

**Public Willingness to Raise Transportation Revenues, Priorities for
Transportation Spending, and Preferences for Types of
Transportation Revenues: Evidence from Montana's Billings and
Missoula Small Urban Areas**
Final Report

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16. Abstract This project analyzed public willingness to raise transportation revenues, public priorities for transportation spending, and public preferences for transportation revenue types using recent household travel surveys for the small urban areas of Billings and Missoula. The share of the public willing to pay more taxes or fees for transportation improvements was 44% in Billings and 36% in Missoula (including neutral or undecided responses). This level of public support for increased transportation revenues is perhaps higher than generally perceived by leaders reluctant to publicly support a gas tax increase. Our results regarding transportation spending priorities are consistent with the prioritization of preserving existing transportation assets. Maintenance and repair of existing infrastructure received the most support of transportation spending options in both the Billings and Missoula survey samples. Our results regarding the preferred type of transportation revenue mechanism (available only for Missoula) suggested that a plurality of the sample (35% including neutral or undecided responses) preferred a \$0.02 per gallon increase in fuel taxes to other options (such as an increase in sales or property taxes). Together, our results suggest a public willingness to more adequately fund transportation investments, a preference for spending on existing transportation assets, and a preference for more direct road user charges over less direct alternatives.			
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Disclaimers

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated in the interest of information and exchange. The report is funded, partially or entirely, by a grant from the U.S. Department of Transportation's University Transportation Centers Program. However, the U.S. Government assumes no liability for use thereof.

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Author Roles and Contributions

Andrea Hamre: Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Project Administration, Writing (Original Draft, Review & Editing). *Jonathan Fisher*: Data Curation, Formal Analysis, Investigation, Methodology, Mapping, Visualization, Writing (Review & Editing). Note: Jonathan Fisher's tenure with WTI concluded in 2021. *David Kack*: Funding Acquisition, Project Administration, Resources, Supervision, Writing (Review & Editing).

Data Statement

This report entailed analysis of household travel survey data obtained by request from staff at the Billings-Yellowstone County Metropolitan Planning Organization and the Missoula Metropolitan Planning Organization. The data are available to the public by request to the MPOs.

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1 Introduction

The primary purpose of this project was to analyze public willingness to raise transportation revenues, public priorities for transportation spending, and public preferences for transportation revenue types in the small urban areas of Billings and Missoula. We used recent household travel surveys to examine the following research questions:

- How willing is the general public to raise transportation revenues?
- What are the transportation spending priorities of the general public?
- What type of transportation revenue mechanism does the general public prefer?

This project was motivated by ongoing challenges surrounding surface transportation funding at the local, state, and federal levels, as well as debates regarding transportation investment priorities. The federal gas tax has not increased from \$0.184 per gallon since 1993, and is not indexed to inflation; to have the same purchasing power as it did in 1993, the federal gas tax would need to more than double to approximately \$0.39 per gallon in 2023 dollars (US BLS 2023; see also Puentes and Prince 2003). Since 2008, the Highway Trust Fund has received hundreds of billions of dollars in transfers from the General Fund of the Treasury; the 10-year total was \$139.9 billion as of 2018 (Davis 2018), and the Infrastructure Investment and Jobs Act of 2021 (“IIJA”) (aka Bipartisan Infrastructure Law or “BIL”) included a \$118 billion General Fund transfer (Davis 2022).¹ Indeed, recent years have strained transportation funding at every level of government: the COVID-19 pandemic and its lasting impacts have drastically reduced gas tax revenues (as well as fare revenues for public transportation), and the ongoing electrification of the American passenger fleet is spurring reevaluation of road user charges (Varn, Eucalitto, and Gander 2020, Jenn and Fleming 2021, Hasnat and Bardaka 2022). Along with these funding challenges, this century has witnessed ongoing debates regarding transportation investment priorities. One of the key debates relates to the so-called “fix it first” approach (i.e., preservation and maintenance of existing transportation infrastructure) versus continuation of the historic focus on expansion of highways and roadways (see, e.g., McCann, Kienitz, and DeLille 2000, Kahn and Levinson 2011, Bellis, Osborne, and Davis 2019).² This debate in turn has resulted in conflicts between different levels of government regarding authorities to set transportation policy, raise transportation revenues, and direct transportation investments. For example, controversy arose in the wake of the BIL, when USDOT (via a December 2021 FHWA memo) issued guidance “to encourage and prioritize the repair, rehabilitation, reconstruction, replacement, and maintenance of existing transportation

¹ The Eno Center for Transportation has provided extensive analysis of Highway Trust Fund insolvency (as well as related transportation financing issues). See, for example: <https://enotrans.org/article-tags/highway-trust-fund/>.

² In the thirteenth year of a national public opinion survey about federal transportation taxes administered and analyzed by researchers at the Mineta Transportation Institute, the vast majority (98%) of respondents were unaware that the federal gas tax has not increased in more than 20 years and 71% of respondents expressed support for increasing the federal gas tax by \$0.10 per gallon if revenue were to be dedicated for maintenance. They also found “that support for both higher gas taxes and a hypothetical new mileage fee has risen slowly but steadily” across the survey series, which has run from 2010 to 2022 (Agrawal and Nixon 2023).

infrastructure” (Pollack 2021). Opposition by the states to perceived federal encroachment on their authority led to an updated memo (issued in February 2023) that stated Biden Administration policy goals while acknowledging that “States are ultimately responsible for deciding how their formula and allocated funding is prioritized” (Bhatt 2023). While states have opposed federal encroachment on their authority, there have also been examples of state preemption of local authority relating to transportation funding. For example (as discussed further below in section 1.2), in 2021 Montana repealed from state law the authority for counties to enact a local option gas tax – after voters passed a referendum in 2020 for Missoula County to exercise its authority to enact such a tax. More broadly, this project is motivated by efforts to examine the alignment (i.e., conformance or congruence) of public spending with the priorities and preferences of the public, which can have important implications for elements important to a thriving democracy, such as political legitimacy, public trust, and political engagement (Christiansen 2020).

This project builds upon our prior research examining travel behavior and transportation planning in the small urban area of Chittenden County, Vermont (as discussed further below in section 1.1) (Hamre, Fisher, and Kack 2020), as well as prior research evaluating the impact of a local option motor fuel excise tax in Montana (as discussed further below in section 1.2) (Hamre and Kack 2020), and makes a unique contribution in its analysis of recent Missoula and Billings household travel surveys for this topic area.³ With this project, we hope to contribute to a greater understanding regarding public support and priorities for transportation investments in the small urban context as well as provide insights that may guide future regional transportation planning efforts in small urban areas. This guidance may be especially relevant as the process is currently underway to designate and establish the Metropolitan Planning Organization (“MPO”) for the Bozeman area, which will become Montana’s fourth MPO (along with those for the Billings, Great Falls, and Missoula areas).⁴

1.1 Recap of Our Prior Research on Public Willingness to Raise Transportation Revenues and Priorities for Transportation Spending

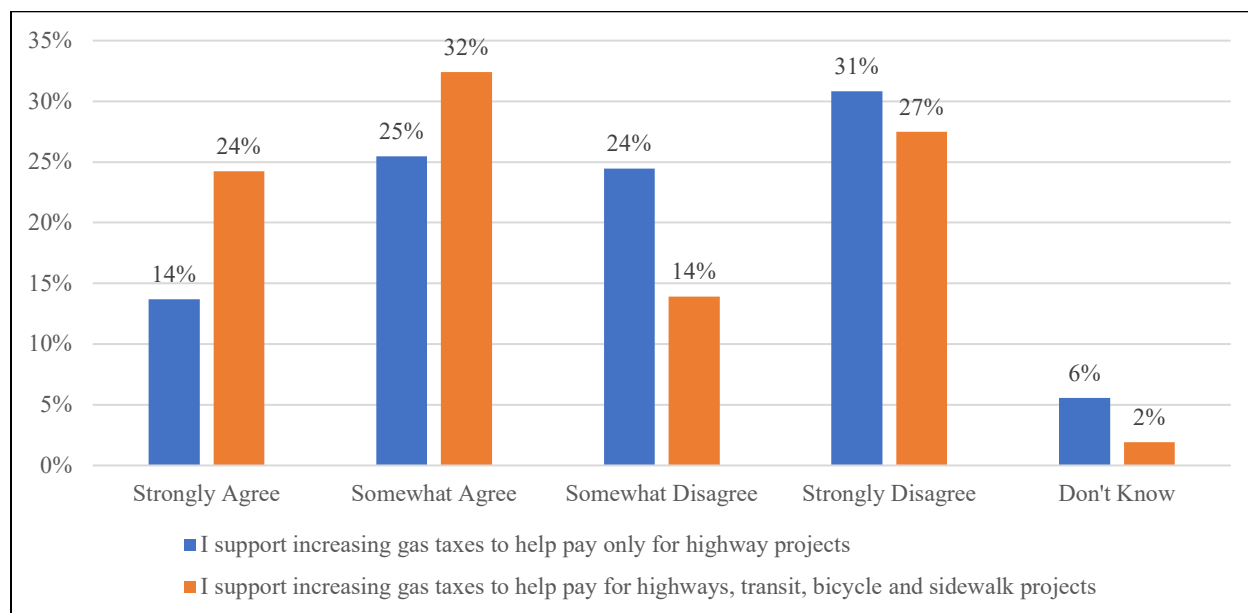
Our prior research examining travel behavior and transportation planning in Chittenden County included an evaluation of scaled responses for two household survey questions:

- *I support increasing gas taxes to help pay only for highway projects*
- *I support increasing gas taxes to help pay for highways, transit, bicycle and sidewalk projects*

As presented in **Error! Reference source not found.**, for the 2018 Chittenden County sample, a combined 39% of the public somewhat or strongly supported an increase in gas taxes exclusively for highway projects while an even higher combined 56% somewhat or strongly supported an increase in gas taxes to help pay for multimodal projects (inclusive of “don’t know” responses).

³ The final reports for these projects included a review of literature regarding public support for increasing gas taxes as well as public priorities for transportation spending (Hamre, Fisher, and Kack 2020), and a discussion of local option fuel taxes within the larger national historical context of road user charges to fund transportation infrastructure (Hamre and Kack 2020).

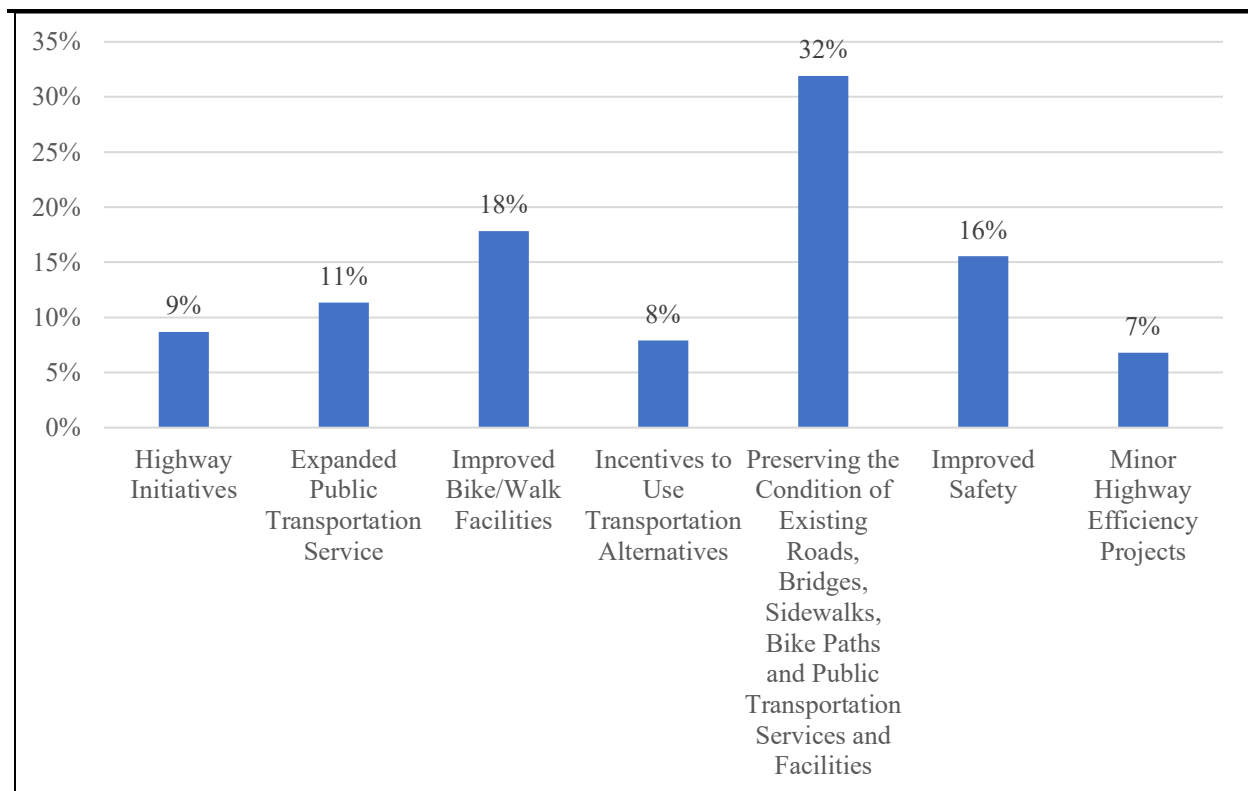
⁴ More information about this ongoing process may be found at: <https://www.bozeman.net/our-city/city-projects/mpo>.



Notes and Source: We compiled these results using data from the 2018 Chittenden County Regional Planning Commission Transportation Survey and applying the survey weights.

Figure 1: Public Support for Increasing Gas Taxes in the 2018 Chittenden County Survey Sample

We also examined a question in the 2018 Chittenden County survey about the public’s transportation spending priorities. As presented in **Error! Reference source not found.**, when asked to distribute 100 points across transportation spending categories, the category focused on preserving existing infrastructure received the highest average number of points (at a mean value of 31.9/100 or about 32%).



Notes and Source: We compiled these results using data from the 2018 Chittenden County Regional Planning Commission Transportation Survey and applying the survey weights.

Figure 2: Distribution of Points Across Transportation Spending Categories by the Public in the 2018 Chittenden County Survey Sample

The present study was an opportunity build on this work by examining public support for increasing gas taxes and public priorities for transportation spending in a new geographic setting (two small urban areas in Montana, as described further below in sections 2.1 and 2.2), as well as by incorporating into our analysis a unique question about public preferences for types of transportation revenue mechanisms that was not available in the 2018 Chittenden County survey.

1.2 Recap of Our Prior Research on the Local Option Motor Fuel Excise Tax in Montana

Our evaluation of the local option motor fuel excise tax in Montana was completed in June 2020. At that time, Missoula County had recently held a voter referendum on exercising county authority to enact a \$0.02 per gallon local option gas tax. With the referendum’s passage, Missoula County became the first county poised to exercise this authority in Montana since authorization for the local option was passed into state law in 1979. We were motivated to estimate the burden such a tax would pose to motorists in Montana. Depending on annual mileage and fuel economy, we estimated a \$0.02 per gallon local option gas tax would amount to a relatively modest burden (\$8-\$27 annually). We noted that collection of the local option gas tax could be shifted from retailers to distributors to ease retailer burdens, and that enacting the local option gas tax could reduce the gap between fuel tax revenues and expenditures for roadways, highways, streets, and bridges – without severely burdening motorists. We further estimated that

an increase in the gas tax would need to be in the \$0.70-\$0.90 per gallon range to fully close the gap between these revenues and expenditures. We also discussed how increases gas taxes could be accompanied by reductions in other forms of revenues, such as property taxes.

Since the completion of our project, the Local Option Motor Fuel Excise Tax has been repealed from Montana state law, and the authority is no longer available to be exercised (Montana Code Annotated 2021). The repeal occurred despite an appeal by Missoula County (as well as additional stakeholders) to Montana Governor Gianforte requesting a veto of the relevant bill. The repeal limited the revenue options available to cover transportation expenditures at the local level. Missoula was set to collect an anticipated \$1.1 million annually from the \$0.02 local option gas tax, with an estimated \$450,000 of that total coming from short-term visitors (i.e., tourists). Missoula County Commissioners noted the local option gas tax revenue would have therefore shifted some of the burden for raising transportation revenues away from local taxpayers, and played an important role in realizing local matching funds required for certain federal funding streams (Kidston 2021).

2 Methods

This analysis examined public willingness to raise transportation revenues, public priorities for transportation spending, and public preferences for transportation revenue mechanisms, using information collected from the public in recent household travel surveys conducted by the MPOs in the Billings and Missoula areas of Montana.

2.1 Study Area

Billings and Missoula are the largest cities in Montana, and are both small urban activity centers with concentrations of population, employment, and transportation options that set them apart from the predominantly rural state of Montana as a whole. In the 2020 Decennial Census, Billings had a population of 117,116 and Missoula had a population of 73,489. These cities are each home to major institutions of higher education, as well as healthcare and hospital facilities, and serve as regional hubs for employment and commerce.

In terms of transportation, the I-90 interstate highway runs through both Billings and Missoula. Fixed route transit service with complementary paratransit is available in each region as well. Billings and Missoula each offer on-street bicycle facilities as well as shared-use paths, and both have earned Bicycle Friendly Community designations from the League of American Bicyclists (Bronze for Billings and Gold for Missoula) in recognition of programs and investments to support bicycling (League of American Bicyclists 2021).

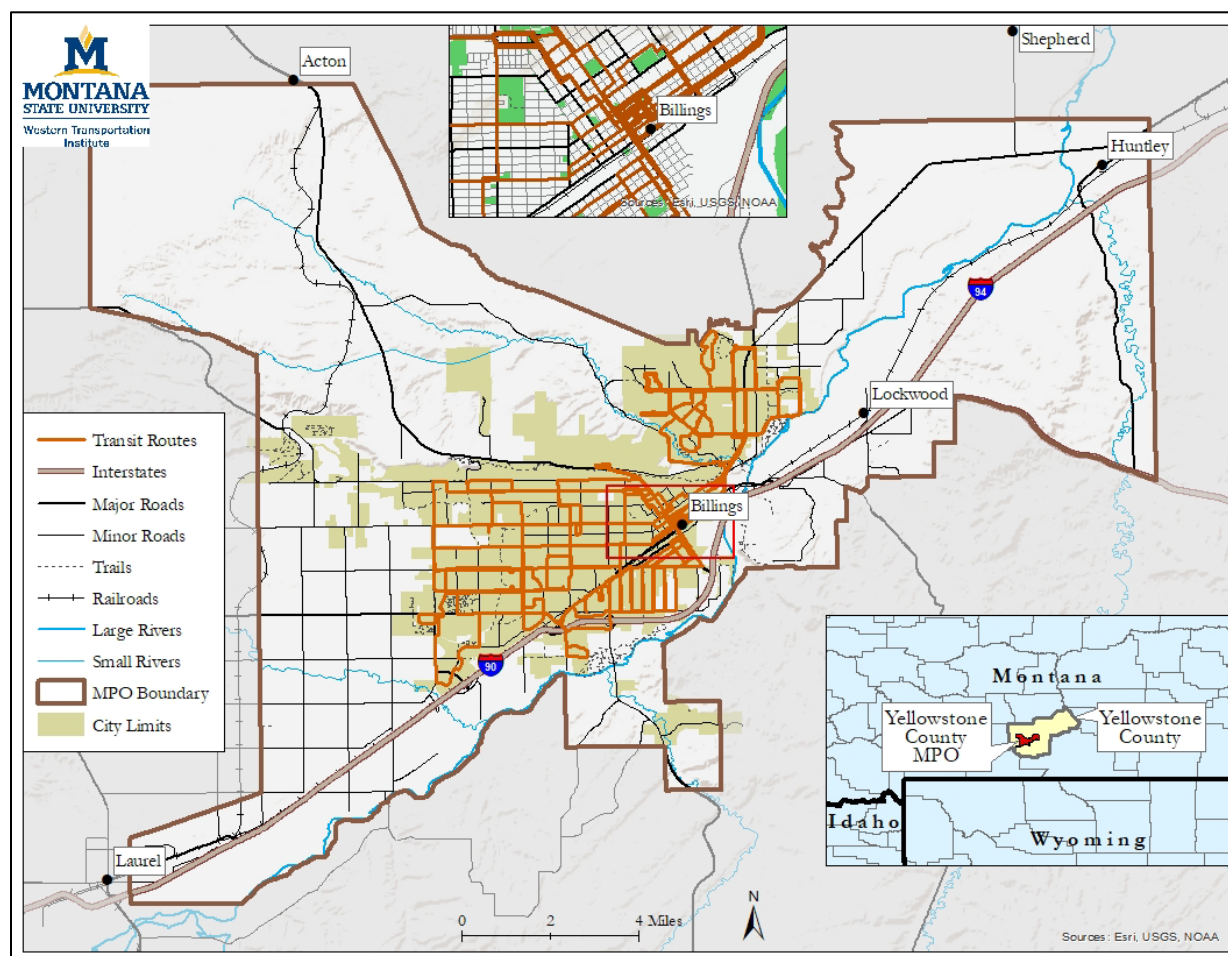
Figure 3 (Billings) and Notes and Source: We created this map using the data sources listed in **Appendix 1**.

Figure 4 (Missoula) provide maps of the study areas, with a particular emphasis on the MPO boundaries and transportation facilities available in each region.

Recent American Community Survey 5-year estimates (**Table 1**) indicate that both Billings and Missoula have a low share of households without access to a private vehicle (6.0% for Billings and 7.8% for Missoula) and a high share of commuters who rely on driving alone (83.1% for Billings and 70.5% for Missoula).

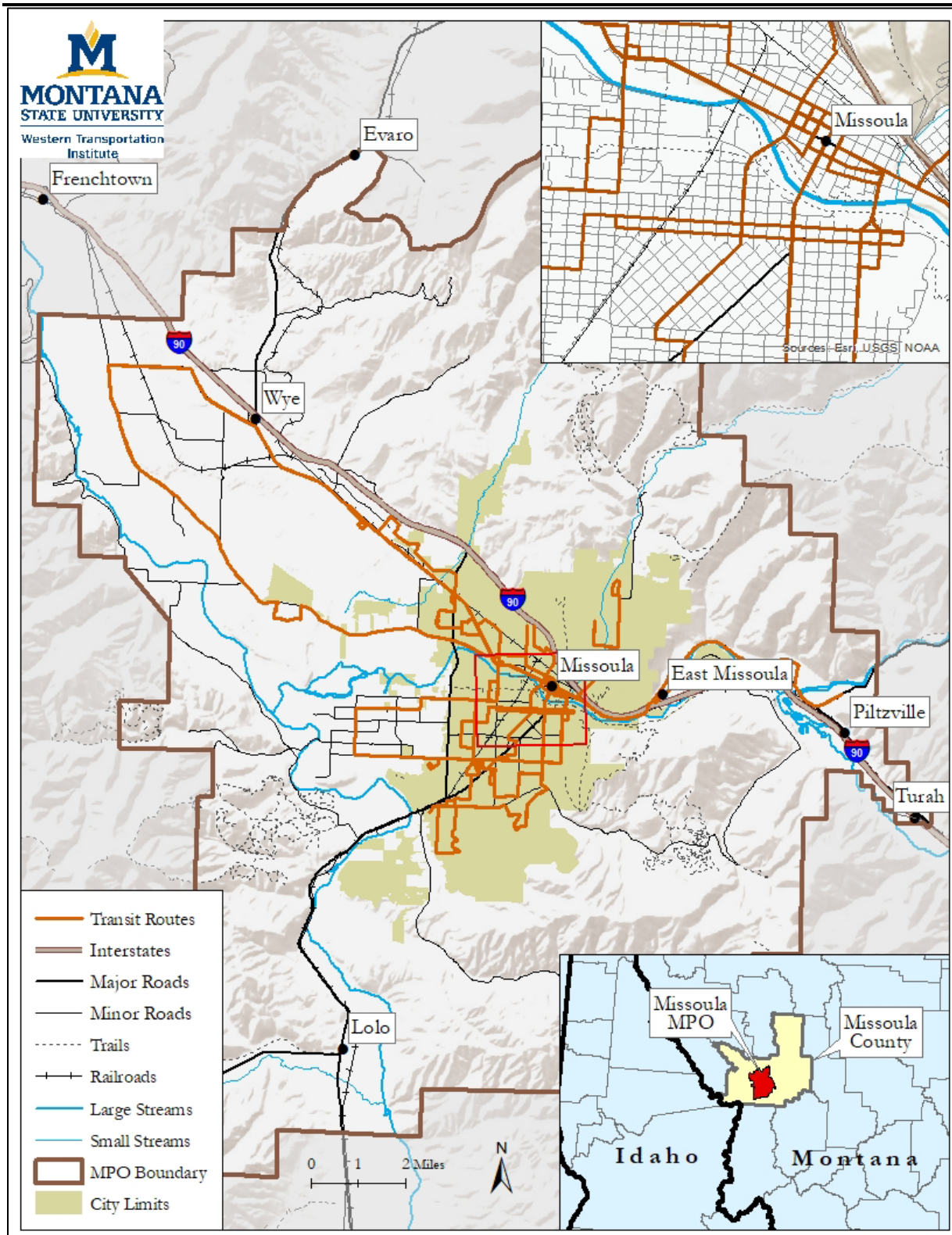
Overall, these two regions offer a compelling opportunity to provide insights into transportation policy and planning in small urban areas – especially those located within predominantly rural states. Indeed, Montana is a large and mountainous Western state known for its vast expanses and relative isolation from major metropolitan areas, with large sectors of its economy devoted to agriculture, food production, and tourism. In terms of transportation revenues, Montana does not use gas tax funds for non-roadway purposes, and its combined total of \$0.3275 in taxes and fees per gallon of gasoline is higher than the state average of \$0.3016 (U.S. Energy Information Administration 2021). Montana received \$19.16 per capita in federal transit funding in FY15 and \$22.69 per capita in FY19 (see Tables 1-3 and 1-6 in American Association of State Highway and Transportation Officials 2021). In terms of state transit funding, Montana spent \$0.32 per capita in FY15 and \$1.06 per capita in FY19 (ranked 42nd that year among all states) (see Tables 1-3 and 1-6 in American Association of State Highway and Transportation Officials 2021).

Figure 5 summarizes federal, state, and total transit funding per capita for FY15 and FY19 for Montana.



Notes and Source: We created this map using the data sources listed in **Appendix 1**.

Figure 3: Map of the Billings Area



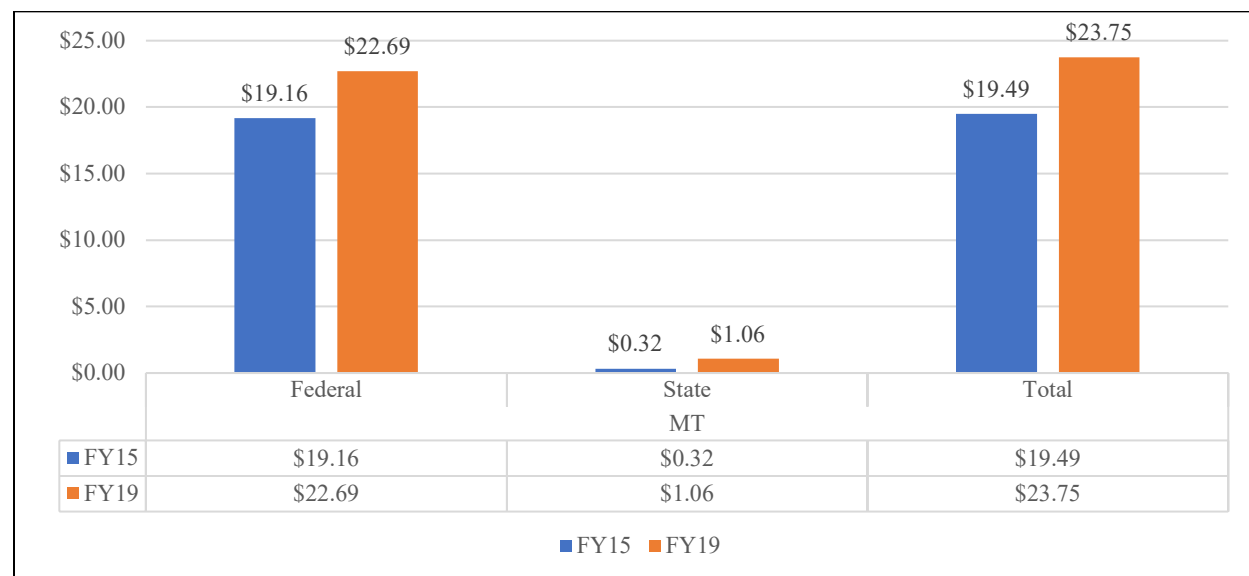
Notes and Source: We created this map using the data sources listed in **Appendix 1**.

Figure 4: Map of the Missoula Area

Table 1: Summary of Key Population and Household Transportation Estimates for the Study Area Counties and Cities

Transportation Estimates	Counties		Central Cities	
	Yellowstone	Missoula	Billings	Missoula
Population	159,008	117,309	109,595	73,710
Area (Square Miles)	2,633	2,592	43.7	29.2
Population Density (Persons per Square Mile)	60	45	2,508	2,524
Primary Commute Mode				
Drove Alone	83.2%	73.0%	83.1%	70.5%
Carpooled	8.6%	9.4%	8.4%	8.9%
Public Transportation	0.5%	2.0%	0.6%	2.6%
Walked	2.7%	5.1%	2.9%	6.6%
Bicycled	0.4%	4.2%	0.6%	6.2%
Taxicab, Motorcycle, Other	0.9%	1.1%	0.9%	0.8%
Worked from Home	3.8%	5.1%	3.6%	4.5%
Household Vehicles				
0	5.3%	5.8%	6.0%	7.8%
1	27.3%	31.1%	31.5%	37.1%
2	37.2%	38.2%	38.1%	37.0%
3	19.1%	17.7%	17.0%	13.9%
4 or more	11.1%	7.2%	7.4%	4.3%

Notes and Source: We compiled this table using the American Community Survey 2015-2019 5-Year Estimates (U.S. Census Bureau 2020).



Notes and Source: We compiled this table using the 2021 edition of the Survey of State Funding for Public Transportation (see Tables 1-3 and 1-6 in American Association of State Highway and Transportation Officials 2021).

Figure 5: Federal, State, and Total Transit Funding Per Capita for Montana (FY 15 and FY19)

2.2 Data

For this study, we analyzed relevant questions from the 2017 Billings-Yellowstone County Household Travel Survey and the 2019 Missoula Area Transportation Survey.⁵ We obtained copies of the survey data by contacting staff at each respective MPO; more information about these surveys may be found in the final reports prepared for the MPOs (Westat 2017, Baldrige 2020).

The Billings survey sampled residents of Yellowstone County in the spring of 2017, and resulted in a final sample of 2,351 individuals (including 1,849 adults). The Missoula survey sampled residents of the Missoula Metropolitan Planning Area in the fall of 2019, and resulted in a final sample of 521 individuals (all adults).

The two surveys used similar wording for the relevant questions, with the notable exception that the 2019 Missoula survey contained a unique follow up question on the preferred type of transportation revenue mechanism which was not collected in the 2017 Billings survey. **Table 2**, **Table 3**, and **Table 4**, detail the survey questions and response options relevant to our analysis.⁶

Table 2: Summary of the Question on Willingness to Raise Transportation Revenues Collected in the 2017 Billings and 2019 Missoula Travel Surveys

2017 Billings Survey	2019 Missoula Survey
Given that current transportation needs are greater than the amount of money available to address them, I support paying more taxes or fees for transportation system improvements.	Current transportation needs in the Missoula area are greater than the amount of money available to address them. Generally speaking, would you support or oppose paying more taxes or fees if the revenues were spent only on transportation system improvements?
Response Options	Response Options
Strongly Disagree	Strongly Oppose
Disagree	Somewhat Oppose
Undecided	Neither Support nor Oppose
Agree	Somewhat Support
Strongly Agree	Strongly Support
	Don't know

Notes: See the final travel survey reports for more information (Westat 2017, Baldrige 2020).

⁵ Regional, state, and national household travel surveys are among the best available sources of disaggregate information about surface transportation. They require a significant investment of time and resources, and are conducted periodically – every 5-10 years if resources allow. Many household travel surveys collect information about individuals, households, and vehicles, and some also include a travel diary to collect trip-level data for a short period (e.g., 24 hours). Statisticians typically guide the sampling process and generate weights to create samples that are representative of the populations from which the sample was drawn.

⁶ The relevant questions for the 2017 Billings survey were included in the household-level file. For the purposes of our analysis, we assigned responses from the survey's 1,066 households to the corresponding 2,351 persons and then applied the person-level survey weights. The 2019 Missoula survey was at the person-level and did not contain a separate household file.

Table 3: Summary of the Question on Priorities for Transportation Spending Collected in the 2017 Billings and 2019 Missoula Travel Surveys

2017 Billings Survey	2019 Missoula Survey
If taxes or fees were raised to improve transportation in the Billings area, what would you want to see the additional revenues used for? (Select all that apply)	If taxes or fees were raised to improve transportation in the Missoula area, what would you want to see the additional revenues used for?
Response Options	Response Options
Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks	Maintain and repair existing streets and roads
Build new transportation corridors	Build new streets and roads
Widen existing transportation corridors	Widen existing streets and roads
Improve public transit (bus)	Improve public transit (bus)
Improve bicycle facilities, such as trails/paths and lanes	Improve bicycle facilities, such as trails/paths and lanes
Improve pedestrian facilities, such as sidewalks and crosswalks	Improve pedestrian facilities, such as sidewalks and crosswalks
Improve safety and reduce crashes	Improve safety and reduce crashes
	Don't know

Notes: See the final travel survey reports for more information (Westat 2017, Baldrige 2020).

Table 4: Summary of the Question on Preferences for Transportation Revenue Mechanisms Collected in the 2019 Missoula Travel Survey

2019 Missoula Survey
What type of tax or fee would you be most willing to support if the revenues were used only for transportation system improvements locally?
Response Options
2 cent increase per gallon of fuel (diesel and gasoline), paid by local residents and visitors
3 percent increase to development fees, paid for by new development
3 percent local sales tax on non-essential items, such as items purchased at bars and restaurants, paid by local residents
1 percent increase to property tax, paid by property owners
None
Don't know

Notes: See the final travel survey report for more information (Baldrige 2020).

3 Results

We analyzed the distribution of responses for key questions in the 2017 Billings and 2019 Missoula household travel surveys about public willingness to raise transportation revenues, public priorities for transportation spending, and public preferences for transportation revenue mechanisms. This discussion begins with a preface regarding our treatment of the scaled survey response options, and then proceeds to discuss the distributions for the key survey questions.

3.1 Our Approach to Scaled Survey Responses

In the following presentation of results, we provide the full distributions for the key outcomes of interest, as well as tabulations to summarize the combined results for responses that differ in the *strength* of an opinion but share the same *direction* (i.e., agree versus strongly agree). In addition, another way to simplify the interpretation of scaled survey responses is to focus on non-neutral or non-missing responses (i.e., ignore responses for the undecided, as well as those who indicated they “don’t know”, or neither support nor oppose options). As a result, we also present versions of the results where the focus is on survey respondents who expressed an opinion in one way or another. We recognize there are tradeoffs to this approach, and provide the presentation of full response distributions for completeness and transparency.

3.2 Support for Increasing Transportation Revenues

The distribution of responses regarding support for increasing transportation taxes and fees are presented in **Table 5** (Billings) and **Table 6** (Missoula) as well as **Figure 6** (including neutral and missing responses). Sizable portions of both samples had neutral or missing responses for this question (with 30% undecided for 2017 Billings and 18% neither supporting nor opposing along with 7% opting for “don’t know” – a combined 25% – for the 2019 Missoula sample). Including neutral or missing responses, a combined 44% of the 2017 Billings sample agreed or strongly agreed with paying more taxes or fees for transportation while a combined 36% of the 2019 Missoula sample somewhat supported or strongly supported paying more taxes or fees for transportation. Excluding neutral and missing responses, a combined 62% of the 2017 Billings sample offered an affirmative response while a combined 48% of the 2019 Missoula sample offered a positive response.

Table 5: Distribution of Responses Regarding Support for Increasing Transportation Taxes or Fees in the 2017 Billings Survey Sample

Survey Question: Given that current transportation needs are greater than the amount of money available to address them, I support paying more taxes or fees for transportation system improvements.

	N	Share of Total	Share of Revised Total
Strongly Disagree	268	11%	16%
Disagree	352	15%	21%
Combined (Strongly Disagree + Disagree)	620	26%	38%
Undecided	701	30%	
Agree	845	36%	51%
Strongly Agree	185	8%	11%
Combined (Strongly Agree + Agree)	1,030	44%	62%
Total	2,351		
Total Excluding Undecided	1,650		

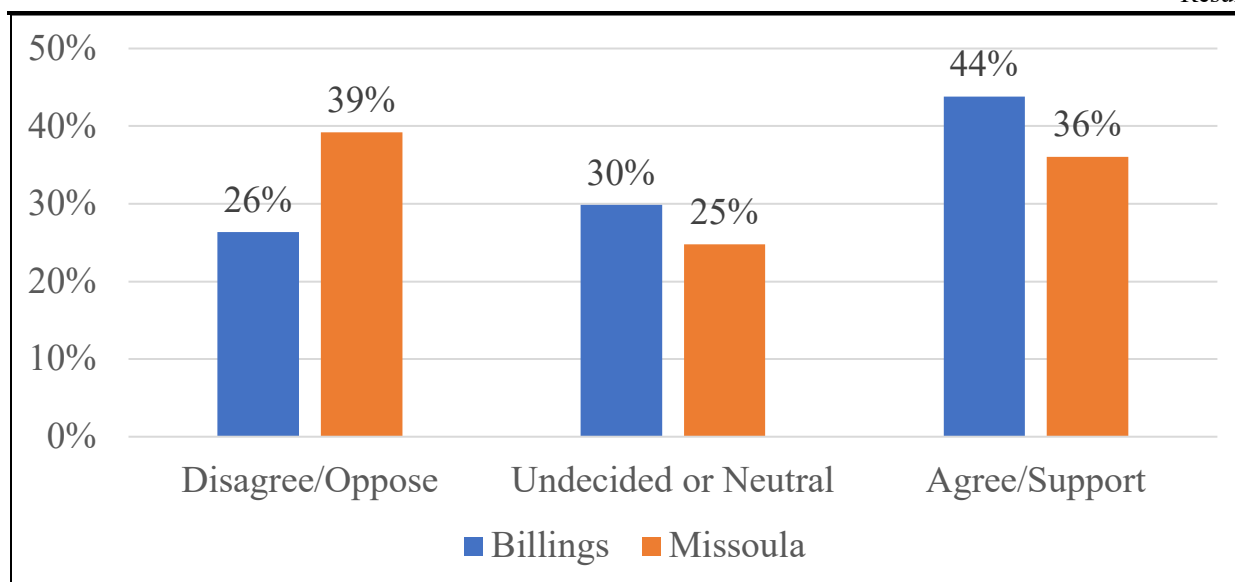
Notes and Source: We compiled these results using data from the 2017 Billings household travel survey and applying the survey weights. Share of Total refers to the total sample size inclusive of the “undecided” response, while the Share of Revised Total refers to the total sample size excluding “undecided” responses. The N of 2,351 inclusive of “undecided” is the same as the N of the total survey sample, indicating no missing responses for this question.

Table 6: Distribution of Responses Regarding Support for Increasing Transportation Taxes or Fees in the 2019 Missoula Survey Sample

Survey Question: Current transportation needs in the Missoula area are greater than the amount of money available to address them. Generally speaking, would you support or oppose paying more taxes or fees if the revenues were spent only on transportation system improvements?

	N	Share of Total	Share of Revised Total
Strongly Oppose	116	22%	30%
Somewhat Oppose	87	17%	22%
Combined (Strongly Oppose + Somewhat Oppose)	203	39%	52%
Neither Support nor Oppose	92	18%	
Somewhat Support	123	24%	32%
Strongly Support	63	12%	16%
Combined (Strongly Support + Somewhat Support)	187	36%	48%
Don't know	36	7%	
Total	518		
Total Excluding Neither Support nor Oppose and Don't Know	390		

Notes and Source: We compiled these results using data from the 2019 Missoula household travel survey and applying the survey weights. Share of Total refers to the total sample size inclusive of the “neither support nor oppose” and “don’t know” responses, while the Share of Revised Total refers to the total sample size excluding these responses. The N of 518 inclusive of “neither support nor oppose” and “don’t know” is less than the N of the total survey sample of 521, indicating 3 missing responses for this question.



Notes and Sources: We compiled these results using data from the 2017 Billings and 2019 Missoula household travel surveys and applying the survey weights.

Figure 6: Distribution of Responses Regarding Support for Increasing Transportation Taxes or Fees (Including Neutral or Missing Responses) in the 2017 Billings and 2019 Missoula Survey Samples

3.3 Use of Transportation Revenues

The distribution of responses regarding use of additional transportation revenues are presented in **Table 7** (Billings) and

Table 8 (Missoula) as well as **Figure 7** (Billings) and **Figure 8** (Missoula). Missing responses were not as significant of an issue for the question regarding use of additional transportation revenues, compared to the question regarding support for increasing transportation revenues. For the 2017 Billings sample, a neutral or undecided option was not provided, and the total survey sample of 2,351 responded to this question. For the 2019 Missoula sample, a “don’t know” option was provided and used by 28 respondents while an additional 41 individuals did not respond to this question, for a combined total of about 13% of the N of 521 in the total survey sample. Notably, the 2017 Billings survey allowed respondents to select multiple options, while the 2019 Missoula survey forced the selection of one option. Among both the 2017 Billings and 2019 Missoula survey samples, maintaining existing transportation infrastructure garnered the most support, with 71% of the 2017 Billings sample selecting this response and a plurality (44% including “don’t know” responses and 47% excluding “don’t know” responses) of the 2019 Missoula sample selecting this response. Widening existing streets and roads was the second most popular response in both samples, with 46% of the 2017 Billings sample selecting this response and 11% (excluding “don’t know” responses) of the 2019 Missoula sample selecting it. Improving safety received the third most support in the 2017 Billings sample with 43% of respondents selecting this option, but was lower (8% excluding “don’t know” responses) than improving transit (11% excluding “don’t know” responses) and bicycle facilities (10% excluding “don’t know” responses) in the 2019 Missoula sample.

Table 7: Distribution of Responses Regarding Use of Transportation Revenues in the 2017 Billings Travel Survey Sample

Survey Question: If taxes or fees were raised to improve transportation in the Billings area, what would you want to see the additional revenues used for? (Select all that apply)

	N	Share of Total
Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks	1,659	71%
Build new transportation corridors	927	39%
Widen existing transportation corridors	1,091	46%
Improve public transit (bus)	525	22%
Improve bicycle facilities, such as trails/paths and lanes	557	24%
Improve pedestrian facilities, such as sidewalks and crosswalks	629	27%
Improve safety and reduce crashes	1,013	43%
Total	2,351	

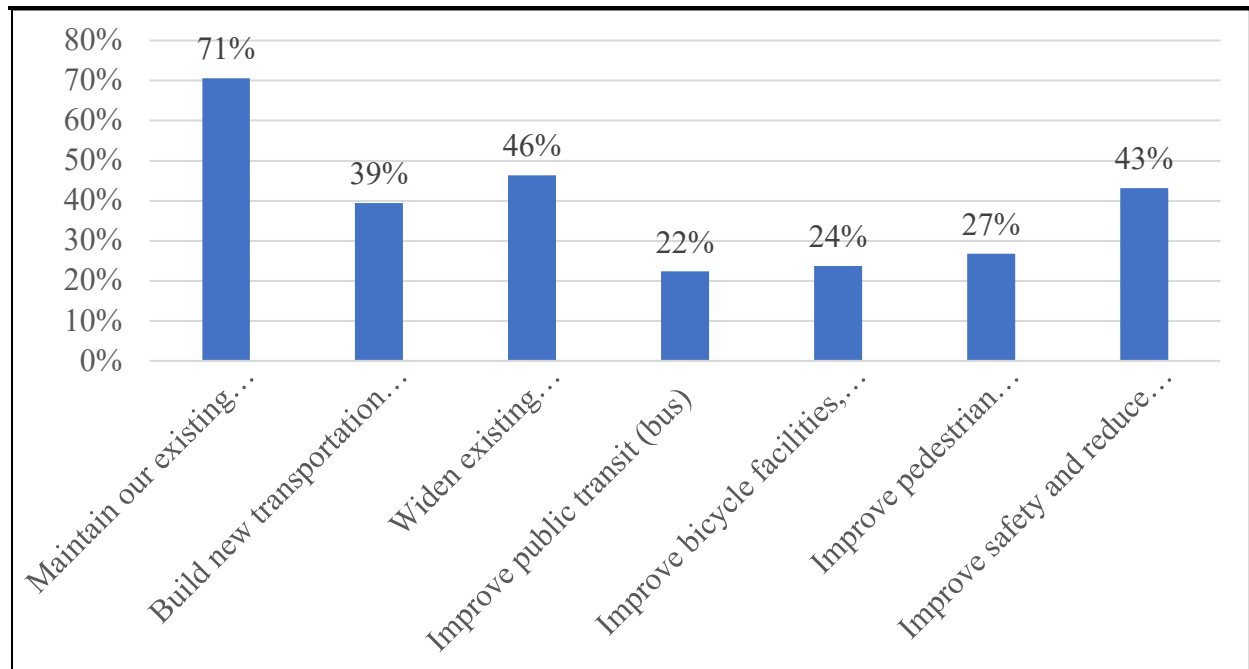
Notes and Source: We compiled these results using data from the 2017 Billings household travel survey and applying the survey weights. The 2017 Billings survey question allowed multiple responses (i.e., “select all that apply”). As a result, the sum of the Share of Total column exceeds 100%. The N of 2,351 is the same as the N of the total survey sample, indicating no missing responses for this question.

Table 8: Distribution of Responses Regarding Use of Transportation Revenues in the 2019 Missoula Travel Survey Sample

Survey Question: If taxes or fees were raised to improve transportation in the Missoula area, what would you want to see the additional revenues used for?

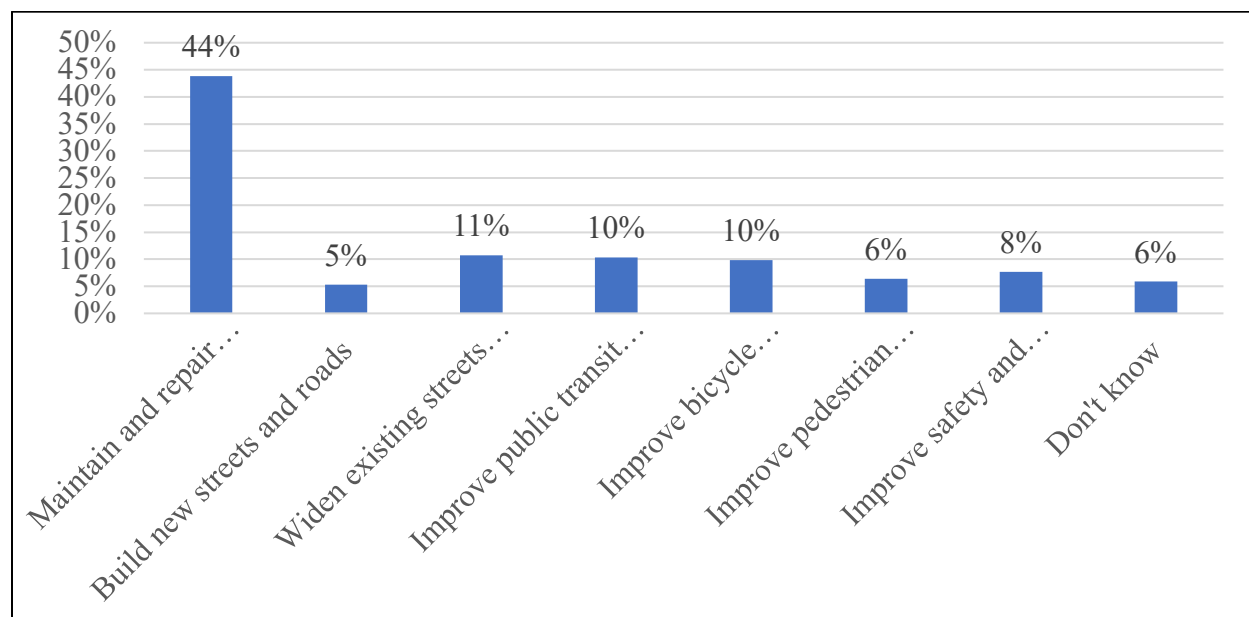
	N	Share of Total	Share of Revised Total
Maintain and repair existing streets and roads	210	44%	47%
Build new streets and roads	26	5%	6%
Widen existing streets and roads	51	11%	11%
Improve public transit (bus)	50	10%	11%
Improve bicycle facilities, such as trails/paths and lanes	47	10%	10%
Improve pedestrian facilities, such as sidewalks and crosswalks	31	6%	7%
Improve safety and reduce crashes	37	8%	8%
Don’t know	28	6%	
Total	480		
Total Excluding “Don’t know”	452		

Notes and Source: We compiled these results using data from the 2019 Missoula household travel survey and applying the survey weights. The N of 480 is less than the N of the total survey sample of 521, indicating 41 missing responses for this question (or about 8% of the total survey sample). Unlike the 2017 Billing survey, the 2019 Missoula survey offered a “don’t know” response option.



Notes and Source: We compiled these results using data from the 2017 Billings household travel survey and applying the survey weights. The 2017 Billings survey question allowed multiple responses (i.e., “select all that apply”).

Figure 7: Distribution of Responses Regarding Use of Transportation Revenues in the 2017 Billings Travel Survey Sample



Notes and Source: We compiled these results using data from the 2019 Missoula household travel survey and applying the survey weights. Unlike the 2017 Billings survey, the 2019 Missoula survey offered a “don’t know” response option.

Figure 8: Distribution of Responses Regarding Use of Transportation Revenues in the 2019 Missoula Travel Survey Sample

3.4 Preferred Type of Transportation Revenue

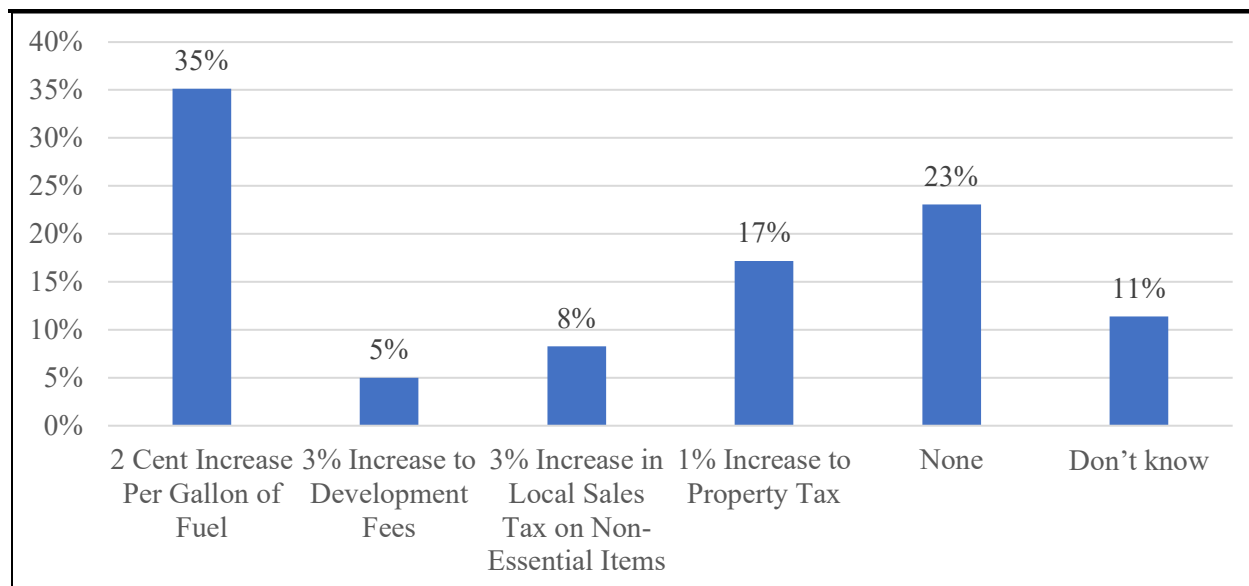
The distribution of responses regarding the preferred type of transportation revenue (tax or fee), collected in the 2019 Missoula survey (but not in the 2017 Billings survey), are provided in **Table 9** and **Figure 9**. A total of 509 individuals responded to this question (98% of the total survey sample), and of those 509 a total of 58 selected the “don’t know” response. Including “don’t know” responses, 35% selected a \$0.02 per gallon increase in the cost of fuel. Excluding “don’t know” responses, 40% selected a 2 cent increase per gallon of fuel. The next most popular option was “none” (23% including “don’t know” responses and 26% excluding “don’t know” responses).

Table 9. Distribution of Responses Regarding Support for Different Types of Transportation Revenues in the 2019 Missoula Travel Survey Sample

Survey Question: What type of tax or fee would you be most willing to support if the revenues were used only for transportation system improvements locally?

	N	Share of Total	Share of Revised Total
2 cent increase per gallon of fuel (diesel and gasoline), paid by local residents and visitors	179	35%	40%
3 percent increase to development fees, paid for by new development	25	5%	6%
3 percent local sales tax on non-essential items, such as items purchased at bars and restaurants, paid by local residents	42	8%	9%
1 percent increase to property tax, paid by property owners	87	17%	19%
None	117	23%	26%
Don't know	58	11%	
Total	509		
Total Excluding “Don't know”	451		

Notes and Sources: We compiled these results using data from the 2019 MMPO household travel survey and applying the survey weights. The BYCMPO survey did not collect comparable information about support for different types of transportation revenues.



Notes and Sources: Distributions based on weighted survey data. Compiled by WTI using household travel survey data from MMPO.

Figure 9: Distribution of Responses Regarding Support for Different Types of Transportation Revenues in the 2019 Missoula Travel Survey Sample

4 Discussion

This project focused on public willingness to raise transportation revenues, public priorities for transportation spending, and public preferences for types of transportation revenues. Our results regarding support for raising transportation revenues are generally consistent with recent prior findings on this topic, including our own analysis in Chittenden County as well as the national research on public opinions regarding the federal gas tax led by the Mineta Transportation Institute (Agrawal and Nixon 2023). In Billings, 44% of the public agreed or strongly agreed with paying more taxes or fees for transportation improvements (including neutral or undecided responses). Meanwhile, in Missoula the share who strongly supported or somewhat supported paying more taxes or fees for transportation improvements was 36% (including neutral or undecided responses). The shares are even higher when neutral and missing responses are excluded. These levels of support are perhaps higher than generally perceived by leaders reluctant to publicly support a gas tax increase. Our results regarding transportation spending priorities are consistent with the prioritization of the preservation of existing transportation assets (i.e., a “fix it first” approach). Maintenance and repair of existing infrastructure received the most support of transportation spending options in both the Billings (71%, with a “select all that apply” structure) and Missoula (47%, with a forced selection of one option and excluding “don’t know” responses) survey samples. Our results regarding the preferred type of transportation revenue mechanism (available only for Missoula) suggested that a plurality (40%, excluding “don’t know” responses) of the sample preferred a \$0.02 per gallon increase in fuel taxes to the other listed options.

Together, we interpret our results across these three categories of survey questions as suggesting a public willingness to more adequately fund transportation investments than has perhaps been previously understood or acknowledged, but also a preference for that increased funding to be spent judiciously on existing transportation assets and a reluctance to overextend funding on expansion, as well as a preference for more direct road user charges (via a per gallon gas tax) over less direct fees via property or sales taxes.

We acknowledge that our analysis focused on the distribution of survey responses; future work could introduce the analysis of additional information contained in the household travel survey data sources (such as sociodemographic and attitudinal information) using appropriate advanced statistical techniques, such as regression analysis. We hope that the present study serves as a helpful overview of the issues discussed as well as the information contained in the analyzed data sources.

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Appendix 1: Source Data for Study Area Maps

WTI staff (Jonathan Fisher) prepared the **Figure 3** map of the Billings area and the **Notes and Source**: We created this map using the data sources listed in **Appendix 1**.

Figure 4 map of the Missoula area using the following sources for geospatial information:

- Montana Spatial Data Infrastructure, Geographic Information Clearinghouse, Montana State Library: https://mslservices.mt.gov/geographic_information/data/datalist/
 - “Montana Transportation Framework” (Roads, Railroads, Trails)
 - “Montana Incorporated Cities and Towns” (City limits)
 - “Montana Major Streams and Lakes” (Rivers)
- 2019 TIGER/Line Shapefiles, U.S. Census Bureau: <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html>
 - (State and County boundaries)
- Open Data Catalog, Bureau of Transportation Statistics, U.S. Department of Transportation: <https://data-usdot.opendata.arcgis.com/>
 - “Populated Places” (Cities)
 - “Metropolitan Planning Organizations” (MPO boundary)
- GIS Technical Staff, City of Billings (by request)
 - Transit routes
 - Trails
- Mountain Line GTFS, OpenMobilityData: <https://transitfeeds.com/p/mountain-line-missoula/765>
 - Transit routes