

# Meredith US 3/NH 25 Improvements Transportation Planning Study

## Project Advisory Committee Meeting No. 12

### MEETING MINUTES

**DATE:** September 26, 2007  
**DATE OF MEETING:** September 18, 2007  
**LOCATION OF MEETING:** Meredith Community Center  
DW Highway, Meredith, NH

#### ATTENDED BY:

#### Advisory Committee Members

<u>Name</u>	<u>Affiliation</u>
Frank Michel	Meredith Board of Selectmen
Tim Drew	NH Department of Environmental Services
Carol Granfield	Meredith Town Manager
John Edgar	Meredith Town Planner
Kevin Morrow	Meredith Police Chief
Chuck Palm	Meredith Fire Chief
Sandra Sullivan	Meredith Citizen Representative
Ken Renoux	Meredith Citizen Representative
Fred Hatch	Meredith Transportation Advisory Task Force/ Historical Society
John Moulton	Meredith Citizen Representative
Mike Izard	Lakes Region Planning Commission
Bill Bayard	Lakes Region Planning Commission
Robert LeCount	Meredith Conservation Commission
Robert Snelling	Town of Holderness
Roger Nash	Meredith Transportation Advisory Task Force

#### Others

<u>Name</u>	<u>Affiliation</u>
Jim Marshall	NHDOT, Project Manager
Cathy Goodman	NHDOT
Bill Oldenburg	NHDOT
CR Willeke	NHDOT
Dave Saladino	Resource Systems Group
Gene McCarthy	McFarland-Johnson, Inc.
Mike MacDonald	McFarland-Johnson, Inc.

**MEETING MINUTES:**

The Agenda for the meeting is attached. These minutes are formatted to follow the Agenda Items.

1. Opening/Project Overview

Jim Marshall opened the meeting and stated that Nancy Mayville was not able to attend. He stated that this would be the 12<sup>th</sup> PAC meeting for the project. Jim then introduced Gene who would give an overview of alternatives modeled to date.

2. Modeling Overview

Gene began by stating that feedback from previous meetings suggested that the definition of scenarios needed to be clarified. He presented a slide for the No Build that demonstrated the format for the meeting’s slide presentation. Gene also distributed black and white copies of slides that would be presented at the meeting. He stated that color copies could be provided for those who needed them. The slide would graphically present the scenario, list the components of the scenario, and present a table of modeling results. Below is the slide for the No Build.

**Future No Build**

- No Improvements
- “Do Nothing” Alternative

Unreleased Vehicles		2,018
Volume on Route 3 south of Route 25	NB	961
	SB	941
	Total	1,902
Travel Time (min) Route 104 to Barnard Ridge Road	NB	10:18
	SB	15:41

*Meredith US 3/NH 25 Improvements Transportation Planning Study*

Gene described the modeling results and a few questions were asked about each. Following is a list of the descriptions and some of the questions that were answered:

- Unreleased vehicles represent the number of vehicle trips that could not be made during the peak hour. The value represents the number of vehicles for the entire geography of the model. The geography is bounded by I-93 to the west, Route 104 to the south, Route 3 and 25 to the east, and Route 25 and 25B to the north. The unreleased vehicles do not affect the functioning of the model. It is a measure of overall congestion and indicates how much of the overall demand is not met. A request was made to see the areas where unreleased vehicles cannot access the model. Dave Saladino stated that this can be done and will look to provide this information.
- Vehicles that are queued on the northbound exit ramp from I-93 Exit 23 are not unreleased vehicles. If they show up on the model that made it to the network. There are additional vehicles that do not even show up on the model run.
- The volumes on Route 3 are for the segment south of the Route 3/25 intersection.
- An additional measure was developed to better understand the differences between scenarios. The travel time from Route 104 to Barnard Ridge Road in both directions is included for each scenario.
- All data presented is for the project design hour which represents a Friday afternoon during the summer. The model can only be run for this specific design hour.
- All model results reflect the Year 2030 and use the future land use presented at previous meetings.

Following is the presentation and discussion for each of the scenarios evaluated to date.

*No Build:* Gene presented the No Build or “Do Nothing” scenario. This reflects the traffic that would occur if no improvements were made. The results suggest a congested corridor with long travel times. Bill Bayard questioned the results that have a longer travel time for southbound traffic when the peak flow on a Friday afternoon would be northbound. Dave Saladino explained that the volume of traffic southbound is nearly as high as the northbound and that this traffic must pass through a left turn signal at the Route 3/25 intersection. Northbound traffic has a higher volume but has a free right turn at the Route 3/25 intersection.

*Capacity Scenario:* Gene presented the four-lane scenario that includes pedestrians. He mentioned that at the last meeting the group requested that all future model runs exclude pedestrians so that they can be compared equally. Gene explained that those scenarios already run were not changed and that some do include pedestrians. The Capacity Scenario assumes the two crosswalks along Route 3 are still in operation. This scenario has the fewest unreleased vehicles, the highest volume of traffic on Route 3, and the shortest travel time.

*Intermediate Scenario with Pedestrians:* This is a three-lane scenario that includes pedestrians. The two crosswalks along Route 3 are still in operation. The crosswalks do reduce the capacity of Route 3 but they also provide gaps such that the Roundabout at Route 3/25 can operate more effectively for the other approaches. The gaps allow traffic to enter the Roundabout that otherwise would be blocked.

Ken Renoux asked for an explanation of an upgraded signal. Gene explained that the current signal functions like two signals because the Route 104 legs are separated. This scenario would eliminate the separation and make it function as one signal. Also, the timing and operation of the signal would be modernized. Ken also asked whether a signal or roundabout had a greater impact on travel times. Gene stated that for the Route 104/3 intersection, either would work. However, the roundabout would be more effective in reducing travel times.

The question of the pedestrian crossings and their affect on travel times was discussed. The model shows that travel times increased when there were no pedestrian crossings. Several members commented that this seemed backwards. Dave explained that the gaps created by the pedestrian crossings can actually help traffic when roundabouts are used. It was mentioned that Michael Wallwork had presented a roundabout from Florida where a pedestrian signal had been added to create gaps and provide a safe place for pedestrians to cross. John Edgar asked why then the volume for northbound Route 3 traffic was higher without the gaps. Dave answered that without pedestrians crossing Route 3, there is no delay for northbound traffic and thus more capacity. The gaps reduce capacity for northbound Route 3 traffic but helps with the overall efficiency of the roundabout. Frank Michel mentioned that the Parade Road Roundabout is our own testing ground and the affect gaps have can be seen when your go around.

A question was asked about the volume of pedestrians crossing and how a roundabout at Route 3/25 would handle pedestrians. Gene explained that the project team counted pedestrians at the two crosswalks and at Route 3/25. The highest number of crossings occurred at Dover Street, then Lake Street, and finally Route 3/25. Gene explained that a roundabout can safely accommodate pedestrian traffic. Pedestrians cross behind the vehicles yielding to enter the roundabout. John Edgar stated that with the overall growth in the model, the volume of pedestrian traffic should grow. Gene stated that the team would look into this and be sure this is accounted for.

Gene reminded the committee that at the last meeting it was decided that pedestrians would be excluded from all further model scenarios. The desire was to create consistency between scenarios. Tim Drew asked if this would be the worst case. This provides the highest capacity for Route 3 traffic.

*Intermediate Scenario without Pedestrians:* This is a three-lane scenario that excludes pedestrians. There are no pedestrians crossing Route 3. Excluding pedestrians had no effect on the unreleased vehicles, provided more capacity for northbound Route 3, slightly increased travel time for northbound traffic, but nearly double travel times for southbound traffic. The lack of gaps in the Route 3/25 roundabout had a direct impact on the southbound travel times.

John Edgar asked whether it would be possible to evaluate how much of the year a particular scenario would or would not work. Is there a year round solution? Gene stated that it should be possible to identify how a scenario would operate at different times of the year. He stated the goal would be to present how an alternative would function at different times of the year.

*School Bypass Scenario:* This is the bypass only with no other improvements. The model statistics are very similar to the No Build. The bypass does not address the demand for the

Route 3 and 25 corridors. It was made clear that it would be more effective on weekends where there is more local traffic heading for northbound Route 3 from Route 25.

*Pleasant Street Bypass – One way Circulation:* Two versions of this scenario were presented. Both assumed a new bypass from Pleasant Street behind the banks that connects to Route 3 north of the hardware store. The bypass would be for westbound traffic while eastbound traffic would be on the existing Route 25. These scenarios assumed a single lane roundabout at Route 3/25, however, one added an extra right turn lane for Route 3 to 25 traffic. The model statistics indicate that the extra lane helps. Gene stated that this option would need to be evaluated for a Sunday afternoon because it may show the need to have an extra lane for the return traffic. The extra lane scenario indicated a longer travel time for northbound traffic. This will be investigated.

*Roundabout Scenario:* This scenario includes 5 new roundabouts. It also assumes a pedestrian signal at Dover Street. The model statistics are not that promising, however, this was due to the proposed roundabout at Lake Street. Gene stated that for the design hour, most traffic is passing through. This roundabout becomes a traffic calming measure and reduces the capacity of Route 3.

*Signal Scenario:* This is a three lane scenario with signals at Route 104/3 and Route 3/25. The model statistics are very similar to the No Build. The signals do not have sufficient capacity to handle the demand.

### 3. Alternatives Modeling

Gene stated that two additional scenarios were modeled. Dave Saladino would present the results. The meeting break occurred between the discussions of the two scenarios.

*School Bypass – One way Circulation Scenario:* This is the same school bypass except that existing Route 25 from Route 3 to Barnard Ridge Road would be for eastbound traffic only. The bypass would be used as westbound Route 25. A single lane roundabout was assumed for the intersection of the bypass with Route 3. The model results indicate that a two-lane or hybrid roundabout would work better. A video of the model was shown.

### 4. Break

### 3. Alternatives Modeling (cont'd)

*Reversible Lane Scenario:* This scenario proposes a three-lane section on Route 3 where the middle lane could be used as a left turning lane, a northbound lane, or a southbound lane. The model was run assuming two lanes northbound and one lane southbound because the Friday peak period needs the additional capacity. The model statistics indicate that it works well for the northbound traffic. The travel time was very low. The team questioned the time, but agreed that the time would be similar to the capacity alternative. Gene then presented examples of how reversible lanes are managed. The examples ranged from simple cones to signals.

A discussion ensued focusing on the Sunday peak period. Many felt it was necessary to evaluate Sunday. Gene stated that the model is for a single design hour. Developing an additional model would take months and be costly. Bill Bayard asked if there was a way to trick the current model to believing it was a Sunday model. Dave Saladino stated that the model uses an origin and destination table to assign trips to the network. This table could potentially be reversed to simulate Sunday. Gene stated that the team would discuss this to see if it is a possibility.

John Moulton wanted to be sure the project team understood the problems that exist on Saturday and Sunday. Carol Granfield asked Police Chief Kevin Morrow to comment on traffic on weekends. He stated that traffic is unpredictable. They are often surprised. Many agreed that Saturday is annoying because it depends upon the weather, local events, etc.

## 5. Alternatives Development

Gene began by presenting a furthered developed concept for the Quarry Road realignment. This was presented as a concept at a previous meeting. The new concept includes widening along Route 25 to provide left turn lanes to Quarry and Beattie Roads. Gene mentioned that the committee has asked to see a Beattie Road realignment concept. Gene presented this concept and it also included left turn lanes on Route 25. Gene stated that although the Quarry Road realignment places the intersection on a horizontal curve, the curves has adequate sight distance. He then presented a profile view of both options. The Quarry Road realignment places the intersection on a crest vertical curve that has a design speed of 50 mph. The Beattie Road realignment places the intersection on horizontal and vertical tangents.

John Moulton who lives in this area stated that the crest vertical curve does pose sight distance problems at this location. Could the vertical curve be lowered to improve the sight distance? Gene stated that it is possible to evaluate this, but it has some issues. Driveways would need to be evaluated to see if they would still work. Also, he stated that once sight distance is improved, speeds usually increase.

A question was asked whether a roundabout could work at this location. Gene stated that during the workshop in December where a group from the committee made recommendations, a roundabout was not mentioned. He stated that this section of Route 25 has a higher travel speed and is more rural in nature. A roundabout would reduce the speed and he wondered if the committee thought this was a good idea. Many members thought that reducing speeds along this entire stretch of Route 25 should be considered in order to improve safety. Gene stated that this can be done and that this approach should be added to the list of Potential Alternatives.

## 5. Next Steps

Jim Marshall closed the meeting by discussing the schedule. He mentioned the need the have a public meeting to present progress to the general public. The timing of a public meeting was discussed. It was felt it should avoid the budgeting and town meeting schedule.

Jim also suggested that the alternatives be developed to a greater level of detail to show how they will look on the ground. Jim mentions developing the three lane section in more detail

and possibly the four lane section. Chuck Palm thought the four lane had been rejected. Gene stated that nothing has been formally rejected at this time. The current process is to present information and at a later time alternatives will be developed and screened.

Fred Hatch felt that the four lane section should be evaluated further since it proves best at accommodating traffic. He thinks we need to develop it further to see if it is even possible. The impacts need to be understood at the one foot level.

There was another discussion about pedestrians. Many felt that the pedestrian should be considered.

John Edgar asked about ITS (Intelligent Transportation Systems) and how it could apply here. Gene mentioned that this is included in the List of Potential Alternatives and will be evaluated.

The next meeting is scheduled for October 16. The November meeting would occur during Thanksgiving week. It was mentioned that last year there was an early December meeting with no meetings the third weeks of November and December.

#### 6. Adjournment

Submitted by,  
Gene McCarthy, P.E.  
McFarland-Johnson, Inc.



CHARLES P. O'LEARY, JR.  
COMMISSIONER

**Meredith 10430 US 3/25 Improvements  
Transportation Planning Study**

JEFF BRILLHART, P.E.  
ASSISTANT COMMISSIONER

Project Advisory Committee  
September 18, 2007  
Tuesday, 5:00 to 8:00 PM  
Meredith Community Center  
DW Highway, Meredith, NH

**AGENDA**

1. Opening / Introduction: Nancy Mayville, Municipal Highways Engineer
2. Modeling Overview: Gene McCarthy and David Saladino, Resource Systems Group
3. Alternatives Modeling: David Saladino
4. Dinner break
5. Alternatives Development
6. Next Steps: Jim Marshall
7. Adjourn (8:00 PM)

**Context Sensitive Solutions (CSS)** is defined as *"a collaborative interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility."*

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