

City of Keene
New Hampshire

AD HOC LOWER WINCHESTER STREET COMMITTEE
MEETING MINUTES

Tuesday, April 25, 2023

6:00 PM

**2nd Floor Conference Room,
City Hall**

Members Present:

Douglas Hamshaw
Sarah Bollinger, Vice Chair
Trevor Bonnette
Jimmy Tempesta
Jim Lamp

Staff Present:

Don Lussier, City Engineer
Brett Rusnock, Civil Engineer

Members Not Present:

Christopher McCauley
Douglas Fish

1) Call to Order/ Chairman's Remarks

Chair Hamshaw called the meeting to order at 6:07 PM.

2) Roll Call and Minute Approval

Chair Hamshaw asked for any corrections to the minutes. With no corrections, Mr. Jim Lamp motioned to approve. The motion to approve was seconded by Ms. Sarah Bollinger and the minutes were approved unanimously.

3) Traffic Projections

A) Background Growth

Chair Hamshaw turned the meeting over to Mr. Gene McCarthy, project manager for McFarland Johnson. Mr. McCarthy introduced himself, explaining that McFarland Johnson is serving as lead consultant on the study working with the city. He introduced Mr. Matt Moore, who is serving as the project engineer.

Mr. McCarthy noted a few guests and asked them to introduce themselves. Mr. Vinod Patel introduced himself as owner of Best Western Plaza Hotel and Tracy Tempesta, as owner of Tempesta's restaurant.

Mr. McCarthy explained that the data collection was performed last year through recording cameras used to collect the data. Individuals then watch the videos and manually count the cars. He explained Peak Hour Traffic Volumes represent a peak of the year. The Department of Transportation has a factor requiring counts during certain time frames to fully understand what is happening during those busiest times. In other construction projects they are consulting on north of Route 101, they learned Saturday was peak time likely due to significant retail in the area. For this project, they collected during the morning, afternoon and on Saturdays.

The details are all noted on the Peak Hour Traffic Volume graphic in the slide presentation. By collecting all volume going through corridor and looking at key intersections monitoring how many people are going through, it provides a dynamic to test the traffic in the area.

Mr. Moore explained the arrows represented the direction of the turn at the respective intersection with the numbers corresponding to the number of cars passing through during AM peak, PM peak and Saturday. To ensure the best approximation, collection was done using a couple of different days of the week (including mid-week) and when school was in, and businesses were open.

He explained that arrows were added to the slide to demonstrate the difference between the AM and PM peak volumes and noted the retail draw for people heading southbound. Numbers over one thousand represent a significant amount of traffic for one single lane. The AM peak volume on the northbound side from Krif Road north is climbing upwards of eight hundred and fifty.

Mr. Lussier said this reflects what one might see out there today regarding the level of congestion and noted that those higher counts are what lead to breaking points in the system.

Mr. Tempesta shared that during certain times, people struggle to get out of his restaurant space on Kit Road onto Winchester Street. He has been told by visitors to his restaurant that they try to get there early in hopes of less traffic. Most of his clientele take a right out of his location and then turn around. It was asked where they are turning around, and he responded usually at Fairfield's or Clark's. Mr. Patel shared that after 5PM, he never turns left.

B) Resultant Demand

Mr. McCarthy shared that for these projects, they do not try to solve the problem based on current conditions, but long-term. They typically look twenty years beyond the time the project is built. They must anticipate how traffic will go between now and that future date. Implementation of this project is estimated for 2025, so they are looking into the future to 2045.

In some projects, one might develop very elaborate models, for this, they are just looking at trends and the expectations for this corridor on uses, growth and the number of people passing through.

In the state of NH, a typical project of this type, they assume a yearly one percent growth. The background growth of one percent per year over twenty years is a significant amount of traffic. They met with the city and discussed that from 2023 to the design year 2045, they assumed a one percent growth for corridors like Winchester Street, Bradco Road and Matthews Road. The minor side roads (Kit Street, Fairbanks Street, Wetmore Street, Lucinda Terrace, and Buffam Road) were assumed at 0.25% growth because they do not expect them to grow at that same

level. They also assumed a future redevelopment of open space on Krif Road drawing approximately three hundred additional peak hour trips.

Mr. Jim Lamp asked who they spoke to about that development. Mr. Lussier explained that they spoke with the planning director and flood plain administrator, Mr. John Rogers. Their guidance was that it is developable, but they will likely need to use some of that land to do flood plain mitigation. An aerial shot was included in the PowerPoint used during the meeting.

Mr. McCarthy shared that when they did develop it, the city allowed some buildings to be developed below the flood plain as it was explained they would not be able to add enough backfill to get them to an appropriate level.

Mr. McCarthy noted they scaled back some of their original numbers due to some of the open land. They assumed twenty five percent of that open land would be used to provide compensatory flood storage. There can be development within those guidelines, but it has not been done mainly because it is more expensive.

Mr. McCarthy was interested in the committee's input. He said the demand is there and the expectation is that it will continue to grow.

Conversation ensued about future growth and development and the attendees agreed that the proposed residential communities in Swanzey will also significantly impact growth in this area.

Ms. Bollinger asked how they projected the directions of the anticipated Krif Road trips.

Mr. McCarthy said he would have to review that. He knew they looked at existing, what is zoned for industrial and expected use for that. As it is industrial, rather than residential, it tends to be one-way trips. He did note that the fact that people doing U-turns from Kit, might falsely increase the number slightly.

Mr. Lussier explained that he was a little surprised at the difference in the numbers from where we are to future expectations, but after speaking with the Department of Transportation and the Community Development staff, he does not see them as unreasonable numbers.

4) Alternatives Development
A) Corridor Alternatives

Mr. McCarthy explained the previously presented data was used to formulate their alternatives. The project goal is to accommodate that level of traffic, while also improving the efficiency and the safety of the area.

Mr. Tempesta asked if the new rotary would affect the flow given the lack of lights. Mr. McCarthy explained the big roundabout will determine the speed of the flow. Mr. Lussier explained that traffic is flowing much better just since the configuration was put in place. As they were looking at the Winchester Corridor, Mr. McCarthy's team broke the project into three segments; South (down to and including Market Basket), Middle (down to and including Matthews) and North (current 101 roundabout to just past Krif Road).

i) North Segment
(1) Current Conditions:

The north segment is currently a three-lane section (single lane in each direction and a dual use center turn lane). To accommodate future expected traffic, they proposed two southbound and two northbound lanes.

(1) North Segment Four Lane with Raised Center Median Option

This option provides two southbound and two northbound lanes to accommodate the future expected traffic with a median in the middle from the roundabout to Krif Road.

Trevor Bonnette spoke and shared that he sees this as being detrimental to business because of the difficulty in making certain turns.

Mr. McCarthy explained that this whole corridor is modeled to calm and smooth the flow of traffic.

Mr. Lussier explained the raised island from the existing roundabout to Fairfields would mean there are no left turns in or out of Kit Street. The engineering team is recommending that this median be included regardless of the alternative selected due to the safety and traffic issues.

Mr. McCarthy pointed out that this alternative is very consistent with what is being built on Winchester Street north of Rt. 101.

(2) Five-Lane with Dual Use Turn Lane Option

This option provides a five-lane section with a center turn lane, making a left means crossing two lanes of traffic. If someone is trying to make a left turn, in that time waiting to do so, they could simply drive to the next intersection and make a U-turn. It would be far safer and take less time.

Mr. Jim Lamp said there are too many decisions to be made using this five-lane option. The four lane is much simpler, and the danger and safety are big issues with this five-lane option.

Mr. Lussier stated he does not love the dual use turn lane option, however members of the steering committee wanted to include it. He has reservations on the safety of it as the dual use left turn lanes are called suicide lanes for a reason as they are not the best safety alternative.

ii) Middle Segment

(1) Current Conditions:

From Krif Road to Bradco Street, both the north and southbound lanes are single lanes.

(2) Two Lane with Raised Center Median Option

This option provides one lane in each direction. A single lane is enough to manage expected traffic volumes into the future. For southbound traffic at Bradco Street, a second lane is introduced for an unimpeded right turn from Bradco onto Winchester St. The only caveat is that drivers heading to Mathews or who want to go northbound will have to weave into the left lane to make the left turn or U-turn.

(3) Three Lane with Dual Use Turn Lane Option

This option includes a single lane in each direction plus a dual use turn lane from Krif to Bradco. The footprint is fairly similar. There are businesses and driveways here. There is a proposed single lane from Matthews Road to Krif, and once again, there is a second southbound lane added from Bradco to Magnolia Way. It is essentially what is functioning currently north of Krif

Road. For safety reasons, it is highly recommended that left turns out of Bradco be prohibited. Drivers will use the proposed roundabout to turn around.

Sarah Bollinger asked about the distance between the end of slip lane from 101 to Kit Street and wondered how much space there will be. Mr. Moore said there is about 360 feet. Mr. McCarthy said they would like it to be more.

Mr. McCarthy indicated that his preference would be to force people to go down to the roundabout to turn around.

iii) South Segment

(1) Current Conditions:

This area runs from Matthews Road to the Market Basket signal. There are many single-family homes in this area and the corridor is tight. Residents had many concerns about the speed as well as access. Right now, it is very narrow with a single lane in each direction. From a capacity perspective, a single lane is appropriate even with growth. The real question is whether some left turning capacity is needed.

(2) Three Lane with dual use turn lane

The first concept includes a center turn lane. At the listening session, people living in this area shared their troubles getting in and out of their drives. To provide appropriate access (three lanes) to make it safer for those residents, some of the mature trees in this area may need to be removed. Leaving the trees would mean leaving it as a single lane in each direction. Mr. Lussier offered to create a survey for the local homeowners to gather their thoughts on the loss of the trees and potential restrictions of left turn movements.

(3) Two Lanes only

Under this option, the southern corridor would remain largely as it exists today, with a single lane in each direction. Dedicated right turn lane is provided at Market Basket.

(4) Expansion of the project at Market Basket

The attendees discuss the feasibility of expanding the project limits to include a roundabout at the Market Basket entrance. This addition would make it possible to prohibit left turns in and out of properties or side streets in the southern segment (for example, with a raised median.. Mr. Lussier stated that he was not sure that the NHDOT would be willing to add this to the project scope. The Committee requested that the design team discuss this opportunity with the NHDOT and report back at the next meeting.

The committee discussed the need understand the concerns and desires of the residents that live along the Southern Segment. Mr. Lussier suggested that the City could send out a survey to this neighborhood to collect their options on various options.

B) Intersection Alternatives

Mr. McCarthy presented a signal alternative for the north segment. It would be a five lane (two lanes either direction) with a dual use center turn lane. The corridor itself remains similar.

Some members noted that the signal alternative would probably need to be designed to accommodate semi-trucks given the number of trucks making deliveries in that area.

In presenting the signal alternative for the middle section, Mr. McCarthy noted that it would be a very hard sell to the Department of Transportation if a signal is warranted at Bradco Street with a signal at Krif Road and at Matthews Road. The three signals from Krif Road, Bradco and Matthews Road would be interconnected. Surprisingly, the delay would be minimal. It will flow, but it is still a signal so at some point, it will pause the traffic.

Mr. Lussier shared that the cost of signalized equipment is very expensive as is the cost of the specialized curbing needed for roundabouts such that it is almost a wash. It really comes down to what the community wants rather than using cost as a deciding factor.

Mr. McCarthy said the one thing about signals is that even if a car is there in the middle of the day with no traffic, they still must sit there if they miss the light. There will always be some degree of delay.

It was asked which one of the solutions would best handle traffic beyond 2045. Mr. McCarthy responded that when you go to the double hybrid, there is so much capacity stored up that he saw that as a good option. He added, the signals would work well beyond 2045 and the thing about signals is that if some big development was built, signals can be retimed and adjusted to address the increased capacity. Mr. Lussier explained the Department of Transportation wants traffic on their highways to keep moving.

Mr. Lussier wanted to hear if there was more information that was not previously provided that committee members would like to see going forward.

2) **Project Schedule**

Mr. McCarthy reviewed the project schedule. They are planning for a final steering committee meeting next month. The goal is for the committee to make a recommendation to the City Council at that time. From there, the team will present the recommendation to the City Council. This phase of the project will culminate with the submission of the Engineering Study report in the fall.

3) **Questions and Answers**

Discussion ensued regarding tractor trailers in the area of Bradco Street. Mr. McCarthy explained that as a state route that would have to accommodate the various trailers. Trucks would have to come out, make a right and then go around the roundabout to perform a U-turn. The roundabout is designed for 18-20 mph speed. The trucks will be able to utilize it without issue and they will design them with truck aprons to accommodate.

Ms. Bollinger asked them about median and beautification. Mr. McCarthy explained the median could include trees, lights (solar), and a bioretention area similar to what is being constructed between Key Road and Pearl Street. It serves two purposes; it is beautiful, but it also serves to calm the traffic.

4) **Adjournment**

There being no further business, Chair Hamshaw adjourned the meeting at 8:02 PM.

Respectfully submitted by,
Amanda Trask, Minute Taker

Reviewed and edited by,
Donald R. Lussier, City Engineer