

QUANTIFICATION: can at least one associated specific indicator be quantified?

MONETIZATION: can at least one associated specific indicator be monetized?

CATEGORIES	DESCRIPTION	PRELIMINARY GENERAL INDICATORS (OUTCOME BASED)	EXAMPLES OF SPECIFIC INDICATORS <sup>1</sup>	Quantification	Monetization <sup>2</sup>		Common Data Sources
					Yes/Some Evidence	No	
Mobility	Does the plan or action help reduce travel costs and improve travel time reliability? Travel cost includes both out-of-pocket expenses and time spent in travel. Reliability includes the extent to which travelers can count on the time their trip will take being consistent from day to day.	Travel time	Travel time savings	Yes	x		Regional Travel Model
		Delay	Vehicle hours of delay	Yes	x		Regional Travel Model
		Travel time reliability		Yes	x		Regional Travel Model
		Travel distance		Yes		x	Regional Travel Model
		Vehicle operating and ownership costs		Yes	x		Oregon Department of Motor Vehicles
		Out of pocket costs		Yes	x		Oregon Department of Energy; Oregon Department of Justice (for average gas price information)
Accessibility	Does the plan or action facilitate the ease with which travelers can reach or use modes transportation. Does the plan or action ease access to opportunities and destinations that give rise to the need for travel.	Connectivity/ease of connections	Intersection density	Yes		x	GIS
		Modal availability	Bicycle network coverage; Pedestrian Network coverage; Transit service hours	No			Local Jurisdiction GIS layers (miles of bikeways, sidewalks, etc)
		Option values		Yes	x		Based on average wages
		Changes in access/ access management/ severance		Yes	x		ODOT Right of way data
		Parking supply and regulations		Yes		x	Local Transportation Department
Economic Sustainability	Does the plan or action contribute to the economic prosperity of Oregon (i.e., growth in employment, production or other high value economic activity)?	Change in employment	Unemployment rate	Yes	x		Local MPO or COG; Oregon Employment Department; Oregon Office of Economic Analysis; Oregon Regional Economic Analysis Project
		Revitalization	Number of new building permits	Yes	x		Local Government Development Commission
		Public accounts		Yes	x		Local Government Management & Finance Office
		Lifecycle cost		Yes	x		Varied, depending on cost elements
		Gross regional product		Yes	x		MPO Management & Finance Office
		Change in personal income		Yes	x		Oregon Regional Economic Analysis Project
		Business productivity from increased competition		Yes	x		Input-output tables by county
		Displacements		Yes	x		County tax assessor data
		Business productivity from proximity		Yes	x		Input-output tables by county
Business productivity from lower transportation costs		Yes	x		Input-output tables by county		
Environmental Sustainability	Does the plan or action help provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs from the perspective of ecological and social objectives?	Greenhouse gases	GHG emissions; GHG per capita	Yes	x		Oregon GreenStep Model; local/regional greenhouse gas inventories
		Water quality and quantity	Impervious surface coverage	Yes	x		DEQ Water Quality; Oregon Water Resources Department
		Local air quality		Yes	x		DEQ Air Quality; Regional Travel Model & EPA MOBILE and CAL3QHC Models
		Agriculture and natural resource lands		Yes	x		US Department of Agriculture; Natural Resources Conservation Services (Soil Maps)
		Biodiversity		Yes	x		Oregon Department of Fish and Wildlife; US Fish and Wildlife Services (Species lists), Oregon Natural Heritage and Information Center
		Wildlife/habitat impacted		Yes	x		Oregon Department of Fish and Wildlife; US Fish and Wildlife Services (Species lists), Oregon Natural Heritage and Information Center
		Geologic resources		Yes		x	Oregon Department of Geology and Mineral Resources; USGS National Earthquake Information Center
		Noise		Yes	x		EPA Community Noise Report (1971); FHWA's Traffic Noise Model (TNM)
		Visual quality/aesthetics		Yes	x		Local Planning Department (Scenic Resource Zoned Lands, Designated Viewshed corridors)
		Heritage		No		x	Oregon State Historic Preservation Office; Oregon Historic Parks and Recreation Department; US Department of the Interior National Register of Historic Places
Safety and Security	Does the plan or action improve the safety of transportation facilities and systems? Does it help improve security at existing or planned transportation facilities?	Highway	Crash rates	Yes	x		ODOT Crash Analysis Unit
		Pedestrian	Pedestrian fatalities	Yes	x		ODOT Crash Analysis Unit
		Bicycle		Yes	x		ODOT Crash Analysis Unit
		Transit		Yes	x		ODOT Crash Analysis Unit
		Aviation		Yes	x		Local Airport
		Freight Rail		Yes	x		ODOT Crash Analysis Unit
		Subjective sense of personal safety		No		x	
		Updated safety and security plans		Yes	x		Local Departments of Transportation; Local Transit Authority; Local Airport; Railroads, etc
Funding the Transportation System / Finance	How does the plan or action impact public accounts? Impacts include effects on fiscal balances and indebtedness	Public-private balance	Ability to leverage private investment	Yes	x		State and local finance data
		Capital costs	Annual capital expenditures	Yes	x		National Transit Database; ODOT; MPO or Local/Regional Transportation Department
		Fiscal balance		Yes	x		State and local finance data

		(OUTCOME BASED)	INDICATORS <sup>1</sup>		Yes/Some Evidence	No	
		Life-cycle operating costs		Yes	x		ODOT or local public works data
		Life-cycle maintenance costs		Yes	x		ODOT or local public works data
		Operating revenues		Yes	x		National Transit Database; Local Transit Authority; ODOT; Local/Regional Transportation Department
<b>Land Use and Growth Management</b>	Does the plan or action help foster efficient development patterns that optimize travel, housing, employment, and infrastructure spending decisions?	Amount of land developed	Ratio of developed to undeveloped land within the UGB	Yes	x		MPO or COG, Local Planning Department
		Land value	Changes in property values	Yes	x		County Tax Assessor Office
		Population density		Yes	x		PSU Population Research Center, Local Planning Department
		Employment density and location		Yes	x		Local MPO or COG; Oregon Employment Department; Oregon Office of Economic Analysis; Oregon Regional Economic Analysis Project
<b>Quality of Life and Livability</b>	Does the plan or action improve the quality of living and working environments, and the experience for people in communities across Oregon?	Physical activity	Heart attack rates	Yes	x		Oregon Public Health Division
		Obesity and health	Childhood obesity rates	Yes	x		Oregon Public Health Division
		Journey ambiance/ travel conditions		Yes	X		published academic research
		Open space		Yes	x		Local Parks and Recreation Department
		Ability to meet travel needs efficiently		Yes	x		MPO and Local Gov Transportation and Land Use Planning Departments (number of needs that can be met within a given distance or travel time)
<b>Equity</b>	Does the plan or action improve the availability of transportation choices among different geographies and population groups? How are the effects of the plan or action distributed across different geographies and population groups?	Distribution of benefits/cost by population group	Impacts to low-income and minority populations	Yes	X		US Census Bureau; American Community Survey; Oregon Department of Education (school info on free and reduced lunch program); Local Housing Authorities; Oregon Dept of Human Services
		Distribution of benefits/costs by geography		Yes	x		US Census Bureau, American Community Survey

1. Note that specific indicators will not be developed until Phase 2. The specific indicators provided here are included as illustrative examples and are not intended to be exhaustive.

2. Monetization determinations are in draft form and subject to review