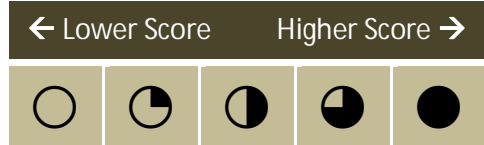


DRAFT CYCCS Phase II Measure of Effectiveness Summary Comparison

September 22, 2011



		Capital Cost	Benefit/Cost	Economic Benefit	Daily Traffic Volumes	Travel Times and Delay	Traffic Safety	Transit	Rural and Urban Character	Environmental Constraints
<i>Regional Strategies</i>										
B-1	Upgrade Rte 111/202									
B-3	Upgrade Route 111/202 with add'l Turnpike access and connections									
B-5	Biddeford Expressway (South)									
B-6	Biddeford Expressway (North)									
K-2	Upgrade Rte 109									
K-3	Kennebunk Expressway									
NB-1	Upgrade Rte 4 and New North Berwick Bypass									
NB-2	Upgrade Rte 4 and New North Berwick – Maine Tpk/Ogunquit Hwy									
NB-3	Ogunquit Expressway									
<i>Local Strategies</i>										
B-2	New Biddeford Highway Connections									
B-4	Southern Sanford Bypass									
K-1	Rte 99 – Rte 35 Connection									

NOTE: Higher scores reflect more positive or less negative impacts to the noted Measure of Effectiveness.

Capital Cost

The Cost MOE includes the estimated construction cost and the present value of periodic reinvestments for the strategy. The rating scale places all strategies with construction costs exceeding \$80 million in the lowest rating, reflecting fiscal constraints.

- More than \$80 Million
 \$60 to \$80 Million
 \$40 to \$60 Million
 \$20 to \$40 Million
 Less than \$20 Million

Benefit/Cost (BC) Ratio

The ratio of expected benefits (quantified in dollar equivalents) to expected costs. In acknowledgement of the conceptual nature of strategies and screening-level application of BC analysis, the rating scale does not treat a BC of 1.0 as a strict cutoff because the strategies are not fully refined at the Phase II level. The modeling and benefit-cost analysis tools applied during Phase II are designed to assess large-scale strategies and may be less reliable in evaluating the smaller, local strategies.

- Negative net benefits
 BC less than 0.7
 BC 0.7 to 1.0
 BC 1.0 to 1.3
 BC 1.3 or higher

Economic Benefit

This is the estimated increase in 2035 regional annual economic output (expressed in 2010 dollars). It includes net changes in long-term jobs, the Gross Regional Product and regional economic output (Gross Regional Product plus additional monies circulating within the regional economy). Gross Regional Product is a measure of the market value of all goods and services produced in York County and immediately adjacent areas. Economic benefits are rated on a relative scale. See the Detailed Phase II Evaluation Matrix for more information regarding the size of added economic benefit in relation to the overall economy of York County.

- Less than \$0.2 Million
 \$0.2 to \$0.4 Million
 \$0.4 to \$0.6 Million
 \$0.6 to \$0.8 Million
 More than \$0.88 Million

Daily Traffic Volumes

The Traffic and Travel Patterns score is based on changes in traffic volumes between select locations indicated below, total vehicle miles traveled and the effect on congested locations:

Biddeford: Route 111, in Arundel and Biddeford, especially approaching Exit 32 from the Maine Turnpike.

Sanford: Route 109 from Springvale to Route 4 in South Sanford.

Wells: Route 109 between the Maine Turnpike and Route 1. Route 1 near Route 109 and south to Ogunquit.

Kennebunk: Route 35 between exit 25 from the Maine Turnpike and downtown. Route 1 in downtown Kennebunk.

For this assessment, decreases of less than 2,000 vehicles per day are considered moderate. Decreases greater than 2,000 vehicles per day are considered large.

- Increases traffic at one or more congested locations
- Does not affect congested locations
- Moderate traffic reduction one or two congested locations
- Moderate traffic reduction at multiple congested locations; moderate reduction in traffic along Routes 4, 109 or 111/202
- Large traffic reductions at two or more congested locations; Large reduction in traffic along Routes 4, 109 or 111/202

Travel Times and Delays

This MOE includes travel times for select trips (Sanford to the Maine Turnpike in Saco, for example) and the projected change in Vehicle Hours Traveled (VHT). See the Detailed Evaluation Matrix for more information.

For this assessment, decreases of less than 5 minutes are considered moderate, while greater decreases are considered large.

- Increases system-wide VHT
- VHT decreases by 0.5% or less. No effect on specific travel times.
- VHT decreases by 0.5% to 1.0%. No or moderate effects on specific travel times.
- VHT decreases by more than 1.0%. Moderate improvement to some specific travel times.
- VHT decreases by more than 1.0%. Large improvement to one or more specific travel times.

Traffic Safety

The Traffic Safety MOE is based on the number of High Crash Locations (HCLs) that would be addressed by the proposed improvement and the expected system-wide change in crash rates based on the amount of travel by highway type. This analysis calculates a theoretical change in county-wide crash frequency based on VMT, functional roadway classification, and statewide crash rates by functional classification. These effects are also captured in the Benefit/Cost Ratio MOE.

- May increase crash frequency
- 0% to 0.5% potential reduction in crashes. Low likelihood of improving existing HCLs
- 0.5% to 1.5% potential reduction in crashes. Moderate likelihood of improving one or more HCLs
- 0.5% to 1.5% potential reduction in crashes and likely to address several HCLs
- Greater than 1.5% potential reduction in crashes

Transit Operations and Access

This MOE focuses on identifying locations where the Phase II Highway Strategies might improve or adversely affect access to transit service or the operation of the services.

- Two or more potential adverse effects noted
- One potential adverse effect noted
- No potential adverse effects noted, or mix of potential adverse and positive effects
- One potential positive effect noted
- Two or more possible positive effects noted

Rural and Urban Character

The Rural and Urban Character MOE considers the amount of undeveloped or lightly developed land potentially affected (rural character), as well as town centers and historic sites (urban character). This MOE is measured in miles of corridor in which these areas are present.

- More than 20 miles
- 15 to 20 miles
- 10 to 15 miles
- 5 to 10 miles
- Fewer than 5 miles

Environmental Constraints

The Environmental Constraints MOE considers the presence of wetlands and other regulated natural resources that are along the general alignment as an indicator of the potential degree of effect on environmental features. This MOE is measured in miles of corridor in which regulated resources are known to be present.

- More than 10 miles
- 7 to 10 miles
- 3 to 7 miles
- 0 to 3 miles
- No environmental constraints identified