

TECHNICAL MEMORANDUM #1

DATE: July 31, 2023

TO: Zachary Horowitz | ODOT

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SUBJECT: TPR Modeling and Analysis Guides Update

Project #22129-005

Tech Memo #1: OAR Review

OREGON ADMINSTRATIVE RULES REVIEW

This memorandum summarizes a review of specific Oregon Administrative Rules (OARs) related to DLCD's Climate Friendly and Equitable Communities (CFEC) program. The purpose of this review was to identify which new or recently modified OARs might influence transportation analysis, modeling processes or procedures. The following OARs were reviewed:

- Transportation Planning Rules (TPR) (OAR 660-012)
- Metropolitan Greenhouse Gas (GHG) Reduction Targets (OAR 660-044)

The attached table summarizes:

- OAR section and title,
- a summary of recent OAR changes including the type of changes (none, edits or new section),
- whether the changes reference analysis or procedures,
- whether the changes potentially require new analysis and procedures guidance
- a brief description of the potential analysis and procedures impact

This OAR review summary table (attached) will help inform and focus future guidance updates.

				Do OAR changes reference analysis/ procedures (A&P) and potentially require new guidance?	Potential A&P Impacts	Notes/Discussion Questions/Ideas	Potential OAPM Changes?	Potential MAG Changes?	Potential MPMLUC Changes?	Potential TSP Guidelines Changes (for Analysis)?	Potential Dev- Rev Guidelines Changes (for Analysis)?	Potential Scenario Planning impacts (Climate	Potential DLCD Guidance Needed (for Analysis)?
OAR Rule	Title	Type of Cha	ar Summary of OAR Changes									Office)?	
			filled to be couldn't that tracrectable a phoios should arould for oth troud of all Occasions including these who cause data			The updated purpose focuses in areas where Oregon is most deficient. Oregon is falling short on transportation safety (with traffic deaths trending higher and four times that of leading countries, and twice that of Canada), so the purpose reups the emphasion on safety. As the roadway network is relatively complete for cars, we focus on ensuring quality options for other modes. This purpose highlights climate pollution, and Oregon's need to meet our goals to reduce the pollution. Oregon's transportation system has inequitably impacted key moderserved poulputions, and decision making has centred the voices of the privileged at the expense of those populations. This purpose acknowledges thos	s t						
660-012-0000	Purpose	Edits	Edited to be explicit that transportation planning should provide for safe travel of all Oregonians, including those who cannot drive. Added emphasis on equity, underserved populations, climate pollution, and wildlife/environmental impacts.	No		problems and focuses on remedies. The purpose retains key coordination and planning elements.							
660-012-0005	Definitions	Edits	Added definitions for terms referenced in the new rules and deleted items replaced by new terms or definitions. New definitions larg pertain to dimate-friendly areas, partiag, facility definitions, equity, and other miscellaneous terms. Ostringuishes between planning and project development, limitations on existing plans/programs; and clarifies that the rules are not	y Yes	Definition for VMT has changed which will influence how VMT is calculated.	- VMT now defined as, "all jurisdiction household-based light vehicle travel regardless of where the travel occurs."	х	х	х				
660-012-0010	Transportation Planning	None	intended to place adoption or enforcement of measures that limit bike/ped/transit. Defines which rules apply to cities and counties and specifies that the new rules from section -0100 to -0920 apply to cities within	N/A									-
660-012-0011	Applicable Rules	New section	MPAs. Provides the effective date for when the rules apply to cities/counties inside MPAs. The section also provides exceptions to the rules. Section (2) and (4) are important. Section (2) describes applicability of interim updates to SPS (i.e., minor updates to an existing TSP.	No									
660-012-0012	Effective Dates and Transition	New section	that won't require all new rules to apply). This section will be relevant for a limited time until all TSPs have been updated to meet current rules. Section (4) defines deadlines for when specific sections of the rules need to be implemented.	No		- Assuming DLCD is providing on-street parking guidance.							
660-012-0015	Preparation and Coordination of Transportation System Plans Coordination with Federally-Required	Edits	Removed references to MPAs	No									
660-012-0016	Regional Transportation Plans in Metropolitan Areas	Deleted	Section deleted and replaced with new sections applicable to MPAs	N/A									
660-012-0020	Elements of Transportation System Plans	None	No changes	N/A									
660-012-0025	Complying with the Goals in Preparing Transportation System Plans; Refinement Plans Determination of Transportation	None	No changes	N/A									
660-012-0030	Needs Evaluation and Selection of	None	No changes	N/A									\vdash
660-012-0035 660-012-0040	Transportation System Alternatives Transportation Financing Program	Edits None	Removed references to MPAs No changes	No N/A									
660-012-0045	Implementation of the Transportation System Plan	Edits	Removed references to MPAs	No									
660-012-0050	Transportation Project Development Timing of Adoption and Update of	None	No changes	N/A									
660-012-0055	Transportation System Plans; Exemptions	None	No changes	N/A									
660-012-0060	Plan and Land Use Regulation Amendments	Edits	Remove references to planned function or capacity and leaves only performance standards as what shall be considered when evaluating plan amendments. Also states that IF the performance standard relies on whelch traffic volumes, the projected volumes at the 15P horizon year should be used to evaluate performance. The rule does not require a traffic volume based performance standar be used to evaluate plan amendments.	No		 - Assuming guidance is already provided given text has not significantly changed - Provides standards for demand reduction allowances which may influence transportation analysis. - Likely overlaps with development review guidance. 					x		
660-012-0065	Transportation Improvements on Rural Lands	None	No changes	N/A									
660-012-0070	Exceptions for Transportation Improvements on Rural Land	None	No changes	N/A									
660-012-0100	Transportation System Plans in Metropolitan Areas	New section	Provides an overview of how cites will be required to adopt, amend, and implement TSPs. The rule lists all required elements of a TSP an MPA and provides direction on determining base and horizon years.	No		Details are covered in later sections (e.g. this section notes equity analysis, which is described in more detail in 660-012-0135).							
660-012-0105	Transportation System Plan Updates	New section	Differentiates between minor and major updates and what elements of a TSP must be updated for each.	No									
660-012-0110	Transportation System Planning Area	New section	Defines geographic scope for cities and counties. Default assumes cities will plan for entire urban area within UGB, including unincorporated areas. Counties can opt to handle planning in urban unincorporated areas.	No									
660-012-0115	Funding Projections	New section	Describes how to develop funding projections. Funding projections shall include a list of sources and the amount of funding available for projects over the planning period	No									
660-012-0120	Transportation System Planning Engagement	New section	Requires TSPs be prepared with public engagement and decision making consistent with statewide goals. Emphasizes engagement wit underserved populations.	h No									
660-012-0125	Underserved Populations	New section	Defines underserved populations. Requires cities and counties to identify areas with concentrations of underserved population; to identify and engage with tribes.	No									
660-012-0130	Decision-Making with Underserved Populations	New section	Directs how to center underserved populations in decision-making. Requires local governments to implement an involvement prograt to ensure equitable participation. Requires local gov's to regularly assess and report on progress.	n No		- Process focused							
660-012-0135	Equity Analysis	New section	Provides direction on conducting an equity analysis. Equity analysis intended to identify impacts on impacted communities, identify strategies to minimize consequences, and report back.	No	Requirements for equity analysis are referred to section 0905	- To what degree is this analysis standardized? Is this captured in TSP Guidelines? - Obes this section require development of an analytical process to complete an equity analysis? Or just it just merely require one to be done (without a formal Explored analysis) or just it just merely require one to be done (without a formal Explored analysis on the county of the							
660-012-0140	Transportation System Planning in the Portland Metropolitan Area	New section	Defines what specifically applies to cities in the Portland Metro area, including local planning for cities and counties. Some overlap wit 660-012-0016 that was deleted as part of the rule update.	No .		many management prompt and the Political Polit							
660-012-0145	Transportation Options Planning	New section	Requirements for the Transportation Options element of the TSP.	Yes	May need to recommend methods to model TDM actions.	How to incorporate trip reduction strategies, TDM policies, etc. into modelling -While guidance on modelling TDM strategies exist, it is currently spread through multiple references and could be consolidated. -Section 145 To analysis needs are more integrated in other sections like 830 and how to quantify how much TO programming really reduces / miligates VMT. This could play into development of the constrained project list -TDM impacts will need to be accounted for in other rules (0160), not in this rule. 0456 only asy to put a TO element in the TSP.	x	x	x	х			
					Section Sections	, and a							
660-012-0150	Transportation System Inventories	New section	en e		Analysis may be needed to support prioritization framework,	- Primarily process-based, so no analysis guidance may be needed APM may provide case study example of prioritization method calculation. e.g weight for projects/preatments appropriate for within/outside CFAs and high- equity areas How can the WMT reduction effects of TO or more programmatic solutions be quantified/geven something simple) to feed into project prioritization (and that	x			х			
660-012-0155	Prioritization Framework	New section	Sets the context for prioritizing projects, placing an emphasis on reducing pollution, increasing equitable outcomes, safety, and accessibility.	Maybe	including VMT, mode shift, performance targets, equitable outcomes, etc.	overall project list that reduces VMT/capita)? - A model prioritization framework and case study may be helpful. - Need to develop the analysis methodology for calculating HH-based vmt per							
660-012-0160	Reducing Vehicle Miles Traveled	New section	Requires cities and counties to use VMT as a measure for GHG pollutions for jurisdictions that do not have an approved Regional Scenario Plan; requires the city or county to adopt a TSP that is projected to reduce VMT. Cities, counties, or Metro must prepare projections for VMT per capita at the horizon year from the financially constrained project ILLA TSP may only be adopted if the projected VMT per capita at the horizon year using the financially constrained project ILLI is lower than the estimated VMT per capita the base year unless there are no projects that require review per -0830.	Yes	Household-based VMT per capita analysis for entire municipality (horizon versus base year)	capita and borders (e.g. city limits or UGB). Will need to consider methodology for trips traveling outside model extends. - Reference scenario assumptions. In Netro (and optionally elsewhere), may be required to meet the VMT/cpa trapset. in TSPs (confirm with Brain/Threesa) to do so, they can include state-led actions and conditions in the target rule (e.g., VMT fees) - See 044-0308 for Scen Planning. - While this section deals with project comparison and prioritization, it is likely	х	x	x	х		x	
			Describes how cities and counties take the combined list of projects developed in the modal elements of the TSP, develop multimoda		Possibly need guidance to score project VMT benefits & Impacts.	qualitative and addressed through TSP Guidelines and may not be encessary to incorporate into ABP. - All ped/bike/transit/micromobility projects can be assumed to reduce writ. Auto projects will be able to be tested through modeling. - APM may provide case study example of prioritization membod calculation. e.g., weight for projects/transitenst papprorisite within/custide CFAs. - Develop a method of prioritization to reduce VMT, benefits/burders on underserved populations, and help achieve performance largets. Will want guidance on how to score projects. Look to STIP, Portland, and Eugene as examples.	х			х			
660-012-0170	Unconstrained Project List	New section	projects, and produce a combined project list which is then used to develop an "unconstrained" project list that would reduce per	Maybe	Maybe even a qualitative approach by type and extent of improvements.	- Consider impacts of VMT reduction from blke, ped, transit, ITS, etc. How do we account for benefits with "missing link" projects in modeling?							

Abbreviations:

- A&P - Analysis and procedures

- OAPM - Oregon Analysis and Procedures Manual

- MAG - Model Applications Guidelines

- MPMLUC - Modeling Procedure Manual for Land Use Changes

			Cities and counties will use the prioritized unconstrained project list and the amount of funding available to produce the financially constrained project list. Projects on the financially constrained project will be used to inform the federally required regional							v		
			transportation plan. The financially-constrained list will also be the only projects that may be assumed as "reasonably likely" when considering if an amendment to a comprehensive plan or land use regulation has a "significant effect" on the transportation system.			 Guidance provided though TSP Guidelines. However some analysis specifics may require documentation. 				^		
660-012-0180	Financially-Constrained Project List	New section	The financially constrained list must result in equitable outcomes, demonstrate a reduction in per capita VMT, and make significant progress toward meeting the jurisdictions targets for a range of performance measures per -0910.	Maybe	Collective financially constrained project list performance target progress.	 This may be the aggregate scoring of a project by project qualitative assessment, and not a technical forecast performance analysis. 						
CC0 013 0100	Transportation System Refinement		And a solution leaves from CASE allow held that and defended the leavest from the solution of									
660-012-0190	Plans	New Section	Based on existing language from -0025, allows jurisdictions to defer some decisions to a later refinement process.	NO								
660-012-0200	Temporary Projects	New section	States that temporary or pilot projects do not need to be included in TSP.	No		- How does this interplay with Dev Rev guidance?						
660-012-0210	Transportation Modeling and Analysis	New section	Sets rules on how to use transportation modeling and analysis to make land use decisions (plan amendments)	Yes	VMT analysis for entire municipality, as part of review for plan amendment	Further discuss degree of sensitivity to land use changes. Consider how relates to SB743.	x	х	х		х	x
						- This has application implications because it supports and transportation		x				
660-012-0215	Transportation Performance Standards	New section	Requires cities and counties to adopt at least two performance standards. Performance standards must support performance measure in -0910 and include specific elements.	Yes	Performance standards toolkit of options	analysis that goes with Comp. Plan amendments. '- Need to develop toolbox of standards and the analytical methods to calculate	^	*	*			
	Coordinated Land Use and											
660-012-0300	Transportation System Planning	New section	General provisions requiring cities and counties to coordinate and adopt provisions in the 0300's.	No								
660-012-0310	Climate Friendly Areas	New section	Sets out standards for which areas should and should not be considered when designating a CFA.	No								
						Will need to identify what information modeling requires to incorporate CFAs into travel demand models. Consider procedures for maintaining control totals, etc.	×	×	х			x
660-012-0315	Designation of Climate Friendly Areas	New section	Describes the process to study potential CFAs. Also describes requirements for adoption of zoning regulations and comp plan amendments.	No	CFAs may require separate analysis procedures.	 Consider procedures for maintaining control totals, etc. May need zoning to modeling TAZ process/data documented. Will need to identify what information modeling requires to incorporate CFAs 						
	Land Use Requirements in Climate		Requirements for code and other land use amendments in CFAs. Provides option to meet prescriptive regulations or demonstrate other			into travel demand models. - Consider procedures for maintaining control totals, etc.	x	x	x			x
660-012-0320	Friendly Areas	New section	standards will meet or be better than prescriptive standards.	Yes	CFAs may require separate analysis procedures;	May need zoning to modeling TAZ process/data documented. The description of the gap summary seems self explanatory and does not						
						appear to require additional A & P definition. -May want to provide guidelines for analysis to clarify any uncertainties. Also						
			Outlines transportation planning requirements for designating CFAs and then later for making plan amendments within CFAs following their initial adoption. Replaces the significant effect analysis that plan amendments in other areas follow pursuant to -0060.			note that there may be changes to the OHP APM methods for summaries; e.g. combine bike/ped level of traffic stress and	×			х		
	Transportation Review in Climate		Primary requirement is a multimodal transportation gap summary. The summary must be completed as part of a TSP update or as a		Methodology for highway impacts summary and multimodal gap	origin-destination demand to identify gaps that would avoid islands.						
660-012-0325	Friendly Areas	New section	separate adopted document in coordination with impacted transportation facility and service providers.	Yes	summary	TSP guidelines.						
			Similar to -0045, ordinance/code implementation requirements. Requirements apply across urban areas and are in addition to CFA requirements. Rule requires pedestrian-friendly and connected neighborhoods; commercial and mixed-use district to be oriented									
660-012-0330	Land Use Requirements	New section	towards peds and transit, limitations on auto-oriented uses; protections for existing and future transportation facilities Describes how to make assumptions about future development for transportation planning purposes. Assumptions based on required population forecasts, existing comp plans and land use regulations, and other TPR requirements. Assumptions are to help coordinate	No								
660-012-0340	Land Use Assumptions	New section	population forecasts, existing comp plans and land use regulations, and other TPR requirements. Assumptions are to help coordinate land use and transportation plans.	No								
660-012 0250	Urban Growth Poundant Francis	New cost!	Requirements for coordinating transportation with a LICP expected expectal	No								
660-012-0350	Urban Growth Boundary Expansions	wew section	Requirements for coordinating transportation with a UGB expansion proposal.									
660-012-0360	Key Destinations	New section	Lists key destinations for coordinating transportation and land use planning.	No		- Assuming DLCD is providing parking guidance.						
					Parking policy is part of modeling parameters but varies based on	- There are some default parking minimum prohibitions (e.g. within 1/4 mile of						
			Directs jurisdictions to remove mandated parking associated with development, OR to amend comp plan & zoning to implement 0425-			chave chosen to remove mandates for whole city. Guidance should update how we think about the amount of parking with new development, but remember	×	×	х			X
660-012-0400	Parking Management	New section	0450.	Yes	Metropolitan area for any of the rules below as applicable	that the market will likely continue to oversupply parking.						
660-012-0405	Parking Regulation Improvements	New section	Requires giving priority parking to those carpooling or vanpooling; encourages the conversion of parking lots to higher uses shared parking; reduce the negative externalized impacts of large parking lots such as heat island effects and reduced walkability.	No		- See -0400						х
660-012-0410	Electric Vehicle Charging	New section	Encourages new buildings to be EV-capable, to install electrical capacity and conduit in order to be ready for wiring and charging stations to be added as demand increases.	No		- See -0400						х
			Requires parking maximums to be established in cities of over 100,000 in areas where car-dominant development would undermine pedestrian-friendliness, CFAs, and along transit corridors; also requires Oregon's three most populous cities to manage on-street									×
660-012-0415	Parking Maximums and Evaluation in More Populous Communities	New section	parking to ensure availability, to explore options to building new parking garages, and to ensure new parking garages have active uses on the ground floor. Metro may provide an alternate approach.	No		- See -0400						
	Exemption for Communities without											x
660-012-0420	Parking Mandates	New section	Requires cities and counties that do not remove parking mandates to comply with 0425-0450.	No		- See -0400						
												х
660-012-0425	Reducing the Burden of Parking Mandates	New section	Allows builders to meet parking mandates by a variety of approaches, including unbundling parking for multi-family.	No		- See -0400						
												x
	Reduction of Parking Mandates for		Requires parking to be limited to one space per unit for residential development w/> 1 DU/property. Reduces parking mandates for									
660-012-0430	Development Types	New section	certain types of needed development	NO		- See -0400						
												¥
	Parking Reform in Climate Friendly		For CFAs, requires removing parking mandates or managing parking with a benefit district. If not removing mandates, unbundle									^
660-012-0435	Areas	New section	parking for multi-family.	No		- See -0400						
												х
660-012-0440	Parking Reform Near Transit Corridors	New section	Cities and counties may not require parking within 0.75 mi of a rail transit stop or 0.5 mi of frequent transit corridors.	No		-See -0400						
												x
660-012-0445	Parking Management Alternative Approaches Parking Management in More	New section	Requires a "fair parking policy" consisting of 3 of 5 suggested provisions OR a "reduced regulation" approach consisting of 15 provision Requires removal of parking mandates OR price 10% of on-street parking (see 660-12-0900). Cities may change back and forth	No		- See -0400						
660-012-0450	Populous Communities	New section	кеquires removal or parking mandates UK price 10% or on-street parking (see bbU-12-090U). Littles may change back and forth between these options.	No		- See -0400 - Should the APM pedestrian level of traffic stress section discuss methods for						х
						developing a pedestrian plan/network with access to key destinations? - Which projects would fill gaps based on most use, equity areas, etc.?	х					
660-012-0500	Pedestrian System Planning	New section	TSPs must include a pedestrian plan that identifies gaps, destinations, and includes a list of projects.	No		- How will the model be sensitive to these pedestrian projects?						
						- Pedestrian crash risk factors not currently documented in the Analysis and Procedures Manual Chapter 4. NCHRP research and guidance exists elsewhere						
						and should be consolidated. - Some safety performance measures that use risk factors that we may want to						
						capture such as "Pedestrian Score which is used in the ODOT Pedestrian & Bicycle Safety Implementation Plan (available on ODOT Internet Site – Highway						
						Safety) which merges risk factors with network-based crash screening. - Do we want to create gap analysis methods that build on pedestrian level of traffic stores? Intersection improvement that the doctors in the control of the c	х					
						traffic stress? Intersection improvements that don't worse bike/ped LTS?						
						- How will model be sensitive to these pedestrian projects?						
						 Coordination on LTS methodology is needed with the multimodal inventory project. This coordination will be determined and evolve as any data collection 						
660-012-0505	Pedestrian System Inventory	New section	Identifies inventory requirements for CFAs, Metro 2040 Centers, within 0.25 mi of schools, and all arterials & collectors.	Yes	Pedestrian crash risk factors and gap analysis methods	- Coordination on LTS methodology is needed with the multimodal inventory						
660-012-0510	Pedestrian System Requirements		Describes the types of facilities required, emphasis on CFAs, 2040 centers, and areas of underserved pops.	Yes No	Pedestrian prioritization factors, including crash risk factors and ga	 Coordination on LTS methodology is needed with the multimodal inventory project. This controllation will be determined and evolve as any data collection limitations (content and/or timing) are identified through the multimodal project? 						
660-012-0510 660-012-0520	Pedestrian System Requirements Pedestrian System Projects			Yes No No		 Coordination on LTS methodology is needed with the multimodal inventory project. This coordination will be determined and evolve as any data collection limitations (content and/or timing) are identified through the multimodal project? 	x					
660-012-0510 660-012-0520 660-012-0600	Pedestrian System Requirements Pedestrian System Projects Bicycle System Planning	New section New section New section	Describes the types of facilities required, emphasis on CFAs, 2040 centers, and areas of underserved pops. Ust of pedestrian projects must be prioritized. Requires a bicycle system element that provides for a substantial portion of short urban trips under 3 miles to be by bicycle for a wide range of users. Must include information on all types of facilities within a CFA, a Metro 2040 center, within 0.25 mil of schools, including width, type &	Yes No No	Pedestrian prioritization factors, including crash risk factors and ga analysis methods	- Coordination on LTs methodology is needed with the multimodal inventory originet. This coordination will be determined and evolve as any data collection limitations (content and/or timing) are identified through the multimodal project? - Same comments for -0505						
660-012-0510 660-012-0520 660-012-0600 660-012-0605	Pedestrian System Requirements Pedestrian System Projects Bicycle System Planning Bicycle System Inventory	New section New section New section New section	Describes the types of facilities required, emphasis on CFAs, 2040 centers, and areas of underserved pops. List of pedestrian projects must be prioritized. Requires a bicycle system element that provides for a substantial portion of short urban trips under 3 miles to be by bicycle for a wide range of users. Must include information on all types of facilities within a CFA, a Metro 2040 center, within 0.25 mil of schools, including width, type & condition, crash risk factors, and record within 5 years of inventory.	Yes No No No Yes	Pedestrian prioritization factors, including crash risk factors and ga	- Coordination on LTS methodology is needed with the multimodal inventory project. This coordination will be determined and evolve any data collection limitations (content and/or timing) are identified through the multimodal project? - Same comments for -0505 - Similar comments as -505 - Assuming design of bicycle facilities is already documented in Blueprint for	×					
660-012-0510 660-012-0520 660-012-0600 660-012-0605	Pedestrian System Requirements Pedestrian System Projects Bicycle System Planning Bicycle System Inventory Bicycle System Requirements	New section New section New section New section New section	Describes the types of facilities required, emphasis on CFAs, 2040 centers, and areas of underserved pops. List of pedestrian projects must be prioritized. Requires a bicycle system element that provides for a substantial portion of short urban trips under 3 miles to be by bicycle for a wide range of users. Must include information on all types of facilities within a CFA, a Metro 2040 center, within 0.25 mil of schools, including width, type & condition, crash risk factors, and record within 5 years of inventory. Planned bicycle facilities must be connected and low stress for people of all ages & abilities.	Yes No No No Yes No	Pedestrian prioritization factors, including crash risk factors and ga analysis methods Bicycle crash risk factors and gap analysis methods Bicycle prioritization factors, including crash risk factors and gap	- Coordination on LTS methodology is needed with the multimodal inventory project. This coordination will be determined and evolve any data collection limitations (content and/or timing) are identified through the multimodal project? - Same comments for -0505 - Similar comments as -505 - Assuming design of bicycle facilities is already documented in Blueprint for Urban Design.						
660-012-0510 660-012-0520 660-012-0600 660-012-0605	Pedestrian System Requirements Pedestrian System Projects Bicycle System Planning Bicycle System Inventory	New section New section New section New section New section New section	Describes the types of facilities required, emphasis on CFAs, 2040 centers, and areas of underserved pops. List of pedestrian projects must be prioritized. Requires a bicycle system element that provides for a substantial portion of short urban trips under 3 miles to be by bicycle for a wide range of users. Must include information on all types of facilities within a CFA, a Metro 2040 center, within 0.25 mil of schools, including width, type & condition, crash risk factors, and record within 5 years of inventory.	Yes No No No Yes No	Pedestrian prioritization factors, including crash risk factors and gain analysis methods Bicycle crash risk factors and gap analysis methods	- Coordination on LTS methodology is needed with the multimodal inventory project. This coordination will be determined and evolve any data collection limitations (content and/or timing) are identified through the multimodal project? - Same comments for -0505 - Similar comments as -505 - Assuming design of bicycle facilities is already documented in Blueprint for	х					

	Public Transportation System				Processes for modeling transit may need to be updated and		Y	v	Y			
660-012-0700	Planning Public Transportation System	New section	TSPs must have a public transportation element coordinated with the service provider, including identification of gaps.	Yes	consolidated.		^	^	^			
660-012-0705	Inventory Public Transportation System	New section	Requires information on local & intercity services including service characteristics, and identifying connections to cities >5k population	No								
660-012-0710	Requirements	New section	Must identify priority corridors and transit supportive facilities.	No								
660-012-0720	Public Transportation System Projects	New section	Requires a prioritized list of projects to address gaps & deficiencies.	No								
660-012-0800	Street and Highway System Planning	New section	TSPs must include a street and highway system element.	No								
660-012-0805	Street and Highway System Inventory		Streets & highway inventories must include some or all the following data depending on functional classification: location, condition, if travel lanes, turn lanes, lane width, pricing strategies, freight routes, and 5-yr crash history.	No		- Data needs for analysis?						
	Street and Highway System		Streets and highways should be designed for the minimum size necessary and consider context. Streets in CFAs must prioritize									
660-012-0810	Requirements	New section	pedestrian, bicycle & transit use. Requires prioritization of projects that reallocate space from motor vehicle travel to other modes; serve underserved populations, solventials are considered to the projects that reallocate space from motor vehicle travel to other modes; serve underserved populations, solventials are considered to the projects that reallocate space from motor vehicle travel to other modes; serve underserved populations, solventials are considered to the projects that reallocate space from motor vehicle travel to other modes; serve underserved populations, solventials are considered to the projects that reallocate space from motor vehicle travel to other modes; serve underserved populations, solventials are considered to the projects that reallocate space from motor vehicle travel to other modes; serve underserved populations, solventials are considered to the projects that reallocate space from motor vehicle travel to other modes; serve underserved populations are considered to the projects that the projects that the projects are considered to the projects are considered to the project to the project travel to the project travel to the project travel travel to the project travel to the project travel tr	No e		- Process, policy, and design standards focus						
660-012-0820	Street and Highway Projects	New section	a safety issue, meet performance standards, and fill gaps.	No	Street prioritization factors	Factors would be developed by Cities and Counties NOTE: Rule has been recently revised.						
660-012-0830	Enhanced Review of Select Roadway Projects	New section	Requires review of projects that add motor vehicle capacity. Existing TSP projects must be reviewed at the time of a major TSP update includes public engagement requirements.	Yes		- Half mile aux lane threshold replace with APM IDA. - APM ch. Sha Isant/induced methods. Does this need to be beefed up & address best-practice modeling methods (feedbacks like Caltrans CEQA TAC/TAF guidance) and when to apply (e.g. SWIM for land use feedback and on edge of regional model). - Consider a one pager on what's in the rule and how it works. Further guidance could be qualitative exercise. - Consider how methodology changes between modeling tools (e.g. ABM vs. Trip x. sketch tool). - Analysis likely needed for subsections & & 6. - What Information meeds to be reported?	х	x	х	х		
						-Build off Climate Office consultant work, which will be working with 8 Metropolitan areas to develop their first reports on performance metrics/targets.					x	
660-012-0900	Reporting	New section	Outside of Metro, cities and counties must annually report on performance measures and the requirements of Division 44 and the TPI Cities & counties in Metro coordinate with Metro.	No	Analysis may be needed to provide a minor and major annual reports.	 Resulting data/methods for creating these metrics would benefit from APM definitions for consistency. 						
						- Is this the same VMT/capita in 0160 but reported annually? - Likely requires some GIS analyses to make the proscribed calculations per the						
						ruleCities without approved scenario plan develop pm targets calibrated to the STS						
						(default scenario for each region).	х	х	x		х	
	Land Use and Transportation		Cities, counties, and Metro that have an approved land use and transportation scenario must report on the performance measures from the approved plan. Cities and counties that do not have an approved land use and transportation scenario must report on the			Same VMT definition, but different in that 0160 is a hard cap, 0905 VMT targets are for planning and reporting purposes. If target isn't met in report, then						
660-012-0905	Performance Measures	New section	specific actions, that they have or will undertake to reduce pollution and increase equitable outcomes for underserved populations. Cities and counties must set targets for each reporting year for each performance measure set at levels that are reasonably likely to	Yes	VMT per capita	propose corrective actions						
660-012-0910	Land Use and Transportation Performance Targets	New section	achieve the regional performance targets from an approved land use and transportation scenario plan OR the regional performance targets from the Statewide Transportation Strategy.	No	Setting performance targets will be influenced by analysis.	- Build off Climate Office work (see notes in -0900)					x	
660-012-0915 660-012-0920	Review of Reports Compliance Hearings	New section	Describes how DLCD will receive, review, and direct remedies for meeting performance targets.	No No	secting performance targets will be influenced by unaryst.	build on climate office work (see notes in 1990)						
660-044-0000	Purpose	Edits	Describes the process for resolving missed deadlines or failing to implement a corrective action This is a new purpose statement that updates the existing purpose statement.	No								
660-044-0005	Definitions	Edits	Every division of rules has a list of definitions. We will keep the list of definitions in the existing division, with changes and additions, a necessary.	No	Original 660-044 definition for greenhouse gas emissions reduction target may influence how VMT is analyzed in 660-012.	- Based on original VisionEval definition in -044. Will need to make best approximation in regional travel models.						
			rule provides compliance dates for the cities and counties in the Eugene-Springfield metropolitan area that conducted regional scenar planning in 2012-2015 to adopt and implement that work. The preferred scenario which resulted from that work will be used as the foundation for meeting the new requirements in this section. This rule also provides compliance dates in the Salem-Keizer metropolitan area that has not yet undertaken scenario planning as described in this division. This section allows for other regions to voluntarily opt into the regional scenario planning program and provides a process for how the commission could require scenario planning in the Albany, Bend, Corvallis, Grants Pass, and Roque Valley metropolitan areas in the									
660-044-0015	Applicability - Compliance Schedule Greenhouse Gas Emissions Reduction	New section	future.	No		- Climate office consultant work will support this (see -0900 comment above).						
660-044-0020	Target for the Portland Metropolitan	Edito	This is an existing rule that provides the greenhouse gas reduction targets for the Portland metropolitan area. Minor amendments we made extending horizon year to incorporate any planning work that goes beyond 2050.	No								
000 044 0020	Greenhouse Gas Emissions Reduction	Luio	This is an existing rule that provides the greenhouse gas reduction targets for the Portland metropolitan area. The major amendment									
660-044-0025	Targets for Other Metropolitan Areas	Edits	makes the targets mandatory. Minor amendments were made extending horizon year to incorporate any planning work that goes beyond 2050.	No								
660-044-0030	Methods for Estimating Greenhouse Gas Emissions and Emissions Reductions	Edits	This is an existing rule that provides the methods by which local governments apply the greenhouse gas targets to the scenario planning process. Clarifles the use vehicle miles traveled to align with the planning requirements in the Transportation Planning Rules (Division 12) rule 660 012.0180.	Yes		Special scenario assumptions allowed when modeling to meet the target. Required for all target calculations in TMAs preferred scenario (Scenario Planning). - Im Metro (and optionally elsewhere), will they also be required to meet the WMT/cap targets in TSPs? - These conditions include state-led actions and conditions in the target rule (e.g., WMT fees), (see 120.165 for TSPs) - These methods only apply for a target rule calculation in regional scenario planning and do not apply to the TSP level-State-led actions should not be used in the TSP, only for a target rule analysis. We have methods for this already in scenario planning guidelines.	x	х	х		x	
660-044-0035	Review and Evaluation of Greenhouse Gas Reduction Targets	Edits	This is an existing rule that provides for how the department review and evaluate the greenhouse gas targets in this division.	No		- This section is focused on policy and process						
	Cooperative Selection of a Preferred		This is an existing rule that provides guidance for Metro as they select a scenario. The Metro region has already selected and adopted preferred scenario by way of their Climate Smart Communities program. This change is to support any future amendments needed to	3	Discusses evaluation requirements and planning assumptions for the preferred land use scenario. Lists example evaluation criteria	- Sets Preferred land use-transportation scenario (VE) that meets the targets.					x	
660-044-0040	Scenario; Initial Adoption Adoption of Regional Plans to	Edits	the plan. This is an existing rule that provides guidance for how the preferred scenario is implemented in the Metro region. Metro has moved	No	and performance criteria which may require new methodologies.	TMAs will do this working with Climate Office consultant.					x	
660-044-0045	Implement the Preferred Scenario	Edits	beyond the adoption phase and is in the implementation phase. This is an existing rule that provides guidance for commission review of the implementation or the preferred scenario in regional plans.	No		-See comment on -0040					x	
660-044-0050	Commission Review of Regional Plans	Edits	The amendments extend commission review to amendment of the regional plan.	No		-See comment on -0040						
660-044-0055	Adoption of Local Plans to Implement the Preferred Scenario	Edits	This is an existing rule that specifies a process for local governments in Metro to implement the preferred scenario.	No		- Metro's rule may have changed with CFEC					х	
660-044-0060	Monitoring	Edite	This is an existing rule that specifies a process for monitoring and reporting implementation of the preferred scenario in the Metro	No	Report monitoring progress implementing preferred scenario may include additional analysis requirements.	Performance measures and targets have been adopted and measured previously. Does not appear to be new guidance.					х	
660-044-0060 660-044-0100		New section	region. This is a new rule that describes the process for scenario planning in cities and counties beyond the Portland Metro region. A work program is the first step in the process. The work program provides the basic framework for conducting the greenhouse gas reduction scenario planning.	No	include additional analysis requirements. May need guidance for converting CFAs into VisionEval inputs						х	
660-044-0110	Land Use and Transportation Scenario Plan Contents		This new rule lists the elements of a scenario plan. The core element is a preferred scenario that would meet the pollution reduction targets. The scenario plan includes additional elements to implement the preferred scenario, to track progress and to report on the planning process. The rule specifies how cities and counties will report and monitor plan implementation, actions taken, and on equitable outcomes	No	Sets guidance for planning assumptions for the land use and transportation scenario plan, including green house gas emissions and performance measures/methodologies.	-See comment on -0040					х	
660-044-0120	Commission Review of a Land Use and Transportation Scenario Plan Local Amendments to Implement	New section	This new rule describes the review process for scenario plans in cities and counties beyond the Portland metropolitan area. Before the formal review, state and local staff will collaborate on the plan and resolve most questions. If there are no remaining issues, the cities and counties will formally submit the plan and the DLO Director will approve it. If there are unresolved questions, the process goes to the commission for a public hearing and decision.	No								
660-044-0130	Approved Land Use and Transportation Scenario Plan	New section	This new rule describes the process for local governments outside of the Portland Metro area to individually implement the regional scenario plan they jointly developed.	No								