

## Cape Cod TIP Project Evaluation - Detailed Scoring Template

Category	Criteria	Points (out of 100)
<b>System Preservation and Modernization</b>	<ul style="list-style-type: none"> <li>Pavement and signal equipment improvement</li> <li>Sidewalks and other infrastructure enhancement</li> <li>Use of modern technology</li> </ul>	<b>35</b>
<b>Mobility</b>	<ul style="list-style-type: none"> <li>Motorist congestion</li> <li>Non-motorist congestion</li> <li>Connectivity / access</li> <li>Mobility / accommodation of non-motorists</li> </ul>	<b>10</b>
<b>Safety</b>	<ul style="list-style-type: none"> <li>Motorist crash history and anticipated safety impact</li> <li>Non-motorist crash history and anticipated safety impact</li> </ul>	<b>10</b>
<b>Economic Impact</b>	<ul style="list-style-type: none"> <li>Access to or within a regionally-designated economic development area</li> <li>Access to or within a locally-designated business district</li> <li>Connections between housing, job, cultural centers, and essential services</li> </ul>	<b>10</b>
<b>Environmental and Health Effects</b>	<ul style="list-style-type: none"> <li>Wetlands, wildlife, or other resource protection</li> <li>Water quality through stormwater management and treatment</li> <li>Air quality / GHG emission</li> <li>Coastal Resiliency / Sea Level Rise Vulnerability</li> <li>Cultural resources or open space</li> <li>Healthy Transportation Options</li> </ul>	<b>10</b>
<b>Cost Effectiveness</b>	<ul style="list-style-type: none"> <li>Project cost per user</li> </ul>	<b>15</b>
<b>Policy Support</b>	<ul style="list-style-type: none"> <li>Regional plans/policies</li> <li>Local plans/policies</li> <li>State or MassDOT Policies and goals</li> </ul>	<b>10</b>

### Notes on Project Scoring

Points within each criterion should be seen as guides. Points should be given based on the best match and may be awarded in between increments as appropriate. Project receiving a negative score on any question should be further analyzed.

<b>A - System Preservation and Modernization Scoring</b>			
	<b>Criterion</b>	<b>Factor</b>	<b>Points</b>
1	<b>Primary asset condition / effect on condition</b>	Poor or failing / substantial improvement	15
		Fair / moderate improvement	8
		Good / minor improvement	4
		Excellent / no improvement	0
2	<b>Enhancements to other assets</b> (Projects elements included in the project, but not part of the primary project focus ie. Sidewalks with repaving project)	Poor or failing / substantial improvement	10
		Fair / moderate improvement	7
		Good / minor improvement	4
		Excellent / no improvement	0
3	<b>Use of modern technology to improve efficiency and support ITS regional efforts</b> (ie. continuous traffic counting equipment, adaptive signal control, emergency preemption systems)	Use of innovative technology and/or incorporation of traffic counting technology	10
		Improvement in technology to current best practices	7
		Maintain/repair existing technology	4
		Not applicable	0
			<b>Total Score = up to 35</b>
<b>B - Mobility Scoring</b>			
	<b>Criterion</b>	<b>Factor</b>	<b>Points</b>
1	<b>Existing motorist congestion / effect on motorist congestion</b> (Projects identified in Congestion Management Plan network are able to receive maximum points)	Location identified in the CMP network/ substantial improvement	4
		Significant existing / substantial improvement	3
		Significant existing / moderate or minor improvement	2
		Minimal existing / minor improvement	1
		No change	0
		Negative effect	-1
2	<b>Effect on mobility / accommodation of non-motorists</b>	Substantial improvement	3
		Moderate improvement	2
		Minimal improvement	1
		No effect for non-motorists	0
		Negative effect on mobility / accommodation	-1
3	<b>Effect on connectivity / access</b> (emphasis placed on key emergency and evacuation routes)	Substantial improvement to connectivity through the corridor	3
		Moderate improvement to connectivity	2
		Minimal effect on connectivity	1
		No effect on connectivity	0
		Negative effect on connectivity	-1
			<b>Total Score = up to 10</b>
<b>C - Safety</b>			
	<b>Criterion</b>	<b>Factor</b>	<b>Points</b>
1	<b>Motorist crash history and anticipated safety impact</b> (Note: Highway Safety Improvement Program (HSIP) eligible locations are determined by MassDOT and includes the 5% percent of locations in the region based on a severity weighted crash rate)	Location is HSIP eligible and project is anticipated to improve motorist safety	5
		Location has a demonstrated crash problem and project is anticipated to improve motorist safety	3
		No demonstrated crash problem, but project is anticipated to improve motorist safety	2
		No safety improvement anticipated	0
		The project may adversely affect motorist safety	-1
2	<b>Non-motorist crash history and anticipated safety impact</b>	Location identified as a HSIP Bicycle or Pedestrian Cluster and project is anticipated to improve non-motorist safety	5
		Location has a demonstrated safety deficiencies for non-motorists and project is anticipated to improve non-motorist safety	3
		Location has a demonstrated safety deficiencies for non-motorists and project is anticipated to improve non-motorist safety	2
		No safety improvement anticipated	0
		The project may adversely affect non-motorist safety	-1
			<b>Total Score = up to 10</b>

<b>D - Economic Impact Scoring</b>			
	<b>Criterion</b>	<b>Factor</b>	<b>Points</b>
1	<b>Effect on access to or within a regionally-designated economic development area</b> (ie. Economic Center, GIZ, etc.)	Substantial improvement	4
		Moderate improvement	3
		Minor improvement	1
		No effect	0
		Negative effect	-1
2	<b>Effect on access to or within a locally-designated business district</b>	Substantial improvement	3
		Moderate improvement	2
		Minor improvement	1
		No effect	0
		Negative effect	-1
3	<b>Effect on connections between housing, job, cultural centers, and essential services within and beyond the region or effect on the freight network</b>	Substantial improvement	3
		Moderate improvement	2
		Minor improvement	1
		No effect	0
		Negative effect	-1
			<b>Total Score = up to 10</b>

<b>E - Environmental and Health Effects Scoring</b>			
	<b>Criterion</b>	<b>Factor</b>	<b>Points</b>
1	<b>Effect on wetlands, wildlife, or other resource protection</b>	Anticipated improvement	2
		Minor contribution to preservation	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
2	<b>Effect on water quality through stormwater management and treatment with an emphasis on for nitrogen</b> (points for anticipated improvements may also be given for projects involving culvert widening)	Anticipated improvement in stormwater management and treatment	2
		Anticipated improvement in stormwater management	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
3	<b>Effect on air quality / GHG emission</b>	Significant, quantifiable decrease in GHG anticipated	2
		Minor, quantifiable or qualitative decrease in GHG anticipated	1
		No effect on GHG anticipated	0
		Anticipated increase in GHG	-1
4	<b>Coastal Resiliency / Sea Level Rise Vulnerability</b> (Vulnerable areas include those identified as a Special Flood Hazard Area (SFHA), areas identified by the Sea, Land, and Overland Surges from Hurricanes (SLOSH) model, or areas susceptible to sea level rise)	Project vulnerable area with resilient design	2
		Project in not in a vulnerable area but includes with resilient design elements	1
		Project not in vulnerable area and not special consideration given to resilient design	0
		Project in a vulnerable area and is not a resilient design	-1
5	<b>Effect on cultural resources or open space</b>	Anticipated improvement	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
6	<b>Healthy Transportation Options</b>	Increase in healthy transportation options	1
		No anticipated impact or negative impacts adequately mitigated	0
		Negative impact	-1
			<b>Total Score = up to 10</b>

F - Cost Effectiveness Scoring			
	Criterion	Factor	Points
1	Project cost per user (Use cost/ADT/lane mile calculation as a general indicator, but flexibility is appropriate when considering unique project circumstances particularly for projects involving bicyclists and pedestrians. Low cost safety measures can be given full points.)	See reference table below, but consider unique circumstances	up to 15
		High cost project serving a small number of users	-1
			<b>Total Score = up to 15</b>
		Notes	Value
	<b>Cost Estimate</b>		
	ADT	For intersections, enter combined ADT of intersecting roads. For projects where ADT is unknown, use regional data to approximate.	
	Length (in miles)	For intersections, enter total length of all approaches within project limits.	
	Number of Lanes	Travel lanes only	
	Project Service Life	7, 14, or 21 years	
<b>Reference</b>			
	<i>Cost/ADT/Lane Mile*</i>	<i>Points</i>	
	<i>is less than \$50</i>	15	
	<i>is less than \$100</i>	12	
	<i>is less than \$200</i>	8	
	<i>is less than \$500</i>	4	
	<i>is less than \$1000</i>	0	
	<i>is more than \$1000</i>	-1	
<i>*Multiply by 2/3, 1, or 1.5 for service life of 7, 14, or 21 years, respectively</i>			
G - Policy Support Scoring			
	Criterion	Factor	Points
1	Community support (as indicated through collective statements or actions of the highest elected officials in the effected communities)	Stated support of the project by the highest elected officials	3
		Actions by highest elected officials indicate general support of the project	2
		Neutral	0
		Collective opposition voiced by the highest elected officials	-1
2	Regional plans/policies (ie. RTP, Regional Policy Plan, CEDS)	Project specifically identified in Regional Plan	3
		Strongly supports Regional Plans/Policies	2
		Moderately supports Regional Plans/Policies	1
		Neutral	0
		Inconsistent with Regional Plans/Policies	-1
3	Local plans/policies(ie. LCP, local ordinances, bylaws, etc.)	Project specifically identified in Local Plan	2
		Consistent with Local Plans/Policies	1
		Neutral	0
		Inconsistent with Local Plans/Policies	-1
4	Project supports Federal or State (including MassDOT) policies and goals not accounted for in other criteria (GreenDOT, Healthy Transportation, Complete Streets, TZD etc.)	Project specifically identified in a existing Federal or State Plan	2
		Consistent with Federal or State Policies or Principles	1
		Neutral	0
		Inconsistent with Federal or State Policies or Principles	-1
			<b>Total Score = up to 10</b>

# Cape Cod TIP Project Evaluation

## Scoring Summary

(For FFY2017-2021 TIP)

**DRAFT Scoring for purposes of assessing the new evaluation criteria.**

See <http://arcg.is/1UWZAYh> for map or projects and data layers used in scoring the projects.

Project#	Project	System Preservation and Modernization			Mobility			Safety		Economic Impact			Environmental and Health Effects			Cost Effectiveness			Policy Support				Total Score	Potential TIP Year	Old Score	Title VI Population Effected (=Income; M = Minority, LEP = Limited English Proficiency)	Cost Estimate	
		A1. Primary asset condition / effect on condition	A2. Enhancements to other assets	A3. Use of modern technology to improve efficiency and support ITS regional efforts	B1. Existing motorist congestion / effect on motorist congestion	B2. Effect on mobility / accommodation of non-motorists	B3. Effect on connectivity / access	C1. Motorist crash history and anticipated safety impact	C2. Non-motorist crash history and anticipated safety impact	D1. Effect on access to or within a regionally-designated economic development area	D2. Effect on access to or within a locally-designated business district	D3. Effect on connections between housing, job, cultural centers, & essential services within & beyond the region or effect on the freight network	E1. Effect on wetlands, wildlife, or other resource protection	E2. Effect on water quality through stormwater management and treatment with an emphasis on for nitrogen	E3. Effect on air quality / GHG emission	E4. Coastal Resiliency / Sea Level Rise Vulnerability	E5. Effect on cultural resources or open space	E6. Healthy Transportation Options	F1. Project cost per use	G1. Community support (as demonstrated through highest elected officials)	G2. Regional plans/policies	G3. Local plans/policies						G4. Project supports Federal or State (including MassDOT) policies and goals not accounted for in other criteria
606272	Barnstable, Rte 28 at Yarmouth Rd	15	10	9	4	3	3	5	2	4	3	3	0	1	1	0	0	1	10	3	3	2	1	83	2018	67	I, M, LEP	\$6,154,421
607398	Yarmouth-Barnstable, Cape Cod Rail Trail Extension	15	10	7	3	3	3	3	5	4	3	3	0	0	2	0	1	1	10	3	3	2	1	82	2017	64	I, M, LEP	\$7,067,146
607397	Wellfleet, Rte 6 at Main St	15	10	9	3	3	3	5	4	3	3	3	1	1	2	0	0	1	8	3	3	1	1	82	2018	44	None	\$2,000,400
606900	Bourne, Belmont Circle Multi-modal Improvements	12	10	5	3	3	3	5	4	4	3	3	1	1	1	0	1	1	15	2	3	1	1	82	2019	46	M	\$5,040,000
607319	Mashpee, Rte 151	12	10	7	4	3	3	5	4	3	3	3	1	1	1	0	1	1	12	2	2	1	1	80	2019	50	M, LEP	\$8,250,000
606707	Dennis, Rte 28 Corridor & Streetscape Improvements	12	10	5	2	3	3	5	4	4	3	3	2	1	2	0	1	1	10	2	3	2	1	79	2017	35	I, M	\$5,597,012
608196	Dennis, Route 28 Streetscape Improvements (Phase 2)	12	10	7	2	3	3	3	4	4	3	3	1	1	2	0	1	1	12	2	3	1	1	79	Future		I, M	\$4,500,000
607405	Chatham, Rte 28 at Main St, Depot Rd, Queen Anne Rd and Crowell Rd	15	10	9	4	3	3	3	3	0	3	3	0	1	1	0	0	1	10	2	3	1	1	76	2019	43	None	\$2,400,000
608422	Sandwich, Shared Use Path on Service Rd (Rte 130 to Chase Rd)	15	10	5	3	3	3	3	4	3	2	3	0	0	2	0	1	1	10	3	3	1	1	76	Future		M	\$5,000,400
607394	Yarmouth, Rte 6 Exit 8 Ramps	15	7	7	3	3	2	5	2	4	3	3	0	1	1	0	0	1	10	1	1	1	1	71	Future		I, M, LEP	\$5,000,400
606276	Barnstable, Route 132 at Route 6A	12	7	8	3	2	1	3	3	2	3	2	0	1	1	0	1	1	10	3	2	1	1	67	Future		I, M, LEP	\$1,200,000
607435	Barnstable, Rte 28 at Osterville-West Barnstable Rd	8	10	8	3	3	2	5	2	0	0	2	0	1	1	0	0	1	12	2	3	1	1	65	2017	34	M, LEP	\$2,311,857
607444	Falmouth, Rte 28A at Rte 151	10	10	8	1	3	3	5	2	0	3	1	0	1	1	0	0	1	8	3	1	1	1	63	2017	50	M	\$2,797,859
608349	Truro-Wellfleet, Route 6 Bicycle Accommodations	10	5	0	3	3	3	1	4	2	2	2	0	0	2	0	1	1	15	3	3	1	1	62	Future		None	\$500,000
608264	Yarmouth, Rte 28 Resurfacing and Related Work	15	7	0	1	2	2	2	3	2	1	1	1	1	0	0	1	1	15	1	3	1	1	61	Future		I, M, LEP	\$4,000,000
201701	Barnstable, CCRTA Hyannis Loop Demonstration	8	3	3	3	3	3	2	2	4	3	3	0	0	1	0	0	1	15	2	2	1	1	60	2017		I, M, LEP	\$659,100
606082	Bourne, Rte 6 Scenic Highway Median Installation	12	7	0	1	1	2	5	2	3	2	2	0	1	0	0	0	0	15	2	3	1	1	60	Future		M	\$8,050,000
245317	Cape Cod, Bicycle Rack Program	15	0	0	1	2	2	0	1	2	2	1	0	0	2	0	1	1	15	3	2	1	1	52	2017		TDB	\$100,000
606236	Barnstable, Rte 28 Resurfacing and Related Work	15	3	0	1	1	1	2	2	2	1	1	1	1	0	0	0	0	15	1	2	1	1	51	Future		I, M, LEP	\$2,875,000
608201	Har-Brew-Orl, Route 6 Resurfacing	12	5	0	1	0	1	2	0	2	1	2	1	1	0	0	0	0	15	1	2	1	1	48	2017		I, M	\$6,615,000
608409	Dennis-Yarmouth, Route 6 Resurfacing and Related Work	12	0	0	1	0	1	2	0	2	1	2	1	1	0	0	0	0	15	0	2	1	1	42	Future		I, M, LEP	\$2,500,000