

**Appendix H**  
**Qualitative Performance Measure Strategy Evaluation for 2003 Plan**

## **Appendix H**

### **Qualitative Performance Measure Strategy Evaluation for 2003 Plan**

The Planning Committee used a qualitative performance measure evaluation of each of the strategies tested in the alternatives analyses for the 2003 Plan. The evaluation was one of the screening tools used in the development of the strategies that were included in the final Best-of Theme analysis. The Best-of Theme served as a primary component in the development of the *Destination Tomorrow* Implementation Plan.

The following factors were included in the consideration of the qualitative performance measure evaluation.

1. The individual scores for each criterion and the total scores are more relevant for comparing projects *within the same theme rather than between themes*. The totals do not reflect that some criteria are potentially more important than others. For example, a total of 17 for two strategies/projects within the Arterial Theme more properly imply equal merit than does comparing a 17 total score for an Arterial strategy/project and a 17 total score for a Transit strategy/project.
2. Many of the Transit projects have higher total scores than many of the more highway-oriented projects. Several roadway projects have high positive scores and some negative scores for individual criteria, which may result in a lower total but may not reflect a project's overall merit.
3. Individual as well as total scores were considered in the evaluation.
4. The evaluation does not consider other important factors such as cost-effectiveness and the importance or priority of the problem that the strategy aims to solve or improve.
5. The evaluation involved a both subjectivity and objectivity.
6. Many strategies have complex benefits and/or impacts. For instance the Gorham Bypass strongly benefits Gorham Village but may have negative impacts on surrounding neighborhoods or developments and have broader regional land use impacts. The scoring tries to reflect this balancing act within criteria and between the criteria.



Appendix H: Qualitative Performance Measure Evaluation for 2003 Plan

Goal Category	Economic Development	Mobility, Connectivity, Accessibility & Safety				Energy Conservation			Land Use			Environmental Quality	Direct/Indirect Transportation Effects (changes in volumes, etc)	Notes/Comments			
		Reduce Congestion & Delay	Improve Safety of Transport Users	Improve Truck Circulation	Provide Regional Connectivity between Transport Modes	Enhance Transportation Choices/Alternatives	Promote Pedestrian, Bike & Transit Modes	Reduce SOV Trips	Minimize Energy Consumption	Discourage Dispersed Development within the Region	Promotes Compact Development within Communities				Transportation Strategies that Protect Neighborhoods	Minimize Physical Environmental Impacts	Reduce Vehicle Emissions
	3	3	3	3	3	3	3	-1	-5	-3	1	-3	-1	-3			
<b>Rating of Achievement of Objectives: from a range of -5 to +5</b>																	
16 Limited access road from the Turnpike to Sebago Lake area/Route 35.	3	3	3	3	3	3	3	-1	-5	-3	1	-3	-1	-3	Increases VMT but reduces congestion.		
<i>Modeling Increment #5 (includes increment 1 only plus below)</i>																	
8 Widening of I-295 to six lanes from Exit 3 to Bucknam Road.	1	3	3	1	1	3	-1	-3	2	-1	1	-1	-1	6			
9 A widening of I-295 and I-95 north of Bucknam Road.	1	3	3	1	2	3	-1	-3	1	-3	1	-1	-1	4			
<i>Additional Measures (off-model)</i>																	
17 Incident management															0		
18 Electronic tolling															0		
<b>Arterial Theme Package</b>																	
<i>Modeling Increment #1</i>																	
3 Reconfigure Exit 7 spur (Route 703) to an arterial.	3	3	1	1	0	1	0	0	0	0	1	-1	0	9			
4 Widen sections of Spring/Cummings in Westbrook and South Portland, Outer Congress in Portland.	3	3	1	3	1	1	1	-1	-1	0	1	0	1	13			
6 Widen & Reconfigure intersections/segments on b. Brighton -- widen to 5 lanes and 3 lanes with reversible lane in peak direction c. Forest -- restripe as 5 lanes (1. south of Woodfords) and 4 lanes (2. betw. Woodfords and Morrills Corner) d. Washington -- restripe as 3 lanes	1	3	1	1	1	1	1	-1	-1	0	-1	0	-1	0	1	6	
11 Widen Route One near Dunstan's Corner.	0	1	1	1	1	1	-1	-1	0	0	0	0	-3	-1	1	4	
13 Widen Riverside Street between Exit 8 and Warren Avenue	0	3	1	1	1	1	1	1	0	0	-1	0	-1	1	8	Less room for cyclists on road. Less room for cyclists on road.	
<i>Modeling Increment #2</i>																	
1 Build a Gorham Village bypass.	3	3	3	1	3	3	1	0	-3	-1	3	0	3	-3	-1	9	Smaller traffic reductions on Rt 25 in Gorham Village from B strategy (above); reductions in Village a positive; potential negative impacts on suburban neighborhoods. Likely to induce new tripmaking in corridor.
2A Build the Route 22/114 southwest bypass.	3	3	3	1	3	3	0	0	-3	-1	3	0	1	-3	-1	6	Improved bicycle-pedestrian environment in Gorham Village. Adds to higher VMT but lowers VHT.
2B Extend Turnpike Exit 7 Spur westward to Running Hill Road, and widen of Running Hill to four lanes.	3	3	3	1	3	3	0	0	-3	-1	3	0	1	-3	-3	4	Adds to higher VMT but lowers VHT.
5 Build Gorham's proposed Industrial Park road.	3	0	0	0	3	1	0	0	0	0	1	1	0	0	9		

+5=strongly positive; +3=moderately positive; +1=slightly positive; 0=negligible; -5=strongly negative; -3=moderately negative; -1=slightly negative. Wilbur Smith Associates

Appendix H: Qualitative Performance Measure Evaluation for 2003 Plan

Goal Category	Economic Development	Mobility, Connectivity, Accessibility & Safety				Energy Conservation			Land Use			Environmental Quality	Notes/Comments				
		Maintain/Improve Travel Alternatives to Key Centers	Reduce Congestion & Delay	Improve Safety of Transport. Layers	Improve Truck Circulation	Provide Regional Connectivity between Transport Modes	Enhances Transportation Choices/Alternatives	Promote Pedestrian, Bike & Transit Modes	Reduce SOV Trips	Minimize Energy Consumption	Discourages Dispersed Development within the Region			Promotes Compact Development within Communities	Transportation Strategies that Protect Neighbors/Neighborhoods	Minimize Physical Environmental Impacts	Reduce Vehicle Emissions
<b>Rating of Achievement of Objectives: from a range of -5 to +5</b>																	
7	Extend the I-295 Connector Road westward beyond Sewall Street.	3	3	1	3	0	-1	0	1	13				Mixed: Positive impacts directly along Connector Street; potential negative on local streets along alignment.			
8	Build the Larabee Road extension to Spring Street.	3	1	1	3	0	-1	0	1	1							
9	Build the Route 1 Southbound ramp to Northbound Scarborough Connector.	1	1	0	3	3	0	0	0	3	0	0	12	J. Bennett proposes to connect further to Gorham Inland Park Road (E5). Proposed to remove trucks from Rt 1 in So. Portland.			
10	Highland Avenue connector road to Rummy Road.	1	0	0	1	1	0	0	-1	0	1	0	2				
<i>Modeling Increment #3</i>																	
11	Falmouth Spur extension west to Route 257/Moshers Corner, Gorham.	1	1	1	3	3	0	-1	-1	-3	0	-1	-3	Adds back traffic to Route 25 in Gorham.			
12	Lumpkin connector to Route 302/Fosters Corner, Windham	1	1	1	3	3	0	-1	-1	-3	0	1	-3	Adds to higher VMT but lowers VHT.			
<i>Additional Measures (off-mode)</i>																	
13	Street interconnectivity -- Collector roads																
14	Access management																
<b>Transit Theme</b>																	
<i>Modeling Increment #1</i>																	
1	Double frequencies on existing fixed route service for METRO, SPBS and BSCOB	1	3	1	0	0	3	3	3	1	0	3	1	3	25	Reduces short trips/cold starts (highest emissions/mile trips).	
<i>Modeling Increment #2</i>																	
2	Route extensions and new routes																
	a. Mail to Walmar.	1	1	0	0	1	1	1	1	1	0	0	1	1	10		
	b. West Falmouth Crossing.	1	1	0	0	1	1	1	1	1	0	0	1	1	11		
	c. Outer ring route.	1	1	0	0	3	3	1	1	1	-1	0	3	1	16		
	d. Inner ring route.	1	1	0	0	3	3	1	1	1	-1	0	3	1	16		
	e. Gorham Bus Service.	1	3	1	0	0	3	3	1	3	1	-1	0	3	1	20	
	f. North Windham Commuter Service.	3	3	1	0	0	3	3	3	3	1	-1	0	3	1	24	
	g. Cape Elizabeth Commuter Service	1	1	1	0	0	3	3	1	1	-1	0	1	1	14		
	h. Brunswick to Portland Express Bus	1	3	1	0	0	3	5	3	3	1	0	0	1	3	24	
	i. Port Shuttle (not modeled)	3	1	1	0	0	5	3	1	0	1	0	1	1	18		
<i>Modeling Increment #3A</i>																	
6	Bus Rapid Transit: New alignment BRT																
	a. Falmouth Route 1	3	1	1	0	3	3	1	1	1	-1	1	1	unk	1	17	1720 PM Peak Hour Trips Forecasted ridership = 165

+5=strongly positive; +3=moderately positive; +1=slightly positive. 0=neutral. -1=slightly negative; -3=moderately negative; -5=strongly negative.

Appendix H: Qualitative Performance Measure Evaluation for 2003 Plan

Goal Category	Economic Development	Mobility, Connectivity, Accessibility & Safety				Energy Conservation			Land Use			Environmental Quality		Direct/Indirect Transportation Effects (changes in volume, etc)	Notes/Comments	
		Provide Transport Alternatives to Econ. Centers	Maintain/Improve Travel Corridor Accessibility to Econ. Centers	Reduce Congestion & Delay	Improve Safety of Transport. Users	Improve Truck Circulation	Provide Regional Connectivity between Transport Modes	Enhance Transportation Choices/Alternatives	Promote Pedestrian, Bike & Transit Modes	Reduce SOV Trips	Minimize Energy Consumption	Discourages Dispersed Development within the Region	Promotes Compact Development within the Region			Transportation Strategies that Protect Neighborhoods
Rating of Achievement of Objectives: from a range of -5 to +5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	31	Unknown BRT Env. Impacts - depends on use of existing vs. new alignment.
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	29	Unknown BRT Env. Impacts - depends on use of existing vs. new alignment.
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	31	Unknown BRT Env. Impacts - depends on use of existing vs. new alignment.
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	27	Unknown BRT Env. Impacts - depends on use of existing vs. new alignment.
	5	3	3	3	3	3	3	3	3	3	3	3	3	3	35	Unknown BRT Env. Impacts - depends on use of existing vs. new alignment.
	0														0	
5															0	
															36	1700 PM Peak Hour Trips
															31	Forecasted ridership = 500
															27	Forecasted ridership = 340
															35	Forecasted ridership = 370
															30	Forecasted ridership = 175
															30	Forecasted ridership = 130
<i>Additional Measures (off-mode)</i>																
7																
3																
4																

Key:  
 +5 = strongly positive; +3 = moderately positive; +1 = weakly positive.  
 0 = negligible/not applicable.  
 -5 = strongly negative; -3 = moderately negative; -1 = weakly negative.  
 unk - Unknown