Opinion Research Findings:

Traffic Roundabouts in Montana

June 2018

MONTANA MDT DEPARTMENT OF TRANSPORTATION

S360

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Methodology

METHODOLOGY | POLL

- Strategies 360 conducted a live telephone survey of 500 adults in Montana.
- Interviews were conducted May 10-14, 2018. A combination of landline and mobile phones were called to ensure greater coverage of the population sampled.
- The margin of error for a survey of 500 interviews is ±4.4% at the 95% confidence level. The margin of error for other subsamples may be higher.
- Other sources of error not accounted for by the stated statistical margin of error include, but are not limited to, question wording, question order, coverage bias, and response bias.
- Please refer to the poll toplines for a full list of results and questions asked.

METHODOLOGY | ONLINE DISCUSSIONS

- Strategies 360 conducted two online discussions, one each in MDT's District 3 (central and northern Montana) and District 4 (eastern Montana) regarding roundabout projects in Belt (D3), as well as Sidney, Poplar, and Miles City (D4).

- Each discussion took the form of an online bulletin board in which roughly 15 adults participated over the course of three days, answering questions on a range of topics related to transportation and roundabouts.

- Participants were recruited across a range of ages, industries, and educational attainment.

- Because this research was qualitative in nature and not statistically representative of the greater population, the results should be viewed as directional, rather than statistically representative or definitive.

Executive summary

EXECUTIVE SUMMARY

- **Roundabouts are a difficult sell in Montana—especially in smaller towns and rural areas.** Rural Montanans often perceive roundabouts as unfamiliar, difficult to use, or unnecessary. Above all, they wonder why roundabouts would be installed in their communities instead of reserved for use in bigger cities.

- While many Montanans are dug in against them, there are **opportunities to shift the narrative** and connect the benefits of roundabouts to things they care about. This all **starts with making a compelling safety case that communicates the "why" and highlights the safety stakes at the local level**.

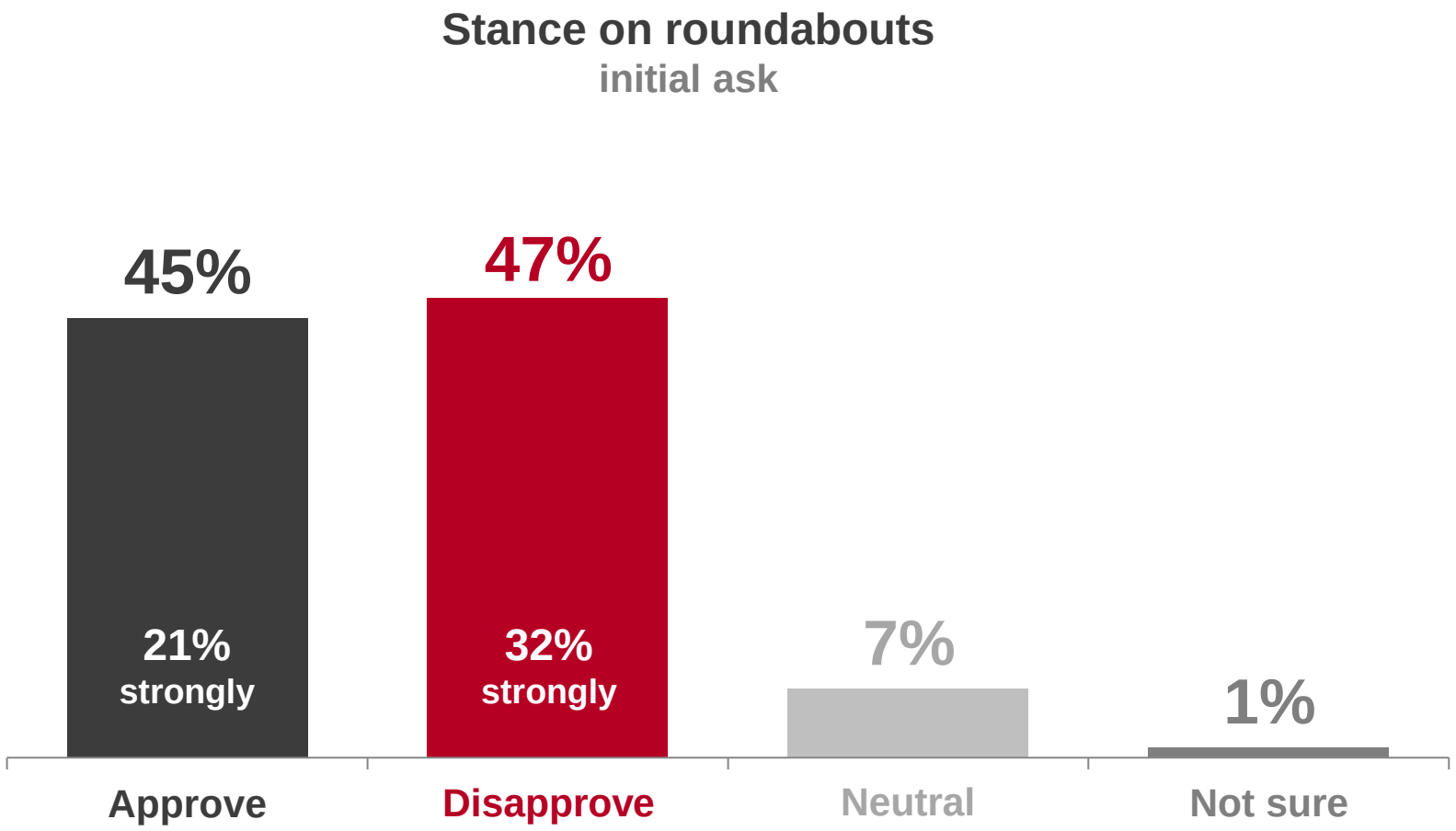
- This report begins with an assessment of current attitudes, evaluates various pro-roundabout messaging angles, diagnoses some of the most damaging critiques of roundabouts, and constructs a comprehensive safety argument that should serve as one of the building blocks for MDT's public outreach.

Existing perceptions

Existing perceptions

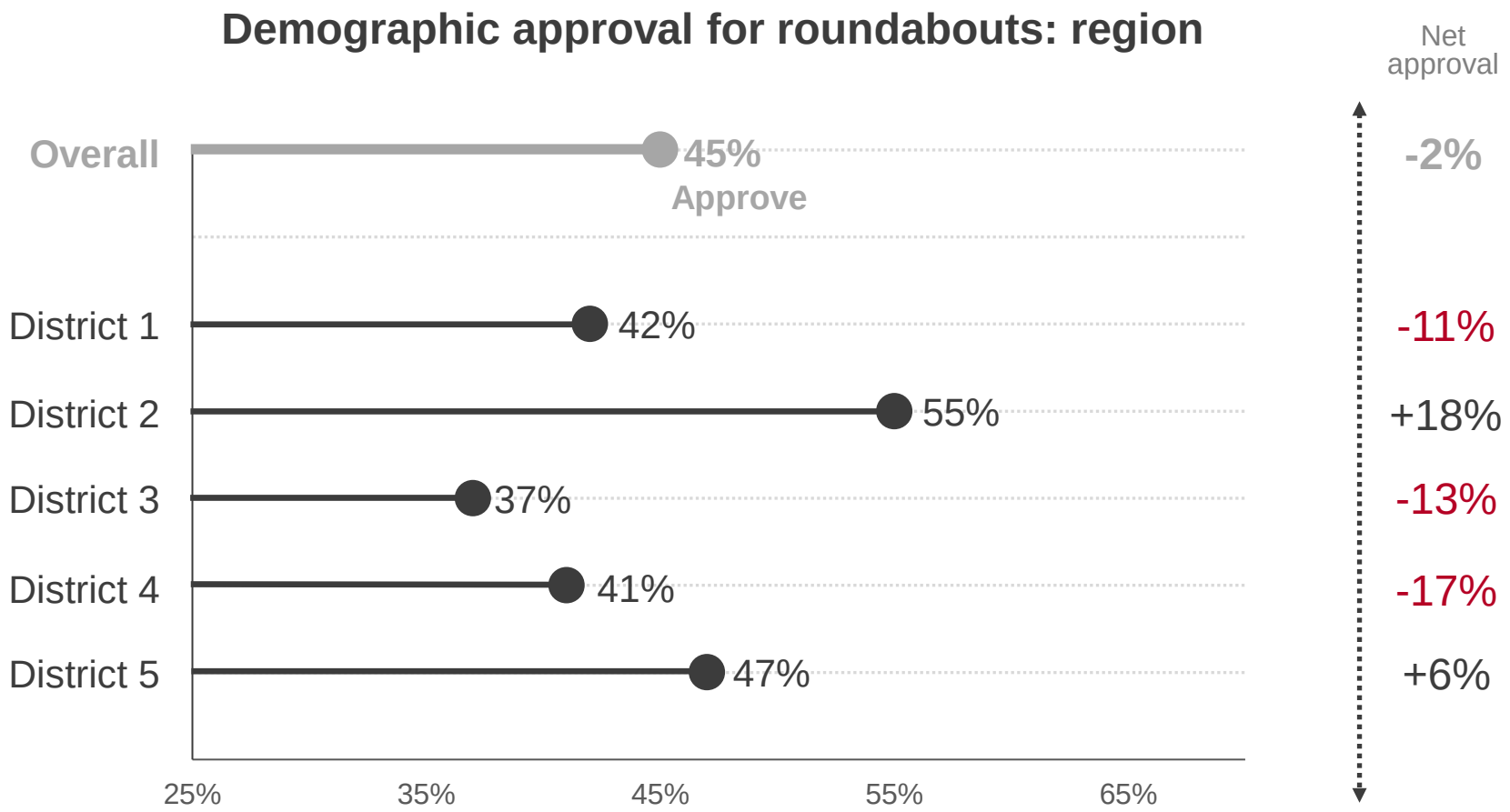
Approval / disapproval of additional roundabouts

Before introducing any information about roundabouts, Montanans are sharply divided on them—and very few have yet to form an opinion.



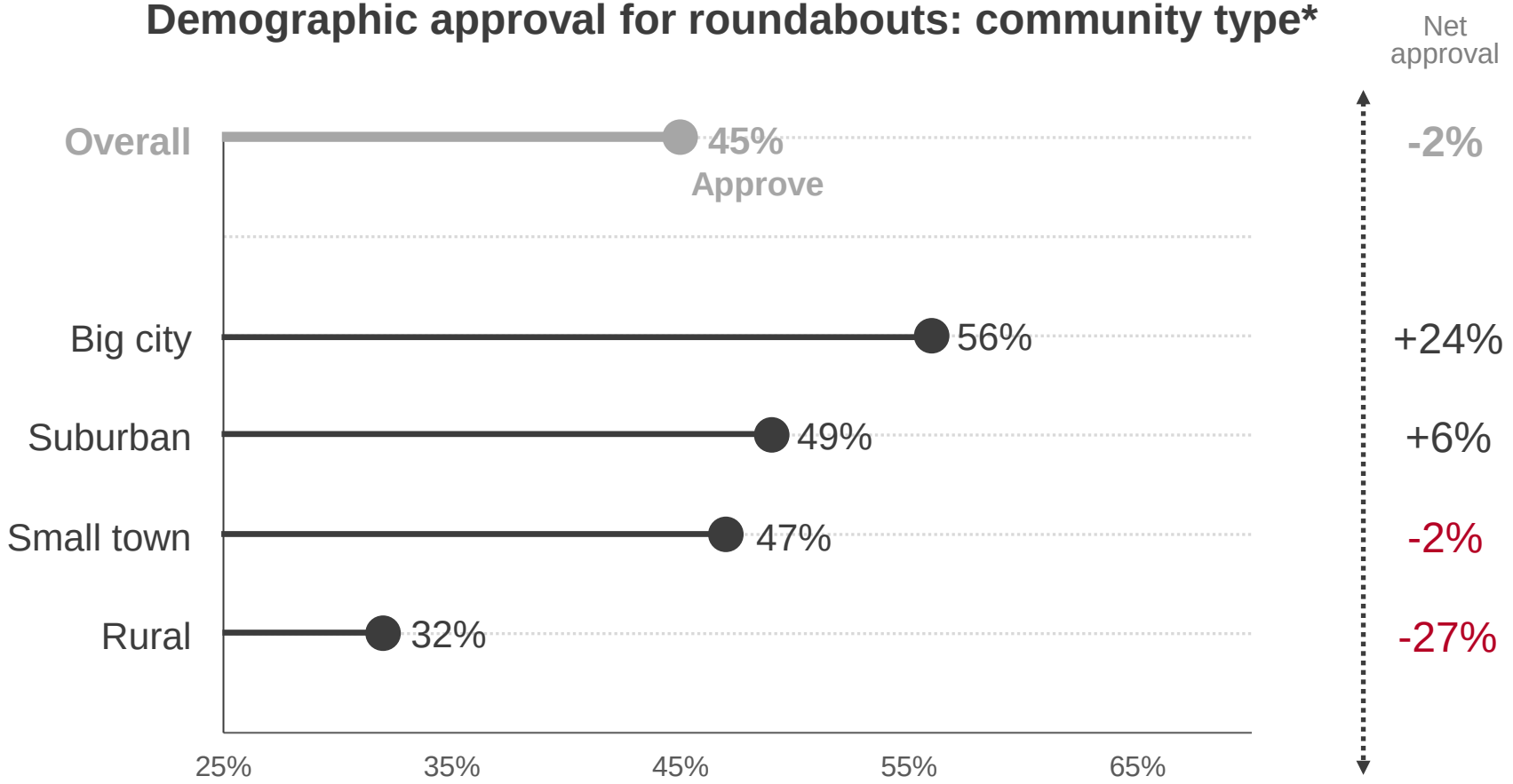
Full question text: “In general, do you approve or disapprove of the use of more traffic roundabouts in your area of Montana?”

Roundabout approval differs substantially by region: it comes in highest in southwestern and central Montana (Districts 2 and 5) but lags considerably in the rest of the state.



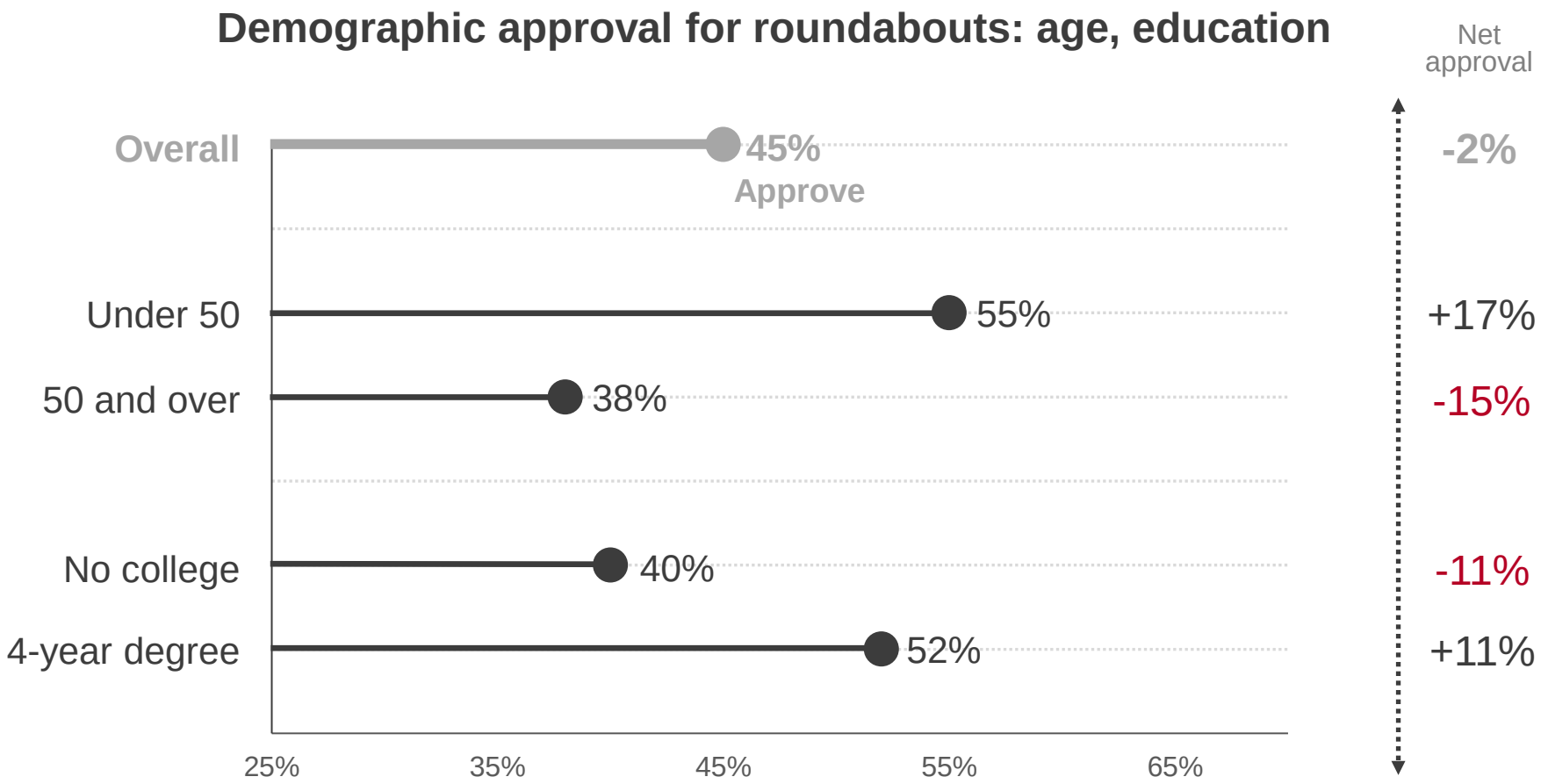
Not surprisingly, urbanization has a strong correlation with approval, with rural Montanans taking a much harder line against roundabouts than their counterparts in more populous areas.

Demographic approval for roundabouts: community type*

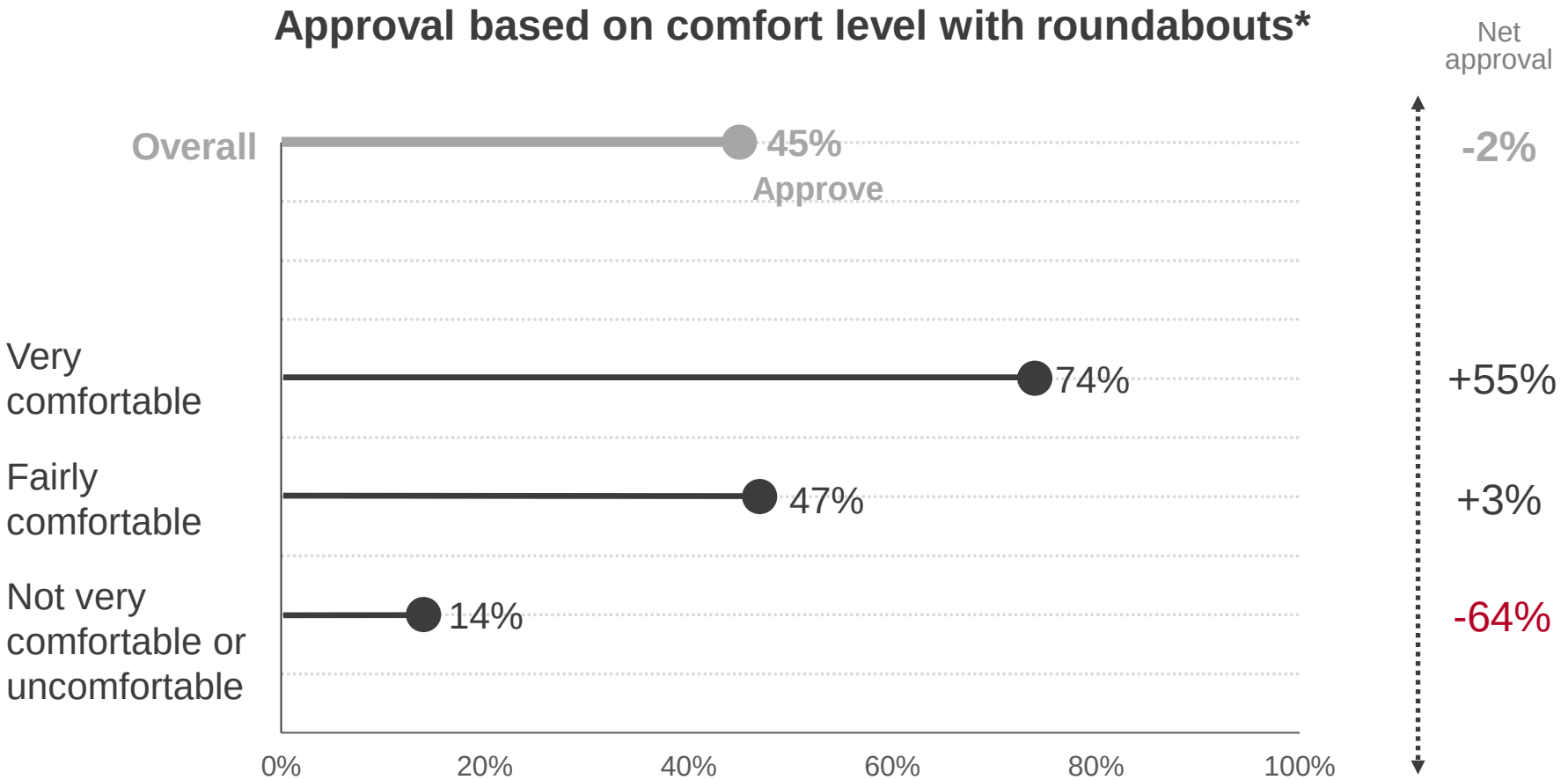


*Respondents were asked to self-identify the type of community they live in.

Age and educational attainment also play significant roles in attitudes toward roundabouts.



Perhaps the most obvious correlation with roundabout approval: comfort level when driving through one. Very few of those with a low comfort level approve of their use.

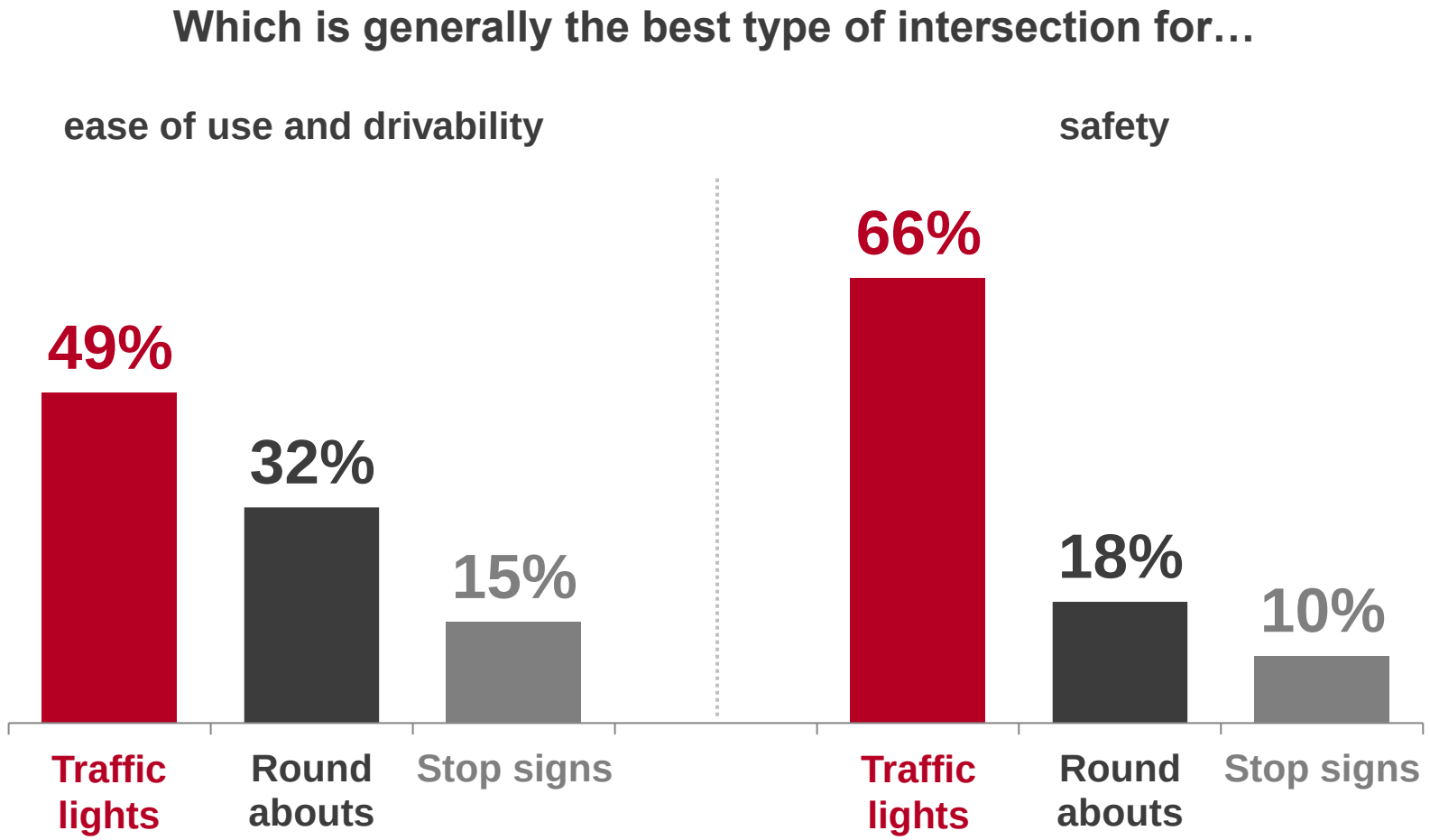


Full question text: “Please tell me which of the following best describes your comfort level when driving through roundabouts.”
Very comfortable = 37%, fairly comfortable = 27%, not very comfortable/uncomfortable = 36%.

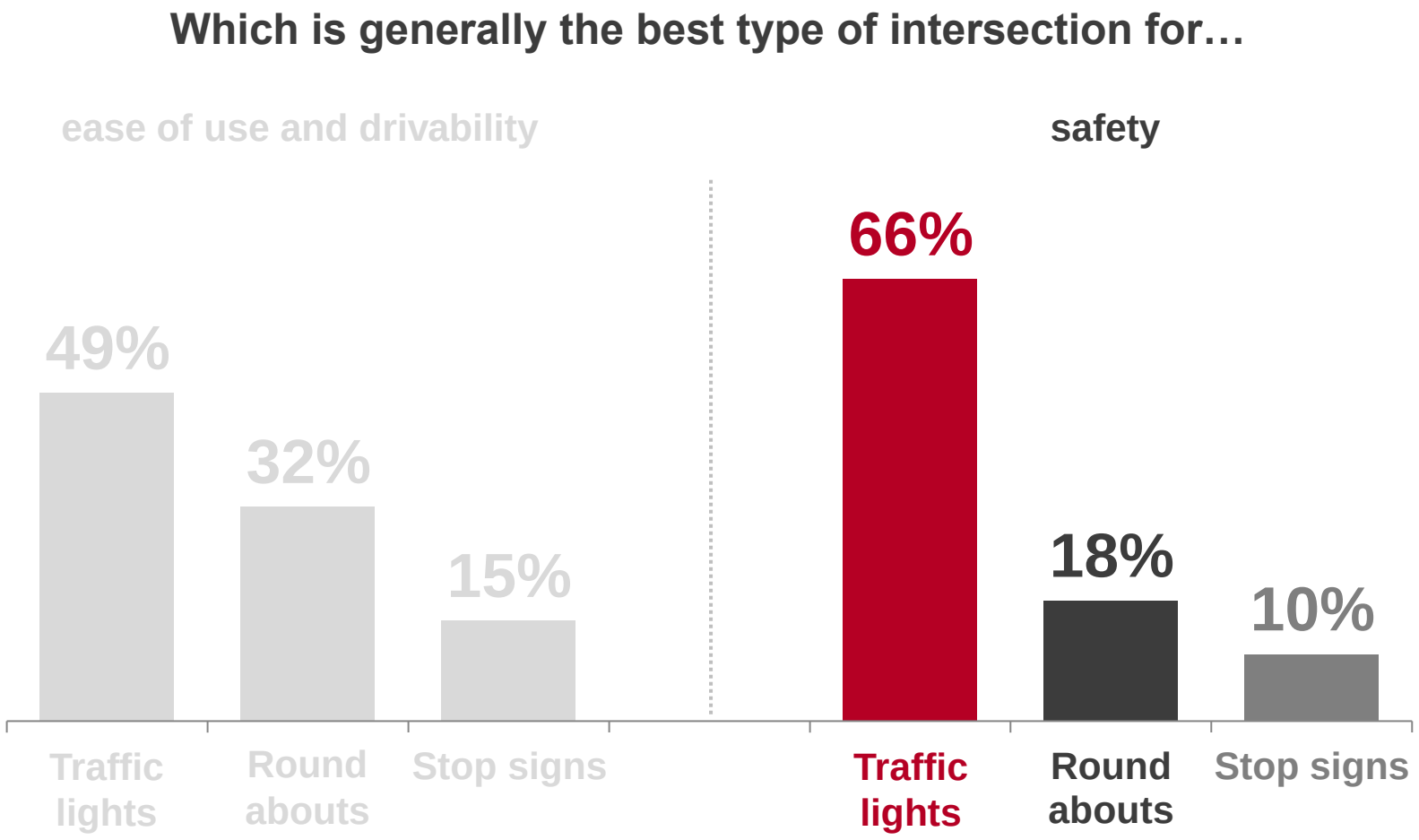
Existing perceptions

Safety and ease of use

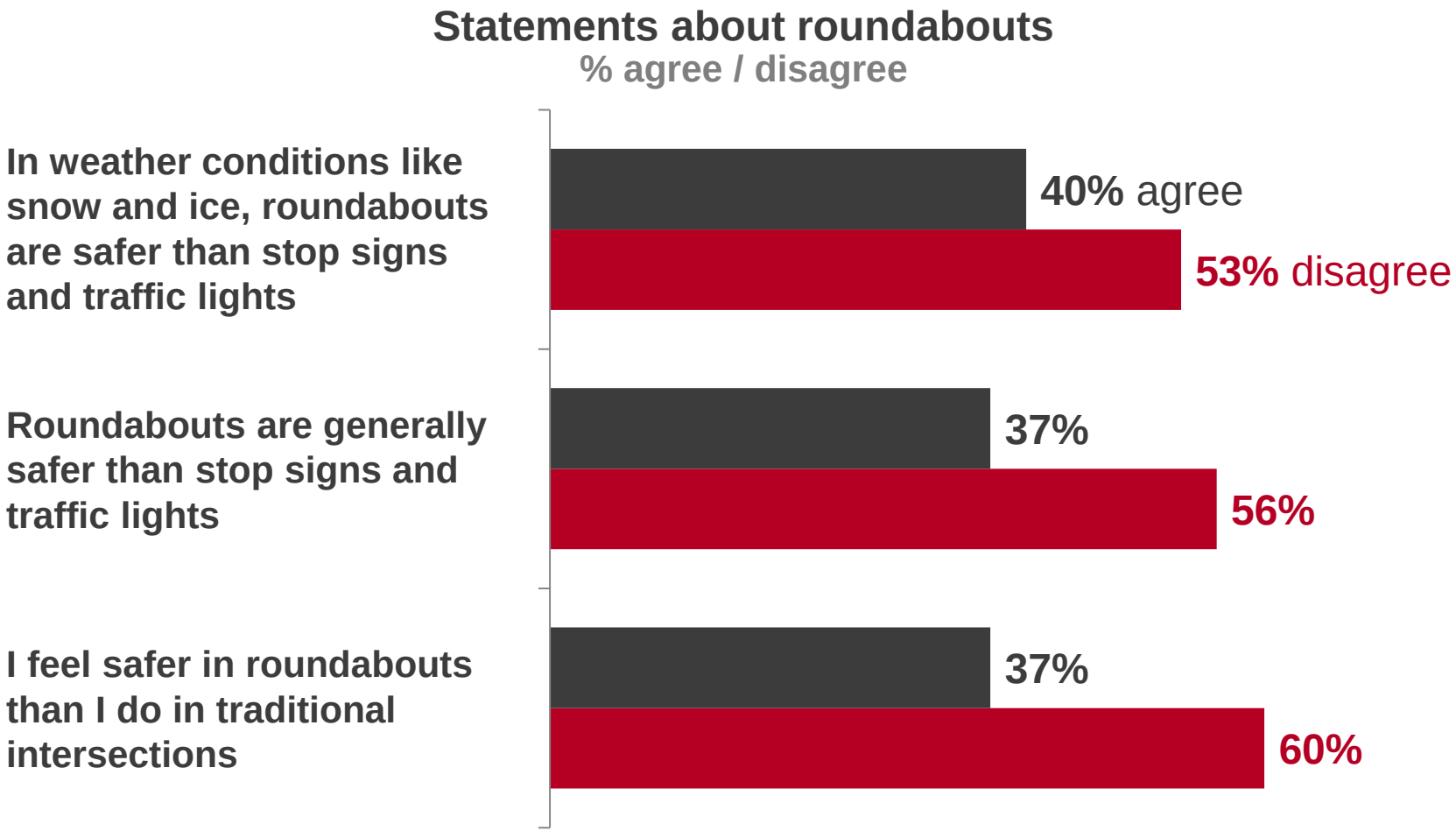
Montana drivers prefer traffic lights to other options regardless of whether they are considering the choice from an ease of use perspective or a safety perspective.



Indeed, as we saw in both the poll and the online discussions, most Montanans simply have no baseline understanding of the safety benefits of roundabouts.



Indeed, Montanans do not yet perceive roundabouts as safer than alternative options, either generally or in adverse weather conditions. And only a minority feels personally safer in them.



For many, skepticism about roundabouts as a safer alternative to traditional intersections appears to be rooted in their own personal discomfort using roundabouts.

"I feel safer in roundabouts" agreement based on roundabout comfort level	% agree
Overall	37%
Very comfortable	66%
Fairly comfortable	33%
Not very comfortable / uncomfortable	9%

Very comfortable = 37%, fairly comfortable = 27%, not very comfortable/uncomfortable = 36%.

Building the right message

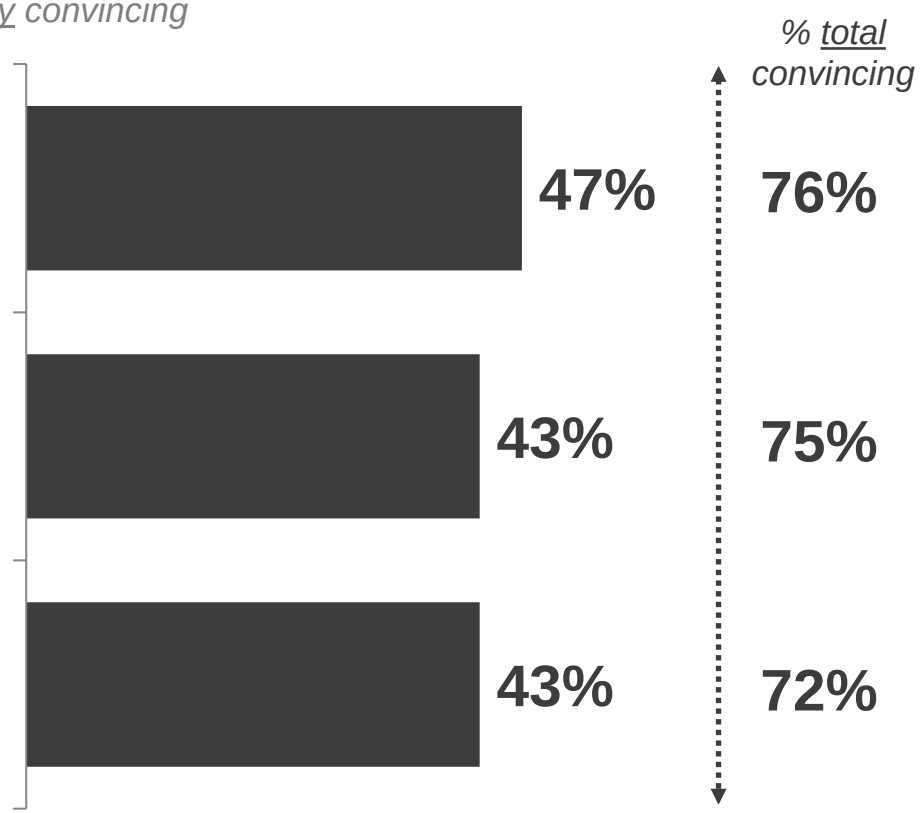
Building the right message

Testing all the angles

The most impactful pro-roundabout arguments include concrete examples of successes in Montana communities (including before/after crash statistics), as well as an explicit reminder that only roundabouts can prevent the most severe and dangerous types of crashes.

Arguments for roundabouts: top tier

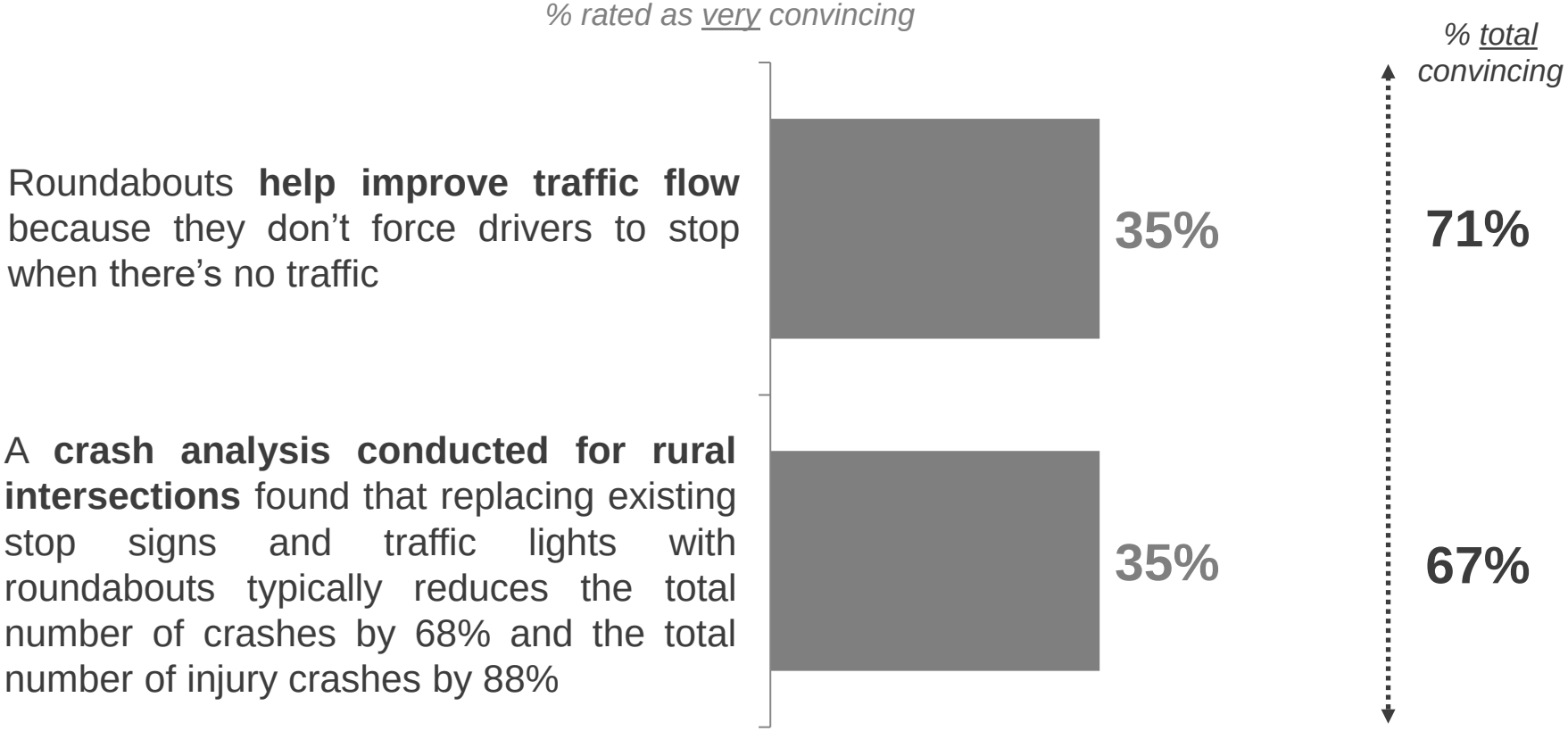
% rated as very convincing



Articulating the benefits for traffic flow is somewhat persuasive, as well as talking about the safety benefits in an aggregate sense.

Arguments for roundabouts: second tier

% rated as very convincing



These arguments show less widespread appeal but can still be used situationally to introduce roundabouts to new audiences or respond to criticism.

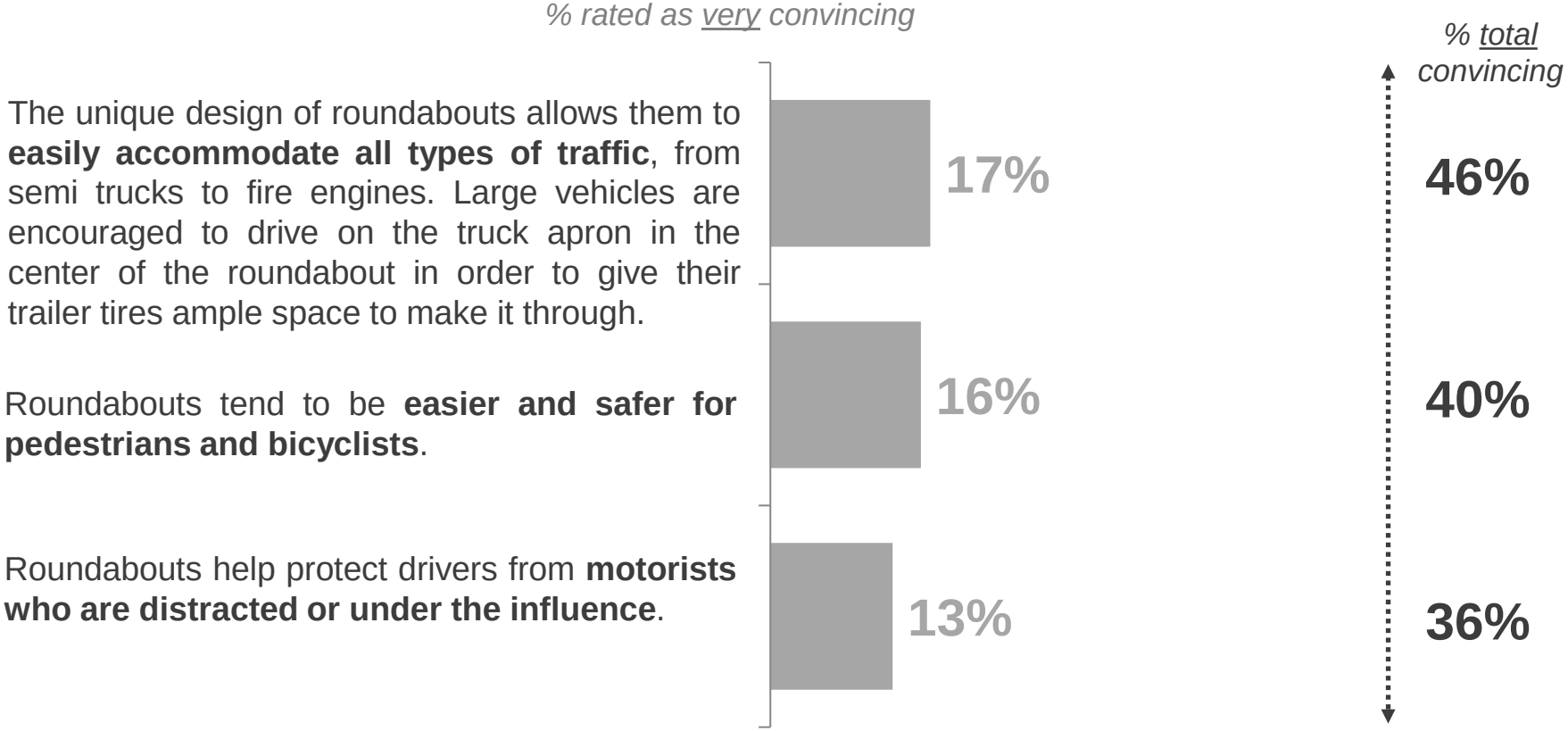
Arguments for roundabouts: situational

% rated as very convincing

More work needs to be done in refining the way MDT talks about large vehicles and truck aprons (see "Challenges and opportunities: large vehicles"). Reckless drivers are a real concern for Montanans, but MDT needs to connect the dots on how roundabouts lessen that risk.

Arguments for roundabouts: situational

% rated as very convincing



Building the right message

Crafting the safety argument

RECOMMENDATIONS | Crafting the safety message

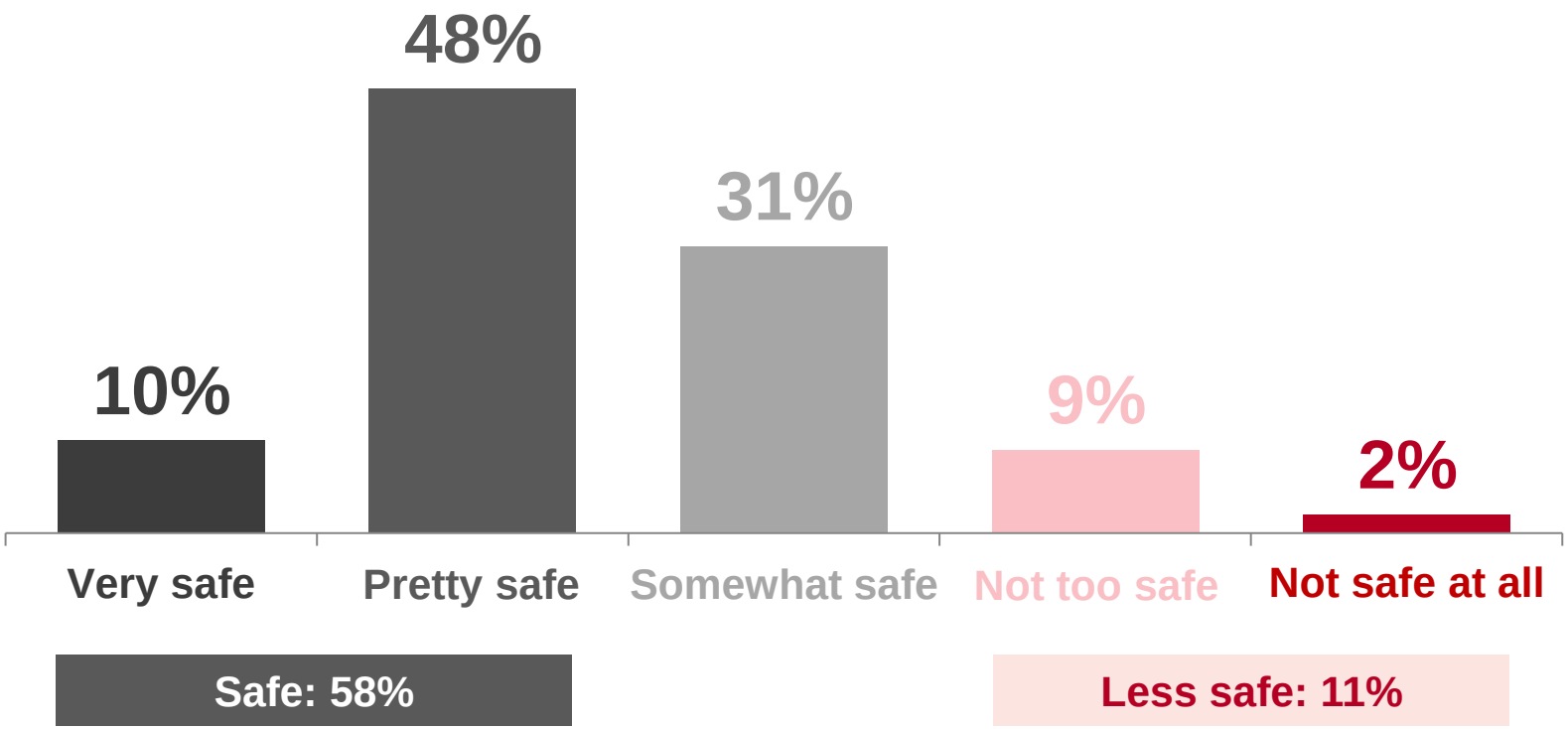
1. **Talking about roundabouts through a safety frame should always be the preferred approach, and the rationale for new roundabout projects should always start with safety.** In the poll, safety arguments generally demonstrated the broadest reach and the greatest intensity levels across the board, from those who already approve of roundabouts to those most skeptical about them (and everyone in between).

2. **Always assume that the audience does not yet understand the safety case for roundabout projects.** In both online discussions, even those who were familiar with roundabout projects underway in their areas exhibited very little understanding of *why* transportation authorities would choose roundabouts for their communities, which leads them to focus on the perceived downsides (e.g. disruptive, confusing, expensive, etc.).

3. **Be specific: use the unique crash analysis data for each intersection under consideration to make the case for the number of lives that can be saved and life-changing crashes that can be prevented. Put these benefits in layman's terms and quantify them.**

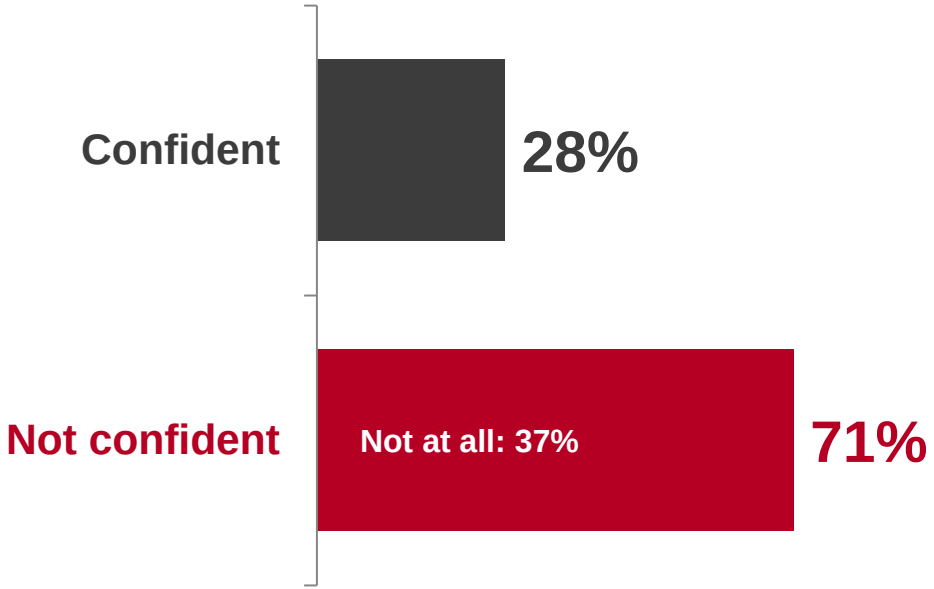
Remember that intersection safety is not a top-of-mind issue for most Montanans, who generally believe their roads are fairly safe. When they think about roundabouts, they usually think first about convenience.

How would you rate the safety of the roads and intersections in your area of Montana?



Yet when it comes to sharing the roads, it's a much different story. Roundabouts represent an obvious solution for Montanans' unease about other drivers.

Confidence in the safety of other drivers*



*Full question text: "How confident are you that drivers you share the road with in Montana exhibit safe driving habits, including not texting while driving and not driving while impaired?"

Sharing the roads

online discussion quotes

"We're in a secluded area and people think it's okay to drive fast and disregard other drivers."

"With low traffic, the concern is with complacent drivers or impaired drivers."

"People need to slow down depending on the condition of the roads. Speed limits are too high in areas."

RECOMMENDATIONS | Crafting the safety message

An example of making the safety argument for a new roundabout in a way that is salient to the local community and draws on the most powerful arguments at MDT's disposal:

The Montana Department of Transportation has proposed a project that would replace a traffic signal at [Intersection X] in Community A with a traffic roundabout. This intersection has been selected given its unusually high history of severe crashes, injuries, and damage to vehicles. Roundabouts are specifically designed to prevent the biggest safety risks to drivers, like high-speed T-bone, head-on, and rear-end crashes that are known to cause traffic deaths.

Over a 10-year period, the intersection identified for a roundabout project in Community A experienced 28 crashes. Twenty-one of these crashes, including one death and nine serious injuries, are considered preventable with the installation of a roundabout. In fact, a crash analysis conducted for rural intersections found that replacing existing stop signs and traffic lights with roundabouts will reduce the total number of crashes at intersections like these by 68% and the total number of injury crashes by 88%.

Roundabouts are safer than stop signs and traffic lights because they require drivers to reduce their speeds when passing through the intersection and ensure that drivers only have to look one way when entering the intersection. They also protect drivers from motorists who are distracted or under the influence because they cannot drive straight through the intersection, which prevents the most serious types of head-on and T-bone crashes.

Lead by explaining **why the intersection was chosen** and explaining that it's **a matter of safety**. If possible, don't cloud the message by talking about traffic flow or other potential benefits at this stage.

Follow up with **specific crash statistics** and establish the stakes. If needed (and applicable), include a quick summary of the Canyon Ferry case study to demonstrate real-life efficacy.

Provide the intuitive reasons roundabouts are safer and connect with impaired/ distracted drivers.

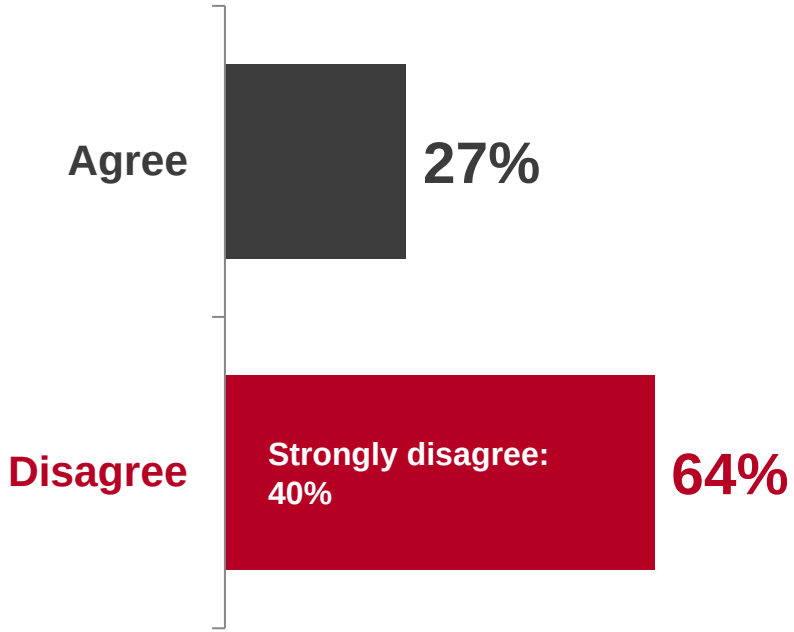
Challenges & opportunities

Challenges & opportunities

Accessibility for large vehicles

One of the most pervasive misconceptions about roundabouts: that they are unwieldy or even unsafe for large vehicles.

Statement: large vehicles can safely and easily drive through roundabouts



*Full question text: “Large vehicles like semis, tractors, fire trucks, and other heavy equipment can safely and easily drive through roundabouts.”

Large vehicles

online discussion quotes

“I think most people in eastern Montana don’t like roundabouts because they aren’t the safest for big semi trucks to navigate.”

“Roundabouts are confusing and somewhat difficult for large vehicles like trucks and tractors with implements.”

“A real pain for large loads.”

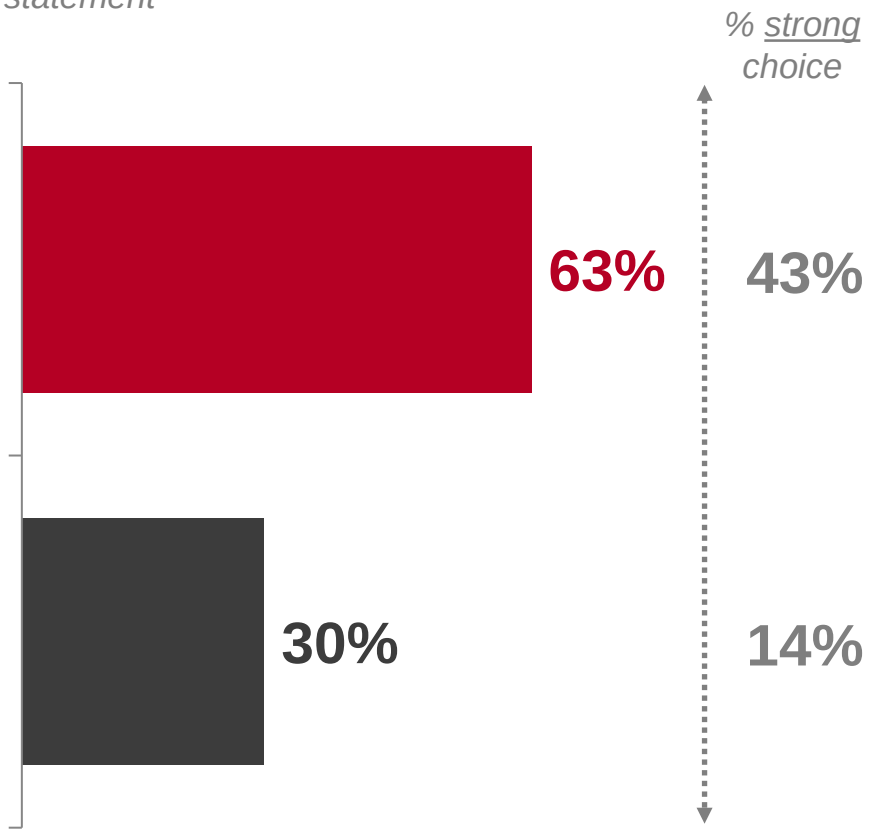
Pitting criticism about large vehicle navigation against a response designed to assuage those concerns, Montanans side 2:1 with the attack, underscored by a substantial intensity gap.

Large vehicles: competing arguments

% prefer each statement

Some people say roundabouts work fine for small vehicles but they **weren't designed for semi trucks, farm equipment, and emergency vehicles** like fire trucks and ambulances. Roundabouts make sense in big cities but they would be too disruptive for our way of life, especially in rural Montana.

Other people say **roundabouts were designed with large vehicles in mind**, and their unique design allows them to easily accommodate all types of traffic, from semi trucks to emergency vehicles. Large vehicles are encouraged to drive on the truck apron in the center of the roundabout in order to give their trailer tires ample space to make it through.



Rural Montanans, as well as those with less experience or comfort with roundabouts, overwhelmingly identify with the criticism about large vehicles and equipment.

Large vehicles % agree w/each statement	Attack	Response
Overall	63%	30%
Not comfortable	**81%**	12%
Used <25 times	**78%**	14%
Rural Montana	**75%**	16%
MDT District 4	**74%**	20%
Under 50	59%	**37%**
City / suburban	54%	**39%**
Very comfortable	41%	**53%**

The groups most likely to side with the attack live in rural Montana and/or have little experience or comfort with roundabouts

Those most receptive to the MDT response are younger, more comfortable with roundabouts, and tend to live in more urban areas—though even these Montanans mostly put more stock in the attack than the response.

RECOMMENDATIONS | How to address trucks & large equipment

1. **Be clear from the outset that roundabouts were designed to accommodate large vehicles and equipment of all stripes.** The research demonstrates that accessibility for large vehicles is already a broadly shared concern—especially in small towns—and one in which most people are only hearing the other side. Even if MDT's response doesn't completely neutralize this argument, it's important to put this information out there and respond to criticism.

2. **Use respected, relevant spokespeople to back up the argument.** In the District 3 online discussion for the Belt roundabout, we followed the testing of these argument pairs with the statement below, which helped address concerns for a handful of participants who were on the fence. Truckers or farmers who move large equipment (especially those who live in the communities in question) will always be the best validators.

   "Several trucking companies/organizations that run hundreds of trucks per day through roundabouts here in Montana support them because of their increased fuel efficiency and improved safety."

3. **It is critically important to remember that large trucks/equipment is not a winning frame. After pushing back on claims that roundabouts are not designed for large vehicles, MDT should pivot right back to the safety case for roundabouts.**

Challenges & opportunities

Why roundabouts? Why here?

For many rural Montanans, talk of roundabouts in their communities produces an instinctive "why here?" response.

- In the online discussions, a number of participants anchored their skepticism or opposition to roundabout projects around this question
- **This is largely a practicality question (i.e. 'why spend so much money when lights and signs work just fine?')**, though we saw some cultural pushback as well
- Because most rural Montanans have limited exposure to roundabouts, **comfort level plays a real role**
- Equally problematic is that **most Montanans lack a grasp of the rationale for roundabouts**

The "why"

online discussion quotes

"Roundabouts are, in theory, easier to use, but I don't think they have a place on a highway in rural eastern Montana."

"In Billings, I think they work great once people get used to them. In a rural setting like Belt…I think it's a waste of resources and money."

"For some traffic in cities, it may be alright. But for rural Montana, no..."

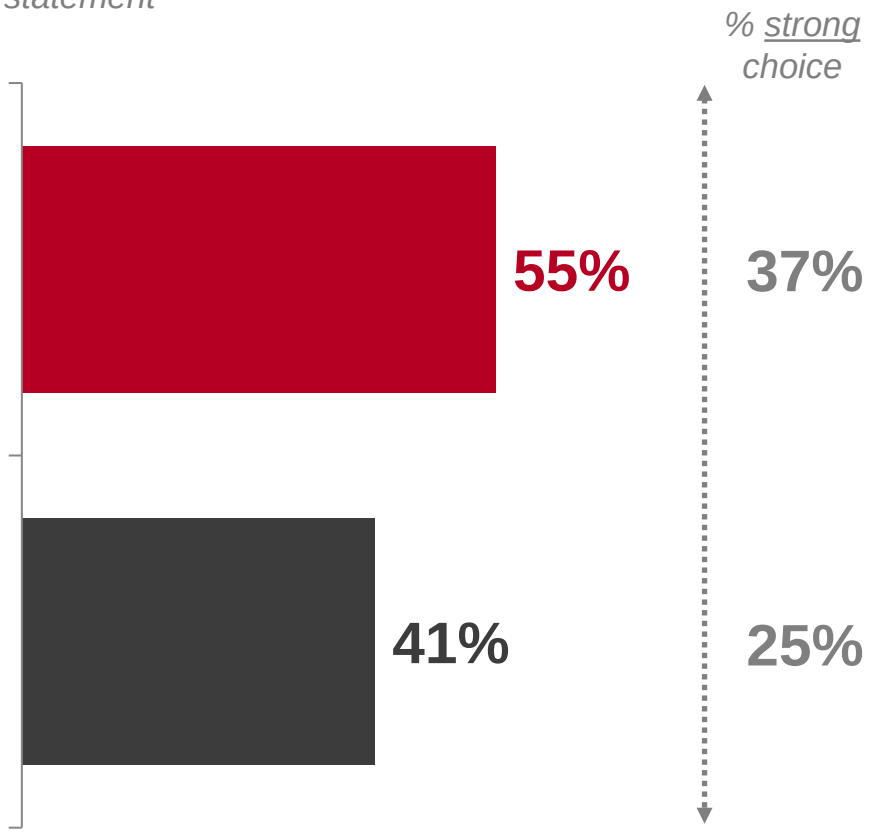
Responding to the “why here?” attack by pivoting to the safety benefits of roundabouts helps undercut the claim that they don’t fit the Montana way of life, though this sentiment resonates fairly broadly.

Appropriate for MT: competing arguments

% prefer each statement

Some people say **roundabouts aren’t a good fit for Montana—especially rural Montana**. They slow down traffic, they can be confusing, and they add an unnecessary layer of complexity on low-traffic roads where all we really need are yield signs, stop signs, or traffic lights.

Other people say **roundabouts improve traffic flow** because they don’t force drivers to stop when there’s no traffic. But their real purpose is to improve safety. **Roundabouts are safer than stop signs and traffic lights** because they require drivers to reduce their speeds and ensure that drivers only have to look one way when entering the intersection. Roundabouts are long-term safety solutions, unlike band-aid fixes like signing, striping, or flashing lights.



RECOMMENDATIONS | How to address the “why here?” argument

1. **The easiest way to address this objection to roundabouts is to supply the “why,” which of course, is safety.** Other considerations, like traffic flow and aesthetics, are largely secondary benefits, and are second-tier considerations for most Montanans.

2. **Still, it’s not enough to simply assert that roundabouts are safer than traffic lights and stop signs**. Generic safety pushback (see previous slide) only goes so far, especially because residents of rural areas and small towns are apt to assume that the generic safety platitudes are based on roundabout use in other cities or states—but their community is different.

3. **Instead, it will be critical to communicate local, relevant safety statistics.** In the online discussions, we typically didn’t turn the tide in favor of roundabouts until after introducing crash analysis statistics, including the history of severe crashes and fatalities at the affected intersection(s), and the number of those incidents considered preventable by a roundabout. And, of course, the Canyon Ferry example.

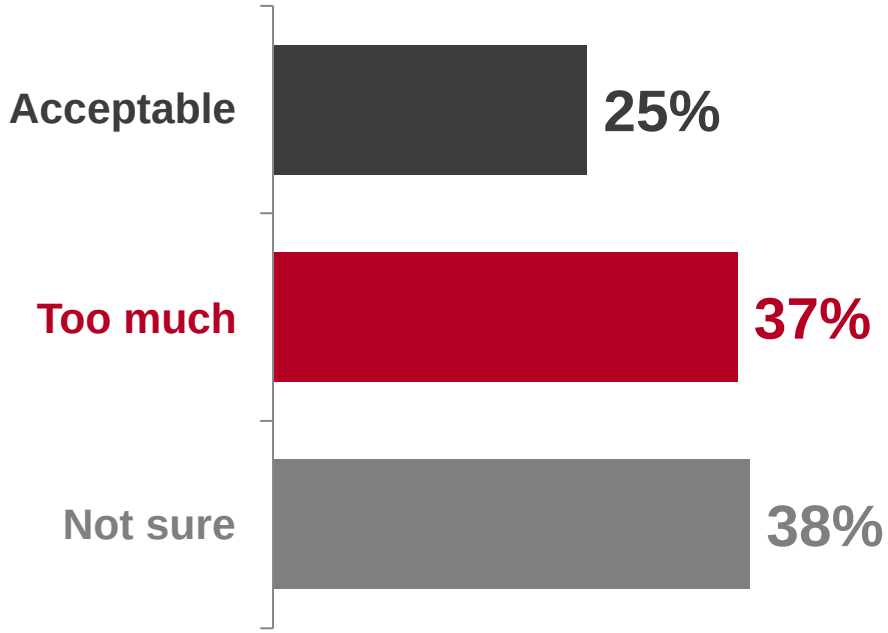
4. **It bears repeating that arguments over whether roundabouts are the best “fit” for small towns is not one MDT is likely to win. Skeptics tend to be swayed only when they learn how many lives have been changed or destroyed at intersections in their own backyards, and how roundabouts are the only real choice from a safety perspective—even if they aren’t the best cultural fit.**

Challenges & opportunities

The cost of roundabouts

Some discussion participants cited cost concerns. However, the poll indicates that most Montanans don't worry too much about cost—at least at first.

Perceptions of roundabout cost*



*Full question text: "Generally speaking, do you think the cost of roundabouts is generally acceptable, or do you think they cost too much?"

Cost

online discussion quotes

"They cost way more money to build and maintain."

"I am astonished that it costs so much for a dinky roundabout. Especially in Belt."

"There is not enough traffic to necessitate a roundabout and the costs that would come with it."

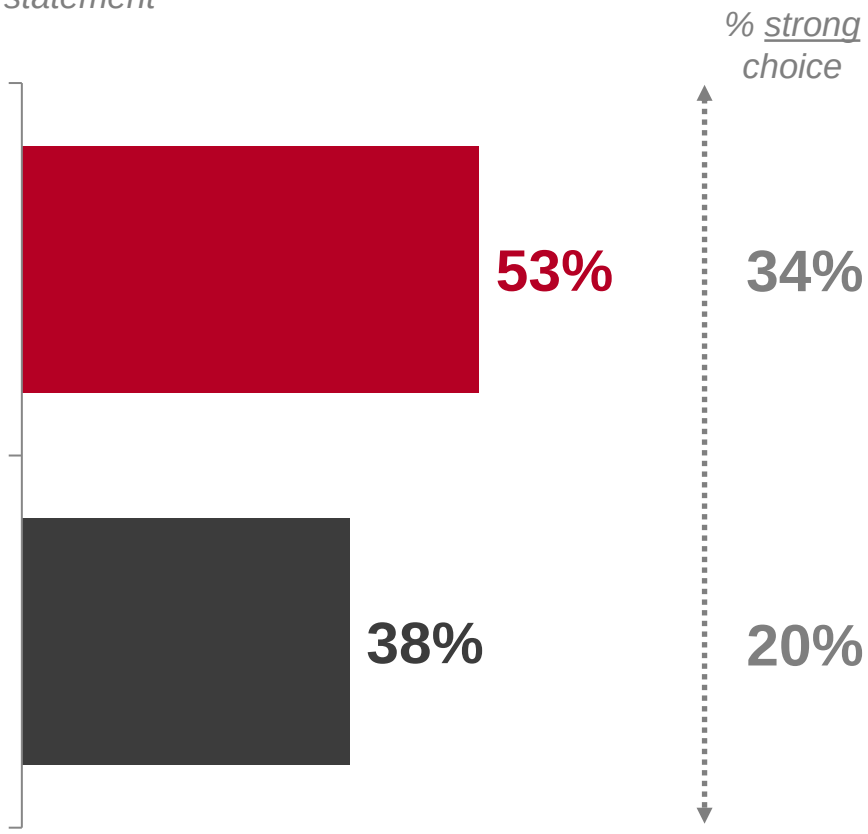
Pushback on cost concerns proves somewhat effective, though once they learn about the actual cost, many Montanans do agree that roundabouts are simply too expensive.

Cost: competing arguments

% prefer each statement

Some people say roundabout projects often cost more than a million dollars each. We **shouldn't be spending our limited taxpayer dollars on roundabouts when there are so many other priorities** that need to be addressed, including basic repairs on roads and infrastructure.

Other people say roundabouts are actually **more cost effective than traffic lights and stop signs in the long run**. Roundabouts typically pay for themselves many times over compared to the costs to the public in crashes, serious injuries, and deaths that used to occur at these intersections. And roundabouts are funded by federal transportation dollars at no additional cost to local taxpayers.



RECOMMENDATIONS | How to address cost

1. **The response argument on the previous slide represents a good start.** However, the idea that local taxpayers are not on the hook for roundabout costs did not seem to disarm cost concerns in the way we had hoped. Additionally, talking about long-term cost savings might be a bridge too far without getting into the specifics of how this has worked in other places.

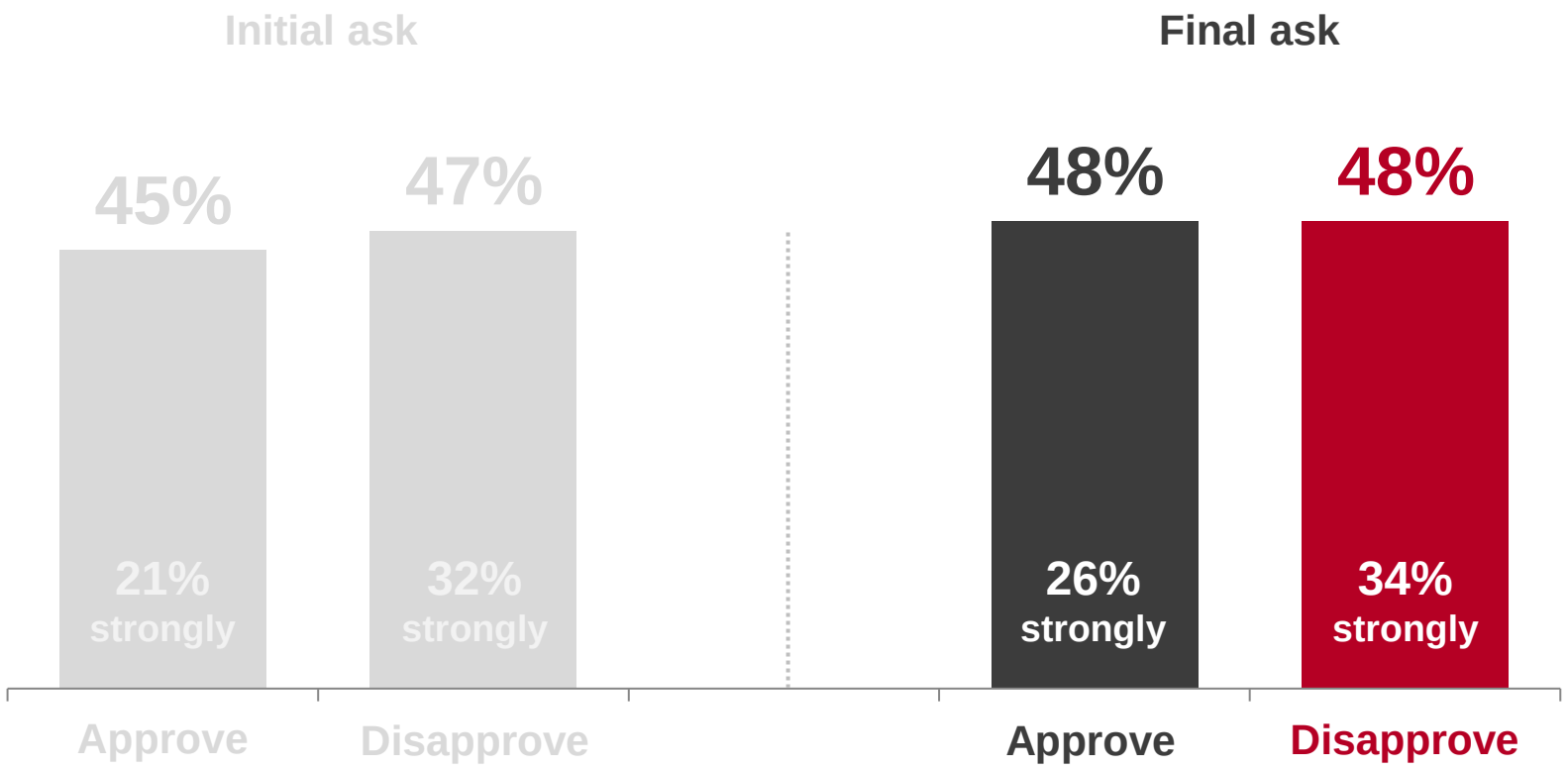
2. In that vein, **MDT's best response to cost concerns is supplementing the arguments above with the cost case study in Canyon Ferry**, which demonstrates the undeniable long-term savings through crash prevention. When we tested this concept in the messaging section of the poll, it performed very well.

3. Still, it is not the end goal to convince Montanans that roundabouts are not as expensive as they believed, nor is it enough to bring most skeptics over to our side. Rebutting unfair cost allegations may often be necessary for new roundabout projects, but **the real objective (is this starting to sound familiar?) is to make the safety case.**

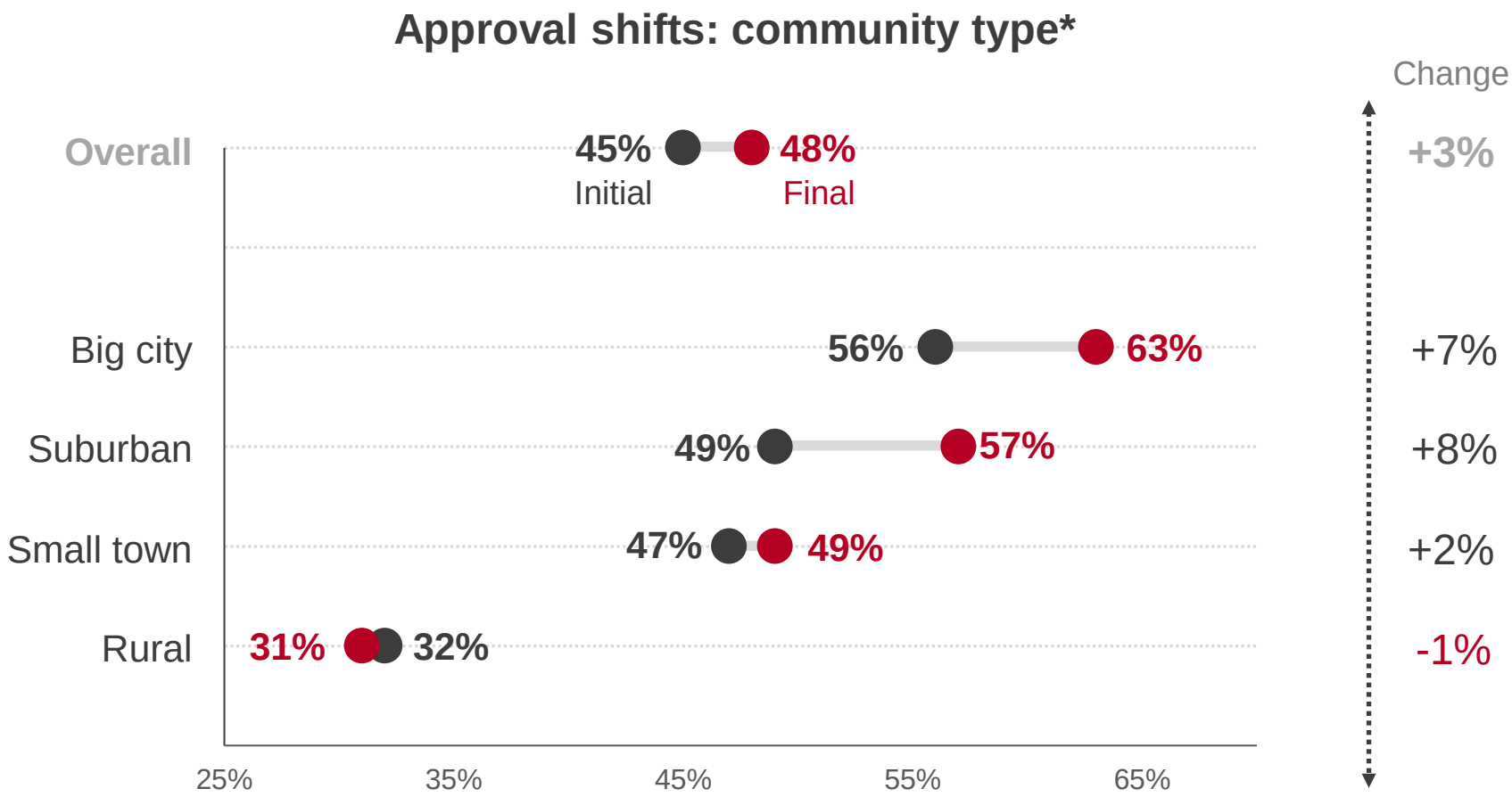
Gauging movement

Participants in our online discussions showed more willingness to change their views on roundabouts than poll respondents. This underscores the importance of localizing the debate, making the safety case relevant to the audience instead of making it more generically and in the aggregate.

Stance on roundabouts: after information

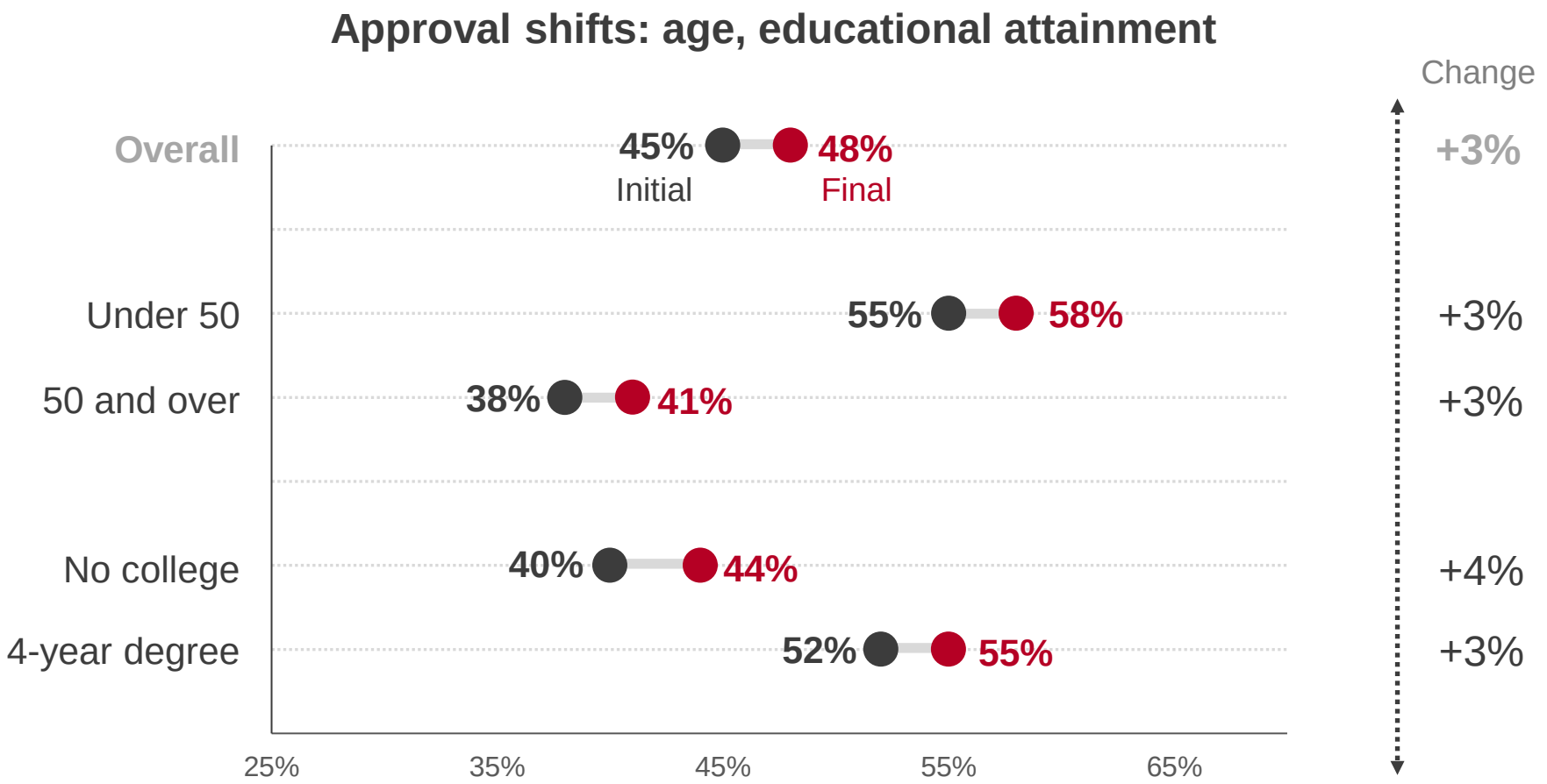


Progress among city and suburb dwellers was moderated by a lack of movement among small town and rural Montanans.



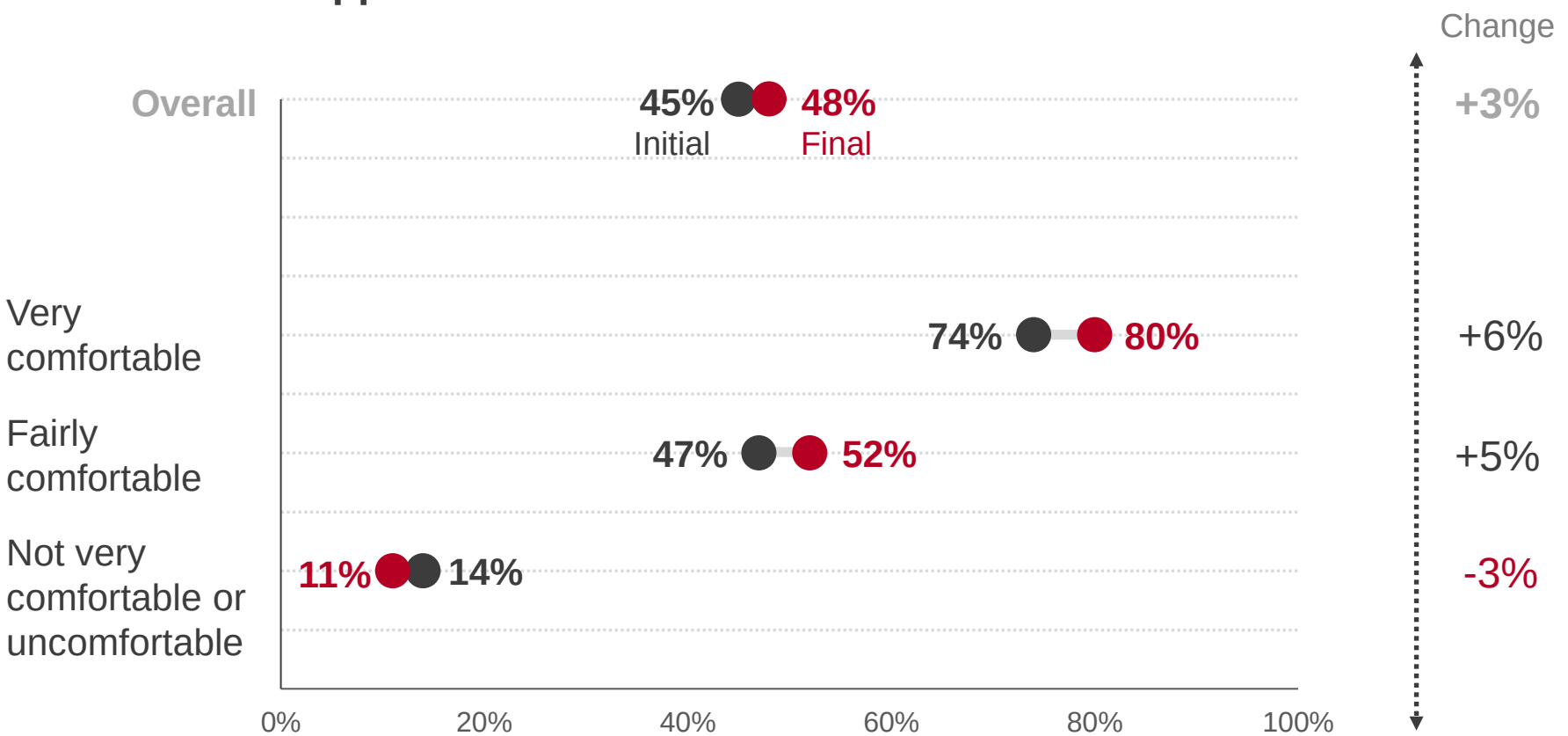
*Respondents were asked to self-identify the type of community they live in.

Movement across age groups and education levels was evenly distributed but very modest.



While pro-roundabout arguments make an observable impact among those with at least moderate comfort, those who don't feel comfortable using roundabouts are completely unmoved. Negative or stressful personal experiences likely outweigh any argument MDT can make.

Approval shifts: comfort level with roundabouts*



Full question text: "Please tell me which of the following best describes your comfort level when driving through roundabouts."
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