Albany Area Metropolitan Planning Organization

City of Albany • City of Jefferson • City of Millersburg • City of Tangent • Linn County •
Benton County • Oregon Department of Transportation

Technical Advisory Committee
Meeting Agenda

Date:	Thursday, July 15, 2021
Time:	9:00am to 11:00am
Location:	Join Zoom Meeting: https://us02web.zoom.us/j/87651575084
	Phone: 1-669-900-6833
	Meeting ID: 876 5157 5084, Passcode: 2020
Contact:	Catherine Rohan, Transportation Planner

1) 9:00 Call to Order, Agenda Review, and Roll Call   **Chair, Gary Stockhoff**

2) 9:05 Public Comments   **Chair**

3) 9:10 Approval of Meeting Minutes (Attachment A)   **Chair**
June 17, 2021 TAC Meeting

ACTION: Approve minutes

4) 9:15 Bicycle and Pedestrian Plan update (Attachment B)   **Catherine Rohan**
Staff will present summary information from the Bicycle
and Pedestrian Plan survey and mapping exercise. Staff
will also report on next steps for the Bicycle and
Pedestrian Plan.

ACTION: General discussion

5) 10:00 Draft Strategic Assessment Document (Attachment C)   **Cody Meyer & Brian Hurley**
DLCD and ODOT have drafted a strategic assessment
document. The document incorporates feedback received
from the TAC at their April meeting, where DLCD and
ODOT presented initial strategic assessment results.

*ACTION: Discussion of draft strategic assessment
document, potential approval to forward to Policy Board*

6) 10:40 Jurisdictional Updates/Other Business   **All**
-Future plans for in-person/hybrid meetings

7) 11:00 Adjournment   **All**
Next meeting: August 19th, 2021 at 9:00am

ALBANY METROPOLITAN PLANNING ORGANIZATION
TAC REMOTE MEETING
Thursday, June 17, 2021
9:00 – 11:00 am

DRAFT MINUTES

Members:	**Representing:**
Chuck Knoll	Linn County
Gary Stockhoff	Benton County
Joe Samaniego & Georgia Edwards	Tangent
James Feldmann	ODOT
Janelle Booth	Millersburg
Ex-Officio:	
Ron Irish	Albany
Daineal Malone	Linn County
Mark Bernard	ODOT

Staff: Catherine Rohan, Nick Meltzer, Steph Nappa, and Emma Chavez

TOPIC	DISCUSSION	DECISION / CONCLUSION
1. Call to Order, Agenda Review, and Roll Call		**Meeting called to order at 9:04 am by Chair Gary Stockhoff.** **There were no changes to the agenda.**
2. Public Comment		**There were no public comments.**
3. Board Approval of May 20, 2021 TAC Meeting Minutes	Staff Catherine Rohan advised of the following edit submitted by Mark Volmert via email: Agenda Item #8: Jurisdictional Updates/Other Business. ○ **FROM:** City of Albany – Bailey reported that the city has a couple of big street projects that will be built over the summer (e.g. road	**Consensus to approve the May 20, 2021 TAC meeting minutes with correction.**

	by library will be rebuilt). <u>Also, the Transit Development Plan (TDP) is currently underway.</u> Albany applied for congressional funding for the Transit Operations Facility, formerly known as the Bus Barn and a sewer project. o **TO:** City of Albany – Bailey reported that the city has a couple of big street projects that will be built over the summer (e.g. road by library will be rebuilt). <u>Also, work on the Albany Transit Implementation Strategy (from the medium-term scenario identified in the Transit Development Plan) is currently underway.</u> Albany applied for congressional funding for the Transit Operations Facility, formerly known as the Bus Barn and a sewer project.	
4. COVID Relief Funding	Staff Nick Meltzer reported that this is a continuation of the previous conversation. A couple of months ago, AAMPO jurisdictions were asked to submit projects for COVID relief funding. There is total funding of $960,000 and $864,000 after the 10 percent reserve. Staff received approximately $8,000,000 in projects submitted. The first task was to look at projects that could be funded with half the requested amount for each member. After more conversations and recognizing the fund limitations; members decided to rethink their project submittals. Since then; Millersburg changed their submission and Tangent and Linn County partnered on a project. That information has been revised. Meltzer reviewed the changes. James Feldmann asked how the distribution amounts were determined. Meltzer advised that staff began with funding half of everyone's projects and then revised those based on conversations with members. Chuck Knoll reported that the Old Oak Drive Sidewalk project total cost will be closer to $400,000; however, they are only requesting $246,000. Knoll also reported that Daineal Malone will be the future AAMPO TAC representative.	**Updated the City of Albany project to Queen Avenue Resurfacing.** **Updated the City of Jefferson project to "TBD".** **Updated total cost of Gibson Hill Modernization to $1.2 million.** **Consensus to recommend the amended project list to the Policy Board.**

	Meltzer went on to report that the City of Albany has expressed that their project is a key intersection to the region and that only receiving half of the funding will not allow for completion. Knoll stated that he agrees to the importance of the Albany project. Ron Irish stated that the city does think the project is important and because there is not a funding stream for the project; they could not build half of it and may end up using those funds for something else such as the Queen Avenue project which is currently on the STIP and short on funding. Knoll asked when the project will be constructed and Irish responded that it is in flux depending on an ODOT rail project which is due to take place next summer. James Feldmann asked what the location of the Jefferson project is and Meltzer responded that the city is currently updating their TSP and the project will be dependent on that completion. Staff felt it appropriate to allocate funds for the city to utilize once their TSP project list is completed. Feldmann asked for the Jefferson description to be noted as TBD. Chair Stockhoff advised that the Gibson Hill Modernization project total cost also needs to be updated to 1.2 million.	
5. Draft MTIP Revision Policy	Rohan advised that AAMPO's MTIP Revision Policy differs from CAMPO's. CAMPO utilizes their TAC's expertise in approving revisions as well as making suggestion to the Board. At the last meeting, TAC members were in agreement to incorporation their expertise into the MTIP Revision Policy. Rohan moved on to review the revisions. Feldmann asked what the differences where between the AAMPO and CAMPO language and Rohan gave examples. Meltzer asked Chair Stockhoff to share feedback on the updates as he sits on both the AAMPO and CAMPO TAC. Chair Stockhoff stated that the updates makes sense and it helps to streamline and define things. Janelle Booth asked for staff to highlight what the TAC would be doing	**Consensus to recommend the MTIP Revision Policy to the Policy Board.**

	differently once the updates are approved by the Policy Board. Rohan answered that while the three levels of review will remain; AAMPO is changing what goes into the three levels. The change is that the second highest level of review will now go to the TAC and the highest level of review will go to the TAC and a recommendation to the Policy Board will be required. It was clarified that changes to any federally funded project would still need to go through this process and no additional process is being added.	
6. Bicycle and Pedestrian Plan Project Prioritization Criteria	Rohan advised that staff has incorporated the last feedback from members into the Bicycle and Pedestrian project prioritization criteria. Changes were made to the connectedness as follows: Previous: "Does the project fill an identified gap in the existing pedestrian or bicycle network? Updated – "Does the project fill an identified gap in the existing pedestrian or bicycle network? Can be accomplished by infilling the existing route or by providing a comparable, alternative route. If the project is part of an important route an additional point is awarded. Mark Bernard stated that the additional points for school designations and transit stops aligns with the Statewide Transportation Improvement Funds (STIF). Feldmann asked if the distance was addressed as far as access to school or transit. Rohan responded that the specific distance was not address but it will be a discretionary decision. Feldmann also asked if points would be added to projects under public priority if a project received negative comments. Rohan replied that staff has not considered it and asked if changing "comments" to "significant support" would be more appropriate. Feldmann indicated that it would.	**Consensus to recommend the Bicycle and Pedestrian Plan Project Prioritization Criteria to the Policy Board with the change noted to #8 public priority.**
7. Jurisdictional	OCWCOG – Meltzer reported that this is Georgia Edward's last TAC	

Updates/Other Business	meeting and he thanked her for her long time participation.	
	City of Tangent – Joe Samaniego reported that the city is working on the Hwy 99E sidewalk project, working on applying for TGM grant fund for a TSP update, and working with Linn County on Safe Routes to School. Samaniego thanked Edwards for all her help bringing him on as the Administrator for the city.	
	ODOT – did not have an update.	
	Linn County – Knoll asked staff to add Daineal Malone's contact information to the list serves as she will be the future Linn County rep on the AAMPO TAC. The Tangent Road Improvement project is scheduled for 2023. The county has the grant agreement in hand for the Gold Fish Farm Road project. Survey work has started for the Gold Fish Farm Road Cox Creek bridge replacement that will be completed in tandem with the Gold Fish Farm Road project. There is hope that the street design will begin soon so that the county can began construction in 2022-2023. Work continues on the Mill City TIGER funded project. Also, have a Tangent Road project underway.	
	Millersburg – the city has a new Community Development Director; Matt Straight. Straight was previously the city of Millersburg's contract planner. There is an industry that has signed a lease with the Millersburg for a portion of property west of the city. The fire station project continues to move along very well.	
	Albany – Ron Irish stated that he is looking forward to working with the county on the coordination of the road design of Gold Fish Farm Road.	
	ODOT – Mark Bernard reported that it is the season for new agreements for the ODOT Public Transportation Division. The agreements will be in as of July 1st and are two year agreements. They cover rural, transit, and demand response for fixed route. There bathroom structure project for the Albany Transit Center is moving along.	

	Benton County – Chair Stockhoff reported that he and Laurel Byer met with the Albany city council in regards to the Gibson Hill project and advised that the county is committed to building that next summer. The county is also advancing on the North Albany section of the Corvallis to Albany trail (Thornton Lake to Rainwater). Once the trail is completed; it will be a critical piece of infrastructure for bike and peds. Benton County received $900,000 to help on the southern segment of the trail. There is hope in receiving additional funding for the middle section is the trail. The county has been executing agreements with ODOT for the next round of transit funding. Lastly, the rebranding of busses will be completed as well.	
8. Adjournment		**Meeting adjourned at 9:52 am.**

AAMPO Bicycle and Pedestrian Plan

Survey Findings

June 15th, 2021

About the Survey

35

Questions

4

Main Question Areas

Transportation Habits

Feelings about Active Transportation Modes

Infrastructure Satisfaction & Desires

Respondent Demographics

Survey promoted for just over one month to the Albany Area community

Bicycle Pedestrian Plan

Albany Area Metropolitan Planning Organization (AAMPO)

Home | About the Plan | Get Involved | Schedule

Survey
Walk and Bike Map
Community Meetings
Stay Informed

- Survey responses from March 18 – April 27, 2021
- Available in English & Spanish

- Promoted via:
  - Project website
  - Email blasts to partners and interested parties
  - Email blasts from partners to their constituents
  - Boosted Facebook posts

4

Who took the survey?

286

Responses

Who took the survey?

City of Residence	AAMPO Survey	Population
Albany	⬇ 76%	89%
Jefferson	⬆ 17%	6%
Millersburg	⬇ 1%	3%
Tangent	▬ 2%	2%
Other	4%	-

Who took the survey?

	Survey	AAMPO Population
Age		
18-34	⬇ **17%**	**31%**
35-64	⬆ **60%**	**49%**
65+	⬆ **23%**	**20%**
Sex		
Female	⬆ **57%**	**51%**

Who took the survey?
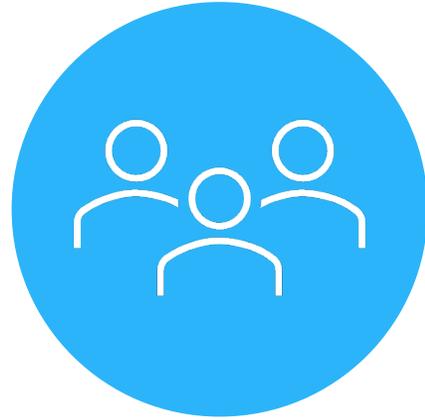
Race/Ethnicity	Survey	AAMPO Population
White	⬆ 92%	87%
Hispanic/Latinx	⬇ 5%	13%
Families with School-Aged Children	⬆ 38%	30%

8

Who took the survey?
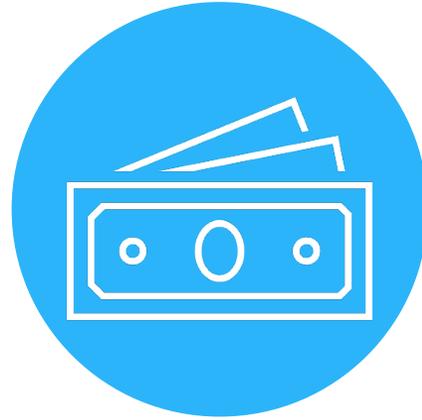
Income	AAMPO Survey	Population
Less than $49K	⬇ 25%	41%
$50K-99K	⬆ 43%	35%
$100K or More	⬆ 32%	24%

Transportation Habits
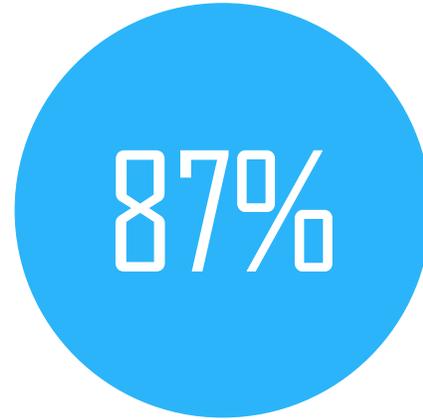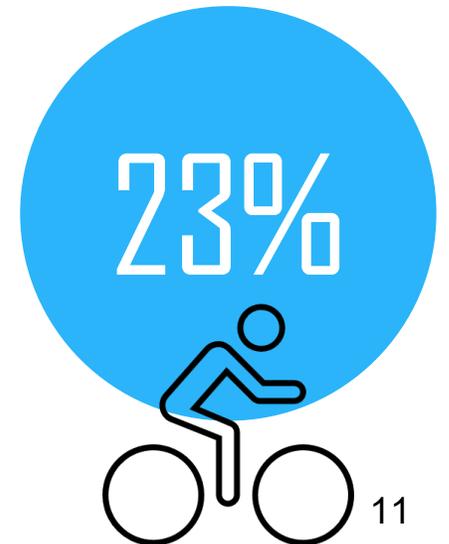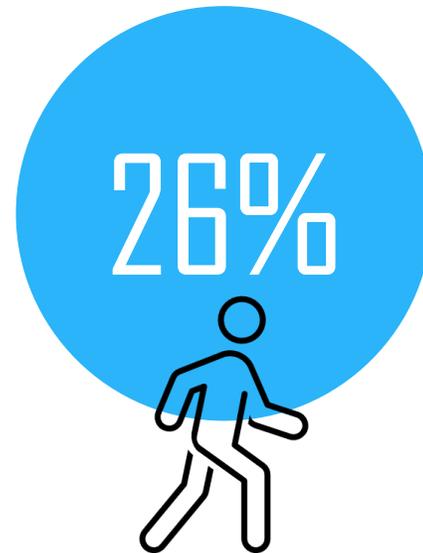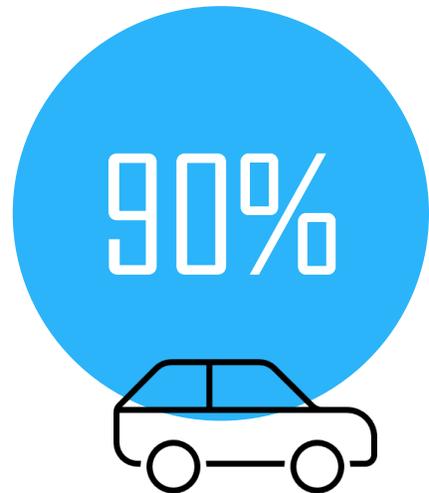
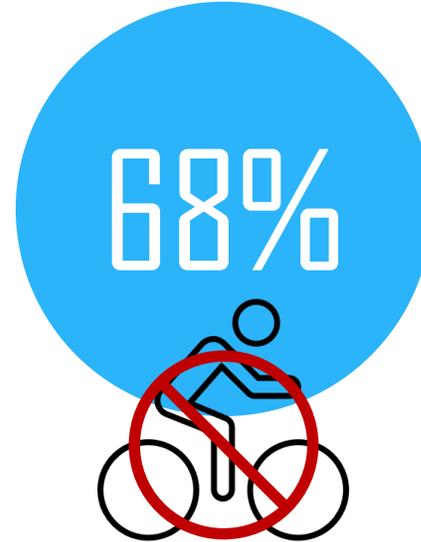*Respondents use active transportation modes for fun or exercise…*

54%

Walk for **fun/ exercise** *more than 2-3 times per wk*

20%

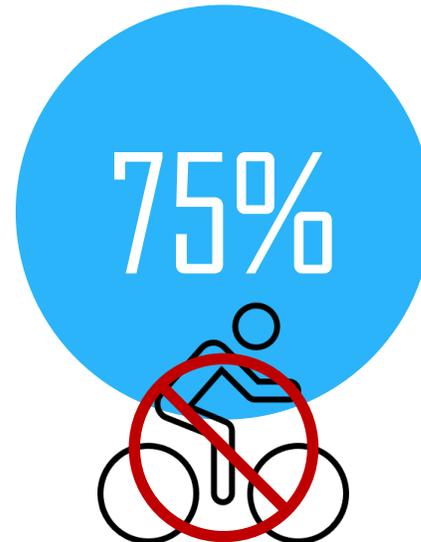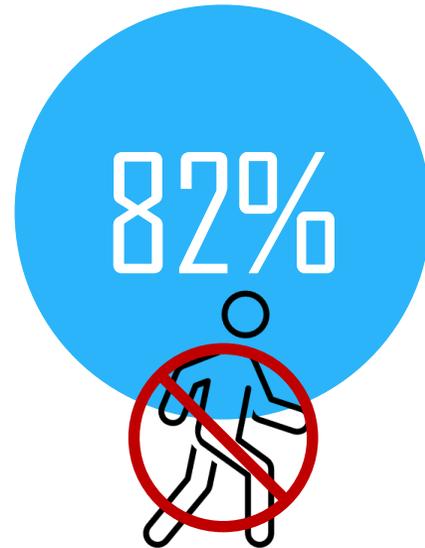Bike for **fun/ exercise** *2-3 times/wk or more*

...more than they do for **commuting** *or* **errands**.

46%

68%

Never walk or bike for **errands**

82%

75%

Never walk or bike for **work/school**

13

Feelings about Active Transportation Modes

Almost half or more respondents walk or bike for health reasons, recreation, or environmental benefits

Fun and exercise are respondents' main reasons for walking or biking.

15
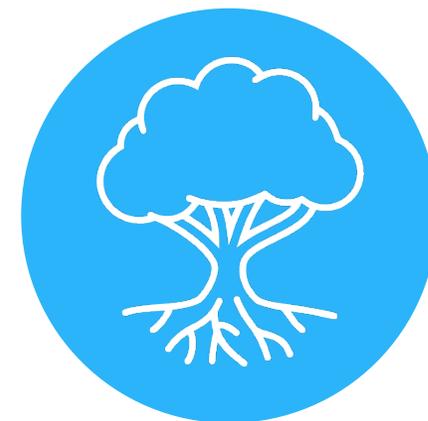
*Respondents are generally **less comfortable** biking than walking.*

72%
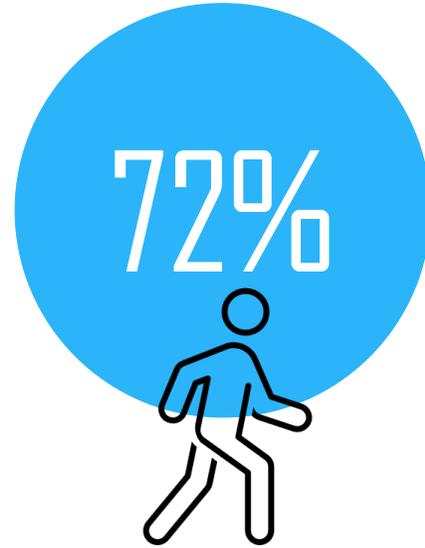
Are *comfortable* **walking** and *sharing space with cars* if there is safe infrastructure

45%
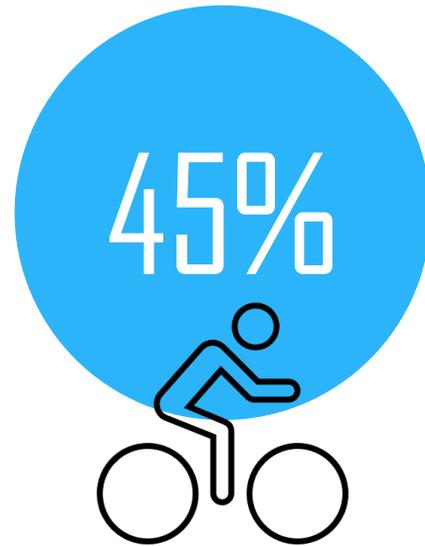
Would like to **bike**, but are *not comfortable sharing space with cars*

16

17

Top Barriers to Walking & Biking

Distance/ convenience and safety/infrastructure *are the two main reasons respondents do not walk or bike more.*

Destination too far

Lack of safe infrastructure

Driving is faster/more convenient
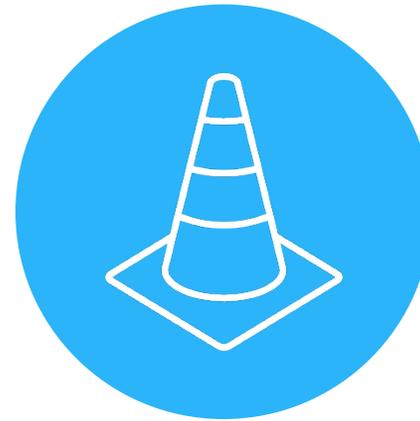
Infrastructure Satisfaction & Desires

56% of respondents **disagree** with the following statement:

"I am **satisfied** with the amount of **pedestrian infrastructure** in the greater Albany area."

Respondents are dissatisfied with the current level of pedestrian infrastructure in the Albany area.

| 6% | 20% | 18% | 38% | 18% |

■ Strongly agree ■ Agree ■ Neither agree nor disagree ■ Disagree ■ Strongly disagree

19

64% **of respondents** **disagree** with the following statement:

Respondents are dissatisfied with the current level of bicycling infrastructure in the Albany area.
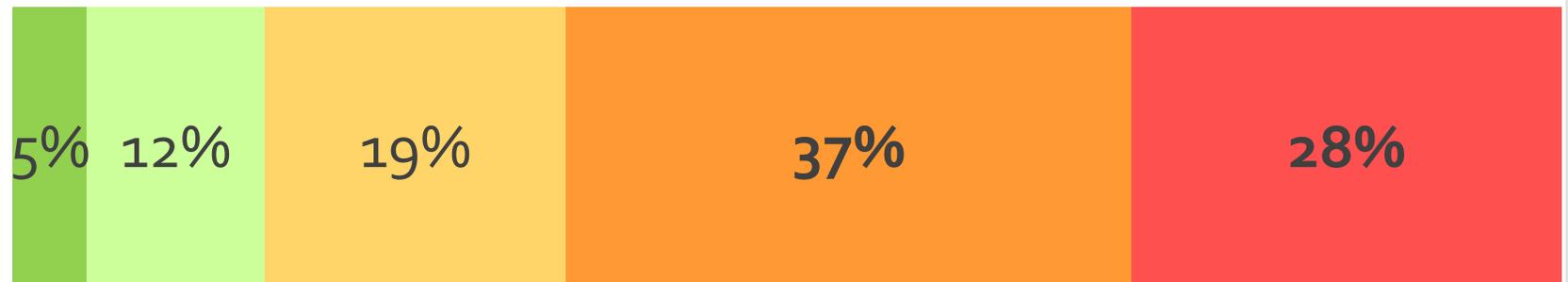
"I am **satisfied** with the amount of **bicycle infrastructure** in the greater Albany area."

| 5% | 12% | 19% | 37% | 28% |

■ Strongly agree ■ Agree ■ Neither agree nor disagree ■ Disagree ■ Strongly disagree

20

75% of respondents agree with the following statement:

Respondents support more funding for pedestrian infrastructure.

"I would **support** more funding for **pedestrian infrastructure** in the greater Albany area."

37%	38%	14%	7%	4%

■ Strongly agree ■ Agree ■ Neither agree nor disagree ■ Disagree ■ Strongly disagree

21

*Respondents support
more funding for
bicycle infrastructure.*

77% **of respondents** **agree** with the following statement:

"I would **support** more funding for **bicycle infrastructure** in the greater Albany area."
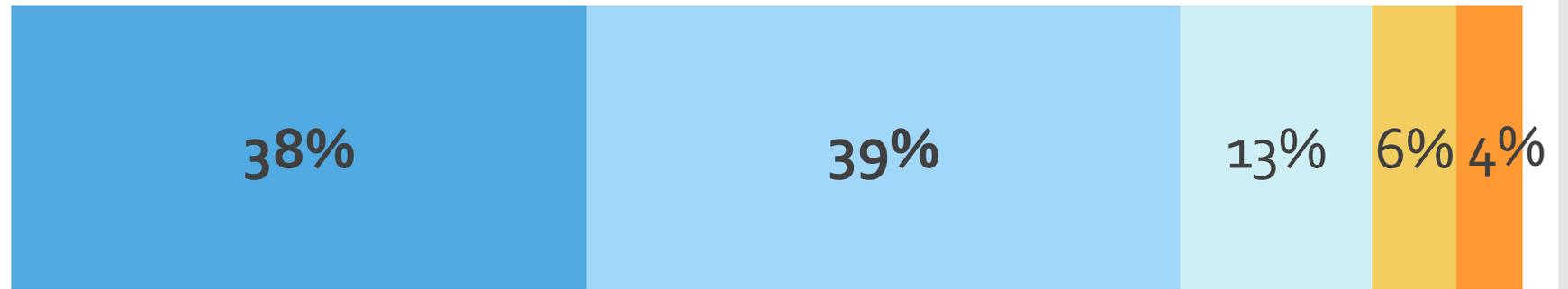
38%	39%	13%	6%	4%

■ Strongly agree   ■ Agree   ■ Neither agree nor disagree   ■ Disagree   ■ Strongly disagree

22

30

Respondents most want:

Generally, more respondents said **larger-scale infrastructure developments and improvements** *would lead them to walk or bike more often, compared with smaller-scale improvements.*
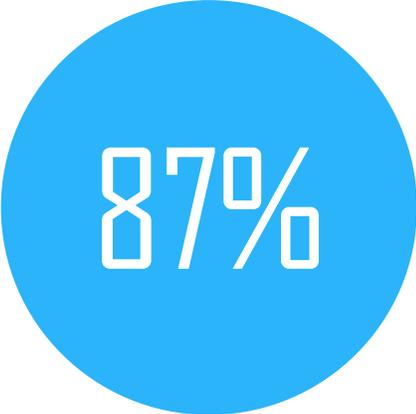
87% *More trails & paths*
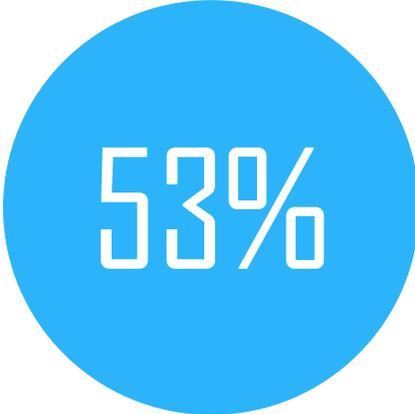
53% *Improved sidewalks*
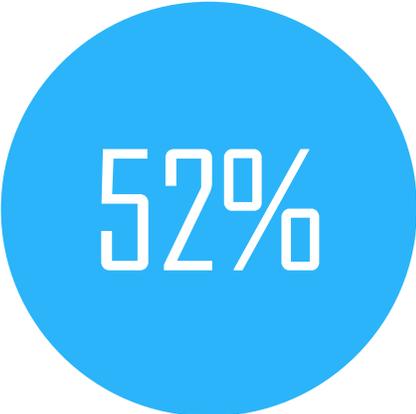
52% *More direct paths to destinations*

50% *More complete sidewalk coverage*

23

Questions or Comments?

Strategic Assessment of Transportation and Land Use Plan
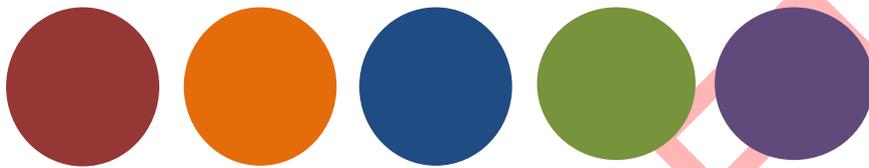
Albany Area Metropolitan Planning Organization

August 2021

About This Report

This report was prepared by staff from the Albany Area Metropolitan Planning Organization (AAMPO), working with staff from the Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD) with input from the AAMPO Technical Advisory Committee. The report summarizes the purpose, scope, and key findings from an analysis of the region's adopted land use and transportation plans prepared using ODOT's VisionEval model. The report is intended to help inform the region's decision-makers and the public as they consider how to update the region's land use and transportation plans.

Please note that this report is for informational purposes only and is not intended to make or express policy decisions by either the metropolitan planning organization or its member local governments.
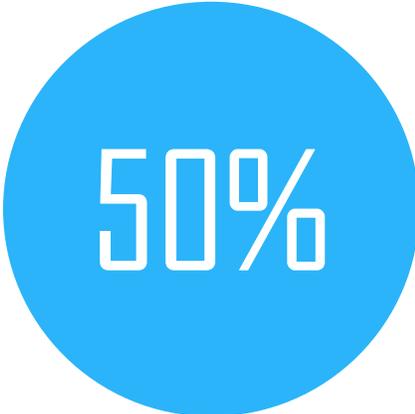
The Albany Area Metropolitan Planning Organization (AAMPO) coordinates regional transportation planning and programming for the Albany Area metropolitan area, which includes the cities of Albany, Jefferson, Tangent, and Millersburg as well as the unincorporated area of Linn and Benton Counties.

Further information about AAMPO is available on the web at: http://www.ocwcog.org/transportation/aampo/

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Table of Contents

Executive Summary

The Albany Area Metropolitan Planning Organization (AAMPO), working with staff from the Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD), engaged in a voluntary planning effort known as a Strategic Assessment of Adopted Local and Regional Land Use and Transportation Plans. The assessment estimates the likely outcomes of adopted plans and trends over the next 20 plus years, to the year 2040. The assessment estimates important outcomes of regional interest including livability, congestion, mobility, and reducing climate pollution.

This report outlines how the Strategic Assessment was prepared and presents the associated findings. In addition to estimating outcomes from adopted plans, the report identifies potential actions that the region may choose to consider to achieve outcomes that are important to the region. The report is intended to inform local officials and policy makers as they update land use and transportation plans and to help evaluate whether to conduct additional work.

Key Findings

By 2040, regional population growth, coupled with expected growth in household income will increase the demand for automotive travel in the Albany area. By implementing the current adopted plans, the region is likely to see a significant increase in traffic delay resulting from this population growth, even though vehicle miles traveled per capita decreases slightly when state-led pricing policies are included. Sensitivity tests show that increasing residential development in central Albany, increased implementation of active transportation infrastructure, and pricing policies are effective solutions to limit the increase in travel delay.

Considering land use, results from the Strategic Assessment demonstrate that providing more compact-livable neighborhoods with more housing units planned, especially middle housing, in mixed-use areas, will provide more housing options and increase biking and walking, thus leading to overall public health improvements.

Household travel costs are another important outcome to consider when assessing transportation strategies. Results show that household transportation operating costs are expected to decrease over time as more people switch over to newer, more fuel-efficient vehicles. However, these vehicles will be more expensive to purchase for the next few years, which may lead to an increase in ownership costs. For auto dependent households, keeping auto operating costs down with strategies such as shifting to new more fuel efficient vehicles or faster vehicle turnover will present challenges for low income households as ownership costs increase. Retaining affordable housing in mixed-use areas that provide more affordable travel options can also help households retain accessibility.

By implementing adopted plans in combination with state-led actions implemented at the local level, AAMPO can expect a 16% greenhouse gas reduction by 2040. However, much more work will be needed at the state and local level to reach the 20% greenhouse gas reduction target for the region. While no one policy on its own meets the target, sensitivity testing results include over 1,000 scenarios that can help the region achieve 20% greenhouse gas reduction. The resulting air quality improvements provide key health benefits for all residents. The improved fuel efficiency of future vehicles also results in lower annual fuel consumption, energy use, as well as keeping more money within the local economy.

Chapter 1: Strategic Assessment Purpose

The Strategic Assessment was conducted to estimate the outcomes of adopted land use and transportation plans and current trends in the Albany metropolitan area. The assessment estimates travel, emissions, household transportation costs, energy use, health-related impacts, and other outcomes. Overall, the assessment provides a picture of what the area may look like given plans, recent trends and information about future conditions.

The results of the assessment will help local governments better understand issues and options as they review and update the area's transportation plans and make investment decisions. In short, this Strategic Assessment evaluates the region's adopted plans, assesses how far those plans help to reach the region's identified goals over the next 20+ years, especially when combined with state-led policies, and identifies alternative paths to achieve future goals. Largely a technical exercise, the assessment provides information to help inform updates or implementation of existing land use and transportation plans, and tests their resilience to future uncertainties.

Changing Circumstances, New Challenges

While AAMPO's Strategic Assessment is prompted by the state's interest and efforts to reduce climate pollution, it is intended to provide information about a range of other important regional issues. For example, the Strategic Assessment also evaluates household spending on transportation; mobility measures such as vehicle miles traveled and delay; and public health indicators, such as air quality, and trips made by walking and biking. Additionally, evaluation of future risks form various combinations of energy prices, vehicle adoption and state-led pricing policies were evaluated. This information provided by the analysis can help the region evaluate how well existing plans prepare the region and its residents for a changing future.

Assuring Adequate Transportation Funding

Maintaining and expanding the transportation system will require more revenue than current funding arrangements generate. Recent trends also show that people are driving more fuel-efficient vehicles, which reduce transportation revenue from gas taxes. While driving and efficient vehicle trends may reduce infrastructure needs per person, population growth will increase the overall demand on the region's roadways, and the gap between available funding and the improvements called for in transportation plans will continue to grow over time. Public support for increased fees or taxes is also uncertain; in short, there is a perfect storm of declining revenues and increasing costs, at the same time that plans call for more resources.

Carefully integrating planning for land use with planning for streets and transit allows for land use patterns that make efficient use of existing investment in the transportation system. Land use and transportation plans that make communities more livable by improving public health and keeping transportation affordable may help to make a business case that expanded transportation funding will generate a high return on investment.

Chapter 2: Regional Context

The AAMPO planning area is in Oregon's Willamette Valley, in fertile farmland between the Cascade Range and the Coast Range. AAMPO sits 70 miles south of Portland and 45 miles north of Eugene along the Interstate 5 corridor. Key economic drivers in the AAMPO area have historically included agriculture and wood products manufacturing, although this has expanded to include rare metals manufacturing, finished building products, and food processing. AAMPOs location along the I-5 corridor has also made the area attractive for warehousing and transportation services. Over the next 20 years, the area's population is expected to grow by over 28%.
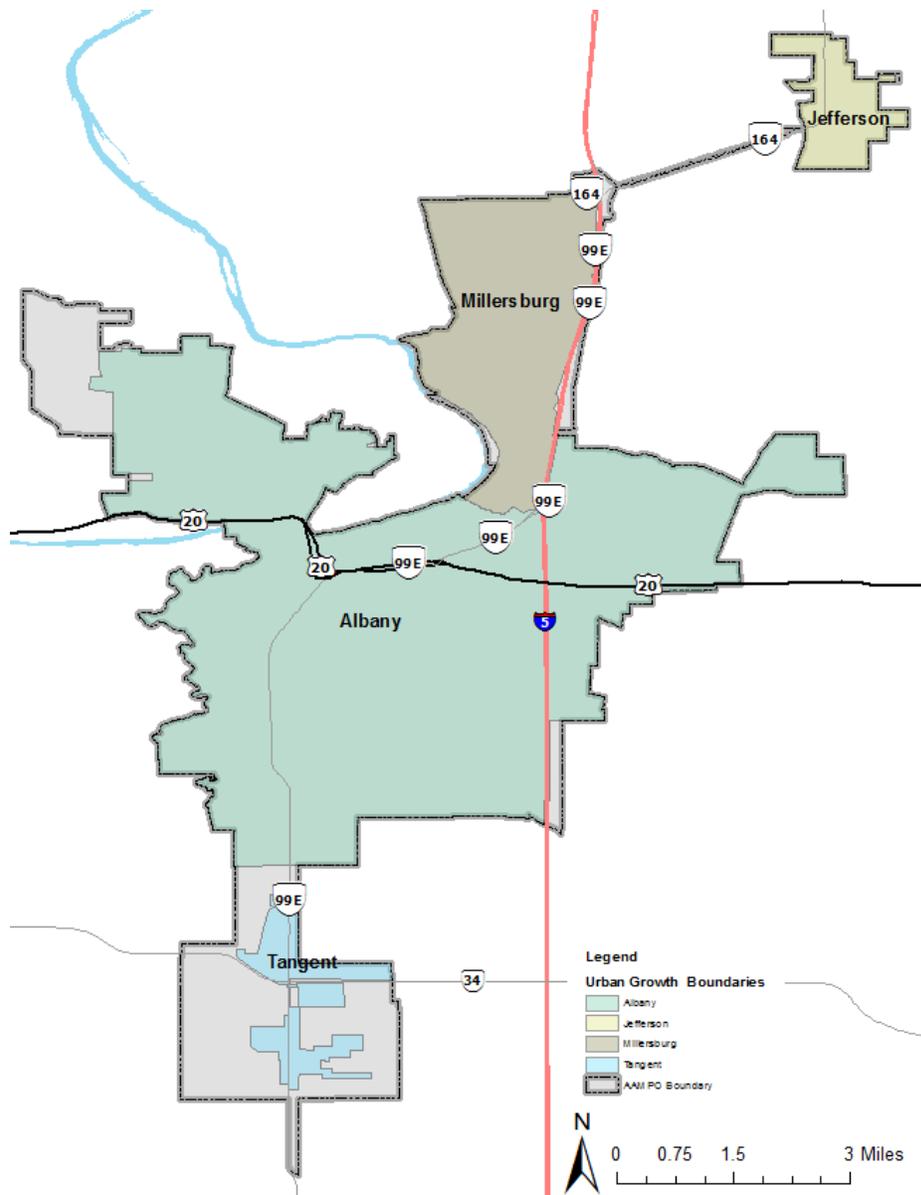
Figure 1. AAMPO Strategic Assessment Study Area

The issue areas considered in the Strategic Assessment, including output measures and key outcomes from the analysis, in many cases align with the proposed goal areas and performance indicators from AAMPO's 2040 RTP. Table 1 below identifies the Strategic Assessment issue areas and proposed RTP goals addressed by the Strategic Assessment.

Table 1. Strategic Assessment Issue Areas and AAMPO RTP Goals

Strategic Assessment Outcome Measures	RTP Goals and Indicators Related to Strategic Assessment Issue Areas

• **Mobility**
  - Daily Vehicle Miles per Capita
  - Travel Delay
  - Transit Ridership
 	
• **Livability**
  - Household travel costs
  - Annual Household Vehicle Cost
  - Household Vehicle Cost as a Percent of Low Income Households' Income
  - Single-family and multi-family housing mix
  - Population in mixed-use areas or activity centers
 	
• **Environment**
  - Greenhouse gas emissions
  - Fuel consumption
	• **Goal 1**: *Provide for a balanced and multi-modal regional transportation system that meets existing needs and prepares for future needs.*
	
	• **Goal 2**: *Enhance regional and intermodal connectivity for movement of all modes within the MPO as well as between the MPO and other areas.*
	
	• **Goal 3**: *Increase the safety and security for all travel modes on the regional system.*
	
	• **Goal 4**: *Protect the natural and built environment.*
	
	• **Goal 5**: *Preserve the mobility of existing freight routes to ensure the efficient movement of goods throughout the region for existing freight movements and future opportunities.*
	
	• **Goal 6**: *Demonstrate responsible stewardship of funds and resources.*
	
	• **Goal 7**: *Coordinate transportation and land use decision-making to foster collaboration and to encourage development patterns which increase transportation options, encourage physical activity, and decrease reliance on the automobile.*
	
	• **Goal 8**: *Provide for a transportation system with positive personal health impacts.*
	
	• **Goal 9**: *Provide for a diversified transportation system that ensures mobility for all.*
	
	• **Goal 10**: *Provide an open and balanced process for planning and developing the transportation system.*
	
	• **Goal 11**: *Provide a coordinated and integrated transit program to provide a safe, efficient, and affordable sustainable transportation option.*

Chapter 3: Analysis

The Strategic Assessment relies on the VisionEval planning model. There are three main steps to the Strategic Assessment process:

1. Establishing the study area and districts;
2. Collecting input data for the base year and future year in a reference scenario and alternative scenarios; and
3. Running and interpreting the VisionEval outputs.

Figure 2 outlines the units of analysis used for the AAMPO Strategic Assessment, which defines the extent of the area that is included in the model. While many VisionEval inputs utilize values that are applicable to the entire region, several Vision Eval inputs require more localized information. The AAMPO service area was segmented into 16 districts, each containing a cluster of Traffic Analysis Zones (TAZ) from the region's travel demand model. The districts also align within the eleven zones delineated in the Regional Plan and capture the mix of demographic and land use conditions across the region.
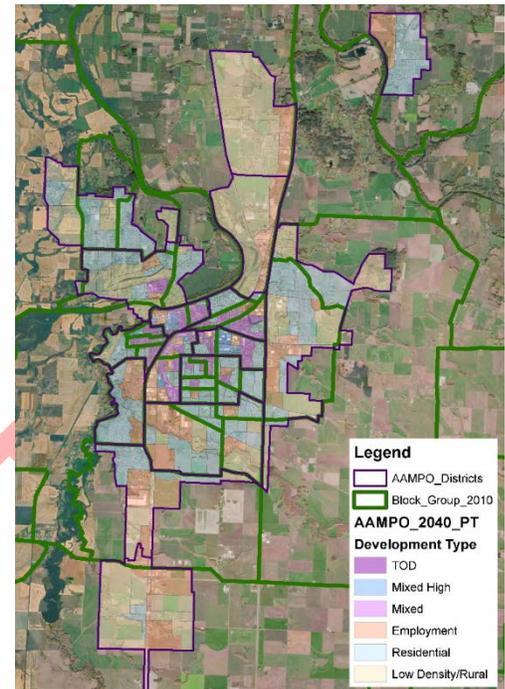
Figure 2. Strategic Assessment Districts

Inputs

Inputs and assumptions for the VisionEval are drawn from a number of sources, including:

- Census data
- Benton, and Linn Counties population forecast
- Adopted local plans, including:
  - Comprehensive Plans and zoning from Albany, Jefferson, Millersburg, Tangent, Benton, and Linn Counties
  - 2018-2040 AAMPO Regional Transportation Plan
- Corvallis-Albany-Lebanon Model (CALM) travel demand model, 2010-2040 RTP scenarios
- Albany Transit System Transit Development Plan
- ODOT VisionEval statewide scenario assumptions retained for GHG Monitoring purposes.

Future state level policies and conditions are drawn from state-level sources including DLCD's Metropolitan Greenhouse Gas Reductions Target Rule (2017) and ODOT's Statewide Transportation Strategy (STS) (2013). These STS Vision assumptions used in this report include ambitious policies and assumptions involving high transportation pricing, high energy prices, federal and state fuel efficiency standards, electric vehicle adoption and alternative fuels use. Where local adopted plans were unclear about future policies or conditions, AAMPO staff consulted with local jurisdiction staff to estimate likely future conditions and expected funding levels. For example, the region's long-term plans for transit do not reflect likely expansion of transit service. The inputs assumed in the adopted plans analysis is shown in Table 3 below.

Table 3. Summary of VisionEval Inputs for Reference Scenario of Adopted Plans

Category		Measure	2010	2040[1]	
Regional Context		MPO population	56,700	72,610	28%
		Average household size / % single-person household	2.55 / 24%	2.55 / 24%	n/a
		Average annual per capita income(2005$)	$25,503	$32,096	26%
		Household Plug-in/battery electric vehicles (by sales year)	0%	40% (16% stock)	n/a
		Average household Vehicle Age (years), auto/light truck-SUV	10.0	9.5	-4%
		Light truck-SUV Share of household vehicles	54%	39%	n/a
		Fuel economy for household vehicles (miles per gallon)	23.1	55.7	141%
		Bus vehicle mix (Internal combustion/Hybrid/Electric) Bus fuels (% Diesel/Gas/CNG)	100/0%/0% 100/0%/0%	100/0%/0% 100/0%/0%	n/a
Pricing		Energy price (fuel per gallon/electricity per kilowatt-hour) (2005$)	$2.43/$0.08	$5.95/$0.31	144%/ 287%
		State annual vehicle fees (2005$)	$35	$54	54%
		Pay as you drive insurance (% households at $0.05/mi)	0%	100%	n/a
		Federal/state Gas taxes (dollar per gallon)(2005$)	$0.385	$0.484	26%
Community Design	**Parking**	Share of workers subject to parking fee	2.6%	6.5%	n/a
		Avg. daily parking fee (in districts that charge)(2005$)	$1.00	$2.00	100%
	Land Use	Households in Urban Mixed Use Areas	5.2%	5.0%	n/a
		Multi-family units – 18% of new units	5,320	6,870 (total)	29%
	Infra-structure	Share of single occupant vehicle trips diverted to bicycles	2%	2%	n/a
		Transit service (fixed route in-service miles)	120,620	270,820	124%
		Freeway & Arterial Roadway miles	168.0 (35 Fwy + 133	173.7 (35 Fwy + 138.7)	3%
Marketing & Incentives	**Mode-shift**	Share of Workers covered by transportation demand management programs	0%	4.6%	n/a
		Share of Households in individualized marketing programs	1.0%	2.6%	n/a
	Driving Efficiency	ITS Program Index: Ramp Metering coverage	0%	0%	n/a
		ITS Program Index: Incident Response coverage	0%	0%	n/a
		ITS Program Index: Signal Coordination coverage	26%	40%	n/a
		ITS Program Index: Access Management coverage	23%	50%	n/a

Note: All dollars values are reported in 2005 dollars, accounting for inflation.

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Chapter 4: Findings

Adopted Plans

The Strategic Assessment quantifies the effect of implementing plans and policies using mobility, economy, land use, environment, and energy indicators. In other words, if the Albany Area metropolitan area builds out its current adopted plans in combination with ambitious state-led policies, the region can expect the type of outcomes that are outlined in Table 4 (at the end of this section). The results contrast current conditions with expected outcomes from implementation of adopted plans and the continuation of expected trends in the year 2040 (the horizon year of the current RTP).

Mobility

The region continues to grow and attract new residents (29% more by 2040), which will put pressure on the existing transportation system to accommodate the increased demand. Investments in transit when combined with supporting state pricing actions leads to decrease in VMT per capita (20.9 to 19.2 miles per day). However, as a result of population growth pressures, the region can expect a more than 79% increase in traffic delay, from 113 daily vehicle delay hours in 2010 to 202 hours in 2040.

> **Relation to RTP Goals**
>
> *The findings related to mobility and congestion (delay) present a challenge for the region to meet RTP Goals 2 and 5, which identifies freight mobility as a key element to support local and regional economic opportunities.*

Investments in the regional transit network identified in the Transit Development Plan and supporting funding through HB 2017 drive an increase in transit ridership. Transit trips are expected to increase by 52% from 3,900 trips per day in 2010 to 5,930 in 2040.

Livability

The costs to travel are certain to undergo change by 2040. The key change is that the future shift to more fuel efficient vehicles (23 to 56 MPG) and electric vehicles, is countered by assumed ambitious state-led pricing policies and doubling of fuel prices by 2040 resulting in higher overall operating costs (40%). Meanwhile, rising incomes (24%) enable local residents to purchase these new fuel-efficient vehicles.

The assessment shows that, with a healthy economy and rising incomes, total household vehicles costs as a share of household income are expected to decline for all households including low income households.

> **Relation to RTP Goals**
>
> *Household transportation cost findings address RTP Goal 11: To Provide a coordinated and integrated transit program to provide a safe, efficient, and affordable sustainable transportation option. Keeping household transportation costs low allows for more disposable income and keeps more money in the local economy.*
>
> *Vehicle operating costs are expected to decrease, while ownership costs increase. This indicates the need for affordable transportation options, transit-supportive-development, and alternatives to household vehicle ownership to achieve reductions in overall household travel costs.*

Environment

More ambitious state policies and federal fuel efficiency standards means vehicles on the road in 2040 will use significantly less energy (-52% annual gallons consumed by all vehicles), with an anticipated doubling of vehicle fuel efficiency (from a 23 miles per gallon (MPG) average in 2010 to 56 MPG in 2040).

The Strategic Assessment shows that by implementing the current local and regional adopted plans combined with state led actions and federal fuel efficiency standards, the Albany Area can expect reduced dependence on foreign oil and a significant reduction in greenhouse gas (greenhouse gas) emissions by 2040.

Total greenhouse gas emissions from household vehicles are expected to drop by about 80% with combined state and local actions, due mostly to expected improvements in vehicle technology and fuels, and changes to the vehicle fleet between 2010 and 2040.

In short, currently adopted local plans, in combination with state actions called for in the Statewide Transportation Strategy, are unlikely to get the region to the 20% reduction target. However, the sensitivity tests in the following section identify combinations of strategies beyond adopted plans that improve the region's ability to achieve a 20% greenhouse gas reduction by 2040.

Relation to RTP Goals

The findings related to greenhouse gas emissions indicate that the AAMPO region's adopted plans do, only when combined with state led actions, reduce greenhouse gas emission, as expressed in RTP Goal 4: To protect the natural and built environment. Although driving is expected to increase, vehicle and fuel efficiency enhancements precipitate gains in the region's air quality.

Relation to State GHG Target

Considering GHG emissions reductions relative to the state target of 20% for the Albany Area, which measures reductions above and beyond improvements in fleet, fuels, and technology, the expected per capita reductions are about 16% when local plans are considered in combination with strategies and actions identified in the Statewide Transportation Strategy (i.e. ambitious pricing such as a carbon tax, and comprehensive system operations management techniques).

Table 4. Summary of VisionEval Outputs, Adopted Plans Analysis

Category	Output	2010	2040[1]	% Change
Mobility	Daily vehicle miles traveled per capita	20.9	19.2	-8%
Mobility	Annual walk trips per capita	106	115	8%
Mobility	Annual short trip miles traveled by bicycle per capita	28.9	29.4	2%
Mobility	Daily Transit Trips	3,900	5,930	52%
Economy	Daily light duty vehicle delay (hours)	113	202	79%
Economy	Annual household vehicle operating costs (state-led pricing fuel, policies, parking) (2005$)	$5,600	$7,860	40%
Economy	Annual household vehicle cost (ownership + operating) (2005$)	$10,120	$12,500	24%
Economy	Total Household Vehicle Costs as a share of income (all households) Total Household Vehicle Costs as a share of income (low income, <=$20k)	14.0% 25.9%	13.6% 24.2%	n/a
Land Use	Households living in mixed-use areas[3]	5.2%	5.0%	n/a
Land Use	Housing type (Single-family : Multi-family)	3.2: 1 (76%)	3.5: 1 (78%)	n/a
Environment	Reduction in greenhouse gas emissions beyond Vehicles and Fuels (VMT per capita) from implementation of locally adopted plans and potential state-led actions/conditions.[2]	n/a	n/a	-16.1% 2005-2040
Environment	Annual greenhouse gas emissions per capita from all vehicles including reductions from vehicle and fuels (million metric tons)	0.272	0.096	-80%
Environment	Bus greenhouse gas emission rates (CO_2e grams per mile)	2,640	1,370	48%
Energy	Annual all vehicle fuel consumption (million gallons)	22.4	10.8	-52%
Energy	Annual external household social costs per mile[2] or per HH (unpaid except under 2040 state-led pricing actions)	$1,110	$670	-40%

Note: All dollar values are reported in 2005 dollars, accounting for inflation.

[1] 2040 assumes State-Led Actions and context variables, including ambitious pricing and vehicles/fuels adoption, and high energy prices.

[2] Social costs are the unintended costs of transportation such as health, safety, noise, water pollution, and the costs of maintaining secure energy sources globally. Such costs to society are not typically paid by motor vehicle drivers, instead they incur costs to society indirectly (e.g. cost of congestion or delays caused by traffic incidents).

[3] Urban mixed-use definition is based on the 2001 National Household Travel Survey measure of the block group level urban/rural indicator. This measure developed by Claritas uses the density of the tract and surrounding tracts to identify the urban/rural context of the tract and identified 4 categories: urban, suburban, second city, town and rural. The urban category roughly corresponds to the inner portions of urbanized areas that are generally characterized by more urban and mixed-use development.

Impacts of Policy Alternatives

The analysis of the adopted plans presented above (Table 4) estimates where the region is now, and where it is likely to be in the future, based on financially constrained adopted plans, significant state-led actions, and other future trends. The natural question that follows is, what will it take to further improve outcomes of importance to the community, such as mobility, livability, emissions, and public health. Sensitivity testing allows the region to evaluate how changes to key factors or policies within local control could affect expected outcomes.

To better understand the possibilities and challenges facing the region, over 1,000 possible scenarios were analyzed. Sensitivity testing analyzes different combinations of local policies to identify the combinations that are most effective in achieving different outcomes. Sensitivity tests represent alternative futures and demonstrate how different choices about regional growth and investment, beyond those in the region's adopted plans, affect various outcome measures.

Table 5 outlines the policy bundles and levels of ambition evaluated as part of sensitivity testing. Due to the multiple combinations that could potentially be tested in these alternative scenarios, the policies and levels of ambition were limited to those outlined in the table. A summary of the local policy alternatives that were tested are shown below.

Policy Alternatives Tested

Land Use
- Level 1: Adopted Plans = Adopted comprehensive plans
- Level 2: Land Use Increase = Increased growth in multi-family housing in central Albany

Transit
- Level 1: Adopted Plans = Adopted 2040 Transit Development Plan
- Level 2: Transit Increase = Doubling the service miles of 2040 Transit Development Plans
- Level 3: Transit High = Eugene/Springfield level of service, Statewide Transportation Strategy goal

Active Transportation - Percent of Single Occupancy Vehicle trips diverted to biking or scooters
- Level 1: Adopted Plans = 2% (Adopted Transportation Systems Plans)
- Level 2: Active Transportation Increase = 9% (Corvallis area levels)
- Level 3: Active Transportation High = 23% (Statewide Transportation Strategy goal)

Transportation Options (TO)- Transportation Demand Management programs
- Level 1: Adopted Plans = Work and Home programs for downtown Albany area
- Level 2: TO Increase = Work and Home programs for entire region

Local Pricing- Parking Pricing and Local Gas Taxes
- Level 1: Adopted Plans = Trend Scenario parking prices and gas taxes
- Level 2: Parking Increase = Increased parking price in downtown Albany area, Worker parking programs
- Level 2: Local Gas Tax = Increased local gas tax

Table 5. Policy Bundles Evaluated as Part of Sensitivity Testing

Category		Adopted Plans		More or [Less] Ambitious Sensitivity Tests
		2010 Inputs	2040 Inputs	Alternate 2040 Inputs
	Vehicles	• HH vehicle mix: 0% electric vehicles in 2010 • 10.0 year vehicle age, 54% household light trucks	• HH vehicle mix: 40% electric vehicle sales in 2040[1] • 9.5 year vehicle age, 39% household light trucks/SUV[1]	• HH vehicle mix: 19% electric vehicle sales in 2040[2] • 10 year vehicle age, 54% Household light trucks/SUV[2]
	Fuels	Statewide Gas-Ethanol E10, Diesel-biofuel B5 standards	• 20% fuel carbon intensity drop by 2035[1]	• Oregon Clean Fuels Program[2] (8% drop by 2025)
Pricing	Energy Costs	• Electricity cost: $0.08/kWh[3] • Fuel Cost: $2.43/gallon[3]	• Electricity cost: $0.31/kWh[1,3] • Fuel Cost: $5.95/gallon[1,3]	• Electricity cost: $0.14/kWh (STS vision + renewables) [2,3] • Fuel Cost: $2.43/gallon[2,3]
Pricing	Per Mile Fees	• Federal/State gas tax: $0.385/gallon [3] • No VMT fee, social cost recovery fee, or use of pay as you drive (PAYD) insurance	• Federal/State gas tax: $0.48/gallon[1,3] • PAYD: 100% use PAYD insurance at $0.05/mile[1,3] • VMT fee: $0.035/mile[1,3] • Social Cost Recovery, roughly equivalent to VMT fee.	• Federal/State gas tax: $0.48/gallon[2,3] • PAYD: 14% use PAYD insurance at $0.05/mile[2] • No VMT Fee or Social Cost Recovery[2]
Community Design	Local Pricing Policies	• 2.6% of Workers pay for parking region-wide • 0% Non-work trips subject to parking fee • Avg. daily parking fee (in areas that charge)[3]: $1	• 6.5% of Workers pay for parking region-wide • 0% Non-work trips subject to parking fee • Avg. daily parking fee (in areas that charge)[3]: $2	• Add $0.15 local gas tax to state/federal taxes[3] • 12.4% of Workers pay for parking region-wide • Increase non-work trips subject to parking fee: 0% • Avg. daily parking fee (in areas that charge)[3]: $4
Community Design	Land Use	• 2010 Census land use inputs (2018 RTP) • 77% existing units in region are single family • 5.2% Households in urban Mixed Use areas	• Adopted plans land use inputs for travel model (2018 RTP) • Urbanized land grows at 15% of population growth • 82% of new units in region are single family • 5.0% Households in urban Mixed Use areas	• 30% of new housing is redirected from the fringe to central Albany. • 46% of new units in region are single family • 7.1% Households in urban Mixed Use areas
Community Design	Modes	• Bus service: 120,620 miles (2.1 miles per capita) • Bus 100% Diesel, B5[2]	• Bus service: 270,820 miles (3.7 miles per capita) • Bus 100% Diesel, B10[2]	• Double service to 541,350 miles (7.5 miles per capita) • 50% HEV buses and van fleet • Bus 100% CNG, assumed to be renewable (RNG)[2] • Quadruple service to 1,067,670 miles (14.7 miles per capita) (STS vision) • 100% battery electric bus and van fleet
Community Design	Modes	• SOV diversion (Single-occupancy-vehicle trips less than 20 miles round trip) to light vehicles (e.g., e-bikes, bikes, scooters): 2%(OHAS)	• SOV Diversion to light vehicles/bikes: 2%	• Quadruple SOV diversion to light vehicles/bikes: 9% • Ambitious Electric Bike shift, SOV diversion: 23%
Community Design	Modes	• Road Network: 35 Arterial, 133 Freeway lane-miles	• Road Network: 35 Arterial, 133 Freeway lane-miles	• Road Network: 42 Arterial, 160 Freeway lane-miles
Community Design	Demand Management	• 0% Workers in employer-based transportation demand management (TDM) programs region-wide • 1% Households in individualized marketing (IM) region-wide	• 4.6% Workers in TDM programs region-wide • 2.6% Households in IM Programs region-wide	• 14.0% Workers in TDM program region-wide • 8.0% Households in IM Programs region-wide

Note: All dollar values are reported in 2005 dollars, accounting for inflation.

Relative Impact of Policy Alternatives

A key result of the sensitivity tests is to better understand the relative impact of more ambitious policies beyond those in current local adopted plans. Figure 3 below highlights various community goals (columns) and the relative impact of policies (bars) in reaching that goal. In each column, the bars indicate the impact of each policy, relative to the impact of other policies in that column.

The findings reveal that increasing compact development in the central areas of Albany and investing in active transportation are key strategies to meet the region's goals.

Reducing VMT

Increasing development and middle housing in the central areas of Albany and active transportation investments have the strongest influence on reducing Vehicle miles traveled (VMT). VMT tracks closely to delay. Aggressive state-led pricing strategies and high fuel prices assumed in the reference dampen further effects of new local pricing policies that are also effective in bringing down VMT.

Increasing Transit Ridership

Increasing development and middle housing in the central areas of Albany and increased funding for transit operations have the strongest influence on increasing transit ridership.

Reduced Vehicle Delay

Increasing development and middle housing in the central areas of Albany and active transportation investments have the strongest influence in reducing vehicle delay. The region's growth in auto delay (113 to 202 daily hours of delay) will require multiple strategies to keep delay in check. Pricing strategies also have a strong effect to limit the growth of delay.

Reduced Climate Pollution

Increasing development and middle housing in the central areas of Albany and active transportation investments have the strongest influence in reducing greenhouse gas emissions. Pricing strategies at both the state and local level have a strong effect on reducing pollution. Cleaner transit vehicles and fuels also improves health for active modes on surface streets.

Figure 3. Relative Impacts of Policies by Outcome Measures

Note: Policies (bars) within each outcome (column) reflecting relative impact for a single outcome. Policy bars should not be compared across outcomes (e.g. land use is not necessarily more effective in reducing in reducing greenhouse gas emissions than travel costs). Effects reflect the policy levels analyzed and changes relative to a reference scenario that includes ambitious pricing and fuel price forecasts, not the generalized potential of the action under any conditions.

Combination of Policies Alternatives to Meet Regional Goals

The assessment shows that while the adopted plans alone will not meet the region's greenhouse gas reduction target, several combinations of policy alternatives will meet or exceed the 20% reduction of greenhouse gas emissions by 2040. Figure 4 shown below begins with the regions adopted plans reference case at the bottom in grey. The results of additional combinations of alternative policies are shown in the bars above this reference case to demonstrate the additional impacts towards achieving the reduction target.

The findings demonstrate that when compared to the reference case of locally adopted plans and ambitious state-led policies:

- Increased Density (including middle housing) or Alternative Mode Investment (a combination of increased bike, TDM, and transit) individually achieve similar progress, moving half the distance to the regional GHG target (nearly 18% in light yellow bars)
- Increased Density and Alternative Mode Investment together results in emission levels just shy of the regional GHG target (19.7% in dark yellow)
- Combining Increased Density, Alternative Mode Investment and Local Pricing, either parking or local gas tax, meets or exceeds the regional GHG target (orange)
- Pushing to the highest level Most Ambitious Polices across Increased Density, Alternative Mode Investment and Local Pricing combined with the reference assumptions on more the ambitious federal and state lead actions exceeds the target (23.2% in blue bar)
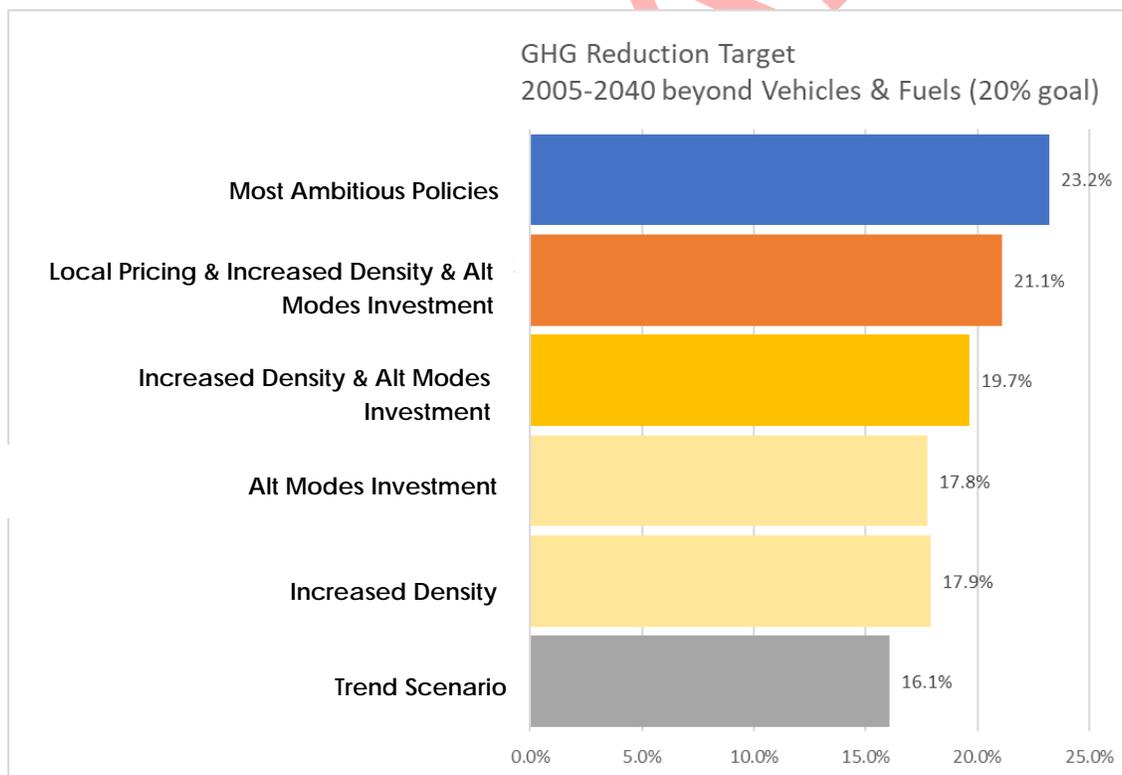
Figure 4. Individual Effects of Policy Bundles on greenhouse gas reduction

These same scenarios have varying impacts on other regional goal outcomes shown in figure 5 below. Policies and programs that work to reduce greenhouse gas emissions also positively impact other regional outcomes of importance. Figure 5 shows more ambitious local policies combined with pricing strategies lead to the most substantial reductions in VMT per capita, delay, and increasing transit ridership. Household travel costs also decrease from the adopted plans level in each scenario.

Combination Scenario Impact on AAMPO Goal Areas

Legend:
- Reference
- Trend Scenario
- Increased Density
- Alt Modes Investment
- Increased Density & Alt Modes Investment
- Local Pricing & Increased Density & Alt Modes Investment
- Most Ambitious Policies

Figure 5. Combination of Policy Alternative on AAMPO Goal Areas

Future Uncertainty and Risk

Future uncertainties, some within and some beyond the region's control, will impact the effectiveness of adopted plans. Regional context, such as population growth, household size, and economic health and income growth, in addition to fuel price and funding for local programs (e.g. g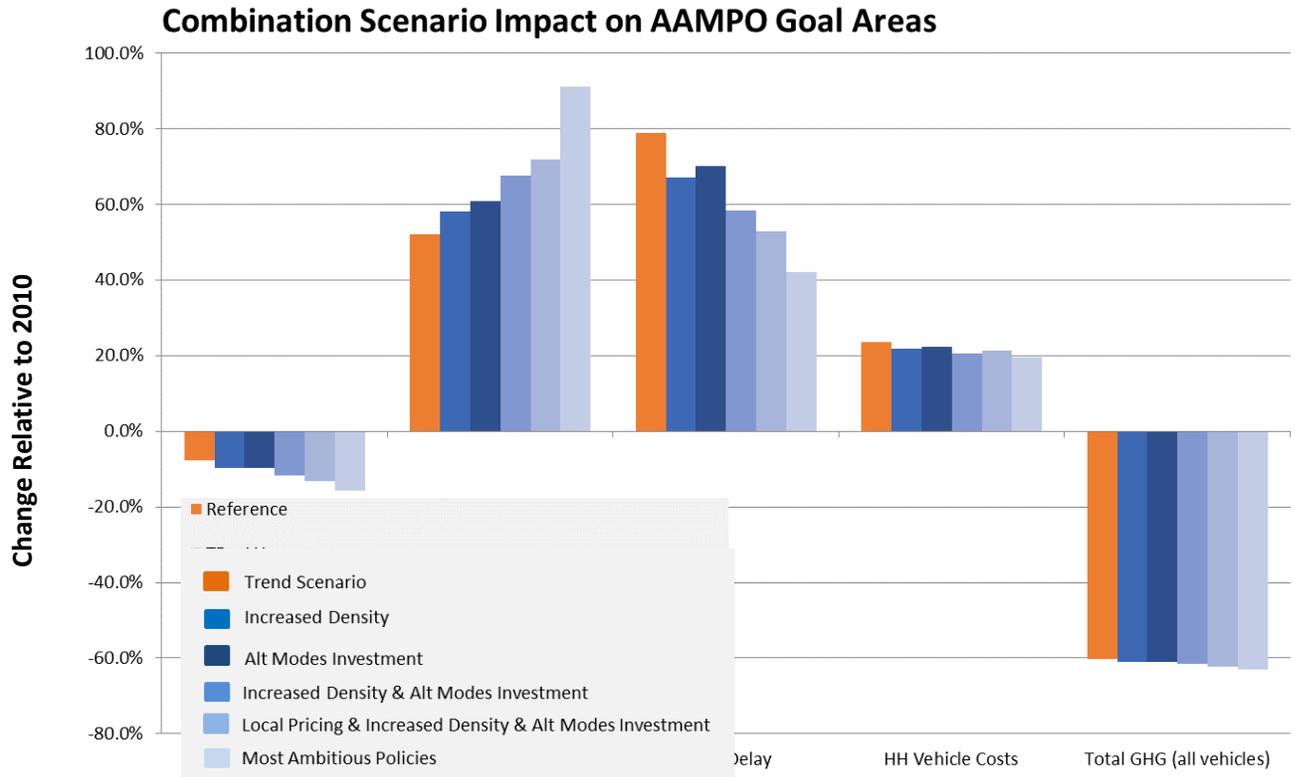as and VMT taxes to cover road maintenance), directly impact the outcomes of adopted plans. A second set of sensitivity tests assess the resilience of the reference scenario under uncertain future conditions assumed in the scenarios discussed so far, that are outside of local control, such as state-led pricing, energy prices and vehicle fleet, fuel, and technology changes.

Figure 6 illustrates the outcomes under different future 2040 scenarios. Each of the scenarios assume the adopted plans policies, but change the following from the reference case:

- "Lower energy costs" and "Higher energy costs"
- Faster adoption of state-led vehicle & fuels policies ("Fast V+F") and Slower adoption of state-led vehicle & fuels policies ("Slow V+F")
- State-led pricing policies happen ("High pricing")or do not happen ("Low pricing")

The impact on the regional outcomes of transit ridership, VMT per capita, delay, household travel costs, and the greenhouse gas emissions target are shown. Resilience testing shows that:

- **State-led policies are important in reaching local goals** (pricing, vehicle & fuel). Reference scenario continues to have the lowest overall GHG reduction across all modes, and the second lowest VMT/capita, with associated positive impacts on transit ridership and delay. These results illustrate the importance of coordinated and comprehensive actions by both state and local governments are needed to achieve climate goals.

- **VMT/capita is lowest** when high pricing (road & carbon-social cost recovery fees) combines with slow vehicle and fuel advancements and high energy costs; keeping operating costs high (High Pricing, Slow V+F, High gas cost). Transit ridership is highest and delay is also lowest. The scenario however, has higher GHG than the reference scenario and the highest household transport costs.

- **VMT/capita is highest** in where energy costs remain low combined with a lack of pricing policies. This is amplified when combined with a push to electrify vehicles, further lowering operating costs and leading to increased VMT and low transit usage, with associated delay and emissions. (Low Pricing, Slow or Fast V+F, Low energy costs)

- **Overall GHG reduction is lowest** when no state-led policies occur (Pricing and Veh & Fuels), coupled with low energy prices (Low Pricing, Slow V+F, Low energy costs). VMT/Capita is one of the highest with less desirable transit and delay, while older vehicles keep vehicle operating costs high.

- **Highest progress towards the region's GHG reduction target** (left set of bars & table) occurs under high state-led pricing policies, combine with high energy costs (14-16% of 20% 2005-2040 target). Achieving the target is particularly challenging under low energy costs forecasts where progress is at a minimum cut in half, and progress is reversed without ambitious pricing policies.

- Although not shown, tests of **higher Income scenarios** showed significantly higher VMT and reduced transit usage, with associated rise in vehicle delays and GHG emissions.

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AAMPO Reference Scenario Resilience to Alternate Futures

Legend:
- Reference
- Low pricing, Fast V+F, High energy costs
- High Pricing, Slow V+F, High energy costs
- Low pricing, Slow V&F, High energy costs
- High Pricing, Fast V+F, Low energy costs
- Low Pricing, Fast V+F, Low energy costs
- Hi Pricing, Slow V+F , Low energy costs
- Low Pricing, Slow V+F, Low energy costs

Categories: Reduce GHG, meet targets; Daily Transit Ridership; Reducing VMT/cap; Delay; HH Vehicle costs (own+operate/HH/yr); Total GHG (all Vehicles); Total GHG (MMT, all vehicles)
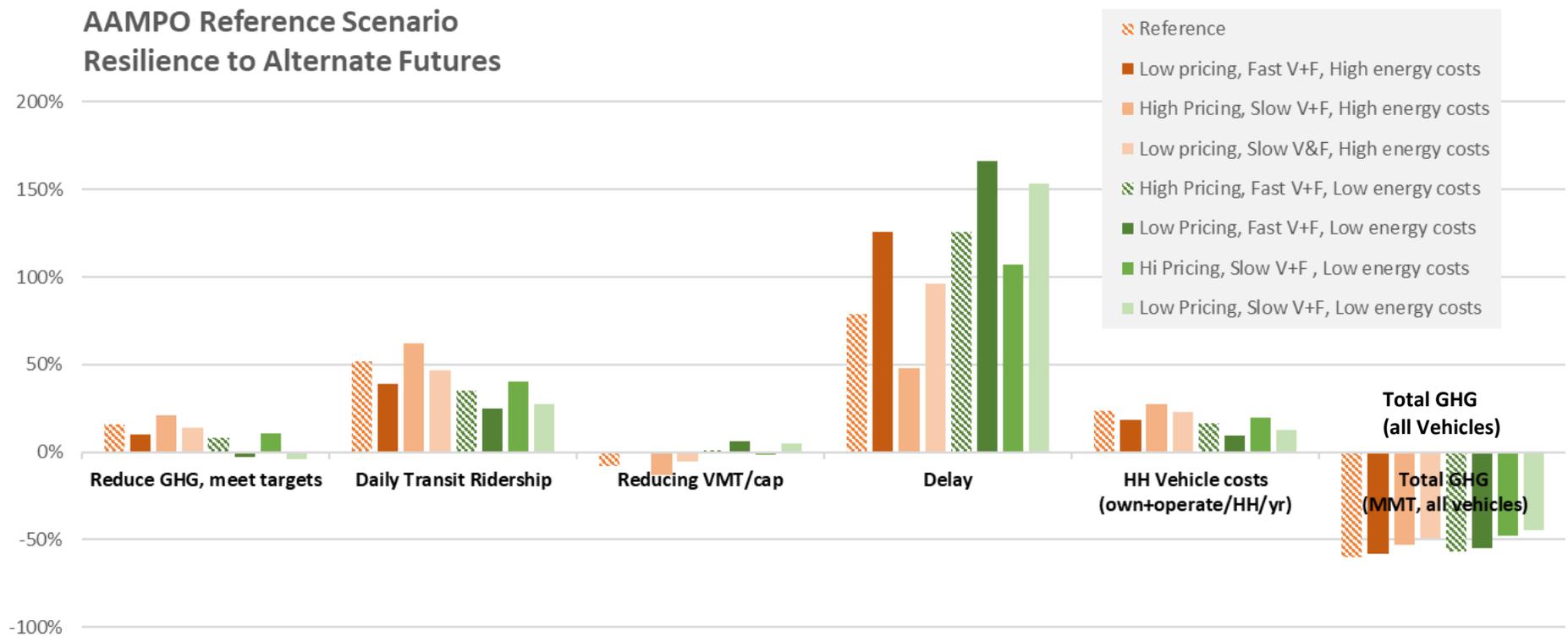
Figure 6. AAMPO Reference Scenario Resilience to Alternative Futures

Key Findings

The key findings of the AAMPO Strategic Assessment are organized by issue area and highlight the key findings of both the initial adopted plans analysis, as well as the sensitivity tests. In addition to these findings, a menu of local policy options is provided to help identify and explore the kinds of actions and programs that can be used to improve mobility, increase transit ridership, reduce VMT, reduce vehicle emissions, and meet other community goals. The local policy options are included as actions, programs or policies for local jurisdiction consideration.

Mobility

Strategic Assessment Measures:
Daily Vehicle Miles per Capita
Travel Delay
Transit Ridership
Transit Service Trends

A regional transportation system provides for the mobility of people and goods, and influences the patterns of growth and economic activity through the accessibility to land. Providing a balanced transportation system ensures access to all parts of the region with transportation choices that are reliable, accessible, and cost-effective. Goal 1 of the Regional Transportation Plan reflects the importance of providing a balanced, multi-modal transportation system.

Adopted Plans

Population growth means traffic delay increases significantly (79%), even though vehicle miles traveled (VMT) per capita decreases (-8%), even under assumptions of state-led pricing policies. Transit trips increase significantly (52%). Key factors include the expected growth in income, which coupled with lower expected auto operating costs, increases the demand for automotive travel. Transit investments as planned also play a key role, as transit investment does not keep up with population growth.

Sensitivity Tests

Sensitivity tests reveal that no single policy, even aggressive pricing schemes or a drastic increase in gas prices, will on its own bring down the delay expected to occur. However focusing on infill development and affordable middle housing in central Albany and investing in transit and active transportation infrastructure can help the region meet it' mobility goals.

Livability

Strategic Assessment Output Measures:
Annual Household Vehicle Cost
Household Vehicle Cost as a Percent of Low-Income Households' Income

Transportation is second only to housing as the biggest expense for Oregon families. The average household spends about 18 percent of its income, or more than $12,000 a year, on transportation. In some areas, lower-income households spend even more.

The move toward more fuel-efficient vehicles will decrease the fuel price per mile; however, gas price increases and pricing policies offset the cost savings. Building communities that reduce reliance on auto trips and promote low-cost walking, cycling, and transit usage can help families cut their transportation costs, especially if households can own one less vehicle. Public and

active modes provide alternatives when gas prices increase and until new vehicles are more widely affordable.

Adopted Plans

Household transportation ownership costs are likely to increase due to the purchase of newer vehicles, while operating costs for these vehicles decrease. Newer, more fuel-efficient vehicles are cheaper to operate, but will be more expensive for households to purchase. The cost savings of fuel efficiency is offset somewhat by the assumed increases in fuel price and state-led pricing policies. Promotion of national car manufacturing leasing programs, and purchase incentives can increase the affordability of new vehicles, while continuing to develop mixed-use, transit accessible housing can help provide other low cost transportation options for low-income households. It is important to remember that vehicle costs are highly susceptible to future uncertainties related to fuel price and income growth.

Sensitivity Tests

Pricing strategies such as VMT fees and increased parking fees, carbon fees, have a strong effect on reducing VMT, congestion, and improving air quality. However, these strategies increase the cost of transportation for households. Pricing policies, even with high adoption of lower auto operating costs for vehicles, could raise annual household transportation costs by up to 25%. A shift towards newer vehicles will improve air quality and reduce operating costs for households, but will present challenges for low-income households as ownership costs increase.

Strategic Assessment Output Measure:
Housing Choice

Household sizes are shrinking and the population is aging. These demographic changes will affect the demand for multi-family housing and single-family attached housing. Responding to these changes by providing more housing options in mixed-use, walkable areas with convenient access to goods and services could significantly affect transportation behavior.

Adopted Plans

The adopted plans scenario shows that the region isn't making much progress towards creating compact livable communities with more residents in mixed-use areas and a richer mix of housing options. A challenge for the region is to continue to provide affordable housing near mixed-use and transit-served areas and increase the supply of multi-family housing.

Sensitivity Tests

Sensitivity testing reveals that land use changes alone have a big effect on changing people's driving behavior. By steering more new development and more affordable housing options, toward transit accessible areas and activity centers, the percentage of population living in mixed-use areas increases and have some of the greatest returns on vehicle, delay, VMT and emissions reduction. The low cost travel options in compact mixed-use communities also provide resilience for lower income growth, pricing policies that maintain our transportation system, or high fuel price uncertainties.

Environment

Strategic Assessment Output Measure:
Greenhouse Gas Emissions

Many of the strategies suggested to reduce greenhouse gas emissions will also improve air quality and help create more livable communities. Over the next several decades, existing federal and state-led-policies on new vehicle standards and fuel will significantly change vehicle emissions. Building communities and a transportation system that enables people to drive less and use public and active transportation options also helps to reduce pollution.

Adopted Plans
Air quality in the Albany Area is expected to improve as a result of adopted plans, both greenhouse gases and criteria air pollutants per capita are expected to decline. By implementing adopted plans in combination with state and federal improvements to vehicles and fuels, the overall per capita greenhouse gas emissions in the region is expected to drop 80% from 2005 levels. When combined with potential state-led actions implemented at the local level, AAMPO can expect a 16% greenhouse gas reduction by 2040. However, much more work will be needed at local level for the region to reach the 20% greenhouse gas reduction target. Changes in the vehicle fleet and other state-led actions provide the bulk of the decrease in emissions.

Sensitivity Tests
Sensitivity tests show that reaching the greenhouse gas target is feasible, and the region has choices among over 200 combinations of more ambitious policies (beyond enhancements to vehicles and fuels) that meet the greenhouse gas target. While no one area of emphasis will enable the region to meet the target, the region can choose from among several variations of ambitious local policies combined with supporting state-led pricing and vehicle technology strategies to meet its goals. Cleaner transit vehicles and fuels also improves health for active modes on surface streets.

Strategic Assessment Output Measure:
Annual fuel consumption per capita

Oregonians drive about 39 billion miles and consume 1.5 billion gallons of gasoline every year. The fuel cost alone accounts for 7 percent of their disposable income. All of Oregon's gasoline is imported, meaning the profits from its sales are not re-invested in the state or regional economy.

Adopted Plans
The fuel used by households, businesses, and transit vehicles in the future is expected to decline by 52% from 2010 levels as fuel economy improves (from 23 to 56 average MPG). This would result in over 11 million gallons of fuel savings in the AAMPO region. That amount of fuel saved would result in over $65 million kept in the local economy in 2040.

Sensitivity Tests
Increasing development in the central areas of Albany and active transportation investments have the strongest influence on reducing fuel consumption and keeping more money in the local economy.

Chapter 5: Policy Options for Local Actions

To help the region identify supporting policies that can help the region meet the stated goals, a policy options toolkit is presented. The toolkit identifies the potential strategies that the region can consider to better meet their goals.

Mobility

Improve access to lower-cost transportation options:
- Invest in public transit enhancements to increase service coverage and frequency
- Promote affordable housing near transit lines
- Partner with employers and community development organizations to provide subsidized ridesharing
- Provide assistance to low-income families to acquire low-emission vehicles

Enhance public transit:
- Seek property or payroll tax increase to maintain and expand service
- Implement fare-free transit service funded via a Transit Operations Utility Fee
- Expand partnerships to implement bus corridor improvements and seek resources for youth bus passes and reduced fares for low-income riders
- Expand workplace TDM and household transportation options programs
- Support statewide pricing efforts such as a VMT fee or pay as you drive insurance
- Continue support of increased rail use for freight

Livability

Expand programs that encourage residential development in central Albany:
- Multi-unit Property Tax Exemption to stimulate the construction of housing in activity centers
- Adopt a Vertical Housing Development Zone to provide property tax exemptions for mixed-use projects to encourage development within activity centers
- Establish downtown revitalization loans to encourage investments in downtowns
- Establish Residential Development Fee Reduction Program within activity centers
- Reduce off-street parking requirements in downtowns and activity centers

Develop facilities that encourage pedestrian travel and bicycling:
- Add bike lanes and pedestrian paths to, from and amongst neighborhoods and activity centers to the local and regional non-motorized transportation network
- Complete system gaps to increase walking and biking connections,
- Integrate mid-block connections (paths, stair-climbs, etc.) into urbanized and developing neighborhoods to promote inter-neighborhood and cross-town pedestrian access
- Enhance overall walking and biking safety through lighting, street design, education, and similar efforts
- Require bike parking facilities in all new multi-family residential developments of 4 or more units and in all commercial, industrial, recreational, and institutional facilities

Environment

Shift to cleaner, more efficient vehicles and fuels and aggressive pricing strategies:

- Support state-led pricing policies
- Consider local gas tax increase or regional carbon tax
- Aggressive adoption of EVs/PHEVs
- Promote the shift to RNG from wastewater plant capture
- Aggressive ITS and driving efficiency programs
- Aggressive investment in public transit, TDM, biking and walking enhancements
- Encourage activity center growth to reduce trip length and increase walking and biking

Promote use of non-SOV transportation options:

- Invest in public transit
- Encourage infill development to reduce trip length and increase walking and biking

Chapter 6: Conclusion

This Strategic Assessment shows that by fully implementing local plans combined with ambitious state-led actions for pricing and vehicle and fuel advancement, the region can expect several positive outcomes, including modest progress in reducing greenhouse gas emissions. The assessment also shows that there are a number of strategies and actions that can help the region achieve its goals related to mobility, livability, and environmental goals.

This report provides the region with new information about the likely outcomes of existing plans, and a local policy toolkit that can be used to help decision makers identify policies to explore for the future. Equipped with this information, the Albany metropolitan area can continue to advance its planning practices to reach the community goals. This report is intended to help start this conversation.

Next Steps

There are several options for next steps by either AAMPO or member local governments to build on results of the Strategic Assessment. At a minimum, the information provided in the Strategic Assessment, including the more detailed information on inputs, assumptions, and sensitivity testing, can help to inform future plan updates and investment decisions. The result of the adopted plans analysis and the sensitivity testing show how well the region fairs on a number of regional goal areas. Using this information, planners, local officials, and others can consider policies that may help the region improve on certain measures, whether it be reducing emissions, increasing mixed-use areas, or reducing delay to improve freight mobility, when updating or implementing the following:

- Regional Transportation Plan/Transportation System Plans – evaluate impact of policies to goal areas and policies to best achieve the desired mix of goals; use place types to assist in land use forecasts and alternative measures analysis;
- Transit plan – leverage the Strategic Assessment to help the business case for continued and/or additional funding for transit service; and
- Active Transportation Plan – leverage the sensitivity test analysis in the Strategic Assessment to help identify active transportation strategies that increase the region's active transportation modes.

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