Middletown Area River Crossing Study

Prepared by the Connecticut Department of Transportation in Cooperation with the Federal Highway Administration

Preliminary Alternatives Development

(Technical Report No. 2)

July 2008

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Background

Purpose and Need:

The Purpose of the Middletown Area River Crossing Study (MARCS) is to determine the need, evaluate alternatives and identify a preferred alignment for a crossing over the Connecticut River (river) in Middletown, at a location to service future travel demand within and through the study area for the longer term. The Arrigoni Bridge, which carries Route 66/17, was constructed in 1938 and is currently the only river crossing in the study area. An improved river crossing and roadway access would reduce congestion during peak hours associated with geometric deficiencies of the existing Arrigoni Bridge, and its connections with Route 9. Constructing a safe and efficient river crossing that will satisfy the travel demands of the region is the ultimate goal of this study. Taking into consideration the findings of the MARCS "Existing Condition and Future No Build Condition" report (November 2007), a preliminary analysis of various alternative river crossing concepts has been conducted and the results are presented in this report.

This report will document the initial screening of preliminary alternative concepts, and present the eight concepts recommended for further consideration and more detailed analysis.

Study Initiation:

The MARCS was initiated in June 2005. The Department of Transportation (Department) met with the Midstate Regional Planning Agency, each of the municipalities involved in the study (Middletown, Portland, Cromwell and East Hampton), and the Middlesex County Chamber of Commerce to discuss study information and specific concerns they may have regarding travel within and through the study area. These concerns are documented in meeting minutes (Appendix D). An Advisory Committee was established to assist in the collection and dissemination of information (Appendix C). Two meetings have been held between the Department and the Advisory Committee. A Technical Working Group was also formed in the beginning stages of this study. Pertinent information, including previous studies, reports and other planned or programmed projects has been reviewed and incorporated into the study as appropriate. Daily and Peak hour traffic volumes have been determined for existing conditions and year 2030 projections.

Existing Conditions and Future No Build Condition Report:

The influence of the Arrigoni Bridge is within the towns of Middletown and Portland, and reaches into Cromwell and East Hampton; therefore, sections of these towns are included in the study area. The Existing Conditions and Future No Build Condition Report (November 2007) analyzed the Arrigoni Bridge and its

ability to accommodate existing and future travel demands. The study also considers the major arterials that link to the Arrigoni, as well as key intersections that are vital to traffic flow in the Middletown region.

Traffic analyses of the Arrigoni Bridge, Route 9 ramp and freeway segments, and key intersections, both signalized and non-signalized, were performed for the existing traffic volumes and for the future year 2030. The results of these analyses are found in various tables in the MARCS Existing Conditions and Future No Build Condition Report. At most intersections the results for year 2030 volumes showed a drop in the Level of Service (LOS) by at least one level, as compared to existing volumes. However, some intersections, freeway segments and ramps resulted in a LOS F with the additional traffic volumes expected in the year 2030. Surprisingly, the Arrigoni Bridge, which currently provides two lanes in each direction, can be expected to accommodate future projected volumes. However, the configuration of the bridge is constrained, with reduced lane widths, no shoulders or median separation. Because it is a non-redundant structure, no improvements to lane and shoulder widths can occur. Since these safety improvements cannot be constructed, the probability of increased traffic incidents with future traffic volumes is likely to occur. Incidents that occur on the Arrigoni Bridge or one of the intersections that are directly linked to the bridge have a compounding effect that can queue traffic on Route 9 as well. It should also be noted that even though the Arrigoni Bridge itself could accommodate the projected traffic volumes for the year 2030, the intersections at each end of the Bridge significantly decrease in LOS. For these reasons, there is a need for a new river crossing that has direct and/or improved access with Route 9.

Planned/Programmed Initiatives:

Projects programmed and planned for the study area are being pursued to improve traffic management in the near and mid term. These projects are included in the future "No Build" scenario for this study, and include the following:

State Project No. 82-300: This project will install variable message signs on both approaches to the Arrigoni Bridge on Route 66, as well as on southbound Route 9 north of the I-91 Interchange in Cromwell and on northbound Route 9 in the vicinity of Route 82 in Chester. Lane control signs will also be installed on the Arrigoni Bridge to designate open and closed lanes in each direction. In addition, cameras will be installed in the Arrigoni Bridge area to allow the monitoring of highway operations approaching the bridge. This project will provide an effective means to reduce congestion due to incidents. The current project schedule has an advertising date of July 2008 with construction in 2009.

State Project No. 82-279: A Route 9 Operational Improvement Study was initiated in January 1999 in an effort to address existing deficiencies, safety issues, and problems that may occur along Route 9 and its interchanges in the

City of Middletown. The overall project area begins just north of the town line in Cromwell and covers Route 9 south to the Silver Street interchange area. During the project evaluation process, it was determined that the Northern Interchange (Route 66 / 17) and the Southern Interchange (Route 17) have independent utility from each other. Based on that determination, the proposed modifications are being pursued as two independent projects (Southern and Northern projects). The top three goals of this initiative are to: (1) eliminate the traffic signals on Route 9, (2) improve Route 9 access to downtown Middletown and surrounding areas and (3) provide appropriate interchanges at Routes 9, 17 & 66 for local and through traffic.

Southern Project Limits:

The project limits for the Route 9 & Route 17 Interchange Improvements begin in the south at the Silver Street Bridge over Route 9. Heading north along Route 9, this project extends to the intersection with Washington Street, which is controlled by a traffic control signal on Route 9. More specifically, in the northbound direction, the project will include the elimination of the existing median opening on Route 9, which will require the project limit in the northbound direction to extend beyond the Washington Street intersection area. In addition to the reconstruction work along Route 9, the project limits encompass the freeway portion of Route 17 from South Main Street to Route 9. The reconstruction activity affecting the local roadway network will include Main Street Extension, East Main Street, River Road, Union Street, Eastern Drive, Walnut Street, including the replacement of the Walnut Street Bridge over Route 9, and Harbor Drive. The improvements to Eastern Drive are intended to provide better access to the new interchange in an effort to replace the existing entrance and exit ramps to Silver Street. Some of the primary features of the proposed improvement plan include the following:

Route 17 / Route 9 Interchange: The main component of the plan is the construction of a new Route 9 / Route 17 Single Point Urban Interchange (SPUI). The existing partial free-flow directional interchange will be completely redesigned into a SPUI interchange. The new plan includes lowering Route 17 into a boulevard segment that will pass under a new bridge that will carry Route 9 over Route 17. The new interchange will add the missing leg of the existing interchange, Route 9 northbound to Route 17, thus creating a full directional interchange at the south end of Middletown's central business district.

Route 9: Included in this plan are proposed improvements to Route 9 to accommodate the proposed interchange design and to mitigate some of the existing deficiencies that currently exist along this segment of Route 9.

One of the most important corridor issues addressed under this project is the improvement to the Route 17 ramp to Route 9 northbound. The existing entrance ramp from Route 17 to Route 9 north experiences frequent incidents, which are caused by a number of factors, including the stop controlled entrance ramp, limited site-lines along Route 9, high travel speeds, and the short acceleration and merge lane. The proposed design will include an operational lane that will allow Route 17 traffic to enter Route 9 without being forced to merge with mainline traffic immediately. Rather, the traffic from Route 17 will have ample time to merge into the through traffic prior to the termination of the operational lane. As part of the overall improvement plan to Route 9 in Middletown, the proposed operational lane will eventually terminate at the proposed Route 66 Interchange, which is being developed as a separate project.

Northern Project Limits:

The project limits for the Route 9 & Route 66 Interchange improvements begin near the Washington Street and Route 9 interchange and end approximately at the Middletown - Cromwell town line. A full diamond interchange is one proposal at the Route 9 Exit 15 (Hartford Avenue/Route 66) area to allow traffic access to and from the Arrigoni Bridge, as well as, to and from Main Street and Route 66. Multiple alternatives for the Northern Project are in the review process with the central concept of elimination of the Traffic Signal on Route 9 at Exit 15 and the creation of direct free flow access to Route 9 in both directions. As stated previously. the northern and southern projects which encompass State Project 82-279 have separate utility, however the northern project and the MARCS study may not; depending on the final location of the new river crossing. For this reason, key participants must coordinate the final northern project concept with the MARCS findings. Alternative A, which is proposed in the MARC Study, is an east-west connector that will help alleviate congestion on Main Street in Middletown, and is described below in more detail. There may be some local road closures and realignments associated with the northern project 82-279.

Identification of Alternatives

Preliminary Alternatives:

Initially, through application of the traffic data and collaboration with various entities, thirteen preliminary alternatives were identified. These alternatives varied in location of crossing with respect to Route 9, access to Route 9 and number of crossings over the river. The number of alternatives was subsequently reduced to eight, considering connections with Route 9 and relative proximity. For instance, some preliminary alternatives that would connect to Route 66/17 in Portland and East Hampton begin to lose their effectiveness as

they connect further east towards Route 66. Also, two of the alternatives were very similar in concept, with one located further to the east and connected with Route 66 close to the East Hampton Town line. The easterly concept was deemed less effective and therefore was eliminated. Other concepts varied only in their connections with Route 9. In these instances the concept that had more direct access to Route 9 was retained. One alternative did not have a river crossing and was therefore eliminated as a concept, and renamed Alternative A. However, because of its ability to relieve traffic flow when combined with other concepts, Alternative A is recommended to be analyzed as a component of each of the alternatives to be considered in the next study phase. This initial screening process took into account the future traffic volumes from an empirical standpoint, realizing that the greatest travel benefit from a new river crossing would be achieved at a location near the current Arrigoni Bridge crossing.

The following sections discuss currently programmed or planned initiatives (including State Project No. 82-279), the No Build Alternative and the eight Candidate Alternative concepts, plus Alternative A in more detail.

Candidate Study Alternatives:

The alignments of the candidate alternatives are illustrated in Figure 1. Appendix A provides the information applied in selecting those alternatives that are considered to warrant further consideration and analysis in the subsequent phases of this study.

No Build Alternative:

The No-Build Alternative assumes no modifications to the existing infrastructure, except for currently programmed and planned projects within the study area and routine maintenance of the Arrigoni Bridge. Consideration of a No Build alternative throughout the planning process is required in compliance with federal and state environmental regulation.

The travel demand forecast for the year 2030 indicates that the LOS will continue to degrade to unacceptable levels on Route 9, the Arrigoni Bridge and various intersections within the study area. An increase in the number of accidents and length of queues associated with the increased traffic volumes can also be expected. The Arrigoni Bridge is a non-redundant structure, and therefore no modifications can be made to increase the width of travel lanes or to add shoulder lanes to bring it to current design standards.

Alternative 1:

This alternative would realign Routes 66/17 in Portland. Traveling east on Route 66/17, motorists would come to a T-intersection south of Thomas Street and west of Grove Street. At the T-intersection, a left-turn would tie into the

existing alignment of Route 66/17 on the eastern side of Grandview Terrace #1. A right-turn from the T-intersection would take vehicles to the west of the development located on Riverside Street. Motorists would cross the river at a narrow section in the river, cross River Road #1 and continue into the proposed single-point intersection at Interchange 13 (Route 17).

Alternative 2:

Alternative 2 would connect to Route 9 in the vicinity of Interchange 12 (Silver Street). This alignment would run north, parallel to Eastern Drive and cross the river touching down west of a development on Riverside Street, then continue across Route 66/17 between Grove Street and Airline Avenue in Portland. The Alignment would continue in a northeasterly direction crossing Hall Hill Road then begin to run northwesterly then parallel with Covell Hill Road. The new roadway would continue in a northwesterly direction over the river south of South Street in Cromwell and connect to the existing Route 9 alignment north of existing interchange 18.

Alternative 3:

Alternative 3 consists of a river crossing that would extend Route 66/17 in Portland through the intersection with Route 17A crossing over the south side of the largest quarry and the river with a possible pier location on Wilcox Island. This alternative would connect to existing Route 9 just north of Interchange 18. The second element of this alternative would eliminate interchange 16 and reconfigure access to Route 9 to the north of the Arrigoni Bridge using added ramps.

Alternative 4:

Alternative 4 would essentially be considered a bypass of Route 9 through Middletown. This concept would begin at Interchange 12 (Silver Street) and continue in a northwesterly direction across the river. The new roadway would fly-over Route 66/17 in the vicinity of Wolcott Avenue. New on- and off-ramps would be constructed for access from Route 66/17. It would continue northwest, crossing over both quarries in Portland, run parallel to the river and cross north of Wilcox Island. This new alignment would connect to existing Route 9 north of Interchange 18.

Alternative 5:

Alternative 5 would realign Route 66/17 and Route 66 in the area of Sand Hill Road in Portland. Route 66 westbound would continue in a northwesterly direction and Route 66/17 would continue in a northeasterly direction as they currently do, but rather than meeting at a curve would intersect at a T-intersection in the vicinity of what is now Gospel Lane. Route 66 would continue

northwesterly either parallel to or incorporating William Street. This alternative would continue through the intersection of 17A and cross the river at that location. Alternative 5 would tie into existing Route 9 North of Interchange 18.

Alternative 6:

Alternative 6 would begin at the intersection of Route 66/17 and Route 17A in Portland and continue through the intersection in a northwesterly direction crossing between the two quarries. This alignment would carry traffic over the river and Route 9 north of the Arrigoni Bridge. Interchange 16 would be closed and new ramps would be constructed from the new alignment. This alternative would merge into the existing roadway alignment near Rome Avenue.

Alternative 7:

Alternative 7 would begin on Route 66 in the town of Portland to the east of Middle Haddam Road, and cross the river in a southwesterly direction. This alignment would merge into River Road # 1 and connect to existing Route 9 at Interchange 12 (Silver Street).

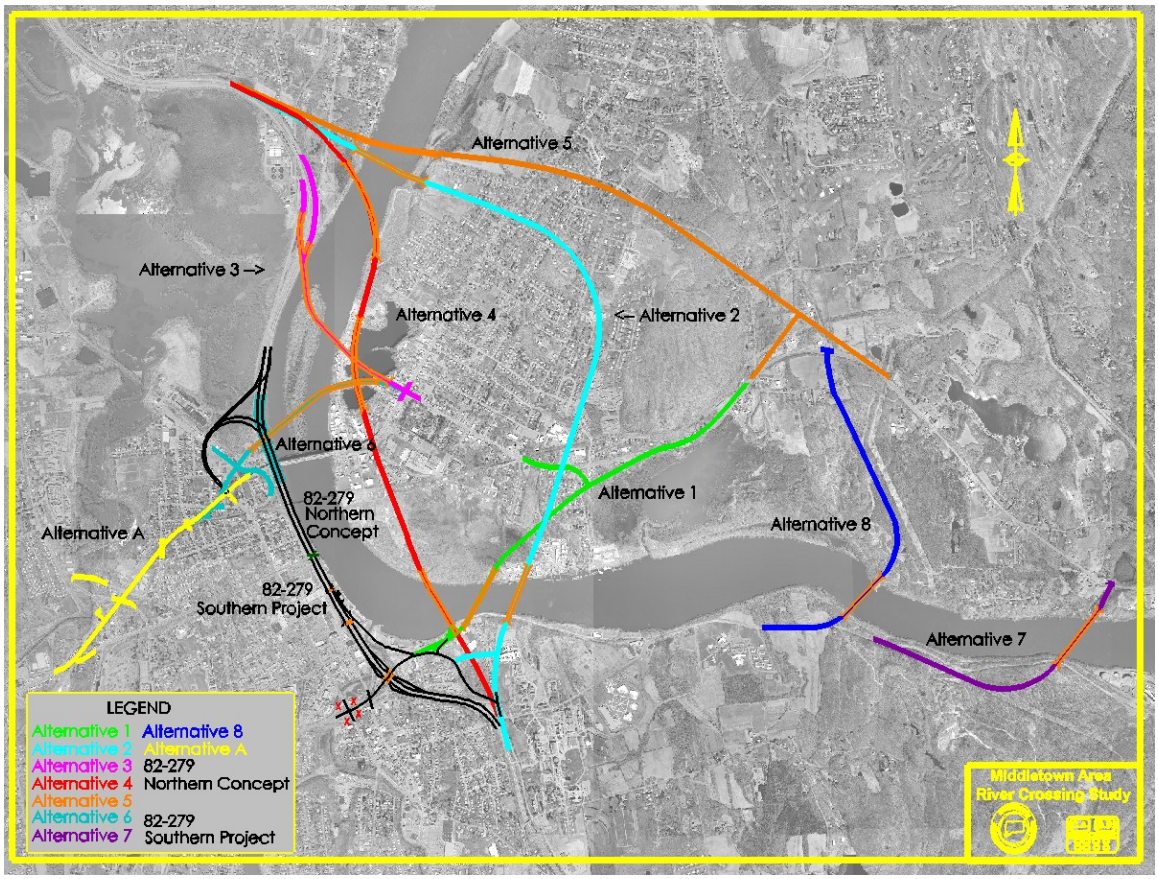
Alternative 8:

Alternative 8 would begin at the intersection of Route 66 and Route 17 in Portland and follows a southeasterly direction parallel to existing high-voltage power lines. This alternative would also cross the river in a southwesterly direction and merge into River Road #1 and then Silver Street, as in Alternative 7. This concept would tie into the existing Route 9 alignment at Interchange 12 (Silver Street).

Alternative A:

Alternative A is not a concept for a new river crossing, but a concept for Route 66 realignment east of the Arrigoni Bridge. This alternative begins just west of Dunn Street in Middletown and follows the existing railroad alignment in a northeasterly direction and would either merge with some of the northern alternative river crossings, the Arrigoni Bridge, or one of the proposed northern concepts from project 82-279. This Concept could be used to alleviate some of the congestion through the center of Middletown, and will compliment any of the river crossing alternatives.

Figure 1
Alternatives Alignment



Route 9, Interchange 19 (Cromwell):

In the analysis of existing and future conditions, Route 9 Interchange 19 in Cromwell was identified as having a high level of congestion. "Route 9 Interchange #19 Cromwell" (Appendix B) provides a detailed description of the issues and some conceptual ideas to address the most critical needs at this location Low cost modifications are being considered to manage congestion and improve capacity in the area of the Route 9 Interchange 19. The southbound off-ramp should be rerouted to create more separation between the Route 9 southbound off ramp and the Intersection of Route 372 and Route 3. Capacity on the Route 9 southbound off ramp could be greatly improved by adding an additional turning lane. Additional through and/or turning lanes are also being investigated on each leg at the Route 372 and Route 3 intersection. Lane Configuration is also being researched at the short leg of Route 372 between Route 3 and the Route 9 southbound on-ramp.

Next Steps

Funding:

The next step in this initiative would be to secure funding for the Department to hire a consultant to complete the next phase in the planning study process, which is to continue with the alternatives analysis. Each Candidate Alternative concept will be further evaluated in terms of geometric refinement, traffic, environmental considerations, cost and constructability, and financial analysis. This will be used to define a recommended preferred improvement plan.

Further Alternatives Development:

Geometric Refinement:

Some geometric deficiencies, including traffic weaves, have been identified in the "Existing Conditions and Future No Build Condition" report. Traffic safety under each Conceptual Alternative will be assessed based on each alternative's ability to improve geometric deficiencies identified in the existing conditions phase of this study. Each Candidate Alternative concept will be evaluated with respect to the number of substandard geometric deficiencies improved over the No Build Scenario. The effect of geometric improvements in terms of reduction in accident rates will be quantified.

Traffic:

A future (2030) traffic operations evaluation of the Candidate Alternative concepts will be undertaken. The evaluation of Conceptual Alternatives will involve capacity analysis of the highway system using methodologies in the Highway Capacity Manual for estimating LOS on the freeways and interchange ramps, local road impact analysis, and local road routing analysis.

Environmental Considerations:

The overall focus of the study is not only improving traffic operations on the Arrigoni Bridge but also improving local access to downtown Middletown via local road enhancements and Transportation Demand Management/ Transportation System Management. This must be accomplished with as minimal impact as is possible upon the physical environment. A screening level assessment will be performed of the potential impacts of the Candidate Alternative concepts regarding environmental resources in the study area. The analysis process for the environmental screening will involve the overlay of project alternatives on mapped environmental resources. This task will be completed for the purpose of identifying potential alternative flaws and to gain a

preliminary planning-level view of project issues and concerns. A detailed impact analysis is neither prudent nor possible at that stage of project development.

The documentation collected at this next phase of the planning process will be compiled to complete a preliminary environmental sensitivity review of the Candidate Alternatives. This documentation will be used as the basis for a subsequent in-depth environmental analysis prepared in accordance with the National (NEPA) and Connecticut Environmental Policy Acts (CEPA). An Environmental Impact Statement /Environmental Impact Evaluation would be required for major U.S. government and Connecticut transportation projects.

Cost and Constructability:

Conceptual construction cost estimates will be developed, including all structural and civil items, for each Conceptual Alternative. These costs will be in current dollars given the conceptual stage at which alternative development and phasing schedules will be. As the Candidate Alternative concepts continue to be refined throughout this study, future year (estimated year of expenditure) costs will be developed and reported in a financial plan for the project. The cost estimates include the taking of property that might be necessary to construct these alternatives. A simple formula will be used that multiplies the number of estimated property takes by an assumed average cost. As alternatives are refined, such costs will be refined as appropriate.

Constructability refers to the relative ease with which an alternative can be constructed. It is inclusive of stage construction, maintenance of traffic and work zone safety. Construction staging includes the planned transition of construction from the existing facility to the newly completed facility. Traditional traffic crossovers, temporary paved embankments, and interim lane configurations are included in this item. Proper barricades, physical barriers and warning devices provide work zone safety to the contractors' manpower and equipment. Also, special construction techniques and methods may need to be used to construct the project in a restrictive environment.

The scope and available information of a planning study typically does not allow for evaluating the maintenance and protection of traffic, construction access and staging, and construction methods in detail. Therefore, a lump sum cost for each alternative will be assumed based on professional judgment and past experience.

For each of the Candidate Alternative concepts, a cursory review will be made regarding the potential issues that could arise during construction. The information presented will not intend to reflect a detailed evaluation of all constructability issues, but to provide general guidance on selecting a recommended Preferred Alternative. A more comprehensive list of issues will be developed at a later stage in project development.

Financial Analysis:

A benefit-cost analysis is a systematic evaluation of the economic advantages (benefits) and disadvantages (costs) of a set of investment alternatives. Typically, a "Base Case" is compared to one or more Candidate Alternatives which have some significant improvement compared to the Base Case. The analysis evaluates incremental differences between the Base Case and the Conceptual Alternative(s). In other words, a benefit-cost analysis tries to answer the question: What additional benefits will result if this alternative is undertaken, and what additional costs are needed to bring it about?

The objective of a benefit-cost analysis is to translate the effects of an investment into monetary terms and to account for the fact that benefits generally accrue over a long period of time whereas capital costs are incurred primarily in the initial years. The primary transportation-related elements that can be monetized are travel time costs, vehicle operating costs, safety costs, ongoing maintenance costs, and remaining capital value (a combination of capital expenditure and salvage value).

The benefits of a transportation investment are typically estimated by comparing the amount of travel time, vehicle miles traveled and expected number of crashes for the alternative to the Base Case. The physical projection of the change brought about by each alternative is usually accomplished by engineering analysis. The second step is translating these physical benefits into monetary values.

In economic terms, the cost of a transportation investment is the value of the resources that must be consumed to bring the project about. The total value of construction and any additional maintenance costs must be estimated. It is important to note that the analysis does not emphasize who incurs the cost but rather aims to include any and all costs that are involved in bringing about the project.

Based on the assumptions listed above and the performance measures that will be reported by a VISSIM model, a benefit-cost (B/C) ratio will be calculated for each of the Conceptual Alternatives. The calculation for B/C is simply the total discounted benefits divided by the total discounted costs. A B/C ratio greater than 1 indicates that the benefit outweighs the costs and the project is economically justifiable.

Preferred Alternative Selection:

The goal at the next phase of the planning process is to evaluate the Candidate Alternatives and ultimately select a Preferred Alternative to be evaluated in greater detail. It is envisioned that local or near-term improvements and one of the Build Alternatives would then be advanced to a further phase of

the project where they would be consolidated into a single Preferred Alternative. For this screening to be successful, careful consideration of the pros and cons of each of the Build Alternatives must be given so that the proposed transportation improvement that moves forward in the study process has the greatest potential for construction and addressing the needs of the corridor.

As part of this effort, the study team will hold a series of meetings with key stakeholders and the Advisory Committee to assess each Conceptual Alternative on the basis of their strengths and weaknesses.

Appendix A
MARCS Preliminary Alternatives

Preliminary Alternatives Screening Analysis:

The Department performed an analysis of the Preliminary Alternatives covering four (4) areas of interest: Operational Benefit, Capital Cost, Environmental and Social Impacts and Constructability. The severity and number of impacts was enumerated to determine the numerical value shown in the Decision Matrix (see Table 1 – Benefit Categories).

Operational Benefit was determined based on traffic diversion from the Arrigoni Bridge for the bridge alternatives. In the case of Alternative A, operational benefit was determined as a percent traffic diversion from Main Street. This analysis was determined using future traffic assigned to the No Build Alternative as compared with future traffic reassigned to each particular alternative. Traffic was forecasted and assigned by the Department.

The Capital Costs were calculated in a qualitative manor by enumerating the compounding factors associated with cost for each of the alternatives. Some of the factors encountered which would affect the ultimate cost of the river crossing include: the Rights Of Way (ROW) acquisition , complexity and length of the bridge structure(s), complexity and length of the road structure, environmental mitigation costs, and in the case of the No Build option the cost of maintaining the bridge without diversion of traffic. Detailed construction cost estimates were not included in the scope of this planning study.

A preliminary assessment of the potential environmental and social Impacts were evaluated by overlaying preliminary alternative locations with Existing Environmental Conditions data maps. Impacts to the following resources were evaluated: Surface Water Resources, Wetlands, Groundwater Resources, FEMA Floodplain, Endangered Species & Natural Inventory Sites, Prime Farmland, Stream Channel Encroachment Lines, Historic Architectural & Archeological Resources, 4F and 6F properties (historic and public spaces), Land Use and Environmental Risk, Economic Justice, and Air Quality.

A preliminary assessment was also made regarding the constructability of each alternative, on the basis of how complicated the design and construction would be. Site characteristics such as severity of slopes, amount and curvature of structures, and proximity to rail right-of-way were considered, as well as the ability to design optimal connections to the existing infrastructure. Brownfield designation requiring additional environmental mitigation would also play a factor. Suspect soil conditions for structures near wetlands were also considered. For instance, would unsuitable material need to be removed or would piles need to be driven to support the structure.

Candidate Alternatives

The results of the Department's analysis of the Preliminary Alternatives covering four (4) areas of interest are shown:

No Build Alternative:

1) Operational Benefit: None.
2) Estimated Capital Cost: Minimal. However, the cost to maintain Arrigoni Bridge could become substantial over time. Without an additional bridge, lane closures, maintenance and protection of traffic could be expensive.
3) Potential Environmental/ Social Impacts: Moderate. Increase in air pollutants possible due to longer traffic queues. Significant increases in traffic queuing, possible incidents, and longer periods of noise due to increased time of congestion are probable.
4) Constructability: N/A.

Alternative 1:

1) Operational Benefit: Moderate. Approximately 20% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Considerable. Due to structure through wetlands.
3) Potential Environmental/ Social Impacts: Considerable – Substantial. Potential significant environmental impacts (impact to land trust, park and potentially archaeological sensitive sites). Slight impact to Environmental Justice areas.
4) Constructability: Low. Complications due to suspect soils.

Alternative 2:

1) Operational Benefit: Considerable. Approximately 40% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Substantial. Numerous property acquisitions and two bridge structures.
3) Potential Environmental/ Social Impacts: Considerable – Substantial. Extensive environmental impacts (potentially numerous property acquisitions, archaeological sensitive sites, moderate impact to park and public spaces). Slight impact to wildlife area possible. Possible impacts to Historic areas. Impacts to Environmental Justice areas could be significant.
4) Constructability: Moderate. Numerous Property acquisitions would require demolition; Ramp configuration for northern bridge to Route 9 could be difficult.

Alternative 3:

1) Operational Benefit: Considerable. Approximately 35% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Considerable. Increased cost due to bridge curvature.
3) Potential Environmental/ Social Impacts: Minimal – Moderate. Minimal environmental impacts, mostly on Wilcox Island. Possible impact to Wildlife area. Moderate impacts to Historic Landmark and slight impact to Archaeological sensitive sites. Moderate impact to Environmental Justice area.
4) Constructability: Low. Extensive difficulty arises from curvature of structure.

Alternative 4:

1) Operational Benefit: Substantial. Approximately 55% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost; Substantial. Extensive cost for structure due to wetlands in the South; Increased cost of northern bridge due to curvature of structure, and multiple bridges.
3) Potential Environmental/ Social Impacts: Substantial. Potential significant impact to wetlands, slight impact to wildlife area, archaeological and Historic sensitive sites. Impact to one park. Alignment poses possible significant impacts through Portland's commercial development. Moderate impacts to Environmental Justice areas.
4) Constructability: Lowest. Substantially difficulty constructing through wetlands for southern bridge, Curvature of northern bridge could pose problems.

Alternative 5:

1) Operational Benefit: Considerable. Approximately 35% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Considerable. Extensive new roadway alignment with potential for numerous R.OW. Takes.
3) Potential Environmental/ Social Impacts: Slight to Moderate. Impacts to wetland areas. Possible impact to Wildlife area depending on alignment. Impacts to Farmland soils could be significant, depending on alignment. Slight impact to Archaeological Sensitive sites with possible impacts to Public Spaces and two Historic areas depending on alignment. Slight to moderate impacts to Environmental Justice areas.
4) Constructability: High. Ramps that connect the new alignment with Route 9 could pose some difficulty.

Alternative 6:

1) Operational Benefit: Substantial. Approximately 60% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Slight. Cost could rise depending on structure length and alignment with Portland Quarries.
3) Potential Environmental/ Social Impacts: Minimal – Considerable. Slight impacts to wetlands. Moderate impacts to Archaeological Sensitive sites and undefined private 4(f), 6(f) spaces. Impact to one park and possible impact to a Historic area. Slight to moderate impacts to Environmental Justice areas, depending on alignment.
4) Constructability: Highest. Curvature of alignment could be in Structures, Tie-in near Arrigoni Bridge could be difficult.

Alternative 7:

1) Operational Benefit: Minimal. Approximately 15% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Moderate. Due to length of new roadway that ties into existing roadway.
3) Potential Environmental/ Social Impacts: Slight. Few environmental impacts. Slight impact to Archaeological Sensitive site, possible impact to park. Slight impacts to Environmental Justice areas.
4) Constructability: Low. Severe slopes near river could prove difficult, extensive fill or structure would be needed.

Alternative 8:

1) Operational Benefit: Minimal. Approximately 15% decrease in Arrigoni Bridge volumes.
2) Estimated Capital Cost: Moderate. New roadway constructed without restriction, length of new roadway extensive.
3) Potential Environmental/ Social Impacts: Minimal. Slight environmental impacts. Slight Archaeological Sensitive site impact and possible impact to park. Slight impact to Environmental Justice area.
4) Constructability: High. Steep slopes near river and access ramps to Route 9 could be difficult.

Alternative A:

1) Operational Benefit: Moderate. Approximately 30% decrease in volume on Main Street.
2) Estimated Capital Cost: Moderate. Multiple bridges and coordination with Railroad.

3) Potential Environmental/ Social Impacts: Slight. Little impact to wetlands. Possible impact to Historic structure. Moderate Property acquisitions. Possible impact to school. Slight impact to Parks and Public Spaces. Impacts to Environmental Justice areas could be moderate.
4) Constructability: Moderate. Dependant on proximity to Railroad

Selection Matrix:

The Alternatives Selection Matrix for Middletown Area River Crossing Study is the product of the Preliminary Alternatives Screening notes (Table 1 - Benefit Categories). Performance is broken into (five) 5 Categories: Operational Benefit, Estimated Cost, Potential Environmental Impacts, Potential Social Impacts and Constructability.

Alternatives were assigned a numerical value (1-5) for each criteria; 1 indicating a poor performance/benefit and 5 indicating best performance/benefit. Operational benefit is weighted double to reflect its greater importance on the decision process; diversion of traffic from the Arrigoni Bridge is the main objective of the project.

The Matrix (Table 2 – Alternatives Selection Matrix) numerically indicates that River Crossing Alternatives 3, 5 and 6 perform the best by a considerable margin. It also shows that failure to create a new river crossing will result in a low operational benefit. Alternative A is not given a ranking because it is anticipated that it will be incorporated with any of the other river crossing concepts. That being said, with a total score of 20 (of a possible 30), Alternative A manifests significant improvements for traffic, with limited negative social and environmental impacts.

Alternatives 7 and 8 are not being recommended for further study. It was found that an easterly location for river crossing does not target the majority of traffic, who mostly drive west along Route 66, North up Route 9 and in the downtown Middletown area. Therefore traffic would continue to utilize the Arrigoni Bridge, failing to relieve traffic on it and the surrounding intersections.

Table 1
Benefit Categories

Benefit Categories				
Determination Basis	**Operational Benefit**	**Capital Costs**	**Environmental/Social Impact**	**Constructability**
	Traffic Diversion	Anticipated Cost	Number and Severity of Impact	Complexity of structures and Optimization of Interchanges
1	None- 0-10%	Substantial	Substantial	Lowest
2	Minimal - 10-20%	Considerable	Considerable	Low
3	Moderate - 20-30%	Moderate	Moderate	Moderate
4	Considerable - 30-40%	Minimal	Minimal	High
5	Substantial - above 40%	Slight	Slight	Highest

Table 2
Alternatives Selection Matrix

Alternatives Selection Matrix for Middletown Area River Crossing Study										
Grading Criteria	Alternative Numbers									
	No Build	1	2	3	4	5	6	7	8	ALT. A
Operational Benefit	2	4	8	7	10	7	10	2	2	6
Estimated Cost	4	2	1	4	1	2.5	5	3	3	3
Potential Environmental Impacts	3	1	2	4	1	3	4	5	4	5
Potential Social Impacts	3.5	2	1	3	1	3	2.5	5	4	3
Constructability	N/A	2	3	2	1	4	5	2.5	4	3
Total Score	12.5	11	15	20	14	19.5	26.5	17.5	17	20
Ranking of Alternatives	8	9	6	2	7	3	1	4	5	(N/A)

Note: A score of 5 indicates the best performance or benefit.
A score of 1 indicates the poorest performance or benefit.
Note: Operational Benefit is weighted twice the other criteria .
Note: Alt. A is combined with Alt's 1-6 therefore it is not ranked individually.

Appendix B

Route 9 Interchange #19, Cromwell:

In the analysis of existing and future conditions, Route 9 Interchange 19 was identified as having a high level of congestion. Under existing conditions, in the northbound direction between interchanges 18 and 19, Route 9 operates at a LOS E during the AM peak hour. In addition, Route 9 southbound between exits 19 and 14 operates at a LOS D during the PM peak hour. The northbound off-ramp at Interchange 19 operates at a LOS E in the AM peak hour. The southbound off-ramp at Interchange 19 functions at a LOS D in the PM peak hour. More information regarding existing and future traffic conditions can be found in Section 2 of the MARCS Existing and Future No Build Condition Report.

Traffic forecasted for 2030 reveals the conditions surrounding Interchange 19 will continue to degrade. All of the aforementioned sections of freeway and ramps function at a LOS F in the future. These conditions prompted further analysis of the interchange and surrounding street system for an opportunity to design a near term, low-cost solution to the traffic problems. Design constraints included the Route 372 overpass structure, so that every attempt will be made not to alter the structure.

Very high ramp volumes, insufficient ramp capacity, short distance between intersections and high left turn movements are among the problems found at this site. Multiple interchange improvement strategies are being tested using Synchro traffic modeling software to verify their functionality given 2030 traffic conditions. The alternative that reveals the best benefit to cost ratio will be refined and recommended for further analysis and design.

The Cromwell Alternative should be a functional, low cost solution to congestion and capacity in the area of Interchange 19. The southbound off-ramp needs to be relocated as to provide more distance between the off ramp and the intersection of Route 372 and Route 3. Capacity on this ramp will be greatly improved by providing a turn lane (possibly two).

A large contributing factor to the functionality of any alternative is increasing the length between the Route 9 southbound interchange and the Route 372/ Route 3 intersection. Ramp traffic queuing at these intersections is a major contributor for congestion, which tends to backup onto Route 9 in the peak hour.

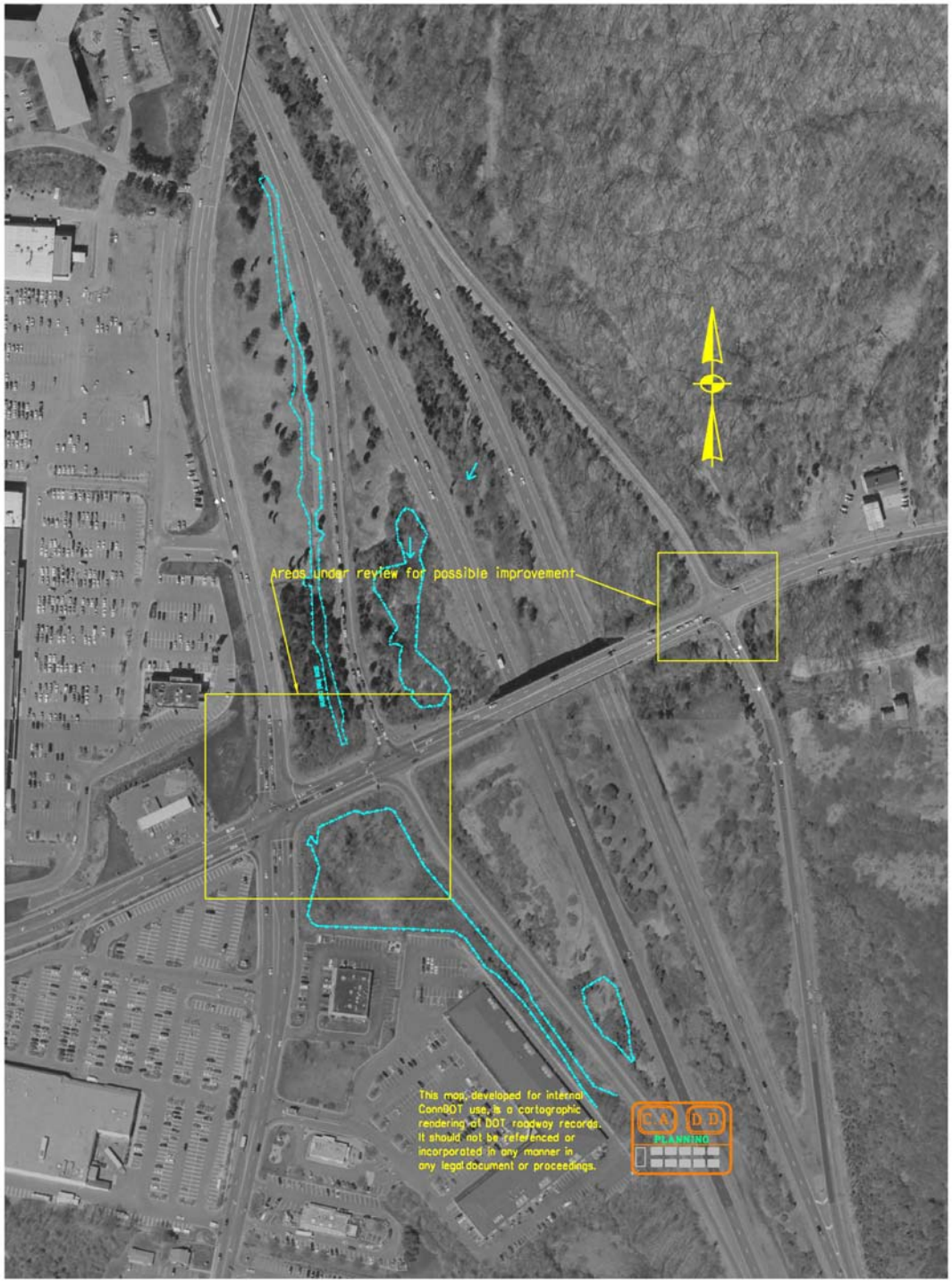
Turning and additional through lanes are being investigated on each leg at the Route 372 and Route 3 intersection. Again, every attempt is being made not to alter the bridge structure which will help limit expenditure for the project. Four lanes, two in each direction, can be accommodated on the Route 372 Bridge over Route 9. Another concept is to add a second lane for approximately the first

900 ft of the Route 9 northbound on ramp, tapering to one lane which is picked up as an operational lane on Route 9. This improvement will allow traffic wishing to head north on Route 9 off of Route 372 while allowing them enough time to merge into one lane.

Major considerations in developing a recommended roadway concept for this interchange include:

- Addressing critical operational needs.
- Avoidance of water resources within and adjacent to the interchange location.
- Limiting the need to acquire developed properties for roadway reconfiguration and/or widening.
- Limiting the need to reconstruct and/or widen the Route 372 bridge over Route 9.
- Capital cost.

Figure B-1 Route 9 Interchange 19 Proposed Improvement Locations



Appendix C
Advisory Committee Members

The Honorable Sebastian N. Giuliano
Mayor
City of Middletown

The Honorable Jeremy Shingleton
First Selectman
Town of Cromwell

Mr. Brian W. Armet, P.E.
Executive Director
The Mattabassett District

The Honorable Robert Drewry
(Acting) Town Manager
Town of East Hampton

The Honorable Susan S. Bransfield
First Selectman
Town of Portland

Mr. Geoffrey Colegrove
Executive Director
Midstate Regional Planning Agency

Mr. Bradley Keazer
Division Administrator
Federal Highway Administration

The Honorable Commissioner Gina McCarthy
c/o David Fox
Department of Environmental Protection

Mr. Robert L. Genuario
Attn: Daniel Morely – Planning Specialist
Office of Policy and Management

Mr. Chester Camarata
Executive Director
Department of Economic and Community Development

Mr. Kevin J. Kelleher
President and Chief Executive Officer
Transportation Strategy Board

Designee Capt. Joe Maco
The Honorable Commissioner John A. Danaher
Department of Public Safety

Mr. Andy Motter
Federal Transit Administration
Region 1

Ms. Susan K. Lee
Project Manager
U.S. Army Corps of Engineers

Mr. Michael Bartlett
Field Supervisor
U.S. Fish and Wildlife Service
New England Field Office

Ms. Diane Rusanowsky
Ecologist
National Marine Fisheries Services

Mr. Timothy Timmerman
U.S. Environmental Protection Agency
New England Region 1

Mr. Gary Kassof
First Coast Guard District (OBR)

Mr. Larry McHugh
Executive Director
Middlesex County Chamber of Commerce

Mr. Frank K. Rogers
Director of Marketing and Sales
Providence and Worcester Railroad

Mr. Eric Hammerling
Executive Director
Connecticut Forest and Park Association

Ms. Lydia Brewster
North End Action Team

Mr. Thomas Cheeseman
Administrator
Middletown Transit District

Ms. Karen Senich
Acting Executive Director
Commission on Culture and Tourism

Mr. Rosario Rizzo Jr.
Manager, Community Relations
Pratt and Whitney

Mr. Philip Fry
Assistant General Manager
Connecticut Transit

Ms. Anne I. Hayes
President
c/o Martha Page
Central Connecticut Bicycle Alliance

Mr. Michael J. Riley
President
Motor Transport Association of Connecticut

Mr. Russell Saint John
13 Boxwood Court
Consultant to P&W Railroad (Worcester, MA)

Appendix D
Meeting Reports

Middletown Area River Crossing Study

Subject:
Project Outreach Meeting

Attendance:
Connecticut Department of Transportation (Department)
Art Gruhn, Pam Sucato,Carmine Trotta, Richard Armstrong, Gary Abramowicz, Sharon Okoye, Kurt Walton, James Andrini, Michael Connors, Gary Sojka, Kimberly Lesay, Grayson Wright, Richard Jankovich, Kenneth Lussier, James Spencer, Keith T. Hall, Brian Cunningham
Federal Highway Administration (FHWA)
Barbara Breslin
Town of Cromwell
Paul C. Beaulieu (First Selectman), Anthony Salvatore (Police Chief), Myron Johnson (Selectman)
Town of Portland
Susan Bransfield (First Selectwoman)
Town of East Hampton
Alan H. Bergren (Town Manager), Matthew Raymond (Police Chief)
Town of Middletown
Bill Warner (Director of Planning),
Middlesex Chamber of Commerce
Larry McHugh (Director), Johanna Bond
Midstate Regional Planning Agency
Robert Haramut

Date - Time: Wednesday, January 25, 2006
10:00 am - 12:00 pm

Location: Connecticut Department of Transportation Administration Building, Conference Room A, 2800 Berlin Turnpike, Newington CT.

Transactions

Meeting began with Project Staff and attendee introductions.

Project overview

This is a two year feasibility study to be carried out by the Department in cooperation with the FHWA and Midstate Planning Region.

The Department's Bureau of Policy and Planning (BPP) will conduct lead study activities under the guidance and assistance of a technical working group consisting of representatives of the Department's Bureau of Engineering and Highway Operations, and FHWA.

The study area consists of the approximate area between Interchanges 10 and 19 along Route 9, and from the Middletown - Middlefield town line to the Portland - East Hampton town line.

The study will concentrate on the ability of the existing transportation system, with particular focus on the ability of the Arrigoni Bridge as currently configured, to meet the current and future transportation needs of the region. Based on the needs findings, the study will develop improvement concepts, including a new bridge on new location.

The study will involve public outreach efforts to include transportation stakeholders.
Central to the Public Outreach effort will be the formation of a project Advisory Committee (AC) consisting of representatives of the community, state and federal agencies, and other groups. Comments or invitation recommendations should be forwarded by e-mail to the BPP project managers. It is anticipated that formal invitations for AC participation will be sent out in February 2006. Public Informational meetings will also be held at key study points. The study team will, as part of the outreach process, meet with individual stakeholder groups to discuss study concerns.

The ***current study phase*** is "Analysis of Exist and Future No-Build Conditions." It is anticipated that this study phase will be completed by late spring, 2006. This study phase will address the existing state of the transportation system, focusing on safety, operations, and environmental issues in the study area. This study phase will also examine the ability of the system as presently configured, to meet the future year 2030 travel demands.

This information will be drafted into a study technical memorandum for discussion at the first Advisory Committee meeting which is expected to be held late spring / early summer 2006.

A "Bridge Location Scoping Evaluation, and Screening" study phase will involve the base analyses inherent in the identification of potential bridge and approach locations.
These determinations will be made with specific attention to future travel and development patterns and environmental sensitivity of potential locations.
Two (2) to 3 river crossing concepts will be developed.

Additional analysis will be carried out on the potential concepts before they are presented to the Advisory Committee and the public for comment.

Subsequent to the Advisory Committee's review, a preferred option will be determined. Cost estimate and draft report will be prepared.

Questions / Comments

Will the study examine Interchange 18 in Cromwell?
This study's mission is to examine the overall transportation system, with particular attention to current river crossing configuration and capacity. Recommendations will be made as they affect or are affected by a river crossing initiative.

The public should be informed on the study process through the media.
The public events all important study activity information will be submitted to the Department's Office of Communication. That office will distribute it to statewide news organizations for reporting.

Have planning alternates for the relocation of Route 66 been done before?
Yes. A "Transportation Authority" was created in the 1960's to develop alignments. The study team will research this information.

What is the purpose of using year 2030 information?
A 20 year traffic forecast is widely used as the basis for the design of a transportation facility. It takes into consideration the considerations such as the ability to fund the proposal, to accurately forecast traffic further out than 20 years, and normal life of most transportation facilities.

What is the time line of the study?
Approximately two years.

Are there any specific federal funds earmarked for this study.
No. General statewide planning funds are being used.

When could construction of a new bridge start.
Approximately ten years, depending upon the recommended action. The Department will address any near term-term actions that are defined and could be funded.

Comment
Safety on the bridge is critical to surrounding towns and to the areas commerce. There was positive public feedback from signage placed on the bridge. Safety improvements should be ongoing.

Exit 19 southbound off ramp to Route 372 often backs up, creating congestion. Is there a remedy for this.
This is an area that is part of the study. If a near term solution for this location can be developed during the course of the study, it will be presented to the Department with a request for attention.

Submitted by: James Andrini Date: January 27, 2006.

Approved by: Carmine Trotta____ Date: January 30, 2006_____

REPORT OF MEETING

Project: Middletown Area River Crossing Study (MARCS)

Date: Tuesday, November 21, 2006
Time: 3:30 P.M.
Location: Portland Town Hall

Subject: Project Outreach Meeting with Town

In Attendance: Please see sign in sheet.

Transactions and Determinations:

Mr. Carmine Trotta and Mr. James Morrin of ConnDOT gave a detailed description of the study limits, including intersections involved, and a brief background of work completed on draft Technical Memorandum Number 1 (Existing and Future No Build Conditions). The current status of the MARCS study was also discussed. After a brief overview of the report, the Town officials were informed that the intent of the meeting was to meet with the individual towns involved in the study in order to confirm the information contained in the draft Technical Memorandum Number 1, and review any concerns on how the project may impact their town specifically.

The next phase of this study process, which included long term build alternatives, was also discussed. Short term solutions were discussed, with emphasis that they would support the long term plans to the extent possible, to minimize throwaway work. The Town was informed that two other studies for Route 9 were ongoing. Some of the short term solutions from the studies may be incorporated within the next 5 to 10 years, which may include new direct connections from Route 9 to the Arrigoni Bridge.

The Town asked if the phasing of the lights that affected the west bound AM bridge traffic to Route 9 could be analyzed. Mr. Morrin stated that the phasing was designed to keep Route 9 traffic flow optimal and that it was preferable for backup to occur on collector/distributor roads than on the mainline. The Town also expressed concerns about the level of congestion at Interchange 19 of Route 9. Mr. Morrin informed the Town that this location was included in the study area and would be analyzed.

Mr. Milardo of the Portland Police Department inquired as to any projects involving the existing bridge. He stated that the majority of the accidents on the Arrigoni Bridge are head-on collisions caused by drifting. Mr. Morrin stated that due to the physical constraints of the bridge, specifically the arches, modifications to the bridge could not be done.

The Town inquired about a project that involved Route 66 and the intersection of Payne Boulevard. Mr. Morrin stated that the Town should contact the ConnDOT design

engineer and inquire as to the status of that project. The Town was also concerned that any future plans would impact a future streetscape project on Route 17 (Main Street). Mr. Morrin stated that the MARCS study would give consideration to all ongoing and planned future projects. The Town also asked when and how this study would be completed. It was stated that the current completion date was tentatively late 2008. Mr. Trotta stated the MARCS study is being conducted in-house however, consultant services may be sought.

Finally, the Town of Portland stated that there are no major routes south to I-95 on the eastern side of the river, therefore, traffic from Portland, Marlborough, East Hampton, etc. cross the Arrigoni Bridge to travel Route 9 to I-95. The Town also voiced concerns about the increasing commuter population on the eastern side of the Arrigoni Bridge and that the increased traffic congestion could inhibit economic growth in the area.

Meeting Attendance

Subject: MARCS
Date: 11/29/2006

Name	Affiliation	Telephone	Email
Town of Portland:			
Susan Bransfield	First Selectwoman	860-342-6715	sbransfield@portlandct.org
Ron Milardo	Police	860-342-6780	rmilardo@portlandct.org
Rick Kelsey		860-342-6734	rkelsey@portlandct.org
Dealina Rhodes		860-342-6720	drhodes@portlandct.org
ConnDOT:			
Carmine Trotta	Planning	860-594-2134	carmine.trotta@po.state.ct.us
James Andrini	Planning	860-594-2148	james.andrini@po.state.ct.us
James Morrin	Planning	860-594-2147	james.morrin@po.state.ct.us
Jeff Hunter	Planning	860-594-2139	jeffrey.hunter@po.state.ct.us

REPORT OF MEETING

Project: Middletown Area River Crossing Study (MARCS)

Date: Wednesday, November 22, 2006
Time: 2:30 P.M.
Location: Middletown Town Hall

Subject: Project Outreach Meeting with Town

In Attendance: Please see sign in sheet.

Transactions and Determinations:

Mr. Carmine Trotta and Mr. James Morrin of ConnDOT gave a detailed description of the study limits, including intersections involved, and a brief background of work completed on technical draft memorandum number 1. The current status of the MARCS study was also discussed. After a brief overview of the report, the Town officials were informed that the intent of the meeting was to meet with the individual towns involved in the study in order to review any concerns on how the project may impact their town specifically.

The next phase of the study process, which included long term build alternatives, was also discussed. Short term solutions were discussed, with emphasis that they would support the long term plans to the extent possible, to minimize throwaway work. The Town was informed that two other studies for Route 9 were ongoing. Some of the short term solutions from the studies may be incorporated within the next 5 to 10 years, which may include new direct connections from Route 9 to the Arrigoni Bridge.

The Town asked if the phasing of the lights that affected the west bound AM bridge traffic to Route 9 could be looked at. Mr. Morrin stated that the phasing was designed to keep Route 9 traffic flow optimal and that it was preferable for backup to occur on collector/distributor roads than on the mainline. Mr. Morrin also explained that the intersections have only been looked at individually and that the next step was to integrate them into a system and look at how the model flows.

Mr. Elkin of the Middletown Police department asked if ConnDOT would be interested in accident history from their Department pertaining to the study area. Mr. Morrin stated that accident statistics would be helpful for the intersections; however he exercised caution and explained how the DOT analyzed accidents on road systems.

The Town of Middletown expressed concerns that the new improvements to Route 66 on the west side of Town will create more traffic problems due to bottlenecking. The Town suggested that the problem with Route 9 is that North-South traffic meets East-West

traffic. One possible solution, the Town proposed would be to elevate the at grade signalized intersections. Mr. Morrin stated that the MARCS study would give consideration to various alternatives to alleviate the traffic issues in the area. The next phase of the study involves forming an advisory committee and looking at study alternatives. The Town asked if this study would include a new bridge and possible rail improvements. Mr. Morrin responded by saying that this study would not include looking into rail improvements; however a new bridge is being considered in the long term proposals.

Finally, the Town of Middletown also voiced concerns about the increasing commuter population and the increased traffic congestion could inhibit economic growth in the area. The Town's concern is not only for future economic growth, but also existing businesses located on Main Street and the fear that if congestion continues to worsen consumers will stay away from Middletown, rather than get stuck in traffic. The Department stated that their concerns would be noted.

Meeting Attendance

Subject: MARCS
Date: 11/21/2006

Name	Affiliation	Telephone	Email
Town of Middletown:			
Seb Giuliano	Mayor	860-344-3401	mayor@cityofmiddletown.com
Craig Elkin	Middletown Police Traffic	860-344-3265	celkin@middletownctpolice.com
Bill Warner	Planning	860-344-3425	bill.warner@cityofmiddletown.com
Rick Kearney	Planning	860-344-3425	richard.kearney@cityofmiddletown.com
ConnDOT:			
Carmine Trotta	ConnDOT	860-594-2134	carmine.trotta@po.state.ct.us
James Morrin	ConnDOT	860-594-2147	james.morrin@po.state.ct.us
Jeff Hunter	ConnDOT	860-594-2139	jeffrey.hunter@po.state.ct.us

REPORT OF MEETING

Project: Middletown Area River Crossing Study (MARCS)

Date: Tuesday, November 28, 2006
Time: 2:00 P.M.
Location: Cromwell Town Hall

Subject: Project Outreach Meeting with Town

In Attendance: Please see sign in sheet.

Transactions and Determinations:

Mr. Carmine Trotta and Mr. James Morrin of ConnDOT gave a detailed description of the study limits, including intersections involved, and a brief background of work completed on draft Technical Memorandum Number 1 (Existing and Future No Build Conditions). The current status of the MARCS study was also discussed. After a brief overview of the report, the Town officials were informed that the intent of the meeting was to meet with the individual towns involved in the study in order to confirm the information contained in the draft Technical Memorandum Number 1, and review any concerns on how the project may impact their town specifically. Mr. Trotta stressed that the draft for Technical Memorandum Number 1 should be reviewed thoroughly because that document is the foundation for the rest of the study.

The next phase of this study process, which included long term build alternatives, was also discussed. Short term solutions were discussed, with emphasis that they would support the long term plans to the extent possible, to minimize throwaway work. The Town was informed that two other studies for Route 9 were ongoing. Some of the short term solutions from the studies may be incorporated within the next 5 to 10 years, which may include new direct connections from Route 9 to the Arrigoni Bridge.

The Town asked if the study would include rail service. Mr. Morrin stated that this study would not look into rail service only at a new river crossing. Mr. Morrin informed the Town that the crossing is considered a long term project with a timeline between 20 and 30 years. The Town also expressed concerns about the level of congestion at Interchange 19 of Route 9. Mr. Morrin informed the Town that this location was included in the study area and would be analyzed. Mr. Salvatore, Cromwell Chief of Police, expressed concerns about the length of time the Town would have to wait for work to be done on Interchange 19. Mr. Salvatore did not think the current interchange configuration could wait 20 years for a solution. It was agreed that one of the problems is the traffic signal configuration between south bound off ramp to Route 372 and intersection of Route 372 with Route 3.

Mr. Morrin of the Department asked the Chief of Police, Mr. Salvatore, if he could provide accident analysis for the intersections involved in the study. Mr. Salvatore stated that he could get the information requested given a reasonable amount of time for collection.

The Town inquired as to when the department foresees some improvements along Route 9 starting. The Department stated that if the project does not run into any obstacles the southern project could be ready for construction between 3 to 5 years from now. The North section would be longer and a new river crossing even longer. The department informed the Town that environmental studies could slow down the northern Route 9 project. Mr. Trotta informed the Town that in order to expend public funds, study documents need to be submitted to the legislature.

The Town expressed concern that any future plans would impact future riverfront economic development and/or impact the historic district of Cromwell. Mr. Morrin stated that the MARCS study would give consideration to all ongoing and planned future projects and the historic properties have been identified in the Technical Draft.

Finally, Mr. Brian Armet of The Mattabassett District informed the Department about the truck and rail traffic used by his organization and voiced concerns about not being a participant in the study so far. Mr. Armet stated his interest is in interchange 18 of Route 9 and how future plans would affect his truck routes and rail traffic. Mr. Armet was informed that he would be included in the Advisory Committee.

Meeting Attendance

Subject: MARCS
Date: 11/28/2006

Name	Affiliation	Telephone	Email
Town of Cromwell:			
Paul Beaulieu	First Selectman	860-632-3410	firstselectman@cromwellct.com
Joe Mazurek	Cromwell	860-632-3420	jmazurek@cromewellct.com
Bob Jahn	Cromwell	860-632-3420	rjahn@cromwellct.com
Craig Minor	Cromwell	860-632-3422	cminor@cromwellct.com
Craig Stevenson	Cromwell	860-306-8325	cstevenson@connectedtoct.com
Anthony Salvatore	Cromwell	860-635-2256 X13	chiefsalvatore@cromwellpd.com
Brian W. Armet	Mattabassett	860-635-5550	bwarmet@mattdist.org
ConnDOT:			
Carmine Trotta	Planning	860-594-2134	carmine.trotta@po.state.ct.us
Jim Andrini	Planning	860-594-2148	james.andrini@po.state.ct.us
James Morrin	Planning	860-594-2147	james.morrin@po.state.ct.us
Jeff Hunter	Planning	860-594-2139	jeffrey.hunter@po.state.ct.us

REPORT OF MEETING

Project: Middletown Area River Crossing Study (MARCS)

Date: Wednesday, November 29, 2006
Time: 2:00 P.M.
Location: East Hampton Town Hall

Subject: Project Outreach Meeting with Town

In Attendance: Please see sign in sheet.

Transactions and Determinations:

Mr. Carmine Trotta and Mr. James Morrin of ConnDOT gave a detailed description of the study limits, including intersections involved, and a brief background of work completed on draft Technical Memorandum Number 1 (Existing and Future No Build Conditions). The current status of the MARCS study was also discussed. After a brief overview of the report, the Town officials were informed that the intent of the meeting was to meet with the individual towns involved in the study in order to confirm the information contained in the draft Technical Memorandum Number 1, and review any concerns on how the project may impact their town specifically. Mr. Trotta stressed that the draft for Technical Memorandum Number 1 should be reviewed thoroughly because that document is the foundation for the rest of the study.

The next phase of this study process, which included long term build alternatives, was also discussed. Short term solutions were discussed, with emphasis that they would support the long term plans to the extent possible, to minimize throwaway work. The Town was informed that two other studies for Route 9 were ongoing. Some of the short term solutions from the studies may be incorporated within the next 5 to 10 years, which may include new direct connections from Route 9 to the Arrigoni Bridge.

The Town asked if the study would include rail service. Mr. Morrin stated that this study would not look into rail service only at a new river crossing. Mr. Morrin informed the Town that the crossing is considered a long term project with a timeline between 20 and 30 years. The Town expressed concerns about the level of congestion at the Intersection of Route16 and Route 66. Mr. Matthew Reimando, East Hampton police chief, stated that Route 16 has become a route for casino traffic, including an increase in limo and bus traffic, for the middle of the State. The police chief also stated that this route is used when problems occur on Route 2. Mr. Morrin informed the Town that this location would be investigated and possibly included in the study area. Mr. Morrin of the Department asked the Chief of Police, Mr. Reimando, if he could provide accident analysis for the intersection(s) involved in the study. Mr. Reimando stated that he would provide the information requested given a reasonable amount of time for collection.

The Town inquired as to when the department foresees some improvements along Route 9 starting. The Department stated that if the project does not run into any obstacles the southern project could be ready for construction between 3 to 5 years from now. The North section would be longer and a new river crossing even longer. The department informed the Town that environmental studies could slow down the northern Route 9 project.

Finally, the Town gave a few suggestions about improving traffic flow. Their first suggestion was to install commuter parking lots; there are none between East Hampton and Portland and possibly one for the intersection of Route 66 & Route 16. Along with adding commuter lots the Town suggested increasing the bus service out to Portland and possibly East Hampton. The Town also suggested taking the existing railroad and adding a trolley service to commute between Portland and Middletown. Mr. Morrin stated that the recommendations, except the rail suggestion, would be looked at in the study process.

Meeting Attendance

Subject: MARCS
Date: 11/29/2006

Name	Affiliation	Telephone	Email
Town of East Hampton:			
Alan H. Bergren	Town Mgr.	860-267-4468	townmanager@easthamptonct.org
Matthew Reimando	Police Chief	860-267-9544	policechief@easthamptonct.org
David Dodes	Planning	860-267-8601	townplanner@easthamptonct.org
ConnDOT:			
Carmine Trotta	Planning	860-594-2134	carmine.trotta@po.state.ct.us
James Andrini	Planning	860-594-2148	james.andrini@po.state.ct.us
James Morrin	Planning	860-594-2147	james.morrin@po.state.ct.us
Jeff Hunter	Planning	860-594-2139	jeffrey.hunter@po.state.ct.us

Meeting Minutes
Middletown Area River Crossing Study

Date: March 15, 2007
Time: 6:00 PM
Place: deKoven House Middletown
Event: First Advisory Committee Meeting (#1)
Attendance: see attached

Attendees met at the deKoven house. Mr. Trotta led introductions.

Mr. Andrini reviewed the meeting agenda. He then conducted a presentation on the following topics: the purpose of Technical Memorandum #1, overview of the study area, public outreach program and summary of existing and future no build conditions.

Ms. Holden presented and overview of the environmental conditions detailed in the Technical Memorandum #1.

Mr. Hunter presented a model of various intersections in the area including the Arrigoni Bridge, Route 66/ Route 9 intersection and Silver Street Interchange using Synchro.

Mr. Andrini presented several preliminary alternative river crossings as discussion points then opened up the meeting for the discussion of next steps to be taken.

Mr. Andrini noted that the next step that the Advisory committee is to undertake is a workshop where stakeholders brainstorm alternatives. This was agreed upon and a date would be settled in the near future.

Mr. Balskus stated that LOS provided in the Feasibility Study and the Synchro Model, especially for the signalized intersection of Rt66 and Rt9 was in reality, worse than stated in the technical memorandum. DOT members agreed. Synchro model is still being fine tuned.

Concern over the length of time required for the study was expressed. Mr. Trotta explained the necessity of such data collection in order for the regulatory process to proceed.

Mr. Balskus questioned why connection to I-691 is currently not included in the study area. DOT stated that connection to I-691 was not included in this study because the construction of such route would be cost prohibitive and therefore infeasible.

Mr. Andrini expressed hope that the selected alternative would use recent Route 66 upgrades to its best advantage. The right of way for the rail line in Middletown may offer an opportunity to upgrade Route 66 through Middletown.

Mr. Armet commented that there is a plan to abandon use of the Water Treatment Facility to the North of Middletown on the River and sell development rights to the property.

In response to questions concerning funding DOT responded that funding is allocated through the study and design phases of this project but no the construction phase.

Mr. Balskus commented on the desire for a “signature” bridge. The DOT responded that the cost of a “signature” bridge is formidable however that doesn’t mean that it will be an eyesore.

Several committee members wondered about the height of the bridge. Mr. Andrini stated that the Coast Guard had been invited to be on the committee however they had declined. They would still be instrumental in determining the height of the bridge as it pertains to river navigation and that that determination would be made in the design phase.

Action Items:

Determine the date and time of the workshop to identify alternatives.

Committee members should email Mr. Andrini with comments.

The meeting ended at 8:00 PM

Submitted by: _____

Approved by: _____

Attendance Sheet
Middletown Area River Crossing Study
Advisory Committee Meeting #1

Name	Organization	Email
Kleykamp, Tyler	OPM	tyler.kleykamp@ct.gov
Balskus, Joe	Consultant for Portland	jbalskus@hotmail.com
Beaulieu, Paul	Town of Cromwell	firstselectman@cromwellct.com
Bergren, Alan	Town of East Hampton	townmanager@easthamptonct.org
Abramowicz, Gary J.	CT DOT	Gary.Abramowicz@po.state.ct.us
Armet, Brian	Mattabassett	bwarmet@mattdist.org
Bauer, David	Town of Middletown	dvauer@sbcglobal.net
Blume, Matt		mblume@vhb.com
Bond, Johanna	Middlesex Chamber of Commerce	jbond@middlesexchamber.com
Bransfield, Susan	Portland	sbransfield@protlandct.org
Cannata, Anne-Marie	Town of Middletown	annemariecandoit@yahoo.com
Connors, Michael	CT DOT	Michael.Connors@po.state.ct.us
Dobmeier, Robert	City of Middletown	bob.dobmeier@cityofmiddletown.com
Driscoll, Katherine M.	CT DOT	Katherine.Driscoll@po.state.ct.us
Elkin, Craig	Middletown Police Department	celkin@middletownctpolice.com
Fox, David	CT DEP	david.fox@po.state.ct.us
Freitas, Amanda	CT DOT	Amanda.Freitas@po.state.ct.us
Haramut, Robert	Midstate RPA	robertbh@snet.net
Holden, Cynthia S.	CT DOT	Cynthia.Holden@po.state.ct.us
Hunter, Jeffrey H.	CT DOT	Jeffrey.Hunter@po.state.ct.us
Lee, Susan	Army Corps of Engineers	susan.k.lee@usace.army.mil
Margnelli, Ed		emargnelli@snet.net
Morrin, James C.	CT DOT	James.Morrin@po.state.ct.us
Newman, Jason	FHWA	jason.newman@fhwa.dot.gov
Reilly, Robert A.	CT DOT	Robert.Reilly@po.state.ct.us
Sojka, Gary J.	CT DOT	Gary.Sojka@po.state.ct.us
Trotta, Carmine P.	CT DOT	Carmine.Trotta@po.state.ct.us
Turner, Robert	FHWA	robert.w.turner@fhwa.dst.gov
Andrini, Jim	CT DOT	james.andrini@po.state.ct.us
Wright Grayson	CT DOT	Grayson.Wright@po.state.ct.us

Meeting Notes

Middletown Area River Crossing Study (MARCS)
Advisory Committee Meeting

In Attendance: Please refer to the attached attendance sheet.
Date - Time: Thursday, December 6, 2007
6:00 pm – 8:00 pm
Location: deKoven House
27 Washington Street, Middletown, CT

The following information was distributed prior to and/or at this meeting:

- Schematic and description of the eight preliminary alternative alignments.
- Rating matrix of the eight preliminary alternative alignments.
- Technical Report #1(Existing and Future No-Build Conditions).

Transactions:

Meeting/Presentation Summary:

James Morrin of the Connecticut Department of Transportation (Department) opened the meeting by welcoming members of the Advisory Committee (AC).

Mr. Morrin then began a brief presentation with background information regarding the study process and how the Department's office of Intermodal Planning arrived at the current phase of the study. Mark Alexander of the Department's office of Environmental Planning reviewed some of the physical constraints in the study area (including environmental and cultural resources).

Mr. Alexander detailed the type and sources of the information that has been gathered to date for use in a preliminary review of the river crossing alternative alignments. He discussed how the information would be used to identify the potential impacts associated with each alternative.

Mr. Morrin then reviewed the 8 preliminary alternative alignments identified to date for a possible river crossing at a new location, and the steps that had been taken in selecting these alignments.

Mr. Morrin explained the Alternatives Selection Matrix, which lists the preliminary alternative alignments and the associated criteria used to rate these alternatives. He gave an overview description of the preliminary alternative alignments, highlighting their differences and similarities and discussed the evaluation criteria used. Mr. Morrin relayed how the alternatives were assessed and ranked in terms of relative operational benefit, estimated cost, potential environmental impact, potential social impacts, and constructability. Greater weight was placed on operational benefit as a primary consideration in addressing the study purpose and need.

Jeffery Hunter gave an overview of a concept developed to improve operations at the Route 9 Interchange #19. A number of comments were received during previous

discussions with the regional planning agency and affected municipalities regarding this interchange area, which includes Route 3 and Route 372. He discussed the steps that were taken to identify alternatives to manage congestion in this area, as well as a proposed concept for improvement.

Mr. Morrin then discussed the next steps in the study process: securing funding to continue with the MARCS study process (through consultant services), evaluating the preliminary alternative alignments and selecting a preferred/recommended alternative. He then opened the discussion for comments and questions from the committee.

Questions/Comments:

1. Question: What about the traffic south of Route 9 - it backs up to Interchange #19?

   Response: There is a concept (State Project No. 82-279) to relieve congestion in this area of Route 9. However, the Department has not yet received the funding needed to advance the design and environmental studies. A request has been submitted for consideration by the State Bond Commission (January 2008) to finance continuation of the MARCS study, as well as the environmental documentation and design for each of the two components of State Project No. 82-279. It is expected that State Project No 82-279 will be completed before the Interchange #19 and MARCS recommended concept would be built.

2. Question: What about traffic turning left at Route 9 southbound at Exit 19 – Can the existing ramp be left in place, as well?

   Response: No, if the existing ramp were to be left in place, a traffic control signal would be necessary at this location. The current analysis shows that this location will operate better without a traffic control signal.

3. Comment: I am concerned about a backup of traffic from the double left turn lanes at Route 9 southbound at Exit 19, which are proposed under the Interchange #19 concept. The year 2030 Interchange #19 alternative concept would be a noticeable improvement from the way this intersection operates today.

   Response: During the preliminary engineering phase, the next phase of concept development, this configuration may be further refined and modified. This concept involves the least environmental impact, and the least cost to construct, while providing an acceptable level of service in the future.

4. Question: Are there any other current studies for Routes 66 and 17 in Portland that would add value to this study?

Response: Not at this time. Additional traffic analysis would be needed for the far reaching areas. There are no plans to conduct such an analysis.

5. Comment: The Interchange #19 concept seems to dump a lot of traffic onto Route 3.

   Response: The analysis indicates that this area will operate better if the majority of the traffic can proceed straight onto Route 3 rather than turn left from Route 372 onto Route 3.

6. Question: What would the new ramp at Interchange #19 look like?

   Response: It would look like the existing ramp and include a small box culvert over the drainage swale.

7. Comment: One bridge replacement preliminary alternative alignment shows a bridge crossing over a quarry and quarries are historic landmarks. It is also a new public park.

   Response: The bridge could traverse over the public park and between quarry ponds.

8. Comment: Look at using the railroad right-of-way - it is leased by ConnDOT. It looks like a great tie into Route 66.

9. Comment: Conceptually, preliminary alternative alignments 3, 5 and 6 appear to rank high above the other alternatives.

   Response: The primary difference between these alternative alignments and the others is the greater operational benefit

10. Question: Everything will be “going green” in 15-20 years - this aspect should be more heavily weighted in years to come. Who looks at emissions issues?

    Response: The effect upon travel due to new fueling resources is not predictable in traffic forecasting. Air quality concerns are typically addressed during the detailed environmental analysis and documentation phase.

11. Comment: Many people that use the Arrigoni Bridge live in Portland and commute 10-20 miles to work using the Bridge. The report only covers a certain distance east and west of the Connecticut River. For the people that use the Bridge, where are the majority of them going?

    Response: As presented in Technical Report No. 1, 22 percent of the people are heading west and 40 percent are heading north. Thirty

percent of the people are heading into southern Middletown and 8 percent are taking Route 9 southbound.

12. Question: Why not put a bridge in another area not shown here as an alternative?

    Response: We have reviewed the study area and there are not many opportunities to locate a new bridge crossing because of physical constraints, such as wetlands and residential land development.

13. Question: You stated that the next step is funding. How long will it take to get a study report?

    Response: It takes approximately nine months to select and contract with a consultant. ConnDOT has completed approximately 30 percent of the analysis to date, and it would take an additional 12-18 months to complete the study with a recommended alignment. Therefore, the total time would be approximately 24-30 months. It is preferred to have a recommended alignment prior to beginning the environmental analysis and documentation phase that would follow.

14. Question: When will the Advisory Committee meet again?

    Response: The committee has met twice. It is expected that four additional meetings will be included in the remaining study process, if funding is provided.

15. Question: Who determines the bonding priority?

    Response: ConnDOT submits proposed projects for funding to the Office of Policy and Management for inclusion on the State Bond Commission agenda. However, ConnDOT does have bonding limits.

16. Question: When can we expect this to be built?

    Response: It will take 5-6 years to complete the Planning process, an additional 10 years for the design phase and to determine funding. Therefore, the project is approximately 20 years away from being built. There are also other major initiatives competing for funding.

17. Question:When would the Interchange #19 concept be built?

    Response: It is anticipated that projects such as Interchange #19 can be advanced separately and in advance (near-term) of completing this MARCS study. Less complex projects that will mitigate congestion in the study area may be advanced if funding can be secured.

18. Question: Didn't the Governor veto the Transportation Bill?

    Response: Legislation provides the authorization to proceed with a transportation initiative. Funding must then be approved through the federal and/or state bonding process.

19. Comment: You should tell the Advisory Committee if you would like legislators to attend the meeting. They are very busy but they might attend if we ask them to.

Submitted by: (signed) ConnDOT Date: December 17, 2007

Approved by: (signed) ConnDOT Date: December 17, 2007

Concurrence: (signed) ConnDOT Date: December 18, 2007

Middletown Area River Crossing Study (MARCS)

Attendance Sheet

Meeting Date: December 6, 2007
Time: 6:00-8:00pm

ConnDOT - Planning:	Phone Number:
Carmine Trotta	(860) 594-2134
James Morrin	(860) 594-2147
Jeffery Hunter	(860) 594-2139
Katherine Driscoll	(860) 594-2146
Melanie Zimyeski	(860) 594-2144
Grayson Wright	(860) 594-2154

ConnDOT – Project Concept:	Phone Number:
Daniel Gladowski	(860) 594-3280

ConnDOT – Inventory and Forecasting:	Phone Number:
Mike Connors	(860) 594-2037
Gary Sojka	(860) 594-2025

DECD:	E-mail:
Chet Camarata	chet.camarata@ct.gov

Town Of Cromwell:	E-mail:
Myron Johnson	N/A

Town Of Portland:	E-mail:
Susan Bransfield	sbransfield@portlandct.org

The Mattabassett District Chamber of Commerce:	E-mail:
Brian W. Armet	bwarmet@MattDist.org

Midstate Regional Planning Agency (MRPA):	E-mail:
Richard Grant	RickGrant@snet.net

Pratt & Whitney – Middletown:	E-mail:
Rosario Rizzo	Rosario.Rizzo@pw.utc.com

CT State Police:	Phone Number:
Sergeant Salvatore Calvo	(860) 534-1000

CT Commission on Culture and Tourism:	E-mail:
Rosemary Bove	Rosemary.Bove@ct.gov

Appendix E
Meeting Reports

Middlesex Chamber of Commerce

Arrigoni Bridge Meeting

September 6, 2007

Members in attendance:

Alan Bergren, Susan Bransfield, Senator Paul Doyle, Officer Craig Elkin, Mayor Sebastian Giuliano, Bill Kristoff, Ed Margnelli, Deputy Fire Chief Jim Lynch, Larry McHugh, Representative Brian O'Connor, Chief Gary Ouellette, Chief Matt Reimondo, Len Samela, Representative Joe Serra, Russ St. John and Johanna Bond.

D.O.T. Middletown Area River Crossing Study Update

Carmine Trotta, Assistant Planning Director, Intermodal Planning and James Morrin, Project Manager, ConnDOT updated members on the current status of the Middletown Area River Crossing Study.

Carmine told members that the project began about one year ago and they have currently been reviewing the transportation needs of the region including the towns of Middletown, Portland, East Hampton and Cromwell.

To date the DOT has created a draft document which includes statistics on the existing condition of the bridge and future no build. There was a meeting in March of 2007 to discuss this draft and based on comments from attendees DOT reanalyzed a few of the traffic counts, but maintains it did not change the overall report.

Currently there are 13 sites that have been identified by the DOT for possible bridge locations. Over the next few months, they will be obtaining traffic and environmental information to help refine the list. DOT hopes to have a short list created by the end of the year. Once the list is finalized, DOT will hold another Advisory Council meeting.

During their review of the plan and in meeting with local officials, it became apparent that the Exit 19 interchange on Route 9 needed immediate attention. The DOT has been working on addressing the problem and has identified three different concepts. They will give an update at a future meeting on this topic.

Carmine stated that there was currently no funding available to move forward, and DOT has submitted a proposal for consideration to the State Bonding Commission.

In conclusion, he expressed that projects of this magnitude take a very long time, utilization of many different agencies as well as substantial funding.

Question, Answer and Comments

Larry began the discussion by urging the elected officials in attendance to contact the Bond Commission asking them to support the DOT's request for funding.

Middlesex County Chamber of Commerce

Arrigoni Bridge Meeting

October 18, 2007

Members in attendance:

Susan Bransfield, Senator Paul Doyle, Bob Fusari, Mayor Sebastian Giuliano, Bill Kristoff, Deputy Chief Brian Kronenberger, Ed Margnelli, Larry McHugh, Lieutenant Ron Milardo, Representative Brian O'Connor, Representative James O'Rourke, Fire Chief Steve Pendel, Len Samela, Representative Joe Serra, and Johanna Bond.

D.O.T. representatives in attendance: Ken Lussier, John Carey, John Korte and Carmine Trotta. Middlesex Chamber's Transportation members in attendance: Vincent Amato, Hugh Cox, Gerry Dyar, Lee Osborne, George Smilas, Tom Cheeseman and Russ St. John.

D.O.T. Update:
John Carey began by expressing that all projects thus far have been to improve operations to the existing bridge. At this point they have identified that there needs to be four additional VMS signs as well as four additional cameras installed on and around the bridge in order to achieve maximum benefit in traffic management.

Possible VMS sign locations, (not defined at this time)
- Westbound Route 66 – on the bridge
- Middletown – on/near the bridge
- Route 9 Southbound in Berlin
- Route 9 Northbound in Chester

Possible camera locations (not defined at this time)
- Route 9 @ 372 or Mattabassett
- Route 9 @ intersection with Bridge
- Route 66 (possibly same location as VMS)
- Middletown (possibly same location as VMS)

John stated that the consultants were in the process of reviewing the best locations for the VMS signs and cameras, but clearly stated that nothing will be decided until he gets feedback from the towns that the locations for each is acceptable. John Korte stated that the polls for the cameras are approximately 70 feet tall which gives them a "birds eye view" of the roadway.

Question and Answer:
Susan told members of DOT that she has been made aware that there are several polls on or around the Arrigoni Bridge that are not being used anymore and DOT should remove these to put up the new ones. John expressed that they would look into it.

Joe Serra asked what benefit will be gained by the VMS and cameras being on the bridge? John stated that the cameras will allow DOT to see continuous live frames on the bridge and give them instantaneous information to be sent to the VMS signs in case of an accident or bridge closure.

Jim O'Rourke stated that the location of the VMS signs will be a key part of this plan because the impact a bridge closure has in both towns is immediate and an earlier rather than later warning would be most beneficial.

Russ St. John asked if there would be any signage stating that the bridge is being monitored at all times by cameras? John stated that there is a state law prohibiting shots from traffic cameras to be used in anyway other than traffic management. Russ stressed that he feels the "thought" of being watched may slow down traffic.

Ed Margnelli asked if the public would have access to the camera images, and John K. stated yes and you can retrieve that information on the ConnDOT website.

Bob Fusari asked if the ConnDOT was connected to any of the GPS systems. DOT is currently working on reporting all information into one system that in the future could possibly connect with companies who maintain the GPS systems. This is currently being reviewed by DOT.

Gerry Dyar asked what the cameras will look like. John stated that the camera itself will look like a round ball, almost like that of a street light.

Mayor Giuliano reiterated the point that motorists need to be warned as far in advance as possible on a delay/closure. John stated that the camera's are going to be instrumental in helping with the diversion plans and the VMS signs already in use on our highways will also display any delay/closure.

Brian O'Connor stated that the VMS sign located on Route 9 Northbound in Middletown should be moved to a new location south of the current location. By the time you reach the sign that tells you there is a problem, you have no options to get off of the highway. John stated that he would look into it.

Middletown Area River Crossing Study Update:
Carmine told members that the staff is looking to schedule a second Advisory Meeting around the second week of December. As stated previously, DOT had identified 13 possible bridge locations, but have narrowed it down to nine. He said they have been going through an internal screening process, trying to eliminate all locations that are not feasible. The nine locations identified have gone through traffic analysis and DOT will bring information on these locations at the December meeting. He reminded members that the Bond commission still has not voted on the money allocation, this vote is essential on continuing research for this project. DOT will send a notice and packet to advisory members prior to the meeting.

Lee Osborne asked if DOT has integrated the current Route 9 project with this project. Carmine expressed that the Route 9 project was in the engineering phase and will be operational before the bridge was close to being built. He did state that the planners of the Route 9 project are working with the Middletown Area River Crossing Study team. Depending on the best location for the new bridge, they are unable to determine at this time if the two projects will coincide.

Larry thanked members in attendance who sent letters of support to the Governor for this project.

Bridge Lighting Update:
Bill Kristoff stated that they hope to start construction in 2008, but due to some temporary set backs they are behind their previous schedule and waiting to hear back from DOT on changes that they requested made to the scope of the project. He hopes to have more to report at the next meeting.

Larry closed the meeting by thanking John and his team for doing a great job and praised them for their continued support of this project.

Middlesex County Chamber of Commerce

Arrigoni Bridge Meeting

February 27, 2008

Meeting notes were not recorded for this meeting.

Middlesex County Chamber of Commerce

Arrigoni Bridge Meeting

April 24, 2008

Meeting notes were not available for this meeting.

Appendix F
Advisory Committee Comments on Draft Report

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

To: James Morrin - Supervising Transportation Planner
DOT - Office of Intermodal Planning, 2800 Berlin Turnpike, Newington

From: David J. Fox - Senior Environmental Analyst **Telephone:** (860) 424-4111

E-Mail: david.fox@ct.gov

Date: June 26, 2008

Subject: Middletown Area River Crossing Study

I have reviewed the *Middletown Area River Crossing Study, Preliminary Alternatives Development, Technical Report No. 2, June 2008.* As noted on page 11, screening level assessments of the potential environmental impacts of the candidate alternatives will be performed as part of the next phase in the planning study process. This will involve utilizing mapped environmental resources to gain a planning-level view of issues and concerns. More detailed environmental analysis would not occur until the subsequent NEPA/CEPA process. For that reason, this document has not been widely distributed throughout our agency for a comprehensive review.

The Department will provide detailed information and comments regarding wetlands and water resources, fisheries resources, federal and state protected species, water quality and other relevant environmental resources during the next study phases. It should be recognized that the alternative alignment locations may have significant differences in the various categories of impacts related to both the riverine and upland resources.

The Alternatives Selection Matrix for this phase combined all potential environmental impacts, including air quality, noise, archaeological sites, environmental justice areas, wetlands, wildlife, public open space, etc., into one grading criterion. As shown on Table 2, four of the eight build alternatives have a higher (better) environmental impact score than the no-build. To achieve this rather counterintuitive result, impacts due to congestion must have been assigned higher weight than impacts due to construction. Any matrix for the more refined analysis in the next phase should include several categories of environmental impacts in order to more fully and accurately demonstrate the differences between the alternatives.

Thank you for the opportunity to review this report. If you have any questions, please contact me. I will also be the primary point of contact for further coordination among the various Department offices as future phases unfold.

cc: Robert Kaliszewski, DEP/OPPD
Robert Hannon, DEP/OPPD