

Key Terms

The following terms are helpful in understanding Mosaic:

- **Aggregated travel data:** travel data loaded that was post-processed in a travel demand model or other algorithm to produce statistics used in various specific indicators. Users can enter either aggregated or disaggregated travel data in Mosaic.
- **Base Case:** the reference bundle which serves as the point of comparison for alternative bundles. The Base Case is usually a “no build” or “low build” alternative.
- **Benefit-Cost analysis (BCA):** Systematic process for calculating and comparing benefits and costs of different bundles of projects, programs, and policies. BCA is used to monetize benefits and costs that can be expressed in dollars.
- **Bundles:** Groups of transportation actions and investments such as projects, policies, and programs that are evaluated in the Tool. Before analysis, each bundle is to be described, with capital cost estimates and funding years entered for each project.
- **Categories of Transportation System Performance:** General topic or outcome against which potential planning and project decisions will be evaluated. Mosaic includes nine Categories of transportation system performance, derived from Oregon Transportation Plan goals and policies.
- **Decision Maker:** Key audience of Mosaic, including agency management, political leaders and key stakeholders. During a planning process, decision makers (in addition to others) help determine the weights of categories and indicators of transportation system performance and evaluate Mosaic results.
- **Disaggregated travel data:** outputs from a travel demand model that include trip tables and travel time tables, organized by origin-destination pairs. Unlike aggregated travel data (see above), Mosaic processes disaggregated data used to measure certain specific indicators (mostly in the Mobility category). Users can enter either aggregated or disaggregated travel data in Mosaic.
- **Discount Rate:** Time-varying assumption that Mosaic uses to reduce the value of future dollar benefits or costs. The higher the discount rate, the less value is placed on future dollar benefits for each project.
- **Indicators (General):** Aspects of the categories of transportation system performance that will be evaluated, and for which a few measures or indicators are defined.

- **Indicators (Specific):** An exact measure of performance, defined by a clear scope and a unit of measurement. Mosaic has 40 specific indicators.
- **Least Cost Planning:** As defined by the Oregon State Legislature in 2009’s Jobs and Transportation Act, “least-cost planning means a process of comparing direct and indirect costs of demand and supply options to meet transportation goals, policies or both, where the intent of the process is to identify the most cost-effective mix of options.”
- **MODA (Multi-Objective Decision Analysis):** a process that evaluates and assigns value to different indicators that cannot be monetized. Stakeholders use a structured process to determine weights to categories and indicators that reflect their relative value. Quantitative or qualitative indicators may be used in MODA, which provides a basis for comparing monetized and non-monetized indicators.
- **Monetized:** Refers to measurement in dollars. Indicators that can be reliably and credibly measured in dollars are “monetized” in Mosaic. Monetization assumptions are based on research literature.
- **Net Present Value (NPV):** Future discounted benefits minus costs. Net present value is used to compare monetized benefits to costs for each bundle.
- **Programs:** In Mosaic, “programs” refers to a suite of travel demand management programs that can be applied in bundles. These programs are designed to reduce vehicle travel demand. Users are provided guidance on the estimated range of effects for each program.
- **Report-only indicator:** these are indicators in Mosaic that are only provided as information to decision makers, but do not have a quantitative effect on the Mosaic analysis. “Report only” indicators are generally those that decision makers are accustomed to seeing during the transportation planning process (e.g., vehicle miles travelled per capita), the benefits of which are already represented in Mosaic benefit-cost calculations.
- **Sensitivity Testing:** in Mosaic, sensitivity testing is the process of testing how bundle values (in dollar or MODA terms) change if certain parameters are changed. For example, users can modify the value of time and see how the results for bundles change. This process allows users to understand how “sensitive” Mosaic outputs are to changes in key parameters, and thereby understand the possible impacts of uncertain measurements or assumptions on Mosaic outputs.
- **Sketch models:** sketch models or sketch planning tools are designed to provide order-of-magnitude estimates of some impacts of land use and transportation plans and

projects. Several sketch models are included in Mosaic. These tools are simpler to use than complex modelling software. However, sketch models provide generalized results that must always be used and interpreted with caution.

- **Time-varying assumptions:** these assumptions include the *real discount rate*, the *value of time for personal and business travel*, and many other assumptions that influence Mosaic results. Users are provided guidance on the appropriate range of value for each assumption.
- **Weighting:** the process of assigning value to certain indicators in Mosaic. Through a structured process, stakeholders work in a group to assign weights for non-monetized indicators (excluding “report only” indicators).