Aquidneck Island Transportation Study
On the move...connecting our communities

Evaluation of Roadway Improvement Packages

		Mobility Benefits										Cost Effectiveness			Economic Development Impact					Environmental Impacts						Degree of Local Support and State Goals and Plans				Safety, Security, and Technology							Cost	
		Reduced vehicle-miles traveled (VMT) or reduced trip lengths	Reduced vehicle-hours traveled (VHT) or reduced trip durations	Reduced delays/back-ups for vehicles at intersections	Travel time differences	Improved mobility for bicyclists and pedestrians	Improved access for transit	Physical or operational enhancement to bus, rail, ferry, and parking systems	Average system travel speeds	**Average Mobility Benefits**		Order of magnitude costs	Opportunity for phasing	**Weighted Average Cost Effectiveness**	Impacts to existing economic bases	Economic development potential (enhanced access/travel time savings to existing and targeted commercial/industrial development areas)	Improved access to vacant and underutilized sites	Enhances opportunities for transit-oriented development	**Average Economic Development Impact**	Greenhouse gas reductions	Study area intersection delays and improvements to air quality	Potential for vehicle trip reductions due to mode shifts/reduced reliance on automobiles	Direct impacts to natural environment (wetland/habitat/ open space/ historic areas/ conservation areas/others)	Impacts to human environment (residential/business/ schools/ community facilities benefits and impacts, environmental justice)	**Average Environmental Impacts**	Consistency with municipal plans, goals, and visions	Concurrence by Portsmouth, Middletown, and Newport officials	Support from implementing agency	**Average Degree of Local Support and State Goals and Plans**	Safer conditions for pedestrians	Safer conditions for bicyclists	Potential for crash reductions (direct improvement to intersection)	Potential for crash reductions (indirect benefit from traffic shifts)	Impacts to emergency response	Improved driveway/roadway access management (consolidation/ elimination of access points on major roadways)	**Average Safety, Security, and Technology**	**Preliminary Order-of-Magnitude Construction Cost Estimate**	**Weighted Index (Max = 100)**
ROADWAY IMPROVEMENTS																																						
1	Pell Bridge Access Improvements	○	◎	◎	◎	◎	◎	○	◎	◎	■	●	◘	◎	●	●	●	●	◎	◎	◎	·	□	◎	●	●	◎	●	●	◎	●	●	◎	●	◎	●	$34,000,000	**57.95**
2a	Burma Road - 2 Lanes with North and South Connections	○	○	○	○	○	○	·	○	○	■	●	◘	□	◎	◎	◎	◎	○	○	·	□	◘	□	◎	·	·	○	○	○	○	◎	○	○	◎	$25,000,000	**18.46**
2b	Burma Road - 4 Lanes with North and South Connections	□	◎	◎	◎	○	○	·	◎	◎	■	●	◘	□	◎	◎	◎	◎	□	◎	◘	■	■	◘	·	·	·	·	◎	◎	○	●	◎	○	◎	$39,000,000	**18.98**
2c	Burma Road - 2 Lanes with North and South Connections - Tank Farms Alignment	○	○	○	○	○	○	·	○	○	■	●	◘	□	◎	●	●	◎	○	○	·	◘	◘	□	·	·	·	·	○	○	○	◎	○	○	◎	$21,000,000	**17.72**
2d	Burma Road - 4 Lanes with North and South Connections - Tank Farms Alignment	□	●	●	◎	○	○	·	◎	◎	■	●	◘	◘	●	●	●	◎	□	●	◘	■	■	◘	·	·	·	·	◎	◎	○	●	●	○	◎	$45,000,000	**26.11**
2e	Burma Road - 4 Lanes with North and South Connections - Limited Access to Route 24	◘	●	●	●	○	○	·	◎	◎	■	●	◘	◘	●	●	●	◎	□	●	◘	■	■	◘	·	·	·	·	◎	◎	○	●	◎	●	●	$56,000,000	**27.54**
3a	Two Mile Corner - Geometric Improvements	·	○	○	·	○	·	·	○	○	◘	·	◘	·	·	·	·	·	·	○	·	·	·	○	◎	◎	◎	◎	○	·	○	·	○	·	○	$2,000,000	**9.46**
3b	Two Mile Corner - Roundabouts	·	◎	◎	○	○	·	·	◎	◎	◘	·	◘	·	·	○	○	○	◎	◎	·	·	□	○	◎	◎	◎	◎	◎	·	●	·	○	◎	◎	$3,000,000	**25.52**
3c	Two Mile Corner - Realignment	○	○	○	○	○	○	·	○	○	◘	·	◘	□	·	◎	○	○	○	○	·	·	◘	·	·	·	·	·	·	◎	·	○	◎	○	$4,500,000	**10.30**
4	Corys Lane/Hedley Street Realignment	·	○	○	○	·	·	·	○	○	□	·	□	·	◎	○	○	◎	○	○	·	□	·	○	●	◎	◎	●	·	·	◎	○	○	○	○	$700,000	**22.31**
5	West Main Rd. Left-turn Lanes (Forest, Oliphant)	·	○	○	○	·	·	·	○	○	□	●	·	·	·	·	·	·	○	○	·	□	·	○	●	●	◎	●	·	·	◎	·	○	·	○	$1,000,000	**19.38**
6	Localized Intersection Safety/Capacity Improvements	·	○	◎	○	○	·	·	○	○	□	●	·	·	·	·	·	·	○	◎	·	·	·	○	●	●	◎	●	○	·	◎	·	○	·	○	$1,000,000	**24.86**
7	Traffic Signal Optimization	·	◎	◎	●	·	◎	·	◎	◎	·	●	○	◎	·	·	·	○	●	◎	·	·	·	◎	●	●	●	●	·	·	○	·	◎	·	○	$100,000	**38.44**

Legend

	Some	Moderate	Substantial
Benefits	○	◎	●
Impacts	□	◘	■
Negligible	·	·	·