Design Criteria Change: Freeway to Rolling Rural

What it states in the DEIS (03/07/12): "The build alternatives would be controlled-access highways and were conceptually designed using the MaineDOT design criteria for freeways. (pg. s7-s9)"

capacity. Route 1A east of Route 46 is forecasted to decrease from LOS D in 1998 to LOS E by 2035. LOS E is defined as traffic flow on two-lane highways having a time delay of greater than 75 percent. Passing under LOS E conditions is virtually impossible. LOS E is seldom attained over extended sections of level terrain on more than a transient condition; most often, small disturbances in traffic flow as LOS E is approached causes a rapid transition to LOS F.

The intersection of Routes 1A and 46 is a signalized intersection. This intersection serves traffic traveling to and from the areas of Downeast Maine and traffic to and from the Ellsworth area and the coast. In 1998, the overall performance of this intersection was estimated using peak-volume conditions at LOS B. By 2035, with increases in traffic volume and corresponding increases in delays, this intersection is forecasted to decline to an overall performance of LOS F. LOS F at a signalized intersection describes a control delay exceeding 80 seconds per vehicle. This LOS occurs when arrival flow rates exceed the capacity of the intersection.

In 1998, the delay on northbound Route 46 to the intersection of Routes 46 and 9 was estimated using peak-volume conditions to be 6.5 seconds (LOS A). By 2035, with increases in traffic volume, this delay is forecasted to increase to 119.4 seconds (LOS F).

Exhibit S.4 – *DHV, v/c Ratio, LOS, and Average Travel Speed for Roadways Segments*

Year	DHV	v/c Ratio	Average Travel Speed (mph)	LOS Rural Two–Lane Road
Route 1A east of I-395				
1998	1,840	0.63	34.6	E
2006	2,001	0.69	33.2	E
2035	3,269	1.12	varies	F
Route 1A east of Route 46				
1998	1,282	0.43	44.1	D
2006	1,268	0.43	44.2	D
2035	2,123	0.72	37.5	E
Route 46 between Routes 1A and 9				
1998	244	0.14	45.1	C
2006	197	0.12	45.6	C
2035	1,006	0.40	40.8	D
Route 9 east of Route 178				
1998	641	0.27	41.2	D
2006	629	0.26	41.3	D
2035	873	0.36	39.5	E
Route 9 east of Route 46				
1998	505	0.20	43.9	D
2006	573	0.23	43.5	D
2035	1,267	0.46	39.3	E

Alternatives

From 2001 to 2010, the MaineDOT and the FHWA conceptually designed and analyzed the No-Build Alternative and more than 70 build alternatives that could potentially satisfy the study purpose and needs and the USACE basic project purpose (exhibit S.5). The build alternatives would be controlled-access highways and were conceptually designed using the MaineDOT design criteria for freeways.

Two lanes would be constructed and used for two-way travel within an approximate 200-foot-wide right-of-way. In designing and analyzing alternatives, the MaineDOT and the FHWA consulted with regulatory and resource agencies at the state and federal level, local officials, special-interest groups, the Public Advisory Committee (PAC), and the public. At the end of the process of identifying, developing, analyzing, and screening alternatives, four alternatives, including the No-Build Alternative, were retained for further consideration and detailed study.

A screening process, undertaken in several stages, was established to systematically consider the wide range of potential alternatives and to identify a reasonable number to be retained for detailed analysis (see Appendix C). The screening analysis considered alternatives that fit into five broad "families", as follows:

- **Family 1: The Upgrade Alternatives.** Widening and other improvements to Route 1A (from I-395 to Route 46) and Route 46 (from Route 1A to Route 9) approximately 10 miles long. Although one upgrade alternative was initially considered, six upgrade and five partial-upgrade alternatives ultimately were considered.
- **Family 2: The Northern Alternatives.** Alternatives that began at the I-395/Route 1A interchange and generally proceeded in a northerly direction to connect with Route 9. These alternatives were five to 10 miles in length, depending on the distance on Route 9 used as part of the alternative. Twelve alternatives in this family were ultimately studied.
- **Family 3: The Central Alternatives.** Alternatives that began at or near the I-395/Route 1A interchange and generally proceeded east and west through the study area to Route 9 east of Route 46. These alternatives were seven to 11 miles in length, depending on the distance on Route 9 used as part of the alternative. Using all possible combinations of the six western components, the four eastern components, and component 3K, 36 possible central alternatives were initially created. Five other alternatives (for a total of 41) in this family were ultimately developed by modifying some of the initial 36 alternatives.
- **Family 4: The Southern Alternatives.** Alternatives that began near the I-395/Route 1A interchange and that were south of Route 1A and east of Route 46. These alternatives paralleled Routes 1A and 46, and intersected Route 9 in East Eddington. These alternatives were

"Design criteria for freeways" is further mentioned on pages s12, s13, s14, 42, 45, 49, & 53.

Prior to the DEIS, the MDOT was discussing using a "Rolling Rural" design:

000431

MaineDOT

This is a memo entered into the official project file for the connector study. It describes estimated reductions in cost that can be achieved by "using a rolling design". It is dated 01/30/12.

Memo

To: I-395/Route 9 Transportation Study Project File
From: Ken Sweeney, P. E. - Chief Engineer
CC: Russell Charette, Project Manager
Date: January 30, 2012
Re: Planning Level Cost Estimates for the Alternatives 2B-2, 5A2B-2, 5B2B-2

The build alternatives have been designed as a two-lane road within a two-lane right-of-way using MaineDOT's criteria for freeways. The latest estimate to construct the build alternatives dated December 2011 range from approximately $93 million for Alternative 2B-2 to $122 million for Alternative 5A2B-2.
After reviewing the cost estimates for the build alternatives, the cost estimates should be reduced by one-third, for planning purposes moving forward. The basis for this one-third reduction includes, but is not limited to:

- Reducing the number of structures that need to meet 1.2 stream bankfull structure design would reduce structure costs.
- Using a rolling design, earthwork quantities would be reduced by approximately one-third
- Recognizing that lump sum items – drainage, signing and pavement marking, erosion and sedimentation control, maintenance and protection of traffic, and mobilization – were calculated as a percentage of construction, additional savings would be realized for these items
- Reducing the contingency percentage from 20% to 10%.
- Reducing the design engineering and construction engineering services, based on the type of construction, from 16% to 10%.

What is a "rolling design"? According to MDOT Commissioner David Bernhardt and MDOT Chief Engineer Ken Sweeney, Rt. 9 is an example of a rolling rural design and has been re-built over the years to those standards (Email communication from Carol Woodcock of Senator Susan Collins' office describing her meeting with Mr. Bernhardt & Mr. Sweeney in early April 2013).

Other than that, I cannot find mention of this exact term anywhere, not even in the National or State Standards—Highway Design Guides. Those documents indicate that Rolling appears to reference Terrain (Definitions) under Vertical Alignment guidelines. Rural appears to relate to Functional Class: Urban Freeway, Rural, Arterial, Collector, Local.

This is a letter sent to the MDOT by their consultant, describing estimates for a reduction in cost based on changing the design criteria. It is dated 12/06/11.

"We understand the DOT would like, following the conclusion of the NEPA process, for the preferred alternative to be developed using rolling criteria."

Gannett Fleming

Excellence Delivered ***As Promised***

000391

December 6, 2011

Ms. Judy Lindsey
Maine Department of Transportation
16 State House Station
Augusta, ME 04333-0016

Re: Revised Cost Estimate for the Build Alternatives
I-395 / Route 9 Transportation Study

Dear Judy:

Attached please find a copy of the latest cost estimate for the build alternatives retained for further consideration and detailed analysis for your review and consideration. We are working to complete both the property acquisition and utility relocation technical memoranda; the memoranda will reflect the costs shown in the attached estimates.

This cost estimate for the build alternatives was prepared using the DOT's freeway criteria. We understand the DOT would like, following the conclusion of the NEPA process, for the preferred alternative to be developed using rolling criteria. Developing the preferred alternative using rolling criteria would reduce the cost to construct it. Based on the DOT's experience with similar projects, we ask that the DOT let us know the anticipated percent reduction in cost that would result from this change in criteria; we will apply this percent reduction to the cost to construct the build alternatives that is shown in the DEIS/Section 404 Permit Application.

We appreciate the opportunity to be of service on this important study. Please contact either Dave Hamlet or myself if you have questions.

Sincerely,

Gannett Fleming, Inc.

William M. Plumpton, CEP
Project Manager

WMP/
Attachment
Pc: D. Hamlet
File 048570

Gannett Fleming, Inc.
P.O. Box 67100 • Harrisburg, PA 17106-7100 | 207 Senate Avenue • Camp Hill, PA 17011-2316
t: 717.763.7211 • f: 717.763.8150
www.gannettfleming.com

000372

Stewart, Jean

From: Plumpton, William M. <wplumpton@GFNET.com>
Sent: Wednesday, January 18, 2012 1:39 PM
To: Charette, Russ
Subject: 395 - alternatives in the '3' family

Russ:

Good afternoon and thanks for letting me clarify the dismissal of some alternatives in favor of continued use of Route 9.

1. According to the Federal Cooperating Agencies – Corps, EPA, and the USWFS – alternatives in the '3' family have substantially greater impacts to the natural environment (waters, wetlands, water quality, vernal pools, habitat among others) and, because other alternatives exist that satisfy the study purpose and needs with less environmental impact, alternatives in the '3' family would not be permitted under Section 404 of the Clean Water Act and needed to be dismissed from further consideration.

   This was the primary reason why the FHWA elevated the study from an EA to an EIS in 2005.

2. The Federal Cooperating Agencies asked the DOT to take another hard look at using more of the portion of Route 9 in the study area as part of the solution to solving the transportation needs in the area. The DOT took another hard look at Route 9. With the economic downturn and fewer miles being driven, Route 9 has more capacity now than originally thought when the study was initiated. Consequently, Route 9 can satisfy the study purpose and needs in the short-term (between now and 2030).

3. In consideration of the status of available funding, now and in foreseeable future, the DOT 'rightsized' the project to use as much of Route 9 as possible and considered anything that didn't use Route 9 in its current condition (i.e., 2 lane and no need to widen it) beyond that which was reasonably foreseeable.

This is an email sent to the MDOT by their consultant, describing reasons for continued use of Rt. 9. It is dated 01/18/12.

"The DOT took another hard look at Route 9."

"In consideration of the status of available funding, now and in foreseeable future, the DOT 'rightsized' the project…" [1]

Design Year Change: 2030 to 2035

The DEIS briefly discusses the change in design year and the reasons why, on pages s5 and 9: "With the recent economic downturn and increase in the price of gas, traffic in the study area has not grown as fast as previously thought."

Pg. 19 of the DEIS: "The MaineDOT took new traffic counts in the study area in 2006 and truck counts on Route 178 at Route 9 in August 2008. The MaineDOT reported the results of these traffic counts in the EIS and revised the traffic projections for the area for 2010 and 2035 using these more recent traffic counts and its statewide travel-demand traffic model."

1.3.2 Safety Concerns

Locations in the study area exhibit higher crash rates than other locations in Maine with similar characteristics.

Data were collected and analyzed to identify high crash locations (HCLs) using a critical rate factor (CRF). The CRF of an intersection or roadway section is a statistical measure of that location's crash history as compared to locations with similar geography, traffic volume, and geometric characteristics. When a CRF exceeds 1.00, the intersection or portion of a roadway has a higher-than-expected crash rate. Those locations with a CRF higher than 1.00 and more than eight crashes in a three year-period are considered HCLs.

Data were collected and analyzed to identify HCLs in the study area (exhibit 1.5). MaineDOT crash data for January 2004 through December 2008 indicate 10 HCLs that meet the criteria in the study area (MaineDOT, 2007b; MaineDOT, 2010).

The majority of crashes occurred on clear days with dry road conditions (MaineDOT, 2000b).

1.3.3 Traffic Congestion

Since the extension of I-395 from Bangor to Route 1A in 1987, traffic volumes in the study area have increased steadily. This growth has been most pronounced along Route 46 between Routes 1A and 9, which has become more widely used by both passenger vehicles and trucks as a connection among I-95, I-395, and Route 9.

Much of the truck traffic in the study area is through-traffic. Most of the truck trips are between the Canadian Maritime Provinces and Washington County at the eastern end, and Penobscot County and the New England states at the western terminus of the trips (MaineDOT, 2000a). Approximately 80 percent of truck traffic on Route 9 uses Route 46, and approximately five of six heavy trucks that use Routes 46 and 1A also use I-395 (MaineDOT, 2001). Route 46 south of Route 9 exhibited the greatest annual growth rate (i.e., annual growth factor of 1.121) in heavy-truck traffic between 1983 and 1996 of all roadways in the greater Bangor area (BACTS, 1998).

Estimates of the current and future annual average daily traffic (AADT) for all vehicles and heavy trucks were determined based on MaineDOT traffic count data (exhibit 1.6).

With the recent economic downturn and increase in the price of gas, traffic in the study area has not grown as fast as previously thought. The MaineDOT and FHWA anticipate the growth in traffic and traffic volumes originally forecast for the study area for the year 2030 won't materialize until the year 2035. By 2035, traffic volumes on Route 46 between Routes

This is a memo acquired as part of the FOAA I personally pursued with MDOT in December 2012. This memo was also in the FOAA the town received (pg. 221, 332).

State of Maine
Department of Transportation
MEMORANDUM

To: Russ Charette, Mobility Management Date: Jan. 11, 2012

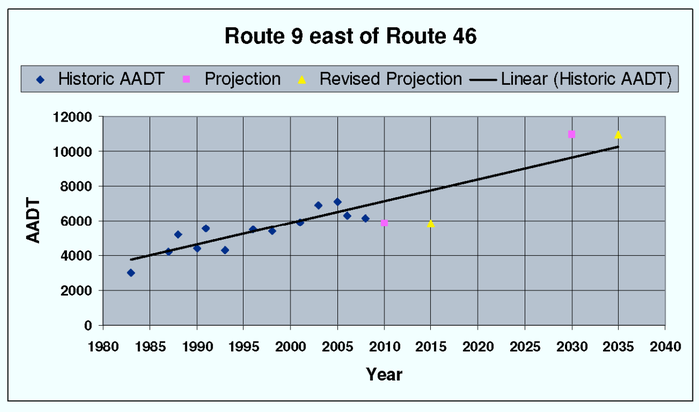
From: Ed Hanscom, Transportation Analysis

Subject: I-395/Route 9 Transportation Study – Revised Projections

Given that the current design-year projection for the I-395/Route 9 Transportation Study is currently 2030 and the anticipated construction of the preferred alternative is unlikely until the 2013-15 time period, consideration has been given to extending the design-year to 2035. The 2035 design year would be consistent with a 20-year design for the project.

Review of historic traffic growth on Route 9 east of Route 46 indicates that the volumes currently projected for 2030 would more accurately represent conditions in 2035. (See figure below.) The flattening in traffic growth that occurred between 2001 and 2008 has slowed the overall growth trend of traffic in the Route 9 corridor. The forecasted traffic volume for the future (10940 vehicles per day) at this key location is much closer to the trend line at 2035 than at 2030.

Therefore, for the purpose of the I-395/Route 9 Transportation Study, I would suggest that the year of the future conditions traffic forecasts and analyses be revised from 2030 to 2035 and that the base year of the 20-year design be changed from 2010 to 2015. The completed future conditions traffic forecasts and analyses of the study remain valid for 2035 design year.



Revision 2030 to 2035.docx2/5/13

"Given that the current design-year projection for the I-395/Route 9 Transportation Study is currently 2030 and anticipated construction of the preferred alternative is unlikely until the 2013-15 time period, consideration has been given to extending the design-year to 2035."

The memo continues on to state that traffic volumes were reviewed and projections revised.

As stated above, traffic counts were taken in 2006 and August 2008. The reasons for the change are economic downturn, and increase in price of gas (or, apparently, anticipated construction timeline).

Gas prices have increased over time.

Consumer Price Index - Average Price Data

Original Data Value

Source: US Dept. of Labor—Bureau of Labor Statistics

Series Id: APU000074714
Area: U.S. city average
Item: Gasoline, unleaded regular, per gallon/3.785 liters

Years: 2003 to 2013

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2003	$1.47	$1.64	$1.75	$1.66	$1.54	$1.51	$1.52	$1.63	$1.73	$1.60	$1.54	$1.49	$1.59
2004	$1.59	$1.67	$1.77	$1.83	$2.01	$2.04	$1.94	$1.90	$1.89	$2.03	$2.01	$1.88	$1.88
2005	$1.82	$1.92	$2.07	$2.28	$2.22	$2.18	$2.32	$2.51	$2.93	$2.79	$2.34	$2.19	$2.30
2006	$2.32	$2.31	$2.40	$2.76	$2.95	$2.92	$3.00	$2.99	$2.59	$2.27	$2.24	$2.33	$2.59
2007	$2.27	$2.29	$2.59	$2.86	$3.13	$3.05	$2.96	$2.78	$2.79	$2.79	$3.07	$3.02	$2.80
2008	$3.05	$3.03	$3.26	$3.44	$3.76	$4.07	$4.09	$3.79	$3.70	$3.17	$2.15	$1.69	$3.27
2009	$1.79	$1.93	$1.95	$2.06	$2.27	$2.63	$2.54	$2.63	$2.57	$2.56	$2.66	$2.62	$2.35
2010	$2.73	$2.66	$2.78	$2.86	$2.87	$2.74	$2.74	$2.75	$2.70	$2.80	$2.85	$2.99	$2.79
2011	$3.09	$3.17	$3.55	$3.82	$3.93	$3.70	$3.65	$3.63	$3.61	$3.47	$3.42	$3.28	$3.53
2012	$3.40	$3.57	$3.87	$3.93	$3.79	$3.55	$3.45	$3.71	$3.86	$3.79	$3.49	$3.33	$3.64
2013	$3.35	$3.69											

The economic downturn however, took the sharpest turn for the worse in September 2008, which is *after* when these traffic counts were collected. September 2008 is when the stock market plunged, Lehman Brothers crumbled, the Federal government took over Fannie and Freddie, President Bush signed the first bailout into law, and so forth.

Lastly, an observation of timeline details:

- Carol Woodcock, of Senator Susan Collins' office, submitted a series of questions to the MDOT on January 9, 2012.
- The MDOT responded to all 41 questions on January 18, 2012, referring throughout to a study design year of 2030.
- The DEIS (dated March 2012) states a design year of 2035.
- The above traffic memo is dated January 11, 2012 and makes official the design year change to 2035.

Did the change in design year get lost in the jumble?

Benefit to Cost Ratio & Analysis part 1

"The estimated construction costs of alternatives include the costs of preliminary engineering, construction engineering, utility relocation, acquisition of property for right-of-way, and mitigating environmental impacts. The costs of the build alternatives would range between approximately $61 million and $81 million (in 2011 dollars)." (DEIS pg. s15-s18)

Fill in the range of cost alternatives….Low should be no greater than $65 M ..you decide High. 000365

Anticipated Construction could begin in 2014-2015

We also discussed wording and had a meeting with the biologists that led to a comment that we should only commit to the 1.2 bankful on the structures that make environmental sense and not a blanket 1.2 statement. We should also avoid the "will be considered in final design" when it involves environmental commitment because the regulators interprete the language consider the same as reguire.

That's all I recall

Thanks

ken

From: Charette, Russ

Sent: Friday, January 13, 2012 12:22 PM

To: Sweeney, Ken

Subject: I-395/Route 9 Study

Ken,

These are the notes Bill took in a conversation about (some) of your comments. Were there others?

Ken stopped this morning to discuss the Adm. Draft DEIS he had two comments:

Replace Jonathon with Todd Jorgensen, the new Division Administrator as the FHWA signatory

Minimize the discussion of the alternatives connection with the concept of an East-West highway. Instead, emphasize the alternative's regional benefits, connectivity of direct access from I-395 to Route 9, and the safety aspects of the connection.

Russ

Russell D. Charette, P.E.

Director, Mobility Management Division

Bureau of Transportation Systems Planning

MaineDOT 16 State House Station

Augusta, Maine 04333

Phone: 207-624-3238

Fax: 207-624-3301

3

01/13/2012: This is an email from Chief Engineer Ken Sweeney to Project Manager Russ Charette, telling him what the costs should be for the alternatives. "Fill in the range of cost alternatives…Low should be no greater than $65 M ..you decide High."

01/20/2012: Email thread between Mr. Sweeney and Mr. Charette. Mr. Sweeney stated he needed to see the cost estimates from the consultant first before drafting a memo to the file as requested by Mr. Charette (pg. 640 FOAA).

01/30/2012: Mr. Sweeney's memo to the file (shown on "Design Criteria Change: Freeway to Rolling Rural" poster). He indicated the cost estimates could be reduced by one-third due to the down-design, and reducing the contingency line.

000392

Cost Estimate Summary for Range of Alternatives

Alternative	Construction	Utility Relocation	Engineering & Inspection	Right-of-Way	Mitigation	Total
2B-2	$ 75,491,276.60	$ 1,578,100.00	$ 12,078,600.00	$ 4,084,912.41	$ -	**$ 93,240,000.00**
5A2B-2	$ 97,629,921.84	$ 3,130,600.00	$ 15,620,780.00	$ 5,205,118.05	$ -	**$ 121,590,000.00**
5B2B-2	$ 79,879,364.36	$ 9,345,600.00	$ 12,780,700.00	$ 9,659,718.99	$ -	**$ 111,670,000.00**

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These are the cost estimates sent to Mr. Sweeney, which he reviewed and decided to reduce by one-third, to reach $61 million.

However,$93,240,000.00 ÷ 3 = $31,080,000.00

$93,240,000.00 - $31,080,000.00 = $62,160,000.00

Note that the cost does not seem to include Mitigation.

Benefits are calculated at $61,424,195 as shown here.

The cost has now changed to $61 million and I have not found where the $1,160,000 has gone.

The benefits calculation does not include jobs creation, transportation benefits beyond the study year, or long term maintenance (pg. 277 FOAA). Given those missing items, the calculated Benefit to Cost ratio is 1.1 according to this document.

1.1 is achieved by using the Average Annual Equivalents numbers (rounded up from 1.077). Using the bottom-line figure Sum of Present Values, the B/C is 1.007

When one examines the calculated amount of cost of construction, reduced mathematically by one-third, and compare to the established benefit amount of $61,424,195 then one comes up with a B/C of 0.988.

The MDOT acknowledges in an email that adjusting the discount rate can create a more favorable BCR (pg. 277 FOAA).

I-395/Route 9 Transportation Study Environmental Impact Statement

Net Present Value Analysis and Benefit-Cost Ratio of Modeled Transportation Benefits

August 1, 2012

000187

Inputs

0.07 Percent Discount Rate *(references: http://www.fhwa.dot.gov/infrastructure/asstmgmt/primer03.cfm, http://www.whitehouse.gov/omb/circulars_a094)*

20 Years Analysis Period

Calendar Year	Project Life	Study Year/ Exponent	Present Value Factor	Construction Costs Current Year	Construction Costs Present Value	Benefits Current Year	Benefits Present Value
2015		0		$61,000,000	$61,000,000	0	0
2016	1	1	1.00000	0	0	4,167,500	4,167,500
2017	2	2	0.87344	0	0	4,386,842	3,831,638
2018	3	3	0.81630	0	0	4,606,184	3,760,018
2019	4	4	0.76290	0	0	4,825,526	3,681,371
2020	5	5	0.71299	0	0	5,044,868	3,596,921
2021	6	6	0.66634	0	0	5,264,211	3,507,766
2022	7	7	0.62275	0	0	5,483,553	3,414,881
2023	8	8	0.58201	0	0	5,702,895	3,319,137
2024	9	9	0.54393	0	0	5,922,237	3,221,304
2025	10	10	0.50835	0	0	6,141,579	3,122,067
2026	11	11	0.47509	0	0	6,360,921	3,022,028
2027	12	12	0.44401	0	0	6,580,263	2,921,716
2028	13	13	0.41496	0	0	6,799,605	2,821,594
2029	14	14	0.38782	0	0	7,018,947	2,722,069
2030	15	15	0.36245	0	0	7,238,289	2,623,489
2031	16	16	0.33873	0	0	7,457,632	2,526,158
2032	17	17	0.31657	0	0	7,676,974	2,430,333
2033	18	18	0.29586	0	0	7,896,316	2,336,235
2034	19	19	0.27651			8,115,658	2,244,047
2035	20	20	0.25842	0	0	8,335,000	2,153,922

	Installation	Benefits
SUM OF PRESENT VALUES	61,000,000	61,424,195
AVERAGE ANNUAL EQUIVALENTS	5,381,279	5,798,009
BENEFIT-COST RATIO	**1.1**	
AVG ANN EQVLNT NET BNFTS	**$416,731**	

Benefits and Assumptions

Benefits (2011$)

$5,117,000	reduction in crash costs
$417,000	reduced vehicle operating costs
$2,801,000	travel time savings
$8,335,000	
$4,167,500	
$219,342.11	(half of total benefits, divided by 19 years)

Assumptions:

1. $8,335,000 in benefits would occur as of design year 2035. However, a lower level of annual benefits would begin in year 1 of project life. Because the amount of benefits was not modeled separately for each project year, it was assumed that 1/2 of design year benefits would occur in project year 1, and increase linearly until 2035.
2. The salvage value of right-of-way was not subtracted from the total project cost. Subtracting the salvage value would decrease the project cost and increase the positive benefit-cost ratio.

Notes:

1. Benefits calculated to design year of 2035, however roadway is expected to exist past 2035 and would continue to provide transportation benefits .
2. Other non-transportation benefits, such as employment and related economic development supported by improved mobility and access, are not accounted for and would provide additional benefits for the public.

"The estimated construction costs of alternatives include the costs of preliminary engineering, construction engineering, utility relocation, acquisition of property for right-of-way, *and mitigating environmental impacts*. The costs of the build alternatives would range between approximately $61 million and $81 million (in 2011 dollars)." (DEIS pg. s15-s18)

Benefit to Cost Ratio & Analysis part 2

The MDOT has performed B/C analyses before on transportation planning projects, such as the Wiscasset Bypass study. This is a section from pg. 29 of the "Wiscasset Route 1 Corridor Study Phase II Alternatives Analysis Supplement" dated Sept. 2009. This analysis includes estimated mitigation costs, and was performed by the same consultant as the I-395/Rt. 9 Study.

These alternatives all show a Benefit to Cost Ratio of 2.27 or greater.

4.4. Summary Comparison of Alternatives – Part 3 (Transportation and Cost Considerations)

Criteria	No Build	N8c	N2f	N2a
Traffic Safety & Mobility				
Change in Annual Crashes, 2030	0	-9	-15	-8
Change in VMT, 2030	0	9,700,000	8,500,000	9,300,000
Change in VHT, 2030	0	-1,130,000	-1,090,000	-1,030,000
Estimated Capital Cost, $M (2006) [8]	$1.1	$82.25	$78.95	$81.75 [8]
Life Cycle Cost, $M (100 Years)	N.A.	$136.01	$123.88	$122.02
Benefit-to-Cost Ratio (Life Cycle)	N.A.	2.46	2.43	2.27
Mitigation Costs (Included in Estimated Capital Cost, Life Cycle Cost & Benefit-to-Cost Above)				
Wetland, $M	N.A.	$1.35	$1.45	$2.05
Wildlife, $M	N.A.	$1.40	$1.80	$1.70
Historic, $M	$0.02	$0.10	$0.23	$0.06
Constructability				
Cofferdam Pier Construct Time (Weeks)	N.A.	32	20-30	6
Earthwork (Cubic Yards)				
Cut (Cubic Yards)	0	920,000	1,150,000	965,000
Fill (Cubic Yards)	0	275,000	420,000	400,000
Excess Earthwork (Cubic yards)	0	645,000	730,000	565,000
Operations	Mobility Decline	Improved Mobility	Improved Mobility	Improved Mobility

[8] Costs updated from DEIS to include new Clark's Point right-of-way and historic preservation costs.

27

The Wiscasset Bypass Study was terminated by the MDOT Commissioner in August 2011.

MDOT Press Release: "The cost of building the bypass far exceeds any potential benefits to motorists and the communities," said MaineDOT Commissioner David Bernhardt. "At a time when we have difficulty finding the financial resources to maintain our existing infrastructure, I cannot justify the expense of building a bypass around Wiscasset."

"Adding more miles to our transportation system in this current fiscal environment doesn't make financial sense," said Bernhardt, "Our responsibility going forward is to manage our existing infrastructure within our existing budget."

With current funding levels stable at best, MaineDOT concluded that the expenditure of funds on new infrastructure was not justifiable.

"The long-term financial forecast for transportation funding makes it difficult to continue to spend scarce resources on such a large, financially unviable project," said Bernhardt, "We are struggling to maintain the roads and bridges we currently have in safe and serviceable condition."

"A project of this magnitude requires major federal participation as well as some type of special funding from the state," said Bernhardt, "We simply do not see this type of funding becoming available in the foreseeable future."

MDOT Letter to Bypass Task Force Members: "Our responsibility going forward is to manage our existing obligations within our existing budget, and to limit adding new infrastructure to that which is shown to provide overwhelming benefits. We know federal transportation funding will continue to decrease, and the era of special earmarks for transportation projects is over.

The department has to look carefully at the potential cost and benefits of any new infrastructure being considered in Maine. Up until the last year, we believed that over time we could develop funding and make the case for spending what will be close to $100 million on this bypass, however, this is no longer possible.

Therefore, I have concluded that the long-term financial forecast – balanced against our number one priority of maintaining the infrastructure we already have and the limited benefits a bypass would provide – makes it impossible to justify that expenditure for this project."

001143

Bostwick, Richard

From: Lindsey, Judy
Sent: Monday, August 01, 2011 8:12 AM
To: Bostwick, Richard
Subject: RE: I-395 connector reduced width

Richard,

It's true, Ken decided the reduced lane and 100" to 125" ROW width was all we needed in the foreseeable future so why do more. I've been told this project will be taken to the Governor as one to move forward even though the price tag is up there. I hadn't notified anyone as I am waiting for the modification to be signed. Bill will be providing a new set of plans when available. I'll keep you in the loop.

Judy

JUDY LINDSEY

MAINE DEPARTMENTOF TRANSPORTATION

BUREAU OF TRANSPORTATION SYSTEMS PLANNING

16 STATE HOUSE STATION

AUGUSTA, MAINE 04333-0016

(207) 624-3291

JUDY.LINDSEY@MAINE.GOV

From: Bostwick, Richard
Sent: Friday, July 29, 2011 1:47 PM
To: Lindsey, Judy
Cc: Ham, Eric
Subject: I-395 connector

I have been told by Judy that Management wants to go with the 2 lane options for the I-395 Brewer to Eddington connector. We have been told that we only need Sect 7 consult on the 2 lane option. Will GF be evaluating the stream crossings and provide a revised length of crossing for the streams that they gave us 4 lane crossings for?

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Richard Bostwick
Supervisor of Field Services
MaineDOT -ENV

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08/01/2011: This is an email from the Project Manager at the time, to other MDOT staff.

"It's true, Ken decided the reduced lane and 100' to 125' ROW width was all we needed in the foreseeable future so why do more. I've been told this project will be taken to the Governor as one to move forward even though the price tag is up there."

The email on the bottom half of the page reads, "I have been told by Judy that Management wants to go with the 2 lane options for the I-395 Brewer to Eddington connector."

After the Fact: Changing & Moving Right-of-Way

000417

Stewart, Jean

From: Plumpton, William M. <wplumpton@GFNET.com>
Sent: Thursday, January 26, 2012 8:13 AM
To: Charette, Russ
Subject: RE: Draft language for eventual inclusion in DEIS
Attachments: Chapter 2 - pgs 56-57.pdf

Russ:

Thanks and new text attached.

I know you said FHWA wants to see it before we formally add it. When they review it, you may wish to remind them that 1) we haven't done any survey yet (we used the USGS 2-foot contours for conceptual design), and 2) the towns didn't have digital property information to share with us for use in conceptual design. We had to digitize the property maps for use. Things may be a bit different. Thanks. Bill.

From: Charette, Russ [mailto:Russ.Charette@maine.gov]
Sent: Thursday, January 26, 2012 7:39 AM
To: Plumpton, William M.
Subject: RE: Draft language for eventual inclusion in DEIS

Bill,

I would suggest that we add just a bit more language to indicate that we would concurrently shift/move the Right of Way as part of that process. We had similar language in our Aroostook County Transportation Study (Caribou Connector project) and we were not allowed to move the planning level corridor.

Russ

Russell D. Charette, P.E.
Director, Mobility Management Division
Bureau of Transportation Systems Planning
MaineDOT 16 State House Station
Augusta, Maine 04333
Phone: 207-624-3238
Fax: 207-624-3301
E-Mail: Russ.Charette@Maine.Gov

From: Plumpton, William M. [mailto:wplumpton@GFNET.com]
Sent: Thursday, January 26, 2012 7:25 AM
To: Charette, Russ
Subject: RE: Draft language for eventual inclusion in DEIS

Russ:

Good morning. Please see the attached excerpt from the ADEIS which we are still revising; the red text shows the changes from the ADEIS dated 11/17/11.

Let us know if you would like anything more or different and gladly make the change. Thanks. Bill. 000418

From: Charette, Russ [mailto:Russ.Charette@maine.gov]
Sent: Wednesday, January 25, 2012 5:11 PM
To: Plumpton, William M.
Subject: Draft language for eventual inclusion in DEIS

Hi Bill,

MaineDOT had a discussion in our Major Studies meeting today about including language in the DEIS for the I-395/Route 9 Study (and possibly another EIS we have in process) about being able to slightly modify the Right of Way corridor location to avoid and minimize impacts to cultural and social resources based on actual survey data.

Please prepare a draft paragraph or so to include in the environmental document. As you well know the Alternatives had been prepared based on planning level data. An ability to "tweak" the ROW corridor as part of final design will be very helpful as we move forward.

Feel free to strengthen my attempt in crafting language to meet that need. FHWA wants to see an initial draft before they agree with the concept. You might also suggest where in the document we would place the language. One of the issues that may come up in further discussions would be the question as to what constitutes a "slight" modification. In our discussion today our chief engineer mentioned 50 feet +/-.

Please let me know if you have any questions.

Russ

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Phone: 207-624-3238
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01/26/12: This email thread shows a discussion regarding changing the wording in the DEIS to allow MDOT to "shift/ move the Right of Way" and to "'tweak' the ROW corridor as part of final design".

"In our discussion today our chief engineer mentioned 50 feet +/-."

"Two lanes would be constructed and used for two-way travel within an approximate 200-foot-wide right-of-way." (DEIS, pg. s9, s13, s14, 42, 45, 49, 53)

"During final design, the Maine DOT would continue to refine the alignment and its right-of-way within the preferred corridor to further avoid and minimize impacts to the natural, social, and economic environments and to coordinate with those that are affected." (DEIS, pg. 57)

Not only does the DEIS indicate that the ROW width would be *200ft*, but that refinement would occur *within the corridor*. This email indicates they decided long beforehand that the ROW width would be 100ft to 125ft.

These changes—both moving the corridor and reducing the ROW width—could affect which properties would be taken, and how close someone may end up being to this roadway.

001143

Bostwick, Richard

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Judy

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Richard Bostwick
Supervisor of Field Services
MaineDOT -ENV

38. Will the proposed connecting route be built to interstate grade standards?
No, the build alternatives would be controlled-access highways and were conceptually designed using the MaineDOT design criteria for freeways. Two lanes would be constructed and used for two-way travel within an appropriate 200-foot-wide right-of-way.

39. Is this going to be designed as a four-lane, divided highway?
No, the build alternatives would be controlled-access highways and were conceptually designed using the MaineDOT design criteria for freeways. Two lanes would be constructed and used for two-way travel within an appropriate 200-foot-wide right-of-way.

40. Are there construction funds?

This Q&A list was sent by Senator Susan Collin's office in January 2012 as previously mentioned. The responses from MDOT do not discuss the changes already in the works such as the down-design to rolling rural or reducing the right-of-way width (as evidenced in the August 2011 email on the "Benefit to Cost Ratio & Analysis part 2" poster and the Dec. 2011 letter from the consultant to MDOT regarding a change to rolling rural design, shown on "Design Criteria Change: Freeway to Rolling Rural" poster.)

Other Interesting Tidbits

000177

December 29, 2011

To: File
From: Judy Lindsey
RE: I-395/ Route 9 Transportation Study Administrative Draft DEIS Status

On December 29, 2011 Bill Plumpton and I conducted a status conference call to discuss next steps for the Administrative Draft DEIS:

Procedural Steps

1. Meeting between Ken and Cheryl Martin to discuss Mark Hasselmann's comments on the Administrative Draft DEIS
   - Mark's comment the 2-lane- 2-lane ROW Preferred Alternative does not satisfy the Purpose and Need (I disagree with this comment as the PA satisfies both the NEPA Purpose and Need as well as the Corps Basic Project Purpose, the agencies concur)
   - Acceptance of the design criteria from Freeway to Rolling to be advanced for the Preferred Alternative prior to the FEIS
   - Interstate Justification Report – June 2011 Major Studies Meeting Mark approved the 8 criteria for an IJR would be incorporated/discussed in the DEIS. The Administrative Draft DEIS was prepared based on this approval see Appendix Dec 22, 2011 comment – IJR must be a separate stand-alone document.
   - I Recommend the Biological Assessment be coordinated and prepared between the DEIS and FEIS.
   - Discussion of the Route 9 footprint and future needs, if any beyond reconfiguration of Route 9/46, prior to the Design year 2030

Discussion items

2. DOT/FHWA needs to come to an agreement on Project Definition
3. Adding discussion on the EA to EIS elevation in the summary duplicates discussion in Chapters 1 and 3; is there value added to discuss in Summary?
4. Purpose and Need
5. Did Mark H completely review the AD DEIS a number of his comments in Chapter 1 and 2 are responded to in Appendices C,D and E. In addition, many are new comments not presented in prior reviews of the DEIS, see file notes from MH.
6. Down-scoping from 2-lanes/2-lane ROW – All alternatives have been analyzed with the same criteria (apples to apples) Mark has stated as the alternative will move forward as a 2-lane/2-lane the analysis is now apples to oranges comparison.
   a. I disagree the alternative analysis for all 70+ alternatives have been conducted with the same footprint and criteria. Between the DEIS and the FEIS the design and analysis for the Preferred Alternative will be advance to reduce/minimize impacts by reducing the design criteria from

This is a document written to the project file, outlining steps that need to be taken and items to be discussed.

It is interesting to note that the FHWA liaison Mark Hasselmann does not think that 2B-2 meets Purpose and Need.

MDOT and FHWA do not agree on a number of items.

Two weeks prior to this letter to the file, there was a series of anonymous postings made to an online NEPA forum, outlining very similar questions and concerns as Mr. Hasselmann has here (pg. 129-132 FOAA).

Mr. Hasselmann was concerned about the proposed down-design in number of lanes and ROW width, as he felt it would be comparing apples to oranges regarding all the other alternatives considered and discarded.

Would any of those alternatives, given a smaller footprint, have had less adverse environmental impact, and thus be a viable option?

Mr. Hasselmann was overruled by his superior at FHWA.

000257

Stewart, Jean

From: Charette, Russ
Sent: Friday, October 12, 2012 3:53 PM
To: Plumpton, William M.
Subject: Cost Estimates

Hi Bill,

I know that we have had quite a bit of discussion with Ken as to costs for the alternatives.

I'm still working to catch up and need estimated costs for the preferred alternative broken down into the following categories:

PE/CE
ROW
Construction
Mitigation
Utility Relocation

We are working on the next department work plan and I need the estimates to include them in the submission that I'm working on. Obviously, I'm paying the price for taking a week off.

Please let me know if you have any questions.

I will need these by Monday afternoon at the latest.

Russ

Russell D. Charette, P.E.
Director, Mobility Management Division
Bureau of Transportation Systems Planning
MaineDOT 16 State House Station
Augusta, Maine 04333
Phone: 207-624-3238
Fax: 207-624-3301
E-Mail: Russ.Charette@Maine.Gov

10/12/12 email from Project Manager Russ Charette to Consultant: "We are working on the next department work plan and I need the estimates to include them in the submission that I'm working on."

10/15/12: I sent an email to Russ Charette asking about the proposed transportation bond at the time. I have asked multiple times about funding for this project, including multiple bond initiatives. I asked, "So, is the connector part of this bond or not? If not, has funding already been set aside for this connector? If not, has a funding source been identified?" In response, I received a phone call from the Assistant Director of the Bureau of Transportation Systems Planning, who assured me that he was 99.9% sure this project was not part of this bond, nor was there funding set aside.

I have not found this project in the work plan released a couple months ago, but there are a number of vaguely-named projects in the plan.

23 §73. TRANSPORTATION POLICY

23 §73. TRANSPORTATION POLICY

1. Short title. This section may be known and cited as the "Sensible Transportation Policy Act."

[1991, c. 1, §1 (NEW) .]

2. Purposes and findings. The people of the State find that decisions regarding the State's transportation network are vital to the well-being of Maine citizens, to the economic health of the State and to the quality of life that the citizens treasure and seek to protect.

The people also find that these decisions have profound, long-lasting and sometimes detrimental impacts on the natural resources of the State, including its air quality, land and water.

The people further find that substantial portions of the state highway system are in disrepair and improvements to the State's roads and bridges are necessary to provide a safe, efficient, and adequate transportation network throughout the State.

The people further find that the State's transportation network is heavily dependent on foreign oil, that such reliance is detrimental to the health of the State's economy and that the health and long-term stability of the State's economy require increased reliance on more efficient forms of transportation.

The people further find that improvements to the transportation network are necessary to meet the diverse transportation needs of the people of the State including rural and urban populations and the unique mobility requirements of the elderly and disabled.

The people further find that the decisions of state agencies regarding transportation needs and facilities are often made in isolation, without sufficient comprehensive planning and opportunity for meaningful public input and guidance.

[1991, c. 1, §1 (NEW) .]

3. Transportation policy. It is the policy of the State that transportation planning decisions, capital investment decisions and project decisions must:

A. Minimize the harmful effects of transportation on public health and on air and water quality, land use and other natural resources; [1991, c. 2, §88 (COR).]

B. Require that the full range of reasonable transportation alternatives be evaluated for all significant highway construction or reconstruction projects and give preference to transportation system management options, demand management strategies, improvements to the existing system, and other transportation modes before increasing highway capacity through road building activities; [1991, c. 2, §88 (COR).]

C. Ensure the repair and necessary improvement of roads and bridges throughout the State to provide a safe, efficient and adequate transportation network; [1991, c. 2, §88 (COR).]

D. Reduce the State's reliance on foreign oil and promote reliance on energy-efficient forms of transportation; [1991, c. 2, §88 (COR).]

E. Meet the diverse transportation needs of the people of the State, including rural and urban populations and the unique mobility needs of the elderly and disabled; [1991, c. 2, §88 (COR).]

F. Be consistent with the purposes, goals and policies of the Comprehensive Planning and Land Use Regulation Act; and [1991, c. 2, §88 (COR).]

G. Incorporate a public participation process in which local governmental bodies and the public have timely notice and opportunity to identify and comment on concerns related to transportation planning decisions, capital investment decisions and project decisions. The department and the Maine Turnpike Authority shall take the comments and concerns of local citizens into account and must be responsive to them. [1991, c. 2, §88 (COR).]

[1991, c. 2, §88 (COR) .]

4. Rulemaking. The Department of Transportation shall adopt a rule within one year of the effective date of this Act, in coordination with the Maine Turnpike Authority and state agencies including the Department of Economic and Community Development, the Department of Agriculture, Conservation and Forestry and the Department of Environmental Protection, to implement the statewide comprehensive transportation policy. The rule must incorporate a public participation process that provides municipalities and other political subdivisions of the State and members of the public notice and opportunity to comment on transportation planning decisions, capital investment decisions, project decisions and compliance with the statewide transportation policy.

The Department of Transportation shall adopt a rule, in coordination with the Department of Agriculture, Conservation and Forestry, that establishes linkage between the planning processes outlined in this section and those promoted by Title 30-A, chapter 187, subchapter 2 and that promotes investment incentives for communities that adopt and implement land use plans that minimize over-reliance on the state highway network. This rule is a major substantive rule as defined in Title 5, chapter 375, subchapter 2-A.

[2011, c. 655, Pt. JJ, §41 (AFF); 2011, c. 655, Pt. JJ, §9 (AMD); 2011, c. 657, Pt. W, §5 (REV) .]

5. Applicability to Department of Transportation. Transportation planning decisions, capital investment decisions and project decisions of the Department of Transportation are governed by and must comply with the transportation policy set forth in this section and rules implementing that policy.

[1991, c. 1, §1 (NEW) .]

6. Capital goals and reporting.

[2011, c. 610, Pt. B, §1 (RP) .]

7. Priorities, service levels, capital goals and reporting. The Department of Transportation shall classify the State's public highways as Priority 1 to Priority 6 corridors using factors such as the federal functional classification system, regional economic significance, heavy haul truck use and relative regional traffic volumes. The department shall also establish customer service levels related to safety, condition and serviceability appropriate to the priority of the highway, resulting in a system that grades each highway as Excellent, Good, Fair, Poor or Unacceptable.

To provide a capital transportation program that is geographically balanced and that addresses urban and rural needs, the department shall include the following goals as part of its capital improvement plans and program delivery. The goals are to:

A. By 2022, improve all Priority 1 and Priority 2 corridors so that their safety, condition and serviceability customer service level equals Fair or better; [2011, c. 610, Pt. B, §2 (NEW).]

B. By 2027, improve all Priority 3 corridors so that their safety, condition and serviceability customer service level equals Fair or better; [2011, c. 610, Pt. B, §2 (NEW).]

C. By 2017, implement a pavement program for all Priority 4 corridors that maintains their ride quality customer service level at Fair or better; [2011, c. 610, Pt. B, §2 (NEW).]

D. Continue the light capital paving program on a 7-year cycle for Priority 5 corridors outside compact areas as defined in section 754; and [2011, c. 610, Pt. B, §2 (NEW).]

E. By 2015, develop and implement a similar asset priority and customer service level system of measurement for all major freight and passenger transportation assets owned or supported by the department, including capital goals. [2011, c. 610, Pt. B, §2 (NEW).]

The department shall report to the joint standing committee of the Legislature having jurisdiction over transportation matters by March 1st of each odd-numbered year quantifying progress realized and time that has elapsed since the goals were established. The department shall recommend any remedial actions, including additional funding or revisions to the goals, that the department determines to be necessary or appropriate.

[2011, c. 610, Pt. B, §2 (NEW) .]

SECTION HISTORY
IB 1991, c. 1, §1 (NEW). RR 1991, c. 2, §88 (COR). 2003, c. 22, §1 (AMD). 2007, c. 470, Pt. B, §1 (AMD). 2011, c. 610, Pt. B, §§1, 2 (AMD). 2011, c. 655, Pt. JJ, §41 (AFF). 2011, c. 655, Pt. JJ, §9 (AMD). 2011, c. 657, Pt. W, §5 (REV).

The Chief Engineer is appointed by the Commissioner.

The Commissioner is appointed by the Governor.