

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The main title is centered in the upper half of the slide.

2017 BILLINGS-YELLOWSTONE COUNTY HOUSEHOLD TRAVEL SURVEY

CITY/COUNTY PLANNING BOARD

JANUARY 23, 2018

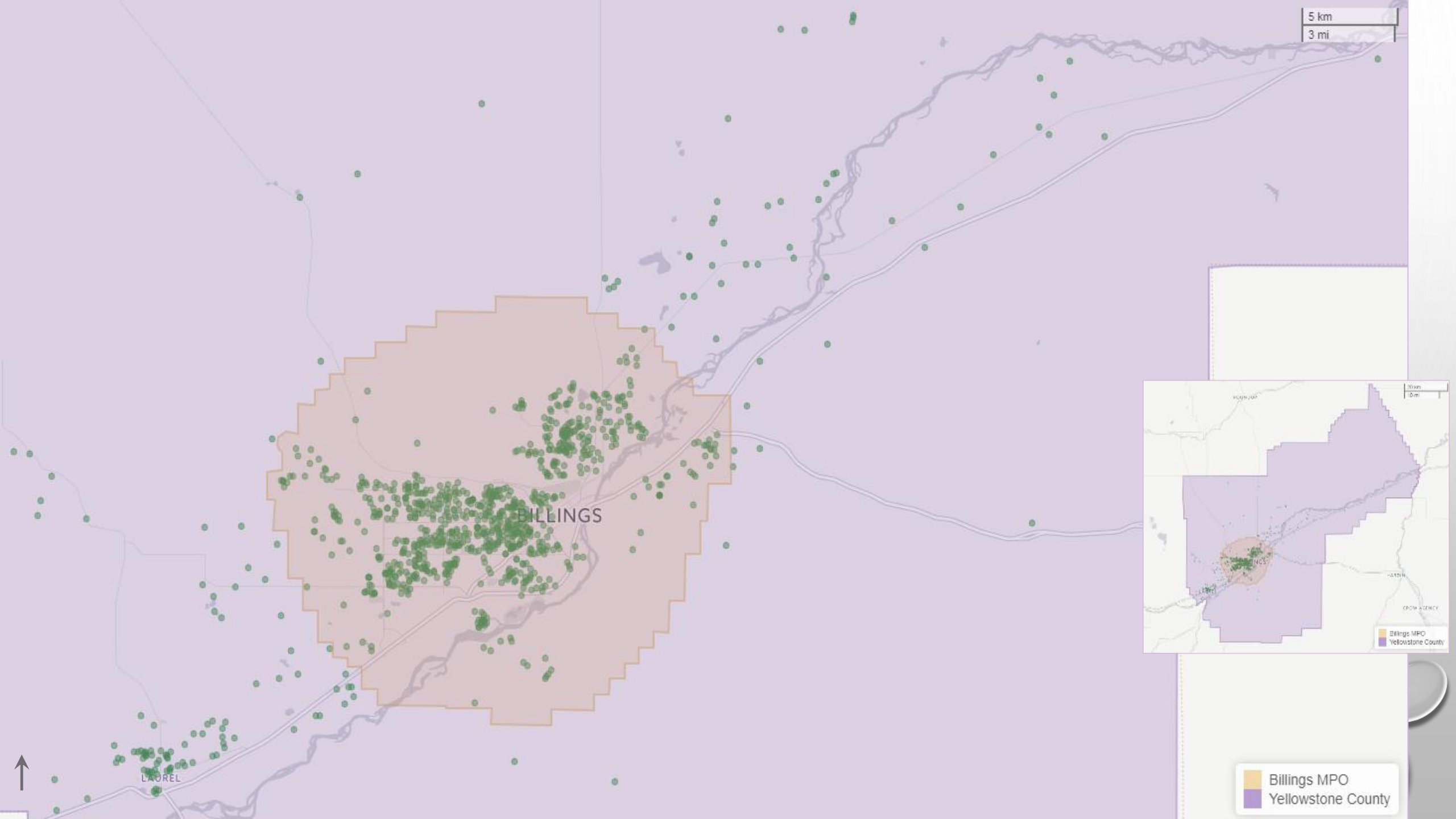
EXECUTIVE SUMMARY

- JOINT BETWEEN BILLINGS MPO AND MDT (\$140,000 PROJECT TOTAL)
- INVITED 20,000 HOUSEHOLDS TO PARTICIPATE
- GOAL – 1100 COMPLETED SURVEYS – REACHED 1,066
- SURVEY TIME (TRAVEL DATES) – MAY 2-JUNE 8, 2017
 - SCHOOL IN SESSION, NOT SUMMER BREAK
 - TUESDAY – THURSDAY

SELECTED CHARACTERISTICS

- A TYPICAL SURVEYED HOUSEHOLD IN THE REGION MAKES 7.9 TRIPS A DAY AND A TYPICAL PERSON MAKES 3.6 TRIPS PER DAY.
 - AFTER APPLYING WEIGHTS, THE AVERAGE NUMBER OF HOUSEHOLD TRIPS RISES TO 8.0 PER DAY AND THE AVERAGE PERSON TRIP RATE FALLS TO 3.43
- THE MAJORITY OF TRIPS MADE (89.7 PERCENT) IN THE REGION ARE AS THE DRIVER OR PASSENGER OF AN AUTOMOBILE, VAN OR TRUCK
- NON-MOTORIZED TRIPS (BY BIKE OR WALKING) ACCOUNT FOR 6.9 PERCENT OF THE TOTAL
- TRIPS MADE USING A PRIVATE VEHICLE TAKE 15.6 MINUTES AND COVERED 5.7 MILES ON AVERAGE COMPARED TO TRANSIT TRIPS WHICH TAKE 23.4 MINUTES AND COVERED 2.8 MILES.
- WORK TRIPS TAKE AN AVERAGE OF 16 MINUTES IN THE REGION
- THE AVERAGE DISTANCE TRAVELED WAS 5.3 MILES
- WORK TRIPS ACCOUNT FOR 13.7 PERCENT OF ALL TRIPS MADE IN THE REGION
- TRIPS NOT CATEGORIZED AS WORK, SCHOOL, SHOPPING, OR RECREATIONAL ACCOUNT FOR 22.5 PERCENT OF ALL TRIPS MADE (THESE INCLUDE ESCORTING MINORS, AND NON-MANDATORY ERRANDS AND MAINTENANCE ACTIVITIES).

5 km
3 mi

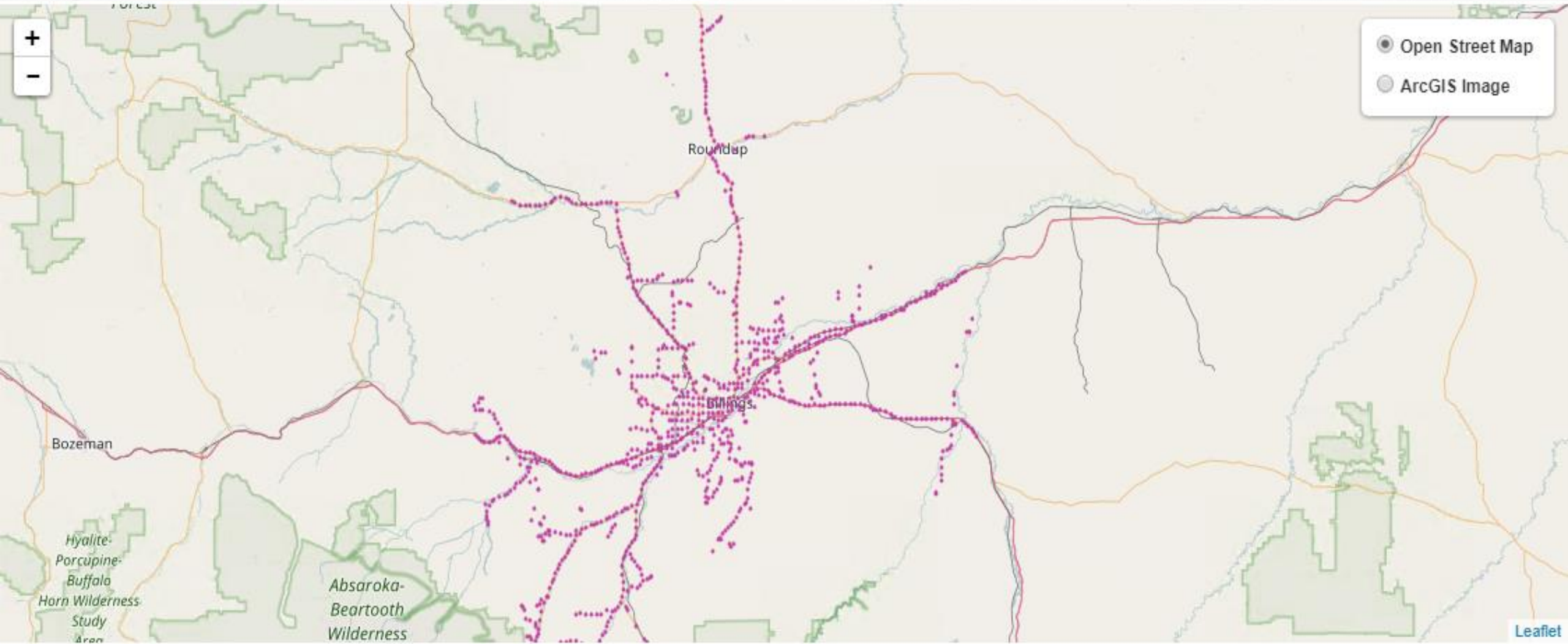


BILLINGS

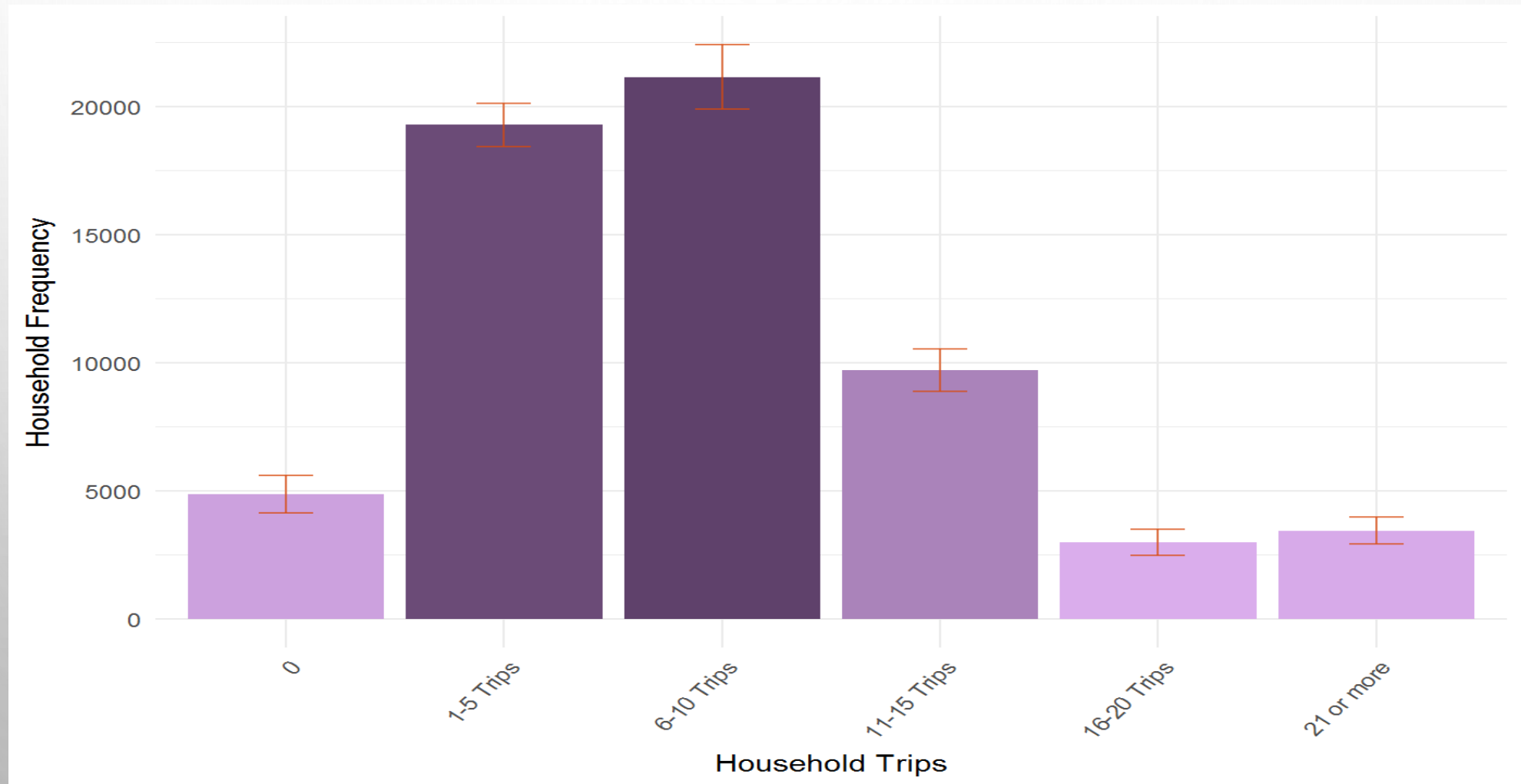
LAUREL

Billings MPO
Yellowstone County

CAPTURED GPS POINTS



VOLUME OF HOUSEHOLD TRIPS



MODE SHARE

Mode	Weighted	Surveyed
Not Ascertained	0.21% *	0.26% *
Walk	5.36%	4.54%
Bicycle	1.57%	1.26%
Motorcycle / moped	0.17% *	0.24% *
Auto / van / truck (as the driver)	71.96%	74.13%
Auto / van / truck (as the passenger)	17.78%	17.22%
Carpool / vanpool	0.48%	0.45%
School bus	1.03%	0.98%
MET Public transit - local bus	1.03%	0.45%
Private bus or shuttle	0.05% *	0.05% *
Airplane	0.04% *	0.02% *
Something Else	0.3%	0.41%

TRIP DURATION

Mode	Weighted	Std. Error	Surveyed
Not Ascertained	61.73 *	47.09 *	73.27 *
Walk	11.98	0.91	12.05
Bicycle	41.07	25.32	30.44
Motorcycle / moped	16.99 *	12.81 *	19.5 *
Auto / van / truck (as the driver)	15.64	0.8	15.63
Auto / van / truck (as the passenger)	17.41	2.92	16.65
Carpool / vanpool	18.75	4.67	17.5
School bus	19.72	2.77	21.27
MET Public transit - local bus	23.4	6.42	24.55
Private bus or shuttle	47.62 *	38.64 *	40.5 *
Airplane	64 *	0 *	64 *
Something Else	55.82	29.56	45.34

AVERAGE TRIP DISTANCE

Mode	Weighted	Std. Error	Surveyed
Not Ascertained	4.71 *	1.52 *	5.36 *
Walk	0.48	0.07	0.54
Bicycle	1.83	0.27	1.74
Motorcycle / moped	4.92 *	8.46 *	5.57 *
Auto / van / truck (as the driver)	5.71	0.34	5.7
Auto / van / truck (as the passenger)	4.57	0.47	4.74
Carpool / vanpool	10.31	4.7	9.08
School bus	2.73	0.4	2.84
MET Public transit - local bus	2.79	0.97	3.86
Private bus or shuttle	9.86 *	7.23 *	8.45 *
Airplane	213.86 *	0 *	213.86 *
Something Else	13.33	8.14	15.57

	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed
Billings roadways are congested at morning and evening rush hours.	0.99% *	0.84% *	9.52%	9.19%	5.09%	5.25%	58.31%	59.76%	25.94%	24.86%
Congestion is when I am surrounded by vehicles on the road, but all the vehicles are still traveling at a reasonable speed.	6.36%	5.82%	46.31%	47.28%	9.67%	8.82%	33.94%	34.71%	3.72%	3.38%
Congestion is when I have to drive below the speed limit because of other vehicles around me.	1.42% *	1.22% *	11.66%	12.1%	7.42%	7.41%	57.13%	59.29%	22.36%	19.98%
Congestion is when I have to sit through more than one cycle at a traffic light.	0.77% *	0.75% *	4.35%	4.5%	3.89% *	2.63% *	41.53%	42.78%	49.21%	49.16%
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.	10.56%	10.13%	14.97%	16.7%	31.46%	31.14%	34.75%	34.62%	8.26%	7.41%
It should be a high priority to add and improve public transit (bus) services in the Billings area	5.34%	4.97%	17.1%	17.64%	27.71%	29.46%	29.65%	31.33%	20.09%	16.51%

	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed	Weighted	Surveyed
It should be a high priority to add and improve bicycle facilities, like bicycle lanes, trails/paths, and racks	11.48%	11.63%	17.2%	18.2%	19.92%	19.98%	28.77%	30.02%	22.53%	20.08%
It should be a high priority to add and improve pedestrian facilities, like sidewalks, trails/paths, and crosswalks	4.16%	4.22%	11.03%	11.73%	15.48%	15.85%	40.99%	43.06%	28.24%	25.05%
It should be a high priority to add and improve roadways for vehicles	1.38% *	1.03% *	4.35%	4.13%	9.48%	9.1%	51.98%	55.07%	32.71%	30.58%

If I knew I would encounter N minutes of congestion on my way to or from work, I would choose an alternate route. (CONGCHOICE)

	Weighted	Std. Error	Surveyed
Less than 3 minutes	2,204.78	448.33	35
5 minutes	11,797.04	1,300.66	210
10 minutes	22,399.34	1,091.76	395
15 minutes	15,023.33	833.60	255
20 minutes	5,115.30	611.93	89
More than 20 minutes	3,861.13	683.20	65
Other: _____	1041.08 *	375.73 *	17 *

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) (TAXES)

	Weighted	Std. Error	Surveyed
Maintain our existing transportation corridors, including streets, roads, sidewalks, bike lanes, and crosswalks	44256.51	1098.42	783
Build new transportation corridors	21547.34	1160.2	384
Widen existing transportation corridors	27607.47	1019.83	505
Improve public transit (bus)	15188.84	1136.55	255
Improve bicycle facilities, such as trails/paths and lanes	14213.07	1235.3	234
Improve pedestrian facilities, such as sidewalks and crosswalks	16795.51	1100.51	258
Improve safety and reduce crashes	27498.82	1265.34	485

How comfortable are you, if at all, travelling through roundabouts in the Billings area, whether you are driving, walking, or biking? (ROUNDABOUTFEEL)

	Weighted	Std. Error	Surveyed
I dont know	56.12 *	57.6 *	1 *
I prefer not to answer	63.46 *	481 *	3 *
Very comfortable	29898.43	1400.36	515
Somewhat comfortable	15034.67	1294.99	268
Neither comfortable nor uncomfortable	3965.43	642.61	68
Somewhat uncomfortable	5260.43	701.65	91
Very uncomfortable	5540.94	731.71	89

Which type of intersection in the Billings area do you generally think is easier to get through, whether you are driving, walking, or biking? (INTERSECTION)

	Weighted	Std. Error	Surveyed
I dont know	56.12 *	57.6 *	1 *
I prefer not to answer	63.46 *	481 *	3 *
Intersection with a roundabout	20819.88	1306.02	369
Intersection with stop signs (4-way stop or 2-way stop)	4370.92	544.02	87
Intersection with a traffic light (stop light)	32332.67	1713.69	542
Uncontrolled intersections (no stop signs, traffic lights, or roundabouts)	2176.43	504.91	33

How many days did you ride a bicycle in the last 30 days? (BIKETRIPS)

	Weighted	Std. Error	Surveyed
I dont know	369.65 *	150.75 *	8 *
I prefer not to answer	235.6 *	472.87 *	6 *
0	47595.1	975.52	825
1	2982.2	502.56	46
2	1659.46	349.29	30
3	1047.54 *	280.61 *	17 *
4	918.92 *	351.1 *	13 *
5	1854.06	349.48	32
6	353.94 *	160.07 *	6 *
7	175.2 *	101.39 *	3 *
8	228.75 *	128.87 *	4 *
9	75.76 *	60.26 *	2 *
10	753.46 *	226.71 *	15 *
12	282.42 *	160.18 *	4 *
13	25.11 *	25.35 *	1 *
15	326.93 *	163.5 *	6 *
18	31.94 *	32.09 *	1 *
20	569.78 *	202.68 *	10 *
25	195.33 *	99.35 *	4 *
28	120.58 *	84.66 *	2 *
30	38.98 *	39.39 *	1 *

What was the primary reason for you to ride a bicycle over the last 30 days? (BIKEREASON)

	Weighted	Std. Error	Surveyed
I dont know	493.73 *	231.76 *	7 *
I prefer not to answer	302.02 *	483.88 *	6 *
Commuting to work or school	1592.41 *	367.77 *	27 *
Recreation	4755.28	721.75	80
Exercise/for my health	4138.12	635.66	77
Personal errands (to the store, post office, and so on)	1346.88 *	401.09 *	20 *
Required for my job	165.57 *	118.5 *	2 *
Didnt bicycle	47046.71	982.18	817

When you ride a bicycle, is it mostly on... (BIKETERRAIN)

	Weighted	Std. Error	Surveyed
I dont know	123.84 *	76.44 *	3 *
I prefer not to answer	224.08 *	451.19 *	5 *
Bike lanes on paved roads	4900.26	754.58	83
Shoulders of paved roads	4065.67	484.96	77
Paved roads, not on shoulders or lined bike lanes (riding in the same lane as cars or other vehicles)	3359.14	705.61	62
Bike paths, walking paths, or trails (defined as paths where cars are not allowed to drive)	6102.29	644.15	107
Unpaved roads (for example dirt, gravel, sand)	1173.01 *	310.5 *	21 *
Sidewalks	4027.68	709.72	51
Didnt bicycle	35864.75	979.68	627
Other	0 *	0 *	0 *

What keeps you, if anything, from riding a bicycle more often? Select all that apply.

(NOBIKEWHY)

	Weighted	Std. Error	Surveyed
Personal health or disability	7726.26	875.88	127
Lack of safe / comfortable bicycle facilities	8722.79	949.4	149
Weather	12147.35	1196.36	215
Safety while biking next to / with cars	13448.48	1059.1	227
Safety while biking through intersections	8248.43	843.74	139
Work schedule, family obligations	10967.07	1266.65	181
Distance to destination is too far	10833.01	867.48	189
Needing to carry bulky items	8238.25	879.71	145
Not interested in bicycling	11492.37	983	216
Nothing keeps me from riding more often	2448.03	478.28	48
No bicycle available	16175.36	971.41	269

How many of the last 30 days did you use public transit? (TRANSTRIPS)

	Weighted	Std. Error	Surveyed
I dont know	288.75 *	133.88 *	5 *
I prefer not to answer	137.72 *	470.67 *	5 *
0	56623.86	706.87	995
1	250.54 *	113.05 *	5 *
2	721.53 *	372.53 *	7 *
3	58.78 *	60.03 *	1 *
4	50.94 *	51.65 *	1 *
5	142.5 *	83.89 *	3 *
6	273.56 *	204.73 *	3 *
8	70.32 *	79.22 *	1 *
9	298.65 *	318.26 *	1 *
12	330.41 *	305.84 *	2 *
15	360.57 *	232.22 *	4 *
18	42.42 *	42.87 *	1 *
26	168.92 *	181.82 *	1 *

What keeps you, if anything, from using public transit more often? Select all that apply. (NOPUBTRANSWHY)

	Weighted	Std. Error	Surveyed
I dont know	0 *	0 *	0 *
I prefer not to answer	0 *	0 *	0 *
Bus doesnt go where I need it to go	15628.45	1274.29	264
Bus doesnt run when I need it to	12730.88	1008.83	214
Work schedule, family obligations	12267.51	1156.56	213
Personal health or disability	2688.56	636.31	34
Weather	955.67 *	289.19 *	17 *
Safety	1463.56 *	398.36 *	20 *
Distance to bus stop is too far	7741.29	1592.47	138
Needing to carry bulky items	4903.96	672.9	81
Nothing keeps me from using public transit more often	18563.79	1708.84	317
Other, specify:	0 *	0 *	0 *

QUESTIONS

