

Agenda



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Metro Technical Advisory Committee
 Date: Wednesday, October 4, 2017
 Time: 10:00 a.m. to noon
 Place: Council Chamber

Time	Agenda Item	Action Requested	Presenter(s)	Materials
10:00	CALL TO ORDER Updates from the Acting Chair		Acting Chair Tom Kloster, Metro	
	<ul style="list-style-type: none"> • Citizen Communications to MTAC • Updates from Committee Members 		All	
10:15 45 min.	Proposed Methodology for the Urban Reserve Goal 14 Alternatives Analysis <i>Purpose: Introduce the Goal 14/urban reserve analysis methodology to support the 2018 Growth Management Decision</i>	Informational	Tim O'Brien, Metro	*
11:00 45 min.	Regional Transportation Technology Strategy (RTx) <i>Purpose: Provide an update and collect feedback on the goals, content and process for Metro's Regional Transportation Technology Strategy</i>	Informational	Eliot Rose, Metro	*
Noon	Adjourn			

- * Material will be emailed with meeting notice
- ** Material will be emailed at a later date after notice
- # Material will be distributed at the meeting.

For agenda and schedule information, call 503-797-1766. To check on closure/cancellations during inclement weather please call 503-797-1700.

Metro respects civil rights

Metro fully complies with Title VI of the Civil Rights Act of 1964 and related statutes that ban discrimination. If any person believes they have been discriminated against regarding the receipt of benefits or services because of race, color, national origin, sex, age or disability, they have the right to file a complaint with Metro. For information on Metro's civil rights program, or to obtain a discrimination complaint form, visit www.oregonmetro.gov/civilrights or call 503-813-7514. Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1890 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 5 business days before the meeting. All Metro meetings are wheelchair accessible. For up-to-date public transportation information, visit TriMet's website at www.trimet.org.

Thông báo về sự Metro không kỳ thị của

Metro tôn trọng dân quyền. Muốn biết thêm thông tin về chương trình dân quyền của Metro, hoặc muốn lấy đơn khiếu nại về sự kỳ thị, xin xem trong www.oregonmetro.gov/civilrights. Nếu quý vị cần thông dịch viên ra dấu bằng tay, trợ giúp về tiếp xúc hay ngôn ngữ, xin gọi số 503-797-1890 (từ 8 giờ sáng đến 5 giờ chiều vào những ngày thường) trước buổi họp 5 ngày làm việc.

Повідомлення Metro про заборону дискримінації

Metro з повагою ставиться до громадянських прав. Для отримання інформації про програму Metro із захисту громадянських прав або форми скарги про дискримінацію відвідайте сайт www.oregonmetro.gov/civilrights або Якщо вам потрібен перекладач на зборах, для задоволення вашого запиту зателефонуйте за номером 503-797-1890 з 8.00 до 17.00 у робочі дні за п'ять робочих днів до зборів.

Metro 的不歧视公告

尊重民權。欲瞭解Metro民權計畫的詳情，或獲取歧視投訴表，請瀏覽網站 www.oregonmetro.gov/civilrights。如果您需要口譯方可參加公共會議，請在會議召開前5個營業日撥打503-797-1890（工作日上午8點至下午5點），以便我們滿足您的要求。

Ogeysiiska takooris la'aanta ee Metro

Metro waxay ixtiraamtaa xuquuqda madaniga. Si aad u heshid macluumaad ku saabsan barnaamijka xuquuqda madaniga ee Metro, ama aad u heshid warqadda ka cabashada takoorista, booqo www.oregonmetro.gov/civilrights. Haddii aad u baahan tahay turjubaan si aad uga qaybqaadatid kullan dadweyne, wac 503-797-1890 (8 gallinka hore illaa 5 gallinka dambe maalmaha shaqada) shan maalmo shaqa ka hor kullanka si loo tixgaliyo codsashadaada.

Metro의 차별 금지 관련 통지서

Metro의 시민권 프로그램에 대한 정보 또는 차별 항의서 양식을 얻으려면, 또는 차별에 대한 불만을 신고 할 수 www.oregonmetro.gov/civilrights. 당신의 언어 지원이 필요한 경우, 회의에 앞서 5 영업일 (오후 5시 주중에 오전 8시) 503-797-1890를 호출합니다.

Metroの差別禁止通知

Metroでは公民権を尊重しています。Metroの公民権プログラムに関する情報について、または差別苦情フォームを入手するには、www.oregonmetro.gov/civilrights。までお電話ください公開会議で言語通訳を必要とされる方は、Metroがご要請に対応できるよう、公開会議の5営業日前までに503-797-1890（平日午前8時～午後5時）までお電話ください。

ការម Metro
ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro
ឬដើម្បីទទួលបានក្បួនប្រកាស រឺសេចក្តីសម្រេចលទ្ធផលនានាគេហទំព័រ
www.oregonmetro.gov/civilrights។
បើលោកអ្នកត្រូវការអនុបកប្រែភាសានៅពេលអង្គ
បុណ្យសាធារណៈ សូមទូរស័ព្ទលេខ 503-797-1890 (ម៉ោង 8 រឺក្នុងម៉ោង 5 ល្ងាច
ថ្ងៃអាទិត្យ) ប្រាំពីរថ្ងៃ
ថ្ងៃមុន មុនថ្ងៃបុណ្យសាធារណៈឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក

إشعار بحقوق مدني من Metro
تحتترم Metro الحقوق والمدنية للمزيد من المعلومات حول برنامج Metro لحقوق والمدنية أو لإبداء شكوى
خلاف تمييزي، رجي زيارة الموقع الإلكتروني www.oregonmetro.gov/civilrights. إن كنت بحاجة
إلى مساعدة في اللغة، ي ج ب على ك الاتصال مقدم ب ر ق ل ه ا ت ف 503-797-1890 من الساعة 8 صباحاً حتى
الساعة 5 مساءً، أيام الاثنين إلى الجمعة قبل خمسة () أيام عمل من موعد الاجتماع.

Paunawa ng Metro sa kawalan ng diskriminasyon
Iginagalang ng Metro ang mga karapatang sibil. Para sa impormasyon tungkol sa programa ng Metro sa mga karapatang sibil, o upang makakuha ng porma ng reklamo sa diskriminasyon, bisitahin ang www.oregonmetro.gov/civilrights. Kung kailangan ninyo ng interpreter ng wika sa isang pampublikong pulong, tumawag sa 503-797-1890 (8 a.m. hanggang 5 p.m. Lunes hanggang Biyernes) lima araw ng trabaho bago ang pulong upang mapagbigyan ang inyong kahilingan. Notificación de no discriminación de Metro.

Notificación de no discriminación de Metro
Metro respeta los derechos civiles. Para obtener información sobre el programa de derechos civiles de Metro o para obtener un formulario de reclamo por discriminación, ingrese a www.oregonmetro.gov/civilrights. Si necesita asistencia con el idioma, llame al 503-797-1890 (de 8:00 a. m. a 5:00 p. m. los días de semana) 5 días laborales antes de la asamblea.

Уведомление о недопущении дискриминации от Metro
Metro уважает гражданские права. Узнать о программе Metro по соблюдению гражданских прав и получить форму жалобы о дискриминации можно на веб-сайте www.oregonmetro.gov/civilrights. Если вам нужен переводчик на общественном собрании, оставьте свой запрос, позвонив по номеру 503-797-1890 в рабочие дни с 8:00 до 17:00 и за пять рабочих дней до даты собрания.

Avizul Metro privind nediscriminarea
Metro respectă drepturile civile. Pentru informații cu privire la programul Metro pentru drepturi civile sau pentru a obține un formular de reclamație împotriva discriminării, vizitați www.oregonmetro.gov/civilrights. Dacă aveți nevoie de un interpret de limbă la o ședință publică, sunați la 503-797-1890 (între orele 8 și 5, în timpul zilelor lucrătoare) cu cinci zile lucrătoare înainte de ședință, pentru a putea să vă răspunde în mod favorabil la cerere.

Metro txoj kev ntxub ntxaug daim ntawv ceeb toom
Metro tributes cai. Rau cov lus qhia txog Metro txoj cai kev pab, los yog kom sau ib daim ntawv tsis txaus siab, mus saib www.oregonmetro.gov/civilrights. Yog hais tias koj xav tau lus kev pab, hu rau 503-797-1890 (8 teev sawv ntxov txog 5 teev tsaus ntuj weekdays) 5 hnub ua hauj lw m ua nte ntawm lub rooj sib tham.



2017 MTAC Tentative Agendas

January 4 - Cancelled	January 18 - Cancelled
February 1 <ul style="list-style-type: none"> • 2018 RTP: Vision Zero and Safety Plan Update (McTighe) • Urban Growth Readiness Task Force Recommended Code Updates Update 	February 15 <ul style="list-style-type: none"> • Powell-Division Update • RTP Evaluation Framework (Mermin) <ul style="list-style-type: none"> ○ System Measures ○ Transportation equity analysis
March 1 - Cancelled	March 15 <ul style="list-style-type: none"> • Regional Transit Strategy • Regional Freight Plan • Building the RTP Investment Strategy* (Ellis)
April 5 <ul style="list-style-type: none"> • 2018 Urban Growth Management Decision Work Program Overview • Expectations for cities proposing residential UGB expansions 	April 19 <ul style="list-style-type: none"> • Building the RTP Investment Strategy* and Project Evaluation Process • Powell-Division Transit and locally preferred alternative resolution and related RTP ordinance • 2040 Grants
May 3 <ul style="list-style-type: none"> • Building the RTP Investment Strategy* (Recommendation to MPAC) (Ellis) 	May 17 - Cancelled
June 7 - Cancelled	June 21 - Cancelled
July 5 - Cancelled	July 19 - Cancelled
August 2 <ul style="list-style-type: none"> • Proposed code for mid-cycle UGB amendment process (Reid) • Designing Livable Streets (McTighe) 	August 16 - Cancelled
September 6 <ul style="list-style-type: none"> • Economic Value Atlas update (Raker) • Southwest Corridor Equitable Development Strategy update (Harper) • Expectations for cities proposing residential UGB expansions (Reid) 	September 20 - Cancelled
October 4 <ul style="list-style-type: none"> • Regional Transportation Technology Strategy (RTx) (Rose) 	October 18 <ul style="list-style-type: none"> • Update on RTP Work Plan and Investment Strategy analysis (Ellis)
November 1 <ul style="list-style-type: none"> • Overview of technical review drafts of safety, transit and freight plans** 	November 15 <ul style="list-style-type: none"> • Draft RTP Investment Strategy and TEA findings (Cho) • Designing Livable Streets (McTighe) • Regional Transit Strategy System Expansion Policy (Snook)***

December 6	December 20
<ul style="list-style-type: none"> • Draft RTP Investment Strategy Findings (Ellis) • Draft Transportation Equity Analysis Findings • RTP 2018 Regional Leadership Forum #4 (Ellis) • Technical review drafts of safety, transit and freight plans (<i>key issues identified for discussion</i>) 	

**RTP Revenue Forecast, Priorities, Evaluation Framework and Call for Projects*

***This includes Regional Transit Strategy, Regional Freight Plan, and Regional Safety Plan*

****Could be considered November 15 or later*

Parking Lot – Future Agenda Items

- Update on technical activities related to land use modeling/growth management
- Transportation resiliency



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Memo

Date: Wednesday, September 27, 2017
To: MTAC Members and Interested Parties
From: Tim O'Brien, Principal Regional Planner
Subject: 2018 Growth Management Decision - Goal 14/Urban Reserve Analysis Methodology

Introduction

Development of the regional urban growth report (UGR) will begin in the latter half of 2017 with a draft UGR expected in June 2018. The methodology outlined below is focused on a residential land need given the current planning efforts underway at the local jurisdiction level. If the results of the UGR include a need for employment land, additional urban reserve areas may need to be included in the final analysis.

Methodology

Metro staff will complete an alternatives analysis applying the Goal 14 locational factors listed below to all urban reserve areas (attached map).

Factor 1 – Efficient accommodation of identified land needs

Factor 2 – Orderly and economic provision of public facilities and services

Factor 3 – Comparative environmental, energy, economic and social consequences

Factor 4 – Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

This Goal 14 analysis will result in a suitability ranking or score for each urban reserve. At this point, staff will propose removing from further consideration those urban reserve areas that are determined to be the least suitable for inclusion in the UGB based on the Goal 14 factors. Staff will then apply the UGB amendment factors contained in Metro Code Section 3.07.1425 to the remaining urban reserve areas. The Metro Code factors are:

- Equitable and efficient distribution of housing and employment opportunities throughout the region;
- Contribution to the purposes of Centers and Corridors;
- Protection of farmland that is important for the continuation of commercial agriculture in the region;
- Avoidance of conflict with regionally significant fish and wildlife habitat; and
- Clear transition between urban and rural lands, using natural and built features to mark the transition.

Metro Code Section 3.07.1110 requires the local government(s) responsible for land use planning and governance of an urban reserve to develop a concept plan for the urban reserve prior to its addition to the UGB. It is expected that local concept plans will provide a more refined analysis related to the provision of infrastructure resulting in different cost estimates compared to the initial Goal 14 analysis. In addition, some local concept plan areas may include only a portion of the urban reserve, thereby compelling the need to develop a subarea analysis for the Goal 14 locational factors and Metro Code factors.

Consultant Services

Oregon Administrative Rule Chapter 660 Division 24 outlines the procedures and requirements of Goal 14 for an amendment of the UGB. This requires an evaluation and comparison of the relative costs, advantages and disadvantages of alternative UGB expansion areas with respect to the provision of public facilities and services needed to urbanize alternative boundary locations. For the purposes of Goal 14

boundary location factor 2, public facilities and services means water, sanitary sewer, storm water management, and transportation facilities. Since Metro does not have the staff expertise necessary to complete Goal 14 boundary location factor 2, consultant services will be needed. The evaluation and comparison must include:

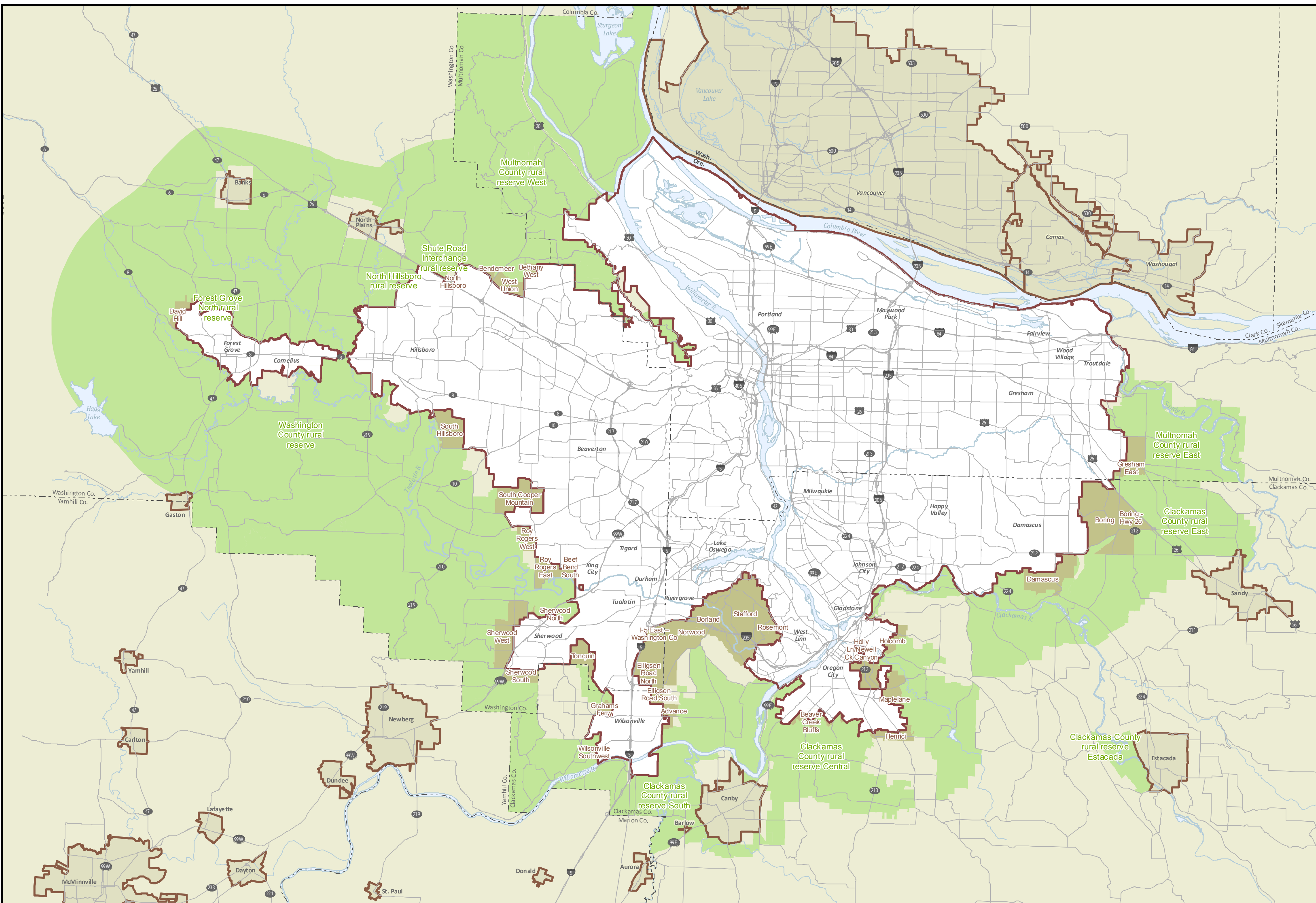
- The capacity of existing public facilities and services to serve areas already inside the UGB;
- The capacity of existing public facilities and services to serve areas proposed for addition to the UGB;
- The impacts to existing water, sanitary sewer, storm water and transportation facilities that serve nearby areas already inside the UGB
- The need for new transportation facilities such as highways and other roadways, interchanges, arterials and collectors, additional travel lanes, other major improvements on existing roadways and the provision of public transit service.

The consultant will address the first three bullets above, including development of preliminary cost estimates for providing sanitary sewer, storm sewer, and water for a residential land need. Metro staff will complete the transportation component of the first three requirements as well as the transportation analysis identified in the last bullet.

The sanitary sewer, water and storm water analysis shall focus on the larger components of the systems as well as the layout of the general distribution lines based on a preliminary road network that will be provided by Metro staff in consultation with local jurisdictions. Preliminary cost estimates for the urban services will address, at a minimum, the following:

- Sanitary sewer – Availability of treatment capacity, trunk line and pump station requirements, and existing local system improvements
- Water – Availability of source, availability of treatment capacity, storage, pump station and transmission line requirements, and existing local system improvements
- Storm water – existing local system improvements including a need for sub-regional systems

Finally, the consultant will review the transportation cost estimates that are developed by Metro staff using the Highway Economic Requirements System State Version (HERS-ST) methodology. Metro Research Center staff will provide base maps and/or electronic data for existing conditions, topographic constraints and sensitive lands as well as projected households based on a buildable lands analysis. Specific service provider data will need to be acquired from the service providers directly. The consultant work is expected to be completed by early 2018.



Title 14, Urban Growth Boundary

November, 2016



The information on this map was derived from digital databases on Metro's GIS. Care was taken in the creation of this map. Metro cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors are appreciated.

- County boundaries
- Urban growth boundaries
- Neighbor cities
- Rural reserve
- Urban reserve



Memo



Date: October 4, 2017
To: Metro Technical Advisory Committee (MTAC) and interested parties
From: Eliot Rose, Senior Technology Strategist
Subject: Metro's Emerging Technologies Strategy

PURPOSE

This memo and the accompanying presentation provides an update on the goals, content, and process for Metro's Emerging Technologies strategy and how it relates to the RTP.

ACTION REQUESTED

The purpose of this presentation is to introduce Metro's Emerging Technologies strategy overall, and specifically how it relates to the RTP, to the Metro Technical Advisory Committee and receive initial feedback from MTAC members. The attached matrix will be used during the presentation and identifies the potential impact that emerging technologies may have on our ability to meet existing RTP goals.

Goal	Key technologies	Promise	Peril
Goal 1: Foster Vibrant Communities and Efficient Urban Form	<ul style="list-style-type: none"> AVs/CVs Shared mobility 	<ul style="list-style-type: none"> AVs minimize space needed for parking 	<ul style="list-style-type: none"> People move further from centers as driving becomes more convenient AVs turn local streets into mini-highways bisecting communities
Goal 2: Sustain Economic Competitiveness and Prosperity	<ul style="list-style-type: none"> All 	<ul style="list-style-type: none"> Make travel throughout the region more reliable and efficient Innovative approaches attract new companies and investment 	<ul style="list-style-type: none"> Automation will likely eliminate jobs in the transportation sector By making driving more convenient, AVs could increase demand and congestion Many other regions are competing as technology innovators
Goal 3: Expand Transportation Choices	<ul style="list-style-type: none"> Shared mobility AVs/CVs 	<ul style="list-style-type: none"> New shared mobility services (bike share, scooter share) provide a greater variety of travel options Autonomous vehicle technologies create opportunities to expand transit and shared mobility service 	<ul style="list-style-type: none"> Shared mobility, especially ridesharing, competes with transit rather than supporting it Innovation focuses on improving vehicle travel, undermining other modes
Goal 4: Emphasize Effective and Efficient Management of the Transportation System	<ul style="list-style-type: none"> ITS Travel info AVs 	<ul style="list-style-type: none"> New data and systems make management easier and more effective AVs manage themselves 	<ul style="list-style-type: none"> As negative impacts of driving are reduced, some people are willing/able to spend longer time periods in their car, leading to increased demand. These residents can work while the AV drives, but others whose work requires them to be physically present face escalating unproductive commute time State, regional, and local governments could be pre-empted from managing some aspects of AV travel
Goal 5: Enhance Safety and Security	<ul style="list-style-type: none"> AVs/CVs ITS Travel info 	<ul style="list-style-type: none"> AVs operate more safely than human-operated cars, reducing collisions Better data is available on how people respond to emergencies, and better systems are available to coordinate responses 	<ul style="list-style-type: none"> People may not feel safe walking/biking next to high-speed traffic
Goal 6: Promote Environmental Stewardship	<ul style="list-style-type: none"> EVs AVs/CVs Shared mobility ITS 	<ul style="list-style-type: none"> EVs will continue to mature, and vehicles will produce fewer emissions per mile ITS strategies help vehicles operate more efficiently Shared mobility has the potential to reduce vehicle trips 	<ul style="list-style-type: none"> Total miles driven are likely to increase due to AVs, which means that the region may see an increase in total emissions even as cars become cleaner AV-induced sprawl could increase development pressure on farmlands and natural areas

Goal	Key technologies	Promise	Peril
Goal 7: Enhance Human Health	<ul style="list-style-type: none"> EVs AVs/CVs Shared mobility ITS 	<ul style="list-style-type: none"> AVs could support walkable communities by reducing land required for parking Bike share promotes active transportation Cars are likely to become cleaner ITS strategies help vehicles operate more efficiently 	<ul style="list-style-type: none"> AVs could make communities less walkable if ped facilities are not improved Total miles driven are likely to increase due to AVs, which means that the region may see an increase in total emissions even as cars become cleaner AV-induced sprawl could increase development pressure on farmlands and natural areas
Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions	<ul style="list-style-type: none"> EVs AVs/CVs Shared mobility ITS 	<ul style="list-style-type: none"> EVs will continue to mature, and vehicles will produce fewer emissions per mile ITS strategies help vehicles operate more efficiently Shared mobility has the potential to reduce vehicle trips 	<ul style="list-style-type: none"> Total miles driven are likely to increase due to AVs, which means that the region may see an increase in total emissions even as cars become cleaner
Goal 9: Ensure Equity	<ul style="list-style-type: none"> All 	<ul style="list-style-type: none"> Shared mobility has the potential to reduce household transportation costs, particularly if it enables households to shed a vehicle Some technologies may make it easier and cheaper to provide access to currently underserved areas 	<ul style="list-style-type: none"> Users of EVs, shared mobility, and data tools are wealthier and whiter than average Access to new technologies often depends smart phones and bank accounts, which low-income people are less likely to have Private shared mobility services usually focus on serving compact communities where housing is more expensive, not HMCs Few shared mobility services offer accommodations for people with disabilities
Goal 10: Ensure Fiscal Stewardship	<ul style="list-style-type: none"> All 	<ul style="list-style-type: none"> Improved data can support better performance-based decision-making 	<ul style="list-style-type: none"> Uncertainty about the future of transportation makes it challenging to make fiscally responsible decisions AVs, EVs and shared mobility have the potential to undermine key sources of transportation revenue
Goal 11: Deliver Accountability	<ul style="list-style-type: none"> All 	<ul style="list-style-type: none"> Technologies generate data that can be used to manage the transportation system New tools create opportunities for more meaningful and widespread public involvement 	<ul style="list-style-type: none"> Private companies have so far been reluctant to share the data that public agencies would need to hold them accountable Jurisdictions often struggle to manage their systems to obtain the data they need, and ensure that it is compatible with existing data sources



Metro

Metro's strategy for emerging technologies in the RTP and beyond: an overview

MTAC, October 4, 2017

Goals of this presentation

- Introduce Metro's approach to the regional technology strategy
- Answer questions and receive feedback

“Emerging technologies”



Automated / connected vehicles (AVs/CVs)



Electric vehicles



Shared mobility (Uber, Lyft, BIKETOWN, Car2Go, ZipCar, Getaround, etc.)



Intelligent transportation systems



Traveler information and payment apps (moovel, Transit App, TriMet OTP)



The large amount of **data** that all of these new technologies generate.

Why are we doing this?

The future is now, and we need to catch up.



TNCs now carry more people in Portland than taxis do, an estimated 7 million rides in 2017.

Car sharing services are operating over 1,000 vehicles within Portland.

Riders have logged over 300,000 trips on **BIKETOWN** since it was launched.

There are over 100,000 **EVs** in Oregon, with the majority located in the Portland region.

We could be seeing deployment of **AVs** in 1-5 ⁵ years.



Techno-utopia or...



techno-dystopia?



New options could bring new benefits and new challenges



- More options, easier carpooling
- Saving money on car ownership
- A safer, more efficient transportation system
- Less air pollution

- Increased vehicle trips and congestion
- More VMT, more sprawl
- Competition with transit
- Communities get left out

Not everyone benefits



Transit costs less than other shared modes, EVs cost more than comparable cars



TNCs could be discriminating against non-white riders



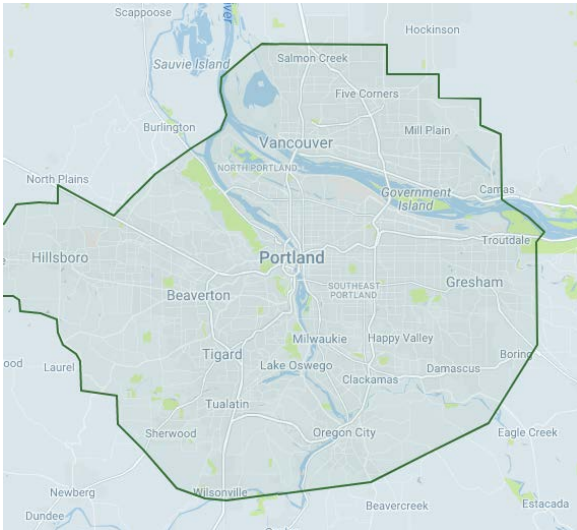
One in three Americans, and half of low-income households, lack a smartphone.



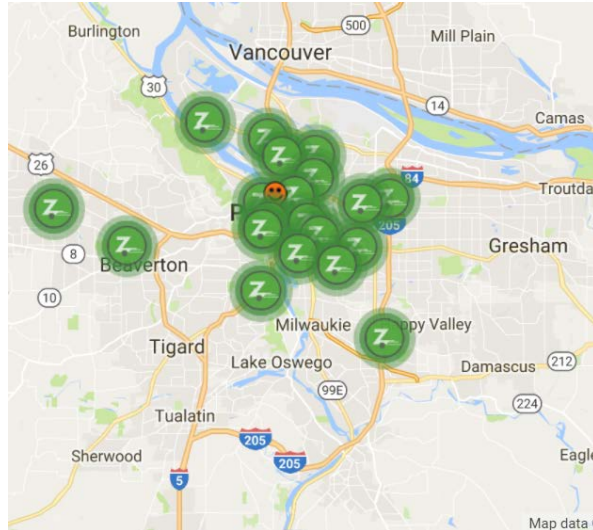
Taxis remain the mode of choice for wheelchair users, in spite of TNCs dominating the market.

Not everywhere benefits

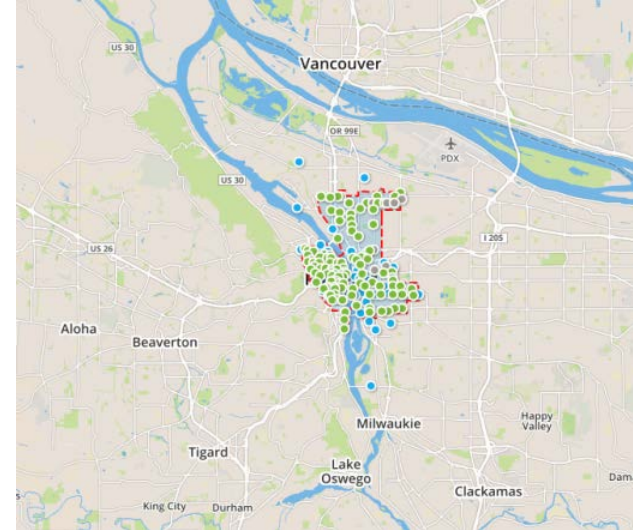
Uber



ZipCar



Bike share



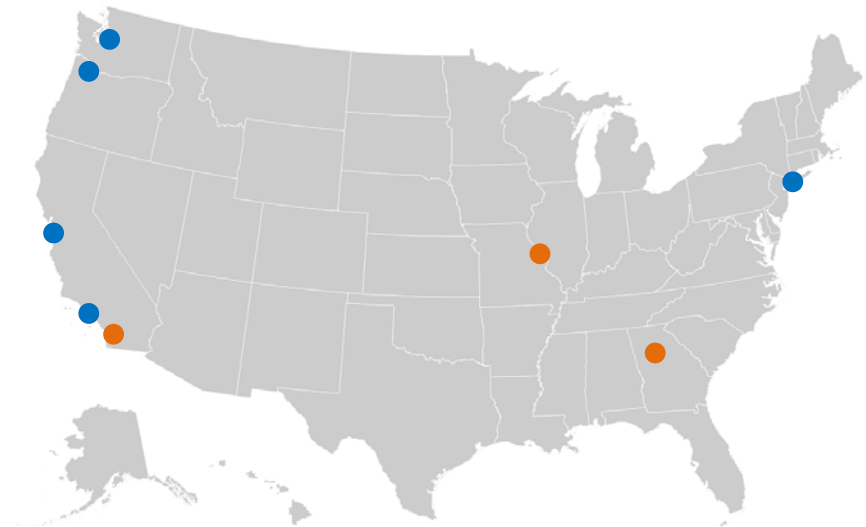
Public agencies have had a hard time being proactive.

- Private firms avoid partnership and oversight.
- We can't plan for services we don't understand.
- It's hard to know where to invest when technology is evolving so rapidly.

**What do we learn from what our
peers and partners are doing?**

What have we done so far?

- Reviewed technology strategies from **cities** and **MPOs** across the U.S.
- Talked with 25 regional stakeholders (public agencies, tech firms, consultants, advocates).
- Collected feedback at RTO and TSMO workshops.



Lesson 1: Values don't change, challenges and tactics do.

Put People and Safety First

The public right-of-way is our most valuable and most flexible public space. Our streets should prioritize access for people, amplifying the role and value of walking, biking, and transit in Seattle. We respect the desire to retain and use privately owned vehicles but will continue to manage the transportation system to move people and goods safely and efficiently. Safety is paramount, no matter how you get around Seattle. Our streets should be comfortable and intuitive for our most vulnerable travelers (people walking and biking). Shared, automated, and other new mobility models should not only advance our Vision Zero safety goals, they should also maintain consumer protections.

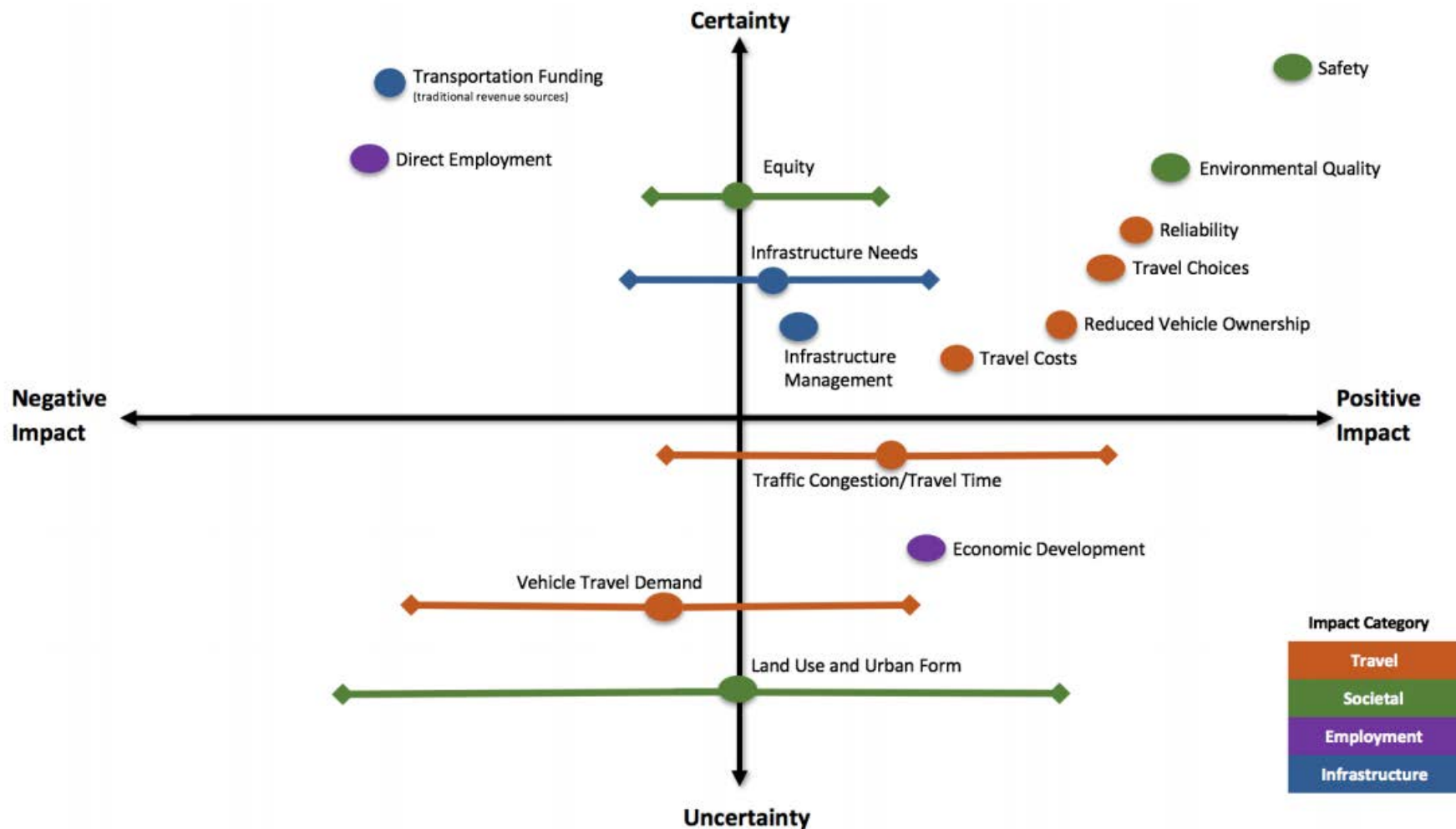
—Seattle New Mobility Playbook

2014 RTP: “Achieve modal targets for increased walking, bicycling, use of transit and shared ride and reduced reliance on the automobile and drive alone trips.”

Lesson 2: We need a big-picture look *and* specific next steps.

- Regional plans tend to talk about “technology” in general
- Local plans often focus on specific technologies—shared mobility, data, etc.
- Planners focus more on broad policies
- People that build and operate the transportation system are often focused on a particular technology

Lesson 3: Be honest about what we don't know.



Lesson 4: Set the stage to test, learn and adapt.

Many plans have short-term action items to help catch up to the pace of technology:

- Identifying new ways to collect, manage, provide, or leverage **data**.
- Developing **partnerships** to help bring new ideas to the table.
- Developing and aligning **resources** to support innovative pilot projects.

RTX: our proposed approach

RTX: What it is

Three components:

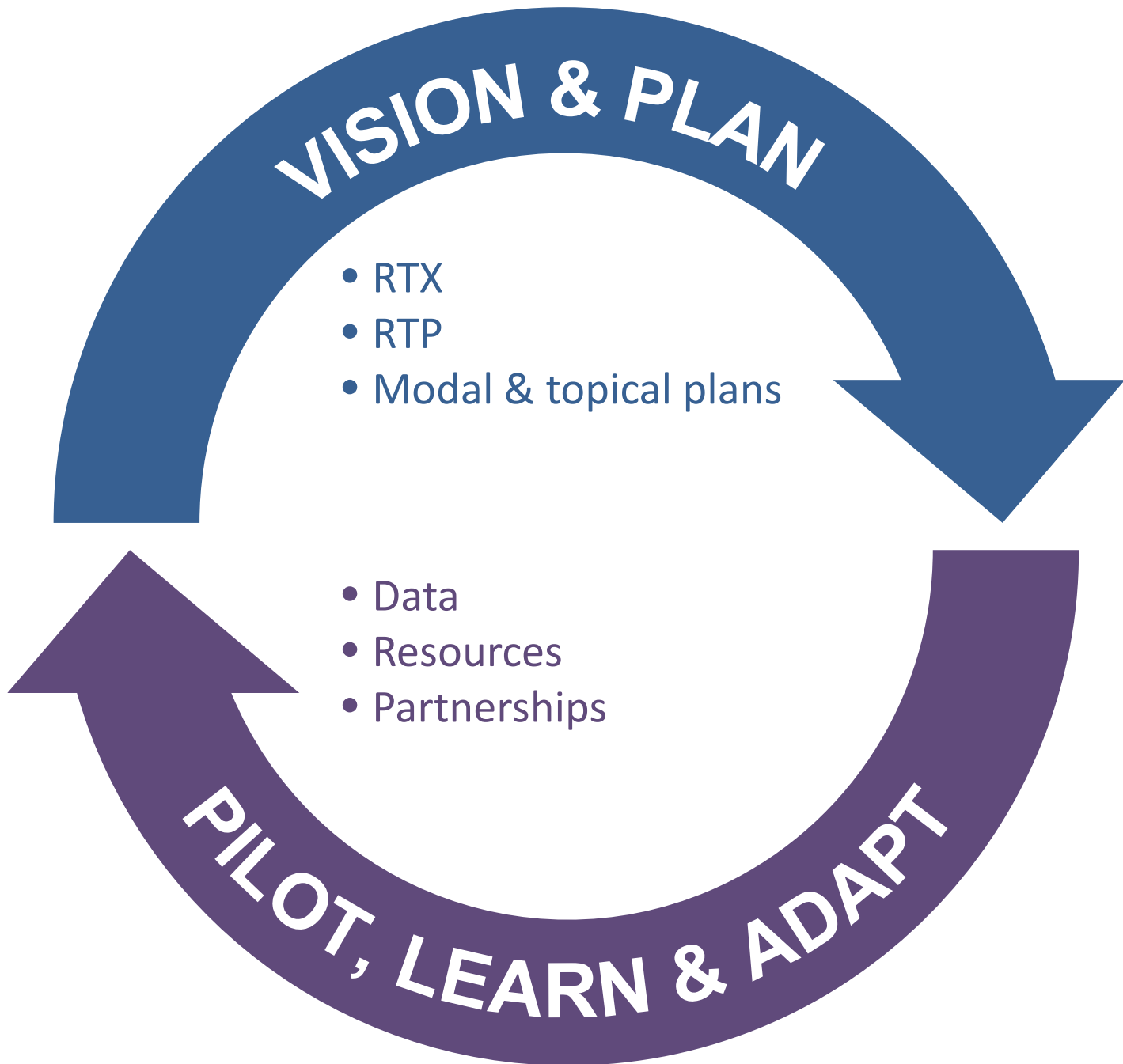
- Impact assessment
- Policies and strategies
- Next steps for implementation



RTX: Challenges

- Varying needs and capacity across the region
- Limited capacity for analysis
- Limited time for engagement
- Need to be creative about implementation





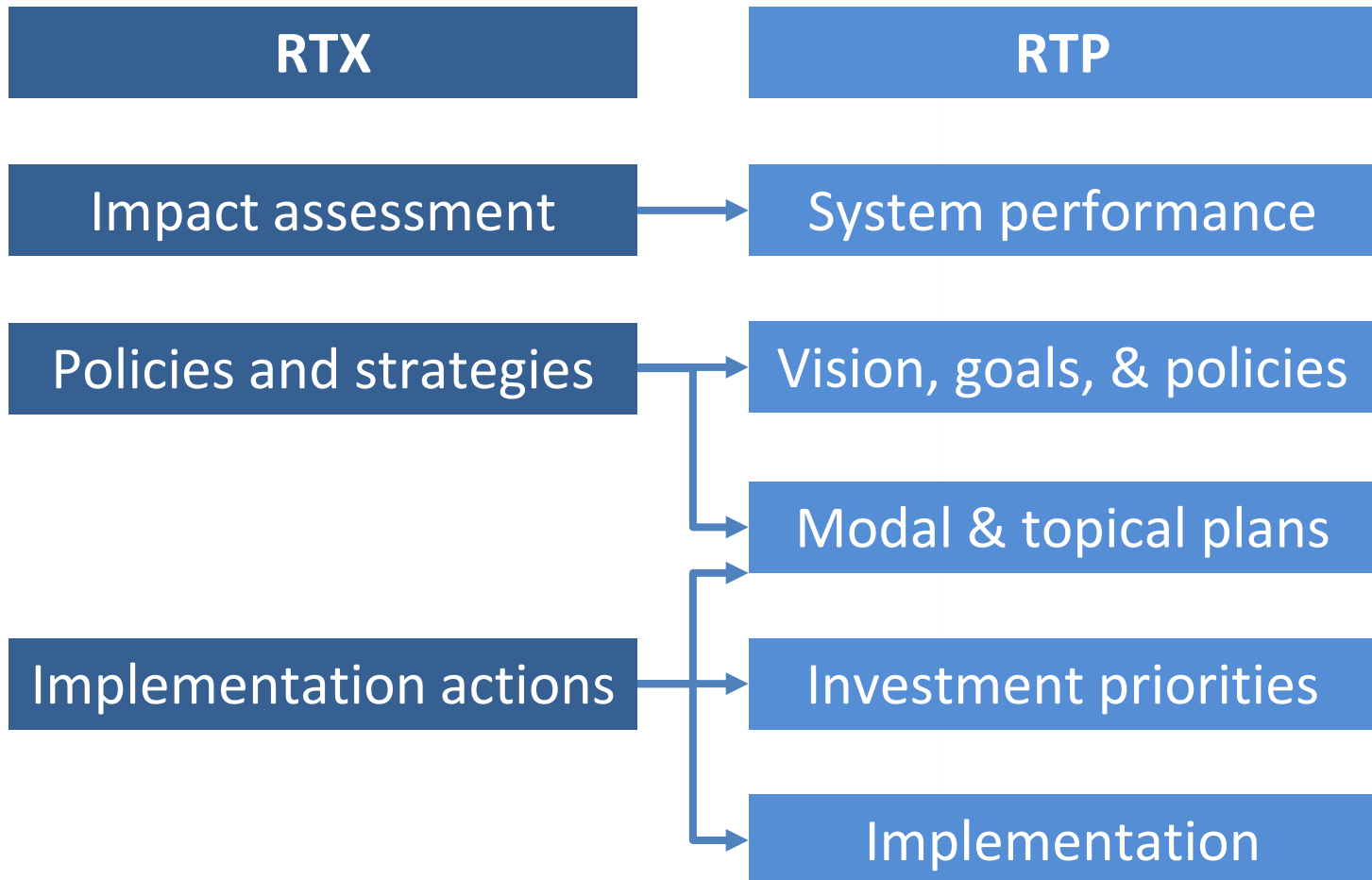
Impact assessment and policy development

- Organized around RTP goals
- Take a look at the promise and peril of different technologies
- Develop policies and strategies to **maximize the promise** and **minimize the peril**

Example: transportation choices

RTP goal	Expand Transportation Choices
Key technologies	Shared mobility, AVs/CVs, traveler information
Promise	Shared mobility increases travel options AVs create opportunities to expand the reach of transit
Peril	New modes compete with transit Innovation focuses on private vehicles
Potential policies	Emerging technologies must support, rather than compete with public transit services, must account for the operational needs of public transit and encourage use of high occupancy modes. (SFCTA)
Potential strategies	Innovate for choice: Prioritize technology pilots and projects that support transit, ridesharing, and bicycling/walking Develop marketplaces: Make it easy for all travelers to seamlessly and competitively compare and book trips

How does it all fit into the RTP?



Potential implementation actions (next 2 years)

Improve and share data

Develop partnerships

Develop resources

Funding processes

Understand equity needs

Build partnerships

Prioritize innovation in Metro grants and funding

Support pilot projects and local planning

Standardize and share data

Support mobility marketplace

Create new grant program

Implementation needs to have a strong focus on equity

- It's where we see the most pressing challenges.
- We have a sense of the barriers that marginalized communities face, but we don't really know what they need.
- It's key to making technology work for many of our other goals (transportation choices, climate, environment, compact development)

Proposed RTX development process

	Aug. 2017	Sept. 2017	Oct. 2017	Nov. 2017	Dec. 2017	Jan. 2018	Feb. 2018	Mar. 2018	Apr. 2018
Metro Council			Direction on approach			Provide direction on RTX draft			
Technical committees		Feedback on approach				Provide feedback on RTX draft			
Policy committees			Feedback on approach					Feedback on RTX draft	
Stakeholder meetings	Develop approach, scope, policies, and actions								
Presentations to collaboratives				Feedback on draft policies					
Outreach events					Feedback on draft policies				

Questions and feedback

Eliot Rose

Senior Technology Strategist

eliot.rose@oregonmetro.gov

503.797.1825