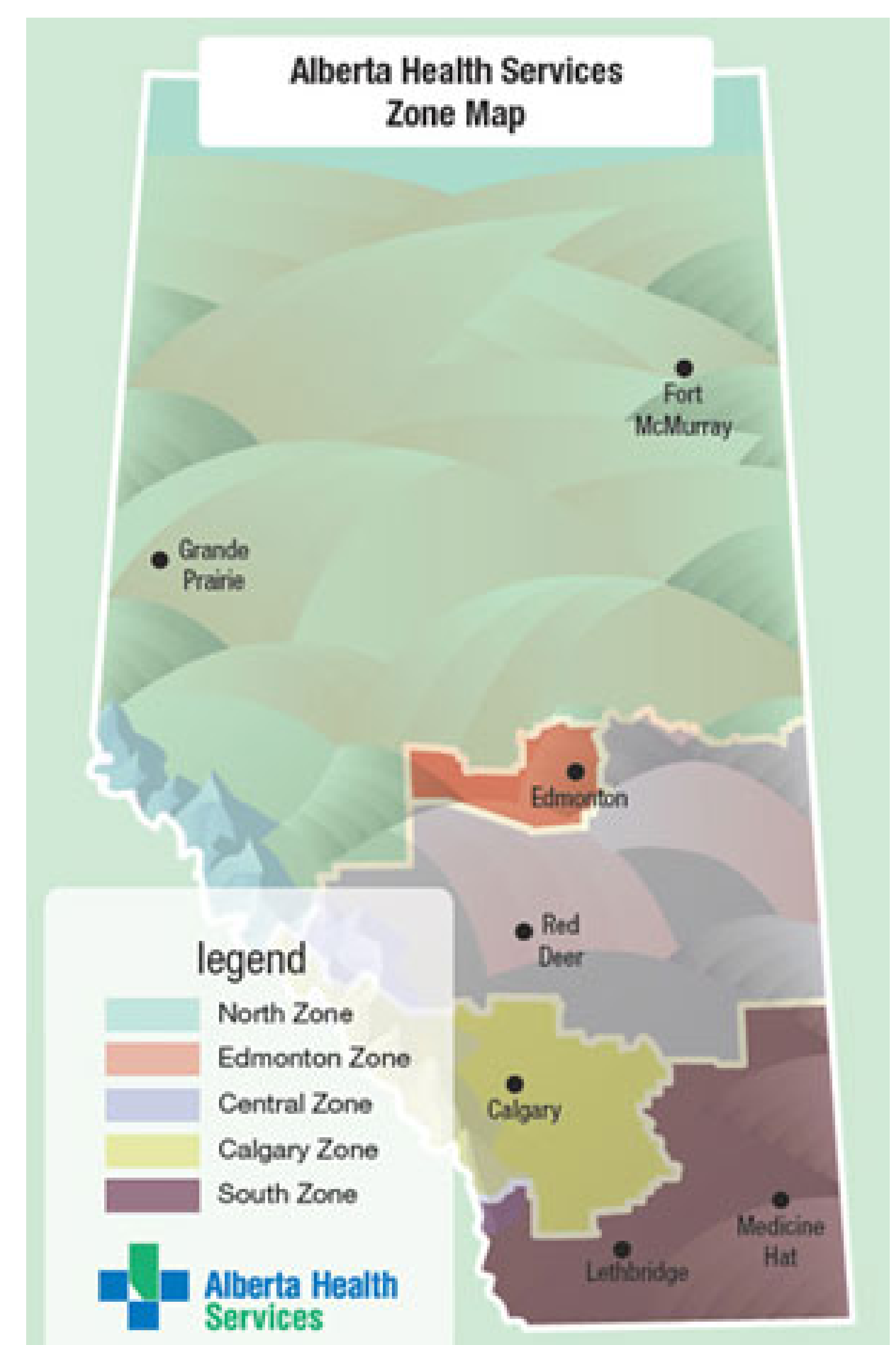
Banister Research, under contract to MARD, interviewed 1,535 individuals throughout the 5 Zones of the province. This total consisted of:

- 1,043 senior drivers,
- 347 senior non-drivers, and
- 145 PWD

The results presented in this report are for PWD living in rural and urban Alberta. In each of the sections, we present the findings from interviews with PWD 18-64 years of age. For those who are interested in the transportation needs of seniors in the province of Alberta, there are separate reports for this segment of our population by region of the province (see Alberta Provincial Transportation Needs Assessment - North Zone, Edmonton Zone, Central Zone, Calgary Zone, and South Zone). These reports can be found on our website at www.mard.ualberta.ca.

As you go through this report, you will notice that the results from PWD in rural and urban areas are similar but not identical. That is, often, the ratings from PWD in rural areas are somewhat higher (or in some instances lower) than the ratings from PWD in urban areas. For the vast majority of questions, the differences in responses between PWD in rural and urban Alberta are not statistically significant (see * below) and should not make a difference in any decisions that you may make regarding implementing or adapting transportation services for PWD in your community.

* Results that are statistically significant are identified by p-values in the report.



Alberta Provincial Transportation Needs Assessment 2016-2017

PWD RURAL & URBAN

Sections of the Report

Section 1: Demographics

In this section, there are descriptions of those we interviewed – their age, sex, marital status, income, living arrangements, place of residence, health status (e.g., long-term illnesses and disabilities, use of mobility aids, and overall physical health). The information is presented for respondents in both rural and urban Alberta.

Section 2: Unmet Transportation Needs

In this section, you will find information on the unmet transportation needs of PWD for rural and urban locations in the province. For example, information is provided on the percent of PWD who do not get to medical appointments or to the grocery store, or who do not attend social events because they do not have a ride. There also is information on the differences between rural and urban PWD in terms of quality of life, sense of well-being, and on measures of social isolation (e.g., companionship, feeling left out, and feeling socially isolated). We have included these last 3 measures because lack of adequate transportation can be a primary cause of social isolation among PWD.

Section 3: Awareness and Use of Transportation Services

In this section, you will find information on awareness of specialized transportation services for PWD in the community. We also asked PWD about their use of these services for trips such as going to medical appointments, for grocery shopping, recreational activities, visits with family and friends, or attending religious activities. Again, the information is presented for respondents in both rural and urban Alberta.

Section 4: The Importance of 'User-Friendly' Transportation Services

In this section, you will find feedback on the importance of 'user-friendly' features of transportation services. These features, which have come to be known as the 5 A's, were developed with the senior population in mind. These 5 A's consist of Availability, Acceptability, Accessibility, Adaptability, and Affordability. Although developed to describe seniors' transportation services, the 5 A's also are applicable to specialized transit for PWD.

Section 5: Summary

In this section, we provide a summary of the findings and how your community can use these results to develop or improve transportation services for PWD. We also encourage you to access similar reports on the unmet transportation needs of seniors in each of the Alberta Health Services Zones.

Alberta Provincial Transportation Needs Assessment 2016-2017

PWD RURAL & URBAN

Before You Get Started -- A Bit More About the Study

As mentioned in the Introduction, a total of 145 PWD participated in the study. To be eligible, participants had to be 18 to 64 years of age; had to have a long-term or recurring disability (e.g., physical, mental, sensory, psychiatric, or learning) that limits their ability to get around out of their home; and had to be a non-driver.

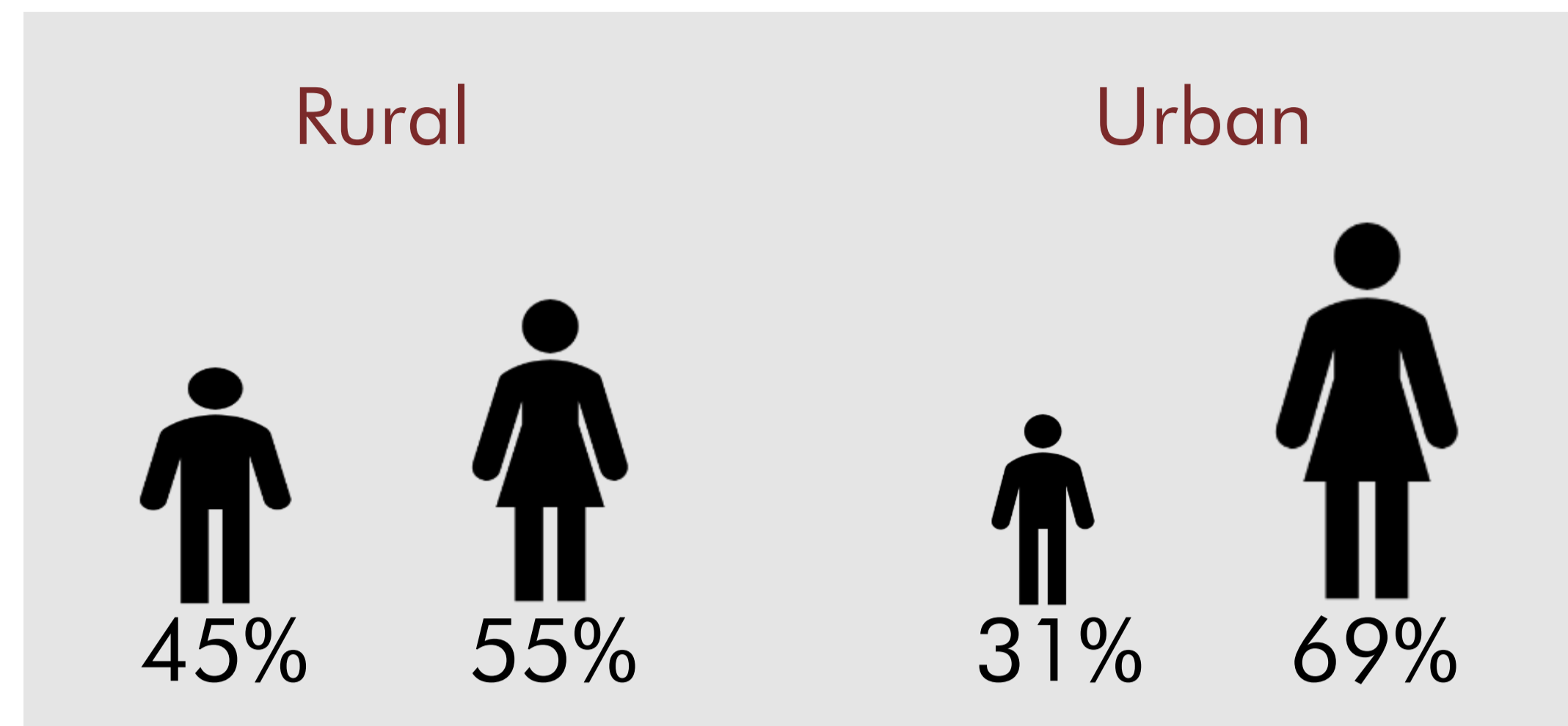
Participants were recruited via random digit dialing as well as through organizations providing services to PWD. For random digit dialing, phone numbers were selected randomly from a bank of telephone numbers in Alberta. Those individuals who were eligible to participate in the survey and consented to participate were interviewed by Banister Research personnel. In addition to random digit dialing, we also recruited PWD via organizations providing services to PWD throughout the province. These primary contacts assisted in recruitment by explaining the study to their clientele and asking if they would be willing to be contacted for possible inclusion in the study. The names and phone numbers of individuals who indicated that they were willing to be contacted were provided to MARD researchers. The contact information of those who met study criteria was then given to Banister Research, with the interview completed at a time and date convenient to the individual. In some cases, proxy interviews were done with knowledgeable family members (e.g., if the individual was unable to speak clearly, was hard of hearing, etc.). The research received ethics approval from the University of Alberta's Health Research Ethics Board.

The results presented in this report are based on responses from 49 PWD in rural Alberta and 96 PWD living in urban centres in the province. A question that you are likely asking yourself is "Are there differences in the responses from PWD in rural Alberta vs. those living in urban areas?" To see if there were, we ran a number of statistical analyses. What we found was that for all but 4 of the questions, the responses between the two groups were very similar (that is, the differences were not statistically significant). The questions that we did find statistically significant differences are on: 1) the availability of specialized transit, 2) the use of transportation services during weekday evenings, 3) the use of specialized transit for medical appointments outside the community, and 4) the likelihood of use of specialized transit for visits with family or friends. To help you as you read through this report, we have indicated in the report the four areas where the responses are significantly different between the two groups.

Overall, the results presented in this report highlight the unmet transportation needs of PWD in Alberta and underscore the need for more responsive forms of transportation for PWD in rural and urban Alberta.

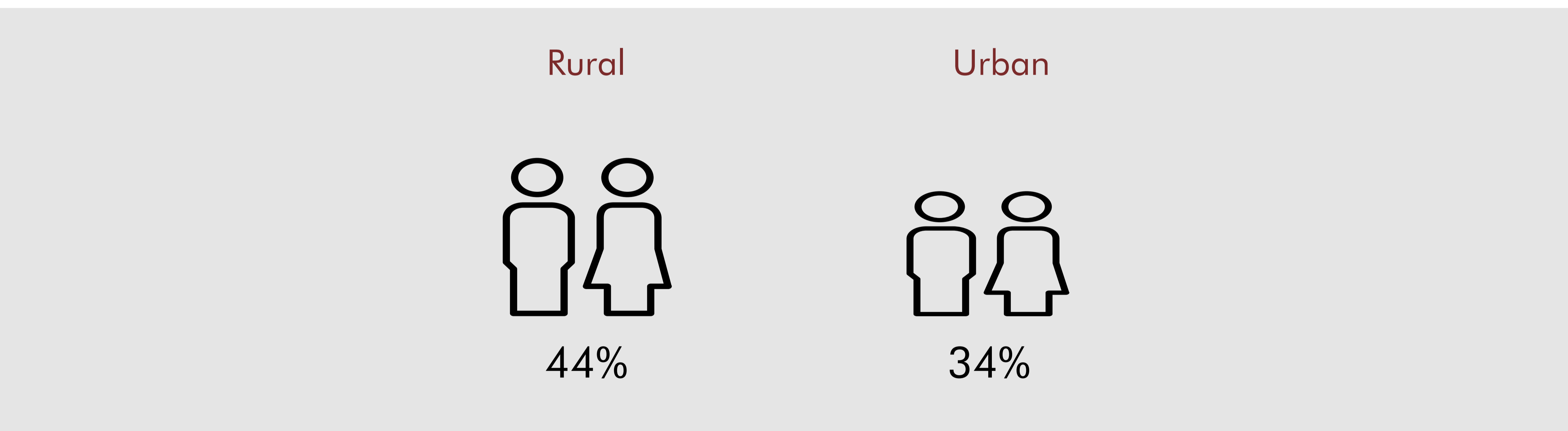
Average Age

Sex



As you can see above, the average age for PWD in rural and urban Alberta was very similar (51 years and 49 years, respectively). In terms of sex, there were more females (55% rural and 69% urban) than males who participated in the survey.

Marital Status



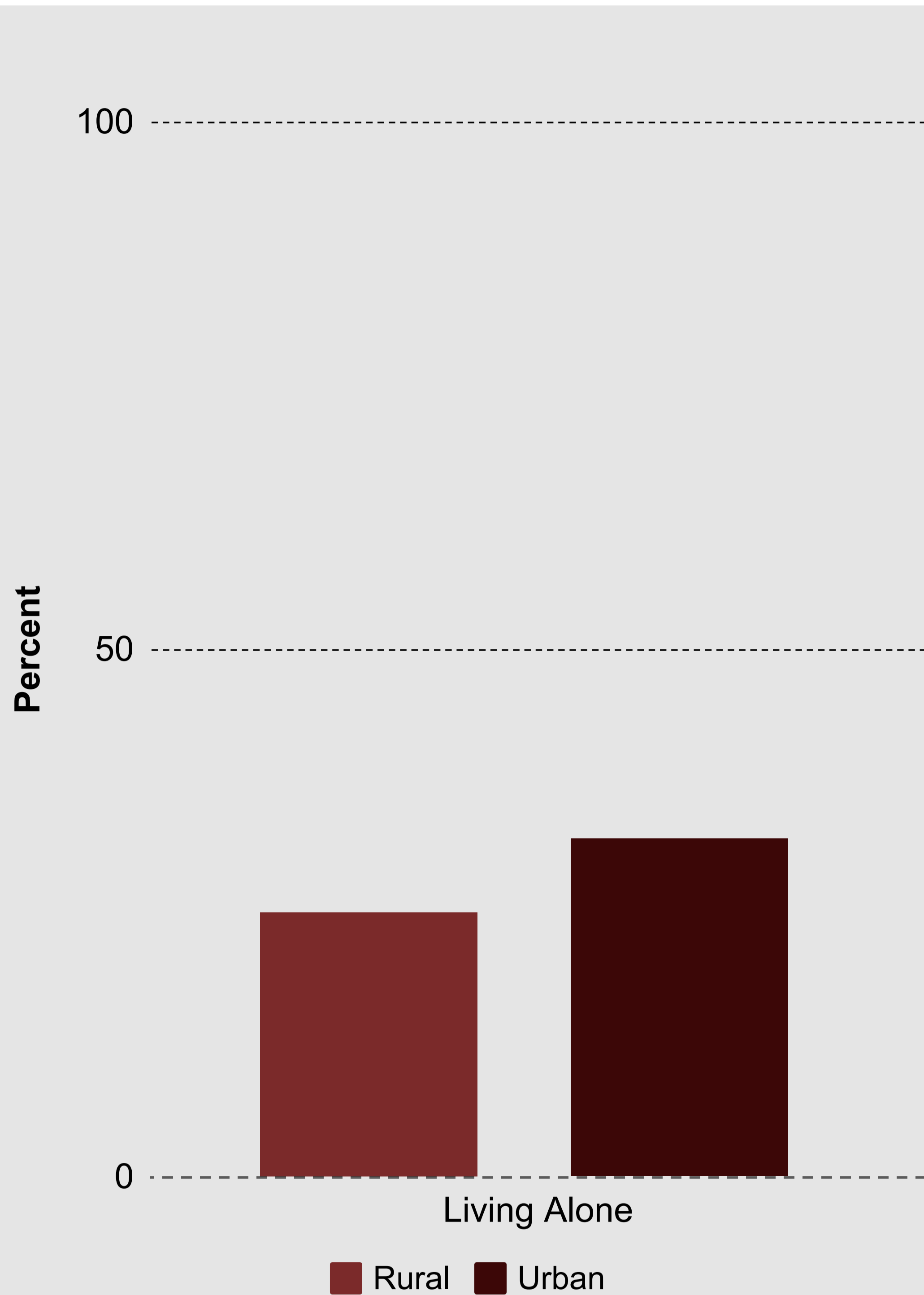
In terms of marital status, a slightly higher percent of PWD living in rural areas were married as compared to PWD in urban areas (44% vs. 34%).

Annual Household Income < \$20,000

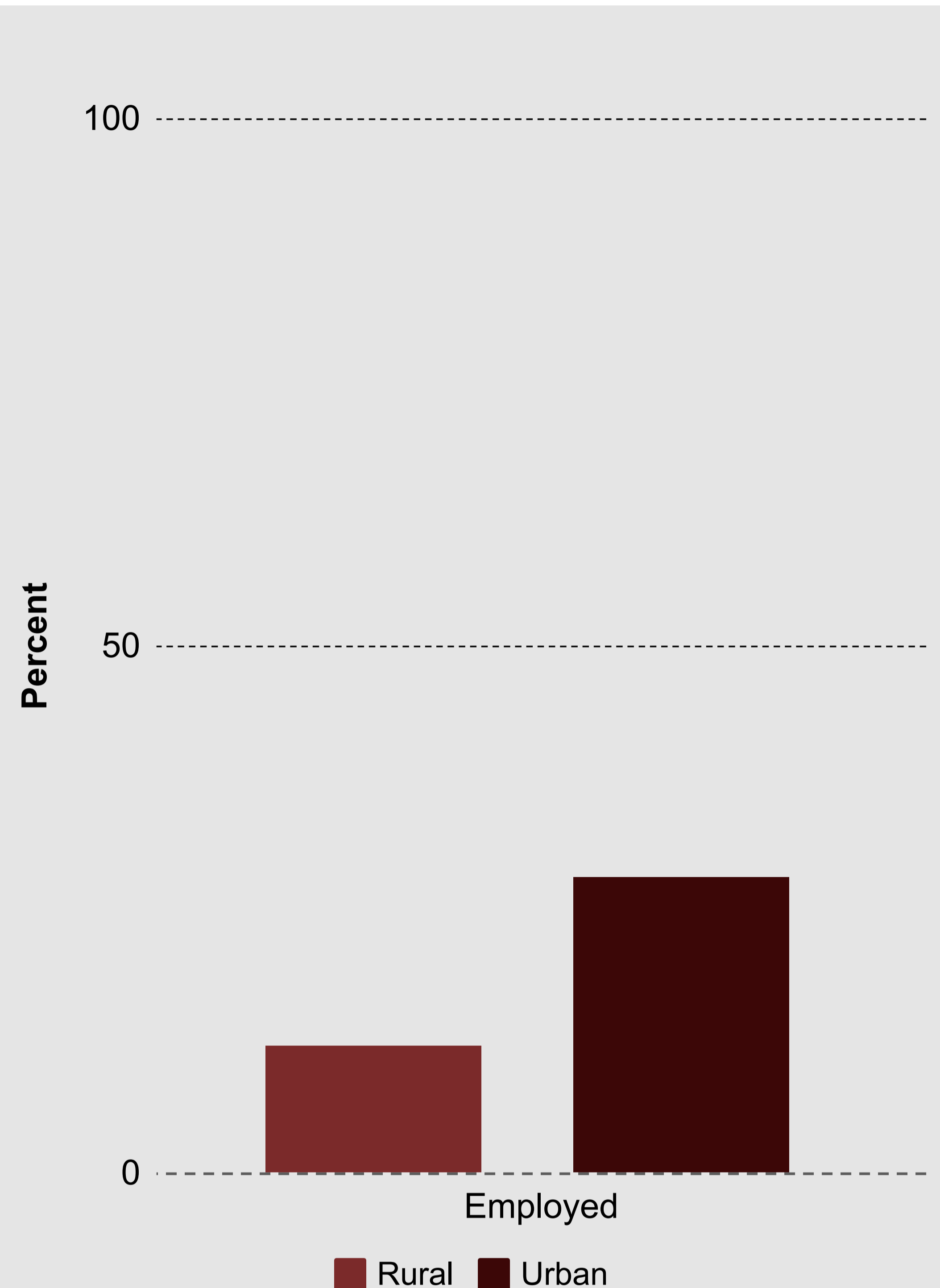


The percent of PWD with an annual household income less than \$20,000 was similar for PWD living in rural (30%) and urban (34%) Alberta.

Living Arrangements



Employment Status

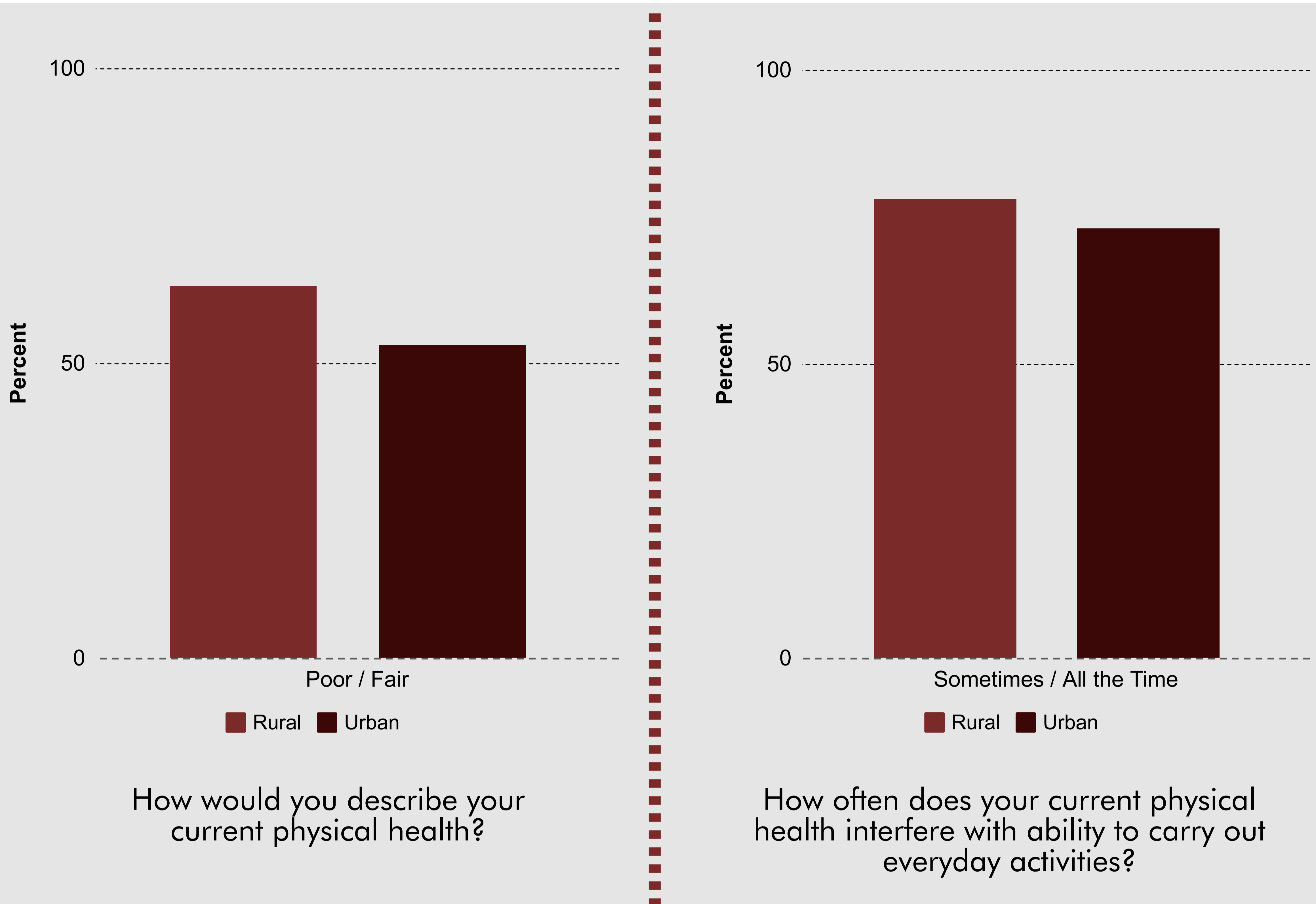


As you can see from the graph to the left, one-quarter (25%) of PWD in rural areas lived alone, with almost one-third (32%) of PWD in urban areas of the province living alone.

In the graph to the right, you can see that PWD in rural areas of the province were less likely to be employed full or part-time (12%) compared to PWD in urban areas (28%) of the province.

A greater percent (45%) of PWD in rural areas indicated that they were on long-term disability/disability leave as compared to PWD in urban areas (35%) (data not shown).

Physical Health



When asked about their physical health, almost 2/3 (63%) of PWD in rural areas said that their health was "poor or fair", with over 1/2 (53%) of PWD in urban areas saying that their physical health was "poor or fair".

And, about three-quarters of PWD in rural (78%) and urban (73%) areas of the province said that their physical health interfered "sometimes or all the time" with everyday activities.

Rely on Family or Friends for Transportation

To Medical Appointments



Rural

Urban

42%

31%

At Least Once
a Month

For Essential Services



Rural

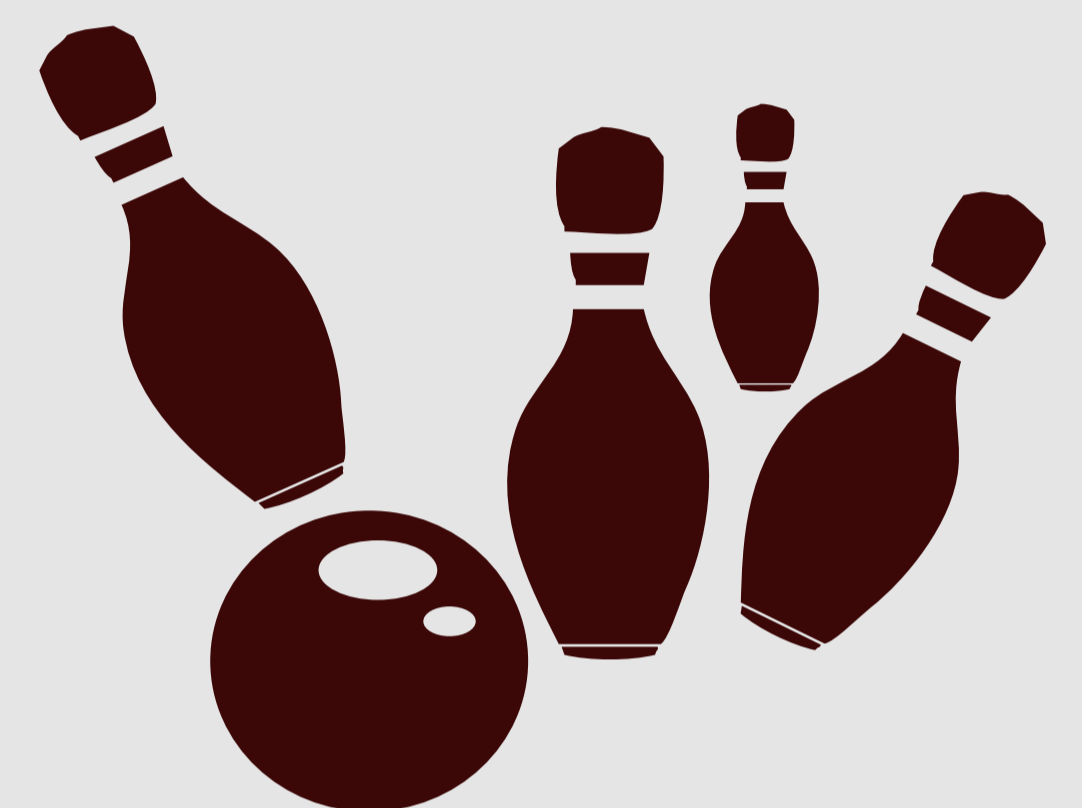
Urban

38%

49%

At Least Once
a Week

For Recreational / Leisure /
Religious Activities



Rural

Urban

28%

21%

At Least Once
a Week

In the last 6 months, 42% of PWD in rural areas relied on family or friends for rides to medical appointments at least once a month as compared to 31% of PWD in urban areas.

A slightly greater percent of PWD in urban areas (49%) relied on family or friends at least once a week for rides for essential services such as groceries compared to 38% of PWD in rural areas.

In terms of attending recreational, leisure, or religious activities, about one-quarter of PWD in both rural and urban areas over the last 6 months relied on family or friends for rides (28% and 21%, respectively).

Unable to Access Services / Activities

Medical Appointments



Rural

Urban

38%

28%

Sometimes / Often

Essential Services



Rural

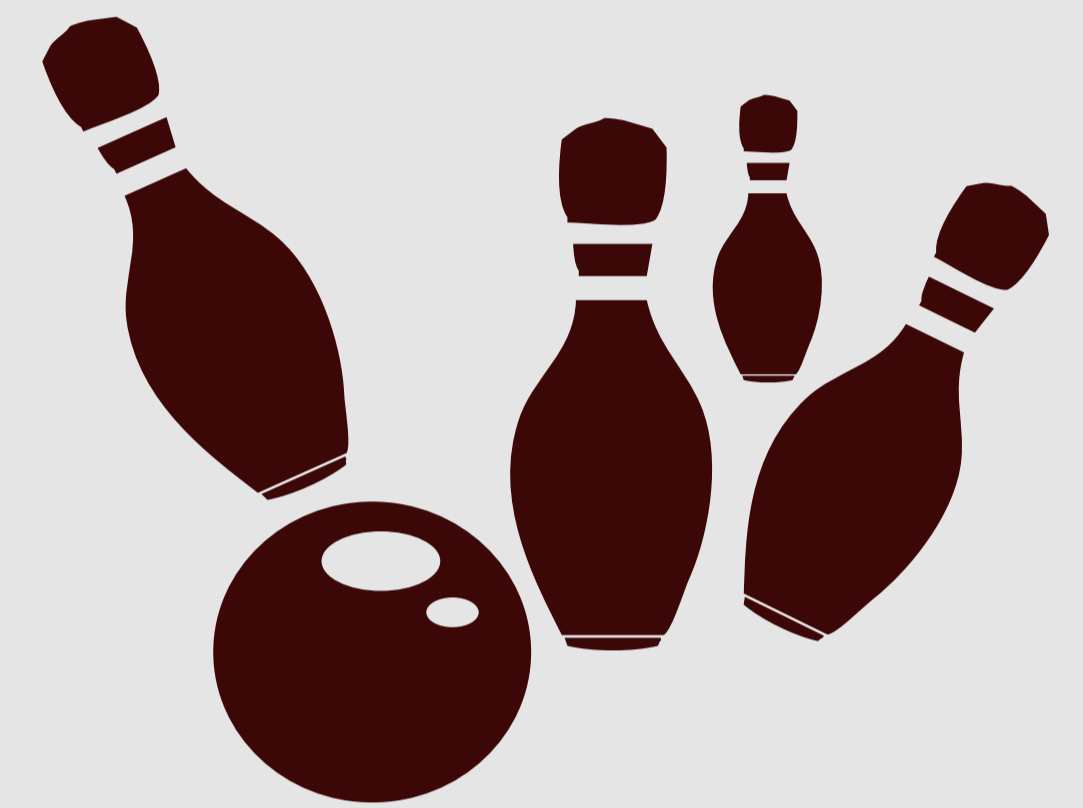
Urban

46%

51%

Sometimes / Often

Recreational / Leisure / Religious



Rural

Urban

57%

58%

Sometimes / Often

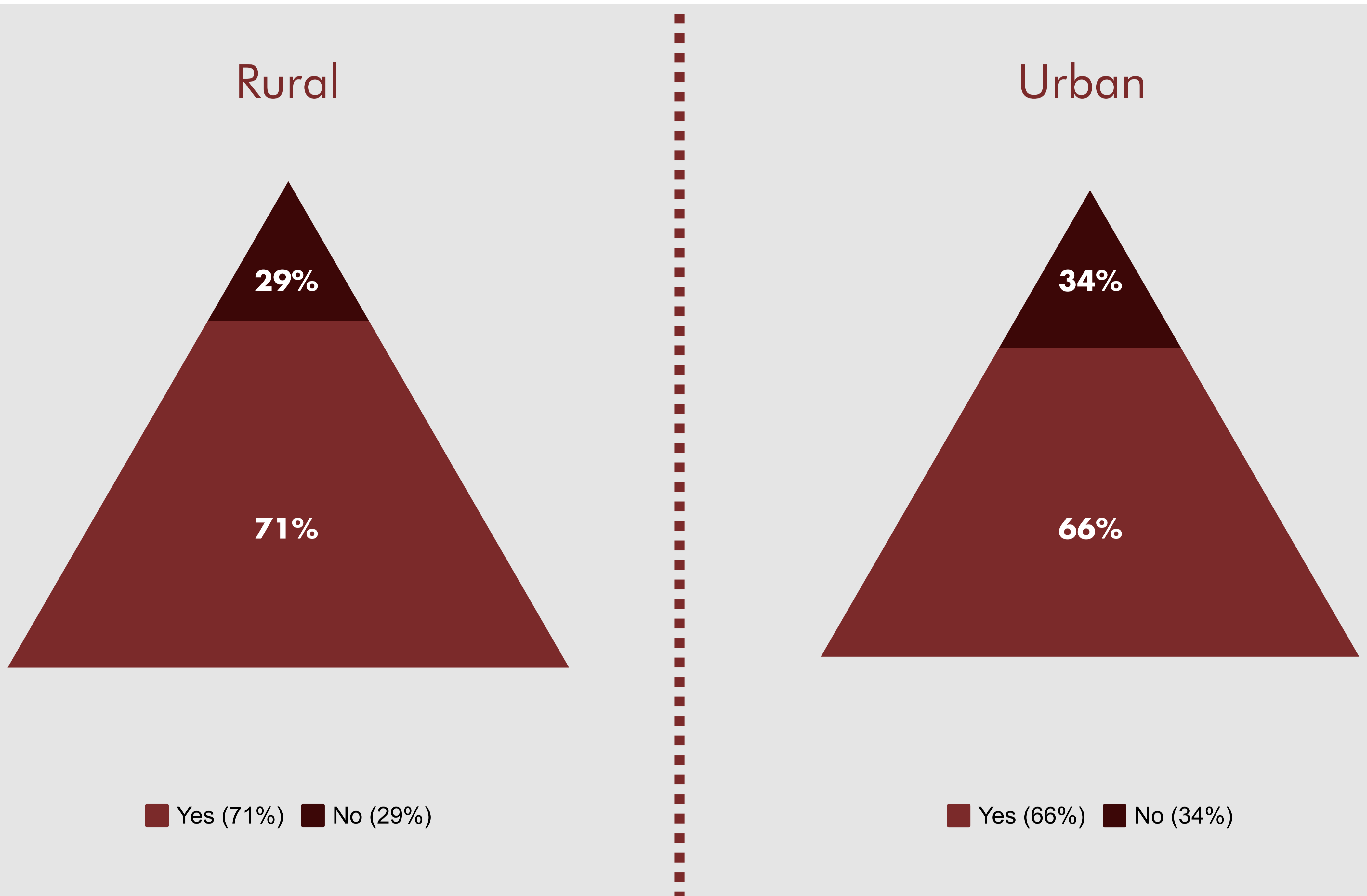
As you can see above, a slightly greater percent of PWD in rural areas "sometimes or often" did not get to medical appointments in the last 6 months because they did not have a ride as compared to PWD in urban areas (38% and 28%, respectively).

In terms of accessing essential services and getting to recreational, leisure, or religious activities in the last 6 months, the responses from PWD in rural and urban areas were very similar. That is, about half of PWD in rural and urban Alberta indicated that they "sometimes or often" were unable to access essential services in the last 6 months because they did not have a ride (46% and 51%, respectively).

And, slightly more than half of PWD in both rural and urban areas indicated that they "sometimes or often" did not go to recreation, leisure, or religious activities in the last 6 months because they did not have a ride (57% and 58%, respectively).

Overall Transportation Deficiency

Percent of PWD with Unmet Transportation Needs for At Least One Trip Type

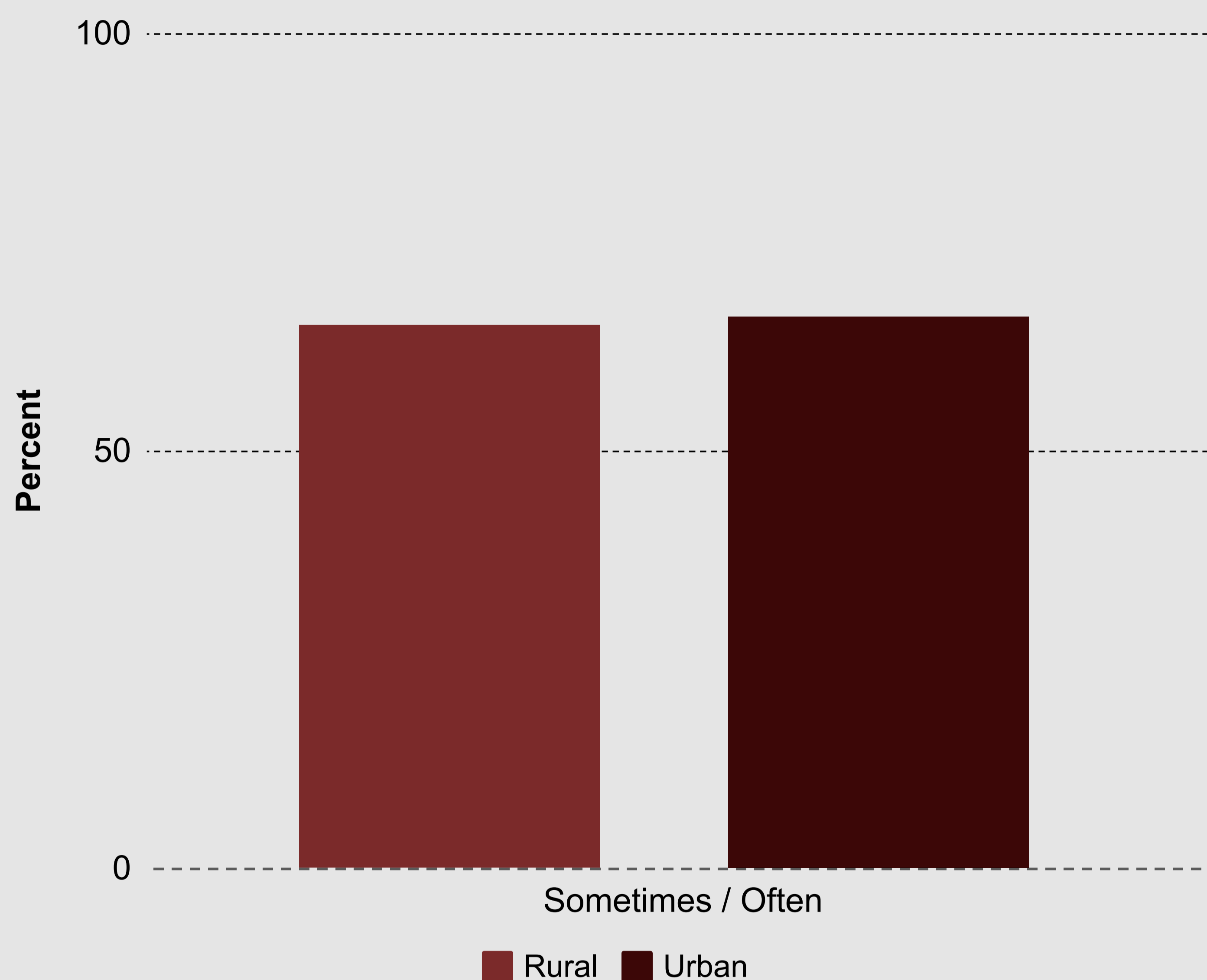


Consistent with the results from the last few pages, you can see that in the graph above to the left that almost three-quarters (71%) of PWD in rural areas and two-thirds (66%) of PWD in urban areas said that yes, in the last 6 months, they had unmet transportation needs for at least one type of trip (e.g., medical appointments, essential services, recreational, social, or religious activities) because they did not have a ride.

Conversely, about one-third of PWD in rural and urban Alberta said that no, they did not have unmet transportation needs in the last six months for at least one of the trip types described above.

Non-Participation in Community Activities

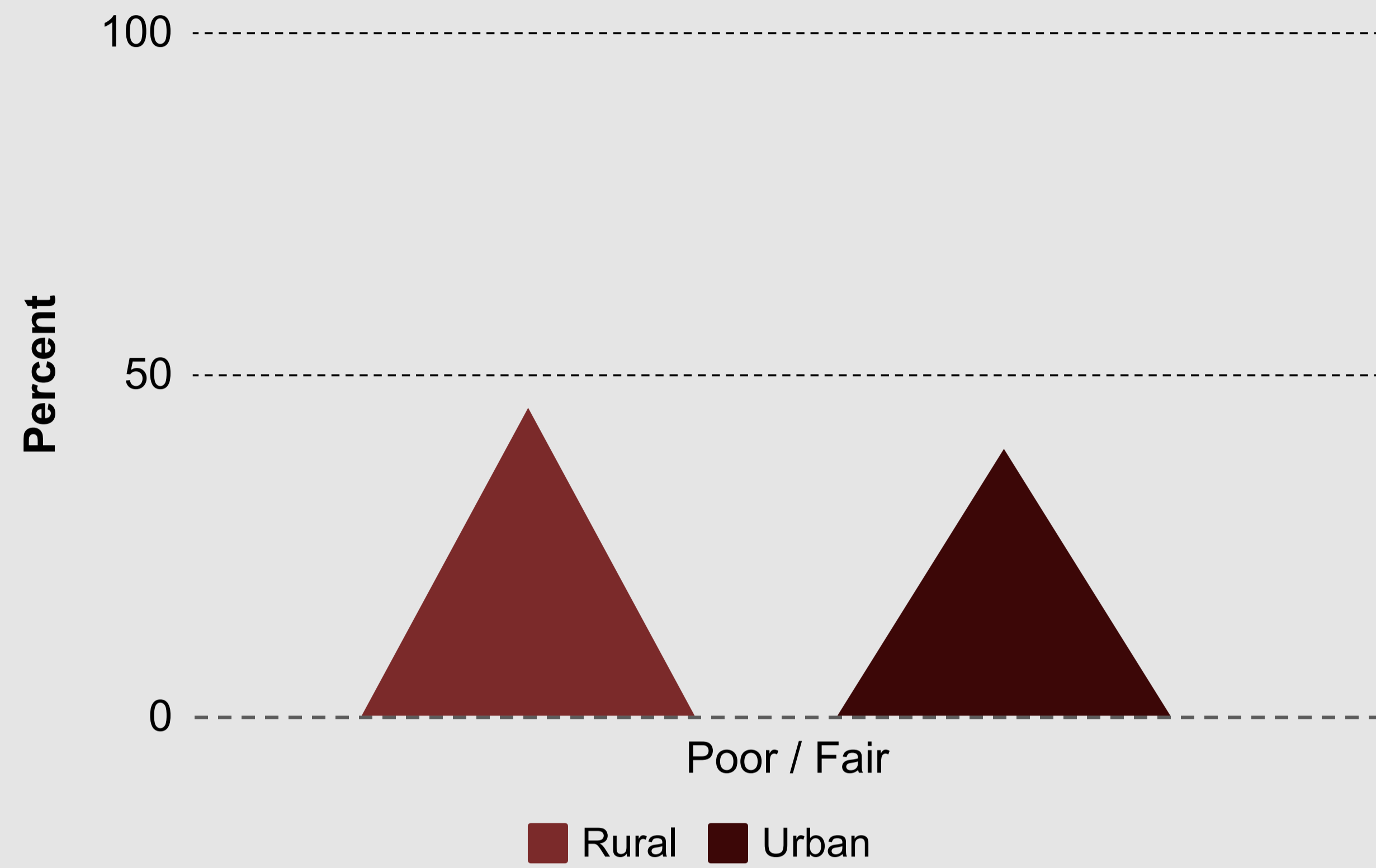
Frequency of Not Participating in More Recreational, Social, Religious, or Other Group Activities Because of Not Having a Ride



When asked how often that they felt like they wanted to participate in more recreational, social, religious, or other group activities but couldn't because they did not have a ride, close to two-thirds of PWD in both rural and urban areas of the province said "sometimes or often" (65% and 66%, respectively).

Quality of Life and Well-Being

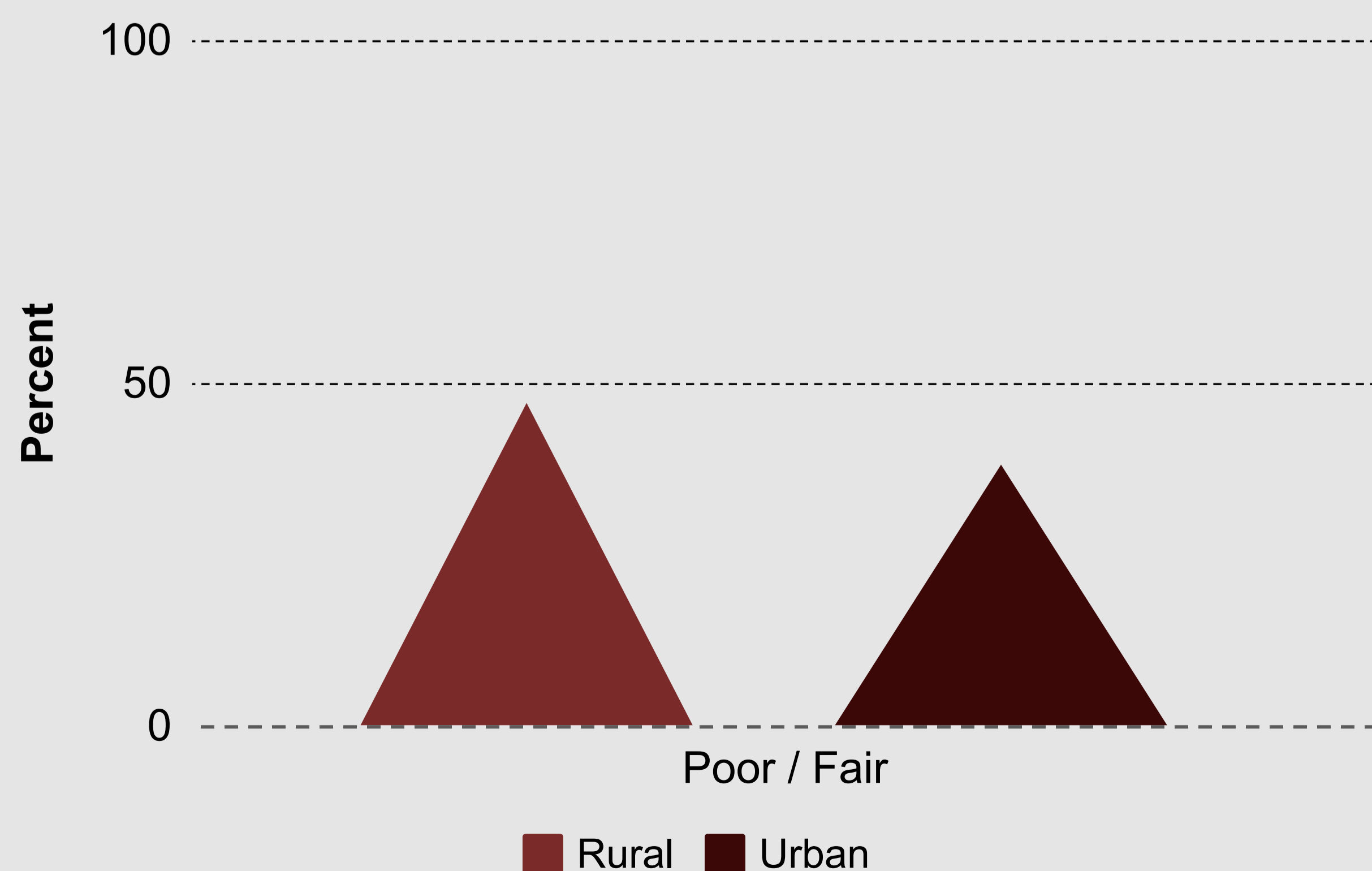
Quality of Life



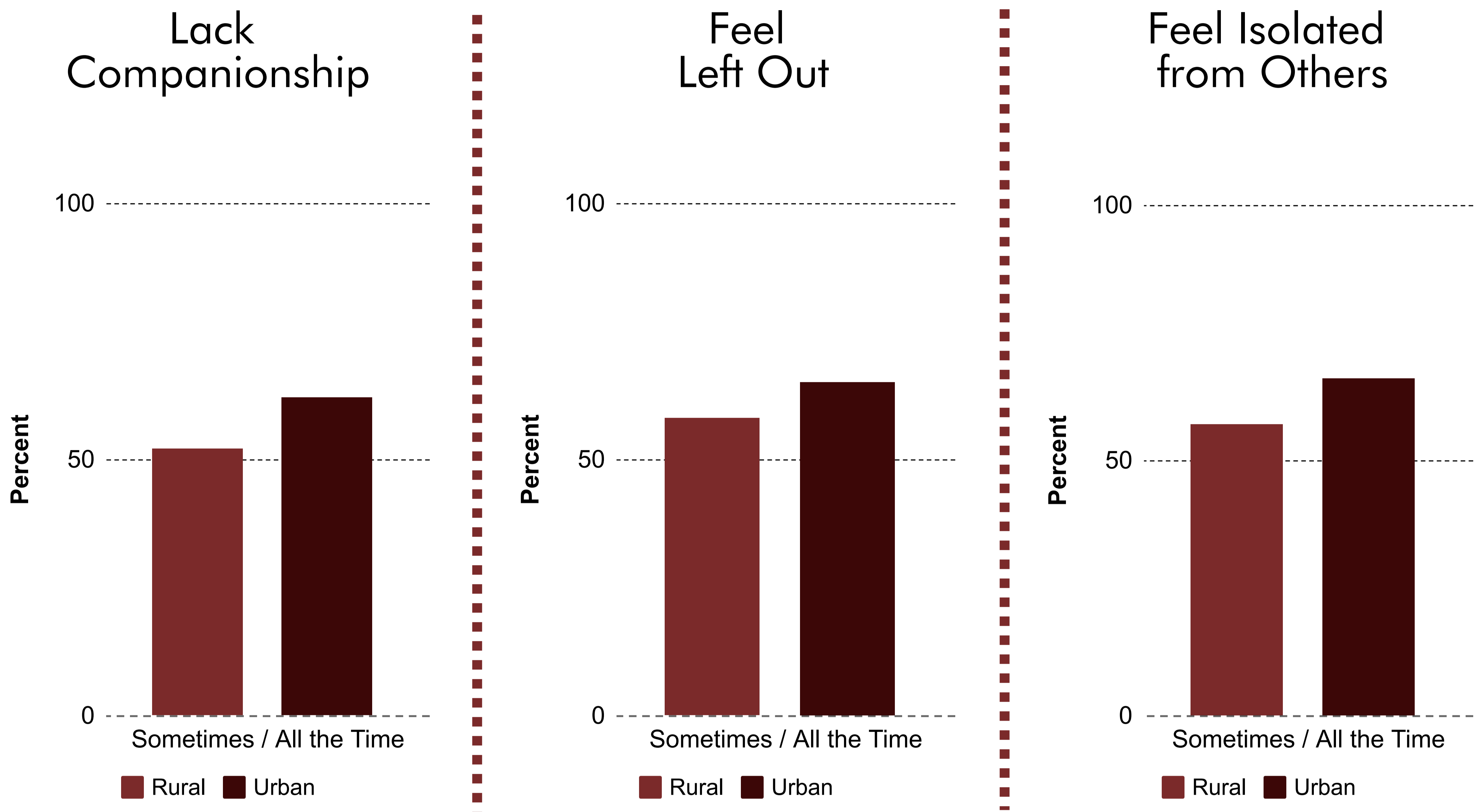
When asked about quality of life, almost half (45%) of PWD in rural areas rated their quality of life as "poor or fair". A slightly lower percent (39%) of PWD in urban areas rated their quality of life the same way (see graph above).

A similar pattern was found on ratings of well-being with a slightly greater percent of PWD in rural areas (47%) having rated their sense of well-being as "poor or fair" as compared to 38% of PWD in urban areas rating their sense of well-being in the same manner (see graph below).

Sense of Well-Being



Companionship, Feeling Left Out, Feeling Isolated



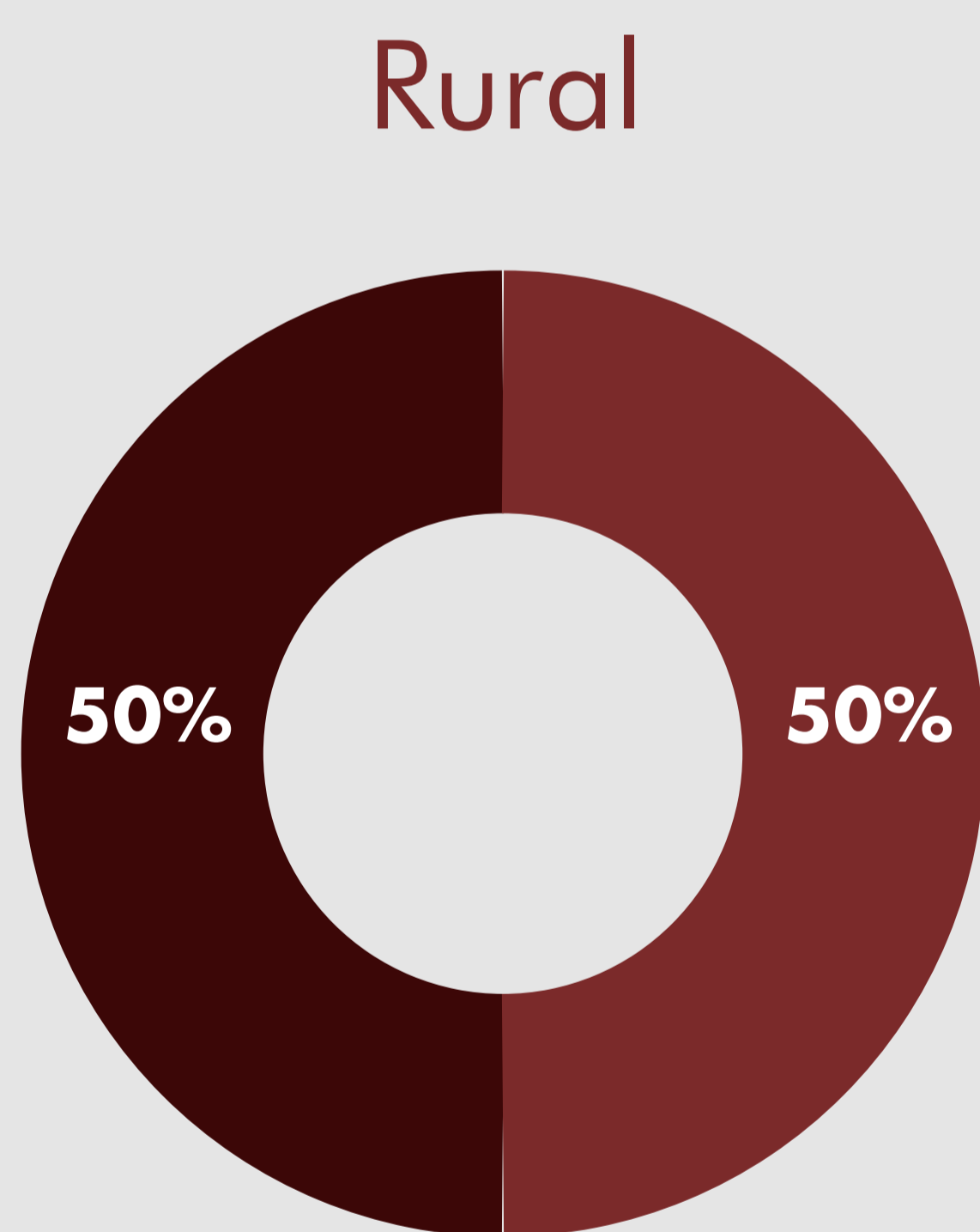
When asked about social isolation, more than half of PWD in rural and urban areas of the province told us that they lacked companionship "sometimes or all the time" (52% and 62%, respectively), felt left out "sometimes or all the time" (58% and 65%, respectively), and felt isolated from others "sometimes or all the time" (57% and 66%, respectively).

Specialized Transit Services in the Community

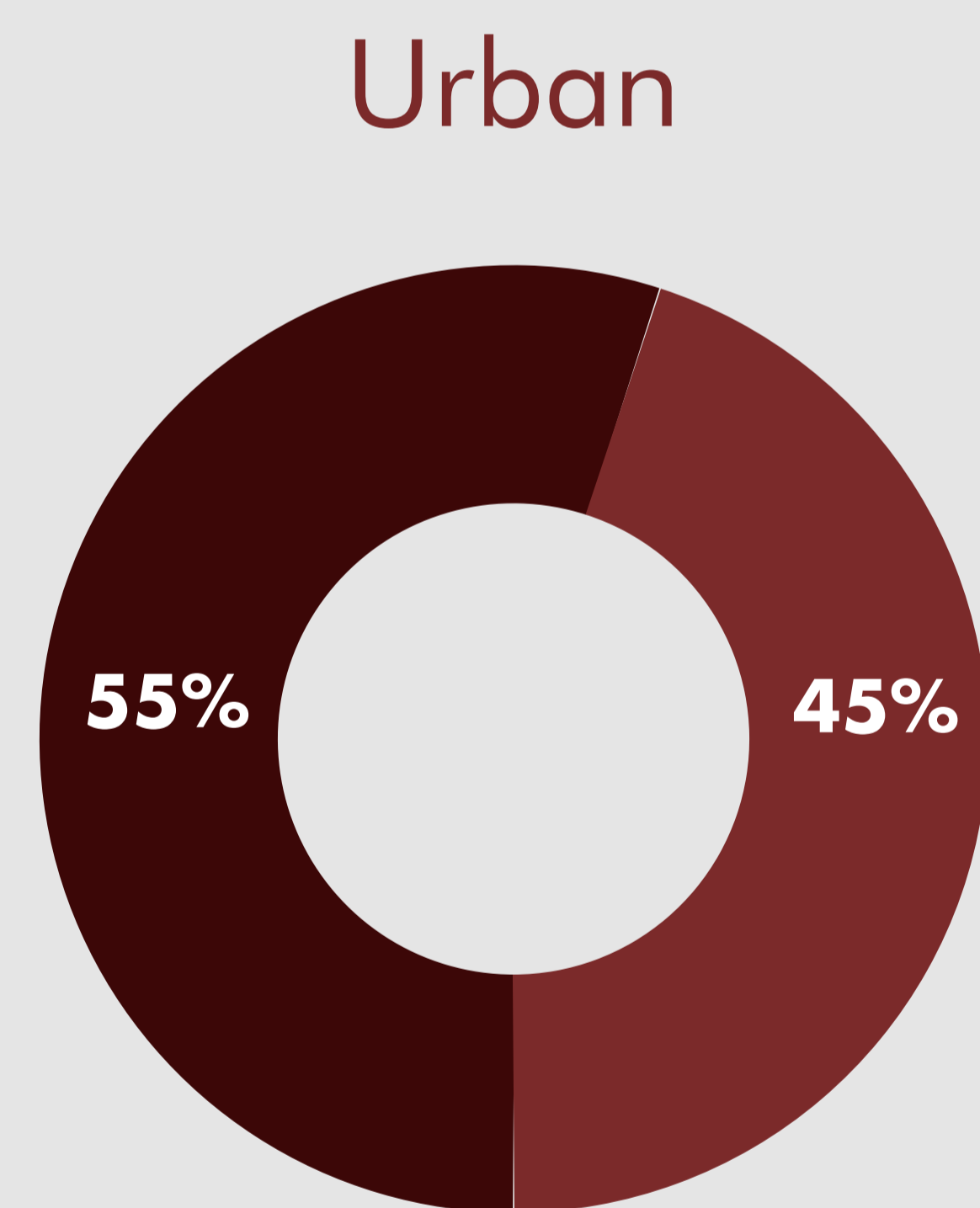


In terms of availability of specialized transit services, not surprisingly, a significantly greater percent of PWD in urban areas (87%) said that there was some form of specialized transit service available in the community as compared to their rural counterparts (55%) ($p < .001$). A handi-bus most often was identified as the specialized transit service that was available by PWD in both rural and urban areas.

PWDs' Use of Specialized Transit Services



■ Yes (50%) ■ No (50%)



■ Yes (55%) ■ No (45%)

When asked about the use of these specialized transit services, more than half of PWD in rural and urban areas of the province said that yes, they used the available services (50% and 55%, respectively).

Importance of Specialized Transit Services in the Community

40%

vs.

46%

of PWD in rural areas said that if they needed transportation, and none were available, they "would not be able to get where they wanted to go".

of PWD in urban areas said that if they needed transportation, and none were available, they "would not be able to get where they wanted to go".

90%

vs.

92%

of PWD in rural areas said that specialized transit services are "somewhat or very important" to their quality of life.

of PWD in urban areas said that specialized transit services are "somewhat or very important" to their quality of life.

57%

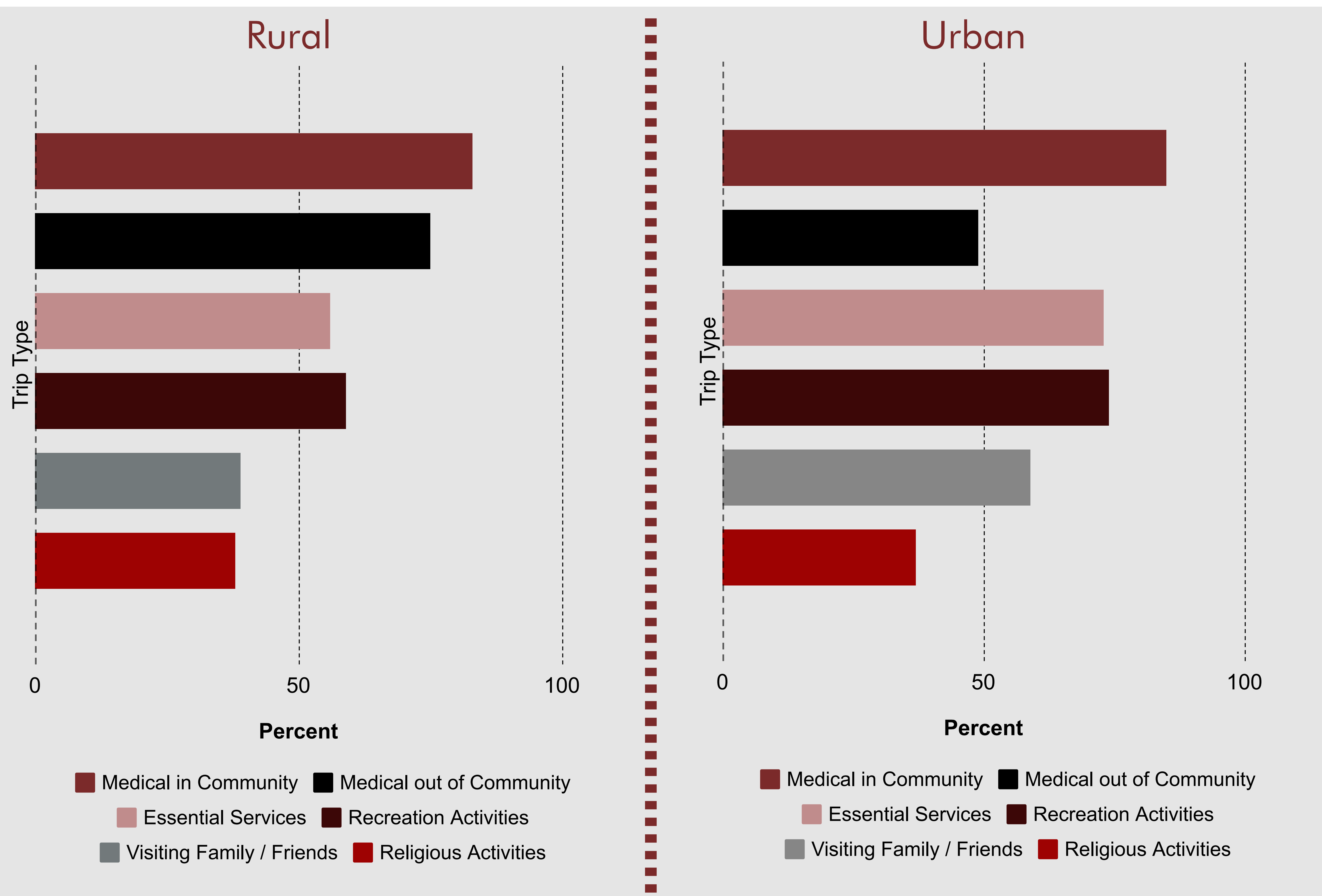
vs.

55%

of PWD in rural areas said that they would be "somewhat or very likely" to use ride-sharing services if they were available in the community.

of PWD in urban areas said that they would be "somewhat or very likely" to use ride-sharing services if they were available in the community.

Use of Specialized Transit Services

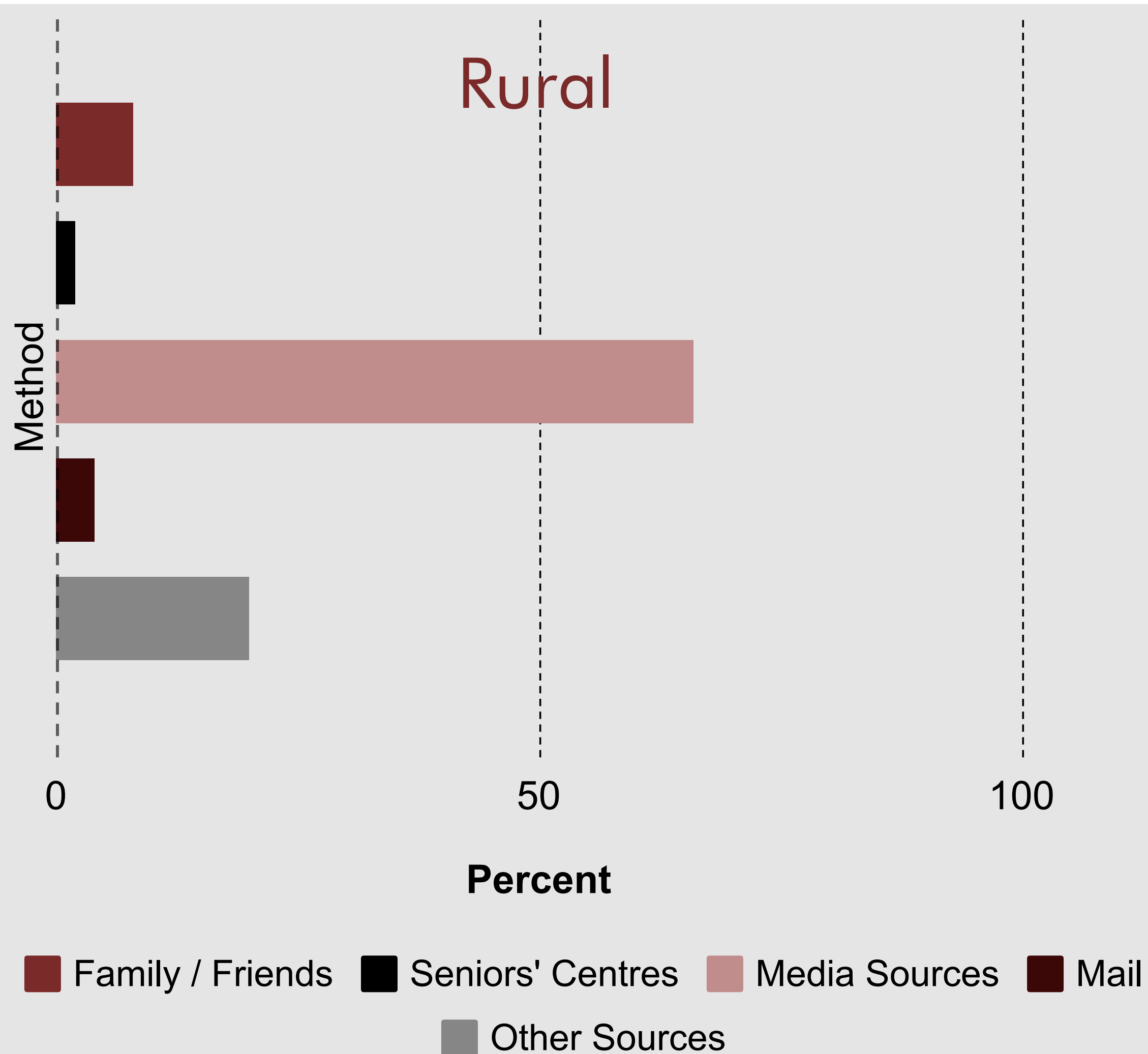


When asked what PWD would use specialized transit services for if they were available in the community, you can see in the graphs that the majority of PWD in rural and urban areas would use the services for transportation to medical appointments in the community (83% and 85%, respectively), for access to essential services such as grocery shopping (56% and 73%, respectively), and for attending recreational activities (59% and 74%, respectively).

Not surprisingly, a significantly greater percent of PWD in rural areas vs. PWD in urban areas (75% vs. 49%, respectively) indicated that if specialized transit services were available in the community, they would use the services for access to medical appointments outside the community ($p < .004$).

On the other hand, a significantly greater percent of PWD in urban areas vs. those in rural areas indicated that if specialized transit services were available in the community, they would use the services for visits with family or friends (59% vs. 39%, respectively) ($p = .03$).

Preferences for Finding out About Specialized Transit Services

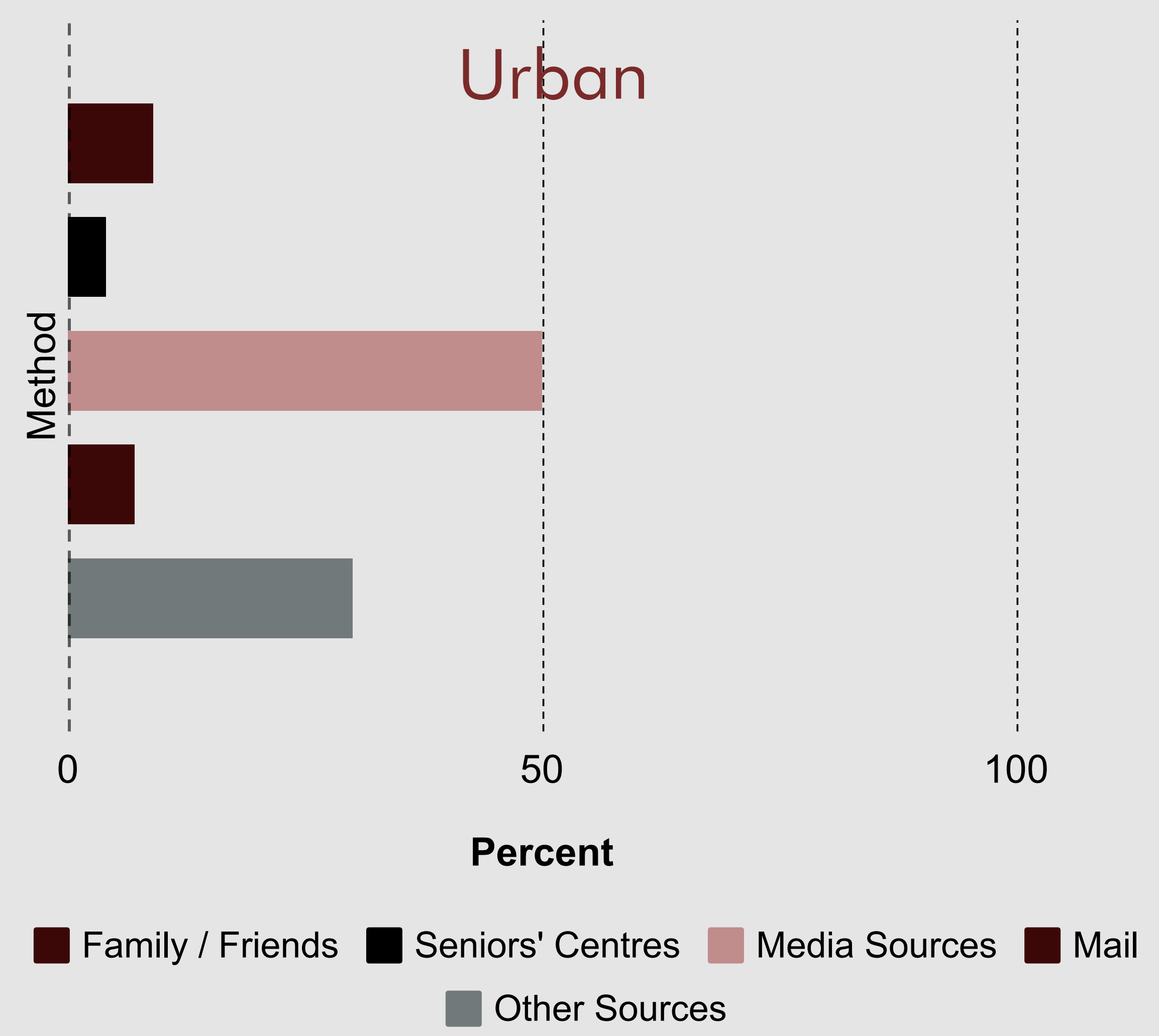


Media Sources Include: Community Newspapers, Television, Radio, Internet

Two-thirds (66%) of PWD in rural areas said that they would prefer to find out about specialized transit services through "media sources" (e.g., newspaper, television, radio, internet), with fewer PWD in rural areas identifying "family or friends", or "other sources" as a preference (see graph to left).

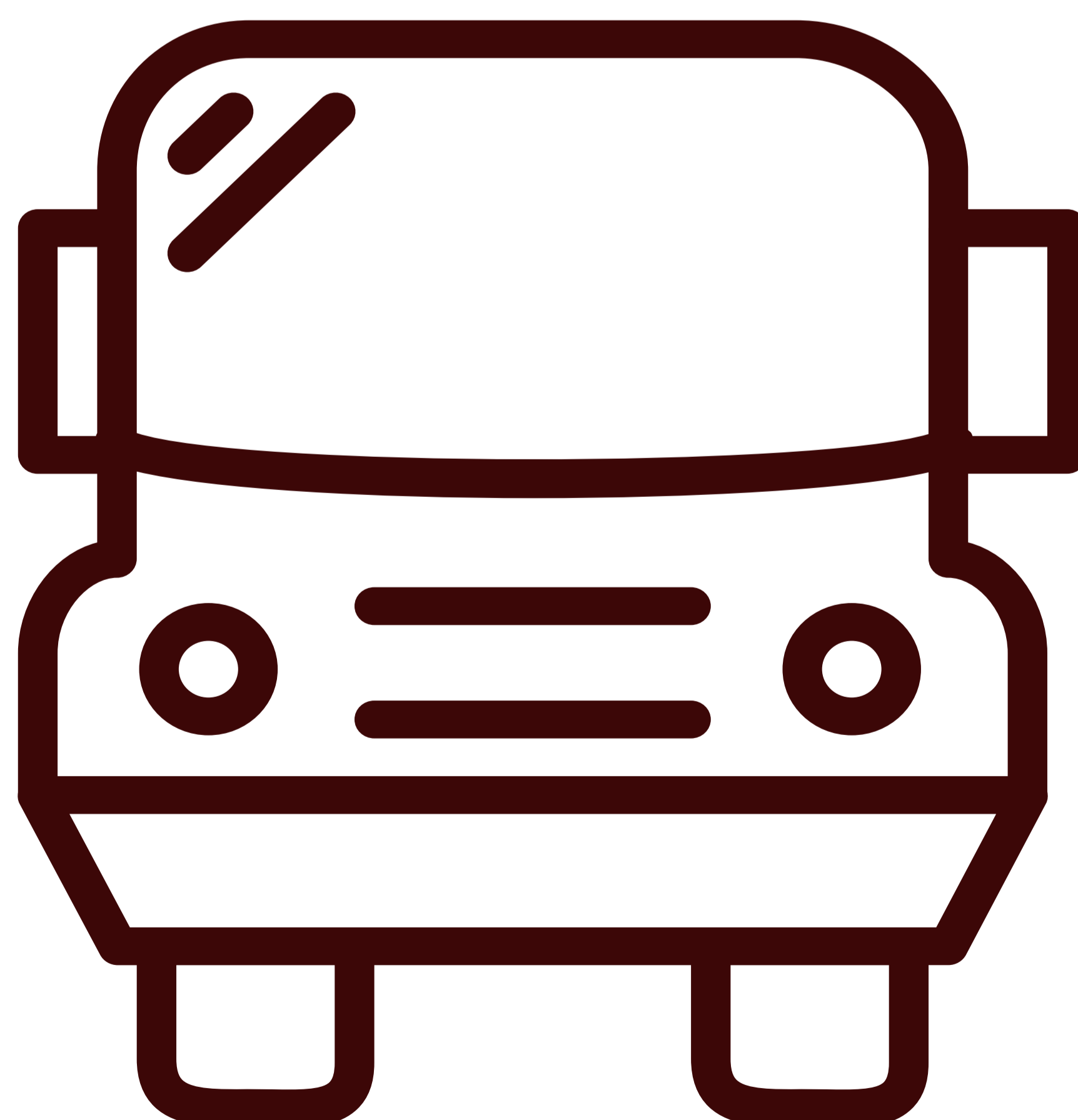
Other Sources Include: Health Care Referral, City/Town/Municipal Office, Pamphlets

Half (50%) of PWD in urban areas indicated that they would prefer to find out about specialized transit services in their community through "media sources" (e.g., community newspaper, television, radio, internet). Fewer PWD in urban areas identified "other sources", "family or friends", the "mail", and "seniors' centres" as methods that they would like to find out about transportation services (see graph to right).



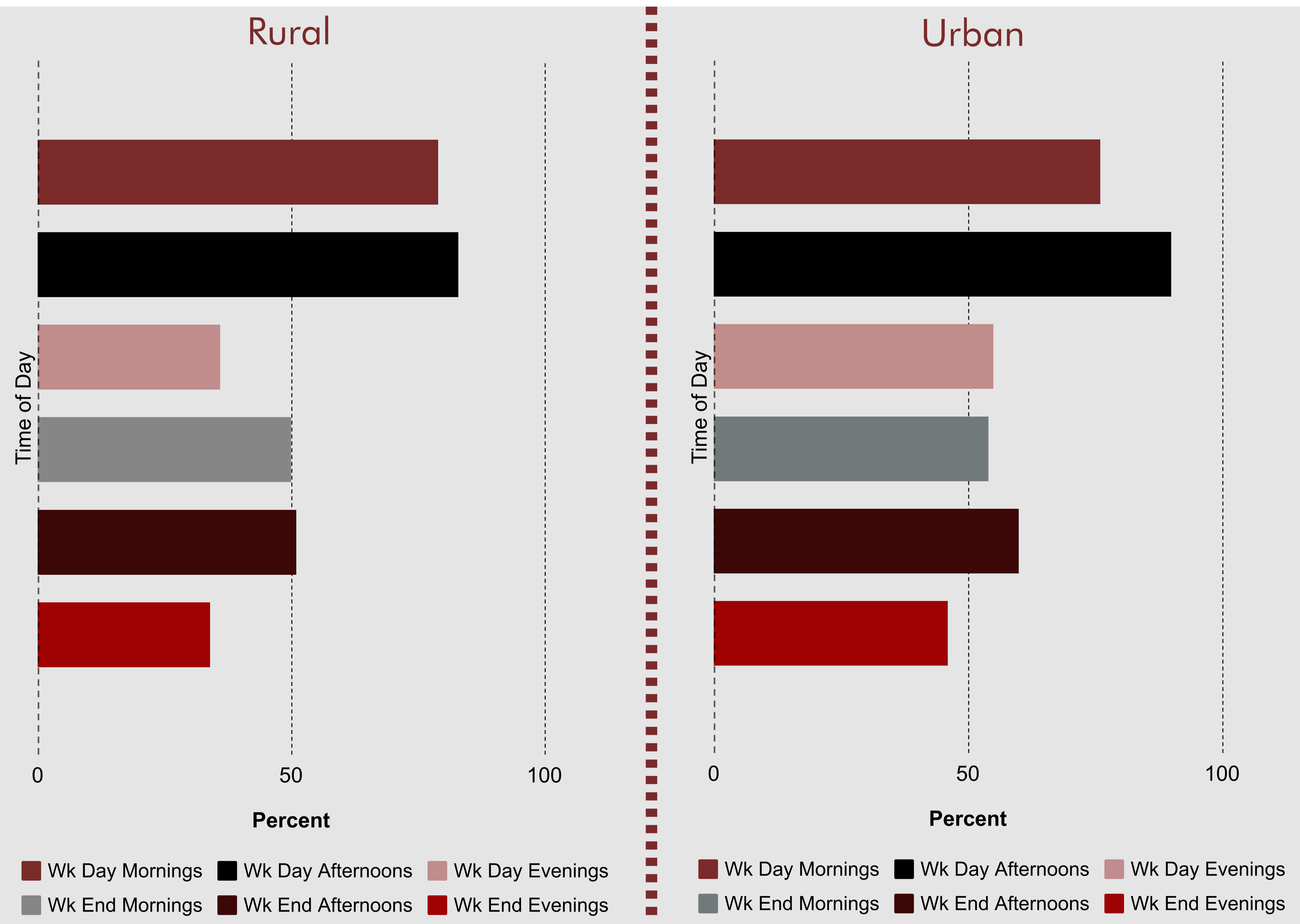
5 A's of 'User Friendly' Transportation

The 5 A's	Description
Availability	Refers to transportation services that are provided and those services are available when needed (e.g., days, evenings; weekdays, weekends).
Acceptability	Refers to transportation in which service quality is acceptable in terms of advance scheduling; vehicles are clean and well-maintained; service providers provide driver 'sensitivity to seniors' training.
Accessibility	Refers to transportation in which the service provider provides 'door-to-door' and 'door-through-door' transportation; provides transportation to essential and non-essential activities.
Adaptability	Refers to transportation that can accommodate riders wanting to make multiple stops (trip chaining); service providers allow for different types of routes (fixed vs. user response) and passenger service (single vs. group); service providers can accommodate wheelchairs and walkers; escorts can be provided.
Affordability	Relates to the cost of transportation and transportation that is affordable (e.g., uses volunteer drivers to reduce costs, vouchers, or coupons available, etc.).



Availability

Time of Day that Specialized Transit Services Should be Available



When asked what time of day that specialized transportation services should be available in the community, PWD in rural areas identified weekday mornings and afternoons (~80% each), followed by weekend mornings and afternoons (~50% each). A similar pattern was evident for PWD in urban areas.

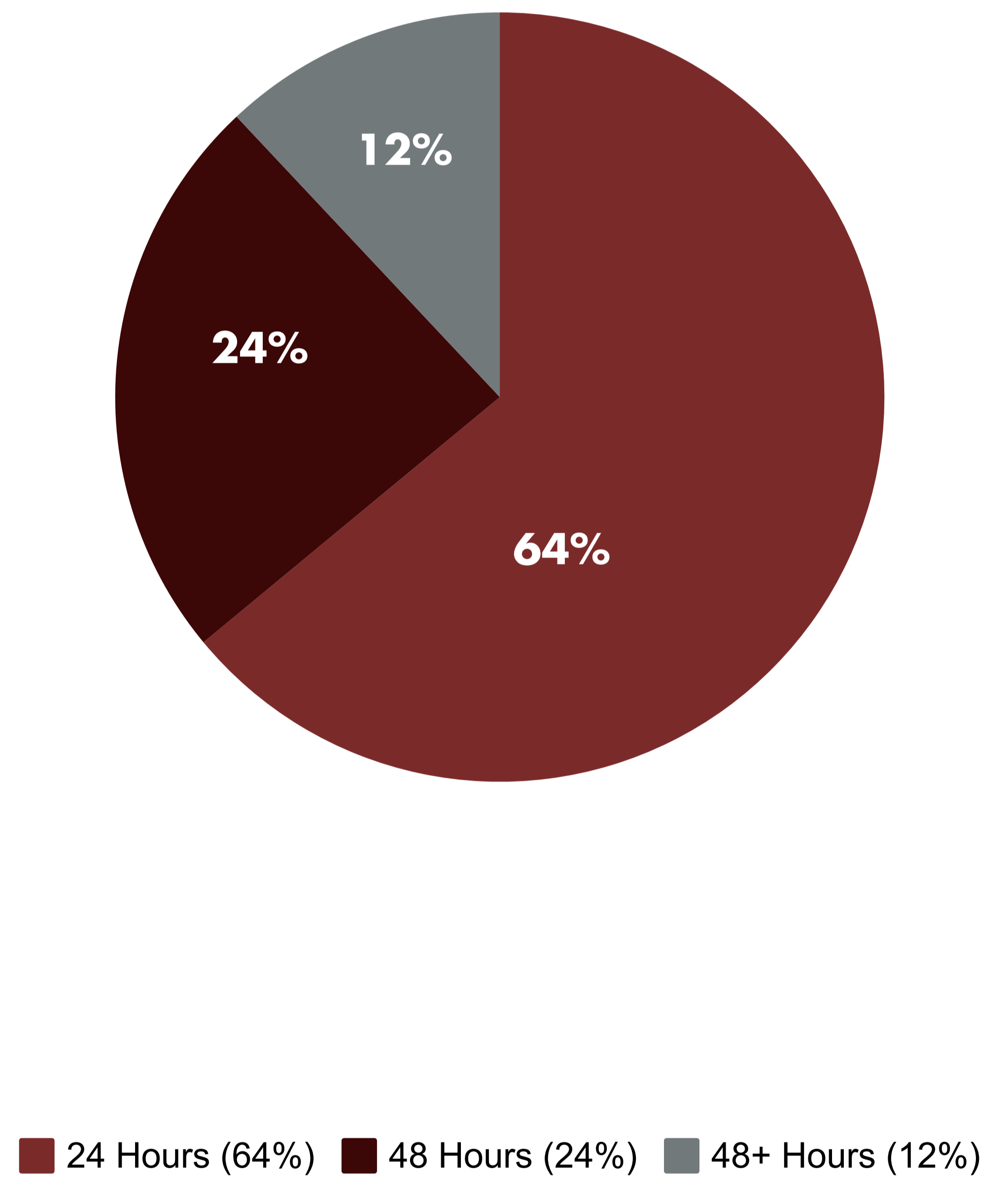
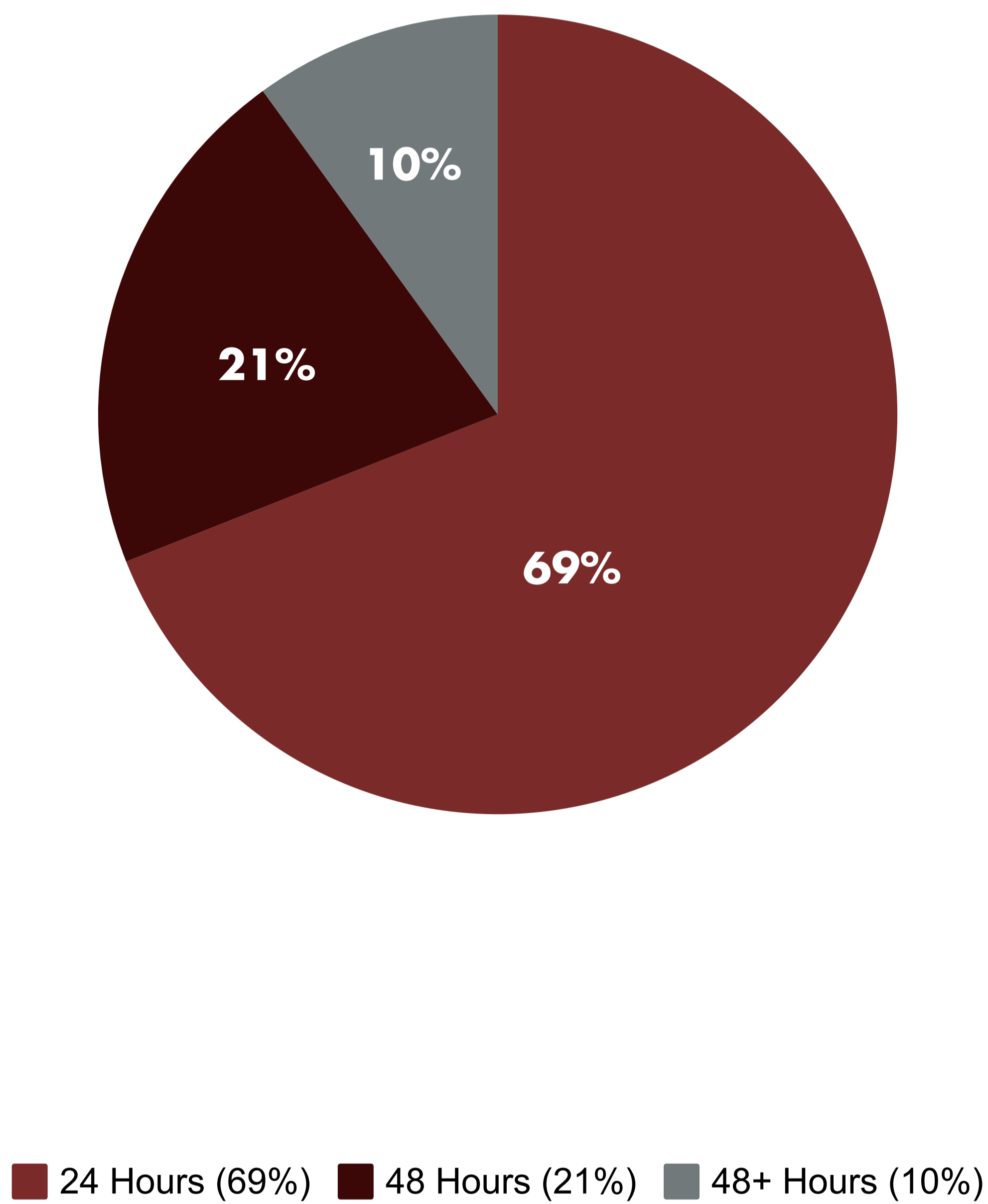
Of interest, a significantly greater percent of PWD in urban areas of the province indicated that specialized transit services should be available weekday evenings as compared to their rural counterparts (55% vs. 36%, respectively) ($p = .03$).

Acceptability

Booking a Ride in Advance

Rural

Urban



When asked about booking a ride for specialized transit services, about two-thirds of PWD in rural and urban areas of the province (69% and 64%, respectively) thought that it was "somewhat or very reasonable" to be able to book 24 hours in advance.

On the other hand, about one-third of PWD in both rural and urban areas (31% and 36%, respectively) thought that having to book a ride 48 hours or greater in advance was "somewhat or very reasonable".

Acceptability

Booking a Trip Online



61%

of PWD in rural areas said that they were "somewhat or very likely" to book trips online for specialized transit services.

vs.

54%

of PWD in urban areas said that they were "somewhat or very likely" to book trips online for specialized transit services.

Knowledgeable about PWD Health Issues



> 90%

Almost all PWD in rural and urban areas said that it was "somewhat or very important" for specialized transit service drivers to be knowledgeable about health issues of PWD.

Accessibility

Importance of Having Specialized Transit Services for Different Trip Types

Medical Appointments



Rural

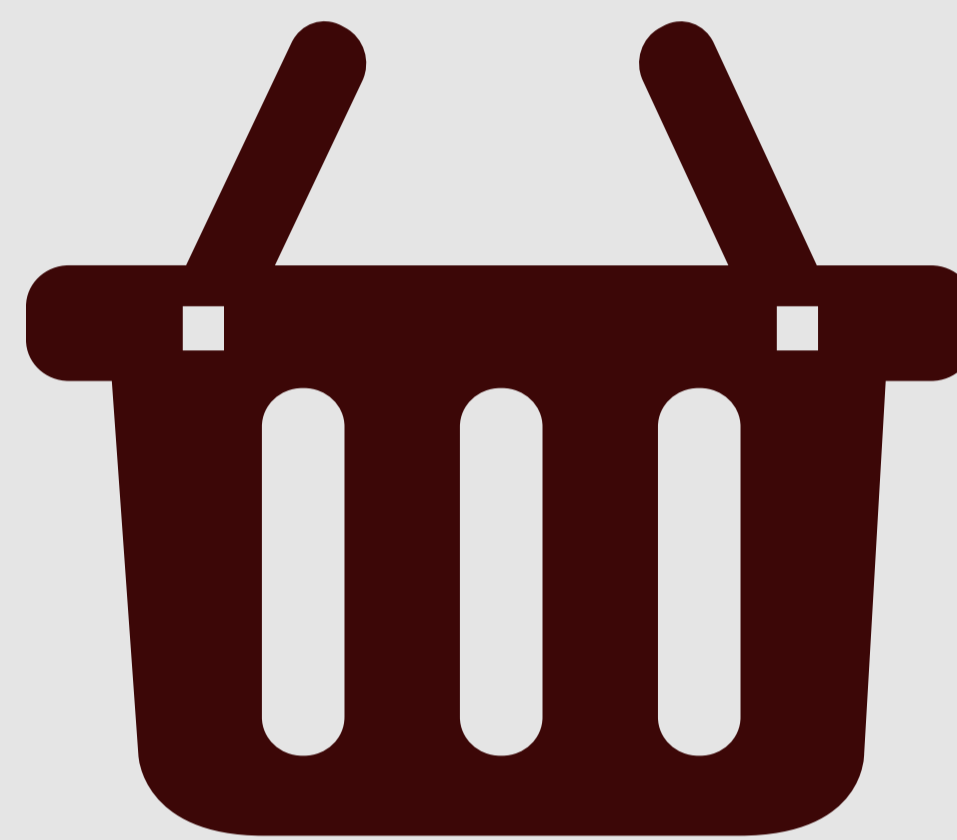
Urban

98%

100%

Somewhat / Very Important

Essential Services



Rural

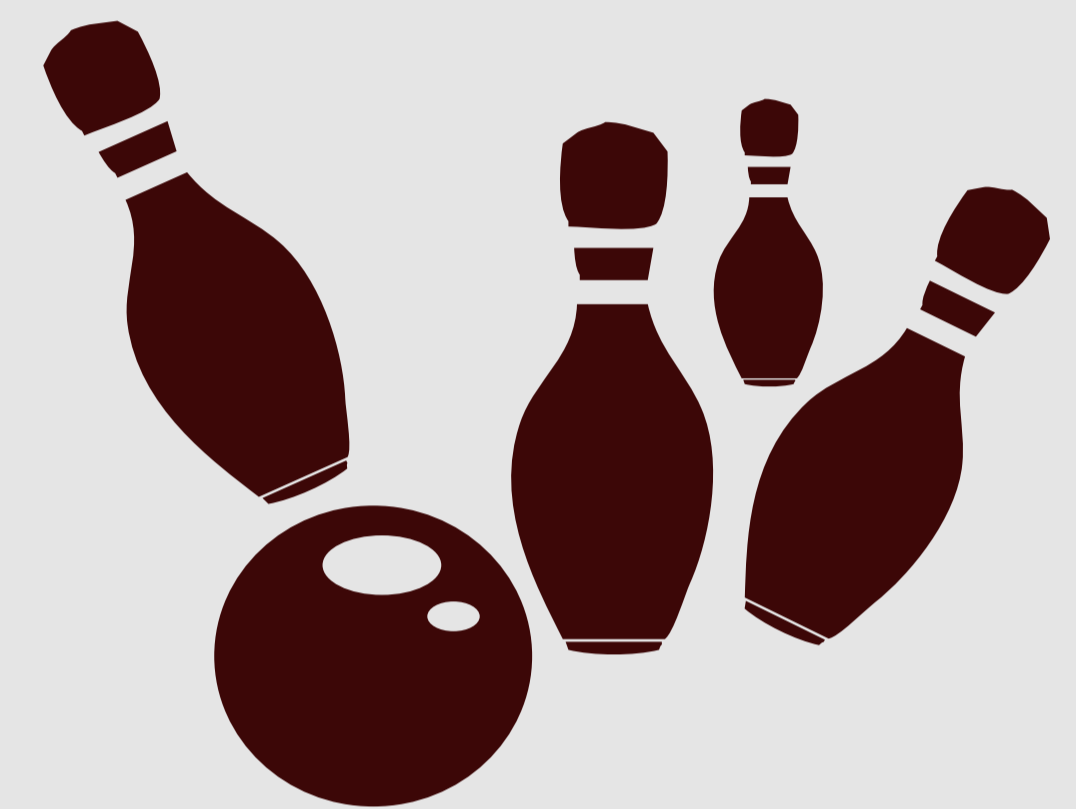
Urban

98%

99%

Somewhat / Very Important

Recreational / Leisure / Religious



Rural

Urban

98%

97%

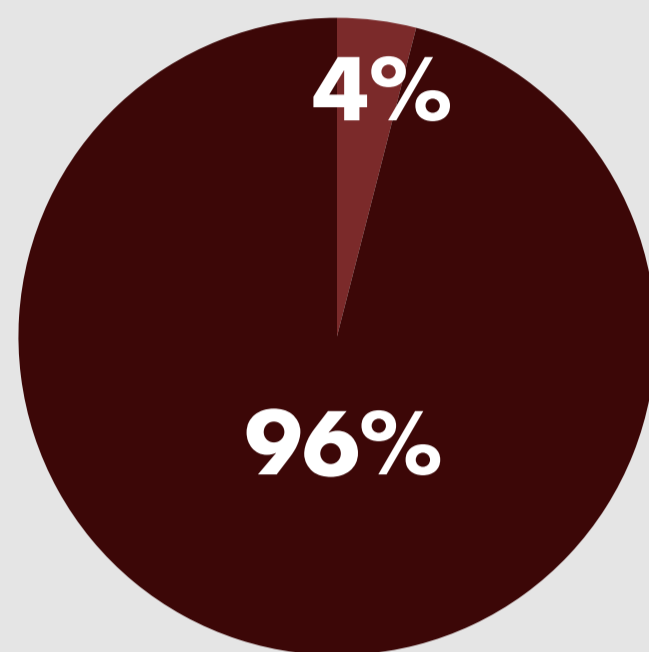
Somewhat / Very Important

When asked about how important is it to have specialized transit services available in the community for medical appointments (e.g., doctor's appointments, diagnostic testing, other medical procedures, etc.), for essential services such as grocery shopping or banking, and for recreation/leisure activities such as bingo or socializing with friends, visits with family or friends, or religious activities, you can see that each of these trip types was rated as being "somewhat or very important" by the vast majority of PWD in both rural and urban areas of the province.

Adaptability

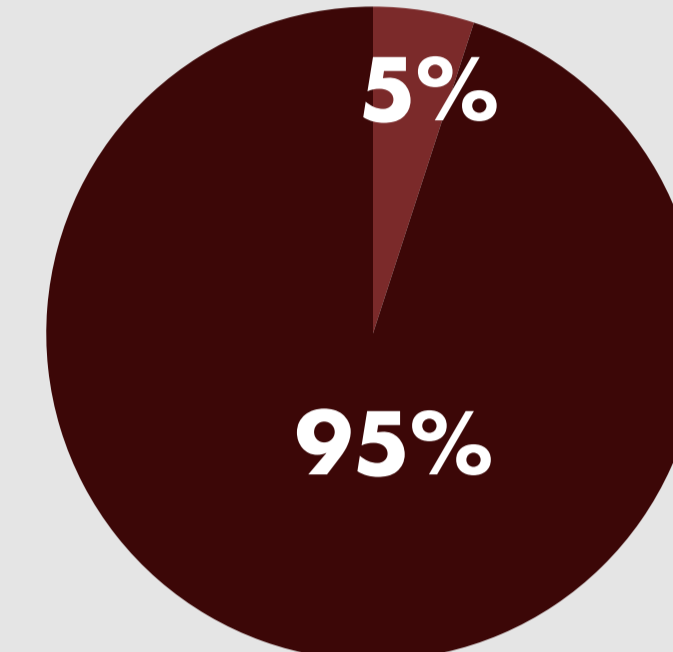
Importance of Specialized Transit Services that Allow for Multiple Stops

Rural



■ Not at all Important (4%) ■ Somewhat / Very Important (96%)

Urban



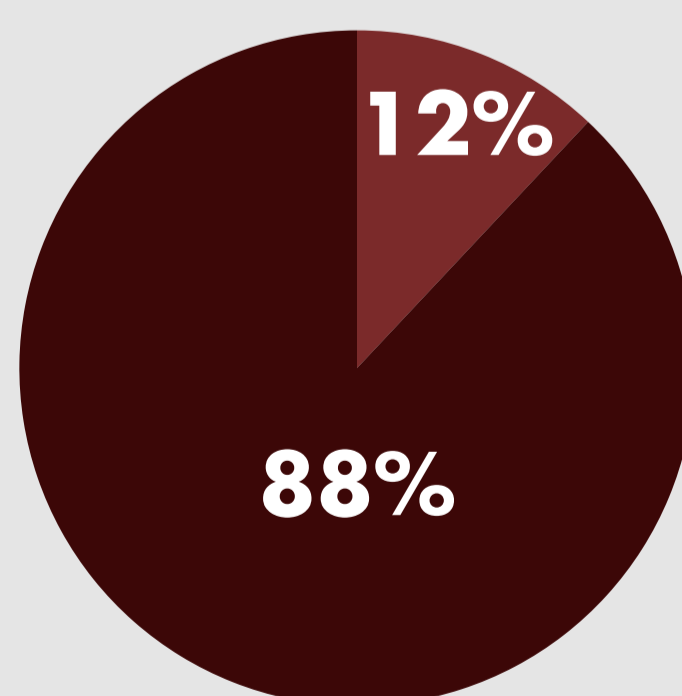
■ Not at all Important (5%) ■ Somewhat / Very Important (95%)

When asked about the importance of specialized transit services that allow for multiple stops (e.g., stopping at the bank and then the grocery store on the way home from a medical appointment), you can see in the graphs above that PWD in rural and urban areas of the province rated this feature as being "somewhat or very important" (96% and 95%, respectively).

This same pattern was evident when asked about the importance of specialized transit services that can accommodate wheelchairs and/or scooters (see graphs below).

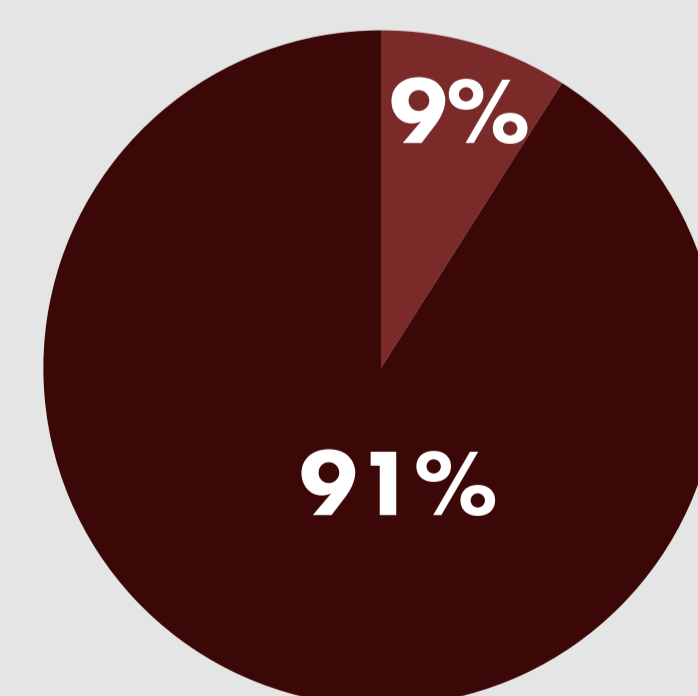
Importance of Specialized Transit Services that Accommodate Wheelchairs and/or Scooters

Rural



■ Not at all Important (12%) ■ Somewhat / Very Important (88%)

Urban



■ Not at all Important (9%) ■ Somewhat / Very Important (91%)

Affordability



Rural

How much can you AFFORD to pay for a one-way ride of ~30km?

How much are you WILLING to pay for a one-way ride of ~30km?

\$11.03

\$12.67

Urban

How much can you AFFORD to pay for a one-way ride of ~30km?

How much are you WILLING to pay for a one-way ride of ~30km?

\$8.74

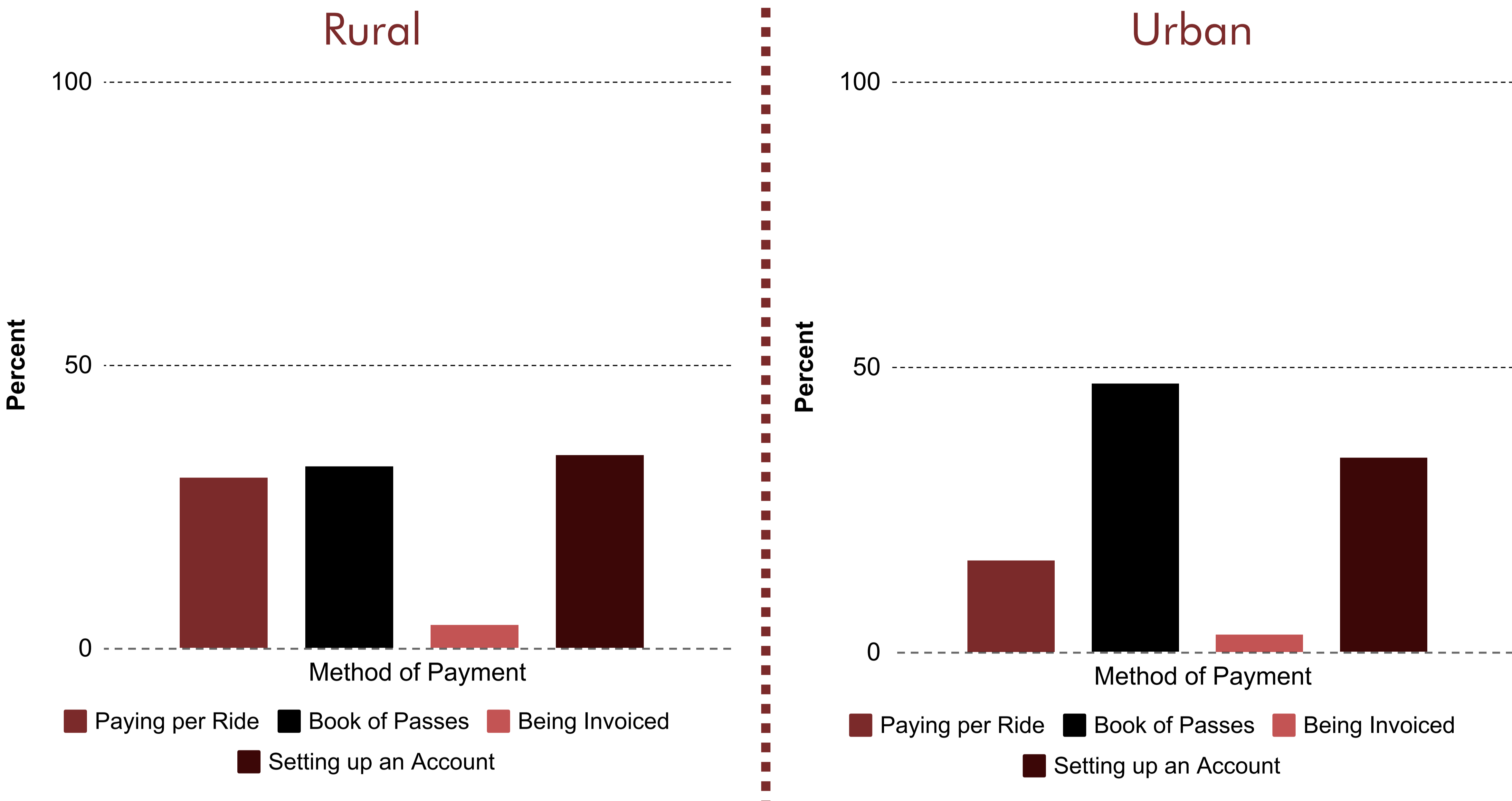
\$9.13

When asked about the cost of specialized transit services, PWD in rural areas indicated that they could afford to pay about \$11.00 for a one-way ride of approximately 20 miles (~30 km) but that they would be willing to pay about \$13.00.

For PWD in urban areas, they said that they could afford to pay about \$9.00 and were willing to pay about the same for a one-way ride of approximately 20 miles (~30 km).

Affordability

Preferred Method of Payment



When asked about the preferred method of payment for specialized transit services, PWD in rural areas indicated that they would prefer "setting up an account" with the service provider (34%), purchasing a "book of passes" (32%), or "paying per ride" (30%) (see graph above to the left).

In comparison, almost half (47%) of PWD in urban areas indicated that they would prefer to purchase a "book of passes" followed by "setting up an account" with the service provider (34%) (see graph above to the right).

Few PWD in rural and urban areas chose "being invoiced" as a preferred method of payment for specialized transit services.

Using the Results to Make a Difference in the Lives of PWD

Results from the 2012 Canadian Survey on Disability indicate that almost 14% of Canadians aged 15 years and older reported some type of disability (this percent refers only to the population living in private households and does not include those living in institutions). Results from this same survey show that disability increases substantially with age, rising from 4.4% among those aged 15 to 24 to 33.2% among those 65 and older. Based on the most recent data from Alberta, 16% of adult Albertans have a disability, with a significant percentage of this population 65 years of age and older (Alberta Seniors and Community Supports, 2006).

Similar to the senior population, transportation mobility has long been recognized as an important issue for PWD. In fact, disability has been identified as "the most important individual characteristic influencing travel behaviour, mobility, and problems with transportation" (Mattson et al., 2010, p. 3). It also is the case that PWD fare far worse than their non-disabled counterparts across a broad range of health indicators, including delays in or failure to receive health care as well as access to other needed services (Mattson et al., 2010). And, we also know that PWD are less likely to drive, are more likely to say that transportation is a limiting factor for trip making ability, and are less likely to indicate that there are adequate transportation options available in the community.

As with the senior population, the need for specialized transit services for PWD in both rural and urban areas will continue to increase. Currently, there are a number of service providers in Alberta providing transportation services to PWD. Because of these service providers, many PWD in our province are able to get to medical appointments, shop for groceries, and attend social activities in their community. It also means that many PWD will be able to be engaged in and be able to contribute to their community. But, many of the 739 communities in Alberta are without specialized transit services for PWD.

However, developing these services is difficult. What is the need? Who will use the service? What types of trips are needed? What days and what times should the service be available? How do PWD want to pay? How much can they pay? The results presented in this report provide answers to many of the questions that communities face when starting up a transportation service for PWD or when improving existing services.

We also encourage you to access our Transportation Toolkit. This Toolkit consists of 6 sections - the first 3 sections of the Toolkit help to build the foundation of an alternate transportation service, with the last 3 sections devoted to launching and building the sustainability of the service. Although the Toolkit focuses on alternate transportation for seniors, the information provided also will be useful for organizations wishing to implement or improve on specialized transportation services for PWD. The Toolkit is available at no charge and can be accessed online at www.mard.ualberta.ca. Or, for a hard copy, email us at mard@ualberta.ca.

If you have questions about the results or wish to discuss how your community can best use the results to improve specialized transit services for PWD, please call or email us.

Citation

Dobbs, B. M., Pidborochynski, T., & Hussey, E. (2017).
Alberta Provincial Transportation Needs Assessment -
Persons with Disabilities: Rural and Urban Alberta.
Edmonton, AB: University of Alberta.

Bonnie M. Dobbs, PhD

Tara Pidborochynski, MSc

Emily Hussey, BSc

Department of Family Medicine

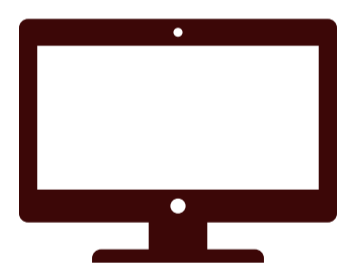
University of Alberta



(780) 492-6273



mard@ualberta.ca



www.mard.ualberta.ca