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## DIVISION 44

### METROPOLITAN GREENHOUSE GAS REDUCTION TARGETS

#### 660-044-0000

##### Purpose

(1) This division implements provisions of chapter 865, section 37 (6), Oregon Laws 2009, and chapter 85, section 5 (1), Oregon Laws 2010, that direct the Land Conservation and Development Commission (“commission”) to adopt rules setting targets for reducing greenhouse gas emissions from light vehicle travel ~~in for each of the state’s~~ metropolitan areas ~~for the year 2035 to aid in meeting the consistent with the~~ state goal in ORS 468A.205 to reduce the state’s greenhouse gas emissions in 2050 to 75 percent below 1990 levels.

(2) This division also implements provisions of Oregon Laws 2009, chapter 865, section 38 regarding land use and transportation scenario planning to reduce greenhouse gas emissions in the Portland metropolitan area. The commission’s intent and expectation is that the requirements set forth in this rule will be integrated into and addressed as part of existing procedures for coordinated regional planning in the Portland metropolitan area. The requirements set forth in this division for scenario planning apply only to the Portland metropolitan area. Nothing in this division is intended to require other metropolitan areas to conduct scenario planning, or provide for commission or department review or approval of scenario plans that other metropolitan areas may develop or adopt. While a preferred scenario may include assumptions about state or federal policies, programs, or actions that would be put in place to reduce greenhouse gas emissions, nothing in this division or commission approval of a preferred scenario is intended to grant authority to the commission, Metro or local governments to approve or require implementation of those policies, programs or actions.

(3) The targets in this division provide guidance to local governments in metropolitan areas on the level of reduction in greenhouse gas emissions to achieve as they conduct land use and transportation scenario planning. Land use and transportation scenario planning to meet the targets in this division is required of the Portland metropolitan area and is encouraged, but not required, in other metropolitan areas. Success in developing scenarios that meet the targets will depend in large part on the state funding for scenario planning; on the state developing strategies and actions that reduce greenhouse gas emissions from light vehicle travel within metropolitan areas; and on state and local governments jointly and actively engaging the public on the costs and benefits of reducing greenhouse gas emissions.

(4) Land use and transportation scenario planning is intended to be a means for local governments in metropolitan areas to explore ways that urban development patterns and transportation systems would need to be changed to achieve significant reductions in greenhouse gas emissions from light vehicle travel. Scenario planning is a means to address benefits and costs of different actions to accomplish reductions in ways that allow communities to assess how to meet other important needs, including accommodating economic development and housing needs, expanding transportation options and reducing transportation costs.

40 (5) The expected result of land use and transportation scenario planning is information on the  
 41 extent of changes to land use patterns and transportation systems in metropolitan areas needed to  
 42 significantly reduce greenhouse gas emissions from light vehicle travel in metropolitan areas,  
 43 including information about the benefits and costs of achieving those reductions. The results of  
 44 land use and transportation scenario planning are expected to inform local governments as they  
 45 update their comprehensive plans, and to inform the legislature, state agencies and the public as  
 46 the state develops and implements an overall strategy to meet state goals to reduce greenhouse  
 47 gas emissions.

48 (6) The greenhouse gas emissions reduction targets in this division are intended to guide ~~an~~  
 49 ~~initial round of~~ land use and transportation scenario planning ~~over the next two to four years~~. The  
 50 targets are based on available information and current estimates about key factors, including  
 51 improvements in vehicle technologies and fuels. Pursuant to OAR 660-044-0035, the  
 52 commission shall review the targets by June 1, ~~2015~~2021, based on the results of scenario  
 53 planning, and updated information about expected changes in vehicle technologies and fuels,  
 54 state policies and other factors.

55 (7) Success in meeting the targets will require a combination of local, regional and state actions.  
 56 State actions include not only improvements in vehicle technology and fuels, but also other  
 57 statewide efforts to reduce greenhouse gas emissions from light vehicle travel. The Oregon  
 58 Department of Transportation prepared a Statewide Transportation Strategy describing state  
 59 actions that could be implemented to reduce greenhouse gas emissions. These efforts—which are  
 60 programs and actions to be implemented at the state level—are currently under review by the  
 61 Oregon Department of Transportation as part of its Statewide Transportation Strategy to reduce  
 62 greenhouse gas emissions. As metropolitan areas develop scenario plans to reduce greenhouse  
 63 gas emissions and compare them to the targets in this division, it is incumbent that metropolitan  
 64 areas and the state work as partners, with a shared responsibility of determining how local and  
 65 statewide actions and programs can reach the targets.

66 (8) Nothing in this division is intended to amend statewide planning goals or administrative rules  
 67 adopted to implement statewide planning goals.

## 68 **660-044-0005**

### 69 **Definitions**

70 For the purposes of this division, the definitions in ORS 197.015 and the statewide planning  
 71 goals apply. In addition, the following definitions shall apply:

72 ~~(1) “1990 baseline emissions” means the estimate of~~  
 73 ~~greenhouse gas emissions from light vehicle travel in each~~  
 74 ~~metropolitan area for the year 1990, as presented by the~~  
 75 ~~Department of Environmental Quality and the Oregon~~  
 76 ~~Department of Energy included in the Agencies’ Technical Report.~~

This term is not used anywhere  
 in the amended rules so a  
 definition is not needed.

77 ~~(2) “2005 emissions levels” means an estimate of greenhouse~~  
 78 ~~gas emissions from light vehicle travel in a metropolitan area~~  
 79 ~~for the year 2005.~~

This term is only used in the definition of “target” and the meaning there is clear.

80 ~~(3) “2035 greenhouse gas emissions reduction goal” means the percentage reduction in~~  
 81 ~~greenhouse gas emissions from light vehicle travel in a metropolitan area needed by the year~~  
 82 ~~2035 in order to meet the state goal of a 75 percent reduction in greenhouse gas emissions from~~  
 83 ~~1990 levels by the year 2050 as recommended by the Department of Environmental Quality and~~  
 84 ~~the Oregon Department of Energy in the Agencies’ Technical Report.~~

85 ~~(4) “Agencies’ Technical Report” means the report prepared~~  
 86 ~~by the Oregon Department of Transportation, the Department~~  
 87 ~~of Environmental Quality and the Oregon Department of~~  
 88 ~~Energy and submitted to the commission on March 1, 2011,~~  
 89 ~~that provides information and estimates about vehicle technologies and vehicle fleet to support~~  
 90 ~~adoption of greenhouse gas reduction targets as required by chapter 865, section 37 (7), Oregon~~  
 91 ~~Laws 2009, and chapter 85, section 5 (2), Oregon Laws 2010.~~

This term is not used anywhere in the amended rules so a definition is not needed.

92 (5) “Design type” means the conceptual areas described in the Metro Growth Concept text and  
 93 map in Metro’s regional framework plan, including central city, regional centers, town centers,  
 94 station communities, corridors, main streets, neighborhoods, industrial areas and employment  
 95 areas.

96 (6) “Framework plan” or “regional framework plan” means the plan adopted by Metro as defined  
 97 by ORS 197.015(16).

98 (7) “Functional plan” or “regional functional plan” means an ordinance adopted by Metro to  
 99 implement the regional framework plan through city and county comprehensive plans and land  
 100 use regulations.

101 (8) “Greenhouse gas” means any gas that contributes to anthropogenic global warming  
 102 including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons,  
 103 perfluorocarbons and sulfur hexafluoride. ORS 468A.210(2). Greenhouse gases are generally  
 104 measured in terms of CO<sub>2</sub> equivalents — CO<sub>2e</sub> — which means the quantity of a given  
 105 greenhouse gas multiplied by a global warming potential factor provided in a state-approved  
 106 emissions reporting protocol.

107 (9) “Greenhouse gas emissions reduction target” or “target”  
 108 means a reduction from 2005 emission levels of per capita  
 109 greenhouse gas emissions from travel in light vehicles.  
 110 Targets are the reductions beyond reductions in emissions that  
 111 are likely to result from the use of improved vehicle  
 112 technologies and fuels. Travel in light vehicles includes all  
 113 travel by members of households or university group quarters living within a metropolitan area  
 114 regardless of where the travel occurs, and local commercial vehicle travel that is a function of  
 115 household labor or demand regardless of where the travel occurs. Examples include commuting

This definition is shorter because substantive requirements were moved to other rules.

116 to work, going to school, going shopping, traveling for recreation, delivery vehicles, service  
 117 vehicles, travel to business meetings, and travel to jobsites.

118 ~~(9) “Greenhouse gas emissions reduction target” or “target” means the percent reduction in~~  
 119 ~~greenhouse gas emissions from light vehicle travel within a metropolitan area from 2005~~  
 120 ~~emissions levels that is to be met by the year 2035 through scenario planning. Greenhouse gas~~  
 121 ~~emissions reduction targets are expressed as a percentage reduction in emissions per capita, i.e.,~~  
 122 ~~total emissions divided by the population of the metropolitan area. Targets represent additional~~  
 123 ~~reductions from 2005 emissions levels beyond reductions in vehicle emissions that are likely to~~  
 124 ~~result by 2035 from the use of improved vehicle technologies and fuels and changes to the~~  
 125 ~~vehicle fleet. When determining whether a scenario meets a target, the reduction per capita is to be~~  
 126 ~~calculated as a percentage of the emissions per capita assuming 2005 light vehicle travel per~~  
 127 ~~capita and 2035 baseline assumptions for light vehicle technologies, fuels and fleet as set forth in~~  
 128 ~~Tables 1 and 2 of OAR 660-044-0010. The combined effect of the baseline assumptions for light~~  
 129 ~~vehicle technologies, fuels and fleet from 1990 to 2035, estimated changes to light vehicle travel~~  
 130 ~~from 1990 to 2005, and scenario planning to meet targets from 2005 to 2035 is to meet the~~  
 131 ~~greenhouse gas emissions reduction goal from 1990 to 2035.~~

132 ~~(10) “Greenhouse gas emissions reduction toolkit” means the~~  
 133 ~~toolkit prepared by the Oregon Department of Transportation~~  
 134 ~~and the department to assist local governments in developing~~  
 135 ~~and executing actions and programs to reduce greenhouse gas~~  
 136 ~~emissions from light vehicle travel in metropolitan areas as provided in chapter 85, section 4,~~  
 137 ~~Oregon Laws 2010.~~

This term is not used anywhere in the amended rules so a definition is not needed.

138 (11) “Land use and transportation scenario planning” means the preparation and evaluation by  
 139 local governments of two or more land use and transportation scenarios and the cooperative  
 140 selection of a preferred scenario that accommodates planned population and employment growth  
 141 while achieving a reduction in greenhouse gas emissions from light vehicle travel in the  
 142 metropolitan area. Land use and transportation scenario planning may include preparation and  
 143 evaluation of alternative scenarios that do not meet targets specified in this division.

144 (12) “Light vehicles” means motor vehicles with a gross vehicle weight rating of 10,000 pounds  
 145 or less.

146 ~~(13) “Light vehicle travel within a metropolitan area” means~~  
 147 ~~trips made by light vehicles that begin and end within the~~  
 148 ~~same metropolitan planning area, and that portion of other~~  
 149 ~~trips made by light vehicles that occurs within the~~  
 150 ~~metropolitan planning area, including a portion of through~~  
 151 ~~trips (i.e., trips that pass through the metropolitan planning~~  
 152 ~~area but do not begin or end there) and that portion within the~~  
 153 ~~metropolitan planning area of other light vehicle trips that~~  
 154 ~~begin or end within the metropolitan planning area. Trips and portions of trips that are within the~~  
 155 ~~metropolitan planning area are illustrated by solid lines as shown in Figure 1. [Figures not~~  
 156 ~~included. See ED. NOTE.]~~

This definition is not needed because the amendment would change what travel is counted to match the way that the model estimates GHG emissions.

157 ~~Figure 1. Light vehicle travel within a metropolitan area. Circles indicate trip origins and~~  
 158 ~~destinations. Arrows indicate the direction of travel. Solid lines indicate the portion of each type~~  
 159 ~~of trip that is considered travel within a metropolitan area for purposes of this definition.~~

160 (14) “Metro” means the metropolitan service district organized for the Portland metropolitan area  
 161 under ORS chapter 268.

162 (15) “Metropolitan planning area” or “metropolitan area” means lands within the boundary of a  
 163 metropolitan planning organization ~~as of the effective date of this division.~~

164 (16) “Metropolitan planning organization” means an  
 165 organization located wholly within the State of Oregon and  
 166 designated by the Governor to coordinate transportation  
 167 planning in an urbanized area of the state pursuant to 49  
 168 U.S.C. 5303(c). ~~The Longview-Kelso-Rainier metropolitan~~  
 169 ~~planning organization and the Walla Walla Valley~~  
 170 ~~metropolitan planning organization are not metropolitan~~  
 171 ~~planning organizations for the purposes of this division. ORS~~  
 172 ~~197.629(7). Included are metropolitan planning organizations for the following areas: the~~  
 173 ~~Portland metropolitan area, the Bend metropolitan area, the Corvallis metropolitan area, the~~  
 174 ~~Eugene-Springfield metropolitan area, the Salem-Keizer metropolitan area and the Rogue Valley~~  
 175 ~~metropolitan area.~~

The amended rules set targets that apply equally to all metropolitan areas (outside of Portland Metro), so the areas do not need to be listed individually.

176 (17) “Planning period” means the period of time over which the expected outcomes of a scenario  
 177 plan are estimated, measured from a 2005 base year, ~~typically 2005~~, to a future year that  
 178 corresponds with greenhouse gas emission targets set forth in this division.

179 (18) “Preferred land use and transportation scenario” means a generalized plan for the Portland  
 180 metropolitan area adopted by Metro through amendments to the regional framework plan that  
 181 achieves the targets for reducing greenhouse gas emissions set forth in OAR 660-044-0020 as  
 182 provided in 660-044-0040.

183 ~~(19) “Scenario planning guidelines” means the guidelines~~  
 184 ~~established by the Oregon Department of Transportation and~~  
 185 ~~the department to assist local governments in conducting land~~  
 186 ~~use and transportation scenario planning to reduce greenhouse~~  
 187 ~~gas emissions from light vehicle travel in metropolitan areas~~  
 188 ~~as provided in chapter 85, section 3, Oregon Laws 2010.~~

The scenario planning guidelines are still available, but they are not a regulatory requirement, so they do not need to be defined in a rule.

189 (20) “Statewide Transportation Strategy” means the statewide strategy ~~adopted~~ accepted by the  
 190 Oregon Transportation Commission as part of the state transportation policy to aid in achieving  
 191 the greenhouse gas emissions reduction goals set forth in ORS 468A.205 as provided in chapter  
 192 85, section 2, Oregon Laws 2010.

193 **660-044-0010**

194 **Target Setting Process and Considerations**

195 ~~(1) This rule describes information and factors that provide~~  
 196 ~~the basis for greenhouse gas emissions reduction targets~~  
 197 ~~included in this division. The purpose of this rule is to inform~~  
 198 ~~local governments and the public about information that was~~  
 199 ~~relied upon to set greenhouse gas emissions reduction targets;~~  
 200 ~~to inform local governments as they conduct land use and~~  
 201 ~~transportation scenario planning, and to inform the department and commission in the review and~~  
 202 ~~evaluation of greenhouse gas emissions reduction targets as required in OAR 660-044-0035.~~

Background information about process and considerations will be documented in the staff report to the Land Conservation and Development Commission, not in a rule. Several substantive provisions were moved to rule 0030.

203 ~~(2) Section 37 (6), chapter 865, Oregon Laws 2009, and section 5 (1), chapter 85, Oregon Laws~~  
 204 ~~2010, direct the commission to adopt rules identifying greenhouse gas emissions reduction~~  
 205 ~~targets for emissions caused by light vehicle travel for each of the state's metropolitan areas.~~  
 206 ~~These statutes direct that the rules must reflect greenhouse gas emissions reduction goals set~~  
 207 ~~forth in ORS 468A.205 and must take into consideration the reductions in vehicle emissions that~~  
 208 ~~are likely to result by 2035 from the use of improved vehicle technologies and fuels. The statutes~~  
 209 ~~also direct that the rules must take into consideration methods of equitably allocating reductions~~  
 210 ~~among the metropolitan areas given differences in population growth rates. The commission has~~  
 211 ~~addressed these statutory considerations as follows:~~

212 ~~(a) Reduction in greenhouse gas emissions from light vehicle travel needed in 2035 to achieve~~  
 213 ~~the state goal of a 75 percent greenhouse gas reduction by 2050. Based on recommendations~~  
 214 ~~from the Department of Environmental Quality and the Oregon Department of Energy in the~~  
 215 ~~Agencies' Technical Report, the commission concludes that a reduction of 52 percent in~~  
 216 ~~greenhouse gas emissions from light vehicle travel in metropolitan areas from 1990 levels is~~  
 217 ~~needed by the year 2035 to support achieving greenhouse gas emissions reduction goals for 2050~~  
 218 ~~set forth in ORS 468A.205. Based on population projections, the overall 52 percent reduction~~  
 219 ~~corresponds to a 74 percent reduction in greenhouse gas emissions per capita from light vehicle~~  
 220 ~~travel in metropolitan areas from 1990 levels by the year 2035. This percentage reduction~~  
 221 ~~assumes steady year by year progress per capita through 2050 in reducing emissions and that the~~  
 222 ~~reduction in light vehicle emissions will be proportionate to the overall state goal for reducing~~  
 223 ~~greenhouse gas emissions. In reaching this conclusion, the commission notes that absent a~~  
 224 ~~Statewide Transportation Strategy and plan for achieving greenhouse gas emissions reductions~~  
 225 ~~there is no policy or other basis at this time for assuming that light vehicle travel in metropolitan~~  
 226 ~~areas should be responsible for a larger or smaller share of expected statewide greenhouse gas~~  
 227 ~~emissions reductions.~~

228 ~~(b) Consideration of reductions in vehicle emissions likely to result by 2035 from use of~~  
 229 ~~improved vehicle technologies and fuels.~~

230 ~~(A) The commission has considered recommendations from~~  
 231 ~~the Oregon Department of Transportation, the Department of~~  
 232 ~~Environmental Quality and the Oregon Department of Energy~~  
 233 ~~about expected changes to the light vehicle fleet, vehicle~~  
 234 ~~technologies and vehicle fuels through the year 2035 as set~~  
 235 ~~forth in the Agencies' Technical Report. The commission~~  
 236 ~~notes that the Agencies' Technical Report indicates~~  
 237 ~~considerable uncertainty and a broad range of possible outcomes for each of the relevant factors.~~  
 238 ~~The commission concludes that a midpoint in the range of plausible fleet, technologies and fuel~~  
 239 ~~outcomes provides a reasonable basis for greenhouse gas emissions reduction targets to guide an~~  
 240 ~~initial round of land use and transportation scenario planning. The baseline assumptions for 2035~~  
 241 ~~light vehicle fleet, light vehicle technologies and vehicle fuels for each metropolitan area are set~~  
 242 ~~forth in Tables 1 and 2.~~

The assumptions for vehicle technology and fuels have been moved to rule 0030 because they are used to project future emissions.

243 ~~(B) The greenhouse gas emissions reduction targets in this division are for greenhouse gas~~  
 244 ~~emissions reductions to be met through land use and transportation scenario planning and are in~~  
 245 ~~addition to reductions estimated to result from changes to the light vehicle fleet, light vehicle~~  
 246 ~~technologies and light vehicle fuels in Tables 1 and 2.~~

247 ~~(C) In evaluating whether a proposed land use and transportation scenario combined with actions~~  
 248 ~~and programs included in the Statewide Transportation Strategy meets greenhouse gas emissions~~  
 249 ~~reduction targets in this division, a local government or metropolitan planning organization may~~  
 250 ~~include:~~

251 ~~(i) Policies or actions included in the Statewide~~  
 252 ~~Transportation Strategy that the Oregon Department of~~  
 253 ~~Transportation estimates are likely to result in changes to~~  
 254 ~~vehicle fleet, technologies or fuels above and beyond the~~  
 255 ~~values listed in Tables 1 and 2;~~

256 ~~(ii) Local or regional programs or actions identified in a land~~  
 257 ~~use and transportation scenario plan that are likely to result in~~  
 258 ~~changes to vehicle fleet, technologies or fuels above and~~  
 259 ~~beyond the values listed in Tables 1 and 2. One example of~~  
 260 ~~such an action would be a local or regional program that is estimated to result in use of hybrid or~~  
 261 ~~electric vehicles in a metropolitan area at greater than the eight percent statewide assumption for~~  
 262 ~~the 2035 model year provided in Table 1; and~~

263 ~~(iii) Policies or actions included in the Statewide Transportation Strategy, other than those~~  
 264 ~~attributable to changes in vehicle fleet, technologies or fuels. Examples of such an action would~~  
 265 ~~be increased inter-city transit or pay-as-you-drive insurance. The Oregon Department of~~  
 266 ~~Transportation would coordinate with local governments and metropolitan planning~~  
 267 ~~organizations in each metropolitan area on estimating the amount of greenhouse gas emissions~~  
 268 ~~reductions expected to result within the metropolitan area from these programs and actions.~~

The STS was not available when the original rules were adopted, so this section was included to accommodate the STS. In this amendment, rule 0030 would describe how the STS is used to project emissions.

269 ~~(c) Equitable allocation of responsibility for greenhouse gas emissions reductions among~~  
 270 ~~metropolitan areas considering differences in population growth rates. The greenhouse gas~~  
 271 ~~emissions reduction targets in this division are in the form of percentage reductions in emissions~~  
 272 ~~per capita. The greenhouse gas emissions reduction targets for individual metropolitan areas~~  
 273 ~~range from 17 percent to 21 percent per capita. The commission concludes that setting the targets~~  
 274 ~~in the form of per capita reductions and adoption of comparable per capita reductions for each of~~  
 275 ~~the state's six metropolitan areas assures that those metropolitan areas that are expected to~~  
 276 ~~experience higher than average rates of population growth between 1990 and 2035 do not bear a~~  
 277 ~~greater responsibility for emissions reductions than metropolitan areas that are expected to grow~~  
 278 ~~more slowly.~~

279 **660-044-0020**

280 **Greenhouse Gas Emissions Reduction Target for the Portland Metropolitan Area**

281 (1) Purpose and effect of targets

282 ~~(a) Metro shall use the greenhouse gas emissions reduction targets set forth in section (3) of this~~  
 283 ~~rule as it develops two or more alternative land use and transportation scenarios that~~  
 284 ~~accommodate planned population and employment growth while achieving a reduction in~~  
 285 ~~greenhouse gas emissions from light vehicle travel in the metropolitan area as required by OAR~~  
 286 ~~660-044-0040 through 660-044-0060 section 37 (6), chapter 865, Oregon Laws 2009.~~

287 ~~(b) This rule does not require that Metro or local governments~~  
 288 ~~in the Portland metropolitan area select a preferred scenario or~~  
 289 ~~amend the Metro regional framework plan (as defined in ORS~~  
 290 ~~197.015(16)), functional plans, comprehensive plans or land~~  
 291 ~~use regulations to meet targets set in this rule. Requirements~~  
 292 ~~for cooperative selection of a preferred land use and transportation scenario and for~~  
 293 ~~implementation of that scenario through amendments to comprehensive plans and land use~~  
 294 ~~regulations as required by section 37 (8), chapter 865, Oregon Laws 2009, shall be addressed~~  
 295 ~~through a separate rulemaking that the commission is required to complete by January 1, 2013.~~

The "separate rulemaking" was completed in late 2012, so this section is no longer needed.

296 (2) This rule only applies to the Portland metropolitan area.

297 (3) The greenhouse gas emissions reduction target, ~~as set forth in OAR 660-044-0005(6), for the~~  
 298 ~~Portland metropolitan area~~ is a 20 percent reduction ~~per capita in greenhouse gas emissions in~~  
 299 ~~the year 2035 below year 2005 emissions levels.~~

300 (4) Targets for the years 2040 through 2050 are:

301 (a) By 2040, a 25 percent reduction

302 (b) By 2041, a 26 percent reduction

303 (c) By 2042, a 27 percent reduction

304 (d) By 2043, a 28 percent reduction

305 (e) By 2044, a 29 percent reduction

These targets are based on method #4 discussed at the November meeting.

- 306 (f) By 2045, a 30 percent reduction  
 307 (g) By 2046, a 31 percent reduction  
 308 (h) By 2047, a 32 percent reduction  
 309 (i) By 2048, a 33 percent reduction  
 310 (j) By 2049, a 34 percent reduction  
 311 (k) By 2050, a 35 percent reduction

312 ~~(4) The greenhouse gas emissions reduction target in section~~  
 313 ~~(3) of this rule identifies the level of greenhouse gas~~  
 314 ~~emissions reduction to be met through land use and~~  
 315 ~~transportation scenario planning consistent with baseline~~  
 316 ~~assumptions and guidance in OAR 660-044-0010(2)(b)(A) to~~  
 317 ~~(C), including reductions expected to result from actions and programs identified in the~~  
 318 ~~Statewide Transportation Strategy.~~

These elements are addressed in rule 0005 (definitions) and rule 0030, so they do not need to be repeated here.

### 319 **660-044-0025**

## 320 **Greenhouse Gas Emissions Reduction Targets for Other Metropolitan Areas**

### 321 (1) Purpose and effect of targets

322 (a) Local governments in metropolitan planning areas not covered by 660-044-0020~~listed in~~  
 323 ~~section (2) of this rule~~ may use the relevant targets set forth in section ~~(23)~~ of this rule as they  
 324 conduct land use and transportation scenario planning to reduce ~~expected~~ greenhouse gas  
 325 emissions ~~from light vehicle travel in the metropolitan planning area.~~

326 (b) This rule does not require that local governments or metropolitan planning organizations  
 327 conduct land use and transportation scenario planning. This rule does not require that local  
 328 governments or metropolitan planning organizations that choose to conduct land use or  
 329 transportation scenario planning develop or adopt a preferred land use and transportation  
 330 scenario plan to meet targets in section ~~(23)~~ of this rule.

### 331 (2) Targets for the years 2040 through 2050 are:

- 332 (a) By 2040, a 20 percent reduction  
 333 (b) By 2041, a 21 percent reduction  
 334 (c) By 2042, a 22 percent reduction  
 335 (d) By 2043, a 23 percent reduction  
 336 (e) By 2044, a 24 percent reduction  
 337 (f) By 2045, a 25 percent reduction  
 338 (g) By 2046, a 26 percent reduction  
 339 (h) By 2047, a 27 percent reduction  
 340 (i) By 2048, a 28 percent reduction  
 341 (j) By 2049, a 29 percent reduction  
 342 (k) By 2050, a 30 percent reduction

These targets are based on method #4 discussed at the November meeting.

343 ~~(2) This rule applies to the following metropolitan planning~~  
 344 ~~areas:~~

345 ~~(a) Bend,~~

346 ~~(b) Corvallis,~~

347 ~~(c) Eugene-Springfield,~~

348 ~~(d) Rogue Valley, and~~

349 ~~(e) Salem-Keizer.~~

350 ~~(3) Targets, as set forth in OAR 660-044-0005(6), for other metropolitan areas are as follows:~~

351 ~~(a) The greenhouse gas emissions reduction target for the Bend metropolitan planning area is an~~  
 352 ~~18 percent reduction per capita in greenhouse gas emissions in the year 2035 below year 2005~~  
 353 ~~emissions levels.~~

354 ~~(b) The greenhouse gas emissions reduction target for the Corvallis metropolitan planning area is~~  
 355 ~~a 21 percent reduction per capita in greenhouse gas emissions in the year 2035 below year 2005~~  
 356 ~~emissions levels.~~

357 ~~(c) The greenhouse gas emissions reduction target for the Eugene-Springfield metropolitan~~  
 358 ~~planning area is a 20 percent reduction per capita in greenhouse gas emissions in the year 2035~~  
 359 ~~below year 2005 emissions levels.~~

360 ~~(d) The greenhouse gas emissions reduction target for the Rogue Valley metropolitan planning~~  
 361 ~~area is a 19 percent reduction per capita in greenhouse gas emissions in the year 2035 below year~~  
 362 ~~2005 emissions levels.~~

363 ~~(e) The greenhouse gas emissions reduction target for the Salem-Keizer metropolitan planning~~  
 364 ~~area is a 17 percent reduction per capita in greenhouse emissions in the year 2035 below year~~  
 365 ~~2005 emissions levels.~~

366 ~~(4) The greenhouse gas emissions reduction targets in section (3) of this rule identify the level of~~  
 367 ~~greenhouse gas emissions reduction to be met through land use and transportation scenario~~  
 368 ~~planning consistent with baseline assumptions and guidance in OAR 660-044-0010(2)(b)(A) to~~  
 369 ~~(C), including reductions expected to result from actions and programs identified in the~~  
 370 ~~Statewide Transportation Strategy.~~

371 **660-044-0030**

372 **Methods for Estimating Greenhouse Gas Emissions and Emissions Reductions**

The amendment to this rule would set targets that apply equally to all metropolitan areas (outside of Portland Metro), so the areas do not need to be listed individually.

373 (1) ~~If local governments within a metropolitan area are~~  
 374 ~~conducting land use and transportation scenario planning to~~  
 375 ~~demonstrate that their plans would meet the greenhouse gas~~  
 376 ~~emissions reductions targets established in this division, then~~  
 377 ~~they shall use the provisions in this rule to project future~~  
 378 ~~emissions. may use information and methods for estimating~~  
 379 ~~greenhouse gas emissions levels from light vehicle travel~~  
 380 ~~recommended by the Oregon Department of Transportation~~  
 381 ~~and the department as set forth in the greenhouse gas~~  
 382 ~~emissions reduction toolkit, or as otherwise approved by the~~  
 383 ~~director of the department and the director of the Oregon~~  
 384 ~~Department of Transportation.~~

Rule 0030 only applies if local governments have chosen to meet the targets. It describes the analysis necessary to make an appropriate comparison between projected emissions and the target. The deleted section is not needed because local governments already have the authority to use methods from ODOT, and they do not need a rule to give them this permission

385 (a) Projected Emission Rates: Projections of greenhouse gas  
 386 emissions must use the emission rates as specified in (A) or  
 387 (B).

388 (A) Projections of greenhouse gas emissions may use the emission rates set forth in Table 1,  
 389 which are based on the Statewide Transportation Strategy and reflect reductions likely to result  
 390 by the use of improved vehicle technologies and fuels.

391 Table 1: Projected Metropolitan Area Vehicle Emissions Rates (CO<sub>2</sub>e per vehicle-mile)

<u>Year</u>	<u>Emission Rates</u> <u>(grams / mile)</u>
<u>2040</u>	<u>140</u>
<u>2041</u>	<u>134</u>
<u>2042</u>	<u>128</u>
<u>2043</u>	<u>123</u>
<u>2044</u>	<u>117</u>
<u>2045</u>	<u>112</u>
<u>2046</u>	<u>108</u>
<u>2047</u>	<u>103</u>
<u>2048</u>	<u>99</u>
<u>2049</u>	<u>94</u>
<u>2050</u>	<u>90</u>

392 (B) Projections of greenhouse gas emissions may use emission rates lower than the rates in Table  
 393 1 if local or regional programs or actions can be demonstrated to result in changes to vehicle  
 394 fleet, technologies, or fuels above and beyond the assumption in the Statewide Transportation  
 395 Strategy. One example would be a program to add public charging stations that is estimated to  
 396 result in use of hybrid or electric vehicles greater than the statewide assumption in the Statewide  
 397 Transportation Strategy.

398 (b) State Actions: Projections of greenhouse gas emissions  
399 may include reductions projected to result from state actions,  
400 programs, and associated interactions up to, but not  
401 exceeding, the levels identified in the Statewide  
402 Transportation Strategy.

Projected emissions should be based on the state actions in the STS; however, local governments could chose to assume a lower level of state action.

403 (c) Local and Regional Policies: Projections of greenhouse  
404 gas emissions may include local or regional actions similar to  
405 actions in the Statewide Transportation Strategy if the local governments have authority to and  
406 have adopted plans that would implement the actions.

407 ~~(2) Local governments conducting land use and transportation~~  
408 ~~scenario planning to meet the greenhouse gas emissions~~  
409 ~~reduction targets established in this division may use methods~~  
410 ~~recommended by the Oregon Department of Transportation,~~  
411 ~~Oregon Department of Environmental Quality and the Oregon~~  
412 ~~Department of Energy to account for additional greenhouse~~  
413 ~~gas emissions resulting from increased traffic congestion or~~  
414 ~~reductions in emissions resulting from measures that reduce~~  
415 ~~traffic congestion in estimating greenhouse gas emissions from light vehicles.~~

This section is not needed because local governments already have the authority to use methods from ODOT, and they do not need a rule to give them this permission.

416 **660-044-0035**

417 **Review and Evaluation of Greenhouse Gas Reduction Targets**

418 (1) The commission shall by June 1, ~~2015~~2021, and at four year intervals thereafter, conduct a  
419 review of the greenhouse gas emissions reduction targets in OAR 660 044 0020 and OAR 660  
420 044 0025.

421 (2) The review by the commission shall evaluate whether revisions to the targets established in  
422 this division are warranted considering the following factors:

423 (a) Results of land use and transportation scenario planning conducted within metropolitan  
424 planning areas to reduce greenhouse gas emissions from light vehicles;

425 (b) New or revised federal and state laws or programs established to reduce greenhouse gas  
426 emissions from light vehicles;

427 (c) State plans or policies establishing or allocating greenhouse gas emissions reduction goals to  
428 specific sectors or subsectors;

429 (d) Policies and recommendations in the Statewide Transportation Strategy adopted by the  
430 Oregon Transportation Commission;

431 (e) Additional studies or analysis conducted by the Oregon  
 432 Department of Transportation, the Department of  
 433 Environmental Quality, the Oregon Department of Energy or  
 434 other agencies regarding greenhouse gas emissions from light  
 435 vehicle travel ~~in metropolitan areas~~, including but not limited  
 436 to changes to vehicle technologies, fuels and the vehicle fleet;

The amended rules would apply to travel by households living within the metropolitan area, not travel with the metropolitan area.

437 (f) Changes in population growth rates, metropolitan planning area boundaries, land use or  
 438 development patterns in metropolitan planning areas that affect light vehicle travel ~~in~~  
 439 ~~metropolitan areas~~;

440 (g) Efforts by local governments in metropolitan areas to reduce greenhouse gas emissions from  
 441 all sources;

442 (h) Input from affected local governments and metropolitan planning organizations;

443 (i) Land use feasibility and economic studies regarding land use densities; and

444 (j) State funding and support for scenario planning and public engagement. ~~;~~ and

445 ~~(k) The share of light vehicle travel within a metropolitan~~  
 446 ~~area not attributable to residents of that area.~~

447 ~~(32)~~ The department shall, in consultation and collaboration  
 448 with affected local governments, metropolitan planning  
 449 organizations and other state agencies, prepare a report  
 450 addressing factors listed in section (2) of this rule to aid the  
 451 commission in determining whether revisions to targets  
 452 established in this division are warranted.

The amended rules would only apply to travel by households living within the metropolitan area, so it would no longer be necessary to estimate travel by non-residents.

#### 453 **660-044-0040**

#### 454 **Cooperative Selection of a Preferred Scenario; Initial Adoption**

455 (1) ~~Within one year of adoption of a preferred scenario~~, Metro shall ~~by December 31, 2014~~,  
 456 amend the regional framework plan and the regional growth concept to select and incorporate a  
 457 preferred land use and transportation scenario that meets targets in OAR 660-044-0020  
 458 consistent with the requirements of this division.

459 (2) In preparing and selecting a preferred land use and transportation scenario Metro shall:

460 (a) Consult with affected local governments, the Port of Portland, TriMet, and the Oregon  
 461 Department of Transportation;

462 (b) Consider adopted comprehensive plans and local aspirations for growth in developing and  
 463 selecting a preferred land use and transportation scenario;

- 464 (c) Use assumptions about population, housing and employment growth consistent with the  
465 coordinated population and employment projections for the metropolitan area for the planning  
466 period;
- 467 (d) Use evaluation methods and analysis tools for estimating greenhouse gas emissions that are:
- 468 (A) Consistent with the provisions of this division;
- 469 (B) Reflect best available information and practices; and,
- 470 (C) Coordinated with the Oregon Department of Transportation.
- 471 (e) Make assumptions about state and federal policies and programs expected to be in effect in  
472 over the planning period, including the Statewide Transportation Strategy, in coordination with  
473 the responsible state agencies;
- 474 (f) Evaluate a reference case scenario that reflects implementation of existing adopted  
475 comprehensive plans and transportation plans;
- 476 (g) Evaluate at least two alternative land use and transportation scenarios for meeting greenhouse  
477 gas reduction targets and identify types of amendments to comprehensive plans and land use  
478 regulations likely to be necessary to implement each alternative scenario;
- 479 (h) Develop and apply evaluation criteria that assess how alternative land use and transportation  
480 scenarios compare with the reference case in achieving important regional goals or outcomes;
- 481 (i) If the preferred scenario relies on new investments or funding sources to achieve the target,  
482 evaluate the feasibility of the investments or funding sources including:
- 483 (A) A general estimate of the amount of additional funding needed;
- 484 (B) Identification of potential/likely funding mechanisms for key actions, including local or  
485 regional funding mechanisms; and,
- 486 (C) Coordination of estimates of potential state and federal funding sources with relevant state  
487 agencies (i.e. the Oregon Department of Transportation for transportation funding); and,
- 488 (D) Consider effects of alternative scenarios on development and travel patterns in the  
489 surrounding area (i.e. whether proposed policies will cause change in development or increased  
490 light vehicle travel between metropolitan area and surrounding communities compared to  
491 reference case).
- 492 (3) The preferred land use and transportation scenario shall include:
- 493 (a) A description of the land use and transportation growth concept providing for land use design  
494 types;

- 495 (b) A concept map showing the land use design types;
- 496 (c) Policies and strategies intended to achieve the target reductions in greenhouse gas emissions  
497 in OAR 660-044-0020;
- 498 (d) Planning assumptions upon which the preferred scenario relies including:
- 499 (A) Assumptions about state and federal policies and programs;
- 500 (B) Assumptions about vehicle technology, fleet or fuels, if those are different than those  
501 provided in OAR 660-044-0010;
- 502 (C) Assumptions or estimates of expected housing and employment growth by jurisdiction and  
503 land use design type; and
- 504 (D) Assumptions about proposed regional programs or actions other than those that set  
505 requirements for city and county comprehensive plans and land use regulations, such as  
506 investments and incentives;
- 507 (e) Performance measures and targets to monitor and guide implementation of the preferred  
508 scenario. Performance measures and targets shall be related to key elements, actions and  
509 expected outcomes from the preferred scenario. The performance measures shall include  
510 performance measures adopted to meet requirements of OAR 660-012-0035(5); and
- 511 (f) Recommendations for state or federal policies or actions to support the preferred scenario.
- 512 (4) When amending the regional framework plan, Metro shall adopt findings demonstrating that  
513 implementation of the preferred land use and transportation scenario meets the requirements of  
514 this division and can reasonably be expected to achieve the greenhouse gas emission reductions  
515 as set forth in the target in OAR 660-044-0020. Metro's findings shall:
- 516 (a) Demonstrate Metro's process for cooperative selection of a preferred alternative meets the  
517 requirements in subsections (2)(a)-(j);
- 518 (b) Explain how the expected pattern of land use development in combination with land use and  
519 transportation policies, programs, actions set forth in the preferred scenario will result in levels  
520 of greenhouse gas emissions from light vehicle travel that achieve the target in OAR 660-044-  
521 0020;
- 522 (c) Explain how the framework plan amendments are consistent with and adequate to carry out  
523 the preferred scenario, and are consistent with other provisions of the Regional Framework Plan;  
524 and,
- 525 (d) Explain how the preferred scenario is or will be made consistent with other applicable  
526 statewide planning goals or rules.

527 (5) Guidance on evaluation criteria and performance measures.

528 (a) The purpose of evaluation criteria referred to in subsection (2)(h) is to encourage Metro to  
529 select a preferred scenario that achieves greenhouse gas emissions reductions in a way that  
530 maximizes attainment of other community goals and benefits. This rule does not require the use  
531 of specific evaluation criteria. The following are examples of categories of evaluation criteria  
532 that Metro might use:

533 (A) Public health;

534 (B) Air quality;

535 (C) Household spending on energy or transportation;

536 (D) Implementation costs;

537 (E) Economic development;

538 (F) Access to parks and open space; and,

539 (G) Equity

540 (b) The purpose of performance measures and targets referred to in subsection (3)(e) is to enable  
541 Metro and area local governments to monitor and assess whether key elements or actions that  
542 make up the preferred scenario are being implemented, and whether the preferred scenario is  
543 achieving the expected outcomes. This rule does not establish or require use of particular  
544 performance measures or targets. The following are examples of types of performance measures  
545 that Metro might establish:

546 (A) Transit service revenue hours;

547 (B) Mode share;

548 (C) People per acre by 2040 Growth Concept design type;

549 (D) Percent of workforce participating in employee commute options programs; and

550 (E) Percent of households and jobs within one-quarter mile of transit.

551 **660-044-0045**

552 **Adoption of Regional Plans to Implement the Preferred Scenario**

553 (1) Within one year of the commission's order approving Metro's amendments to the regional  
554 framework plan to select and incorporate a preferred land use and transportation scenario, Metro  
555 shall adopt regional functional plan amendments to implement the framework plan amendments.

556 (2) Functional plan amendments shall establish requirements, deadlines and compliance  
557 procedures for amendments to local comprehensive plans, transportation system plans and land  
558 use regulations as necessary to implement the framework plan amendments. The functional plan  
559 amendments shall require affected cities and counties to adopt implementing amendments to  
560 comprehensive plans and land use regulations within two years of acknowledgement of Metro's  
561 functional plan amendments or by a later date specified in the adopted functional plan.

562 (3) Functional plan amendments shall include requirements that local governments amend local  
563 comprehensive plans, transportation system plans and land use regulations to:

564 (a) Use population, housing and employment allocations to specific areas and land use design  
565 types that are consistent with estimates in the framework plan including assumptions about  
566 densities, infill, and redevelopment;

567 (b) Apply comprehensive plan designations and zoning districts that are consistent with land use  
568 design type, allowing uses and densities that are consistent with land use design type and limiting  
569 uses that would be incompatible with the design type specified in the preferred scenario; and,

570 (c) Include other provisions needed to implement the amended framework plan.

571 (4) As part of its adoption of functional plan amendments under this rule, Metro shall adopt  
572 findings demonstrating that actions required by the functional plan amendments are consistent  
573 with and adequate to implement the relevant portions of the preferred land use and transportation  
574 scenario set forth in the adopted framework plan amendments. The findings shall demonstrate  
575 that assumptions or allocations of housing and employment growth to specific areas are  
576 consistent with the estimates or assumptions in the framework plan amendments. In the event  
577 Metro's allocations or assumptions vary from those upon which the framework plan amendments  
578 are based, Metro shall demonstrate that the revised assumptions or allocations, in combination  
579 with other measures adopted as part of the functional plan will meet the GHG reduction target in  
580 OAR 660-044-0020.

581 (5) Those portions of the preferred scenario in the framework plan that Metro chooses to  
582 implement by establishing requirements for city and county comprehensive plans and land use  
583 regulations shall be set forth in amendments to the functional plan. The amendments shall meet  
584 the following minimum planning standards:

585 (a) For adoption of amendments to the regional framework plan, the Metro Council shall follow  
586 the process set forth in the Metro Charter;

587 (b) For adoption of amendments to the functional plan, the Metro Council shall follow the  
588 process set forth in the Metro Charter for adoption of ordinances;

589 (c) The Metro Council shall strive for flexibility when establishing new requirements for cities  
590 and counties, and shall consider offering optional compliance paths to cities and counties, such  
591 as adoption of a model ordinance developed by Metro;

592 (d) Metro shall make new requirements for cities and counties included in the functional plan  
593 amendments adopted under this rule enforceable by Metro pursuant to ORS 268.390(6);

594 (6) When it adopts an updated regional transportation system plan required by OAR chapter 660,  
595 division 12, Metro shall demonstrate that the updated plan is consistent with framework plan  
596 amendments adopting a preferred scenario as provided in 660-044-0040(3).

#### 597 **660-044-0050**

#### 598 **Commission Review of Regional Plans**

599 (1) The commission shall review Metro's framework plan amendments adopting a preferred land  
600 use and transportation scenario and amendments to functional plans to implement the framework  
601 plan amendments in the manner provided for periodic review under ORS 197.628 to 197.650.

602 (2) The commission's review of framework plan amendments adopting a preferred land use and  
603 transportation scenario shall determine whether the preferred scenario can reasonably be  
604 expected to achieve greenhouse gas emission reductions as set forth in the targets in OAR 660-  
605 044-0020, other requirements of this division, and any applicable statewide planning goals.

606 (3) The commission's review of amendments to functional plans shall determine whether the  
607 adopted functional plans are consistent with and adequate to carry out relevant portions of the  
608 framework plan amendments.

609 (4) The commission may conduct review of Metro's framework plan amendments adopting a  
610 preferred scenario in conjunction with review of a UGB update or an update to the regional  
611 transportation system plan.

#### 612 **660-044-0055**

#### 613 **Adoption of Local Plans to Implement the Preferred Scenario**

614 (1) Local governments shall amend comprehensive plans, land use regulations, and  
615 transportation system plans to be consistent with and implement relevant portions of the  
616 preferred land use and transportation scenario as set forth in Metro's functional plans or  
617 amendments. "Consistent" for the purpose of this section means city and county comprehensive  
618 plans and implementing ordinances, on the whole, conforms with the purposes of the  
619 performance standards in the functional plan and any failure to meet individual performance  
620 standard requirements is technical or minor in nature.

621 (2) Beginning one year from Metro's adoption of a preferred scenario, local governments in the  
622 Portland metropolitan area shall, in adopting an amendment to a comprehensive plan or  
623 transportation system plan, other than a comprehensive plan or transportation system plan update  
624 or amendment to implement the preferred scenario, demonstrate that the proposed amendment is  
625 consistent with the preferred land use and transportation scenario.

626 **660-044-0060**627 **Monitoring and Updates**

628 (1) Metro shall as part of reports required by ORS 197.301 prepare a report monitoring progress  
629 in implementing the preferred scenario including status of performance measures and  
630 performance targets adopted as part of the preferred scenario.

631 (2) Metro's report shall assess whether the region is making satisfactory progress in  
632 implementing the preferred scenario; identify reasons for lack of progress, and identify possible  
633 corrective actions to make satisfactory progress. Metro may update and revise the preferred  
634 scenario as necessary to ensure that performance targets are being met.

635 (3) The commission shall review the report and shall either find Metro is making satisfactory  
636 progress or provide recommendations for corrective actions to be considered or implemented by  
637 Metro prior to or as part of the next ~~scheduled~~ update of the preferred scenario.