

*Standard Performance Attributes for Transportation Projects*

<i>Performance Attribute</i>	<i>Definition</i>
<b>Mainline Operations</b>	An assessment of traffic operations and safety on the mainline facility(s), including off-ramps, and collector-distributor roads. Operational considerations include level of service relative to the 20 year traffic projections as well as geometric considerations such as design speed, sight distance, lane widths and shoulder widths.
<b>Local Operations</b>	An assessment of traffic operations and safety on the local roadway infrastructure, including on-ramps and frontage roads. Operational considerations include level of service relative to the 20 year traffic projections; geometric considerations such as design speed, sight distance, lane widths; bicycle and pedestrian operations and access.
<b>Maintainability</b>	An assessment of the long-term maintainability of the transportation facility(s). Maintenance considerations include the overall durability, longevity and maintainability of pavements, structures and systems; ease of maintenance; accessibility and safety considerations for maintenance personnel.
<b>Construction Impacts</b>	An assessment of the <u>temporary</u> impacts to the public during construction related to traffic disruptions, detours and delays; impacts to businesses and residents relative to access, visual, noise, vibration, dust and construction traffic; environmental impacts related to water quality, air quality, soil erosion and local flora and fauna.
<b>Environmental Impacts</b>	An assessment of the permanent impacts to the environment including ecological (i.e., flora, fauna, air quality, water quality, visual, noise); socioeconomic impacts (i.e., environmental justice); impacts to cultural, recreational and historic resources.
<b>Project Schedule</b>	An assessment of the total project delivery from the time as measured from the time of the Study to completion of construction.

- ◆ In addition to these “standard” six performance attributes, up to two additional attributes should be made available to address site specific issues. The use of these attributes should be based upon the discretion of the project’s PDT and/or stakeholders. A list of commonly used attributes that may be relevant is provided below. It should be noted that this list is not all inclusive and that the VA Process must be flexible enough to consider any potential aspect of performance.

<i>Optional Performance Attributes for Transportation Projects</i>	
<i>Performance Attribute</i>	<i>Definition</i>
<b>Phaseability</b>	An assessment of how easily a transportation facility can be improved or expanded upon at some future date. This attribute considers the degree of “throw-away work” involved as well as future traffic and public impacts when the planned future improvements are made.
<b>Land-Use Compatibility</b>	An assessment of the overall compatibility of transportation facilities with existing and planned land uses. This attribute considers how a transportation facility will directly affect the quality and viability of the land-uses around it. <i>[NOTE: This attribute is often used for projects that involve significant right-of-way acquisition and that will have significant impacts to municipalities and/or private entities.]</i>
<b>Cultural Impacts</b>	An assessment of the permanent impacts to cultural, recreational and historic resources. <i>[NOTE: Sometimes it is desirable to split the standard attribute “Environmental Impacts” into multiple, free-standing attributes. This is in recognition that sometimes socioeconomic, cultural and natural resources are in conflict with one another.]</i>
<b>Ecological Impacts</b>	An assessment of the permanent impacts to the ecological resources including flora, fauna, air quality and water quality. <i>[NOTE: Sometimes it is desirable to split the standard attribute “Environmental Impacts” into multiple, free-standing attributes. This is in recognition that sometimes socioeconomic, cultural and natural resources are in conflict with one another.]</i>
<b>Hydrological Impacts</b>	An assessment of the project’s impact to lakes, rivers and streams in its vicinity. The attribute also considers the performance of the transportation facility during flood events.

Stated attribute suggestions from the Advisory Committee Meeting on September 10, 2008

- Safety
- Congestion
- Variations in peak periods for schools.
- Emergency Access to hospital and Key Peninsula
- Lighting for pedestrian safety
- Accommodations and safety for non-motorized facilities.
- Safe public access to park property.

- ◆ The use of the following performance attributes (or any variation of these) should be strongly discouraged for the following reasons:

<p><b>Public Acceptance</b></p>	<p>This attribute commonly appears but should be avoided due to the difficulty on trying to assess the broad notion of community or public acceptance by such a small group of individuals possessing a relatively narrow perspective (i.e., the PDT). In reality, “public” or “community” acceptance is a byproduct of the “standard” performance attributes described previously. In other words, the public is more likely to accept a design solution that performs well in these areas (and/or costs less) and less likely to accept one that does not (and/or costs more). Therefore, the use of such an attribute is redundant.</p>
<p><b>Constructability</b></p>	<p>This attribute also commonly appears on VA Studies, however, it is really a byproduct of “Project Schedule,” “Construction Impacts,” and cost. A design solution that is more constructible than another will involve trade-offs between these three areas. Therefore, inclusion of an attribute such as “Constructability” is redundant and unnecessary.</p>
<p><b>Right-of-Way Impacts</b></p>	<p>This attribute is better described by attributes such as “Environmental Impacts,” “Land-Use Compatibility” or possibly “Cultural Impacts” as well as cost. My experience has been that when this attribute is used, in effect, performance is really related to cost, which results in “double counting” by considering this as both an output (i.e., performance) and an input (i.e., cost).</p>

**EXAMPLE TAKEN FROM SR-16/Burnham I/C Level 2 Screening**

<b>PERFORMANCE ATTRIBUTE &amp; REQUIREMENT DEFINITIONS</b>	
<b><i>Performance Attribute</i></b>	<b><i>Definition</i></b>
<b>Traffic Operations SR 16</b>	Operations on SR 16 mainline and ramps
<b>Traffic Operations Local Streets</b>	Traffic Operations and access on city and county streets (Economic Vitality)
<b>Constructability</b>	Phasing, MOT during construction and impact to traveling public and businesses
<b>Utility Impacts</b>	Water, Sewer, Power, High Voltage
<b>R/W impacts</b>	Need to acquire / purchase R/W
<b>Compatibility with interim</b>	Interim project on existing Interchange to mitigate for traffic impacts (minimize throw away)
<b>Need for Additional Projects</b>	The interchange improvements would require additional projects on SR16, in the City, and Pierce County to create traffic distribution and keep acceptable level of service at critical intersections.
<b>Environmental Impacts</b>	Wetlands, Streams, EJ, Cultural Resources