



TranPlanMT Stakeholder Workshop Summary

Date:	June 15, 2016	Start Time: 1:00 p.m.	End Time: 5:00 p.m.
Meeting called by:	MDT Rail, Transit, and Planning Division		Attendees:
Project:	TranPlanMT		Noted within the minutes.
Project Number:	DOWL: 4638.11579.01		
Subject:	Stakeholder Workshop Summary		

Invitations and Attendance

MDT mailed invitations to 119 stakeholders in May 2016 inviting stakeholders to attend a stakeholder workshop on June 15, 2016, take an online survey, and provide feedback on local plans. On June 8, 2016, DOWL followed up by email with a reminder to register for the event. All communications contained a stakeholder-specific link to an online survey. Twenty-seven stakeholders responded to DOWL staff prior to the conference.

Thirty stakeholders attended the meeting in addition to seven MDT staff members and seven representatives from DOWL and Fehr & Peers. Attendees received a background information packet, voting hardware, and an online survey reminder card.

Overview Presentation

Sarah Nicolai provided an overview presentation outlining the long-range transportation planning process, LRTP requirements, and purpose of the workshop.

TrendLab+ Exercise

Ms. Nicolai, Kendra Breiland, and Jon Nepstad conducted a TrendLab+ exercise, inviting stakeholders to provide feedback on how national trends may affect future transportation conditions in Montana. The consultant team provided Montana-specific data for each trend area and asked stakeholders to predict if the trend would increase, decrease, or remain unchanged in the next twenty years. Trend areas included: driving age population, vehicle ownership, suburban migration, licensing regulations, congestion and time use, non-auto modes, fuel costs, labor force participation, GDP and real income growth, goods and services delivery, telecommuting/teleconferencing, social networking, shared mobility services, autonomous cars, and driverless vehicles. The full context of each question and polling results are available in the presentation attached to this memorandum.

Survey Summary

Ms. Nicolai provided a summary of the survey data collected through the stakeholder link. She discussed transportation priorities, top strategies, and budget allocation as reflected by stakeholder input.

Breakout Sessions

Following the TrendLab+ exercise, stakeholders were asked to participate in small group discussions in one of six policy areas: Montana's economy, Montana's environment, Montana highway safety, preservation and maintenance, congestion and delay relief, and transportation options. Two groups (Montana highway safety and preservation and maintenance) were combined due to a small number of participating stakeholders. The groups focused on discussing issues expected to affect Montana's transportation system in the future. The groups also revisited policy goals and actions from the 2007 TranPlan 21 update and proposed modifications. DOWL, Fehr & Peers, and MDT staff facilitated the conversations and transcribed key discussion items. Summaries of attendance and discussion group topics are provided below and photographs of discussion group written materials are attached to this memorandum.

Congestion and Delay Relief

Cody Salo	DOWL facilitator
Lynn Zanto	MDT recorder
Chris Saunders	City of Bozeman
Jessica Morriss	Missoula MPO
Andrew Finch	Great Falls MPO

- Prioritize 1- preservation 2- mobility 3- capacity 4- other/all modes
- Shift some level of resources to preservation.
- Include context sensitive design (CSD) in more of the policy language.
- Utilize a holistic approach to level of service (LOS), including multimodal considerations for operational improvements.
- Reference “multimodal” in place of “roadway” when applicable to policy discussion.
- Utilize the term “active” transportation in place of “alternative”.
- Work with MDT to improve ITS, adaptive signal control, and coordination.
- Streamline project development on state routes. A ten-year project delivery may result in projects that are designed for outdated conditions.
- Allow flexibility with design standards considering CSD.
- Complete patchwork transportation networks/systems.
- Share truck traffic/freight considerations data with local groups.
- Include maintenance/preservation of multimodal facilities in the Transportation Alternatives program.
- Continue emphasis on advanced right-of-way acquisition.
- Provide an educational element to MDT’s mission, focusing on communication as a common theme to both the public and local agencies.
- Develop an MDT urban design section to focus on these challenges.
- Increase revenue base to support all transportation infrastructure.
- More robust safety management.

Montana Highway Safety

Doug Enderson	DOWL facilitator
Jessica Salo	DOWL facilitator
Carol Strizich	MDT recorder
Ivan Ulberg	MDT recorder
Angie Bear Claw	Crow Tribal Transit
Anna O’Donnell	AAA Montana
Bob Armstrong	Montana Highway Patrol
Ryan Leland	City of Helena

- Convert undivided two lane facilities to five lane facilities
- Provide more bike lanes and sidewalks in urban areas.
- Conduct winter maintenance (i.e., sand sooner) to prevent crashes.
- Expand shoulders in rural areas.
- Add turn lanes to increase safety.
- Expedite project delivery.
- Investigate/require a seat belt/helmet law.
- Increase safety education, especially for teen drivers.
- Increase law enforcement. Current law enforcement practices are reactionary versus proactive.
- Continue to improve cooperative/collaborative efforts with regard to safety education and improvements.

Preservation and Maintenance

Same attendees as Montana Highway Safety

- Repair potholes in a timely manner. They cause crashes and stakeholders perceive a delay in getting them repaired.
- Add additional lanes to improve safety.
- Conduct winter maintenance of roads but assure snow does not pile up on the adjacent sidewalks.
- Mow ditches in rural areas more frequently.
- Sweep streets in the spring to keep roads clear of debris. Bicyclists often infringe into the driving lanes to avoid rock/gravel in the bike lanes/shoulders.
- Assure construction projects are completed in a timely manner. Construction delays affect traffic and it is difficult to provide enforcement in construction zones when work is not actively taking place.
- Provide more clarification to local jurisdictions regarding MDT fund distributions and justification.
- Provide additional clarification to the public and stakeholders regarding the P3 process. Maintain and enhance the process while providing better transparency in the decision-making process.
- Recognize funding issues faced by tribal, city, and county governments.
- Provide additional clarification to stakeholders and the public with regard to access of MDT/FHWA funds. Stakeholders would like more “say” in how/where the money goes.
- Increase coordination with the public and local stakeholders regarding planning of improvements and fund distributions.

Montana's Environment

Sarah Nicolai	DOWL facilitator
Corrina Collins	MDT recorder
Jonathan Ferree	MT Department of Fish, Wildlife and Parks
Renee Lemon	MT Department of Fish, Wildlife and Parks
John Anderson	Fergus County
Mike McGrath	US Fish & Wildlife Service
David Rise	Environmental Protection Agency

- Simplify and streamline the permitting process to reduce project cost and time.
- Minimize impacts to natural resources. In particular, stakeholders noted roadway construction often occurs too close to rivers. Increase separation tolerances between road and river corridors, recognizing that reconstruction of existing roadways may be in close proximity to water bodies.
- Provide stakeholders with early opportunities for input. Examples include opportunity to comment/ provide peer review on the wildlife accommodation process (current research project) and during project development. Facilitate annual meetings with MDT and FWP biologists.
- Include “green” technology and bioengineered solutions for bank stabilization and storm water.
- Recognize concern for wildlife connectivity.
- Consider the human safety aspect of wildlife conflicts.
- Further integrate the environmental review and permitting processes. Permitting should apply to the entire project (not just construction limits).
- Improve data collection efforts (carcass counts, wildlife collision locations) to make more informed decisions about wildlife accommodations (fencing, crossings, etc.).
- Consider land use planning in wildlife accommodation decisions (example – don’t plan crossing right next to a new subdivision).
- Consider environmental impacts in freight planning (example – hazardous materials spills).
- Develop an overarching mitigation policy outlining avoidance, minimization, and mitigation guidelines.

Montana's Economy

Jon Nepstad	Fehr & Peers facilitator
Diane Myers	MDT recorder
Bob Sivertsen	Highway 2 Association
Gordon Jackson	Native American Development Corporation
Cal Klewin	Theodore Roosevelt Expressway Association
Allison Mouch	MT Department of Commerce
Fred Burrow	Great Falls Commission
Colleen Weatherford	BNSF

- Simplify and streamline the permitting process. Current process is impedence to economic growth as compared with contiguous states/provinces.
- Examine additional funding sources to add capacity to the network, including interchanges and stretches of highway.
- Increase institutionalized higher level coordination between MDT leadership and other agencies such as the Montana Department of Commerce.
- Give higher prioritization to capacity enhancements. Scarce transportation monies are going to bike/ped projects instead of capacity enhancements.
- Increase permanent (institutionalized) engagement with the private sector.
- Provide a transportation advisory board. State agencies to identify transportation representatives.
- Improve air transportation.

Transportation Options

Kendra Breiland	Fehr & Peers facilitator
Charity Watt	MDT recorder
Cory Aldridge	MUTD Mountain Line
Melinda Barnes	Bike/Walk Montana
Trish McKenna	Montana Aeronautics Board
Lynn Hellegard	Missoula/Ravalli TMA
Beth Shumate	MT Dept. of Fish, Wildlife and Parks
Mandi Zanto	MT Dept. of Public Health and Human Services
Karin Hilding	City of Whitefish
Erin Hess	MT Dept. of Commerce
Shyla Patera	Northcentral Independent Living Center
Marilee Brown	Bozeman Pedestrian and Traffic Safety Committee
Jim Hegleson	Montana Transit Association

- Examine additional funding sources for non-motorized and transit projects.
 - Safe Routes to School (SRTS) and Community Transportation Enhancement Program (CTEP) funds are no longer available - programs sunset with SAFETEA-LU.
 - TA grants process is frustrating and grants are difficult to obtain.
 - When funds exist, bureaucratic hurdles can be prohibitive.
 - Funding for maintenance of non-auto facilities is very limited.
- Consider construction of additional infrastructure for transportation options. Lack of existing infrastructure limits options.
- Consider partnerships with organizations to maintain bike paths.

- Construct infrastructure to provide access to disabled users.
 - Includes sidewalk connectivity.
 - Current designs make it uncomfortable for ADA users (reliance on narrow shoulders, orientation of curb ramps).
 - Limited transit hours of operation and/or vehicles that don't accommodate wheelchairs.
- Increase/improve data collection efforts regarding walking, biking and transit use.
 - Current major data source is Census Journey-to-Work data which misses all travel that is not work related.
 - Data holes prevent us from understanding the magnitude of need.
 - Develop tools to understand how future uses will lead to increased demand for transportation options, including watching demographic trends since youth and elderly rely more heavily on non-auto facilities.
- Consider shifting mindset in planning projects from moving cars to moving people. The current mindset is pervasive not just at MDT, but for Montanans as a whole.
 - Update prioritization metrics to recognize benefits of non-auto transportation. Increase focus on climate change, options, and safety and reduce focus on speed.
 - Current practice has been to provide minimal infrastructure – how do we change the mindset to go beyond?
- Revise current design standards to allow innovative, low-cost solutions. Current design standards for projects, in particular transit, may be excessive.
- Explore ways to provide transit in non-traditional formats, like vanpools. Demand responsive options might be most effective in Montana.
- Leverage partners such as schools, cities, and MPOs to create a more robust, connected system, regardless of the provider.
- Address continuing insurance barriers for UBER/LYFT to operate in Montana.
- Develop a statewide bike/ped plan.

Next Steps

Ms. Nicolai concluded the workshop by providing an overview of next steps in the planning process. She encouraged stakeholders to share the public online survey link with friends and colleagues.



Stakeholder Workshop

JUNE 15, 2016





Welcoming Remarks

Director Mike Tooley



Introductions



MONTANA DEPARTMENT OF TRANSPORTATION

Lynn Zanto – Rail, Transit & Planning Division Administrator
Charity Watt – Project Manager
Project Management Team Members

CONSULTANT SUPPORT TEAM



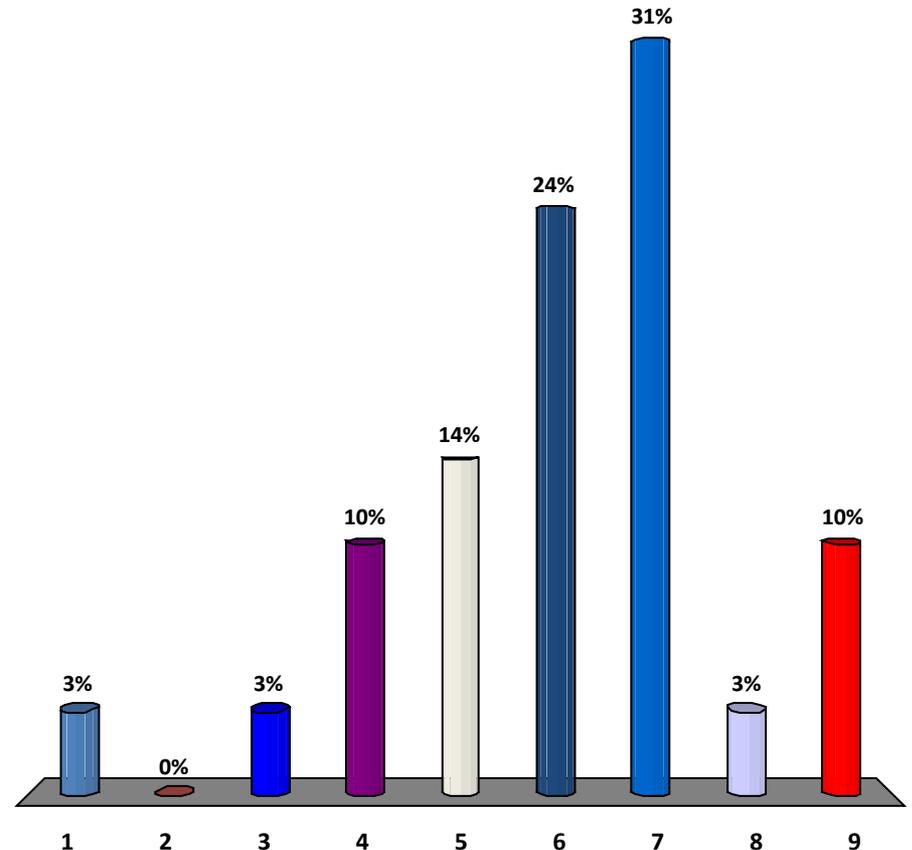
Sarah Nicolai
Cody Salo
Jessica Salo
Doug Enderson
Nik Griffith



Jon Nepstad
Kendra Breiland

Who do you represent?

1. Tribal
2. Elderly
3. Environmental
4. Economic Development
5. MPO
6. Public Transit
7. Govt. Resource
8. Intermodal
9. Other Stakeholders



Agenda

1:00 to 1:15 p.m. **Welcoming Remarks and Introductions**

1:15 to 1:30 p.m. **Overview Presentation**

- ▶ Purpose and Desired Workshop Outcomes
- ▶ Long-range Transportation Planning Process

1:30 to 2:30 p.m. **TrendLab+ Exercise**

2:30 to 2:45 p.m. **Break**

2:45 to 3:00 p.m. **Online Survey Summary**

3:00 to 4:00 p.m. **Goal-setting Exercise in Breakout Discussion Groups**

4:00 to 4:30 p.m. **Team Reports**

4:30 to 4:45 p.m. **Schedule and Next Steps**

4:45 to 5:00 p.m. **Closing Remarks**



Overview Presentation



Purpose of Workshop

Overview of
planning process

Big-picture thinking
about trends

Revisit 2007
Issues and Goals

Feedback from partners
and stakeholders

**We want
your
input!**

Today's Desired Outcomes

ISSUES

Stakeholder feedback will influence issue identification in the plan



GOALS

Today's stakeholder discussions will be a consideration in goal development for the plan



Long-range Transportation Planning

23 CFR 450 directs MDT:

- Continuing, cooperative, and comprehensive **statewide multimodal transportation planning process.**
- **Safe and efficient management, operation, and development of surface transportation systems.**
- **Serve mobility needs of people and freight and foster economic growth and development.**

L RTP Requirements

Develop a
20-Year Plan

Consider **All**
Transportation
Modes

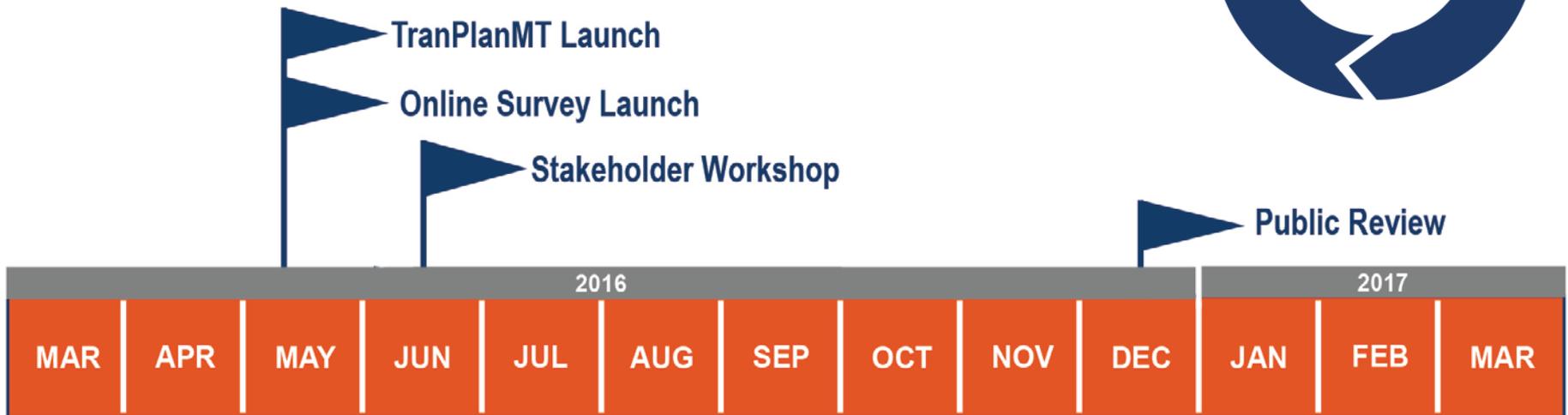


Focus on
Preservation
and **Efficiency**

Coordinate with
Multiple Agencies

L RTP Requirements

Offer **public involvement opportunities**
and **consider public input**



Visit the website at <http://www.mdt.mt.gov/tranplan/>

LRTP Requirements

Publish the Plan in

**Accessible
Formats**

Include
Consideration of
**Environmental
Mitigation**



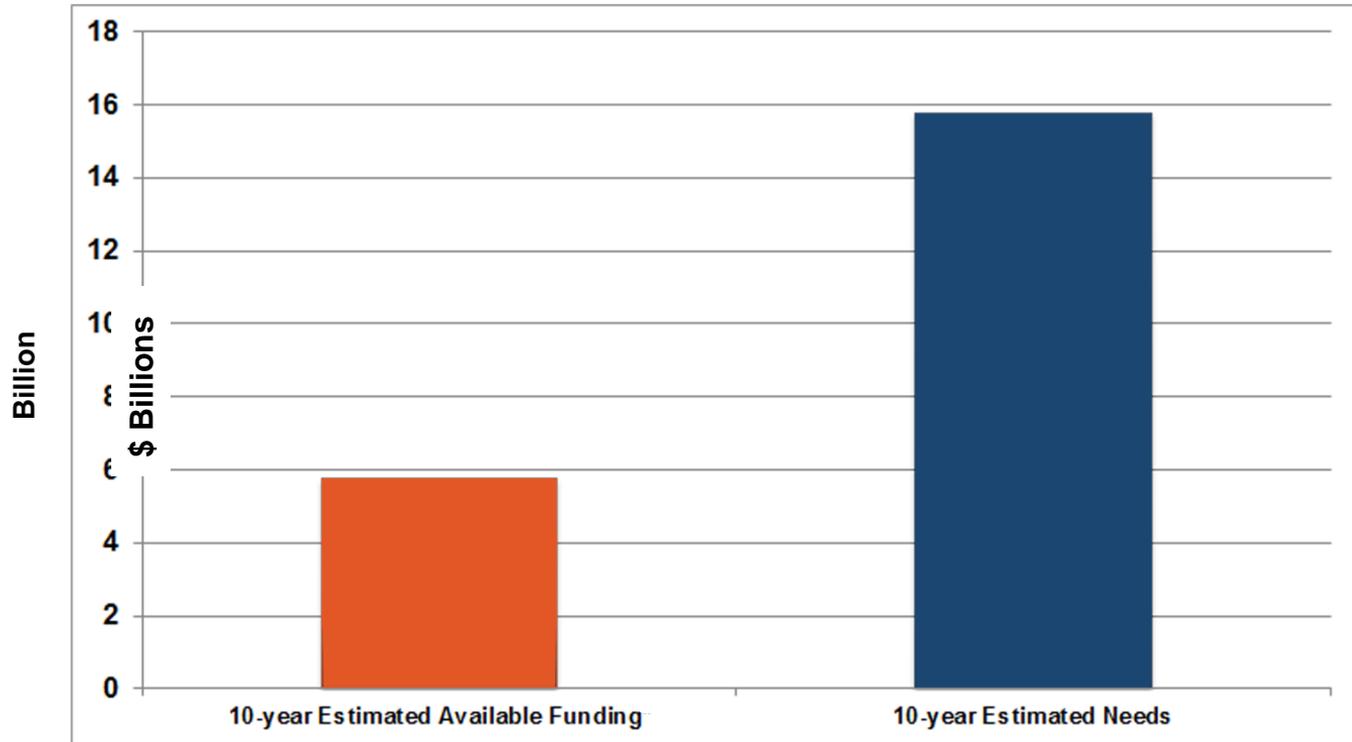
Consider Planning Factors

- Economic Vitality
- Safety
- Security
- Travel/Tourism
- Accessibility and Mobility
- Connectivity
- Environmental Stewardship
- Efficient Management and Operations
- System Preservation
- Resiliency/Reliability

Incorporate
**Performance-based
Approach**

Funding Availability

Estimated Available Funding vs. Estimated Needs



**Need
projected
to outpace
funding
almost
3 to 1**

Total Estimated 10-year Need: \$15.8 Billion
Total Available 10-year Funding: \$5.8 Billion



TrendLab+ Exercise



TrendLab+ Exercise

Demographic

- Driving Age Population
- Vehicle Ownership
- Suburban Migration

Regulatory

- Licensing Regulations

Transportation

- Congestion and Time Use
- Non-auto Modes

Energy

- Fuel Costs

Economic

- Labor Force Participation
- GDP & Real Income Growth
- Household Formation
- Goods & Services Delivery

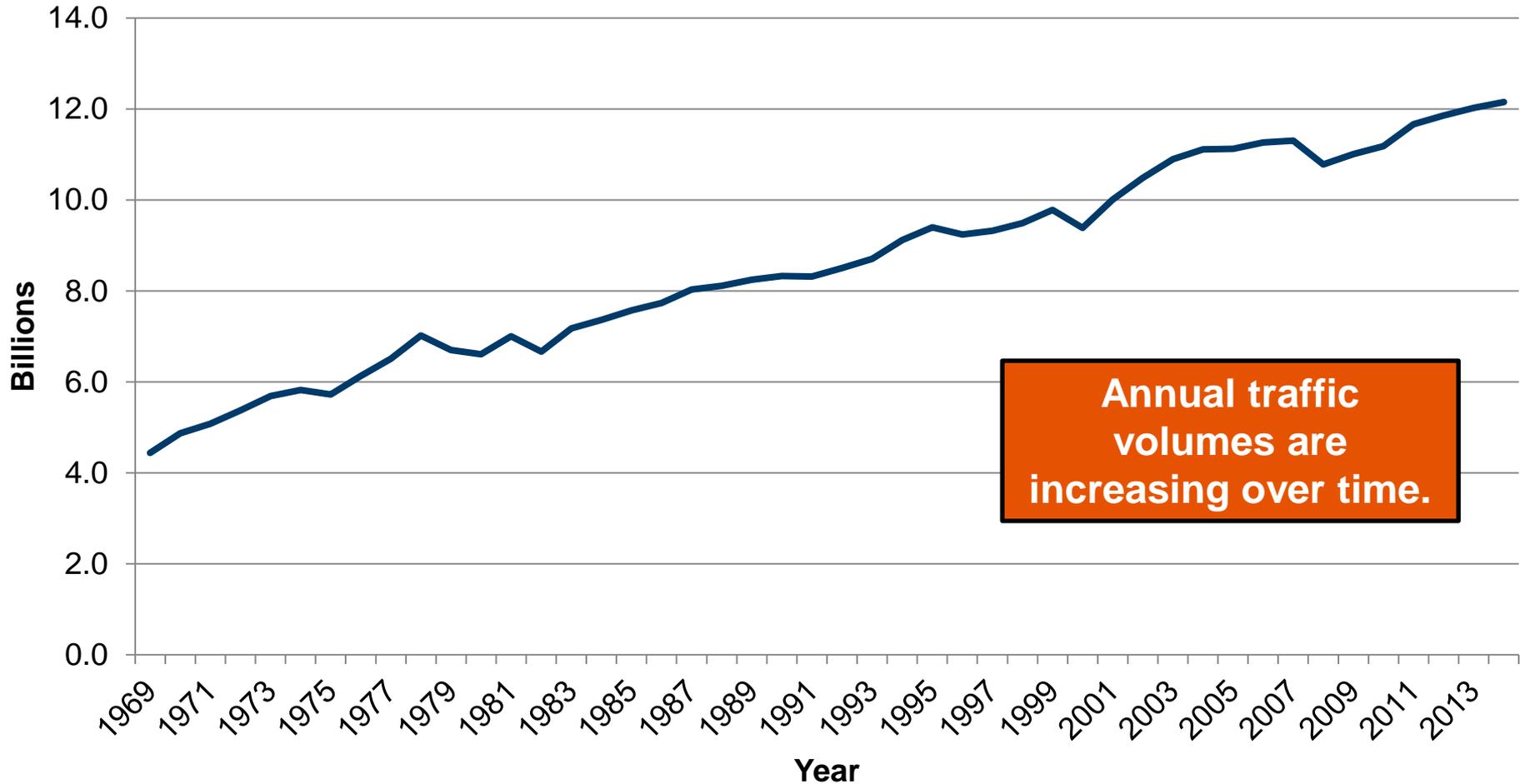
Technology

- Teleconferencing/
Telecommuting
 - Social Networking
 - Shared Mobility Services
 - Autonomous Cars
 - Driverless Vehicles
-

Consider how
future trends
will affect
vehicle miles
traveled
(VMT)

Annual Vehicle Miles Traveled (AVMT)

Annual Vehicle Miles Traveled (AVMT)

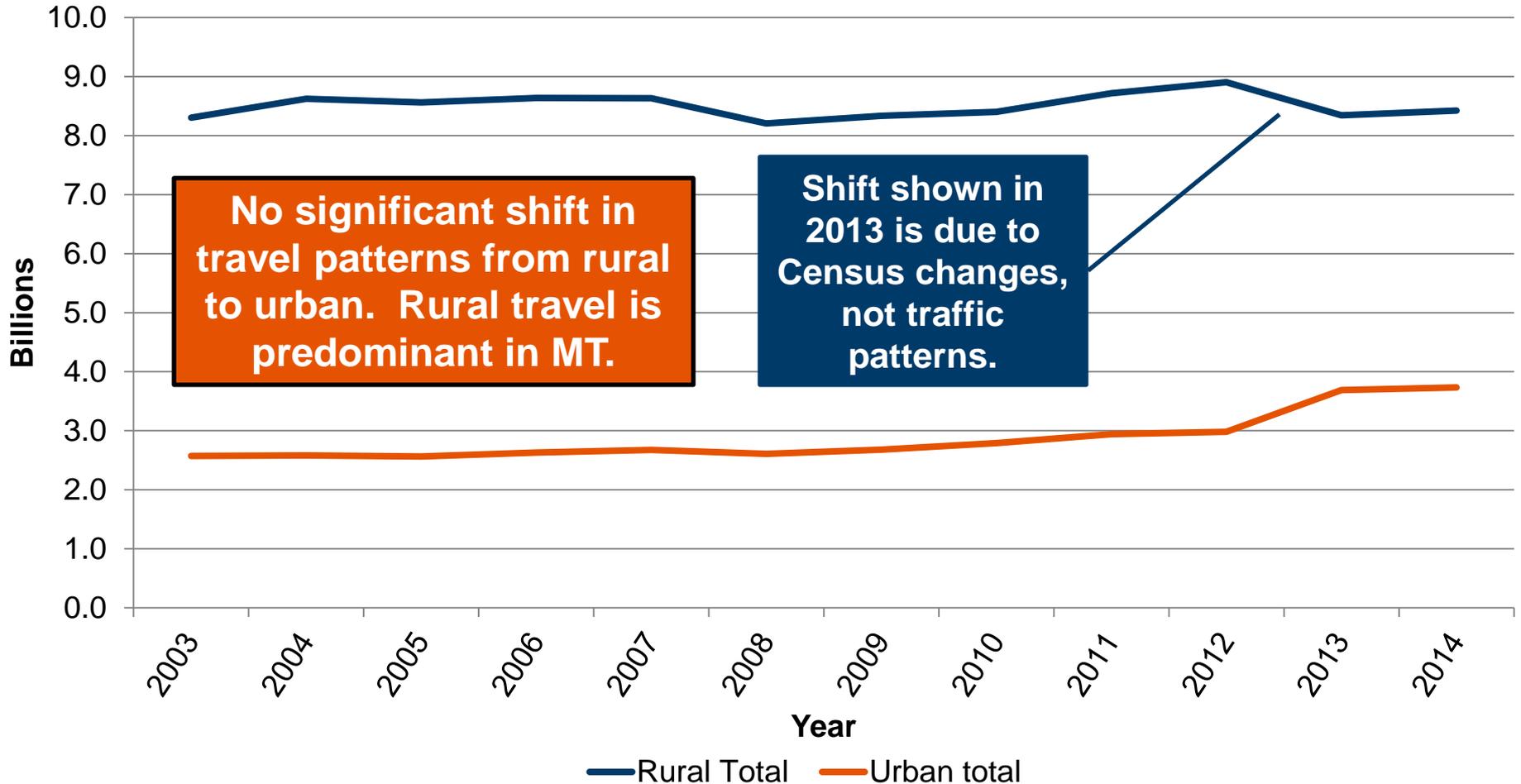


Source: MDT, 2016.

— Annual Vehicle Miles Traveled (AVMT)

Annual Vehicle Miles Traveled (AVMT)

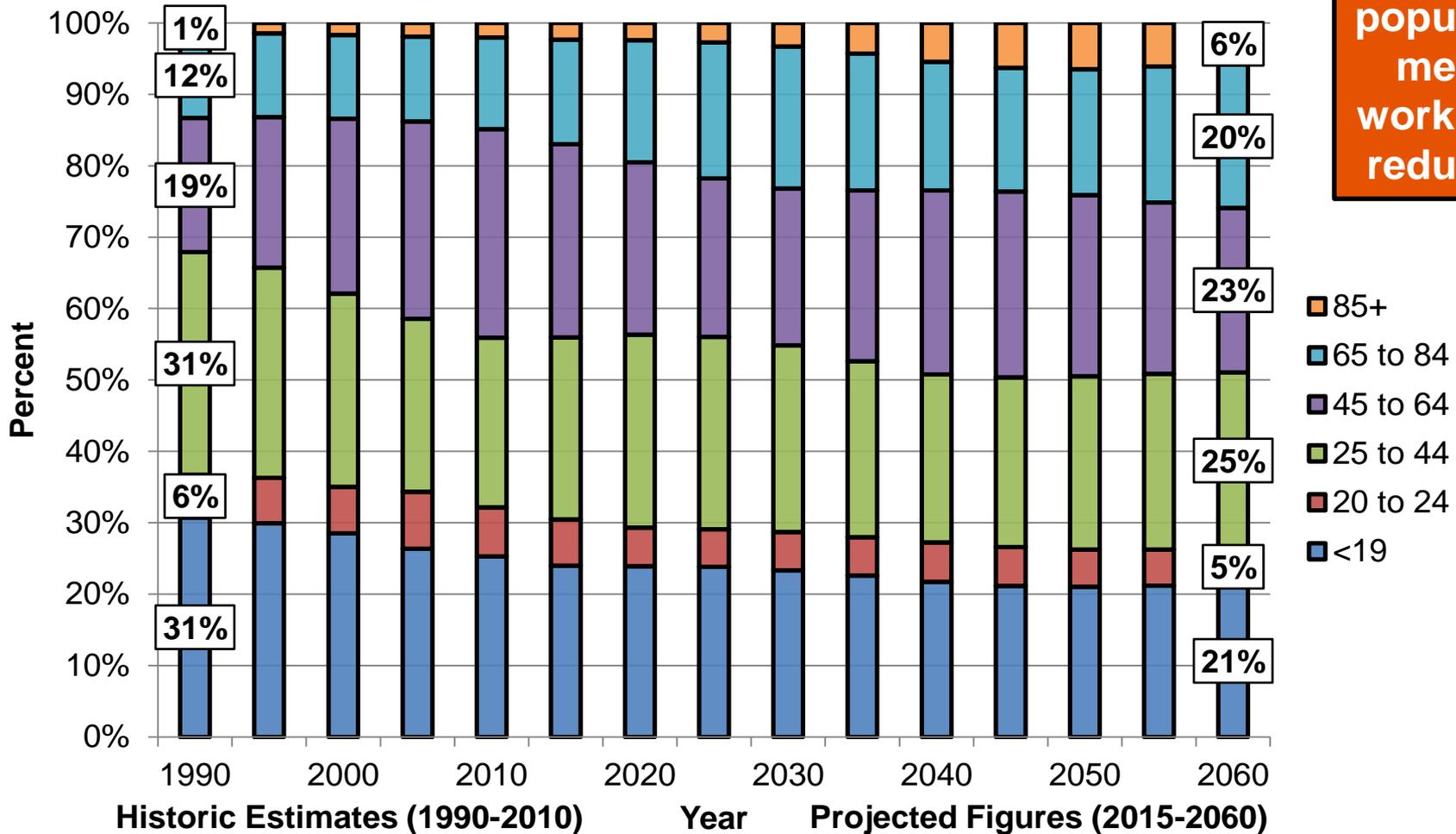
Annual Vehicle Miles Traveled – Urban & Rural



Source: MDT, 2016. * Note: The 2010 census resulted in increase in urban areas/expansion of boundaries. Changes were implemented in 2013 to reflect the census. The shift shown in 2013 is due to the census change, not change in traffic patterns.

Demographics – Driving Age

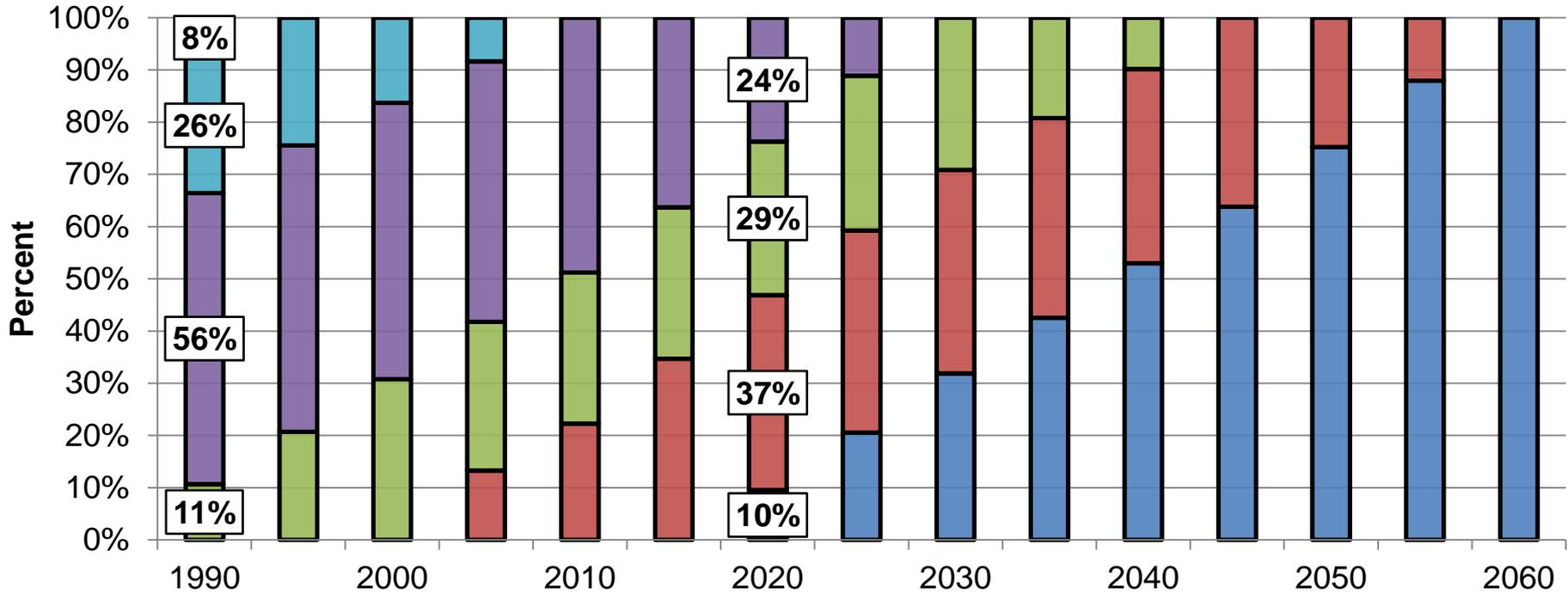
Montana's Projected Population - Percent Age Group of the Total Population, 1990-2060



Aging population means work force reduction

Demographics – Driving Age

Montana's Projected Population - Percent of the Work Force Population by Generation, 1990-2060



Millennials & post-Millennials will dominate future work force

- Future Generations (Born after 1995)
- The Millennial Generation (Born 1981 to 1995)
- Generation X (Born 1966 to 1980)
- The Baby Boom Generation (Born 1946 to 1965)
- The Silent Generation (Born 1931 to 1945)
- The Greatest Generation (Born before 1931)

Sources: eREMI – A Product of Regional Economic Model, Inc. – Released April 2013. Compiled by the Census & Economic Information Center; MT Department of Commerce (www.ciec.mt.gov). Graph by DOWL, 2016.

Demographics – Driving Age

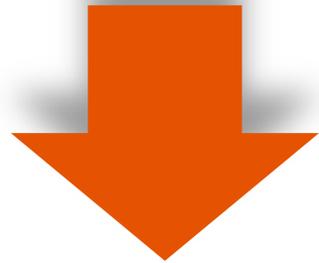
Which scenario will control in Montana?



Boomers are more active, retire later, and live longer. They continue to drive and remain mobile.

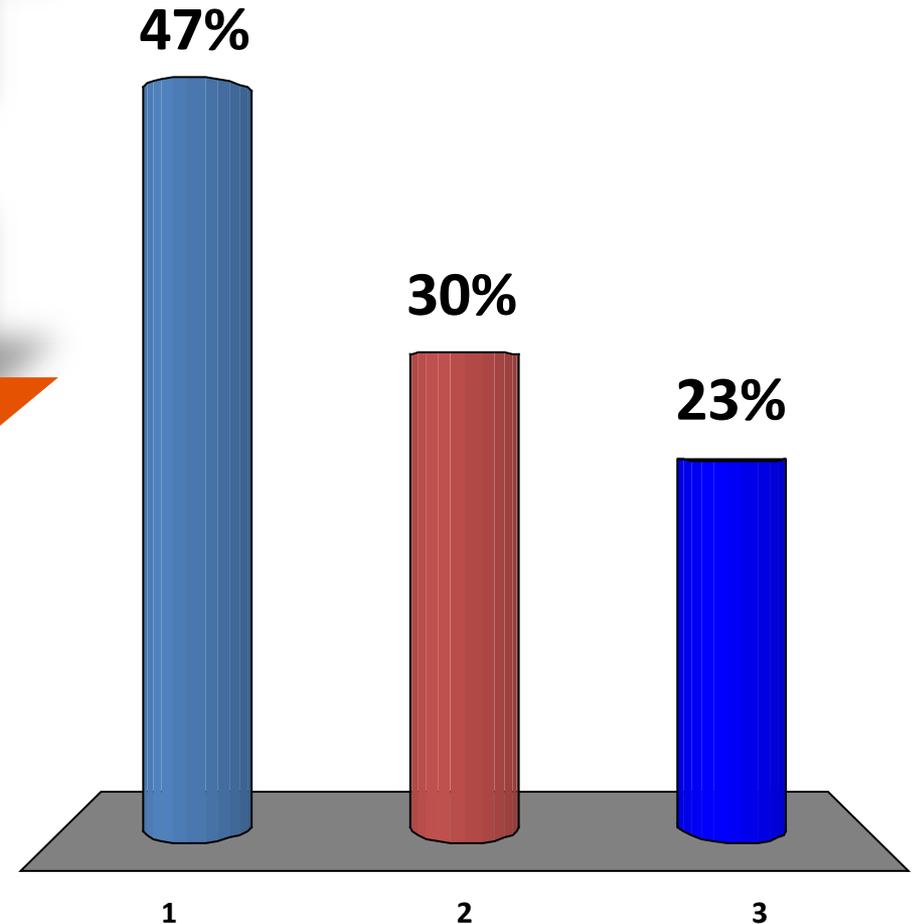
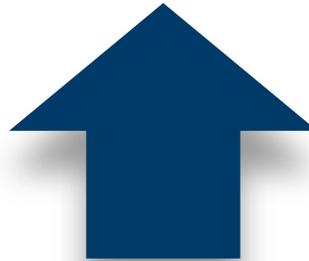
No significant change.

Fewer work trips as labor force declines. Millennials and beyond drive less due to generational views on transportation.



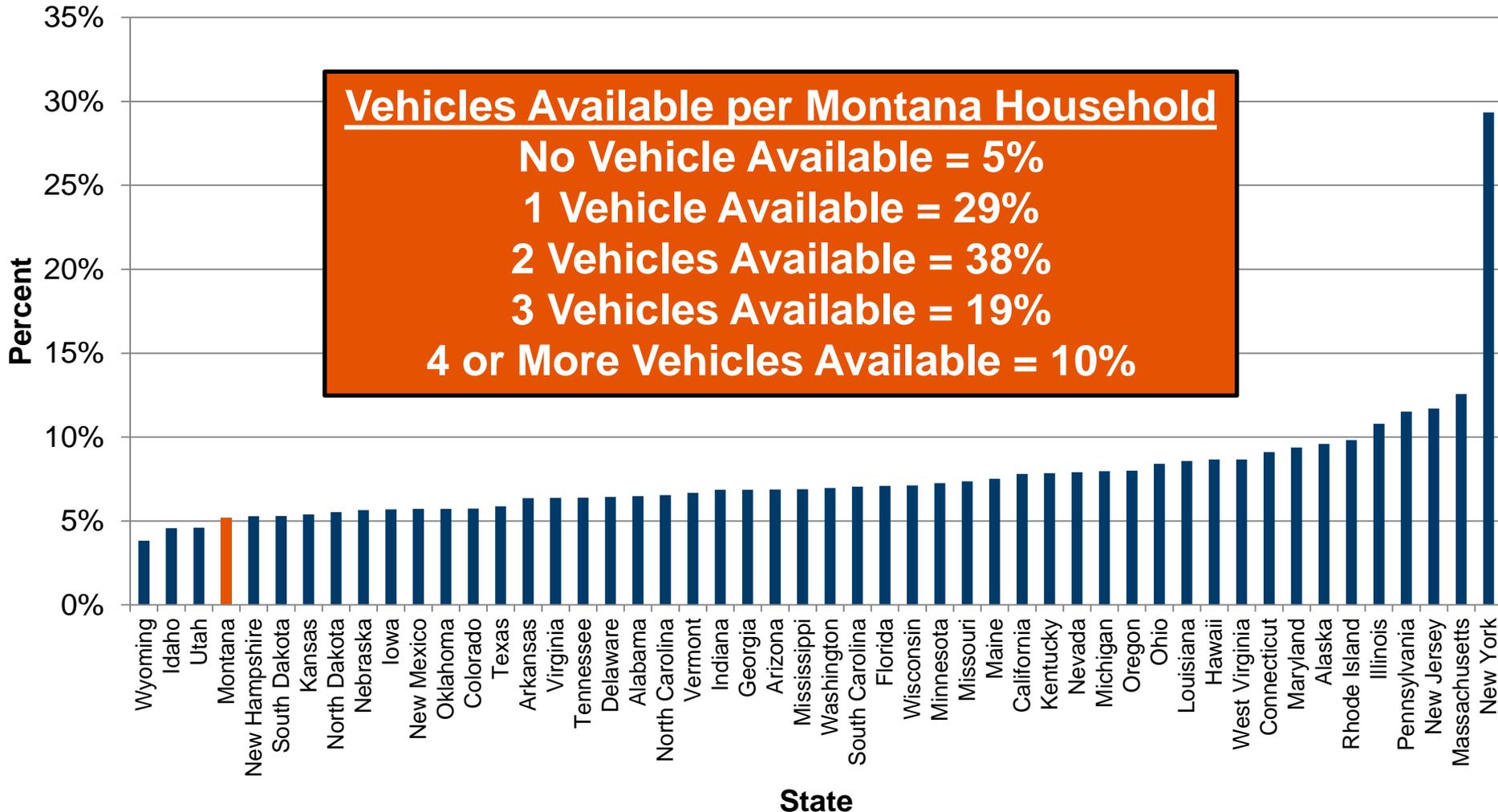
Demographics – Driving Age

1. Trend-Up Scenario
2. No Significant Change
3. Trend-Down Scenario



Demographics – Vehicle Ownership

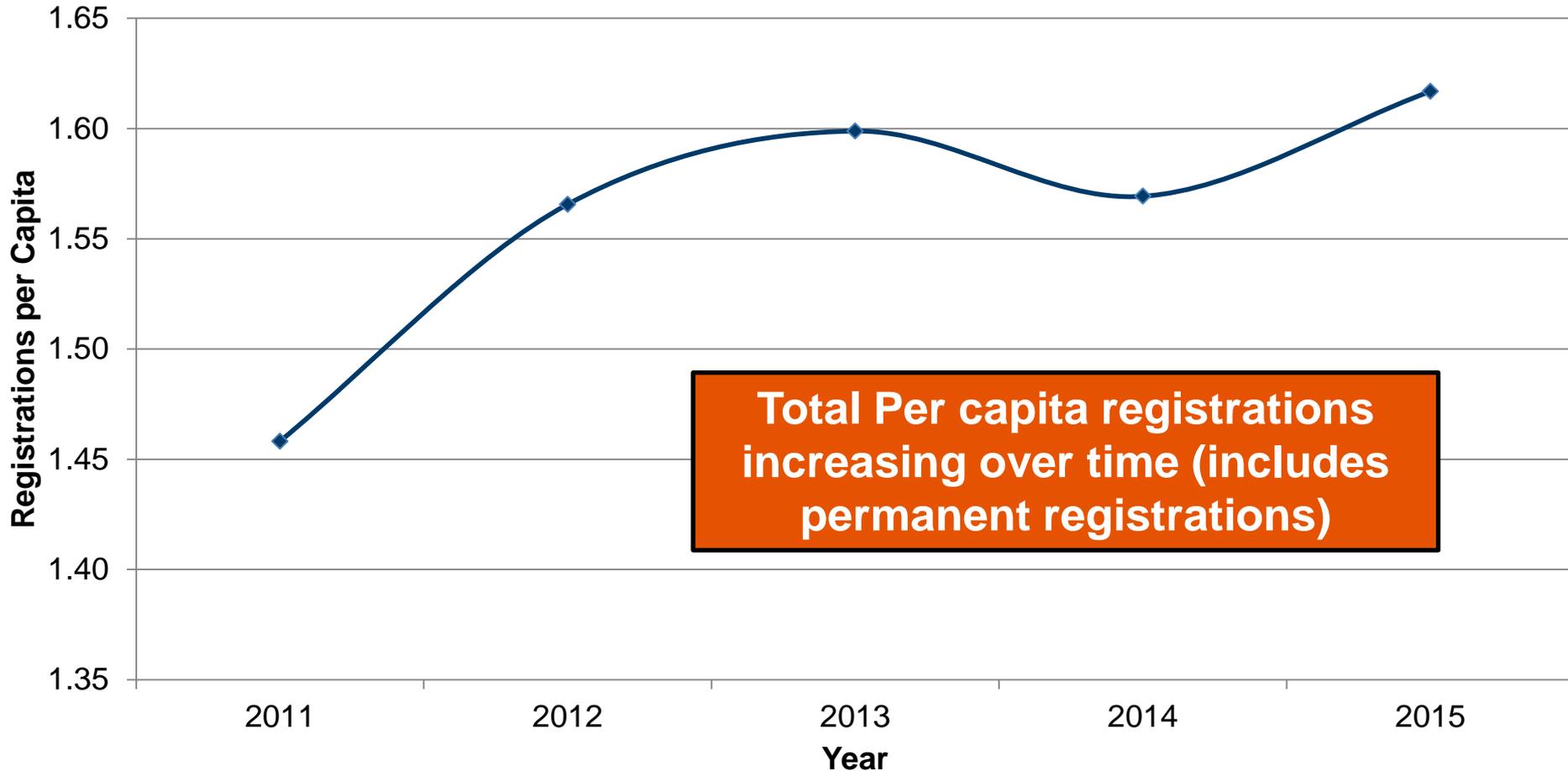
Percent of Households with No Vehicle Available



Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates. Graph by DOWL, 2016.

Demographics – Vehicle Ownership

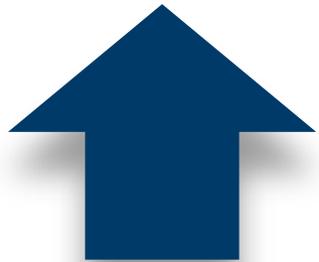
Total Vehicle Registrations per Capita



Sources: Montana Department of Justice, Motor Vehicle Division, 2016 (Data excludes Motorcycles/Quadricycles (Off-highway Only), Trailers, Boats, Snowmobiles, Truck Campers, Golf Carts, Special Mobile, Manufactured Dwellings, and Other categories). Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015, U.S. Census Bureau, Population Division, December, 2015. Graph by DOWL, 2016.

Demographics – Vehicle Ownership

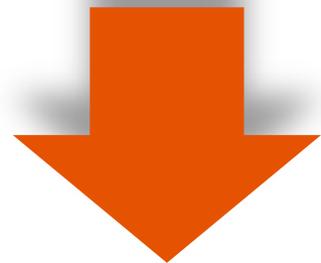
Which scenario will control in Montana?



Millennials form families and households of their own in towns and rural areas.

No significant change.

Millennials remain at home with family members for longer periods, and forego car ownership.

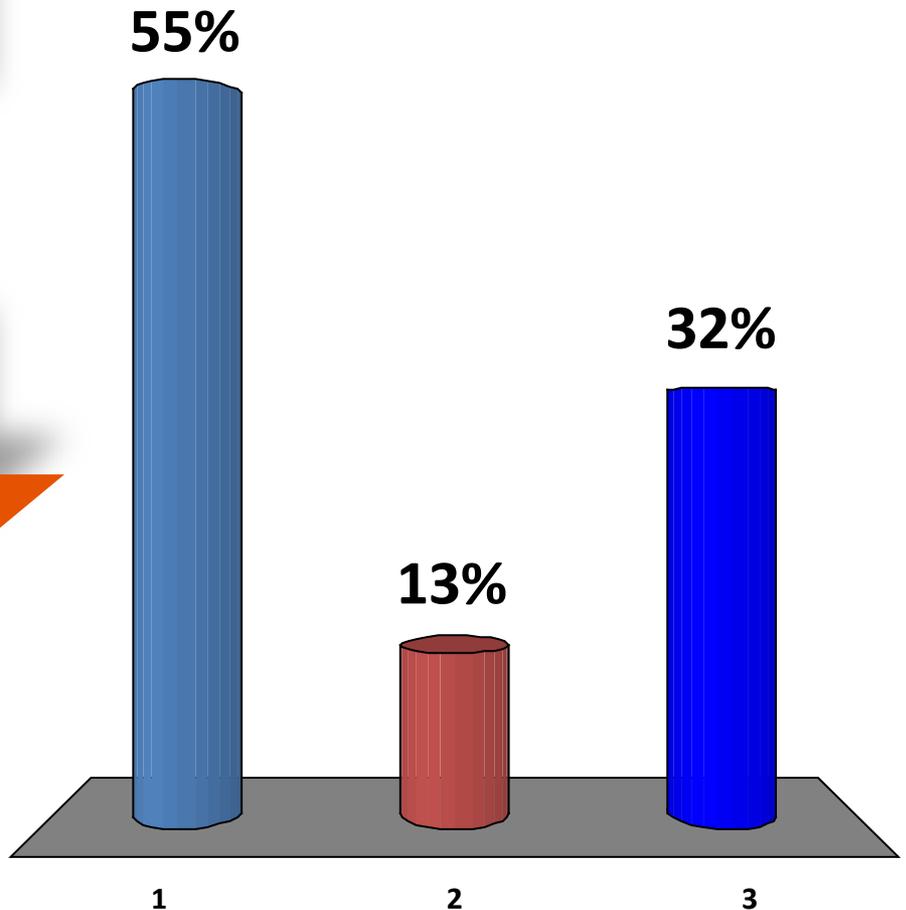
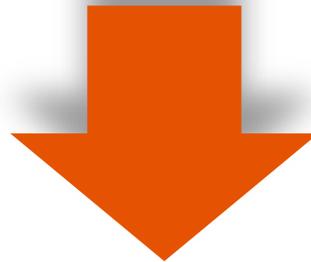


Demographics – Vehicle Ownership

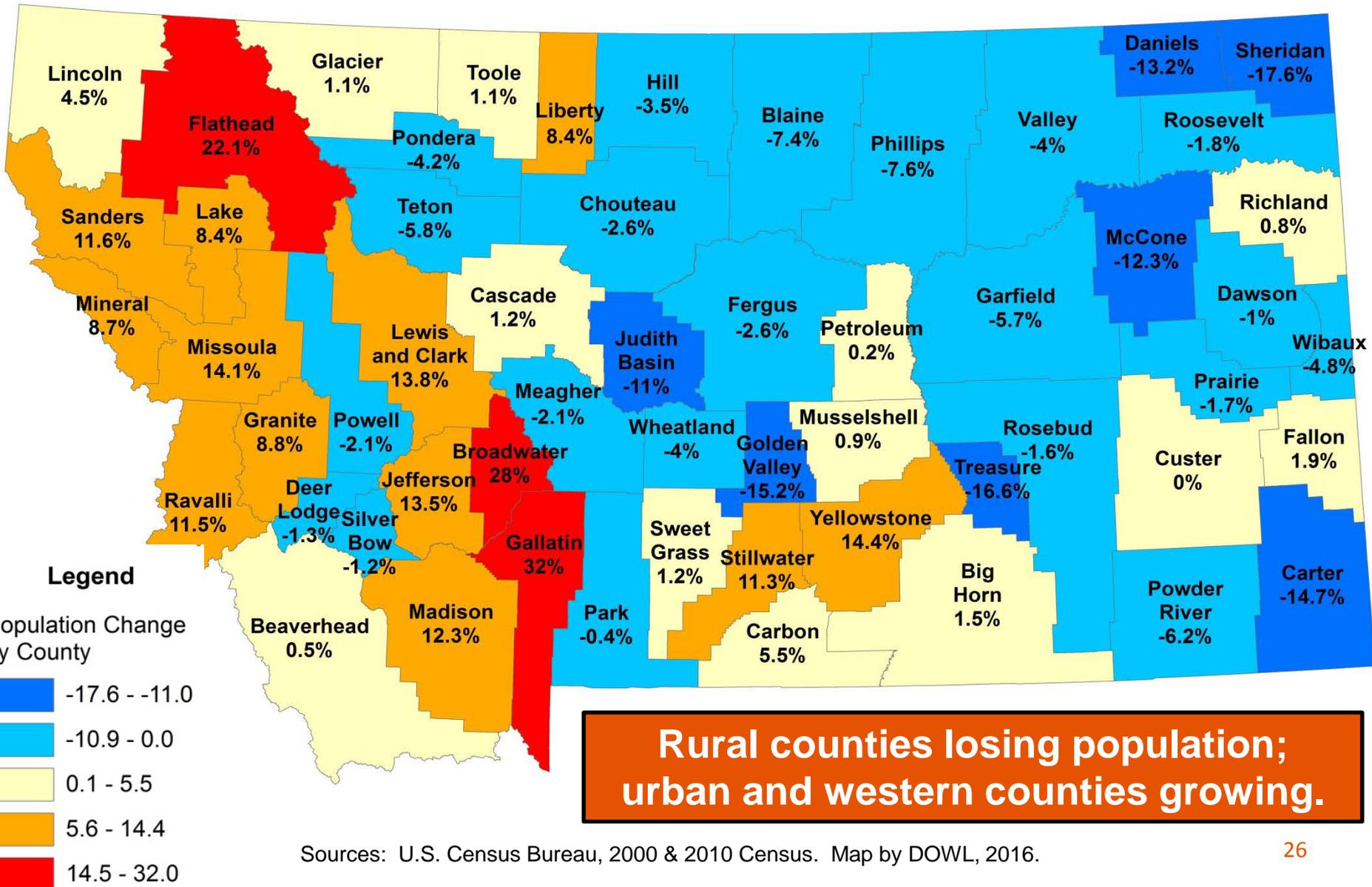
1. Trend-Up Scenario

2. No Significant Change

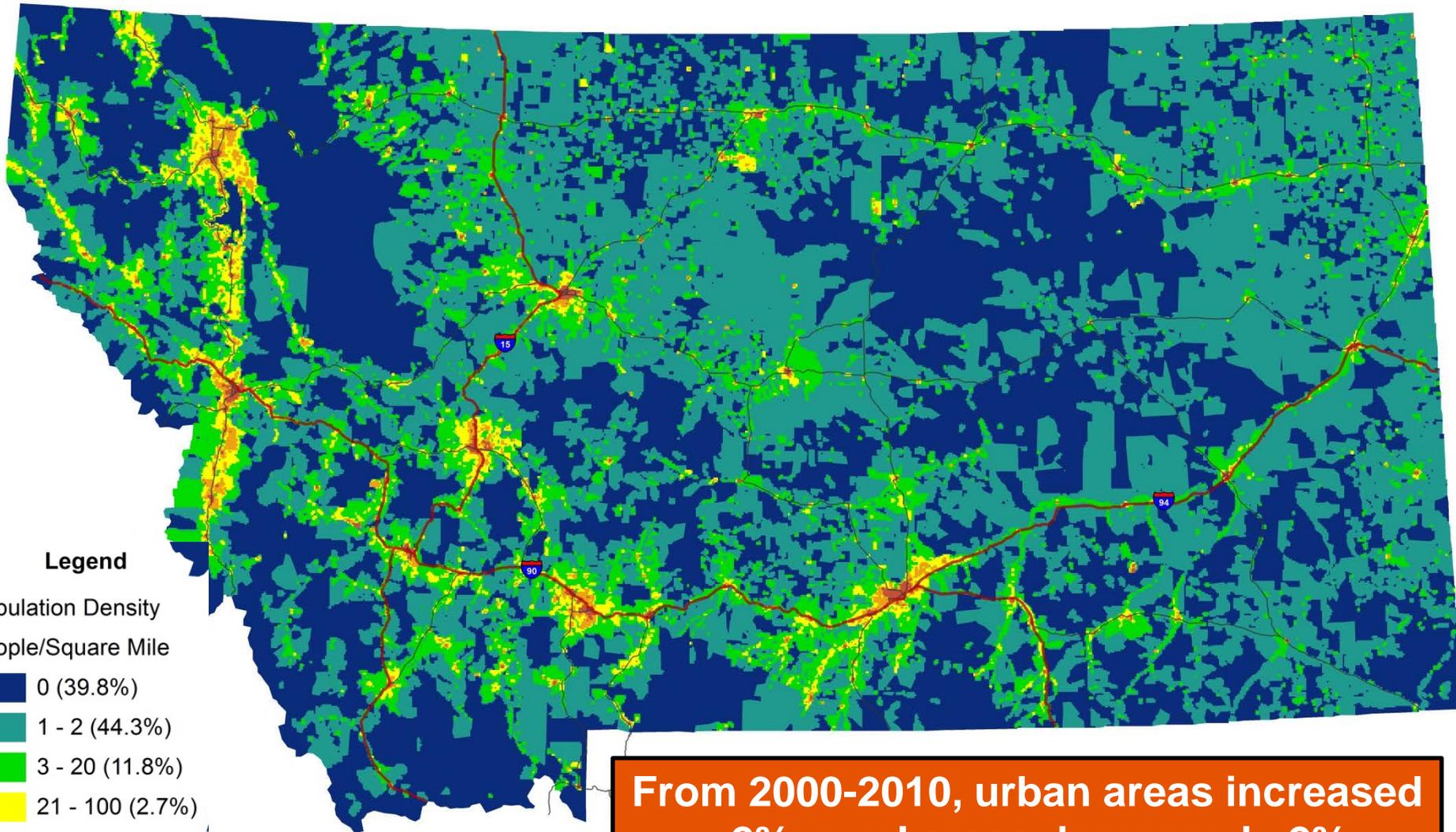
3. Trend-Down Scenario



Demographics – Suburban Migration



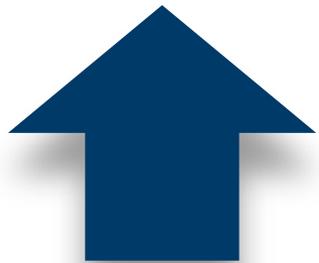
Demographics – Suburban Migration



From 2000-2010, urban areas increased ~2%, rural areas decreased ~2%

Demographics – Suburban Migration

Which scenario will control in Montana?



Montanans in rural areas have to drive further to access amenities.

No significant change.

Fewer, shorter work trips as the labor force and rural population declines. Millennials and post-millennials drive less due to generational views on transportation.

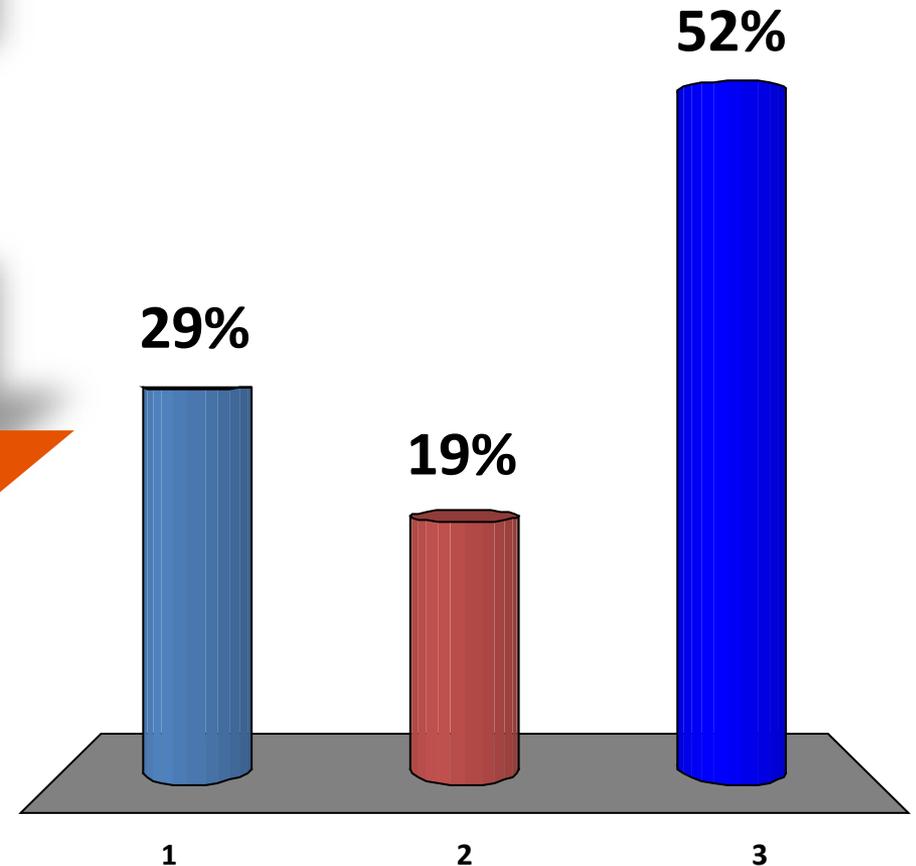
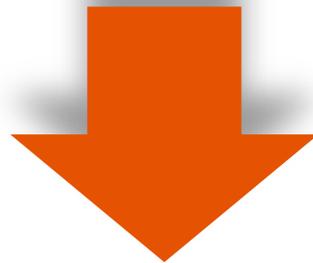


Demographics – Suburban Migration

1. Trend-Up Scenario

2. No Significant Change

3. Trend-Down Scenario



Regulations – Driver Licensing

Montana's Graduated Driver Licensing Law

- 3-step program for driver's under the age of 18
- Teens gradually work up to driving on their own
- Step 1: Permit Period
- Step 2: First-Year Restricted License
- Step 3: Full Privilege Driver License

Program participation increasing in last 5 years

Traffic Education Program Enrollment	2011	2012	2013	2014	2015
High School Participation Rate	69%	72%	76%	80%	79%
Student Completion Rate	67%	67%	70%	69%	74%

Source: Montana Office of Public Instruction, 2016. Table by DOWL, 2016.

Regulations – Driver Licensing

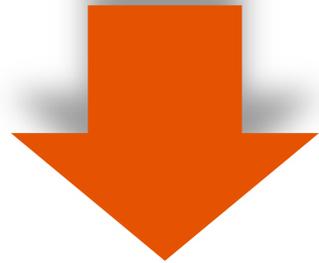
Which scenario will control in Montana?



Millennials reach licensure rates of previous generations in their late 20s and early 30s.

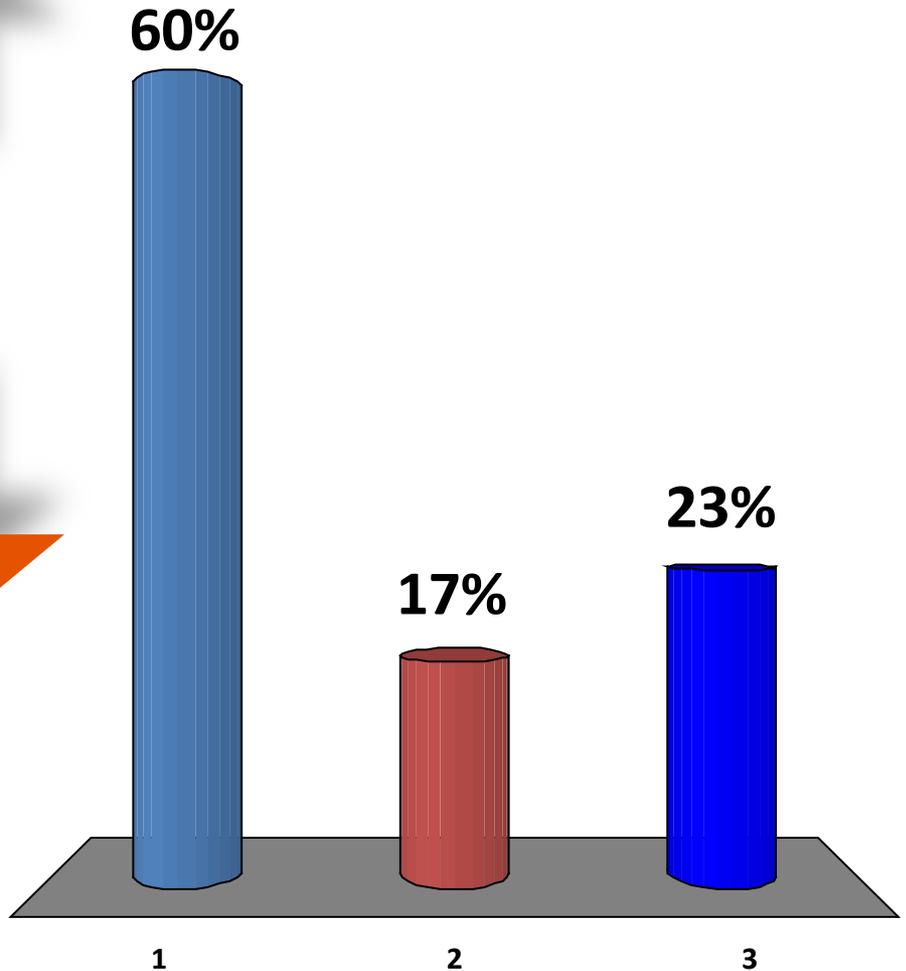
No significant change.

Stricter teen licensure laws curtail licensure rates among Millennials.



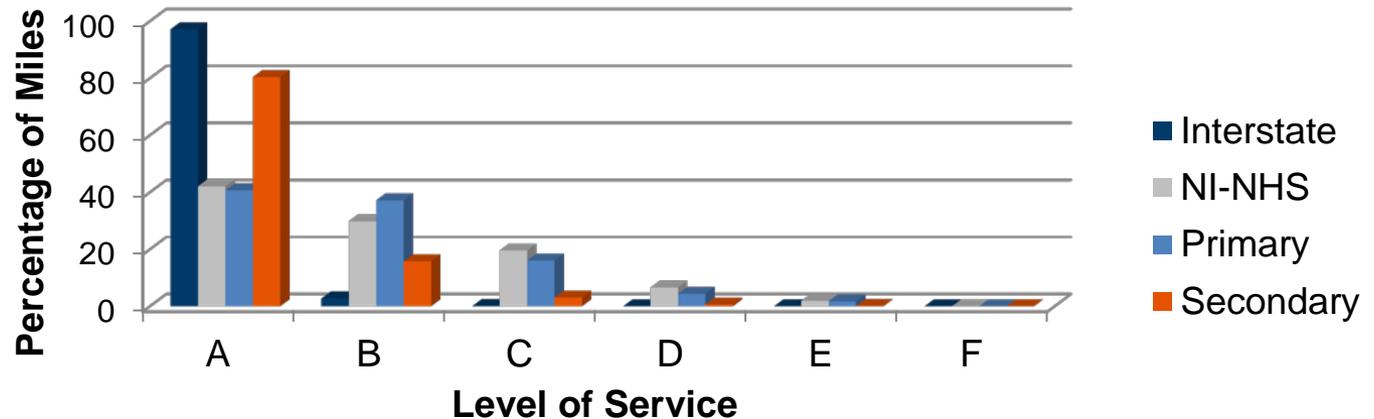
Regulations – Driver Licensing

1. Trend-Up Scenario
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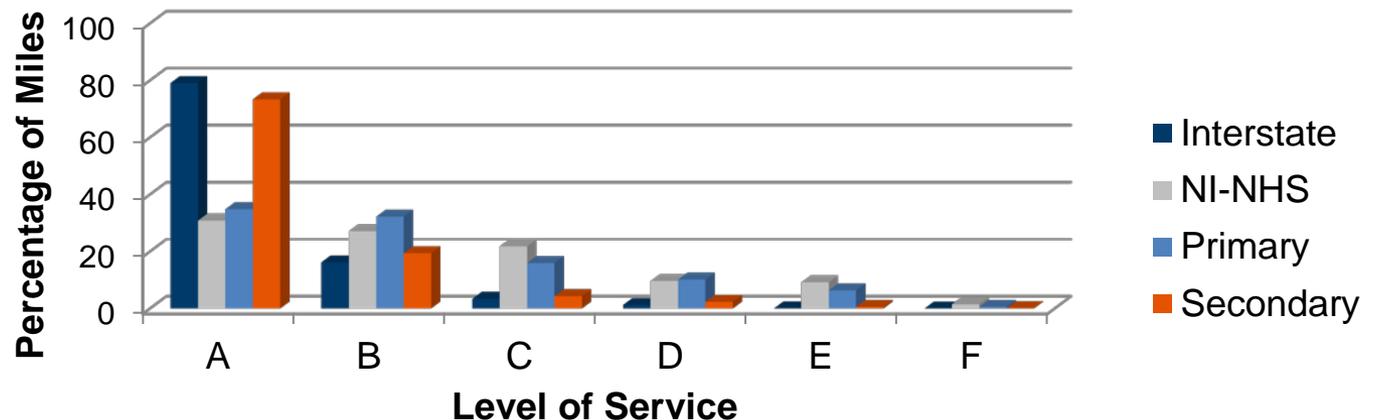
Transportation – Congestion

Percent of Miles by Level of Service, 2008



Montana's rural on-system highways are generally uncongested today (level of service A and B).

Percent of Miles by Level of Service, 2028



Highway operations projected to slightly degrade by 2028.

Source: MDT, 2016. Tables by DOWL, 2016.

Transportation – Congestion

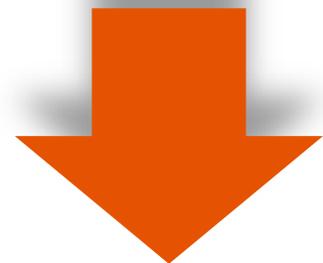
Which scenario will control in Montana?



Will Montanans drive less as congestion levels increase in future years?

No significant change.

Will Montanans continue to drive more despite increasing congestion?

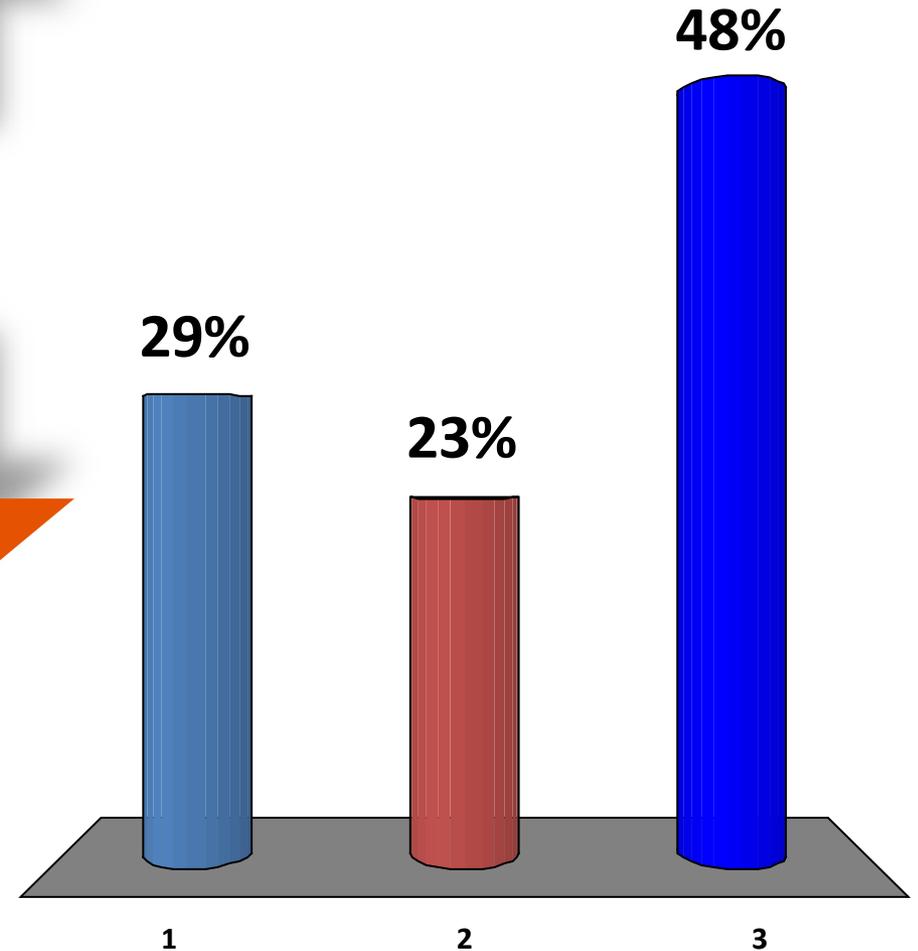
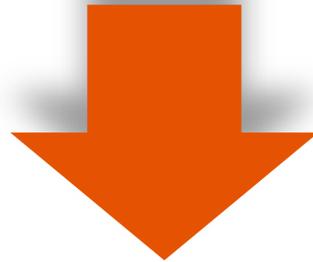


Transportation – Congestion

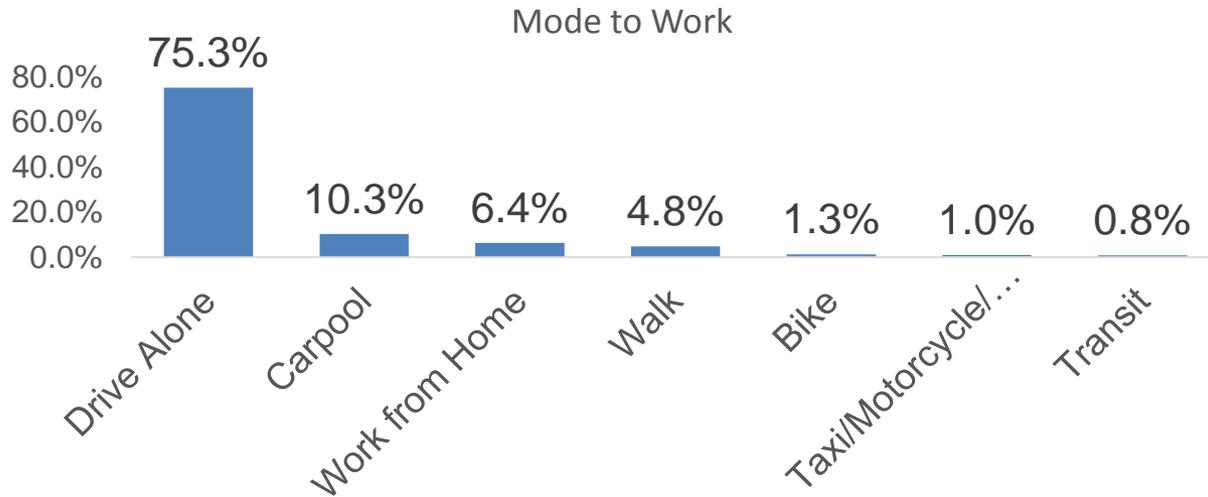
1. Trend-Up Scenario

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Transportation – Modal Trends

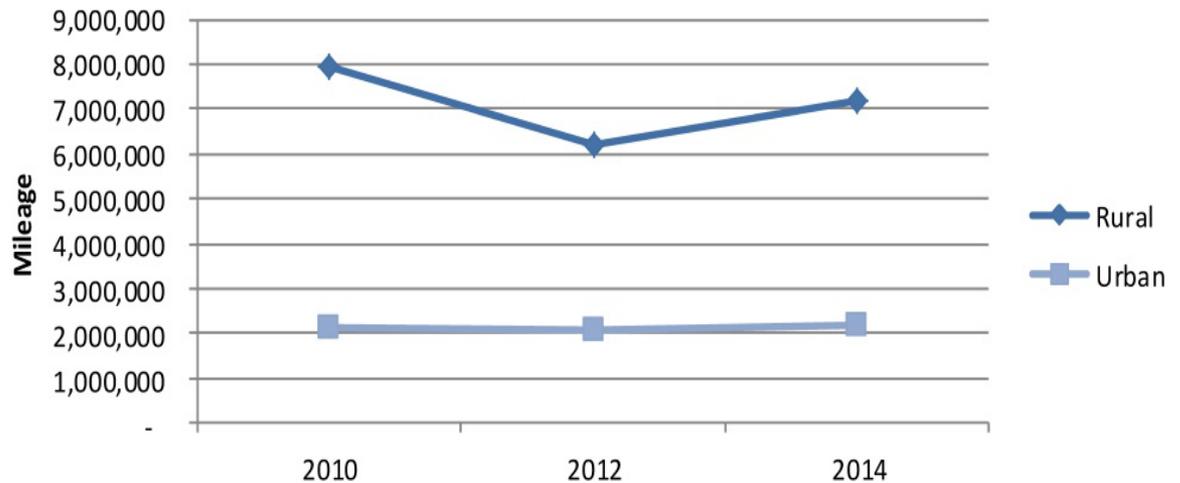


Most Montanans drive alone to work

Source: ACS 5 Year Estimates (2010-2014)

Transit mileage remaining fairly steady

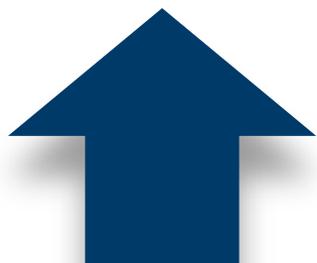
Annual Transit Mileage Trends



Source: TranPlan21 MDT Biennial Report 2013-2014.

Transportation – Modal Trends

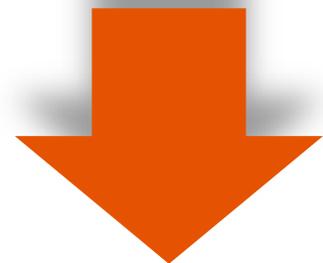
Which scenario will control in Montana?



Will urban preference patterns increase biking, walking, and transit priority in Montana?

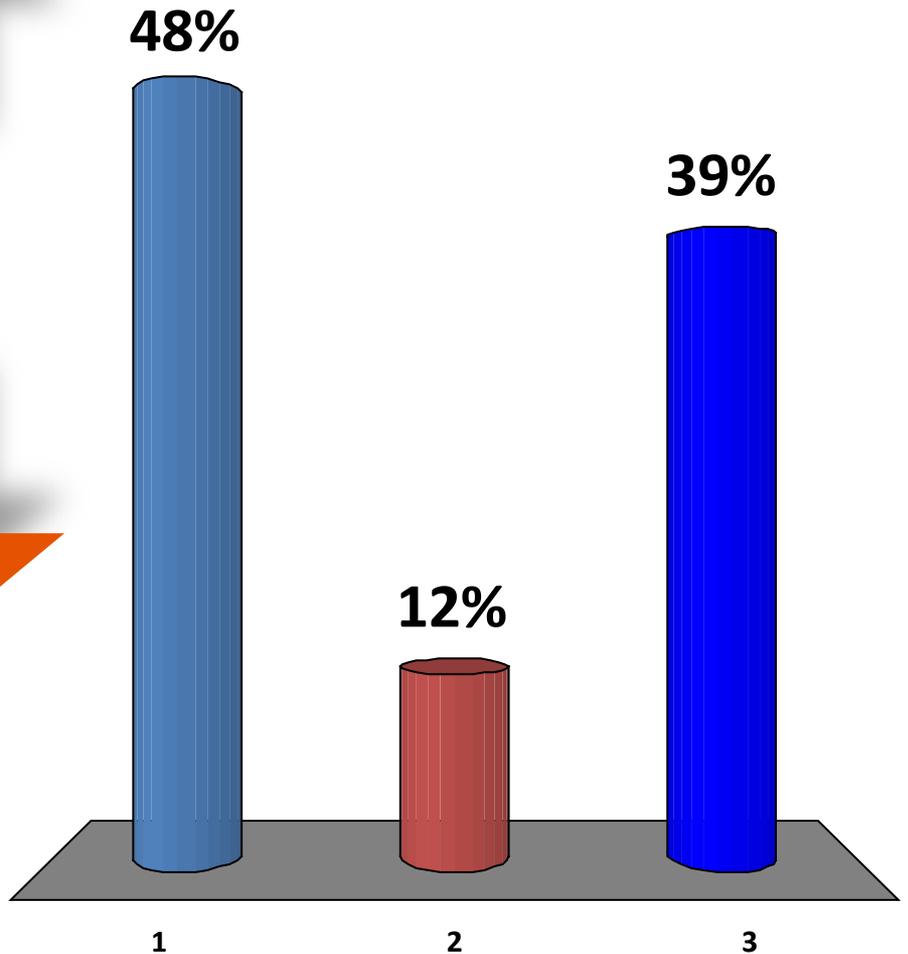
No significant change.

Will Montanans continue to choose driving alone over alternative modes?



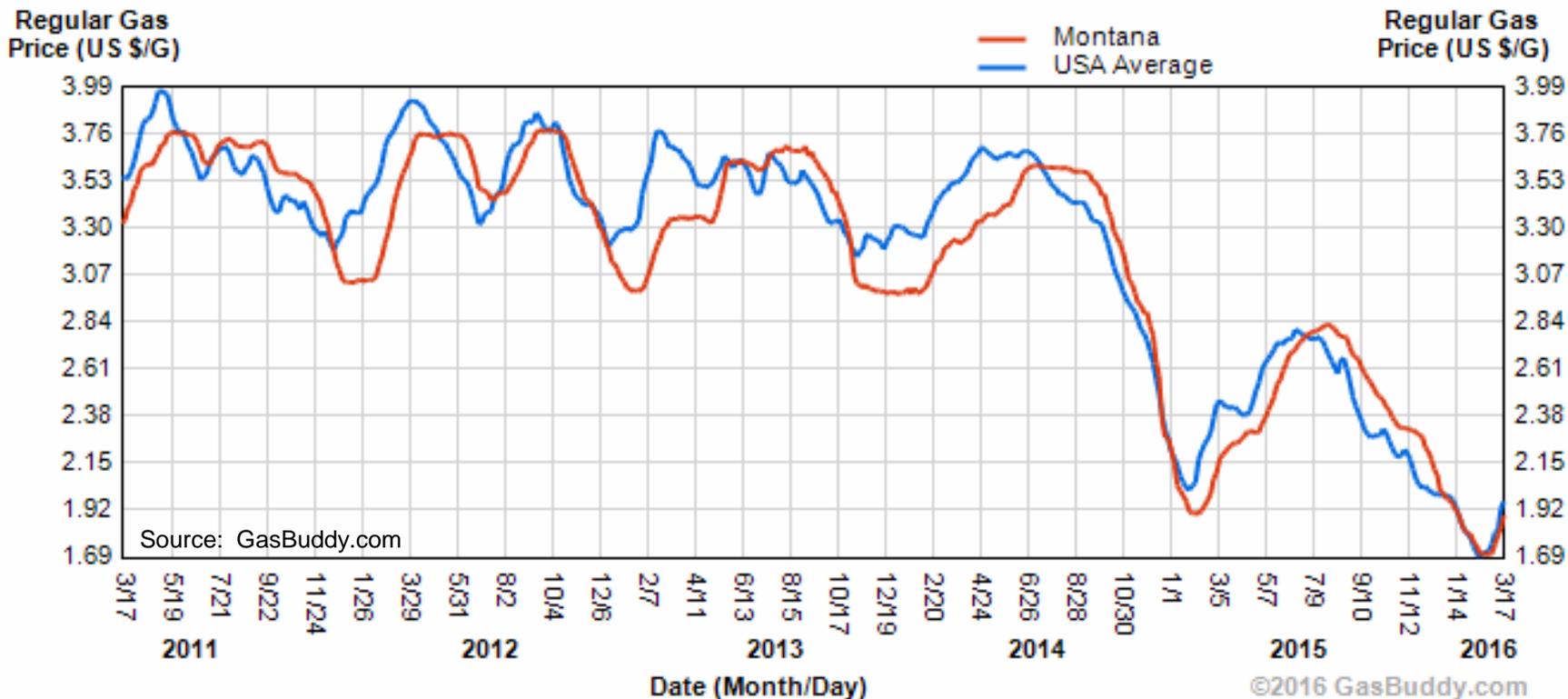
Transportation – Modal Trends

1. Trend-Up Scenario
2. No Significant Change
3. Trend-Down Scenario



Energy – Fuel Costs

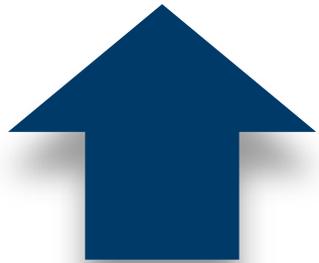
60 Month Average Retail Price Chart



Fuel prices have dropped substantially since 2011

Energy – Fuel Costs

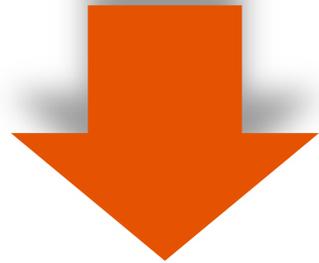
Which scenario will control in Montana?



Fuel costs remain at the high levels that helped produce VMT slowdown in the early 2000s.

No significant change.

Vehicle fuel efficiency and North America energy independence will result in stable to lower cost per mile.

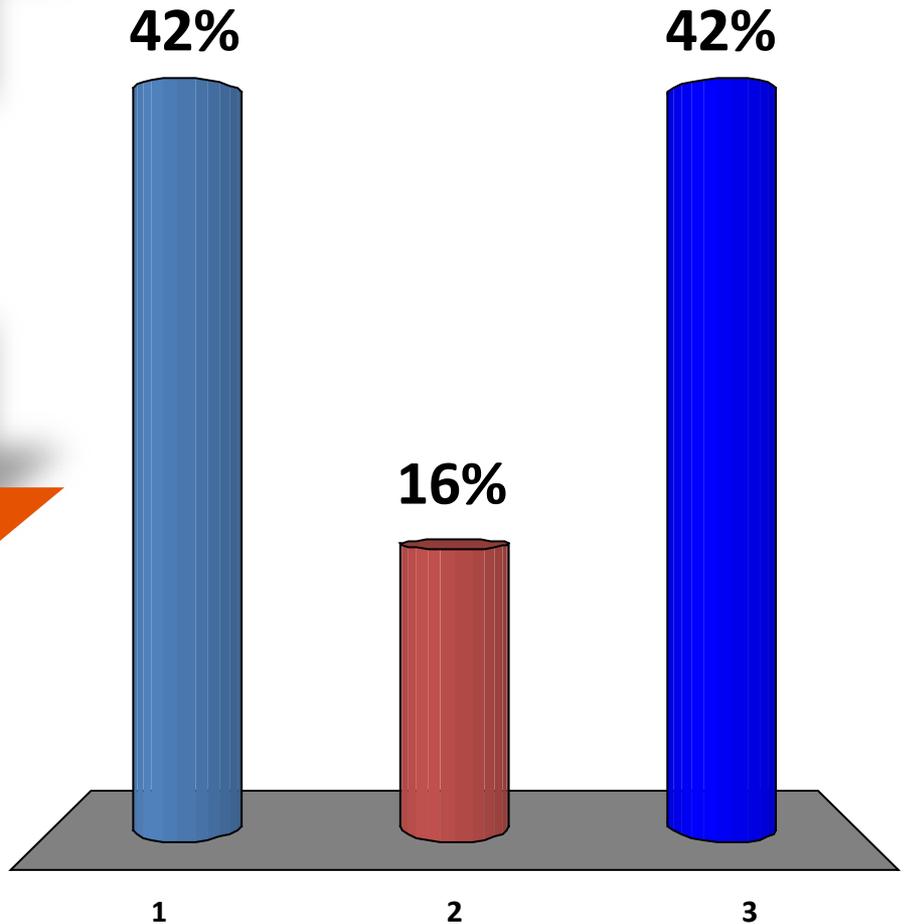


Energy – Fuel Costs

1. Trend-Up Scenario

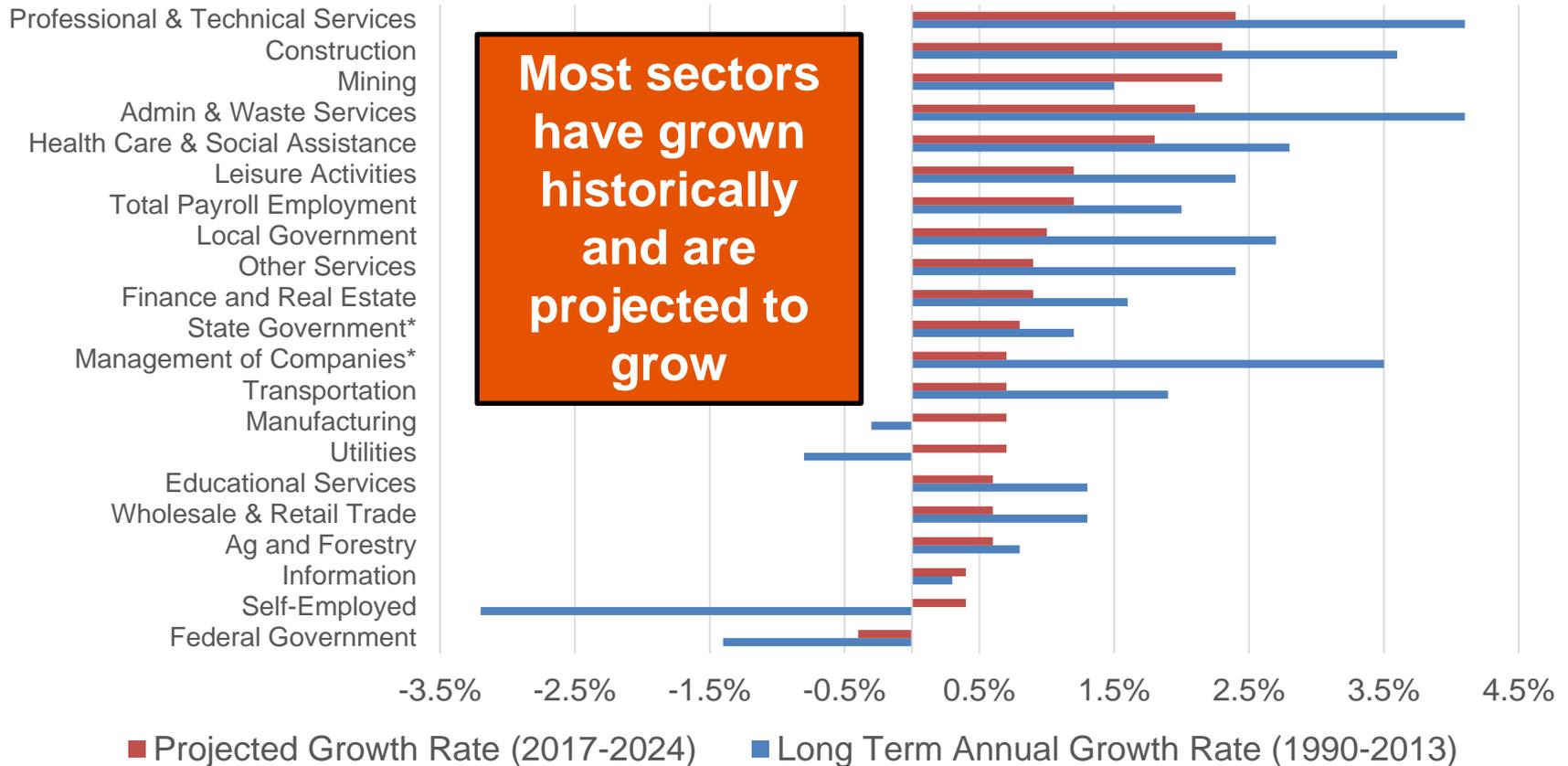
2. No Significant Change

3. Trend-Down Scenario



Economics – Labor Force Participation

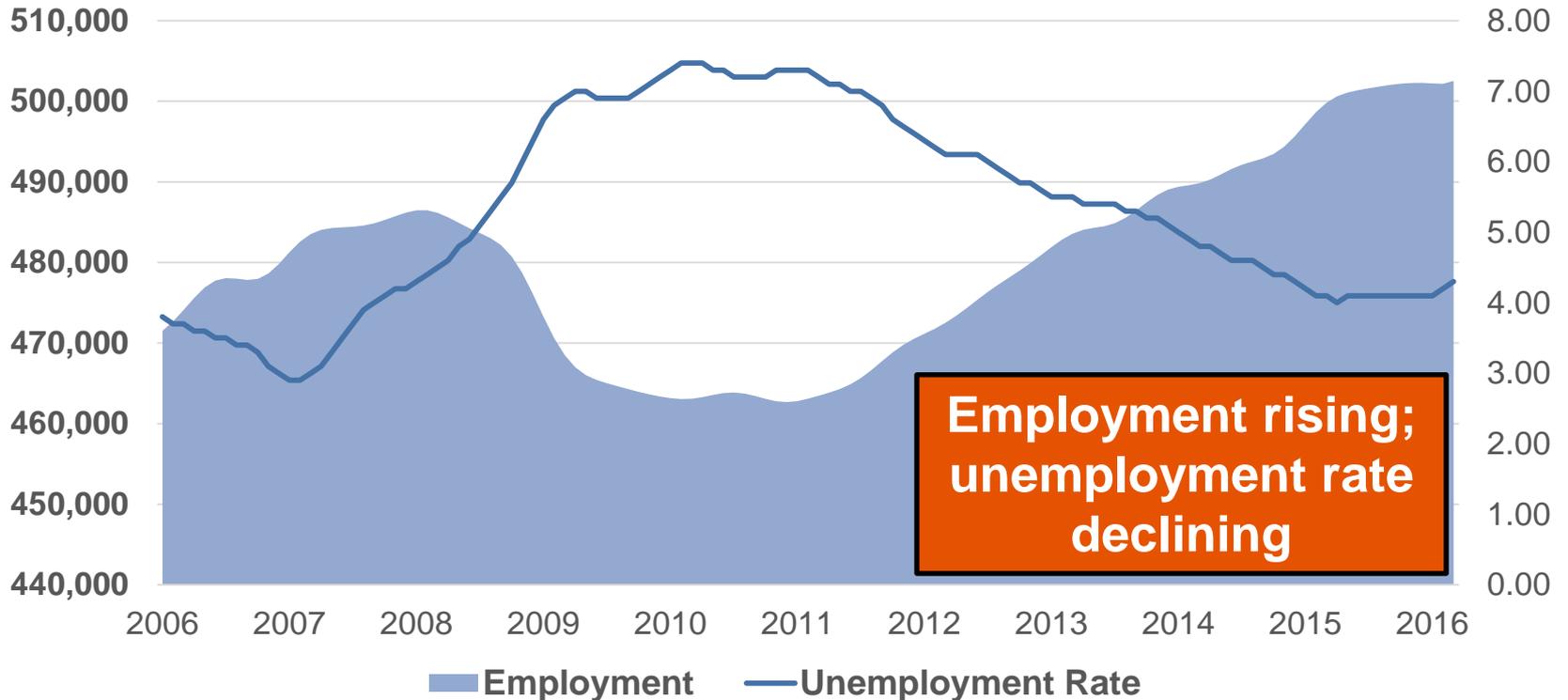
Montana Annual Employment Growth by Sector (Historic and Projected)



Source: Montana Department of Labor & Industry, Montana Employment Projections 2015-2024

Economics – Labor Force Participation

Montana Employment & Unemployment Rate



Source: U.S. Bureau of Labor Statistics

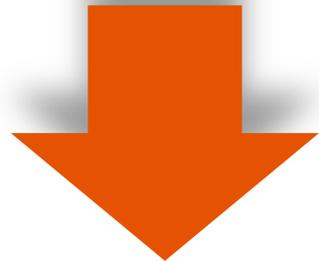
Which scenario will control in Montana?



Millennials enter workforce in larger numbers. Boomers continue working beyond traditional retirement age.

No significant change.

Job skills of recent graduates erode before jobs become available to them, and student loan repayment diminishes discretionary spending.



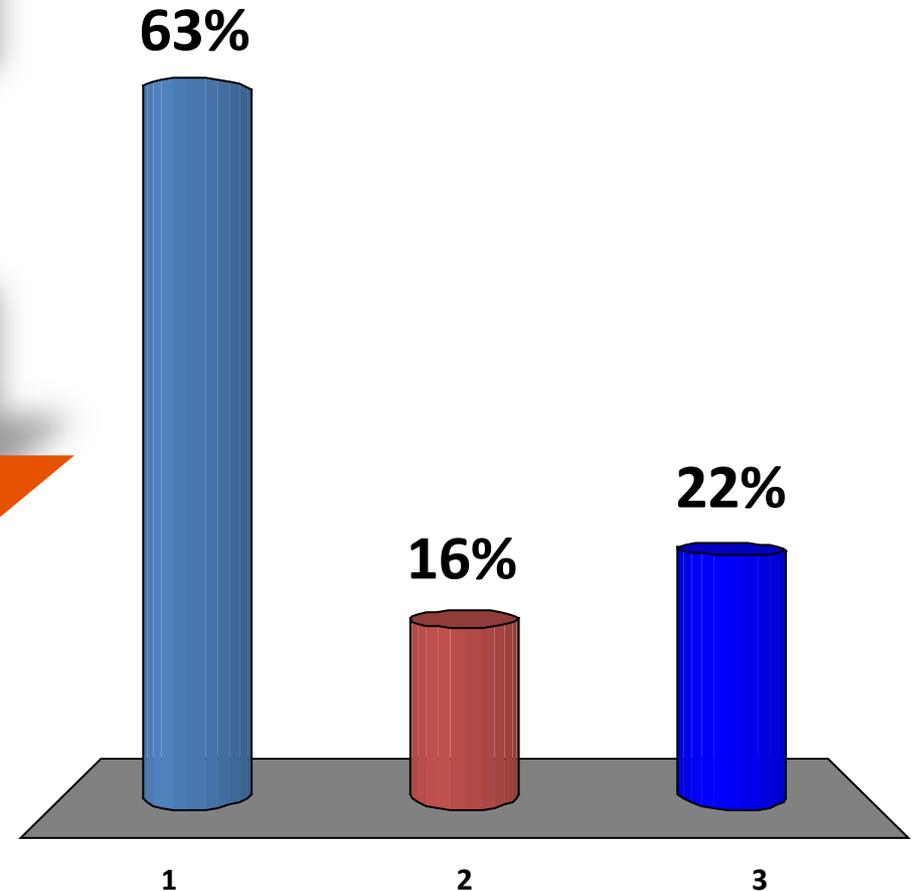
Economics – Labor Force Participation

1. Trend-Up Scenario



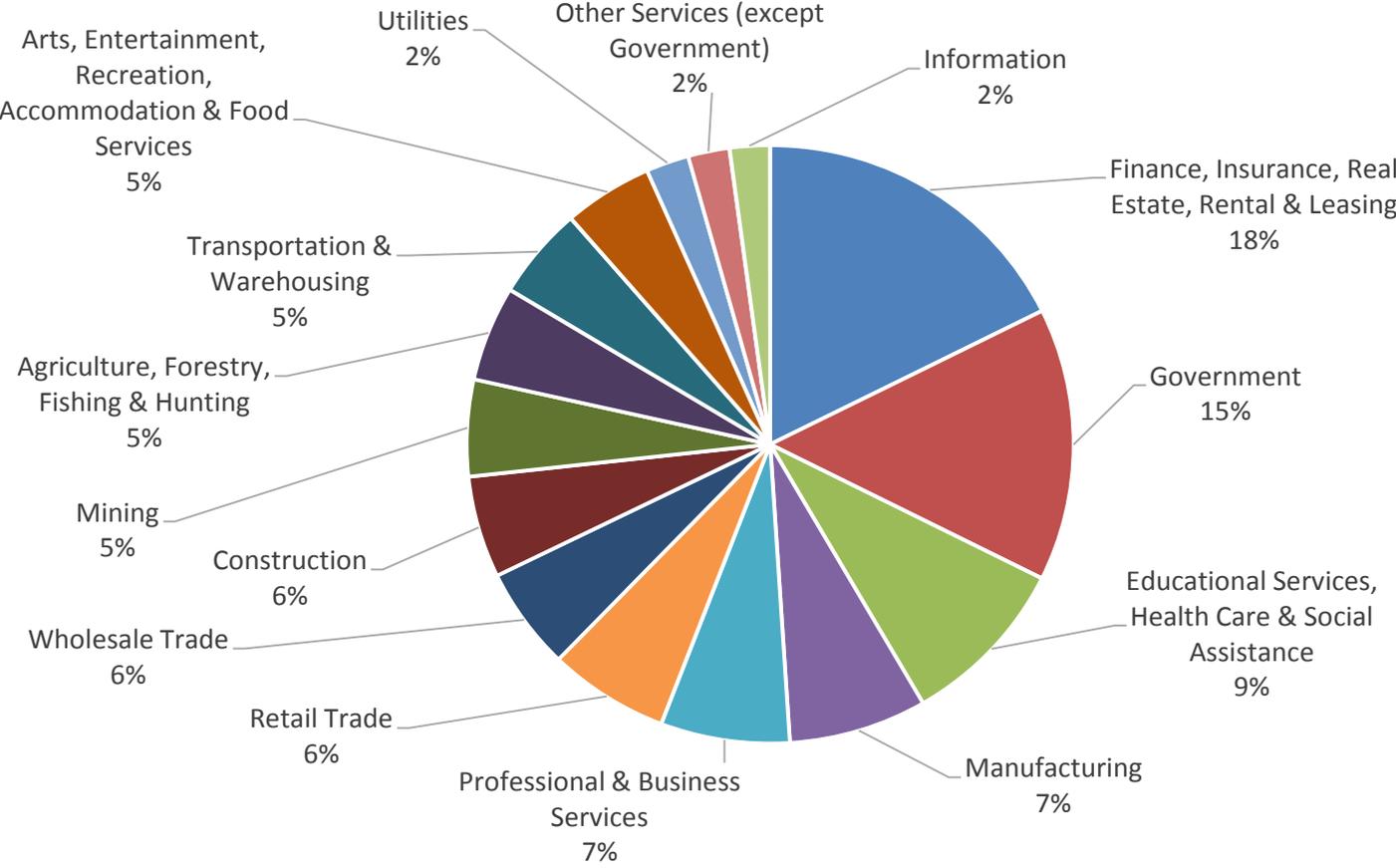
2. No Significant Change

3. Trend-Down Scenario



Economics – GDP

2014 Gross Domestic Product By Industry

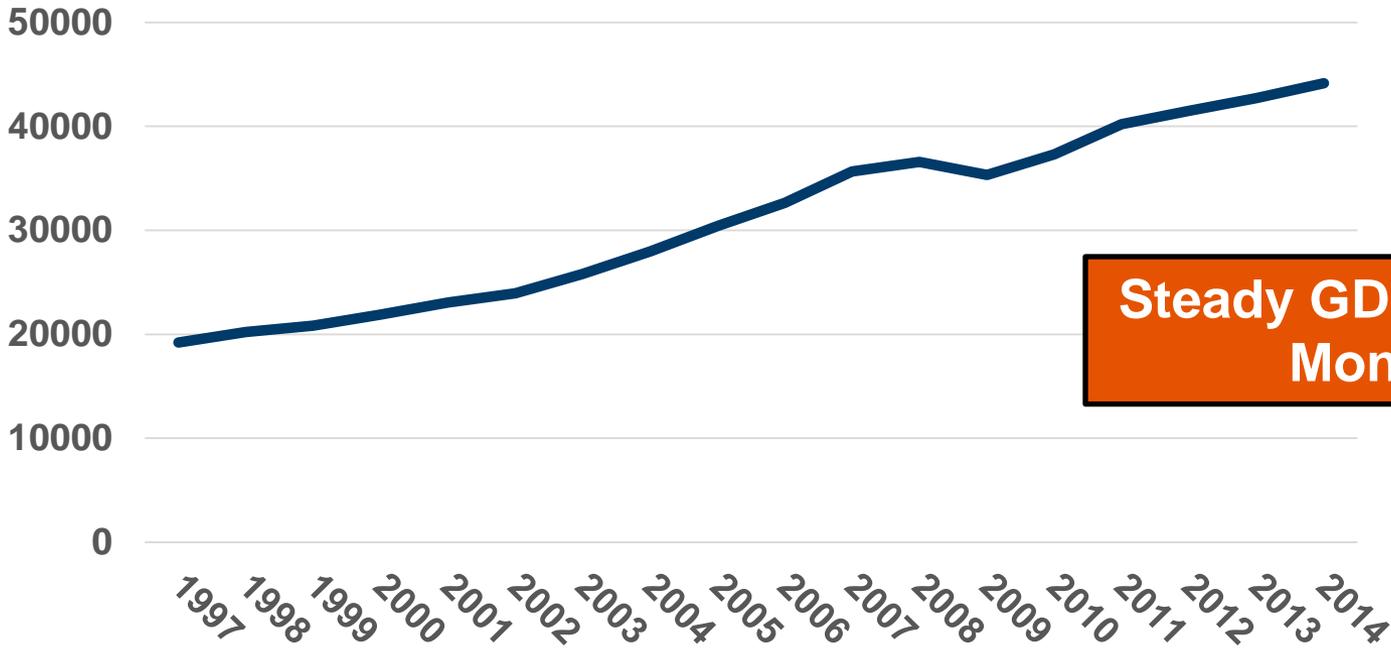


Montana economic development is strong and diversified

Source: U.S. Department of Commerce: Bureau of Economic Analysis Regional Data

Economics – GDP

Historic GDP Growth

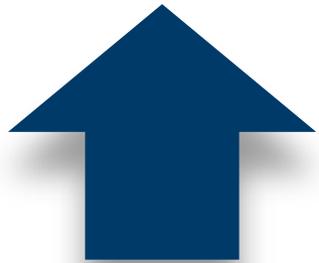


Steady GDP growth in Montana

Source: U.S. Department of Commerce: Bureau of Economic Analysis Regional Data

Economics – GDP & Income Growth

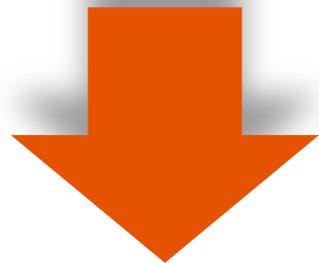
Which scenario will control in Montana?



Improving economy increases GDP and median incomes.

No significant change.

Economic growth in GDP does not offset inflation erosion of median household incomes.

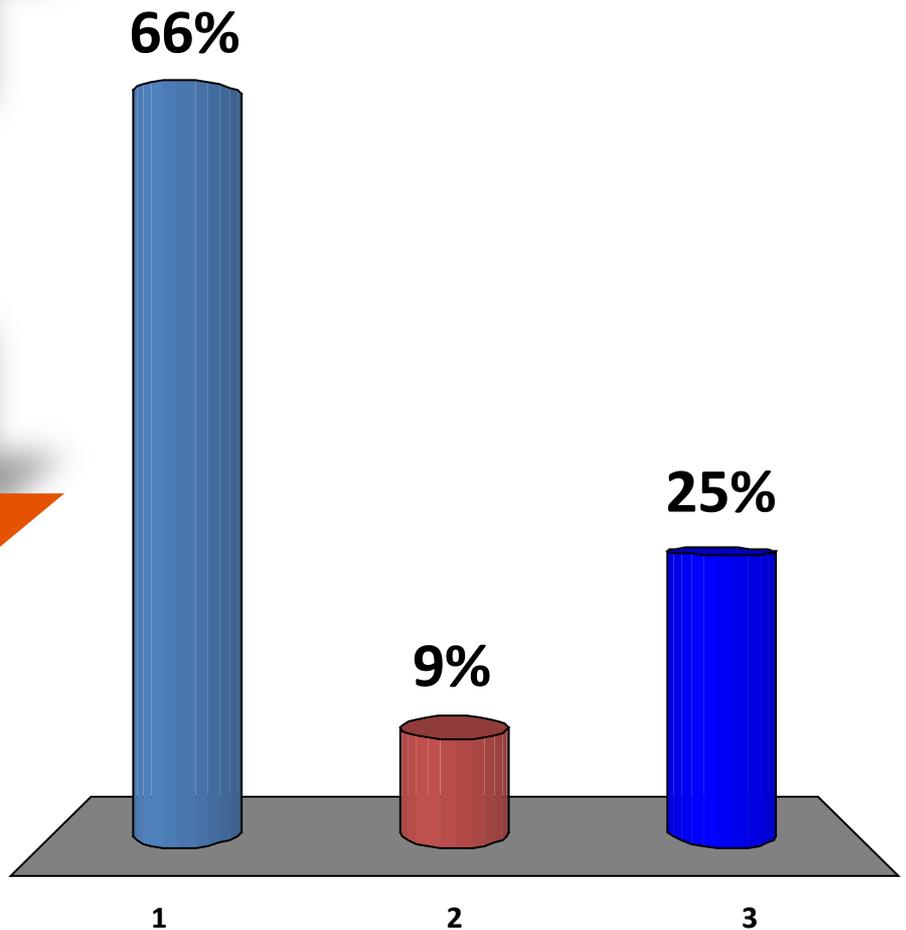
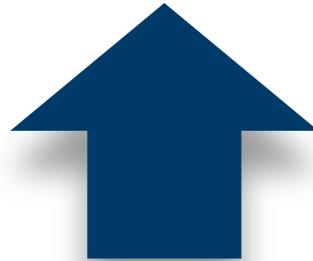


Economics – GDP & Income Growth

1. Trend-Up Scenario

2. No Significant Change

3. Trend-Down Scenario



Economics – Household Formation

Subject	2000	2010
	Percent of Total Households	Percent of Total Households
Family Households With own Children Under 18 Years	31%	26%
Nonfamily Households with Householder Living Alone	27%	30%
Households with Individuals 65 years and over	23%	26%
Average Household Size	2.45	2.35
Average Family Size	2.99	2.91

Montana household trends:

- smaller
- fewer children
- more people over 65
- more people living alone

Sources: U.S. Census Bureau, 2000 & 2010 Census. Table by DOWL, 2016.

Economics – Household Formation

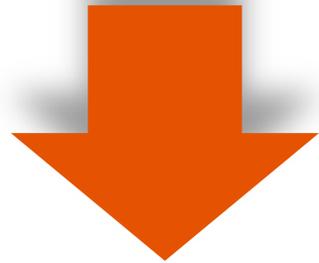
Which scenario will control in Montana?



Millennials eventually find jobs, buy homes, and raise families.

No significant change.

Millennials and post-Millennials form fewer households later in life due to economic pressures.



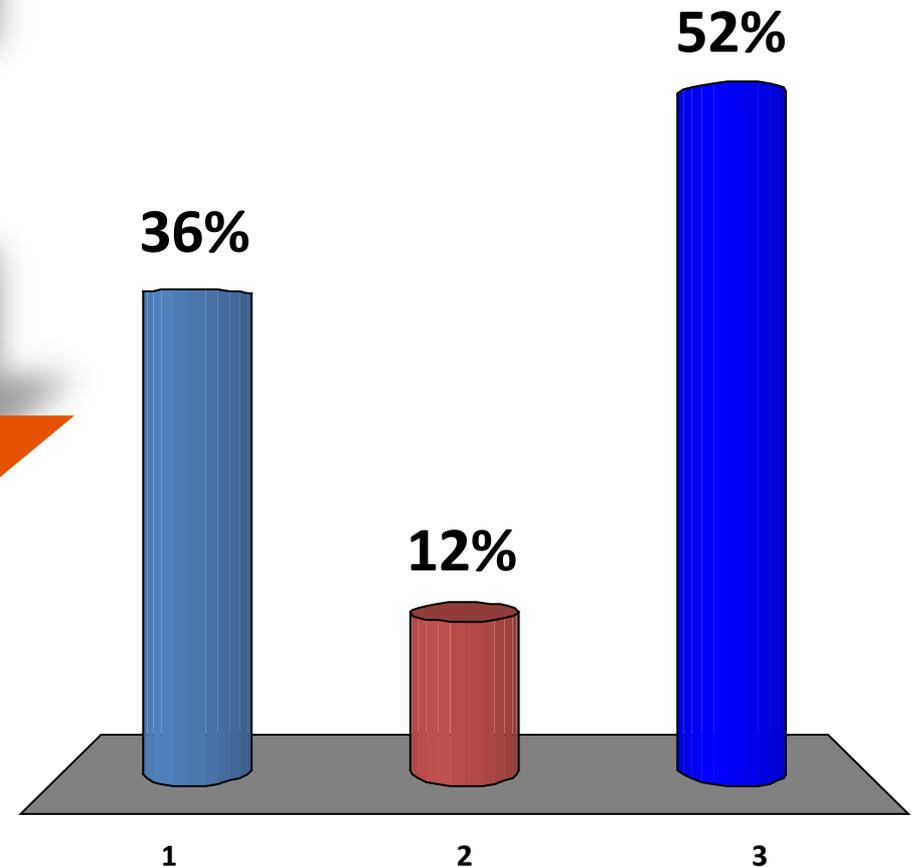
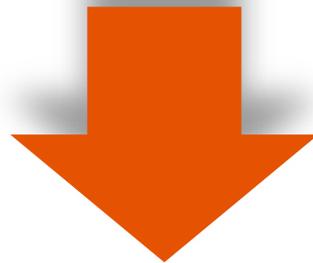
Economics – Household Formation

1. Trend-Up Scenario



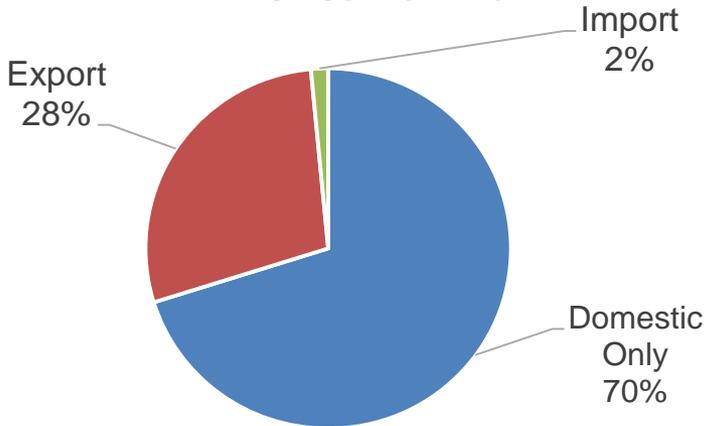
2. No Significant Change

3. Trend-Down Scenario

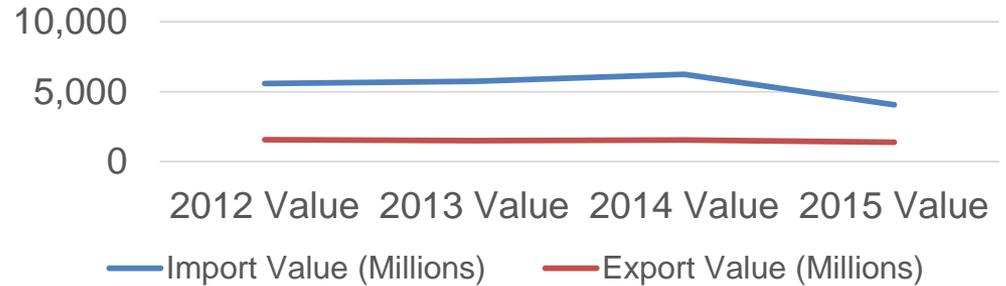


Economics – Goods & Services

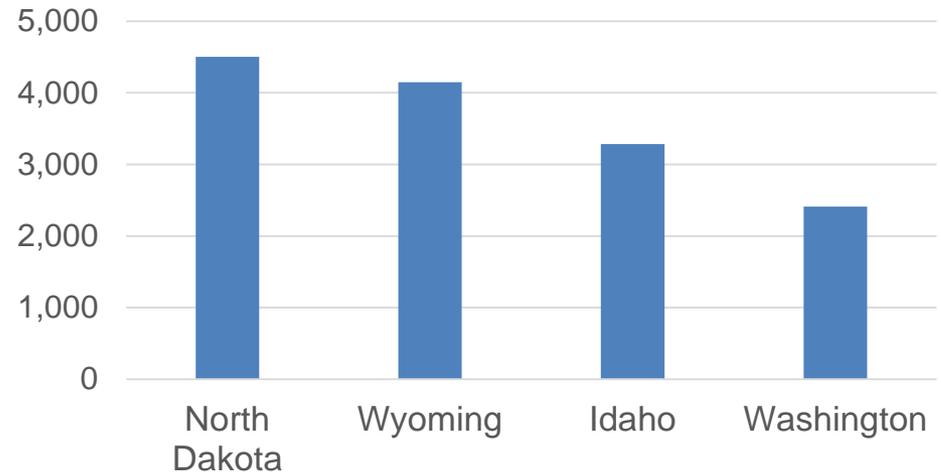
Percentage of Shipment Value By Type (2012)



Montana Foreign Import/Export Values (Millions)



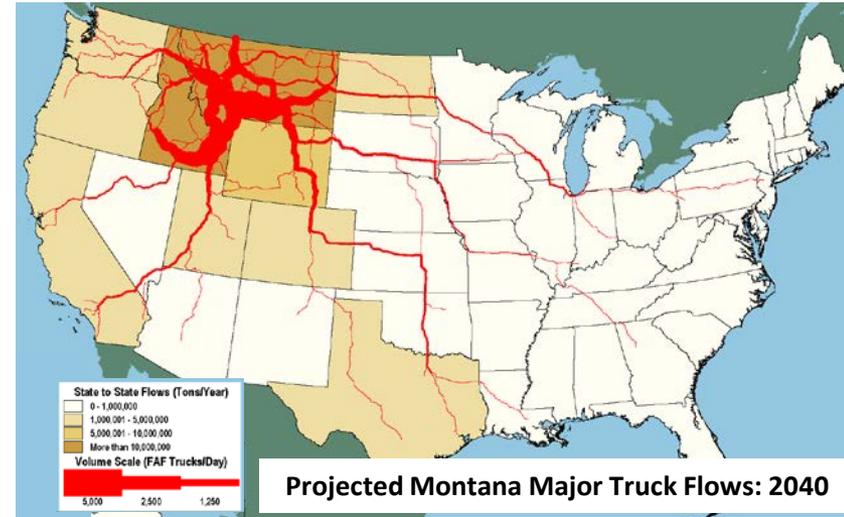
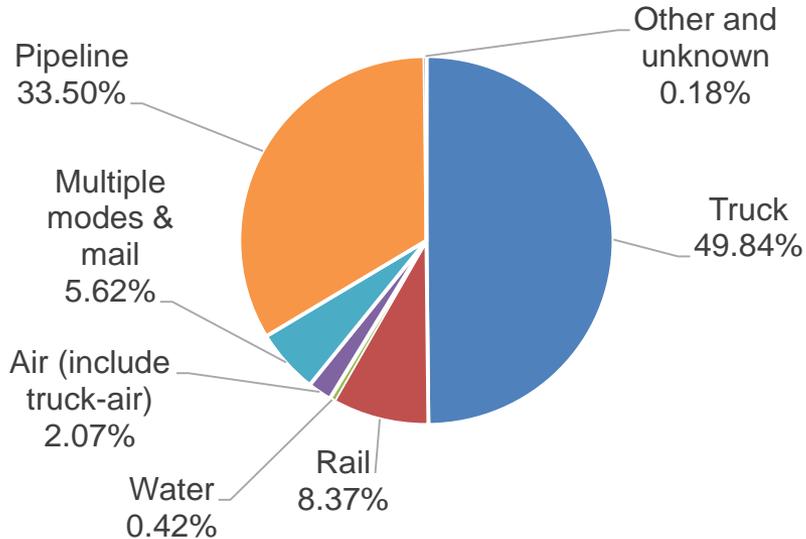
Top Domestic Trade Partners (Millions)



Trade values relatively steady since 2012; strong domestic trade with adjacent states

Economics – Goods & Services

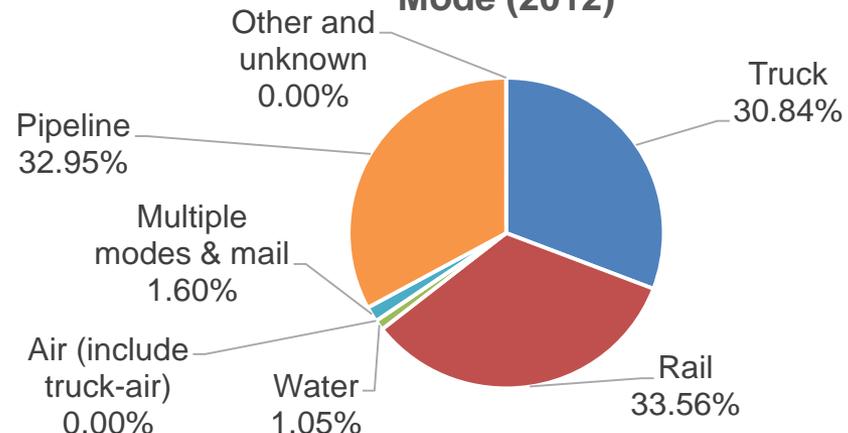
All Shipments as a Percentage of Total Value by Mode (2012)



Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 3.1.2, 2011. (http://ops.fhwa.dot.gov/freight/freight_analysis/state_info/montana/mt.htm)

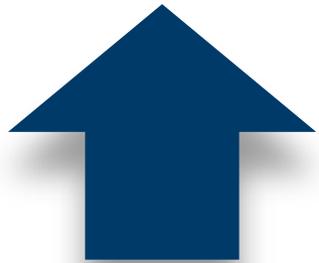
Trucking = 50% of shipments by value and 30% by tonnage; pipeline & rail other major modes

All Shipments as a Percentage of Total Tons by Mode (2012)



Source: US DOT Federal Highway Administration: Freight Management and Operations - Montana Freight Profiles and Maps (http://ops.fhwa.dot.gov/freight/freight_analysis/state_info/montana/mt.htm)

Which scenario will control in Montana?



Just-in-time shipping will increase delivery VMT.

No significant change.

Internet ordering, 3D printing, and same day delivery will result in lower consumer VMT.

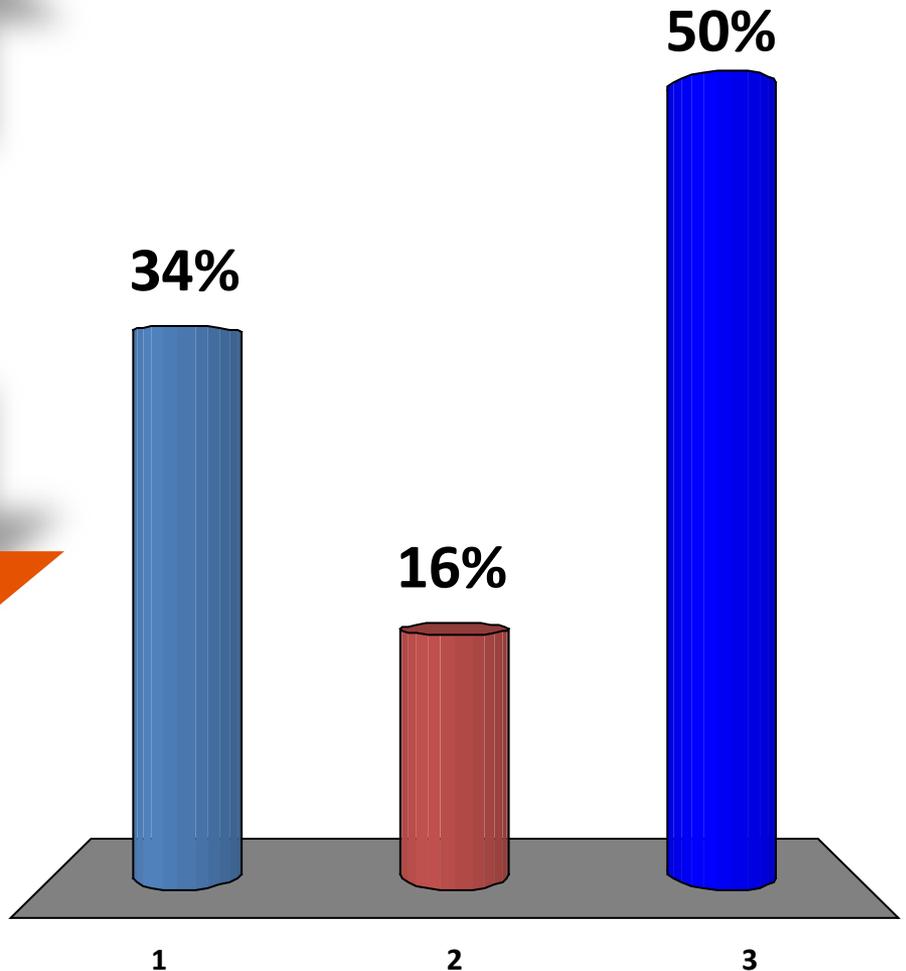
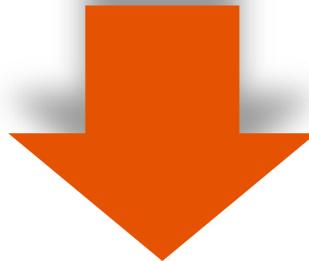
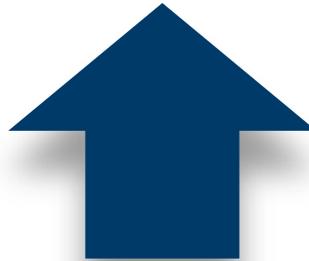


Economics – Goods & Services

1. Trend-Up Scenario

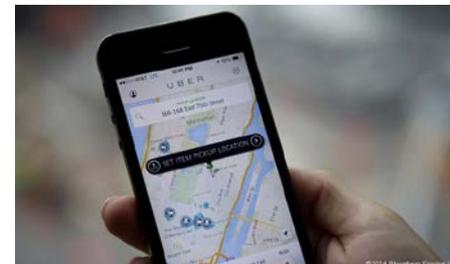
2. No Significant Change

3. Trend-Down Scenario

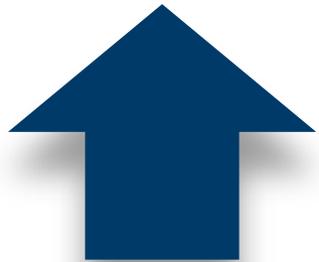


Technology

- **Teleconferencing & Telecommuting**
 - “Come Home to Montana”
- **Social Networking**
 - Virtual forums substitute face-to face social encounters
- **Shared Mobility Services**
 - Transportation Network Companies (TNCs), Uber/Lyft
- **Autonomous Cars**
 - Self-driving cars
- **Driverless Vehicles**
 - Unoccupied



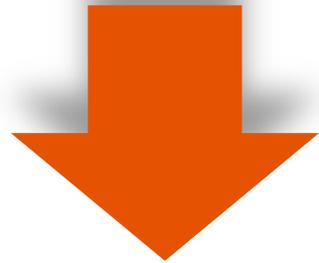
Which scenario will control in Montana?



Virtualization will continue to make business travel less needed.

No significant change.

The technologies are already with us. The effects have already occurred.

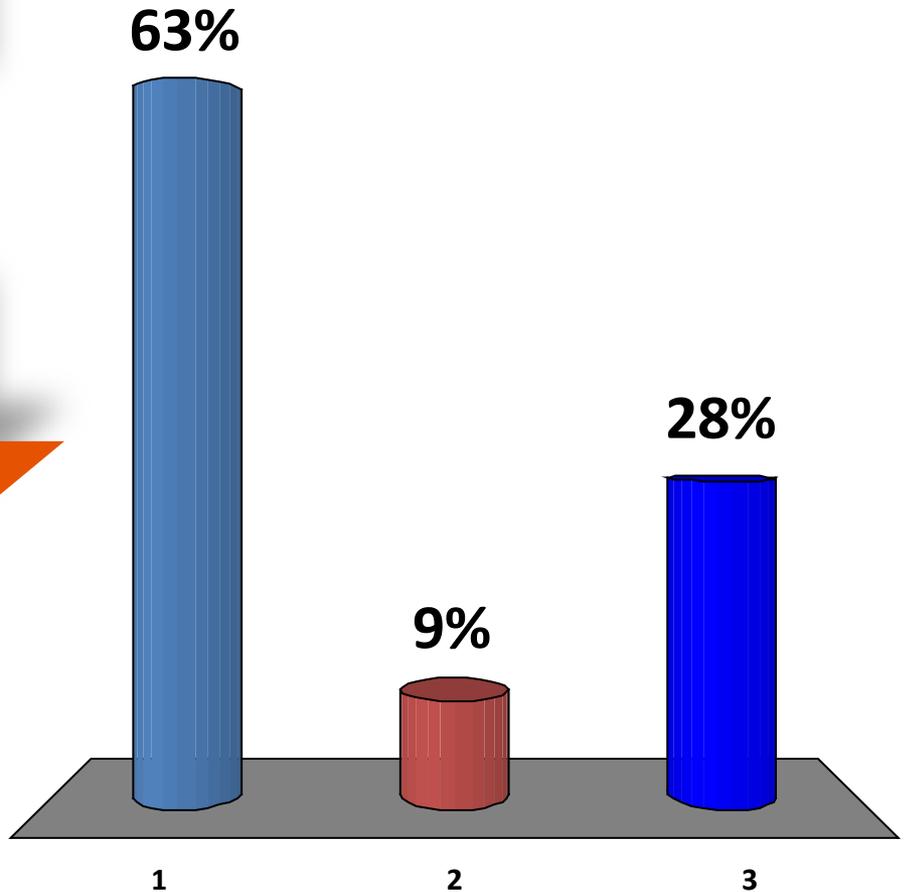
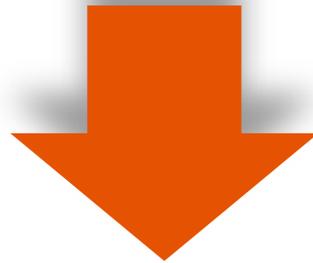


Technology – Telecommuting/Teleconferencing

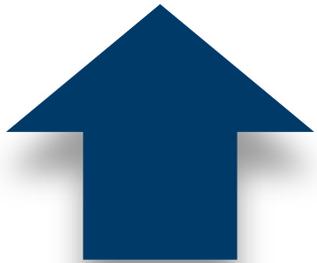
1. Trend-Up Scenario

2. No Significant Change

3. Trend-Down Scenario



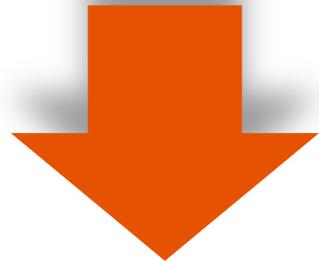
Which scenario will control in Montana?



Connected applications and sharing economy will play a bigger and bigger role in human interaction, further reducing solo travel.

No significant change.

Social networking will continue to alter vehicle ownership and per-capita driving, but only to the degree it already has.

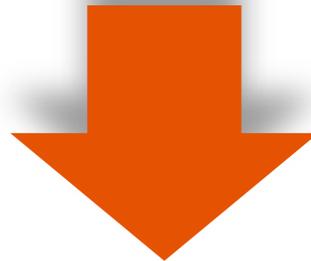


Technology – Social Networking

1. Trend-Up Scenario

2. No Significant Change

3. Trend-Down Scenario



39%

24%

36%

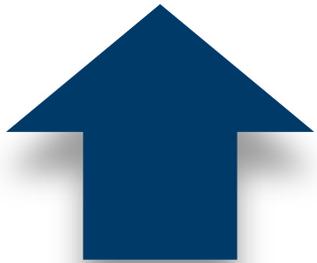
1

2

3

Technology – Shared Mobility Services

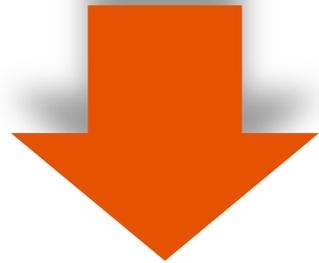
Which scenario will control in Montana?



Users of shared mobility services replace some transit and walk/bike trips and the increase in services provided increases the deadhead VMT

No significant change.

Increase in shared mobility services provides enhanced mobility that allows a larger proportion of population to reduce their car ownership and thereby decrease their overall VMT.



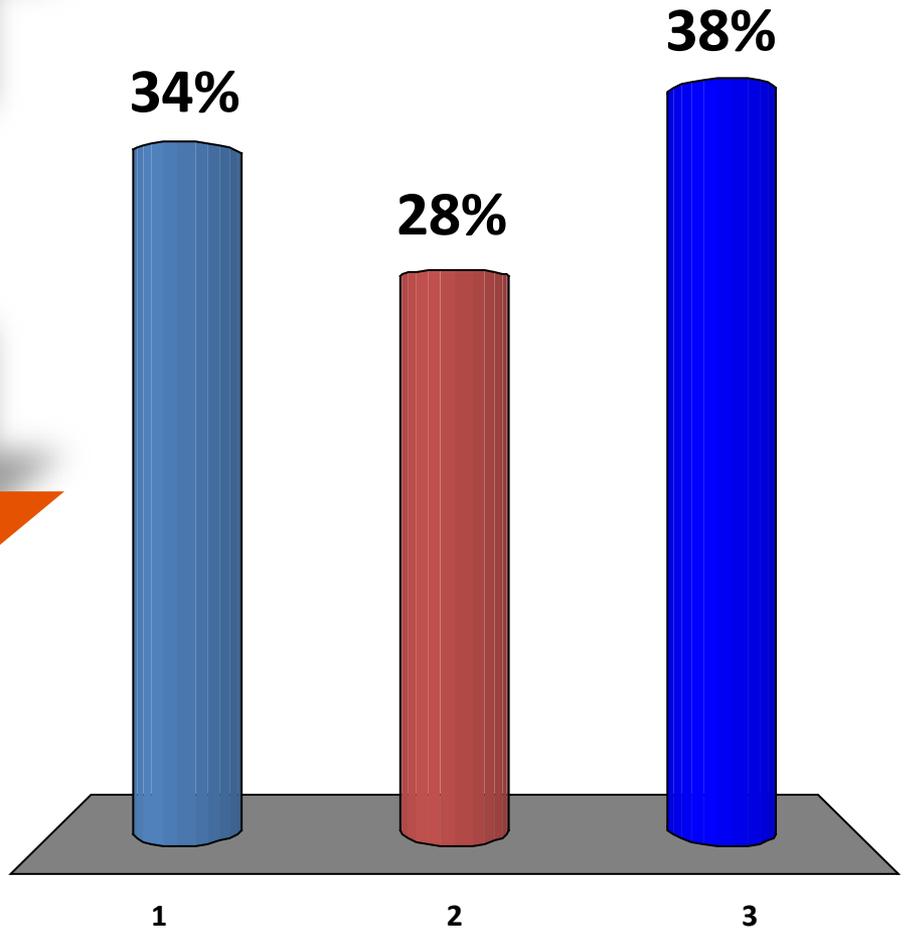
Technology – Shared Mobility Services

1. Trend-Up Scenario



2. No Significant Change

3. Trend-Down Scenario



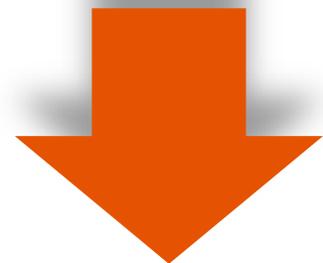
Which scenario will control in Montana?



Added safety and operating characteristics offer freedom to multi-task, increasing acceptance of even longer travel time times and distances.

No significant change.

Government regulation, liability concerns and purchase prices, and multi-year time frames for fleet turnover will delay widespread presence for 30 years.

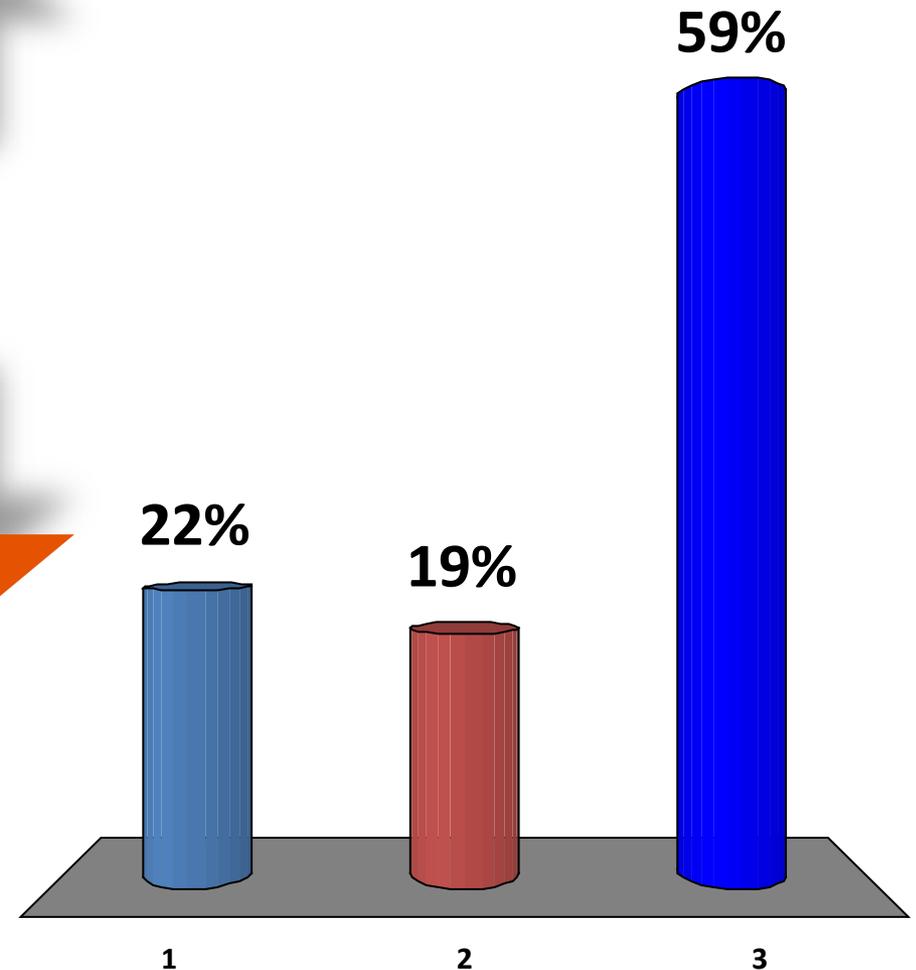


Technology – Autonomous Cars

1. Trend-Up Scenario

2. No Significant Change

3. Trend-Down Scenario



Technology – Driverless Vehicles

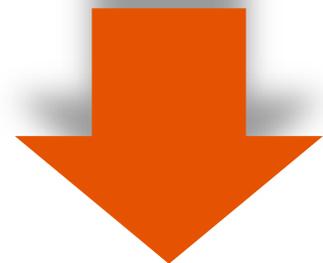
Which scenario will control in Montana?



Reduced parking requirements will create a significant benefit to real estate, development costs and urban environments, accelerating adoption.

No significant change.

Government regulation, liability concerns and purchase prices, and multi-year time frames for fleet turnover will delay widespread presence for 40+ years.



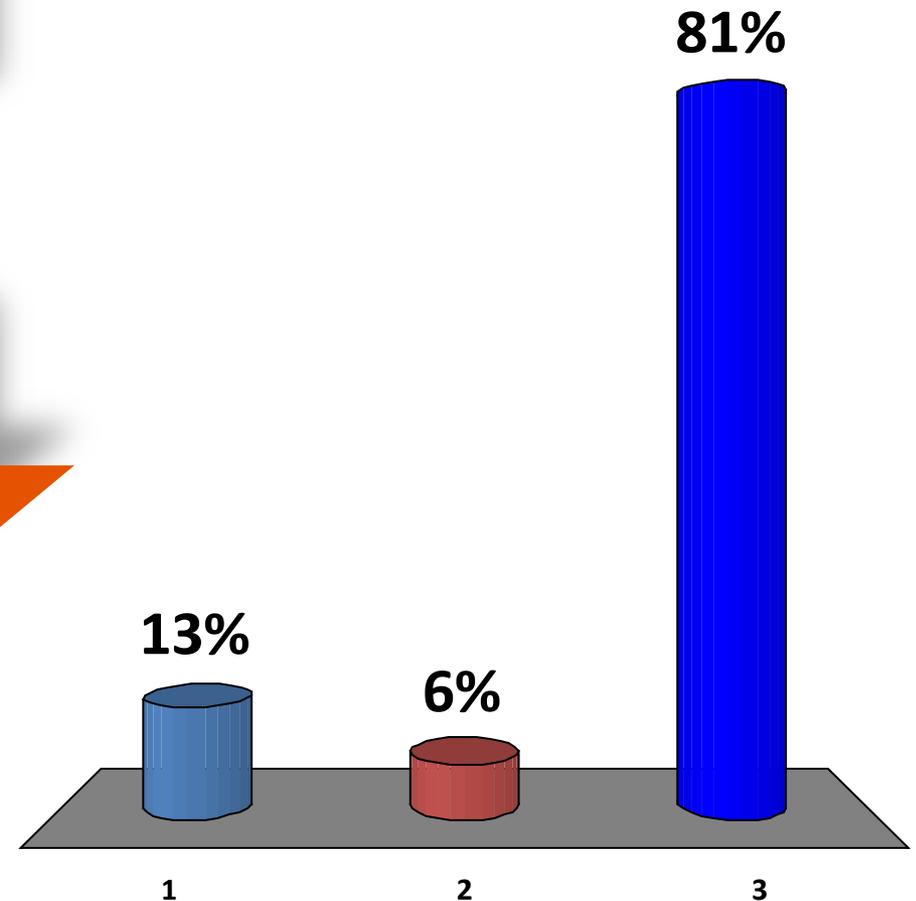
Technology – Driverless Vehicles

1. Trend-Up Scenario



2. No Significant Change

3. Trend-Down Scenario



TrendLab+ Voting Summary

Demographic

- Driving Age Population
- Vehicle Ownership
- Suburban Migration

Regulatory

- Licensing Regulations

Transportation

- Congestion and Time Use
- Non-auto Modes

Energy

- Fuel Costs

Economic

- Labor Force Participation
- GDP & Real Income Growth
- Household Formation
- Goods & Services Delivery

Technology

- Teleconferencing/ Telecommuting
 - Social Networking
 - Shared Mobility Services
 - Autonomous Cars
 - Driverless Vehicles
-



Break (15 minutes)





Online Survey Summary



Stakeholder Survey

Priority	Rank
Montana Highway Safety	1
Transportation Options	2
Preservation & Maintenance	3
Congestion & Delay Relief	4
Montana's Economy	5
Montana's Environment	6
Quality & Cost Effectiveness	7

Rankings reflect average order based on stakeholder responses as of June 14, 2016.

Stakeholder Survey

Transportation Options



Provide pedestrian and bicycle facilities.

Montana Highway Safety



Improve road safety through engineering (such as traffic signals, guardrail, redesign, slope flattening).

Montana's Economy



Monitor and address road capacity and operation needs due to community growth and development.

Congestion and Delay Relief



Clear winter roads during and immediately after storm events.

Top Strategies

Preservation and Maintenance



Preserve road pavement and bridge deck condition.

Montana's Environment



Minimize environmental impacts.

Quality & Cost Effectiveness

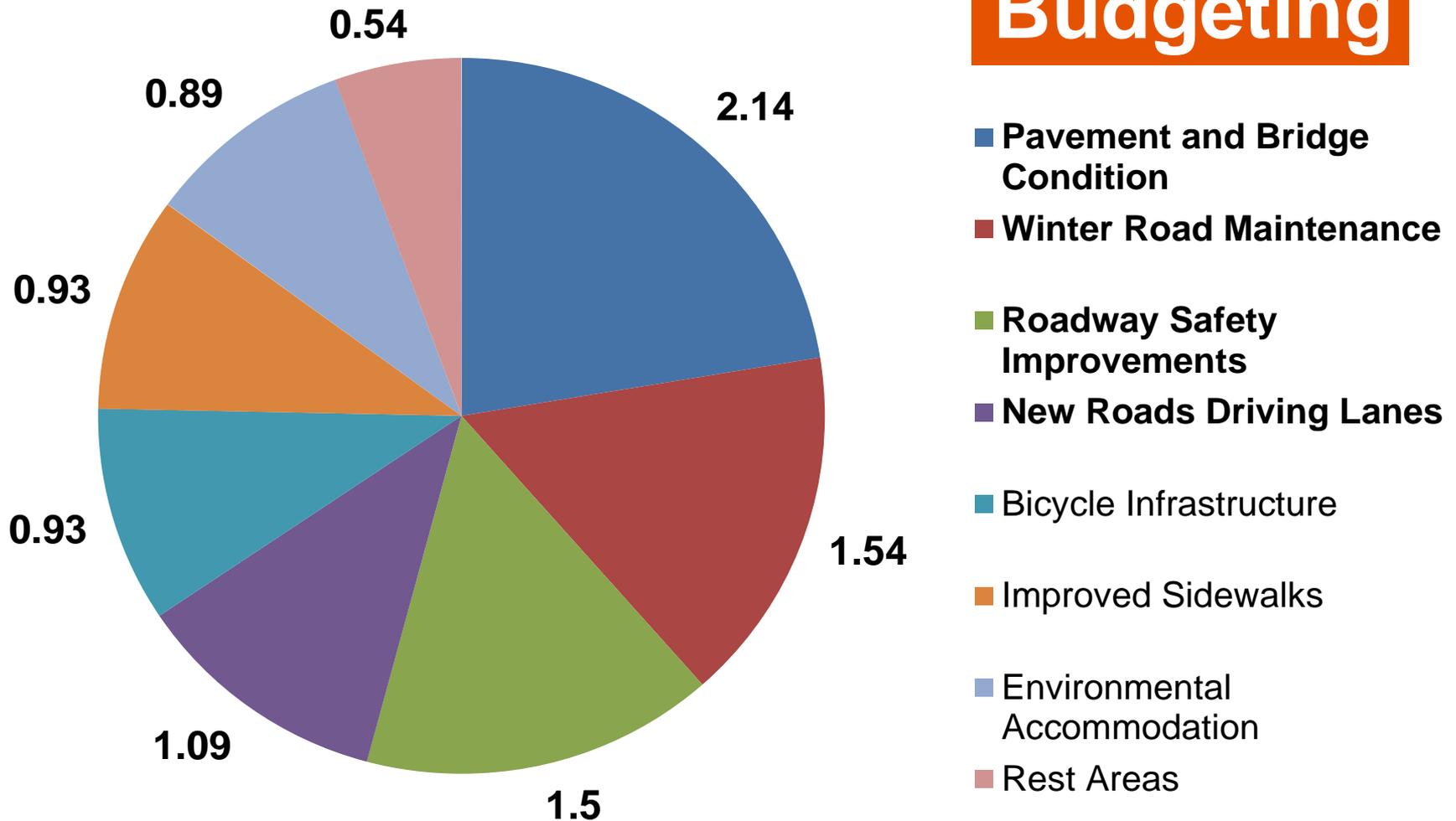


Identify innovative products and services to save time and money without sacrificing quality.

Selections reflect strategies receiving the highest average number of stars allotted out of five total stars based on stakeholder responses as of June 14, 2016.

Stakeholder Survey

Budgeting



Results represent average number of chips (out of 10) allotted to each category based on stakeholder responses as of June 14, 2016.



Goal-setting Exercise with Breakout Discussions



Goal-Setting Exercise



Montana's Environment



Transportation Options



Montana Highway Safety



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Congestion and Delay Relief



Preservation & Maintenance



Montana's Economy

Goal-Setting Tips

- Are the policy goals still relevant today and moving forward for the next 20 years?
- What steps are necessary to implement each policy statement? What is feasible?
- Will stakeholders and the public support the policy?
- Are we missing any important policy areas?
- Can the current action statements be streamlined and consolidated to describe specific objectives?



Break (15 minutes)

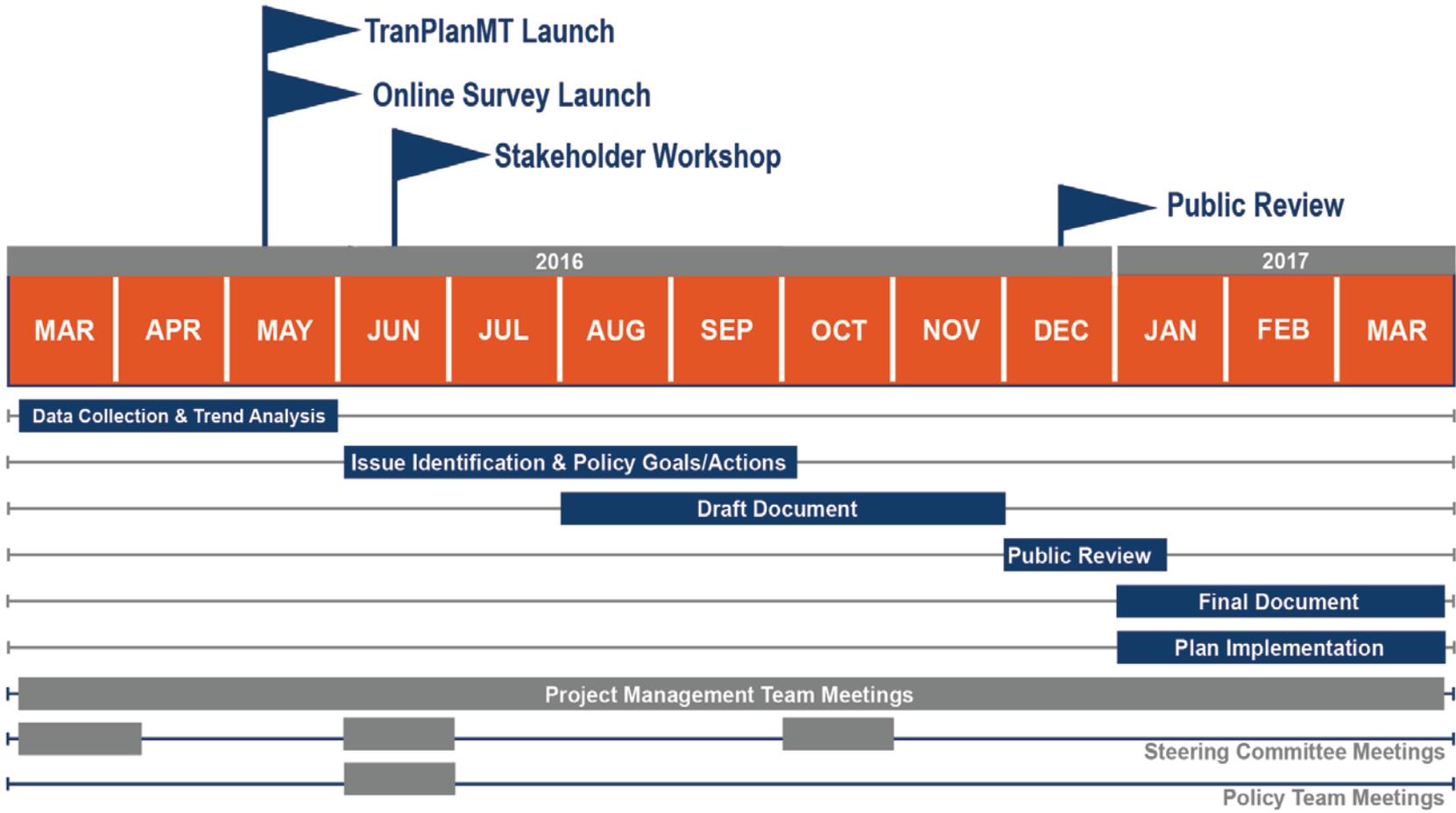




Reports Back to Group



Next Steps



Visit the website at <http://www.mdt.mt.gov/tranplan/>



Closing Remarks





Montana's Environment

Issues

Policy Goals

COST + TIME FACTOR OF PERMITTING PROCESS

IMPACTS TO NAT. RESOURCES -

CONSTRUCTION LOCATED ^{MORE} TOO CLOSE TO RIVERS IN PARTICULAR; SEPARATION BTW ROAD CORRIDORS + RIVER CORRIDORS PERMITTING COSTS DECREASE WHEN FURTHER FROM RIVERS (NEW CONSTRUCTION, REROUTING) (LOTS OF AIRRAJ)

OPPORTUNITIES FOR EARLY INPUT ON BIOLOGY & WILDLIFE CONNECTIVITY PERMEABILITY; EARLY COLLABORATION ON PROJECTS IMPORTANCE OF WILDLIFE CONNECTIVITY. - ANNUAL MTBS BTW MDT + PWP BIOLOGISTS.

INCORPORATION OF GREENER TECH, BIOENGINEERING IN BANK STABILIZATION (MAINTAIN INTEGRITY OF HABITAT, ETC)

WILDLIFE ACCOMMODATIONS PROCESS - OPPORTUNITY FOR PEER REVIEW

INTEGRATION BTW ENVIRO REVIEW + PERMITTING PROCESSES. WILLINGNESS TO INTEGRATE PROCESSES OUTSIDE CONSTRUCTION SPHERE (LIMITS)

* PERMITS SHOULD APPLY TO ENTIRE PROJ; NOT JUST CONST. LIMITS *

MDT BIOLOGISTS HAVE BEEN GOOD @ LISTENING TO, WORKING W/ PWP. CONSCIOUS, COGNIZANT, ETC.

SAFETY ELEMENT OF WILDLIFE CONNECTIVITY → PROVIDES FOR HUMAN SAFETY; FEWER WILDLIFE-VEHICLE CONFLICTS

BETTER DATA COLLECTION ON CARCASS COUNTS, COLLISIONS, FENCING (COST COMPARISONS, ANALYSIS) → TO PRIORITIZE FIXING STRUCTURES

GREEN TECH IN STORMWATER DRAINAGE → SEDIMENT CONTROL → FIRST CONTROL EROSION

INTERAGENCY COLLABORATION (MDT-DEQ) TO ALLOW FOR EARLY INPUT

→ LAND USE PLANNING - FUTURE COMMUNITY DEV.

2007-8 POLICY GOALS SHOULD BE MOVED, NOT CARRIED FWD IN ENVIRONMENTAL

CONSIDER ENVIRONMENTAL IMPACTS IN FREIGHT PLANNING POLICY

→ ADVANCE PLANNING TO ENABLE CONTRACTORS SUFFICIENT TIME TO HANDLE PERMITTING PROCESS

(IMPROVED COMM BTW MDT + CONTRACTORS RE PERMITTING PROCESS

→ IMPACT AVOIDANCE WHILE MAINTAINING SAFETY - PROTECT RIVERS + STREAMS RATHER THAN MITIGATE

- CONSIDER BUFFER ZONE -

- DOES MDT HAVE A MITIGATION POLICY (WHEN TO AVOID, MINIMIZE, MITIGATE, COST EFFECTIVENESS - ABILITY TO REIMBURSE) → OUTLINE SCENARIOS FOR NEW ARGUMENT BENEFICIAL OVER MITIGATION.

→ DEVELOP OVERSIGHT IN MIT. POLICY; CLEAR GUIDANCE TO DIRECT POLICY

CONSIDER LOCATION - APPROPRIATE SOLUTIONS - DYNAMIC NATURE OF RIVERS

→ CONSIDER FEW HABITATS; CONNECTIVITY EARLY IN PROJECT PLANNING & DESIGN (PIH TOO LATE FOR WILDLIFE ISSUES)

→ ALLOW FOR BETTER COLLABORATION (AGENCIES + STAKEHOLDERS) ON WILDLIFE

OVERALL MITIGATION PLAN

→ PROMOTE AGENCY + STAKEHOLDER COLLAB/CONSULTATION/ IMPROVED DATA COLLECTION POLICY ON WILDLIFE/VEH CONFLICTS, CARCASS COUNTS, ETC.



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Montana's Economy

2007-2008 Policy Goals

Economic Development

- ✓ Goal A: Preserve the efficient functioning of the transportation system used by Montana's export-oriented ("basic") industries to access regional, national, and international markets.
- ✓ Goal B: Monitor and address capacity needs arising from Montana's economic growth trends.
- ✓ Goal C: Support state and local economic development initiatives to maximize new economic opportunities. *add Private*
i.e. Growth
- Goal D: Support the tourism industry through promoting access to recreational, historical, cultural, and scenic destinations. *re-word*
- Goal E: Develop MDT's organizational capacity to support economic development. *too broad*
communication



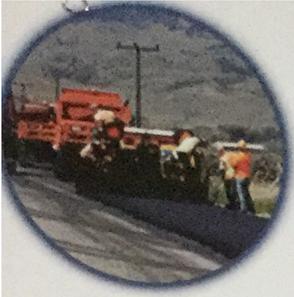
Montana's Economy

Issues

- Willingness to invest in transportation infrastructure "regulatory environment"
↳ environmental & permitting
- Inadequate Funding - who will pay and how? Federal gas tax static.
- add • Land use policies/local also. Consider long-term maintenance.
- * Improved state agency coordination (i.e. MOT & Dept of Commerce) - Goal D and other entities
 - Goal B supports A.
 - ↳ Need more multimodal.
 - Goal C → add Private
 - Concern → using gas tax \$ for trails, paths, etc. On-going maintenance must be paid for.
 - Goals are about maintaining - what about growth?
- * Need transportation advisory board
 - need better air transportation
 - ↳ State agencies
 - ↳ industries
 - ↳ transportation providers

Policy Goals

- Share results of this meeting



Preservation & Maintenance #3

Issues

- Mowing
- POTHOLES*
 - ↳ MAINT., CRASHES
 - ↳ DELAY IN REPAIRS
- Sidewalk maint.
- CONSTR. PROJ'S - TIME
 - ↳ DELAY TO TRAFFIC
 - ↳ TIME: START-FINISH OF PROJ
 - ↳ ENFORCEMENT IN ZONES w/NO WORK ACTIVE
- DISTRIBUTION OF FUNDS TO VARIOUS AREAS, ~~STATE~~ JURISDICTIONS; FACTORS (P3 process)
 - Tribal Funding Issues
 - * County Funding Issues
 - * City Funding ~~ISSUES~~ ISSUES
 - ACCESS TO MDT/FHWA FUNDS & SOME "SAY" IN HOW/WHERE \$ GOES (BETTER CO-ORDINATION)
- Sweeping/Spring Maint*

Policy Goals

GOAL A:

Q: STILL A VALID GOAL? YES
 SEQUENCE? YES

P3 PROCESS: MAINTAIN/ENHANCE ^{TRANSPARENCY} COMMUNICATION IN OUR DECISION-MAKING PROCESS.

1. COORD. w/ LOCAL PLANNING.
2. EXPIDITE PROJ. DELIVERY.
3. EARLY COORD/CO-OPER/COMMUNICATION w/ STAKEHOLDERS/PUBLIC IN MDT'S PROCESSES & PROJ. DELIVERY.





Transportation Options

Issues Policy Goals

MONEY

LACKING INFRASTRUCTURE

ACCESS Public transit • trails
Service
INFRASTRUCTURE

SAFE ROUTES / CTEP open

TA grants ^{be a road} / ^{hard get} + use

Maintenance funds to take care of new infrastructure

• Change mindset from moving 'cars' to moving 'people' (bikes/peds/airstrips)

• Look at users help maintain (airstrips, bike trails)

• Change attitudes/education to motorists re: bikes

• Red tape to get design

• bikes lowest on totem pole

• more creative solutions private partnerships / volunteers

• ^{add} facilities near schools

• insurance for users/LRT

Bike/ped

- Pursue Funding ^{solutions} for projects/maintenance for all modes ^{MDT employees}

- Accessibility & Connectivity

- prioritize ped/bike accommodations ^{& projects with btp} (schools, high needs, high density)

- data collection & forecasting future use

- Statewide bike/ped plan including a maintenance plan ^{collaboration in center}

- MDT b/p per district ^{MDT be a leader (all modes)}

- Bike ped transit board

• Fund & encourage ^{replace (promote/support)}

• Change 'consolidation' to 'coordination'

missing regional & statewide transit ^{moving people not to tra. talk & pay for}

Combine bike-ped-transit



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Transportation Options

Issues

- How transp options fit into performance measures
- Lacking data counts
- Prioritization: Alternatives on road designs to free up money
road diets
pro active approach
- transit - infrastructure improvements along hwy's (MST makes it very \$) (bus pullouts/design regs)
- park and ride/light rail - plan now for future
- Montana mindset that always must drive.
- Keep walking in mind
- limited hours of operation for transit
- Connectivity btwn transit/walk/bike

Policy Goals

- Support TDM
- Missing 'teeth' to meet/exceed not just meet minimum
- help meet climate action goals
- rewards to local government to provide accommodations



Transportation Options

Issues

- Only mtg the minimum (width) · how go above/beyond
- Connectivity - sidewalks · biketrails/paths
- ADA ramps pointing into inter-sections
- youth & elderly obstacles to transportation options (van pools - bedroom communities) shuttle
- too ↑ Speed limits in urban areas
- traffic signals for ^{people w} mobility issues
- Overreliance on shoulders rather than other facilities

Policy Goals



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Montana Highway Safety

Issues

- ^{Need for} Expanded lanes on 2-lane roads to improve safety & reduce crashes
- More bike lanes in urban areas & sidewalks
- Early winter maint. (sand sooner) to prevent crashes
- expand shoulders in rural areas
- ~~ideas~~ Added turn lanes
- expedited project delivery
- Seat belt/helmet (primary) law
- Increased teen driver safety edu (really everyone/all aspects)
- Increased enforcement
 - currently reactive vs. proactive
- Continue & improve cooperative efforts

Policy Goals

- Goal A — perpetuate
- Goal B — add stakeholders not just agencies & possibly other states
- Goal C — ~~not a high priority~~
 - ~~need clearer~~
 - still valid but needs to be better defined
 - redundancy in system



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Montana Highway Safety

#1

2007-2008 Policy Goals

Traveler Safety

- Goal A: Reduce the number and severity of traffic crashes on Montana's roadways.
- Goal B: Provide leadership and coordinate with other Montana agencies to improve traveler safety.
- Goal C: Provide leadership and coordinate with other Montana agencies to promote transportation system security.





Congestion & Delay Relief

2007-2008 Policy Goals

Roadway System Performance

Goal A: Establish explicit priorities for ~~roadway~~ ^{transportation} improvements.

Goal B: Preserve mobility for people and industry in Montana ~~within available resources.~~

Goal C: Improve the productivity of the roadway system.

Goal A: Establish explicit priorities for ~~roadway~~ ^{transp} improvements
1st: Preservation 3rd: Capacity
2nd: mobility 4th: Other

Goal B:





Congestion & Delay Relief

Issues Policy Goals

Trends

- Pop. Migration from rural to urban
- Increasing density acceptance
- NO roadway capacity to accommodate urban growth impacting route continuity / connectivity
- economic/industrial growth not near interchanges
- Retrofitting existing roads - given constrained R/W - existing development
- maxing on peak hour is it best approach to design process

Opportunities

- increase use of ITS
- Operational improvements i.e. signal synchronization, technology
- ensure quality, cost effectiveness, time-lined in project delivery
- ensure context sensitive solutions





Congestion & Delay Relief

Issues

- emphasis on LOS can be hinderance
- policies/processes
- modal interactions
- Resource Constraint
- Ability to MAINTAIN expanding infrastructure

Policy Goals

- shift some level of resources toward preservation
- continue same level \$ for filling infrastructure gaps (more so for non-railway)
- Increase Gas Tax & Revenue Base to support all transp. infrastructure



Congestion & Delay Relief

Issues

Policy Goals

GOAL A: Strategy Brainstorming

- Freight?? not enough info?
- Prioritization for projects?
- Education to balance realities/expectations
- Robust urban design needed
- Context Sensitivity

GOAL B:

- preserving R/W for all transp.
- Actively pursue/use context sensitive solutions
- ensure all transp modes not just roads
- more robust access mgmt
- B.4 retain