

Lee Area Traffic Study
Summary of Fourth Working Group Meeting
Tuesday, November 6, 2007, 4:00 PM.
Lee Library Gallery, 100 Main Street, Lee, MA

Attendees:

Name	Organization
Alison Church	Berkshire Regional Planning Commission
Bryan Emmett	Berkshire Natural Resources Council
Peter Frieri	MassHighway District 1
Robert Gorden	Becket Historical Commission
Nat Karns	Berkshire Regional Planning Commission
Anuja Koirala	Berkshire Regional Planning Commission
Dana Lacasse	MassHighway District 1
Gerald LePrevost	Lee Traffic Committee
Jorja-Ann Marsden	Stockbridge Town Administrator
Mark Moore	MassHighway District 1
Christine Neumann	Berkshire Regional Planning Commission

1. Introductions

Mr. Karns welcomed everyone to the meeting and introduced Robert Gorden, a new representative from Becket. Members introduced themselves.

2. Summary of 09-25-07 Working Group Meeting

Mr. Karns noted that it is a priority to keep a good written record of all the meetings.

3. Summary of 11-01-07 1st Public Meeting

There were a few people from Becket present at the Public Meeting. Stockbridge had two representatives, but there was no one present from West Stockbridge or Lenox. Mr. Karns indicated that he hopes to have full representation of people from all of the potentially affected areas.

- Identified Problems: The “loudest” messages made by people at the Public Meeting were the need to mitigate truck traffic and the large volume of traffic experienced in Lee.

A member of the Working Group asked when conclusions were likely to be reached. Mr. Karns clarified that the study will probably take 6 to 12 months. Before the group begins defining potential alternatives, it needs to focus on determining the evaluation criteria in the abstract. For example, any alternative will need to be evaluated in terms of how it alleviates the truck traffic problem or what kind of truck problem it creates somewhere else. Other evaluation criteria will include using a cost estimate which may rule out some viable alternatives due to financial constraints.

- Identified Solutions: Mr. Frieri suggested that it may be important to qualify where the trucks are coming from and where they are going and to establish whether the trucks are serving Lee or simply moving through Lee. A brain storming discussion followed to determine how this could be accomplished. Mr. Frieri also commented on the delay experienced on the side streets at the non-signalized intersections and suggested trying to better quantify the delay through observed counts. This would be helpful data to have when considering any short term improvements. BRPC will meet with MHD to determine what

numbers are in the model and to do a cross check with observed counts to see how the numbers in the model compare with reality.

4. Criteria for Evaluation of Alternatives

The current list of evaluation criteria is a rough draft of standard measurements and criteria used in previous similar studies. The list does not imply relative importance and many of the alternatives are not mutually exclusive. Mr. Karns would like to keep the evaluation criteria as “quantitative” as possible rather than make “qualitative” judgments on levels of impact.

Mr. Karns envisioned a two step methodology for evaluating the alternatives. The first stage would be to eliminate through a “coarse screening” process those alternatives that do not warrant further consideration; the alternatives that actually make the problem worse will be eliminated. The second stage would be to comprehensively assess the remaining alternatives in terms of possible and negative impacts on traffic, the community and the environment. It is important to note that each of these remaining alternatives will have impacts.

- Traffic and Mobility Factors: A few clarifications were made concerning how Vehicle Hours Traveled is measured. VHT is a net measurement that takes the total of all the cars in the system and provides an average. Vehicle Miles Traveled is listed under air quality.

There was some discussion on the walking and bicycling factor concerning whether it is a criteria to have the alternatives measured against, or if it is an alternative in and of itself. There was a discussion of putting the walking/biking factor as part of a Transportation Demand Management (TDM)/Transportation Systems Management (TSM) alternative or placing it under the residential/community impacts. TSM generally relates to improvements made to the existing system, such as intersection improvements, signals, and minor widening in order to make the system function as it is. TDM provides mechanisms to get people out of their cars within the downtown.

There was a lengthy discussion on how to measure a reduction in truck traffic and if it is more important to measure the number of trucks reduced or just the impacts of the trucks. It would be hard to develop a measure to show reduction in truck traffic impacts (e.g. how does one measure a reduction in noise?) A reduction in noise would be a neighborhood/community impact as well as part of a reduction in truck traffic.

The following means of quantifying the level of impact of trucks were discussed:

- Measuring how many homes/businesses are directly impacted by trucks
- Measuring the number of stops a truck is expected to make through an area (i.e. the number of traffic lights a truck goes through.)
- Measuring the lanes miles of steep slope (above 8%) within a given alternative.
- Measuring the number of sharp turns. The geometric improvements concerning sharp turns relative to the evaluation of truck traffic would be an acceptable criteria rather than using the geometric improvements in relation to safety.

There was some discussion as to whether the interest in reducing the number of trucks going through the downtown should be expanded to include dense neighborhoods. There was a concern that by taking away the truck traffic, there would be a reduction in car traffic. Mr. Frieri suggested developing an “efficiency” measure to illustrate how trucks get to where they need to go.

- Safety: The safety criteria needs to be looked at further because some improvements, such as geometric improvements, might allow the traffic to move more quickly but would possibly also increase the number of accidents. Mr. Karns hypothesized that the safety in downtown Lee is relatively good given the volume and speed of traffic so that improving travel time in Lee might actually decrease safety. Mr. Moore agreed that the traffic volumes are not necessarily tied to safety or geometric improvements.

The group raised the question of how to assess safety in terms of accidents and whether it would be better to pay attention to the rate of accidents or the raw number. A short discussion followed concerning the assessment of accident data. The data is unclear because the intersections are relatively safe. Mr. Karns suggested that the accident measurement may be one of the criteria that

will be more qualitative in nature. For example, if average travel speeds increase, accidents may also increase, but there may not be a way to measure this. If alternative facilities are built that are limited access highways, these would be expected to have significantly lower accidents.

There was a brief discussion on the effect of traffic lights on driver frustration at the non-signalized intersections and the number of risky maneuvers made turning from the side streets. Mr. Leprevost mentioned that he didn't think the traffic lights would make much difference on the traffic speed but would just make it easier for drivers on the side streets to have a chance to turn. Ms. Church noted that the only measurable effect of the traffic lights would be how they affect truck traffic and regional mobility overall. The final report will relate the tradeoffs of traffic signals and note that, although the introduction of traffic signals will provide side streets a chance to turn, they would also have the potential to decrease regional mobility and through travel speed. Further, more traffic lights would increase the affect of the truck traffic by slowing traffic and making the stopping and starting effect of each truck more pronounced. The document would also comment that, by using actuated signals and correct signal phasing and timing, these negative tradeoffs would be minimized.

Property and Residential Impacts: The parcel inventory will count individual properties. The analysis for impacts on property will be a little different from the analysis of residential impacts because residential impacts take into account the houses impacted as well as the properties. BRPC staff is presuming that the proximity of the house to the alternative will be weighted. For example, an alternative that requires the taking of a house is more severe than one that traverses in front of the house. Furthermore, impacts experienced by people who live 300 or 400 feet from the roadway will be more severe than for people who live five thousand feet back. The weighting of the impacts will also relate to topography. A house located below the roadway, at level with the roadway, or above the roadway will all have different levels of impact. Mr. Karns suggested using a fixed buffer in the GIS count of homes impacted for this study. The size of the buffer was discussed. Mr. Karns wasn't sure that 100 feet or 200 feet would be adequate. Mr. Moore noted that geometric changes to the buffer are much more critical than the noise changes. Members of the Working Group agreed that 200 feet to the building (not the parcel line) didn't seem like an adequate buffer. It was decided to have a graduated scale – the house immediately adjacent to the road will be more greatly impacted than the houses farther back – and will make the assumption that after a certain number of feet there is no impact. Ms. Church noted that the improvements to the Laurel Street residents should also be taken into account. Ms. Koirala suggested using a three tiered buffer. The working group agreed with this. There was a short discussion on why the buffer is smaller for existing facilities than for new facilities. Ms. Church explained that existing facilities already experience impacts from existing roads but the impact upon a new facility is perceived to be greater. Ms. Koirala noted that these measures are meant to be relatively equal to each other. The Working Group understood this concept and agreed with it.

- Neighborhood Impacts: There was a discussion on whether a facility that goes through a neighborhood is worse than one that skirts around neighborhood or one that is well away from a neighborhood. In this context, it is not easy to define a "neighborhood," some rural areas consider themselves a neighborhood although they wouldn't be classified as such through a population or household density count.

Mr. Emmett suggested using a density analysis rather than just a number of impacted houses. Ms. Church and Mr. Karns would like to ask the Working Group representatives to identify the cohesive neighborhoods in their communities in an attempt to measure something more than just the number of houses impacted.

Ms. Church raised the issue of cut-through traffic on community centers.

- Business and Economic Development Impacts: Although any diversion of traffic may have a negative economic impact, it may improve traffic flow, and thus has a positive impact (a reduction in travel time is a benefit to the businesses, but conversely, reducing traffic through downtown Lee may be a negative consequence.)

Mr. Emmett suggested using measures similar to those discussed earlier, rather than just a measure of the traffic, to measure the quality of the traffic – drive through time, average stops and delays, etc. Mr. LePrevost suggested that it's partly to do with destinations. If you have

destinations that people like, the idea is to get people there easily. Truck traffic does not make traveling on the main street very easy because it decreases the visibility of the businesses. It will be important to create a definition of the key business areas in the Lee.

Mr. Emmett suggested adding the viability of agricultural operations under the business impacts rather than the environmental impacts because more traffic on any street will impact a farmer's ability to get from field to field and affect their ability to run their business. He asked if there is a Lee Agricultural Commission that would want to be a part of this. The effects on agricultural land will be measured by mapping out the prime agricultural soils and identifying areas that are currently used for agriculture.

- Environmental Impacts: Air quality is measured through vehicle miles traveled (VMT). This is the standard measure.

Water resources/wetlands/flood plains/lakes/ponds/aquifers are all mapped and easily identifiable. Mr. Emmett suggested using the core critical aquatic resources and the critical supporting watersheds layer which is the counterpart to the biomap core habitat layer. This layer looks beyond just the number of wetlands and attempts to measure the importance of each one and identify what land areas are critical to those wetlands. The presumption is that even if a new roadway does not run through a regulated wetland, there will be impacts that spill over. The intent is to avoid the fragmentation of the natural resources areas, which have been mapped. An alternative that proposes to go through a chunk of the core habitat will be considered worse than an alternative that skirts the wetland or one that avoids it completely. It is still considered an impact if the alternative touches the margin of the area, but it is seen as much less of an impact than if an alternative goes through the middle of it. There was a discussion on how to measure visual impacts. Again, if an alternative is going to go right through a viewshed, it is considered more of an impact than if it's skirting around it, it is another level of impact. Typically, visual impacts are measured using a visibility range like that used for cell towers. For this study, it was decided that it would be best to use a buffer.

There was a question on how each of these criteria will be used to evaluate the alternatives and a brief discussion followed regarding the goals of the study and what the study is trying to accomplish. For Lee, reducing the truck traffic is an important goal to try to achieve. From a regional mobility standpoint, the goal is to improve travel time to the Mass Turnpike while recognizing that this goal is going to have to be achieved within real parameters of acceptable impacts. This has to be evaluated consistently for all the towns so that the problem doesn't just get moved to another community.

There was a discussion with Mr. Emmett about the UMASS fragmentation index and the maps he provided. The maps show a metric of how valuable each land area is in relation to other features such as roads, water, etc. It is based on landscape potential rather than the level of biodiversity. Mr. Emmett will work with Mark Maloy from BRPC to create a map using this information to share with the Working Group.

5. Next Meeting Date

The next meeting of the Working Group will be held on Tuesday, December 11th at 4:00pm.