



ALTERNATIVE SCREENING PROCESS- SHORTLISTED ALTERNATIVES AND RATIONALE

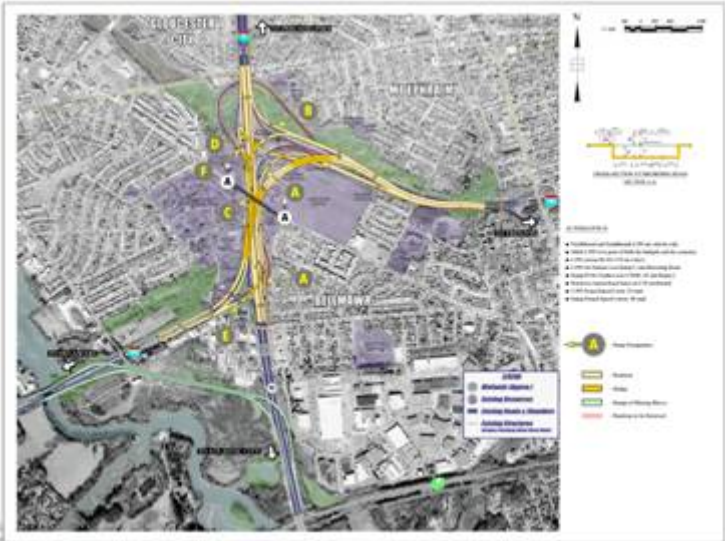
Ileana Ivanciu, Dewberry



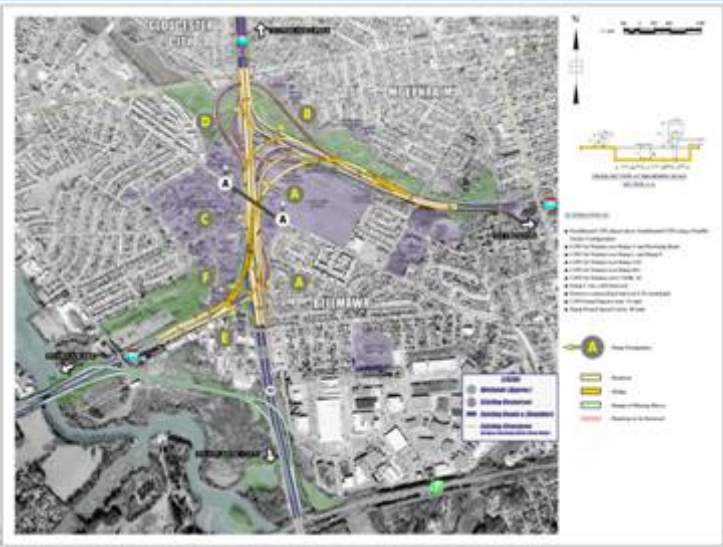
I-295/I-76/Route 42 Direct Connection

Camden and Gloucester Counties

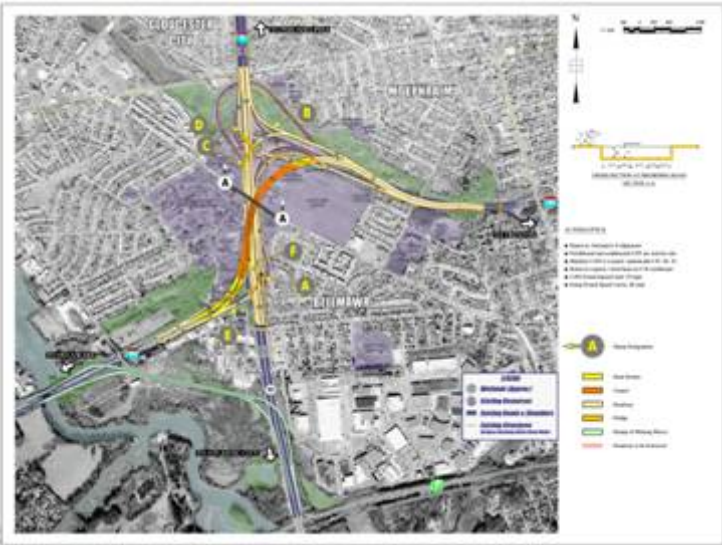
Recommended Alternatives



Alternative D



Alternative G2



Alternative K





Alternatives Screening

OBJECTIVE - Select a shortlist of feasible alternatives that satisfy the project purpose and need with minimal impacts to the natural and built environment to be studied through the EIS process



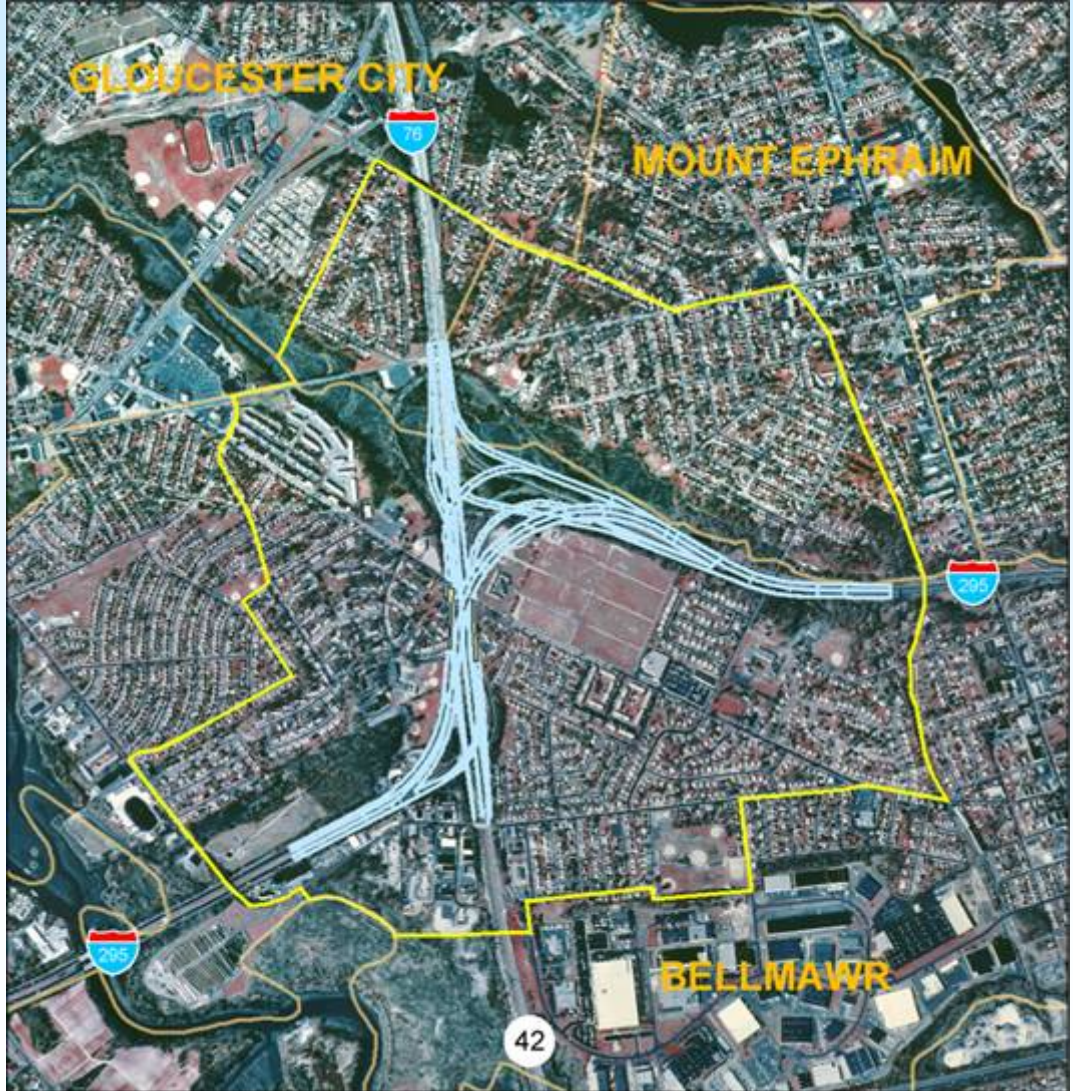
Alternatives Screening Process

- Multidisciplinary Project Team
 - ☉ Engineers
 - ☉ Planners
 - ☉ Scientists
- Preliminary impact assessment by alternative
 - with respect to all screening criteria
- Two-day workshop
 - ☉ Fill out matrix
 - ☉ Integrate scores vertically by alternative
 - ☉ Compare alternatives
 - ☉ Recommend shortlist for further study



**I-295/I-76/Route 42
Direct Connection**
Camden and Gloucester Counties

Socioeconomic Impacts



Alternative D



**I-295/I-76/Route 42
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**Potential Residential and Commercial
ROW Impacts of Alternative D**



Total Residences Impacted - 22
Total Businesses Impacted - 8



**I-295/I-76/Route 42
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Potential Floodplain Impacts



Alternative D – 6 Acres

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Potential Wetland Impacts

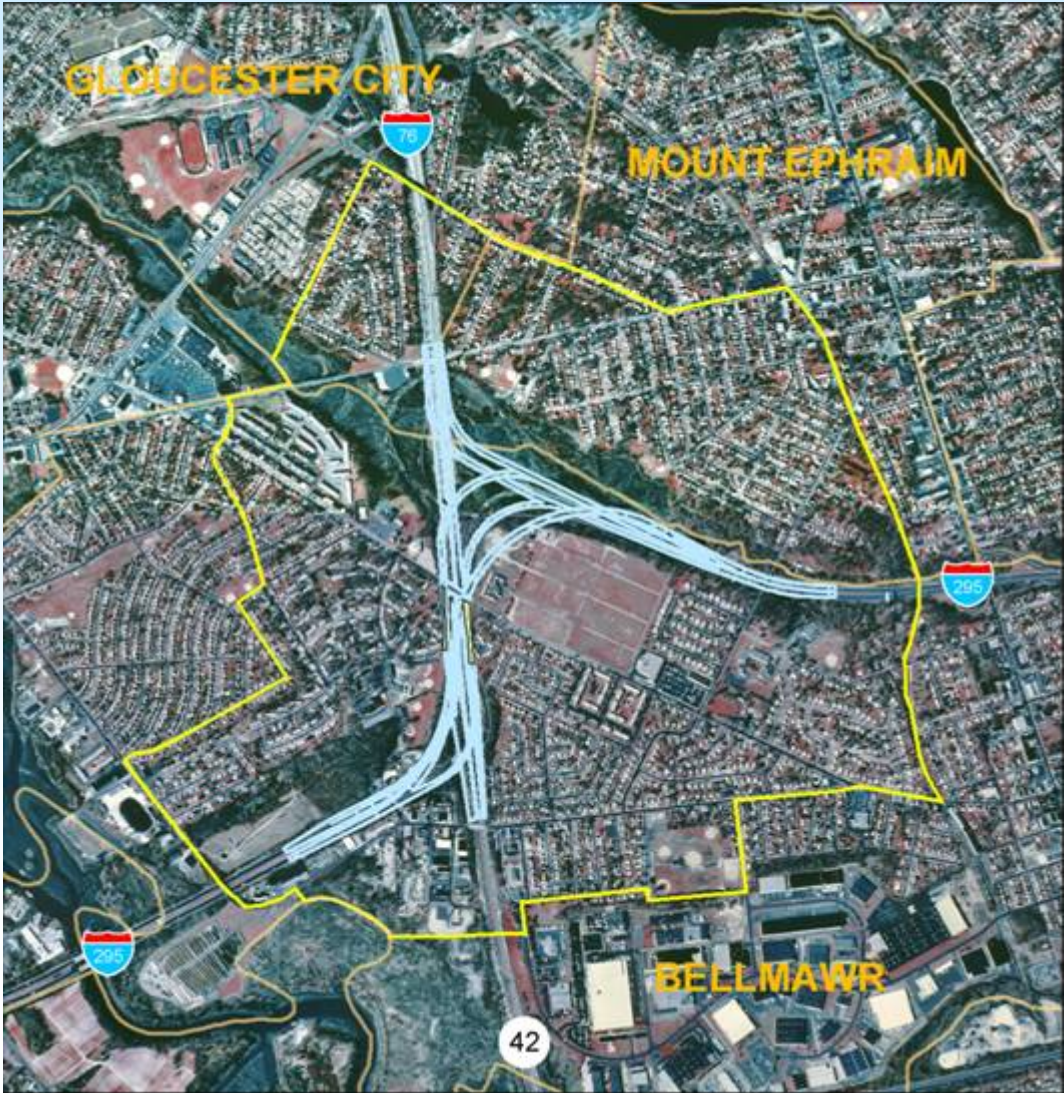


Alternative D – 8 Acres



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Socioeconomic Impacts



Alternative G2



I-295/I-76/Route 42
Direct Connection
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**Potential Residential and Commercial
ROW Impacts of Alternative G2**



Total Residences Impacted - 22
Total Businesses Impacted - 10



**I-295/I-76/Route 42
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Potential Floodplain Impacts



Alternative G2 – 7 Acres



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Potential Wetlands Impacts

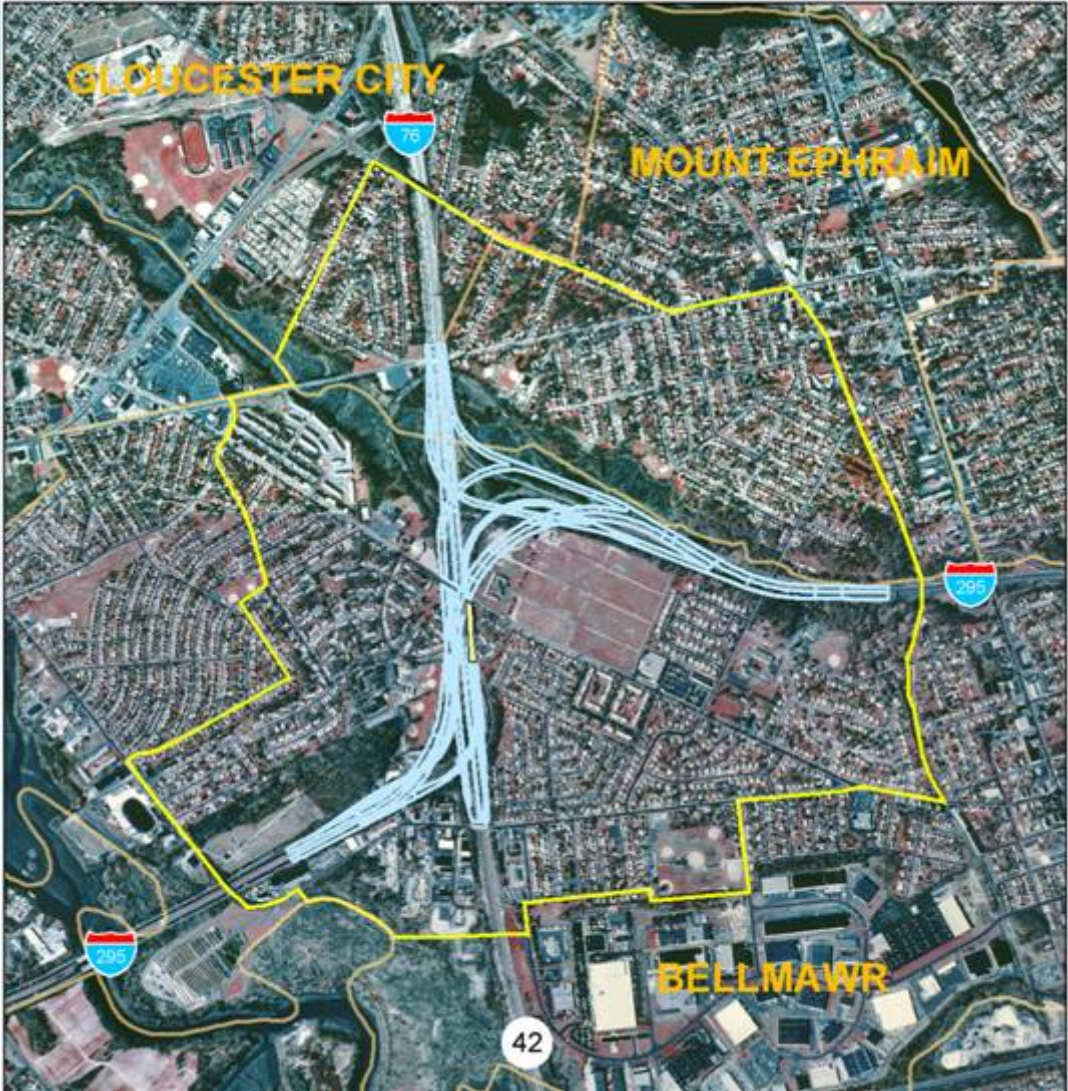


Alternative G2 – 9 Acres



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Socioeconomic Impacts



Alternative K



**I-295/I-76/Route 42
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**Potential Residential and Commercial
ROW Impacts of Alternative K**



Total Residences Impacted - 30
Total Businesses Impacted - 10



**I-295/I-76/Route 42
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Potential Floodplain Impacts



Alternative K – 9.5 Acres



**I-295/I-76/Route 42
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Potential Wetlands Impacts



Alternative K – 12 Acres





IMPACTS			
	D	G2	K
Constructability	H	H	H
Maintain and Operate	M	M	H
Comparison of Estimated Construction Cost (x100,000)	8.2	12.5	17.4
Compliance with Design Criteria			
◆ Undesirable design features	0	2	1*
◆ Number of conflict points	2	1	2
Visual/Contextual Impacts	M	H	L

NOTES:

1. *H - High Sensitivity, M - Moderate Sensitivity, L - Low Sensitivity*
2. *The terms High, Moderate, and Low Sensitivity are used relative to the sensitivities of the other alternatives under consideration. An item labeled 'L' means only that the potential impacts are lower than those of alternatives labeled 'M' or 'H'.*
3. *Alternative K is assumed to be a bored tunnel underneath the cemetery.*
4. ** Although all alternatives meet current geometric design standards, certain design features applicable to open roadways may not be applicable in a tunnel (shoulders).*



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**Potential Residential and Commercial
ROW Impacts**



Alternative H1 - 32 Residences
Businesses – 10
Wetlands Acres – 11.5
Floodplain Acres 12.5



Alternative B1 - 58 Residences
Businesses – 10
Wetlands Acres – 13.5
Floodplains Acres - 22



Alternative A - 49 Residences
Businesses – 9
Wetlands Acres 17.0
Floodplains Acres – 16.5



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Potential Residential and Commercial ROW Impacts



Alternative B2 - 73 Residences
Businesses - 10



Alternative E2 – 190 Residences
Businesses - 12



Alternative E – 189 Residences
Businesses - 11



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Potential Floodplain Impacts



Alternative A1 – 23.5 Acres



Alternative B2 – 29 Acres



Alternative C2 – 27.5 Acres



**I-295/I-76/Route 42
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Potential Floodplain Impacts



Alternative I – 2 Acres Floodplain
3800 Cemetery Plots Impacted
53 Residential Impacts
11 Businesses



Alternative G – 5 Acres Floodplain
ROW Impacts Similar to G2



Alternative E – 3.5 Acres Floodplain
124 Cemetery Plots Impacted
189 Residential Impacts
11 Businesses



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Potential Wetlands Impacts



Alternative A 1 – 21 Acres



Alternative B – 12.5 Acres



Alternative C1 – 16 Acres



I-295/I-76/Route 42 Direct Connection

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Potential Wetlands Impacts



Alternative I – 2.5 Acres Wetlands



High Socioeconomic Impacts



3800 Cemetery Plots Impacted
56 Residential Impacts
11 Business Impacts



**I-295/I-76/Route 42
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Potential Wetlands Impacts



Alternative I1 -7 Acres Wetlands



- 3800 Cemetery Plots Impacted
- 55 Residential Impacts
- 11 Business Impacts
- 2 Park Impacts



High Socioeconomic Impacts



I-295/I-76/Route 42 Direct Connection

Camden and Gloucester Counties

Potential Wetlands Impacts



Alternative E – 4.5 Acres Wetlands

High Socioeconomic Impacts

- 189 Residential Impacts
- 11 Business Impacts
- 124 Cemetery Plots



Alternatives Screening

- Informed qualitative decision-making approach
- Iterative
- Consensus amongst stakeholders
 - ☯ Project team members
 - ☯ DOT core group
 - ☯ LOB, CAC, ACM
 - ☯ Impacted Communities
 - ☯ Traveling motorists

