

2018 Billings Urban Area Long Range Transportation Plan

Billings City Council

October 15, 2018



What is an LRTP?

A long range transportation plan (LRTP):

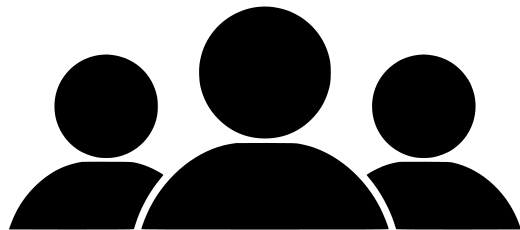
- Outlines the long-range vision for the transportation system
- Lists all transportation improvements that are expected in the next 20 years → **2040**

Why are we updating it?

Metropolitan areas with populations over 50,000 (such as the Billings urban area) are federally required to update their LRTP every 4 years

Updating this document helps Billings define its vision for the transportation system and plan future projects

Who is involved?



Resource Agencies and Public



Where are we in the timeline?

L RTP TIMELINE



What is next?

- ▶ Draft Plan is available for review and comment
 - ▶ www.Billingslrtp.com
- ▶ Plan adoption schedule
 - ▶ TAC Meeting - October 4th (completed)
 - ▶ Yellowstone County BOCC - October 9th (completed)
 - ▶ Yellowstone County Board of Planning - October 10th (completed)
 - ▶ **Billings City Council - October 15th (tonight)**
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 - ▶ Yellowstone County Board of Planning - October 23rd
 - ▶ Policy Coordinating Committee - October 30th

Draft Plan is available for review and comment at www.billingslrtp.com

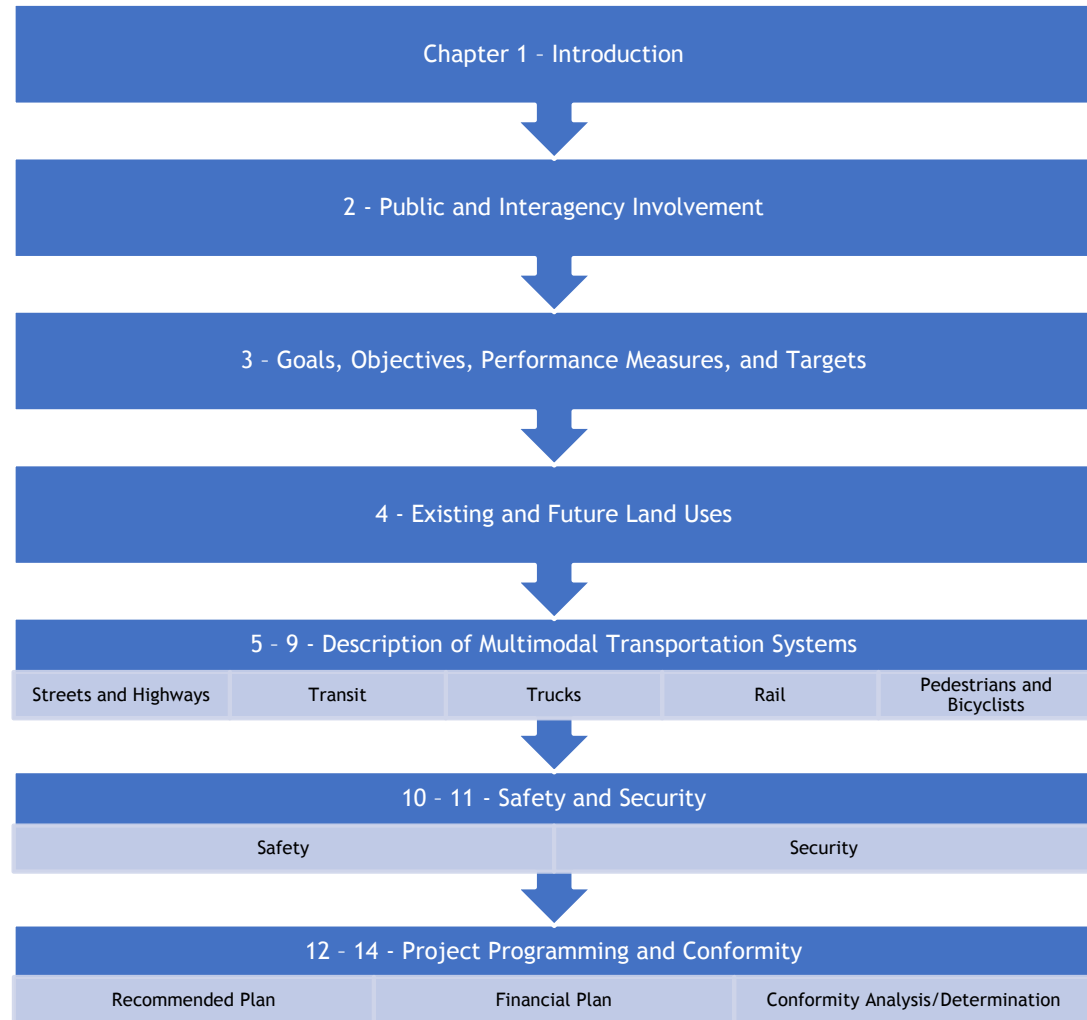
2018 Billings Urban Area Long Range Transportation Plan



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What are the elements of the 2018 LRTP?

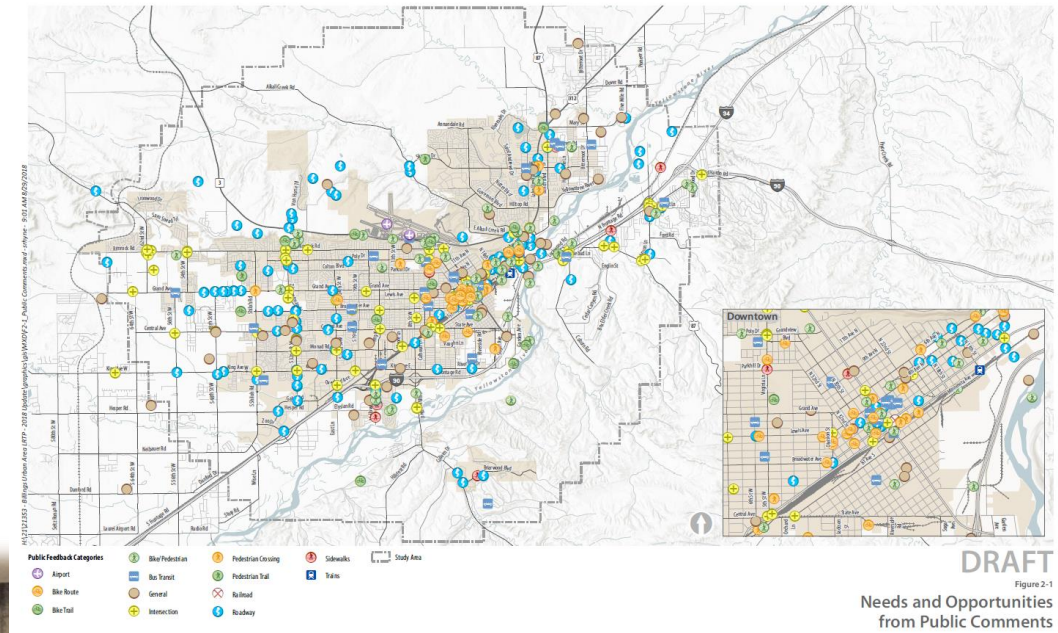


- 15 Plans, Studies, & Policies Since 2014 LRTP
- 25 Major Projects Since 2014 LRTP
- 8 Ongoing

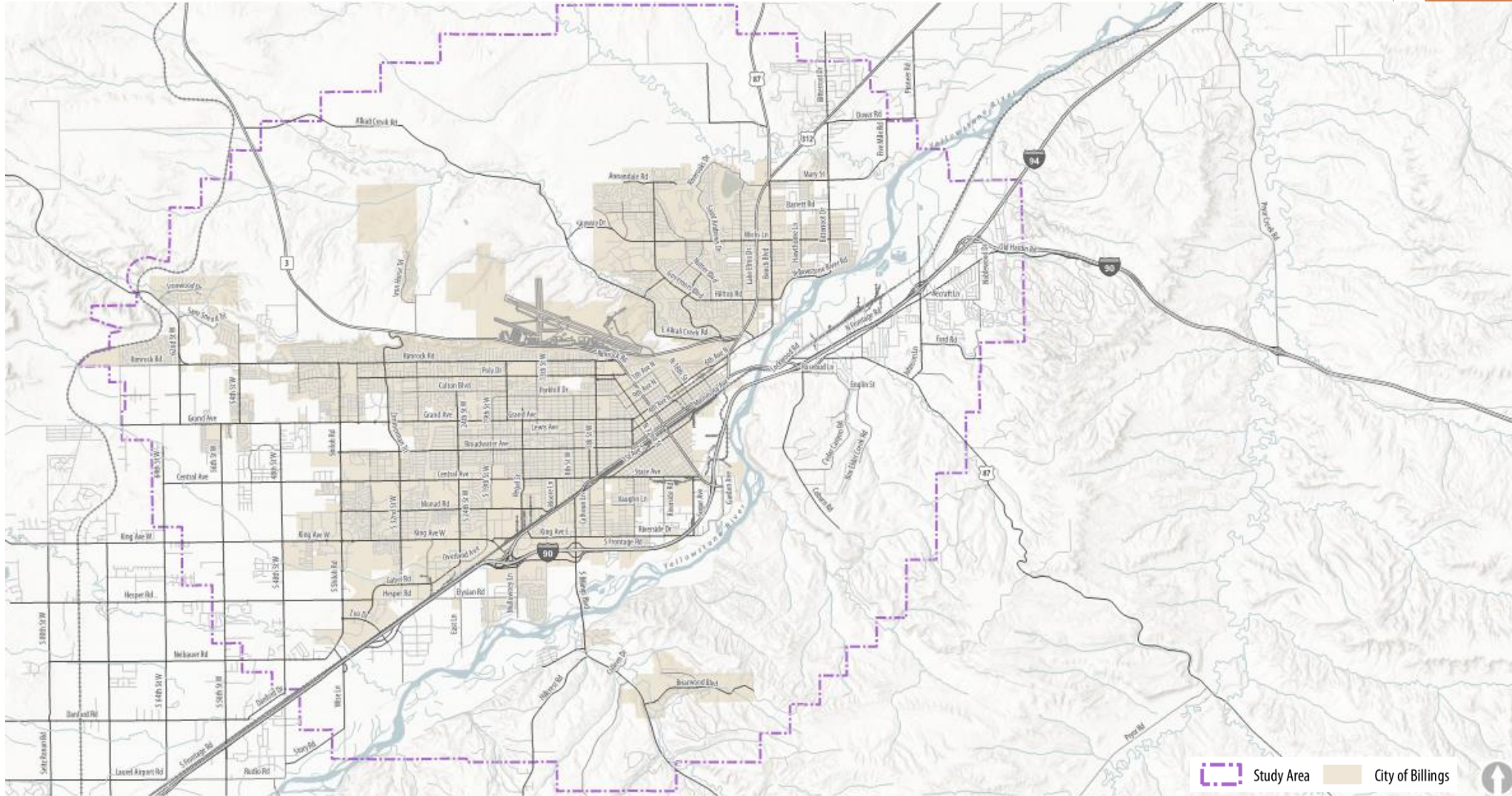


Public and Interagency Involvement

- ▶ www.billingslrtp.com
- ▶ Steering committee
- ▶ Resource agencies
- ▶ Youth engagement
- ▶ Open houses and online survey
- ▶ Media coordination and social media
- ▶ Email updates



Where is the study area?



LRTP Goals

1. Safety

- Develop a safe transportation system

2. Functional Integrity and Efficiency

- Optimize, preserve, and enhance the existing transportation system

3. Prioritized Improvements

- Identify and prioritize projects that mitigate deficiencies, maximize the use of existing facilities, and balance anticipated needs with available funding

4. Environment

- Develop a transportation system that protects the natural environment and promotes a healthy, sustainable community

5. Public Transit and Transportation

- Create a transportation system that supports the practical and efficient use of transit

6. Pedestrians and Bicyclists

- Create a transportation system that supports the practical and efficient use of active transportation such as walking and bicycling

7. Economic Vitality

- Ensure adequate transportation facilities to support the existing local economy and connect Billings to local, regional, and national commerce

Land Use - Population Growth (2017 to 2040)

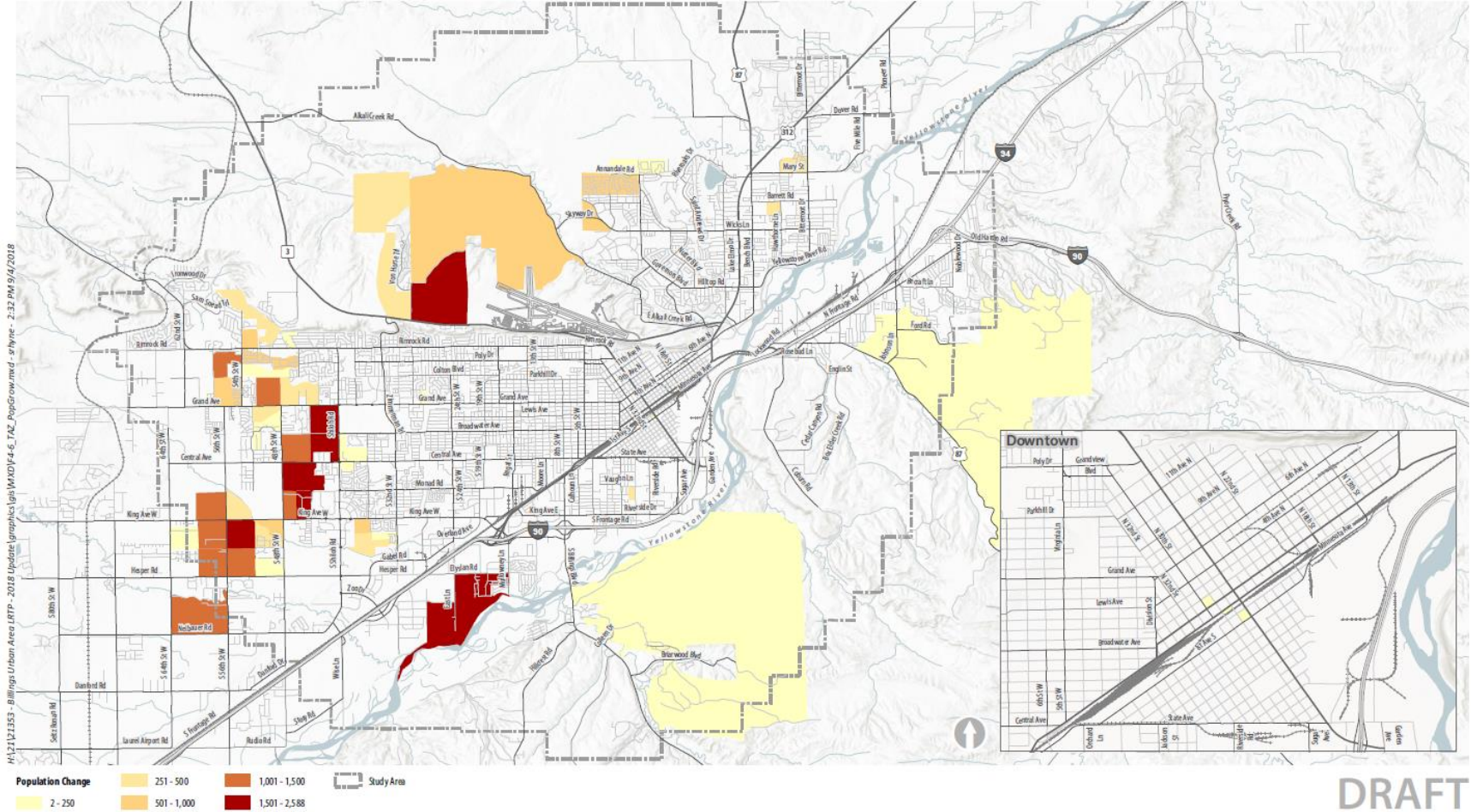


Figure 4-6
Population Growth (2017 to 2040)

Land Use - Employment Growth (2017 to 2040)

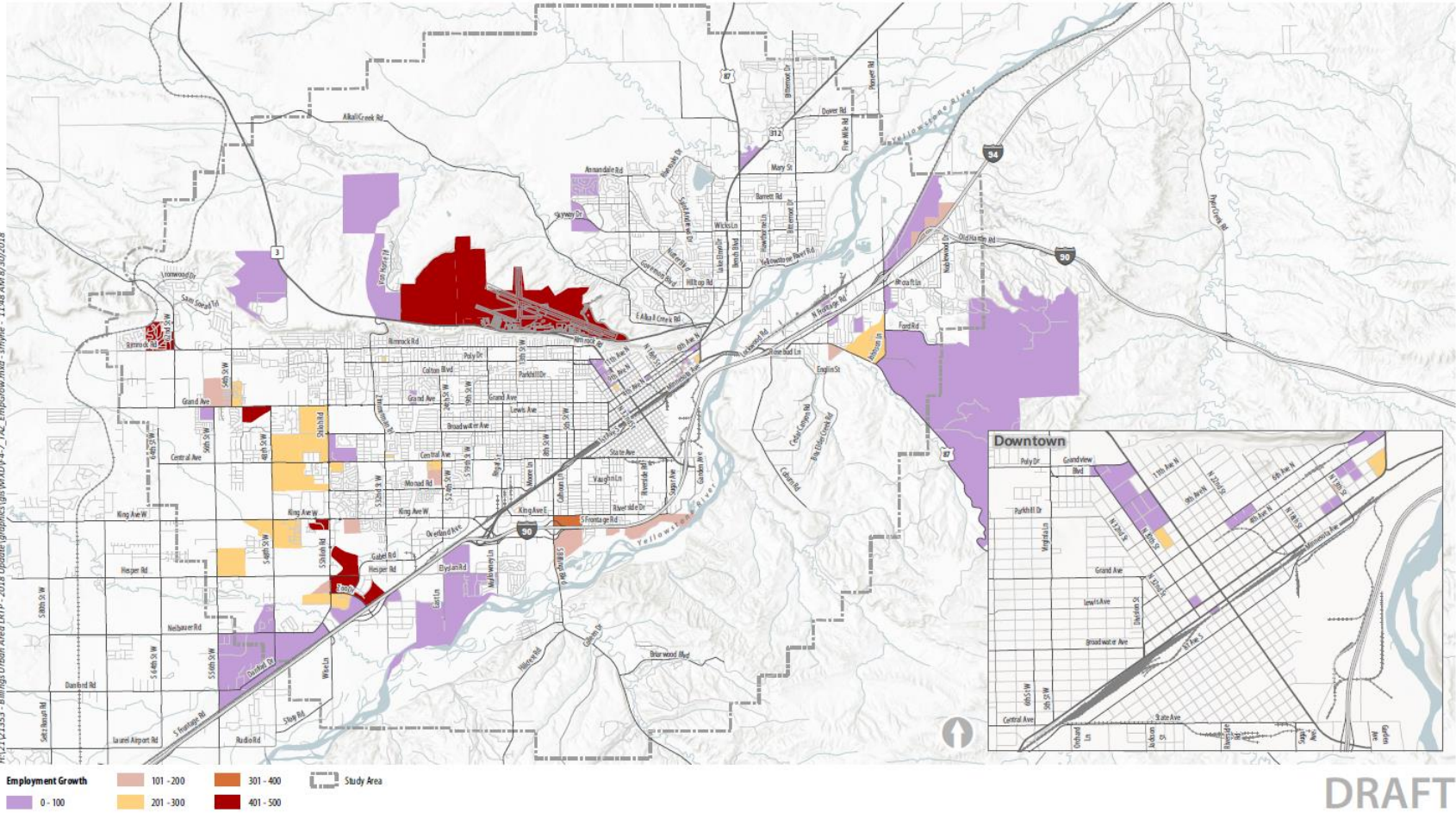
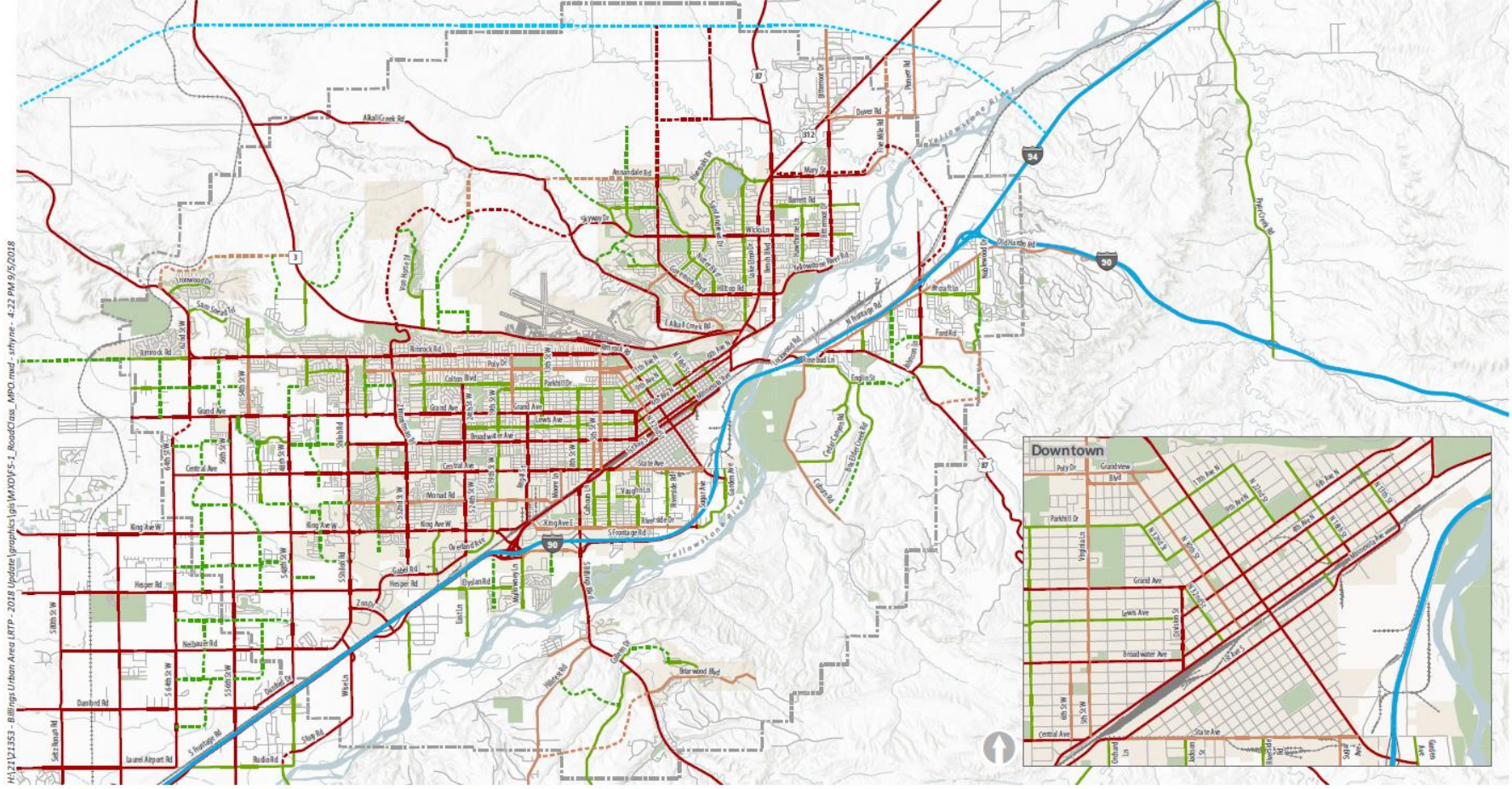


Figure 4-7
Employment Growth (2017 to 2040)

Functional Classification Map



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- Roadway Classification**
- Interstate
 - Principal Arterial
 - Minor Arterial
 - Collector
 - Proposed Freeway Controlled Access
 - Proposed Principal Arterial
 - Proposed Minor Arterial
 - Proposed Collector
 - Study Area
 - Park
 - City of Billings

Note: This functional classification map does not represent the federally approved system.

DRAFT

Figure 5-1

Functional Classification Map

Draft Project List - Types / Categories

Committed Projects

- Transportation Improvement Program (TIP)
- Capital Improvement Plan (CIP)
- Years 2018-2028

Recommended Projects

- Not programmed
- Upcoming projects for the TIP and CIP
- Years 2029-2040

Illustrative Projects

- Visionary
- Not expected to occur within 2040 horizon

Fiscal Constraint of LRTP

Draft Project List - Roadway and Intersection Projects



Draft Project List - Roadway and Intersection Projects

Committed Projects

- 33 Roadway
- 30 Intersection
- Includes several annual programs

~\$343 million

120 Total Projects

58 - Roadway

62 - Intersection

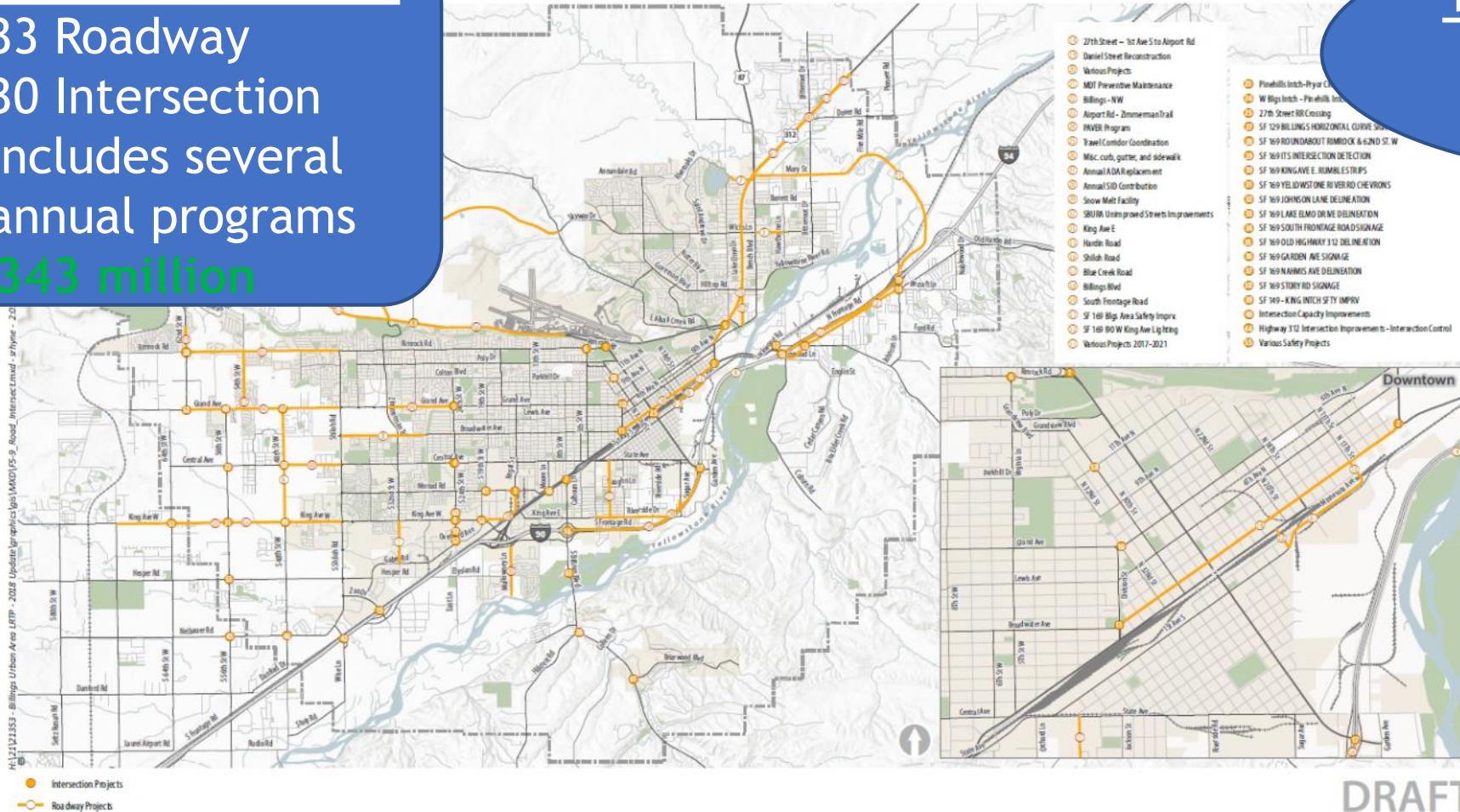


Figure 5-9
Intersection and Roadway Projects

Draft Project List - Congestion Management Projects

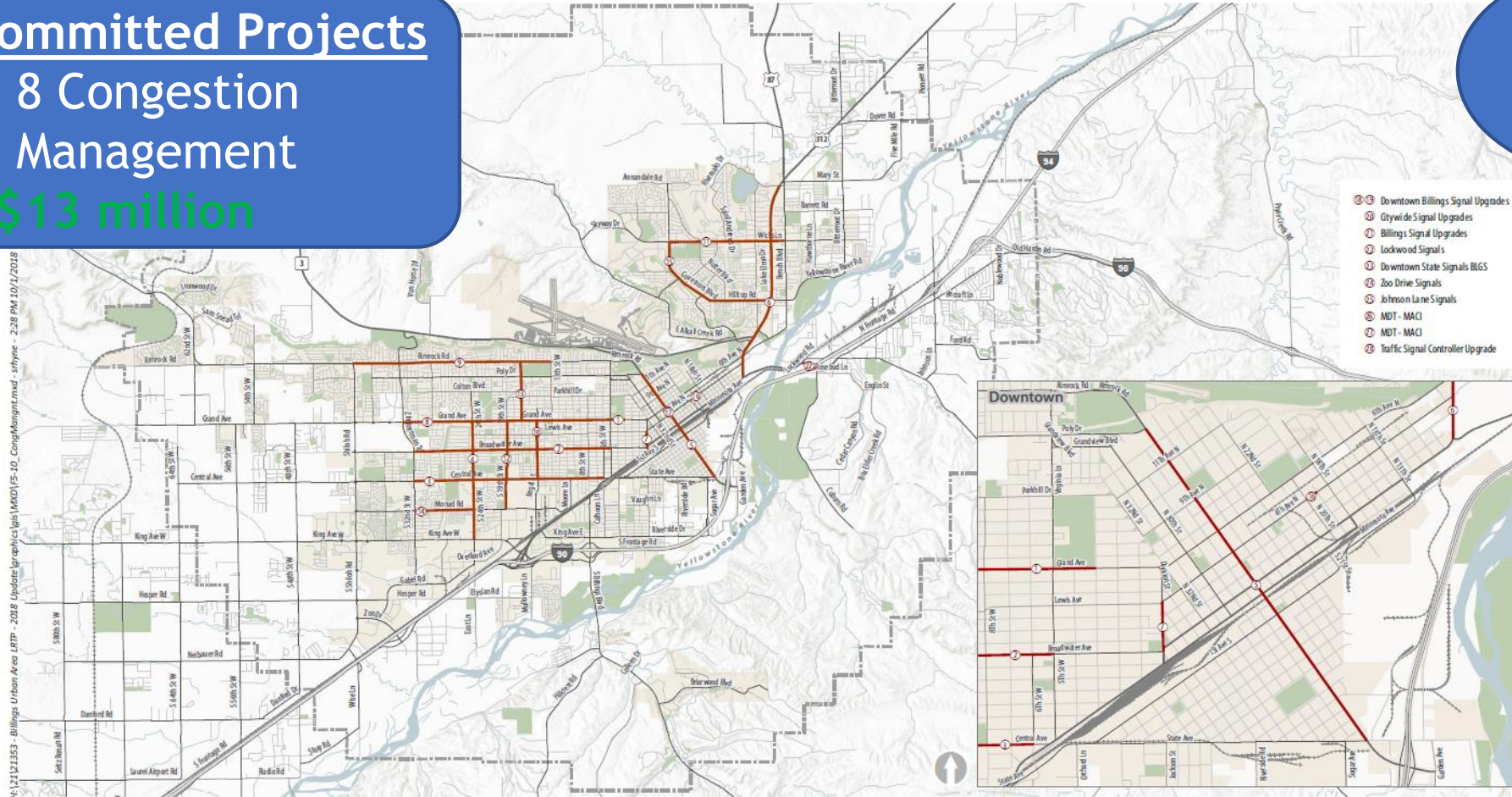


Draft Project List - Congestion Management Projects

Committed Projects

- 8 Congestion Management
~\$13 million

28 Total Projects



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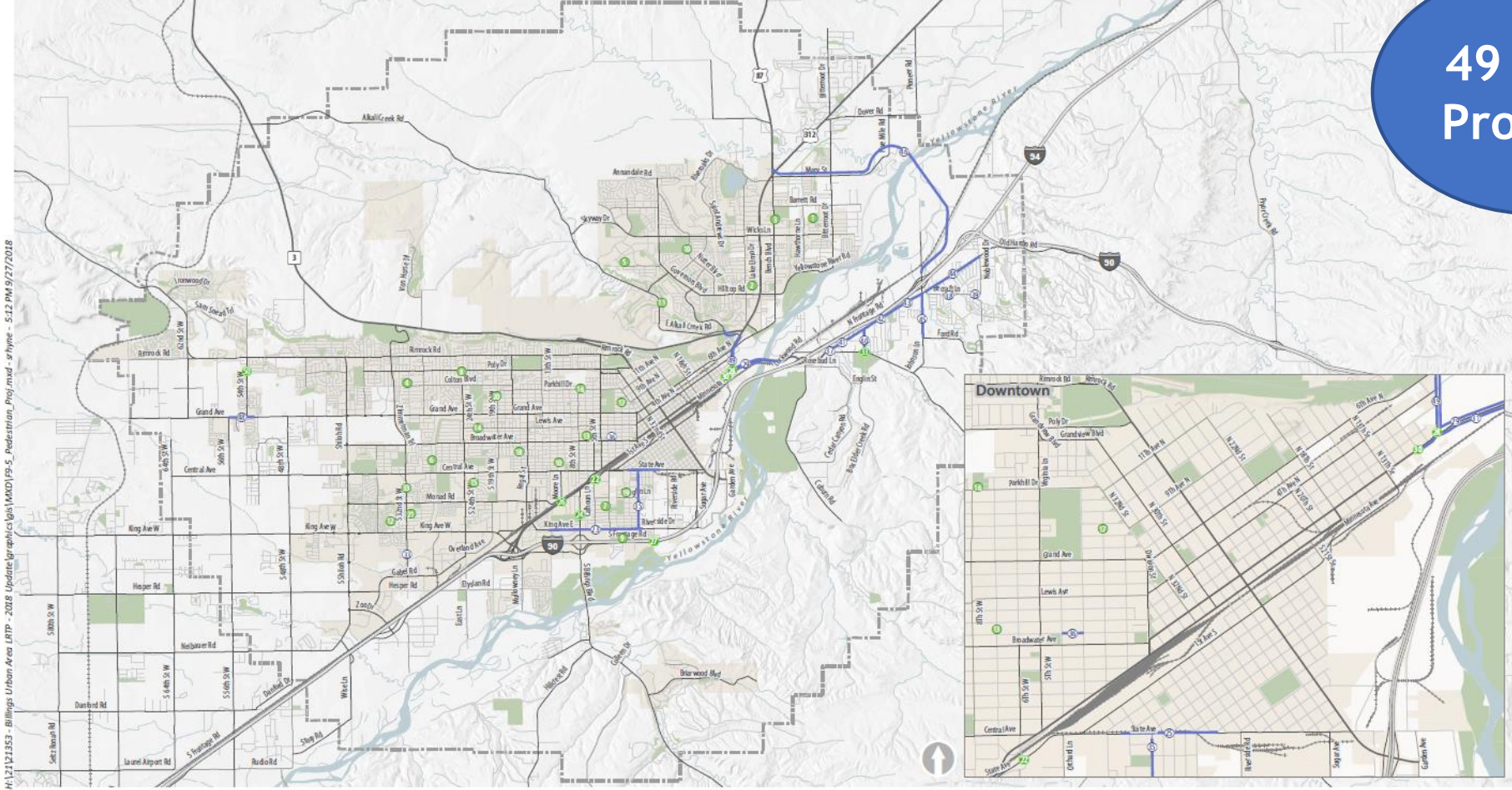
Figure 5-10
Congestion Management Projects

Draft Project List - Pedestrian, Bicycle, & Multi-use Trail Projects



Draft Project List - Pedestrian Projects

49 Total Projects



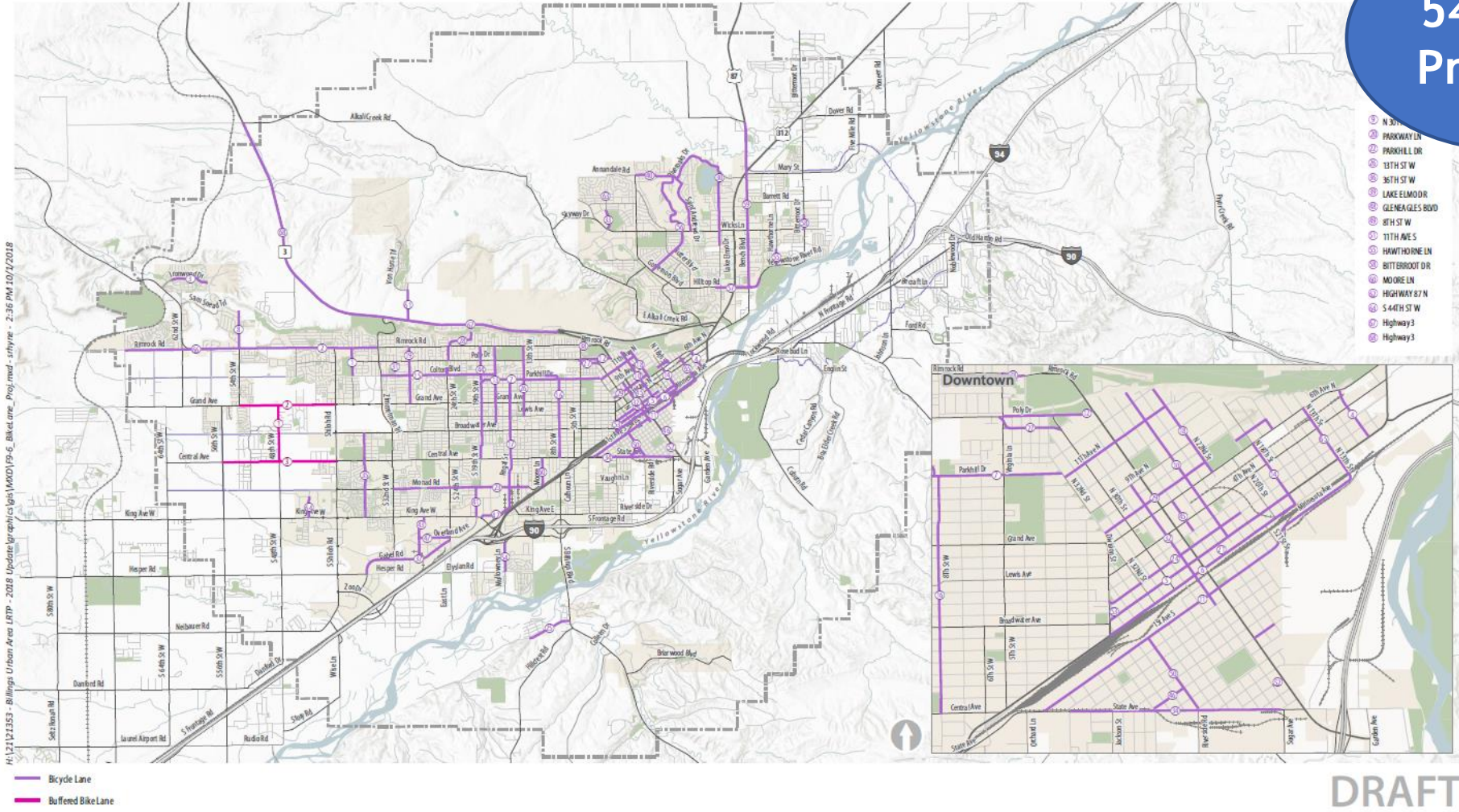
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- Pedestrian Crossing
- Safe Routes to Schools
- Pedestrian Projects

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Figure 9-5
Pedestrian Projects

Draft Project List - Bicycle Lane Projects

54 Total Projects

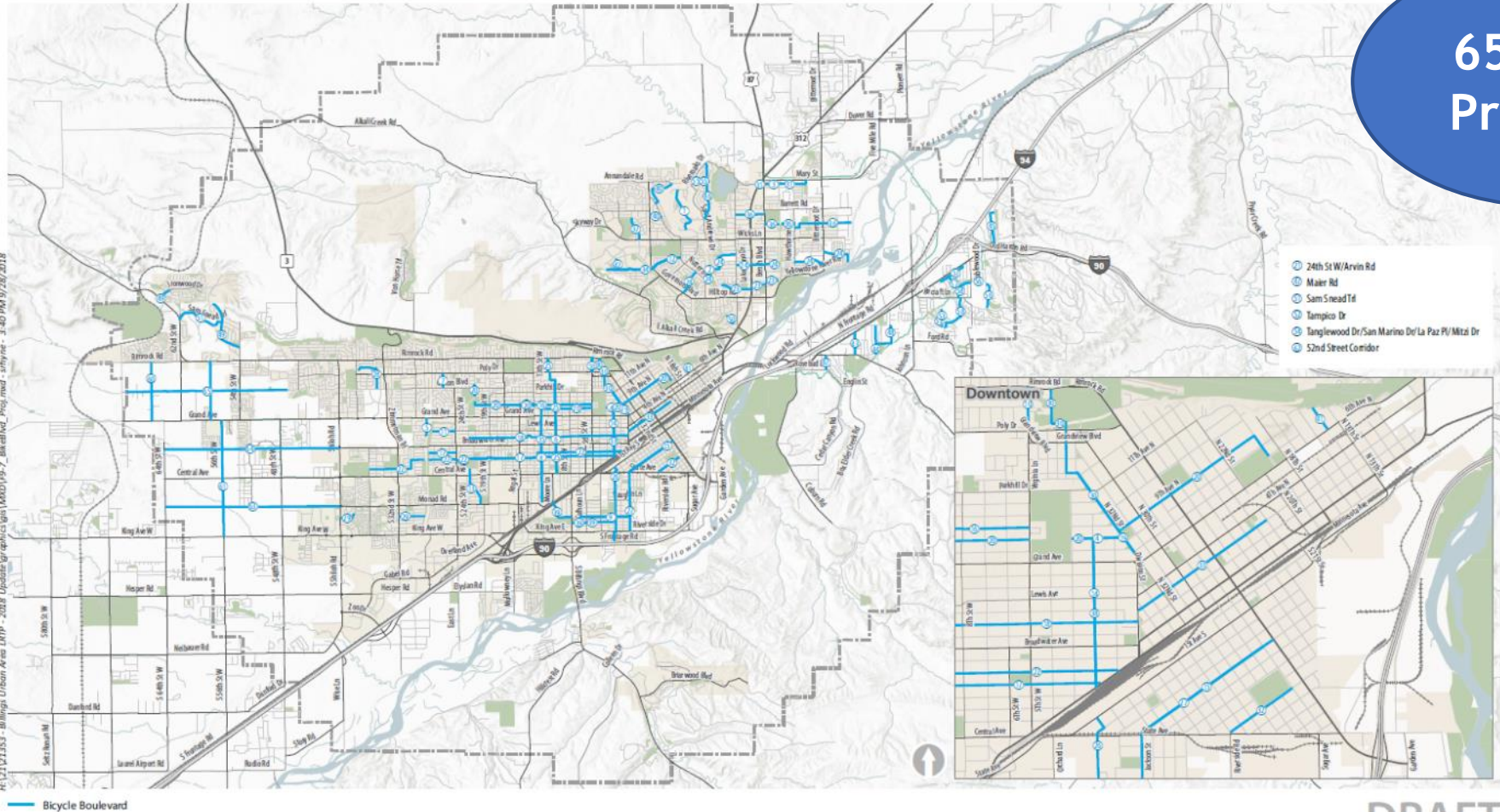


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Figure 9-6
Bicycle Lane and Buffered Bike Projects

Draft Project List - Bicycle Boulevard Projects

65 Total Projects



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Figure 9-7
Bicycle Boulevard Projects

Draft Project List - Pedestrian, Bicyclists, & Multi-use Trails

Committed Projects

- 8 Pedestrian* (includes two annual programs)
 - 2 Bike Lane*
 - 9 Multi-use Trail
- ~\$19 million

276 Total Projects

- 49 - Pedestrian
- 54 - Bicycle Lane
- 65 - Bicycle Boulevard
- 108 - Multi-use Trail

Project ID1	Proposed Name	Length (Miles)	Project Description	Estimated Planning Level Cost
				\$416,000
MT88	South of Governors Blvd		Multi-use Trail from W Wicks Ln to Aronson Ave	\$871,000
MT80	Lockwood Tributary Trail		Multi-use Trail from Old Hardin Rd to Highway 87E	\$1,804,000
MT87	Central Ave		Multi-use Trail from Shiloh Rd to East of 64th St W	\$1,541,000
MT88	West of Governors Blvd		Multi-use Trail from South of W Wicks Ln to Constitution Ave	\$719,000
MT89	Inner Belt Loop Trail		Multi-use Trail from Alkali Creek Rd to Highway 3	\$1,147,000
MT90	Blue Creek Rd		Multi-use Trail from Colleen Dr to Fredwick Rd	\$430,000
MT91	Broadwater Ave		Multi-use trail from Shiloh Rd to unspecified	\$806,000
MT92	Monad Rd		Multi-use Trail from S 17th St W to Laurel Rd	\$721,000
MT93	Hogans Slough Trail		Multi-use Trail from Shiloh St W to Division Ave	\$317,000
MT94	Monad Rd		Multi-use Trail from Exit of S 48th St W to Highway 3	\$430,000

Project ID1	Proposed Name	Length (Miles)	Project Description	Estimated Planning Level Cost
MT14	Four Dances Connector	1	Construct a multi-use trail from Lockwood Trail to Four Dances Natural Area	\$548,034
MT15	Heights BWA	3	Construct a multi-use trail from Aronson Ave to Lake Elmo State Park	\$2,740,189
MT16	Heights Upper Loop	4.5	Construct a multi-use trail from Yellowstone River to Alkali Creek Rd	\$4,710,253
MT17	High Ditch	4	Construct a multi-use trail from Rimrock West Trail to Hogans Slough	\$2,192,188
MT18	Hogans Slough	5.8	Construct a multi-use trail from Shiloh Rd to BNSF Rail with Trail	\$3,014,180
MT19	Inner Belt Loop	6.5	Construct a multi-use trail from Governors Blvd to Highway 3	\$5,937,032
MT20	King Avenue	1	Construct a multi-use trail from S 44th St W to Hogans Slough	\$911,180
MT21	Lockwood	6	Construct a multi-use trail from Interstate-90 to Shiloh Rd	\$5,480,337
MT22	Monad	1	Construct a multi-use trail from S 48th St W to Hogans Slough	\$918,300
MT23	Monad	2.6	Construct a multi-use trail from BWA Canal Trail to 48th St W	\$2,288,474
MT24	MRL Trail with Trail	9	Construct a multi-use trail from Interstate-90 to Highway 3 E	\$8,220,506
MT25	Heiberg Ranch	1	Construct a multi-use trail from Extension of Existing Trail to Inner Belt Loop	\$913,390
MT26	Rimrock Road	1.5	Construct a multi-use trail from 54th St W to Cove Ditch	\$1,370,084
MT27	Sonora Park	1	Construct a multi-use trail from Aronson Ave to Inner Belt Loop Trail	\$918,300

Project ID1	Proposed Name	Length (Miles)	Project Description	Estimated Planning Level Cost
MT28	Snow Ditch	2	Construct a multi-use trail from Shiloh Rd to Big Ditch	\$1,096,067
MT29	South Hogans Slough	1	Construct a multi-use trail from Suburban Ditch to MRL Trail with Trail	\$913,390
MT30	Spring Creek Extension	1	Construct a multi-use trail from 24th St W to 15th St W	\$913,390
MT31	Transect Connector	0.5	Bring McCall trail segment up to standards and complete connection to Transect Center Trail at 32nd Street West	\$480,000
MT32	Two Moon Park to Five Mile Creek	3	Construct a multi-use trail from Kiwanis Trail to Five Mile Creek	\$2,740,189
MT33	Western Yellowstone River Trail	5	Construct a multi-use trail from Josephine Crossing Trail to Shiloh Rd Trail	\$4,566,948
MT34	Riverfront Park	2.5	Construct a multi-use trail from Mystic Park Trail to Riverfront Park Trails	\$1,920,000
MT35	25th Street Railroad Bridge	0.9	Construct a multi-use trail from Montana Avenue to Minnesota Avenue	\$1,700,000
MT36	BWA to Swords Park Trail	5.5	Construct a multi-use trail from Lily's Park to Aronson Ave	\$5,003,643
MT37	Rim Top Trail from 27th Street West/ Airport Road to Zimmerman Trail vicinity	3.5	New trail along the Rims resulting from Highway 3 corridor study	\$1,200,000
MT38	Downtown BWA Corridor Trail/On Street Facilities	1.5	Complete Trail through MSU-B Campus in alignment with MSU-B Master Plan and trail/ on-street facilities along Poly Dr through Virginia Lane Intersection to 18th/Poly Drive	\$210,000
MT39	24th Street Pedestrian Bridge	0.25	Construct a multi-use bridge to cross the tracks near 34th Street	\$1,000,000

Project ID1	Proposed Name	Length (Miles)	Project Description	Estimated Planning Level Cost
MT40	44th Street West	0.5	Construct a multi-use bike/pedestrian path along 44th Street from Shiloh Conservation Area to King Avenue West	\$102,000
MT41	Heights Middle School Path	0.25	Construct a trail from the Kiwanis trail to New Heights Middle School near Bench and Barrett	\$131,250
MT42	6th Avenue N		Multi-use Trail from 6th Avenue Bypass to N 10th St	\$1,062,000
MT43	BWA Canal Trail		Multi-use Trail from 6th Avenue N to Transect Way	\$6,115,000
MT44	Montana Ave/ Underpass Ave		Multi-use Trail from Division St to S Billings Blvd	\$1,500,000
MT45	Wicks Ln		Multi-use Trail from Glenview Blvd to Kiwanis Trail	\$2,313,000
MT46	Rosebud Ln		Multi-use Trail from Highway 87E to West of Rosebud Ln	\$2,765,000
MT47	N 27th St		Multi-use Trail from Rimrock Rd to Mountain View Blvd	\$372,000
MT48	Grand Ave		Multi-use Trail from 24th St W to Zimmerman Tr	\$674,000
MT49	Hopper Rd		Multi-use Trail from East of Shiloh Rd to S Shiloh Rd	\$181,000
MT50	Highway B/E		Multi-use Trail from Johnson Ln to Old Hardin Rd	\$824,000
MT51	24th		Multi-use Trail from Stillwater to South of King Ave W	\$332,000
MT52	Broadwater Ave		Multi-use Trail from 24th St W to 28th St W	\$925,000
MT53	1st Ave/Old Hardin Rd/Highway 87E		Multi-use Trail from N 13th St to Hogan Rd	\$6,168,000

Project ID1	Proposed Name	Length (Miles)	Project Description	Estimated Planning Level Cost
MT54	BWA Canal Trail North		Multi-use Trail from East of Shadow Heights to Aronson Ave	\$3,337,000
MT55	20th St Trail		Multi-use Trail from S 25th St to S 27th St	\$177,000
MT56	Gabel Rd		Multi-use Trail from Heigler Rd to Zoo Rd	\$177,000
MT57	South of Emerald Dr/Sword Ln		Multi-use Trail from Emerald Dr to Sword Lane	\$540,000
MT58	Rimrock Rd		Multi-use Trail from 54th St W to 66th St W	\$855,000
MT59	King Ave E		Multi-use Trail from Sugar Ave to King Ave W	\$1,747,000
MT60	King Ave W/Island Rd		Multi-use Trail from S 20th St W to S Frontage Rd	\$2,796,000
MT61	Arnold Drain Trail		Multi-use Trail from 18th St W to 25th St W	\$640,000
MT62	Chrysalis Acres		Multi-use Trail from Ivan Burson St to Hollowell Ln	\$75,000
MT63	Suburban Ditch Trail		Multi-use Trail from Songbird Dr to Muldowney Ln	\$526,000
MT64	Falcon Ridge		Multi-use Trail unspecified	\$200,000
MT65	Kiwanis Trail Corridor		Multi-use Trail from Bitterroot Dr to Mary St	\$559,000
MT66	Highway B/ Bypass		Multi-use Trail from Hounslop Rd to Johnson Ln	\$6,747,000
MT67	Jim Dunchei Trail		Multi-use Trail from South of Mary St to E&F St	\$1,479,000
MT68	Muldowney Ln		Multi-use Trail from S Frontage Rd to Story Rd	\$432,000
MT69	Transect Park Trail		Multi-use Trail from High Sierra Blvd to Alkali Creek Rd	\$1,746,000

Draft Projects and Strategies - Other Modes

Transit

- **Increase funding** through federal or local sources
- Improve equipment and facilities
- All-day fixed route service to Billings Heights by 2020
- Vehicle tracking and automatic fare collection by 2025
- Designated fixed-route bus stops by 2025

Truck

- Major roadway projects:
 - *Billings Bypass*
 - *I-90 Yellowstone River Bridge*
 - *Inner Belt Loop*
- Widening and reconstructions throughout the Billings Urban Area

Rail

- **Crossing studies** at 27th Street and Moore Lane
- **Improve underpasses** at 21st Street and 13th Street
- Coordinate rail infrastructure improvements with Lockwood

Revenue & Project Cost Analysis - Fiscal Constraint

Estimated Revenue ~ \$900M
 Estimated C+R Projects ~ \$800M
 Difference ~ \$100M

Funding Source	2019-2028			2029-2040		
	Projected Funding	Expenditures	Difference	Projected Funding + Carryover	Expenditures	Difference
FEDERAL						
National Highway Performance Program	\$ 258,620,000	\$ 241,529,142	\$ 17,090,858	\$ 77,344,858	\$ 47,041,000	\$ 30,303,858
Highway Safety Improvement Program (HSIP)	\$ 21,530,000	\$ 19,908,244	\$ 1,621,756	\$ 19,051,756	\$ 17,935,000	\$ 1,116,756
Surface Transportation Improvement Program	\$ 39,610,000	\$ 30,095,611	\$ 9,514,389	\$ 54,639,000	\$ 46,734,301	\$ 7,904,699
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	\$ 37,870,000	\$ 28,393,611	\$ 9,476,389	\$ 54,916,389	\$ 12,920,877	\$ 41,995,512
Federal Transit Authority (FTA) Funds	\$ 24,240,000	\$ 23,817,028	\$ 422,972	\$ 29,522,972	\$ 29,100,000	\$ 422,972
STATE AND LOCAL						
TransADE	\$ 730,000	\$ 700,000	\$ 30,000	\$ 900,000	\$ 870,000	\$ 30,000
Operations and Maintenance (State)	\$ 14,720,000	\$ 14,720,000	\$ -	\$ 17,670,000	\$ 17,670,000	\$ -
State Fuel Tax	\$ 21,510,000	\$ 17,005,684	\$ 4,504,316	\$ 30,304,316	\$ 23,196,000	\$ 7,108,316
HB473 Gas Tax Funds (BaRSAA)	\$ 7,990,000	\$ 6,344,316	\$ 1,645,684	\$ 11,225,684	\$ 8,404,000	\$ 2,821,684
Other (Private, Bonds, TIF, CDBG, etc.)	\$ 34,340,000	\$ 22,954,144	\$ 11,385,856	\$ 52,595,856	\$ 40,574,737	\$ 12,021,119
Local Transit Mill Levy	\$ 21,360,000	\$ 21,360,000	\$ -	\$ 25,640,000	\$ 25,640,000	\$ -
Transit Fares	\$ 5,890,000	\$ 5,890,000	\$ -	\$ 7,060,000	\$ 7,060,000	\$ -
Other (Transit)	\$ 1,590,000	\$ 1,590,000	\$ -	\$ 1,910,000	\$ 1,910,000	\$ -
Arterial Fee Fund	\$ 44,970,000	\$ 20,970,000	\$ 24,000,000	\$ 53,960,000	\$ 53,882,814	\$ 77,186
Total	\$ 534,970,000	\$ 455,277,780	\$ 79,692,220	\$ 436,740,831	\$ 332,938,729	\$ 103,802,102

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Thank You For Your Time

▶ Questions?