

Agenda



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Metro Technical Advisory Committee (MTAC)
Date: Wednesday, January 17, 2024
Time: 9:00 a.m. to 12:00 p.m.
Place: Virtual meeting held via Zoom
video recording is available online within a week of meeting
[Connect with Zoom](#)
Passcode: 982966
Phone: [888-475-4499](tel:888-475-4499) (Toll Free)

9:00 a.m.	Call meeting to order, Declaration of Quorum and Introductions	Chair Kehe
9:10 a.m.	Comments from the Chair and Committee Members <ul style="list-style-type: none">• Updates from committee members around the Region (all)• Survey results on MTAC meetings at MRC (Chair Kehe)	
9:20 a.m.	Public communications on agenda items	
9:23 a.m.	Consideration of MTAC minutes, December 20, 2023 (action item) Send edits/corrections to Marie Miller	Chair Kehe
9:25 a.m.	Urban Growth Management Functional Plan Title 4 Map and Amendments in 2023 Purpose: As required by Metro code, the previous year's UGMFP Title 4 map and amendments from the previous year are shared annually with MPAC and Metro Council. Staff will share a summary from 2023.	Glen Hamburg, Metro
9:45 a.m.	Economic conditions/trends Purpose: Understand state and national population / economic trends in preparation for the 20-year regional forecast produced for the urban growth management decision in 2024.	Ted Reid, Metro Dennis Yee, Metro Josh Harwood, Metro Joe Gordon, Metro
11:00 a.m.	Adjournment	Chair Kehe

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ ១ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលបានពាក្យបណ្តឹងរើសអើងសម្រាប់សេវាសេវាសេវា www.oregonmetro.gov/civilrights។
បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បីអាចឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

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2024 Metro Technical Advisory Committee (MTAC) Work Program

As of 1/5/2024

NOTE: Items in italics are tentative; bold denotes required items

All meetings are scheduled from 9am – noon

<p><u>MTAC meeting, January 17, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) • Survey results on MTAC meetings at MRC (Chair Kehe) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • UGMFP Title 4 Map and Amendments in 2023 (Glen Hamburg, 20 min) • Economic conditions/trends (Ted Reid/Dennis Yee/Josh Harwood/Joe Gordon, Metro, 75 min) 	<p><u>MTAC meeting, February 21, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Middle Housing Panel Discussion (Chair Kehe, Metro/ Joseph Edge, Clackamas County Community Rep, 90 min) • Urban Growth Boundary discussion topic: Preliminary regional forecast methods and results (Ted Reid/Dennis Yee, Metro, 45 min)
<p><u>MTAC meeting, March 20, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Overview of Emergency Transportation Routes Phase 2 project (John Mermin, 20 min) • Urban Growth Boundary discussion topic: Preliminary UGB capacity estimates (Ted Reid/Clint Chiavarini/Dennis Yee, Metro, 45 min) 	<p><u>MTAC meeting, April 17, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Urban Growth Boundary discussion topic: Historic development trends (Ted Reid/Al Mowbry / Joe Gordon, Metro, 45 min)
<p><u>MTAC meeting, May 15, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Urban Growth Boundary discussion topic: City UGB expansion proposals (city presentations) (Ted Reid, Metro, 45 min) 	<p><u>MTAC meeting, June 26, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Pending employment land expansion proposal, analysis of possible benefits of UGB expansion (Ted Reid, Metro, 45 min) • Urban Growth Boundary discussion topic: Draft functional plan language (Update to Title 6) and regional centers (Glen Hamburg, Metro, 20 min) • EPA Climate Pollution Reduction Grant (Eliot Rose, Metro, 30 min)

<p><u>MTAC meeting, July 17, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Draft UGR (Ted Reid, Metro; 90 min) • Connecting First and Last Mile Study Introduction (Ally Holmqvist, Metro; 45 min) 	<p><u>MTAC meeting, August 21, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Recommendations to MPAC (if requested) (Ted Reid, Metro) FULL MEETING
<p><u>MTAC meeting, September 18, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p>	<p><u>MTAC meeting, October 16, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p>
<p><u>MTAC meeting, November 20, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p>	<p><u>MTAC meeting, December 18, 2024</u></p> <p><u>Comments from the Chair</u></p> <ul style="list-style-type: none"> • Committee member updates around the region (Chair Kehe and all) <p><u>Agenda Items</u></p> <ul style="list-style-type: none"> • Follow up on process (Ted Reid, Metro) • Connecting First and Last Mile Study Policy Framework (Ally Holmqvist, Metro; 45 min)

Parking Lot/Bike Rack: Future Topics (These may be scheduled at either MTAC meetings or combined MTAC/TPAC workshops)

- Status report on equity goals for land use and transportation planning
- Regional city reports on community engagement work/grants
- Regional development changes reporting on employment/economic and housing as it relates to growth management
- Update report on Travel Behavior Survey
- Updates on grant funded projects such as Metro’s 2040 grants and DLCD/ODOT’s TGM grants. Recipients of grants.
- Transit-Oriented Development (TOD) annual report/project profiles report
- Employment & industrial lands
- 2040 grants highlights update

For MTAC agenda and schedule information, e-mail marie.miller@oregonmetro.gov

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Meeting minutes

Meeting: **Metro Technical Advisory Committee (MTAC) meeting**

Date/time: Wednesday, December 20, 2023 | 9:00 a.m. to 12:00 p.m.

Place: Virtual video meeting via Zoom

Members Attending

Eryn Kehe, Chair
Joseph Edge
Carol Chesarek
Victor Saldanha
Tom Armstrong
Aquilla Hurd-Ravich
Steve Koper
Katherine Kelly
Jamie Stasny
Jessica Pelz
Gary Albrecht
Neelam Dorman
Laura Kelly
Gery Keck
Cindy Detchon
Tara O'Brien
Bret Marchant
Rachel Loftin
Preston Korst
Erik Cole
Mike O'Brien

Affiliate

Metro
Clackamas County Community Member
Multnomah County Community Member
Washington County Community Member
City of Portland
Second Largest City in Clackamas County, Oregon City
Washington County: Other Cities, City of Tualatin
City of Vancouver
Clackamas County
Washington County
Clark County
Oregon Department of Transportation
Oregon Dept. of Land Conservation & Development
Tualatin Hills Park & Recreation District
North Clackamas School District
TriMet
Greater Portland, Inc.
Community Partners for Affordable Housing
Home Builders Association of Metropolitan Portland
Schnitzer Properties, Inc./ Revitalize Portland Coalition
Green Infrastructure/Sustainability, Mayer/Reed, Inc.

Alternate Members Attending

Kamran Mesbah
Vee Paykar
Faun Hosey
Miranda Bateschell
Erika Palmer
Kevin Cook
Theresa Cherniak
Glen Bolen
Kelly Reid
Cassera Phipps
Chris Faulkner
Jeff Hampton
Aaron Golub
Jacqui Treiger
Craig Sheahan

Affiliate

Clackamas County Community Member
Multnomah County Community Member
Washington County Community Member
Washington County: Other Cities, City of Wilsonville
Washington County: Other Cities, City of Sherwood
Multnomah County
Washington County
Oregon Department of Transportation
Oregon Dept. of Land Conservation & Development
Clean Water Services
Clean Water Services
Business Oregon
Portland State University
Oregon Environmental Council
David Evans & Associates, Inc.

Guests Attending

Adrienne DeDona
Barbara Fryer
Brian Hurley
Bruce Coleman
Dakota Meyer
Eric Rutledge
Kevin Young
Kia Selley
Marc Farrar
Max Nonnamaker
Nancy Chapin
Rebecca Geisen
Schuyler Warren
Tracy Lunsford
Valentina Peng

Affiliate

JLA
City of Cornelius
Oregon Department of Transportation
City of Sherwood
City of Troutdale
City of Sherwood
OR Dept. Land Conservation & Development
North Clackamas Park & Recreation District
Metropolitan Land Group, LLC
Multnomah County Health Department
TSG Services
Regional Water Providers Consortium
City of Tigard
Parametrix
JLA

Metro Staff Attending

Cindy Pederson, Clint Chiavarini, Eliot Rose, Eryn Kehe, Glen Hamburg, Jake Lovell, Marie Miller, Ted Reid

Call to Order, Quorum Declaration and Introductions

Chair Eryn Kehe called the meeting to order at 9:00 a.m. A quorum was declared. Introductions were made. Zoom logistics and meeting features were reviewed for online raised hands, renaming yourself, finding attendees and participants, and chat area for messaging and sharing links. An overview of the agenda was given.

Comments from the Chair and Committee Members

- **Updates from committee members around the Region** – none given.
- **2024 MTAC meeting schedule and member poll on in-person meetings** (Chair Kehe) Poll questions were shared with members and alternate members on interest in meeting in-person with hybrid options, and frequency of meetings held in-person in 2024. Technical difficulties from the poll prevented final results, but information given at the meeting showed interest in meeting in-person with hybrid options on a quarterly basis. A survey will be given to members and alternate members to ask input on these questions. Results will be shared in January. A reminder was given on the MTAC 2024 meeting schedule included in the meeting packet.

Public Communications on Agenda Items – none given.

Consideration of MTAC minutes November 15, 2023 meeting

Chair Kehe asked for a vote to approve MTAC minutes from November 15, 2023 meeting.

ACTION: Motion passed with no opposed, and 5 abstentions

EPA Climate Pollution Reduction Grant (Eliot Rose, Metro/ Adrienne DeDona, JLA/ Tracy Lunsford, Parametrix) The presentation began with defining what the Climate Pollution Reduction Grants (CPRG) include. The CPRG grants are non-competitive, 4-year planning grants that fund states and

metropolitan areas (*The Portland-Vancouver metropolitan statistical area (MSA) includes Clackamas, Clark, Columbia, Multnomah, Skamania, Washington and Yamhill counties*) to create plans and identify strategies that:

- Significantly reduce greenhouse gases (GHGs) and offer other co-benefits
- Can be readily implemented by agency partners
- Are aligned with federal and state climate funding sources

The Climate Partners' Forum is a group of self-nominated technical staff from agencies across the MSA who help to steer the CPRG planning grant. These forum members review deliverables and provide feedback at key points, are typically lead climate staff in their organization, have expertise in different GHG emissions sectors and strategies (e.g., energy, buildings, transportation), and may join or leave the Forum at any time, and may invite other staff within their agency to participate.

Preliminary CAP round of planning (now-Mar '24) will focus on emissions and actions where public agencies are poised to achieve significant GHG reductions. Comprehensive CAP round of planning (Apr '24-Aug '25) will cover all relevant GHG emissions and actions. The second round of planning includes provided updates on GHG emissions and PCAP/CCAP implementation actions in the status report with other federal climate funds known later.

Highlighted were the CPRG implementation grants: the basics

- Total funding available: \$4.3b
- Individual grant amount: \$2m-500m
- Number of awards expected: 30-115
- EPA expects 50-70% of grants to be <\$10m
- Match required: none
- Grant period: 5 years
- Eligible applicants: states, municipalities, and tribes
- *Projects must be included in a PCAP to be eligible for CPRG implementation grants.*

The PCAP will be an action-driven plan that reviews potential projects and highlights those that best align with EPA's implementation funding criteria. It will focus on projects that are focused on reducing GHGs, can reduce GHG emissions within 5 years, are documented in existing plans, are detailed enough for us to understand potential GHG reductions, costs, and work plans, can be led by public agencies, and have a clear lead applicant with the capacity to develop an application.

Evaluation criteria EPA is looking for in the notice of funding opportunity (NOFO):

- Significantly reduce GHG emissions in a cost-effective manner (60 points)
- Have a clear, well-thought-out work plan (45)
- Have reasonable, well-documented budgets (45)
- Benefit people living in federally designated Low Income and Disadvantaged communities (35)
- Have a sound plan to track implementation and performance (30)
- Are led by agencies with a track record of successfully managing EPA grants (30)
- Provide quality jobs (5)

The PCAP 5-month timeline was presented. The importance of coordination was noted. In addition to the Portland-Vancouver region, Oregon, Washington, and the Affiliated Tribes of Northwest Indians, have received planning grants. Any projects identified in these PCAPs are also eligible for implementation grants. The initial screening criteria of projects was presented:

- Readiness: is information available?
- GHG reductions: likelihood of significant GHG reductions within 5 years
- Local agency authority: authority, resources and experience to lead implementation
- Scalability: can it benefit multiple agencies or communities within the MSA?
- Co-Benefits: especially with respect to equity

Priority action categories were described:

Support EV transition through charging infrastructure

Make transit convenient, frequent, accessible and affordable

Make biking, walking and active transportation safe and convenient

Use technology to actively manage the transportation system

Improve building energy efficiency

And Other categories not related to transportation / land use

Screening results for potential PCAP strategies was reviewed. Next steps with the program were described.

Comments from the committee:

Jamie Stasny noted one of the items that you said is rising to the top is implementation of congestion pricing in the region. I'm curious what that will look like and what you're imagining these grants could be used for in that vein of projects. Mr. Rose noted we're still figuring that out with a lot of details of implementation that continue to be worked out. With the stage we're at we are trying to screen out actions and identify the ones that do the most to reduce greenhouse gas emissions and are the most ready to go. We felt pricing belonged on the short list because it's a critical strategy to climate smart, which is our regional strategy for reducing transportation related GHG. It's such a big opportunity for the region to reduce GHG that we wanted to leave the door open to it.

Vee Paykar noted you mentioned that GHG was the highest scored criteria for the project, but there were others such as equity. How much of the criteria was the percentage of the score? Mr. Rose presented the slide in the presentation that detailed what EPA is looking for. There are 250 points total available. There are 60 points related to available for reducing GHG. The one related to work plan, budgets, performance and successful management of EPA grants are basically related to can the agency that's applying for this grant deliver on it. Do they have the plan and the experience to do that. Those four criteria collectively account for 150 points. And then there's 40 points related to equity and workforce development that provide quality jobs. But federal notices of funding are complicated and vague documents. For those interested in the details the implementation grant NOFO link was shared: <https://www.epa.gov/system/files/documents/2023-09/CPRG%20General%20Competition%20NOFO.pdf>

Glen Bolen noted that re-looking at the scores, I'm thinking of transit access. We've done a lot of first last mile studies in this region. I know Washington County did a big one a few years ago. I could imagine, especially within where we have equity focus areas that good quality access to transit stops would be very successful in high scoring. I think it's pretty implementable and gets to the human health and safety goals in our local plans and the RTP.

Tara O'Brien agreed with Mr. Bolen's comments. The EPA is very interested in the very quantifiable GHG emission reduction in terms of the implementation grants. So what Metro has been leading now is looking at the strategies that we can point to some data through Climate Smart and other work we've done in the region to quantify those. As we are trying to hone in on what the most successful

implementation grants could be, we're looking closely at those criteria that you just brought up and what can we quantify GHS emission reduction from. I think access to transit could be apart of that, but we have been trying to look at what types of projects would be most successful. Looking at some of the analysis we've done through Climate Smart, what can we point to the emissions reduction the most either through fleet transition or known mode shift, and trying to connect those things which serves the areas that EPA cares most about. I think there are a lot of pieces that could come into play in implementation grants that we're talking with partners about and how to possibly combine some of those into the most successful application.

Joseph Edge agreed with the pedestrian access to transit plan for use with new funds. Getting sidewalks built, particularly in unincorporated Clackamas County is nearly impossible. This could be true in other areas of the region as well, and hopefully score high with the criteria. It was noted that building rails to everywhere is just really expensive. One idea mentioned was kind of a full build out of the FX bus network to where we have frequent express routes that aren't necessarily just an upgrade of the bus route that it's replacing, but maybe are thinking about providing connections between all of the regional centers on the region 2040 plan. In this manner we would have a high quality capacity transit by definition. Again, build out that FX network to help serve policy goals as opposed to just replace bus line that has really good ridership which obviously is a criteria that we shouldn't ignore. But maybe a more ambitious plan that isn't purely focused on the highest ridership lines, but it also focuses on connecting key destinations where maybe easy transit trips don't already exist and maybe one day transition to rail on the plan.

Vee Paykar noted it was really important that we think about the other modes that reduce GHG emissions, not simply change our entire fleet to electric. When you build out complete streets you are reducing GHG emissions. It's just harder to quantify. It is something you like to see in the long term with the change of pedestrians reduction in traffic violence and all these other things that allow for people to want to be able to take other modes safely. How do we not lose these opportunities in the grants and how can we demonstrate this.

Gary Albrecht noted appreciation of including Clark County part of these discussions and will continue to collaborate on these efforts as much as possible.

Draft Sherwood West Concept Plan (Erika Palmer & Eric Rutledge, City of Sherwood) The Sherwood West Concept Plan was described as large Urban Reserve area located just to the west of Sherwood city limits, which the City of Sherwood has identified as an area for future growth. Future development in Sherwood West will require expansion of the Metro urban growth boundary (UGB). Since 2016, the city and surrounding areas have seen significant changes including:

- Shifting of City Council priorities focusing on employment and job growth to diversify the city's tax base,
- Construction of a new high school within the Sherwood West study area,
- Adoption of the Sherwood 2040 Comprehensive Plan, and
- Recent changes to statewide and local housing regulations to plan for "missing middle housing" in residential areas.

Information on the plan provided a general framework for locating various land uses, transportation networks, open spaces, and public services. Once the area is brought into the UGB, the City will conduct additional analysis and undertake a comprehensive planning effort to refine the general concepts that are laid out in the Concept Plan – a necessary next step prior to land being eligible for

future annexation and development. The planning and engagement process was described. Information on the plan included land use, transportation, and green space.

The City of Sherwood will have the ability to request expansion of the UGB to include Sherwood West in 2024. There is more work to be done to prepare Sherwood West for future growth and development. The comprehensive planning and zoning process offers an opportunity for the City to reach out to affected property owners and the larger community to refine higher-level concepts. Robust community engagement, in addition to further evaluation of the topics addressed in this plan, will be an essential component of the City's next steps in developing refined plans and future regulations for Sherwood West.

Comments from the committee:

Joseph Edge noted particular interest in the concept of the middle housing zones in order to try and make sure that we're actually seeing some productivity there. You mentioned on your upcoming steps where this is found. Can you provide any kind of enlightenment on how you've done this before or how it might change in terms of guaranteeing that kind of orderly annexation, and to make sure that the properties are actually being brought into the city. In particular, I'm thinking about the larger parcel, employment and industrial land. How do we make sure that we're actually getting those within city limits?

Eric Rutledge noted that all of us as practitioners and planning, engineering and development planners want orderly growth and our city council does as well. We think we can accomplish the orderly growth mainly through annexation policy. Right now our annexation policy is relatively minimal. So we likely, as part of the next phase, will update our annexation policy and likely require an annexation agreement with a property owner or developer before they come into the city.

Infrastructure is one of the biggest challenges with development. By the time you get through annexation and you get into a land use phase it's not too late. You can address things at that point but you have less opportunity to address shared interests and infrastructure with a developer or property owner. The annexation agreement allows us to get in front of that, get partnerships with them and make sure we get the transportation, street improvements, storm water management and all that goes with urbanization. At the same time we don't want to discourage development but what we definitely don't want is disorderly development and issue with traffic, storm water and other factors.

Carol Chesarek asked, with the middle housing and the cottage cluster housing, what has been done in the code to ensure how the desired housing types will actually be built at the price points you are looking for? Mr. Rutledge noted the reason we want middle housing and cottage cluster is because by their nature they'll be smaller and more affordable. So we have some of that built in already. At the last WA Co. TAC meeting discussion was held on a reduced or lower TDT (transportation development tax) for middle housing right now. If they built that today based on that reduced TDT we really haven't gotten into any type of agreements with developers to deliver at a certain price point, deeded restrictions and things like that. I think the approach to start would be to see if we can get that housing at the price points based on a market approach. If we feel we can't do that I think we would consider other options as well. Our first approach will be through sort of basic incentives, reduced SDC for this type of housing, maybe more density. It was noted much of this work is yet to come if this area comes into the growth boundary.

Aquilla Hurd-Ravich noted the hospitality zone and wondered if there's a model that you used and how you are thinking about incentivizing that development space. Mr. Rutledge noted we have started to engage lightly and informally with stakeholders who might have interest in being involved (developers, winemakers, master planner). It's something we need to do a lot more work on. Examples of winery tasting rooms and associated development was shared.

Chair Kehe added a little more context around this in terms of the urban growth boundary decision. I'm sure you all remember we've talked a lot about the production of the Urban Growth Report, which is a report that will present all of the data and information that you've begun to learn about how we're collecting. It includes those 3 parts of looking at capacity inside the growth boundary to accommodate needed growth in the future as well as demand and growth looking out 20 years for the region. This is the math problem between what our projected need is and what our supply is inside the growth boundary, and what needed land we have for the future. This comes together with readiness. All of that comes together in the Urban Growth Report which the committee will be along for the ride as each piece comes together.

Urban Growth Boundary discussion topic: Town and regional centers and CFEC (Update to Title 6)

(Glen Hamburg, Metro) Background and an overview of a state requirement to amend Title 6, *Centers, Corridors, Station Communities, and Main Streets*, of Metro's Urban Growth Management Functional Plan in order to require local adoption of boundaries for regional and town centers was provided. The Growth Concept foresees numerous walkable, higher-density, mixed-use centers of employment, housing, cultural and recreational activities, and transit service across the region, with those centers helping to grow the economy, provide affordable housing, and promote vibrant and distinctive communities that reduce the need for sprawl and minimize transportation costs and contributions to climate change.

There are three types of 'centers' envisaged in the 2040 Growth Concept:

1. The **Central City**, which includes areas such as Downtown Portland, Old Town/Chinatown, the Pearl, Goose Hollow, South Waterfront, the Lloyd District, Lower Albina, and the Central Eastside, is the region's business and cultural hub, indeed the primary center for finance, commerce, government, retail, tourism, arts, and entertainment with the most intensive development of housing and employment.
2. **Regional centers**, serving hundreds of thousands of people in major urban areas outside the Central City and surround high-quality transit service, multi-modal street networks, and nodes of regional through-routes. Regional centers are typically characterized by two- to four-story employment and housing development, larger commercial uses, healthcare facilities, and local government services.
3. **Town centers**, which are smaller than regional centers and serve populations of tens of thousands of people. They offer more locally focused retail uses, like restaurants, cafes, brewpubs, childcare facilities, cinemas, and dry cleaners and public amenities like libraries and community halls. Town centers are typified by one- to three-story buildings for employment and housing, as well as a strong sense of community identity.

Over the last couple years, Oregon's Land Conservation and Development Commission (LCDC) has updated certain Oregon Administrative Rules (OARs) as part of the state's Climate Friendly and Equitable Communities (CFEC) program. CFEC aims to reduce greenhouse gas pollution and improve social equity in transportation services and community health, safety, and livability. To those ends, CFEC includes measures intended to accelerate the development and transformation of Metro's centers in ways that are consistent with the 2040 Growth Concept and RFP policies.

Implementing CFEC measures for centers necessitates defining a geographic area where those measures apply. OAR 660-012-0012(4)(d) therefore requires Metro to amend UGMFP Title 6 by the end of 2024 to include a mandate that cities and counties adopt boundaries of the regional and town centers for which they have land use planning authority and for which they have adopted urban land use designations. Cities and counties in the region then have until the end of 2025 to adopt those center boundaries. The locally adopted boundaries must be in the general location of the center as depicted on the 2040 Growth Concept Map.

Over the next year, Metro staff will continue to have dialogue with staff of cities and counties, DLCD, and other stakeholders to refine the amendments to UGMFP Title 6 intended to comply with CFEC requirements before submitting a formal proposal of amendments for review by MTAC, MPAC, and ultimately the Metro Council to be considered for adoption by the Metro Council with the 2024 Urban Growth Report. Details on the amendment requirements were reviewed in the presentation.

Comments from the committee:

Joseph Edge asked if the intent from CFEC that the adopted boundaries of the region 2040 centers will need to be treated and regulated as the climate friendly areas that are required of non-Metro jurisdictions in the state. Mr. Hamburg agreed, that's the kind of idea that outside of Metro there are these climate friendly areas. Inside of Metro we already have these 2040 centers that sort of look and act like what these climate friendly areas are. So in the Metro region the climate friendly areas will be these regional and town centers.

Kevin Young added the requirements that are established for climate friendly areas in downtown NPO's will not be applied to town and regional and central city centers in the Metro region. Essentially, it's continuing to implement the Climate Smart Communities program and the program that's already ongoing in the Metro region. There are some associated requirements. One of the things that happens with the designation, with the adoption of the centers, is a permutation in terms of transportation impact review. Zone changes in those areas would not go through the old significant effect test process. There's a new process that is significantly onerous and more streamlined and more focused on promoting transportation options in town and regional centers. That will also be in effect within the Metro region, but the zoning minimum densities allowed, building heights, all of that stuff is not a component within the Metro region. The 30% requirement for housing does not apply for housing so that calculation is necessary.

Mr. Edge noted, then in the spirit of CFEC, even if the state isn't requiring it, we might want to consider that jurisdictions target 30% of their housing in their designated centers. There's a proposal underway to require Metro counties, urban counties to plan for housing needs analyses for their unincorporated areas that are not intended to be brought into cities. I would encourage us to want to see the new housing be targeted for centers in the unincorporated parts of counties that are under that county planning authority. To that end I'd like you to describe the role of station communities and how they relate to centers and why they're not included in this proposal.

Mr. Hamburg noted the quick answer is they're not included in this proposal because CFEC is not requiring Metro to do that. We once had a requirement for the adoption of center boundaries and then those requirements were removed, and now we're at this incentive approach. We are back to the idea that in order to focus certain regulatory provisions we need to define what that geography is, meaning that we need to adopt boundaries. CFEC didn't require all jurisdictions to have boundaries for station

communities being specifically focused around light rail. And not all centers are focused around a light rail transit stop.

Mr. Edge noted we don't have the high capacity transit element present in all our centers. With that in mind, station communities provide that benefit of having existing high capacity transit access for that surrounding area. I would encourage us to figure out a way that we can guarantee, through defining boundaries, requiring boundaries and zoning designations adopted around station communities. Particularly the ones that already exist that haven't seen such designation changes. I think that's an important thing moving forward to consider the role of station communities and how they compliment what we're trying to do with CFEC. And not to look at it as what the minimum compliance is required by the state, but what we are trying to do for the 2040 concept.

Mr. Hamburg noted in some cases some station communities overlap with a 2040 center. So there will be some cases where the boundaries get adopted for a center and end up having some benefits for the station community that's in there. Chair Kehe added there has been discussion on the need to update the 2040 vision. This kind of bigger policy question is one of those that is something that we should reflect on in thinking about a 2040 update.

Glen Bolen noted a recent presentation from the City of Portland on the Multnomah Montgomery Park redevelopment plan with the Streetcar elements among them. The planning described with urban transportation in this central city area could be related to town or regional center level of intensity development. Is this playing into the 30% or more of populations in these centers? Are there thoughts on this or a path planned? Would Portland be expanding sort of the city in this method? Would they be creating a new semi-regional center or town center? If you look at Portland's comprehensive plan I see places like 82nd Avenue for example that have center like characteristics to their plans, too.

Tom Armstrong noted when the City of Portland updated their comprehensive plan in 2016 we designated a number of local town centers that aren't on the 2040 map that Mr. Hamburg mentions, to reach sort of town center level of activities and we would be interested in either as part of this process, or some upcoming process, to be able to recognize those town centers in the regional context. Mr. Bolen added when we look at context mapping for use of the urban design blueprint, that's one of the things that we look at. I noticed Portland had made these town center like designations along roads like 82nd that reflect how we do our assessments.

Michael O'Brien thanked Mr. Edge for bringing up the station communities and centers discussion. It's interest looking at the map the stated communities are shown on the Metro map. I think it's important that we start to look at these as a way to build ourselves out of the housing crisis in one sense, but also in terms of climate resiliency. These areas, as they were designed and sold to the public with the light rail, was that we are going to build up communities at the light rail stops. That has not happened in my view to the extent or even close to the extent that they need to for making an impact on this. I think if we can incentivize and place stricter restrictions on what happens in these areas and provide some benefit or monetary benefit to developers to increase and expand on these areas, I think we are doing ourselves a great favor on a number of different fronts. I would wholeheartedly say let's be thinking of those a little more closely as we talk about 2040.

Adjournment

There being no further business, meeting was adjourned by Chair Kehe at 11:21 a.m.

Respectfully submitted,

Marie Miller, MTAC Recorder

Attachments to the Public Record, MTAC meeting December 20, 2023

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	12/20/2023	12/20/2023 MTAC Meeting Agenda	122023M-01
2	MTAC Work Program	12/8/2023	MTAC Work Program as of 12/8/2023	122023M-02
3	Memo	11/16/2023	TO: MTAC and interested parties From: Marie Miller, Metro RE: 2024 Metro Technical Advisory Committee (MTAC) Meeting Schedule	122023M-03
4	Minutes	11/15/2023	Draft minutes from MTAC 11/15/2023 meeting	122023M-04
5	Draft Resolution from City of Sherwood	July 18, 2023	RESOLUTION 2023-060 ACCEPTING THE SHERWOOD WEST CONCEPT PLAN	122023M-05
6	Report	July 18, 2023	Sherwood West Concept Plan	122023M-06
7	Appendix A	July 18, 2023	APPENDIX A Future Development Timeline	122023M-07
8	Appendix B	July 18, 2023	APPENDIX B Housing Policy Implications Memo	122023M-08
9	Appendix C	July 18, 2023	Appendix C Public Engagement Plan	122023M-09
10	Appendix D	July 18, 2023	Appendix D Open House #1 (Online) Summary	122023M-10
11	Appendix E	July 18, 2023	Appendix E Open House #2 and Survey Summary	122023M-11
12	Appendix F	July 18, 2023	Appendix F Development Trends and Implications Memo	122023M-12
13	Appendix G	July 18, 2023	Appendix G Economic Opportunities Memo	122023M-13
14	Appendix H	July 18, 2023	Appendix H Transportation Issues Memo	122023M-14
15	Appendix I	July 18, 2023	Appendix I Plan Concepts	122023M-15
16	Appendix J	July 18, 2023	Appendix J Alternatives Evaluation Memo	122023M-16
17	Appendix K	July 18, 2023	Appendix K Developer Tour Summary	122023M-17

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
18	Appendix L	July 18, 2023	Appendix L Transportation Impact Analysis	122023M-18
19	Appendix M	July 18, 2023	Appendix M Housing Memo	122023M-19
20	Appendix N	July 18, 2023	Appendix N Infrastructure and Phasing Analysis	122023M-20
21	Appendix O	July 18, 2023	Appendix O Preliminary Infrastructure Funding Strategy	122023M-21
22	Presentation	12/20/2023	Sherwood West Concept Plan	122023M-22
23	Memo	12/13/2023	TO: MTAC and interested parties From: Glen Hamburg, Associate Regional Planner RE: CFEC-Required Amendments to UGMFP Title 6 for Regional and Town Centers	122023M-23
24	Presentation	12/20/2023	CFEC and 2040 Centers	122023M-24
25	Presentation	12/20/2023	EPA Climate Pollution Reduction Grant (CPRG)	122023M-25
26	Handout	12/20/2023	Technical Memorandum – Draft Screening Results for PCAP Strategies	122023M-26



Memo

Date: January 10, 2024
To: Metro Technical Advisory Committee (MTAC)
From: Glen Hamburg, Associate Regional Planner
Subject: UGMFP Title 4 Map and Amendments in 2023

Background

Title 4, *Industrial and Other Employment Areas*, of the Urban Growth Management Functional Plan (UGMFP) seeks to improve the region's economy by protecting a supply of sites for employment with requirements for local jurisdictions to limit the types and scale of certain non-industrial uses in designated Regionally Significant Industrial Areas, Industrial Areas, and Employment Areas. Those areas are officially depicted on the UGMFP's "*Title 4 Industrial and Other Employment Areas Map*" (i.e., the "Title 4 Map", Attachment A). The Title 4 Map was first adopted in 1996 and has been amended several times. However, amendments have been infrequent in recent years. Between 2014 and 2022, only one amendment, affecting 20 acres, was made to the map.

As required by Title 4, Metro's Chief Operating Officer (COO) will be submitting a written report to the Council and MPAC by January 31 on the cumulative effects on employment land in the region of amendments to the Title 4 Map during the preceding calendar year. This memo previews that report.

Title 4 Map amendments in 2023

Title 4 sets forth several avenues for amending the map, either through a Metro Council ordinance or through an order of the COO, depending on the circumstances. There were no amendments made to the Title 4 Map by the Metro Council in 2023, but COO Order No. 23-001, signed in September of 2023, amended the map at the request of the City of Happy Valley pursuant to UGMFP Subsection 3.07.450(b).

Subsection 3.07.450(b) provides that, when the Metro Council adds territory to the UGB and designates all or part of the territory as Regionally Significant Industrial Area, Industrial Area, or Employment Area, the COO shall issue an order to conform the Title 4 Map to the land use designations subsequently established by the city or county responsible for comprehensive planning. In the case of COO Order No. 23-001, the map amendment occurred a number of years after the UGB expansion, for the following reasons.

Ordinance No. 02-969B adopted by the Metro Council in December 2002, and Ordinance No. 04-1040B adopted by the Metro Council in June 2004, added territory in Clackamas County to the UGB, including approximately 2,700 acres generally located in the Pleasant Valley / North Carver area¹ of the former City of Damascus. These ordinances also preliminarily designated some sections of the added territory as Regionally Significant Industrial Area, Industrial Area, and Employment Area on the Title 4 Map, with the understanding that the Title 4 Map could be amended after the area was planned for urban uses by the responsible local jurisdiction. With the incorporation and disincorporation of the City of Damascus, the subsequent agreement between the City of Happy Valley and Clackamas County for the area to be planned by the City of Happy Valley, and the general complexities of developing the area, urban planning of the Pleasant Valley / North Carver area wasn't completed by the City of Happy Valley until March of 2023.

¹ The Pleasant Valley / North Carver area is generally located east of SE 152nd Ave, west of SE Anderson Rd, and north of the Clackamas River.

The City of Happy Valley's comprehensive land use plan for the Pleasant Valley / North Carver area was informed by a December 2018 buildable lands inventory, a January 2020 housing needs analysis, and a January 2020 economic opportunity analysis, as well as traffic and utility studies, analyses of topography and habitat areas, broad public outreach, and input from numerous stakeholders. The City's plan identifies that certain portions of the 2,700-acre plan area are less suitable for industrial development than they are for other types of employment uses (e.g., commercial uses) and residential uses, but retains protections of 14.5 acres of Title 4 designated Industrial land in the plan area. COO Order No. 23-001 therefore amended the Title 4 Map to conform with the determinations made by the City in its local plan.

COO Order No. 23-001 also updated the Title 4 Map to reflect a UGB amendment adopted by the Metro Council in February 2023 in Ordinance No. 23-1488.

MTAC members may be aware of some other city or county zone changes from industrial to other uses that occurred during 2023. None of those zone changes were found to be in conflict with Title 4, so amendments to the Title 4 Map were not necessary or requested by cities or counties.

Cumulative effects on employment land in the region

COO Order No. 23-001 removed Title 4 Map designations for approximately 800 acres of the roughly 2,700-acre Pleasant Valley / North Carver comprehensive plan area, while retaining 14.5 acres of the plan area's Industrial designations along Hwy 212. The undesignated acres were: already developed with other (e.g., institutional, commercial, or residential) uses; not zoned to allow for industrial uses; and/or were determined by the City of Happy Valley to be less suitable for industrial development than other uses due to factors such as topography, environmental features, parcel size, road and utility service access, and nearby land uses. The City's adopted land use plan for the area and its implementing regulations nonetheless allow for other employment-supporting uses in some affected areas, such as tourism-oriented commercial uses, medical offices, and financial institutions.

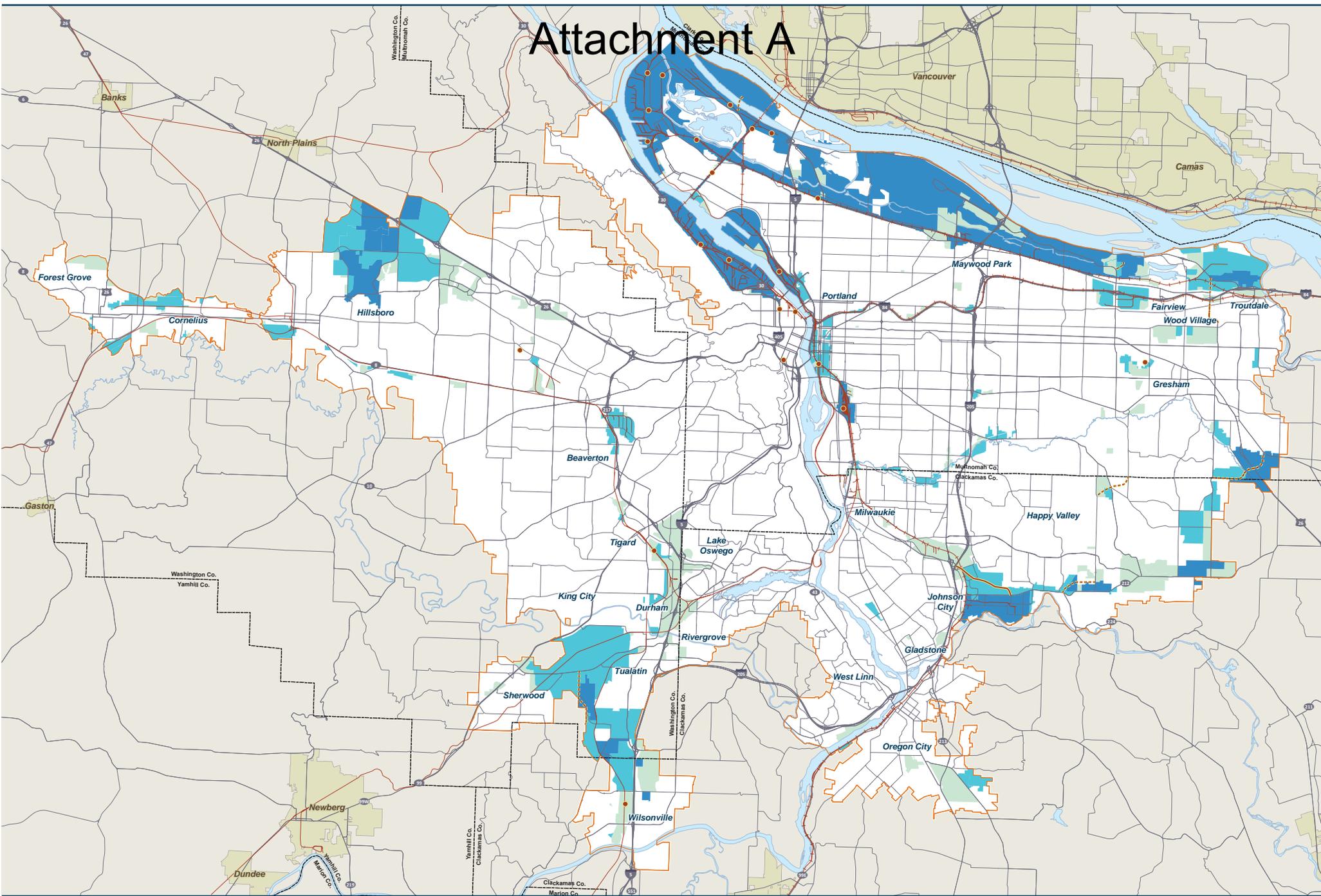
As noted above, COO Order No. 23-001 also updated the Title 4 Map to reflect Ordinance No. 23-1488, which added land to the UGB adjacent to the City of Tigard in exchange for removing a substantially equivalent amount of land in Clackamas County. The areas removed from the UGB by the ordinance were *not* planned or zoned for industrial uses and were determined to be less ready to accommodate urban development than the areas the ordinance added to the UGB.

Therefore, the Order's removal of Title 4 Map designations in Pleasant Valley / North Carver area, which had been applied nearly 20 years ago and prior to any comprehensive planning of the affected territory, and the updates to reflect Ordinance No. 23-1488 did not reduce the supply of land that would reasonably be expected to develop with employment land uses.

Future UGMFP and Title 4 Map updates

Staff anticipates that the number of requests for Title 4 Map amendments may increase in the next few years as local plans and regional economic needs continue to change. A refresh of the 2040 Growth Concept would offer an opportunity for Metro Council consideration of industrial land policy and regulatory updates including an update of the Title 4 Map.

Attachment A

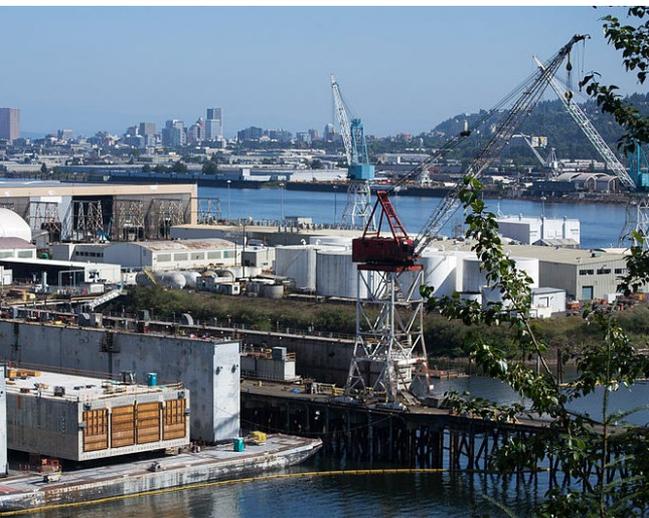


Title 4 Industrial and other Employment Areas

- Employment area
- Industrial area
- Regionally significant industrial area
- Proposed main roadway route
- Proposed road connector
- Mainline freight
- Branch line freight
- Rail yard
- County boundary
- Metro urban growth boundary
- Neighbor city



Materials following this page were distributed at the meeting.



The UGMFP Title 4 Map and Amendments in 2023

MTAC: January 17, 2024

UGMFP Title 4

Purpose:

- Provide/protect sites for employment
- Promote industry “**clustering**”
- Promote capacity and **efficiency of transportation system** for movement of goods/services
- Encourage non-industrial uses to locate in 2040 Centers, Corridors, Main Streets, and Station Communities

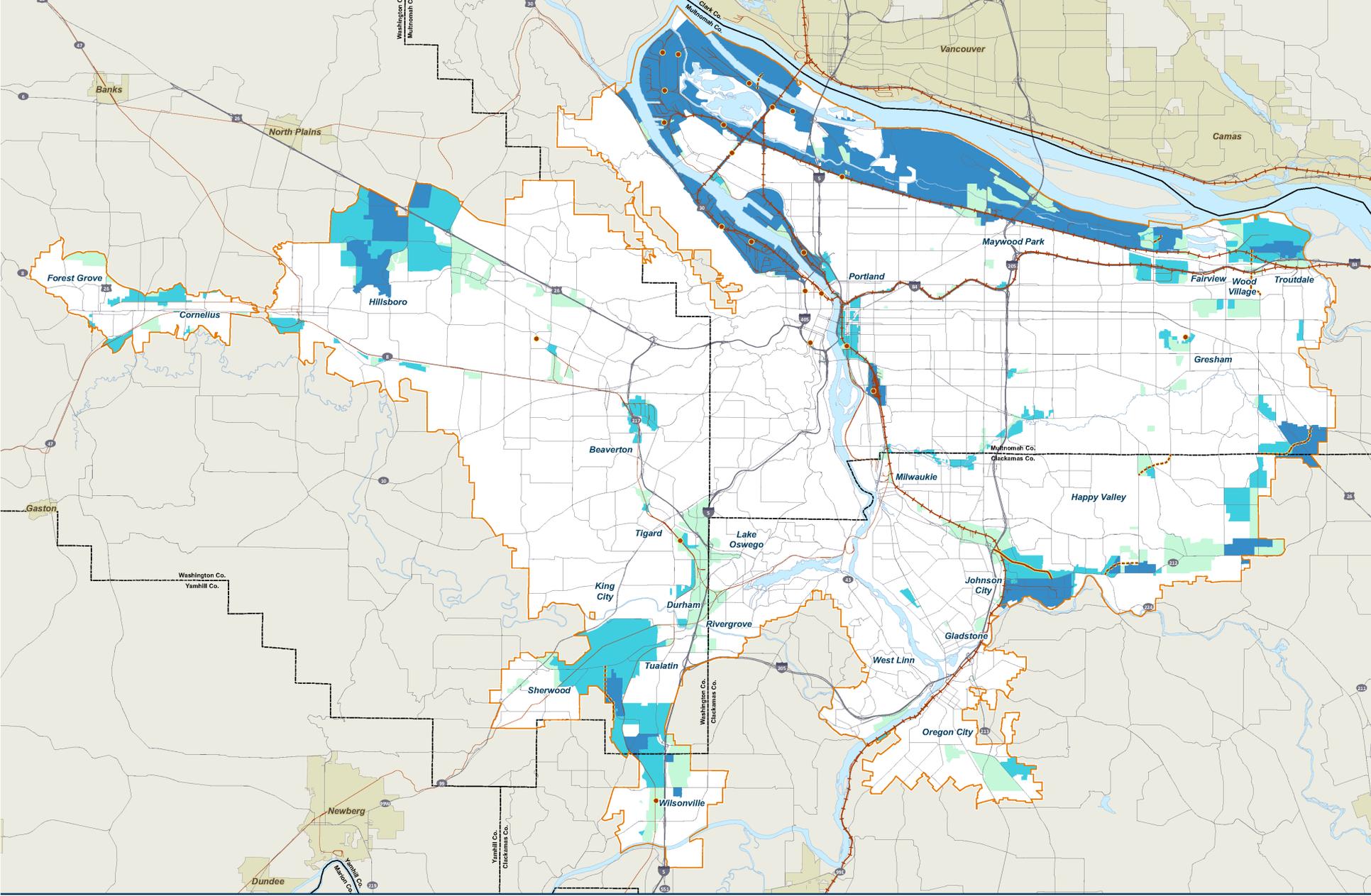


UGMFP Title 4

Methods:

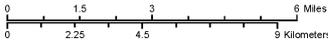
- Restrictions on land divisions
- Restrictions on large-footprint retail commercial uses
- Criteria and procedures for changing local land use allowances
- The “Title 4 Map”





Title 4 Industrial and other Employment Areas

September 2023



- Employment area
- Industrial area
- Regionally significant industrial area
- Proposed main roadway route
- Proposed road connector
- Mainline freight
- Branch line freight
- Rail yard
- County boundary
- Metro urban growth boundary
- Neighbor city



Diverging from the Map

Must satisfy certain Title 4 criteria concerning:

- Site area
- Proximity to other RSIA/Industrial areas
- Effects on employment capacity
- Effects on regional freight network
- Impacts to 2040 Centers
- Access to specialized services

Amending the Map

Several Title 4 pathways:

- By Council ordinance, to better achieve RFP policies
- By Council ordinance, to make locally requested changes that could not meet divergence standards
- By COO order, following local comprehensive planning

2023 Amendments

Request of Happy Valley:

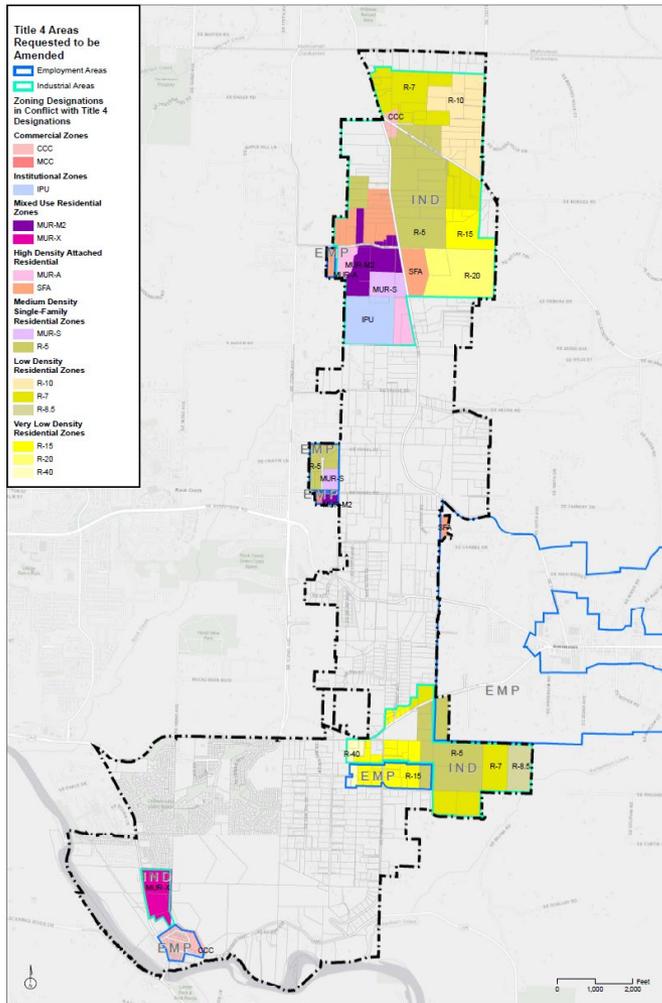
Changes following local development and adoption of plan for Pleasant Valley / North Carver area (2,700 acres)

- Buildable Lands Inventory
- Economic Opportunities Analysis
- Housing Needs Analysis
- Traffic and utility studies
- Analysis of topography and habitat
- Broad public outreach

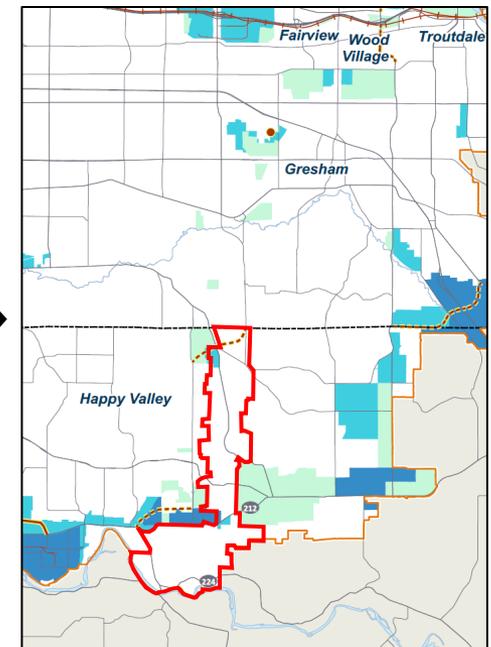
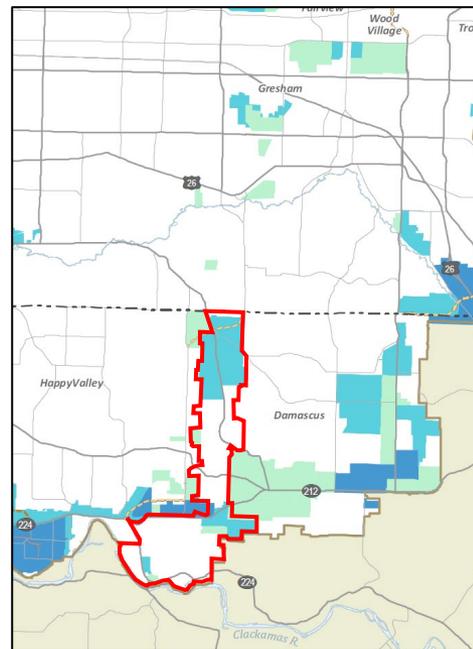


Credit: City of Happy Valley

2023 Amendments



- City's Plan: 800 acres better suited for other uses (commercial, residential)
- Title 4 designation removed by COO order (also conforming map to 2023 UGB decision)



Thank you!



MTAC (Regional Forecast)

Dennis.Yee@oregonmetro.gov (Metro Economist)

January 17, 2024

New Forecast Mandates & Expected Deliverables

Regional Employment by industry sectors (baseline & range)

- Econometric model links the forecast for each industry to 1) national & demographic trends; 2) industrial assumptions; 3) input-output mechanisms / inter-industry trade-flows between industries
- Estimated coefficients behave as regional quotients which size the economic impacts of each variable to forecast industry growth rates

Regional Population (range | age, sex, race/ ethnicity)

- Population pyramids connected to latest US census assumptions (births & deaths)
- Cohort-component model linked to econometric model of region (net migration)
- Coordination with PSU Pop. Res. Ctr. (per ORS 195.033 | ORS 195.036)

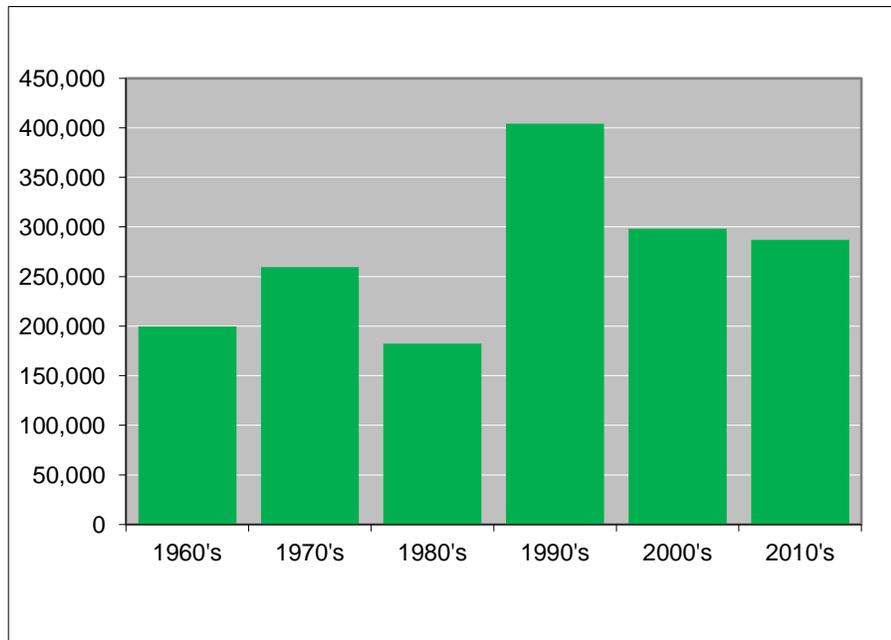
Households (HIA forecast) i.e., household size, income & age bracket

Disability – population forecast

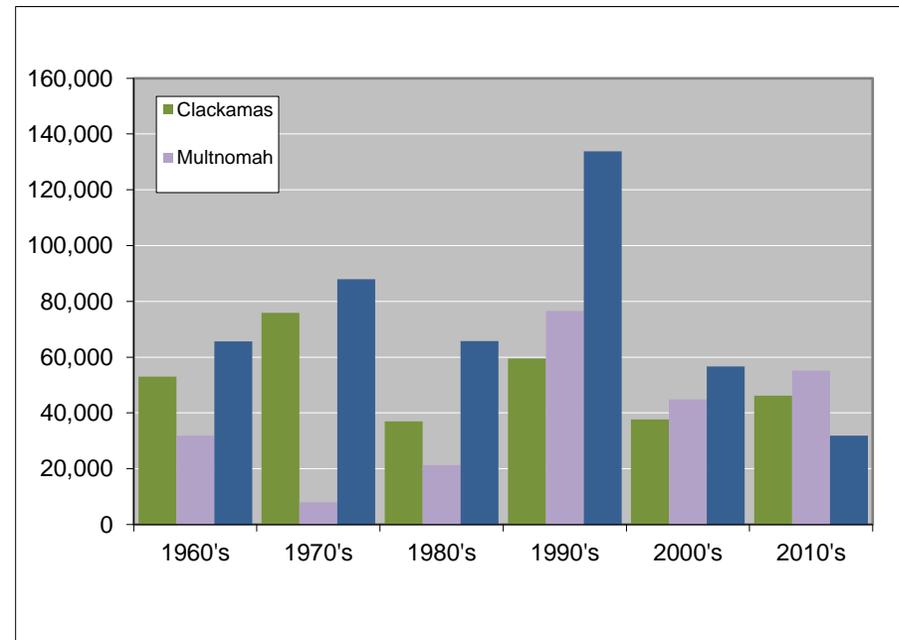
Peer review – forthcoming in January / February

Population Growth by Decade

Metropolitan Area (MSA)

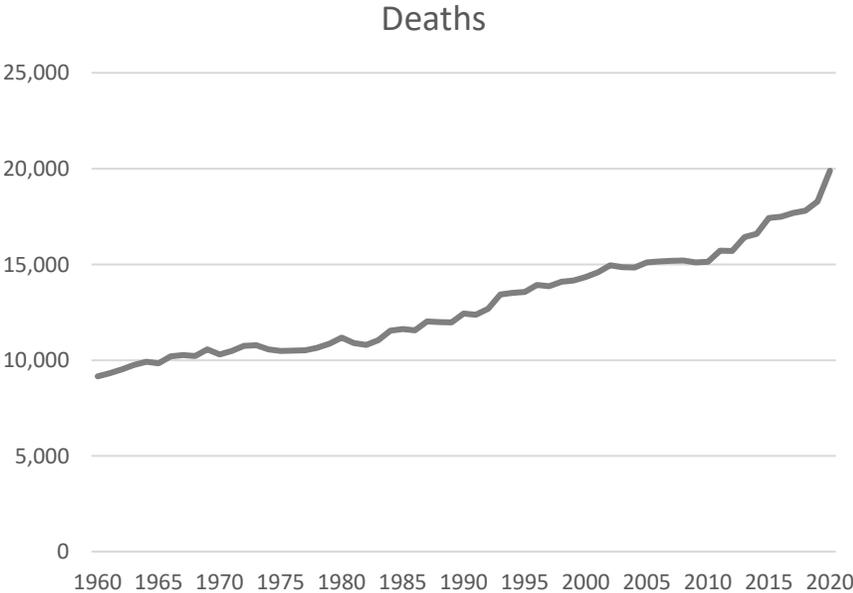


County

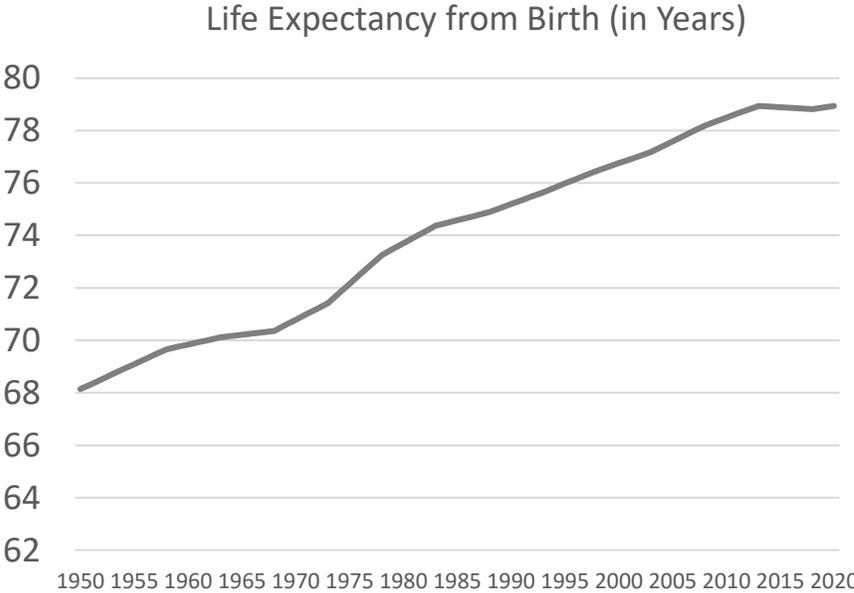


Vital statistics - deaths

MSA deaths rises



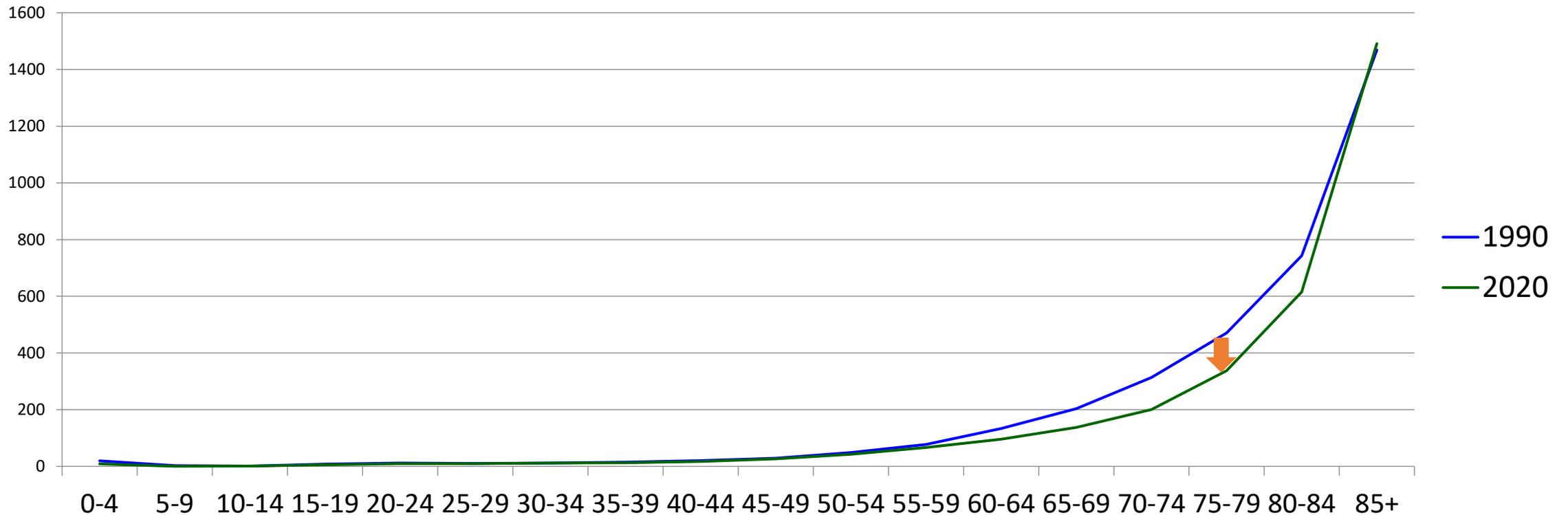
Average life expectancy improves



Note: differences in y-axis

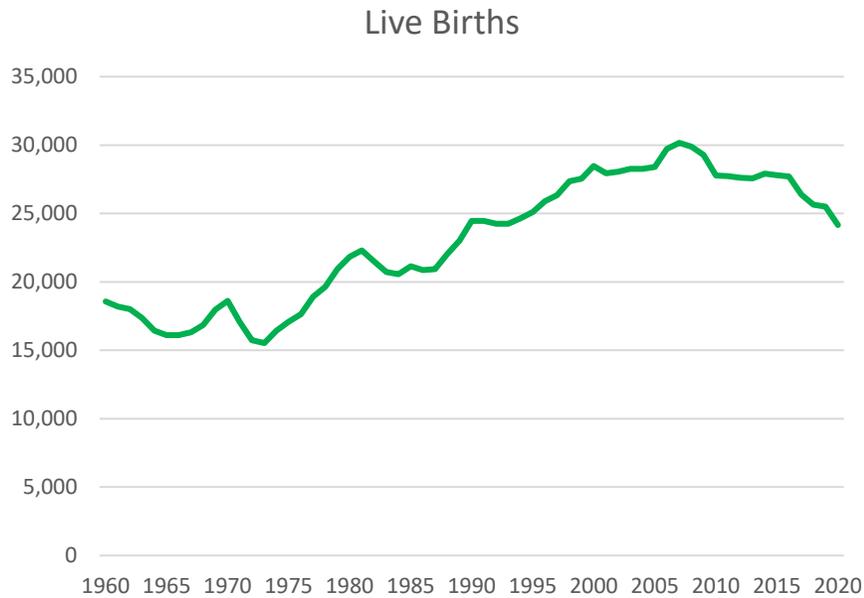
Death rates decline ... particularly evident in retirement-age cohorts

MSA Age-specific death rate per 10,000



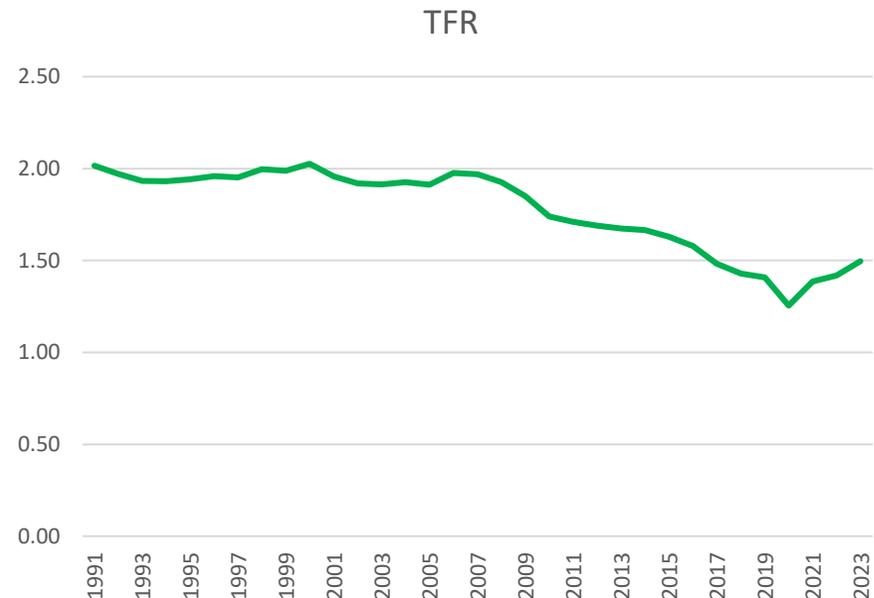
Vital statistics - births

MSA births in decline

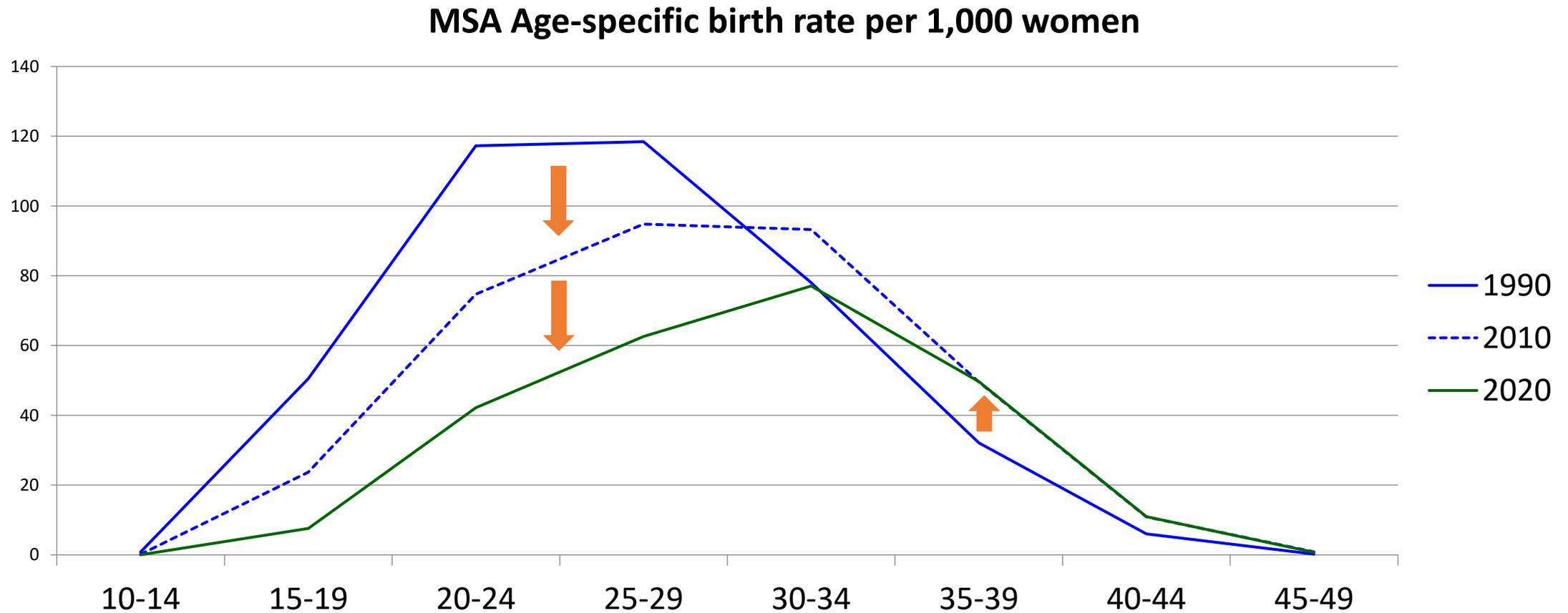


Note: differences in y-axis

Total fertility rate (TFR) declines ... women averaging fewer babies



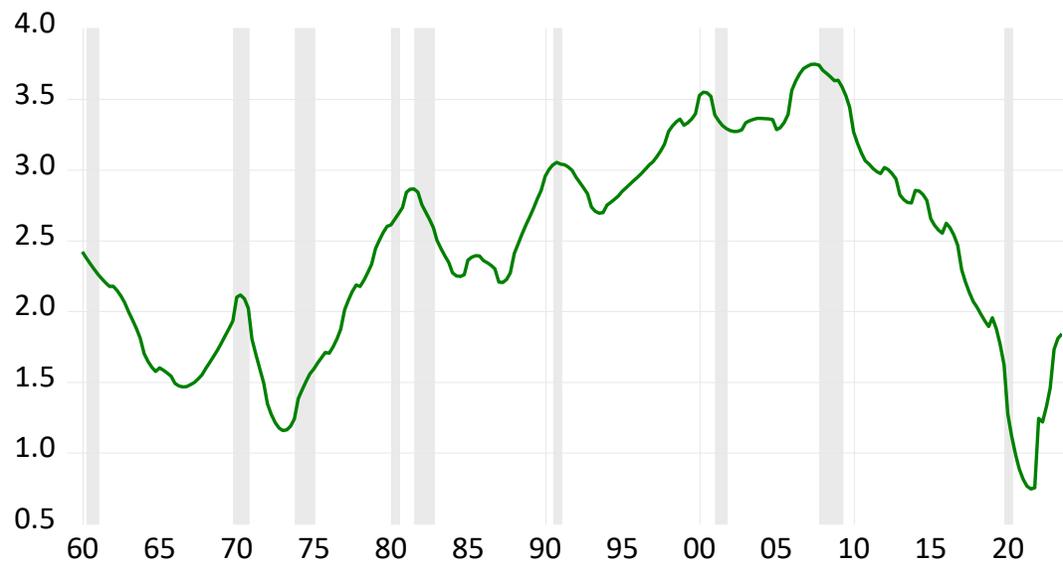
Birth rates diminish ... delay in child rearing



MSA Population trends ... growth rates sharply slow as number of deaths exceed live births

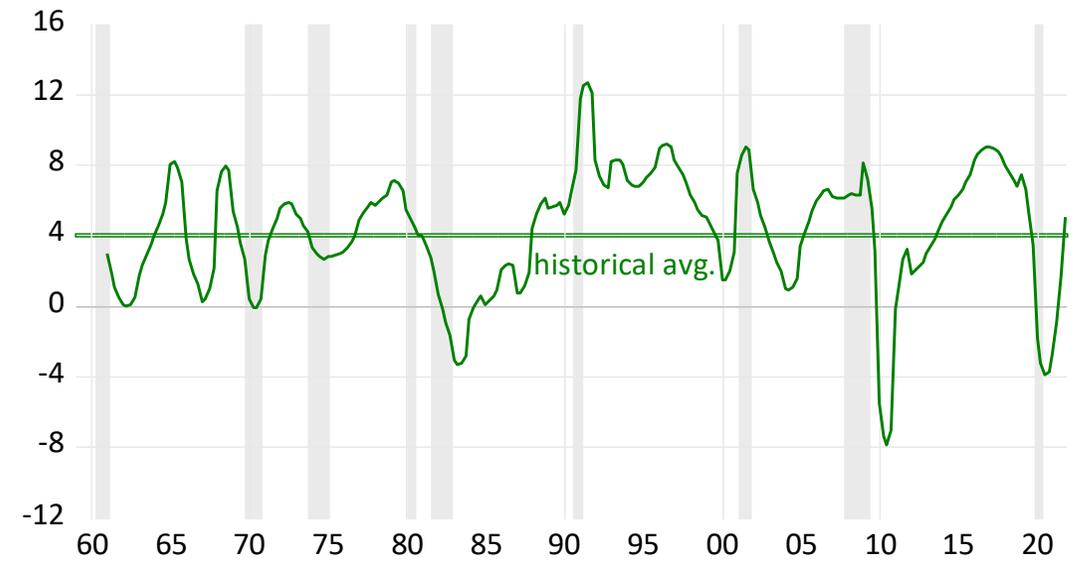
Deaths expected to soon outpace births as more baby boomers 'age out'

MSA Natural Change (Quarterly freq)



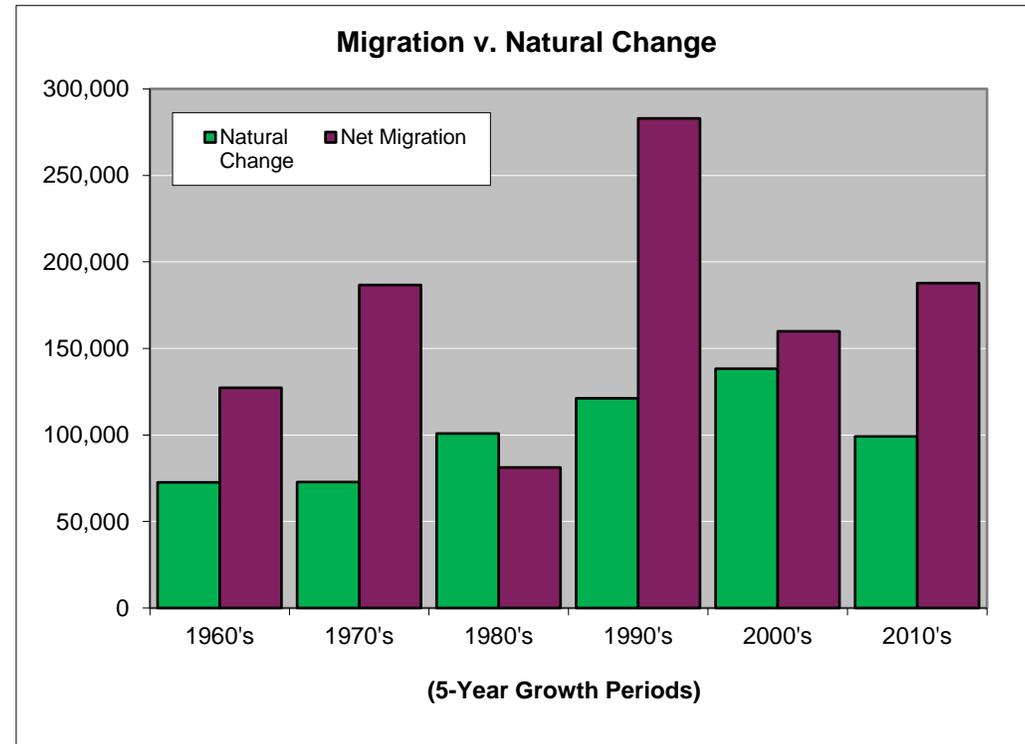
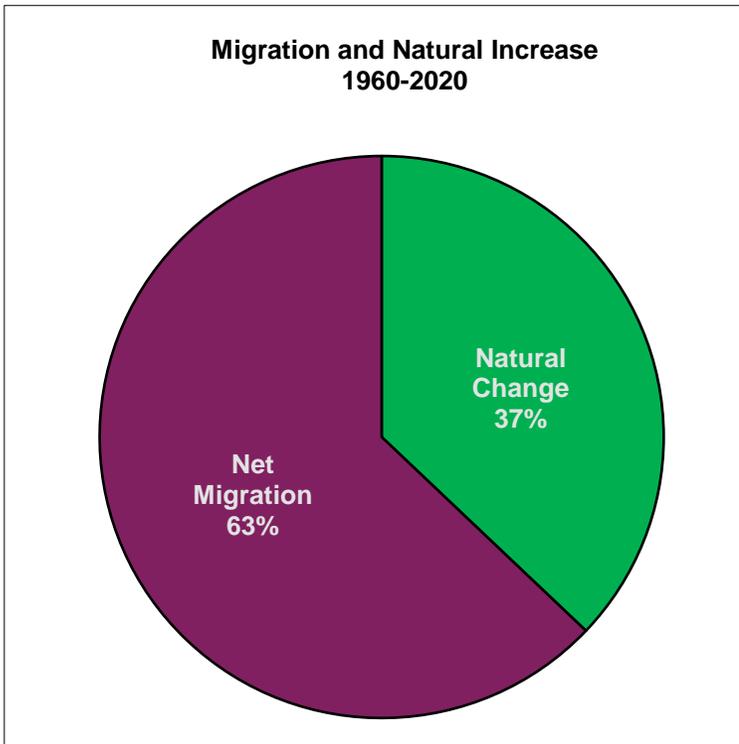
Net in-migration adds to natural increase... boosting historical population growth

MSA Net Migration (Quarterly freq)

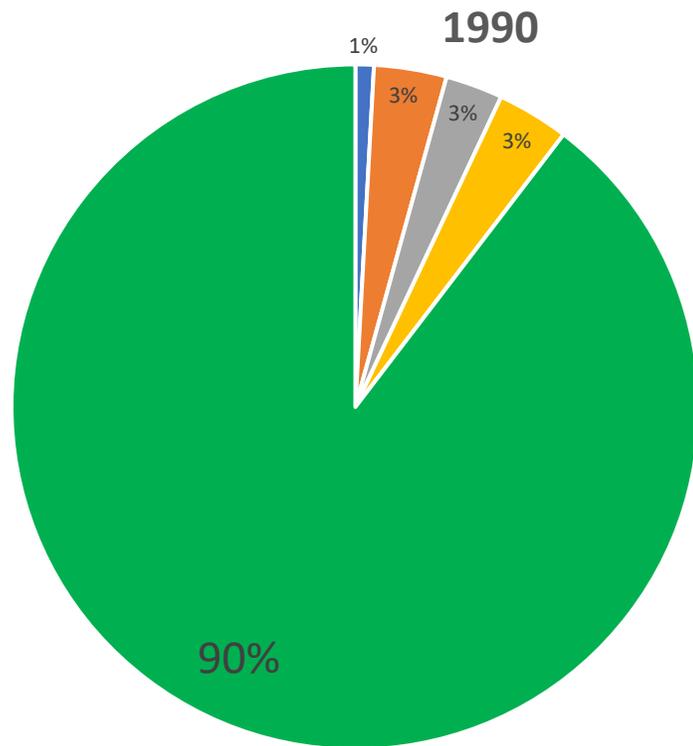


Note: differences in y-axis

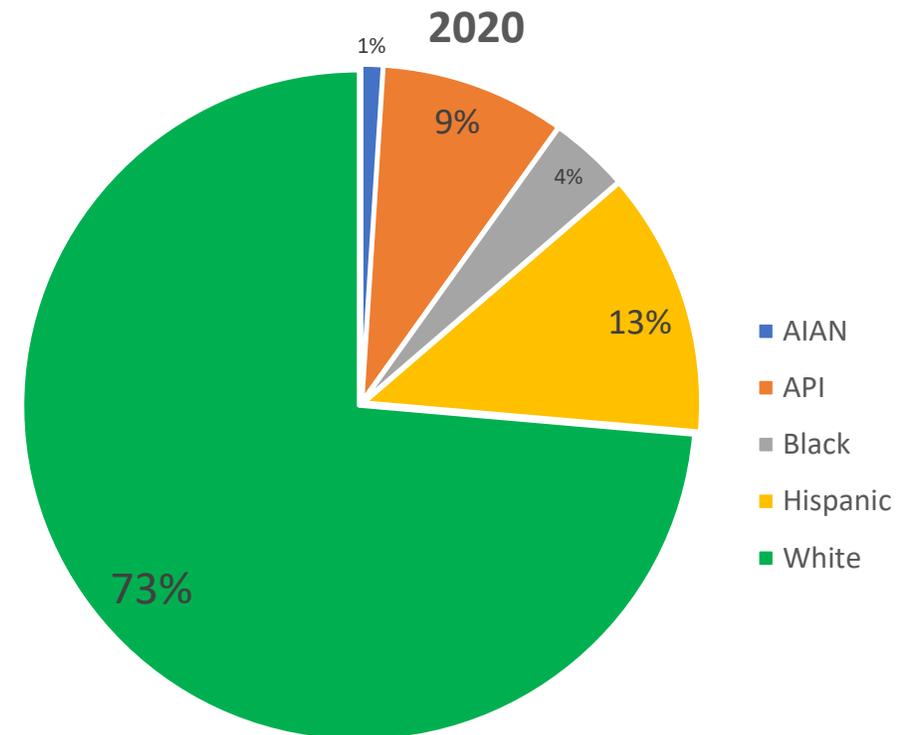
Contributions to MSA Population Growth



MSA Population by Race & Ethnicity ... rise in diversity

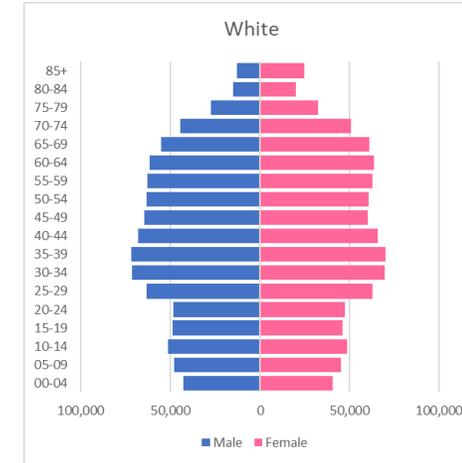
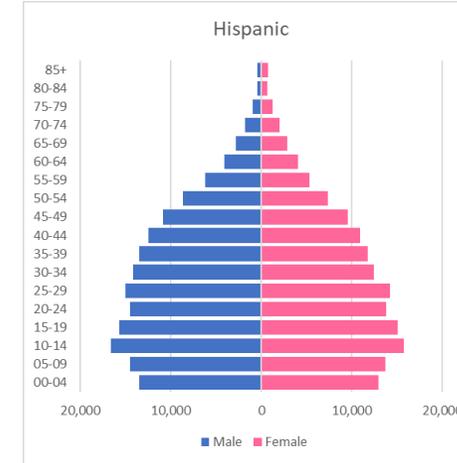
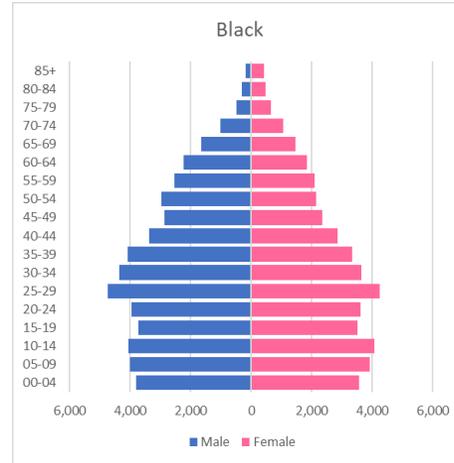
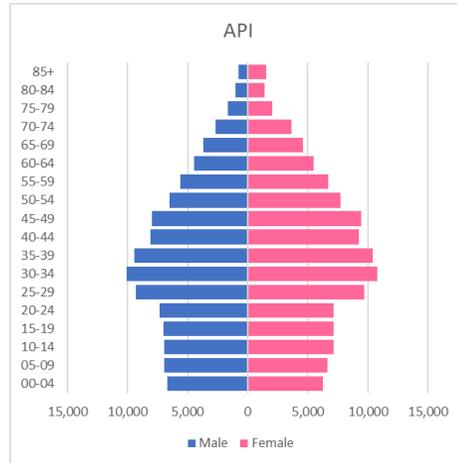
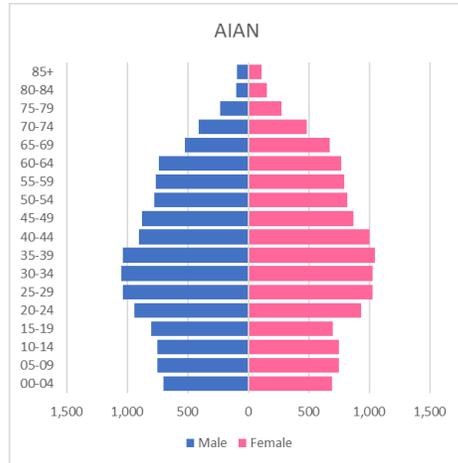


- AIAN
- API
- Black
- Hispanic
- White

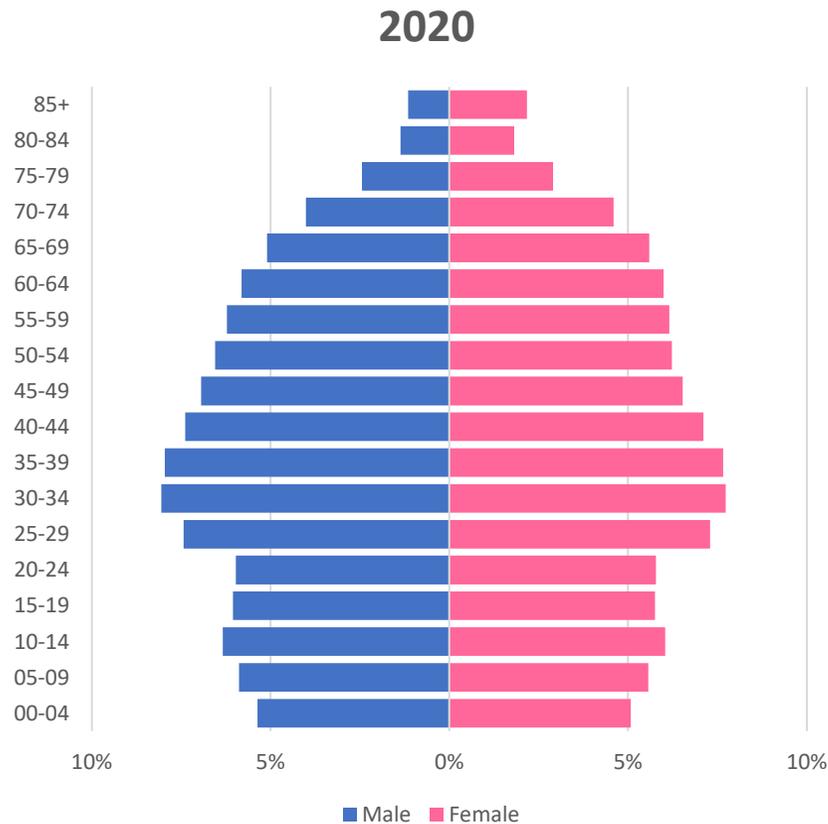


- AIAN
- API
- Black
- Hispanic
- White

MSA Population Pyramids by Race



MSA Population pyramid ... beehive shape is characteristic of a population growing very slowly

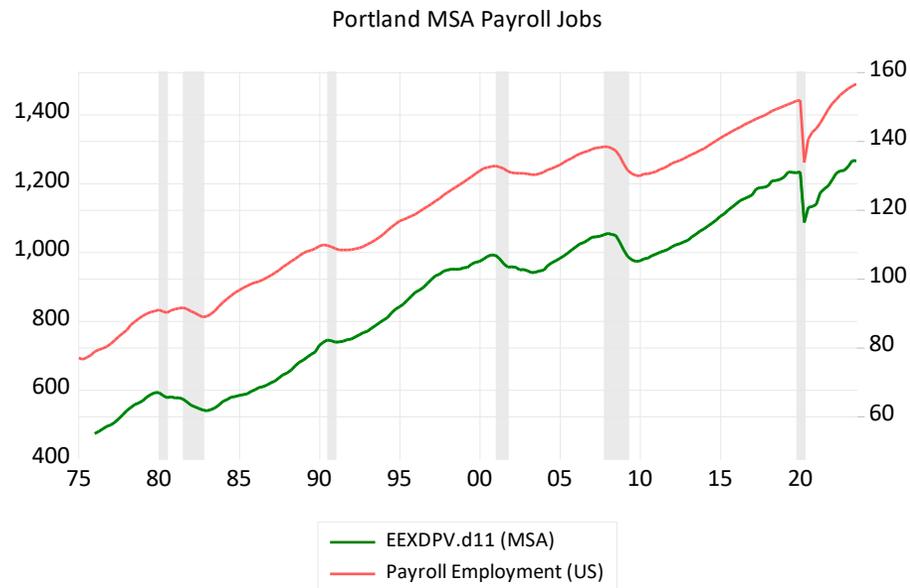


“Constrictive population pyramids describe populations that are elderly and shrinking. Constrictive pyramids often look like beehives and typically have an inverted shape with the graph tapering in at the bottom. Constrictive pyramids have smaller percentages of people in the younger age cohorts and are typically characteristic of countries with higher levels of social and economic development, where access to quality education and health care is available to a large portion of the population.”

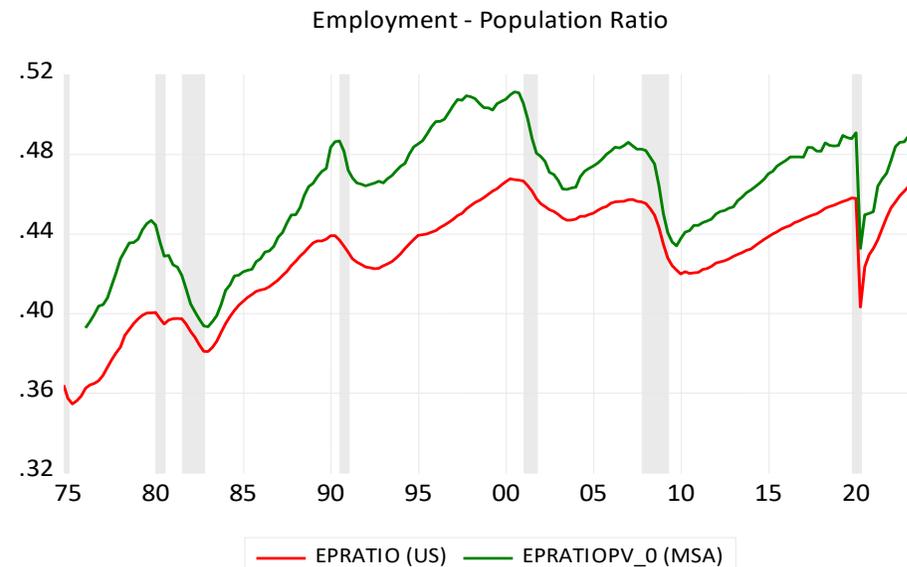
Source: <https://populationeducation.org/what-are-different-types-population-pyramids/#:~:text=Stationary%2C%20or%20near%20stationary%2C%20population,taper%20off%20toward%20the%20top.>

Employment and population (MSA & US)

Employment dips with recessions ... jobs overall return to pre-pandemic levels



Last decades, emp-pop ratio has hovered near 0.5 for the MSA



Note: differences in y-axis

INDUSTRY SECTOR GROWTH (MSA)

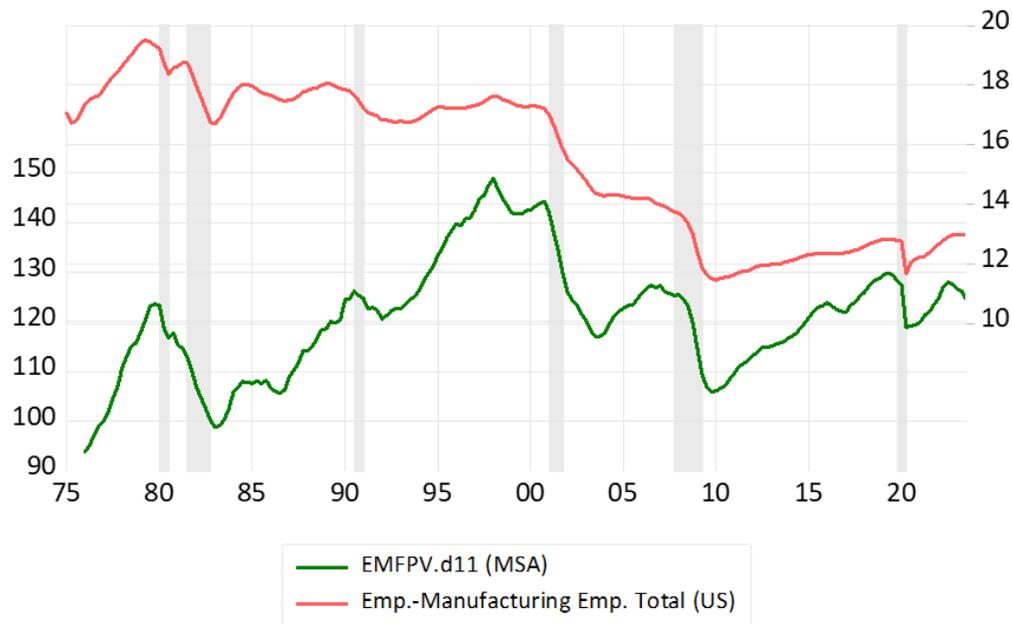
*rankings sorted by
NAICS code and by
historic growth %*

<u>Industry Name by NAICS</u>	<u>APR%: History 1976-2022</u>	<u>sorted by historical growth rates</u>	<u>APR% 1976-2022</u>
Total Nonfarm Payroll	2.1%	Mgmt. of Companies	4.2%
Manufacturing, total	0.6%	Pro., Sci., Tech. services	3.9%
Durable MF, total	0.7%	Education	3.6%
Lumber products	-1.9%	Info - Publishing	3.5%
Primary metals	-0.1%	Admin. & Waste Mgmt. Services	3.5%
Fabricated metals	0.6%	Health care	3.3%
Machinery	0.4%	Construction	2.9%
Computer & Electronics	2.1%	Real Estate	2.6%
Transportation Equipment	-0.4%	Private Non-manufacturing, total	2.5%
Other Durable MF	0.8%	Hospitality	2.5%
Non-durable MF, total	0.2%	Other services	2.3%
Food processing	1.0%	Leisure	2.3%
Paper products	-2.1%	Computer & Electronics	2.1%
Other Non-durable MF	0.3%	Transportation, Warehousing & Utilities	2.1%
Private Non-manufacturing, total	2.5%	Total Nonfarm Payroll	2.1%
Natural resources	-0.9%	State & Local gov.	1.5%
Construction	2.9%	Retail trade	1.5%
Wholesale trade	1.4%	Finance & Insurance	1.5%
Retail trade	1.5%	Wholesale trade	1.4%
Transportation, Warehousing & Utilities	2.1%	Government, total	1.4%
Info - Publishing	3.5%	Food processing	1.0%
Info - Internet	0.8%	Other Durable MF	0.8%
Finance & Insurance	1.5%	Info - Internet	0.8%
Real Estate	2.6%	Durable MF, total	0.7%
Pro., Sci., Tech. services	3.9%	Manufacturing, total	0.6%
Mgmt. of Companies	4.2%	Fabricated metals	0.6%
Admin. & Waste Mgmt. Services	3.5%	Machinery	0.4%
Education	3.6%	Federal gov.	0.3%
Health care	3.3%	Other Non-durable MF	0.3%
Leisure	2.3%	Non-durable MF, total	0.2%
Hospitality	2.5%	Primary metals	-0.1%
Other services	2.3%	Transportation Equipment	-0.4%
Government, total	1.4%	Natural resources	-0.9%
Federal gov.	0.3%	Lumber products	-1.9%
State & Local gov.	1.5%	Paper products	-2.1%

Spotlight: selected industry sectors (MSA & US)

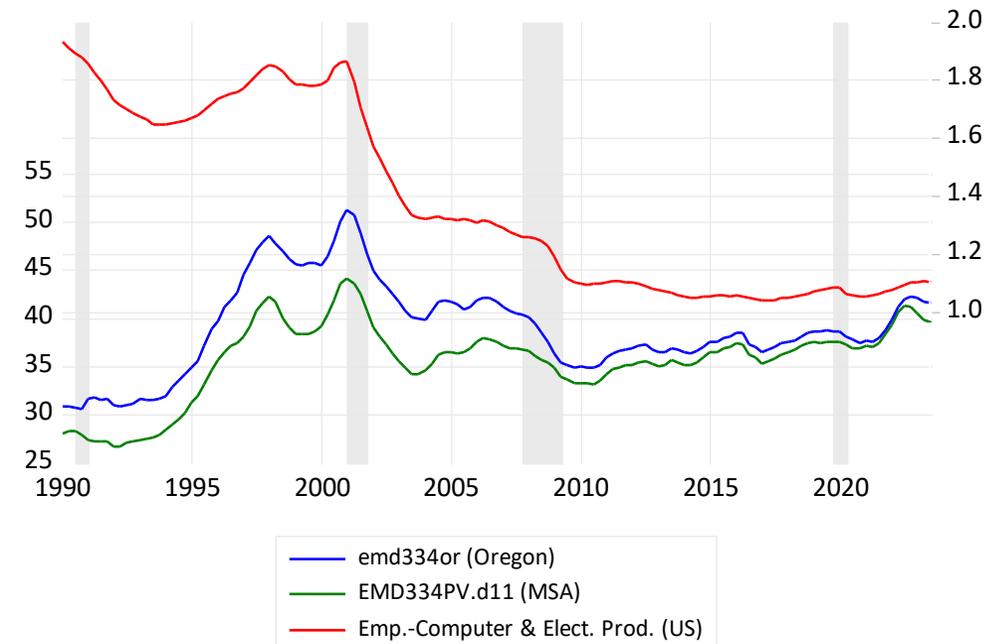
Manufacturing jobs

Manufacturing, total employment



High-tech jobs (NAICS 334)

Computer & Electronics Jobs (NAICS 334)



HIA forecast

- Decline in avg. household size in MSA
- Proportional increase in MSA lower income brackets
- Aging of population / head of household in MSA



Household Size Categories

	1 person	2-person	3-person	4-preson	5 or more		(excludes pop in GQ) average HH size
2020	27.2%	36.0%	15.4%	12.9%	8.5%	100.0%	2.52
2030	30.2%	36.0%	16.4%	12.4%	4.9%	100.0%	2.31
2040	31.4%	36.0%	16.8%	12.2%	3.6%	100.0%	2.23
2050	32.2%	36.1%	16.9%	12.0%	2.8%	100.0%	2.19

Household Income Brackets

	under \$15,000	\$15,000 - \$24,999	\$25,000 - \$34,999	\$35,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,999	\$100,000 - \$149,999	\$150,000 and over	
2020	7.5%	5.9%	6.6%	10.3%	16.8%	13.8%	19.1%	20.0%	100.0%
2030	8.2%	6.8%	7.4%	11.4%	16.2%	12.8%	18.2%	19.0%	100.0%
2040	8.4%	7.2%	7.7%	11.9%	16.0%	12.4%	17.9%	18.6%	100.0%
2050	8.6%	7.3%	7.9%	12.1%	15.9%	12.2%	17.7%	18.4%	100.0%

Household Age Brackets (Head of Household)

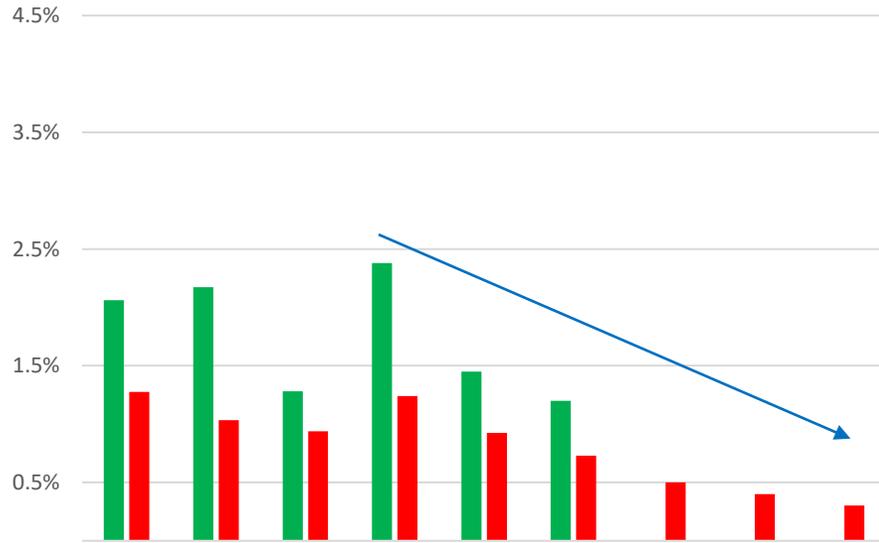
	under 25	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	85 & over	
2020	3.3%	16.9%	19.9%	17.9%	17.8%	15.0%	6.6%	2.6%	100.0%
2030	3.2%	13.7%	18.4%	18.2%	16.8%	14.9%	10.3%	4.5%	100.0%
2040	3.3%	12.7%	16.1%	17.6%	17.5%	15.3%	11.2%	6.2%	100.0%
2050	3.2%	12.1%	15.0%	16.4%	17.5%	16.2%	12.2%	7.6%	100.0%

GQ stands for group quarters

Outlook ... growth to taper

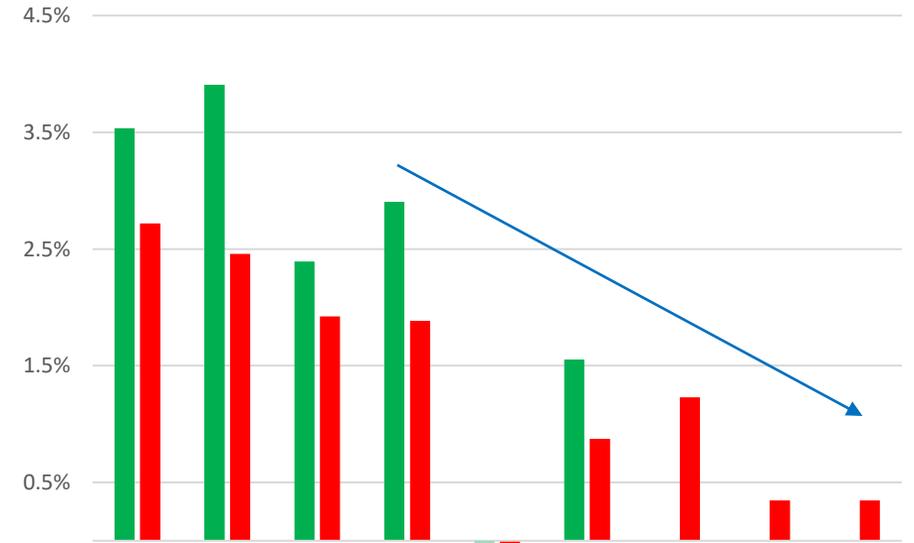
(US forecast: S&P Global | IHS Markit, Dec. 2023)

Population (MSA & US) ... slowing due to underlying demographics & vital statistics



	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-20	2020-30	2030-40	2040-50
MSA (7 counties)	2.1%	2.2%	1.3%	2.4%	1.4%	1.2%			
US	1.3%	1.0%	0.9%	1.2%	0.9%	0.7%	0.5%	0.4%	0.3%

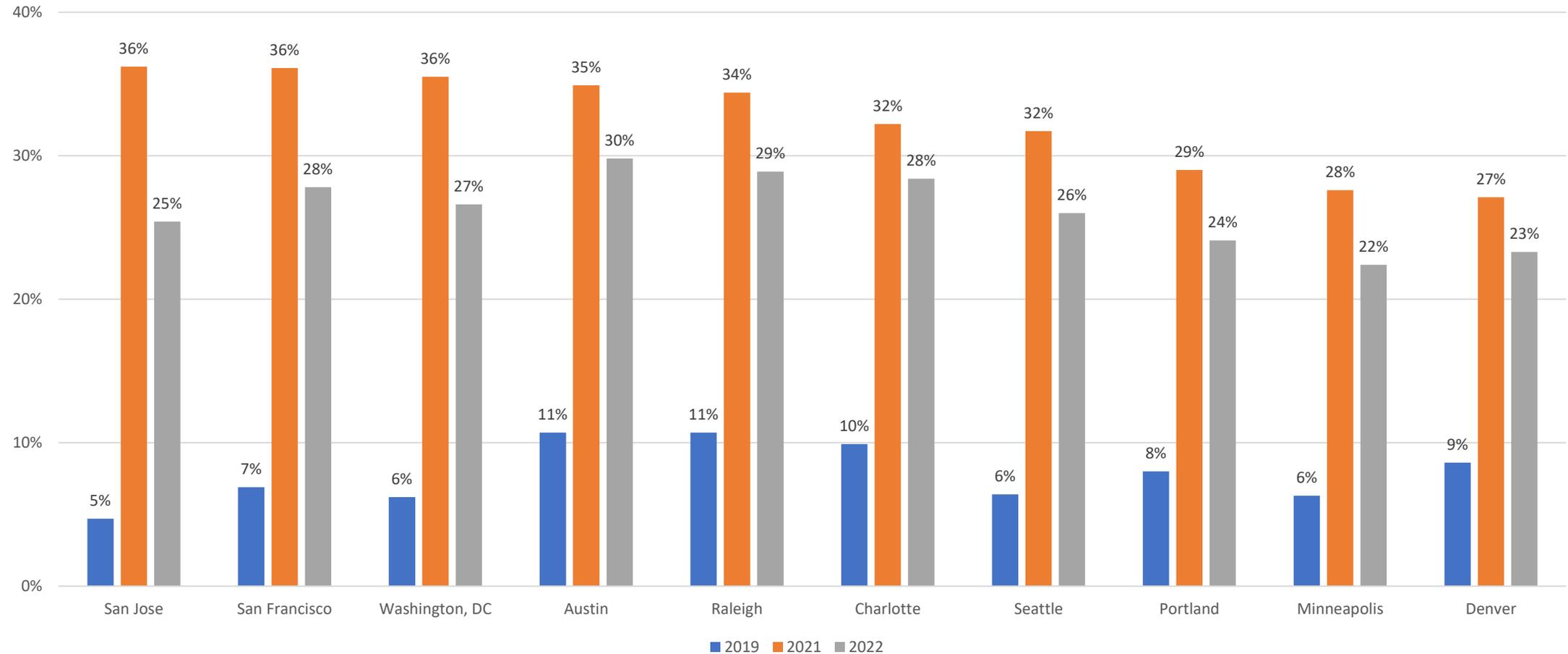
Payroll Jobs (MSA & US) ... slowing w/ labor force participation topping out and lower population growth



	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-20	2020-30	2030-40	2040-50
MSA (7 counties)	3.5%	3.9%	2.4%	2.9%	0.0%	1.6%			
US	2.7%	2.5%	1.9%	1.9%	-0.1%	0.9%	1.2%	0.3%	0.3%

Worked from Home by
Metro Area and City

Worked from Home: Top 10 Metro Areas



Worked from Home: Top 10 Cities

