



Hyannis Access Study Implementation

November 27, 2012

Glenn Cannon, P.E., Transportation Engineer

Today's Agenda

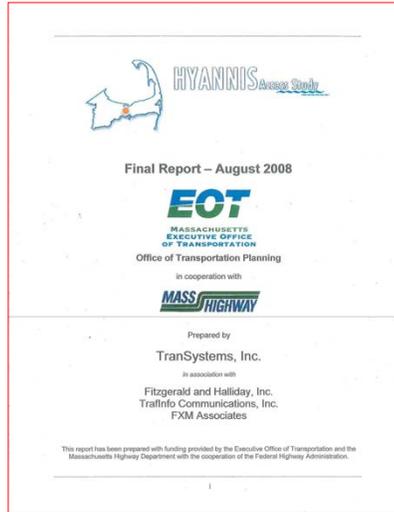


- Project History
- Project Status
- Project Schedule

Project History Hyannis Access Study 2008



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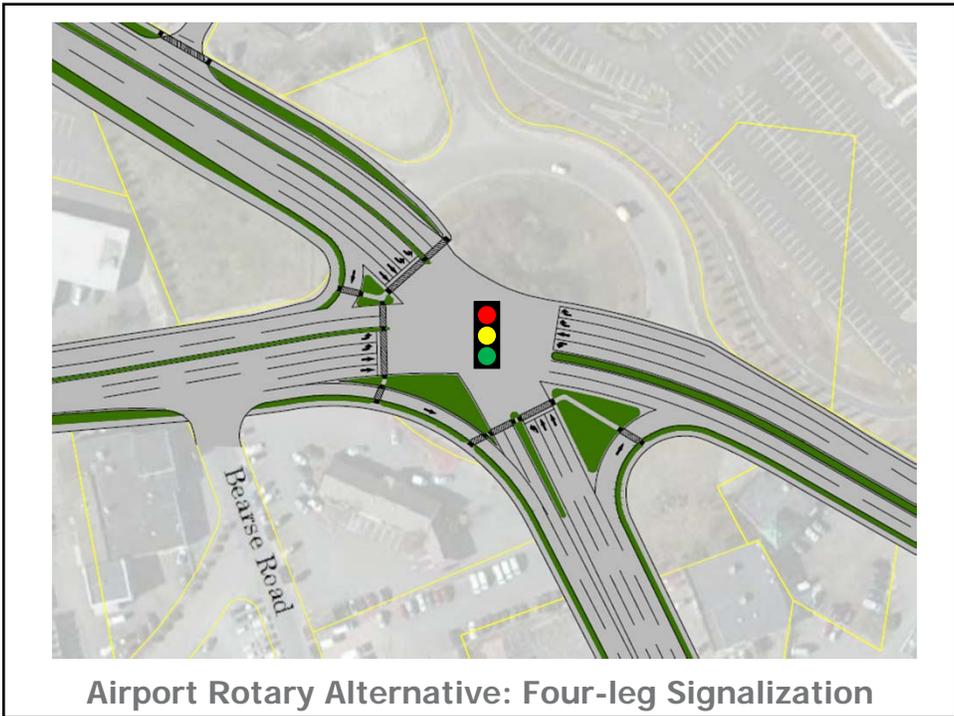
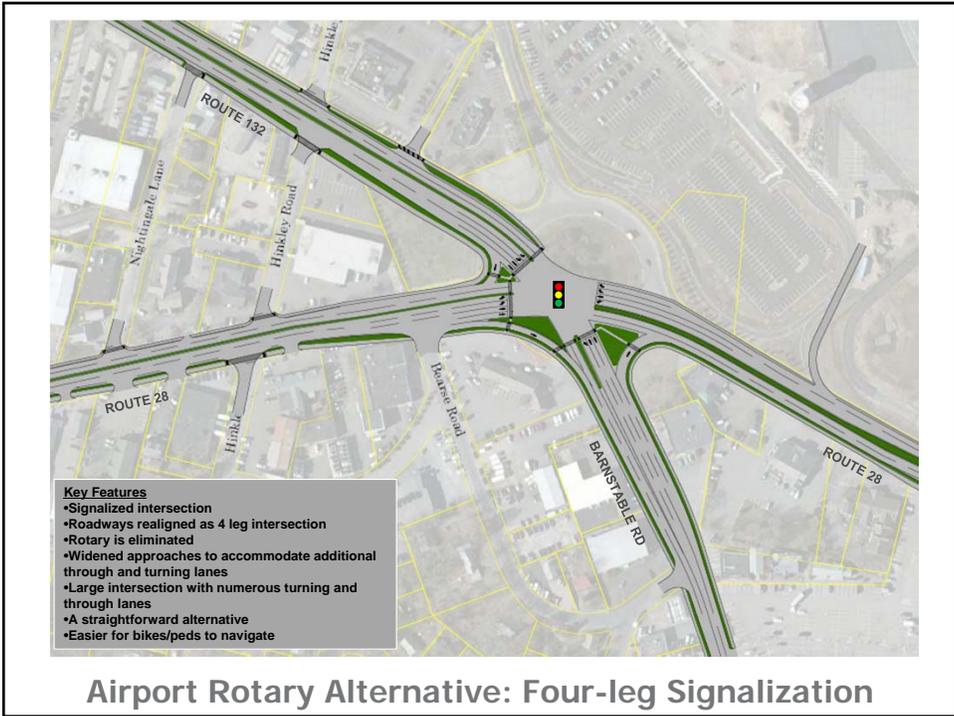


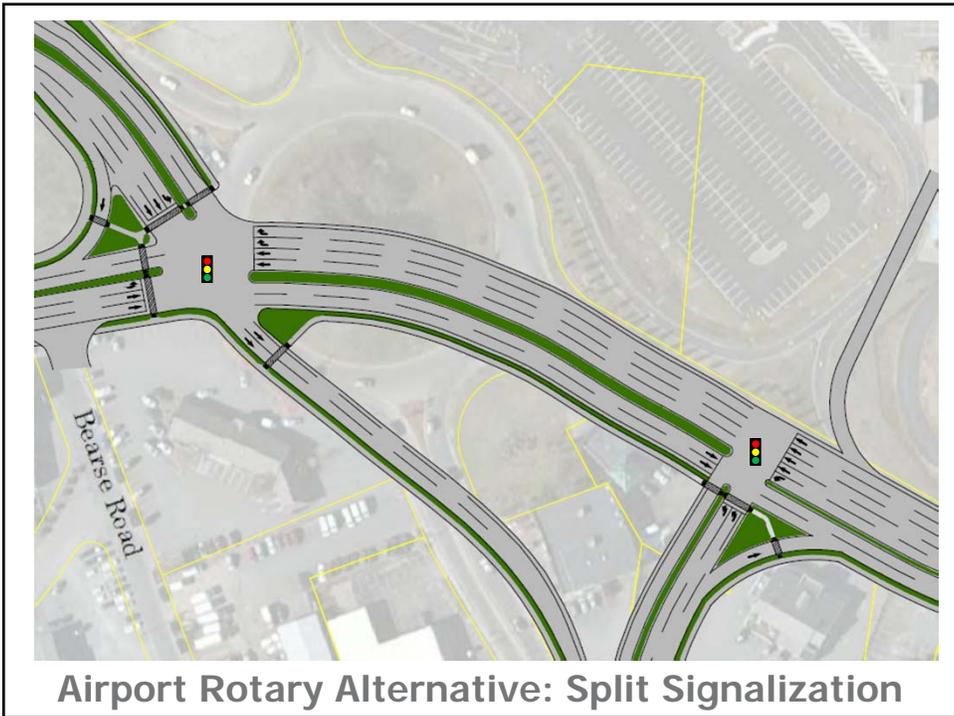
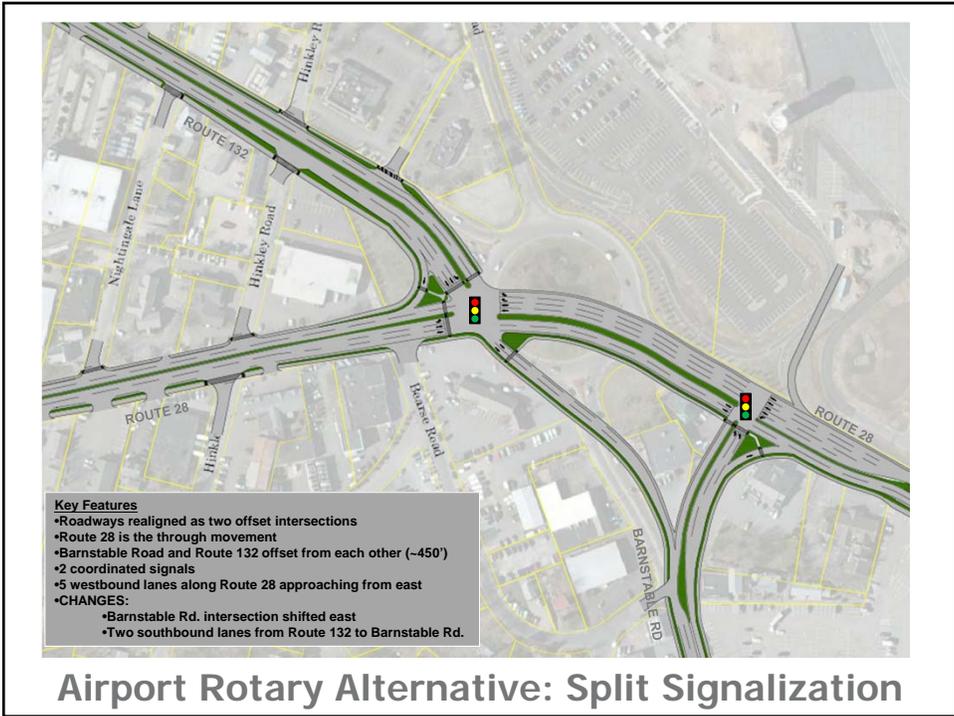
Hyannis Access Study 2008

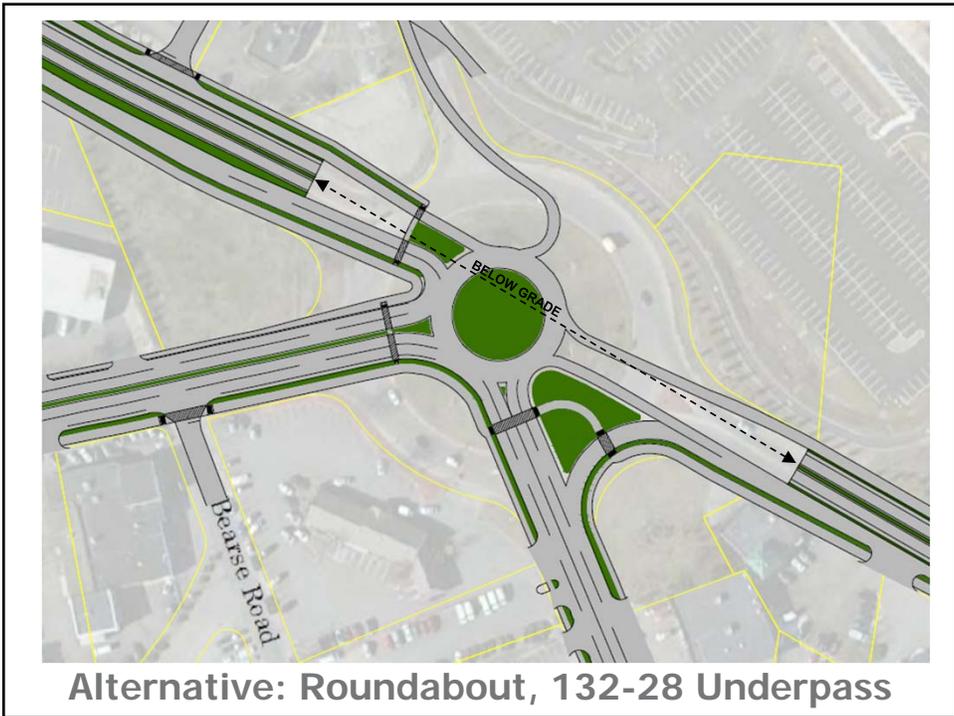
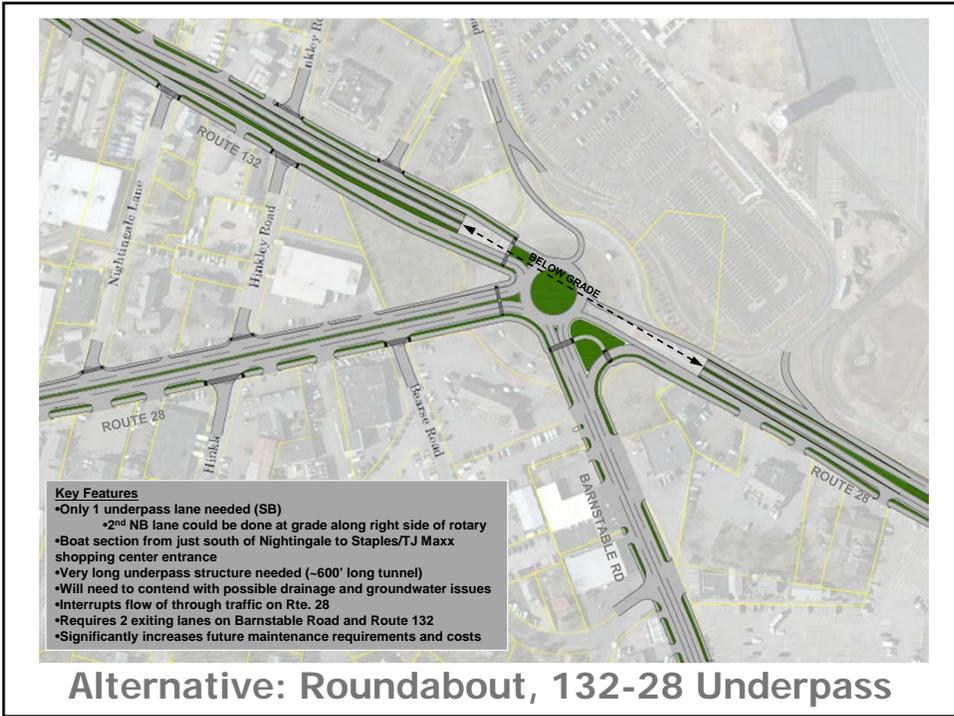


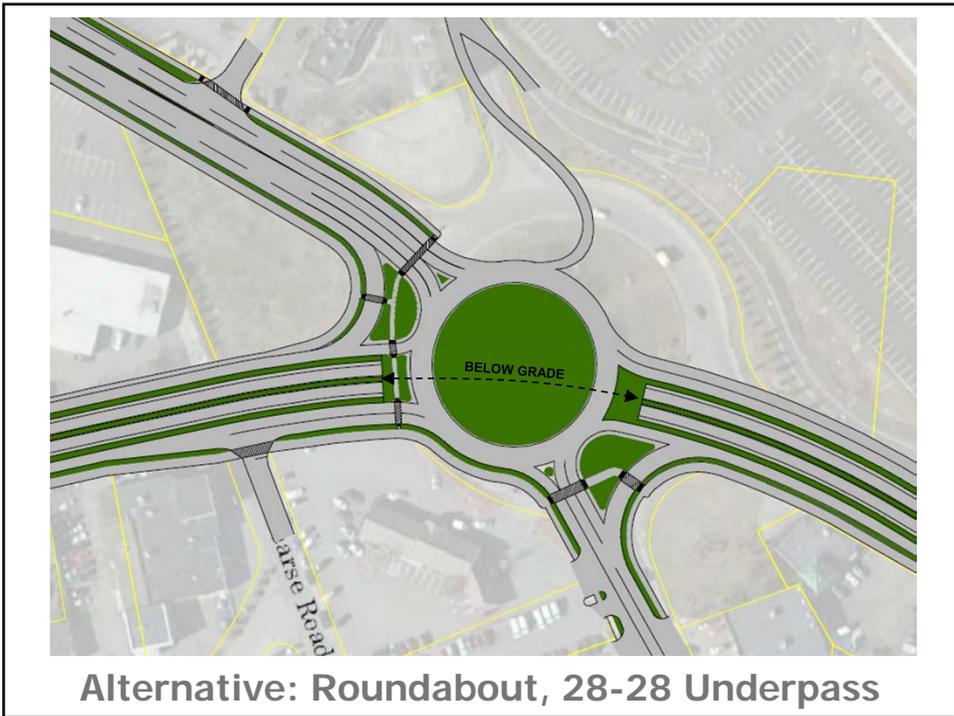
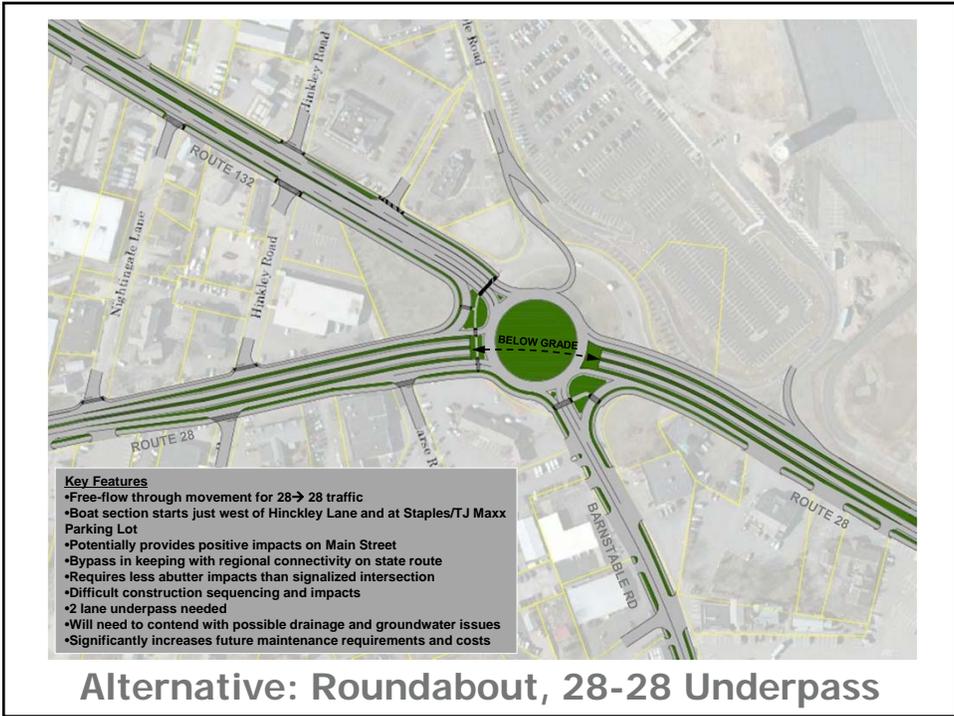
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- **Four Alternatives at the Airport Rotary**
- **Route 28/Yarmouth Road Intersection**
- **Needed Yarmouth Road Corridor Study**
- **Did not address Route 28 between Airport Rotary and Yarmouth Road**

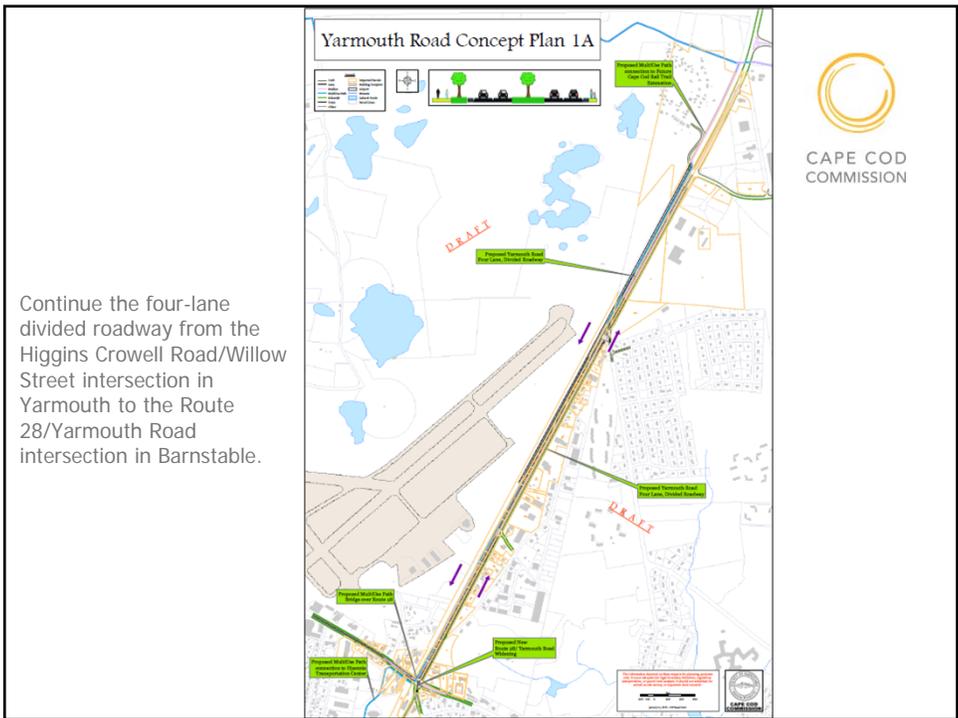
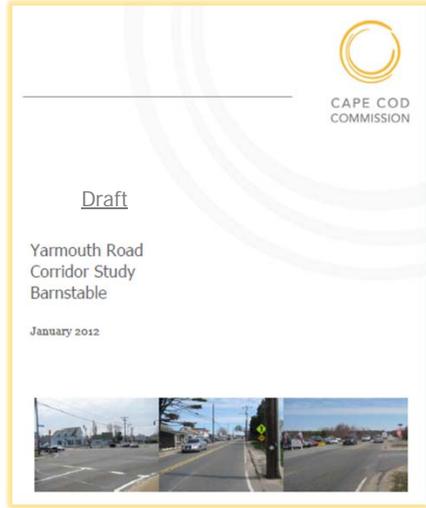








Yarmouth Road Corridor Study 2010





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Yarmouth Road: Concepts 1a
looking south

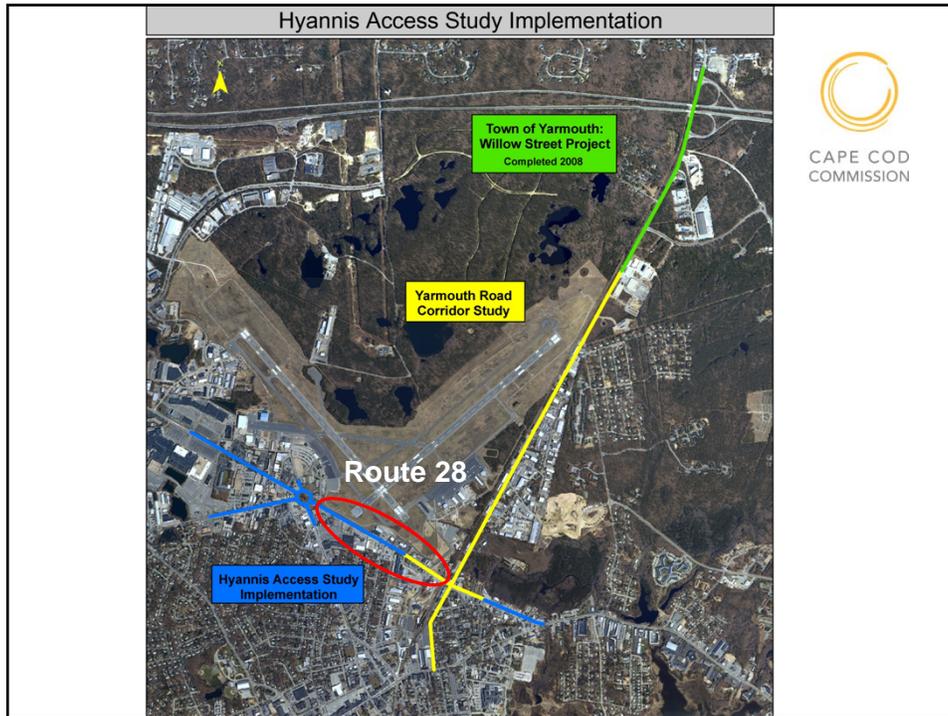
Route 28 / Yarmouth Road Intersection



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Route 28



Project Status



- Public Information Meeting 6/30/10
- Alternatives Developed
- Last Task Force Meeting 9/2/10
- Project Suspended September 2010
- Public Information Meeting 6/20/2012
- Public Meeting 7/31/2012
- Stakeholder Meetings – Summer/Fall 2012
- Alternatives Refined

Hyannis Access Implementation



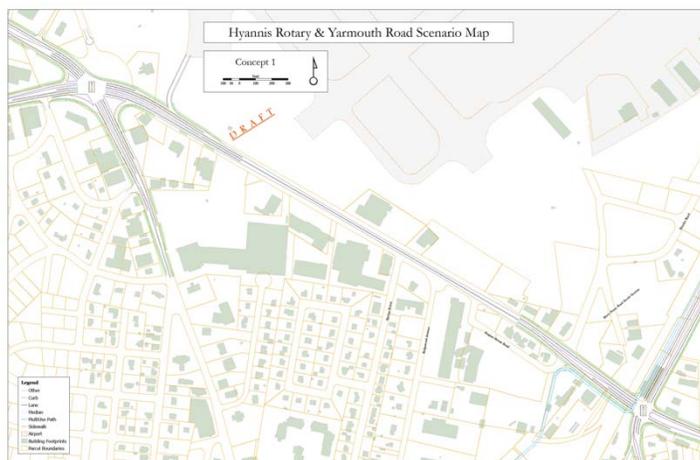
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- Four Alternatives at the Rotary
- Four Alternatives for Route 28
- Sixteen Alternatives total

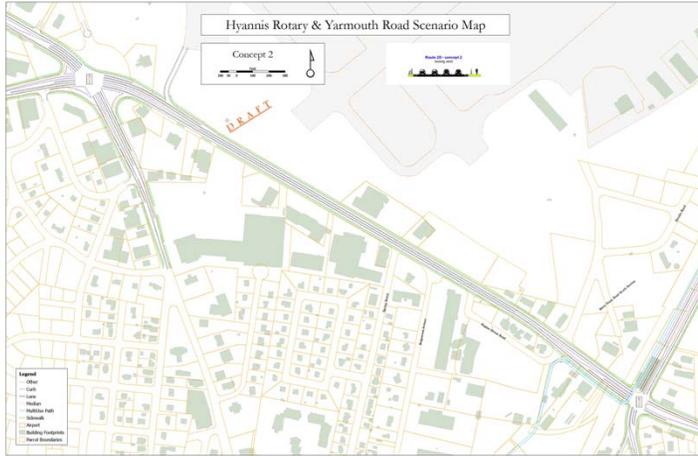
Concepts with No Route 28 Widening



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Concepts with Route 28 Widening, No Median



Current Concept Plans



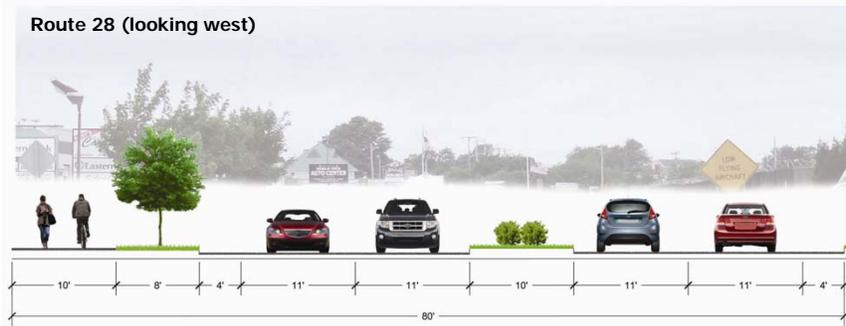
1. Signalize Rotary, No Rt 28 Widening	9. Grade Separation (Rt 132-Rt 28), No Rt 28 Widening
2. Signalize Rotary, Rt 28 Widening, No Median	10. Grade Separation (Rt 132-Rt28), Rt 28 Widening, No Median
3. Signalize Rotary, Rt 28 Widening w/Median & Signals	11. Grade Separation (Rt 132-Rt28), Rt 28 Widening w/Median & Signals
4. Signalize Rotary, Rt 28 Widening w/Median & Roundabouts	12. Grade Separation (Rt 132-Rt28), Rt 28 Widening w/Median & Roundabouts
5. Dual Signals, No Rt 28 Widening	13. Grade Separation (Rt 28-Rt28), No Rt 28 Widening
6. Dual Signals, Rt 28 Widening, No Median	14. Grade Separation (Rt 28-Rt 28), Rt 28 Widening, No Median
7. Dual Signals, Rt 28 Widening w/Median & Signals	15. Grade Separation (Rt 28-Rt 28), Rt 28 Widening w/Median & Signals
8. Dual Signals, Rt 28 Widening w/Median & Roundabouts	16. Grade Separation (Rt 28-Rt 28) Rt 28 Widening w/Median & Roundabouts

Typical Cross Section



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Route 28 (looking west)



Concept 3 – Signalize Rotary, Route 28 Widening with Median and Signals

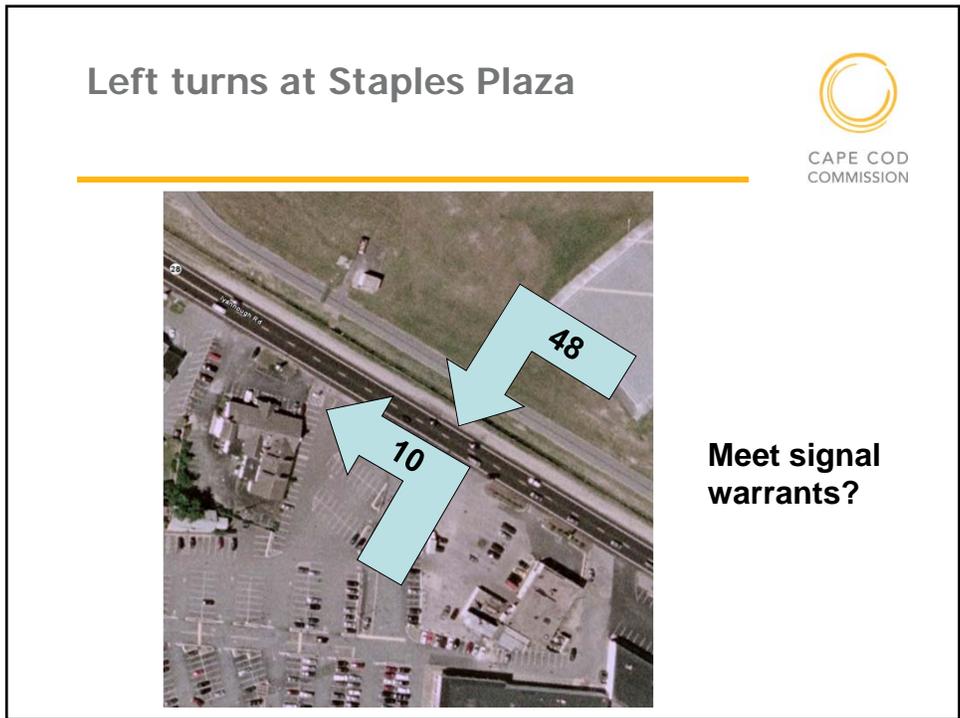
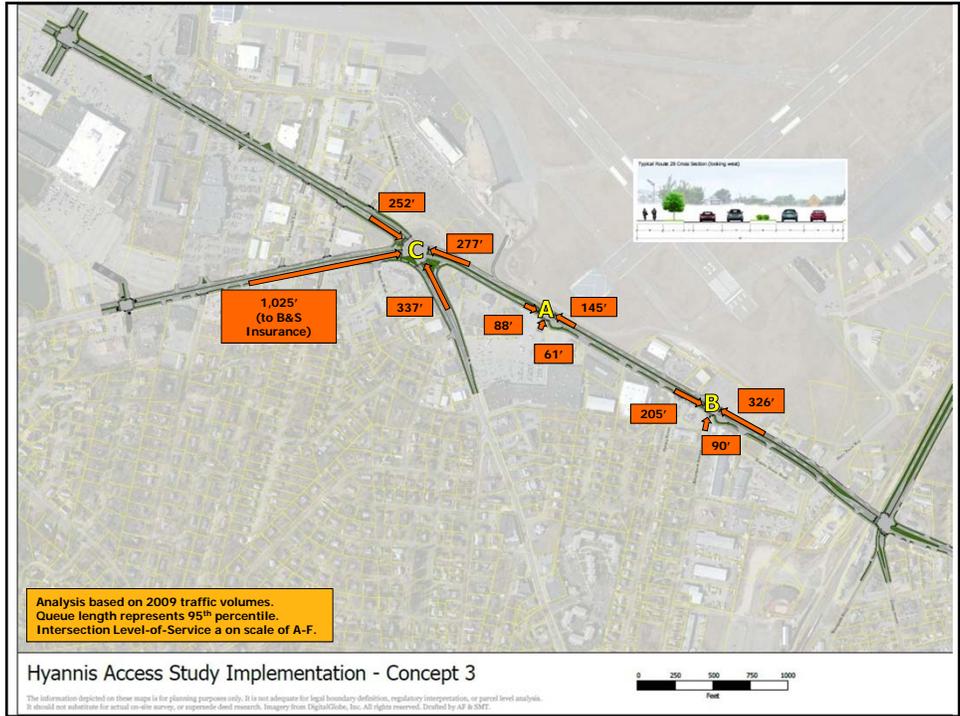


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Hyannis Access Study Implementation - Concept 3

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Concept 4 – Signalize Rotary, Route 28 Widening with Median and Roundabouts



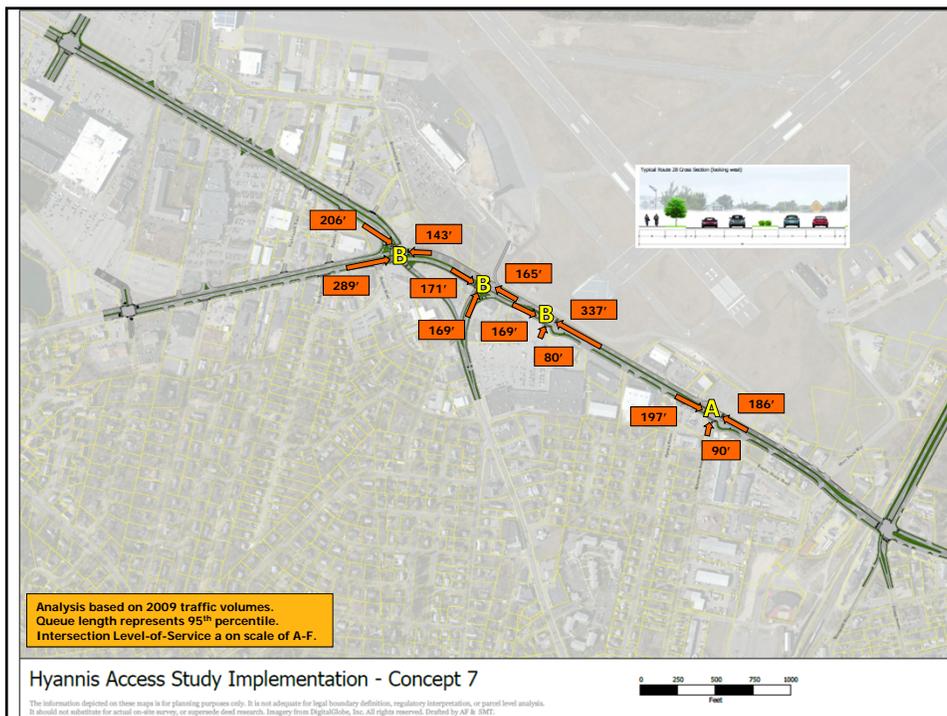
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Concept 7 – Dual Signals, Route 28 Widening with Median and Signals



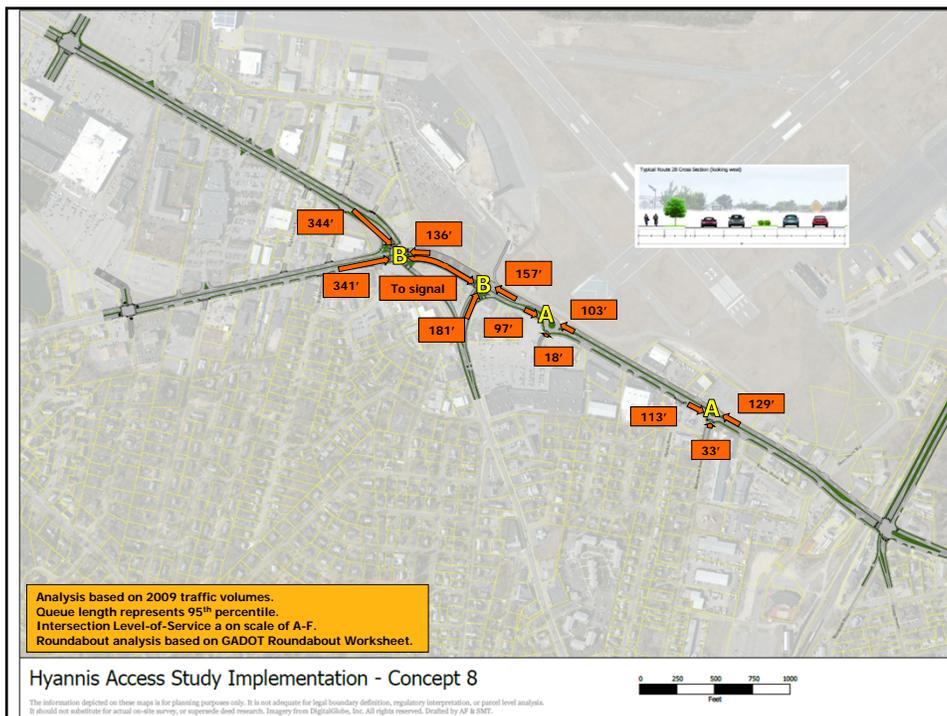
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Concept 8 – Dual Signals, Route 28 Widening with Median and Roundabouts



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Concept 11 – Grade Separation (Rte 132 to Rte 28), Route 28 Widening with Median and Signals



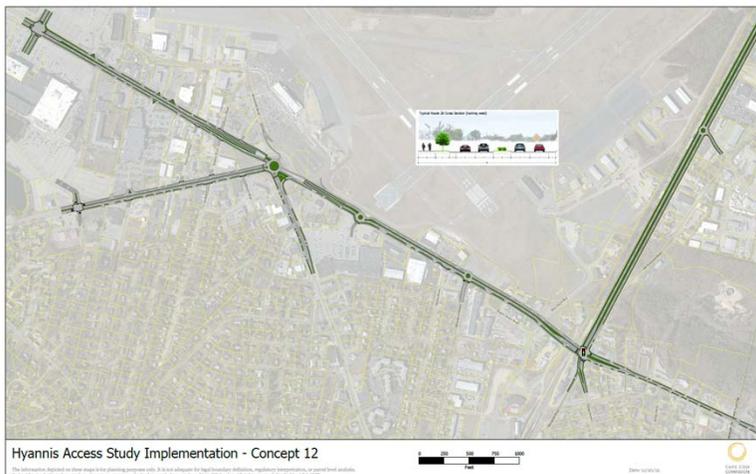
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Concept 12 – Grade Separation (Rte 132 to Rte 28), Route 28 Widening with Median and Roundabouts



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Concept 15 – Grade Separation (Rte 28 to Rte 28), Route 28 Widening with Median and Signals



Concept 16 – Grade Separation (Rte 28 to Rte 28), Route 28 Widening with Median and Roundabouts



Measures of Effectiveness



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Total Delay Of All Vehicles In The Design Hour (in hours)

Four-way Signal:	56.6
Split Signal:	48.2
132-28 Underpass:	22.1
28-28 Underpass:	22.1

Signalized Rt 28 @ Mary Dunn Way / Engine House Rd



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These numbers reflect 2009 traffic volumes.
Queue lengths represent 95th percentile.

Inflated Numbers

Transit-Oriented Development



Rte. 28 / Bears' Way Project Preferred Alternative



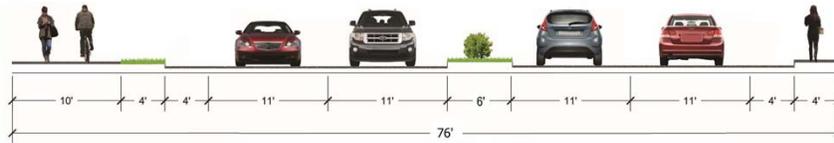
Rte. 28 Between Airport Rotary and Cape Cod Mall Signal



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Route 28 (looking west)



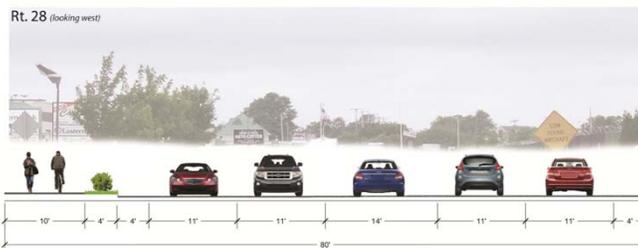
Route 28: 5-Lane Cross-Section



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Rt. 28 (looking west)



Traffic Signal Alternative – Driver Dilemma



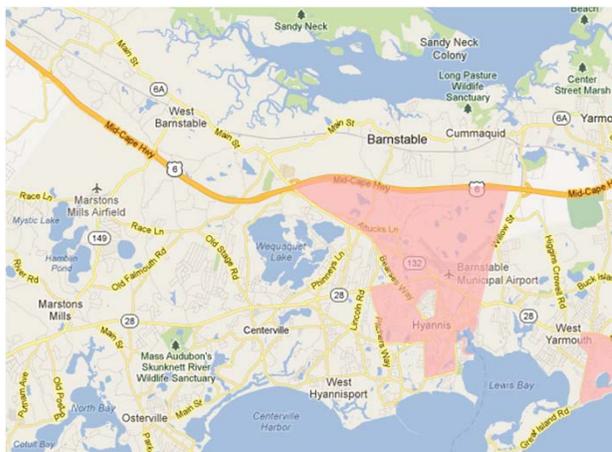
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Environmental Justice Population



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Example Evaluations



Improve Safety for Motorists, Pedestrians, and Bicyclists					Decrease Impacts to Residential Neighborhoods			Support Land Use and Cultural Interests			Decrease Impacts to the Natural Environment					Improve Economic Opportunities		Evaluate Project Costs and Impacts		Maintain Transportation Choices within the Study Area	
Traffic Flow in and Around the Study Area	Improve Safety for Motorists, Pedestrians, and Bicyclists	Impact on Emergency Access	Increase Mobility and Transportation A. Choices	Improve access to the Hyannis Transportation Center, the Sultan Care and a future connection to the Cape Cod Rail Trail	Impact Long Established Residential Neighborhoods	Supports Local Land Use Goals	Gateway Planning and Land Use Values	Impacts to Historical, Cultural and Architectural Resources	Impacts to the Natural Environment	Impacts to Water Resources (Drinking Water)	Impacts to Fish Species	Impacts to Wetlands	Impact to Air Quality	Impacts to Local Business	Impacts to Growth Incentive Zone	Right of Way Impacts	Construction Phases	Impact to Municipal Airport	Impact to Municipal Airport		
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Evaluation Criteria Summaries



Hyannis Access Study Implementation - Evaluation Criteria		
Goal	Objective	Measure/Indicator
Improve Safety for Motorists, Pedestrians, and Bicyclists	Improve Safety for Motorists, Pedestrians, and Bicyclists	Reduce traffic volume on local roads
	Improve Safety for Motorists, Pedestrians, and Bicyclists	Reduce traffic volume on local roads
	Improve Safety for Motorists, Pedestrians, and Bicyclists	Reduce traffic volume on local roads
Decrease Impacts to Residential Neighborhoods	Decrease Impacts to Residential Neighborhoods	Reduce traffic volume on local roads
	Decrease Impacts to Residential Neighborhoods	Reduce traffic volume on local roads
	Decrease Impacts to Residential Neighborhoods	Reduce traffic volume on local roads
Support Land Use and Cultural Interests	Support Land Use and Cultural Interests	Reduce traffic volume on local roads
	Support Land Use and Cultural Interests	Reduce traffic volume on local roads
	Support Land Use and Cultural Interests	Reduce traffic volume on local roads
Decrease Impacts to the Natural Environment	Decrease Impacts to the Natural Environment	Reduce traffic volume on local roads
	Decrease Impacts to the Natural Environment	Reduce traffic volume on local roads
	Decrease Impacts to the Natural Environment	Reduce traffic volume on local roads
Improve Economic Opportunities	Improve Economic Opportunities	Reduce traffic volume on local roads
	Improve Economic Opportunities	Reduce traffic volume on local roads
	Improve Economic Opportunities	Reduce traffic volume on local roads
Evaluate Project Costs and Impacts	Evaluate Project Costs and Impacts	Reduce traffic volume on local roads
	Evaluate Project Costs and Impacts	Reduce traffic volume on local roads
	Evaluate Project Costs and Impacts	Reduce traffic volume on local roads
Maintain Transportation Choices within the Study Area	Maintain Transportation Choices within the Study Area	Reduce traffic volume on local roads
	Maintain Transportation Choices within the Study Area	Reduce traffic volume on local roads
	Maintain Transportation Choices within the Study Area	Reduce traffic volume on local roads

Goal: Improve Mobility and Safety for all Users within the Study Area



- **Improve automobile traffic flow in and around the Study Area**
- **Improve safety for bicyclists, pedestrians, and motorists**
- **Improved emergency access to the Hospital**
- **Increase Mobility and transportation choice for non-automotive users**
- **Improve access to the Hyannis transportation Center, the urban core, and a future connection to the Cape Cod Rail Trail**

Goal: Decrease Impacts to Residential Neighborhoods



- **Minimize impacts to local streets**
- **Minimize impacts to residential neighborhoods**

Goal: Support Land Use and Cultural Interests



- **Support local land use goals**
- **Support Gateway planning and land use vision**
- **Minimize impacts to historical, cultural and architectural resources**

Goal: Decrease Impacts to the Natural Environment



- **Minimize impacts to the natural environment**
- **Minimize impacts to water resources**
- **Minimize impacts to rare species**
- **Minimize impacts to wetlands**
- **Improve air quality**

Goal: Improve Economic Opportunities



- Minimize impacts to local business
- Improve access to the Growth Incentive Zone

Goal: To Evaluate Project Costs and Impacts



- Reduce Costs
- Reduce right-of-way impacts

Goal: To Maintain Transportation Choices within the Study Area



- Minimize impacts to the railroad
- Improve access to Hyannis Transportation Center
- Improve access to the Steamship Authority Hyannis Ferry
- To enhance and/or reduce impacts to Barnstable Municipal Airport

Next Steps



Pick date for:

- Evaluation Review
- Preferred Alternative Selection

Feedback?



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Contact

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Thank You for attending!



Project materials available at:

www.capecodcommission.org/quicklinks/hyannisaccess