Council meeting agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Tuesday, December 14, 2021 **10:30 AM** **https://zoom.us/j/471155552 (Webinar ID: 471155552) or 877-853-5257 (toll free)**

This Council Meeting will adjourn into a Council Work Session

Please note: To limit the spread of COVID-19, Metro Regional Center is now closed to the public.

This meeting will be held electronically. You can join the meeting on your computer or other device by using this link: https://zoom.us/j/471155552 (Webinar ID: 471155552) or 877-853-5257 (toll free).

If you wish to attend the meeting, but do not have the ability to attend by phone or computer, please contact the Legislative Coordinator at least 24 hours before the noticed meeting time by phone at 503-797-1916 or email at legislativecoordinator@oregonmetro.gov.

1. Call to Order and Roll Call

2. Public Communication

Public comment may be submitted in writing and will also be heard by electronic communication (videoconference or telephone). Written comments should be submitted electronically by emailing legislativecoordinator@oregonmetro.gov. Written comments received by 4:00 p.m. the day before the meeting will be provided to the council prior to the meeting.

Those wishing to testify orally are encouraged to sign up in advance by either: (a) contacting the legislative coordinator by phone at 503-797-1916 and providing your name and the agenda item on which you wish to testify; or (b) registering by email by sending your name and the agenda item on which you wish to testify to legislativecoordinator@oregonmetro.gov. Those requesting to comment during the meeting can do so by using the “Raise Hand” feature in Zoom or emailing the legislative coordinator at legislativecoordinator@oregonmetro.gov. Individuals will have three minutes to testify unless otherwise stated at the meeting.

3. Consent Agenda

3.1 Consideration of the Council Meeting Minutes for November 30, 2021 — 21-5638

Attachments: 113021c Minutes

4. Ordinances (Second Reading)

4.1 Ordinance No. 21-1472A, For the Purpose of Adopting a Metro Council District Reapportionment Plan and Declaring an Emergency — ORD 21-1472A

Presenter(s): Anne Buzzini (she/her), Metro
Ina Zucker (she/her), Metro
Clint Chiavarini (he/him), Metro

Attachments: Ordinance 21-1472A
Exhibit A
Exhibit B
Staff Report
Attachment 1
Attachment 2
Attachment 3
Attachment 4
Attachment 5
Attachment 6

5. Adjourn to Work Session

Work Session

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សេចក្តីជូនដំណឹងអំពីការមិនរើសអើងរបស់ Metro

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

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February 2017

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Clackamas, Multnomah and Washington counties, and Vancouver, WA Channel 30 – Community Access Network *Web site*: www.tvctv.org *Ph*: 503-629-8534 Call or visit web site for program times.	**Portland** Channel 30 – Portland Community Media *Web site*: www.pcmtv.org *Ph*: 503-288-1515 Call or visit web site for program times.
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Oregon City and Gladstone Channel 28 – Willamette Falls Television *Web site*: http://www.wftvmedia.org/ *Ph*: 503-650-0275 Call or visit web site for program times.	

PLEASE NOTE: Show times are tentative and in some cases the entire meeting may not be shown due to length. Call or check your community access station web site to confirm program times. Agenda items may not be considered in the exact order. For questions about the agenda, call the Metro Council Office at 503-797-1540. Public hearings are held on all ordinances second read. Documents for the record must be submitted to the Regional Engagement and Legislative Coordinator to be included in the meeting record. Documents can be submitted by e-mail, fax or mail or in person to the Regional Engagement and Legislative Coordinator. For additional information about testifying before the Metro Council please go to the Metro web site www.oregonmetro.gov and click on public comment opportunities.

Agenda Item No. 3.1

Consideration of the Council Meeting Minutes for November 30, 2021
Consent Agenda

Metro Council Meeting
Tuesday, December 14, 2021

Metro

600 NE Grand Ave.
Portland, OR 97232-2736
oregonmetro.gov

Metro

Minutes

Tuesday, November 30, 2021

10:30 AM

https://zoom.us/j/471155552 (Webinar ID: 471155552) or 877-853-5257 (toll free)

Council meeting

1. Call to Order and Roll Call

Council President Peterson called the Metro Council meeting to order at 10:31 a.m.

Present: 6 - Council President Lynn Peterson, Councilor Shirley Craddick, Councilor Christine Lewis, Councilor Juan Carlos Gonzalez, Councilor Mary Nolan, and Councilor Gerritt Rosenthal

2. Public Communication

Council President Peterson opened the meeting to members of the public wanting to testify on a non-agenda items.

Seeing no further discussion on the topic, Council President Peterson moved on to the next agenda item.

3. Ordinances (First Reading and Public Hearing)

3.1 Ordinance No. 21-1472, For the Purpose of Adopting a Metro Council District Reapportionment Plan and Declaring an Emergency

Council President Peterson called on Anne Buzzini (she/her), Ina Zucker (she/her) and Clint Chiavarini (he/him) to present to Council.

Ina thanked everyone involved in the redistricting process.

Staff pulled up *2021 Metro Redistricting PowerPoint Presentation*.

Anne began by recapping Metro's role in redistricting, the need for redistricting, specific requirements that Council must abide by when redistricting, Council's redistricting values, explained Council's adopted criteria, the scenarios and engagement process, and the reapportionment plan before Council today.

Council Discussion:

Council President Peterson asked how staff handled questions and concerns from Parkrose and Beaverton.

Councilor Gonzalez added that Tualatin also had a number of questions and comments throughout this process.

Anne explained that the Parkrose testified that they would have liked to be in a single district and that the redistricting subcommittee considered a map with all of Parkrose in District 1 but did not recommend this map to Council. Anne then explained that Beaverton and Tualatin also requested to be in as few districts as possible and why the redistricting subcommittee recommends the map that they do.

Councilor Gonzalez asked if Staff reached out to Staff in Parkrose, Tualatin and Beaverton to explain the recommendation.

Anne explained that staff had not reached out as Councilors had expressed interest in reaching out on an elected to elected level.

3.1.1 Public Hearing for Ordinance No. 21-1472

Council President Peterson opened the meeting to members of the public wanting to testify on Ordinance No. 21-1472.

Seeing no further discussion on the topic, Council President Peterson moved on to the next agenda item.

4. Adjourn

There being no further business, Council President Peterson adjourned the Metro Council Meeting at 10:47 a.m.

Respectfully submitted,

Stellan Roberts

Stellan Roberts, Legislative Assistant

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Council meeting action update

Tuesday, November 30, 2021 10:30 AM

1. Call to Order and Roll Call

Present: 6 - Council President Lynn Peterson, Councilor Shirley Craddick, Councilor Christine Lewis, Councilor Juan Carlos Gonzalez, Councilor Mary Nolan, and Councilor Gerritt Rosenthal

3. Ordinances (First Reading and Public Hearing)

3.1 **Ordinance No. 21-1472**, For the Purpose of Adopting a Metro Council District Reapportionment Plan and Declaring an Emergency

Assigned to Council; second reading scheduled for December 7, 2021

PLEASE NOTE: Official copies of legislation will be available in electronic format via format via Metro Online Records. For assistance, please contact Becky Shoemaker, Metro Record Officer at ext. 1740.

ATTACHMENTS TO THE PUBLIC RECORD FOR THE MEETING OF NOVEMBER 30, 2021

ITEM	DOCUMENT TYPE	DOC DATE	DOCUMENT DESCRIPTION	DOCUMENT NO.
1.0	PowerPoint	11/30/21	2021 Metro Redistricting PowerPoint Presentation.	113021c-01

Agenda Item No. 4.1

Ordinance No. 21-1472A, For the Purpose of Adopting a Metro Council District Reapportionment Plan and Declaring an Emergency

Ordinances (Second Reading)

Metro Council Meeting
Tuesday, December 14, 2021

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING A METRO COUNCIL DISTRICT REAPPORTIONMENT PLAN AND DECLARING AND EMERGENCY	)))	ORDINANCE NO. 21-1472A Introduced by Chief Operating Officer Marissa Madrigal in concurrence with Council President Lynn Peterson

WHEREAS, Section 31(1) of the Metro Charter establishes the minimum criteria for reapportionment of Council districts, requiring such districts to be, as nearly as practicable, of equal population and to be contiguous and geographically compact, and provides that "the Council may by ordinance specify additional criteria for districts that are consistent with this section"; and

WHEREAS, on October 21, 2021, Metro Council adopted Ordinance No. 21-1469, for the purpose of establishing additional criteria for Metro Council district reapportionment; and

WHEREAS, Section 31(1) of the Metro Charter requires that within three months after the official completion of the U.S. Census, the Council shall change the district boundaries in a manner that accords equal protection under the law and shall assign councilors to the reapportioned districts; and

WHEREAS, on September 16, 2021, Metro received official data compiled by the 2020 U.S. Census; and

WHEREAS, the 2020 U.S. Census identifies the Metro population as 1,670,601, thereby establishing an average district population of 278,434; and

WHEREAS, pursuant to Ordinance No. 21-1469, the Chief Operating Officer has developed a reapportionment plan that includes assignment of councilors to the new districts; NOW THEREFORE,

THE METRO COUNCIL ORDAINS AS FOLLOWS:

1. The Council adopts the reapportionment plan attached to this Ordinance as Exhibit A; and

2. The Council adopts the assignment of councilors to reapportioned districts attached to this Ordinance as Exhibit B; and

3. This ordinance being necessary for the health, safety and welfare of the Metro area, for the reason that the work of reapportionment should proceed without delay as stipulated in the Metro Charter, an emergency is declared to exist and this ordinance shall take effect immediately pursuant to Metro Charter Section 38(1).

ADOPTED by the Metro Council this 14th day of December, 2021.

Lynn Peterson, Council President

Attest:

Approved as to Form:

Jaye Cromwell, Recording Secretary

Carrie MacLaren, Metro Attorney

Ordinance 21-1472A Exhibit A

2021 Council District Reapportionment Plan

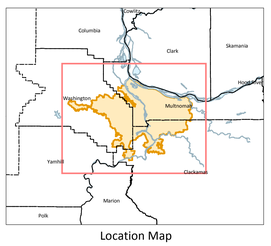
- Existing council districts
- Areas of change from existing
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets

Proposed Metro council districts

1 4
2 5
3 6

0 0.5 1 2 3 4 Miles

N



Location Map

Metro

DATA RESOURCE CENTER
600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736
drc@oregonmetro.gov | gis.oregonmetro.gov
TEL (503) 797-1742 | FAX (503) 797-1909

District	Existing Population	Existing Deviation from optimal %	Existing Deviation from optimal #	Proposed Population	Proposed Deviation from optimal %	Proposed Deviation from optimal #
1	254,849	-8.5%	-23,585	268,836	-3.4%	-9,598
2	278,249	-0.1%	-185	277,211	-0.4%	-1,223
3	283,611	1.9%	5,178	287,238	3.2%	8,805
4	296,836	6.6%	18,403	290,153	4.2%	11,720
5	278,329	0.0%	-105	278,339	0.0%	-95
6	278,727	0.1%	294	268,824	-3.5%	-9,610
Total	1,670,601			1,670,601		
Optimal	278,434			278,434		

Scenario Summary

This scenario represents minimal changes from the existing districts in order to balance population within each district.

This scenario splits the area east of Highway 217 (West Slope) and puts the unincorporated area east of the City of Beaverton city limits into District 6. The remainder is split along Canyon Rd between Districts 3 and 4. The western boundary of District 1 moves west from 122nd Ave to 102nd Ave/Cherry Blossom Dr/112th Ave north of Division Street. South of Division Street, the boundary roughly follows the 122nd alignment to the County line.The formerly jagged boundary in Happy Valley is consolidated along the 162nd Ave alignment north of Sunnyside Rd and uses the natural feature of Rock Creek south of Sunnyside Rd. An area south of Eckert Rd along Hwy 224 moves to District 2.

A minor change was made between Districts 4 and 5 north of the Hwy 26/Hwy 217 interchange to bring a commercial area within Beaverton City limits (Peterkort Centre) into District 4.

Another minor change brings a small area of Tualatin previous in District 2 into District 3.

At the request of Multnomah County Elections, the line between Districts 5 and 6 was moved from I-5 to the center of the river adjacent to downtown to match State Legislative boundaries.

EXHIBIT B TO ORDINANCE NO. 21-1472A

Assignment of Councilors to Reapportioned Districts

District 1: Shirley Craddick

District 2: Christine Lewis

District 3: Gerritt Rosenthal

District 4: Juan Carlos González

District 5: Mary Nolan

District 6: N/A*

*The District 6 Councilor will be appointed by the Metro Council no later than January 13, 2021.

IN CONSIDERATION OF ORDINANCE NO. 21-1472A, FOR THE PURPOSE OF ADOPTING A METRO COUNCIL DISTRICT REAPPORTIONMENT PLAN, AND DECLARING AN EMERGENCY

Date: December 8, 2021
Department: Council Office
Meeting Date: December 14, 2021

Prepared by: Anne Buzzini
Presenter(s): Anne Buzzini, Ina Zucker, Clint Chiavarini
Length: 10 minutes

ISSUE STATEMENT

Every 10 years, following the completion of the U.S. Census, the Metro Council is required to evaluate whether each of its six districts are of relatively equal population, and to make adjustments to district boundaries as necessary to guarantee equitable citizen representation. The redrawn maps shift the boundaries of the six Metro Council districts to account for any uneven growth in the metropolitan region. The Metro Council must also assign councilors to reapportioned districts.

The U.S. Census data delivered September 2021 indicated that some districts present a significant difference from the average population; District 4 has grown in population at a greater rate than other districts in the last ten years, whereas District 1 grew in population at a slower rate.

The Metro Council has a legal requirement of three months from receipt of U.S. Census data to complete the redistricting process. Council must adopt new boundaries in December 2021 to meet legal timelines for redistricting and to afford adequate notice for the appointment process for the existing vacancy in District 6.

The Metro Council Subcommittee on Redistricting reviewed numerous scenarios and narrowed down to a list of five scenarios for consideration by the full Council and the public (Attachment 1). Metro opened a written public comment period and held two public hearings to solicit feedback from the public about the proposed scenarios. To publicize the comment opportunities, Metro staff relied on a number of interested party mailing lists, as well as notifying cities, counties, school districts, and community involvement organizations. In addition to the public comment opportunities, Metro staff engaged MPAC and BIPOC community organizations that had participated in Metro's U.S. Census outreach.

After the close of the public comment period, staff considered feedback and created augmented scenarios for the Subcommittee's review. The Subcommittee reviewed these augmented scenarios and recommended to Council adoption of a slightly changed version of Scenario A2, known as Scenario A2 Alternate (Attachment 2).

Scenario A2 Alternate presented a minor shift from the original Scenario A2 to incorporate feedback received during the public comment period. The City of Happy Valley noted that the proposed boundary in Scenario A2 would bifurcate the city's future downtown corridor. This boundary was shifted west to accommodate that growth, affecting approximately 400 residents.

After the first read of Ordinance 21-1472 on November 30, 2021, with Scenario A2 Alternate serving as the reapportionment plan, Metro Council received feedback from city and county partners in Washington County that additional efforts should be made to ensure that the City of Beaverton remains in two Metro Council districts instead of three.

Staff prepared for Council an amended map with the City of Beaverton in two districts. This map was known as the -1 amendment to Exhibit A (Attachment 3). The map retained key features from Scenario A2 Alternate but the District 4 boundary east of Hwy 217 was shifted to the east, and a small area south of Hwy 8 was moved into District 3. To ensure District 6 remained within the 5% variance limit, the District 6/District 1 boundary in East Portland was shifted east to 122nd Ave between Division St. and Foster Rd.

Upon further consideration of unhoused populations living along the riverbank below I-5, staff made additional changes to the map to move the boundary to the middle of the Willamette River instead of using the freeway as a boundary. This change is in line with State Legislative districts. These additional changes to the map were known as the -2 amendment.

On December 7, Council amended the reapportionment plan in Ordinance 21-1472, substituting the original 2021 Council District Reapportionment Plan (Scenario A2 Alternate) with the -2 amendment. This adopted amendment is now attached to the amended Ordinance 21-1472A as Exhibit A.

The 2021 Council District Reapportionment Plan addresses key themes from the public comment periods. The map moves to the west, north of Division St, the boundary of Districts 1 and 6 in East Portland to better serve that area. It keeps several unincorporated areas in Washington County intact, including Bethany, Rock Creek, Cedar Mill, and Cedar Hills, and it keeps the City of Tualatin in a single district, and the City of Beaverton in two districts.

ACTION REQUESTED

Staff seeks Council adoption of the 2021 Council District Reapportionment Plan and assignment of councilors to reapportioned districts. The deadline for adopting the reapportionment plan, as stated in the Metro Charter, Section 31(1), is December 16, 2021.

IDENTIFIED POLICY OUTCOMES

On October 21, 2021, Council adopted ordinance 21-1469, which set forth specific criteria for considering new Council district boundaries. In that ordinance, Council set a range of

0% to 5% difference in population between actual district population and the average district population.

Additionally, Council said it would consider the following communities of common interest:

- Cities under 20,000 in population
- Compact minority or underrepresented communities and groups
- Corridors identified in the 2040 Growth Plan or corridors of regional significance in the Regional Transportation Plan
- Federally-recognized transit districts within the Metro boundary
- Regional centers, town centers, and investment areas identified in the 2040 Growth Plan
- Established neighborhood associations and community planning and participation organizations
- School districts

POLICY OPTIONS FOR COUNCIL TO CONSIDER

1. Adopt the 2021 Council District Reapportionment Plan on December 14, 2021 and meet the deadline for reapportioning districts and assigning councilors to redrawn districts.
2. Direct staff to provide augmented or new scenarios, leading to a failure to timely reapportion; the Council President shall then establish the new boundaries, per the Metro Charter, Section 31(2).

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

Anticipated Effects

New Metro Districts are adopted and effective immediately, per the 2021 Council District Reapportionment Plan. Councilors are assigned to the redrawn districts.

Legal Antecedents

U.S. Constitution, federal Voting Rights Act, Oregon Secretary of State 2021 Redistricting Directive, Metro Charter Section 31(1) and Section 31(2), Metro Ordinance 21-1469.

Community Feedback

Criteria

Metro held a public comment period from October 15 through November 1, 2021, soliciting feedback about criteria, priorities, and whether and how any specific communities should be kept intact. Information about the public comment period was shared with cities and counties, school boards, MPAC members, 57 community-based organizations, and approximately 4,000 people on Metro's interested parties list. Notification of the public comment period was also shared by the media.

Metro also consulted with several community advocates for in-depth analysis of communities of common interest, particularly with regard to 82nd Avenue and Aloha.

Metro received 14 public comments, which highlighted consideration of 82nd Avenue; Aloha; East Portland and East County; Happy Valley, Milwaukie, Sellwood and Errol Heights; NE Sandy Boulevard; unincorporated Clackamas County; and unincorporated Washington County north of Highway 26. For full comments, see Attachment 6: Criteria Written Public Comments.

Scenarios
Metro held a second public comment period from November 3 through 14, 2021 to learn which scenarios residents most preferred and why. Metro also held two public hearings over Zoom on November 9 and 10. To publicize the public comment period and public hearings, Metro staff used the same process outlined above in "Criteria."

In total, 37 residents, advocates, and elected officials commented during the written and oral comment period. Additionally, several MPAC members made comments during a staff presentation to MPAC on November 10, 2021.

The feedback highlighted three areas of interest that echoed the comments of the first public comment period. Residents expressed concern about the treatment of specific areas, including: Aloha, Boring, Damascus, Happy Valley, West Slope, and unincorporated Clackamas and Washington Counties broadly. For a summary of these comments, see Attachment 4: Redistricting Scenarios Public Comment Summary. For the full text off each comment, see Attachment 5: Scenarios Written Public Comments.

BACKGROUND

At the September 30, 2021 Council work session, Metro Council gave direction to staff on the values to instill in the redistricting process: racial equity, transparency, and accountability.

At the October 21, 2021 Council meeting, Council adopted Ordinance 21-1469, which set forth criteria for the 2021 redistricting process. Jurisdictional partners, community advocates, and the general public were invited to comment on the criteria and provide feedback on relative priorities.

On November 9, 2021 Council considered five scenarios for redistricting at a work session (Attachment 1). The Subcommittee then reconsidered the five scenarios, alongside two augmented scenarios that were informed by two public hearings and a public comment period. The Subcommittee recommended Scenario A2 Alternate (Attachment 2) be adopted as the 2021 Council District Reapportionment Plan.

On November 30, 2021 Council held a first reading and public hearing of Ordinance 21-1472, including the 2021 Council District Reapportionment Plan. As a result of feedback received after the first reading, Council directed staff to make adjustments to the map so

that Beaverton could remain in two Metro Council districts (Attachment 3: Amended Scenario A2 Alternate, -1 amendment). Staff also created a -2 amendment to the map to adjust boundaries along the Willamette River near I-5 (Exhibit A to Ordinance 21-1472A).

On December 7, 2021 Council adopted an amendment to Ordinance 21-1472, substituting the -2 amendments as the final 2021 Council District Reapportionment Plan (Exhibit A to Ordinance 21-1472A).

ATTACHMENTS

Attachment 1: Initial Scenarios (A1, A2, B1, B2, C)
Attachment 2: Scenario A2 Alternate
Attachment 3: Amended Scenario A2 Alternate (-1 amendment)
Attachment 4: Redistricting Scenarios Public Comment Summary
Attachment 5: Scenarios Written Public Comments
Attachment 6: Criteria Written Public Comments

Scenario A1

2021 Metro Council Redistricting

Public Comment Draft, November 3, 2021

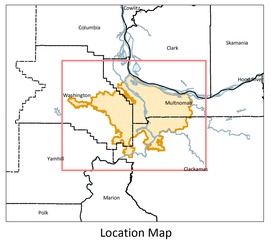
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets
- Areas of change from existing

Proposed Metro council districts

1 2 3 4 5 6

0 0.5 1 2 3 4 Miles

N



Location Map

Metro

DATA RESOURCE CENTER
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drc@oregonmetro.gov | gis.oregonmetro.gov
TEL (503) 797-1742 | FAX (503) 797-1909

	Existing		Scenario A1		
		Deviation		Deviation from optimal	
District	Population	from optimal	Population	%	#
1	254,849	-8.5%	268,174	-3.7%	-10,260
2	278,249	-0.1%	271,722	-2.4%	-6,712
3	283,611	1.9%	288,470	3.6%	10,037
4	296,836	6.6%	285,179	2.4%	6,746
5	278,329	0.0%	278,329	0.0%	-105
6	278,727	0.1%	278,727	0.1%	294
Total	1,670,601		1,670,601		
Optimal	278,434		278,434		

Scenario Summary

Scenarios A1 and A2 represent a minimal change from the existing districts.

Scenario A1 removes the area east of Highway 217 (West Slope) from District 4 and adds it to District 3. The area of Tualatin east and north of I-5 and I-205 is moved from District 3 to District 2 and more of the eastern portion of Happy Valley is moved into District 1. (During the last redistricting process in 2011, Happy Valley was entirely within District 2 but has since grown eastward into District 1.)

Scenario A2

2021 Metro Council Redistricting

Public Comment Draft, November 3, 2021

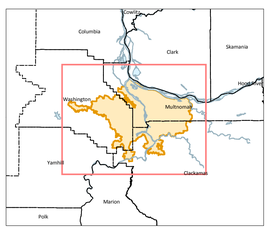
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets
- Areas of change from existing

Proposed Metro council districts

1 4
2 5
3 6

0 0.5 1 2 3 4 Miles

N



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	Existing		Scenario A2		
		Deviation		Deviation from optimal	
District	Population	from optimal	Population	%	#
1	254,849	-8.5%	277,187	-0.4%	-1,247
2	278,249	-0.1%	277,611	-0.3%	-823
3	283,611	1.9%	283,937	2.0%	5,504
4	296,836	6.6%	285,179	2.4%	6,746
5	278,329	0.0%	278,329	0.0%	-105
6	278,727	0.1%	268,358	-3.6%	-10,076
Total	1,670,601		1,670,601		
Optimal	278,434		278,434		

Scenario Summary

Scenarios A1 and A2 represent a minimal change from the existing districts.

Scenario A2 removes the area east of Highway 217 (West Slope) from District 4 and adds it to District 6. The western boundary of District 1 moves west from 122nd Ave to 102nd Ave/Cherry Blossom Dr/112th Ave. The formerly jagged edge in Happy Valley is consolidated along 172nd Ave.

Scenario B1

2021 Metro Council Redistricting

Public Comment Draft, November 3, 2021

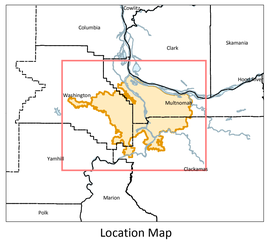
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets
- Areas of change from existing

Proposed Metro council districts

1 2 3 4 5 6

0 0.5 1 2 3 4 Miles

N



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	Existing		Scenario B1		
		Deviation		Deviation from optimal	
District	Population	from optimal	Population	%	#
1	254,849	-8.5%	286,598	2.9%	8,165
2	278,249	-0.1%	269,667	-3.1%	-8,767
3	283,611	1.9%	268,740	-3.5%	-9,694
4	296,836	6.6%	279,467	0.4%	1,034
5	278,329	0.0%	290,416	4.3%	11,983
6	278,727	0.1%	275,713	-1.0%	-2,721
Total	1,670,601		1,670,601		
Optimal	278,434		278,434		

Scenario B1 Summary

Districts 1,2,3, and 4 are identical in Scenario B1 and B2. Only Districts 5 and 6 change.

District 1 becomes entirely within Multnomah County and the western boundary moves to I-205.

District 2 becomes entirely within Clackamas County pulling in all of Happy Valley and Damascus

District 3 brings in the area east of Hwy 217 and South of Hwy 26

District 4 consolidates Aloha north of Farmington Rd into the district and part of the area north of Hwy 26.

District 5 includes a larger section of Washington County (Cedar Mill and part of Bethany)

District 6 includes the section of District 2 in Multnomah County.

Downtown Portland is split along Burnside.

Scenario B2

2021 Metro Council Redistricting

Public Comment Draft, November 3, 2021

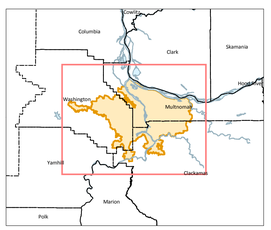
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets
- Areas of change from existing

Proposed Metro council districts

1 4
2 5
3 6

0 0.5 1 2 3 4 Miles

N



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	Existing		Scenario B2		
		Deviation		Deviation from optimal	
District	Population	from optimal	Population	%	#
1	254,849	-8.5%	286,598	2.9%	8,165
2	278,249	-0.1%	269,667	-3.1%	-8,767
3	283,611	1.9%	268,716	-3.5%	-9,718
4	296,836	6.6%	279,467	0.4%	1,034
5	278,329	0.0%	277,398	-0.4%	-1,036
6	278,727	0.1%	288,755	3.7%	10,322
Total	1,670,601		1,670,601		
Optimal	278,434		278,434		

Scenario B2 Summary

Districts 1,2,3, and 4 are identical in Scenario B1 and B2. Only Districts 5 and 6 change.

District 1 becomes entirely within Multnomah County and the western boundary moves to I-205.

District 2 becomes entirely within Clackamas County pulling in all of Happy Valley and Damascus

District 3 brings in the area east of Hwy 217 and South of Hwy 26

District 4 consolidates Aloha north of Farmington Rd into the district and part of the area north of Hwy 26.

District 5 and 6 are oriented north-south.

District 5 includes most of east Portland from Martin Luther King Jr. Blvd on the west, to I-205 on the east

District 6 includes North, South, and West Portland and part of Washington County north of Hwy 26

Scenario C

2021 Metro Council Redistricting

Public Comment Draft, November 3, 2021

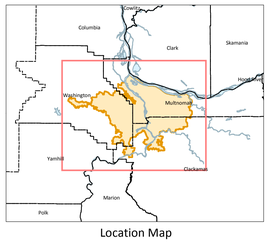
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets
- Areas of change from existing

Proposed Metro council districts

1 2 3 4 5 6

0 0.5 1 2 3 4 Miles

N



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	Existing		Scenario C		
		Deviation		Deviation from optimal	
District	Population	from optimal	Population	%	#
1	254,849	-8.5%	268,174	-3.7%	-10,260
2	278,249	-0.1%	271,722	-2.4%	-6,712
3	283,611	1.9%	286,020	2.7%	7,587
4	296,836	6.6%	287,629	3.3%	9,196
5	278,329	0.0%	278,329	0.0%	-105
6	278,727	0.1%	278,727	0.1%	294
Total	1,670,601		1,670,601		
Optimal	278,434		278,434		

Scenario C Summary

Scenario C consolidates Aloha into a District 4. To offset this inclusion, the Cedar Hills area (as well as West Slope) is moved into District 3.

Otherwise, Scenario C is identical to Scenario A1 (description below) for boundaries in Districts 1 and 2.

Scenario A1 removes the area east of Highway 217 (West Slope) from District 4 and adds it to District 3. The area of Tualatin east and north of I-5 and I-205 is moved from District 3 to District 2 and more of the eastern portion of Happy Valley is moved into District 1. (During the last redistricting process in 2011, Happy Valley was entirely within District 2 but has since grown eastward into District 1.)

Scenario A2 Alternate

2021 Council District Reapportionment Plan

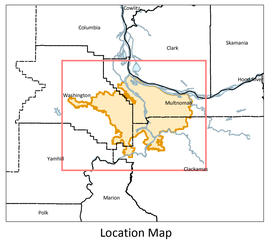
- Existing council districts
- Areas of change from existing
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets

Proposed Metro council districts

1 2 3 4 5 6

0 0.5 1 2 3 4 Miles

N



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TEL (503) 797-1742 | FAX (503) 797-1909

	Existing		Proposed		
		Deviation		Deviation from optimal	
District	Population	from optimal	Population	%	#
1	254,849	-8.5%	277,587	-0.3%	-847
2	278,249	-0.1%	277,211	-0.4%	-1,223
3	283,611	1.9%	283,937	2.0%	5,504
4	296,836	6.6%	285,179	2.4%	6,746
5	278,329	0.0%	278,350	0.0%	-84
6	278,727	0.1%	268,337	-3.6%	-10,097
Total	1,670,601		1,670,601		
Optimal	278,434		278,434		

Scenario Summary

This scenario represents minimal changes from the existing districts in order to balance population within each district.

This scenario removes the area east of Highway 217 (West Slope) from District 4 and adds it to District 6. The western boundary of District 1 moves west from 122nd Ave to 102nd Ave/Cherry Blossom Dr/112th Ave. The formerly jagged boundary in Happy Valley is consolidated along the 162nd Ave alignment north of Sunnyside Rd and uses the natural feature of Rock Creek south of Sunnyside Rd. An area south of Eckert Rd along Hwy 224 moves to District 2.

A minor change was made between Districts 4 and 5 north of the Hwy 26/Hwy 217 interchange to bring a commercial area within Beaverton City limits (Peterkort Centre) into District 4.

Another minor change brings a small area of Tualatin previous in District 2 into District 3.

Amended Scenario A2 Alternate

2021 Council District Reapportionment Plan

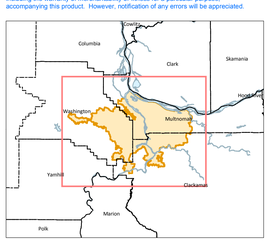
- Existing council districts
- Areas of change from existing
- MAX light rail
- Street Car
- WES
- County lines
- Urban growth boundary
- Metro jurisdictional boundary
- Arterial streets

Proposed Metro council districts

1 4
2 5
3 6

0 0.5 1 2 3 4 Miles

N



Location Map

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TEL (503) 797-1742 | FAX (503) 797-1909

District	Existing Population	Existing Deviation from optimal %	Existing Deviation from optimal #	Proposed Population	Proposed Deviation from optimal %	Proposed Deviation from optimal #
1	254,849	-8.5%	-23,585	268,240	-3.7%	-10,194
2	278,249	-0.1%	-185	277,211	-0.4%	-1,223
3	283,611	1.9%	5,178	287,238	3.2%	8,805
4	296,836	6.6%	18,403	290,153	4.2%	11,720
5	278,329	0.0%	-105	278,350	0.0%	-84
6	278,727	0.1%	294	269,409	-3.2%	-9,025
Total	1,670,601			1,670,601		
Optimal	278,434			278,434		

Scenario Summary

This scenario represents minimal changes from the existing districts in order to balance population within each district.

This scenario splits the area east of Highway 217 (West Slope) and puts the unincorporated area east of the City of Beaverton city limits into District 6. The remainder is split along Canyon Rd between Districts 3 and 4. The western boundary of District 1 moves west from 122nd Ave to 102nd Ave/Cherry Blossom Dr/112th Ave north of Division Street. South of Division Street, the boundary roughly follows the 122nd alignment to the County line.The formerly jagged boundary in Happy Valley is consolidated along the 162nd Ave alignment north of Sunnyside Rd and uses the natural feature of Rock Creek south of Sunnyside Rd. An area south of Eckert Rd along Hwy 224 moves to District 2.

A minor change was made between Districts 4 and 5 north of the Hwy 26/Hwy 217 interchange to bring a commercial area within Beaverton City limits (Peterkort Centre) into District 4.

Another minor change brings a small area of Tualatin previous in District 2 into District 3.

Date: Wednesday, November 23, 2021

To: Metro Council

From: Anne Buzzini, Metro Council Office

Subject: Metro Redistricting Scenarios Public Comment Summary

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Background

Metro began its 2021 redistricting process in September 2021. Council provided direction to staff in a September work session about the values and criteria it wished to instill in this process. Staff then launched a redistricting page on the Metro website and reached out to community members to participate in a comment period. That public comment period, alongside engagement with community-based organizations, brought forth a few key issues that residents hoped Council would address during the redistricting process.

With this feedback, Council adopted in October an ordinance identifying additional criteria by which it would judge new Metro district boundary scenarios, pursuant to its charter authority to do so. A Metro Council Subcommittee on Redistricting was named, and staff provided to the committee a variety of scenarios for their consideration. Five were chosen to move forward for greater consideration by Council and by the public. Metro staff opened a second public comment period, this time about scenarios.

Criteria Public Feedback Summary

During the first public comment period about criteria (October 18-November 1), residents hoped that 82nd Avenue would not be used as a dividing line in any new maps so that the Jade District, which exists both east and west of 82nd Avenue, would be kept intact. Additionally, residents and advocates suggested moving the boundary between Districts 1 and 6 west, preferably to I-205 or another corridor.

Metro staff also heard that it was important to keep together the communities in northern unincorporated Washington County, including Bethany, Rock Creek, Cedar Hills, and Cedar Mill. To the south, residents and advocates asked that Aloha be reunited into a single district.

Scenarios Public Comment Period

Metro opened a second public comment period (November 3-14) to hear from residents their preferred scenarios. Additionally, Metro held two public hearings on November 9 and 10 over Zoom to receive oral testimony. Finally, MPAC members were invited to comment on the proposed scenarios during a regularly scheduled meeting on November 10.

To publicize the written comment period and public hearings, Metro staff sent an email announcing the opportunities to approximately 4,000 interested parties subscribed to receive Metro updates. Staff also sent email notices to school boards across the region; neighborhood association and CPO coordinators; city and county administrators, clerks, and managers; and

staff at 57 community-based organizations that have worked with Metro in the past on issues related to planning, transportation, and housing.

Metro received 31 written comments from interested parties, 6 testifiers at the public hearings, and 7 comments from MPAC members.

Feedback Themes and Areas of Concern

Broad Themes

In discussing the five scenarios, commenters highlighted several central themes. Some themes were general and were used to make different arguments about different maps. These themes included:

- Maintaining the character of existing neighborhoods
- Grouping like neighborhoods together, based on shared characteristics
- Ensuring equitable representation
- Racial equity—some residents preferred specific maps because of perceived impacts on the equitable representation of BIPOC groups, but did not necessarily provide details as to why these maps appeared to impact BIPOC representation

Keeping Cities Intact
Beaverton, Happy Valley, and Tualatin

Elected officials in particular urged Metro to keep cities intact. Under the circumstances, "intact" could mean keeping a city entirely in one district or in as few districts as possible given the population. The mayors of Beaverton and Tualatin both hoped that their cities would stay in two districts or one, respectively.

The City of Happy Valley took a different tack and suggested dividing the city along a specific corridor, so that future new development will remain in a single district distinct from the older part of the city, which has different needs. Meanwhile, some Happy Valley residents argued in favor of keeping the city in a single district.

Keeping Unincorporated Areas Together
Damascus/Boring/Happy Valley, Bethany/Cedar Mill, West Slope, and Aloha

Similar to keeping cities intact, several residents hoped to keep specific unincorporated areas together. These areas included the unincorporated portions of Clackamas County near Happy Valley, Boring, and Damascus and northern portions of Washington County near Bethany.

For Clackamas County, residents offered up different views. Some felt the county line provides a strong demarcation between District 2 and Districts 1 and 6. These residents argued in favor of keeping all of Clackamas County in a single Metro district. Others felt strongly that the areas near Happy Valley, Damascus, and Boring shared unique characteristics and should be kept together in District 1.

"[The southeastern portion of the region] has much more in common with Gresham and east County than Lake Oswego and the Stafford area. Boring and Damascus should absolutely be included in District 1." –Resident preferring Scenarios A1 and C

Washington County residents provided similar feedback for the areas near Bethany; they hoped these areas would remain together with other portions of Washington County. When it came to West Slope, there was less consensus: some residents felt West Slope belonged with Beaverton and others felt it shared more in common with Southwest Portland neighborhoods.

"[A1] keeps most of the urban unincorporated area in Washington County in one district." –Resident preferring Scenario A1

"The inclusion of Cedar Hills in District 6 [in A2] makes more sense to seamlessly maintain connection along the main thoroughfare of Beaverton Hillsdale Highway." —Resident preferring Scenario A2

Several residents also mentioned Aloha and preferred maps that kept the unincorporated area in a single Metro district. Arguing in favor of this approach, one resident wrote:

"I'm hoping you can be mindful that Aloha continues to receive 'the short end of the stick' when it comes to building power and connecting to policy and policy makers - which ultimately ensures we can build community and advocate for needed change. Please keep Aloha entirely in one district." –Resident preferring Scenarios B1, B2, and C

<u>Keeping East Portland Intact</u>
82nd Avenue and the Jade District

The feedback with the greatest consensus among commenters was to keep East Portland intact and to move west the boundary between District 1 and District 6. Residents pointed to the vibrant community along both sides of 82nd Avenue that makes up the Jade District and asked that it not be disturbed by making it a boundary. Several commenters liked the idea of using I-205 as a boundary demarcating the beginning of East Portland, while another said that 102nd/Cherry Blossom/112th would also make a fine boundary. One person said that, in any event, 122nd should *not* be the boundary in the next map.

Commenters' Preferred Scenarios

While those submitting written comments leaned in favor of Scenarios A1 and C, among the small group of MPAC members and those who came to the public hearings, preferences were mixed.

One commenter summed it up:

"All scenarios have their pluses and minuses. Everyone that weighs in has a bias for their choice." –Resident preferring Scenario A1

One commenter who preferred both A1 and C explained the reasoning for the preference:

> *"In addition to the advantage of changing little, therefore not confusing the public further about Metro, these scenarios ensure that each Councilor must represent and understand a varied district. The whole idea of Metro is to think regionally and broadly, not just advocate for one type of community." –Resident preferring Scenarios A1 and C*

Other commenters liked Scenario C for its treatment of Aloha, areas surrounding Happy Valley, and West Slope.

However, with such a small sample size, it is hard to extrapolate whether the preferences held by commenters are shared regionally.

Attachment 5
Scenarios Written Public Comments

Comment #	Name	District	Preferred Scenarios	Comment
1	Duncan Hwang	6	A1, A2, C	Scenario B2 greatly impacts 82nd Ave, Jade District, and AAPI community centers. It moves our communities to a brand new district 5 where we have minimal contact with electeds. We would prefer SE Portland remain intact. Our communities are concentrated along 82nd and into SE Portland along Division and in Lents. A and C keep those communities more intact. NW, N, SW Portland all in an apple core district does not make sense to me.
2	Michael Vest	1	A1	All scenarios have their pluses and minuses. Everyone that weighs in has a bias for their choice. I would choose the one that is most efficient for Metro to deliver services to the communities, however that could be measured.
3	John Murphy	3	C	Scenario C seems to best represent the character and diversity in the 6 metro districts and will lead to better representation of the communities involved.
4	Brendan Brezic	5	A2	District 1's connectivity to the Hazelwood, Mill Park, and Powellhurst-Gilbert Neighborhoods and other East Portland neighborhoods east of the 205 makes more sense than including Happy Valley. Additionally, the inclusion of Cedar Hills in District 6 makes sense to more seamlessly maintain connection along the main thoroughfare of Beaverton Hillsdale Highway. This proposal seems like it would still offer a diverse demographic in all districts.
5	Karen Buehrig	2	A2	I think it has the best geographic distribution. I like having the rural part of Damascus in District 1, but not the more urban Happy Valley.
6	Teresa Lawler	4	C	I live in West Slope and Washington County. We have much more in common interests/issues with the Districts on the west side of the Metro Area, and less in common with Portland's. Therefore Option A-2 is least favored. Scenario C combines similar neighborhoods the best, although A1,B1&B2 are acceptable.

7	Bill Waring	5	B2	It keeps my neighborhood in Washington County much more intact.
8	Marietta Matto	5	A1	It looks like A1 is best for Unincorporated Washington Co. It seems we have similar problems.
9	Harrison Whitmarsh	5	A1	As a Realtor, I have a wealth of information about these neighborhoods, and I think A1 properly segments the map into like-neighborhoods. The populations of this map have the most in common.
10	Lori Geres	2	B1	Shift to encompass all of Clackamas County in one zone.
11	Michael Dahlstrom	3	C	Of the options, pulling Aloha into District 4 is reasonable. As the area is legislatively proposed to become part of both Hillsboro and Beaverton, there at least is some commonality. Putting the area east of I-5 to District 2 still crosses county boundaries between WashCo and ClackCo, there is still more commonality in River Grove to Lake Oswego/West Linn than Tualatin. And moving West Slope/Cedar Mills into the district with Beaverton makes sense for the commissioner. Realizing that unincorporated areas of Aloha, Reedville, Cedar Mill and West Slope remain unwilling to annex to their legislatively assigned adjacent cities (and the cities apparent unwillingness to try and annex), there are at least common services between those unincareas service providers and the cities'. Washington County Plan 2000, ORS Urban Area Plans, and Metro's own 2040 Plan all identify city responsibilities and eventual assumption of services. Perhaps in Districts 2 and 4, those commissioners might be interested in promoting future annexations?
12	Sean McClintock	6	B2	SE Portland has more in common with NE Portland than we do with the SW and S areas. I feel these boundaries better align shared interests and values.
13	Rachel Reynolds	6	B2	Most accurately represents the “feel” of each district. Areas of town have a vibe, and this reflects the vibe boundaries.
14	Leslie Wu	6	B1	This is the only scenario that blocks the area east of i205 outside the district for SE. The area east of i205 has very different needs

				than the rest of the area in SE and so should be grouped with the remaining area east of i205.
15	Ray Young	1	A1, C	Scenarios B1 and B2 make no sense in how they treat Boring and Damascus. I have lived in the the SE corner of Metro over 50 years, and that area has much more in common with Gresham and east County than Lake Oswego and the Stafford area. Boring and Damascus should absolutely be included in District 1.
16	Rithy Khut	6	A1, B2, C	For simple changes (A1 and C), the rural areas outside of Gresham and Happy Valley should be represented as one block. Same as Aloha. For B2, it makes more sense that D5 should be a contagious block and D6 includes all the areas of the West Hills/Tualatin Mountains.
17	Shaun Sullens	5	C	It removes west slopes and puts it in a different area.
18	Bryce Glenn	6	A2	I prefer A2 because of the minimal changes. It also makes sense to simplify the boundary in Happy Valley.
19	Robin Ye	5	B1, C	B1 Merits: Makes I-205 the dividing boundary between District 1 and 6, keeping together East Portland. Clackamas County line makes sense as a southern border differentiating District 1 and 2. District 5 inner core/SW Portland preserves a better understanding of transportation, commerce, and community links between SW Portland corridors and adjacent cities running down Willamette and 99W. District 4 reflects housing development while still keeping communities in unincorporated Washington County together and using TV Highway as a corridor of interest. C merits: Very few changes applied, but the changes do make sense by using US-26 West as a northern border for District 3; maintaining TV highway as the important corridor that it is for District 4.
20	Dave Malcolm	5	B1	Common sense, easily understood boundaries and common issues in the areas.
21	Jim Emerson	5	A1, C	In addition to the advantage of changing little, therefore not confusing the public further about Metro, these scenarios ensure that each Counselor must represent (and understand) a varied

				District. The whole idea of Metro is to think Regionally and broadly, not just advocate for one type of community.
22	Mary Manseau	4	A1	It keeps most of the urban unincorporated area in Washington County within one district. However, why is west bonny slope--a Washington county area--lumped with dissimilar areas in Multnomah County and City of Portland. A finer filter should be used when looking at where to draw the lines on a map! Just because an area has a Portland mailing address, doesn't mean that an area has any relationship or share any similarities with City of Portland.
23	Susan Andrews	N/A	B1	I do not think the natural areas in the west hills should be consolidated into an urban area. The east and north areas of Bethany are closely linked ecologically to the west hills and decisions about watershed, wildlife, natural areas as well as transportation planning should group these areas together.
24	Alana Mongkhounsavath	2	B1, B2	I live in unincorporated Clackamas county, for ease, sometimes I say Milwaukie sometimes Happy Valley. Most of my neighbors don't know what Metro is. Where is my community meant to go to ask for better services? There is so much growth that is happening east of where I live, my neighbors and I deserve one voice representing us. It makes sense to capture cities and unincorporated areas into a single district – don't keep my community divided (it doesn't make sense to have half of Happy Valley in one district and the other half in another).
25	Carol Hasenberg	6	A1, C	I like to have my slice of EPDX in District 6 because I think my interests and values are more in line with that area.
26	Monica Klau	N/A	C	Seems the most balanced.
27	Meng-Lun Chen-Pinkham	3	A1, A2, C	Population is closer to each other. And in district 6 population will increase pretty fast over time since it's closer to downtown area.
28	Catherine Nicewood	1	A1	A1 is more aligned with physical boundaries that make sense.
29	Lin Pond	1	B1	Concern for district 1 - Please do not make the border NE 122nd. By making 205 the boundary the district will have common needs and issues that Metro can address. Keeping NE 122nd as the boundary

				splinters Outer East Portland making it harder for an area that is in much need of attention from getting cohesive attention. NE 122nd already suffers a lack of business investment and an abundance of county/service providers which has severely impacted livability. The services have gone in as grocery stores have gone out. We need one representative to be speaking for this part of METRO. Please do not make NE 122nd the boundary for district 1. Please use 205 as the boundary.
30	Sara Schmitt	5	B1, B2	I'm grateful for the opportunity to provide input during the redistricting process. I live in North Portland in Multnomah County, and I work as an educator in Beaverton, in Washington County. Over the last 10 years, the Metro region has grown and our communities have become increasingly diverse. As our communities become increasingly diverse, it's imperative that we adjust Metro boundaries to guarantee equitable representation. This will give voice and power to historically underrepresented communities when decisions are made about regional planning, access to natural spaces, transportation, sustainability, land use and development, etc. This is a once in a decade opportunity to ensure equitable representation, and I urge you to consider racial equity in this redistricting process. As mapped now, scenarios A1, A2, and C do not advance that value. On the other hand, scenarios B1 and B2 would keep communities of common interest intact and empowered. Decisions about ways that the Metro Council will improve the liveability and health of our region will be improved with equitable representation of historically marginalized voices. Thank you for the important work you are doing to update the representation in the Metro districts.

31	Felicita Monteblanco	4	B1, B2, C	Greetings Metro President and Council! Thank you for all your hard work on this! I write as a long-time resident of Aloha. As you are likely aware, Aloha is unincorporated, which means politically we don't have a lot of power. It also happens to be extremely diverse and have a diversity of incomes. I am especially sensitive to my community after the redrawing of congressional maps that divide Aloha and Beaverton in half. While I have no doubt your job is very difficult I'm hoping you can be mindful that Aloha continues to receive "the short end of the stick" when it comes to building power and connecting to policy and policy makers - which ultimately ensures we can build community and advocate for needed change. Please keep Aloha entirely in one district. All the best, Felicita Monteblanco

Attachment 6
Criteria Written Public Comments

Comment #	Name	Comment
1	Duncan Hwang	We worked heavily on the Division Transit Project and recently in securing funding for jurisdictional transfer of 82nd Ave. During the state redistricting process, there were maps that split HD 46 and HD47 along 82nd Ave. We did not support those maps. We would ask that Metro redistricting keeps the Jade District and 82nd in one district, which aligns with the criteria of compact minority and underrepresented communities as well as areas surrounding major hubs or corridors intact. We've haven't seen any draft maps from Metro, but East County should have stronger representation. East Portland should begin at I-205 at the minimum to keep the Jade District and Lents as close as possible. We saw our work really focusing on 97266 and 97206 zip codes, so ideally those would be combined in the same district.
2	Wendy Lawton	Good morning, Metro Team – I fully support the criteria you've created for this redistricting process – bravo to you. As an elected city councilor in Fairview, and a community advocate for East Multnomah county, I encourage you to give East County strong consideration. We are diverse, growing, young, and poor. We need a strong voice, one where our communities are keep intact and are growing as we are. Diversity, equity, and inclusion are key compass points for you – and we in East County, along with communities on the Western edge of the Metro map, are where that racial, cultural, and socio-economic diversity exists. Keep us strong, and make us stronger, as you look at your boundaries. Thank you for asking for feedback – and for listening.
3	Bryan Hedlind	Communities of interest should be a top priority. Unincorporated Washington County north of Highway 26 should be kept together. I also support the other expressed redistricting goals including emphasizing equity in representation.
4	Ray Young	Keep the general geographic area, they all seem to consistent and true to existing communities. Just adjust current boundaries a little to insure close parity of

		population in each district. No good reason to do any radical changes.
5	Gary Wasserman	It makes sense for communities around my residence to have common representation. Those would include Milwaukie, Happy Valley, and Portland neighborhoods Sellwood and Errol Heights.
6	Michael Best	Keeping commercial and business interests separate and away from residential areas.
7	Laura Content	Communities of color should have a strong presence in as many districts as possible.
8	Karen Bolin	Aloha is slowly being swallowed up by Beaverton on the East side and Hillsboro on the West side. The Aloha-Reedville Study that was done 10 years ago identified the "markers" for our area. Our Aloha Business Association serves our community as a place to network and support our residents and business owners. Criteria to keep all of Aloha represented by one person would be helpful to keep our identity and desire to stay Aloha. We are affordable for people in Washington County and want to stay that way for as long as possible.
9	Tamara DeRidder	The NE Sandy Corridor
10	Cindy Passannante	The most important issues in our area are to keep the small community feel, the open and county feel while being close to major hubs. We do NOT need to be over developed and want to stay as a rural/ country area where people and be a little country but still have small sized city representation.
11	Jacob Loeb	The 2020 U.S. Census suffered from many flaws that may have undercounted people of color. In addition to COVID-19 limiting the full counting process, past administration tactics dissuaded certain people from participating. Some estimates think the undercount rates for Black and Latinx children were about double that for all children. Is there any adjustment to population counts that can be applied to the redistricting formula to counteract this imbalance, perhaps using statistical models to make up for the likely gap in these undercounted groups?
12	Mark Waggoner	We would be more accurately represented and have better elections if we adopted all at-large seats and used ranked choice voting with multiple winners.
13	Kathryn Harrington	I am writing as an individual member, the at-large elected Chair of the Washington Board of Commissioners and a former Metro Councilor District 4 (2007 – 2018) who went through redistricting with the 2010 census.

		In WA Co, there are many areas of urban unincorporated areas (UUAs) neighborhoods outside of cities, which has underscored for me how major roadways, more so that school districts, plan a key role in association with Metro Council District boundaries. Please use your Urban Reserves maps to consider how city boundaries will be moving over these next 10 years. Please also try to limit how a city might be split amongst 3 different Metro Districts in the various options you might review. Additionally, while District 5 has had constituents in WA Co for over a decade, please consider how that representation area in WA Co could be expanded to have meaning versus those residents feeling ignored. If you would like a map that illustrates the puzzle piece areas of the UUAs around cities for a simple view, we have those to provide your team, just let us know. I know that you will be thoughtful in your consideration. Best Wishes, and thank you for what you do each week in your work for us all in this great Portland Metropolitan Region. Our work together is better because the Metro Council and Metro exist. Respectfully submitted, Kathryn Harrington Chair, Washington County Board of Commissioners
14	Sage Cerulean	If possible consider making the cities and unincorporated places in the Metro area of Clackamas County its own group, or two if the redistricting means another district will be added. I know residents in the county don't feel like they have a voice as it is right now and I think this would be a good step towards gaining that trust.

Materials following this page were distributed at the meeting.

Comments submitted on behalf of No More Freeways for the December 14th Metro Council meeting. I also plan to address these comments verbally during the public communications section of the meeting.

Thanks.

Chris
503 223-3688

No More Freeways and several partner organizations recently submitted comments to ODOT on the Regional Mobility Pricing Project that are quite pertinent to this project as well, and I am attaching those comments.

JPACT and Metro Council have directed that regional congestion pricing policy be developed in the 2023 RTP. A key point of Metro's research on the topic is that how revenue from pricing is spent is critical to the equity outcomes of pricing. But ODOT seeks to pre-empt Metro's process and dedicate the majority of pricing revenue to widening freeways via three separate projects with siloed policy analysis: I-205 Tolling Project, Regional Mobility Pricing Project and IBR tolling.

The region deserves a robust conversation about pricing on a regional basis. If Metro has established that this policy development should occur in the 2023 RTP process, then ODOT's pricing projects should also be processed as part of the RTP, and NOT BEFORE.

I would also note that many policy makers are relying on electrification to deal with GHG emissions from transportation. I'm attaching two articles on this topic. One makes it clear that electrification **CANNOT** happen quickly enough to affect the next two critical decades in determining our climate future. The other points out that the **COMBINATION** of electrification and mode shift CAN address our climate needs and **ALSO MAKES THE TRANSPORTATION SYSTEM MORE AFFORDABLE**.

The current set of FIVE freeway widening projects that ODOT is pursuing in the region are increasing VMT and GHG. I believe Metro has an obligation to prevent this climate disaster.

Several other points I would emphasize:

- Pricing motor vehicle travel is a critical tool for addressing our climate emergency, but using the revenue from that pricing to expand freeways is counter productive and wastes the opportunity to shift travel to transit, biking and walking and to serve the region's equity, climate and safety goals.
- Using tolling proceeds to repay construction bonds essentially "locks us in" to an amount of driving. This is poor policy when our RTP urges us to reduce both VMT and Greenhouse Gas emissions per capita.

- ODOT is creating a pattern of doing NEPA analysis on construction projects, then later doing a separate NEPA process for pricing which would fund the project. This is a faulty process that avoids analyzing pricing as an alternative to construction.
- During discussion of the I-205 Toll Project, leaders in Clackamas County have fairly called out the lack of a robust transit alternative to the highway. ODOT should be required to analyze a transit alternative to the construction project.

Submitted by Chris Smith on behalf of No More Freeways.

The Compact City Scenario – Electrified

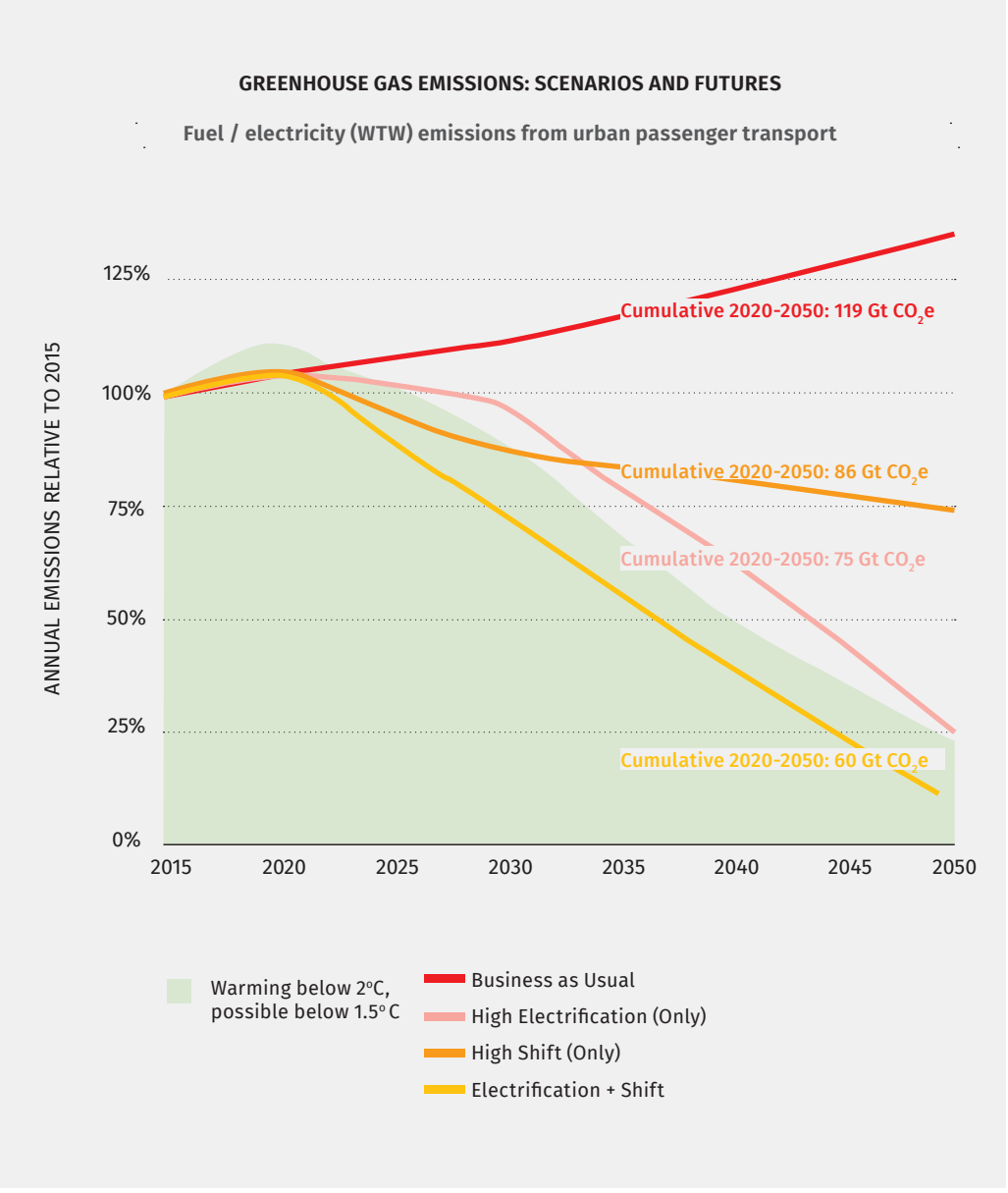
THE ONLY WAY TO 1.5°C

ITDP

UCDAVIS
UNIVERSITY OF CALIFORNIA

Unless humanity reaches net-zero carbon emissions by 2050, climate change will reach catastrophic levels. Urban passenger transport is responsible for about a tenth, and rising, of the world's total greenhouse gases. But there are solutions. Battery technology is rapidly improving, and electric vehicles (EVs) show unprecedented promise. We cannot decarbonize transport without them. EVs also bring important co-benefits, like the reduction of air pollution. Similarly, many cities are reducing emissions by shifting travel from cars to walking, bicycling, and public transit, saving money in the process and improving transport equity.

However, neither vehicle electrification nor modal shift alone can sufficiently decarbonize the sector, even under highly optimistic scenarios. Only with both electrification and modal shift can we achieve an emissions reduction consistent with global warming of less than 1.5°C by the end of the century. Climate change is urgent. We must do everything we can, all at once, all together.



Only the combination of compact cities with modal shift and vehicle electrification is consistent with the International Energy Agency's Sustainable Development Scenario (SDS), limiting global warming to less than 2°C with a possibility of limiting it to less than 1.5°C.

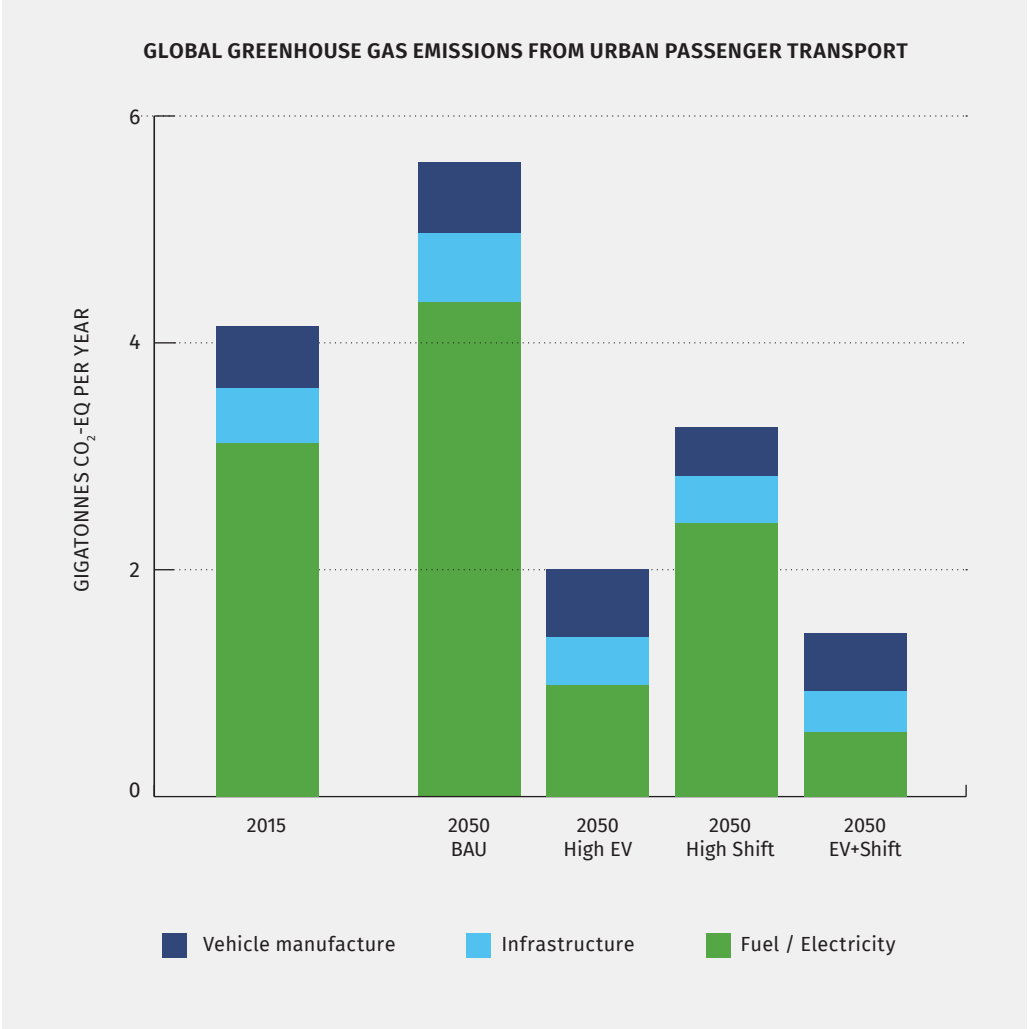
A study by ITDP and the University of California, Davis, developed four worldwide scenarios in consultation with global experts on electrification and transportation:[1]

1.***BAU:*** Business as usual

2.***High EV:*** Aggressive electrification of public and private vehicle fleets

3.***High Shift:*** Policies that build compact cities focused on walking, bicycling, and public transit instead of cars

4.***EV+Shift:*** Electrification and modal shift combined

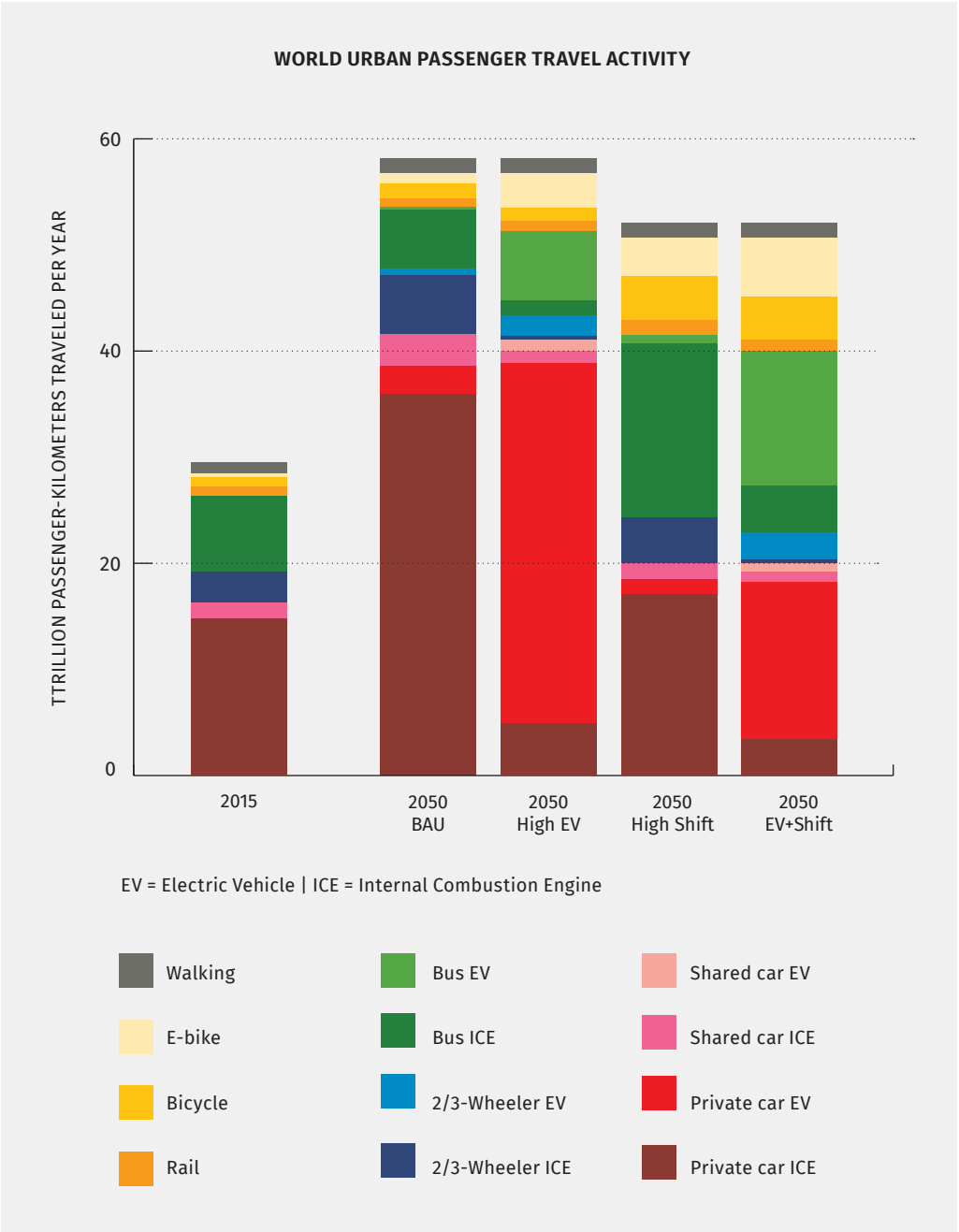


1 The assumptions and findings have been reviewed by technical experts representing the International Energy Agency, the International Transport Forum–Organisation for Economic Co-operation and Development, the ClimateWorks Foundation, and the Global Fuel Economy Initiative.

The latter three scenarios are highly ambitious but feasible pathways for the future of urban passenger transport.

To meet the terms of the Paris Agreement and avoid catastrophic climate change, we must reduce GHG emissions from urban passenger transport by a cumulative 53 gigatonnes over the period from 2020 to 2050.(footnote [2]) The High EV scenario alone could prevent a cumulative 44 gigatonnes, or High Shift alone could prevent 33 gigatonnes. Neither scenario by itself is sufficient. But the combination of these scenarios (Electrification + Shift) could reduce emissions by a cumulative 59 gigatonnes, making it the only scenario consistent with limiting global warming to less than 1.5°C.

Over the next 30 years, the world's population will grow larger and more urban. Global demand for urban passenger travel will double. Our scenarios imagine four ways of accommodating that growth.



2 Adapted from International Energy Agency (2021), World Energy Model, IEA, Paris. Our adaptation assumes that necessary emission reductions from urban passenger transport (by all modes) follow the same curves relative to 2015 as necessary reductions from road passenger transport using light-duty vehicles (urban or nonurban). This approach to understanding consistency with future extents of global warming is more sophisticated than the approach described in the pre-publication brief that was circulated in early November, 2021; but the conclusion is unchanged.

BAU sees the world manufacture almost two billion new internal combustion engine cars by 2050. The vast majority of growth in car use is in low- and middle-income regions: Africa, for example, sees a quintupling of its private urban car fleet, reaching 224 million cars by 2050—significantly more cars than are in cities in the United States today.

High EV includes electrification of cars, motorcycles, and buses. Our projections for electrification align with the ambitious goal, announced at COP26 in November 2021,[3] of phasing out ICE vehicle sales worldwide by 2040.

High Shift is based on compact and mixed urban land use, reducing overall travel demand by about 11% relative to BAU, combined with a paradigm shift in transportation planning. In the *High Shift* world, it is easier to get around cities by walking, cycling, or riding transit than it is by driving, and so the demand for cars is reduced. While global car use increases slightly due to population growth, it is far lower than under *BAU* or *High EV*.

The *EV+Shift* scenario imagines a future that is a combination of the *High EV* and *High Shift* scenarios. It is a future of dramatically reduced overall car use, plus electrification of most of the motorized travel that remains.

BUSINESS AS USUAL

A car-oriented street in Cairo represents the future for much of the world under Business as Usual.
SOURCE: Friedrich Stark via Alamy Stock

Impacts:

- Increase in traffic fatalities
- High direct public and private costs
- Reduced access to opportunities for low-income people without cars
- Increase in urban highways, dividing neighborhoods and subsidizing suburban sprawl into farmland
- Increase in carbon emissions, leading to climate catastrophe

3 UN Climate Change Conference UK 2021 (2021), COP26 declaration on accelerating the transition to 100% zero emission cars and vans, 10 November.

HIGH EV

This photo from Los Angeles shows the kind of car-centric infrastructure that will be prevalent in a High Electrification future. **SOURCE:** GaudiLab via Shutterstock

Impacts:

- Increase in traffic fatalities
- High direct public and private costs
- Reduced access to opportunities for low-income people without cars
- Increase in urban highways, dividing neighborhoods and subsidizing suburban sprawl into farmland
- Sharp reduction in carbon emissions
- Sharp reduction in local air and noise pollution

Key policies:

- Supply- and demand-side EV incentives, including zero-emissions vehicle waivers and tax rebates, achieving purchase price parity
- Ambitious fuel economy and tailpipe carbon dioxide standards
- Battery reuse and recycling
- Public charging infrastructure
- Electric grid expansion and decarbonization

HIGH SHIFT

A physically separated bicycle lane in the streets of Indonesia. **SOURCE:** ITDP Indonesia.

Impacts:

- Reduction in traffic fatalities
- Increased access to opportunities, especially for low-income people
- Increase in walking and cycling, which improve physical and mental health, reducing health care costs.
- High local air and noise pollution relative to *High EV*
- Insufficient carbon reductions to meet the Paris Agreement

Key policies:

- Strong incentives for compact, mixed-use, transit-oriented development
- Market rate pricing of parking spaces
- Reallocation of transport budgets to walking, cycling, and public transit
- Street redesigns shifting space from cars to bus lanes, physically protected bicycle lanes, and footpaths
- Promotion of bicycles, especially shared electric bicycles

EV + SHIFT

The electric buses of the bus rapid transit system in Nanning, China, exemplify the Electrification+Shift future.
SOURCE: ITDP China

Impacts:

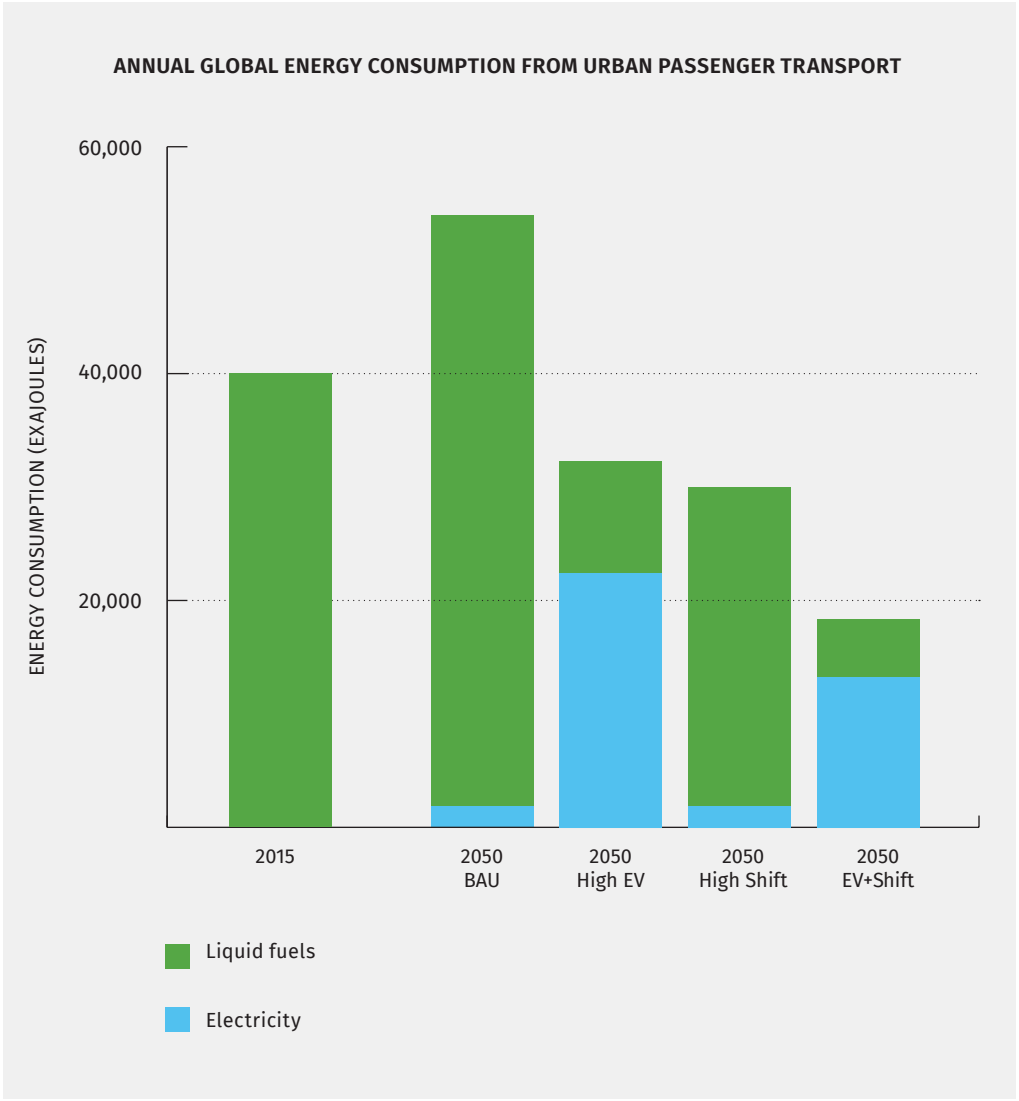
- Reduction in traffic fatalities
- Increased access to opportunities for all
- Increase in walking and cycling, which improve physical and mental health, reducing health care cost
- Extreme reduction in local air and noise pollution
- Massive reduction in carbon emissions consistent with the terms of the Paris Agreement

Key policies:

- All policies listed for *High EV* and for *High Shift*
- Creation of low-emission areas, especially in city centers, to simultaneously incentivize modal shift and vehicle electrification

The synergy between *High Shift* and *High EV* makes the *EV+Shift* scenario more feasible:

Compared to *High EV*, the reduced demand for driving in *EV+Shift* means that about 300 million fewer electric cars are required and about 9,000 fewer exajoules of electricity are needed to power them (a 40% reduction). Our modeling assumes an ambitiously decarbonized grid.[4] Synergy makes both EV manufacturing and the energy transition more feasible.



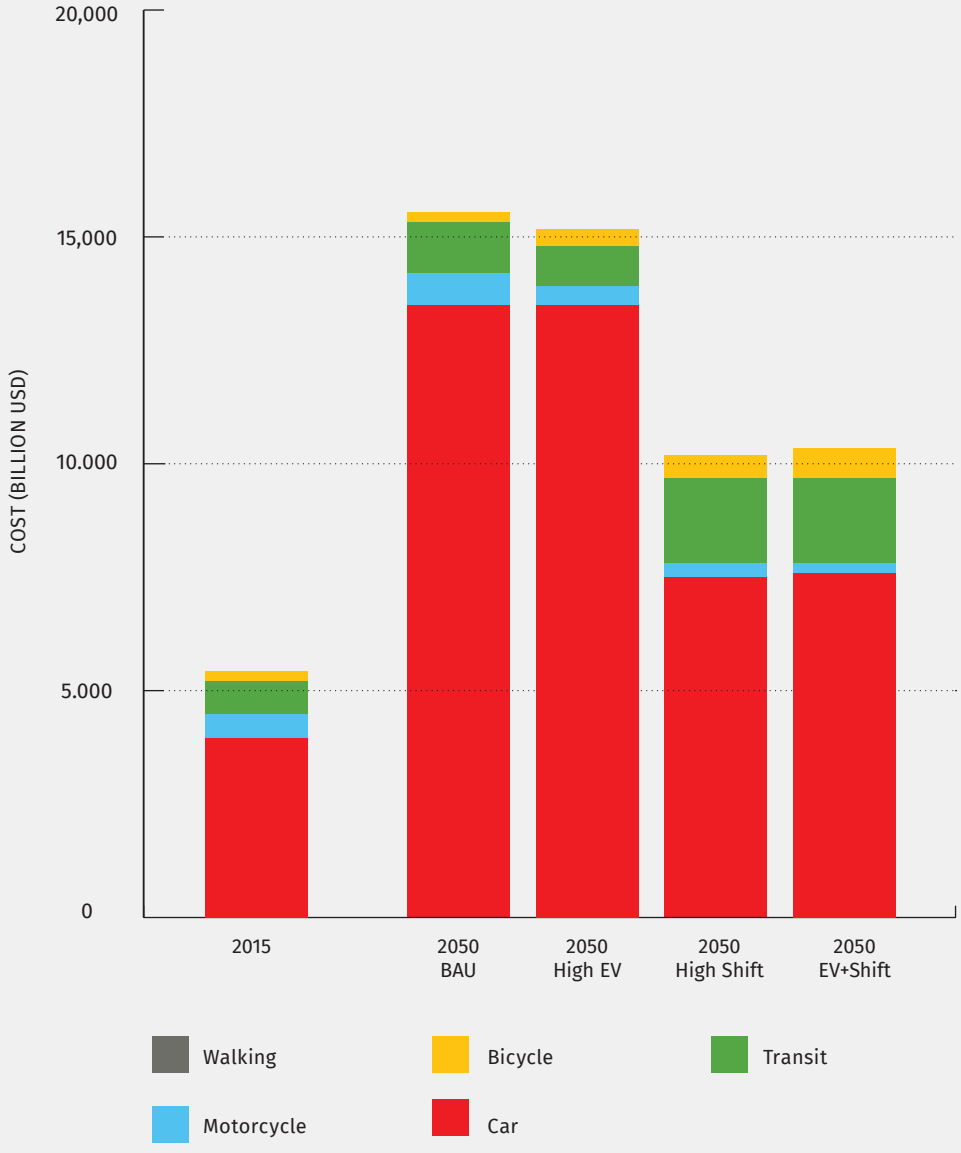
4 The International Energy Agency's *Sustainable Development Scenario.*

Car travel, by any energy source, is the most expensive mode of urban transport per passenger-kilometer. Compared to *BAU* and *High EV,* the *High Shift* and *EV+Shift* scenarios represent an annual saving of over $5 trillion per year by 2050 in direct costs (including fuel, operation, manufacture, and infrastructure)—money that can be used for other decarbonization efforts.

Our climate's future depends not only on EVs but also on compact cities, public transit, bicycle lanes, and footpaths. Neither approach alone is sufficient, but when combined, these two strategies are easier to achieve, more impactful, and more beneficial to society as a whole.

EV+Shift is an ambitious vision for our planet's future. It will require a vast global effort, comparable in each country to the construction of the U.S. Interstate Highway System in the 1950s or of China's high-speed rail network in more recent years. But those feats of infrastructure were possible, and so is the decarbonization of urban passenger transport.

DIRECT GLOBAL PUBLIC AND PRIVATE COSTS OF URBAN PASSENGER TRANSPORT



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Date: November 15, 2021

To: Metro Council
JPACT

From: Chris Smith, No More Freeways

Subject: **IBR, Climate Change and Electric and Autonomous Vehicles**

As you consider the $36M MTIP amendment for preliminary engineering (PE) on the five-mile freeway project known as the Interstate Bridge Replacement, I would ask you to examine the impacts on climate change.

The “national commitments” from the recently concluded COP26 in Glasgow still put us on a projected path for 2.5 degrees Celsius global heating, even as leaders express the need to limit such warming to 1.5 degrees to avoid devastating impacts.

All of the alternatives proposed for the IBR include 10 lanes. Whether or not we call these “auxiliary lanes” (they are longer than the entire I-405 freeway) is immaterial. The project refers to these lanes creating “a more efficient bridge”. That very efficiency is what will induce more single occupancy vehicle trips, increasing greenhouse gas emissions. We must prevent that.

Policy makers are tempted to rely on vehicle electrification to address climate change. But I urge you to look at the adoption curves to understand that this is unlikely to occur fast enough to meet the near term reductions needed to limit warming to 1.5 degrees

The chart below is provided by the Victoria Transport Policy Institute (see attached report). The key point to note is that fleet turnover lags sales by almost two decades. Even with commitments to end sales of internal combustion vehicles by 2035 (part of the COP26 commitments), we still don’t see full fleet turnover until at least 2050, leaving us largely dependent on greenhouse gas emitting vehicles during the next two critical decades. Electric vehicle sales are increasing much more slowly than these objectives. Global automotive industry consultants EY (formerly Ernst and Young) predict that EVs will not be a majority of new US car sales until 2036[1].

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1 https://www.ey.com/en_gl/news/2021/06/electric-vehicles-to-dominate-sales-five-years-sooner-than-expected-ey-analysis

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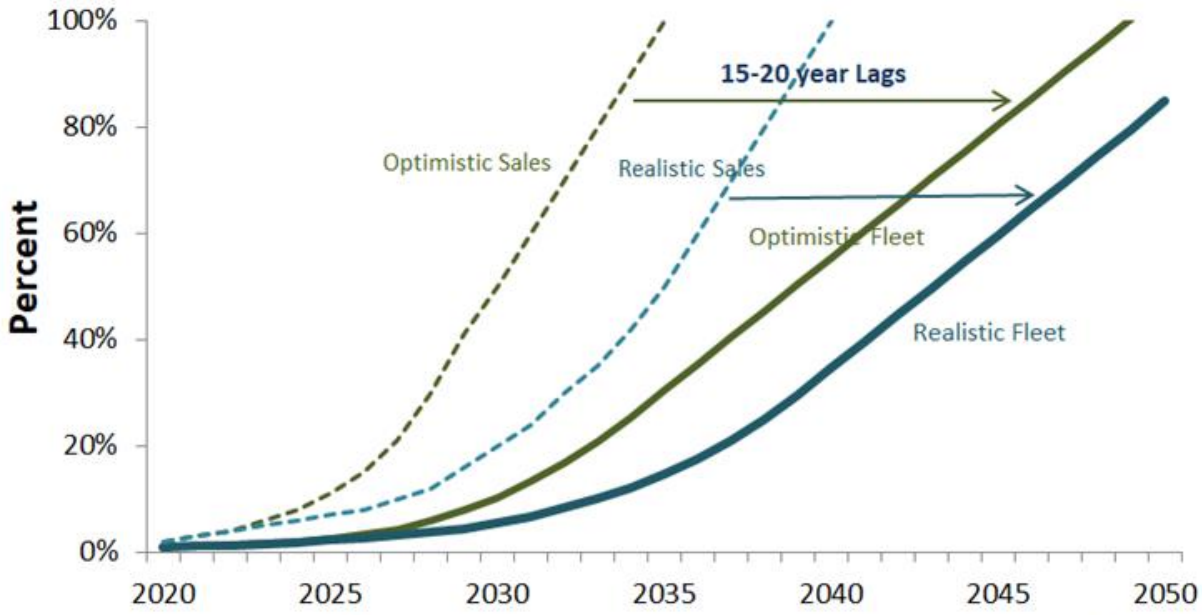
The COP26 declaration on accelerating the transition to 100% zero emission cars[2] ends with this dose of cold water (emphasis mine):

> "We recognise that alongside the shift to zero emission vehicles, a sustainable future for road transport **will require wider system transformation, including support for active travel, public and shared transport**, as well as addressing the full value chain impacts from vehicle production, use and disposal."



Optimistically, half of new vehicle sales could be electric by 2030, but realistically it will probably take longer, and since only about 5% of vehicles are replaced each year, it takes 15-20 years between a percentage of sales becoming a percentage of the fleet. With current policies it is unlikely that the fleet will be full electric by 2050.

We also need to consider lifecycle impacts. The production and operation of electric vehicles isn't zero carbon, best estimates are that life-cycle emissions from building EVs and their batteries and charging them will produce about 30 to 50 percent of the emissions of greenhouse gases as gasoline-powered cars.

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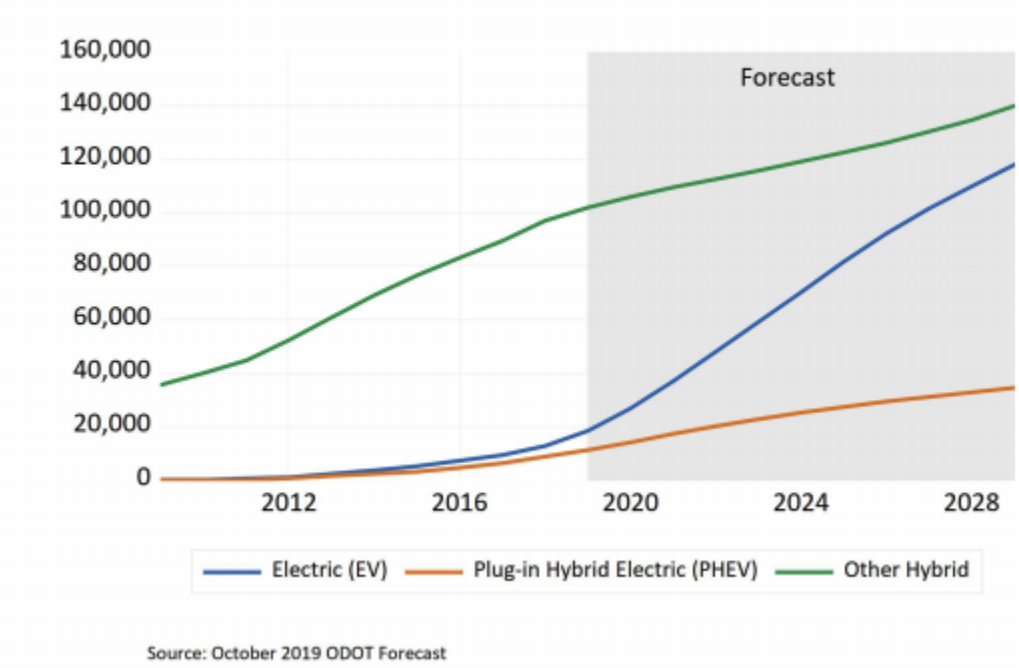
2 https://www.gov.uk/government/publications/cop26-declaration-zero-emission-cars-and-vans/cop26-declaration-on-accelerating-the-transition-to-100-zero-emission-cars-and-vans

ODOT is forecasting fossil fuel vehicles for the foreseeable future

By ODOT's own forecast, only 3 percent of Oregon vehicles will be electric by 2030.

The agency's October 2019 revenue forecast predicts the size and composition of Oregon's light duty vehicle fleet through 2029. They forecast that in 2029 Oregon will have about 3.9 million light duty vehicles, but only about 120,000 of them (total) will be electric vehicles. That's just 3 percent of the fleet; 97 percent will still be internal combustion engines. The slow adoption of electric vehicles, as depicted in ODOT's official revenue forecasts, means the agency believes that its efforts to promote EVs won't have a significant effect on the state's greenhouse gas emissions any time in the next decade, at least.

Figure 12. Electric and Hybrid Vehicle Stock Forecast



Source: October 2019 ODOT Forecast

Electric vehicle adoption is happening more slowly than called for in Metro's and ODOT's climate plans. Vehicles are lasting longer, the fuel efficiency (and carbon emissions) of new vehicles are not improving as called for in those plans, and the vehicle mix has shifted decisively to heavier, more polluting SUVs. Portland is failing utterly to reduce its transportation GHG's. The independent, national DARTE inventory[3] estimates that Portland area

[3] Gately, C., L.R. Hutyra, and I.S. Wing. 2019. DARTE Annual On-road CO2 Emissions on a 1-km Grid, Conterminous USA, V2, 1980-2017. ORNL DAAC, Oak Ridge, Tennessee, USA. https://doi.org/10.3334/ORNLDAAC/1735

transportation greenhouse gases increased by 1,000 pounds per person per year over the past five years.

It's worth remembering that electric vehicles don't have zero emissions: Much of our electric system still generates greenhouse gases, and the life-cycle costs associated with EV and batter manufacturing produce substantial amounts of greenhouse gases On a life-cycle basis, large electric cars and SUVs produce only about 40 percent fewer greenhouse gas emissions than conventional internal combustion vehicles—about 300 grams per mile vs about 500 grams (Ambrose, et al, 2020[4]). Even rapid electrification of the fleet won't be sufficient to come close to meeting our greenhouse gas reduction goals. The State Smart Transportation Institute (SSTI) reports[5] that increasing VMT could wipe out most of the gains from the likely level of vehicle electrification.

Transit, walking and biking can reduce greenhouse gases in the near term

C40 Cities (of which Portland is a member) issued the attached report, MAKING COP26 COUNT, arguing for a doubling of mode share for transit and active transportation, and making the case that doing so would be a powerful jobs program!

In considering IBR funding, I urge you to push for alternatives that contribute to RTP goals to reduce VMT and build a climate-resilient future for our region.

The role of Autonomous Vehicles

Of course, electric vehicles do nothing to reduce highway congestion.

There are hopes that in the future autonomous vehicles will be able to better use highway infrastructure by "platooning", traveling at high speeds with minimal spacing between vehicles. The predictions of when autonomous vehicles will be able to safely operate at highway speeds are still highly speculative. And while platooning may increase throughput on limited access highways, it then threatens to overwhelm arterial and local streets with higher volumes of traffic, producing more congestion and safety problems. In addition, platooning will likely increase VMT and total emissions.

I would suggest you consider the limiting factors. Platooning will only be possible when a high percentage of vehicles are AVs, possibly requiring dedicated AV lanes. Given that AVs will suffer

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[4] Hanjiro Ambrose, Alissa Kendall, Mark Lozano, Sadanand Wachche, Lew Fulton, Trends in life cycle greenhouse gas emissions of future light duty electric vehicles, Transportation Research Part D: Transport and Environment, Volume 81, 2020, 102287, ISSN 1361-9209, https://doi.org/10.1016/j.trd.2020.102287.

[5] https://ssti.us/2021/09/13/the-amount-we-drive-could-make-or-break-clean-energy-plans/

from the same fleet turnover lags as EVs, automation will not mitigate highway congestion in the next few decades. Our best defense against congestion remains road pricing.

Please decline this MTIP amendment until the project includes IBR scenarios that focus on transit, active transportation and pricing as requested by President Peterson and Commissioner Hardesty in their October 21 letter.

Attachment sources:

- https://www.planetizen.com/blogs/114511-clean-vehicles-versus-vehicle-travel-reductions-better-transportation-emission
- https://www.c40.org/wp-content/uploads/2021/11/ITF-C40-joint-report-Making-COP26-count-Nov-2021-2.pdf
- Letter from City of Portland and Metro to IBR ESG, October 21, 2021

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Clean Vehicles Versus Vehicle Travel Reductions: Better Transportation Emission Reduction Planning

There are many possible ways to reduce transportation emissions, some of which provide large co-benefits. Unfortunately, current evaluation practices tend to overlook some of the best. Lets examine why.

August 30, 2021, 12:00 PM PDT
By Todd Litman

Aram Vartian / Flickr

The Intergovernmental Panel on Climate Change's recent "Code Red" report highlights the urgency of reducing greenhouse gas emissions. "The internationally agreed threshold of 1.5°C is perilously close. We are at imminent risk of hitting 1.5°C in the near term. The only way to prevent exceeding this threshold is by urgently stepping up our efforts and pursuing the most ambitious path."

Since transportation activities generate the largest share of greenhouse gas (GHG) emissions, transportation professionals have a critical role in identifying the most effective and overall beneficial emission reduction strategies; our role is similar to an emergency medicine team. The good news is that many jurisdictions are now establishing ambitious emission reduction targets. For example, President Biden recently established a target to reduce U.S. GHG emissions 50-52% by 2030. The even better news is that there are many cost effective transportation emission reduction strategies The bad news is that current evaluation practices tend to overlook and undervalue some of the best. My new report, *Comprehensive Transport Emission Reduction Planning – Guidelines for Evaluating Transportation Emission Reduction Strategies* examines why this occurs and how to correct it. Let me summarize this research.

Clean Vehicles versus Vehicle Travel Reductions

Most transportation emission reduction strategies can be categorized as either *clean vehicle* strategies that reduce per-mile emission rates, or *vehicle travel reduction* strategies that reduce total vehicle travel, as summarized below.

Examples of Emission Reduction Strategies

Clean Vehicles	Vehicle Travel Reductions
Technologies and policies that reduce emission rates per vehicle-mile	*TDM and Smart Growth policies that reduce total vehicle travel*

• Shifts to more efficient and alternative fuel vehicles (e.g., hybrid, electric and hydrogen). • High emitting vehicle scrapage programs. • Efficient driving and anti-idling campaigns. • Switching to lower carbon and cleaner fuels. • Inspection and maintenance programs. • Resurface highways. • Roadside “high emitter” identification • Increase fuel prices	• Multimodal planning (improve walking, bicycling, public transit, ridesharing, etc.) • Smart Growth policies that create more compact and multimodal communities. • transportation demand management programs (commute trip reduction, freight transport management, etc.) • More efficient road, parking and vehicle pricing. • Vehicle parking policy reforms. • Increase fuel prices

Clean vehicles reduce per-mile emission rates. Vehicle travel reductions reduce total motor vehicle travel. Fuel price increases help achieve both.

Better Analysis

Which emission reduction strategies are most effective and beneficial overall? That depends on how they are analyzed. My report reviewed the assumptions and evaluation methods used in more than a dozen emission reduction plans. I found many are biased in ways that tend to exaggerate the benefits of clean vehicle strategies, and undervalue vehicle travel reduction strategies. Let me describe these.

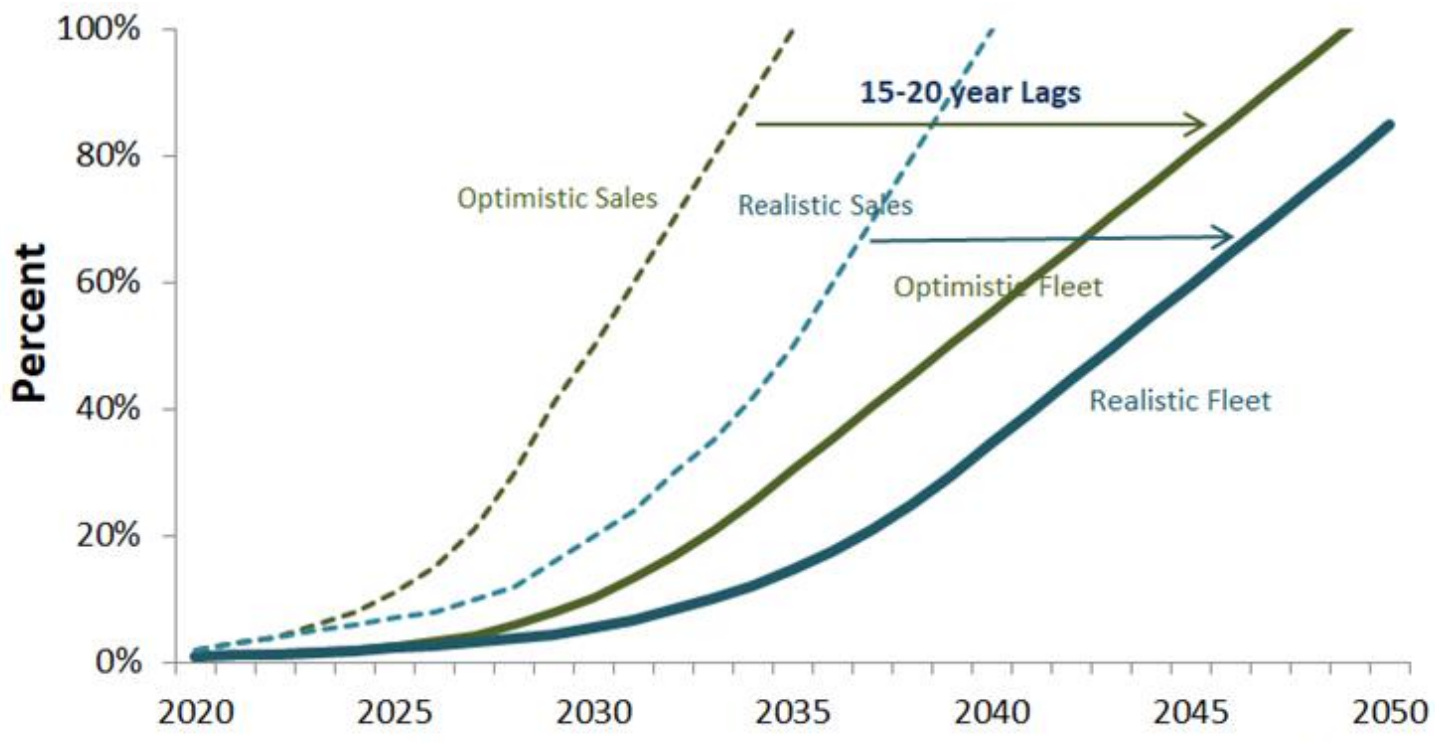
Unrealistic Fleet Turnover Predictions

Many emission reduction plans assume that electric vehicles can quickly replace fossil fuel vehicles using overly optimistic fleet turnover predictions.

Since only about 5% of vehicles are replaced each year, it takes decades for new technologies to fully penetrate a fleet unless many operable vehicles are scrapped prematurely. Electric vehicles currently represent less than 2% of new vehicle sales.

Optimistically, half of new vehicles could be electric by 2030, but realistically it will probably take longer, and because the development of electric SUVs and light trucks is particularly slow, the remaining fossil fuel vehicles will skew to low fuel economy. With current policies, the fleet is unlikely to be fully electric by 2050, as illustrated below.

Optimistic and Realistic Electric Vehicle Sales and Fleet Penetration



Optimistically, half of new vehicle sales could be electric by 2030, but realistically it will probably take longer, and since only about 5% of vehicles are replaced each year, it takes 15-20 years between a percentage of sales becoming a percentage of the fleet. With current policies it is unlikely that the fleet will be full electric by 2050.

Rebound Effects

Because cleaner vehicles generally have lower operating costs they tend to increase total vehicle travel and associated costs. For example, electric cars cost are about half as much to operate as a comparable fossil fuel car, which typically increases vehicle-miles 10-30%. This is called a *rebound*

effect, and the additional vehicle-miles are called *induced vehicle travel*. Although there are still net emission reductions—a 10-30% rebound effect leaves 70-90% net savings—the induced travel increases congestion, infrastructure costs, crashes, and sprawl-related costs. The additional travel provides user benefits, otherwise motorists would not drive more miles, but these tend to be modest since the additional travel consists of marginal-value vehicle-miles that users are most willing to forego if their costs increase.

High Costs of Cleaner Vehicles

Electric vehicles currently receive various subsidies, as summarized in Table 2. Since a typical gasoline car produces about seven annual tonnes of carbon, compared with five for a hybrid and two for an electric car, vehicle electrification emission reductions cost $100-400 per tonne, which is higher than many other emission reduction strategies. These may decline somewhat as electric vehicle technology improves, but until a vehicle-miles tax is applied to electric vehicles they will continue to receive approximately $300 annual subsidy in avoided road user taxes, representing approximately $60 cost per ton of emissions reduced.

Typical Electric Vehicle Subsidies

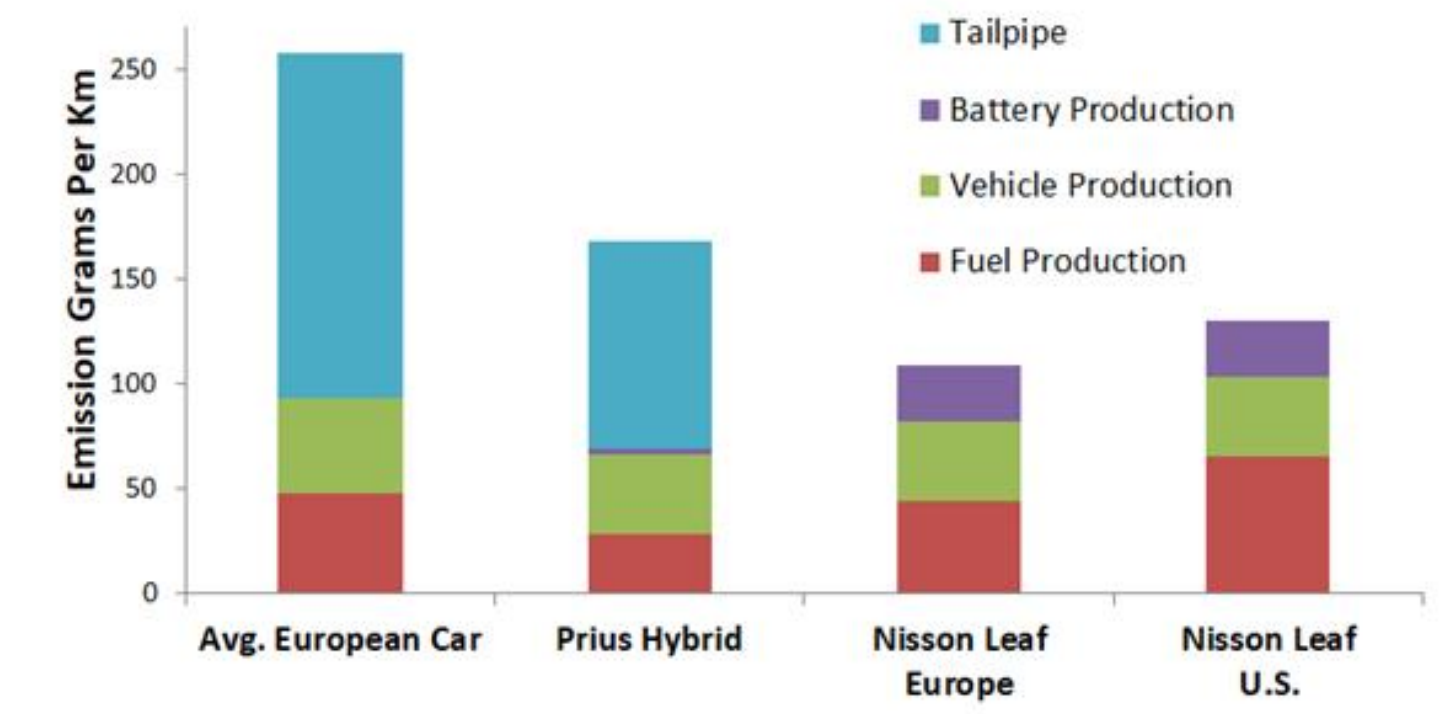
Subsidy	Annual Value
Corporate Average Fuel Economy (CAFE) credits ($4,700 over 15 years)	$313
Purchase subsidy ($5,000 over a 15-year vehicle life)	$333
Electric vehicle recharging stations (50 free annual recharges costing $2.50)	$125
Road user fee exemption (12,500 annual miles, 20 mpg, 50¢ tax per gallon)	$310
Total Annual Subsidy	*$1,081*

Electric vehicles receive various subsidies that currently total more than $1,000 per year.

Lifecycle Emissions

Many plans exaggerate clean vehicle benefits by ignoring emissions embodied in vehicle and electricity production. Hybrids typically reduce emissions by a third, and electric cars by two-thirds, compared with typical fossil fuel cars, as illustrated below. This is good, but it is an exaggeration to call them "zero emission" vehicles.

Life-cycle GHG Emissions



Electric vehicles typically reduce emissions 50-80% compared with a comparable fossil-fuel vehicle. It is an exaggeration to call them "zero emission vehicles."

In addition, automobile transportation and the sprawl they increase emissions by increasing road and parking infrastructure requirements, along with their embedded emissions, and by displacing emission-sequestering forests.

Outdated Transportation Models

Emission reduction plans use transportation models to predict how a policy will affect vehicle travel and emissions. Many of these models are outdated and inaccurate. For example, a major study, *Impacts of Land Use and Pricing in Reducing Vehicle Miles Traveled*, predicted that a 25¢ per mile VMT fee, equivalent to a $5 per gallon fuel tax, would only reduce affected vehicle travel 15%. It explains,

"This is due to the low price-elasticity of vehicle travel demand – a known feature of travel behavior that can be attributed partially to the lack of competitive alternative modes of travel in much of the region."

Such low elasticity values are based on studies performed in the United States during the last quarter of the 20th Century, when employment rates and wages were increasing and fuel prices were relatively low. More recent studies indicate that vehicle travel is two or three times more price sensitive than older models assume. Older models also underestimate the vehicle travel reductions provided by transportation demand management (TDM) and Smart Growth policies. For example, if an older model predicts that a price change will reduce vehicle travel 5%, the actual long-term impact is likely to be 10-15%. Similarly, if it predicts that electric vehicles will be driven only 10% more annual miles than comparable fossil fuel vehicles, the true rebound effect is probably 20-30%.

Scope of Vehicle Travel Reduction Strategies Considered

Most emission reduction plans consider a limited set of vehicle travel reduction strategies, and omit some of the most effective. They often include active and public transport improvements, vehicle sharing, telework, and sometimes road pricing and transit-oriented development, but few include comprehensive multimodal planning, efficient transportation pricing (including parking, insurance and registration fees), comprehensive Smart Growth policies, and targeted travel reduction programs.

Additional Impacts and Co-Benefits

Cleaner vehicles conserve fossil fuel and reduce emissions but provide few other benefits, and by inducing additional vehicle travel they can increase external costs such as congestion, infrastructure cost, crashes and sprawl-related costs. Because they and their infrastructure are costly and require large subsidies that could instead, be invested in non-auto modes, they reduce overall affordability and contradict social equity goals. In contrast, vehicle travel reductions and Smart Growth provide a far greater range of economic, social and environmental benefits. By improving walking, bicycling, public transit, vehicle sharing and affordable infill housing options, vehicle travel reduction programs tend to provide large affordability and social equity benefits. Few emission reduction plans consider all of these impacts; as a result, they undervalue vehicle travel reduction strategies.

Latent Demand for Multimodal Lifestyles

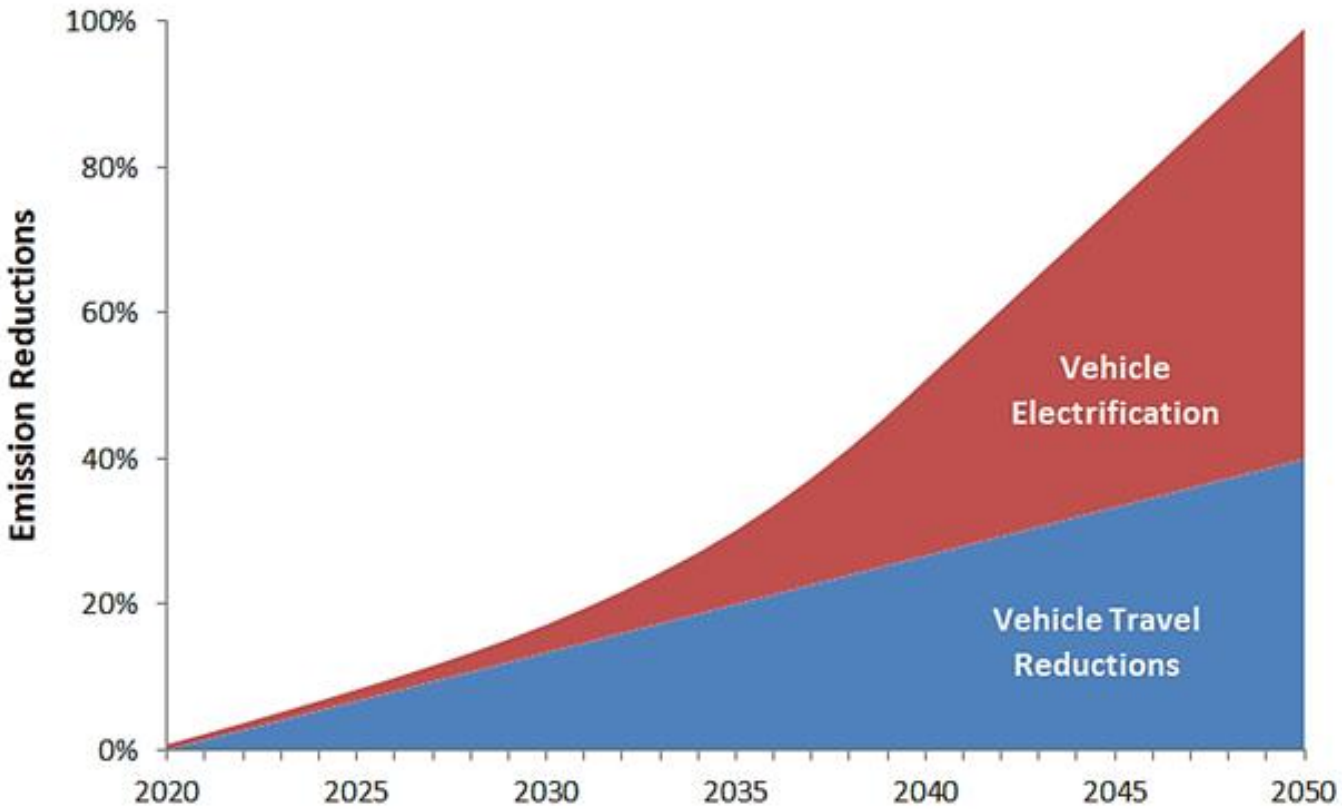
Some emission reduction plans assume that most people want to live automobile-dependent lifestyles, so vehicle travel reductions harm consumers and are difficult to implement. There are good reasons to be skeptical of such claims. Surveys indicate that many North Americans would like to drive less, rely more on non-auto modes, and live in more multi-modal communities, provided that these alternatives are convenient, comfortable and affordable. TDM and Smart Growth respond to those demands. There are many examples of integrated TDM and Smart Growth programs that provide large travel reductions and benefits, including user cost savings, public health, community livability, and fun.

Comparing Impacts

The figure below compares potential emission reductions provided by vehicle electrification and vehicle travel reductions. Fleet electrification will take decades, and considering emissions embodied in vehicle and fuel production, plus rebound effects, only reduces a vehicle's emission about 70%.

A set of cost-effective TDM and Smart Growth policies can reduce North American per capita vehicle-miles by 40% or more, comparable to peer countries such as Germany, Norway, and Sweden. Many of these strategies can be implemented quickly, and reducing total vehicle ownership and sprawl provides indirect as well as direct emission reductions.

Comparing Emission Reductions



Fleet electrification will take decades and only reduces emission about 70% due to embodied energy and rebound effects. Many vehicle travel reduction strategies can be implemented quickly. As a result, cost-effective vehicle travel reduction strategies are likely to provide greater emission reductions and more total benefits than vehicle electrification during the next three decades.

This analysis indicates that both vehicle electrification and vehicle travel reductions are needed to achieve ambitious emission reduction targets. Because of the 15-20 year lag between new vehicle market penetration and total vehicle fleet penetration, vehicle electrification cannot provide significant emission reductions before 2040. In contrast, many TDM and Smart Growth policies can be implemented quickly, providing earlier and more total emission reductions during the three-decade period.

Summary and Recommendations

The table below summarizes various planning biases, their impacts, and ways to correct them.

Comparing Impacts

Planning Bias	Impacts	Corrections
Exaggerates the speed of clean vehicle market penetration.	Overestimates clean vehicle impacts and benefits.	Use realistic predictions of clean vehicle fleet penetration.
Use of outdated travel models that underestimate travel impacts.	Underestimates clean vehicle rebound effects, and undervalues vehicle travel reductions.	Use newer and better modes for predicting travel impacts.
Overlooks embodied and upstream emissions	Overestimates clean vehicle emission reductions and benefits.	Apply lifecycle analysis that accounts for all emissions.
Ignores rebound effects (increased travel by clean vehicles), and the increased external costs that result.	Overestimates clean vehicle benefits and underestimates their community costs.	Account for rebound effects and the additional external costs that result.
Failure to account for all clean vehicle subsidies, and compare them with other emission reduction strategies.	Underestimates clean vehicle costs and regressivity.	Estimate and compare unit emission reduction costs (dollars per tonne of emission reductions).
Only considers a limited and ineffective set of vehicle travel reduction strategies.	Undervalues TDM and Smart Growth impacts and benefits.	Consider a broad range of potential vehicle travel reduction strategies.
Overlooks TDM and Smart Growth co-benefits, besides emission reductions.	Undervalues TDM and Smart Growth benefits.	Account for all significant co-benefits.

Assumes that TDM and Smart Growth harm consumers and are unpopular.	Undervalues vehicle travel reduction impacts and benefits.	Consider consumer preferences for more multimodal lifestyles.

Current emission reduction planning practices are biased in ways that tend to exaggerate clean vehicle benefits and undervalue TDM and Smart Growth strategies. These can be corrected.

Other recent publications also conclude that vehicle travel reduction strategies provide greater benefits than commonly recognized. For example, a *New York Times* article "There's One Big Problem with Electric Cars. They're Still Cars," highlights problems caused by automobile traffic. A *New Scientist* article, "Electric Cars Won't Shrink Emissions Enough - We Must Cut Travel Too," argues that vehicle travel reductions are needed to achieve emission reduction targets. A Rocky Mountain Institute study, "Our Driving Habits Must Be Part of the Climate Conversation," concludes that the United States must reduce vehicle travel by 20% to limit global warming to 1.5°.

Conclusions

Many jurisdictions and organizations have ambitious emission reduction targets and are developing plans to achieve them. My research indicates that the analysis methods used to develop those plans are often biased in ways that exaggerate the benefits of clean vehicles (hybrid, electric and hydrogen), and undervalue TDM and Smart Growth strategies. Many plans assume that clean vehicle policies are more effective, cost effective, fast, reliable, and popular than vehicle travel reductions. There are good reasons to question those assumptions.

Because of the 15-20 year lag between changes in new vehicle purchases and changes in the overall vehicle fleet, clean vehicles can provide little emission reductions before 2040, and considering vehicle and electricity production emissions, plus rebound effects, clean vehicles only reduce emissions by 60% to 80%; it is inaccurate to describe them as having "zero emissions."

Integrated TDM and Smart Growth strategies could reduce emissions by 20% within a decade and 40% by 2050, are very cost-effective overall, and provide numerous co-benefits. Although few motorists want to give up driving altogether, surveys indicate that many would like to drive less, rely more on alternative modes, and live in more walkable communities, provided that they are convenient, safe and affordable; TDM and Smart Growth respond to those demands, making consumers better off overall.

This study suggests that to be efficient and equitable, transportation emission reduction plans should rely at least as much on vehicle travel reductions as on clean vehicle strategies, with particular emphasis on "quick win" strategies that can be implemented in a few years.

There is a positive message here. With better analysis we can identify emission reduction strategies that also help achieve other economic, social and environmental goals. Everybody wins!

For More Information

Jonn Axsen, Patrick Plötz and Michael Wolinetz (2020), "Crafting Strong, Integrated Policy Mixes for Deep CO_2 Mitigation in Road Transport," *Nature Climate Change*.

Austin L. Brown, et al. (2021), *Driving California's Transportation Emissions to Zero*, Institute of Transportation Studies.

Kevin Fang and Jamey Volker (2017), *Cutting Greenhouse Gas Emissions is Only the Beginning: A Literature Review of the Co-Benefits of Reducing Vehicle Miles Traveled*, National Center for Sustainable Transportation.

Allen Greenberg and Jay Evans (2017), *Comparing Greenhouse Gas Reductions and Legal Implementation Possibilities for Pay-to-Save Transportation Price-shifting Strategies and EPA's Clean Power Plan*, Victoria Transport Policy Institute.

He Pou a Rangi (2021), *Draft Advice for Consultation*, New Zealand Climate Change Commission.

ICAT (2020), *ICAT Toolbox: Policy Assessment Guidelines*, Initiative for Climate Action Transparency.

ITF (2021), *Transport Climate Action Directory*, International Transport Forum (www.itf-oecd.org).

Todd Litman (2020), *Are Vehicle Travel Reduction Targets Justified?*, Victoria Transport Policy Institute.

Farhad Manjoo (2021), "There's One Big Problem with Electric Cars. They're Still Cars," *New York Times*.

Carlton Reid (2021), "Don't Despair Over Climate Report's Horrors, There Are Fixes — But Electric Cars Not One of Them," *Forbes*.

Street Smart is a clearinghouse that provides information for integrating climate change, public health, and equity concerns into transport planning.

SUM4All (2019), *Catalogue of Policy Measures Toward Sustainable Mobility*, Sustainable Mobility for All.

TfA and SGA (2020), *Driving Down Emissions: Transportation, Land Use and Climate Change*, Transportation for America.

Vancouver (2020), *Climate Emergency Action Plan*, City of Vancouver.

Adam Vaughan (2019), Electric Cars Won't Shrink Emissions Enough - We Must Cut Travel Too," *New Scientist* (www.newscientist.com); at https://bit.ly/3b3Kyh5.

Kea Wilson (2021), *Biden's Climate Vision is Too Focused on EVs — Again*, StreetsBlog USA.

Brian Yudkin, et al. (2021), *Our Driving Habits Must Be Part of the Climate Conversation*, Rocky Mountain Institute.

ENERGY ENVIRONMENT TRANSPORTATION TRANSPORTATION EMISSION REDUCTIONS CLIMATE ACTION View More

Todd Litman

Todd Litman is founder and executive director of the Victoria Transport Policy Institute, an independent research organization dedicated to developing innovative solutions to transport problems.

NOVEMBER 2021

MAKING COP26 COUNT

How investing in public transport this decade can protect **our jobs, our climate, our future**

The Future Is PUBLIC TRANSPORT

C40

The C40 Cities Climate Leadership Group (C40) connects 97 of the world's greatest cities, representing over 700 million people and one quarter of the global economy. Created and led by cities, C40 is focused on tackling climate change and driving urban action that reduces greenhouse gas emissions and climate risks, whilst increasing the health, wellbeing and economic opportunities of urban citizens.

ITF

The International Transport Workers' Federation (ITF) is a democratic, affiliate-led federation which improves working lives, connecting nearly 700 affiliated trade unions from 150 countries and helping to secure rights, equality and justice for their members. ITF works as a voice for nearly 20 million working men and women across the world.

CONTENTS

Section 1

EXECUTIVE SUMMARY

With the right action and public investment, including from national governments, public transport can be an engine that powers the world out of the economic, social and climate crises we face today. World leaders are meeting to agree next steps on climate action at the UN climate conference in Glasgow. The need for action has never been more urgent. The United Nations has warned that we are at 'code red for humanity', with human-induced climate change already affecting weather and climate extremes in every region of our planet[1].

Transport is currently responsible for a quarter of CO2 emissions. To combat this, a global shift to public transport, walking and cycling is needed, reducing car use alongside a transition to zero-emission vehicles. **The proportion of public transport journeys in the world's cities must double in this decade to bring global emissions down, in line with keeping the temperature rise to 1.5°C.** Without this action, it will simply not be possible for countries to deliver on the global goal to at least halve emissions within this decade.

> **"Climate protection cannot work without a modal shift. Local transport must become a good alternative to cars ... above all, people must be taken along."**
> Robert Seifert, young vehicle maintenance worker, Berlin

Doubling public transport usage as part of a green recovery would, by 2030, create tens of millions of jobs in cities around the world (4.6 million new jobs in the nearly 100 C40 cities alone), cut urban transport emissions by more than half, and reduce air pollution from transport by up to 45%[2]. It would protect lower-income and service-sector workers and connect city residents to work, education and community.

This briefing brings together **key insights from interviews on the ground in cities around the world** – from transport workers, city officials and commuters - about the needs of and potential for our cities' transport systems. It features **new research highlighting the local jobs potential in five global cities** that are leading the way, or have the political will, in making this shift on public transport. It also puts forward **new polling** demonstrating the level of public support for this investment.

Interviewees highlighted the good progress that has already been made to strengthen access to public transport in cities, but also described **the obstacles we need to overcome to move forward**. Under-funding; short-termism; disjointed planning; ageing, damaged infrastructure unfit for a changing climate; poor working conditions and low morale; cuts to services and privatisation: these are just some of the issues which can undermine our public transport systems, discouraging potential passengers, hurting the workers that keep our societies moving and the communities who depend on them, and making it more difficult for cities to deliver services - as well as negatively impacting climate targets.

1 United Nations, 'Secretary-General Calls Latest IPCC Climate Report 'Code Red for Humanity', Stressing 'Irrefutable' Evidence of Human Influence', 9 August 2021; https://www.un.org/press/en/2021/sgsm20847.doc.htm
2 https://thefutureispublictransport.org/

> **"What most workers and commuters want is public transport that is reliable, that is sustainable, that is affordable [and which provides] more and better jobs for employees."**
> Eric Phumlani, South African Transport and Allied Workers' Union (SATAWU), Johannesburg

The COVID-19 pandemic has further impacted both the funding available for and the use of public transport, at the very point we need both to increase. It has also reinforced just how important the system is for workers that we all depend on. While office workers were typically able to work from home, around the world we saw the likes of health workers, energy workers, cleaners and care workers - as well as transport workers themselves – relying on buses, trains and metros throughout the crisis. This underlines the lack of protections and safety nets for informal transport workers, with accounts of some left struggling to survive through lockdowns.

By contrast, **transport workers, city officials and union leaders described how transformational it can be when we achieve a major modal shift to public transport.** This means investing in, planning and running affordable systems which people can rely on to get them where they need and want to go safely, comfortably and quickly. When public transport provides a real alternative, and is coupled with mechanisms to incentivise shifts away from private cars, it can yield huge benefits in terms of tackling climate change, quality of life, creating jobs and making them more accessible, and promoting social and gender justice and public health.

> **"It's making passengers feel it's safe and convenient … that transit is useful, it's affordable, connections are easy and the system is easy to navigate."**
> Jesus Sapien, Public Transit Director, Phoenix

These views are supported by the data. **New modelling in five global cities shows that investing in public transport at the level needed to limit global warming to 1.5°C would create over 650,000 new, good-quality transit jobs in those cities alone and another 650,000 more jobs globally.** Polling in different cities indicates that members of the public expect their usage of public transport to rebound, but they want to see public transport systems become more accessible, affordable and widespread to help workers connect to their jobs and make society run better. Importantly, there is strong public support across different regions for investing in and expanding public transport for the benefit of people and the planet. And such investment would have wider societal benefits, with positive impacts for social equality, safety, public health, social welfare, quality of life, access to work, education and economic development.

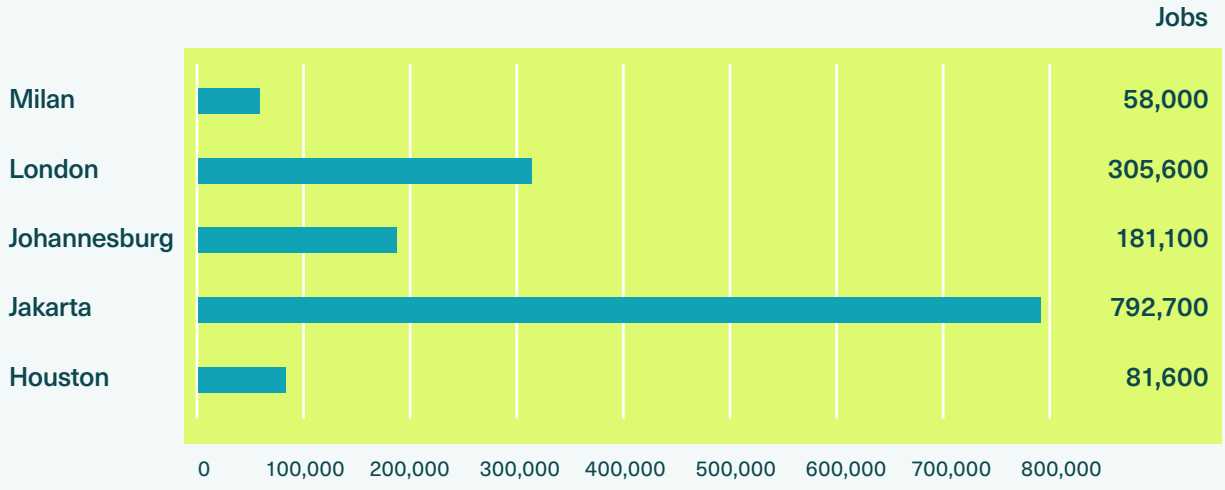


Chart 1:
Public transport investment is a jobs engine. Climate-friendly public transit investment creates hundreds of thousands of jobs for cities and countries, 2021 – 2030.

Given the urgent need for action, transport unions, mayors of some of the world's leading cities, workers, civil society groups and city residents have joined together to **call on the world's governments to be more ambitious in their climate plans**, and direct the scale of investment required so that everyone has access to clean public transport. This must start by cities doubling the share of journeys by public transport and advancing a just transition to zero emission transport by 2030. Cities are already taking action, but much more can be done with the right support from national governments and the right partnerships locally, bringing cities together with workers and the communities they serve to deliver a just transition.

> **"Cities designed, managed and operated to be consistent with a zero-carbon economy will be fantastic places. They'll be green, less polluted, safer and more accessible."**
> Ben Plowden, Transport for London

PHOTO: Queen Street Station, North Hanover Street, Glasgow, UK by Ross Sneddon | **SOURCE:** Unsplash

Glasgow Trades Union Council's Stuart Graham explained that the strain hosting COP26 will itself place on Glasgow's public transport will illustrate how desperately investment, planning and coordination is needed to achieve a system which works for people and planet. He called for the conference to be a starting point for a new commitment to support public transport over the next decade.

Section 2

INTRODUCTION

While progress has been made by national governments on setting targets to phase out diesel and petrol cars, firm targets to increase the share of journeys being taken by public transport are **largely missing from the revised nationally determined contributions (NDCs)** submitted under the Paris Agreement[3]. This is in contrast to the many cities that have not only pledged to create zero-emission areas for traffic by 2030, but have also identified the need to increase the share of trips made on public transport or by walking and cycling.[4]

Significant investment is required to expand, improve and move towards zero-emissions public transport. US$205 billion a year is needed this decade for the nearly 100 C40 cities that together account for 25% of global GDP. **With trillions currently being spent on COVID-19 economic stimuli, this is a key opportunity to bring emissions down rapidly while creating much needed jobs and boosting local economies.** Following the drop in travel resulting from COVID-19, which led to a loss of revenues for public transport just at the point both ridership and funding needed to increase, we are now seeing that urban residents expect to return to public transport ridership post-pandemic[5].

As this briefing shows, major investment is now required to achieve modal shift. This is necessary if we are to bring global emissions down in line with keeping temperature rises to 1.5°C.

Such investment generates important economic and societal benefits too. C40 and ITF have conducted new modelling, focusing on five global cities, to show how many jobs new public investment could create in both the cities themselves and country-wide. Alongside that, city officials, transport workers and unions across 19 cities globally have been interviewed to gather insights into how public transport investment should be planned and coordinated, and how operations should be run, to maximise benefits for passengers, workers, residents and wider society.

The findings provide important insights, which highlight the actions that need to be taken by decision-makers at COP26 and beyond.

PHOTO: Boda boda riders in Kampala, Uganda | **SOURCE:** ITF

3 https://changing-transport.org/summary-analysis
4 https://www.c40.org/other/green-and-healthy-streets
5 Polling data conducted on behalf of C40 by Clear Path Strategies

Section 3

JOBS AND ACCESS TO MORE JOBS: WHAT PUBLIC TRANSPORT INVESTMENT COULD DELIVER

Public transport is not only key to averting catastrophic climate change, **it is a powerful motor of job creation**. The investment needed for modal shift to keep us on a pathway of a maximum global temperature rise of 1.5°C could create millions of good-quality jobs in cities around the world. This would also stimulate urban economies, leading to further job creation.

To show just what investment could mean in practice, modelling carried out in five cities (London, Jakarta, Milan, Johannesburg and Houston) shows that **each city would gain tens of thousands of jobs between 2021 and 2030 via public transport investment** and put them on a pathway to meet climate goals aligned with the Paris Agreement. **Additional jobs would be created throughout the country where each city is located**, in manufacturing and services that support and result from public transport investment. Still further jobs would likely be created by the stimulation of urban economies through increased access to employment, services and leisure activities.

London, for example, would gain 143,700 public transport jobs while **the UK** as a whole would gain 161,900 additional jobs, for a total of over 300,000 jobs between 2021 and 2030. Aligning **Johannesburg's** public transit system with policy to limit temperature increases to 1.5°C would create 127,100 public transport jobs throughout **South Africa**, with 54,000 of those in Johannesburg itself. Extrapolating this to cities throughout the world means that climate-friendly public transit investment would create **millions of jobs globally**.

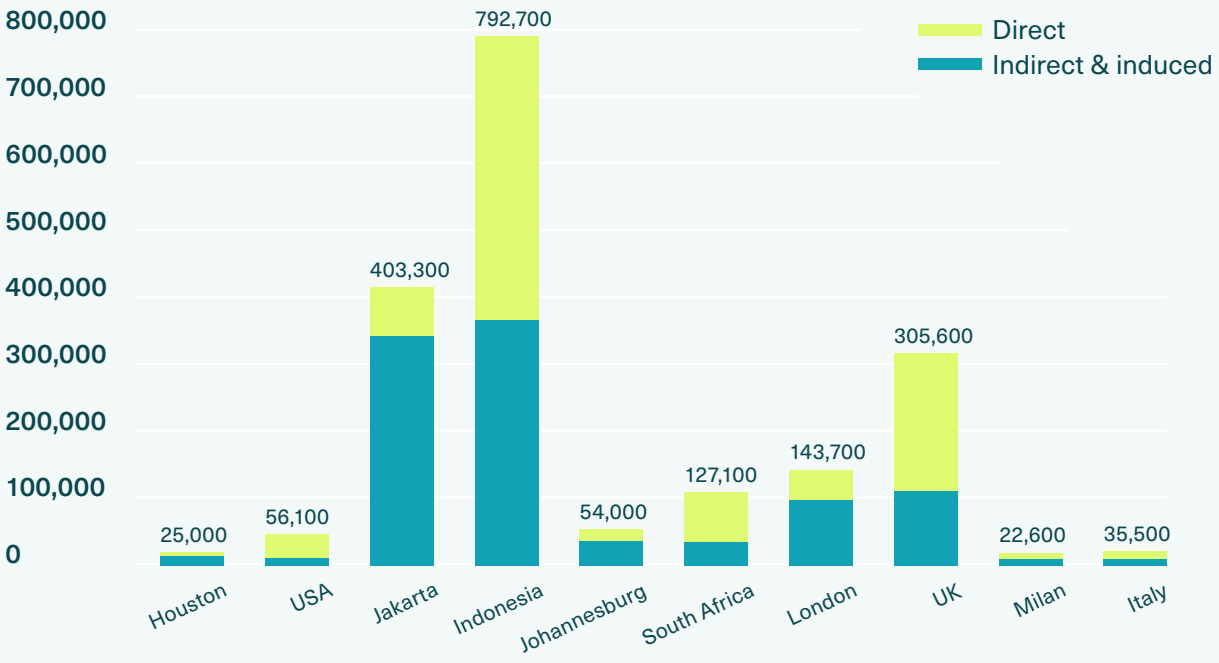


Chart 2. Jobs created by Paris Agreement-aligned public transit investment in five sample cities (note: jobs created in a country include those in the city).

> **It is essential that the government has a vision for public transportation, building a public transportation network as the best way to tackle the climate crisis in terms of the transportation system. At this moment, many governments are only talking about a shift from gasoline cars to electric cars … but to tackle the climate crisis, the government should point out that it is very important to have a public transportation system to reduce personal vehicle use."**
> SungHee Oh, Korean Public Services and Transportation Workers' Union (KPTU), Seoul

Public transport investment would generate a mix of direct, indirect and induced jobs in both construction and operations:

- **Direct jobs** are created directly by the new investment, either through construction or operations. This would include, for example, new jobs building rail lines or operating additional transport routes.
- **Indirect jobs** are created as a result of spending on goods and services for construction or operations. This would include, for example, jobs manufacturing rail components for new rail lines.
- **Induced jobs** are created by new workers spending on services like food or retail, allowing those industries to grow due to the increased economic activity. This would include, for example, spending on food or clothes by construction workers employed on building new rail lines, or by new transport workers.

Across the five cities, the modelling showed that direct jobs would account for four out of ten (42%) total jobs created. The remaining jobs are indirect and induced, which demonstrates how public transport investment can be a dynamic engine for broader economic activity.

> **The huge advantage of investing in a system that is carbon zero, or going towards carbon zero, is that it has a whole set of other benefits … It stimulates the supply chain in the UK economy where quite a lot of vehicles are made. It has huge benefits in terms of air pollution and health."**
> Ben Plowden, Transport for London

As well as generating jobs in urban centres, modelling showed a substantial number of jobs generated nationwide. **Job creation would be split roughly half and half between the cities themselves (49%) and the rest of the countries where they are situated (51%).** There are some variations depending on where in each country key industries are located. In the more industrial Milan, for example, more jobs (64%) would be created in the urban area.

The modelling also considered transport job creation through a gender lens. Women's participation in public transport employment remains stubbornly low. Given today's distribution of jobs between men and women, only one in three jobs created would go to a woman (33%). This underlines **the importance of proactive policy to end gender-based segregation and discrimination in public transport work and advance a just transition.**

The motor of jobs and economic growth that is public transport will need adequate public funding to run properly. Putting in the investment to fund the public transport improvements and expansion we need over the next decade and beyond will be a vital part of keeping the world from tipping into a climate catastrophe. And every dollar, rupiah, pound, euro, or rand invested in public transport is a vehicle for job creation, generating work for people all over the world.

> **We must develop the infrastructure as a whole … We need appropriate vehicles and then we must facilitate and make the modal shift more attractive, in particular for commuters. This way, they are given the opportunity to shift from their private cars to local public transport … We need a financial ramp-up for the local public transport and for railways … it really depends on funding."**
> Martin Burkert, Railway and Transport Union (EVG), Berlin

PHOTO: Passengers on MRT, Jakarta, Indonesia by Pradamas Gifarry | **SOURCE:** Unsplash

Section 4

STORIES FROM THE GROUND: HOW THE CLIMATE CRISIS, COVID-19 AND CASH FLOW HAVE IMPACTED PUBLIC TRANSPORT SYSTEMS

Violent cyclones and typhoons, smoke from rampant forest fires: in every city, interviewees described the climate change impacts they are already experiencing. The damage and harm spread across our economies, communities and societies, including to public transport.

Johannesburg workers, for example, explained how **heavy rains** and **major storms** can damage rail tracks and vehicles, and cause buses to get stuck, leaving users unable to get to work. In Stockholm, major rainfall has led to flooding in tunnels leading to and from stations and impacted the bus network, while **extreme snowfall events** can knock out the entire transport system. Such incidents impact the reliability and speed of public transport, which can push users away from the very services we need to help tackle climate change.

> **"One of the big issues ... is planning ... for how our system will cope with more extremes of weather. None of our drainage or sewage systems ... is designed to cope with the ... amount of water we're likely to have in the future. What are the impacts of that going to be on the public transport system?"**
> Sam Gurney, Trades Union Congress (TUC), London

Climate change also has implications for **public health.** A city official described how people with respiratory conditions would move to Phoenix in the 1970s and 80s because of its clean air. The city is now seeing issues with poor air quality and rising asthma rates. Among those affected are, of course, the men and women who keep public transport moving. In Cairo, a union official working at a hospital explained how, as temperatures have risen, she has seen patients arriving with conditions like hypertension and heart disease struggling as temperatures have ramped up.

Where working conditions are already poor, without decent protections or standards, climate impacts can cause further harm. Interviewees in Manila and Cebu explained how transport workers on informal buses ('jeepneys'), who already drive 12 to 16 hours a day, are being affected by increasingly high summer temperatures. As union official Angelica Mata put it,

> **"[The] traditional jeepney ... engine is [around] 15 to 20 years old already... It's hot on their feet. [And in the heat], the sweat is just drying up on their backs. So that's very hazardous for them. And they cannot stop because ... they have to keep up with the payments, the gas, the take-home [pay]."**

PHOTO: Inside a jeepney in Davao, Philippines | **SOURCE:** Piqsels

The consequence is exhaustion and very low morale among drivers, which is bad for them, bad for passenger safety, and bad for the public transport system which relies on them.

> **"Workers in the informal sector, they don't have job security. They don't have anything, any protection ... So we need the government ... to decide whether informal transport workers should have social security and protection. That will be beneficial today and in future, too."**
> Dennis Kamadi, Transport and Allied Workers Union (TAWU), Nairobi

Old or damaged **infrastructure** is another issue. Some of Berlin's rail infrastructure has been in service for over 175 years, while Johannesburg and Durban have seen services disrupted by vandalism and cable theft. Workers and unions in Delhi, Mumbai and Lucknow raised concerns over the dismantling of their public transport systems and the dangers to workers posed by privatisation, outsourcing and informalisation.

More broadly, interviewees raised concerns that in some cities the planning and coordination of public transport is not meeting people's needs. They described the "rampant splintering" of services following some forms of privatisation of public transport. Coordination becomes a problem among multiple competing operators, and when a passenger cannot, for instance, easily use a ticket across different routes run by competitors, this puts them off using public transport.

> **"In South Africa, most people used to use public transport, but because of the unreliability ... most people decided on getting their own mode of transport, which means more cars on the road ... There are people that are aware [and] concerned about the climate changes. But ... if the public transport is not reliable, then what are you going to do?"**
> Zenathi Mtshabe, bus worker, Johannesburg

> **"It's about money and political will... Common sense is being labelled as radical."**
> Stuart Graham, Glasgow Trades Union Council

Interviewees described **a mix of underlying issues: short-term funding linked to political cycles** and who controls expenditure; lobbying by other interest groups at the expense of public transport; **policies of privatisation and informalisation,** and in some cases corruption; and **narrow approaches which put transport in a bubble,** missing how it links to policy areas like the environment, health and development.

PHOTO: Mandela Bridge with trains underneath in Johannesburg, South Africa, by Tembinkosi Sikupela | **SOURCE:** Unsplash

And, of course, the pandemic...

> **Unfortunately, due to the impacts of COVID-19, 84 staff members lost their lives. Despite the losses, the staff never stopped working ... and, by virtue of that, the railway kept on running ... Mumbai's lifeline, the railway, continued to provide services to the people."**
> Pradeep Ahire, metro worker, Mumbai

COVID-19 has hit public transport hard, at the very time the climate emergency is making the sector more important than ever. The pandemic has also underlined just how important the system is for the livelihoods of local communities.

As passenger numbers reduced significantly, either due to official restrictions or passenger concerns over health, interviewees described how people turned to private vehicles**. In cities where restrictions are easing, continued reluctance to use public transport has implications for traffic congestion.** And that has a huge economic cost: in 2017, congestion was estimated to have cost the US alone US$305 billion (a 10% increase from the previous year)[6].

Polling in different cities indicates that members of the public expect their usage of public transport to rebound, but they want to see public transport systems become more accessible, affordable, safer and widespread to help workers connect to their jobs and for society to run. Importantly, there is strong public support (an average of 87% of the population in the five surveyed cities) for prioritising investing in and expanding public transport for the benefit of people and the planet.[7]

It is important to understand who continued to use public transport, even at the height of the pandemic: typically lower-income workers, often those on the frontline of the COVID-19 emergency. This highlights that, **for many of the people on whom our communities rely - those who run our hospitals and health clinics, who look after the most vulnerable and keep our cities clean - public transport is not a choice.** It is the only option they have. And it is important that we have a system which serves them as they serve us.

> **With COVID, because less people are taking public transport, it's really obvious that there's way more traffic on the roads. You can definitely see a correlation there."** James Glimco, Teamsters Local 777, Chicago

> **The folks that are riding our services are the folks that need it the most. We definitely saw that through the pandemic. We saw medical workers, hotel workers, construction workers ... They were not 'choices riders'. They didn't have the option of telework. Public transport was absolutely the only way for them to get around, especially to their jobs and schools, and secondarily to things like shopping, groceries and medical appointments."**
> Jesus Sapien, Public Transit Director, Phoenix

The pandemic both impacted funding and exposed weaknesses in current systems. London, for example, relies heavily on farebox revenues because it does not receive the level of government funding for public transport operations from which other cities benefit. Farebox revenues collapsed at the start of the pandemic, as Londoners followed government guidance to stay at home and avoid all but essential travel. **Despite the fall in demand, Transport for London (TfL) kept services going so that they were available for those making essential journeys, and to avoid passengers turning their backs on a service they could not rely on.**

6 https://www.bloomberg.com/news/articles/2018-02-07/new-study-of-global-traffic-reveals-that-traffic-is-bad

7 C40 commissioned polling on public perceptions of public transport in Jakarta, Johannesburg, London, Milan and Phoenix in the period to September 2021.

> **What people want when they turn up … is a safe, reliable and orderly [public transport] system. If you start cutting services [due to COVID-19] … you potentially get into this spiral where people trust the system less, don't use it, therefore don't pay your fare, and therefore you get into a downward spiral where you're cutting services progressively."**
> Ben Plowden, Transport for London

However, TfL was left with a huge shortfall, with serious implications in terms of both paying its immediate bills and keeping up long-term investment. While the UK government subsequently offered extra funding, unions have objected to some of the strings attached which they fear could lead to fare hikes, job cuts and attacks on conditions of employment. Given the pandemic recovery and the climate crisis, governments should be providing funding and support to improve public transport while making it more affordable, so as to achieve the modal shift we need to limit global heating to 1.5°C.

Interviewees in cities like Johannesburg described public transport operators - including those owned and managed privately - going out of business through lockdowns, leaving only informal transport to fill the gaps. And **informal workers especially were too often left without an income or sufficient assistance through lockdowns,** forced to find other means to survive and, in the worst cases, finding themselves criminalised for begging. This reinforces the need for a system with sustained public funding, and formalised work with adequate protections for workers.

PHOTO: Bus driver in London, UK by Just Jack | **SOURCE:** Unsplash

> **Especially during the start of the pandemic last year, because of the loss of work opportunities for drivers, they were practically begging on the streets. Asking for help from the general public in order for them to survive. The government's response to their seeking help and assistance was, especially in response to their begging, to put them in jail."**
> Ernesto Cruz, National Confederation of Transport Workers Unions (NCTU), Manila

WHY A JUST TRANSITION TO ZERO EMISSION BUSES IS ESSENTIAL

Many of the workers and union officials interviewed raised the link between climate change initiatives and electrification, and the risk of some jobs being made obsolete. They highlighted their support for more energy-efficient public transport as they themselves are exposed to high levels of risk from air pollution. But there must be a just transition that is inclusive, creates jobs and reduces inequalities.

> **There are a lot of highly skilled jobs ... and all of those workers will have to be retrained ... What happens to them with electrification? We want [these workers] to remain employed, but they need to have training, so that they can take a similar job at the same level. You can't ask mechanics doing a highly skilled job today to do a low-skilled job in the future."**
> Angelo Piccirillo, Italian Federation of Transport Workers (FILT CGIL), Milan

PHOTO: Metro station in Milan, Italy by Josè Maria Sava | **SOURCE:** Unsplash

Section 5

A TRANSFORMATIVE APPROACH TO PUBLIC TRANSPORT

> **Every government should acknowledge the critical role of public transportation in society. They should talk more about how the government can strengthen the public transportation system for ordinary people, not for the rich."**
> SungHee Oh, KPTU, Seoul

> **The way to get greenhouse gas reductions is to make [reduced driving] possible - to make that fair and reasonable there need to be good alternatives in place."**
> Daniel Firth, C40 and former city official

Global leaders need to recognise how important the way we travel is to the struggle against climate change, and to all our daily lives. Interviewees emphasised the need for **public transport systems which people can always rely on to get them where they need to go**. Systems must be built to serve communities who already depend on them, while becoming a viable option for many more people. Passengers and our communities need public transport workers with good working conditions and job security.

Transport must not be traded off against support for areas like health, education or social welfare. Public services need to be seen as interdependent, and planned as such. As we invest in public transport we must take a broad and long-term view, taking account of the impacts of both societal shifts and climate change. By investing in infrastructure and operations resilient to changing weather conditions, we reduce the risks of unexpected costs and disruption from retrofitting and damage in future. And with the pandemic accelerating remote working for many office workers, we need to plan for where and when people are likely to travel.

> **A system that is carbon zero or going towards carbon zero is a ... win, win, win. You get environmental benefits but also very significant social and economic benefits... Compact, connected and clean cities ... are going [to be] sustainable both from an environmental point of view, but also socially and economically."**
> Ben Plowden, Transport for London

Positively, there are strong examples to draw from in public transport systems around the world. TfL, for example, has achieved a major modal shift, with walking, cycling and public transport trips at around two-thirds, up from half when the public authority was formed in 1999. TfL also sits across the planning, management and operation of London's whole transport system, including creating disincentives for car use, and can share learnings with other cities, looking at what they can best do given their specific circumstances. Public transport is not a competition. By sharing approaches and ideas with each other, cities can, with proper investment and support, move quickly to strengthen their systems.

At the same time, **interviewees emphasised the need for safeguards and effective scrutiny**, to increase public confidence in new support and ensure that funding leads to the real change our planet and society need.

BUILDING FROM POSITIVE EXAMPLES: PHOENIX

In Phoenix, a city covering a large area and where the majority of trips are made using private vehicles, voters backed major investment in public transport in 2015. City officials explained how, having already invested in a fleet of cleaner vehicles, they began adding routes, adding earlier and later times, increasing frequency and coordinating bus and light rail times. They discussed approaches with the local community and brought the location of more vulnerable communities into planning. With temperatures hitting new highs, they looked at how to make public transport more attractive, with initiatives like shade corridors, so people can get to and wait for buses more comfortably. This approach saw a rise in passenger numbers before the pandemic, and positive feedback from people who have not used public transport in the past.

PHOTO: Light rail stop in Phoenix, USA by Judy Hedding | **SOURCE:** Tripsavvy

Section 6

CONCLUSIONS

From this research we can see there are varied and significant **challenges** facing us, but that the benefits – for our jobs, our climate and our future – of committing to public transport in cities around the world are very significant.

Public transport is an economic, social and climate solution: city leaders, officials and transport workers know that and are already protecting and championing the way we move around our cities, working hard to keep communities safe, connected, healthy and happy. We can see from our research that people living in cities acknowledge, appreciate and widely support this.

We need to harness and solidly back the dedication and talent of city leaders, officials and transport workers by providing immediate, long-term and stable government financial support. Doubling the percentage of public transport journeys in cities, in order to keep us on the pathway of a maximum of 1.5°C global heating, requires governments around the world to step up, walk the talk and take **courageous financial decisions.** The time for action is now. The future is public transport.

PHOTO: Two children at bus stop in Warsaw, Poland by Oska26 | **SOURCE:** iStock

Recommendations

1. Cities, metropolises and territories need immediate, **long-term and stable governmental financial support**, in order to deliver:

   Safe, frequent, affordable and accessible public transport within a 10-minute walk from all city residents' homes.[8]

   A green and just recovery that collectively doubles the proportion of public transport journeys in cities, and advances a just transition to zero-emissions public transport by 2030.[9]

   Access to work and a better health and quality of life for all in a post-pandemic world, achieving the aims of the UN Sustainable Development Goal 11 to make cities inclusive, safe, resilient and sustainable.

2. We urge national leaders to urgently **raise their ambition on urban public transport in line with these goals as part of their Nationally Determined Contributions,** and immediately set out on a path towards delivering them within a year as part of their economic plans. This would mean using appropriate and agile legislative and financial tools to deliver the scale of public investment required for a significant commitment to modal shift to public transport. As an integrated system, public transport requires a holistic government approach. National governments, local authorities, mayors, and international institutions must work together to ensure equitable public transport access for all, ensuring a green and just transition.

3. All the workers who keep our public transport moving, formally and informally, should be engaged in the planning and implementation of expanded systems, including electrification, **with the aim of creating and sustaining decent, green and formal jobs,** with good working conditions, pay, standards and rights.

Read and share The Future Is Public Transport global coalition statement.

8 This vision is inspired by the Institute for Transportation and Development Policy's 'People Near Frequent Transit' indicator: https://naindicators.itdp.org/

9 Data from McKinsey suggests 40-80% of miles travelled in cities needs to be walking, cycling and public transport to limit global heating to 1.5°C. Using current ratios this is roughly 30-60% for public transport. Pre-pandemic data (2019) from Google's Environmental Insights Explorer indicates that an average of 29% of distance covered across 60 cities is by public transport.

Methodology

This report is based on modelling and interviews carried out between July and September 2021.

Full details of the methodology behind the modelling and the results generated are available online at https://www.itfglobal.org/en/reports-publications, https://www.c40knowledgehub.org and https://thefutureispublictransport.org/.

Semi-structured interviews were conducted with transport workers and city and union officials covering 19 cities: **Berlin, Cairo, Cebu, Chicago, Delhi, Durban, Glasgow, Jaipur, Johannesburg, London, Lucknow, Manila, Milan, Mumbai, Nairobi, Phoenix, Seoul, Stockholm and Vancouver.**

Acknowledgements

We would like to thank everyone who contributed their time and expertise to this research. In particular, we appreciate the support provided by representatives of AIRF, C40 Cities, DMKS, EVG, FILT CGIL, GUPTAW-C, IBT, JMSKS, KPTU, NCTU, SATAWU, TAWU, UP-MREU, the Glasgow Trades Union Council, the UK Trades Union Congress, the City of Phoenix Public Transit Department, Transport for London, and Friends of the Earth Scotland.

We would also especially like to thank the International Association of Public Transport (UITP) for all their assistance in providing data on public transport systems worldwide.

PBOT
PORTLAND BUREAU OF TRANSPORTATION

Metro

October 21, 2021

Greg Johnson, Program Administrator
Interstate Bridge Replacement Program

Re: October 21, 2021 Executive Steering Group Meeting

Dear Mr. Johnson:

Thank you for providing materials for the October 21st Executive Steering Group meeting. We appreciate the hard work you and the team have put into advancing the Interstate Bridge Replacement Program for the region. Given what a critical stage we are in and the items of concurrence proposed on the Agenda, we wanted to provide feedback in writing.

We recognize the goal to identify an IBRP Solution by early 2022. However, we are concerned about the design options analysis. As previously expressed, to get to the IBR Solution we cannot maintain the same highway and toll rate assumptions from the Columbia River Crossing – which is currently the case in the preliminary design options. To understand the effect of holistic design, analysis must include a review of the potential for high quality transit paired with congestion pricing at similar rates to other cities to effect transportation demand. This change in demand should inform bridge and highway design options. We urge the team to fully consider a holistic modeling and analysis approach, to ensure we can advance our shared goals as articulated in the Desired Outcomes, and to produce an evaluation supportive of the needs of decision-makers. Without this analysis, we do not feel we will have enough information to identify the best IBR solution nor answer the questions from our councils. ***We need to see analysis that looks at what is possible if we fully invest in transit capacity and access and integrate equitable congestion pricing.*** Our staff have previously shared the need for this modeling, analysis, and evaluation and remain prepared to engage and support the effort.

We want to be very clear about what we and our colleagues on the Metro Council and Portland City Council will need to make and support the necessary decisions to get us there:

- **Design Options**: We support the technical work underway to develop and explore individual design options. However, we are concerned that under the current work plan elements will only be analyzed individually as if they do not influence each other (i.e., highway design, tolling, and transit options). Further, the modeling underway is critical to make informed decisions about the IBRP Solution and some significant base assumptions have not been adequately revisited. This will not produce the information we need to make decisions on major elements such as the number of lanes crossing the river. As mentioned above, we need to see analysis that looks at what is possible if we fully invest in transit capacity and access and integrate equitable congestion pricing.

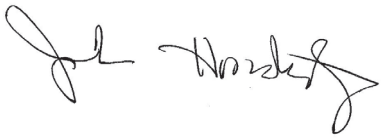
- **Desired Outcomes**: we appreciate the collaboration between the IBR program and partners to gain consensus on Desired Outcomes. These statements are foundational to the work ahead and we look forward to incorporating any additional feedback provided by the Equity Advisory Group.

- **Screening Criteria**: we look forward to seeing how the screening criteria relate and support our ability to measure success against Desired Outcomes. We will need data from modeling, equity, and climate technical analysis to understand how options perform relative to screening criteria metrics and to identify tradeoffs.

In sum, to reach an IBRP Solution together we need to develop and agree on screening criteria, develop and agree on alternatives, analyze and measure the alternatives against the criteria, and conduct an inclusive public outreach effort - one that gives the public sufficient time to weigh in on the results of the analysis. And agency partners need sufficient time for briefings with elected officials and public boards.

This project is very important to meet our region's needs. We look forward to partnering to move the project forward.

Sincerely,



Jo Ann Hardesty
Commissioner, City of Portland

Lynn Peterson
President, Metro Council

Cc: John Willis
Frank Green
Ray Mabey
Chris Regan
Debra Nudelman
Millicent Williams
Johnell Bell

Date: September 29, 2021

To: Oregon Toll Program (ODOT)

CC: Oregon Governor Kate Brown
Portland Commissioner Jo Ann Hardesty
Multnomah County Commissioner Jessica Vega Pederson
Metro Council President Lynn Peterson
Oregon Legislature - Joint Committee on Transportation

From: Aaron Brown, No More Freeways
Chris Smith, No More Freeways
Joe Cortright, No More Freeways
Mary Peveto, Neighbors for Clean Air
Paxton Rothwell, Sunrise PDX

Subject: **Comments on Regional Mobility Pricing Project draft Purpose and Need**

No More Freeways PDX and our partner organizations appreciate the opportunity to comment on the Draft Purpose and Need Statement for the Regional Mobility Pricing Project. We are fans of pricing as a tool to improve the equity, sustainability and functioning of our regional transportation system.

Having said that, we have to express our extreme disappointment with ODOT's approach to pricing as expressed in this Purpose and Need Statement and in other projects.

The purpose of a pricing system needs to be the management of congestion and the reduction of Vehicle Miles Travelled (VMT) and the associated impacts of over-reliance on single-occupancy automobile trips - NOT the expansion of freeway facilities.

Here are our detailed concerns:

- No More Freeways' core philosophy is that just as the use of horses for urban transportation reached a point more than a century ago where it simply could not scale, leaving cities awash in a flood or horse manure, we now have reached the point where the single-occupancy vehicle, and freeways especially, cannot scale to meet the needs of urban transportation. Our society cannot tolerate the greenhouse gas emissions, air toxics and particulates, horrendous safety impacts and long-standing inequities arising

from considering the SOV as the core of our transportation system. In addition we are simply running out of space to store and move vehicles that consume so much space to hold in most cases a single occupant.

As such, ODOT's efforts to continue expanding the freeway system in the Portland metro area are anathema to our vision of an equitable and effective transportation system. In particular we object to the "build it, then price it" approach to the projects underway for RMPP, IBR and I-205 pricing.

In all cases pricing should be considered as an **alternative** to freeway expansion, rather than being applied after construction of new facilities.

- The document is devoid of any mention of induced demand. The regional approach of inducing demand via new capacity, then seeking to manage that demand via pricing is counterproductive and will waste resources that could be better spent addressing climate, equity and the critical safety needs of ODOT's orphan highways in the region.

  How revenues are spent is a critical factor in whether any pricing system is equitable. Revenue from congestion pricing should be focused on giving disadvantaged communities alternatives to buying and maintaining an expensive vehicle to be able to access our transportation system. Solutions that expand transit, biking and walking options are critical to both the equity and sustainability of our transportation system. Dollars spent on expanding freeway capacity have negative returns to the community.

  You cannot serve two masters. Attempting to set a toll rate that funds freeway expansion projects **and** provides funding to multi-modal alternatives will result in increasing the cost of the transportation system while significantly reducing the expansion of much needed alternative options.

- The document fundamentally mis-identifies the sources of emissions from our road network. The approach in the document suggests, as made clear by one subheading that "Our transportation system must reduce greenhouse gas emissions by managing congestion."

  Let's be clear. While traffic congestion may result in concentrating emissions in some areas, the source of greenhouse gases and other emissions is **traffic,** not traffic congestion. A larger amount of free flowing traffic produces more emissions than a lesser amount of congested traffic[1]. The misdirection in this document is a criminal deception on this point.

[1] Alexander Y. Bigazzi, Miguel A. Figliozzi (2012). Congestion and emissions mitigation: A comparison of capacity, demand, and vehicle based strategies, Transportation Research Part D: Transport and Environment, Volume 17, Issue 7, Pages 538-547. https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1130&context=open_access_etds

The core metric that drives so many of the negative system impacts is Vehicle Miles Traveled (VMT). VMT drives all flavors of emissions and is also critical for safety. Crashes, injuries and deaths are proportionate to VMT. While because of its limited access nature, freeway miles are generally safer, there are no freeway-only trips. Freeway trips start and end on the local street network, where traffic deaths are now at record levels.

VMT reduction is a footnote in this document. It must become a major theme.

Transportation contributes 40% of the greenhouse gas emissions in our region, and these emissions are increasing. We must reduce VMT to curb these emissions. Electrification of the fleet will not happen quickly enough to meet national and international climate goals, and does nothing to reduce the impacts of congestion and particulate pollution from tire and brake wear.

- This proposal is freeway-centric and does not look at the whole transportation system. Both Metro[2] and the City of Portland[3] have congestion pricing studies in progress, and this project references neither. In particular, the Metro study analyzes four approaches to pricing analyzed against Regional Transportation Plan goals and suggests that the segment tolling approach that ODOT is pursuing may not be the optimal approach. ODOT is blinded by its desire to fund the expansion of freeways and needs to be a much better regional partner.

[2] Metro Regional Congestion Pricing Study, Final Report July 2021
https://oregonmetro.legistar.com/View.ashx?M=F&ID=9783574&GUID=BAC80BE1-9549-4721-806D-F1194FA9B605
[3] City of Portland Pricing Options for Equitable Mobility (POEM)
https://www.portland.gov/transportation/planning/pricing-options-equitable-mobility-poem