LANE TRANSIT DISTRICT
BOARD OF DIRECTORS
BOARD RETREAT

Wednesday, December 18, 2019
9:00 a.m. – 3:15 p.m.

Northwest Christian University
Burke-Griffeth Hall
875 12th Avenue, Eugene

Public testimony will not be heard at this meeting.

AGENDA

Time		ITEM	Page
9:00 a.m.	I.	CALL TO ORDER	
9:01 a.m.	II.	ROLL CALL	

❒ Carl Yeh (President)   ❒ Kate Reid (Vice President)   ❒ Joshua Skov (Secretary)
❒ Don Nordin (Treasurer)   ❒ Caitlin Vargas   ❒ Steven Yett   ❒ Emily Secord

9:02 a.m.	III.	COMMENTS FROM BOARD PRESIDENT	

This agenda item provides an opportunity for the Board president to formally communicate with the Board on any current topics or items that may need consideration.

9:05 a.m.	IV.	BOARD TRAINING	
12:00 p.m.	V.	LEGAL COUNSEL PRESENTATION	
12:10 p.m.	VI.	STRATEGIC BUSINESS PLAN	2
12:30 p.m.	VII.	LUNCH	

A virtual tour of Santa Clara Transit Station will be available during lunch.

1:00 p.m.	VIII.	STRATEGIC BUSINESS PLAN CONTINUED	
1:30 p.m.	IX.	LTD'S WHY, HOW & WHAT	181
3:15 p.m.	XIV.	ADJOURNMENT	

The facility used for this meeting is wheelchair accessible. To request a reasonable accommodation or interpreter, including alternative formats of printed materials, please contact LTD's Administration office no later than 48 hours prior to the meeting at 541-682-5555 (voice) or 7-1-1 (TTY through Oregon Relay).

AGENDA ITEM SUMMARY

DATE OF MEETING:	December 18, 2019
ITEM TITLE:	STRATEGIC BUSINESS PLAN
	Tom Schwetz, Director of Planning and Development
PREPARED BY:	Aurora Jackson, General Manager
DIRECTOR:	Information and Discussion
ACTION REQUESTED:	

PURPOSE: Provide information to the Board regarding LTD's strategic context and examples of Strategic Business Plans from other transit agencies.

ROLE OF THE BOARD: The Board's role in this instance is to obtain information for a future decision.

HISTORY: This memo provides the Board with information intended to support the Board's discussion related to the scoping of LTD's Strategic Business Plan. This information falls into three categories:

 a) LTD's Origins
 b) Current Economic Outlooks
 c) Example Strategic Business Plans

Attachment 1 provides a summary of LTD's origins. Attachment 2 provides a summary from the December 11, 2019 meeting of the Federal Open Market Committee (Federal Reserve). Attachment 3 provides the State of Oregon's December 2019 Quarterly Economic Forecast. To assist the Board in its scoping discussion, Attachments 4-6 provide examples of Strategic Business Plans from TriMet, COTA, and LA Metro.

NEXT STEPS: The Board will discuss and provide input on the scope for the development of a Strategic Business Plan. Based on input from the Board, staff would begin development of a scope of work.

SUPPORTING DOCUMENTATION:

 1) Attachment 1: LTD's Origin Story
 2) Attachment 2: Summary from the December 11, 2019 meeting of the Federal Open Market Committee
 3) Attachment 3: State of Oregon's December 2019 Quarterly Economic Forecast
 4) Attachment 4: TriMet - FY20 Business Plan
 5) Attachment 5: COTA - 2019 Strategic Plan
 6) Attachment 6: LA Metro - Metro Vision 2028

LTD's Origin Story

It is interesting to consider why LTD was formed back in 1970. In terms of transportation, there were several other forms of transportation available in most urban areas in Oregon and across the country. In fact, with few exceptions, private operators across the country were finding that there was no profit in operating urban transit services. Public policy makers could have concluded that the market had spoken and that transit service was no longer a viable means of transportation in urban areas. However, the policy discussion at the national level starting in the late 50's and early 60's became focused on the equity of urban transportation and the need for a form of low-cost urban mobility available to those not able to afford the costs associated with operating an automobile. Below is a brief summary illustrating how the federal role in urban transit in this country was established, and how state and local agencies took actions that led to the creation of LTD.

Federal Urban Mass Transportation Acts - 1964 and 1970

In the Urban Mass Transportation Act of 1964, Congress made several findings including:

"(2) that the welfare and vitality of urban areas, the satisfactory movement of people and goods within such areas, and the effectiveness of housing, urban renewal, highway, and other federally aided programs are being jeopardized by the deterioration or inadequate provision of urban transportation facilities and services, the intensification of traffic congestion, and the lack of coordinated transportation and other development planning on a comprehensive and continuing basis; and

(3) that Federal financial assistance for the development of efficient and coordinated mass transportation systems is essential to the solution of these urban problems."

The 1970 Urban Mass Transportation Act updated the 1964 act. In that update, Congress stated that

"the Congress finds that the rapid urbanization and the continued dispersal of population and activities within urban areas has made the ability of all citizens to move quickly and at a reasonable cost an urgent national problem; that it is imperative, if efficient, safe, and convenient transportation compatible with soundly planned urban areas is to be achieved, to continue and expand the Urban Mass Transportation Act of 1964; and that success will require a Federal commitment for the expenditure of at least $10,000,000,000 over a twelve-year period to permit confident and continuing local planning, and greater flexibility in program administration. It is the purpose of this Act to create a partnership which permits the local community, through Federal financial assistance, to exercise the initiative necessary to satisfy its urban mass transportation requirements."

1969 HB 1808 – Oregon Legislature enables creation of Transit Districts

House Bill 1808 passed in March 1969 without strong opposition, allowing the creation of transit districts and providing them with the power to raise revenue though a payroll tax (ORS 267.085(1)).

Council Bill 11365 – Eugene Council formally requests creation of a Metropolitan Transit District

In June, 1970 the Eugene city Council passed a motion requesting creation of a "Metropolitan Transit District" which led to the Governor's action to create Lane Transit District and appoint its first board. Attachment 1 provides the minutes from that Council meeting. Below are the Minutes from the council meeting. Given that it was a public hearing, it is insightful to see what the concerns and hopes were at the point where the formation decision was being made. The discussion begins at "Public Hearing, Creation of a Mass Transit District."

Council Chamber
Eugene, Oregon
June 22, 1970

Adjourned meeting of the Common Council of the city of Eugene, Oregon - called to order by His
Honor Lester E. Anderson at 7:30 p.m. on June 22, 1970 - in the Council Chamber, with the
following Councilmen present: Messrs. McDonald, Teague, Purdy, Gribskov, Mohr and Williams;
Mrs. Hayward; and Mrs. Beal.

Minutes of meetings held May 25, 1970 and June 1, 1970 as mailed to Council members were approved.

Public Hearing, Budget - Mayor Anderson announced a hearing on the 1970-71 Budget. There was no
one present who wished to be heard either in favor of or in opposition to the budget. The hearing
was closed. Further action will be taken under "Ordinances."

Public Hearing, Creation of a Mass Transit District - Under state law the City Council has authority,
by adoption of resolution, to take action to create a Mass Transit District. The resolution is
transmitted to the Governor, who will appoint a Board of Directors. Many letters have been received
in regard to this matter, and the city of Springfield held an informal meeting, in which they sup-
ported adoption of the Mass Transit District Resolution. A letter was received from Governor
McCall in which he said he was aware of the problem and would act promptly if and when a resolution
was received from the city of Eugene. The League of Women Voters forwarded a statement supporting
the idea of a Mass Transit District, but saying they would prefer another method be used. They
were not in favor of the formation of another service district, but felt the urgency would over-
ride that consideration.

Mr. McDonald moved seconded by Mr. Teague that the Council adopt the resolution requesting the
creation of a Metropolitan Transit District, and that it be referred to the city of Springfield
and Lane County for support and comment.

Mr. Al Urquhart, 1960 Agate Street, urged the Council to support a Mass Transit System. He pointed
out that this move would be consistent with the goals adopted by the City Council in 1967, and
that this would be a major step to alleviate air pollution.

Sarah Lawson said that the people from Springfield had chartered a bus to bring interested people
to the meeting. Most of these people have no other means of transportation.

Mr. Harry Hermiston, 3921 Virginia Street, Springfield, and Mr. William F. Stone, 225 North 41st
Street, Springfield, also spoke in support of this motion.

Mr. Kenneth Omlid, 350 Cherry Drive, Chairman of the Lane County Commissioners, supported a mass
transit system but felt that the system should be publicly owned and operated. He objected to
authority being in the hands of a seven man board, without the vote of the people. He felt that
the people should have a vote on the type of tax adopted.

Mr. Omlid felt that it was unfortunate that this problem had not been solved before it became a
crisis, and said that the County had provided for a November ballot measure. He felt that the
voters would sanction a small tax subsidy involved.

Mr. Charles Potterf, 2685 Floral Hill, said that the formation of this district frightened him,
and that he felt it would be something he would have to pay for, but would have nothing to say
about.

In reply to Mr. Potterf's question, the City Manager said that this had nothing to do with the
airport, but provided for a transit service within the metropolitan district. After its formation
it would be operated by a Board appointed by the Governor, and the City would have no responsibility
or authority for its operation.

Councilman Williams asked for clarification on the thirty-day referendum period. The City Attorney
explained the referendum and how it could be used.

There was further discussion by the Council of the use of the referendum by voters, and how they
could go about this.

Mrs. Hayward said that she was concerned about keeping a mass transportation system in operation,
and that she felt this was an overriding consideration.

In answer to Mrs. Hayward's question, the City Manager said that to attempt to keep the Emerald
Transportation System in operation until after the November election would be a fairly expensive
operation because of several problems, the major one being the salary rate of drivers, and the
purchase of new equipment. It would cost approximately eighty or ninety thousand dollars for a
six to eight month period. For a short period the system could keep running with a small subsidy.

In answer to Mrs. Hayward, Commissioner Omlid said that the County would propose to put a measure
on the ballot and that the district would have to be decided through a cooperative effort of the
Council of Governments and could be within the urbanized boundary.

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In answer to Dr. Purdy's fears, the City Attorney said that the organization of mass transit district provides for the alternative replacement by a metropolitan service district.

Councilwoman Hayward commented that she would prefer the establishment of a metropolitan service district by the vote of the people, but only 10% of the voters need sign the petition to place the matter on the ballot. The important matter is to keep the bus system operating.

Mayor Anderson said that he could think of many reasons for voting down the resolution, the tax burden, mechanics of government, etc., but if the resolution was not passed, the City would watch the demise of the mass transit system in the area. Once lost, a system is usually gone for good, or restoration is much more difficult. With the thought in mind of whether to pass the resolution or to watch the demise of the bus system and the failure to meet the demands of the people in the area, the Mayor felt that the resolution must be passed.

A vote was taken on the motion as stated. Motion carried.

Assessment Ordinance, Paving Willamette Street from 40th Avenue to south of the 7th Addition to Edgewood - This project was initiated by the City Council after receiving requests from property owners in the area. Because of the controversial nature of the project, the Council requested an assessment be made on the basis of estimated costs so the Council could be sure it could finance the project prior to investing money. The assessment ordinance was read May 25, 1970, and held over to this meeting to allow the proper notice of assessment to be given to owners of property. Written protests have been received on the project from almost all those involved, including some who originally supported the project.

Mayor Anderson said that the Council had been quite realistic in its approach, and that this was one way it could get the reaction of the people concerned.

There was no one in the audience who spoke in favor of the proposal.

Mayor Anderson requested that those in the audience in opposition to the proposal stand. A large number of those present were in opposition.

Councilwoman Hayward said that from the large number of owners opposed and the letters received, it had been indicated that this was not the time to pave Willamette Street.

Mr. Leonard Oswald, 4275 Willamette Street, was opposed to this project and suggested that traffic control might solve the problem.

Mrs. Joy Goolsby, 18 East 47th, said that she had written various letters, and questioned the city's assessment procedures.

The City Attorney explained that the City Charter covers the rules regarding assessments of property for streets, sewers, sidewalks and other public improvements authorized by law.

Mrs. Goolsby suggested that the Council should study assessment procedures of other cities, and perhaps revise the charter so that a more equitable method may be devised.

Mayor Anderson suggested that Mrs. Goolsby write to the City Manager and request that this matter be placed on a committee of the whole agenda.

Mrs. Daniel Sullivan, 95 East 46th, agreed with Mrs. Goolsby, and requested an opportunity to discuss the matter.

Council Bill No. 9195 - Levying assessments for paving Willamette Street from 40th Avenue to south boundary Edgewood Estates 7th Addition was submitted and read in full May 25, 1970, and held over to allow notice of assessment to property owners, for consideration with written protests on file.
Mr. McDonald moved seconded by Mr. Teague that the bill be read the second time by council bill number only, with unanimous consent of the Council. Motion carried unanimously and the bill was read the second time by council bill number only.

Mr. McDonald moved seconded by Mr. Teague that the bill be read the third time by council bill number only, with unanimous consent of the Council. Motion carried unanimously and the bill was read the third time by council bill number only.

Mr. McDonald moved seconded by Mr. Teague that the bill be approved and given final passage. Rollcall vote. All councilmen present voting nay, the motion failed.

Bids, Public Works Department - Bids were opened June 11, 15, 16 and 22. Public Works Director outlined bids and amounts bid. Staff recommends award in all cases except No. 6, opened on June 11.

PAVING & SANITARY SEWER	Contract Cost	Square Foot Cost		To City	Budgeted
1. Within Berkshire Park					
Wildish Construction	$6,212.60	28' pvg	$752.34	0	
Eugene Sand & Gravel	6,768.70	San Lat	246.88		
		San Serv	110.18		
		Levy	52.56		
			COMPLETION DATE: 9-1-70		
2. Spring Blvd. from Firland Blvd. to 500' NE of Firland Blvd.		Lat. 0.59/sq fot; Serv 206.68/ea Levy 0.005/sq.ft			
Wildish Const. Co.	19,274.13	28' pvg	11.05/fr.ft	0	
Eugene Sand Y Gravel	20,397.05	36' pvg	13.75/fr.ft		
			COMPLETION DATE: 9-1-70		

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Federal Reserve Economic Outook

Press Release

December 11, 2019

Federal Reserve issues FOMC statement

For release at 2:00 p.m. EST

Information received since the Federal Open Market Committee met in October indicates that the labor market remains strong and that economic activity has been rising at a moderate rate. Job gains have been solid, on average, in recent months, and the unemployment rate has remained low. Although household spending has been rising at a strong pace, business fixed investment and exports remain weak. On a 12-month basis, overall inflation and inflation for items other than food and energy are running below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee decided to maintain the target range for the federal funds rate at 1-1/2 to 1-3/4 percent. The Committee judges that the current stance of monetary policy is appropriate to support sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective. The Committee will continue to monitor the implications of incoming information for the economic outlook, including global developments and muted inflation pressures, as it assesses the appropriate path of the target range for the federal funds rate.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric 2 percent inflation objective. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.

Voting for the monetary policy action were Jerome H. Powell, Chair; John C. Williams, Vice Chair; Michelle W. Bowman; Lael Brainard; James Bullard; Richard H. Clarida; Charles L. Evans; Esther L. George; Randal K. Quarles; and Eric S. Rosengren.

Oregon Economic and

Revenue Forecast

December 2019

Volume XXXIX, No. 4

Release Date: November 20, 2019

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Foreword

This document contains the Oregon economic and revenue forecasts. The Oregon economic forecast is published to provide information to planners and policy makers in state agencies and private organizations for use in their decision making processes. The Oregon revenue forecast is published to open the revenue forecasting process to public review. It is the basis for much of the budgeting in state government.

The report is issued four times a year; in March, June, September, and December.

The economic model assumptions and results are reviewed by the Department of Administrative Services Economic Advisory Committee and by the Governor's Council of Economic Advisors. The Department of Administrative Services Economic Advisory Committee consists of 15 economists employed by state agencies, while the Governor's Council of Economic Advisors is a group of 12 economists from academia, finance, utilities, and industry.

Members of the Economic Advisory Committee and the Governor's Council of Economic Advisors provide a two-way flow of information. The Department of Administrative Services makes preliminary forecasts and receives feedback on the reasonableness of such forecasts and assumptions employed. After the discussion of the preliminary forecast, the Department of Administrative Services makes a final forecast using the suggestions and comments made by the two reviewing committees.

The results from the economic model are in turn used to provide a preliminary forecast for state tax revenues. The preliminary results are reviewed by the Council of Revenue Forecast Advisors. The Council of Revenue Forecast Advisors consists of 15 specialists with backgrounds in accounting, financial planning, and economics. Members bring specific specialties in tax issues and represent private practices, accounting firms, corporations, government (Oregon Department of Revenue and Legislative Revenue Office), and the Governor's Council of Economic Advisors. After discussion of the preliminary revenue forecast, the Department of Administrative Services makes the final revenue forecast using the suggestions and comments made by the reviewing committee.

Readers who have questions or wish to submit suggestions may contact the Office of Economic Analysis by telephone at 503-378-3405.

Katy Coba
DAS Director
Chief Operating Officer

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EXECUTIVE SUMMARY

December 2019

The longest running U.S. economic expansion marches on. Growth has slowed in 2019 and downside risks remain elevated. However, a recession is not yet seen in the data. Importantly, the two primary causes for concern are either improving – the yield curve is no longer inverted – or at least not getting worse – the trade war escalation is on hold for the time being. That said, while slower growth this year was expected, the question is whether or not the composition of and factors behind the slowdown point to something more worrisome.

Nationwide economic growth has slowed to potential as business investment remains weak, but the consumer is strong. Of course consumption is not a leading indicator, but provided the labor market holds up, so too should spending. Here in Oregon, job growth has slowed to gains seen in our underlying population. For the eleventh year of expansion, such gains remain solid. To date, Oregon's slowdown is driven more by fewer hirings and a tight labor market, rather than an increase in layoffs. These dynamics, when combined with ongoing strong income growth keep the outlook intact. As confirmed by recently released Census data, current economic conditions in Oregon have rarely been better. The expansion endures even as risks remain elevated.

Oregon's General Fund tax collections continue to outstrip gains in the underlying economy so far in the 2019-21 biennium. The largest part of Oregon's General Fund, personal income tax collections, surged during the peak tax season and continued to post strong gains as extension filers submitted their tax returns in the fall. Both income tax payments net of refunds, as well as withholdings out of paychecks, have been posting growth rates above what economic gains would call for. Corporate tax collections have slowed a bit in recent months, but remain elevated above their typical size as well.

The primary forecasting challenge for the current biennium is to determine how much of the recently strong tax collections are due to temporary factors that will fade away in the months ahead. Even without the onset of recession, revenue growth is facing major headwinds during the current biennium. State & federal tax policies, a big kicker refund and slower economic growth will all weigh on General Fund revenues in the near term.

While there is a great deal of uncertainty about the staying power of recent revenue growth, the December forecast reflects a stable economic outlook, with the expected size of General Fund collections increasing slightly over what was expected at the Close of Session.

Going forward, the uncertain path of the nationwide economy will dominate the revenue outlook. Fortunately, Oregon is better positioned than ever before to weather a revenue downturn. Automatic deposits into the Rainy Day Fund and Education Stability Fund have added up over the decade-long economic expansion. When the projected ending balance for the current biennium is included, Oregon is expected to end the biennium with more than $2.7 billion in reserves set aside, amounting to almost 13% of the two-year budget.
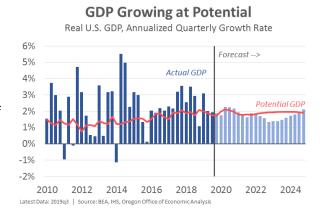
ECONOMIC OUTLOOK

U.S. Economy

The longest running U.S. economic expansion marches on. Growth has slowed in 2019 and downside risks remain elevated. However, a recession is not yet seen in the data. Importantly, the two primary causes for concern are either improving – the yield curve is no longer inverted – or at least not getting worse – the trade war escalation is on hold for the time being. That said, while slower growth this year was expected, the question is whether or not the composition of and factors behind the slowdown point to something more worrisome or if everything remains on track.

GDP growth in recent quarters has slowed to potential. Clearly this is not a bad place for the economy to be in the eleventh year of expansion. However the underlying composition of recent gains are likely unsustainable should it continue.

Overall, consumer spending is approximately two-thirds of U.S. GDP. Over the past year the consumer has accounted for 85% of the growth and in the past six months, the consumer has accounted for more than 100% of the growth. This means that all other segments of the economy, on net, have recently contracted.

GDP Growing at Potential
Real U.S. GDP, Annualized Quarterly Growth Rate

Latest Data: 2019q3 | Source: BEA, IHS, Oregon Office of Economic Analysis

There are a lot of moving parts, and volatility within components of growth is to be expected. That said, the very weak business investment and export readings raise concerns. Moody's Analytics goes so far as to say "the consumer is shouldering all the burden in preventing the slowing from turning into something worse." Looking forward the concern is that while the consumer will lead growth, as usual, it cannot be the only source of growth for the expansion to endure.

There are at least three primary channels in which a slowdown in the economy could occur: firms' demand side, firms' supply side, and labor supply or a full employment economy.

First, firms may be delaying or foregoing investment and hiring at a slower pace due to their actual level of sales. If businesses are seeing lower sales or slower growth in their orders, they may pull back. Similarly, rising businesses costs squeezing profit margins would have a similar impact on firm behavior. There are issues like rising labor costs and tariffs that are impacting profits. Slower global growth in addition to the trade war are hurting international sales. That said, steady growth in consumer spending, and inflation that remains tame overall, work in the opposite direction, indicating current economic conditions are not worsening considerably.

Second, concerns about the future state of the economy may have businesses delaying their investment and hiring decisions due to uncertainty. This could be due to general economic news like the spell of recession worries over the summer, the trade war, political uncertainty, or state or local policies that have firms taking a wait-and-see approach. Such conditions are harder to measure but business surveys have generally weakened in 2019, even as they remain at high levels historically. The pullback in capital spending this year points toward concerns or uncertainty over the future, however some of today's weaker numbers may reflect stronger figures last year when investment increased following the federal tax cuts. Last year's stronger growth may have impacted the timing of investment, while not raising the overall level much over a multiyear horizon.
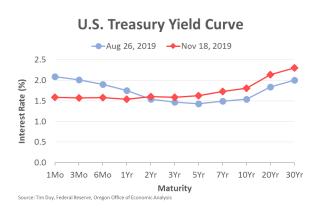
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Third, the economy may be closer to full employment than some economists believe. If true, growth will necessarily slow as there remains very little underutilized resources that need to be put back to work. In this case, there is hardly any spare capacity for firms to hire or expand into. As such, the economy would transition down to sustainable rates of growth that are ultimately driven by workforce (demographics) and productivity trends. There is no question that the economy today is in better shape than it has been in quite some time, and it is beginning to run into more supply side constraints, so full employment cannot be entirely discounted as a major factor behind the slower economic growth.

All told, it is likely that all three channels are impacting the economy today, at least somewhat, and helping to contribute to slower growth. Looking forward each has different implications on the outlook. If current economic conditions deteriorate significantly then a recession is knocking on the door. If firms are wary of making investments or hiring workers because they are concerned about the future, the economy runs the risk of talking itself into recession. If enough firms or households pull back on spending and hiring at the same time, then it creates the forces behind the negative spiral that is a recession. While all that is missing from this scenario is some sort of event that coordinates the pessimism, it also implies there remains the opportunity for the concerns to be ameliorated before it is too late. The third channel that could be driving the slowdown is overall benign and something to be celebrated given economic history and the fact that full employment is rarely achieved and even rarer sustained. However it also does imply that slower growth is here to stay.

Speaking of policies impacting the economy or at least the outlook, the two most worrisome issues in 2019 appear to be on the mend. The trade war is no longer escalating and the situation may even be diffusing as a Phase 1 trade deal is currently being negotiated between China and the U.S. To be clear, slower global growth, a stronger U.S. dollar, and the trade war are going to continue to impact the economy. The overall outlook for manufacturing remains weak. Half of all U.S. states have lost manufacturing jobs in recent months. That said, from a growth accounting perspective, so long as the situation is not escalating or conditions deteriorating further, the international sector should shift from a drag to at least neutral in the year ahead, with risks balanced to the upside and downside.

More importantly from a policy perspective, the Federal Reserve has made three interest rate reductions so far in 2019. These cuts, characterized as insurance against slower domestic and international growth, are designed to support the economy and head off a recession.

The upshot is in recent months the yield curve has un-inverted. Long-term interest rates are once again higher than short-term rates. This indicates that monetary policy likely is no longer too restrictive relative to current economic conditions and future market expectations.

U.S. Treasury Yield Curve

Source: Tim Duy, Federal Reserve, Oregon Office of Economic Analysis

Recent action by the Fed, where it cuts interest rates following a yield curve inversion but the overall flow of economic data remained healthy, is an historical outlier. Typically the Fed continues to raise interest rates at this point in the business cycle as it is increasingly worried about inflation. Today's continued low levels of inflation have allowed the Fed to focus more on its maximum employment part of its mandate rather than the price stability portion.

Bottom Line: The U.S. economy remains in expansion and the baseline outlook calls for continued, albeit slower, growth. While recession risks remain elevated, they appear to be abating somewhat. The typical catalysts for
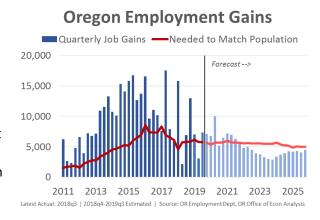
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recession are not rearing their heads but the slowdown in business investment and hiring is problematic. The Federal Reserve's insurance cuts are designed to engineer a soft landing for the economy and head off further weakness. The U.S. consumer remains strong, but consumption is not a leading indicator. Should the labor market falter or income growth weaken, the outlook would be revised down. Time will tell whether this is the top of the cycle or 2019 just hit a rough patch. It's important to remember that the U.S. does not know what the eleventh year of an economic expansion looks like as we have never experienced one. The expansion has now entered into uncharted and choppy waters.

Oregon Economy

Oregon continues to see healthy rates of growth when it comes to employment, income, and GDP. However the state is no longer significantly outpacing the nation like it was a couple years ago. While the big picture remains the same, recent Oregon data is somewhat of a mixed bag.

As expected, statewide employment continues to transition down to more sustainable rates, however it has come in below forecast so far in 2019. On the other hand, personal income growth is outstripping expectations, which feeds more directly into stronger consumer spending and higher public sector tax collections.

Oregon Employment Gains

Latest Actual: 2018q3 | 2018q4-2019q3 Estimated | Source: OR Employment Dept, OR Office of Econ Analysis

Much like the U.S., the local economy is growing roughly at its potential. The slowdown in jobs means Oregon is adding approximately 2,000 per month so far in 2019 when underlying demographics suggest the state needs around 1,900 or so to hold the unemployment rate steady. For uncharted waters and the eleventh year of the expansion, growth remains solid. The question is whether or not there is information to be learned by the composition of the slowdown and possible underlying factors.
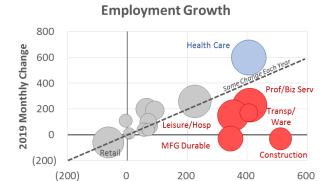
First, it should be noted that most sectors in Oregon are adding jobs at about the same pace this year as last year. The slowdown is really being driven by a handful of industries. Some of these industries experiencing slower gains in 2019 can likely be attributed to known factors, while others less so.

Durable goods manufacturing is the first place to look for impacts of the trade war and weakening global growth. Slower gains, or even losses this year are seen across all subsectors from wood products to semiconductors, metals to machinery. The one subsector holding up best is transportation equipment.

Transportation and warehousing are slower this year in part due to large openings and job gains a year ago. 2019 growth remains healthy when compared to history and another large facility in the mid-Willamette Valley is currently ramping up its workforce.

Decomposing Oregon's Slower 2019 Employment Growth

Latest Data: Oct '19 | Source: Oregon Employment Department, Oregon Office of Economic Analysis

Construction employment has really boomed in recent years, even as underlying measures of construction activity has increased at a slower pace. This year's slowdown in construction employment was expected, and may reflect a realignment of jobs with the actual volume of work.

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On the other hand, it is harder to pinpoint the slowdowns in leisure and hospitality, and professional and business services on any specific factor. Within leisure and hospitality, the entertainment, recreation, and accommodation subsectors continue to see healthy gains. The slowdown is driven entirely by restaurants. Consumer spending remains solid and local policies like the rising minimum wage impact industries beyond just restaurants of course, so the slowing remains an issue to watch.

Within professional and business services, the slowdown is across all three major subsectors: technical services, management of companies, and administrative and waste services. Given the breadth of the slowing, it may point more toward labor supply issues – ability to find workers – than industry-specific issues.

Second, the slowdown is seen in *net* employment gains which are the end result of many different decisions businesses and workers make. So far, available data paint a complicated picture but one that points toward fewer net hires rather than more layoffs.

Oregon businesses are advertising job openings less frequently in the past year, as measured by both online help wanted ads and the Oregon Employment Department's job vacancy survey. This is one indication that local firms are looking to hire less than a year or two ago. However it is an open question as to whether firms are hiring less because they are seeing weaker sales or because the labor market is tight and finding workers is difficult.

Job Availability in Oregon

Data is seasonally-adjusted by OOEA using X13 | Source: Conference Board, OR Emp Dept, OR Office of Econ Analysis

Along these lines, the available labor supply is growing more slowly due to both the inflows and outflows of the labor market.
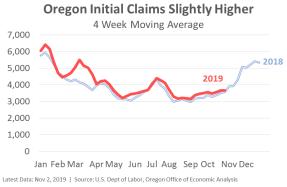
As the business cycle matures and job growth slows, in-migration tapers as well. Oregon's population is increasing, but at a slower pace than in years past. The influx of new, working-age residents is smaller this year than last and will be even smaller in the years ahead. Preliminary population estimates for 2019 indicate that in-migration may have slowed a bit more than expected, indicating labor supply increased less than expected as well. While annual estimates are difficult, we know one year from now the official 2020 Census population estimates will be available, providing a solid anchoring point for our office's demographic research and forecast.

In addition to the inflows into the workforce being smaller, it looks like the outflows into retirement are larger in 2019 than expected. Retirements appear to have spiked. The household survey indicates retirements are running some 7,000 or so higher than what would be expected based upon demographics and the aging population alone. To put the 7,000 increase in perspective, that is equivalent to three or four months of employment growth. This means even if firms hired replacements, the higher level of retirements could certainly impact *net* employment gains across the state.

While hiring and labor supply are clearly impacting Oregon's slower job growth this year, crucially it does not appear that firms are laying off significantly more workers than in recent years. Initial claims for unemployment insurance remain the best or at least one of the best leading indicators available.

Locally, initial claims are running a few percentage points higher than a year ago, but they typically jump 10-20% higher in the year leading up to a recession. Oregon claims do not meet that threshold, or at least not yet. Additionally, initial claims at the national level are running even with or lower than last year.

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That said, at least one measure of layoffs is higher in recent months. The number of Worker Adjustment and Retraining Notification Act (WARN) notices and the affected number of jobs is rising. The challenge is figuring out whether these public notices impact the topline economic data. At least in Oregon, it does not appear that WARN notices are a leading indicator, or have not been historically. Additionally, WARN notices do not account for any more than a small percentage of overall labor market flows. That said, we know there are always firms opening or closing, expanding or contracting. What matters is whether the good news outweighs the bad or vice versus.

Oregon Initial Claims Slightly Higher
4 Week Moving Average

Latest Data: Nov 2, 2019 | Source: U.S. Dept of Labor, Oregon Office of Economic Analysis

It is possible that the elevated WARN notices are simply indicative of a few firm-specific issues. However they may also reflect broader, economic problems just now coming to the forefront. Some of these notices will result in layoffs during the holidays or early next year, meaning the impacted workers have yet to file any claims for unemployment insurance.

That said, until initial claims increase significantly, the labor market should continue to grow. One reason is that initial claims incorporate two different behaviors. The most obvious being firm layoffs. It is hard to have a recession and all that ensues without firms laying off workers, incomes dropping and businesses and consumers pull back out of fear and uncertainty. The second behavioral factor included in initial claims are workers' response to being laid off. If an individual is able to quickly land another job, or at least believes she is able to land another job in short order, she may not take the time to file a claim and wait for the check. So initial claims are important not just due to firm behavior but also how workers respond in terms of their own job prospects.
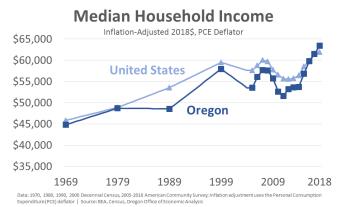
Bottom Line: All told, regardless of known or unknown factors, the slower job growth in Oregon is an issue our office will continue to monitor. For now the expansion remains intact and outlook largely unchanged. One primary reason is the slowing in Oregon to date points more toward an economy running into labor supply constraints than anything more problematic. The two major national drags are improving or at least appear to not be getting worse. And encouragingly, the slowdown is not as apparent in the Oregon income figures which are coming in above expectations. Of course these circumstances could and will change, but for now Oregon is expected to continue to see healthy rates of growth in the year ahead.

Latest Census Data Shows Oregon's Strong Economy

While Oregon is transitioning down from peak job growth rates a couple years ago, the tighter labor market is driving higher incomes as Oregonians work more hours and at higher wages. The latest Census data reveals just how strong Oregon's economy is and how these economic gains are reaching all corners and populations of the state. As is always the case, Census data is lagged and backward looking. That said it is important to take stock of socioeconomic conditions and right now the data is highly encouraging.

In 2018, Oregon's median household income grew the second fastest across all states, with only Idaho seeing stronger gains. This now puts the typical Oregonian household's income 2.4 percent higher than their

Median Household Income
Inflation-Adjusted 2018$, PCE Deflator

Data: 1970, 1980, 1990, 2000 Decennial Census; 2005-2018 American Community Survey; Inflation adjustment uses the Personal Consumption Expenditure (PCE) deflator | Source: BEA, Census, Oregon Office of Economic Analysis
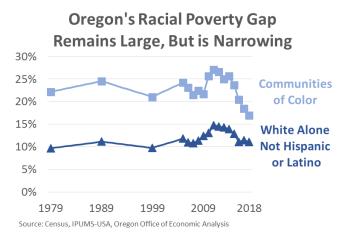
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national counterparts. This marks the first time in more than 50 years this is true. One has to go back to the 1960 Census to find a time when median incomes in Oregon were higher than national figures.

Furthermore, incomes today on an inflation-adjusted basis are at all-time highs. These gains are experienced across the spectrum as both high- and low-income Oregon households are above their pre-recession peaks. Over the past few years, income growth has been strongest in the lowest quintile of households, or those with incomes of less than $27,000 per year. Of course these households were the hardest hit during the recession and had further ground to regain. The good news is that ground has been regained, even if such household still struggle to make ends meet.

With stronger income gains among the bottom part of the distribution, Oregon's poverty rate continues to decline. At 12.6% statewide, Oregon's poverty rate is now half a percentage point below the U.S. which stands are 13.1%. Oregon's poverty rate is now lower than it has been since 2000, and the state's relative position vis a vis the nation is nearly back to the differences seen at that time as well.

Oregon's Racial Poverty Gap Remains Large, But is Narrowing

Source: Census, IPUMS-USA, Oregon Office of Economic Analysis
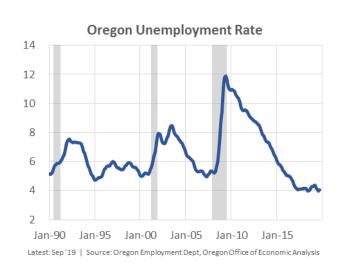
Decomposing the poverty rate shows the current economic expansion really is reaching all corners and populations. Census has changed the way it surveys and defines racial and ethnic groups over the decades. That said, poverty rates among Oregon's communities of color are at multi-decade lows, if not historic lows. A racial gap remains, as White, Not Hispanic or Latino Oregonians (and Americans) experience lower poverty rates overall. However the racial gap is narrowing as the expansion continues.

Oregon's Labor Market

The Office of Economic Analysis examines four main sources for jobs data: the monthly payroll employment survey, the monthly household survey, monthly withholding tax receipts and the quarterly census of employment and wages. Right now all four measures of the labor market are improving. Jobs are being added, albeit at a slower rate. Wages are rising, both in aggregate and for each worker. The unemployment rate is holding steady and remains under what would historically be considered full employment for Oregon, although the share of prime working-age Oregonians without a job indicates there is some room for further improvement.

Oregon Unemployment Rate

Latest: Sep '19 | Source: Oregon Employment Dept, Oregon Office of Economic Analysis

Importantly, wages in Oregon remain strong, although different measures of wages have diverged a bit in recent years. The good news is that after three years of revisions, the wages as reported by the BEA and from the payroll records (QCEW) are once again telling the same story.

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That said, withholding out of Oregonian paychecks continue to outstrip these other measures of economic wages. This gap is larger than it has been historically. It is also seen across nearly all industries and not confined to a particular sector or two. Our office and the Department of Revenue continue to research the topic. One item impacting these trends is the increase in withholding out of retirement accounts (pensions and IRA distributions). Given the increase in retirements and stock market returns, such withholdings are an increasing share of all withholding in the state, but are not directly tied to the labor market. Even so, wage growth for Oregon workers remains strong. Oregon's average wage, while lower than the nation's, is at its highest relative point since the mills closed in the 1980s.

Total Oregon Wage Growth
Year-over-Year

Latest Withholding 2019q3, Latest BEA and QCEW 2019q2
Source: BEA, Oregon Employment Dept, Oregon Dept of Revenue, Oregon Office of Economic Analysis
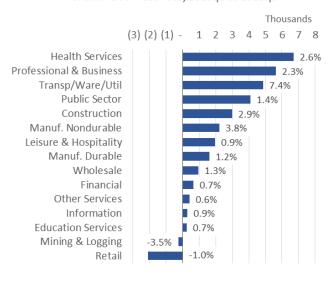
Overall, getting a handle of the health of Oregon's labor market is being somewhat complicated by technical issues within the underlying payroll jobs data. For this reason the employment data in our office's forecast is adjusted for two important technical purposes: seasonality at the detailed industry level and the upcoming benchmark revisions[1]. Specifically, our office uses the benchmarked, or revised employment data through 2018q3 and imputes the 2018q4 through 2019q3 employment data based upon the available preliminary Oregon estimates, national data, and our office's economic forecast model. As such, for this quarterly forecast, the first pure forecast period is 2019q4.

In the third quarter, total nonfarm employment increased 1.6 percent over the past year. Growth was led by the private sector at 1.6 percent, while the public sector increased 1.4 percent. These rates of growth are a clear step down from the full-throttle

Oregon Employment Growth
Growth Over Past Year, 2018q3 to 2019q3

Sector	Growth
Health Services	2.6%
Professional & Business	2.3%
Transp/Ware/Util	7.4%
Public Sector	1.4%
Construction	2.9%
Manuf. Nondurable	3.8%
Leisure & Hospitality	0.9%
Manuf. Durable	1.2%
Wholesale	1.3%
Financial	0.7%
Other Services	0.6%
Information	0.9%
Education Services	0.7%
Mining & Logging	-3.5%
Retail	-1.0%

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[1] Each year the U.S. Bureau of Labor Statistics revise the employment data – a process known as benchmarking. The current establishment survey (CES), also known as the monthly payroll survey, is benchmarked against the quarterly census of employment and wages (QCEW), a series that contains all employees covered by unemployment insurance. The monthly CES is based on a sample of firms, whereas the QCEW contains approximately 96 percent of all employees, or nearly a complete count of employment in Oregon. The greatest benefit of the CES is the timeliness – monthly employment estimates are available with only a one month lag – and these estimates are reasonably accurate. However the further removed from the latest benchmark, the larger the errors. The QCEW is less timely as the data is released approximately 3-4 months following the end of the quarter. The greatest benefit of the QCEW is that is a near 100 percent count of statewide employment. For these reasons, the CES is usually used to discuss recent monthly employment trends, however once a year the data is revised to match the historical QCEW employment trends. The last month of official benchmark data is September 2018. The QCEW is currently available through June 2019, thus the preliminary benchmark used here covers the October 2018 – June 2019 period.

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rates seen a few years ago, however still remain fast enough to keep pace with population gains so far.

The nearby graph illustrates the number of job gains by major industry by the length of the bar. The percentage increase these changes represent is noted as well.

So far in recovery, the large service sector industries have generally led job growth in terms of the number of jobs added and with above-average growth rates. These include jobs in professional and business services, health services, and leisure and hospitality industries. These three industries have gained just over 14,000 jobs in the past year and account for 47 percent of all job gains across the state. Now, given these industries account for 38 percent of all Oregon jobs, today they are increasing at a similar rate as the rest of the economy. Growth in the past year is being led to a larger degree by construction, nondurable manufacturing, and transportation, warehousing, and utilities.

In terms of illustrating how each industry has fared over the Great Recession and so far in recovery, the second graph shows both the depths of recessionary losses[2] and where each industry stands today relative to pre-recession peak levels.

Currently, thirteen major industries are at all-time highs. Private sector food manufacturing, education, and health never really suffered recessionary losses – although their growth did slow during the recession. Professional and business services and leisure and hospitality have each regained all of their losses and are leading growth today. Over the past couple of years retail emploment, other services, transportation, warehousing and utilities, and construction, in addition to the public sector have surpassed their pre-recession levels and are at all-time highs. Additionally, wholesale trade and metals and machinery manufacturing have fully regained their recessionary losses. Most recently non-durable manufacturing excluding food is all the way back back; this growth is led by beverages (breweries), chemicals, and plastics and rubber. In total, the twelve private sector industries at all-time highs account for 71 percent of all statewide jobs. The public sector accounts for an additional 16 percent of all jobs.

Oregon Employment by Industry
■ Great Recession Losses ■ 2019q3 Relative to Peak

With the Great Recession being characterized by a housing bubble, it is no surprise to see wood products, construction, mining and logging and financial services (losses are mostly real estate agents) among the hardest hit industries. These housing and related sectors are now recovering, although they still have much ground to make up. Transportation equipment manufacturing suffered the worst job cuts and is likely a structural decline due to the RV industry's collapse[3]. With that being said, the subsectors tied to aerospace are doing better and

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[2] Each industry's pre-recession peak was allowed to vary as, for example, construction and housing-related industries began losing jobs earlier than other industries or the recession's official start date per NBER.
[3] http://oregoneconomicanalysis.com/2012/07/10/rv-workers-and-reemployment/

the ship and boat building subsector is growing again. Metals and machinery manufacturing, along with mining and logging, have shown the largest improvements since the depths of the recession.

Coming off such a deep recession, goods-producing industries exhibited stronger growth than in past cycles. While all manufacturing subsectors have seen some growth, they are unlikely to fully regain all of their lost jobs. The good news, certainly in the short-term, is that much of the manufacturing sector has returned to growth in the past year following declines a year or two ago. Given ongoing trade issues, it is a question just how long these gains will last. That said, Oregon manufacturers typically outperform those in other states, in large part due to the local industry make-up. Oregon does not rely upon old auto makers or textile mills. The state's manufacturing industry is comprised of newer technologies like aerospace and semiconductors. Similarly Oregon's food processing industry continues to boom[4] even with layoffs and a closure recently.

All told, each of Oregon's major industries has experienced some growth in recovery, albeit uneven. As the economy continues to recover there will be net winners and net losers when it comes to jobs, income and sales. Business cycles have a way of restructuring the economy.
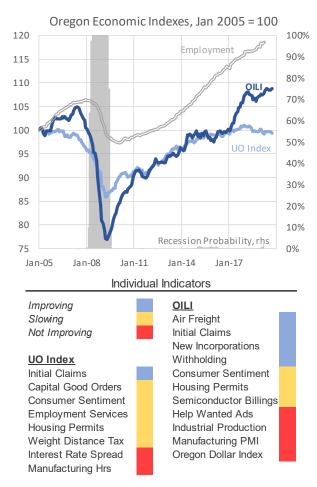
For additional information on the most recent quarter's employment forecast errors, please refer to Table A.1 in Appendix A.

Leading Indicators

Over the past year both of the Oregon-specific composite leading indicators have largely moved sideways. In any given month the positive readings on individual indicators are offset by weaker readings on other indicators. That said, if we step back and look at the bigger picture, most indicators remain in expansion territory but clearly slowing down. Given that these models can be thought of as a green light versus red light indication of the economy, they point toward continued growth and not an impending recession, or at least not yet.

In September, the individual indicators most tied to manufacturing, slowing global growth and the trade war continue to be the most worrisome. That said, the decline in help wanted ads is added to the list following revised data.

All told the data flow and Oregon's leading indicators remain a mixed bag. In general, economic forecasters see a heightened risk of recession so far in 2019 but are not altering their baseline forecasts accordingly. Rather, they are acknowledging the risks and continuing to monitor the situation.

Oregon Economic Indexes, Jan 2005 = 100

Individual Indicators

Improving	OILI
Slowing	Air Freight
Not Improving	Initial Claims
	New Incorporations
UO Index	Withholding
Initial Claims	Consumer Sentiment
Capital Good Orders	Housing Permits
Consumer Sentiment	Semiconductor Billings
Employment Services	Help Wanted Ads
Housing Permits	Industrial Production
Weight Distance Tax	Manufacturing PMI
Interest Rate Spread	Oregon Dollar Index
Manufacturing Hrs	

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[4] https://oregoneconomicanalysis.com/2018/06/27/oregons-food-economy/

University of Oregon professor Jeremy Piger has created a real time probability of recession[5] model, and finds there is a 2.8 percent chance the U.S. has entered into a recession. However, another recession will come, of that we can be sure. IHS Markit puts the probability of recession in the next year at 35 percent, while the Wall Street Journal Economic Forecasting Survey puts it at 30 percent.

Hopefully Oregon's leading indicators will give a signal in advance of the next recession, which neither is doing today. While past experience is no guarantee of future performance, Oregon's leading indicator series do have a good track record in their relatively brief history. Both series flattened out in 2006 and began their decline in advance of the Great Recession. Similarly both Oregon series reached their nadir in March 2009, a few months before the technical end of the recession (June 2009 per NBER) and about 9 months in advance of job growth returning to Oregon.

Short-term Outlook

While Oregon's economic expansion continues, growth has slowed and stabilized. In recent years, the state has enjoyed robust, full-throttle rates of job gains in the 3-3.5 percent range, or nearly 5,000 jobs per month. No longer is this the case. Oregon is expected to continue to see healthy job gains – a bit more than 2,000 per month or about 2 percent over this year and into 2020 – but the state is now past its peak growth rates for this expansion. Importantly, such gains remain strong enough to hold unemployment down and account for ongoing population growth.

After these near-term job gains, supply side constraints and longer-run demographic trends weigh on growth to a larger degree. These supply side constraints include a tighter labor market, infrastructure, energy costs, capacity utilization and the like. The large wave of retiring Baby Boomers will weigh on job growth rates for the coming decade. There will be enough jobs overall, as the generational churn is hidden underneath the labor market's surface.

The general characteristics of the current forecast remain the same as in recent quarters although employment is revised down and personal income is revised up in keeping with historical revisions and tracking this year.

Economic Forecast Summary

		Quarterly					Annual				
		2019:3	2019:4	2020:1	2020:2	2020:3	2018	2019	2020	2021	2022
Personal Income, Nominal	U.S.	3.6	4.3	4.1	4.1	4.3	5.6	4.8	4.2	4.4	4.4
% change	Oregon	4.2	4.1	4.2	4.6	4.7	6.2	5.3	4.5	4.9	4.8
Wages and Salaries, Nominal	U.S.	4.6	4.3	5.2	5.5	4.5	5.0	5.4	4.9	4.6	4.6
% change	Oregon	6.1	4.4	5.4	6.1	5.1	5.7	5.8	5.4	5.5	5.2
Population	U.S.	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7
% change	Oregon	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.1
Housing Starts	U.S.	1.29	1.27	1.27	1.27	1.26	1.25	1.26	1.27	1.25	1.26
U.S. millions, Oregon thousands	Oregon	20.4	21.2	21.7	21.8	22.0	19.6	20.8	21.9	22.8	23.3
Unemployment Rate	U.S.	3.7	3.6	3.6	3.5	3.5	3.9	3.7	3.5	3.6	3.8
	Oregon	4.0	4.0	3.9	3.8	3.8	4.1	4.1	3.8	3.9	4.0
Total Nonfarm Employment	U.S.	1.2	1.0	0.9	1.5	0.2	1.7	1.5	1.0	0.7	0.5
% change	Oregon	1.5	1.5	1.4	2.1	1.1	2.0	1.5	1.5	1.4	1.0
Private Sector Employment	U.S.	1.2	1.1	0.8	0.7	0.9	1.9	1.7	0.9	0.8	0.5
% change	Oregon	1.8	1.5	1.3	1.4	1.7	3.3	1.5	1.4	1.5	1.1

There is one categorical change made in recent forecasts, which is to switch the inflation variable to the Consumer Price Index for All Urban Consumers, West Region (All Items) to align with HB 2118 (2019). For most

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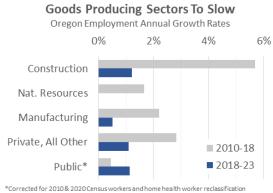
[5] http://pages.uoregon.edu/jpiger/us_recession_probs.htm/

of our office's history, we used the Portland-Salem CPI however in 2018 the Bureau of Labor Statistics stopped publishing that series due to budget cuts and realigning their work products. Portland is now the largest metropolitan area in the nation without its own CPI. BLS is still collecting local data but not publishing local estimates. HB 2118 standardizes inflation calculations throughout statute and our office is now forecasting the same inflation metric.

Private sector growth, measured by the number of jobs created, will be dominated by the large, service sector industries like professional and business services, leisure and hospitality and health.

Nevertheless, goods-producing industries, while smaller, had previously been growing at above-average rates. Expectations in recent forecasts have been that these goods-producing industries would slow. Growth over the next few years would be considerably less than that seen in the past few years.

Even construction is expected to add jobs at a slower pace even as the housing rebound continues. This is in part due to the fact that growth must cool off after the exceptionally strong gains in construction in recent years. Additionally construction employment growth has far outpaced increases

Goods Producing Sectors To Slow
Oregon Employment Annual Growth Rates

*Corrected for 2010 & 2020 Census workers and home health worker reclassification
Source: Oregon Employment Dept, Oregon Office of Economic Analysis

in new home construction. One side effect of this pattern is that productivity within the construction industry is declining. More workers producing fewer units of new housing or remodel activity means industrywide productivity is lower today than a decade or two ago. This is evident in the national data as well and is something researchers continue to dig into. No consensus has been reached as of yet.

Manufacturing is expected to see growth, albeit very slow growth in the coming years. This growth will be strongest among the state's food and beverage manufacturers, predominantly breweries and wineries. That said, any further global weakening or strengthening of the dollar will weigh further on the outlook. Oregon as a whole is not expected to fully regain all of its Great Recession related manufacturing job losses. That said, both the Portland and Medford metro regions have fully regained their losses. Nationwide about 1 out of 5 metros have done so as well.

Oregon Manufacturing Employment
Oregon's Severe Recessions

Source: Oregon Employment Department, Oregon Office of Economic Analysis
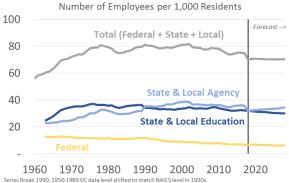
Public sector employment at the local, county and state level for both education and non-education workers is growing in Oregon, as state and local revenues continue to improve along with the economy. Over the forecast horizon, government employment is expected to grow roughly in line with population growth and the increased demand for public services, albeit just a hair faster than population growth alone. One public sector risk to the

Government Workers in Oregon
Number of Employees per 1,000 Residents

Series Break 1990, 1950-1989 SIC data level shifted to match NAICS level in 1990s
Latest Data: 2018 | Source: Oregon Employment Department, Oregon Office of Economic Analysis

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outlook is PERS. The extent to which government hiring by local and state entities is impacted in the coming years as contributions increase is unknown.

Along with an improving labor market, stronger personal income gains are here, although tax law changes have pushed around growth rates in the recent past (see the expiring Bush tax cuts and the fiscal cliff) and may do so again moving forward. Recent revisions have also raised Oregon's personal income above previous forecast estimates. Personal income is now forecasted to grow 5.3 percent in 2019, slow to to 4.5 percent in 2020 and then settle in at 4.9 percent in 2021, 4.8 percent in 2022 and 4.7 percent in 2023.

As the economy continues to improve, household formation is increasing too, which will help drive up demand for new houses. Household formation was suppressed earlier in the recovery, however the improving economy and increase in migration have returned in full force. Even as more young Oregonians are living at home, as the Millennials continue to age into their late-20s through their mid-30s, demand for housing will increase as well. In fact, given the underlying demographics, household formation should slightly outpace overall population growth in the coming years.

Housing starts to begin the year have totaled just over 20,000 at an annual pace, which is about the level of Oregon's long-run average, at least prior to the housing bubble. The outlook calls for a few more gains as housing production increases to meet demand. Starts will total 20,800 in 2019, and increase to 21,900 in 2020 and 22,800 in 2021. Over the extended horizon, starts are expected to average around 23,000 per year to meet demand for a larger population and also, partially, to catch-up for the underbuilding that has occurred in recent years.

A more complete summary of the Oregon economic outlook and forecast changes relative to the previous outlook are available as Table A.2 and A.3 in Appendix A.

Forecast Risks

The economic and revenue outlook is never certain. Our office will continue to monitor and recognize the potential impacts of risk factors on the Oregon economy. Although far from comprehensive, we have identified several major risks now facing the Oregon economy in the list below:

- U.S. Economy. While Oregon is more volatile than the nation overall, the state has never missed a U.S. recession or a U.S. expansion. In fact, Oregon's business cycle is perfectly aligned with the nation's, at least when measuring peak and trough dates for total nonfarm employment. If anything, Oregon actually leads the U.S. by a month or two. The fact that there are more worrisome trends or risks at the U.S. level means there should be concerns about the Oregon outlook. Should the U.S. fall into recession, Oregon will too. That said, should the U.S. economy accelerate, Oregon's economy should receive a similar boost as well.

- Housing affordability. Even as the housing market recovers, new supply has not kept up with demand (both from new households and investor activity). This applies to both the rental and ownership sides of the market. As such, prices have risen considerably and housing (in)affordability is becoming a larger risk to the outlook. Expectations are that new construction will pick up a bit in the next year or three, to match the increase in demand, which will alleviate some price pressures. However to the extent that supply does not match demand, home prices and rents increasing significantly faster than income or

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wages for the typical household is a major concern. While not included in the baseline outlook, significantly worse housing affordability may dampen future growth as fewer people can afford to move here, lowering net in-migration and the size of the labor force.

- Global Spillovers Both Up and Down. The international list of risks seems to change by the day: a hard Brexit, sovereign debt problems in Europe, equity and property bubbles in places like Canada, South America and Asia, political unrest in Hong Kong, the Middle East and Venezuela, nuclear arsenal concerns with North Korea, and commodity price spikes and inflationary pressures in emerging markets. In particular, with China now a top destination for Oregon exports, the state of the Chinese economy – and its real estate market, or public debt burden – has spillover effects to the Oregon economy. Any economic slowing, or deteriorating relations in or with Asia is a potential threat to the Pacific Northwest.

- Federal fiscal policy. The uncertainty regarding federal fiscal policy remains a risk. Some policies are likely to impact Oregon more than the typical state, while others maybe not as much. The good news for Oregon is that outside of outright land ownership, the federal government has a relatively small physical presence in the state. This means that direct spending reductions are less likely to hurt Oregon. Of course, it also limits the local benefit from any potential increases in federal spending, as was recently passed by Congress. In terms of federal grants as a share of state revenue, Oregon ranks 29th highest. For federal procurement as a share of the economy, Oregon ranks 48th highest. Oregon ranks below average in terms of military-dependent industries as well. The one area that Oregon ranks above average is in terms of direct federal employment, ranking 19th highest among all states. Oregon also is exposed to an above-average share of federal transfer payments to households. Transportation funding is also a major local concern. Overall, the direct impact may be less than in other states but the impact will be felt nevertheless, particularly as our closest neighboring states have large federal and military workforces.

- Climate and Natural Disasters. Weather forecasting is even more difficult than economic forecasting a year or two into the future. While the severity, duration and timing of catastrophic events like earthquakes, wildfires and droughts are difficult to predict, we do know they impact regional economies. Fires damage forests and tourism. Droughts in particular impact our agricultural sector and rural economies to a larger degree. Whenever Cascadia, the big earthquake, hits, we know our regional economy and its infrastructure will be crippled and in need of immediate repairs. Some economic modeling suggests that Cascadia's impact on Oregon will be similar to Hurricane Katrina's on New Orleans. Longer-term issues like the potential impact of climate change on domestic migration patterns are likewise hard to predict and outside our office's forecast horizon. There is a reasonable expectation that migration flows will continue to be strong as the rest of the country becomes less habitable over time.

- Commodity price inflation. Always worrisome is the possibility of higher oil (and gasoline) prices. While consumer spending has held up pretty consistently in this recovery, anytime there is a surge in gas prices, it eats away at consumers' disposable income, leaving less income to spend on all other, non-energy related goods and services. This impact is certainly more muted today[6], but a risk nonetheless.

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[6] https://oregoneconomicanalysis.com/2018/11/08/oregons-energy-intensity-and-household-spending/

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- Federal timber policy and transfers impact regional economies and local governments. Reductions in public employment and services are being felt in the impacted counties in recent years and decades. For more information from a historical perspective, see two recent blog posts, here and here[7].

- Initiatives, referendums, and referrals. Generally, the ballot box and legislative changes bring a number of unknowns that could have sweeping impacts on the Oregon economy and revenue picture.
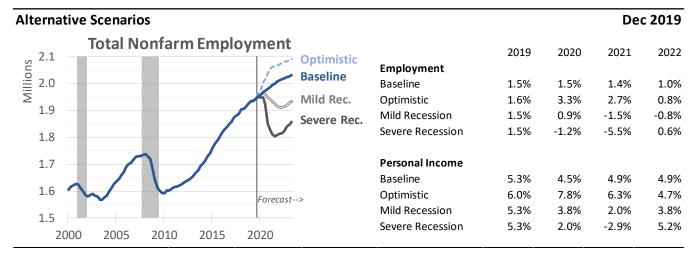
Alternative Scenarios

The baseline forecast is our outlook of the most likely path for the Oregon economy. As with any forecast, however, many other scenarios are possible. In conjunction with the Legislative Revenue Office, this forecast provides three alternative scenarios, which are modeled on growth patterns over previous business cycles.

Optimistic Scenario:

The expansion is able to gather steam as the trade tensions and manufacturing weakness fade and recede into the rearview mirror of history. The U.S. economy builds momentum into 2020. The economy is soon firing on all cylinders, resulting in faster productivity growth which raises the speed limit of overall gains. Wages and incomes increase likewise increase at a faster rate. All of this results in stronger consumer spending and more business investment.

In Oregon, job gains are broad based with strong growth in all private sector industries. The unemployment rate remains lower than under the baseline scenario as individuals are able to find employment more readily and income growth accelerates. The labor force participation gap closes and even turns positive as more Oregonians enter the labor market. The increase in employment and income support a self-sustaining economic expansion in which new income fuels increased consumer spending (and debt reduction) which begets further increases in employment. Such an expansion increases housing demand as newly employed households (and increasing income for existing households) find their own homes after doubling-up with family and friends during the recession. This results in new construction returns to normal levels about a year earlier than the baseline.

Alternative Scenarios   **Dec 2019**

	2019	2020	2021	2022
Employment				
Baseline	1.5%	1.5%	1.4%	1.0%
Optimistic	1.6%	3.3%	2.7%	0.8%
Mild Recession	1.5%	0.9%	-1.5%	-0.8%
Severe Recession	1.5%	-1.2%	-5.5%	0.6%
Personal Income				
Baseline	5.3%	4.5%	4.9%	4.9%
Optimistic	6.0%	7.8%	6.3%	4.7%
Mild Recession	5.3%	3.8%	2.0%	3.8%
Severe Recession	5.3%	2.0%	-2.9%	5.2%

Mild Recession Scenario:

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[7] http://oregoneconomicanalysis.wordpress.com/2012/01/23/historical-look-at-oregons-wood-product-industry
http://oregoneconomicanalysis.wordpress.com/2013/05/28/timber-counties/

The slowdown in economic growth and increased trade tensions carry over and escalate. Financial markets remain spooked and the yield curve inverts again. Real estate prices correct and the housing market stall worsens, removing one potential driver of growth. Strained trade relations result in falling exports, business confidence tumbles and so does capital spending. The U.S. dollar strengthens further, chocking off the manufacturing cycle entirely. These factors are enough weight on the recovery that by early-2020 the economy slides back into recession. Job losses ensue and while not severe – about 55,000 jobs in Oregon when it is all said and done – it takes a toll on business income, housing starts and personal income. The unemployment rate returns to nearly 7 percent. The net effect of the mild recession is an extended period of prolonged economic weakness, not unlike Japan's so-called Lost Decade(s). Although inflation is expected to remain positive, a key difference.

Severe Recession Scenario:

After expanding for 11 years at relatively lackluster growth rates, the U.S. economy falls back into recession. Industrial production declines and the slower personal income growth in the U.S. worsens. Strained trade relations develop into an all-out trade war. The Fed, already lacking in traditional monetary policy ammunition, is not able to stave off such an impact. While the catalyst may be different, the economic effect is similar to late 2008 and early 2009, although not quite as severe when the dust settles. This is little comfort when the unemployment spikes back to 9 percent and more than 147,000 Oregonians lose their jobs by early-2021.

Besides the domestic economic headwinds and Federal Reserve tightening, the likely culprit in this scenario is either a meltdown of the financial markets sparked by some geopolitical shock, or quickly rising inflation. Economic growth in the U.S., while fairly steady as of late, is not nearly strong enough to withstand an external financial shock of this magnitude, nor a Federal Reserve quickly raising rates to fight inflation. Further economic effects of a recession this size are personal income losses of around 5 percent, about three-quarters the size of the Great Recession losses in Oregon. Housing starts plummet to near historical low levels of construction and home prices decline further. On the bright side, when construction does rebound, it will result in a surge of new home building that will rise above the state's long term average level of building due to pent-up demand for housing and that the state will have under built housing during this time period.

Extended Outlook

IHS Markit projects Oregon's economy to fare well relative to the rest of the country in the coming years. The state's Real Gross State Product is projected to be the twenty-second fastest among all states across the country in terms of growth with gains averaging 1.8 percent from 2019 through 2024. Total employment is expected to be the twelfth strongest among all states at an annualized 0.7 percent, while manufacturing employment will be the second fastest in the country at 0.5 percent. Total personal income growth is expected to be 4.5 percent per year, the fifteenth fastest among all states, according to IHS Economics.

Our office is equally, if not more bullish in terms of Oregon's relative growth prospects. Much of Oregon's advantage comes from population growth, specifically the ability to attract and retain young, working-age households. Our office expects population growth to average 1.1 percent over the next handful of years. Recently, IHS lowered their forecast for Oregon population growth to 0.9 percent over the same time period. These differences are not immaterial. It amounts to a 5 year difference of nearly 50,000 Oregonians of which between two-thirds and three-fourths would be among the working-age population. As such, our overall economic outlooks have diverged just a bit.

OEA has identified three main avenues of economic growth that are important to continue to monitor over the extended horizon: the state's dynamic labor supply, the state's industrial structure and the current number of start-ups, or new businesses.

Oregon has typically benefited from an influx of households from other states, including an ample supply of skilled workers. Households continue to move to Oregon even when local jobs are scarce, as long as the economy is equally bad elsewhere, particularly in California. Relative housing prices also contribute to migration flows in and out of the state. For Oregon's recent history – data available from 1976 – the labor force in the state has both grown faster than the nation overall and the labor force participation rate has been higher. However while the past two years have brought considerable improvements there remain potentially worrisome signs, particularly when the next recession comes.

First, on the bright side, all of the recessionary-induced declines in the labor force itself have been reversed in the recent years. Oregon's labor force has never been larger. However, the participation rate may be a little lower than expected, when adjusting for the size of the population and the aging demographics. Such modeling is sensitive to assumptions but it is encouraging that much of the participation gap has closed as the expansion has endure.

Oregon's Labor Market
Population 16 and Over
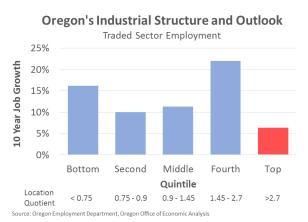
A complicating factor is that Oregon is now at the point where demographics and the economy effectively offset one another. Job gains are just enough to account for the increase in Baby Boomers retiring. As such, the fact that Oregon's labor force participation rate and employment to population ratio have flattened out and even fallen somewhat in recent months is not necessarily a cause for concern. What would be more concerning is if the declines accelerated or that demographically-adjusted participation rates no longer increased as the expansion continues.

Oregon's industrial structure is very similar to the U.S. overall, even moreso than nearly all other states. That said, Oregon's manufacturing industry is larger and weighted toward semiconductors and wood products, relative to the nation which is much more concentrated in transportation equipment (autos and aerospace).

However, these industries which have been Oregon's strength in both the recent past and historically, are now expected to grow the slowest moving forward. Productivity and output from the state's technology producers is expected to continue growing quickly, however employment is not likely to follow suit. Similarly, the timber industry remains under pressure from both market based conditions and federal regulations. Barring major changes to either, the slow growth to downward trajectory of the industry in Oregon is likely to continue.

Oregon's Industrial Structure and Outlook
Traded Sector Employment
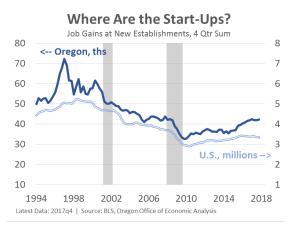
With that being said, certainly not all hope is lost. Those top industries in Oregon comprise approximately 7 percent of all statewide employment. And many industries in which Oregon has a larger concentration that then

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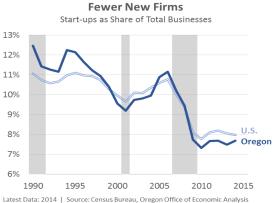
typical state are expected to perform quite well over the coming decade. These industries include management of companies, food and beverage manufacturing, published software along with some health care related firms.

The state's real challenges and opportunities will come in industries in which Oregon does not have a relatively large concentration. These industries, like consulting, computer system design, financial investment, and scientific R&D, are expected to grow quickly in the decade ahead. To the extent that Oregon is behind the curve, then the state may not fully realize these gains if they rely more on clusters and concentrations of similar firms that may already exist elsewhere in the country.

Another area of potential concern that may impact longer term economic growth is that of new business formation. Over the past few years, the number of new business license applications with the Oregon Secretary of State have begun to grow again and even accelerate. However data available from the U.S. Census Bureau and Bureau of Labor Statistics clearly indicate that entrepreneurship and business formation remain at subdued levels and rates.

Where Are the Start-Ups?
Job Gains at New Establishments, 4 Qtr Sum

Latest Data: 2017q4 | Source: BLS, Oregon Office of Economic Analysis

The share of all businesses that are start-ups, either in Oregon or across the nation, is effectively at an all-time low, with data starting in the late 1970s. Associated start-up employment follows a similar pattern. The concern is that new businesses are generally considered the source of innovation and new ideas, products and services that help propel economic growth. To the extent that fewer start-ups indicate that R&D more broadly is not being undertaken, slower growth is to be expected moving forward. However, if the larger firms that have won out in today's marketplace are investing in R&D and making those innovations themselves, then the worries about the number of start-ups today is overstated. It can be hard to say which is the correct view. However seeing these longer run,

Fewer New Firms
Start-ups as Share of Total Businesses

Latest Data: 2014 | Source: Census Bureau, Oregon Office of Economic Analysis
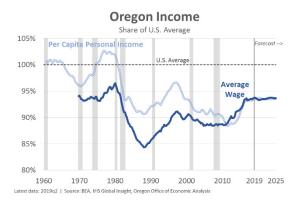
downward trends in new business formation warrants, at the very least, concern about future growth prospects.

Importantly, Oregon also enjoys the long-term advantages of low electricity costs; a central location between the large markets of California, Vancouver and Asia; clean water; low business rents and living costs when compared to other Left Coast locations; and an increasingly diverse industrial base.

Finally, one long-run concern for some policymakers and think tanks has been Oregon's relatively low income and wage numbers in recent decades. Back in the heyday of the timber industry, Oregon's per capita personal income and median household income were in-line with the nation overall. At this time, Oregon's average wage was lower in part due to the industrial composition, but these lower wages were made up at the statewide level by demographics and household composition.

Oregon Income
Share of U.S. Average

Latest data: 2019q2 | Source: BEA, IHS Global Insight, Oregon Office of Economic Analysis

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Even since the timber industry restructured following the severe early 1980s recessions, Oregon's relative incomes have been lower. The regional economy experienced a major shock and it took quite a long time to recover. However, finally, in this current economic expansion, Oregon is regaining the ground lost decades ago.

Oregon's median household income now matches the U.S. overall. Average wages in Oregon are at their highest relative point since the mills closed in the early 1980s. And the state's per capita personal income is back to where it was prior to the dotcom crash in 2001.
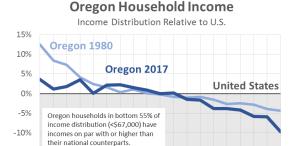
In terms of the outlook, expectations are for Oregon's relative positions to hold steady in the coming years. The primary reason for this is that Oregon's average wages have already accelerated in recent years, even as U.S. wages are just now picking up. Our office expects Oregon's average wage to continue to increase by 4 percent per year. However as the U.S. accelerates closer to Oregon's annual rate, Oregon's growth advantage in recent years will lessen.

One major factor influencing per capita personal income trends is the relative incomes at the very top of the distribution. Make no mistake, Oregon's highest-income households have done well financially. However incomes at the top of the national distribution have increased even further. This gap among the richest households is large enough, and the incomes high enough to weigh on Oregon's overall per capita income figures.

Median Household Income
Inflation-Adjusted, PCE Deflator

Oregon vs U.S.	1969	1979	1989	1999	2009	2018
	(-2.2%)	(-0.4%)	(-9.3%)	(-2.6%)	(-3.5%)	(+2.4%)

Data: 1970, 1980, 1990, 2000 Decennial Census; 2005-2018 American Community Survey; Inflation adjustment uses the Personal Consumption Expenditure (PCE) deflator | Source: BEA, Census, Oregon Office of Economic Analysis

Oregon Household Income
Income Distribution Relative to U.S.

Oregon households in bottom 55% of income distribution (<$67,000) have incomes on par with or higher than their national counterparts.

Income Percentile

Source: IPUMS-USA, Oregon Office of Economic Analysis

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Revenue Summary

As the 2019-21 biennium has begun, all major types of Oregon's General Fund tax collections continue to outstrip gains in the underlying economy. The largest part of Oregon's General Fund, personal income tax collections, surged during the peak tax season and continued to post strong gains as extension filers submitted their tax returns in the fall. Both income tax payments net of refunds, as well as withholdings out of paychecks, have been posting growth rates above what economic gains would call for. Corporate tax collections have slowed a bit in recent months, but remain elevated above their typical size as well.

PIT Payments Outstrip Income Growth
% change year ago

* Full Year Filers   **Excluding Kicker Credits

The primary forecasting challenge for the current biennium is to determine how much of the recently strong tax collections are due to temporary factors that will fade away in the months ahead. Even without the onset of recession, revenue growth is facing major headwinds during the current biennium. State & federal tax policies, a big kicker refund and slower economic growth will all weigh on General Fund revenues in the near term.

Over the past business cycle, state tax policy changes have played a role in boosting tax collections. In particular, the increase in personal tax rates (Measure 66) and the imposition of a corporate minimum tax with (Measure 67) have supported additional revenue growth. In addition to enacting these tax laws, policymakers have increased revenues further by allowing some tax credits to sunset and by being selective about which federal tax law changes Oregon couples to. On net, however, the impact of state tax law changes has been relatively small since many tax cuts as well as tax increases have been enacted.

Corporate Taxes
$ thousands, 12 month sum
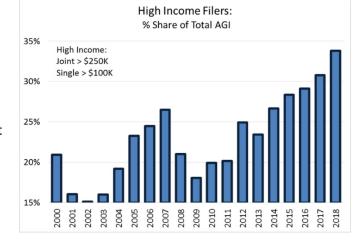
Oregon's income tax rate structure has also played a role in supporting above-trend revenue gains. Strong household income gains represent the most encouraging aspect of Oregon's economic expansion. As households earn more income, many step up tax brackets, leading to even faster growth in personal income tax liability. Also, as income growth has become polarized, a higher share of earnings is being accounted for by households at the top of the income distribution. Such households often face the highest tax rates. High-income households currently account for an income share that is around 50% larger than it was during the peak of the last economic expansion. The share of income reported by high-income households is very sensitive to the business cycle and will fall off sharply when the next recession inevitably comes around, exacerbating revenue losses.

Perhaps the biggest factor behind Oregon's above-trend revenue gains has been the federal tax reforms that were enacted at the end of 2017. Federal tax law changes have boosted Oregon's recent tax collections through several avenues. While many of these factors are clearly temporary and will fade in the months ahead, it can be

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argued that some of the federal tax reforms have broadened Oregon's tax base and will persist over the extended horizon.

Among temporary factors, timing shifts in tax payments in response to changing federal tax rules have been very widespread, particularly for business tax liability. Through strategic accounting practices, both firms and individuals actively pulled costs into 2017 and pushed income into future years in order to reduce their tax burdens. Also, taxpayers have sought to take full advantage of expiring or limited deductions, and have actively claimed bonus depreciation and Section 179 expenses.

High Income Filers:
% Share of Total AGI

High Income:
Joint > $250K
Single > $100K

In addition to shifts in the timing of tax payments, some taxpayers are turning to more complicated tax management strategies in response to federal reforms. In particular, some filers have changed their business structures or reporting classifications in light of the new federal rules. Switching between C-corporations and passthrough entities, from wages to business income, and dividing or merging different lines of business are all strategies that have the potential to lower tax burdens for some filers. To date, however, the adoption of complicated tax management strategies has been surprisingly limited. Over time, as tax practitioners get more experience with the new rules, such strategies may become more widespread. However, many practitioners report being hesitant to advise making big changes in filing status due to the uncertain future of federal tax policies. Filing changes are not without cost, and under a new administration or Congress, some of the federal law changes may well be reversed in the years ahead. For example, the decision to switch into a C-Corporation, is very difficult to reverse should incentives change.

While many of the downstream effects of federal tax law changes are likely to be temporary, Oregon's tax base has clearly grown somewhat due to the reforms. One goal of the federal reforms was to rely on a broader tax base rather than higher tax rates. Corporate deduction limits such as the cap on net interest deductions feed through to state tax liability. Personal income tax deduction limits on business income such as operating losses can also affect state tax liability. In addition to limiting deductions, the territorial system of international taxation appears to have given businesses an incentive to report more income domestically.

While there is a great deal of uncertainty about the staying power of recent revenue growth, the December forecast reflects a stable economic outlook, with the expected size of General Fund collections increasing slightly over what was expected at the Close of Session. Going forward, the uncertain path of the nationwide economy will dominate the revenue outlook. Fortunately, Oregon is better positioned than ever before to weather a revenue downturn. Automatic deposits into the Rainy Day Fund and Education Stability Fund have added up over the decade-long economic expansion. When the projected ending balance for the current biennium is included, Oregon is expected to end the biennium with more than $2.7 billion in reserves set aside, amounting to almost 13% of the two-year budget.

Longer term, revenue growth in Oregon and other states will face considerable downward pressure over the 10-year extended forecast horizon. As the baby boom population cohort works less and spends less, traditional

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state tax instruments such as personal income taxes and general sales taxes will become less effective, and revenue growth will fail to match the pace seen in the past.

2019-21 General Fund Revenues

Gross General Fund revenues for the 2019-21 biennium are expected to reach $21,169 million. This represents an increase of $57 million from the September 2019 forecast, and an increase of $149 million relative to the Close of Session forecast. With revenue gains expected to be very modest from an historical perspective, there is both upside and downside risk to the forecast.

Table R.1

2019-21 General Fund Forecast Summary

(Millions)	2019 COS Forecast	September 2019 Forecast	December 2019 Forecast	Change from Prior Forecast	Change from COS Forecast
Structural Revenues					
Personal Income Tax	$18,283.5	$18,292.4	$18,285.8	-$6.7	$2.3
Corporate Income Tax	$1,190.8	$1,270.0	$1,325.9	$55.9	$135.1
All Other Revenues	$1,546.1	$1,549.8	$1,557.4	$7.6	$11.3
Gross GF Revenues	$21,020.4	$21,112.1	$21,169.0	$56.9	$148.6
Offsets and Transfers	-$203.5	-$196.8	-$209.1	-$12.3	-$5.5
Administrative Actions[1]	-$21.5	-$21.5	-$21.5	$0.0	$0.0
Legislative Actions	-$199.5	-$199.5	-$199.5	$0.0	$0.0
Net Available Resources	**$22,914.4**	**$23,226.7**	**$23,389.5**	**$162.8**	**$475.1**
Confidence Intervals					
67% Confidence	+/- 7.1%		**$1,497.4**	**$19.67B to $22.67B**	
95% Confidence	+/- 14.1%		**$2,994.8**	**$18.17B to $24.16B**	

1 Reflects cost of cashflow management actions, exclusive of internal borrowing.

Personal Income Tax

Personal income tax collections were $2,460 million during the first quarter of fiscal year 2020, $13 million (0.5%) above the latest forecast. Compared to the year-ago level, total personal income tax collections rose by 9.0% relative to a forecast that called for an 8.4% increase. Table B.8 in Appendix B presents a comparison of actual and projected personal income tax revenues for the July-September quarter. Strong growth in collections has continued into the second quarter of fiscal year 2020.

Personal income tax collections during the 2019-21 biennium will be constrained by many factors, including a large kicker credit. During the kicker certification process, when revenue data is reconciled with accounting records, it was determined that the kicker credit included an additional $118 million, bringing the total amount to just under $1.7 billion. This change was roughly neutral from a budgeting perspective since the beginning balance grew along with the size of the kicker credit.

Corporate Excise Tax
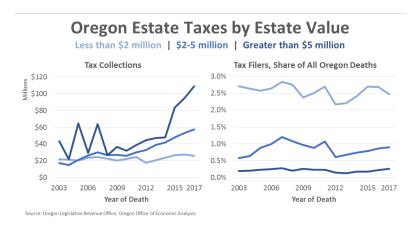
Corporate excise tax collections equaled $230 million for the first quarter of fiscal year 2020, $9 million (4.2%) below the September forecast. Compared to the year-ago level, net corporate excise tax collections fell by 9.5% while the forecast called for a decline of 13.1%.

Federal Tax Law Changes have injected a good deal of uncertainty into the outlook for corporate tax payments. It is likely that the corporate tax base has become larger in Oregon. In part, firms are now recognizing more of their global income streams. Also, some employees, investors, partnerships, S-corps and sole proprietorships face a larger tax incentive to incorporate. Conversely, some C-corporations and employees will benefit from becoming pass-through entities. Accelerated depreciation provisions are also impacting the revenue stream, as is the repatriation of deferred income from multinational corporations. While large, the amount of taxes on repatriated earnings appears to be falling short of expectations, and has been revised downward.

Other Sources of Revenue

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Non-personal and non-corporate revenues in the General Fund account for approximately 7 percent of the total. One-fifth of this amount comes from Oregon Liquor Control Commission revenues, while estate taxes account for another fifth. In terms of forecast changes in recent biennia, estate taxes stand out as they have come in considerably above expectations.

Overall the number of estates impacted by the tax is relatively steady over the past decade, both in absolute numbers and as a share of all Oregon deaths. The growth in tax collections largely reflects the increasing size of a few very large estates. Looking forward, the outlook for collections remains strong, however not quite as strong as demographics and asset markets alone suggest due to household's tax planning capabilities.

Oregon Estate Taxes by Estate Value
Less than $2 million | $2-5 million | Greater than $5 million

Source: Oregon Legislative Revenue Office, Oregon Office of Economic Analysis

All told, General Fund revenues excluding personal and corporate taxes are expected to total $1.56 billion in 2019-21, an upward revision of $7.6 million relative to the previous forecast. Increases in insurance taxes and interest earnings were partially offset by downward revisions in tobacco taxes, criminal fines and securities fees. In the out biennia, these revenues are revised higher due to a stronger outlook for insurance taxes.

Extended General Fund Outlook

Table R.2 exhibits the long-run forecast for General Fund revenues through the 2027-29 biennium. Users should note that the potential for error in the forecast increases substantially the further ahead we look.

Revenue growth in Oregon and other states will face considerable downward pressure over the 10-year extended forecast horizon. As the baby boom population cohort works less and spends less, traditional state tax instruments such as personal income taxes and general sales taxes will become less effective, and revenue growth will fail to match the pace seen in the past.

Table R.2

General Fund Revenue Forecast Summary (Millions of Dollars, Current Law)

Revenue Source	Forecast 2017-19 Biennium	% Chg	Forecast 2019-21 Biennium	% Chg	Forecast 2021-23 Biennium	% Chg	Forecast 2023-25 Biennium	% Chg	Forecast 2025-27 Biennium	% Chg	Forecast 2027-29 Biennium	% Chg
Personal Income Taxes	18,823.3	17.2%	18,285.8	-2.9%	21,709.3	18.7%	23,672.7	9.0%	25,717.4	8.6%	28,408.1	10.5%
Corporate Income Taxes	1,752.7	44.8%	1,325.9	-24.4%	1,288.4	-2.8%	1,459.4	13.3%	1,697.3	16.3%	1,909.0	12.5%
All Others	1,339.3	3.9%	1,557.4	16.3%	1,405.0	-9.8%	1,470.9	4.7%	1,543.1	4.9%	1,639.2	6.2%
Gross General Fund	21,915.3	18.1%	21,169.0	-3.4%	24,402.7	15.3%	26,603.0	9.0%	28,957.8	8.9%	31,956.3	10.4%
Offsets and Transfers	*(129.5)*		*(209.1)*		*(112.0)*		*(114.3)*		*(78.3)*		*(80.8)*	
Net Revenue	21,785.8	17.6%	20,959.9	-3.8%	24,290.6	15.9%	26,488.7	9.0%	28,879.5	9.0%	31,875.4	10.4%

Tax Law Assumptions

The revenue forecast is based on existing law, including measures and actions signed into law during the 2019 Oregon Legislative Session. OEA makes routine adjustments to the forecast to account for legislative and other actions not factored into the personal and corporate income tax models. These adjustments can include expected kicker refunds, when applicable, as well as any tax law changes not yet present in the historical data. A summary of actions taken during the 2019 Legislative Session can be found in Appendix B Table B.3. For a detailed treatment of the components of the 2019 Legislatively Enacted Budget, see: LFO 2019-21 Budget Summary.

Although based on current law, many of the tax policies that impact the revenue forecast are not set in stone. In particular, sunset dates for many large tax credits have been scheduled. As credits are allowed to disappear, considerable support is lent to the revenue outlook in the outer years of the forecast. To the extent that tax credits are extended and not allowed to expire when their sunset dates arrive, the outlook for revenue growth will be reduced. The current forecast relies on estimates taken from the Oregon Department of Revenue's 2019-21 Tax Expenditure Report together with more timely updates produced by the Legislative Revenue Office.

General Fund Alternative Scenarios

The latest revenue forecast for the current biennium represents the most probable outcome given available information. OEA feels that it is important that anyone using this forecast for decision-making purposes recognize the potential for actual revenues to depart significantly from this projection.

Currently, the overwhelming downside risk facing the revenue outlook is the threat that the U.S. economic recovery will lose steam in the near term. Such a scenario, however it played out, would result in drastic revenue losses. Two recessionary scenarios are displayed in table R.2b. In a severe recession, biennial revenues could come in as much as $4.7 billion lower than predicted over the next two biennia[8].

TABLE R2b										December 2019
Alternative Cyclical Revenue Forecast ($ millions)										
	2017-19 BN		2019-21 BN		2021-23 BN		2023-25 BN		2025-27 BN	
Baseline Case	FY '18	FY '19	FY '20	FY '21	FY '22	FY '23	FY '24	FY '25	FY '26	FY '27
Personal Income										
Level	206.7	218.8	229.4	240.2	252.0	264.0	274.9	289.8	304.1	318.8
% change	6.0%	5.9%	4.8%	4.7%	4.9%	4.8%	4.1%	5.4%	4.9%	4.8%
Taxes										
Personal Income	8,872	9,909	8,588	9,698	10,665	11,044	11,564	12,108	12,557	13,161
Corporate Excise & Income	739	927	749	577	619	669	708	752	821	877
Other General Fund	633	706	698	859	694	711	727	744	762	781
Total General Fund	10,244	11,542	10,035	11,134	11,978	12,424	12,999	13,604	14,139	14,819
% change	4.3%	12.7%	-13.1%	11.0%	7.6%	3.7%	4.6%	4.7%	3.9%	4.8%
Moderate Recession	FY '18	FY '19	FY '20	FY '21	FY '22	FY '23	FY '24	FY '25	FY '26	FY '27
Personal Income										
Level	206.7	218.8	223.8	228.7	242.5	257.0	269.7	286.5	301.4	316.5
% change	6.0%	5.9%	2.3%	2.2%	6.0%	6.0%	5.0%	6.2%	5.2%	5.0%
Taxes										
Personal Income	8,872	9,909	8,295	9,046	10,102	10,633	11,263	11,917	12,391	13,008
Deviation from baseline	*0*	*0*	*-293*	*-652*	*-563*	*-411*	*-301*	*-191*	*-166*	*-153*
Corporate Excise & Income	739	927	712	522	572	634	681	735	806	864
Deviation from baseline	*0*	*0*	*-36*	*-55*	*-47*	*-36*	*-26*	*-17*	*-14*	*-13*
Other General Fund	633	706	698	859	694	711	727	744	762	781
Total General Fund	10,244	11,542	9,705	10,427	11,368	11,978	12,671	13,396	13,959	14,653
% change	4.3%	12.7%	-15.9%	7.4%	9.0%	5.4%	5.8%	5.7%	4.2%	5.0%
Deviation from baseline	*0*	*0*	*-329*	*-708*	*-610*	*-447*	*-328*	*-208*	*-180*	*-166*
Biennial Deviation		*0*		*-1,037*		*-1,057*		*-536*		*-346*
Severe Recession	FY '18	FY '19	FY '20	FY '21	FY '22	FY '23	FY '24	FY '25	FY '26	FY '27
Personal Income										
Level	206.7	218.8	209.0	216.8	233.2	250.2	265.5	285.0	299.8	314.8
% change	6.0%	5.9%	-4.5%	3.7%	7.5%	7.3%	6.1%	7.3%	5.2%	5.0%
Taxes										
Personal Income	8,872	9,909	7,521	8,376	9,550	10,233	11,016	11,829	12,299	12,912
Deviation from baseline	*0*	*0*	*-1,066*	*-1,322*	*-1,115*	*-811*	*-548*	*-280*	*-257*	*-249*
Corporate Excise & Income	739	927	616	465	527	599	660	727	798	855
Deviation from baseline	*0*	*0*	*-133*	*-112*	*-92*	*-70*	*-48*	*-25*	*-23*	*-22*
Other General Fund	633	706	698	859	694	711	727	744	762	781
Total General Fund	10,244	11,542	8,836	9,700	10,771	11,543	12,403	13,299	13,859	14,547
% change	4.3%	12.7%	-23.4%	9.8%	11.0%	7.2%	7.5%	7.2%	4.2%	5.0%
Deviation from baseline	*0*	*0*	*-1,199*	*-1,434*	*-1,207*	*-882*	*-596*	*-305*	*-280*	*-271*
Biennial Deviation		*0*		*-2,633*		*-2,089*		*-901*		*-552*

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[8] The methodology for computing alternative scenarios has been changed to reflect recent work done by the Legislative Revenue Office. Assumptions: Recessions begin in 2019 and return to baseline income by 2026. The moderate recession

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Corporate Activity Tax

HB 3427 (2019) creates a new state revenue source by implementing a corporate activity tax (CAT). The tax is expected to generate $1.6 billion in revenue in 2019-21 and $2.8 billion in 2021-23. These revenues are dedicated to spending on education. The legislation also included personal income tax rate reductions, reducing General Fund revenues. The net impact of HB 3427 was designed to generate approximately $1 billion per year in new state resources.

This forecast represents the second time the new CAT has been included. Table B.12 in Appendix B has details on 10 year forecast and the allocation of resources, while the personal income tax reductions are built into the General Fund forecasts as shown in Tables B.1 and B.2.
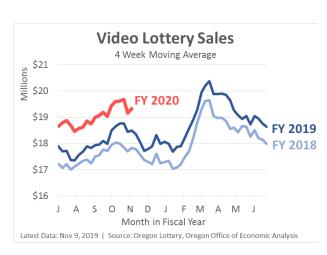
In terms of the big picture economic impacts, as always, our office starts with the Legislative Revenue Office's impact statement and any Oregon Tax Incidence Model (OTIM) results LRO found. At the top line, OTIM results find minimal macroeconomic impacts across Oregon due to the new tax. Personal income, employment, population, investment and the like are less than one-tenth of a percent different under the new tax relative to the baseline. The model results also show that price levels (inflation) will increase above the baseline as some of the CAT is pushed forward onto consumers. Of course these top line, statewide numbers mask the varying experiences that individual firms and different industries will experience. There are likely to be some businesses or sectors that experience large impacts from the CAT, or where pyramiding increases prices to a larger degree, while other businesses or sectors see relatively few impacts.

Today we have no real economic or revenue data to evaluate the impact of the corporate activity tax as it begins in 2020. While businesses will make quarterly payments throughout 2020, it really will not be until April 2021 when their annual tax return is due that we will have a complete look at the revenue, taxpayer behavior and the like. As data does become available, our office, in conjunction with our advisors and the Legislative Revenue Office will work together to better understand the revenue and its impact. Our office will update the outlook accordingly at that time.

Lottery Earnings

While available Lottery resources are largely unchanged relative to three months ago, these small topline changes mask two underlying forecast adjustments.

First, video lottery growth not only remains strong, but has accelerated in the recent months. The video outlook has been raised $11 million in 2019-21 and $4.1 million in 2021-23, while the outer biennia adjustments are relatively minor. These near-term changes, when combined with recent forecast revisions, have removed much of the weakness or lingering hangover expectations from the ilani Casino Resort in southwest Washington.

Video Lottery Sales
4 Week Moving Average

Latest Data: Nov 9, 2019 | Source: Oregon Lottery, Oregon Office of Economic Analysis

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scenario assumes personal income growth will be reduced by one-half relative to the baseline in 2019 and 2020. The severe recession scenario assumes personal income will decline in 2019 by as much as it did in 2009. The percentage deviation in personal income taxes is 1.4 times the deviation in personal income. The percentage deviation in corporate income taxes is 2.0 times the deviation in personal income.

Second, traditional lottery has been revised down approximately $2.4 million per year over the extended forecast due to adjustments made to the multistate jackpot games, Powerball and Mega Millions.

No adjustments were made to the outlook for sports betting as the game has only been available for a handful of weeks and is therefore it is too soon to know how accurate the initial projections are. Scoreboard is projected to generate $8.3 million in available resources in 2019-21. These revenues are dedicated to the PERS Employer Incentive Fund per SB 1049 (2019).

Longer term, sports betting is forecasted to generate $29.4 million in 2021-23 and $42.2 million 2023-25 for the Employer Incentive Fund. These estimates are highly uncertain and come from myriad assumptions about the size of the sports betting market overall, industry competition, player adoption rates, administrative costs and the like. The research team at Lottery provided the underlying estimates of the handle, gross gaming revenue and expenses. Our office worked to extend the analysis over the full forecast horizon and to translate the gaming revenue estimates into available resources.
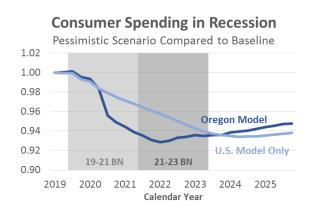
We also know that additional uncertainty arises from the volatility of revenues as wagers come in heavy on one team or another. For this reason, the forecast also assumes that Lottery will build reserves out of the sports betting revenue to help account for the expected volatility.

These figures have been discussed among the Lottery forecast advisory group and represent just a first step in incorporating sports betting revenue into the outlook. As actual sales data comes in, our office, along with the Oregon Lottery, Oregon Legislative Fiscal and Revenue Offices, and the state CFO's office will discuss trends, issues and risks. We will update the outlook accordingly.

Lottery Outlook and Distributions

Given the uncertain economic outlook and discussions with the advisory group, our office went ahead and modeled the impacts a recession would have on video lottery spending in Oregon. Of course one can model myriad alternative scenarios, however this one starts with IHS Markit's pessimistic scenario of a mild to moderate recession. Our office then ran this through our economic and lottery models and compared the outcomes relative to the baseline.

All told, there is a clear impact and a permanent reduction in sales over the forecast horizon amounting to around $45 million per year ($29 million in transfers). Consumer spending on recreational services in this scenario is not expected to return to the baseline. However, given that the baseline has ongoing growth built into it, the mild to moderate recession scenario really results in a couple of flat years for video lottery sales. At this point, they also just happen to split into 2019-21 and 2021-23. If this scenario comes to pass, overall lottery resources for both biennia will

Consumer Spending in Recession
Pessimistic Scenario Compared to Baseline

show growth, albeit slower growth than the baseline. And the more severe a recession is, the larger the impact on consumer spending.

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Other big picture issues to watch include broader national trends in gaming markets, demographic preferences for recreational activities, and to what extent consumers increase the share of their incomes spent on gaming. In much of the past 10 years, consumers have remained cautious with their disposable income. Increases in spending on gaming have largely matched income growth at best.

Over the long-run our office expects increased competition for household entertainment dollars, increased competition within the gaming industry, and potentially shifts in generational preferences and tastes when it comes to gaming. As such, our outlook for video lottery sales is continued growth, however at a rate that is slightly slower than overall personal income growth. Lottery sales will continue to increase as Oregon's population and economy grows, however video lottery sales will likely be a slightly smaller slice of the overall pie.
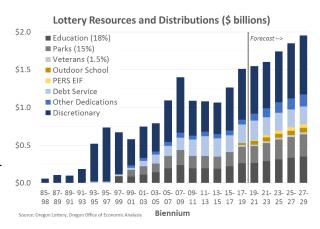
Finally, in recent years Oregon voters approved two new amendments for where lottery resources are to be spent. The Outdoor School Education Fund is set to receive the lesser of 4 percent of net proceeds or $5.5 million per quarter ($44 million per biennium), adjusted for inflation. The Veterans' Services Fund is set to receive 1.5 percent of net proceeds.

For more on the Lottery and overall gaming outlook, see our office's recent report[9].

The full extended outlook for lottery earnings can be found in Table B.9 in Appendix B.

Budgetary Reserves

The state currently administers two general reserve accounts, the Oregon Rainy Day Fund[10] (ORDF) and the Education Stability Fund[11] (ESF). This section updates balances and recalculates the outlook for these funds based on the May revenue forecast.

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[9] https://oregoneconomicanalysis.com/2019/02/13/lottery-and-gaming-outlook-2019/

[10] The ORDF is funded from ending balances each biennium, up to one percent of appropriations. The Legislature can deposit additional funds, as it did in first populating the ORDF with surplus corporate income tax revenues from the 2005-07 biennium. The ORDF also retains interest earnings. Withdrawals from the ORDF require one of three triggers, including a decline in employment, a projected budgetary shortfall, or declaration of a state of emergency, plus a three-fifths vote. Withdrawals are capped at two-thirds of the balance as of the beginning of the biennium in question. Fund balances are capped at 7.5 percent of General Fund revenues in the prior biennium.
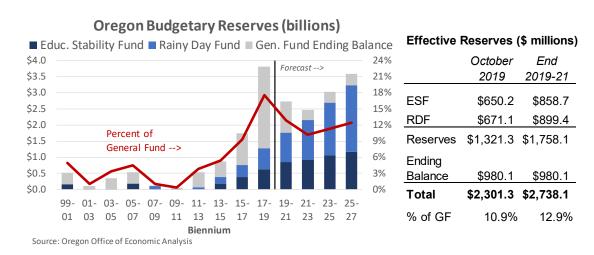
[11] The ESF gained its current reserve structure and mechanics via constitutional amendment in 2002. The ESF receives 18 percent of lottery earnings, deposited on a quarterly basis – 5% of which are deposited in the Oregon Growth sub-account.

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As of this forecast the two reserve funds currently total a combined $1.32 billion. At the end of the current 2019-21 biennium, they will total $1.76 billion. A slightly lower interest rate forecast results in fewer interest earnings for both reserve accounts relative to last quarter's forecast.

The forecast for the ORDF includes one deposit for this biennium relating to the General Fund ending balance from the previous biennium (2017-19). A deposit of $199.5 million is expected in 2020 after the accountants close the books. The ORDF deposit relating to the increased corporate taxes from Measure 67 was made in June 2019. We had previously assumed it would occur during the 2019-21 biennium, however statute requires it to occur by the end of the biennium in which the revenues were received. All told, at the end of 2019-21 the ORDF will total $899.4 million.

The forecast for the ESF calls for $239.0 million in deposits during the 2019-21 biennium based on the current Lottery forecast. This would bring the ESF balance to $858.7 million at the end of the current biennium.

Together, the ORDF and ESF are projected to have a combined balance of $1.76 billion at the close of the 2019-21 biennium. Provided the General Fund ending balance remains unallocated, total effective reserves at the end of 2019-21 would total more than $2.73 billion, or 12.9 percent of current revenues.

Oregon Budgetary Reserves (billions)

Source: Oregon Office of Economic Analysis

Effective Reserves ($ millions)

	October 2019	End 2019-21
ESF	$650.2	$858.7
RDF	$671.1	$899.4
Reserves	$1,321.3	$1,758.1
Ending Balance	$980.1	$980.1
Total	**$2,301.3**	**$2,738.1**
% of GF	10.9%	12.9%

Such levels of reserve balances are bigger than Oregon has ever been able to accumulate, at least in the state's recent history. However, such reserves would likely be just sufficient enough to withstand a typical recession's impact on state revenues, but not likely enough to account for the increase in public services and programs during downturns. That said, reserves of approximately 7 percent are generally accepted to withstand a medium sized recession. Oregon now has reached that threshold.

B.10 in Appendix B provides more details for Oregon's budgetary reserves.

The ESF does not retain interest earnings. The ESF has similar triggers as the ORDF, but does not have the two-thirds cap on withdrawals. The ESF balance is capped at five percent of General Fund revenues collected in the prior biennium.

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Recreational Marijuana Tax Collections

The underlying outlook for recreational marijuana sales and tax collections remains intact and largely unchanged. That said, there are a couple of new issues to the forecast that warrant continued monitoring to gauge their impact on taxes paid and/or the flow of money and when it is disbursed to recipient programs.

Tax collections in recent months have largely tracked expectations, although a couple million to the high side resulting in a minor upward revision to 2019-21 available resources. No other changes have been made to the underlying sales forecast.

One potential risk to sales and tax collections remains the outcome of pending policies and lawsuits regarding the vaping ban. Getting a handle on both the current market share of potentially impacted products and estimates of how consumers would respond is challenging but something our office continues to research. Should the ban, which is a public health concern, go into effect, our office will adjust the sales and tax revenue outlook accordingly.
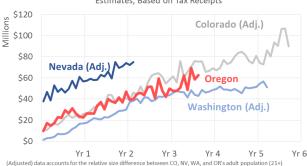
In terms of a potential issue that does not impact the sales outlook, but could impact resources for recipient programs is the timing and size of actual transfers into the Oregon Marijuana Account. The current process is businesses make monthly estimated payments based on their sales, but then file quarterly tax returns. Once the return has been processed at the Department of Revenue, then the tax revenue from that particular business is available to transfer to programs.

To the extent that firms file tax returns in a timely manner and/or there are relatively few disputes between businesses and tax authorities, then monies may be available for recipient programs faster than is currently assumed in the forecast – generally a one or two quarter delay. This may have been the case in the first quarter of the 2019-21 biennium in which the actual transfer made into the Oregon Marijuana Account was about $4 million larger than expected, based upon these timing assumptions. Given such transfers are relatively new and fluctuations will naturally occur due to filing and processing patterns, no fundamental changes have been made yet to these timing assumptions. However this issue remains one to monitor moving forward.

Combined, the somewhat stronger sales in recent months and larger than expected quarterly transfer result in available resources in 2019-21 being revised higher by $6.6 million, while expectations remain unchanged in future biennia.
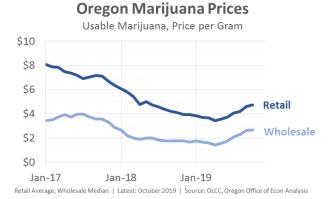
Finally, prices are one issue that could have long-run impacts. As our office has discussed every quarter since we began developing the recreational marijuana forecast, prices are a big risk to the outlook. Oregon levies its recreational marijuana tax based on the price of the product. As such if prices fall, then the state receives less tax revenue for every ounce sold, or every edible purchased. Over the past couple of years this is exactly what has happened. Total state tax collections leveled off throughout 2018 and into early 2019, however the relatively stagnant topline masked big price declines and increases in quantities sold.

Recreational Marijuana Sales Base
Estimates, Based on Tax Receipts

(Adjusted) data accounts for the relative size difference between CO, NV, WA, and OR's adult population (21+)
Latest Data: Sep '19 | Source: OR Dept of Revenue, WA Econ & Rev Forecast Council, Oregon Office of Economic Analysis

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However, over the past six months or so, prices are once again rising, leading to higher tax collections but slower gains in the volume of products sold. This is certainly the case for usable marijuana where wholesale prices are up around 50 percent since the start of the year and retail prices more like 25 percent.

Oregon Marijuana Prices
Usable Marijuana, Price per Gram

Retail Average, Wholesale Median | Latest: October 2019 | Source: OLCC, Oregon Office of Econ Analysis

This rebound in prices is likely the bounce back following the large supply glut in recent years. As that inventory is sold or converted to other forms like concentrates, extracts, edibles and the like, prices are rising as the market works to find a better equilibrium between consumer demand and industry supply.

So far, price declines are ongoing among the concentrates and edibles, and their volume of sales is growing strongly. These differences among market segments represent any number of possibilities including that rising prices among more recently harvested products have not fully worked their way into the entire market yet, and/or the possibility that in a more mature industry, there may be greater seasonality in prices that ebbs and flows with harvest season.

Looking forward, Oregon is posed for strong growth in the coming years as the state's population, household incomes, and marijuana usage rates all increase. Furthermore, black and medical market conversions should boost recreational sales and tax collections as well.

That said, the outlook remains highly uncertain with substantial upside and downside risks. These risks include not only usage rates and prices, but shifts in supply and regulations that impact product availability. Additionally potential actions by the federal government remains a large risk as marijuana is a controlled substance and leakage into other states a large concern. Furthermore, the federal legalization of hemp introduces yet another risk to the outlook. To the extent that consumers choose to purchase CBD products, which have many of the same purported medical benefits as cannabis but without the psychoactive component, then these widely available products may gain market share at the expense of the Oregon taxed recreational marijuana products only available at licensed retailers.

See Table B.11 in Appendix B for a full breakdown of distributions for recreational marijuana tax collections. Note that these distributions are based on current law.

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POPULATION AND DEMOGRAPHIC OUTLOOK

Population and Demographic Summary

Oregon's population count on April 1, 2010 was 3,831,074. Oregon gained 409,550 persons between the years 2000 and 2010. The population growth during the decade of 2000 to 2010 was 12.0 percent, down from 20.4 percent growth from the previous decade. Oregon's rankings in terms of decennial growth rate dropped from 11th between 1990 and 2000 to 18th between 2000 and 2010. Oregon's national ranking, including D.C., in population growth rate was 12th between 2010 and 2018 lagging behind all of our neighboring states, except California. Slow population growth during the decade preceding the 2010 Census characterized by double recessions probably cost Oregon one additional seat in the U.S. House of Representatives. Actually, Oregon's decennial population growth rate during the most recent census decade was the second lowest since 1900. As a result of economic downturn and sluggish recovery that followed, Oregon's population increased at a slow pace in the recent past. However, Oregon's current population is showing very strong growth as a consequence of state's strong economic recovery. Population growth between 2017 and 2018 was 11th fastest in the nation. Due to this better than average growth on national scale, Oregon will most likely get an additional seat in the U.S. House of Representatives. Based on the current forecast, Oregon's population of 4.195 million in 2018 will reach 4.705 million in the year 2029 with an annual rate of growth of 1.0 percent between 2018 and 2029.

Oregon's economic condition heavily influences the state's population growth. Its economy determines the ability to retain existing work force as well as attract job seekers from national and international labor market. As Oregon's total fertility rate remains below the replacement level and number of deaths continue to rise due to aging population, long-term growth comes mainly from net in-migration. Working-age adults come to Oregon as long as we have favorable economic and living conditions. During the 1980s, which include a major recession and a net loss of population during the early years, net migration contributed to 22 percent of the population change. On the other extreme, net migration accounted for 76 percent of the population change during the booming economy of early 1990s. This share of migration to population change declined to 32 percent in 2010, lowest since early 1980s when we actually had negative net migration for several years. As a sign of slow to modest economic gain, the ratio of net migration-to-population change has registered at 89 percent in 2018 and will continue to rise throughout the forecast horizon. By 2029, all of the population growth and more in Oregon will come from the net migration due to the combination of continued high net migration, decline in the number of births, and the rise in the number of deaths. The natural increase of population, defined as the numbers of births minus deaths, will actually turn negative by the end of the forecast period due to the below replacement level fertility and increase in the number of deaths associated with the increase in the elderly population. With Oregon's favorable economic and environmental conditions, high level of net migration into Oregon will continue through the forecast horizon that will be solely responsible for Oregon's population growth.

Age structure and its change affect employment, state revenue, and expenditure. Demographics are the major budget drivers, which are modified by policy choices on service coverage and delivery. Growth in many age groups will show the effects of the baby-boom and their echo generations during the forecast period of 2018-2029. It will also reflect demographics impacted by the depression era birth cohort combined with changing migration of working age population and elderly retirees through history. After a period of slow growth during the 1990s and early 2000s, the elderly population (65+) has picked up a faster pace of growth and will surge to the record high levels as the baby-boom generation continue to enter this age group and attrition of small depression era cohort due to death. The average annual growth of the elderly population will be 2.9 percent

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during the 2018-2029 forecast period. However, the youngest elderly (aged 65-74) has been growing at an extremely fast pace in the recent past and will continue the trend in the near future exceeding 4 percent annual rate of growth due to the direct impact of the baby-boom generation entering the retirement age and smaller pre-baby boom cohort exiting the 65-74 age group. This fast paced growth rate will taper off to negative growth by the end of the forecast period as a sign of end of the baby-boom generation transitioning to elderly age group. Reversing several years of slow growth and a period of shrinking population, the elderly aged 75-84 started to show a positive growth as the effect of depression era birth-cohort has dissipated. An unprecedented fast pace of growth of population in this age group has started as the baby-boom generation is starting to mature into 75-84 age group. Annual growth rate during the forecast period of 2018-2029 is expected to be unusually high 5.3 percent. The oldest elderly (aged 85+) will continue to grow at a slow but steady rate in the near future due to the combination of cohort change, continued positive net migration, and improving longevity. The average annual rate of growth for this oldest elderly over the forecast horizon will be 2.9 percent. An unprecedented growth in oldest elderly will commence near the end of the forecast horizon as the fast growing 75-84 age group population transition into this oldest elderly age cohort. As a sign of massive demographic structure change of Oregon's population, starting in 2023 the number of elderly population will exceed the number of children under the age of 18. To illustrate the contrast, in 1980 elderly population numbered less than half of the number of children in Oregon.

As the baby-boom generation matures out of oldest working-age cohort combined with slowing net migration, the once fast-paced growth of population aged 45-64 has gradually tapered off to below zero percent rate of growth by 2012 and has remained and will remain at slow or below zero growth phase for several years. The size of this older working-age population will see only a small increase by the end of the forecast period. The 25-44 age group population is recovering from several years of declining and slow growing trend. The decline was mainly due to the exiting baby-boom cohort. This age group has seen positive but slow growth starting in the year 2004 and will increase by 1.5 percent annual average rate during the forecast horizon mainly because of the exiting smaller birth (baby-bust) cohort being replaced by larger baby-boom echo cohort. The young adult population (aged 18-24) will remain nearly unchanged over the forecast period. Although the slow or stagnant growth of college-age population (age 18-24), in general, tend to ease the pressure on public spending on higher education, but college enrollment typically goes up during the time of very competitive job market, high unemployment, and scarcity of well-paying jobs when even the older people flock back to colleges to better position themselves in a tough job market. The growth in K-12 population (aged 5-17) will remain very low in the near future and will see negative growth for the rest of the forecast years. This will translate into slow growth or even decline in the school enrollments. On average for the forecast period, this school-age population will actually decline by -0.2 percent annually. The growth rate for children under the age of five has remained below or near zero percent in the recent past due to the sharp decline in the number of births. Although the number of children under the age of five declined in the recent years, the demand for child care services and pre-Kindergarten program will be additionally determined by the labor force participation and poverty rates of the parents.

Overall, elderly population over age 65 will increase rapidly whereas the number of children actually decline over the forecast horizon. The number of working-age adults in general will show fast paced growth after the year 2023. Hence, based solely on demographics of Oregon, demand for public services geared towards children and young adults will likely to decline or increase at a slower pace, whereas demand for elderly care and services will increase rapidly.

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Procedure and Assumptions

Population forecasts by age and sex are developed using the cohort-component projection procedure. The population by single year of age and sex is projected based on the specific assumptions of vital events and migrations. Oregon's estimated population of July 1, 2010 based on the most recent decennial census is the base for the forecast. To explain the cohort-component projection procedure very briefly, the forecasting model "survives" the initial population distribution by age and sex to the next age-sex category in the following year, and then applies age-sex-specific birth and migration rates to the mid-period population. Further iterations subject the in-and-out migrants to the same mortality and fertility rates.

Populations by age-sex detail for the years 2000 through 2009, called intercensal estimates, in the following tables are developed by OEA based on 2000 and 2010 censuses. Post-censal population totals for the years 2010 through 2018 are from the Population Research Center, Portland State University. The numbers of births through 2018 and the deaths through 2017 are from Oregon's Center for Health Statistics. All other numbers and age-sex detail are generated by OEA.

Annual numbers of births are determined from the age-specific fertility rates projected based on Oregon's past trends and past and projected national trends. Oregon's total fertility rate is assumed to be 1.6 per woman in 2018 and this rate is projected to remain below the replacement level of 2.1 children per woman during the forecast period, tracking below the national rate.

Life Table survival rates are developed for the year 2010. Male and female life expectancies for the 2010-2029 period are projected based on the past three decades of trends and national projected life expectancies. Gradual improvements in life expectancies are expected over the forecast period. At the same time, the difference between the male and female life expectancies will continue to shrink. The male life expectancy at births of 77.4 and the female life expectancy of 81.8 in 2010 are projected to improve to 79.4 years for males and 83.5 years for females by the year 2029.

Estimates and forecasts of the number of net migrations are based on the residuals from the difference between population change and natural increase (births minus deaths) in a given forecast period. The migration forecasting model uses Oregon's employment, unemployment rates, income/wage data from Oregon and neighboring states, and past trends. Distribution of migrants by age and sex is based on detailed data from the American Community Survey. The annual net migration between 2018 and 2029 is expected to remain in the range of 38,500 to 47,500, averaging 42,600 persons annually. In the recent past, slowdown in Oregon's economy resulted in smaller net migration and slow population growth. Estimated population growth and net migration rates in 2010 and 2011 were the lowest in over two decades. Migration is intrinsically related to economy and employment situation of the state. Still, high unemployment and job loss in the recent past have impacted net migration and population growth, but not to the extent in the early 1980s. Main reason for this is the fact that other states of potential destination for Oregon out-migrants were not faring any better either, limiting the potential destination choices. The role of net migration in Oregon's population growth will get more prominence as the natural increase will decline considerably due to rapid increase in the number of deaths associated with aging population and decline in the number of births largely due to the decline in fertility rate.

APPENDIX A: ECONOMIC FORECAST DETAIL

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Total Nonfarm Employment, 3rd quarter 2019

(Employment in thousands, Annualized Percent Change)

	Preliminary Estimate		Forecast		Forecast Error		Y/Y Change
	level	% ch	level	% ch	level	%	% ch
Total Nonfarm	1,943.3	1.5	1,951.0	2.4	(7.7)	(0.4)	1.6
Total Private	1,644.4	1.8	1,650.9	2.5	(6.6)	(0.4)	1.6
Mining and Logging	6.9	(1.7)	7.0	7.2	(0.1)	(1.3)	(3.5)
Construction	108.6	0.6	109.7	(0.1)	(1.1)	(1.0)	2.9
Manufacturing	199.4	2.0	200.4	0.8	(1.0)	(0.5)	2.0
Durable Goods	137.5	0.8	138.4	0.8	(0.9)	(0.6)	1.2
Wood Product	23.2	(1.9)	23.8	1.6	(0.6)	(2.6)	(1.4)
Metals and Machinery	40.3	0.9	40.4	(1.8)	(0.0)	(0.1)	2.1
Computer and Electronic Product	38.7	1.7	38.9	4.8	(0.3)	(0.7)	1.6
Transportation Equipment	13.0	5.9	12.7	(3.6)	0.2	1.9	6.4
Other Durable Goods	22.3	(1.3)	22.6	0.8	(0.2)	(1.0)	(1.2)
Nondurable Goods	61.9	4.9	62.0	0.6	(0.1)	(0.2)	3.8
Food	30.0	(0.5)	31.0	0.9	(1.0)	(3.3)	0.5
Other Nondurable Goods	31.9	10.2	31.0	0.4	0.9	3.0	7.0
Trade, Transportation & Utilities	356.1	1.0	356.9	1.1	(0.9)	(0.2)	1.1
Retail Trade	209.2	(1.1)	211.5	1.6	(2.3)	(1.1)	(1.0)
Wholesale Trade	76.6	1.1	76.4	0.7	0.2	0.2	1.3
Transportation, Warehousing & Utilities	70.4	7.3	69.1	0.1	1.3	1.9	7.4
Information	34.5	(4.6)	34.6	4.6	(0.1)	(0.3)	0.9
Financial Activities	103.1	0.3	103.1	2.2	(0.0)	(0.0)	0.7
Professional & Business Services	254.7	2.9	256.3	6.4	(1.6)	(0.6)	2.3
Educational & Health Services	303.3	4.7	301.5	2.4	1.9	0.6	2.3
Educational Services	36.7	(0.7)	36.6	(1.7)	0.1	0.2	0.7
Health Services	266.7	5.5	264.9	3.0	1.8	0.7	2.6
Leisure and Hospitality	213.1	0.3	216.7	4.0	(3.6)	(1.7)	0.9
Other Services	64.6	0.1	64.6	(0.5)	0.0	0.0	0.6
Government	298.9	0.2	300.0	1.6	(1.1)	(0.4)	1.4
Federal	29.3	4.5	28.6	(5.2)	0.6	2.2	4.2
State	40.0	(11.1)	40.9	(3.1)	(0.9)	(2.2)	1.5
State Education	0.9	26.4	0.8	(3.6)	0.1	8.4	5.7
Local	229.7	1.8	230.5	3.3	(0.9)	(0.4)	1.0
Local Education	131.6	(3.8)	132.8	(2.1)	(1.1)	(0.9)	(0.9)

Oregon Forecast Summary

	Quarterly					Annual					
	2019:3	2019:4	2020:1	2020:2	2020:3	2018	2019	2020	2021	2022	2023
Personal Income ($ billions)											
Nominal Personal Income	225.8	228.1	230.4	233.0	235.7	213.1	224.4	234.4	246.0	257.9	270.1
% change	4.2	4.1	4.2	4.6	4.7	6.2	5.3	4.5	4.9	4.8	4.7
Real Personal Income (base year=2012)	205.3	206.1	207.1	208.5	209.9	197.0	204.5	209.3	215.6	221.3	226.8
% change	2.5	1.5	1.9	2.8	2.7	4.1	3.8	2.4	3.0	2.6	2.5
Nominal Wages and Salaries	114.1	115.4	116.9	118.7	120.2	107.0	113.3	119.4	125.9	132.4	138.8
% change	6.1	4.4	5.4	6.1	5.1	5.7	5.8	5.4	5.5	5.2	4.8
Other Indicators											
Per Capita Income ($1,000)	53.1	53.5	53.8	54.3	54.7	50.8	52.8	54.5	56.6	58.6	60.7
% change	2.9	2.8	2.9	3.3	3.4	4.9	4.0	3.2	3.7	3.7	3.6
Average Wage rate ($1,000)	58.1	58.7	59.2	59.8	60.4	55.5	57.8	60.1	62.6	65.2	67.8
% change	3.8	3.8	4.0	4.0	4.0	3.7	4.2	4.0	4.1	4.1	4.1
Population (Millions)	4.3	4.3	4.3	4.3	4.3	4.20	4.25	4.30	4.35	4.40	4.45
% change	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.1	1.1
Housing Starts (Thousands)	20.4	21.2	21.7	21.8	22.0	19.6	20.8	21.9	22.8	23.3	23.0
% change	(16.4)	18.5	7.9	3.5	2.1	1.8	6.1	5.3	3.9	2.3	(1.3)
Unemployment Rate	4.0	4.0	3.9	3.8	3.8	4.1	4.1	3.8	3.9	4.0	4.2
Point Change	(0.1)	(0.1)	(0.1)	(0.1)	0.0	0.0	(0.0)	(0.3)	0.0	0.2	0.2
Employment (Thousands)											
Total Nonfarm	1,943.3	1,950.3	1,957.1	1,967.1	1,972.3	1,912.1	1,940.6	1,968.8	1,995.8	2,016.6	2,031.5
% change	1.5	1.5	1.4	2.1	1.1	2.0	1.5	1.5	1.4	1.0	0.7
Private Nonfarm	1,644.4	1,650.3	1,655.8	1,661.7	1,668.6	1,617.3	1,641.8	1,665.3	1,689.7	1,707.6	1,720.3
% change	1.8	1.5	1.3	1.4	1.7	3.3	1.5	1.4	1.5	1.1	0.7
Construction	108.6	108.8	109.1	109.1	109.3	105.3	108.5	109.2	110.4	111.1	111.9
% change	0.6	0.8	0.9	0.3	0.5	7.7	3.0	0.7	1.1	0.6	0.8
Manufacturing	199.4	199.4	198.5	198.4	198.1	195.3	198.9	198.2	198.0	198.5	199.1
% change	2.0	(0.1)	(1.8)	(0.3)	(0.6)	2.8	1.9	(0.3)	(0.1)	0.3	0.3
Durable Manufacturing	137.5	137.7	137.7	137.8	137.6	135.6	137.5	137.7	137.3	137.2	137.5
% change	0.8	0.4	0.2	0.1	(0.5)	3.0	1.4	0.1	(0.3)	(0.0)	0.2
Wood Product Manufacturing	23.2	23.2	23.2	23.3	23.3	23.5	23.3	23.3	23.4	23.5	23.7
% change	(1.9)	0.3	0.2	0.3	0.2	2.4	(0.7)	(0.3)	0.3	0.7	0.9
High Tech Manufacturing	38.7	38.7	38.8	38.8	38.8	38.0	38.6	38.8	39.0	39.2	39.2
% change	1.7	0.6	0.3	0.4	(0.1)	3.0	1.6	0.6	0.4	0.7	(0.1)
Transportation Equipment	13.0	12.9	12.9	12.9	12.8	12.2	12.8	12.8	12.7	12.7	12.7
% change	5.9	(0.7)	(2.0)	(0.1)	(1.1)	2.5	5.2	0.2	(1.1)	0.1	0.3
Nondurable Manufacturing	61.9	61.7	60.7	60.6	60.4	59.6	61.4	60.6	60.7	61.2	61.6
% change	4.9	(1.0)	(6.2)	(1.0)	(0.8)	2.2	2.9	(1.4)	0.2	0.9	0.6
Private nonmanufacturing	1,444.5	1,451.0	1,457.3	1,463.3	1,470.6	1,422.1	1,442.8	1,467.1	1,491.7	1,509.2	1,521.3
% change	1.6	1.8	1.8	1.7	2.0	3.4	1.5	1.7	1.7	1.2	0.8
Retail Trade	209.2	209.1	209.0	208.9	209.0	211.4	209.6	209.0	209.5	210.0	210.5
% change	(1.1)	(0.2)	(0.2)	(0.2)	0.2	0.2	(0.9)	(0.3)	0.2	0.2	0.2
Wholesale Trade	76.6	76.8	76.8	76.9	76.9	75.1	76.5	76.9	77.3	77.5	77.6
% change	1.1	1.1	0.0	0.1	0.4	0.1	1.9	0.6	0.5	0.2	0.1
Information	34.5	34.6	34.6	34.6	34.7	34.4	34.6	34.7	34.7	34.8	34.9
% change	(4.6)	0.9	0.3	0.3	0.3	0.4	0.7	0.2	0.3	0.2	0.2
Professional and Business Services	254.7	256.7	259.1	261.3	264.9	249.7	254.3	263.4	275.9	283.9	287.4
% change	2.9	3.2	3.7	3.6	5.5	2.1	1.8	3.6	4.7	2.9	1.2
Health Services	266.7	268.8	271.1	272.8	274.2	258.9	265.0	273.4	278.7	283.3	288.0
% change	5.5	3.2	3.5	2.6	2.1	9.3	2.4	3.2	1.9	1.6	1.7
Leisure and Hospitality	213.1	214.0	215.1	216.7	218.1	211.2	213.3	217.2	220.3	222.9	224.9
% change	0.3	1.9	2.0	3.0	2.6	2.4	1.0	1.9	1.4	1.2	0.9
Government	298.9	300.0	301.3	305.4	303.7	294.8	298.8	303.5	306.1	309.0	311.2
% change	0.2	1.5	1.8	5.5	(2.3)	(4.8)	1.4	1.6	0.8	0.9	0.7

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Oregon Forecast Change (Current vs. Last)

	Quarterly					Annual					
	2019:3	2019:4	2020:1	2020:2	2020:3	2018	2019	2020	2021	2022	2023
Personal Income ($ billions)											
Nominal Personal Income	225.8	228.1	230.4	233.0	235.7	213.1	224.4	234.4	246.0	257.9	270.1
% change	1.7	1.3	1.0	0.8	0.7	1.8	1.8	0.8	0.6	0.4	0.4
Real Personal Income (base year=2012)	205.3	206.1	207.1	208.5	209.9	197.0	204.5	209.3	215.6	221.3	226.8
% change	1.9	1.5	1.2	1.0	0.9	1.9	1.9	0.9	0.9	0.6	0.4
Nominal Wages and Salaries	114.1	115.4	116.9	118.7	120.2	107.0	113.3	119.4	125.9	132.4	138.8
% change	1.2	0.9	0.8	0.8	0.8	0.7	1.2	0.8	0.8	0.9	0.9
Other Indicators											
Per Capita Income ($1,000)	53.1	53.5	53.8	54.3	54.7	50.8	52.8	54.5	56.6	58.6	60.7
% change	1.7	1.3	1.0	0.8	0.7	1.8	1.8	0.8	0.6	0.4	0.4
Average Wage rate ($1,000)	58.1	58.7	59.2	59.8	60.4	55.5	57.8	60.1	62.6	65.2	67.8
% change	1.4	1.3	1.3	1.3	1.3	0.7	1.4	1.3	1.3	1.3	1.4
Population (Millions)	4.25	4.27	4.28	4.3	4.3	4.20	4.25	4.30	4.35	4.40	4.45
% change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Housing Starts (Thousands)	20.4	21.2	21.7	21.8	22.0	19.6	20.8	21.9	22.8	23.3	23.0
% change	(6.7)	(3.2)	(2.6)	(2.6)	(2.8)	(0.2)	(3.1)	(2.7)	(2.8)	(2.7)	(2.8)
Unemployment Rate	4.0	4.0	3.9	3.8	3.8	4.1	4.1	3.8	3.9	4.0	4.2
Point Change	(0.4)	(0.4)	(0.5)	(0.6)	(0.6)	0.0	(0.2)	(0.6)	(0.8)	(0.9)	(0.7)
Employment (Thousands)											
Total Nonfarm	1,943.3	1,950.3	1,957.1	1,967.1	1,972.3	1,912.1	1,940.6	1,968.8	1,995.8	2,016.6	2,031.5
% change	(0.4)	(0.5)	(0.6)	(0.6)	(0.6)	(0.0)	(0.3)	(0.6)	(0.5)	(0.5)	(0.5)
Private Nonfarm	1,644.4	1,650.3	1,655.8	1,661.7	1,668.6	1,617.3	1,641.8	1,665.3	1,689.7	1,707.6	1,720.3
% change	(0.4)	(0.5)	(0.6)	(0.7)	(0.7)	0.0	(0.3)	(0.6)	(0.5)	(0.5)	(0.5)
Construction	108.6	108.8	109.1	109.1	109.3	105.3	108.5	109.2	110.4	111.1	111.9
% change	(1.0)	(1.1)	(1.1)	(1.3)	(1.4)	0.0	(0.8)	(1.4)	(1.7)	(1.7)	(1.6)
Manufacturing	199.4	199.4	198.5	198.4	198.1	195.3	198.9	198.2	198.0	198.5	199.1
% change	(0.5)	(0.6)	(1.0)	(0.9)	(0.9)	0.0	(0.5)	(0.9)	(1.0)	(1.2)	(1.2)
Durable Manufacturing	137.5	137.7	137.7	137.8	137.6	135.6	137.5	137.7	137.3	137.2	137.5
% change	(0.6)	(0.7)	(0.6)	(0.3)	(0.3)	(0.0)	(0.5)	(0.4)	(0.3)	(0.5)	(0.5)
Wood Product Manufacturing	23.2	23.2	23.2	23.3	23.3	23.5	23.3	23.3	23.4	23.5	23.7
% change	(2.6)	(2.8)	(2.9)	(2.6)	(2.4)	0.0	(1.8)	(2.5)	(2.1)	(2.9)	(2.6)
High Tech Manufacturing	38.7	38.7	38.8	38.8	38.8	38.0	38.6	38.8	39.0	39.2	39.2
% change	(0.7)	(0.7)	(0.9)	(0.3)	(0.0)	(0.1)	(0.3)	(0.2)	0.5	1.1	1.5
Transportation Equipment	13.0	12.9	12.9	12.9	12.8	12.2	12.8	12.8	12.7	12.7	12.7
% change	1.9	1.1	3.3	3.3	3.0	(0.3)	0.6	3.2	3.7	3.8	4.0
Nondurable Manufacturing	61.9	61.7	60.7	60.6	60.4	59.6	61.4	60.6	60.7	61.2	61.6
% change	(0.2)	(0.4)	(2.0)	(2.1)	(2.3)	0.1	(0.5)	(2.2)	(2.6)	(2.7)	(2.7)
Private nonmanufacturing	1,444.5	1,451.0	1,457.3	1,463.3	1,470.6	1,422.1	1,442.8	1,467.1	1,491.7	1,509.2	1,521.3
% change	(0.4)	(0.5)	(0.6)	(0.6)	(0.6)	0.0	(0.3)	(0.6)	(0.5)	(0.4)	(0.4)
Retail Trade	209.2	209.1	209.0	208.9	209.0	211.4	209.6	209.0	209.5	210.0	210.5
% change	(1.1)	(1.3)	(1.4)	(1.5)	(1.5)	(0.1)	(0.7)	(1.5)	(1.4)	(1.2)	(0.8)
Wholesale Trade	76.6	76.8	76.8	76.9	76.9	75.1	76.5	76.9	77.3	77.5	77.6
% change	0.2	0.4	0.4	0.4	0.3	0.0	0.3	0.4	0.5	0.5	0.4
Information	34.5	34.6	34.6	34.6	34.7	34.4	34.6	34.7	34.7	34.8	34.9
% change	(0.3)	(0.2)	(0.5)	(0.8)	(0.8)	0.0	0.4	(0.8)	(0.9)	0.4	0.4
Professional and Business Services	254.7	256.7	259.1	261.3	264.9	249.7	254.3	263.4	275.9	283.9	287.4
% change	(0.6)	(1.2)	(1.5)	(1.4)	(1.2)	0.0	(0.4)	(1.3)	(0.3)	0.3	0.3
Health Services	266.7	268.8	271.1	272.8	274.2	258.9	265.0	273.4	278.7	283.3	288.0
% change	0.7	0.7	0.8	0.7	0.6	(0.0)	0.4	0.6	0.1	(0.3)	(0.5)
Leisure and Hospitality	213.1	214.0	215.1	216.7	218.1	211.2	213.3	217.2	220.3	222.9	224.9
% change	(1.7)	(2.0)	(2.1)	(2.1)	(2.2)	0.0	(1.2)	(2.1)	(1.7)	(1.7)	(1.5)
Government	298.9	300.0	301.3	305.4	303.7	294.8	298.8	303.5	306.1	309.0	311.2
% change	(0.4)	(0.3)	(0.3)	(0.3)	(0.3)	(0.1)	(0.2)	(0.3)	(0.3)	(0.4)	(0.5)

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Dec 2019 - Personal Income

(Billions of Current Dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total Personal Income*												
Oregon	200.6	213.1	224.4	234.4	246.0	257.9	270.1	282.9	296.7	311.3	326.1	341.5
% Ch	5.4	6.2	5.3	4.5	4.9	4.8	4.7	4.7	4.9	4.9	4.8	4.7
U.S.	16,878.8	17,819.2	18,670.6	19,454.2	20,305.1	21,190.8	22,092.6	23,059.0	24,137.0	25,260.8	26,405.3	27,605.0
% Ch	4.7	5.6	4.8	4.2	4.4	4.4	4.3	4.4	4.7	4.7	4.5	4.5
Wage and Salary												
Oregon	101.2	107.0	113.3	119.4	125.9	132.4	138.8	145.5	152.6	160.0	167.6	175.6
% Ch	5.6	5.7	5.8	5.4	5.5	5.2	4.8	4.8	4.9	4.9	4.8	4.7
U.S.	8,462.1	8,888.5	9,370.5	9,826.8	10,283.1	10,754.7	11,222.8	11,708.1	12,259.7	12,854.7	13,466.5	14,099.5
% Ch	4.7	5.0	5.4	4.9	4.6	4.6	4.4	4.3	4.7	4.9	4.8	4.7
Other Labor Income												
Oregon	24.5	25.6	26.8	28.2	29.7	31.3	32.9	34.4	36.2	38.1	40.0	42.0
% Ch	4.5	4.4	4.6	5.0	5.6	5.3	4.9	4.7	5.1	5.3	5.1	4.9
U.S.	1,343.9	1,417.2	1,472.6	1,541.5	1,613.1	1,687.1	1,760.5	1,836.6	1,923.1	2,016.4	2,112.4	2,211.7
% Ch	3.7	5.5	3.9	4.7	4.6	4.6	4.4	4.3	4.7	4.9	4.8	4.7
Nonfarm Proprietor's Income												
Oregon	17.3	18.1	18.9	19.2	19.4	19.3	19.3	19.6	20.1	20.8	21.6	22.4
% Ch	11.5	4.4	4.2	2.0	0.7	(0.3)	0.0	1.4	2.7	3.7	3.7	3.6
U.S.	1,480.1	1,561.6	1,626.1	1,644.4	1,646.9	1,634.5	1,627.5	1,639.1	1,659.0	1,685.2	1,723.4	1,775.4
% Ch	6.6	5.5	4.1	1.1	0.1	(0.8)	(0.4)	0.7	1.2	1.6	2.3	3.0
Dividend, Interest and Rent												
Oregon	42.3	45.8	47.0	48.4	50.6	53.0	55.6	58.4	61.3	64.2	66.9	69.8
% Ch	8.0	8.3	2.7	3.0	4.4	4.7	5.0	5.0	5.0	4.7	4.3	4.4
U.S.	3,400.4	3,686.9	3,775.9	3,892.0	4,069.9	4,263.5	4,468.1	4,699.4	4,949.5	5,184.8	5,404.5	5,637.3
% Ch	6.2	8.4	2.4	3.1	4.6	4.8	4.8	5.2	5.3	4.8	4.2	4.3
Transfer Payments												
Oregon	37.8	40.0	43.1	45.1	47.5	50.0	52.8	55.8	58.8	61.8	65.0	68.2
% Ch	2.5	5.9	7.8	4.6	5.2	5.4	5.6	5.5	5.4	5.2	5.1	5.0
U.S.	2,804.0	2,920.0	3,115.8	3,274.6	3,435.6	3,607.7	3,799.4	4,004.0	4,216.1	4,432.6	4,658.6	4,891.9
% Ch	3.2	4.1	6.7	5.1	4.9	5.0	5.3	5.4	5.3	5.1	5.1	5.0
Contributions for Social Security												
Oregon	17.9	18.5	19.5	20.6	21.7	22.8	24.0	25.2	26.4	27.7	29.0	30.3
% Ch	7.3	3.5	5.4	5.7	5.4	5.0	5.1	4.9	5.0	4.8	4.5	4.5
U.S.	693.9	733.7	775.1	810.0	843.1	878.9	915.1	953.3	997.1	1,044.7	1,093.8	1,144.8
% Ch	5.3	5.7	5.7	4.5	4.1	4.2	4.1	4.2	4.6	4.8	4.7	4.7
Residence Adjustment												
Oregon	(4.7)	(4.9)	(5.1)	(5.2)	(5.4)	(5.5)	(5.6)	(5.8)	(6.0)	(6.2)	(6.4)	(6.6)
% Ch	2.9	4.0	4.6	2.4	2.2	2.3	2.6	3.1	3.2	2.9	3.3	3.0
Farm Proprietor's Income												
Oregon	0.0	(0.1)	(0.0)	(0.0)	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.3
% Ch	(96.6)	(429.7)	(49.8)	(96.7)	(5,527.3)	299.4	15.3	(16.2)	1.7	11.8	5.3	0.4
Per Capita Income (Thousands of $)												
Oregon	48.4	50.8	52.8	54.5	56.6	58.6	60.7	62.9	65.4	67.9	70.5	73.2
% Ch	3.8	4.9	4.0	3.2	3.7	3.7	3.6	3.7	3.8	3.9	3.8	3.8
U.S.	51.8	54.4	56.6	58.5	60.7	62.9	65.1	67.5	70.2	73.0	75.8	78.8
% Ch	4.0	4.9	4.0	3.5	3.6	3.6	3.5	3.7	4.0	4.0	3.9	3.9

* Personal Income includes all classes of income minus Contributions for Social Security

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Dec 2019 - Employment By Industry
(Oregon - Thousands, U.S. - Millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total Nonfarm												
Oregon	1,875.3	1,912.1	1,940.6	1,968.8	1,995.8	2,016.6	2,031.5	2,045.2	2,061.9	2,079.3	2,095.0	2,110.0
% Ch	2.3	2.0	1.5	1.5	1.4	1.0	0.7	0.7	0.8	0.8	0.8	0.7
U.S.	146.6	149.1	151.3	152.8	153.9	154.7	154.9	155.1	155.6	156.5	157.4	158.2
% Ch	1.6	1.7	1.5	1.0	0.7	0.5	0.2	0.1	0.4	0.6	0.6	0.5
Private Nonfarm												
Oregon	1,565.5	1,617.3	1,641.8	1,665.3	1,689.7	1,707.6	1,720.3	1,731.8	1,745.9	1,760.5	1,773.0	1,784.6
% Ch	2.5	3.3	1.5	1.4	1.5	1.1	0.7	0.7	0.8	0.8	0.7	0.7
U.S.	124.3	126.6	128.8	130.0	131.0	131.6	131.7	131.7	132.1	132.9	133.6	134.3
% Ch	1.8	1.9	1.7	0.9	0.8	0.5	0.1	0.0	0.3	0.6	0.6	0.5
Mining and Logging												
Oregon	7.0	7.2	7.0	7.1	7.1	7.2	7.2	7.2	7.3	7.3	7.3	7.3
% Ch	(1.8)	3.2	(3.3)	1.7	0.5	0.6	0.6	0.2	0.5	0.3	0.2	0.3
U.S.	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
% Ch	1.1	8.3	2.6	(1.5)	(0.3)	2.1	2.6	2.1	1.0	(0.4)	(0.2)	(0.1)
Construction												
Oregon	97.8	105.3	108.5	109.2	110.4	111.1	111.9	112.5	113.0	113.5	114.1	114.7
% Ch	8.2	7.7	3.0	0.7	1.1	0.6	0.8	0.5	0.4	0.5	0.5	0.5
U.S.	7.0	7.3	7.5	7.5	7.5	7.6	7.7	7.7	7.8	8.0	8.1	8.3
% Ch	3.6	4.6	2.8	0.2	0.3	1.2	0.6	0.7	1.5	1.9	1.9	2.1
Manufacturing												
Oregon	190.0	195.3	198.9	198.2	198.0	198.5	199.1	199.1	199.4	200.0	200.5	201.0
% Ch	0.9	2.8	1.9	(0.3)	(0.1)	0.3	0.3	0.0	0.1	0.3	0.3	0.2
U.S.	12.4	12.7	12.8	12.7	12.5	12.5	12.5	12.4	12.3	12.3	12.2	12.1
% Ch	0.7	2.0	1.2	(1.0)	(1.5)	(0.0)	(0.0)	(0.7)	(0.8)	(0.3)	(0.6)	(1.1)
Durable Manufacturing												
Oregon	131.6	135.6	137.5	137.7	137.3	137.2	137.5	137.4	137.5	137.8	138.1	138.3
% Ch	0.3	3.0	1.4	0.1	(0.3)	(0.0)	0.2	(0.0)	0.1	0.2	0.2	0.2
U.S.	7.7	7.9	8.1	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.6
% Ch	0.3	2.7	1.5	(0.9)	(1.6)	(0.0)	0.2	(0.5)	(0.7)	(0.2)	(0.7)	(1.4)
Wood Products												
Oregon	23.0	23.5	23.3	23.3	23.4	23.5	23.7	23.9	24.1	24.2	24.4	24.7
% Ch	0.9	2.4	(0.7)	(0.3)	0.3	0.7	0.9	0.9	0.7	0.4	0.8	1.2
U.S.	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
% Ch	1.1	2.4	0.5	0.8	2.3	4.7	3.2	0.5	2.1	2.4	0.1	(0.7)
Metal and Machinery												
Oregon	37.4	39.3	40.4	40.2	39.6	38.9	38.7	39.0	39.4	39.7	39.7	39.7
% Ch	1.9	5.2	2.8	(0.4)	(1.5)	(1.7)	(0.5)	0.7	1.0	0.7	0.2	(0.0)
U.S.	2.9	3.0	3.0	3.0	2.9	2.9	3.0	3.0	3.0	3.0	2.9	2.9
% Ch	0.1	3.1	1.3	(1.7)	(2.3)	1.0	1.9	0.6	(0.4)	(0.2)	(1.1)	(1.8)
Computer and Electronic Products												
Oregon	36.9	38.0	38.6	38.8	39.0	39.2	39.2	38.8	38.4	38.2	38.0	37.8
% Ch	(2.4)	3.0	1.6	0.6	0.4	0.7	(0.1)	(1.1)	(1.0)	(0.6)	(0.5)	(0.4)
U.S.	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
% Ch	(0.9)	1.6	2.7	0.2	(0.1)	0.8	0.4	0.4	0.2	(0.3)	(0.6)	(1.1)
Transportation Equipment												
Oregon	11.9	12.2	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.8	12.8
% Ch	(2.3)	2.5	5.2	0.2	(1.1)	0.1	0.3	(0.7)	(0.8)	0.5	1.1	0.5
U.S.	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.5
% Ch	0.8	3.6	2.1	(0.9)	(2.2)	(3.4)	(3.9)	(3.6)	(2.4)	(0.4)	0.3	(1.2)
Other Durables												
Oregon	22.6	22.7	22.4	22.5	22.7	22.8	23.0	23.0	23.0	23.1	23.2	23.2
% Ch	3.4	0.5	(1.2)	0.6	0.5	0.8	0.8	(0.0)	0.1	0.3	0.4	0.1
U.S.	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2
% Ch	0.9	1.8	0.7	(0.3)	(0.9)	1.0	0.9	(0.4)	(0.3)	0.1	(0.7)	(1.1)
Nondurable Manufacturing												
Oregon	58.4	59.6	61.4	60.6	60.7	61.2	61.6	61.7	61.9	62.2	62.5	62.7
% Ch	2.3	2.2	2.9	(1.4)	0.2	0.9	0.6	0.2	0.3	0.5	0.5	0.4
U.S.	4.7	4.7	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.5	4.5	4.5
% Ch	1.3	0.9	0.7	(1.1)	(1.3)	(0.1)	(0.3)	(0.9)	(0.9)	(0.6)	(0.5)	(0.7)
Food Manufacturing												
Oregon	29.8	29.9	30.0	28.8	29.1	29.3	29.5	29.6	29.7	29.8	30.0	30.1
% Ch	2.2	0.5	0.2	(4.0)	0.9	0.9	0.6	0.3	0.2	0.5	0.6	0.4
U.S.	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
% Ch	2.7	1.3	0.8	(0.0)	0.6	1.8	1.4	0.6	0.4	0.7	0.6	0.2
Other Nondurable												
Oregon	28.6	29.7	31.4	31.8	31.6	31.9	32.1	32.1	32.2	32.4	32.5	32.6
% Ch	2.5	3.9	5.7	1.1	(0.4)	0.8	0.6	0.2	0.3	0.5	0.4	0.3
U.S.	3.1	3.1	3.1	3.1	3.0	3.0	3.0	2.9	2.9	2.8	2.8	2.7
% Ch	0.6	0.7	0.7	(1.7)	(2.2)	(1.1)	(1.3)	(1.7)	(1.7)	(1.3)	(1.2)	(1.2)
Trade, Transportation, and Utilities												
Oregon	349.0	352.2	355.8	356.4	357.4	358.2	359.0	360.0	360.9	361.5	361.9	362.5
% Ch	2.0	0.9	1.0	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.1
U.S.	27.4	27.7	27.8	27.7	27.6	27.5	27.2	26.8	26.6	26.6	26.5	26.5
% Ch	0.7	0.9	0.6	(0.3)	(0.4)	(0.6)	(1.1)	(1.2)	(0.8)	(0.3)	(0.1)	(0.3)

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Dec 2019 - Employment By Industry
(Oregon - Thousands, U.S. - Millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Retail Trade												
Oregon	210.9	211.4	209.6	209.0	209.5	210.0	210.5	211.2	211.9	212.3	212.5	212.8
% Ch	1.9	0.2	(0.9)	(0.3)	0.2	0.2	0.2	0.4	0.3	0.2	0.1	0.1
U.S.	15.8	15.8	15.8	15.7	15.6	15.4	15.2	15.0	14.8	14.7	14.7	14.7
% Ch	0.0	(0.1)	(0.3)	(0.7)	(0.6)	(0.7)	(1.4)	(1.6)	(1.3)	(0.6)	(0.2)	(0.2)
Wholesale Trade												
Oregon	75.0	75.1	76.5	76.9	77.3	77.5	77.6	77.7	77.9	78.0	78.2	78.4
% Ch	1.4	0.1	1.9	0.6	0.5	0.2	0.1	0.2	0.2	0.2	0.2	0.2
U.S.	5.8	5.9	5.9	6.0	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9
% Ch	0.5	0.7	1.5	0.4	0.4	(0.1)	(0.4)	(0.2)	(0.2)	(0.0)	0.1	(0.5)
Transportation and Warehousing, and Utilities												
Oregon	63.1	65.7	69.7	70.5	70.6	70.7	70.9	71.0	71.1	71.2	71.3	71.3
% Ch	3.3	4.1	6.1	1.0	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
U.S.	5.7	6.0	6.1	6.1	6.1	6.1	6.0	5.9	5.9	5.9	5.9	5.9
% Ch	3.1	3.9	2.3	0.3	(0.4)	(0.9)	(1.2)	(1.0)	(0.2)	0.4	(0.1)	(0.2)
Information												
Oregon	34.2	34.4	34.6	34.7	34.7	34.8	34.9	34.9	35.0	35.0	35.1	35.1
% Ch	1.9	0.4	0.7	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1
U.S.	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7
% Ch	0.7	0.5	(0.1)	0.6	0.0	(1.5)	0.3	0.5	(0.4)	(0.4)	(0.8)	(1.5)
Financial Activities												
Oregon	100.0	102.2	103.1	104.1	105.3	105.8	105.8	105.7	105.5	105.4	105.3	105.4
% Ch	3.0	2.2	0.8	1.0	1.1	0.5	(0.0)	(0.1)	(0.1)	(0.2)	(0.1)	0.2
U.S.	8.4	8.6	8.7	8.8	8.8	8.9	8.8	8.8	8.8	8.7	8.7	8.7
% Ch	2.0	1.4	1.3	1.3	0.6	0.1	(0.4)	(0.4)	(0.2)	(0.3)	(0.3)	0.1
Professional and Business Services												
Oregon	244.6	249.7	254.3	263.4	275.9	283.9	287.4	291.0	297.9	305.7	311.9	317.5
% Ch	2.2	2.1	1.8	3.6	4.7	2.9	1.2	1.3	2.4	2.6	2.0	1.8
U.S.	20.5	21.0	21.5	22.2	23.1	23.5	23.6	23.9	24.4	24.9	25.4	25.8
% Ch	2.0	2.4	2.3	3.2	4.1	1.9	0.6	1.0	2.1	2.4	1.8	1.6
Education and Health Services												
Oregon	272.9	295.4	301.7	310.2	315.6	320.2	325.0	329.8	333.9	337.3	340.1	342.5
% Ch	2.9	8.3	2.1	2.8	1.7	1.5	1.5	1.5	1.2	1.0	0.8	0.7
U.S.	23.2	23.7	24.2	24.6	24.8	25.0	25.1	25.2	25.4	25.5	25.7	25.9
% Ch	2.4	2.1	2.4	1.3	1.0	0.6	0.5	0.6	0.6	0.5	0.7	0.9
Educational Services												
Oregon	36.0	36.6	36.7	36.8	36.9	36.9	37.0	37.0	37.1	37.1	37.1	37.1
% Ch	0.9	1.6	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.0	0.0	0.0
U.S.	3.7	3.7	3.8	3.8	3.7	3.6	3.5	3.5	3.4	3.4	3.3	3.3
% Ch	2.8	1.6	1.6	(0.9)	(2.0)	(2.1)	(2.3)	(1.9)	(1.5)	(1.2)	(1.0)	(1.0)
Health Care and Social Assistance												
Oregon	236.9	258.9	265.0	273.4	278.7	283.3	288.0	292.7	296.8	300.2	303.0	305.4
% Ch	3.2	9.3	2.4	3.2	1.9	1.6	1.7	1.6	1.4	1.2	0.9	0.8
U.S.	19.5	19.9	20.5	20.8	21.1	21.4	21.6	21.8	22.0	22.2	22.4	22.7
% Ch	2.4	2.1	2.6	1.8	1.6	1.1	0.9	1.0	0.9	0.8	1.0	1.2
Leisure and Hospitality												
Oregon	206.4	211.2	213.3	217.2	220.3	222.9	224.9	226.2	227.4	228.8	230.4	231.9
% Ch	3.3	2.4	1.0	1.9	1.4	1.2	0.9	0.6	0.5	0.6	0.7	0.7
U.S.	16.1	16.4	16.7	16.9	17.1	17.3	17.4	17.5	17.4	17.4	17.5	17.6
% Ch	2.5	1.9	2.1	1.4	0.8	1.3	0.8	0.1	(0.2)	0.0	0.4	0.6
Other Services												
Oregon	63.5	64.3	64.6	64.8	65.0	65.2	65.3	65.4	65.7	66.1	66.3	66.7
% Ch	(0.6)	1.3	0.5	0.2	0.4	0.2	0.1	0.2	0.4	0.6	0.4	0.5
U.S.	5.8	5.8	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.8	5.8	5.8
% Ch	1.4	1.3	1.5	0.1	(0.7)	(0.8)	(0.8)	(0.5)	(0.2)	0.1	0.3	0.5
Government												
Oregon	309.8	294.8	298.8	303.5	306.1	309.0	311.2	313.4	316.0	318.8	322.0	325.4
% Ch	1.0	(4.8)	1.4	1.6	0.8	0.9	0.7	0.7	0.8	0.9	1.0	1.0
U.S.	22.4	22.4	22.6	22.8	22.9	23.0	23.2	23.4	23.5	23.7	23.8	24.0
% Ch	0.5	0.4	0.5	1.2	0.2	0.7	0.7	0.7	0.7	0.6	0.6	0.6
Federal Government												
Oregon	28.2	28.1	28.7	29.7	28.4	28.4	28.3	28.3	28.2	28.2	28.2	28.1
% Ch	(0.2)	(0.3)	2.3	3.4	(4.4)	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)	(0.1)
U.S.	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
% Ch	0.4	(0.3)	0.9	4.3	(4.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Government, Oregon												
State Total	56.2	39.5	40.5	40.3	41.1	41.7	42.2	42.6	43.0	43.6	44.1	44.8
% Ch	1.0	(29.7)	2.5	(0.7)	2.1	1.5	1.1	0.9	1.0	1.2	1.4	1.4
State Education	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
% Ch	3.3	2.0	6.2	2.4	(1.5)	(1.2)	(1.1)	(0.4)	(0.5)	(0.4)	0.0	0.3
Local Government, Oregon												
Local Total	225.3	227.1	229.5	233.5	236.5	238.9	240.6	242.5	244.8	247.1	249.7	252.5
% Ch	1.2	0.8	1.1	1.7	1.3	1.0	0.8	0.8	0.9	0.9	1.1	1.1
Local Education	132.7	132.7	132.1	132.4	134.4	136.0	137.3	138.3	139.3	140.5	141.7	142.3
% Ch	1.2	(0.1)	(0.4)	0.2	1.5	1.2	0.9	0.8	0.7	0.8	0.9	0.4

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	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GDP (Bil of 2009 $), Chain Weight (in billions of $)	18,108.1	18,638.2	19,058.1	19,431.1	19,813.8	20,155.3	20,446.3	20,796.3	21,233.1	21,693.6	22,150.1	22,620.0
% Ch	2.4	2.9	2.3	2.0	2.0	1.7	1.4	1.7	2.1	2.2	2.1	2.1

Price and Wage Indicators												
GDP Implicit Price Deflator, Chain Weight U.S., 2009=100	107.8	110.4	112.5	115.3	118.1	121.0	124.0	126.9	129.8	132.6	135.5	138.6
% Ch	1.9	2.4	1.9	2.5	2.4	2.5	2.5	2.3	2.2	2.2	2.2	2.2
Personal Consumption Deflator, Chain Weight U.S., 2009=100	105.9	108.1	109.8	112.0	114.1	116.5	119.1	121.6	124.1	126.5	129.1	131.7
% Ch	1.8	2.1	1.5	2.1	1.8	2.2	2.2	2.1	2.0	2.0	2.0	2.0
CPI, Urban Consumers, 1982-84=100												
West Region	254.7	263.3	270.5	277.3	283.2	290.8	298.4	306.0	313.4	320.9	328.7	336.7
% Ch	2.8	3.3	2.8	2.5	2.1	2.7	2.6	2.5	2.4	2.4	2.4	2.4
U.S.	245.1	251.1	255.8	261.2	266.0	272.8	279.5	286.1	292.4	298.9	305.5	312.3
% Ch	2.1	2.4	1.9	2.1	1.8	2.5	2.5	2.3	2.2	2.2	2.2	2.2
Oregon Average Wage Rate (Thous $)	53.5	55.5	57.8	60.1	62.6	65.2	67.8	70.6	73.5	76.5	79.6	82.8
% Ch	3.3	3.7	4.2	4.0	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
U.S. Average Wage Wage Rate (Thous $)	57.7	59.6	61.9	64.3	66.8	69.5	72.4	75.5	78.8	82.1	85.6	89.1
% Ch	3.1	3.3	3.9	3.9	3.9	4.0	4.2	4.2	4.3	4.3	4.2	4.1

Housing Indicators												
FHFA Oregon Housing Price Index 1991 Q1=100	393.7	424.6	443.8	465.1	483.0	501.4	520.6	540.0	559.4	579.6	600.5	621.8
% Ch	8.1	7.9	4.5	4.8	3.8	3.8	3.8	3.7	3.6	3.6	3.6	3.5
FHFA National Housing Price Index 1991 Q1=100	245.4	261.6	274.1	284.1	291.8	300.0	309.2	318.4	327.9	337.7	347.7	358.0
% Ch	6.5	6.6	4.8	3.7	2.7	2.8	3.0	3.0	3.0	3.0	3.0	3.0
Housing Starts												
Oregon (Thous)	19.3	19.6	20.8	21.9	22.8	23.3	23.0	23.2	22.9	22.9	22.7	22.7
% Ch	1.7	1.8	6.1	5.3	3.9	2.3	(1.3)	1.0	(1.5)	0.0	(0.9)	(0.1)
U.S. (Millions)	1.2	1.2	1.3	1.3	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2
% Ch	2.6	3.4	0.6	0.8	(1.6)	1.3	(2.5)	(1.5)	1.0	(1.4)	(2.5)	(0.3)

Other Indicators												
Unemployment Rate (%)												
Oregon	4.1	4.1	4.1	3.8	3.9	4.0	4.2	4.3	4.4	4.3	4.3	4.3
Point Change	(0.7)	0.0	(0.0)	(0.3)	0.0	0.2	0.2	0.1	0.0	(0.0)	(0.0)	0.0
U.S.	4.4	3.9	3.7	3.5	3.6	3.8	4.2	4.5	4.5	4.4	4.4	4.4
Point Change	(0.5)	(0.5)	(0.2)	(0.2)	0.0	0.2	0.4	0.3	0.0	(0.1)	(0.0)	0.0
Industrial Production Index U.S., 2002 = 100	104.4	108.6	109.6	110.9	112.3	113.6	114.4	115.8	118.0	120.3	122.4	124.6
% Ch	2.3	3.9	0.9	1.2	1.3	1.1	0.8	1.2	1.8	2.0	1.8	1.8
Prime Rate (Percent)	4.1	4.9	5.3	4.8	5.1	5.5	5.7	5.7	5.7	5.7	5.7	5.7
% Ch	16.7	19.7	8.3	(10.4)	8.0	7.0	4.2	0.3	(0.0)	0.0	0.0	0.0
Population (Millions)												
Oregon	4.14	4.20	4.25	4.30	4.35	4.40	4.45	4.49	4.54	4.58	4.63	4.67
% Ch	1.6	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9
U.S.	325.7	327.7	330.1	332.4	334.7	337.1	339.4	341.6	343.9	346.1	348.3	350.5
% Ch	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
Timber Harvest (Mil Bd Ft)												
Oregon	3,692.1	3,619.9	3,564.6	3,651.0	3,698.6	3,787.7	3,826.8	3,849.1	3,908.7	3,914.0	3,918.2	3,919.9
% Ch	(1.9)	(2.0)	(1.5)	2.4	1.3	2.4	1.0	0.6	1.5	0.1	0.1	0.0

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APPENDIX B: REVENUE FORECAST DETAIL

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Table B.1 General Fund Revenue Statement

Table B.1
General Fund Revenue Statement -- 2019-21

	Estimate at COS 2019	Forecasts Dated: 9/1/2019			Forecasts Dated: 12/1/2019			Difference	
		2019-20	2020-21	Total 2019-21	2019-20	2020-21	Total 2019-21	12/1/2019 Less 9/1/2019	12/1/2019 Less COS
Taxes									
Personal Income Taxes	18,283,508,000	8,654,067,000	9,638,356,000	18,292,423,000	8,587,742,000	9,698,026,000	18,285,768,000	(6,655,000)	2,260,000
Film and Video and Transfer to Counties	(45,262,000)	(22,230,000)	(23,032,000)	(45,262,000)	(22,230,000)	(23,032,000)	(45,262,000)	0	0
Corporate Income Taxes	1,190,805,000	695,166,000	574,792,000	1,269,958,000	748,720,000	577,156,000	1,325,876,000	55,918,000	135,071,000
Transfer to Rainy Day Fund & PERS UAL	(158,254,000)	(101,500,000)	(50,041,000)	(151,541,000)	0	(163,803,000)	(163,803,000)	(12,262,000)	(5,549,000)
Insurance Taxes	132,563,000	73,071,000	59,321,000	132,392,000	75,904,000	63,833,000	139,737,000	7,345,000	7,174,000
Estate Taxes	361,189,000	179,554,000	185,935,000	365,489,000	179,554,000	185,935,000	365,489,000	0	4,300,000
Cigarette Taxes	64,998,000	32,663,000	32,335,000	64,998,000	31,922,000	31,888,000	63,810,000	(1,188,000)	(1,188,000)
Other Tobacco Products Taxes	66,534,000	33,053,000	33,481,000	66,534,000	32,218,000	32,811,000	65,029,000	(1,505,000)	(1,505,000)
Other Taxes	1,636,000	823,000	813,000	1,636,000	878,000	878,000	1,756,000	120,000	120,000
Fines and Fees									
State Court Fees	138,730,000	69,281,000	69,449,000	138,730,000	70,227,000	69,449,000	139,676,000	946,000	946,000
Secretary of State Fees	70,837,000	35,392,000	35,445,000	70,837,000	35,392,000	35,445,000	70,837,000	0	0
Criminal Fines & Assessments	51,748,000	25,874,000	25,874,000	51,748,000	25,366,000	25,366,000	50,732,000	(1,016,000)	(1,016,000)
Securities Fees	27,269,000	13,206,000	13,606,000	26,812,000	12,690,000	13,206,000	25,896,000	(916,000)	(1,373,000)
Central Service Charges	10,376,000	5,188,000	5,188,000	10,376,000	5,188,000	5,188,000	10,376,000	0	0
Liquor Apportionment	348,537,000	167,298,000	181,239,000	348,537,000	167,298,000	181,239,000	348,537,000	0	0
Interest Earnings	102,965,000	51,477,000	51,488,000	102,965,000	55,301,000	51,488,000	106,789,000	3,824,000	3,824,000
Miscellaneous Revenues	13,500,000	6,500,000	7,000,000	13,500,000	6,500,000	7,000,000	13,500,000	0	0
One-time Transfers	155,200,000	0	155,200,000	155,200,000	0	155,200,000	155,200,000	0	0
Gross General Fund Revenues	21,020,395,000	10,042,613,000	11,069,522,000	21,112,135,000	10,034,900,000	11,134,108,000	21,169,008,000	56,873,000	148,613,000
Total Personal and Corporate Transfers	(203,516,000)	(123,730,000)	(73,073,000)	(196,803,000)	(22,230,000)	(186,835,000)	(209,065,000)	(12,262,000)	(5,549,000)
Net General Fund Revenues	20,816,879,000	9,918,883,000	10,996,449,000	20,915,332,000	10,012,670,000	10,947,273,000	20,959,943,000	44,611,000	143,064,000
Plus Beginning Balance	2,318,444,712			2,532,321,712			2,650,498,712	118,177,000	332,054,000
Less Anticipated Administrative Actions*	(21,472,000)			(21,472,000)			(21,472,000)	0	0
Less Legislatively Adopted Actions**	(199,459,036)			(199,459,036)			(199,459,036)	0	0
Available Resources	22,914,392,677			23,226,722,677			23,389,510,677	162,788,000	475,118,000
Appropriations	22,409,455,625			22,409,455,625			22,409,455,625	0	0
Estimated Ending Balance	504,937,052			817,267,052			980,055,052	162,788,000	475,118,000

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Table B.2 General Fund Revenue Forecast by Fiscal Year

General Fund Revenue Forecast December 2019

($Millions)

Fiscal Years	2017-18 Fiscal Year	2018-19 Fiscal Year	2019-20 Fiscal Year	2020-21 Fiscal Year	2021-22 Fiscal Year	2022-23 Fiscal Year	2023-24 Fiscal Year	2024-25 Fiscal Year	2025-26 Fiscal Year	2026-27 Fiscal Year	2027-28 Fiscal Year	2028-29 Fiscal Year
Taxes												
Personal Income	8,893.1	9,930.3	8,587.7	9,698.0	10,664.9	11,044.4	11,564.2	12,108.5	12,556.5	13,160.8	13,890.3	14,517.8
Film and Video & Transfer to Counties	(20.6)	(21.7)	(22.2)	(23.0)	(23.3)	(26.7)	(24.8)	(24.0)	0.0	0.0	0.0	0.0
Corporate Excise & Income	755.0	997.8	748.7	577.2	619.0	669.4	707.6	751.9	820.7	876.6	935.8	973.2
Transfer to RDF & PERS UAL	(16.2)	(71.1)	0.0	(163.8)	0.0	(62.0)	0.0	(65.5)	0.0	(78.3)	0.0	(80.8)
Insurance	76.7	83.5	75.9	63.8	64.1	66.4	68.8	71.1	73.8	76.7	84.9	88.1
Estate	176.5	204.7	179.6	185.9	189.9	195.3	200.7	205.6	211.9	218.3	228.3	235.2
Cigarette	33.7	31.9	31.9	31.9	31.3	30.8	30.3	29.6	29.0	28.4	27.9	27.5
Other Tobacco Products	32.4	31.2	32.2	32.8	33.2	33.8	34.2	34.4	34.6	34.8	35.0	35.1
Other Taxes	0.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Other Revenues												
Licenses and Fees	126.3	132.7	143.7	143.5	144.9	145.5	146.2	146.8	147.5	148.0	148.7	149.2
Charges for Services	5.4	5.4	5.2	5.2	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Liquor Apportionment	142.6	151.8	167.3	181.2	166.1	173.8	181.6	190.0	198.6	207.8	217.0	226.7
Interest Earnings	30.2	57.0	55.3	51.5	51.0	50.8	50.8	50.7	50.8	50.8	50.7	50.7
Others	8.2	7.0	6.5	162.2	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
Gross General Fund	10,281.0	11,634.3	10,034.9	11,134.1	11,978.2	12,424.4	12,999.1	13,603.9	14,139.2	14,818.6	15,635.4	16,320.9
Net General Fund	10,244.3	11,541.5	10,012.7	10,947.3	11,954.9	12,335.7	12,974.3	13,514.4	14,139.2	14,740.3	15,635.4	16,240.1

Biennial Totals	2017-19 BN	Change (%)	2019-21 BN	Change (%)	2021-23 BN	Change (%)	2023-25 BN	Change (%)	2025-27 BN	Change (%)	2027-29 BN	Change (%)
Taxes												
Personal Income	18,823.3	17.2%	18,285.8	-2.9%	21,709.3	18.7%	23,672.7	9.0%	25,717.4	8.6%	28,408.1	10.5%
Corporate Excise & Income	1,752.7	44.8%	1,325.9	-24.4%	1,288.4	-2.8%	1,459.4	13.3%	1,697.3	16.3%	1,909.0	12.5%
Insurance	160.3	15.1%	139.7	-12.8%	130.6	-6.5%	139.8	7.1%	150.5	7.6%	173.0	14.9%
Estate Taxes	381.2	18.1%	365.5	-4.1%	385.1	5.4%	406.3	5.5%	430.2	5.9%	463.5	7.7%
Cigarette	65.6	-6.9%	63.8	-2.7%	62.1	-2.7%	59.9	-3.5%	57.4	-4.2%	55.4	-3.4%
Other Tobacco Products	63.6	2.0%	65.0	2.3%	67.0	3.1%	68.6	2.3%	69.4	1.2%	70.0	0.9%
Other Taxes	2.0	9.6%	1.8	-11.1%	1.8	0.0%	1.8	0.0%	1.8	0.0%	1.8	0.0%
Other Revenues												
Licenses and Fees	259.0	5.2%	287.1	10.9%	290.3	1.1%	293.0	0.9%	295.5	0.9%	297.9	0.8%
Charges for Services	10.9	5.8%	10.4	-4.6%	10.9	4.8%	10.9	0.0%	10.9	0.0%	10.9	0.0%
Liquor Apportionment	294.4	12.4%	348.5	18.4%	339.9	-2.5%	371.7	9.4%	406.4	9.4%	443.7	9.2%
Interest Earnings	87.2	250.5%	106.8	22.5%	101.8	-4.7%	101.5	-0.3%	101.5	0.0%	101.5	-0.1%
Others	15.2	-89.8%	168.7	1009.3%	15.5	-90.8%	17.5	12.9%	19.5	11.4%	21.5	10.3%
Gross General Fund	21,915.3	18.1%	21,169.0	-3.4%	24,402.7	15.3%	26,603.0	9.0%	28,957.8	8.9%	31,956.3	10.4%
Net General Fund	21,785.8	17.6%	20,959.9	-3.8%	24,290.6	15.9%	26,488.7	9.0%	28,879.5	9.0%	31,875.4	10.4%

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Table B.3 Summary of 2019 Legislative Session Adjustments

	19-21	21-23	23-25	Revenue Impact Statement
Personal Income Tax Impacts (millions)				
Tax Expenditure Extension - HB 2164	-$70.5	-$146.0	-$156.4	HB 2164
Rural Medical Provider – HB 2847	-$0.2	-$0.4	-$0.4	HB 2847
Corporate Activity Tax – HB 3427	-$352.0	-$548.0	-$599.0	HB 3427
DOR Tax Compliance – SB 523 & HB 5033	$1.1	$1.4	$1.4	SB 523 HB 3206
Personal Income Tax Total	**-$421.6**	**-$693.0**	**-$754.4**	
Corporate Income Tax Impacts (millions)				
Medical Provider Taxes - HB 2010	-$5.0	-$8.0	-$8.0	HB 2010
Medical Provider Taxes - SB 523	$1.20	$1.2	$1.2	SB 523
Corporate Activity Tax – HB 3427	-$71.0	-$151.0	-$163.0	HB 3427
Corporate Income Tax Total	**-$74.8**	**-$157.8**	**-$169.8**	
Other Tax/Revenue Impacts (millions)				
Court Filing Fees - HB 3447	$3.1	$3.6	$3.8	HB 3447
OLCC Fees - SB 248	$5.2	$5.6	$5.7	SB 248
DOR Collections - SB 980	$0.5	$0.5	$0.5	SB 980
DOR Tax Compliance - HB 5033	$0.2	$0.4	$0.4	HB 5033
Fund Shifts and Adjustments – HB 2377	$179.6	$26.5	$10.0	HB 2377
Other Tax Total	**$188.5**	**$36.6**	**$20.4**	

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Table B.4 Oregon Personal Income Tax Revenue Forecast

TABLE B.4	OREGON PERSONAL INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS								December 2019
	Thousands of Dollars - Not Seasonally Adjusted								
	2009:3	**2009:4**	**2010:1**	**2010:2**	**FY 2010**	**2010:3**	**2010:4**	**2011:1**	**2011:2**	**FY 2011**
WITHHOLDING	1,092,795	1,151,673	1,157,857	1,116,552	4,518,878	1,146,189	1,196,214	1,262,781	1,218,439	4,823,622
%CHYA	-6.0%	-2.6%	2.6%	2.5%	-1.0%	4.9%	3.9%	9.1%	9.1%	6.7%
EST. PAYMENTS	176,110	161,759	186,894	265,703	790,467	179,692	148,589	207,036	284,662	819,978
%CHYA	-33.4%	-7.5%	-14.0%	1.0%	-14.1%	2.0%	-8.1%	10.8%	7.1%	3.7%
FINAL PAYMENTS	63,363	77,013	105,745	515,262	761,383	62,259	81,728	114,877	607,592	866,456
%CHYA	-9.9%	-22.5%	1.6%	-2.8%	-5.3%	-1.7%	6.1%	8.6%	17.9%	13.8%
REFUNDS	96,477	188,704	459,550	380,459	1,125,190	92,291	151,515	432,478	340,652	1,016,937
%CHYA	4.8%	4.6%	2.6%	-5.9%	0.1%	-4.3%	-19.7%	-5.9%	-10.5%	-9.6%
OTHER	(138,521)	-	-	136,193	(2,328)	(136,193)	-	-	165,933	29,740
TOTAL	1,097,271	1,201,740	990,947	1,653,251	4,943,210	1,159,655	1,275,015	1,152,216	1,935,973	5,522,860
%CHYA	-10.2%	-5.9%	-1.2%	2.3%	-3.4%	5.7%	6.1%	16.3%	17.1%	11.7%
	2011:3	**2011:4**	**2012:1**	**2012:2**	**FY 2012**	**2012:3**	**2012:4**	**2013:1**	**2013:2**	**FY 2013**
WITHHOLDING	1,235,508	1,287,030	1,348,171	1,269,562	5,140,271	1,262,589	1,364,547	1,354,116	1,321,413	5,302,666
%CHYA	7.8%	7.6%	6.8%	4.2%	6.6%	2.2%	6.0%	0.4%	4.1%	3.2%
EST. PAYMENTS	194,674	185,239	199,238	299,646	878,797	205,533	159,104	278,341	321,896	964,874
%CHYA	8.3%	24.7%	-3.8%	5.3%	7.2%	5.6%	-14.1%	39.7%	7.4%	9.8%
FINAL PAYMENTS	85,889	87,233	117,628	627,762	918,512	72,224	91,338	123,456	785,542	1,072,560
%CHYA	38.0%	6.7%	2.4%	3.3%	6.0%	-15.9%	4.7%	5.0%	25.1%	16.8%
REFUNDS	64,687	156,272	530,800	360,618	1,112,377	52,211	109,503	536,506	383,176	1,081,397
%CHYA	-29.9%	3.1%	22.7%	5.9%	9.4%	-19.3%	-29.9%	1.1%	6.3%	-2.8%
OTHER	(165,933)	-	-	193,614	27,681	(193,614)	-	-	201,367	7,753
TOTAL	1,285,451	1,403,230	1,134,237	2,029,966	5,852,884	1,294,521	1,505,486	1,219,407	2,247,042	6,266,457
%CHYA	10.8%	10.1%	-1.6%	4.9%	6.0%	0.7%	7.3%	7.5%	10.7%	7.1%
	2013:3	**2013:4**	**2014:1**	**2014:2**	**FY 2014**	**2014:3**	**2014:4**	**2015:1**	**2015:2**	**FY 2015**
WITHHOLDING	1,333,946	1,435,630	1,442,755	1,420,313	5,632,644	1,455,822	1,523,453	1,576,188	1,505,337	6,060,801
%CHYA	5.7%	5.2%	6.5%	7.5%	6.2%	9.1%	6.1%	9.2%	6.0%	7.6%
EST. PAYMENTS	221,695	214,342	247,826	357,218	1,041,080	264,823	236,303	305,582	408,957	1,215,665
%CHYA	7.9%	34.7%	-11.0%	11.0%	7.9%	19.5%	10.2%	23.3%	14.5%	16.8%
FINAL PAYMENTS	83,096	112,495	139,923	730,795	1,066,309	92,647	144,239	156,188	847,330	1,240,403
%CHYA	15.1%	23.2%	13.3%	-7.0%	-0.6%	11.5%	28.2%	11.6%	15.9%	16.3%
REFUNDS	67,098	197,448	472,018	354,437	1,091,001	100,729	173,522	520,272	375,119	1,169,642
%CHYA	28.5%	80.3%	-12.0%	-7.5%	0.9%	50.1%	-12.1%	10.2%	5.8%	7.2%
OTHER	(201,367)	-	-	180,356	(21,011)	(180,356)	-	-	163,398	(16,959)
TOTAL	1,370,272	1,565,018	1,358,485	2,334,246	6,628,021	1,532,207	1,730,473	1,517,685	2,549,903	7,330,268
%CHYA	5.9%	4.0%	11.4%	3.9%	5.8%	11.8%	10.6%	11.7%	9.2%	10.6%
	2015:3	**2015:4**	**2016:1**	**2016:2**	**FY 2016**	**2016:3**	**2016:4**	**2017:1**	**2017:2**	**FY 2017**
WITHHOLDING	1,551,517	1,644,209	1,711,568	1,634,728	6,542,022	1,675,744	1,705,280	1,835,155	1,769,354	6,985,533
%CHYA	6.6%	7.9%	8.6%	8.6%	7.9%	8.0%	3.7%	7.2%	8.2%	6.8%
EST. PAYMENTS	309,470	141,009	327,008	423,839	1,201,325	300,866	319,225	382,445	450,241	1,452,777
%CHYA	16.9%	-40.3%	7.0%	5.7%	-0.5%	-2.8%	126.4%	17.0%	6.2%	20.9%
FINAL PAYMENTS[1]	99,618	321,345	141,818	813,132	1,375,913	103,631	144,248	175,235	919,186	1,342,301
%CHYA	7.5%	122.8%	-9.2%	-4.9%	10.2%	4.0%	-55.1%	23.6%	13.0%	-2.4%
REFUNDS	85,113	203,981	577,546	562,601	1,429,241	138,825	254,851	574,417	454,899	1,422,992
%CHYA	-15.5%	17.6%	11.0%	50.0%	22.2%	63.1%	24.9%	-0.5%	-19.1%	-0.4%
OTHER	(163,398)	-	-	236,108	72,710	(236,108)	-	-	192,251	(43,856)
TOTAL	1,712,094	1,902,583	1,602,848	2,545,205	7,762,729	1,705,308	1,913,902	1,818,419	2,876,134	8,313,763
%CHYA	11.7%	9.9%	5.6%	-0.2%	5.9%	-0.4%	0.6%	13.4%	13.0%	7.1%
	2017:3	**2017:4**	**2018:1**	**2018:2**	**FY 2018**	**2018:3**	**2018:4**	**2019:1**	**2019:2**	**FY 2019**
WITHHOLDING	1,748,844	1,836,249	2,011,564	1,851,177	7,447,834	1,925,880	2,039,120	2,079,900	1,999,015	8,043,914
%CHYA	4.4%	7.7%	9.6%	4.6%	6.6%	10.1%	11.0%	3.4%	8.0%	8.0%
EST. PAYMENTS	321,032	451,037	464,534	512,671	1,749,274	367,772	284,002	321,858	532,273	1,505,905
%CHYA	6.7%	41.3%	21.5%	13.9%	20.4%	14.6%	-37.0%	-30.7%	3.8%	-13.9%
FINAL PAYMENTS[1]	92,364	169,785	174,096	878,587	1,314,832	104,644	156,592	225,515	1,385,562	1,872,312
%CHYA	-10.9%	17.7%	-0.6%	-4.4%	-2.0%	13.3%	-7.8%	29.5%	57.7%	42.4%
REFUNDS	133,143	266,467	686,100	610,486	1,696,196	140,701	335,635	546,225	445,573	1,468,133
%CHYA	-4.1%	4.6%	19.4%	34.2%	19.2%	5.7%	26.0%	-20.4%	-27.0%	-13.4%
OTHER	(192,251)	-	-	237,300	45,049	(237,300)	-	-	222,477	(14,823)
TOTAL	1,836,845	2,190,604	1,964,094	2,869,249	8,860,793	2,020,295	2,144,078	2,081,049	3,693,754	9,939,176
%CHYA	7.7%	14.5%	8.0%	-0.2%	6.6%	10.0%	-2.1%	6.0%	28.7%	12.2%

Note: "Other" includes July withholding accrued to June.

Tax law impacts are reflected in the collections numbers to produce more meaningful projections.

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OREGON PERSONAL INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS
Thousands of Dollars - Not Seasonally Adjusted

December 2019

	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
WITHHOLDING	2,059,715	2,176,486	2,184,008	1,992,664	8,412,873	2,086,896	2,199,475	2,296,590	2,098,177	8,681,138
%CHYA	6.9%	6.7%	5.0%	-0.3%	4.6%	1.3%	1.1%	5.2%	5.3%	3.2%
EST. PAYMENTS	413,316	295,004	361,809	538,838	1,608,967	387,326	282,816	359,944	566,284	1,596,371
%CHYA	12.4%	3.9%	12.4%	1.2%	6.8%	-6.3%	-4.1%	-0.5%	5.1%	-0.8%
FINAL PAYMENTS[1]	131,560	218,646	156,825	650,664	1,157,695	96,866	136,108	172,394	1,019,351	1,424,719
%CHYA	25.7%	39.6%	-30.5%	-53.0%	-38.2%	-26.4%	-37.7%	9.9%	56.7%	23.1%
REFUNDS	144,251	300,991	1,171,944	931,566	2,548,752	194,873	446,783	786,759	586,279	2,014,695
%CHYA	2.5%	-10.3%	114.6%	109.1%	73.6%	35.1%	48.4%	-32.9%	-37.1%	-21.0%
OTHER	(222,477)	-	-	179,435	(43,042)	(179,435)	-	-	189,927	10,492
TOTAL	2,237,864	2,389,145	1,530,698	2,430,035	8,587,742	2,196,780	2,171,616	2,042,169	3,287,460	9,698,026
%CHYA	10.8%	11.4%	-26.4%	-34.2%	-13.6%	-1.8%	-9.1%	33.4%	35.3%	12.9%

	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
WITHHOLDING	2,196,874	2,315,734	2,419,301	2,208,890	9,140,800	2,312,427	2,437,533	2,542,003	2,320,325	9,612,288
%CHYA	5.3%	5.3%	4.9%	4.8%	5.1%	5.3%	5.3%	5.1%	5.0%	5.2%
EST. PAYMENTS	406,938	297,137	377,805	589,776	1,671,656	423,730	309,398	393,399	614,174	1,740,701
%CHYA	5.1%	5.1%	5.0%	4.1%	4.7%	4.1%	4.1%	4.1%	4.1%	4.1%
FINAL PAYMENTS[1]	113,800	170,066	191,890	1,085,934	1,561,689	121,756	178,576	184,072	1,096,016	1,580,420
%CHYA	17.5%	24.9%	11.3%	6.5%	9.6%	7.0%	5.0%	-4.1%	0.9%	1.2%
REFUNDS	130,693	287,931	759,992	591,079	1,769,695	136,390	301,089	816,692	636,332	1,890,503
%CHYA	-32.9%	-35.6%	-3.4%	0.8%	-12.2%	4.4%	4.6%	7.5%	7.7%	6.8%
OTHER	(189,927)	-	-	250,376	60,449	(250,376)	-	-	251,867	1,491
TOTAL	2,396,992	2,495,006	2,229,004	3,543,897	10,664,899	2,471,148	2,624,418	2,302,781	3,646,049	11,044,398
%CHYA	9.1%	14.9%	8.6%	7.5%	9.7%	3.1%	5.2%	3.3%	2.9%	3.6%

	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
WITHHOLDING	2,427,095	2,558,387	2,670,569	2,438,090	10,094,142	2,549,228	2,687,094	2,812,155	2,568,430	10,616,907
%CHYA	5.0%	5.0%	5.1%	5.1%	5.0%	5.0%	5.0%	5.3%	5.3%	5.2%
EST. PAYMENTS	440,900	321,934	409,664	643,674	1,816,171	461,891	337,262	429,532	679,499	1,908,185
%CHYA	4.1%	4.1%	4.1%	4.8%	4.3%	4.8%	4.8%	4.9%	5.6%	5.1%
FINAL PAYMENTS[1]	116,578	175,700	197,453	1,137,317	1,627,048	125,260	186,514	206,444	1,194,996	1,713,213
%CHYA	-4.3%	-1.6%	7.3%	3.8%	3.0%	7.4%	6.2%	4.6%	5.1%	5.3%
REFUNDS	146,771	323,592	863,946	673,029	2,007,338	154,529	341,148	911,809	710,610	2,118,097
%CHYA	7.6%	7.5%	5.8%	5.8%	6.2%	5.3%	5.4%	5.5%	5.6%	5.5%
OTHER	(251,867)	-	-	286,051	34,184	(286,051)	-	-	274,310	(11,741)
TOTAL	2,585,935	2,732,429	2,413,740	3,832,103	11,564,207	2,695,799	2,869,722	2,536,321	4,006,625	12,108,466
%CHYA	4.6%	4.1%	4.8%	5.1%	4.7%	4.2%	5.0%	5.1%	4.6%	4.7%

	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027
WITHHOLDING	2,668,096	2,812,347	2,942,370	2,687,282	11,110,095	2,787,021	2,937,675	3,080,911	2,804,349	11,609,955
%CHYA	4.7%	4.7%	4.6%	4.6%	4.6%	4.5%	4.5%	4.7%	4.4%	4.5%
EST. PAYMENTS	484,445	353,730	450,482	712,332	2,000,989	507,032	370,222	471,434	744,819	2,093,506
%CHYA	4.9%	4.9%	4.9%	4.8%	4.9%	4.7%	4.7%	4.7%	4.6%	4.6%
FINAL PAYMENTS[1]	130,289	194,150	215,361	1,257,772	1,797,572	135,635	202,766	225,624	1,322,635	1,886,660
%CHYA	4.0%	4.1%	4.3%	5.3%	4.9%	4.1%	4.4%	4.8%	5.2%	5.0%
REFUNDS	163,954	361,859	994,088	781,541	2,301,442	173,571	382,839	1,053,749	828,529	2,438,689
%CHYA	6.1%	6.1%	9.0%	10.0%	8.7%	5.9%	5.8%	6.0%	6.0%	6.0%
OTHER	(274,310)	-	-	223,629	(50,680)	(223,629)	-	-	235,803	9,403
TOTAL	2,844,567	2,998,368	2,614,124	4,099,474	12,556,533	3,032,488	3,127,823	2,724,218	4,279,076	13,160,834
%CHYA	5.5%	4.5%	3.1%	2.3%	3.7%	6.6%	4.3%	4.2%	4.4%	4.8%

	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
WITHHOLDING	2,927,843	3,086,086	3,224,579	2,944,530	12,183,039	3,087,694	3,244,012	3,388,244	3,093,837	12,813,786
%CHYA	5.2%	5.2%	4.8%	5.1%	5.1%	5.5%	5.1%	5.1%	5.1%	5.2%
EST. PAYMENTS	533,696	389,692	496,039	781,326	2,200,754	560,496	409,261	520,927	820,260	2,310,943
%CHYA	5.4%	5.4%	5.3%	5.0%	5.2%	5.0%	5.0%	5.0%	5.0%	5.0%
FINAL PAYMENTS1	142,936	214,094	237,943	1,393,629	1,988,602	150,810	225,905	250,447	1,462,927	2,090,089
%CHYA	5.5%	5.7%	5.6%	5.5%	5.5%	5.5%	5.5%	5.3%	5.0%	5.1%
REFUNDS	182,781	403,152	1,106,675	870,071	2,562,678	191,774	422,915	1,166,560	917,299	2,698,549
%CHYA	5.2%	5.2%	4.9%	4.9%	5.0%	4.9%	4.9%	5.4%	5.4%	5.3%
OTHER	(235,803)	-	-	316,338	80,534	(316,338)	-	-	317,893	1,555
TOTAL	3,185,891	3,286,720	2,851,887	4,565,753	13,890,251	3,290,888	3,456,263	2,993,057	4,777,617	14,517,825
%CHYA	5.2%	5.2%	4.9%	6.9%	5.7%	3.3%	5.2%	5.0%	4.6%	4.5%

Note: "Other" includes July withholding accrued to June. Tax law impacts are reflected in the collections numbers to produce more meaningful projections.

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Table B.5 Oregon Corporate Income Tax Revenue Forecast

TABLE B.5   **OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS**

Thousands of Dollars - Not Seasonally Adjusted   **December 2019**

	2009:3	2009:4	2010:1	2010:2	FY 2010	2010:3	2010:4	2011:1	2011:2	FY 2011
ADVANCE PAYMENTS	79,579	163,877	66,451	147,313	457,220	115,286	175,561	76,405	165,354	532,606
%CHYA	-20.9%	12.8%	4.2%	51.3%	12.3%	44.9%	7.1%	15.0%	12.2%	16.5%
FINAL PAYMENTS	20,404	24,009	38,412	45,714	128,539	21,781	21,206	35,770	40,805	119,562
%CHYA	-13.2%	-10.2%	72.1%	109.5%	36.2%	6.8%	-11.7%	-6.9%	-10.7%	-7.0%
REFUNDS	29,072	137,244	40,080	25,774	232,170	23,130	89,877	39,065	31,489	183,562
%CHYA	3.3%	9.9%	-40.6%	-30.7%	-9.9%	-20.4%	-34.5%	-2.5%	22.2%	-20.9%
TOTAL	70,910	50,642	64,784	167,254	353,589	113,936	106,890	73,111	174,670	468,606
%CHYA	-26.1%	7.3%	247.5%	104.0%	45.1%	60.7%	111.1%	12.9%	4.4%	32.5%

	2011:3	2011:4	2012:1	2012:2	FY 2012	2012:3	2012:4	2013:1	2013:2	FY 2013
ADVANCE PAYMENTS	120,766	154,290	86,873	156,652	518,581	130,348	110,207	80,942	282,526	604,023
%CHYA	4.8%	-12.1%	13.7%	-5.3%	-2.6%	7.9%	-28.6%	-6.8%	80.4%	16.5%
FINAL PAYMENTS	19,117	26,841	32,512	33,322	111,792	16,387	21,377	36,660	34,009	108,433
%CHYA	-12.2%	26.6%	-9.1%	-18.3%	-6.5%	-14.3%	-20.4%	12.8%	2.1%	-3.0%
REFUNDS	34,927	91,252	55,051	18,153	199,384	33,212	17,832	25,595	182,929	259,568
%CHYA	51.0%	1.5%	40.9%	-42.4%	8.6%	-4.9%	-80.5%	-53.5%	907.7%	30.2%
TOTAL	104,955	89,878	64,335	171,820	430,989	113,524	113,751	92,007	133,606	452,888
%CHYA	-7.9%	-15.9%	-12.0%	-1.6%	-8.0%	8.2%	26.6%	43.0%	-22.2%	5.1%

	2013:3	2013:4	2014:1	2014:2	FY 2014	2014:3	2014:4	2015:1	2015:2	FY 2015
ADVANCE PAYMENTS	123,591	187,195	150,401	183,348	644,535	193,248	206,088	106,689	183,611	689,637
%CHYA	-5.2%	69.9%	85.8%	-35.1%	6.7%	56.4%	10.1%	-29.1%	0.1%	7.0%
FINAL PAYMENTS	27,794	18,162	32,218	52,283	130,456	28,815	73,552	57,268	71,415	231,051
%CHYA	69.6%	-15.0%	-12.1%	53.7%	20.3%	3.7%	305.0%	77.8%	36.6%	77.1%
REFUNDS	20,123	118,303	109,296	32,511	280,232	49,952	155,439	58,361	35,167	298,918
%CHYA	-39.4%	563.4%	327.0%	-82.2%	8.0%	148.2%	31.4%	-46.6%	8.2%	6.7%
TOTAL	131,262	87,054	73,323	203,120	494,759	172,111	124,202	105,597	219,860	621,770
%CHYA	15.6%	-23.5%	-20.3%	52.0%	9.2%	31.1%	42.7%	44.0%	8.2%	25.7%

	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
ADVANCE PAYMENTS	173,329	220,326	118,673	202,813	715,141	136,698	215,677	102,663	195,412	650,449
%CHYA	-10.3%	6.9%	11.2%	10.5%	3.7%	-21.1%	-2.1%	-13.5%	-3.6%	-9.0%
FINAL PAYMENTS	67,305	59,752	63,509	70,433	260,998	44,746	93,441	52,164	81,824	272,175
%CHYA	133.6%	-18.8%	10.9%	-1.4%	13.0%	-33.5%	56.4%	-17.9%	16.2%	4.3%
REFUNDS	42,388	156,984	85,446	81,453	366,271	39,680	166,537	73,066	57,733	337,016
%CHYA	-15.1%	1.0%	46.4%	131.6%	22.5%	-6.4%	6.1%	-14.5%	-29.1%	-8.0%
TOTAL	198,245	123,094	96,736	191,793	609,868	141,764	142,581	81,761	219,503	585,608
%CHYA	15.2%	-0.9%	-8.4%	-12.8%	-1.9%	-28.5%	15.8%	-15.5%	14.4%	-4.0%

	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
ADVANCE PAYMENTS	179,603	185,787	182,395	303,835	851,620	222,891	249,768	158,748	264,445	895,852
%CHYA	31.4%	-13.9%	77.7%	55.5%	30.9%	24.1%	34.4%	-13.0%	-13.0%	5.2%
FINAL PAYMENTS	42,600	66,460	46,270	108,539	263,869	74,735	102,942	68,818	174,861	421,356
%CHYA	-4.8%	-28.9%	-11.3%	32.6%	-3.1%	75.4%	54.9%	48.7%	61.1%	59.7%
REFUNDS	72,225	129,963	122,291	54,224	378,703	43,428	167,871	128,586	50,616	390,501
%CHYA	82.0%	-22.0%	67.4%	-6.1%	12.4%	-39.9%	29.2%	5.1%	-6.7%	3.1%
TOTAL	149,978	122,284	106,374	358,150	736,786	254,198	184,839	98,980	388,690	926,707
%CHYA	5.8%	-14.2%	30.1%	63.2%	25.8%	69.5%	51.2%	-7.0%	8.5%	25.8%

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OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS

Thousands of Dollars - Not Seasonally Adjusted

December 2019

	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
ADVANCE PAYMENTS	236,341	265,808	134,646	207,601	844,397	160,834	196,049	119,104	192,821	668,808
%CHYA	6.0%	6.4%	-15.2%	-21.5%	-5.7%	-31.9%	-26.2%	-11.5%	-7.1%	-20.8%
FINAL PAYMENTS	67,657	96,706	115,253	96,804	376,420	50,004	132,965	108,084	94,281	385,335
%CHYA	-9.5%	-6.1%	67.5%	-44.6%	-10.7%	-26.1%	37.5%	-6.2%	-2.6%	2.4%
REFUNDS	73,866	179,170	154,412	64,649	472,097	56,382	211,670	145,457	63,479	476,987
%CHYA	70.1%	6.7%	20.1%	27.7%	20.9%	-23.7%	18.1%	-5.8%	-1.8%	1.0%
TOTAL	230,132	183,345	95,486	239,757	748,720	154,457	117,344	81,731	223,624	577,156
%CHYA	-9.5%	-0.8%	-3.5%	-38.3%	-19.2%	-32.9%	-36.0%	-14.4%	-6.7%	-22.9%

	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
ADVANCE PAYMENTS	159,372	197,826	122,773	200,735	680,706	164,647	204,535	127,749	208,615	705,546
%CHYA	-0.9%	0.9%	3.1%	4.1%	1.8%	3.3%	3.4%	4.1%	3.9%	3.6%
FINAL PAYMENTS	52,145	147,421	118,084	107,171	424,821	59,379	166,054	130,540	121,146	477,119
%CHYA	4.3%	10.9%	9.3%	13.7%	10.2%	13.9%	12.6%	10.5%	13.0%	12.3%
REFUNDS	54,174	217,752	149,349	65,227	486,503	55,794	231,453	157,571	68,482	513,300
%CHYA	-3.9%	2.9%	2.7%	2.8%	2.0%	3.0%	6.3%	5.5%	5.0%	5.5%
TOTAL	157,343	127,495	91,508	242,679	619,025	168,232	139,136	100,719	261,279	669,365
%CHYA	1.9%	8.7%	12.0%	8.5%	7.3%	6.9%	9.1%	10.1%	7.7%	8.1%

	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
ADVANCE PAYMENTS	168,948	210,198	131,912	215,364	726,423	174,235	217,218	136,460	222,946	750,859
%CHYA	2.6%	2.8%	3.3%	3.2%	3.0%	3.1%	3.3%	3.4%	3.5%	3.4%
FINAL PAYMENTS	67,456	184,523	167,623	146,352	565,955	83,286	249,747	198,558	171,774	703,365
%CHYA	13.6%	11.1%	28.4%	20.8%	18.6%	23.5%	35.3%	18.5%	17.4%	24.3%
REFUNDS	58,966	250,387	193,066	82,396	584,816	68,420	315,739	223,759	94,446	702,364
%CHYA	5.7%	8.2%	22.5%	20.3%	13.9%	16.0%	26.1%	15.9%	14.6%	20.1%
TOTAL	177,437	144,335	106,469	279,320	707,562	189,101	151,226	111,259	300,274	751,861
%CHYA	5.5%	3.7%	5.7%	6.9%	5.7%	6.6%	4.8%	4.5%	7.5%	6.3%

	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027
ADVANCE PAYMENTS	182,264	227,039	142,450	232,422	784,175	188,495	235,893	148,090	240,828	813,307
%CHYA	4.6%	4.5%	4.4%	4.3%	4.4%	3.4%	3.9%	4.0%	3.6%	3.7%
FINAL PAYMENTS	100,280	306,099	205,059	189,090	800,528	110,254	312,998	211,662	206,934	841,848
%CHYA	20.4%	22.6%	3.3%	10.1%	13.8%	9.9%	2.3%	3.2%	9.4%	5.2%
REFUNDS	75,781	366,580	226,096	95,528	763,984	77,379	372,833	230,805	97,569	778,586
%CHYA	10.8%	16.1%	1.0%	1.1%	8.8%	2.1%	1.7%	2.1%	2.1%	1.9%
TOTAL	206,763	166,558	121,413	325,985	820,719	221,370	176,059	128,947	350,193	876,569
%CHYA	9.3%	10.1%	9.1%	8.6%	9.2%	7.1%	5.7%	6.2%	7.4%	6.8%

	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
ADVANCE PAYMENTS	195,819	244,819	152,721	247,977	841,336	201,409	250,448	155,155	252,076	859,088
%CHYA	3.9%	3.8%	3.1%	3.0%	3.4%	2.9%	2.3%	1.6%	1.7%	2.1%
FINAL PAYMENTS	121,932	320,219	216,440	222,525	881,115	131,757	324,717	219,502	232,275	908,251
%CHYA	10.6%	2.3%	2.3%	7.5%	4.7%	8.1%	1.4%	1.4%	4.4%	3.1%
REFUNDS	79,097	376,630	232,502	98,405	786,633	80,054	379,835	234,792	99,464	794,145
%CHYA	2.2%	1.0%	0.7%	0.9%	1.0%	1.2%	0.9%	1.0%	1.1%	1.0%
TOTAL	238,654	188,408	136,659	372,097	935,818	253,111	195,330	139,865	384,887	973,194
%CHYA	7.8%	7.0%	6.0%	6.3%	6.8%	6.1%	3.7%	2.3%	3.4%	4.0%

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TABLE B.6   **December 2019**

Cigarette & Tobacco Tax Distribution (Millions of $)

	Cigarette Tax Distribution*							Other Tobacco Tax Distribution			
	General Fund	Health Plan	Tobacco Use Reduction	Mental Health	State Total	Cities, Counties & Public Transit	Total	General Fund	Health Plan	Tobacco Use Reduction	State Total
Distribution Forecast*											
2019-20	31.922	124.410	4.962	21.765	183.059	9.925	192.984	32.218	24.858	2.765	59.841
2020-21	31.888	124.275	4.957	21.742	182.862	9.914	192.776	32.811	25.315	2.816	60.942
2019-21 Biennium	63.810	248.685	9.920	43.507	365.921	19.839	385.760	65.029	50.173	5.580	120.783
2021-22	31.325	122.081	4.870	21.358	179.633	9.739	189.372	33.236	25.643	2.852	61.732
2022-23	30.764	119.894	4.782	20.975	176.416	9.565	185.980	33.795	26.075	2.900	62.770
2021-23 Biennium	62.088	241.976	9.652	42.333	356.049	19.304	375.353	67.032	51.718	5.752	124.502
2023-24	30.320	118.164	4.713	20.672	173.869	9.427	183.296	34.175	26.368	2.933	63.475
2024-25	29.604	115.374	4.602	20.184	169.764	9.204	178.968	34.416	26.554	2.953	63.923
2023-25 Biennium	59.923	233.537	9.315	40.857	343.633	18.631	362.264	68.591	52.921	5.886	127.399
2025-26	28.975	112.924	4.504	19.756	166.160	9.009	175.169	34.623	26.713	2.971	64.307
2026-27	28.422	110.768	4.418	19.379	162.987	8.837	171.824	34.800	26.850	2.986	64.636
2025-27 Biennium	57.397	223.693	8.923	39.135	329.147	17.845	346.993	69.423	53.563	5.957	128.943
2027-28	27.934	108.866	4.342	19.046	160.188	8.685	168.873	34.951	26.966	2.999	64.916
2028-29	27.502	107.185	4.275	18.752	157.714	8.551	166.265	35.080	27.066	3.010	65.156
2027-29 Biennium	55.436	216.051	8.618	37.798	317.903	17.236	335.138	70.031	54.032	6.009	130.072

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Table B.7 Revenue Distribution to Local Governments

TABLE B.7   **December 2019**

Liquor Apportionment and Revenue Distribution to Local Governments (Millions of $)

| | Liquor Apportionment Distribution | | | | | | | | | Cigarette Tax Distribution [2] |
| | Total Liquor Revenue Available | General Fund (56%) | Mental Health [1] | Oregon Wine Board | City Revenue | | | Counties | |
					Revenue Sharing	Regular	Total		
2019-20	294.383	167.298	9.518	0.336	53.287	37.301	90.587	26.643	9.925
2020-21	318.914	181.239	10.311	0.364	57.727	40.409	98.136	28.864	9.914
2019-21 Biennium	613.297	348.537	19.829	0.701	111.014	77.710	188.724	55.507	19.839
2021-22	307.245	166.083	10.258	0.364	59.337	41.536	100.873	29.668	9.739
2022-23	321.058	173.776	10.494	0.373	62.007	43.405	105.412	31.003	9.565
2021-23 Biennium	628.303	339.859	20.751	0.736	121.344	84.941	206.285	60.672	19.304
2023-24	335.143	181.627	10.735	0.382	64.727	45.309	110.036	32.363	9.427
2024-25	350.215	190.035	10.982	0.392	67.640	47.348	114.987	33.820	9.204
2023-25 Biennium	685.358	371.661	21.717	0.774	132.366	92.657	225.023	66.183	18.631
2025-26	365.608	198.627	11.234	0.401	49.428	70.611	120.039	35.306	9.009
2026-27	382.056	207.817	11.493	0.411	51.652	73.789	125.441	36.894	8.837
2025-27 Biennium	747.664	406.444	22.727	0.813	101.080	144.400	245.480	72.200	17.845
2027-28	398.875	216.959	12.010	0.430	53.924	77.034	130.958	38.517	8.685
2028-29	416.820	226.720	12.550	0.449	56.350	80.500	136.850	40.250	8.551
2027-29 Biennium	815.694	443.680	24.560	0.879	110.274	157.534	267.809	78.767	17.236

[1] Mental Health Alcoholism and Drug Services Account, per ORS 471.810

[2] For details on cigarette revenues see TABLE B.6 on previous page

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Table B.8 Track Record for the September 2019 Forecast

(Quarter ending September 30, 2019)

Personal Income Tax	Forecast Comparison				Year/Year Change	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference		Prior Year	Percent Change
Withholding	$2,059.7	$2,094.9	-1.7%		$1,925.9	6.9%
Dollar difference		-$35.2			$131.0	
Estimated Payments*	$413.3	$393.0	5.2%		$367.8	12.4%
Dollar difference		$20.4			$131.8	
Final Payments*	$131.6	$105.0	25.3%		$104.6	25.7%
Dollar difference		$26.6			$25.5	
Refunds	-$144.3	-$145.6	-0.9%		-$140.7	2.5%
Dollar difference		$1.3			-$3.6	
Total Personal Income Tax	**$2,460.3**	**$2,447.3**	**0.5%**		**$2,257.6**	**9.0%**
Dollar difference		$13.1			$202.7	

Corporate Income Tax	Forecast Comparison				Year/Year Change	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference		Prior Year	Percent Change
Advanced Payments	$236.3	$196.2	20.5%		$222.9	6.0%
Dollar difference		$40.1			$13.5	
Final Payments	$67.7	$82.7	-18.2%		$74.7	-9.5%
Dollar difference		-$15.1			-$7.1	
Refunds	-$73.9	-$58.0	27.4%		-$43.4	70.1%
Dollar difference		-$15.9			-$30.4	
Total Corporate Income Tax	**$230.1**	**$220.9**	**4.2%**		**$254.2**	**-9.5%**
Dollar difference		$9.2			-$24.1	

Total Income Tax	Forecast Comparison				Year/Year Change	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference		Prior Year	Percent Change
Corporate and Personal Tax	**$2,690.5**	**$2,668.2**	**0.8%**		**$2,511.8**	**7.1%**
Dollar difference		$22.3			$178.7	

* Data separating estimated and other personal income tax payments is no longer available. Tracking represents estimates based on banking data.

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Table B.9 Summary of Lottery Resources

TABLE B.9
Summary of Lottery Resources

Dec 2019 Forecast

(in millions of dollars)	2019-21 Current Forecast	Change from Sep-19	Change from COS 2019	2021-23 Current Forecast	Change from Sep-19	2023-25 Current Forecast	Change from Sep-19	2025-2027 Current Forecast	Change from Sep-19	2027-29 Current Forecast	Change from Sep-19
LOTTERY EARNINGS											
Traditional Lottery	146.300	(7.297)	(8.600)	150.331	(4.813)	150.579	(4.830)	150.407	(4.831)	150.419	(4.830)
Video Lottery	1,321.015	11.306	16.071	1,421.482	4.148	1,547.904	0.424	1,649.732	(0.625)	1,749.693	(0.663)
Scoreboard (Sports Betting)[1]	8.252	0.000	8.252	29.425	0.000	42.198	0.000	46.404	0.000	49.901	0.000
Administrative Actions	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Available to Transfer	**1,475.567**	*4.009*	*15.723*	**1,601.238**	*(0.665)*	**1,740.680**	*(4.406)*	**1,846.543**	*(5.457)*	**1,950.014**	*(5.493)*
ECONOMIC DEVELOPMENT FUND											
Beginning Balance	65.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Transfers from Lottery	1,475.567	4.009	15.723	1,601.238	(0.665)	1,740.680	(4.406)	1,846.543	(5.457)	1,950.014	(5.493)
Other Resources[2]	5.731	0.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000
Total Available Resources	**1,546.638**	*4.009*	*15.723*	**1,603.238**	*(0.665)*	**1,742.680**	*(4.406)*	**1,848.543**	*(5.457)*	**1,952.014**	*(5.493)*
ALLOCATION OF RESOURCES											
Constitutional Distributions											
Education Stability Fund[3]	265.602	0.722	2.830	288.223	(0.120)	313.322	(0.793)	332.378	(0.982)	351.002	(0.989)
Parks and Natural Resources Fund[4]	221.335	0.601	2.358	240.186	(0.100)	261.102	(0.661)	276.981	(0.819)	292.502	(0.824)
Veterans' Services Fund[5]	22.134	0.060	0.236	24.019	(0.010)	26.110	(0.066)	27.698	(0.082)	29.250	(0.082)
Other Distributions											
Outdoor School Education Fund[5]	45.306	0.000	0.000	49.857	0.135	52.275	0.142	54.810	0.149	57.469	0.156
County Economic Development	50.231	0.000	0.000	54.500	0.159	59.347	0.016	63.251	(0.024)	67.083	(0.025)
HECC Collegiate Athletic & Scholarships[6]	14.100	0.000	0.000	16.012	(0.007)	17.407	(0.044)	18.465	(0.055)	19.500	(0.055)
Gambling Addiction [7]	14.593	0.000	0.000	16.012	(0.007)	17.407	(0.044)	18.465	(0.055)	19.500	(0.055)
County Fairs	3.828	0.000	0.000	3.828	0.000	3.828	0.000	3.828	0.000	3.828	0.000
Other Legislatively Adopted Allocations[8]	879.210	0.000	0.000	238.900	0.000	234.300	0.000	234.300	0.000	234.300	0.000
Employer Incentive Fund (PERS)[1]	8.252	0.000	8.252	29.425	0.000	42.198	0.000	46.404	0.000	49.901	0.000
Total Distributions	**1,524.591**	*1.383*	*13.677*	**960.961**	*0.052*	**1,027.295**	*(1.450)*	**1,076.581**	*(1.867)*	**1,124.336**	*(1.87)*
Ending Balance/Discretionary Resources	**22.047**	**2.626**	**2.047**	**642.277**	**(0.717)**	**715.385**	**(2.956)**	**771.962**	**(3.590)**	**827.678**	**(3.619)**

Note: Some totals may not foot due to rounding.

1. Per SB 1049 (2019), Sports Betting revenues are transferred to Economic Development Fund making them subject to the constitutional distributions, then an equal amount is transferred to the Employer Incentive Fund

2. Includes interest earnings on Economic Development Fund and reversions.

3. Eighteen percent of proceeds accrue to the Ed. Stability Fund, until the balance equals 5% of GF Revenues. Thereafter, 15% of proceeds accrue to the School Capital Matching Fund.

4. The Parks and Natural Resources Fund Constitutional amendment requires 15% of net proceeds be transferred to this fund.

5. Per Ballot Measure 96 (2016), 1.5% of net lottery proceeds are dedicated to the Veterans' Services Fund

6. Per Ballot Measure 99 (2016), the lesser of 4% of Lottery transfers or $22 million per year is transferred to the Outdoor Education Account. Adjusted annually for inflation.

7. Approximately one percent of net lottery proceeds are dedicated to each program. Certain limits are imposed by the Legislature.

8. Includes Debt Service Allocations, Allocations to State School Fund and Other Agency Allocations

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Table B.10: Budgetary Reserve Summary and Outlook   **Dec 2019**

Rainy Day Fund

(Millions)	2017-19	2019-21	2021-23	2023-25	2025-27
Beginning Balance	$376.4	$666.6	$899.4	$1,241.5	$1,631.2
Interest Earnings	$23.5	$33.3	$55.7	$80.4	$103.0
Deposits[1]	$266.7	$199.5	$286.4	$309.3	$327.7
Triggered Withdrawals	$0.0	$0.0	$0.0	$0.0	$0.0
Ending Balance[2]	**$666.6**	**$899.4**	**$1,241.5**	**$1,631.2**	**$2,061.9**

Education Stability Fund[3]

(Millions)	2017-19	2019-21	2021-23	2023-25	2025-27
Beginning Balance	$384.2	$621.1	$858.7	$920.8	$1,059.2
Interest Earnings[4]	$22.4	$31.8	$47.1	$57.4	$64.4
Deposits[5]	$235.9	$239.0	$62.1	$138.4	$109.4
Distributions	$21.0	$33.2	$47.1	$57.4	$64.4
Oregon Education Fund	$0.0	$0.0	$0.0	$0.0	$0.0
Oregon Opportunity Grant	$21.0	$33.2	$47.1	$57.4	$64.4
Withdrawals	$0.0	$0.0	$0.0	$0.0	$0.0
Ending Balance	**$621.1**	**$858.7**	**$920.8**	**$1,059.2**	**$1,061.7**

Total Reserves

(Millions)	2017-19	2019-21	2021-23	2023-25	2025-27
Ending Balances	**$1,287.7**	**$1,758.1**	**$2,162.3**	**$2,690.4**	**$3,123.6**
Percent of General Fund Revenues	5.9%	8.4%	8.9%	10.2%	10.8%

Footnotes:

1. Includes transfer of ending General Fund balances up to 1% of budgeted appropriations as well as private donations. Assumes future appropriations equal to 98.75 percent of available resources. Includes forecast for corporate income taxes above rate of 6.6% for the biennium are deposited on or before Jun 30 of each odd-numbered year.

2. Available funds in a given biennium equal 2/3rds of the beginning balance under current law.

3. Excludes funds in the Oregon Growth and the Oregon Resource and Technology Development subaccounts.

4. Interest earnings are distributed to the Oregon Education Funds (75%) and the State Scholarship Fund (25%), provided there remains debt outstanding. In the event that debt is paid off, all interest earnings distributed to the State Scholarship Fund.

5. Contributions to the ESF are capped at 5% of the prior biennium's General Fund revenue total. Quarterly contributions are made until the balance exceeds the cap.

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Table B.11 Recreational Marijuana Resources and Distributions

TABLE B.11   **Dec 2019**

Summary of Marijuana Resources

(in millions of dollars)	2019-21 Current Forecast	Change from Sep-19	Change from COS 2019	2021-23 Current Forecast	Change from Sep-19	2023-25 Current Forecast	Change from Sep-19	2025-27 Current Forecast	Change from Sep-19	2027-29 Current Forecast	Change from Sep-19
MARIJUANA EARNINGS											
+ Tax Revenue [1]	248.208	6.694	10.239	298.841	0.000	326.435	0.000	352.873	0.000	379.312	0.000
- Administrative Costs [2]	14.246	0.052	0.052	14.193	0.000	14.193	0.000	14.193	0.000	14.193	0.000
Net Available to Transfer	**233.962**	**6.642**	**10.186**	**284.648**	**0.000**	**312.242**	**0.000**	**338.680**	**0.000**	**365.118**	**0.000**
OREGON MARIJUANA ACCOUNT											
Beginning Balance	28.765	0.000	0.000	8.405	5.314	0.000	0.000	0.000	0.000	0.000	0.000
Revenue Transfers	233.962	6.642	10.186	284.648	0.000	312.242	0.000	338.680	0.000	365.118	0.000
Other Resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(1.000)
Total Available Resources	**262.727**	**6.642**	**10.186**	**293.053**	**5.314**	**312.242**	**0.000**	**338.680**	**0.000**	**365.118**	**(1.000)**
ALLOCATION OF RESOURCES											
State School Fund (40%)	103.765	0.000	0.000	118.062	2.966	124.897	0.000	135.472	0.000	146.047	(0.400)
Mental Health, Alcoholism, & Drug Services (20%)	51.882	0.000	0.000	59.031	1.483	62.448	0.000	67.736	0.000	73.024	(0.200)
State Police (15%)	38.912	0.000	0.000	44.273	1.112	46.836	0.000	50.802	0.000	54.768	(0.150)
Cities (10%)	23.396	0.664	1.019	28.465	(0.309)	31.224	0.000	33.868	0.000	36.512	(0.100)
Counties (10%)	23.396	0.664	1.019	28.465	(0.309)	31.224	0.000	33.868	0.000	36.512	(0.100)
Alcohol & Drug Abuse Prevention, Intervention & Treatment (5%)	12.971	0.000	0.000	14.758	0.371	15.612	0.000	16.934	0.000	18.256	(0.050)
Total Distributions	**254.322**	**1.328**	**2.037**	**293.053**	**5.314**	**312.242**	**0.000**	**338.680**	**0.000**	**365.118**	**(1.000)**
Ending Balance	**8.405**	**5.314**	**8.269**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

Note: Some totals may not foot due to rounding.

1. Retailers pay taxes monthly, however taxes are not available for distribution to recepient programs until the Department of Revenue receives and processes retailers' quarterly tax returns. As such, there is a one to two quarter lag between when the initial monthly payments are made and when monies be come available to distribute.

2. Administrative Costs reflect monthly collection costs for the Department of Revenue in addition to distributions to the Criminal Justice Commission and OLCC per SB 1544 (2018)

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Table B.12 Fund for Student Success (Corporate Activity Tax)

TABLE B.12   **Dec 2019**

Summary of Corporate Activity Tax Resources

(in millions of dollars)	2019-21			2021-23		2023-25		2025-27		2027-29	
	Current Forecast	Change from Sep-19	Change from COS 2019	Current Forecast	Change from Sep-19	Current Forecast	Change from Sep-19	Current Forecast	Change from Sep-19	Current Forecast	Change from Sep-19
Corporate Activity Tax											
+ Tax Revenue	1,596.267	0.000	0.000	2,806.156	0.000	3,063.290	0.000	3,344.575	0.000	3,657.172	0.000
- Administrative Costs	9.520	0.000	0.000	19.200	0.000	21.312	0.000	23.656	0.000	26.259	0.000
Net Available to Transfer	**1,586.747**	0.000	0.000	**2,786.956**	0.000	**3,041.978**	0.000	**3,320.918**	0.000	**3,630.913**	0.000
Fund for Student Success											
Beginning Balance	0.000	0.000	0.000	34.760	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Revenue Transfers	1,586.747	0.000	0.000	2,786.956	0.000	3,041.978	0.000	3,320.918	0.000	3,630.913	0.000
Other Resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Available Resources	**1,586.747**	0.000	0.000	**2,821.716**	0.000	**3,041.978**	0.000	**3,320.918**	0.000	**3,630.913**	0.000
ALLOCATION OF RESOURCES											
State School Fund	643.000	0.000	0.000	739.000	0.000	796.686	0.000	869.740	0.000	950.927	0.000
Student Investment Account	472.740	0.000	0.000	1,041.358	0.000	1,122.646	0.000	1,225.589	0.000	1,339.993	0.000
Statewide Education Initiative Account	265.122	0.000	0.000	624.815	0.000	673.588	0.000	735.354	0.000	803.996	0.000
Early Learning Account	171.125	0.000	0.000	416.543	0.000	449.058	0.000	490.236	0.000	535.997	0.000
Total Distributions	**1,551.987**	0.000	0.000	**2,821.716**	0.000	**3,041.978**	0.000	**3,320.918**	0.000	**3,630.913**	0.000
Ending Balance	**34.760**	0.000	0.000	**0.000**	0.000	**0.000**	0.000	**0.000**	0.000	**0.000**	0.000

Note: Some totals may not foot due to rounding.

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APPENDIX C: POPULATION FORECASTS BY AGE AND SEX

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Table C.1 Oregon's Population Forecasts and Component of Change 1990-2029

Year (July 1)	Population	Population Change Number	Percent	Births Number	Rate/1000	Deaths Number	Rate/1000	Natural Increase	Net Migration Number	Rate/1000
1990	2,860,400	69,800	2.50	42,008	14.87	24,763	8.76	17,245	52,555	18.60
1991	2,928,500	68,100	2.38	42,682	14.75	24,944	8.62	17,738	50,362	17.40
1992	2,991,800	63,300	2.16	42,427	14.33	25,166	8.50	17,261	46,039	15.55
1993	3,060,400	68,600	2.29	41,442	13.69	26,543	8.77	14,899	53,701	17.75
1994	3,121,300	60,900	1.99	41,487	13.42	27,564	8.92	13,923	46,977	15.20
1995	3,184,400	63,100	2.02	42,426	13.46	27,552	8.74	14,874	48,226	15.30
1990-1995		**324,000**		**210,464**		**131,769**		**78,695**	**245,305**	
1996	3,247,100	62,700	1.97	43,196	13.43	28,768	8.95	14,428	48,272	15.01
1997	3,304,300	57,200	1.76	43,625	13.32	29,201	8.91	14,424	42,776	13.06
1998	3,352,400	48,100	1.46	44,696	13.43	28,705	8.62	15,991	32,109	9.65
1999	3,393,900	41,500	1.24	45,188	13.40	29,848	8.85	15,340	26,160	7.76
2000	3,431,100	37,200	1.10	45,534	13.34	28,909	8.47	16,625	20,575	6.03
1995-2000		**246,700**		**222,239**		**145,431**		**76,808**	**169,892**	
2001	3,470,400	39,300	1.15	45,536	13.20	29,934	8.67	15,602	23,698	6.87
2002	3,502,600	32,200	0.93	44,995	12.91	30,828	8.84	14,167	18,033	5.17
2003	3,538,600	36,000	1.03	45,686	12.98	30,604	8.69	15,082	20,918	5.94
2004	3,578,900	40,300	1.14	45,599	12.81	30,721	8.63	14,878	25,422	7.14
2005	3,626,900	48,000	1.34	45,892	12.74	30,717	8.53	15,175	32,825	9.11
2000-2005		**195,800**		**227,708**		**152,804**		**74,904**	**120,896**	
2006	3,685,200	58,300	1.61	46,946	12.84	30,771	8.42	16,175	42,125	11.52
2007	3,739,400	54,200	1.47	49,404	13.31	31,396	8.46	18,008	36,192	9.75
2008	3,784,200	44,800	1.20	49,659	13.20	32,008	8.51	17,651	27,149	7.22
2009	3,815,800	31,600	0.84	47,960	12.62	31,382	8.26	16,578	15,022	3.95
2010	3,837,300	21,500	0.56	46,256	12.09	31,689	8.28	14,567	6,933	1.81
2005-2010		**210,400**		**240,225**		**157,246**		**82,979**	**127,421**	
2011	3,857,625	20,325	0.53	45,381	11.80	32,437	8.43	12,944	7,381	1.92
2012	3,883,735	26,110	0.68	44,897	11.60	32,804	8.47	12,093	14,017	3.62
2013	3,919,020	35,285	0.91	44,969	11.53	33,168	8.50	11,801	23,484	6.02
2014	3,962,710	43,690	1.11	45,447	11.53	33,731	8.56	11,716	31,974	8.11
2015	4,013,845	51,135	1.29	45,660	11.45	35,318	8.86	10,342	40,793	10.23
2010-2015		**176,545**		**226,354**		**167,458**		**58,896**	**117,649**	
2016	4,076,350	62,505	1.56	45,647	11.28	35,339	8.74	10,308	52,197	12.90
2017	4,141,100	64,750	1.59	44,602	10.86	36,773	8.95	7,829	56,921	13.85
2018	4,195,300	54,200	1.31	42,906	10.29	36,900	8.85	6,006	48,194	11.56
2019	4,247,700	52,399	1.25	42,872	10.16	38,549	9.13	4,323	48,076	11.39
2020	4,299,400	51,701	1.22	42,867	10.03	39,169	9.17	3,699	48,002	11.23
2015-2020		**285,555**		**218,894**		**186,729**		**32,165**	**253,390**	
2021	4,349,800	50,400	1.17	42,861	9.91	39,880	9.22	2,981	47,418	10.96
2022	4,399,000	49,200	1.13	42,849	9.80	40,654	9.29	2,196	47,004	10.75
2023	4,447,100	48,100	1.09	42,822	9.68	41,490	9.38	1,332	46,768	10.57
2024	4,493,800	46,699	1.05	42,790	9.57	42,413	9.49	377	46,322	10.36
2025	4,539,300	45,500	1.01	42,750	9.47	43,364	9.60	-614	46,114	10.21
2020-2025		**239,899**		**214,073**		**207,801**		**6,272**	**233,627**	
2026	4,583,000	43,700	0.96	42,711	9.36	44,306	9.71	-1,596	45,296	9.93
2027	4,625,300	42,300	0.92	42,667	9.27	45,293	9.84	-2,625	44,926	9.76
2028	4,666,000	40,700	0.88	42,621	9.17	46,389	9.99	-3,768	44,468	9.57
2029	4,705,100	39,100	0.84	42,570	9.09	47,452	10.13	-4,883	43,983	9.39
1990-2000		**570,700**		**432,703**		**277,200**		**155,503**	**415,197**	**13.10**
2000-2010		**406,200**		**467,933**		**310,050**		**157,883**	**248,317**	**6.83**
2010-2020		**462,100**		**445,248**		**354,187**		**91,061**	**371,039**	**9.19**
2019-2029		**457,400**		**427,509**		**430,410**		**-2,901**	**460,301**	**10.26**

Sources: 1990-1999 population - U.S. Census Bureau; 2000-2009 population - intercensal estimates by Office of Economic Analysis; population estimates 2010-2018 by Population Research Center, PSU; births and deaths 1990-18/17: Oregon Center for Health Statistics.

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Table C.2 Population Forecasts by Age and Sex: 2010-2029

Age	2010 Male	Female	Total	2011 Male	Female	Total	2012 Male	Female	Total	2013 Male	Female	Total	2014 Male	Female	Total
0-4	122,327	116,130	238,457	121,092	115,088	236,180	119,516	113,359	232,875	118,293	111,850	230,143	117,872	111,493	229,365
5- 9	121,539	116,369	237,908	121,767	115,893	237,660	122,733	116,900	239,634	124,024	117,953	241,977	124,734	118,038	242,772
10-14	124,508	118,732	243,241	124,074	119,044	243,118	123,603	118,287	241,890	123,386	118,206	241,593	123,403	118,463	241,865
15-19	131,126	124,540	255,667	129,068	121,927	250,996	127,517	120,587	248,104	126,643	119,875	246,518	126,847	119,972	246,819
20-24	128,787	124,903	253,689	130,576	126,691	257,267	132,853	128,787	261,640	135,293	130,705	265,998	136,741	132,080	268,821
25-29	134,019	131,816	265,835	133,302	130,829	264,132	132,463	129,927	262,390	132,508	130,403	262,911	134,578	132,874	267,452
30-34	131,489	128,325	259,814	133,512	130,743	264,255	135,689	133,329	269,018	137,321	135,074	272,395	139,932	137,412	277,344
35-39	128,070	123,596	251,665	125,924	121,787	247,710	126,018	122,275	248,293	128,683	124,338	253,022	130,858	126,562	257,420
40-44	125,969	122,843	248,811	128,974	125,358	254,332	130,795	126,620	257,415	131,483	127,467	258,950	131,047	126,698	257,745
45-49	130,825	132,538	263,363	127,795	128,542	256,337	125,434	124,976	250,410	123,864	122,179	246,043	124,309	121,474	245,783
50-54	135,129	141,565	276,693	134,682	140,654	275,335	133,445	139,197	272,643	132,080	137,545	269,625	131,568	136,140	267,708
55-59	133,011	140,802	273,812	134,009	142,349	276,358	134,403	143,058	277,461	134,376	142,746	277,122	133,344	142,041	275,385
60-64	115,236	121,045	236,281	121,440	127,818	249,258	122,921	129,548	252,470	124,925	132,821	257,745	127,753	136,837	264,590
65-69	81,854	87,917	169,771	84,425	90,852	175,277	92,096	98,785	190,881	97,983	105,059	203,042	103,544	110,487	214,031
70-74	56,925	62,949	119,874	59,485	65,640	125,125	62,496	69,113	131,609	67,184	73,899	141,083	71,303	78,473	149,776
75-79	40,932	50,101	91,034	41,549	50,075	91,624	42,654	50,692	93,346	44,224	52,064	96,287	46,443	54,145	100,588
80-84	30,391	42,734	73,126	30,500	42,287	72,787	30,560	41,822	72,381	30,774	41,257	72,031	31,046	40,788	71,834
85+	26,800	51,458	78,258	27,598	52,275	79,874	28,360	52,915	81,276	28,995	53,538	82,533	29,522	53,890	83,411
Total	1,898,938	1,938,362	3,837,300	1,909,773	1,947,852	3,857,625	1,923,557	1,960,178	3,883,735	1,942,040	1,976,980	3,919,020	1,964,844	1,997,866	3,962,710
Mdn. Age	37.2	39.4	38.3	37.4	39.7	38.5	37.6	39.9	38.7	37.8	40.0	38.9	38.0	40.1	39.0

Age	2015 Male	Female	Total	2016 Male	Female	Total	2017 Male	Female	Total	2018 Male	Female	Total	2019 Male	Female	Total
0-4	118,065	111,542	229,607	119,058	112,182	231,240	119,560	112,675	232,236	118,557	111,613	230,170	117,123	110,204	227,327
5- 9	125,502	118,321	243,824	125,540	118,120	243,660	125,253	117,281	242,534	124,926	116,377	241,303	125,067	116,397	241,464
10-14	122,975	118,328	241,303	123,807	118,633	242,441	125,568	120,566	246,133	127,404	122,223	249,627	128,481	122,681	251,162
15-19	127,735	120,633	248,368	128,448	121,638	250,085	129,149	122,339	251,038	129,338	122,073	251,411	129,610	122,533	252,143
20-24	137,304	132,672	269,977	137,526	132,652	270,178	138,151	133,323	271,474	137,916	133,230	271,146	138,362	133,523	271,885
25-29	137,959	137,056	275,015	143,647	143,914	287,560	149,363	150,285	299,649	154,128	155,225	309,353	158,424	156,940	315,365
30-34	141,525	138,707	280,232	144,070	140,722	284,792	146,205	142,880	289,086	148,173	145,415	293,588	151,745	149,552	301,297
35-39	134,484	129,808	264,292	138,181	133,110	271,291	142,320	136,983	279,303	145,127	139,407	284,534	148,589	142,255	290,844
40-44	130,040	125,302	255,342	129,051	124,315	253,366	130,216	125,672	255,887	133,595	128,185	261,780	130,713	136,251	266,964
45-49	127,060	123,545	250,606	131,246	126,804	258,051	134,157	128,892	263,049	135,475	130,160	265,635	135,400	129,637	265,037
50-54	129,981	133,569	263,550	127,847	130,622	258,469	126,391	127,711	254,102	125,327	125,340	250,667	126,116	124,882	250,998
55-59	133,245	142,271	275,516	133,803	142,713	276,516	133,264	142,249	275,513	132,346	141,198	273,544	132,091	140,121	272,213
60-64	130,407	139,689	270,096	132,872	142,414	275,286	134,431	144,220	278,651	135,166	144,565	279,730	134,545	144,218	278,764
65-69	109,922	117,550	227,472	116,860	124,952	241,812	119,222	127,460	246,681	121,835	131,164	253,000	122,984	135,379	260,363
70-74	74,860	82,510	157,370	77,688	85,607	163,296	85,391	93,610	179,001	91,329	99,843	191,172	96,745	105,107	201,852
75-79	48,615	56,084	104,698	51,000	58,692	109,692	53,744	62,024	115,768	57,958	66,449	124,407	61,575	70,575	132,149
80-84	31,707	40,809	72,517	32,509	40,934	73,443	33,587	41,566	75,152	35,014	42,755	77,768	36,838	44,438	81,275
85+	30,095	53,967	84,062	30,836	54,337	85,173	31,428	54,414	85,842	32,073	54,392	86,465	32,525	54,071	86,596
Total	1,991,483	2,022,363	4,013,845	2,023,989	2,052,361	4,076,350	2,057,401	2,083,700	4,141,100	2,085,686	2,109,614	4,195,300	2,112,990	2,134,710	4,247,700
Mdn. Age	38.1	40.2	39.1	38.2	40.2	39.2	38.3	40.2	39.2	38.5	40.3	39.4	38.7	40.4	39.5

Age	2020 Male	Female	Total	2021 Male	Female	Total	2022 Male	Female	Total	2023 Male	Female	Total	2024 Male	Female	Total
0-4	115,485	108,642	224,127	113,931	107,176	221,107	112,949	106,283	219,232	112,889	106,251	219,140	112,803	106,195	218,998
5- 9	125,506	116,608	242,114	126,190	117,019	243,209	126,211	116,888	243,099	124,988	115,673	240,661	123,361	114,142	237,503
10-14	129,473	123,177	252,650	129,378	122,864	252,242	128,764	121,686	250,450	128,230	120,542	248,771	128,215	120,388	248,603
15-19	129,295	122,504	251,799	130,034	122,642	252,676	131,486	124,263	255,749	133,139	125,739	258,879	134,049	126,027	260,076
20-24	139,146	134,064	273,210	139,370	134,748	274,118	139,512	134,273	273,785	139,833	134,571	274,406	140,136	135,049	275,186
25-29	157,870	159,525	317,395	157,414	158,576	315,990	156,779	158,150	314,930	156,251	157,705	313,956	156,516	157,735	314,251
30-34	156,098	154,904	311,001	161,955	162,013	323,967	167,721	168,672	336,394	172,714	173,797	346,511	175,452	176,885	352,338
35-39	150,607	143,816	294,423	152,900	145,650	298,550	154,603	147,310	301,913	156,541	149,866	306,407	160,174	154,062	314,236
40-44	140,210	134,153	274,363	143,934	137,509	281,443	147,691	141,001	288,693	150,499	143,431	293,930	153,970	146,282	300,252
45-49	134,517	128,324	262,840	133,318	129,191	262,509	134,247	128,200	262,447	137,643	130,719	268,362	140,276	133,237	273,513
50-54	129,084	127,220	256,304	133,179	130,476	263,655	135,855	132,376	268,230	137,064	133,618	270,682	136,888	133,011	269,899
55-59	130,616	137,485	268,101	128,373	134,286	262,659	126,645	131,261	257,906	125,505	128,754	254,260	126,228	128,214	254,442
60-64	134,621	144,581	279,202	134,971	144,808	279,779	134,297	144,208	278,505	133,261	143,084	276,346	132,899	141,928	274,827
65-69	127,780	138,302	266,083	129,940	140,858	270,798	131,299	142,435	273,734	131,919	142,760	274,679	131,236	142,413	273,649
70-74	102,809	111,840	214,649	108,984	118,688	227,672	111,114	120,983	232,097	113,523	124,569	238,093	116,442	128,626	245,068
75-79	64,714	74,181	138,895	67,038	76,909	143,948	73,676	84,113	157,789	78,838	89,852	168,691	83,527	94,693	178,220
80-84	38,667	46,037	84,704	40,515	48,207	88,722	42,670	50,971	93,641	46,027	54,738	100,765	48,932	58,277	107,209
85+	33,399	54,141	87,540	34,186	54,570	88,756	35,142	55,265	90,407	36,273	56,291	92,564	37,774	57,757	95,530
Total	2,139,897	2,159,503	4,299,400	2,165,610	2,184,190	4,349,800	2,190,661	2,208,339	4,399,000	2,215,140	2,231,961	4,447,100	2,238,879	2,254,921	4,493,800
Mdn. Age	38.9	40.6	39.7	39.1	40.8	39.9	39.3	40.9	40.1	39.4	41.1	40.2	39.6	41.3	40.4

Age	2025 Male	Female	Total	2026 Male	Female	Total	2027 Male	Female	Total	2028 Male	Female	Total	2029 Male	Female	Total
0-4	112,849	106,259	219,108	113,040	106,456	219,496	112,794	106,225	219,018	112,529	105,976	218,505	112,246	105,713	217,958
5- 9	121,576	112,500	234,076	119,869	110,936	230,805	118,861	110,042	228,903	118,823	110,049	228,872	118,777	110,042	228,819
10-14	128,492	120,426	248,918	129,121	120,774	249,895	129,069	120,567	249,636	127,746	119,241	246,988	126,029	117,601	243,630
15-19	134,884	126,367	261,251	134,602	125,881	260,483	133,923	124,649	258,572	133,437	123,437	256,749	133,192	123,201	256,393
20-24	139,711	134,915	274,626	140,121	134,643	274,764	141,542	136,257	277,800	143,145	137,675	280,820	144,006	137,877	281,883
25-29	157,247	158,154	315,401	157,457	158,830	316,288	157,373	157,968	315,341	157,400	157,909	315,309	157,406	158,080	315,486
30-34	176,119	177,691	353,811	175,265	176,281	351,545	174,295	175,587	349,881	173,456	175,745	349,192	173,529	174,663	348,192
35-39	164,655	159,512	324,167	170,666	166,728	337,394	176,543	173,422	349,965	181,557	178,505	360,063	184,225	181,516	365,741
40-44	155,941	147,798	303,739	158,206	149,599	307,804	159,866	151,219	311,085	161,772	153,757	315,529	165,431	157,973	323,404
45-49	144,264	136,695	280,959	147,998	140,046	288,043	151,780	143,535	295,315	154,589	145,940	300,529	158,079	148,781	306,860
50-54	135,950	131,591	267,541	134,708	130,357	265,065	135,620	131,333	266,952	139,013	133,853	272,866	141,624	136,382	278,007
55-59	129,128	130,549	259,676	133,184	133,813	266,997	135,841	135,705	271,546	137,050	136,926	273,977	136,875	136,256	273,132
60-64	131,330	139,208	270,538	129,020	135,892	264,913	127,255	132,778	260,032	126,088	130,210	256,298	126,808	129,660	256,467
65-69	131,275	142,779	274,054	131,595	142,970	274,564	130,940	142,351	273,291	129,936	141,223	271,159	129,585	140,055	269,640
70-74	119,041	131,463	250,504	121,043	133,873	254,917	122,350	135,370	257,721	122,985	135,711	258,696	122,399	135,406	257,805
75-79	88,750	100,822	189,571	94,063	106,930	200,993	96,042	109,098	205,140	98,274	112,447	210,721	100,930	116,168	217,099
80-84	51,439	61,345	112,783	53,304	63,620	116,924	58,785	69,792	128,577	63,134	74,723	137,858	67,034	78,830	145,864
85+	39,377	59,198	98,575	41,031	61,077	102,108	43,002	63,522	106,524	45,897	66,868	112,764	48,582	70,139	118,721
Total	2,262,028	2,277,271	4,539,300	2,284,293	2,298,706	4,583,000	2,305,881	2,319,419	4,625,300	2,326,704	2,339,296	4,666,000	2,346,756	2,358,344	4,705,100
Mdn. Age	39.9	41.4	40.6	40.1	41.6	40.8	40.3	41.8	41.0	40.5	42.0	41.2	40.7	42.2	41.4

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Table C.3 Population of Oregon: 1990-2029

Year (July 1)	Total Population	Change from previous year Number	Percent
1990	2,860,400	-	-
1991	2,928,500	68,100	2.38%
1992	2,991,800	63,300	2.16%
1993	3,060,400	68,600	2.29%
1994	3,121,300	60,900	1.99%
1995	3,184,400	63,100	2.02%
1996	3,247,100	62,700	1.97%
1997	3,304,300	57,200	1.76%
1998	3,352,400	48,100	1.46%
1999	3,393,900	41,500	1.24%
2000	3,431,100	37,200	1.10%
2001	3,470,400	39,300	1.15%
2002	3,502,600	32,200	0.93%
2003	3,538,600	36,000	1.03%
2004	3,578,900	40,300	1.14%
2005	3,626,900	48,000	1.34%
2006	3,685,200	58,300	1.61%
2007	3,739,400	54,200	1.47%
2008	3,784,200	44,800	1.20%
2009	3,815,800	31,600	0.84%
2010	3,837,300	21,500	0.56%
2011	3,857,625	20,325	0.53%
2012	3,883,735	26,110	0.68%
2013	3,919,020	35,285	0.91%
2014	3,962,710	43,690	1.11%
2015	4,013,845	51,135	1.29%
2016	4,076,350	62,505	1.56%
2017	4,141,100	64,750	1.59%
2018	4,195,300	54,200	1.31%
2019	4,247,700	52,399	1.25%
2020	4,299,400	51,701	1.22%
2021	4,349,800	50,400	1.17%
2022	4,399,000	49,200	1.13%
2023	4,447,100	48,100	1.09%
2024	4,493,800	46,699	1.05%
2025	4,539,300	45,500	1.01%
2026	4,583,000	43,700	0.96%
2027	4,625,300	42,300	0.92%
2028	4,666,000	40,700	0.88%
2029	4,705,100	39,100	0.84%

Oregon's Population and Annual Percent Change, 1950-2029

Table C.4 Children: Ages 0-4   Table C.5 School Age Population: Ages 5-17   Table C.6 Young Adult Population: Ages 18-24

Year (July 1)	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. Number	Percent
1980	199,525	---	---	524,446	---	---	329,407	---	---
1990	209,638	10,113	5.07%	532,727	8,281	1.58%	268,134	-61,273	-18.60%
2000	223,207	13,569	6.47%	624,316	91,589	17.19%	330,328	62,194	23.20%
2001	224,645	1,438	0.64%	624,675	358	0.06%	336,660	6,333	1.92%
2002	225,084	439	0.20%	624,611	-64	-0.01%	340,778	4,118	1.22%
2003	226,652	1,568	0.70%	624,349	-262	-0.04%	345,266	4,487	1.32%
2004	228,353	1,701	0.75%	625,461	1,112	0.18%	349,138	3,873	1.12%
2005	230,008	1,655	0.72%	628,326	2,865	0.46%	351,076	1,938	0.55%
2006	231,882	1,874	0.81%	633,646	5,320	0.85%	354,328	3,252	0.93%
2007	236,160	4,278	1.85%	635,720	2,074	0.33%	356,311	1,983	0.56%
2008	239,340	3,180	1.35%	635,372	-348	-0.05%	358,967	2,656	0.75%
2009	239,929	589	0.25%	633,575	-1,797	-0.28%	360,134	1,166	0.32%
2010	238,457	-1,472	-0.61%	630,741	-2,835	-0.45%	359,764	-370	-0.10%
2011	236,180	-2,277	-0.95%	628,366	-2,375	-0.38%	360,675	911	0.25%
2012	232,875	-3,305	-1.40%	628,688	323	0.05%	362,580	1,904	0.53%
2013	230,143	-2,733	-1.17%	630,161	1,473	0.23%	365,925	3,346	0.92%
2014	229,365	-777	-0.34%	631,753	1,592	0.25%	368,525	2,600	0.71%
2015	229,607	242	0.11%	633,304	1,550	0.25%	370,167	1,642	0.45%
2016	231,240	1,632	0.71%	635,485	2,182	0.34%	370,880	712	0.19%
2017	232,236	996	0.43%	638,094	2,608	0.41%	373,086	2,206	0.59%
2018	230,170	-2,065	-0.89%	639,287	1,194	0.19%	374,200	1,114	0.30%
2019	227,327	-2,843	-1.24%	641,363	2,076	0.32%	375,292	1,092	0.29%
2020	224,127	-3,200	-1.41%	644,564	3,200	0.50%	375,209	-83	-0.02%
2021	221,107	-3,020	-1.35%	646,828	2,264	0.35%	375,418	209	0.06%
2022	219,232	-1,875	-0.85%	646,809	-19	0.00%	376,274	856	0.23%
2023	219,140	-92	-0.04%	645,104	-1,705	-0.26%	377,612	1,338	0.36%
2024	218,998	-142	-0.06%	642,387	-2,718	-0.42%	378,981	1,369	0.36%
2025	219,108	110	0.05%	638,308	-4,078	-0.63%	380,563	1,582	0.42%
2026	219,496	388	0.18%	633,913	-4,396	-0.69%	382,035	1,472	0.39%
2027	219,018	-478	-0.22%	630,474	-3,438	-0.54%	384,437	2,402	0.63%
2028	218,505	-513	-0.23%	627,201	-3,273	-0.52%	386,228	1,791	0.47%
2029	217,958	-547	-0.25%	624,676	-2,524	-0.40%	386,048	-180	-0.05%

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Table C.7 Criminally At Risk Population (males): Ages 15-39

Table C.8 Prime Wage Earners: Ages 25-44

Table C.9 Older Wage Earners: Ages 45-64

Year (July 1)	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. Number	Percent
1980	561,931	---	---	790,750	---	---	491,249	---	---
1990	544,738	-17,193	-3.06%	926,326	135,576	17.15%	531,181	39,932	8.13%
2000	616,988	72,250	13.26%	996,500	70,174	7.58%	817,510	286,329	53.90%
2001	618,906	1,918	0.31%	994,587	-1,913	-0.19%	847,276	29,766	3.64%
2002	620,252	1,347	0.22%	989,996	-4,591	-0.46%	876,242	28,966	3.42%
2003	622,211	1,959	0.32%	987,755	-2,241	-0.23%	903,499	27,257	3.11%
2004	626,423	4,212	0.68%	988,932	1,177	0.12%	930,032	26,533	2.94%
2005	633,901	7,478	1.19%	994,575	5,644	0.57%	957,826	27,793	2.99%
2006	644,210	10,309	1.63%	1,004,110	9,535	0.96%	985,638	27,813	2.90%
2007	652,287	8,077	1.25%	1,014,565	10,455	1.04%	1,008,986	23,348	2.37%
2008	657,248	4,961	0.76%	1,022,060	7,495	0.74%	1,025,501	16,515	1.64%
2009	657,327	79	0.01%	1,024,971	2,911	0.28%	1,039,689	14,188	1.38%
2010	653,491	-3,836	-0.58%	1,026,126	1,155	0.11%	1,050,150	10,461	1.01%
2011	652,382	-1,109	-0.17%	1,030,430	4,304	0.42%	1,057,288	7,138	0.68%
2012	654,540	2,158	0.33%	1,037,116	6,686	0.65%	1,052,983	-4,305	-0.41%
2013	660,449	5,909	0.90%	1,047,277	10,162	0.98%	1,050,536	-2,447	-0.23%
2014	668,956	8,507	1.29%	1,059,961	12,683	1.21%	1,053,466	2,930	0.28%
2015	679,008	10,051	1.50%	1,074,881	14,920	1.41%	1,059,767	6,301	0.60%
2016	691,871	12,863	1.89%	1,097,009	22,128	2.06%	1,068,321	8,554	0.81%
2017	705,188	13,317	1.92%	1,123,925	26,916	2.45%	1,071,315	2,993	0.28%
2018	714,682	9,493	1.35%	1,149,254	25,330	2.25%	1,069,577	-1,738	-0.16%
2019	725,247	10,565	1.48%	1,174,471	25,216	2.19%	1,067,011	-2,565	-0.24%
2020	733,015	7,768	1.07%	1,197,182	22,712	1.93%	1,066,447	-564	-0.05%
2021	741,672	8,657	1.18%	1,219,950	22,768	1.90%	1,066,602	155	0.01%
2022	750,102	8,430	1.14%	1,241,929	21,979	1.80%	1,067,088	486	0.05%
2023	758,480	8,378	1.12%	1,260,804	18,876	1.52%	1,069,649	2,561	0.24%
2024	766,327	7,848	1.03%	1,281,076	20,272	1.61%	1,072,681	3,032	0.28%
2025	772,617	6,289	0.82%	1,297,118	16,041	1.25%	1,078,714	6,034	0.56%
2026	778,111	5,494	0.71%	1,313,031	15,913	1.23%	1,085,018	6,304	0.58%
2027	783,676	5,565	0.72%	1,326,272	13,241	1.01%	1,093,846	8,828	0.81%
2028	788,868	5,192	0.66%	1,339,199	12,927	0.97%	1,103,670	9,824	0.90%
2029	792,357	3,489	0.44%	1,352,822	13,624	1.02%	1,114,465	10,796	0.98%

Table C.10 Elderly Population by Age Group

Year (July 1)	Ages 65+	%Change from previous decade/yr.	Ages 65-74	%Change from previous decade/yr.	Ages 75-84	%Change from previous decade/yr.	Ages 85+	%Change from previous decade/yr.
1980	305,841	---	185,863	---	91,137	---	28,841	---
1990	392,369	28.29%	224,772	20.93%	128,813	41.34%	38,784	34.48%
2000	439,239	11.95%	218,997	-2.57%	162,187	25.91%	58,055	49.69%
2001	442,558	0.76%	218,838	-0.07%	163,878	1.04%	59,843	3.08%
2002	445,890	0.75%	219,614	0.35%	165,109	0.75%	61,167	2.21%
2003	451,080	1.16%	222,361	1.25%	165,669	0.34%	63,050	3.08%
2004	456,984	1.31%	226,373	1.80%	165,842	0.10%	64,769	2.73%
2005	465,089	1.77%	231,926	2.45%	166,077	0.14%	67,087	3.58%
2006	475,596	2.26%	239,931	3.45%	165,787	-0.17%	69,877	4.16%
2007	487,657	2.54%	250,131	4.25%	165,148	-0.39%	72,379	3.58%
2008	502,959	3.14%	264,201	5.63%	164,354	-0.48%	74,403	2.80%
2009	517,502	2.89%	277,606	5.07%	163,513	-0.51%	76,383	2.66%
2010	532,062	2.81%	289,645	4.34%	164,159	0.40%	78,258	2.45%
2011	544,686	2.37%	300,402	3.71%	164,410	0.15%	79,874	2.06%
2012	569,493	4.55%	322,490	7.35%	165,727	0.80%	81,276	1.75%
2013	594,977	4.47%	344,125	6.71%	168,319	1.56%	82,533	1.55%
2014	619,639	4.15%	363,807	5.72%	172,422	2.44%	83,411	1.06%
2015	646,119	4.27%	384,842	5.78%	177,215	2.78%	84,062	0.78%
2016	673,416	4.22%	405,107	5.27%	183,136	3.34%	85,173	1.32%
2017	702,446	4.31%	425,682	5.08%	190,921	4.25%	85,842	0.79%
2018	732,812	4.32%	444,171	4.34%	202,175	5.89%	86,465	0.73%
2019	762,236	4.02%	462,215	4.06%	213,424	5.56%	86,596	0.15%
2020	791,871	3.89%	480,732	4.01%	223,599	4.77%	87,540	1.09%
2021	819,896	3.54%	498,470	3.69%	232,670	4.06%	88,756	1.39%
2022	847,668	3.39%	505,831	1.48%	251,431	8.06%	90,407	1.86%
2023	874,790	3.20%	512,771	1.37%	269,455	7.17%	92,564	2.39%
2024	899,677	2.84%	518,717	1.16%	285,429	5.93%	95,530	3.20%
2025	925,488	2.87%	524,558	1.13%	302,355	5.93%	98,575	3.19%
2026	949,507	2.60%	529,481	0.94%	317,918	5.15%	102,108	3.58%
2027	971,253	2.29%	531,012	0.29%	333,717	4.97%	106,524	4.32%
2028	991,198	2.05%	529,855	-0.22%	348,578	4.45%	112,764	5.86%
2029	1,009,129	1.81%	527,445	-0.45%	362,963	4.13%	118,721	5.28%

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BUSINESS PLAN

FY2020 – FY2024

FINAL
April 2019

TriMet: A History of Innovation and Service

From our beginning, TriMet has served as a leader and innovator in public transit. We have delivered many "firsts" in our 50-year drive to strengthen the communities and the metropolitan region we serve.

1969   Private transit service in the Portland area faced flagging ridership and losses—threatening cuts in service. Civic and business leaders came together to find a solution and by the end of the year, **TriMet was born**. The first TriMet buses began service on December 1.

1973   TriMet identifies strategies to increase bus ridership by simplifying and concentrating downtown service on the **5th and 6th Avenue Transit Mall** and expanding its bus fleet.

1975   TriMet begins service that eventually becomes **TriMet LIFT**, well in advance of requirements by the Americans with Disabilities Act of 1990.

1982   **A grid of bus lines** with some running every 15-minutes or less all day is introduced to Portland's eastside. This provided for better cross-town direct trips without having to transfer through downtown. It set the stage for future Frequent Service and transit network improvements.

1986   The eastside **Banfield Light Rail Project** begins service as **MAX**.

1998   **Westside MAX Blue Line** introduces **low-floor, easy-entry light rail cars** to North America.

2001   **Airport MAX Red Line** (the West Coast's first train to plane) and the modern **Portland Streetcar** opens.

2004   **Interstate MAX Yellow Line** opens ahead of schedule with improvements to connecting bus service.
        TransitTracker™ - one of the first real-time arrival information systems in the nation - starts.

2005   TriMet and Google develop the **GTFS (General Transit Feed Specification),** which is now a worldwide standard for transit apps. TriMet becomes the first transit system on Google Transit.

2009   **I-205/Portland Mall MAX Green Line** to Clackamas Town Center and PSU opens on time, upgrading the Portland Mall and adding light rail service north-south in downtown Portland.

        TriMet opens **WES (Westside Express Service) Commuter Rail**, a 14.7 mile, suburb-to-suburb commuter rail line with service between Beaverton and Wilsonville.

        TriMet introduces **Open Trip Planner**, an online trip planner that includes transit, biking, and walking options. This open-source trip planner is now used at many systems around the world.

2013   TriMet introduces its **Mobile Ticketing App**. Use of this app overtakes cash payments on buses by 2017.

2015   TriMet opens the **Portland-Milwaukie MAX Orange Line**, which includes **Tilikum Crossing**, *Bridge of the People*, the first multi-modal bridge of its kind in the U.S. It carries MAX, streetcar trains, buses, bicyclists, and pedestrians only.

2017   TriMet introduces **Hop Fastpass®**, the next generation of electronic fare systems.

2018   TriMet pioneers virtual card (on mobile devices) for **Hop Fastpass®**

2019   TriMet releases beta version **multi-modal trip planner** with transit, walking, biking, ridesharing, and bikesharing all in one planning step for customers

Letter from the General Manager

This is the third Business Plan we've published. Updated annually, the strategic Business Plan for FY2020 through FY2024 presents our goals and objectives and how to achieve them by being strategic, maintaining what we have, and staying smart about how we grow. Achieving the Goals and Objectives and completing the Key Strategic Actions in this Plan will help us address the needs of our customers and community.

With each year, we learn more and pursue a better experience for our customers. I am very proud of our team of operators, mechanics, supervisors, trainers, and managers who have worked together to make our service more reliable. We have continued to improve on-time performance so that you can have more confidence in when your train or bus will arrive and how long it will take to get where you're going. This is not easy, as anyone who has driven many miles on congested streets during rush hour can tell you and TriMet operators have to do it every day. So, we're also working with cities and counties to get improvements at intersections, smarter traffic signals, and other ways to make buses more reliable and faster.

We still have much to do. Where we missed targets, we have revised our Key Strategic Actions to improve our performance. Amid all the details, we must continue to foster a culture of safety and strive to provide service where all of our riders and employees feel safe and secure.

Thanks to the State of Oregon, House Bill 2017 (HB2017) now provides more funding for transit. With this new funding, we introduced a Low-Income Fare for eligible adult riders. Already, more than 10,000 people have signed up for the program and are getting to work, medical appointments, and everything else they need while paying a smaller percentage of their household budget. In addition, we will be adding services and investments in areas with many low-income households. For the next four years, we plan to introduce more service each year, especially on bus routes with high ridership potential.

This year, TriMet turns 50! Back in 1969, a group of leaders from the Portland region went to Salem and asked for help to ensure the mobility and economic vitality of the region by creating a public transit agency. Now, 50 years later, we embrace the need to stay current, by expanding our relevance and benefit in the region. While we will always provide bus and rail service and pursue excellence in doing so, we also need to expand our role to help you connect to transit. In order to get you where you need to go, we want to offer a full range of options that includes transit. Now, at betaplanner.trimet.org, you can plan a trip to and from anywhere in the TriMet district and see options for buses and trains, but also for using a park & ride, biking, walking, Uber, ShareNow (formerly car2go), or Biketown. Then it links to those services online or your phone so you can book and pay for the ride too. Give it a try! We'll keep working to improve the way we help you combine and choose among the varied and growing options for getting around our great region.

Doug Kelsey
General Manager

TRIMET BUSINESS PLAN FY2020 – FY2024

Table of Contents

Introduction

As TriMet continues to grow, we must simultaneously maintain our current infrastructure and still be able to expand. New technology and innovation present opportunities and challenges. We have to closely coordinate our efforts within the agency and pursue priorities in a comprehensive, agency-wide manner. Having clearly defined Goals, Objectives, Measures, and Targets allows us to drive and measure progress. We celebrate our successes and strive to improve our Key Strategic Actions where we still have more to accomplish.

This Business Plan covers Fiscal Years FY2020 through FY2024 and will be updated annually with a rolling five-year horizon. The Business Plan and its strategic priorities will inform both the operating and capital budgets each year and vice-versa.

Strategic Priorities

For the next decade and more, TriMet will strategically pursue prioritized improvements and enhancements that help us live up to our Vision (see pages 8-10) and meet our Goals and Objectives. Considering equity in all of our activities and continuing to build a culture of safety to improve system safety and security for all mobility options, TriMet's strategic priorities (for roughly a 15 year horizon) are:

- Enhance customer experience and become a connector of peoples' lives and integrator of transportation choices

- Increase the share of trips in the region on transit and other low-impact and/or healthy options such as walking, biking, telecommuting, bikeshare, and similar mobility options

- Reduce customer travel times significantly, improving people's access to the needs in their lives

- Help counter global climate change threat by reducing carbon emissions from transportation in our region, including converting to a non-diesel bus fleet

- Support the Regional Transportation Plan and regional transportation funding efforts

- Improve system safety and security for all mobility options

- Optimize internal systems and processes including information technology

- Improve farebox recovery (which compares fare revenue and costs for a comprehensive cost-efficiency measure that also correlates with ridership productivity) and increase use and return on TriMet assets and value capture

- Improve state of good repair for TriMet assets

- Ensure TriMet is highly rated by the FTA and develop other 3rd party funding relationships to advance regional projects, such as Southwest Corridor, Division Transit Project, Red Line Extension, and reliability investments

Points of Emphasis for FY2020

In order to make real progress for FY2020, we must focus and emphasize specific efforts in this Business Plan and in the TriMet Budget. Again, considering equity in all of our activities and continuing to build a culture of safety, TriMet's points of emphasis for FY2020 are:

- New mobility opportunities and partnering to enhance mobility and connections to transit

- Implement near-term improvements that will increase ridership

- Reduce customer travel times and increase reliability

- Champion policies that give transit priority over single occupancy vehicles at cities, counties, Metro and ODOT

- Meaningful public engagement

- Safety and security presence on the system including fare enforcement

- Technology and process modernization, especially information technologies to make data more useful and our work more effective and efficient

- Personnel focus on the following issues: adequate staffing for operational excellence; implementing recommendations from employment diversity report; focus and investment in training; and workforce development

- Deliver HB2017-payroll-tax-funded services and benefits, including continuing to increase enrollment in the Low-Income Fare program

- Deliver capital program including design and funding steps for regional projects

Serving the Community with this Plan

This Business Plan and its Goals and Objectives are informed by our ongoing efforts to understand the needs and desires of our riders as well as the broader community. We will continue to engage the diverse communities we serve as we implement and update this Plan, because they are the ultimate reason we strive for success.

TriMet

About Us

- **Transit district created by Oregon law** serving over 1.5 million people in a 533-square-mile area
- **Primarily funded through an employer payroll tax, self-employment tax, and a recently-introduced employee payroll tax**. Fare revenues and some federal, state and local grants round out our budget
- **Governed by a seven-member board of directors**, who each represent a geographical district where they must reside

Our Customers

Riders:

- **Took more than 97 million boardings** on TriMet last year—adults, youth, seniors, and persons with disabilities
- **Comprise 68 percent** of the region's adults who have ridden TriMet within the last year
- **82 percent have a car available** but instead choose TriMet
- Ride for **many different purposes** including work, school, medical appointments, shopping, going to special events or the airport, visiting friends, etc.

Regional communities benefit from:

- **Investing in our region's transit and roads,** which will reduce projected congestion by half over the next 25 years
- **Generating nearly $1.1 billion in economic benefits**, a return of $2.40 for every $1 spent
- MAX helping spur **more than $21 billion in development value** within walking distance of MAX stations
- **Supporting mobility for residents** for work, education, medical visits, and other daily needs

Regional residents:

- **Encounter less congestion** thanks to people taking transit instead of driving in cars—45 percent of rush-hour commuters into downtown take transit
- **Breathe easier** with fewer cars on the road, resulting in cleaner air for the Portland area
- **Live healthier** by walking, rolling, or biking to transit
- **See benefits to our community and our earth** by promoting a smaller carbon footprint and lower reliance on fossil fuels

Regional businesses benefit, too:

- **Employers**—1,341 worksites or campuses offer TriMet pass programs, reducing the need to provide expensive parking
- **Retail and recreation**—more than half of our customers use transit for shopping and/or recreation for at least some of their trips
- **Freight—**addressing congestion means freight can move more freely on our roads and highways, saving more than $150 million per year
- **Colleges and universities**—46 percent of Portland State University students, faculty, and visitors take transit to campus
- **Part of the region's competitive livability** for talent in the global environment

Our Services

Buses

- Serve most of the metropolitan area and connect with MAX, WES, Portland Streetcar, and other bus services
- 85 bus lines, including 14 Frequent Service lines
- Ridership: Almost 57 million boardings (FY2018)

WES Commuter Rail

- Serves Beaverton, Tigard, Tualatin, and Wilsonville with weekday rush-hour service
- Five stations and 14.7 miles of track
- Ridership: over 400,000 boardings (FY2018)

Streetcar

- City of Portland owns track and cars; TriMet operators run the Streetcars
- Ridership: Over 4.8 million boardings (FY2018)

MAX Light Rail

- Connects Beaverton, Clackamas, Gresham, Hillsboro, Milwaukie, Portland, and Portland International Airport
- Five MAX lines stretching over 60 miles
- Ridership: almost 39 million boardings (FY2018)

LIFT Paratransit Service

- Provides door-to-door service for people with disabilities who are unable to ride TriMet's regular buses or trains
- Over 250 LIFT buses and 15 LIFT vans
- Ridership: about one million boardings (FY2018)

Mobility Information for Travelers

- **Multi-modal trip planner** including rail, bus, bike, walking, ridesharing and combined options: available now at betaplanner.trimet.org

- **Rider Support**: 503-238-RIDE(7433) call or text (text support is NEW!); 1-844-MyHopCard(694-6722); hello@trimet.org; twitter.com/trimethelp (@trimethelp); twitter.com/myhopcard (@myhopcard)

- **When the next train or bus will arrive at any stop**: trimet.org or by text: send stop ID # to 27299

- **Service alerts**: trimet.org/alerts and twitter.com/trimetalerts (@trimetalerts)

- **Social media accounts:** Facebook.com/trimet; twitter.com/trimet (@trimet); Instagram.com/ridetrimet (@ridetrimet)

TriMet's Primary Roles in the Region

Providing service and projects that:

- **Support our economy:** Get employees to work and customers to businesses with integrated mobility options

- **Ease congestion:** Attract many riders to transit and encourage travel modes other than driving during peak periods by providing integrated mobility, coordinated information and the kinds of service and capital projects that lead to development and lifestyles that rely less on peak-period driving

- **Provide mobility for those with few options:** Provide a critical service for seniors, people with disabilities, school kids, low-income households, households without cars and others who have few mobility options by getting them to work, school and other destinations by transit or other accessible mobility options

- **Help shape the future of our region:** Deliver service, mobility options, and capital projects that help attract residents, businesses, and development to centers, main streets, and corridors that communities have identified as future growth areas

- **Reduce emissions and support environmental sustainability:** Deliver mobility options and support development that encourage mobility other than driving. Transit, walking, and bicycling especially promote personal and community health, and reduce resource use, greenhouse gases, and emissions in neighborhoods

Strengths, Weaknesses, Opportunities, and Challenges

Each year, we will refresh our understanding of our strengths and weaknesses, as well as the external forces and current circumstances that present both opportunities and challenges for us in achieving our vision, mission, and goals. This is a district-wide effort.

Strengths

- System safety is a value at TriMet
- Mission-driven work
- HB2017 new funding from state
- Strong revenue base for the Plan period
- Overall positive public support of TriMet
- Proven ability to expand
- Regional thought leader and influencer
- Accessible, open data with good supporting information technology infrastructure
- Progress on providing more comprehensive information to customers about options for traveling within the region
- Demonstrated effective capital planning process
- New ridership pattern information from Hop Fastpass®
- Support from Congressional delegation and state leadership
- First Special Tax Revenue Bond to receive highest ratings from Moody's (Aaa), S&P (AAA) and Kroll (AAA)
- Demonstrated desire to work across departments and divisions
- Improved average age of bus fleet
- Good Hop Fastpass® adoption rate and introduction of virtual pay
- Low-Income Fare rapidly gaining customers
- Enterprise Content Management System being implemented
- High level of pension funding
- Positive Train Control on WES fully functional and operating

Weaknesses

- Have not yet fully achieved a culture of safety
- Many competing needs for capital and operating resources
- Retirements leading to loss of institutional knowledge
- Workload, expectations, and staff capacity not consistently well matched
- Administration, maintenance and parking space is near capacity
- Physical separation of administration employees and operations employees hinders communication and teamwork
- Inconsistent internal understanding of what it means to provide excellent customer service
- Dispersed and not fully coordinated data collection, management, and document sharing
- TriMet is in the early stages of refining systems to better deliver large numbers of small capital projects
- Training needs at all levels
- Incomplete employee understanding of leadership decisions
- Incomplete internal resources for communicating with our riders and communities with limited English proficiency
- Capital asset maintenance and replacement needs
- Still developing succession planning and technical capacity
- Lack of communication about career advancement opportunities within TriMet

Opportunities

- Strong public and jurisdictional support for existing and expanded public transit

- Increased payroll tax funding

- New technologies available for data analysis, information, and communication

- External partnerships, including transit agency peers

- Pursue and leverage new technologies available for productivity and new services

- Open source and open data community connections

- Increased security on the system

- Growth of Transportation Network Companies (TNC) and other travel options may help solve "last mile" challenges

- Autonomous vehicle technology and potential for safety benefits

- Support at federal level (Federal Transit Administration and Congress)

- Further Transit Oriented Development leveraging

- Reputation based on proven project delivery history

- Ability to leverage strong brand

- Potential for 3rd party commercial revenue generating opportunity

- Regional and local growth policies

- Bus-only lanes and other transit prioritization

- High percentage of choice riders

- Further expand diversity of TriMet staff and contractors

- Light rail fleet replacement and remanufacturing

- Advances in clean fuel technology

- Advance opportunities to collaborate with Union leadership

Challenges

- Competing regional demands and priorities
- Decline in ridership and shifts in location of demand
- Safety of employees who provide direct service to customers
- Congestion and increasing bus travel times
- Maintaining reliability and addressing crowding challenges
- Operating complexity and/or cost of some services
- Competitive local labor market (especially information technology and other technical positions)
- Uncertainty of federal funding due to shutdowns
- Perception of level of safety and security for riders
- Limitations on resources to meet customer demand for latest technology products and services
- High customer expectations of service levels and service capacity
- Impact of some riders on comfort of others
- Changing political and regulatory environment
- Portions of service area lacking sidewalks or with inaccessible crossings and sidewalks
- Significant but rare event resiliency (e.g., earthquakes)
- Cybersecurity
- Maintaining consistent coordination with local partners to help transit operate more efficiently with less delay
- Concerns about facilities and projects from nearby residents
- High project-related real estate costs
- Growth of TNCs and other mobility options could be destabilizing
- Waning public trust in government and large institutions
- Quick and timely delivery of service and facilities
- Providing high-quality, cost-effective accessible service for those with limited mobility
- Potential risk of major safety incident (e.g., train derailment)
- Robust local and transit industry construction demand creates price and delivery risk for TriMet capital projects
- Asset maintenance and replacement impacts available budget
- Potential significant economic downturn
- High expectations about TriMet's ability to deliver community improvement and transformation including sidewalks, housing, and place making
- Uncertainty in clean fuel technology
- Aging population and changing ridership patterns

Premises

Agency
- TriMet vision, mission, and values continue to guide TriMet
- TriMet will strengthen its culture of safety
- Expect no significant change to TriMet governance

Requirements
- TriMet will meet or exceed all regulatory obligations at federal, state, and local levels

Cost Effectiveness
- All proposed actions will be informed by the need to ensure cost effectiveness and risk mitigation

Growth
- Population and employment growth continues in the same general pattern using Metro's projections
- Service needs and expectations of the region and employers are that annual service growth will average about 2.1 percent or more plus additional HB2017-funded service, with modest LIFT growth of two percent or less

Economy
- Regional growth will continue
- Fuel/energy prices will stay relatively stable over the five-year horizon
- No major increases in the unemployment rate

Financial
- TriMet expects to use state funding provided by HB2017 to expand service (especially to low-income communities), buy battery electric buses, assist in building needed facilities to support growth, facilitate Community/Job Connectors, and provide for the Low-Income Fare program
- Emphasis on State of Good Repair needs to continue
- Federal and state funding and oversight will remain relatively constant
- TriMet maintains its excellent bond rating
- Strategic Financial Plan Guidelines remain in force

Service
- Service will grow and respond to changing demographics in various communities in the region
- TriMet continues to focus on its vital culture of safety as well as on-time performance for rail and bus

Vehicle Technology
- Fleet mix – TriMet continues to operate mostly 40-foot buses. TriMet will add articulated buses for the Division Transit Project and will consider articulated buses for other lines
- TriMet has adopted a Non-Diesel Bus Plan[1] which calls for shifting to non-diesel buses with a trial period between now and 2023. For 2024 and beyond, TriMet would no longer purchase any diesel buses and by 2040 there would be no diesel buses left in the fleet
- Autonomous vehicle technology offers some opportunities and potential challenges which require more exploration

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[1] http://trimet.org/electricbuses/pdf/TriMet-Non-Diesel-Bus-Plan-September-2018.pdf

Strategy Map

Four strategic Success Categories— Customers, Internal Business Practices, People and Innovation, and Financial —frame the Goals that are the focus of this Business Plan

Vision, Mission and Values

Vision: TriMet will be the leader in delivering safe, convenient, sustainable, and integrated mobility options necessary for our region to be recognized as one of the world's most livable places

Mission: Connect people with valued mobility options that are safe, convenient, reliable, accessible, and welcoming for all

Values
Safety, Inclusivity, Equity, Community, Teamwork

Customers

- Satisfied Riders
- Satisfied Community Stakeholders and Employers
- Satisfied Broader Community

Internal Business Practices

- Deliver Safe, Efficient, and Equitable Service
- Design and Deliver Successful Projects
- Business Practices that Create Value and Spur Innovation and Continuous Improvement

People and Innovation

- Ensure a Culture of Safety
- TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive
- Foster Service Excellence and Innovation

Financial

- Fiscally Sound and Compliant
- Manage Assets to Ensure Safety and Optimize Value, Performance, and Resiliency
- Financial Capacity to Advance Regional Expectations for Service Growth and Quality as Represented in the Regional Transportation Plan

Vision, Mission, and Values

Everyday transportation options are changing, and the transit industry is developing better tools to integrate all those options. TriMet will always operate buses and MAX and provide transportation for seniors and persons with disabilities, but we also must offer our customers convenient connections to and from transit and help as many people in our region as possible to navigate to their best options. TriMet's Vision, Mission, and Values needed a refresh to better reflect the future challenges and opportunities.

How did TriMet develop these statements?

Sources of input for the updated Vision, Mission, and Values include the following:
- Board Guidance
- Internal – TriMet employees, including a survey with 190 responses
- External – Riders, Stakeholders, and Community, including the Committee on Accessible Transportation, the Transit Equity Advisory Committee, and community organizations.

What changed?

The new statements are as follows:

Vision, Mission and Values

Vision: TriMet will be the leader in delivering safe, convenient, sustainable, and integrated mobility options necessary for our region to be recognized as one of the world's most livable places

Mission: Connect people with valued mobility options that are safe, convenient, reliable, accessible, and welcoming for all

Values
Safety, Inclusivity, Equity, Community, Teamwork

TriMet is our community's life connector. We span the growing region with bus, MAX light rail, WES commuter rail, and LIFT paratransit for persons with disabilities while connecting to other services including Portland Streetcar, other bus systems like C-TRAN, local shuttles, and newer mobility options such as Uber, Lyft, eScooters, bikeshare, etc.

The vision calls for TriMet to be the leader in providing transit and connecting people to their many mobility options. By doing so, we will play our part in helping make this region one of the world's most livable places for everyone in our region.

The updated mission recognizes the wider variety of options people now have available to travel. Our core services will continue to be bus, rail, and paratransit, but as explained on the next page and encapsulated in the graphic on the next page, there are many options that our customers can connect to now. Our mission is to provide great transit service, improve access to transit, and help connect people to mobility options that are safe, convenient, sustainable, integrated with each other, and welcoming to everyone who travels within our region.

Our values…

Safety: We must include our safety values in everything we do.

Inclusivity: Our service and our decision-making should include the needs and input of our customers, our stakeholders, and the public.

Equity: We're dedicated to making our transit system a place where all are welcome and are treated with dignity and respect. More than that, we proudly use equity as a lens to help guide our decisions in ways that benefit those who most need it.

Community: The boldness of our vision stems from our commitment to improving this region. We support communities throughout the region with service, amenities, projects, and engagement.

Teamwork: Working together as a team, TriMet employees are committed to improving our customers' experiences. We all strive for collegiality, collaboration, and to honor everyone's contributions.

What does this change mean?

Our Vision, Mission, and Values guide our future efforts to serve our customers better. We want to be the leader in delivering safe, convenient, sustainable, and integrated mobility options that help people get where they need to go. We'll keep working hard to make our services more convenient for our current and future customers, more sustainable, and to help people navigate all the mobility options out there to best fit their needs. This is not a big change from before; the updated Vision, Mission, and Values simply better reflect the direction that we were already starting to pursue. The transit industry is improving integration with mobility options and TriMet needs to do the same to serve our region and push toward our Vision.

The graphic below shows the modes we operate in the center blue oval, and the blue arrows show the modes our customers can connect to with our new multi-modal trip planner (now available to the public in a beta version at http://betaplanner.trimet.org). Over time, we expect to add more modes and make it easier for our customers to make all of the connections they need.

Goals, Objectives, Measures, Targets, and Key Strategic Actions

The following pages identify Objectives, Measures, Targets, and Key Strategic Actions designed to make smart, measurable progress on each of the Goals. In the following tables, you will find:

- Goals – Statements of expected or desired achievements or outcomes.

- Objectives – More specific statements of Goals in a way that is actionable and leads to Measures, Targets, and Key Strategic Actions.

- Measures – Quantitative or qualitative methods of identifying the status of a given issue.

- Targets – Specific planned-for performance on Measures. Each Measure has an associated Target to ensure that the Business Plan is focused and leads to a clear indication of whether targets are being met (and therefore demonstrate that chosen actions are effective).

- Key Strategic Actions – Specific actions identified to make progress toward Targets.

Our Strategy Map gives structure to Goals of the overall TriMet Business Plan. On the following pages, Objectives, Measures, Targets, and Key Strategic Actions provide more clarity about where we are making progress. We will coordinate the efforts, sub-goals, and actions of all TriMet departments so that our efforts are aligned at each level.

Simple icons showing our status and a description of results.

A list of acronyms and definitions for terms used in the Objectives, Measures, Targets, and Key Strategic Actions is included at the end of this Plan.

New battery electric bus now in service with overhead charger at Sunset Transit Center

Customers Goals

Our customers ultimately determine the success of our efforts. While more than two-thirds of adults in the region ride TriMet at least occasionally, even those who don't ride still benefit. By providing transit, we also provide benefits to employers, community stakeholders, and to the broader community. Along with our riders, they have expectations for TriMet in terms of congestion, environmental, and community benefits, so we have also included them here.

CUSTOMERS GOAL 1:
Satisfied Riders

OBJECTIVE	STATUS		RESULTS
1. Provide safe service	**FY2019**	☐ Deployment strategy in development but not complete	✔ Public safety and security advisory committee formed and meeting ▪ Developing scope of work informed by initial recommendations from safety and security advisory committee ▪ Security presence on system increasing during FY2019 ▪ Customer experience audit and benchmarking completed ▪ Working with union to implement eighth camera in buses; timing uncertain ▪ Developing training programs for TriMet in-field staff on de-escalation and mental health first aid for implementation in FY2020 ▪ 74 percent of bus riders and 72 percent of MAX riders say they feel safe or very safe on board

	MEASURE / TARGET		KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Implement deployments based on strategy during FY2020	▪ Continuously engage with community groups and riders to meet safety needs on board and at TriMet facilities ▪ Develop and deliver a code of conduct/ civility campaign ▪ Implement updated security deployment consistent with needs and community engagement in the field during FY2020 ▪ Develop quarterly reporting for safety and security committee on fare enforcement program ▪ Implement eighth camera with audio in buses

⬆ = on target   ☐ = caution   ⬇ = off target   ✔ = completed Key Strategic Action

CUSTOMERS GOAL 1:
Satisfied Riders

OBJECTIVE	STATUS	RESULTS
2. Increase ridership	FY2019 — ▢ Average weekly boardings down 0.7 percent[2]	✔ Market segmentation analysis completed. ▪ Bus service budget increased 4.7 percent during FY2019 ▪ Service improvements included introducing first over-night service in over 30 years, spanning from Gresham to Forest Grove, adding Line 73 to the Frequent Service network, a new bus line in Clackamas County, new bus connection between NE Portland and downtown across the Fremont Bridge, and other enhancements. ▪ Completed HB2017 plan with approval from state to enhance service, make investments in service growth, purchase battery electric buses, and offer Low-Income Fare program ▪ Enhanced outreach regarding Hop Fastpass® for Latinx and Asian communities ▪ Community/Job Connector program developed as part of HB2017 planning process to help address first- and last-mile connection needs. ▪ Developed near-term ridership strategy and started implementation in FY2019 ▪ Multiple bus lane and intersection treatments installed in partnership with City of Portland, reducing travel times, improving reliability, and minimizing delays to bus riders ▪ Created Transit-Oriented Development department to leverage TriMet assets and increase development near transit that will contribute to ridership with recent efforts expected to ultimately yield up to 950 housing units, including over 500 affordable units ▪ Individualized marketing completed around WES and included in new resident kits for new apartment residents across the region.

MEASURE / TARGET	KEY STRATEGIC ACTIONS

FY2020 - FY2024 — Stabilized or increased boardings: FY2020
 	
2 percent annual percentage increase in boardings for bus and MAX: FY2022
	▪ Develop strategies to increase ridership compared to regional growth, including:
	  ○ Target service enhancements in locations that will address changing demands
	  ○ Personalized marketing programs (e.g., new resident information or tourist-focused automated tours)
	  ○ Increase employer fare program participation
	  ○ Broaden multicultural marketing strategies
	  ○ Develop enhanced first- and last-mile strategies for coordination with other transportation options
	  ○ Coordinate safety and security with customer service and ambassador deployment to enhance sense of security and increase ridership
	▪ Enhance high-demand service with HB2017 funding that will result in significant ridership increases
	▪ Implement strategy for TriMet's support of Transit-Oriented Development equitable housing and for value capture that supports higher transit demand around existing MAX, DTP, and Frequent Service

[2] for FY 2019 through February compared to FY2018

▲ = on target   ▢ = caution   ▼ = off target   ✔ = completed Key Strategic Action

CUSTOMERS GOAL 1:
Satisfied Riders

OBJECTIVE		STATUS	RESULTS
3. Improve overall customer experience	**FY2019**	🟨 Customer experience audit complete and customer experience work plan under development based on findings ⬆ 2.8 customer complaints[3] about personal safety and security per 100,000	✔ Established public safety and security advisory committee to incorporate community feedback into safety and security strategies and identified benchmarks ▪ Now providing 24-hour/7-days-a-week customer information support via text ▪ Agency-wide customer experience training under development

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Set of measures related to customer experience developed: FY2020, based on customer experience audit and comparison to peers 2.8 or fewer customer complaints about personal safety and security per 100,000 boardings	▪ Implement customer experience work plan results in late FY2019 and in FY2020 ▪ Increase visibility and frequency of customer service personnel on the system ▪ Improve cleanliness of vehicles ▪ Expand customer information through technologies that support chat function by early FY2020 ▪ Begin providing agency-wide customer experience training in FY2020

[3] FY2019 to date as of end of March 2019

⬆ = on target   🟨 = caution   ⬇ = off target   ✔ = completed Key Strategic Action

CUSTOMERS GOAL 1:
Satisfied Riders

OBJECTIVE	STATUS	RESULTS
4. Ensure equitable distribution of services and resources across the TriMet system	**FY2019** ↑ Revenue hours provided ↑ Vehicle loads ↑ On time performance ↑ Service availability ↑ Vehicle assignment – Bus ↑ Vehicle assignment – MAX *Stop amenities:* ↑ Seating ↑ Lighting ↑ Elevators ↑ Digital displays ↑ Shelters ↑ Signs, maps and/or schedules ↑ Waste receptacles	✓ Addressed FY2018 disparity finding by relocating bus fleets between garages and retiring older buses. These actions improved the equitable distribution of newer buses being assigned between minority/low-income lines and non-minority/higher income lines. The vehicle assignment measure moved from within 20 percent (off target) to within 5 percent (on target) ✓ Completed all Board hiring objectives for General Manager[4] including those related to equity ▪ All minority and/or low-income lines are better than, equal to, or within 5 percent of non-minority and/or non-low-income lines on all measures ▪ Enhanced bus service in neighborhoods with high concentrations of persons of color and/or low-income ▪ Implemented Low-Income Fare program and engaged with communities of color and/or low-income in the region to provide the Low-Income Fare to those eligible ▪ Added an equity criterion into evaluation scoring process for capital project proposals

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024 Minority and low-income access within five percent or better than non-minority and non-low-income access across different measures: ▪ Revenue hours provided ▪ Vehicle loads ▪ On time performance ▪ Service availability ▪ Vehicle assignment ▪ Stop amenities	▪ Conduct annual review of service performance, vehicle assignments, and amenity distribution and implement needed service or amenity adjustments to reach equity targets ▪ Enhance outreach and engagement activities with communities of concern to ensure equity is a part of every significant decision for TriMet service and budget priorities ▪ Explore policies, procedures, and metrics to achieve equity lens for TriMet ▪ Update TriMet's Language Access Plan during FY2020; implement FY2021 to FY2023

↑ = on target	▉ = caution	↓ = off target	✓ = completed Key Strategic Action

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[4] http://news.trimet.org/2018/02/trimet-board-of-directors-chooses-coo-doug-kelsey-as-agencys-next-general-manager/

CUSTOMERS GOAL 1:
Satisfied Riders

OBJECTIVE	STATUS		RESULTS
5. Improve customer information and services	FY2019	⬆ Implemented improvements under Customer Information Strategy	▪ Improved overall quality and timing of service information to our customers, including adding text support ▪ Hop Fastpass® expanded to more customers ▪ Expanded Hop Fastpass® awareness outreach along with Low-Income Fare ▪ Beta version of enhanced multi-modal trip planner released March 2019 at betaplanner.trimet.org to improve customer information regarding trip planning and provide more mobility options for each trip using open-source information technology

	MEASURE / TARGET	KEY STRATEGIC ACTIONS

FY2020 - FY2024	Implementation steps for customer information strategy during FY2020	▪ Implement enhanced information to customers through technology advances and communications strategies:
		  o Minimize imprecise, global service messages
		  o Deliver multi-year project to overhaul our existing digital information displays and introduce new and expanded digital components during FY2021–FY2023
		  o Develop strategy for on-board digital information displays
		▪ Engage and educate about customer access to Hop Fastpass®
		▪ Develop enhanced Hop Fastpass® customer value strategy, including potential mobility management opportunities that extend beyond directly provided service
		▪ Enhance technology and partnership protocols to provide frictionless information, trip-planning and travel for customers

⬆ = on target   🟨 = caution   ⬇ = off target   ✔ = completed Key Strategic Action

CUSTOMERS GOAL 1:
Satisfied Riders

OBJECTIVE		STATUS	RESULTS
6. Achieve market acceptance of Hop Fastpass® as a fare instrument	**FY2019**	⬆ 41.9 percent[5] of fares collected through Hop Fastpass®	▪ Developed and released virtual card for Android users with a version for Apple iPhone and Watch available in 2019 ▪ Over 21 million taps with Hop Fastpass® since introduction with over 79,000 active Hop cards ▪ Low-Income Fare program implemented using Hop Fastpass® ▪ Now more than 500 retail locations carry Hop cards – compared to less than 150 for paper tickets before ▪ Implementing Hop Fastpass® for LIFT customers

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	75 percent of fare revenue from Hop: by end of FY2022	▪ Implement Hop Fastpass® roll-out plan and deliver key milestones on time ▪ Migrate annual, universal, and monthly passes to Hop during FY2020 ▪ Further integrate Hop Fastpass® for uses such as LIFT rides and Bike & Ride secure bike parking facility access

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[5] As of March 2019

⬆ = on target   ▮ = caution   ⬇ = off target   ✔ = completed Key Strategic Action

CUSTOMERS GOAL 2:
Satisfied Community Stakeholders and Employers

OBJECTIVE	STATUS	RESULTS

7. Help shape the future of cities and our region in line with Metro 2040 Growth Concept	**FY2019** *Access to housing and employment measures:*
	
	⬆ Housing near MAX (increased to 14.1 percent)
	
	⬆ Housing near Division Transit Project (increased to 3.9 percent)
	
	⬆ Housing near Frequent Service Bus (increased to 28.4 percent)
	
	⬆ Housing near all transit (increased to 86.5 percent[6])
	
	⬆ Employment near MAX (increased to 27.9 percent)
	
	⬆ Employment near Division Transit Project (increased to 1.6 percent)
	
	⬆ Employment near Frequent Service bus (increased to 23.2 percent)
	
	⬆ Employment near all transit (increased to 93.1 percent)
		▪ Created new Transit-Oriented Development department at TriMet to provide more focus and get more benefit from development around transit
		▪ TriMet-owned land opportunities yielded eight projects with partners:
		  o Two projects where TriMet sold land and one where TriMet is in negotiations to sell to a non-profit developer who will construct affordable housing adjacent to transit. Together, those projects are expected to provide nearly 500 affordable units with TriMet contributing by either discounting the price directly (within Federal Transit Administration constraints) or with likely savings by providing land through direct sale to a non-profit rather than a market-wide sales process
		  o Five value capture projects in negotiations (see Objective 27)
		▪ Executed agreement with partners supporting equitable development in Southwest Corridor
		▪ Housing and employment development continues to occur around light rail and Frequent Service bus consistent with regional and local development strategies
		▪ Added new bus line coverage, bringing more housing and jobs close to transit

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024 Percentage and/or volume of housing development and employment within walking distance of MAX, Division Transit Project, and Frequent Service bus greater than or equal to previous year	▪ Implement strategy for TriMet's support of Transit-Oriented Development equitable housing and for value capture that supports transit around MAX, Division Transit Project, and Frequent Service bus, including management of real property and underutilized Park & Ride lots ▪ Pursue development of Southwest Corridor Project as described in Objective 21

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6 Due to improvements in methodology, some corrected numbers are below those reported last year. This applies to numbers for housing near all transit, employment near Division Transit Project, and employment near all transit. Previous year results were also updated using the improved methodology. For all measures, this year's performance does represent a real increase over the previous year.

⬆ = on target   🟨 = caution   ⬇ = off target   ✔ = completed Key Strategic Action

CUSTOMERS GOAL 2:
Satisfied Community Stakeholders and Employers

OBJECTIVE	STATUS	RESULTS
8. Ease congestion by providing attractive travel options during peak periods	**FY2019** 🟨 29.4 percent[7] of travelers in Banfield and Sunset corridors during peak hour in peak direction rode MAX (down from 29.6 percent)	▪ Total peak hour, peak direction travelers in Banfield and Sunset corridors on MAX grew compared to previous count, as did estimated total people in cars at the same points ▪ Red Line project further defined through public review and design refinement. Locally Preferred Alternative expected to be considered by TriMet Board in April 2019 ▪ Engaged community regarding Red Line Extension and Reliability Project through community meetings, one-on-one conversations with nearby community members, and online information ▪ Added peak hour bus service on multiple lines ▪ Developed procurement process that will include options for additional higher capacity buses beyond Division Transit Project

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024 Percentage of travel on MAX as percent of all travel in Banfield and Sunset corridors during peak period equal to or greater than previous year[8]	▪ Pursue Red Line extension to Fairplex and MAX system improvements to Gateway and Airport tracks through Small Starts or other federal program ▪ Introduce higher capacity buses into service when and where appropriate during the next five years

⬆ = *on target* 🟨 = *caution* ⬇ = *off target* ✔ = *completed Key Strategic Action*

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[7] Data comparing Oregon Department of Transportation traffic counts with TriMet peak MAX ridership, both in Fall 2018

[8] Measure under review and may be changed in future reports

CUSTOMERS GOAL 2:
Satisfied Community Stakeholders and Employers

OBJECTIVE	STATUS[9]	RESULTS
9. Support the region's economy by expanding employee access to jobs and customer access to businesses	**FY2019** ⬆ 93.1 percent of employment within walking distance of transit (up from 92.8 percent) ⬆ 97.0 percent of retail within walking distance of transit (up from 96.9 percent)	✓ Completed final HB2017 plan before state deadline ▪ Introduced Low-Income Fare[10] program through Hop Fastpass® to be paid for with new state funding from HB2017. Over 10,000 users signed up for Low-Income Fare ▪ Supported additional development near MAX stations (see Objectives 7 and 27) ▪ Implemented bus priority in multiple locations with City of Portland in regional Enhanced Transit Concept process to improve bus operations and encourage additional development along frequent transit lines ▪ Explored options with partners for grant applications to operate pilot autonomous vehicle shuttle services and represented needs for transit in Oregon Department of Transportation autonomous vehicle Task Force ▪ Representing needs for transit on statewide autonomous vehicle task force

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024 Percent of employment accessible by transit equal to or greater than previous year Percent of retail accessible by transit equal to or greater than previous year	▪ With HB2017 committee approval, expand non-TriMet shuttle program to help address first- and last-mile needs ▪ Continue outreach to expand use of Low-Income Fare program ▪ Pursue and implement partnerships to provide mobility in low-productivity, lower-demand areas and times of day when demand is not high enough to provide cost-effective TriMet fixed-route service. Assess feasibility and, if promising, develop and implement pilot partnership for non-TriMet program during FY2020 ▪ Develop steps with partners to implement future pilot using autonomous vehicle technology

⬆ = on target   ▢ = caution   ⬇ = off target   ✓ = completed Key Strategic Action

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[9] Due to improvements in methodology, current year corrected numbers are below those reported last year. Previous year results were also updated with the new methodology. This year's performance does represent a real increase over the previous year.

[10] http://trimet.org/lowincome
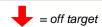
CUSTOMERS GOAL 2:
Satisfied Community Stakeholders and Employers

OBJECTIVE	STATUS	RESULTS
10. Advance mobility for those with limited options	**FY2019** 🟨 Projected 15.7 million[11] boardings on fixed route service by seniors and persons with disabilities (down from 15.9 million) ⬆️ LIFT customer satisfaction with service provided: 91 percent 🟨 Cost per ride on LIFT service increased 2.8 percent (which was slightly above inflation[12])	▪ LIFT strategy under development and on-track for completion by end of FY2019 ▪ Hop Fastpass® implementation for LIFT customers begun in FY2019 ▪ 38% of Hop Fastpass® taps during the past year were for Honored Citizen customers as of March 2019 ▪ Partnering with Ride Connection to allow retired TriMet LIFT vehicles to be used by community organizations to provide their own rides to service recipients ▪ LIFT/Cab boardings are down due to closure of worksites for persons with disabilities by state-funded entities and TriMet is working to support getting persons with disabilities to their new places of employment

MEASURE / TARGET	KEY STRATEGIC ACTIONS

FY2020 - FY2024
 	
Boardings for seniors and persons with disabilities provided on fixed route service equal to or greater than previous year
 	
Customer satisfaction rating on LIFT equal to or greater than previous year
 	
Cost/ride on LIFT service at or below targeted budget amount
	▪ Increase flexibility of services and tools for riders
	  o Automated call-back function for LIFT riders
	  o Achieve full Hop Fastpass® integration for LIFT and cab service by FY2021
	▪ Complete LIFT strategy by end of calendar 2019 and begin implementation during FY2020
	▪ Implement pilot project for demand responsive service for seniors and persons with disabilities. Begin work in FY2020 following engagement with riders and public

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[11] Projected based on current trends as of February 2019

[12] Twelve-month average as of February 2019, compared to 2.3% February 2019 year-over-year Consumer Price Index for Urban (CPI-U) Consumers Western US size class B/C cities rate at http://www.bls.gov/regions/west/data/xg-tables/ro9xg01.htm

⬆️ = on target   🟨 = caution   ⬇️ = off target   ✓ = completed Key Strategic Action

CUSTOMERS GOAL 2:
Satisfied Community Stakeholders and Employers

OBJECTIVE		STATUS	RESULTS
11. Improve environmental performance and stewardship	FY2019	⬆ Board adopted strategy for transition to non-diesel buses, starting with new battery electric bus purchases during this five-year period	▪ TriMet Board adopted Non-Diesel Bus Plan ▪ Five battery electric buses received and expected to be in service before end of FY2019 ▪ 64 new buses being received in FY2019, most replacing buses as much as 21 years old, resulting in lower emissions ▪ Energy efficiency improvements made at the Elmonica Rail Maintenance Facility to reduce carbon emissions and improve energy efficiency of operations at our facilities

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Progress on implementation of Non-Diesel Bus Plan	▪ Implement TriMet Non-Diesel Bus Plan, including: 　o Finalize scope and designs for battery electric bus charging infrastructure at Powell and future Columbia Garage including Public Utilities partnerships 　o Pursue purchase of additional battery electric buses 　o Pilot retrofitting existing vehicles with battery electric bus systems or other more fuel efficient diesel options

⬆ = on target　　☐ = caution　　⬇ = off target　　✓ = completed Key Strategic Action

CUSTOMERS GOAL 3:
Satisfied Broader Community

OBJECTIVE	STATUS		RESULTS
12. Ensure strong support for transit and TriMet	**FY2019**	↓ Overall public approval[13] rating for TriMet at 75 percent (81 percent for riders)	✓ Completed all Board objectives for General Manager[14] ▪ Approval rating improved since last year and above 80 percent for riders, but not yet meeting target of 80 percent for all respondents (including non-riders) ▪ Engaged public and provided information about budget development, Service Enhancement Plans, Annual Service Plans, and transit improvement projects such as Division Transit Project, Southwest Corridor Project, MAX Red Line Improvements Project, fourth bus garage, and more than a dozen other, smaller projects scattered across the district

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024	Approval rating at or above 80 percent in Attitude & Awareness survey (combined riders and non-riders)	▪ Enhance opportunities for public engagement and incorporate stakeholder and community needs in planning and decision-making with emphasis on low-income and minority engagement ▪ Provide to voters facts, data, and information that demonstrate the clear need for additional public transportation investment

↑ = on target   ■ = caution   ↓ = off target   ✓ = completed Key Strategic Action

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[13] Respondents who "strongly approve" or "somewhat approve" of "the job TriMet is doing", 2018 TriMet Attitude and Awareness survey

[14] http://news.trimet.org/2018/02/trimet-board-of-directors-chooses-coo-doug-kelsey-as-agencys-next-general-manager/

CUSTOMERS GOAL 3:
Satisfied Broader Community

OBJECTIVE		STATUS	RESULTS
13. Increase funding for regional mobility expansion	FY2019	⬆ Completed Division Transit Project Finance Plan	✓ Completed funding plan of all non-federal funds for Division Transit Project ▪ Continuing to pursue federal funding from Federal Transit Administration for remainder of Division Transit Project ▪ Secured pledge of $25 million in state proposed budget from Governor for Southwest Corridor Project

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024	Needed investments in Southwest Corridor obtained: FY2021	▪ Ensure public has full access to information, data, and facts demonstrating need for additional light rail, transit, and transportation investment, especially in the Southwest Corridor

⬆ = on target	🟨 = caution	⬇ = off target	✓ = completed Key Strategic Action

Internal Business Practices Goals

INTERNAL BUSINESS PRACTICES GOAL 1:
Deliver Safe, Efficient, and Equitable Service

OBJECTIVE	STATUS	RESULTS
14. Increase personal safety	**FY2019** ⬆ 1.3 passenger injuries per million boardings ⬆ No preventable deaths occurred ⬆ Rail Safety Audit closed, with all action items addressed *Collisions per 100,000 miles[15]:* 🟨 Bus: 2.9 ⬇ MAX: 1.7 ⬆ LIFT: 1.0 ⬆ WES: 0.1	✓ Completed all action items from rail safety audit successfully ✓ Completed Safety Management System Plan ▪ Installed improvements to reduce MAX right-of-way intrusions by cars ▪ Now incorporating trend analysis to prioritize enhancements to keep pedestrians away from rail right-of-way ▪ Implemented Positive Train Control on WES, improving safety and meeting Federal Railroad Administration requirement on time

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024 1.9 or fewer passenger injuries per million boardings Zero preventable deaths Collisions per 100,000 miles ▪ Bus: 2.6 ▪ MAX: 1.3 ▪ LIFT: 1.3 ▪ WES (per year): <1	▪ Submit fully FTA-compliant Public Transportation Agency Safety Plan to Oregon Department of Transportation before July 20, 2020 ▪ Develop or procure Safety Management System tracking system ▪ Increase employee and contractor high-visibility presence on system ▪ Continue treatments to reduce MAX right-of-way intrusions

⬆ = on target 🟨 = caution ⬇ = off target ✓ = completed Key Strategic Action

[15] Twelve-month average as of February 2019.

INTERNAL BUSINESS PRACTICES GOAL 1:
Deliver Safe, Efficient, and Equitable Service

OBJECTIVE	STATUS	RESULTS
15. Provide reliable performance	**FY2019** On-time performance: ⬆ Bus: 86.9 percent[16] ⬆ MAX: 89.0 percent ⬇ LIFT: 91.2 percent[17] 🟨 WES: 94.3 percent	▪ Again improved on-time performance for both bus and MAX ▪ Rewrote bus preventive maintenance program with levels to emphasize predictive and preventive maintenance. This will reduce in-service breakdowns ▪ Replacing components on Type 2 and 3 MAX cars to reduce service disruptions ▪ Completed multiple projects to reduce heat-related speed restrictions, reducing delays during hot weather ▪ Adjusted and aggressively managed departures from layover locations to improve on-time performance and added reserve vehicles to fill service gaps when needed ▪ WES achieved 99.9 percent on-time performance during the month of January 2019

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024 On-time performance – percentage of trips on schedule (less than one minute early and no more than five minutes after scheduled time)	▪ Implement agency-wide, multi-faceted projects and operations enhancements for improving the service and maintenance components that contribute to on-time performance (especially vehicle reliability and switch reliability) ▪ Complete and implement internal information technology strategic plan in FY2020 and FY2021

	FY2020	FY2022
Bus	83.8 percent	85 percent
MAX	88 percent	90 percent
LIFT	93.5 percent	
WES	95 percent	

On-time performance on minority and low-income lines better than or within 5 percent of non-minority and non-low income lines

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

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[16] Bus and MAX performance numbers are FY19 average through February 2019

[17] LIFT and WES performance numbers are 12 month average through February 2019

INTERNAL BUSINESS PRACTICES GOAL 1:
Deliver Safe, Efficient, and Equitable Service

OBJECTIVE	STATUS[18]	RESULTS
16. Improve service delivery	**FY2019** ⬆ 156.9 miles of MAX and Frequent Bus lines ⬆ 1.9 percent overloaded peak trips on MAX and Bus (down from 2.1 percent) 🟨 13.6 mph on bus (down from 13.7) 🟨 17.9 mph on MAX (down from 18.0) ⬆ Vehicle loads on minority and low-income lines as good or better than non-minority and non-low income lines	▪ Enhanced Line 73 – 122nd Ave to Frequent Service and added new Line 31 ▪ Introduced all-night service on Lines 20 and 57 and the new Line 272 – the first all-night transit service in the region for over 30 years ▪ Line 24- Fremont extended in March 2019 into NW Portland and to Goose Hollow for new northeast-to-west transit connection and added weekend service ▪ Acquired land and began design for fourth bus garage ▪ Reduced road calls that take buses out of service, reducing disruptions of customer trips ▪ Multiple bus priority treatments in City of Portland installed to improve travel times ▪ Began pilot project for Portland Urban Data Lake (regional transportation data storage) with partners ▪ Rail operations optimization technology data being used to tweak MAX schedule for enhanced accuracy ▪ Selected Enterprise Content Management System and started multi-year roll-out ▪ Downtown MAX average speed declined slightly to 7.19 mph

	MEASURE / TARGET	KEY STRATEGIC ACTIONS

	FY2020 - FY2024
	
	Number of miles of Frequent Service (bus and MAX) lines equal to or greater than previous year
	
	2 percent or fewer overloaded weekday peak trips, MAX and Bus
	
	Average miles per hour including passenger stops for Bus and MAX greater than or equal to previous year
	
	Vehicle loads on minority and low-income lines better than or within 5 percent of non-minority and non-low income lines
	
	Milestones of delivery for Enterprise Content Management System
		▪ Develop operations and travel time improvements strategy for rail and bus including Internet of things/Smart Cities strategies
		▪ Begin construction on the fourth bus garage
		▪ Expand service with HB2017 funding, with enhanced service to low-income communities, including service to East Portland and East Multnomah County in FY2020
		▪ Design and implement bus and rail operations improvements including signal, street improvements, and operating procedure improvements
		▪ Develop comprehensive service assessment including Service Planning and Scheduling Best Practices review and implement key identified best practices and recommended actions for fixed route and LIFT
		▪ Develop and implement agency-wide solutions for technology modernization to improve data analysis and information sharing:
		  o Implement enterprise content management system
		  o Coordinate data analysis and reporting across TriMet and pilot information technology tools
		▪ Implement pilot project for Portland Urban Data Lake in FY2020
		▪ Complete first step of agency-wide facilities master plan during FY2020

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[18] As of late calendar year 2018.

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 1:
Deliver Safe, Efficient, and Equitable Service

OBJECTIVE	STATUS	RESULTS
17. Ensure cost-effective service	**FY2019** ⬇ Bus Cost per vehicle hour increased 6.9 percent[19] ⬇ MAX Cost per vehicle hour increased 13.3 percent ⬆ WES Cost per vehicle hour decreased 3.2 percent ⬇ LIFT Cost per vehicle hour increased 3.7 percent	▪ Implemented new bus preventive maintenance practices that will improve reliability with less breakdowns ▪ Implemented more cost-effective bus spare ratio ▪ Bus, MAX and LIFT cost per vehicle hour exceeded inflation[20] ▪ WES cost increase stayed below inflation ▪ Integrated Business Plan Goals and Objectives more directly into annual operations budget decision-making to keep investments focused on meeting priority needs ▪ New capital budget prioritization process implemented for annual budget decisions and ongoing project tracking and financial management ▪ Identify and implement cost-effective strategies to hire qualified employees in all sections and train current employees as our bus fleet evolves ▪ Updated preventive maintenance procedures for Type 2 and 3 light rail vehicles and fully digitized the process, improving efficiency, reliability, and employee safety

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024 Annual increase in cost per vehicle hour (bus, MAX, WES, LIFT/CAB) less than or equal to targeted budget amount	▪ Implement changes in maintenance practices identified in Continuous Improvement Processes ▪ Ensure necessary capital and operating needs are approved and deployed to support new service before implementation ▪ Ensure market-competitive labor costs ▪ Review structural long-term state of good repair requirements and impact on cost per hour

⬆ = on target 🟨 = caution ⬇ = off target ✔ = completed Key Strategic Action

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[19] All measures for this Objective are 12-month average year-over-year as of February 2019

[20] Compared to 2.3% February 2019 year-over-year Consumer Price Index for Urban (CPI-U) Consumers Western US size class B/C cities rate at https://www.bls.gov/regions/west/data/xg-tables/ro9xg01.htm

INTERNAL BUSINESS PRACTICES GOAL 1:
Deliver Safe, Efficient, and Equitable Service

OBJECTIVE	STATUS	RESULTS
18. Increase resiliency	**FY2019** ⬆ All-Hazards Emergency Management Plan on schedule ⬆ Continuity of Operations Plan on schedule	✓ Produced and distributed guide to home preparedness for all TriMet employees ▪ First full All-Hazards Emergency Management Plan complete and expected to be approved by the Oregon Department of Transportation by the time this Plan is published ▪ Continuity of Operations Plan underway and expected to be complete by new target ▪ TriMet Emergency Operations Center (EOC) staff trained in National Incident Management System (NIMS)

	MEASURE / TARGET	KEY STRATEGIC ACTIONS

FY2020 - FY2024	Annual update of All-Hazards Emergency Management Plan (includes earthquake preparedness and climate change resilience) completed: before end of FY2020
	
	Continuity of Operations Plan finished and roll-out completed: FY2020
		▪ Update annually and begin implementation of broad-based All-Hazards Emergency Management Plan including
		  o Earthquake, extreme weather, and climate change
		  o Review of standards, design criteria, procurements, redundancy, and projects for long-term resilience
		▪ Develop and implement updated vision for Emergency Management Program
		▪ Train TriMet staff on Incident Command System based on the training plan
		▪ Provide annual training to Emergency Operations Center staff on emergency management roles and activities

⬆ = on target   ⬛ = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 2:
Design and Deliver Successful Projects

OBJECTIVE	STATUS	RESULTS
19. Develop higher capacity bus services	**FY2019** 🟨 Division Transit Project on new, updated schedule	✓ Completed National Environmental Policy Act work for Division Transit Project ✓ Completed 60 percent design for Division Transit Project ▪ Federal Transit Administration announced that it has allocated $87.4 million to help fund the Division Transit Project ▪ Engaged public regarding design and service of Division Transit Project through community events and other methods including building a full-scale working model of a project station for community and stakeholders to test interaction of buses, passengers, bicyclists, and pedestrians ▪ Engaged public regarding construction and expansion of capacity at Powell garage (which will be able to accommodate higher-capacity, articulated buses) including open house, community meetings, one-on-one conversations with nearby community members, and online information ▪ Including options for additional articulated buses as part of Division Transit Project bus procurement

	MEASURE / TARGET	KEY STRATEGIC ACTIONS

	FY2020 - FY2024
	Division Transit Project in service: Fall 2022
		▪ For Division Transit Project:
		  o Complete Federal Transit Administration Project Development requirements
		  o Enter into Grant Agreement with Federal Transit Administration
		▪ Implement higher capacity articulated buses on other bus line service, when and where appropriate, during the next five years

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 2:
Design and Deliver Successful Projects

OBJECTIVE		STATUS	RESULTS
20. Develop partnerships to support faster and more reliable bus service	FY2019	⬆ Four hotspots implemented during FY2019[21].	▪ Secured funding for transit priority treatments from HB2017 and pursuing additional funding for further treatments ▪ Installed bus transit priority improvements at multiple locations within City of Portland (SE Washington at 82nd; SE Division at 60th Ave; NE Sandy at Killingsworth; and NE 15th at Fremont). ▪ Three bus lanes from Transit Mall to bridges in downtown included in adopted Central City In Motion Plan and scheduled for implementation before end of calendar 2019 to improve bus travel times and reliability ▪ Regional Transportation Plan adopted with a Transit Plan and more transit priority policies

		MEASURE / TARGET	KEY STRATEGIC ACTIONS

	FY2020 - FY2024	Implement five transit priority spot improvements that decrease transit peak delay by 10% or more	▪ Implement Enhanced Transit bus improvements. This includes:
			  o Design improvements
			  o Secure funding
			▪ Improve transit priority on corridors and/or at hotspots
			▪ Increase supportive policies for improving transit travel time and performance with the region, counties, cities, and ODOT
			▪ Develop and implement strategy for faster limited-stop bus services including potential use of freeway shoulders
			▪ Expand transit priority spot improvement program in City of Portland and expand to other jurisdictions through efforts including pursuit of state grant funding

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[21] As of March 2019

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 2:
Design and Deliver Successful Projects

OBJECTIVE		STATUS	RESULTS
21. Meet milestones for successful development of Southwest Corridor	FY2019	⬆ FY2019 milestones met–completed Draft Environmental Impact Statement (DEIS) and Locally Preferred Alternative (LPA)	✓ Completed Draft Environmental Impact Statement and Locally Preferred Alternative with successful adoption at all involved jurisdictions ▪ Request to Federal Transit Administration to enter Project Development for Southwest Corridor Project approved February 2019 ▪ Engaged public regarding design, environmental benefits, potential impacts of project, and equitable development through community groups and events. Distributed information at transit centers and provided support staff for Metro-hosted open houses and Community Advisory Committee meetings ▪ Executed agreement with partners supporting equitable development in Southwest Corridor

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Enter FTA Project Development: by end of FY2019 FEIS/ROD completed: FY2020	▪ Complete FTA Project Development during FY2021 ▪ Continue public engagement on project ▪ Ensure full information availability and focus on regional funding measure for November 2020

⬆ = on target   ▮ = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 2:
Design and Deliver Successful Projects

OBJECTIVE		STATUS	RESULTS
22. Improve existing MAX infrastructure for reliability and capacity	FY2019	⬆ Planned projects completed	✓ Completed control and signal improvements at Ruby Junction and Elmonica Yards ▪ Completed switch and track improvements in Hillsboro at Hatfield Government Center ▪ Began contracting out for mid-life remanufacturing of older light rail vehicles

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Programmed switch, track, control, and systems improvements completed: before end of FY2020	▪ Implement systems reliability improvement projects in Capital Improvement Plan (signal, overhead catenary system, light rail vehicle improvements) including: o Selected turnout replacements in Rose Quarter and Lloyd completed in FY2020 o Steel Bridge work completed during FY2021 o Switch, track, control and systems improvements at Cleveland during FY2020 and FY2021 ▪ Note that Key Strategic Actions also significantly address Objective 37

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 3:
Business Practices that Create Value and Spur Innovation and Continuous Improvement

OBJECTIVE	STATUS		RESULTS
23. Maximize benefits and potential of Hop Fastpass®	**FY2019**	⬆ Hop Fastpass® continued substantial growth in use	✓ Low-Income Fare implemented with Hop Fastpass® ▪ Conducted broad outreach program and phased out non-Hop fares for single use ▪ Coordinated with ODOT and smaller transit agencies around the region and across Oregon to prepare for potential adoption of Hop Fastpass® in future years ▪ Conducting ticket exchanges for Hop Fastpass®™ to allow customers to switch over ▪ Began accepting Hop Fastpass® on LIFT

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024	Increase total monthly year-over-year Hop taps at least 25%: FY2020[22] Number of additional business partners added annually: target to be developed	▪ Conduct strategic review during FY2020 of additional benefits possible with Hop Fastpass® ▪ Phase out paper fares (excluding LIFT paratransit and Bus Ticket Printer fares) with robust public engagement by end of calendar 2019 ▪ Encourage Oregon transit agencies and other entities to implement Hop Fastpass® and other mobility solutions ▪ Further integrate Hop Fastpass® for uses such as LIFT rides and Bike & Ride secure bike parking facility access ▪ Review opportunities for Hop Fastpass® data for marketing and service planning ▪ Finish implementation of Hop Fastpass® with institutional pass users in FY2020

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[22] Measure and Target under review and may be updated

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 3:
Business Practices that Create Value and Spur Innovation and Continuous Improvement

OBJECTIVE		STATUS	RESULTS
24. Test electric buses in service for performance and cost-effectiveness	FY2019	⬆ Received first battery electric bus and operated in service	• First battery bus in service with more on the way • Construction completed for charging at Merlo bus garage. Dispensers undergoing testing • In-route charging equipment at Sunset completed, commissioned, and in use • Adopted broader fleet strategy in Non-Diesel Bus Plan

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Procure and operate non-diesel buses on-time based on TriMet Non-Diesel Bus Plan	• Conduct assessment of efficiency, cost, and service reliability of electric buses in service • Purchase additional non-diesel buses during five year period • Ensure bus garages will be compatible with electric charging infrastructure needs

⬆ = on target   ▢ = caution   ⬇ = off target   ✓ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 3:
Business Practices that Create Value and Spur Innovation and Continuous Improvement

OBJECTIVE		STATUS	RESULTS
25. Develop and pursue strategic partnerships to optimize and innovate practices and processes	FY2019	↑ Completed Mobility on Demand (MOD) Sandbox technologies project on-time	▪ Completed Mobility on Demand (MOD) Sandbox technologies project on-time and released web-based multi-modal trip planner using the technology (currently available as of April 2019 at betaplanner.trimet.org) ▪ Completed initial strategic analysis of new mobility opportunities including autonomous vehicle technology

	MEASURE / TARGET	KEY STRATEGIC ACTIONS

FY2020 - FY2024	At least one project implemented and adding value during FY2020	▪ Implement internal practices in each division that support partnership and innovation
		
		 ▪ Develop long-term strategic approach for New Mobility opportunities
		
		 ▪ Develop approaches for integration of technology and policy framework to deploy technologies and use for the following:
		
		     o Implement pilot rail operations optimization technology using internet of things technology applications for MAX vehicles
		
		     o Develop autonomous vehicle technology strategy, approaches, and partnership opportunities
		
		     o Transit signal priority and enhanced corridors
		
		     o Develop technology and partnership protocols to provide frictionless information and trip-planning, travel, and integrated payment options for customers
		
		 ▪ Conduct strategic review of internal business processes in 2020 to 2021 and launch change management and implementation strategy in 2022
		
		 ▪ Identify and act on opportunities within supply chain and operating platform for strategic partnerships
		
		 ▪ Implement pilot project for demand responsive service for seniors and persons with disabilities. Begin work in FY2020 following engagement with riders and public

↑ = on target   ▮ = caution   ↓ = off target   ✔ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 3:
Business Practices that Create Value and Spur Innovation and Continuous Improvement

OBJECTIVE		STATUS	RESULTS
26. Grow business inclusion and diversity efforts	FY2019	⬆ Improved ability to encourage and track participation in contracting opportunities	▪ Added staff to work with Disadvantaged Business Enterprise (DBE) contractors and TriMet project definition to increase DBE participation ▪ Tracking of opportunities and success in hiring Disadvantaged Business Enterprises and/or Minority Business Enterprises (DBE/MBE) ▪ Increased diversity of executive team

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Future targets to be developed during FY2020	▪ Enhance agency-wide efforts on diversity in contracting by extending and expanding upon Engineering & Construction best practice approaches to all contracting efforts ▪ Target and increase recruitment of small, DBE/MBE-certified firms for opportunities to do contract work for TriMet ▪ Build the regional pool of qualified contractors by mapping potentially eligible firms and helping them achieve DBE certification ▪ Work with other regional agencies to identify systemic strategies and approaches to supporting and strengthening the regional DBE/MBE contracting community

⬆ = on target   ▢ = caution   ⬇ = off target   ✔ = completed Key Strategic Action

INTERNAL BUSINESS PRACTICES GOAL 3:
Business Practices that Create Value and Spur Innovation and Continuous Improvement

OBJECTIVE	STATUS	RESULTS

27. Innovatively increase financial resources	**FY2019** ⬆ Multiple projects sold or making progress toward development	✓ Sold over $1.2 million worth of Clean Fuel credits (state of Oregon program developed to reduce greenhouse gas emissions), providing opportunity to generate revenue for transit from reduced carbon emissions due to the transit service we provide
		▪ Initial analysis of TriMet-owned land opportunities yielded eight projects with partners:
		  ○ Two projects where TriMet has sold land and one in negotiations to sell to a non-profit developer who will construct affordable housing adjacent to transit (see Objective 7).
		  ○ Five projects still in negotiations, three value capture projects with mixed market rate and affordable housing, one academic and potential mixed-use, and the other likely office/commercial.
		  ○ A total of about 900 or more housing units, including over 500 affordable units.
		▪ Created new Transit-Oriented Development team which has started a strategic review of development and commercial opportunities

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024 Milestones for strategy to leverage current TriMet assets	▪ Advance strategy for leveraging current TriMet assets and intellectual property, such as using existing land, right-of-way, Park & Rides, and other resources ▪ Encourage transit-oriented development that increases off-peak and weekend transit ridership to take advantage of available capacity of existing services ▪ Pursue additional funding sources for TriMet projects ▪ Deliver FY2020 external commercial opportunity scan

⬆ = on target   ▧ = caution   ⬇ = off target   ✓ = completed Key Strategic Action

People & Innovation Goals

PEOPLE & INNOVATION GOAL 1:
Ensure a Culture of Safety

OBJECTIVE		STATUS	RESULTS
28. Successfully implement the Safety Management System across the organization	FY2019	⬆ Seven safety audits performed to date during FY2019 ⬆ 3.8 lost time injuries rate (per 200,000 hours worked)	▪ Bus panels for operator safety will be included in all new bus orders ▪ Procuring Learning Management System for safety- and security-related training ▪ New peer-based safety and support team working with operators to increase practices that support a culture of safety

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Six or more safety audits performed annually 5.4 per 200,000 hours or lower lost time injuries rate[23]: FY2022	▪ Implement Safety Management System. Examples include: o Continue Risk Analyses, including Operational and Job Hazard Analyses, to identify significant safety risks and implement mitigation measures ▪ Deliver consistent departmental safety awareness information to existing and new employees ▪ Implement and ensure effectiveness of safety risk mitigation measures. Develop and implement continuous improvement plans in operations safety. Deliver additional security technology, infrastructure, and practices ▪ Incorporate safety and security recognitions for employees during ROSE Week 2020

⬆ *= on target*　　🟨 *= caution*　　⬇ *= off target*　　✔ *= completed Key Strategic Action*

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[23] This target may need to be updated during FY2020 in keeping with OSHA requirements

PEOPLE & INNOVATION GOAL 2:
TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive

OBJECTIVE		STATUS	RESULTS
29. Invest wisely in people	FY2019	⬆ 5.0 average score on most recent quarterly engagement survey with one to six rating scale (six is best) 🟨 3.7 percent training and development costs (including tuition reimbursement) as a percentage of payroll ⬇ 26 percent of employees below their predicted compensation (average ratio for those under target is 0.97) 🟨 5.4 percent turnover percentage – minus retirements from agency (overall)	▪ Expanded internal training resources including management development, bias awareness, communication, financial, and technological skills

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	4.6 or better on engagement survey benchmark[24] with one to six rating scale (six is best) At least four percent training and development costs as a percentage of payroll Zero percent of employees below an acceptable range of their predicted compensation[25]: FY2023 For employees below predicted compensation, 1.0 ratio of actual salary to predicted compensation No more than five percent turnover percentage – minus retirements from agency	▪ Implement improved Predicted Compensation Model approach ▪ Review and update compensation across divisions to better match market ▪ Continually update market survey of benchmark jobs ▪ Develop Professional and Leadership Development Strategy by end of FY2021 ▪ Implement Learning Management System

⬆ = on target	🟨 = caution	⬇ = off target	✓ = completed Key Strategic Action

[24] Benchmark based on other employers in similar industries

[25] Based on Objective Compensable Factors and meets Oregon Pay Equity Act requirements

PEOPLE & INNOVATION GOAL 2:
TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive

OBJECTIVE		STATUS	RESULTS
30. Ensure open and honest communication between management and direct-customer-serving employees	FY2019	⬆ Quantum employee survey results from communication question ("There is open and honest communication between employees and manager") averaged 4.7 (on a 1-6 scale) during FY2019 to date	▪ Multiple internal committees with broad representation include Employee Recognition committee and continued commitment to ongoing groups such as Employee Round Tables, Continuous Improvement Teams, ongoing Service Performance and Development Committee, and Service Change Management Committee ▪ Internal education and training program includes communication skills, inclusiveness and cultural agility for all, including managers ▪ Implemented internal collaboration software for meetings, video and screen sharing across the agency to coordinate across TriMet locations

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Meet or exceed benchmark[26] average of 4.1 (out of six) on communication question ("There is open and honest communication between employees and manager")	▪ Develop and implement strategies in each division to strengthen internal communication channels, especially with direct-customer-serving employees, including more face-to-face communication ▪ Implement regular meetings between leaders and employees ▪ More clearly communicate efforts motivated by results of engagement survey

[26] Benchmark based on other employers in similar industries

⬆ = on target ▮ = caution ⬇ = off target ✔ = completed Key Strategic Action

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PEOPLE & INNOVATION GOAL 2:
TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive

OBJECTIVE		STATUS	RESULTS
31. Foster sense of community and cross-functional camaraderie	FY2019	⬆ Committees formed and cross-functional engagement activities expanded providing more cross-functional communication ⬆ 521 employees participated in volunteer events[27] (273 community benefit and 248 TriMet internal and service opportunities)	▪ Multiple internal committees with broad representation include new scheduling-led employee roundtables, Continuous Improvement Teams, ongoing Service Performance and Development Committee, Service Change Maintenance Committee, and Operations/Engineering & Construction Technical Advisory Group ▪ Offered volunteer opportunities to benefit community causes through "Team TriMet" and other opportunities including Pride Parade, and Heart Walk ▪ Volunteer efforts to support TriMet colleagues such as Bus Roadeo, holiday dinners, and Recognize Outstanding Service Excellence (ROSE) Week ▪ Supplemented rider information during major service disruptions and community events with voluntary Ride Guide and Ask Me duty (not currently included in measure) ▪ Executive management increased volunteer activities

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Number of employees participating in external- and colleague-serving volunteer events equal to or higher than previous year	▪ Continue to pursue initiatives for cross-functional engagement and connections between TriMet employees in different departments. Use committees with broad representation including direct-customer-serving employees. Look for additional opportunities to create and strengthen cross-divisional work teams, information sessions, and social events ▪ Continue offering volunteer activities and include executive management

⬆ = on target   🟨 = caution   ⬇ = off target   ✔ = completed Key Strategic Action

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[27] Calendar year 2018 totals as compared to calendar 2017 totals

PEOPLE & INNOVATION GOAL 2:
TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive

OBJECTIVE	STATUS			RESULTS
32. Achieve agency Affirmative Action goals	**FY2019**			▪ Working with community organization to improve ability to place more applicants with disabilities in positions at TriMet ▪ Workforce diversity review completed and improvements being implemented ▪ Improved internal training for equitable hiring practices with new Hiring Well and Bias Busting classes for all staff involved in hiring

Actual (FY2018)[28]	Non-union Jobs	All Jobs
Minority	↑ 23.3 percent	↑ 26.7 percent
Women	↑ 37.5 percent	↓ 25.9 percent
Veteran	↓ 4.3 percent	↓ 4.4 percent
Persons with Disabilities	↓ 0.6 percent	↓ 0.6 percent

↑ TriMet's Executive Team has a utilization for race (non-white) of 27.3 percent, and a utilization rate for gender (female) of 36.4 percent

MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024	

Utilization rates are equal to or exceed weighted average availability rates in TriMet's Affirmative Action Plan[29] for management positions and all TriMet District positions: end of FY2020

Targets[30]	Non-union Jobs	All Jobs
Minority	16.6 percent	23.3 percent
Women	37 percent	29 percent
Veteran	6.4 percent	6.4 percent
Persons with Disabilities	7 percent	7 percent

Utilization rate for executive positions is equal to or exceeds availability rates in TriMet's Affirmative Action Plan

KEY STRATEGIC ACTIONS

▪ Use additional methods to recruit diverse candidates, including using search firms that are skilled in recruitment of diverse candidates
▪ Implement research- and outreach-based search techniques to identify candidates

↑ = on target   🟨 = caution   ↓ = off target   ✓ = completed Key Strategic Action

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[28] Data not yet available for FY2019

[29] http://trimet.org/equity/pdf/affirmative-action-plan.pdf. Note that targets are periodically updated based on latest availability figures and may not always be current on trimet.org

[30] Targets for women and minority utilization goals from the average availability for each group from the "Utilization Analysis and Placement Goal Table" in the Affirmative Action Plan. Utilization targets for veterans and persons with disabilities were taken from Office of Federal Contract Compliance Programs website http://www.dol.gov/ofccp/

PEOPLE & INNOVATION GOAL 2:
TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive

OBJECTIVE		STATUS	RESULTS
33. Recruit a talented workforce	FY2019	⬆ 91 percent average year to date acceptance to offer ratio 🟨 62 days average time to fill positions	▪ Acceptance to offer well above target ▪ Increased outreach and recruitment efforts for talent and diversity of candidates ▪ Added management and hiring classes required for TriMet employees who hire staff ▪ Using outside expertise to enhance recruiting efforts and practices

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	75 percent or higher acceptance to offer ratio 60 days or less average time to fill positions	▪ Improve time to fill through collaboration between hiring managers and human resources staff

⬆ = on target   🟨 = caution   ⬇ = off target   ✔ = completed Key Strategic Action

PEOPLE & INNOVATION GOAL 2:
TriMet is Where Diverse and Talented People Want to Come, Stay, and Thrive

OBJECTIVE		STATUS	RESULTS
34. Pursue Professional Growth for Employees	FY2019	☐ 48 percent of identified key positions have "ready now" or "ready soon" candidates	▪ Successfully filled multiple key positions in agency due to retirement or turnover. Improving documentation of positions and processes to rely less on institutional memory of individual employees

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	50 percent or more of key positions included in succession plans have candidates identified as "ready now" or "ready soon": FY2020[31]	▪ Deliver training and provide practical experience opportunities to improve ability of staff to gain promotion within TriMet. Engage employees directly in planning and implementing their own professional development ▪ Recruit with succession in mind especially for vacancies reporting to strategic positions ▪ Improve ability for internal candidates to move into management positions

↑ = on target   ☐ = caution   ↓ = off target   ✓ = completed Key Strategic Action

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[31] Measure under review and likely to change for Final Business Plan

PEOPLE & INNOVATION GOAL 3:
Foster Service Excellence and Innovation

OBJECTIVE	STATUS		RESULTS
35. Foster employee innovation, including process improvements	FY2019	⬆ Progress made in encouraging innovation especially in operational divisions	▪ Innovation training conducted for a pilot group of employees ▪ All divisions creating or enhancing regular practice of recognizing and encouraging innovation in all areas, including process improvements

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024	Implementation steps of training, encouragement, and recognition practices	▪ Continue regular practice of recognizing and encouraging innovation in all areas, including process improvements ▪ Provide external training on fostering innovation to some employees and provide time and venues to share strategies and practices with other employees

| ⬆ = on target | ▮ = caution | ⬇ = off target | ✔ = completed Key Strategic Action |

Financial Goals

FINANCIAL GOAL 1:
Fiscally Sound and Compliant

OBJECTIVE	STATUS	RESULTS
36. Manage financial performance within Strategic Financial Plan guidelines	**FY2019** ⬆ All six Strategic Financial Plan[32] guidelines met ⬆ Net medical benefits cost per covered employee *decreased*	▪ All six Strategic Financial Plan guidelines were met for FY2019 ▪ Redesigned Budget forms and CIP project pages to identify Business Plan objectives addressed, as well as department-level narratives incorporating how it addresses the Business Plan. ▪ Business Plan added resource and capability feedback loop to annual update to improve understanding of need to deliver Key Strategic Actions ▪ Enterprise risk management registry under way. Preparing for mitigation identification and prioritization ▪ AAA bond rating with more stringent criteria reaffirmed by Standard & Poors

	MEASURE / TARGET	KEY STRATEGIC ACTIONS
FY2020 - FY2024	Meet all six Strategic Financial Plan guidelines Net medical benefits cost per covered employee increases at a rate no greater than the Federal Employment Cost Index[33]	▪ Actively manage and enhance financial performance and decision-making ▪ Refine measurement, analysis, reporting, and management approaches to ensure budget process and strategic planning are fully aligned, including: o Develop each annual five-year Business Plan, well-coordinated with budget realities and with a fresh review of opportunities and challenges ▪ Achieve active and retiree contributions to premium costs that are consistent with industry peers ▪ Implement an enterprise risk management process during FY2020 including identifying specific mitigation treatments to include in the Business Plan for FY2021

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[32] www.trimet.org/pdfs/sfp/14-07-37-Strategic-Financial-Plan-WEB.pdf
[33] www.bls.gov/ncs/ect/

⬆ = on target   ▮ = caution   ⬇ = off target   ✔ = completed Key Strategic Action

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Financial Goals

FINANCIAL GOAL 2:
Manage Assets to Ensure Safety and Optimize Value, Performance, and Resiliency
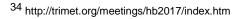
OBJECTIVE		STATUS	RESULTS
37. Meet or exceed state of good repair targets for all identified asset classes	FY2019	▲ Completed Transit Asset Management Plan before deadline	✔ Transit Asset Management Plan completed before federal deadline ▪ TAM Plan inventory and condition assessments on-target for completion for end of FY2019 ▪ FY2019 adopted budget includes increased allocation to state of good repair ▪ State of good repair needs for assets emphasized in annual budget prioritization process

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	Zero asset classes below established targets in the short, medium, and long term, as defined in the Transit Asset Management Plan: FY2022	▪ During five year period, develop and implement plan to repair, replace or otherwise remedy any asset classes not fully at target ▪ Replace key assets for customer experience and safety ▪ Procure and implement Enterprise Asset Management System – technology improvements for asset inventory, condition assessment, maintenance, and management of TriMet assets

▲ = on target   ▉ = caution   ▼ = off target   ✔ = completed Key Strategic Action

FINANCIAL GOAL 3:
Financial Capacity to Advance Regional Expectations for Service Growth and Quality as Represented in the Regional Transportation Plan

OBJECTIVE		STATUS	RESULTS
38. Manage financial capacity to deliver regional expectations for service growth	**FY2019**	⬆ 4.7 percent growth in budgeted bus service hours for FY2019	▪ Completed TriMet's Transit Improvement Plan with approval of HB2017 Advisory Committee[34] and met state deadlines ▪ Expecting Oregon Transportation Commission approval on time before end of FY2019

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	3.1 percent average growth or more in annual percentage of new bus service enhancement, including growth funded by HB2017: FY2020-FY2022	▪ Every year, prioritize sufficient operating funds, and additional HB2017 funds to meet the priorities identified for service improvements in each Annual Service Plan

⬆ = on target   🟨 = caution   ⬇ = off target   ✓ = completed Key Strategic Action

[34] http://trimet.org/meetings/hb2017/index.htm

FINANCIAL GOAL 3:
Financial Capacity to Advance Regional Expectations for Service Growth and Quality as Represented in the Regional Transportation Plan

OBJECTIVE		STATUS	RESULTS
39. Maintain acceptable farebox recovery to optimize the balance of service demands, revenue, and cost	**FY2019**	⬇ Fixed-route farebox recovery rate at 21.0 percent[35]	▪ Farebox recovery rate below target as average boardings were slightly reduced, Low-Income Fare was implemented, and cost per vehicle hour grew above inflation due to increased investments in maintenance and operations needs

		MEASURE / TARGET	KEY STRATEGIC ACTIONS
	FY2020 - FY2024	25 percent or greater farebox recovery (passenger revenue/ operations cost) for fixed route	▪ In FY2021, after the previous decade with no fare increase, implement incremental increases in fares as called for in adopted fare policy[36], approximately $0.10 every two years ▪ During five year period, develop and implement strategies to reduce fare evasion

⬆ = *on target*   🟨 = *caution*   ⬇ = *off target*   ✔ = *completed Key Strategic Action*

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[35] Passenger revenue/ system cost 12-month average as of February 2019

[36] As adopted in the Strategic Financial Plan guidelines: http://trimet.org/pdfs/sfp/14-07-37-Strategic-Financial-Plan-WEB.pdf

The Route Ahead

Each year's Strategic Business Plan is, by necessity, a dynamic document. This is our second annual update, reflecting on performance for the prior year and tailoring our actions in response. We've completed some Key Strategic Actions, adjusted others to better fit changing circumstances, and taken on a few new Actions as well.

TriMet's management will use the Goals, Objectives, Measures, Targets, and Strategic Actions to set individual targets, define detailed objectives, and focus efforts at the individual, team, and department level with the overall strategic needs. Annual updates will allow us to take on the future with a solid route map while retaining the flexibility to respond when things change.

A few key projects and initiatives are on the immediate horizon and will continue to be developed and expanded in future updates of the Business Plan including:

- Construction of a fourth bus garage to support our expansion of service using HB2017 funding from a State-levied payroll tax

- Division Transit Project

- Expanding our battery electric bus fleet in keeping with the recently adopted Non-Diesel Bus Plan

- Safety Management System and how it fosters our culture of safety

- Upcoming Annual Service Plans

- The challenge of regional growth, congestion, and advances in technology

We believe in a bright future for this region and we are committed to being the leader in delivering safe, convenient, sustainable, and integrated mobility options necessary for our region to be recognized as one of the world's most livable places.

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Acronyms and Definitions

Annual Service Plan – Annual plan for bus and rail service enhancements including changes and adjustments from public engagement

AV – Autonomous Vehicle – A vehicle with technology that senses the environment and navigates with reduced or no human input

Business Plan – Overall, agency-level plan that includes Goals, Objectives, Measures, Targets, and Key Strategic Actions at the agency-level

Continuity of Operations Plan – A formal plan for ensuring continuity of operations even in extreme emergencies (e.g., large earthquake)

DBE – Disadvantaged Business Enterprise – Companies with ownership by socially and/or economically disadvantage individual(s)

DTP – Division Transit Project – Capital construction project to provide higher-capacity, more reliable, and faster bus service along SE Division

DEIS – Draft Environmental Impact Statement – A requirement for some large federally funded projects studying potential environmental impacts of those projects

ESMS – Environmental and Sustainability Management System – A systematic approach to improve environmental and sustainability performance

FEIS – Final Environmental Impact Statement – A requirement for some large federally funded projects studying potential environmental impacts of those projects

FFGA – Full Funding Grant Agreement – A contract with the federal government to receive a percentage of funding to construct a transit project

FTA – Federal Transit Administration – The federal agency that provides oversight and funding opportunities for transit agencies

FY – Fiscal Year – The fiscal operating period used by TriMet and other public agencies in Oregon, which runs July 1 through June 30 of the following calendar year; e.g., FY2020 is from July 1, 2019, through June 30, 2020

Goals – Expected achievements during the five years of the Business Plan. Goals are grouped by Success Category. Goals lead to Objectives, Measures, Targets, and Key Strategic Actions

HB2017 – House Bill 2017 – Recently-enacted funding from the State of Oregon for transit that began in FY2019

Hop Fastpass® – Regional transit fare card that works on TriMet, Streetcar, and C-TRAN (with plans for additional services in the future). See www.myhopcard.com

IOT – Internet of Things – Use of sensing technology distributed in many places (e.g., such as in buses, light rail vehicles, or signal infrastructure) to provide more data and information about assets, operations, etc.

Key Strategic Actions – The most impactful or Strategic Actions for agency-level planning and management in the Business Plan. These are specific actions identified to make progress toward Targets, Objectives, and Goals

KPI – Key Performance Indicators – A term not used in this Plan; see Measures and Targets

MBE – Minority Business Enterprise – Companies with ownership by minorities

Measures – Quantitative or qualitative methods of identifying the status in a given issue

MOD – Mobility On Demand Sandbox – A federal grant that TriMet used to improve open source online trip planning and mapping that other transit agencies and transportation providers can also use. The new trip planner integrates transit with other shared-use modes (e.g., ride sharing, ride-hailing, and bike share) and a beta version is currently available as of April 2019 at betaplanner.trimet.org)

NEPA – National Environmental Policy Act – The federal statute that requires environmental review of federally-funded projects

NIMS – National Incident Management System – a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines

Objectives – Specific statements elaborating goals in a way that are actionable and lead to Measures, Targets, and Key Strategic Actions

ODOT – Oregon Department of Transportation – the state agency responsible for transportation

Project Development – Step in the process requirements for large federally-funded transit projects

PUDL - Portland Urban Data Lake – A coordinated collection of data about transportation in the region to be implemented to support TriMet and other regional big data analysis needs and support Smart Cities functions

Pulse Survey – Periodic survey of a small sample of TriMet employees conducted several times a year

Quantum Survey – Periodic survey of TriMet employees conducted every few years

Resilience – The ability of an agency or a service to withstand challenges from external forces like weather and climate change or economic variability

ROOT – Rail Operations Optimization Technology – The name of TriMet's MAX vehicle project that incorporates Internet of Things (IOT) approaches to vehicle and operations management

ROSE – Recognize Outstanding Service Excellence – One week each year to specifically recognize excellent service by all employees

S & P Global – An independent rating company that rates various bonds including public bonds issued by TriMet

SMS - Safety Management System – A comprehensive and coordinated approach to safe operations, maintenance, actions, and management

SEP – Service Enhancement Plan – Long-range shared vision for bus service developed over four years with rider, community, stakeholder, and jurisdictional engagement that illustrates desired future service and serves as a guide to each year's Annual Service Plan priorities

Southwest Corridor – Current planning process for a new, proposed light rail line serving the southwest portion of the region including Tigard, Tualatin, and southwest Portland

SGR - State of Good Repair – A transit industry term that means keeping facilities and vehicles in good repair to maintain safety, efficiency, and operability

Strategic Financial Plan – Adopted TriMet Plan for the long-term financial health of the agency

Strategic Premises – Basic assumptions underlying the projections, analysis, plans, and approaches

Strategic Success Categories – Categories of focus to help organize Goals, Objectives, Measures, Targets, and Key Strategic Actions. They include: Customers, Internal Business Practices; People and Innovation; and Financial

Targets – Specific planned-for performance on Measures. Each Measure has an associated Target to ensure that the Business Plan is focused and leads to a clear indication of whether targets are being met (and therefore demonstrates whether chosen Actions are effective)

Predicted Compensation – A predicted level of pay that an employee would be at, or above, based on the objective compensable factors contained in the Oregon Pay Equity Act

TNCs – Transportation Network Companies – Companies that use technology platforms to connect passengers to rides in personal, non-commercial vehicles; e.g., Uber, Lyft

TAM - Transit Asset Management Plan – A formal, federally-required plan identifying how to manage, for long-term safety and operability, all significant assets owned and maintained by a transit agency; e.g., buses, garages, rail tracks, storage facilities, etc.

MOVING EVERY LIFE FORWARD

STRATEGIC PLAN 2019 - 2024

COTA

Introduction

Current State of COTA

COTA's vision is **"To move every life forward"** and COTA's mission is **"We provide solutions that connect people to prosperity through innovation, dedication and teamwork."** As the regional public transit provider for greater Columbus and Central Ohio, COTA serves over 1.2 million residents with nearly 19 million passenger trips annually. Operationally, COTA has over 1,100 employees, 40+ bus routes, more than 300 buses, and operates out of four facilities in the Columbus area. COTA received the Outstanding Public Transportation System Achievement Award from the American Public Transportation Association (APTA) in 2018. COTA acknowledges and understands advancements in mobility are disrupting the transportation sector and fundamentally changing the way people move.

Technological disruptions such as automated, connected, electric, and shared vehicles (ACES) will have a major influence on transportation services in the form of mobility, accessibility, safety, congestion, and planning. More important however, customer expectations of service are changing in our connected world. What holds true is an efficient, safe, and well-maintained transportation network is vital to the region's success. Success for COTA is defined as moving people where they want to go, enhancing the economic vitality and growth of the region, and closing social barriers for all communities. The combination of the external forces and the importance of COTA's role in the Columbus region is the backdrop for undertaking a strategic planning process.

Purpose of the Strategic Plan

COTA's strategic plan defines and articulates the strategic direction for COTA for the next five (5) years. Through a collaborative strategic planning process, guiding principles were developed to focus the organization on those strategic areas that will enable COTA to achieve its mission and vision. The guiding principles are then underpinned with initiatives that are responsive to the changing expectations of customers and emerging technologies.

These initiatives have an eye on enhancing COTA's services for the citizens of Central Ohio. Nesting the initiatives under the guiding principles will align efforts and keep COTA moving towards its mission and vision. From this strategic plan a more detailed operational plan will be developed which establishes the details of each initiative for operational execution. The following diagram outlines the importance of each step:

1 Strategic Plan

Articulation of COTA's mission, vision, guiding principles, and overarching initiatives over the next five years.

2 Operational Plan

Development of a tactical, detailed operational plan building on the initiative framework established in the strategic plan

3 Operational Execution

Execution of the operational plan, resulting in realization of the strategic vision, mission, and guiding principles.

To Move Every Life Forward

We Provide Solutions That Connect People To Prosperity Through Innovation, Dedication and Teamwork

Approach for Building COTA's Strategic Plan

COTA is integral to the social and economic well-being of Central Ohio. A collaborative approach to building the strategic plan emphasized the importance of including a diverse set of opinions, both inside and outside the organization. The process incorporated a number of inputs from internal and external sources.

This approach ensured a comprehensive awareness of the dynamics surrounding COTA, including the changing mobility sector and community specific considerations, as well as incorporating internal viewpoints, capabilities, and underlying culture of the organization. The insights gained from this thought process were used to establish the building blocks of the strategic plan.

The Input Process

Benchmarking
Completed analysis of seven (7) transit agencies similar to COTA

External Interviews
Conducted sessions with 23 entities

Internal Workshops
Participated in COTA's Board retreat and conducted SWOT exercise and visioning session

Participated in COTA's Leadership retreat and conducted the same SWOT and visioning session as the Board retreat

Executed six (6) internal workshops with 128 COTA employees (10% of COTA's workforce) to conduct the SWOT exercise

Diversity, Equity, & Inclusion Interviews
Conducted eleven (11) individual interviews (e.g., Chief Officers, Senior Leaders, Board Member)

Conducted three (3) group interviews with a total of 17 employees

1. HR, Sustainability, Government Affairs, Marketing and Communication;
2. Finance, Legal, Information Technology; and
3. Operations and Development

Innovations to Consider from Other Transit Agencies

To help inform COTA's strategic plan, an external benchmarking exercise of other mobility and transit agencies was conducted. The focus was to identify and evaluate innovative strategic initiatives that COTA's peers have undertaken.

These benchmarks are from peers which are trying to address growth, manage congestion, ensure fiscal and environmental sustainability, and provide equitable access in unique ways and are enormously helpful to COTA's strategic approach.

Initiative Overview

Benefits

Initiative Overview	Benefits
Chicago CTA, Bike Sharing: Integrated bike sharing into the existing mobility app to solve last-mile connectivity issues	Aims to create an efficient and smooth multi-modal transit experience
LA Metro, Micro Transit System: On-demand first- & last-mile services accessed through mobile devices	Mobility on Demand for first- and last-mile solutions reaches more people to get them to the transit. Technology can replace former expensive approaches such as park and rides
LA Metro, Workforce Development Program: Initiative focused on careers in the transportation industry	Creates career pathways into the transportation industry
Boston Bus Rapid Transit Pilots: Dedicated Bus Rapid Transit and dedicated bus/bike lanes for smoother service	Integrates and modernizes transit system for commuters
RTC of Southern Nevada, Self Driving Shuttle: Carries up to 12 passengers and provides free rides on 0.5 mile trips in the loop	The study will help to analyze consumer reactions to autonomous vehicles
Greater Cleveland Regional Transit Authority: VanShare Service requires minimum of 6 people sharing rides to in-county destinations	Benefits those who do not live on RTA's fixed-route service
Cincinnati Mobility Lab: Uber's data to conduct studies aimed at improving the commuting experience	Provides ways for ride sharing to be incorporated into public transit
Jacksonville Transit Authority: Multi-modal responsibilities of JTA and how it has evolved from a toll authority to a transit agency	Allows a holistic approach in planning mobility service offerings

External Interviews: Listening to the "Voice of Columbus"

A key input into the strategic plan was capturing the voice of the community in which COTA operates. This included conducting 23 different interviews throughout Central Ohio, with various economic leaders, community leaders, workforce development groups, The Ohio State University, and planning agencies. Listening to this broad set of stakeholder groups helped solidify COTA's relevance in Central Ohio as well as how COTA should position itself within the next five (5) years. The external stakeholders also articulated how COTA assists in accomplishing the mission of their specific organizations. With this insight, the strategic plan aligns COTA's service delivery with the expectations of Central Ohio.

Internal Workshops: Capturing COTA's Capabilities and Aspirations

Capturing the voice within COTA, from the vision of the Board, to the insights across the employee population, was also a critical element to the strategic plan. This effort involved workshops involving over 150 employees, COTA leadership, and Board members who participated and voiced their views on COTA's future direction. Given the fact the internal stakeholder group was so diverse and spanned the full spectrum of the organization, it was critical to make sure the strategic message was aligned. Two key outputs from these sessions were: (1) the strategic themes that became the foundation for the strategic plan and (2) the identification of strengths, weaknesses, opportunities, and threats to guide COTA's five (5) year strategic plan and underlying initiatives.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS

The Importance of Equity, Diversity, and Inclusion at COTA

Through the collaborative strategic planning process, it was clear that equity, diversity, and inclusion (EDI) are of core importance to COTA. To ensure EDI is infused through the strategic plan and incorporated as a part of COTA's cultural fabric, nearly 30 interviews were conducted. These interviews spanned the full spectrum of employees. COTA's employees and the community COTA serves are diverse and the organization must be intentional in serving both. COTA understands that a commitment to EDI is essential to the success of the organization.

In addition to driving creativity, innovation, and engagement, diverse and inclusive organizations reap the benefits of being more sustainable and agile. In pursuit of EDI excellence, COTA will develop a stronger and more effective workforce, resulting in increased comprehensive services that better meet the needs of COTA's consumers. COTA will be able to leverage the effects of EDI to support and maintain its recognition as being a leader in mobility for all.

Equity
Providing fair access, opportunity, and advancement for all people is achieved by understanding and eliminating barriers that prevent full participation for disadvantaged groups. Employee motivation is critically contingent on the incorporation of equity.

Diversity
By seeking to attract and retain individuals of demographic diversity, such as, but not limited to race, ethnicity, gender, age, orientation, socio-economic background, physical ability, and religion, COTA will derive value from individuals' differences of experiences, perspectives, and thought processes. Diverse organizations are also more successful at attracting and retaining talent.

Inclusion
Organizations succeed at maintaining diversity when they focus on inclusion. Employees feel valued, respected, and supported when inclusion is part of the organizational culture. In establishing a strong inclusive culture, COTA can expect job satisfaction to increase among employees, resulting in maximum productivity.

Overview of COTA's Guiding Principles

The collaborative approach employed to develop the strategic plan collected thousands of data points and input from internal and external stakeholders. Within the data, a number of strategic themes emerged. The strategic themes are an articulation of the expectations of COTA from the stakeholder's perspective. These strategic themes were then used as the basis to create COTA's guiding principles for its five-year strategic plan.

Strategic Themes from Stakeholder Engagement

— Make COTA the easy mobility option
— Intentionally commit COTA to an equitable, diverse, and inclusive culture
— Leverage partners to enhance service delivery
— Achieve organizational excellence
— Use data to make better decisions
— Drive enhanced mobility services to meet customer demands
— Actively engage in Central Ohio economic development
— Market COTA's services to educate and inform customers

Guiding Principles

Based on an evaluation of these themes, four guiding principles were established for COTA's strategic plan with equity, diversity, and inclusion residing at the core. The guiding principles' primary goal is serving the Central Ohio region. The graphic below represents COTA's guiding principles:

Improve the Customer Experience

Provide Access to Mobility Options

Equity, Diversity and Inclusion

Achieve Organizational Excellence

Prioritize the Use of Data and Analytics

Introduction to Four Guiding Principles

These guiding principles provide the foundation for the strategic plan, set the direction for the organization, and represent where COTA will focus during the coming years.

Overview of Each Principle

Improve the Customer Experience: to serve current and future customers and deliver a customer experience that is easy to use, reliable, and convenient.

We now live in a world where customers expect a highly-personalized, differentiated, and meaningful experience from businesses and organizations. This is particularly important to COTA because of its highly-diverse customer base. Affordability, ease, availability, and safety are critical factors in enhancing the customer experience and achieving dignity for disadvantaged individuals and communities.

Achieve Organizational Excellence: to make COTA employees focused, collaborative, and innovative.

In order to execute against COTA's five-year strategic plan, COTA will need to align its operating model and performance metrics with the services it offers. COTA will also need to ensure it is focused on developing and embracing its diverse workforce. A workforce encompassing diversity of demographics leads to diversity of thought, experiences, and perspectives, resulting in better decision-making and outcomes.

Provide Mobility Options: to enhance service delivery to customers through partnerships with innovative organizations.

It is imperative to consider additions and enhancements to COTA's traditional mass transit services including collaboration with the private sector to extend and implement services. Further community partnerships are vital to understanding and providing mobility options to all customers including individuals who are considered disadvantaged or low-income. COTA's collaboration with community leaders will provide unique insight towards understanding and prioritizing effective mobility options across its service population.

Prioritize the Use of Data and Analytics: to make better decisions, enhance services and enhance safety

The combination of big data trends and the emphasis on smart technologies offers COTA a wealth of data and analytics capabilities if embraced. As the world of mobility evolves, it is becoming more critical to leverage data into insights for COTA to improve and optimize its services.

Initiatives

COTA will pursue specific initiatives aligned to the guiding principals over the next five years. These initiatives were a product of the input sessions with the various internal and external stakeholder groups in the strategic plan development process. The initiatives were balanced between "Early Opportunities", "Improvements", or "Transformations." These categories represent the importance of realizing the mission and vision of COTA by achieving momentum quickly, improving key areas that need critical attention, and propelling the organization forward through transformations. Categorized this way, the initiatives align with COTA's journey of meeting the needs of the new mobility ecosystem.

For each guiding principle, several initiatives have been identified and classified.

Initiative Classification	Definition
Early Opportunity	Minimal operational investment (dollars and time); benefits can be realized in < 1 Year
Improvement	Moderate operational investment (dollars and time); benefits can be realized in 1 to 5 years
Transformation	Significant operational investment (dollars and time); benefits can be realized > 5 years

Improve the Customer Experience

Improve the Customer Experience is a guiding principle which requires a combination of personalized offerings to meet customer preferences, ensuring those in need of COTA's services are served with dignity, making it easier to interact with COTA and aligning services to capture new customers.

	Initiative	Early Opportunity	Improvement	Transformation
a.	Enhance the COTA fleet to adapt and provide responsive services			✓
b.	Add innovative service offerings that anticipate customer's future mobility needs		✓	
c.	Develop and implement a targeted marketing program to meet the distinct needs of COTA's customer segments	✓		
d.	Create a culture of customer service that dignifies mobility as a valid choice		✓	
e.	Align services with customer needs and preferences by adding amenities to meet customer demand		✓	

Provide Access to Mobility Options

The guiding principle of *Provide Access to Mobility Options* includes the following initiatives: expanding COTA's current service, offering a menu of new services with the help of private sector partnerships, and ensuring transportation equity is achieved by providing access to all.

	Initiative	Early Opportunity	Improvement	Transformation
f.	Leverage a mobility partner to pilot a first- & last-mile solution	✓		
g.	Implement a multi-modal trip planning and payment app with options that provide access to mobile users and the un-banked			✓
h.	Ensure transportation planning supports access to jobs, healthcare, and education for disadvantaged communities	✓		
i.	Commit COTA's resources to focus on upfront community planning		✓	
j.	Expand service network to include additional geographies in Central Ohio	✓		
k.	Increase and expand service to capture new customer segments, including disadvantaged riders		✓	

Achieve Organizational Excellence

Achieve Organizational Excellence is a guiding principle which includes initiatives to retain and attract a strong, diverse, equitable, and inclusive workforce, deploying tools to measure performance and leveraging resource capacity and a range of partnerships.

	Initiative	Early Opportunity	Improvement	Transformation
l.	Implement programs to retain, train, and attract a diverse talent pool at all levels of the organization		✓	
m.	Establish and engage employee resource groups (e.g., Veterans, LGBTQ, African-American women, etc.) within the organization	✓		
n.	Incorporate targeted recruiting to increase diversity within departments		✓	
o.	Develop metrics and Key Performance Indicators (KPIs) to measure organizational performance			✓
p.	Match resource capacity with operational needs (i.e., shift flexibility and cross training)		✓	
q.	Improve service and operations through innovative partnerships		✓	
r.	Promote the use of small, disadvantaged businesses through partners		✓	
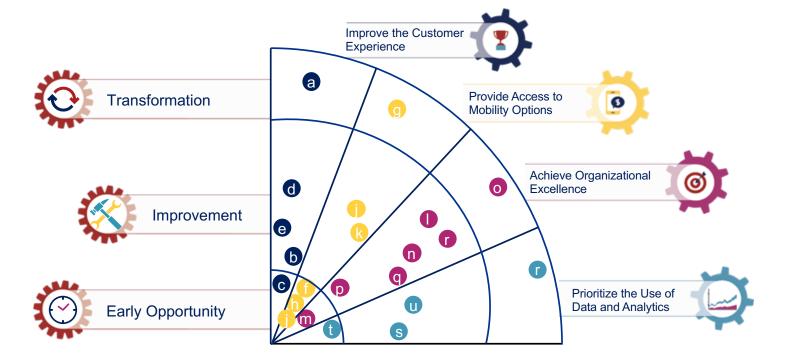
Prioritize the Use of Data and Analytics

The guiding Principle *Prioritize the Use of Data and Analytics* includes leveraging data analytics to improve COTA's services and meet the needs of its current and future users, evaluating data and technology as a foundation to new business models, and leveraging analytics to improve EDI outcomes.

	Initiative	Early Opportunity	Improvement	Transformation
s.	Leverage existing operational data to promote transportation equity			✓
t.	Use D&A to evaluate mobility trends and new business models to assess their feasibility for COTA's service delivery operations		✓	
u.	Leverage D&A to implement, measure, and improve new pilot projects and scale across the COTA service delivery operations	✓		
v.	Implement D&A capabilities to improve business operations outside of service delivery operations (i.e., human resources, marketing, etc.)		✓	

Transformation Plan

The initiatives have been developed through the strategic planning process and then identified and targeted an Early Opportunity, an Improvement, or a Transformational activity. COTA wants to ensure initiatives can be achieved for near-term impact, but also take on the transformational work to serve our growing community's mobility needs for decades to come. This graphical analysis summarizes where COTA can start now and where to focus in the long term.

Improve the Customer Experience

Transformation

Provide Access to Mobility Options

Achieve Organizational Excellence

Improvement

Early Opportunity

Prioritize the Use of Data and Analytics

Conclusion

COTA's strategic plan is our organization's North Star to innovate mobility and share what the community can expect from COTA over the next five years. Based on extensive internal and external input, the plan includes action-oriented initiatives that are organized by COTA's new guiding principles. It is the inspiration for the future role COTA and our employees will play in the Central Ohio region to positively impact lives and realize economic opportunities.

Acknowledgments

The following groups and individuals provided valuable input towards this strategic plan.
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Central Ohio Transit Authority

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External Stakeholders and Community Leaders

— CelebrateOne
— Central Ohio Area Agency on Aging
— Columbus2020
— The Columbus Foundation
— The Columbus Partnership
— Columbus State Community College
— COSI
— Columbus Urban League
— DriveOhio
— Franklin County Job & Family Services
— Goodwill Columbus
— HandsOn Central Ohio
— Mid-Ohio Regional Planning Commission
— Nationwide Foundation
— The Ohio State University
— Smart Columbus
— ULI Columbus
— Steiner & Associates
— United Way of Central Ohio
— The Workforce Development Board of Central Ohio
— YWCA Columbus
— City of Columbus - Mayor Andrew J. Ginther
— City of Columbus - City Council
— City of Columbus - Dept. of Neighborhoods
— City of Columbus - Development
— City of Columbus - Information Technologies
— City of Columbus - Public Service
— City of Columbus - Utilities

Metro Vision 2028

A Strategic Plan for 2018-2028

DRAFT

Los Angeles County Metropolitan Transportation Authority

M Metro®

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    Appendices can be accessed online: metro.net/vision2028

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INTRODUCTION

Los Angeles County is a beautiful place with a vibrant, diverse economy that draws people from all around the world in pursuit of seemingly unlimited opportunities to realize their dreams. As in all major metropolitan areas, a reliable, high-quality transportation system is crucial to the County's continued prosperity and the quality of life of its inhabitants. But the imperative—and the challenge—of efficiently moving people and goods takes on particular significance in LA County, given its daunting geographical scale and its longstanding, near-iconic association with the automobile. Put simply, few issues will be more important in shaping the region's future and sustaining its unparalleled economic and social promise than our collective ability to marshal the creativity, the resources, and the political will to implement transportation solutions that successfully meet LA County's mobility needs—now and in the future.

It has been more than ten years since the Los Angeles County Metropolitan Transportation Authority (Metro) last undertook an agency-wide strategic planning process. In that time, the County itself, and the transportation challenges and opportunities it confronts, has evolved dramatically. While LA County has made important investments in improving and expanding its transportation infrastructure over the last decade with the passage of Measure R,[1] a sales tax for transportation approved by voters in 2008, transportation capacity has struggled to keep pace with growth in travel demand. The Los Angeles region consistently ranks among the top congested places in the country.[2] Meanwhile, a critical recent development in terms of the County's ability to make needed transportation investments going forward was the passage in 2016 of Measure M,[3] a voter-approved sales tax anticipated to inject $120 billion of transportation funds into the region over the next 40 years.

This Metro Vision 2028 Plan (Plan) outlines the agency's strategic goals for 2018–2028, and the specific actions Metro will undertake to meet those goals. It explains what the public can expect from Metro over the next ten years and describes how we intend to deliver on those expectations.

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[1] For information on Measure R, please visit metro.net/projects/measurer

[2] Texas A & M Transportation Institute, Urban Mobility Scorecard, https://mobility.tamu.edu/ums/congestion-data/west-map/ and INRIX, 2017 Traffic Scorecard

[3] For information on Measure M, please visit theplan.metro.net

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ABOUT METRO AND ITS MISSION

LA County's transportation system is a complex network, consisting of highways, local streets, sidewalks, bikeways, buses, and rail, and controlled by a patchwork of local, regional, state, and federal agencies. Metro is woven into this complex landscape as the regional transportation planner, coordinator, designer, builder, funder, and operator. Because it serves these multiple functions for one of the country's largest and most populous counties—more than 10 million people live within Metro's service area—Metro is unique among the nation's transportation agencies. Its core mission is to provide a world-class transportation system that enhances quality of life for those who live, work, and play within LA County.

> *"Metro's mission is to provide a world-class transportation system that enhances quality of life for those who live, work, and play within LA County."*

This Plan reflects Metro's current understanding of the aspirations and mobility goals of the people we serve. Achieving these goals will require concerted coordination and active collaboration with local municipalities; municipal transit operators; Councils of Government; Metrolink; Access Services; political, business, and community leaders; other partners and stakeholders; and the public, all of whom have critical roles to play in realizing the vision described in this Plan.

METRO'S VISION FOR THE FUTURE OF TRANSPORTATION IN LOS ANGELES COUNTY

This Plan is designed to **deliver a mobility system that enables people to travel swiftly and easily throughout the LA County region, no matter where they want to go or when.** Metro recognizes that vast disparities exist between the ability of individuals and communities to identify and safely access even the most basic needs in life, such as jobs, housing, education, and health care. Despite substantial investment and progress toward addressing transportation inequities, current socio-economic disparities continue to be exacerbated by a lack of high-quality transportation options among the most disadvantaged populations of the County. Thus, a crucial part of Metro's vision is to bridge these gaps and help remove mobility barriers to increased prosperity for all the County's residents.

Metro also recognizes that, while an adequate, safe, and efficient network of roads and highways will always be an essential component of our transportation system, building new roadway capacity without managing the long-term demand for solo driving is not a plausible strategy for meeting the region's rapidly evolving mobility needs. An approach primarily geared to serving single-occupancy vehicles is neither economically nor environmentally sustainable, nor would it advance other widely shared goals for improving quality of life within the region. Instead, the focus of this Plan is to address increased mobility demands by improving the variety and quality of transportation options available to people. Specifically, the actions set forth in this Plan aim to double the total usage of transportation options other than driving alone, including taking transit, walking, biking, sharing rides, and carpooling.

Achieving this vision by 2028 means that Metro will take steps to accomplish the following:

Ensuring that all County residents have access to high-quality mobility options within a 10-minute walk from home.

Reducing maximum wait times for any trip to 15 minutes during any time of day.

Improving average travel speeds on the County's bus network by 30 percent.

Providing convenient and dependable options for bypassing congestion on streets and highways.

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Later sections describe Metro's plan for achieving these outcomes in greater detail. There are many important current and short-term initiatives underway at Metro that can be completed within today's resource, technical, political, and legislative environments. Those initiatives are not all necessarily referenced in this Plan because they are already on a path towards implementation. This Plan describes the initiatives that go beyond the status quo and the aggressive, strategic actions required to meet the region's ambitious mobility goals. To provide context for these sections, we begin by discussing the process used to develop the Plan and by describing some of the key trends that we believe will shape the County's transportation needs and challenges in the decades to come.

THE VISION 2028 PROCESS

To establish a baseline for understanding where LA County is now, Metro started the strategic planning process by opening an extensive dialogue with its many diverse stakeholders. The purpose of this information-gathering exercise was to begin identifying key trends, issues, opportunities, and challenges for the region and to learn from a range of perspectives about how Metro could help meet those challenges.

As a first step, Metro launched a comprehensive customer satisfaction survey of transit riders and non-riders in the County. We administered the survey online and received over 18,000 responses. In addition, Metro conducted focus group research to elicit input from groups that may have historically been less prone to engage in online surveys, such as those with limited English proficiency as well as low-income, elderly, and minority populations. The survey results are provided in Appendix A.

During a 17-month-long outreach process, Metro conducted more than 130 meetings and interviews with external and internal key stakeholders. We were interested in hearing not only about transportation needs and concerns, but also, critically, about how these concerns relate to social and economic priorities, such as affordable housing, equity, jobs, and education. The interviews were essential for painting a true picture of the County's current transportation landscape, for articulating a compelling and comprehensive vision for the Plan, and for informing Metro's understanding of the specific actions and investments that would be needed to realize this vision. A list of the stakeholders consulted during the planning process is provided in Appendix B.

Metro also administered an agency-wide survey of its 10,800 employees to assess staff's readiness to implement planned initiatives and to learn how Metro leadership could better support and develop the agency's workforce to meet future mobility needs. More than 4,700 Metro employees responded to the survey.

In sum, this extensive outreach process was enormously valuable in identifying key trends and developing specific elements of Metro's Vision 2028 Plan for the next decade.

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KEY TRENDS

Understanding the overarching trends that will shape transportation needs in LA County going forward is critical to Metro's success in meeting those needs. Based on our outreach to stakeholders, transportation system users, and staff, we identified several key trends.
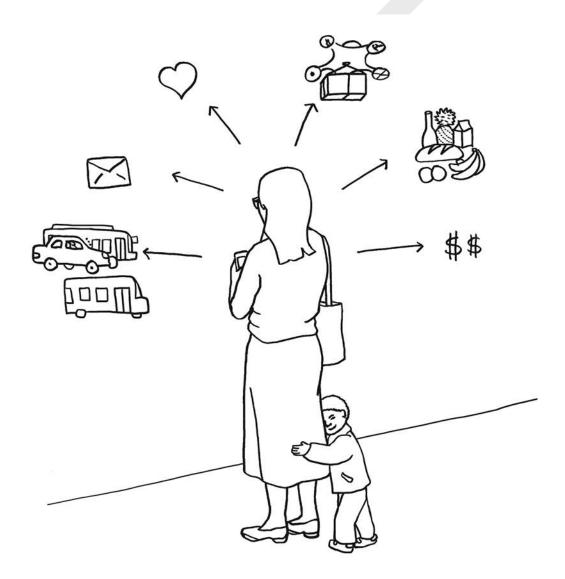
Continued growth in demand is straining an already oversubscribed transportation system. LA County is currently home to more than ten million people and its population is projected to grow further over the next decade. This means that an increasing volume of people and goods will need to travel on an already-congested transportation network. Overall consumption in the region is expected to intensify the conflicts between passenger and goods movement. Optimizing system capacity to accommodate new growth will be necessary to ensure that the region can meet these new demands and remain economically competitive in the global marketplace. Significant investments are needed, both to shore up an aging system of roadway and transit infrastructure as well as to expand and fully utilize available capacity to ensure continued delivery of safe and reliable transportation services.
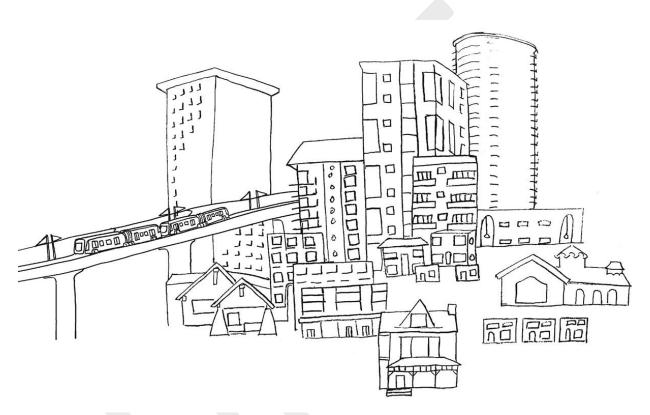
Increasing challenges in meeting the mobility needs and expectations of a diverse County. LA County is home to a diverse population with ever-evolving mobility needs and expectations. As a result, the transportation system and the delivery of mobility services must continue to adapt to changing demographics and consumer demands. For example, as the population ages, older people have different needs for access than younger people. Younger people have different expectations about the use of technology for their trips. For Metro, the task of communicating with the public about our services is made more complex by the diversity of people who use those services. The region's socioeconomic and ethnic diversity creates challenges to ensuring that the transportation system is inclusive and responsive to the needs of all people in LA County.

Technological innovations are changing the mobility landscape. Technological innovations are changing the way consumers access goods and services. They influence how businesses operate, create virtual worlds of social interactions and economic transactions that further reshape the mobility landscape, and change travel preferences and service performance expectations. The widely anticipated autonomous vehicle technology presents possibilities for safer, more efficient travel, but could also add to the appeal of solo travel in passenger vehicles. Metro is well-positioned to harness the power of technology innovations to enhance customer experience by offering new mobility services, integrating and optimizing the design of vehicles and infrastructure, increasing overall system efficiency, and improving the first/last-mile experience for transit users—all to better manage and serve the mobility needs of the public.

A shortage of affordable housing across the region exacerbates transportation challenges. As the LA County economy surges, rising housing costs are pushing many workers farther away from their jobs, imposing added strains on the transportation system and affecting quality of life for those impacted. Metro has the opportunity to work with local government, community partners, businesses, and institutions to support transit-oriented communities that are affordable for families of diverse income levels, particularly as we undertake an unprecedented expansion of the region's transit system. Metro also has the opportunity to leverage its resources and influence to help stabilize and support communities in which people have access to high-quality mobility options and can continue to reside in their changing neighborhoods.
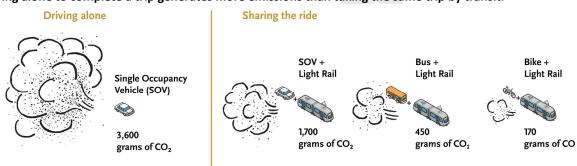
Failure to reform policies that favor solo driving will continue to add congestion and reduce mobility. Historically, transportation policies and investments in LA County and elsewhere have prioritized travel in private passenger vehicles at the expense of providing other high-quality travel alternatives. The result is an unequal transportation system that exacerbates the divide between those who have the access and means to drive and those who do not, while providing inadequate options for both groups. This system is not sustainable from an economic or environmental perspective. As more people turn to driving alone for speed and convenience, mobility for all travelers suffers due to the inefficient use of existing street space. Changing this paradigm and raising the quality of alternative transportation options is essential to delivering a system that provides better mobility for everyone. This means investing in attractive transit options that can carry more people in less space, clarifying policies on solo driving, and removing incentives that further exacerbate transportation inequities. Metro also recognizes the need for a transportation system that more harmoniously balances the movement of passengers and goods while maintaining speed and economic competitiveness. Moving forward we must align Metro's policies

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and investments across its portfolio of programs and services to provide more high quality transportation options for people and to manage demand from all users.

Achievement of our mobility goals has long-term ramifications beyond the next ten years. As transportation contributes nearly 40% of all greenhouse gas (GHG) emissions in California, and demand for trips continues to increase due to population and economic growth, Metro's ability to increase use of modes other than driving alone is integral to reaching the LA region's and State of California's ambitious climate goals. By providing more convenient, efficient, and appealing alternatives, Metro can move more people while reducing GHG emissions for each trip taken, significantly limiting the impact transportation has on the environment.

Driving alone to complete a trip generates more emissions than taking the same trip by transit.

Greenhouse Gas Emissions per Person per Trip. Units are approximate grams of CO2 equivalent from life-cycle assessment based on long-term emissions projections.Transit trips are based on average emissions over peak and off-peak times.

Mikhail Chester et al, "Infrastructure and Automobile Shifts: Positioning Transit to Reduce Life-Cycle Environmental Impacts for Urban Sustainability Goals", Environmental Research Letters 8, no.1 (2013). doi:10.1088/1748-9326/8/1/015041

A STRATEGIC PLAN FOR THE NEXT TEN YEARS

The Metro Vision 2028 Plan is organized around five goals that together advance our vision for a world-class transportation system that will efficiently and equitably serve the mobility needs of people and businesses in LA County. These goals are:

1. Provide high-quality mobility options that enable people to spend less time traveling;
2. Deliver outstanding trip experiences for all users of the transportation system;
3. Enhance communities and lives through mobility and access to opportunity;
4. Transform Los Angeles County through regional collaboration and national leadership; and
5. Provide responsive, accountable, and trustworthy governance within the Metro organization.
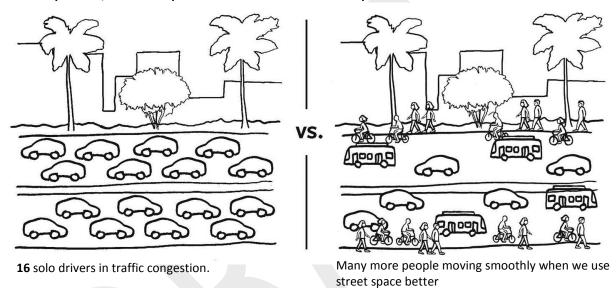
The sections that follow describe the specific initiatives and actions we have identified for achieving each of these goals, including, where applicable, benchmarks and targets that will help Metro measure progress. Both the goals themselves, and the action items identified to achieve those goals, reflect input gathered through the outreach process described previously. The Action Matrix at the end of the Plan summarizes the goals, initiatives, and actions for quick reference.

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Goal 1: Provide high-quality mobility options that enable people to spend less time traveling.

To achieve this goal, Metro will expand transportation options, improve the quality of its transit network and assets, and take steps to manage demand on the entire network. This includes leveraging resources and influence and working with public and private sector partners to provide a transportation system that is easy, convenient, and reliable for diverse users. Increased use of high-capacity mass transit, walking, bicycling, and sharing rides will allow the existing network to accommodate more trips while providing a higher level of mobility for residents and businesses. Specific actions and initiatives to advance this goal are described below.

Finite and precious, our street space can be better used. For example:

16 solo drivers in traffic congestion.

Many more people moving smoothly when we use street space better

1.1 To expand the transportation network and increase mobility for all users, Metro will:

<u>**Target infrastructure and service investments toward those with the greatest mobility needs**</u>.
For the ten million residents of LA County, access to opportunity requires access to transportation. Currently, however, vast disparities in access to high-quality transportation exist among neighborhoods and population groups in the region. These differences limit the ability of many residents to access jobs, housing, education, and health care. To address and overcome these disparities, Metro will begin by identifying gaps in the transportation system and then prioritize service and infrastructure investments to areas with the greatest need in terms of improving transportation options for the County's most vulnerable populations.

Metro has established an equity framework founded on the principles of comprehensive, broad, and inclusive community engagement. These principles will be embedded in all aspects of the agency's activities as we forge partnerships to plan and deliver mobility services and related infrastructure that addresses physical, social, and economic barriers to access. An overview of the equity framework is provided in Appendix C.

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Expand the transportation system as responsibly and quickly as possible. Measures R and M provide funding for investments to strengthen and expand LA County's transportation system, as well as to support ongoing operations and maintenance so that the system can continue to perform at the highest levels over time. Metro is committed to delivering projects in Measures R and M as quickly as possible without adversely affecting other services and responsibilities. Our Long Range Transportation Plan update process will be used to forecast available revenues to meet the timeline for completing those projects. As a start, LA's commitment to host the 2028 summer Olympic Games creates a strong added incentive to improve mobility across the region quickly. Metro has the opportunity to advocate for accelerated resources, particularly from the state and federal government, to deliver the 28 projects that have been identified for improving the transportation system before the start of the Games.

1.2 To improve LA County's overall transit network and assets, Metro will:

Invest in a world-class bus system that is reliable, convenient, and attractive to more users, for more trips. Metro's bus network is the foundation of our public transport system and carries over 70% of our transit passengers. However, our 2017 customer satisfaction survey highlights several opportunities for attracting and promoting increased use of the network. Despite proximity to bus services, many survey respondents did not feel that buses offered them a viable form of transportation. Many expressed concern that bus travel was too slow and took too long to get them where they wanted to go. Respondents attributed this issue to buses operating on congested streets, being stuck at traffic lights, and lacking dedicated lanes that would prioritize bus travel. There was also concern about the reliability and convenience of trips that require multiple transfers, since the wait time between transfers can greatly increase travel time uncertainty and overall trip time. Increasing congestion on local streets has significantly degraded the performance of Metro bus routes in recent years, causing substantial inconvenience to transit passengers and increasing Metro's costs to maintain the same levels of service.

To address the travel time and reliability concerns we heard in the customer survey, Metro will prioritize significant investments to improve the performance and overall user experience of our bus network over the next ten years, including a 30% improvement to the system-wide average bus speed from the current 11 mph. We will collaborate with municipal partners and other transit operators to dedicate the resources necessary to reclaim street space in order to maximize people throughput over vehicle throughput. Exclusive lanes will be assigned to high capacity vehicles, and passengers who are willing to share rides will be rewarded. Metro will also take a more aggressive approach to identifying and mitigating congestion hot spots that inhibit faster transit operating speeds on the network. In sum, we will work to vastly reduce trip times for bus passengers by finding ways to move buses swiftly through congested areas. Complementing this effort is our NextGen Bus Study, which will reimagine the bus network to improve mobility for residents in the County. Our current bus network has not had a major overhaul in 25 years. Since that time, LA County has added over a million residents, many local communities have transformed, and travel patterns have changed.

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For the local bus network, Metro's aim is to achieve a minimum average speed of 15 miles per hour (mph) and an aggregate minimum service frequency of 15 minutes along each service corridor. Where there would be significant challenges to delivering a minimum service frequency of 15 minutes, Metro will explore opportunities to provide more demand responsive services as a better alternative for customers.

Metro will also make a number of improvements aimed at increasing the speed and carrying capacity of the entire bus system.

- Over the first five years of this Plan, Metro will identify and implement measures, such as signal priority, queue jumps, and enforcement of exclusive lanes, to achieve a minimum average speed of 18 mph on Rapid bus routes, in order to provide faster travel than on local bus routes.

- In the second five years of this Plan, Metro will begin converting strategic Metro Rapid corridors to bus rapid transit (BRT) corridors as part of an effort to establish a network grid of high-frequency, high-capacity, fast bus service across LA County.

- Metro will expand the BRT program as planned along major arterials and highways throughout the County and will use Metro funds to provide incentives for regional partners to accelerate the delivery of elements that are critical to BRT success, such as signal priority and exclusive lanes.

Any savings from improving bus network efficiency will be reinvested in bus services for LA County.

Partner with Metrolink to increase the capacity of the regional transportation system. Regional commuter rail services in LA County are provided on behalf of Metro by the Southern California Regional Rail Authority (SCRRA) under the brand name Metrolink, which serves people traveling to LA County from throughout the Southern California region. Metrolink trains run on routes that parallel congested highway corridors and offer the traveling public an alternative solution to driving alone. However, service is at capacity due to the constraints of the existing infrastructure, such as single-track sections and limited station capacity. This affects the frequency of services on all lines. Metrolink service is further constrained by operating agreements with freight railroads and the freight traffic that shares tracks on parts of the network. Metro will work with SCRRA to leverage the potential of this critical transportation resource by exploring opportunities to provide more frequent and reliable services, improving customer satisfaction, and supporting better transit connections throughout the network.

Optimize the speed, reliability, and performance of the existing system by revitalizing and upgrading Metro's transit assets. To deliver world-class transit service, transit assets must be maintained in a state of good repair. Over the next ten years, Metro will build a state-of-the-art, condition-based asset management practice for maintaining all its mission-critical assets to the highest performance standards and upgrading to current technologies. This will significantly reduce trip disruptions on our buses and trains and improve the integrity of the overall network.

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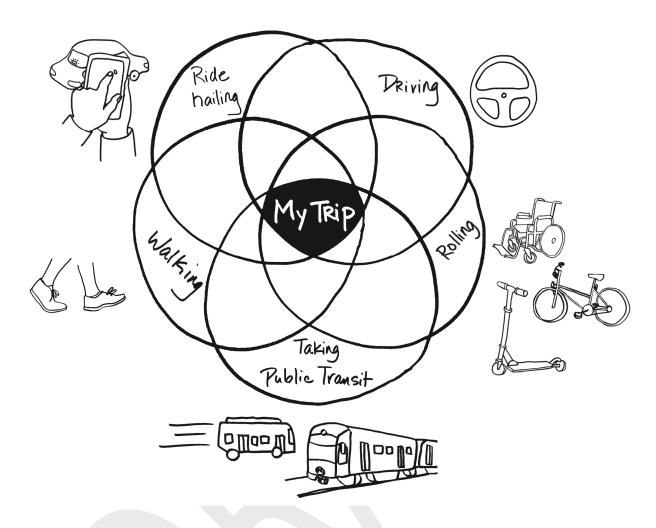
Improve connectivity to provide seamless journeys. A major opportunity exists to improve customers' overall trip experiences by improving the connectivity of transportation services. A number of customer survey respondents indicated that access to and from Metro rail stations made it challenging to use rail service. Transit customers, even those with access to bus service, reported challenges resulting from the need to transfer between routes.

To improve connectivity and service performance across the entire transportation network, Metro will measure and improve upon a number of factors:
- Distance customers must travel to access a high-quality service;
- Number of transfers to complete a trip;
- Time to wait at each transfer point;
- Quality of the integration and coordination of mobility services, regardless of mode or provider (e.g., rail and bus connections, coordination of services between Metro and municipal transit operators, improvements at transfer points between transit lines);
- Level of understanding and comfort with using the transit system (this issue is discussed further as part of Goal 2, improving user experience);
- Quality, content, and accuracy of information provided to users for their entire trip, (likewise discussed as part of Goal 2); and
- Existence and quality of transportation infrastructure, such as sidewalks, bikeways, and drop-off zones, that help facilitate access to transit.

As a major funder of many transportation providers in the region, Metro will leverage its resources to provide incentives for public and private sector partners to connect and integrate mobility infrastructure and services with the aim of delivering more efficient and seamless journeys across the County. We will update our design standards to improve connectivity between transit lines and connecting modes for all transit facilities. All transit corridors under study will include plans related to creating clear, comfortable, and user-friendly transfers at major connection points.

Improve safety on the transit system and reduce roadway collisions and injuries. As a transit operator and funding partner for streets and highways, Metro plays a significant role in transportation safety. Metro will continue to use improvements in technology, equipment, and infrastructure to improve safety on its transit network. In addition, Metro's funding decisions will prioritize projects that improve safety and reduce conflicts between the different users of the roadway while improving system integration and maximizing person throughput. Finally, Metro will develop and execute a legislative strategy to improve passenger and transit vehicle safety through policy and regulatory actions at all levels of government.

1.3 As part of an effort to manage transportation demand through fair and equitable pricing structures, Metro will:

Develop simplified, sustainable, and comprehensive pricing policies to support the provision of equitable, affordable, and high-quality transportation services. Sustainable pricing of transportation services has long posed challenges for government agencies around the world. Metro will assess new pricing models to develop a simplified, fiscally sustainable, system-wide approach to pricing that addresses affordability concerns for low-income and disadvantaged populations while also providing better mobility and security for all users across Metro's portfolio of transportation services. Reforms to our pricing strategy must balance revenue, equity, security, and ridership concerns. Over the next five years, Metro will conduct a comprehensive pricing study to develop policy recommendations consistent with these goals.

Implement the ExpressLanes Tier 1 network within the next ten years. Travel time uncertainty is a significant factor in people's choice of transportation modes. The Metro ExpressLanes Program can help mitigate time uncertainty by providing solo drivers a choice to pay a toll in order to save time. This program currently operates on the I-110 and I-10 freeways. Not only will ExpressLanes

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provide drivers with options for a reliable trip experience, it will also improve the operational efficiency of existing highway lane capacity and improve the performance of Bus Rapid Transit services that run along such corridors. Planning studies are underway to add new ExpressLane corridors in the County that will eventually create a network that benefits users system-wide.

In the future, it may be possible to reduce capital investment needs through advances in technology (i.e. use of apps to pay for tolls) and the use of innovative financing models to accelerate the implementation of the planned ExpressLanes Tier 1 network within LA County. Revenue generated from the ExpressLanes Program will be reinvested to provide improved, high-capacity mobility services throughout the County.

Test and implement pricing strategies to reduce traffic congestion. Congestion in LA County is prevalent throughout the day and occurs on arterial streets as well as on regional highways. To address this problem, Metro will test strategies for managing demand in the most traffic-clogged areas of the County. Such strategies will seek to simultaneously improve transportation equity by applying excess revenues to expand high-quality rapid transit options. Metro will conduct a study to identify the best locations for proof-of-concept projects, with the intent to deploy demonstration projects within five years.
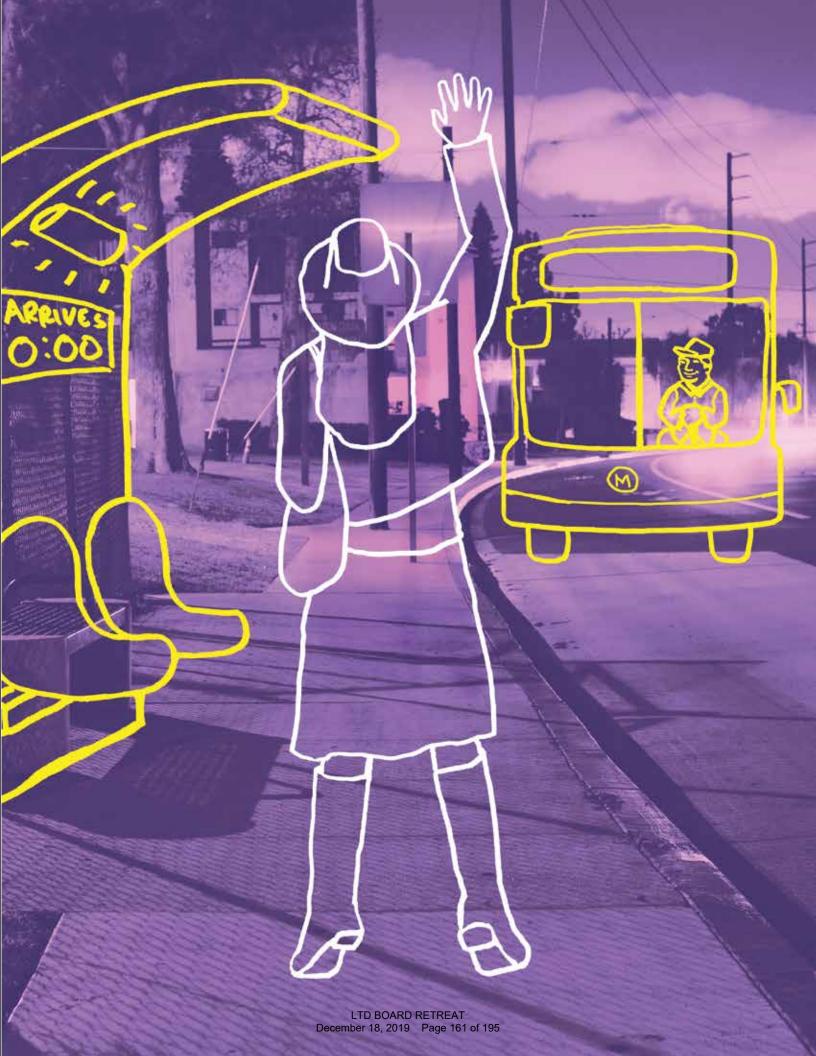
Manage congestion and reduce conflicts between the movement of goods and people on streets and highways. LA County is home to the nation's largest container port complex, which handles approximately 40 percent of all containerized imports to the United States and serves as a critical transport link for U.S. exports. Movements between the County's ports and intermodal transfer, warehousing, and distribution facilities located along its major north-south and east-west transportation corridors generate high volumes of truck traffic on highways and connecting local arterials. Resulting congestion and traffic delays adversely affect businesses' ability to get goods to market quickly and cause economic losses to the County and the nation as a whole.

Meanwhile the growth of home delivery services is adding to traffic in urban areas, further straining the County's local road networks. This trend is also leading to increased interactions between delivery-vehicle drivers and other travelers (including bus passengers, pedestrians, bicyclists, and motorists), impacting transit operations, exacerbating parking issues, and elevating the need for curb management on local streets.

In sum, rising demand for the movement of people and goods increases congestion and affects safety, efficiency, and capacity on the County's critical freight corridors and local streets. Metro's aim is to ensure that all transportation system users can safely and effectively coexist despite the potential conflicts between them. Strategies to resolve these conflicts will include the use of technology and pricing to improve safety and operational efficiencies in high-volume corridors while increasing rapid transit capacity as a way to move large numbers of people through these corridors more quickly. Metro will also consider strategies that involve pricing all vehicle travel to manage congestion.
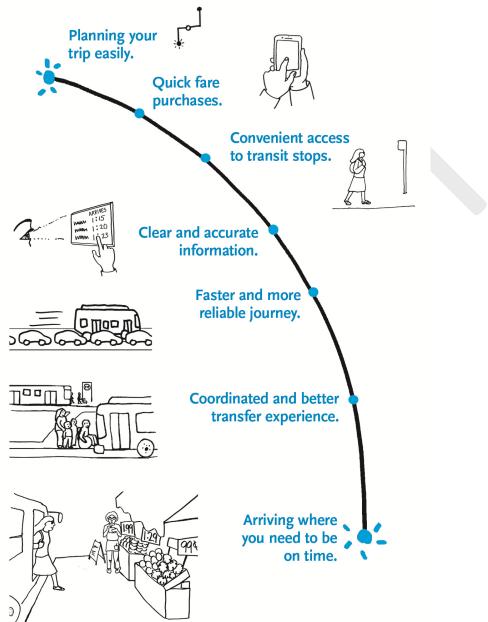
Finally, Metro commits to working in partnership with the Ports of Los Angeles and Long Beach, Caltrans, local municipalities, and private freight operators to leverage the resources necessary to improve operational conditions on all the County's critical freight corridors as well as on local streets.

<u>Explore opportunities for expanding access to shared, demand-responsive transportation options for everyone.</u> The prevalence of transportation networking companies (TNCs), such as Uber and Lyft, is generating new demand-responsive travel options for many people. However, these types of services are not accessible to all residents, add to congestion and pollution, and typically operate under different rules than other providers, which remain subject to strict regulations of the past. Metro will begin looking at possible legislative and regulatory strategies for leveling the playing field to preserve competition, reduce negative effects, and ensure access to a variety of transportation options for everyone.

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Goal 2: Deliver outstanding trip experiences for all users of the transportation system.

Metro will endeavor to improve trip experiences for all users of the transportation system, recognizing that a world-class system, serving a world-class metropolis, should be attractive, affordable, efficient, safe, convenient, and user-friendly. Specifically, Metro will take actions to improve security, ease of use, and access to accurate travel information on the region's transit systems, and improve customer satisfaction at all customer touch points, as described below.

Planning your trip easily.

Quick fare purchases.

Convenient access to transit stops.

Clear and accurate information.

Faster and more reliable journey.

Coordinated and better transfer experience.

Arriving where you need to be on time.

2.1 Metro is committed to improving security. Consistent with that commitment, Metro implemented a new staffing and deployment model in 2017 that is designed to increase the

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visibility and effectiveness of security and law enforcement personnel at Metro facilities. Metro's objectives are to:

- Prevent crime,
- Reduce the transit system's vulnerability to terrorism, and
- Enforce Metro's Code of Conduct, as well as the payment of fares.

To achieve these objectives, Metro is relying on a multi-layered, integrated security program that comprises technology, people, and partnerships. Our first line of defense is prevention. By actively riding buses and trains, and by conducting foot patrols at stations, the deployment strategy aims to deter criminal activity by maintaining high law enforcement visibility, system-wide. Metro also plans to install state-of-the-art technologies for improved video surveillance and access control systems. Metro is also working with social service agencies to provide outreach to persons experiencing homelessness or suffering from mental illness. Connecting these populations to social services will have a positive impact on the overall experience of transit users.

Partnering with communities is a key component of Metro's plan and is critical to improving the security environment. As Metro continues to identify ways to enhance security, we will engage in community outreach to help inform our strategy to prevent sexual harassment, transit-related crime, and fare evasion. Metro's team of civilian fare inspectors will undergo implicit bias training, and law enforcement partners will increase their community policing efforts. Metro is committed to implementing a security and policing model that enables all transit users to travel anytime and anywhere, without fear.

2.2 Metro is committed to improving legibility, ease of use, and trip information on the transit system. Whether planning a trip, paying a fare, finding a stop, or sharing a ride, customers need convenient and seamless options for planning and completing their travel. In Metro's 2017 customer satisfaction survey, respondents asked for clear, timely, and accurate information about arrival times, bus lines, and transfers between transit services.

In coming years, Metro will work to align information across all its technology platforms to ensure that customers can make informed travel decisions and easily access accurate trip information. We will coordinate with other municipal and local transit operators, Metrolink, and Access Services to streamline transit information across the different providers. In addition, Metro is in the process of equipping its bus fleet with a cellular data system that will vastly improve arrival time predictions and make more information available to riders through on-board WiFi. This capability will be expanded to all of Metro's rail services so that accurate information is consistent across all modes.

Metro will also work to improve the transfer experience, focusing on four guiding principles from our Transfers Design Guidelines:

- Efficiency, which relates to the rider's path from transit door to transit door and to how transit stations/stops are located in relation to each other.

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- Accessibility, as defined by clear paths and boarding areas for riders of all abilities and accommodations for the different ways people travel (e.g. alone or with bicycle, wheelchair, stroller, etc).
- Clarity, with respect to the quality of information and wayfinding supports provided to help users navigate the station area and greater transit network.
- Comfort, in terms of the quality of the transit environment, the amenities provided, and users' overall perceptions of safety and security.

To streamline trip payment for all travelers within the next five years, Metro will integrate fare collection for all mobility service providers through our Transit Access Pass (TAP) card program. Metro will leverage TAP's planned enhancements while positioning our agency to take advantage of rapidly evolving technology and fare payment options over the 10-year horizon of this Plan. Along with this program, Metro will implement a new mobile application that integrates trip planning and payment for all services on a single platform. Beyond five years, Metro will establish an open payment system that allows cardholders to use TAP for small purchases of other goods and services, in addition to mobility services.

2.3 Metro will improve customer satisfaction at all customer touch points. Touch points include when customers are interfacing with Metro's trip planning tools and website, using mobility services, waiting at a bus stop or train station, contacting Metro's customer care service center, or interacting with Metro personnel in other ways. Metro plans to dedicate staff resources to oversee customer experience and will develop a comprehensive approach for improving customer satisfaction, focusing on several areas of opportunity:
- Develop a unifying vision and strategy for enhancing the customer's experience,
- Improve customer journey and touch points, and
- Use data analytics to benchmark and measure system performance in meeting customer satisfaction targets.

Metro will regularly seek feedback through customer engagement to improve existing products and services and develop new ways to meet evolving customer needs.

WESTBOUND →

Metro

Goal 3: Enhance communities and lives through mobility and access to opportunity.

Transportation plays an integral role in supporting vibrant, prosperous communities and in enabling individuals and families to access jobs, essential services, education, and other social, cultural, and recreational opportunities. Through active collaboration with public- and private-sector partners, Metro will continue to work to make LA County's transportation system more accessible, inclusive, and responsive to the needs of the diverse communities it serves.

3.1 To lift up local communities, Metro will create jobs and career pathways in transportation. Metro is already deploying a number of strategies to ensure that its programs and services generate direct opportunities for LA County residents to contribute to their communities and the local economy.

For example, Metro is rolling out the Workforce Initiative Now-Los Angeles (WIN-LA) Program, a groundbreaking workforce development program that promotes career pathways in the transportation field, including in such occupations as construction, operations and maintenance, administration, and professional services. The program will support participants in areas such as life skills development, skill set enhancement, and educational attainment services. WIN-LA will also increase resources for the training and placement of qualified individuals in "hard-to-fill" positions within Metro and the transportation industry.
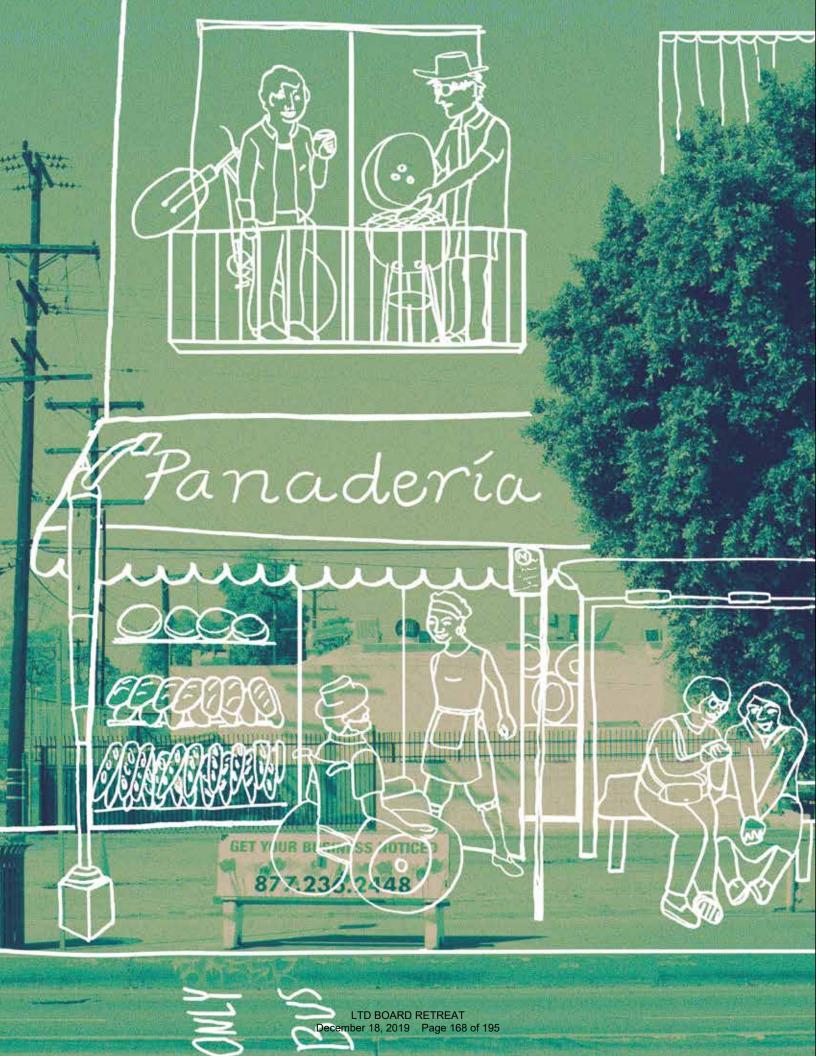
Metro is eager to collaborate with private-sector employers, community colleges, labor organizations, and others to implement WIN-LA. We will also work with federal funding partners to support targeted and local hiring in the interests of advancing economic opportunities and benefits for communities in LA County.

Finally, Metro will develop a transportation-focused school curriculum to extend the career pipeline to elementary, middle, and high school students. This curriculum will be implemented as part of a specialized school in Los Angeles that is designed to cultivate the transportation workforce of the future.

3.2 Metro will leverage its transit investments to catalyze transit-oriented communities and help stabilize neighborhoods where these investments are made. Transit-oriented communities (TOC) maximize equitable access to the transit network through land use and community development policies, which are integrated with transportation infrastructure and service delivery. As further defined by Metro's TOC Policy, we will actively promote vibrant, healthy, complete communities that support transit use by emphasizing:

* Development and retention of affordable housing;
* Land use regulations that promote housing development along with a mix of uses that minimize the need for residents to travel long distances to access jobs, goods, and services; and
* Transportation infrastructure and services that prioritize safe and efficient movement of people and allow for seamless connections between modes.

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Metro will work to achieve these objectives by:

- Working aggressively to achieve 35% affordable housing on Metro-owned land;
- Actively partnering with municipalities, developers, community-based organizations, philanthropic organizations, and other willing partners to fund, implement, enable, and incentivize investments that lead to TOCs;
- Integrating TOC considerations into each stage of the transit corridor process, from early planning studies through engineering and design, to ensure that community needs are addressed holistically to deliver high quality transit services that improve mobility (social, economic, physical) for the communities we serve.

3.3 Metro is committed to genuine public and community engagement to achieve better mobility outcomes for the people of LA County. Using our equity framework as a guide, Metro will invite a diverse range of voices to participate in decision-making about future service and infrastructure investments. This includes proactively reaching out to those who have remained at the margins of decision-making in the past, including underserved communities and the organizations that represent them. We will increase efforts to establish multiple forums and methods to engage communities meaningfully, which may include in-person and virtual meetings and townhalls, social media platforms, community surveys, and a variety of other methods specific to the context and needs of each community.

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Goal 4: Transform Los Angeles County through regional collaboration and national leadership.

Metro has been entrusted with improving LA County's transportation system, thereby helping the region to realize its full economic potential and delivering greater access to opportunity and improved quality of life for the County's ten million residents. Achieving the vision and goals laid out in this Plan will require cooperation, coordination, and collaboration among Metro and its many partners and stakeholders.

4.1. Metro will work with partners to build trust and make decisions that support the goals of the Strategic Plan. While Metro owns and operates significant components of the County's transportation system, the remaining elements, particularly streets and highways, are governed by other jurisdictions. Many transportation services in the region are also owned and operated by a combination of public and private providers. Although Metro does not direct the actions of its partners, Metro does distribute a substantial portion of the County's transportation funds to these organizations. In this capacity, Metro can provide incentives for partner organizations to help in delivering the mobility agenda described in this Plan.

Transportation interfaces with quality of life issues, such as equity, economic opportunity, gentrification, displacement, affordable housing, homelessness, environment, public health, and access to education and health care. Beyond its core transportation responsibilities, Metro cannot address the broader challenges facing our community alone. Partnerships with other public, private, and non-profit organizations are essential to identify and implement effective solutions.

Metro's partnerships will be guided by several principles:

- Metro will work to build trust with partners and stakeholders across the County in the interests of sharing data and information for transparent, inclusive decision-making.
- Metro will encourage municipal partners to adopt transit-supportive land use policies, including appropriate parking, urban design, and housing regulations.
- Metro will work closely with municipalities, Councils of Government, Caltrans, municipal and local transit operators, Metrolink, and Access Services to implement holistic strategies for advancing mobility goals in LA County.
- Metro will incentivize partners to coordinate resources and cooperate with Metro to improve multimodal transportation options for all users.
- Metro will seek opportunities for co-investments with public and private sector partners where both risk and reward are shared proportionately between partners.

Historically, Metro has assumed a de facto role in attempting to mitigate some of these challenges. However, to realize its strategic goals, Metro must engage the participation of stakeholders across the region and play a supporting role where the governing authority lies with other organizations. Leveraging these partnerships, Metro can take deliberate steps to lead where it has the authority, offer guidance where it provides funding, and support others where there are additional opportunities to shape outcomes that benefit the broader public.

4.2 Metro will help drive mobility agendas, discussions, and policies at the state, regional, and national levels. As we implement this Plan over the next ten years, Metro will engage partners throughout government and in the private sector to test ideas and solutions for delivering better, faster, smarter, and more cost-effective transportation services to our customers. We will work with the California legislature and the U.S. Congress to explore new or enhance existing cost-sharing models, enact supportive policies and, where appropriate, remove bureaucratic red-tape to bring innovative ideas to fruition. With respect to new technologies that have yet to be regulated, such as autonomous vehicles, Metro will work to help establish and enforce policies aimed at shaping their deployment in ways that advance the goals in this Plan and protect the public interest.

To focus its efforts for the duration of this Plan, Metro will develop a five-year legislative strategy and track progress on an annual basis. Metro will also continue building coalitions with local and regional organizations to address common issues at the state and national levels.

Goal 5: Provide responsive, accountable, and trustworthy governance within the Metro organization.

To deliver the best possible mobility outcomes, Metro itself—as an organization—must be positioned to succeed. Responsive, accountable, and trustworthy governance is critical to continuing the building of credibility with decision-makers, public and private sector partners, customers, and employees. By improving its business practices, Metro can perform more effectively and adapt more nimbly to the changing needs of its customers.

5.1 Metro will leverage funding and staff resources to accelerate the achievement of goals and initiatives prioritized in this Strategic Plan. This includes aligning all of the agency's business processes, resources, plans, and tools with its strategic vision, goals, and initiatives and ensuring that financial decisions, annual budgets, and the update of Metro's Long Range Transportation Plan support the Metro Vision 2028 Plan. It also means aligning human capital and financial resource decisions to reflect the Plan's vision and priorities. This realignment will occur in a phased approach over the next several years to allow for the completion of initiatives that are already in progress.

5.2 Metro will exercise good public policy judgment and sound fiscal stewardship. Although LA County has seemingly unlimited transportation needs, we operate in an environment of finite resources. This means Metro must continuously prioritize limited resources to provide the most value to the public while maintaining a high standard of fiscal responsibility. We will be transparent about the tradeoffs of these budget decisions and use best practices to assess the full life-cycle costs of infrastructure and service investments, particularly as we move to implement projects made possible by Measures R and M. Metro is keenly aware of the need to allocate adequate resources for operation and maintenance over the life of our equipment and infrastructure. We will not build unless we can also afford to maintain.

Periodically, Metro will evaluate existing service investments to ensure that we are continuing to offer high-quality mobility options across the County. The metrics used to assess service quality will extend beyond service frequency and coverage to include performance outcomes such as responsiveness and productivity. Metro will preserve service levels, quality, and performance to the greatest extent possible, especially during periods of declining or uncertain revenues. When revenues fall short of projections, investments in service continuity and maintenance to preserve all mission-critical operations in a state of good repair should take precedence over other investments.

Metro strives to achieve the highest return on investment for taxpayers and acknowledges that "return" is not always best measured in monetary terms. The value that Metro provides in transportation services is defined by more than just fare box recovery and ridership. As passenger miles traveled in LA County continue to grow, strains on the transportation system can be expected to increase. Metro will regularly evaluate its service offerings to ensure the lowest system impact for the highest gain in mobility. Metro will consider multiple measures of success to demonstrate value to the public, such as:

- Productivity of service in terms of people throughput
- Passenger miles traveled relative to vehicle miles traveled

Over the next two years, Metro will align the policies governing its service investments with the priorities and objectives of this Plan and will incorporate the measures used to assess Metro services in an agency-wide program for performance management and continuous improvement.

Metro operates under the philosophy that the assets we acquire and develop on behalf of LA County taxpayers should generate maximum value and benefit to the public. As part of this obligation, Metro will explore, evaluate, and implement revenue generation and value creation initiatives to generate additional resources needed to support operations, maintenance, and reinvestment in the County's mobility system.

5.3 Metro will apply prudent commercial business practices to create a more effective agency.
Flexibility in our governance structure, policies, and processes will allow Metro to be nimble and to quickly realize the benefits of new opportunities that arise in the ever-changing transportation landscape. Over the next ten years, Metro will look at its internal processes to remove unnecessary procedures and decision ladders that stand in the way of being an agile, high-functioning organization. We will explore new business models, technologies, and tools for delivering services better, faster, and more effectively and empower our staff with increased decision-making authority where appropriate. By applying prudent commercial business practices, Metro can use resources more efficiently, generating cost-savings that we will reinvest to improve service for customers. Other organizational improvements and reforms will free up capacity for innovation and strategic thinking and allow Metro to cultivate a workforce that can more effectively advance its mobility goals.

Over the next five years, Metro will develop a program of rigorous performance management and continuous improvement that includes streamlining business processes. One aim of this program will be to greatly improve the quality, management, and use of data to help Metro make prudent decisions in all parts of the organization. Key performance indicators and targets will be scrutinized and updated to ensure that they align with desired outcomes for both customer-facing services and internal business processes. Metro will identify and incorporate global best practices and will benchmark its performance against that of best-in-class organizations.

Information exchange is essential to meeting Metro's commitments to the public. We intend to be transparent in our processes, decision-making, and performance and to share information about our progress with the public along the way.

5.4 Metro will expand opportunities for businesses and external organizations to work with us.
The number of new players in transportation continues to increase. Unconventional firms now overlap with traditional providers, enhancing access to innovation, but challenging Metro's ability to respond quickly to the rapid pace of change. To maximize our engagement with traditional and non-traditional business partners, Metro will re-examine contracting rules, policies, and regulations to minimize requirements that unnecessarily restrict creativity and create barriers to

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entry for emerging and small businesses. We will also survey the small business community on a regular basis to assess the impact of changes we make to our processes and procedures.

Metro will continue to promote its Unsolicited Proposal Policy as another mechanism for introducing new ideas and business models and will refine this process to focus on solutions for specific problems. Expanding the network of businesses that can contract with Metro will help drive innovation, support market competition, and generate better mobility solutions for the people of LA County.

5.5 Metro will supplement and strengthen programs to address workplace safety, security, and employee wellness. Supporting the physical and mental health and wellbeing of Metro's workforce is of the utmost importance. To that end, Metro will continue to invest in holistic programs for worker safety and wellness throughout its operations, with a special focus on enhancing security for frontline employees and improving worker safety at maintenance facilities and construction sites. These efforts will address all aspects of worker safety and security, including prevention first, incident response, and post-incident support and care.

5.6 Metro will build and nurture a diverse, inspired, and high-performing workforce. Metro recognizes that the work its employees do every day, in every single position, has a potentially significant impact on quality of life in LA County. Our employees are foundational to our success and we are committed to hiring the best people and nurturing them throughout their careers at Metro.

Over the next few years, Metro will streamline and improve recruitment processes to quickly hire the best and the brightest workers at all levels of the organization. We will also continue to develop our Career Pathways program to provide leadership and supervisory training and build a leadership capacity within the organization.

The 2017 Metro Team Survey provides a benchmark for employees' feelings about their work environment. Based on results from the survey, Metro is taking action to improve communications, safety, trust, and diversity and inclusion across the organization. We will continue to seek feedback from employees to improve their work experience and establish a culture of continuous workforce improvement.

In addition, Metro's Senior Leadership Team will cultivate a work environment that encourages innovation, independent thinking, and respect throughout the organization. Sharing this philosophy will help establish Metro as a workplace of choice that thrives on the exceptional talent to be found within the organization and in the transportation industry at-large.

CONCLUSION

To successfully and sustainably meet the transportation needs of LA County in the decades to come, existing resources must be used more effectively. The current system is inefficient: limited street space is largely given over to single-occupancy vehicles, which are too often stuck in traffic, while the most disadvantaged members of our community are confined to a patchwork of

transportation options that frequently fail to meet their basic mobility needs. Changing this state of affairs is central to transforming LA County into a happier, more vibrant, more prosperous, and more equitable place to live and work.

This Plan describes the aggressive, long-term initiatives required to meet our region's ambitious mobility goals. Only by taking bold action can we make lasting, positive impacts for our region and our citizens. It is a collective effort requiring participation from all players in the region, making leadership and partnership essential to achieving these goals.

Fulfilling and sustaining LA County's economic and social promise will mean that our future transportation system can be a bridge to prosperity. As we have described through this Plan's five goals, there is no single solution for our transportation challenges; we must tackle them from several different angles using a variety of strategies. Accomplishing these mobility goals will take leadership, partnership, and widespread support of the vision for our mobility future. We must summon the courage and political will of our elected leaders as well as the support of the public. We will need a higher tolerance for risk and greater perseverance to get through the inevitable challenges. Above all, we must relentlessly pursue this vision together because our future depends on it.

This Plan is about changing how Metro does business and about putting customers at the heart of our operations. The aggressive proposals we have put forward reflect a desire to cultivate a new relationship with all the County's residents. Fully achieving our core goal of delivering convenient, efficient travel options for everyone, at all times, on all modes, may take longer than a decade. But over the next ten years, we believe we can make substantial progress consistent with the needs and priorities our customers have expressed.

Time is a precious commodity, and it must be valued accordingly. Transforming travel in LA County is all about giving people more time to focus on the things that matter most to them. You, the transportation system user, are at the heart of this journey, and we hope you will join us as we embark, together, on building a better transportation future for LA County.

ACTION MATRIX
Summary of Actions

Actions	Measure	Timeline
Vision: Double the total usage of transportation modes other than driving alone, including transit, walk, bike, shared-ride and carpool modes.		
Establish baseline mode share for all trips	Mode share benchmark and improvements over time	Benchmark in 2019, periodic tracking of trends
Establish mobility standards, benchmark current condition, and identify gaps **• Ensuring that all County residents have access to high-quality mobility options within a 10-minute walk from home;** **• Reducing maximum wait times for any trip to 15 minutes during any time of day;** **• Improving average travel speeds on the County's bus network by 30 percent; and** **• Providing convenient and dependable options for bypassing congestion on streets and highways.**	• % households within 10-minute walk of high-quality mobility options • Average wait time for services by mode • Average travel speeds for each class of bus service compared to benchmark • Average level of service in managed lanes measured as function of time of day and day of week.	2 years for benchmark data and gap analysis
Goal 1: Provide high quality mobility options that enable people to spend less time traveling.		
Initiative 1.1 - To expand the transportation network and increase mobility for all users, Metro will:		
Target infrastructure and service investments toward those with the greatest mobility needs.		
* Implement equity framework and adopt performance metrics; incorporate into practices at Metro	Adherence to performance metrics	2 years
Expand the transportation system as responsibly and as quickly as possible.		
* LRTP schedule for Measures R and M	Progress toward project completion, compared to financial forecast	Ongoing
* Advocate for accelerated resources, particularly from the state and federal government, to deliver the 28 by '28 projects	Progress toward project completion	10 years
Initiative 1.2 - To improve LA County's overall transit network and assets, Metro will:		
Invest in a world-class bus system that is reliable, convenient, and attractive to more users, for more trips.		
* Allocate resources in 10-year Strategic Budget Plan for World Class Bus implementation	Availability of resources to accomplish World Class Bus Initiatives according to schedule for completion	Annually
* Improve Metro Local travel speeds to 15 mph	Improvements to average travel speeds compared to baseline	5 years
* Improve Metro Rapid speeds to 18 mph	Improvements to average travel speeds compared to baseline	5 years
* Convert strategic Metro Rapid corridors to bus rapid transit corridors	Adherence to implementation schedule	5-10 years
* Identify congestion hot spots for critical/core bus corridors	Hot spot mitigation plan completion	2 years
* Implement transit priority measures (e.g., signal priority, queue jumps, exclusive lanes, and congestion hot spot mitigations) for bus corridors.	Funding/resource allocation in annual budget	5 years
* Align transit network with future land use plans to determine best mitigation approaches to improve bus operations.		5 years

Actions	Measure	Timeline
Partner with Metrolink to increase the capacity of the regional transportation system.		
* Work with the Southern California Regional Rail Authority (SCRRA) to provide more frequent and reliable Metrolink services, improve customer satisfaction, and support better transit connections throughout the network.	Customer satisfaction and utilization of Metrolink services	5 years
Optimize the speed, reliability, and performance of the existing system by revitalizing and upgrading Metro's transit assets.		
* Build a state-of-the-art, condition-based asset management practice for maintaining all mission-critical assets to the highest performance standards and upgrading to current technologies.	Funding/resource allocation in 10 year Strategic Budget Plan and annual budget	5 years
Improve connectivity to provide seamless journeys.		
* Define guidelines for performance outcomes of full transportation network	Define guidelines for performance outcomes	1 year
* Update funding guidelines for local and municipal transit providers to align with achieving goals of Metro Strategic Plan	Modifications to local and municipal transit services to align with the transportation network per the Metro Strategic Plan	2 years
* Incentivize Metro funding program recipients to contribute to achieving the mobility goals of the transportation network per the Metro Strategic Plan	Progress toward achieving mobility goals of transportation network; effectiveness of funding programs	1 year
* Update Metro design standards to improve connectivity between transit lines and connecting modes for all transit facilities	Update Metro design guidelines	2 years
* Plans to create clear, comfortable, and user-friendly transfers at all major connection points	Progress toward incorporation into transit corridor studies	2 years
* Collaborate with municipal partners to establish policies to prohibit curb congestion in bus corridors	Improvement to bus operations	5 years
Improve safety on the transit system and reduce roadway collisions and injuries.		
* Use improvements in technology, equipment, and infrastructure to improve safety on Metro transit network	Measure before and after effects of safety improvements and enforce ongoing reporting	
* Update funding program criteria to prioritize projects that improve safety and reduce conflicts between different users of the roadway while improving system integration and maximizing person throughput	Measure before and after effects of safety improvements and enforce ongoing reporting	
* Develop and execute a legislative strategy to improve passenger and transit vehicle safety through policy and regulatory actions at all levels of government	Decrease in rates of fatalities and injuries on transportation system	
Initiative 1.3 - As part of an effort to manage transportation demand through fair and equitable pricing structures, Metro will:		
Develop simplified, sustainable, and comprehensive pricing policies to support the provision of equitable, affordable, and high-quality transportation services.		
* Conduct comprehensive transportation system pricing study to determine options for meeting four goals of revenue, equity, security, and ridership	Completion of study and staff recommendation on strategy	5 years
* Implement transportation system pricing policy based on study	Improvement to trends for attaining policy goals of revenue, equity, security, and ridership.	5-10 years
Implement the ExpressLanes Tier 1 network within the next ten years.		
* Implementation of ExpressLanes network	Completion of ExpressLanes network	10 years
Test and implement pricing strategies to reduce traffic congestion.		
* Pilot study to identify best locations for proof of concept	Completion of study and staff recommendation	2 year
* Implement pilot program	Change in people-throughput during pilot	5 years

Actions	Measure	Timeline
Manage congestion and reduce conflicts between the movement of goods and people on streets and highways.		
* Develop strategy to increase rapid transit capacity and consider strategies to price all vehicle travel to manage congestion.	Improvement to safety and people- throughput	5 years
Explore opportunities for expanding access to shared, demand-responsive transportation options for everyone.		
* Begin looking at possible legislative and regulatory strategies for leveling the playing field to preserve competition, reduce negative effects, and ensure access to a variety of transportation options for everyone		2 years
Goal 2: Deliver outstanding trip experiences for all users of the transportation system.		
Initiative 2.1 - Metro is committed to improving security.		
* Update performance measures related to security, benchmarked against best-in-class organizations	Response times trending down; number of violent crimes on system trending down	Ongoing, but allow for new security contract numbers to indicate trends
* Develop and implement employee training program, including outreach to community-based organizations; provide implicit bias training for fare inspectors and officers.	Employee Training Program plan, funding and implememtation.	2 years
* Explore and implement prevention tactics. Promote prevention as a first measure to reduce frequency and severity of crimes.	Crime analysis and proposed tactics for managing incidents.	5 years
* Install state-of-the-art video surveillance and access control systems	Funding and installation per schedule	3 years
* Measure change in perception of safety	Customer Survey	Biennially
* Develop and implement community policing plan	Progress toward completion	2 years
* Develop and deploy program to prevent sexual harassment on system.	Progress towards deployment of program. Improvements to program measures over time.	2 years
Initiative 2.2 - Metro is committed to improving legibility, ease of use, and trip information on the transit system.		
* Transit Access Pass (TAP) card integration across all services	Progress towards completion of TAP integration across network of transportation services within 5 years	5 years
* Develop plan and implementation process/schedule to align transit information across system	Progress toward completion of information alignment in 3 years.	3 years
* New mobile app integrating trip information and fare payment for all mobility services in the County	Funding and implementation of mobile app	5 years
* Partner with other transit providers to share transit information across all digital signs and mobile platforms for convenient trip planning and transfers across region.	Customer satisfaction	Biennially
* Conversion of bus and rail fleets to cellular communications and data systems to improve accuracy of travel time, allow TAP card loading and wireless transfer of data and fares	Funding and implementation timeline benchmarked to original plan	In progress for completion in 2 years
* Establish open payment system for TAP	Progress towards implementation within five years	

Actions	Measure	Timeline
Initiative 2.3 - Metro will improve customer satisfaction at all customer touch points.		
* Customer satisfaction survey	Results of customer satisfaction survey compared to 2017 survey	Biennially
* Dedicate staff resources to oversee customer experience and develop a comprehensive approach for improving customer satisfaction	Completion of customer satisfaction plan and implementation	1 year
* Performance measurement/ continuous improvement program with measures related to customer satisfaction for all services, benchmarked against best-in-class organizations	Performance measurement/ continuous improvement program with measures related to customer satisfaction for all services, benchmarked against high performing organizations	2-5 years
* WiFi as amenity to all customers	Implementation of WiFi on all Metro transit services	3 years
Goal 3: Enhance communities and lives through mobility and access to opportunity.		
Initiative 3.1 - To lift up local communities, Metro will create jobs and career pathways in transportation.		
* Implement Workforce Initiative Now-Los Angeles (WIN-LA) Program	Track participation and progress of participants over time	
* Develop curriculum for Transportation School	Progress towards implementation of transportation curriculum in schools	
* Work with federal funding partners to support targeted and local hiring	Track participation	
Initiative 3.2 - Metro will leverage its transit investments to catalyze transit-oriented communities and help stabilize neighborhoods where these investments are made.		
* Achieve 35% affordable housing on Metro-owned land	Rate of implementation of affordable housing compared to goal.	
Initiative 3.3 - Metro is committed to genuine public and community engagement to achieve better mobility outcomes for the people of LA County.		
* Develop community engagement strategy in alignment with equity framework in Initiative 1.1		
Goal 4: Transform Los Angeles County through regional collaboration and national leadership.		
Initiative 4.1 - Metro will work with partners to build trust and make decisions that support the goals of the Strategic Plan.		
* Align funding program requirements to Metro Strategic Plan goals and initiatives.	Projects funded that support or advance initiatives in Metro Strategic Plan.	
Initiative 4.2 - Metro will help drive mobility agendas, discussions, and policies at the state, regional, and national levels.		
* Develop annual and 5-year legislative strategy on mobility issues	Track progress on an annual basis	
Goal 5: Provide responsive, accountable, and trustworthy governance.		
Initiative 5.1 - Metro will leverage funding and staff resources to accelerate the achievement of goals and initiatives prioritized in this Strategic Plan.		
* Align all of the Metro's business processes, resources, plans and tools with its strategic plan vision, goals, and initiatives	Alignment of annual budget and staff resources	2 years
Initiative 5.2 - Metro will exercise good public policy judgment and sound fiscal stewardship.		
* Develop 10 year Strategic Budget Plan reflecting Metro Strategic Plan goals and initiatives phased in over 10 year period	Alignment of annual budget to Strategic Budget Plan	1 year
* Use best practices to assess the full life-cycle costs of infrastructure and service investments; identify and share information about trade-offs	Transparency about full life cycle costs of projects and services	

Actions	Measure	Timeline
* Regularly evaluate Metro's service offerings to ensure the lowest system impact for the highest gain in mobility.	Consider multiple measures of success to demonstrate value to the public, such as: • Productivity of service in terms of people throughput • Passenger miles traveled relative to vehicle miles traveled	
Initiative 5.3 - Metro will apply prudent commercial business practices to create a more effective agency.		
* Develop a program of rigorous performance management and continuous improvement across all functions of the organization. Look at internal processes to remove unnecessary procedures and decision ladders.	Annual improvements in performance across all functions of the organization	5 years
* Establish baseline for system performance	Benchmark report	1 year
* Allocate staff and financial resources in annual and 10-year strategic budget plan to lead and administer the performance management and continuous improvement program	Resource allocations reflected in the annual budget and 10-year Strategic Budget Plan	1 year
Initiative 5.4 - Metro will expand opportunities for businesses and external organizations to work with us.		
* Survey the small business community to assess the impact of changes we make to our processes and procedures.	Favorability ratings compared to baseline	Annually
Initiative 5.5 - Metro will supplement and strengthen programs to address workplace safety, security, and employee wellness.		
* Conduct survey to gauge employee perceptions of safety, security and wellness	Favorability ratings in each category compared to baseline	Biennially
Initiative 5.6 - Metro will build and nurture a diverse, inspired and high-performing workforce.		
* Develop and implement supervisor training curriculum to build leadership capacity from within the organization	Supervisory training curriculum	
* Streamline and improve processes for recruitments and promotions to focus on hiring the best people	Recruitment and retention rates improving over time. Department satisfaction on recruitment and retention processes.	3 years
* Update onboarding process and curriculum for new employees to incorporate understanding of Metro vision and philosophy	Favorability ratings for biennial Employee Survey	Biennially

AGENDA ITEM SUMMARY

DATE OF MEETING:	December 18, 2019
ITEM TITLE:	WHY STATEMENT
PREPARED BY:	Tom Schwetz, Director of Planning and Development
DIRECTOR:	Aurora Jackson, General Manager
ACTION REQUESTED:	Information and Discussion

PURPOSE: Provide information to the Board for its discussion of LTD's Why, How, and What statements in preparation for framing the development of the agency's Strategic Business Plan.

ROLE OF THE BOARD: The Board's role in this instance is to obtain information for a future decision.

HISTORY: At a Board retreat in March, 2014, the Board was presented with material that staff, working with Bell & Funk, had prepared regarding an update to LTD's foundational mission, vision, and values statements (Attachment 1 provides definitions for these terms). This material was developed using a structure developed by Simon Sinek, which recasts mission, vision, and values statements in terms of articulating a hierarchy of <u>Why</u> we do what we do, <u>How</u> we do what we do, and <u>What</u> we do. Attachment 2 provides excerpts from Sinek's book that provide context and definition of his concept. The following link provides a 5 minute video from Simon Sinek describing his concept - Simon Sinek Video.

Development of these statements continued over the course of 2014 and early 2015 and were adopted by the Board at its June 2015 meeting as part of the Board's adoption of a 2015-16 *Roadmap*.

As adopted by the Board at its June 2015 meeting, these statements are as follows:

Why we do what we do

We provide people the independence to achieve their goals, creating a more vibrant, sustainable and equitable community.

How we do it
- We serve the community with respect.
- We will continuously question if there's a better way.
- We collaborate internally and externally.
- We care for our employees, customers and business partners.
- We plan for a sustainable future.

What we do
- We provide reliable transit services that address the needs of the community.
- We provide a viable alternative to the automobile through high-quality transportation options, programs and services.
- We provide leadership in the development of the region's transportation system.
- We practice safety and maintain safe and accessible vehicles, services and facilities.
- We practice sound fiscal and sustainability management.

Over the last 5 years, LTD has been using these statements as an articulation of its mission, vision, and values. As the Board begins its discussion of the development of the agency's Strategic Business Plan, it is important for the board to review these statements and determine what, if any, changes should be made to better reflect the board's sense of the agency's core mission and value to the community.

As part of its retreat, the Board will be asked to review each of the statements above. Key questions to consider include:

- The Why statement currently focuses on individuals, but does not reference broader community goals - should the board add language related to broader community goals?
- Does each statement provide clarity on who we are as an agency and why we exist?
- Is each statement clearly articulated?
- Taken as a whole, do these statements reflect what the board believes the agency's purpose <u>should</u> be?

To assist the Board in its review of this material, Attachment 3 provides examples of the foundational statements made in the example Strategic Business Plans from TriMet, COTA, and LA Metro. A presentation will be provided to explain this topic in further detail.
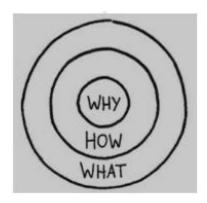
NEXT STEPS: Based on feedback from the Board, staff will update the statements to be used as a basis for scoping the agency's Strategic Business Plan.

SUPPORTING DOCUMENTATION:

1) Attachment 1: Defining Mission, Vision, Values, and Goals
2) Attachment 2: Excerpts from Sinek, Simon. <u>Start with Why: How Great Leaders Inspire Everyone to Take Action</u>
3) Attachment 3: Foundational Statements from example Strategic Business Plan

Excerpts from Sinek, Simon. Start with Why: How Great Leaders Inspire Everyone to Take Action. Penguin Publishing Group. Kindle Edition.

Chapter 3

THE GOLDEN CIRCLE.

WHY
HOW
WHAT

There are a few leaders who choose to inspire rather than manipulate in order to motivate people. Whether individuals or organizations, every single one of these inspiring leaders thinks, acts and communicates exactly the same way. And it's the complete opposite of the rest of us. Consciously or not, how they do it is by following a naturally occurring pattern that I call The Golden Circle.

The concept of The Golden Circle was inspired by the golden ratio—a simple mathematical relationship that has fascinated mathematicians, biologists, architects, artists, musicians and naturists since the beginning of history. From the Egyptians to Pythagoras to Leonardo da Vinci, many have looked to the golden ratio to provide a mathematical formula for proportion and even beauty. It also supports the notion that there is more order in nature than we think, as in the symmetry of leaves and the geometric perfection of snowflakes.

What I found so attractive about the golden ratio, however, was that it had so many applications in so many fields. And even more significantly, it offered a formula that could produce repeatable and predictable results in places where such results might have been assumed to be a random occurrence or luck. Even Mother Nature—for most people a symbol of unpredictability—exhibited more order than we previously acknowledged. Like the golden ratio, which offers evidence of order in the seeming disorder of nature, The Golden Circle finds order and predictability in human behavior. Put simply, it helps us understand why we do what we do. The Golden Circle provides compelling evidence of how much more we can achieve if we remind ourselves to start everything we do by first asking why.

The Golden Circle is an alternative perspective to existing assumptions about why some leaders and organizations have achieved such a disproportionate degree of influence. It offers clear insight as to how Apple is able to innovate in so many diverse industries and never lose its ability to do so. It explains why people tattoo Harley-Davidson logos on their bodies. It provides a clearer understanding not just of how Southwest Airlines created the most profitable airline in history, but why the things it did worked. It

even gives some clarity as to why people followed Dr. Martin Luther King Jr. in a movement that changed a nation and why we took up John F. Kennedy's challenge to put a man on the moon even after he died. The Golden Circle shows how these leaders were able to inspire action instead of manipulating people to act.

This alternative perspective is not just useful for changing the world; there are practical applications for the ability to inspire, too. It can be used as a guide to vastly improving leadership, corporate culture, hiring, product development, sales, and marketing. It even explains loyalty and how to create enough momentum to turn an idea into a social movement. And it all starts from the inside out. It all starts with Why. Before we can explore its applications, let me first define the terms, starting from the outside of the circle and moving inward.

WHAT: Every single company and organization on the planet knows WHAT they do. This is true no matter how big or small, no matter what industry. Everyone is easily able to describe the products or services a company sells or the job function they have within that system. WHATs are easy to identify.

HOW: Some companies and people know HOW they do WHAT they do. Whether you call them a "differentiating value proposition," "proprietary process" or "unique selling proposition," HOWs are often given to explain how something is different or better. Not as obvious as WHATs, many think these are the differentiating or motivating factors in a decision. It would be false to assume that's all that is required. There is one missing detail:

WHY: Very few people or companies can clearly articulate WHY they do WHAT they do. When I say WHY, I don't mean to make money—that's a result. By WHY I mean what is your purpose, cause or belief? WHY does your company exist? WHY do you get out of bed every morning? And WHY should anyone care?

When most organizations or people think, act or communicate they do so from the outside in, from WHAT to WHY. And for good reason—they go from clearest thing to the fuzziest thing. We say WHAT we do, we sometimes say HOW we do it, but we rarely say WHY we do WHAT we do.

But not the inspired companies. Not the inspired leaders. Every single one of them, regardless of their size or their industry, thinks, acts and communicates from the inside out.
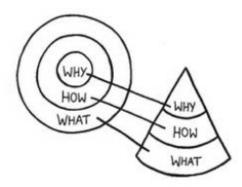
> *Sinek, Simon. Start with Why: How Great Leaders Inspire Everyone to Take Action (pp. 37-40). Penguin Publishing Group. Kindle Edition.*

From Chapter 8

START WITH WHY, BUT KNOW HOW
Energy Excites. Charisma Inspires.

The Golden Circle is not just a communication tool; it also provides some insight into how great organizations are organized. As we start to add dimension to the concept of The Golden Circle, it is no longer helpful to look at it as a purely two-dimensional model. If it is to provide any real value in how to

build a great organization in our very three-dimensional world, The Golden Circle needs to be three-dimensional. The good news is, it is. It is, in fact, a top-down view of a cone. Turn it on its side and you can see its full value.

The cone represents a company or an organization—an inherently hierarchical and organized system. Sitting at the top of the system, representing the WHY, is a leader; in the case of a company, that's usually the CEO (or at least we hope it is). The next level down, the HOW level, typically includes the senior executives who are inspired by the leader's vision and know HOW to bring it to life. Don't forget that a WHY is just a belief, HOWs are the actions we take to realize that belief and WHATs are the results of those actions. No matter how charismatic or inspiring the leader is, if there are not people in the organization inspired to bring that vision to reality, to build an infrastructure with systems and processes, then at best, inefficiency reigns, and at worst, failure results. In this rendering the HOW level represents a person or a small group responsible for building the infrastructure that can make a WHY tangible. That may happen in marketing, operations, finance, human resources and all the other C-suite departments. Beneath that, at the WHAT level, is where the rubber meets the road. It is at this level that the majority of the employees sit and where all the tangible stuff actually happens.

> *Sinek, Simon. Start with Why: How Great Leaders Inspire Everyone to Take Action (pp. 137-138). Penguin Publishing Group. Kindle Edition.*

Attachment 2

Defining Mission, Vision, Values, and Goals

(Definitions drawn from Peter Senge, *The Fifth Discipline*)

Mission – *"Whether you call it a mission or purpose, it represents the fundamental reason for the organization's existence. Why do we do what we do?"*

Examples:

LTD:
"We provide people the independence to achieve their goals, creating a more vibrant, sustainable and equitable community."

Ann Arbor Transportation Authority:
"It is the mission of the Ann Arbor Transportation Authority to facilitate mobility by providing options for safe, efficient, and reliable transportation."

Vision – *"A vision is a picture of the future you seek to create, described in the present tense, as if it were happening now. A statement of 'our vision' shows where we want to go and what we will be like when we get there."*

Examples:

LTD (previous):
"To provide the best public transportation services imaginable."

Vision in Haiku
Innovating, sustaining
Safe and secure
Everyone rides the bus

Ann Arbor Transportation Authority:
"The Ann Arbor Transportation Authority is an organization providing, managing, and facilitating the greatest range of high-quality transportation options throughout Washtenaw County. It is an organization that respects and values its customers and its employees. AATA maintains its position as a recognized leader in the public presentation industry by being a flexible organization utilizing innovative technology and practices for the benefit of its customers. Members of AATA interact and work together and with external stakeholders in a spirit of cooperation and with the highest professional standards in order to make the organization 'The Ride of Choice'."

Valley Regional Transit:
We envision a Valley Regional Transit with adequate and secure funding to support a regional public transportation system that meets the personal and business needs of treasure valley residents and supports a livable and healthy community.

Intercity Transit (Olympia, WA):
Our vision is to be a leading transit system in the country, recognized for our well trained, highly motivated, customer-focused, community-minded employees committed to enhancing the quality of life for all citizens of Thurston County.

Values – *"Values describe <u>how</u> we intend to operate, on a day-to-day basis, as we pursue our vision. Values are best expressed in terms of behavior: If we act as we should, what would an observer see us doing? <u>How</u> would we be thinking?"*

<u>Examples</u>:

<u>LTD</u>:

- We serve the community with respect.
- We will continuously question if there's a better way.
- We collaborate internally and externally.
- We care for our employees, customers and business partners.
- We plan for a sustainable future.

Goals – *Goals are "milestones we expect to reach before too long. Every shared vision effort needs not just a broad vision, but specific, realizable goals. Goals represent what people commit themselves to do in the short-run."*

The six long-term strategic goals in LTD's Long-Range Transit Plan have been framed in a manner that covers the range of anticipated strategic challenges facing LTD over the next 20 years.

<u>Examples</u>:

<u>LTD</u>:

GOAL 1: Provide attractive travel options to improve ease of connectivity throughout LTD's service area

GOAL 2: Sustain and enhance economic prosperity, environmental health, and quality of life in the community through investment in transit service and infrastructure

GOAL 3: Ensure equitable and accessible transit service throughout LTD's service area

GOAL 4: Maintain and enhance safety and security of LTD's services

GOAL 5: Use LTD's resources sustainably in adapting to future conditions

GOAL 6: Engage the regional community in LTD's short- and long-term planning processes

Introduction

Current State of COTA

COTA's vision is **"To move every life forward"** and COTA's mission is **"We provide solutions that connect people to prosperity through innovation, dedication and teamwork."** As the regional public transit provider for greater Columbus and Central Ohio, COTA serves over 1.2 million residents with nearly 19 million passenger trips annually. Operationally, COTA has over 1,100 employees, 40+ bus routes, more than 300 buses, and operates out of four facilities in the Columbus area. COTA received the Outstanding Public Transportation System Achievement Award from the American Public Transportation Association (APTA) in 2018. COTA acknowledges and understands advancements in mobility are disrupting the transportation sector and fundamentally changing the way people move.

Technological disruptions such as automated, connected, electric, and shared vehicles (ACES) will have a major influence on transportation services in the form of mobility, accessibility, safety, congestion, and planning. More important however, customer expectations of service are changing in our connected world. What holds true is an efficient, safe, and well-maintained transportation network is vital to the region's success. Success for COTA is defined as moving people where they want to go, enhancing the economic vitality and growth of the region, and closing social barriers for all communities. The combination of the external forces and the importance of COTA's role in the Columbus region is the backdrop for undertaking a strategic planning process.

Purpose of the Strategic Plan

COTA's strategic plan defines and articulates the strategic direction for COTA for the next five (5) years. Through a collaborative strategic planning process, guiding principles were developed to focus the organization on those strategic areas that will enable COTA to achieve its mission and vision. The guiding principles are then underpinned with initiatives that are responsive to the changing expectations of customers and emerging technologies.

These initiatives have an eye on enhancing COTA's services for the citizens of Central Ohio. Nesting the initiatives under the guiding principles will align efforts and keep COTA moving towards its mission and vision. From this strategic plan a more detailed operational plan will be developed which establishes the details of each initiative for operational execution. The following diagram outlines the importance of each step:

1 Strategic Plan

Articulation of COTA's mission, vision, guiding principles, and overarching initiatives over the next five years.

2 Operational Plan

Development of a tactical, detailed operational plan building on the initiative framework established in the strategic plan

3 Operational Execution

Execution of the operational plan, resulting in realization of the strategic vision, mission, and guiding principles.

To Move Every Life Forward

We Provide Solutions That Connect People To Prosperity Through Innovation, Dedication and Teamwork

Approach for Building COTA's Strategic Plan

COTA is integral to the social and economic well-being of Central Ohio. A collaborative approach to building the strategic plan emphasized the importance of including a diverse set of opinions, both inside and outside the organization. The process incorporated a number of inputs from internal and external sources.

This approach ensured a comprehensive awareness of the dynamics surrounding COTA, including the changing mobility sector and community specific considerations, as well as incorporating internal viewpoints, capabilities, and underlying culture of the organization. The insights gained from this thought process were used to establish the building blocks of the strategic plan.

The Input Process

Benchmarking
Completed analysis of seven (7) transit agencies similar to COTA

External Interviews
Conducted sessions with 23 entities

Internal Workshops
Participated in COTA's Board retreat and conducted SWOT exercise and visioning session

Participated in COTA's Leadership retreat and conducted the same SWOT and visioning session as the Board retreat

Executed six (6) internal workshops with 128 COTA employees (10% of COTA's workforce) to conduct the SWOT exercise

Diversity, Equity, & Inclusion Interviews
Conducted eleven (11) individual interviews (e.g., Chief Officers, Senior Leaders, Board Member)

Conducted three (3) group interviews with a total of 17 employees

1. HR, Sustainability, Government Affairs, Marketing and Communication;
2. Finance, Legal, Information Technology; and
3. Operations and Development

The Importance of Equity, Diversity, and Inclusion at COTA

Through the collaborative strategic planning process, it was clear that equity, diversity, and inclusion (EDI) are of core importance to COTA. To ensure EDI is infused through the strategic plan and incorporated as a part of COTA's cultural fabric, nearly 30 interviews were conducted. These interviews spanned the full spectrum of employees. COTA's employees and the community COTA serves are diverse and the organization must be intentional in serving both. COTA understands that a commitment to EDI is essential to the success of the organization.

In addition to driving creativity, innovation, and engagement, diverse and inclusive organizations reap the benefits of being more sustainable and agile. In pursuit of EDI excellence, COTA will develop a stronger and more effective workforce, resulting in increased comprehensive services that better meet the needs of COTA's consumers. COTA will be able to leverage the effects of EDI to support and maintain its recognition as being a leader in mobility for all.

Equity
Providing fair access, opportunity, and advancement for all people is achieved by understanding and eliminating barriers that prevent full participation for disadvantaged groups. Employee motivation is critically contingent on the incorporation of equity.

Diversity
By seeking to attract and retain individuals of demographic diversity, such as, but not limited to race, ethnicity, gender, age, orientation, socio-economic background, physical ability, and religion, COTA will derive value from individuals' differences of experiences, perspectives, and thought processes. Diverse organizations are also more successful at attracting and retaining talent.

Inclusion
Organizations succeed at maintaining diversity when they focus on inclusion. Employees feel valued, respected, and supported when inclusion is part of the organizational culture. In establishing a strong inclusive culture, COTA can expect job satisfaction to increase among employees, resulting in maximum productivity.

Overview of COTA's Guiding Principles

The collaborative approach employed to develop the strategic plan collected thousands of data points and input from internal and external stakeholders. Within the data, a number of strategic themes emerged. The strategic themes are an articulation of the expectations of COTA from the stakeholder's perspective. These strategic themes were then used as the basis to create COTA's guiding principles for its five-year strategic plan.

Strategic Themes from Stakeholder Engagement

— Make COTA the easy mobility option
— Intentionally commit COTA to an equitable, diverse, and inclusive culture
— Leverage partners to enhance service delivery
— Achieve organizational excellence
— Use data to make better decisions
— Drive enhanced mobility services to meet customer demands
— Actively engage in Central Ohio economic development
— Market COTA's services to educate and inform customers

Guiding Principles

Based on an evaluation of these themes, four guiding principles were established for COTA's strategic plan with equity, diversity, and inclusion residing at the core. The guiding principles' primary goal is serving the Central Ohio region. The graphic below represents COTA's guiding principles:

Introduction to Four Guiding Principles

These guiding principles provide the foundation for the strategic plan, set the direction for the organization, and represent where COTA will focus during the coming years.

Overview of Each Principle

Improve the Customer Experience: to serve current and future customers and deliver a customer experience that is easy to use, reliable, and convenient.

We now live in a world where customers expect a highly-personalized, differentiated, and meaningful experience from businesses and organizations. This is particularly important to COTA because of its highly-diverse customer base. Affordability, ease, availability, and safety are critical factors in enhancing the customer experience and achieving dignity for disadvantaged individuals and communities.

Provide Mobility Options: to enhance service delivery to customers through partnerships with innovative organizations.

It is imperative to consider additions and enhancements to COTA's traditional mass transit services including collaboration with the private sector to extend and implement services. Further community partnerships are vital to understanding and providing mobility options to all customers including individuals who are considered disadvantaged or low-income. COTA's collaboration with community leaders will provide unique insight towards understanding and prioritizing effective mobility options across its service population.

Achieve Organizational Excellence: to make COTA employees focused, collaborative, and innovative.

In order to execute against COTA's five-year strategic plan, COTA will need to align its operating model and performance metrics with the services it offers. COTA will also need to ensure it is focused on developing and embracing its diverse workforce. A workforce encompassing diversity of demographics leads to diversity of thought, experiences, and perspectives, resulting in better decision-making and outcomes.

Prioritize the Use of Data and Analytics: to make better decisions, enhance services and enhance safety

The combination of big data trends and the emphasis on smart technologies offers COTA a wealth of data and analytics capabilities if embraced. As the world of mobility evolves, it is becoming more critical to leverage data into insights for COTA to improve and optimize its services.

Initiatives

COTA will pursue specific initiatives aligned to the guiding principals over the next five years. These initiatives were a product of the input sessions with the various internal and external stakeholder groups in the strategic plan development process. The initiatives were balanced between "Early Opportunities", "Improvements", or "Transformations." These categories represent the importance of realizing the mission and vision of COTA by achieving momentum quickly, improving key areas that need critical attention, and propelling the organization forward through transformations. Categorized this way, the initiatives align with COTA's journey of meeting the needs of the new mobility ecosystem.

For each guiding principle, several initiatives have been identified and classified.

Initiative Classification	Definition
Early Opportunity	Minimal operational investment (dollars and time); benefits can be realized in < 1 Year
Improvement	Moderate operational investment (dollars and time); benefits can be realized in 1 to 5 years
Transformation	Significant operational investment (dollars and time); benefits can be realized > 5 years

Vision, Mission, and Values

Everyday transportation options are changing, and the transit industry is developing better tools to integrate all those options. TriMet will always operate buses and MAX and provide transportation for seniors and persons with disabilities, but we also must offer our customers convenient connections to and from transit and help as many people in our region as possible to navigate to their best options. TriMet's Vision, Mission, and Values needed a refresh to better reflect the future challenges and opportunities.

How did TriMet develop these statements?

Sources of input for the updated Vision, Mission, and Values include the following:
- Board Guidance
- Internal – TriMet employees, including a survey with 190 responses
- External – Riders, Stakeholders, and Community, including the Committee on Accessible Transportation, the Transit Equity Advisory Committee, and community organizations.

What changed?

The new statements are as follows:

Vision, Mission and Values

Vision: TriMet will be the leader in delivering safe, convenient, sustainable, and integrated mobility options necessary for our region to be recognized as one of the world's most livable places

Mission: Connect people with valued mobility options that are safe, convenient, reliable, accessible, and welcoming for all

Values
Safety, Inclusivity, Equity, Community, Teamwork

TriMet is our community's life connector. We span the growing region with bus, MAX light rail, WES commuter rail, and LIFT paratransit for persons with disabilities while connecting to other services including Portland Streetcar, other bus systems like C-TRAN, local shuttles, and newer mobility options such as Uber, Lyft, eScooters, bikeshare, etc.

The vision calls for TriMet to be the leader in providing transit and connecting people to their many mobility options. By doing so, we will play our part in helping make this region one of the world's most livable places for everyone in our region.

The updated mission recognizes the wider variety of options people now have available to travel. Our core services will continue to be bus, rail, and paratransit, but as explained on the next page and encapsulated in the graphic on the next page, there are many options that our customers can connect to now. Our mission is to provide great transit service, improve access to transit, and help connect people to mobility options that are safe, convenient, sustainable, integrated with each other, and welcoming to everyone who travels within our region.

Our values…

Safety: We must include our safety values in everything we do.

Inclusivity: Our service and our decision-making should include the needs and input of our customers, our stakeholders, and the public.

Equity: We're dedicated to making our transit system a place where all are welcome and are treated with dignity and respect. More than that, we proudly use equity as a lens to help guide our decisions in ways that benefit those who most need it.

Community: The boldness of our vision stems from our commitment to improving this region. We support communities throughout the region with service, amenities, projects, and engagement.

Teamwork: Working together as a team, TriMet employees are committed to improving our customers' experiences. We all strive for collegiality, collaboration, and to honor everyone's contributions.

What does this change mean?

Our Vision, Mission, and Values guide our future efforts to serve our customers better. We want to be the leader in delivering safe, convenient, sustainable, and integrated mobility options that help people get where they need to go. We'll keep working hard to make our services more convenient for our current and future customers, more sustainable, and to help people navigate all the mobility options out there to best fit their needs. This is not a big change from before; the updated Vision, Mission, and Values simply better reflect the direction that we were already starting to pursue. The transit industry is improving integration with mobility options and TriMet needs to do the same to serve our region and push toward our Vision.

The graphic below shows the modes we operate in the center blue oval, and the blue arrows show the modes our customers can connect to with our new multi-modal trip planner (now available to the public in a beta version at http://betaplanner.trimet.org). Over time, we expect to add more modes and make it easier for our customers to make all of the connections they need.

ABOUT METRO AND ITS MISSION

LA County's transportation system is a complex network, consisting of highways, local streets, sidewalks, bikeways, buses, and rail, and controlled by a patchwork of local, regional, state, and federal agencies. Metro is woven into this complex landscape as the regional transportation planner, coordinator, designer, builder, funder, and operator. Because it serves these multiple functions for one of the country's largest and most populous counties—more than 10 million people live within Metro's service area—Metro is unique among the nation's transportation agencies. Its core mission is to provide a world-class transportation system that enhances quality of life for those who live, work, and play within LA County.

> *"Metro's mission is to provide a world-class transportation system that enhances quality of life for those who live, work, and play within LA County."*

This Plan reflects Metro's current understanding of the aspirations and mobility goals of the people we serve. Achieving these goals will require concerted coordination and active collaboration with local municipalities; municipal transit operators; Councils of Government; Metrolink; Access Services; political, business, and community leaders; other partners and stakeholders; and the public, all of whom have critical roles to play in realizing the vision described in this Plan.

METRO'S VISION FOR THE FUTURE OF TRANSPORTATION IN LOS ANGELES COUNTY

This Plan is designed to **deliver a mobility system that enables people to travel swiftly and easily throughout the LA County region, no matter where they want to go or when.** Metro recognizes that vast disparities exist between the ability of individuals and communities to identify and safely access even the most basic needs in life, such as jobs, housing, education, and health care. Despite substantial investment and progress toward addressing transportation inequities, current socio-economic disparities continue to be exacerbated by a lack of high-quality transportation options among the most disadvantaged populations of the County. Thus, a crucial part of Metro's vision is to bridge these gaps and help remove mobility barriers to increased prosperity for all the County's residents.

Metro also recognizes that, while an adequate, safe, and efficient network of roads and highways will always be an essential component of our transportation system, building new roadway capacity without managing the long-term demand for solo driving is not a plausible strategy for meeting the region's rapidly evolving mobility needs. An approach primarily geared to serving single-occupancy vehicles is neither economically nor environmentally sustainable, nor would it advance other widely shared goals for improving quality of life within the region. Instead, the focus of this Plan is to address increased mobility demands by improving the variety and quality of transportation options available to people. Specifically, the actions set forth in this Plan aim to double the total usage of transportation options other than driving alone, including taking transit, walking, biking, sharing rides, and carpooling.

Achieving this vision by 2028 means that Metro will take steps to accomplish the following:

Ensuring that all County residents have access to high-quality mobility options within a 10-minute walk from home.

Reducing maximum wait times for any trip to 15 minutes during any time of day.

Improving average travel speeds on the County's bus network by 30 percent.

Providing convenient and dependable options for bypassing congestion on streets and highways.

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Later sections describe Metro's plan for achieving these outcomes in greater detail. There are many important current and short-term initiatives underway at Metro that can be completed within today's resource, technical, political, and legislative environments. Those initiatives are not all necessarily referenced in this Plan because they are already on a path towards implementation. This Plan describes the initiatives that go beyond the status quo and the aggressive, strategic actions required to meet the region's ambitious mobility goals. To provide context for these sections, we begin by discussing the process used to develop the Plan and by describing some of the key trends that we believe will shape the County's transportation needs and challenges in the decades to come.

THE VISION 2028 PROCESS

To establish a baseline for understanding where LA County is now, Metro started the strategic planning process by opening an extensive dialogue with its many diverse stakeholders. The purpose of this information-gathering exercise was to begin identifying key trends, issues, opportunities, and challenges for the region and to learn from a range of perspectives about how Metro could help meet those challenges.

As a first step, Metro launched a comprehensive customer satisfaction survey of transit riders and non-riders in the County. We administered the survey online and received over 18,000 responses. In addition, Metro conducted focus group research to elicit input from groups that may have historically been less prone to engage in online surveys, such as those with limited English proficiency as well as low-income, elderly, and minority populations. The survey results are provided in Appendix A.

During a 17-month-long outreach process, Metro conducted more than 130 meetings and interviews with external and internal key stakeholders. We were interested in hearing not only about transportation needs and concerns, but also, critically, about how these concerns relate to social and economic priorities, such as affordable housing, equity, jobs, and education. The interviews were essential for painting a true picture of the County's current transportation landscape, for articulating a compelling and comprehensive vision for the Plan, and for informing Metro's understanding of the specific actions and investments that would be needed to realize this vision. A list of the stakeholders consulted during the planning process is provided in Appendix B.

Metro also administered an agency-wide survey of its 10,800 employees to assess staff's readiness to implement planned initiatives and to learn how Metro leadership could better support and develop the agency's workforce to meet future mobility needs. More than 4,700 Metro employees responded to the survey.

In sum, this extensive outreach process was enormously valuable in identifying key trends and developing specific elements of Metro's Vision 2028 Plan for the next decade.

District Authority

"Dillon's Rule":

A local government may exercise powers that are expressly provided for by law, or are necessarily implied.

District Authority

Expressly provided authority:

- "Principal Act" of District
  - ORS 267.010
- Other statutes, e.g.:
  - Elections (ORS Ch. 255)
  - Bonds (ORS Ch. 287A)
  - Contracts (ORS Ch. 279A, B, C)
- Administrative Rules
- Ordinances

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District Authority

Necessarily implied authority, e.g.:

- Purchasing supplies
- Employing staff
- Entering into contracts
- Incidental tasks relating to exercise of authority

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District Authority

Board action:
- Must be at a properly called public meeting
- Requires a quorum to be present
- Generally requires approval by a majority of the board
- All votes must be taken publicly (no secret ballots)

District Authority

Board Member Qualifications

- Must be qualified to serve in the District (usually "elector" or resident)

- Governor or County Commission Appointment

Board Decision Making

Regular voting procedures
- Affect day-to-day operations
- Recorded in the minutes

Resolution
- Establishes formal policy of board
- Governs internal operations
- Simple adoption procedures

Ordinance
- Local law
- Requires statutory authority

Ethics

Conflict of Interest:

- Potential Conflict

  - You and/or close family member may benefit

- Actual Conflict

  - You and/or a close family member will benefit

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Ethics

- Nepotism
- Personal Gain
- Gifts

Public Meetings

- Regular Meetings
- Special Meetings
- Executive Sessions
- Notifications
- Quorum (seven member boards)
  - Four to conduct business
  - Decisions must be unanimous (4-0)

Public Meetings

Purposes of Public Meetings Law:

- To open meetings of governing bodies to the public;

- To give notice of the time and place of meetings; and

- To make meetings accessible to those wishing to attend.

- No requirement to let the public talk.

- Distinguish between "public meeting" and "public hearing."

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Public Meetings

- Any meeting where a quorum of the decision-making body is present and is discussing or "deliberating toward" a matter of business is a public meeting.

- Any meeting of a body formed to advise a public body is a public meeting.

- Notice is required for all public meetings.

Public Meetings

Running an effective board meeting:

- The Chair (President) is in charge of Meeting.
- Public meetings law does NOT give attendees the right to speak.
- Don't squabble in public.
- Know the public meetings law.
- Keep accurate minutes.

Effective Board

- **Vision:**
  - What does the District strive to be?
  - How do we want to be seen?
- **Mission:**
  - Why does the District exist?
  - What services do we provide?
- **Values:**
  - What are our guiding principles?
  - What are our standards for conduct and ethics?

Effective Board

Four Way Test, Before you Think, Say or Do

- Is it the truth?
- Is it fair to all concerned?
- Will it build good will and better friendships?
- Will it be beneficial to all concerned?

Expectations of Appointed Officials

- Prepared and Informed
- Honest
- Courteous
- Respectful of each other and the organization
- On Time
- Friendly
- Courage
- Represent Board Position/Action
- Understand Role and Responsibilities

Expectations of Staff

- Prepared and Informed
- Provides Options
- Provides Recommendations
- Organized Board Packets
- Communications, no surprises
- Honest
- Friendly
- Represents Boards Actions

Meeting Organization

- Have a leader, Be the leader
- Call meeting to order
- Motion/Seconds (Use Them)
- Manage Discussion/Dialogue/Deliberations
- Seek comments from all Board Members
- Call for Votes
- Vote and Move On

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Meeting Organization

- Agenda Elements
  - Meeting Place, Date and Time
  - Minutes of Previous Meeting
  - Financial Report
  - Comments from Public on Agenda Items
  - Staff Reports/Committee Reports
  - Unfinished Business
  - New Business
  - Comments from Public on Non Agenda Items
  - Good of the Order
  - Next Meeting Date

Challenging Scenarios

- **Public Interaction:** Who's meeting is it?

- **New Member Orientation:** I came to fix this.

- **Good Ole Boy's/Girl's Club:** Lack of Transparency

- **Loyalty:** Conflicting Personal Interest

Summary

- Communicate
- Listen
- Share Facts and Information
- Provide a Comfortable Meeting Atmosphere
- Be Fair, Friendly, and Organized
- Be Prepared and Informed
- It is Okay to Smile

Thank You!

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From: Barb Eichberger
Sent: Wednesday, December 18, 2019 9:25 AM
To: Camille Gandolfi
Subject: Resulting Word Cloud

Improvise Spend Fiscal
Independence Adventure
People Annual Serve Interdepe
Save Lead Cheap Speedy
Plan Reliable
City Regional Local County
Safety Solitude

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