Underground Updates

The necessity to repair the underground infrastructure is approved from this document's perspective. There are issues with the monetary impact on the property owners. The city should make all attempts to secure more funding and/or reduce taxes to defray the potential loss in revenues, resulting from cases where the loss of business during construction is a possibility. The project needs to be transparent about the costs, both the amount and the source of any funding. The timing and staging of the implementation must also consider/include the business owners.

Surface Design and Restructure

Only one alternative is documented and being presented to the public. The Mayor, George Hansel, stated there was an alternate solution in his introduction at the last public meeting. The solution should be provided with equal representation, to allow citizens to see the comparisons. Anything less is simply an afront to the representative government that our citizens expect! Proposals should also contain budgetary costs in comparison. None have been shown to this point. The citizens for Keene deserve to know all options regarding the possible designs, there impact and funding/costs.

The following evaluation of the current proposal provides a simple discussion of restructure of downtown traffic flows presented in the last public meeting. The proposal can be viewed on the city website.

If you do not wish to read analysis below, please proceed to the Summary conclusion, as it provides a different very simple solution which is more effective in moving traffic and accommodates the potential growth of the downtown business.

The following is a list of the elements of the proposed solution to be addressed. There are also some recommendations provided.

1. **Northern extension of the Central Park grounds.** Festivals of any size require traffic to be blocked. The proposed northern extension of the park, replacing the traffic circle is not effective solution for any reasonable size gatherings and expositions. It was stated by one of the city team representatives, "that roads would be blocked for festivals in any case as the attendees tend to overflow into traffic lanes in any case". The festivals are only about 5 to 7 per year, in the summer.

   Casual use of the park by citizens and small groups, (100 to 200+), are easily accommodated by the current configuration and does not reduce the adjacent parking. In addition, a great deal of the space in the new proposal will still remain paved for a fire lane further reducing the potential of the green space planned.

   Note: This is the single change proposed that affects almost all the design tenants of the current proposed traffic flow design. It is very important to understand that if the current traffic corridor at the north end of the square remains, that all the traffic flow design

limitations, discussed below, become unnecessary, with one or two exceptions. Exceptions will be addressed in the conclusion. If traffic remains as it is today the new proposed traffic circle is not required!

2. **Celebrations using the square.** – see 1 above.

3. Bicycle Traffic through Downtown

Bicycle traffic is the lowest of priorities following motor vehicles and pedestrians. The current design has no physical barrier, like a curb or other delineating barrier, between riders and pedestrians. On any busy day this would be a volatile and dangerous situation. Certainly, in the most likely situations of multiple riders, clubs etc. this is the large exposure. Riding other than very slowly (at pedestrian or close to speeds), single file within the designated bikes lanes, would significantly increase the exposure to pedestrian and cyclist injuries.

Occupants of the parked cars would be in conflict with the bike lane, when accessing their vehicles. Carrying packages, strollers, or other burdens would make the problem more complex. Who would have the right-of-way. Pedestrian traffic could cause the bike riders to make numerous stops.

Recommended

Currently only Washington Street and Main Street have adequate space to enable bicycle lanes. The lanes on Main Street are the primary focus. Single bike riders can easily use a bike lane defined on the right side of the roadway. Multiple riders, (pelotons), will use the traffic lanes in the roadway, they will not use the bike lane single file, a fact of nature! This applies to any bike lane even in the center or on the sidewalk area. Additionally, the cars are parked at an angle on Main Street. When leaving a parking space it is difficult to see traffic and would be especially difficult to see bicycle riders in a bike lane.

For both of these reasons the bicycle traffic on Main Street should use the right traffic lane. They will be much more visible and be located where the diver's anticipation of competing traffic is located.

4. **Pedestrian crosswalk at the south end of the square.**

This is currently a problem that needs to be addressed. The new proposal required shortening the lengths of the walks exposed to traffic. The traffic would need to be stopped for almost the same time that it takes to cross the existing walk. The new design accomplishes this by removing (3) traffic lanes, limiting the volume of traffic through the intersection.

The new plan single lane configuration form West Street turning south on South Main is a real problem! It constrains normal traffic as vehicles waiting for parking on South Main Street will cause a stoppage of traffic that will propagate to the remainder of the traffic flow, often

interrupting the other traffic from entering. **There are three traffic flows converging on the single lane, from the traffic circle, from West Street and from southbound traffic from Court Street.**

The exposure is extended to fire and other emergency vehicles that will be delayed as the involved drivers attempt to clear the single lane.

5. Traffic Signals

The design documents currently presented do not articulate the signals and pedestrian management that would still be required. It was stated the current programming was old and inadequate and new signals are in the new plan. New signals need to be reprogrammed using new equipment to better manage the traffic flow with algorithms based on flows of vehicles and pedestrians. The re-programing, using new capabilities, may significantly improve the traffic flows of the current configuration, using the existing lanes, (with some modifications).

Note: This **does apply to** the cross-walk problem on the south end of the square. The new capabilities with dynamic traffic monitoring can better manage the traffic and pedestrian dynamics based on current traffic volumes.

6. **Cross walk problem for Main Street Crossing**

The main problem is the south end pedestrian crossing of Main Street. Traffic lanes (3) have been removed to shorten the distance.

New more computerized programmable traffic signals are in the plan. The new capabilities can be used to provide a better crossing solution with the current length and configurations. The walk should be widened. The center waiting area expanded and a walk lights in the center modified to allow better dynamic management of the crossing.

There are many programming options, one is simply to control/stage the late comers by using the new lights in the center. They may have to wait an extra cycle, but it is as safe as any controlled crosswalk, which is the greatest concern!

7. **New Round About**

Round-abouts are most effective where pedestrian requirements do not exist. The existing traffic flows will be problematic due to some single lane exits and significant flow interruptions, due to pedestrian traffic. Keene downtown square by its nature is a business environment, and therefore has high in pedestrian traffic volumes.

8. **Delivery trucks** (include handicap and public transport requirements)

Delivery trucks currently stop frequently to deliver to businesses on the square. The proposed design has restricted most of the traffic to single lanes and obviated direct delivery to businesses on the north end, like The Stage. As most of the businesses do not have easily accessible alternate entrances for delivery, this poses a significant problem.

Further complicating the problem is the lack of drop off points that elderly and handicapped individuals. Currently they are frequently dropped off in front of the Church or The Stage, which would be non-accessible in the new design.

9. **Parking backups**

On the East, West of the roundabout and South turn from West Street, down main street there are single lanes and reduced lanes on Main coming north. Stopping to wait for a parking space to be vacated, will stop traffic. Effect of the stoppage in all these cases can propagate backups, which at times, (during many busy periods of the day), will cause normal traffic flows to backup into the roundabout causing traffic delays. During these busy times to all entry-exit segments of the round-about may be affected/stopped. This is not a problem when multiple lanes are maintained in the current traffic flows.

This is not a problem with the current solution, as there is ample room with multiple lanes, to go around parking, drop off, or delivery vehicles.

10. **Fire/Emergency vehicle traversing to south bound main street.**

There is a single entry to south bound main street and single lanes on Washington Street. In many cases, waiting for parking and traffic volumes, may cause a significant delay while space is made to allow fire trucks enough space to proceed. (Reference, Item 4). Navigating the new round-about will be more difficult and require trucks to use the extended aprons making driving more difficult/hazardous, than the cross over today.

Note: this is also true for general flow as the design has three lanes of traffic from various angles merging into the south bound Main Street, single lane flow constriction.

11. **Cross Walk at Gilbo Avenue and Railroad. (with an island and speed bump)**

This plan is ill-defined. The pedestrian crossing paths are not defined and therefore is left up to the discretion of the person(s) crossing. They could choose a direct route or diagonal route. Cars will not be able to see pedestrians entering 30 feet up the road on the opposite side. This will cause significant delays in traffic flow, as indecisions will reign. The problem is easily resolved by placing a direct crossing (wider), at the north end of the intersection. Pedestrians can still easily and safely get to both pedestrian areas on Railroad and Gilbo Avenue. In this case motorist will not have to address this conundrum.

Note: this is also a requirement of the proposal in the next item.

12. **Traffic bypass and using Gilbo Avenue as a new business corridor**

    Gilbo Avenue west bound is an excellent opportunity to expand the retail business power of Keene downtown. A new section for businesses extending to the old Railroad buildings would be a great attraction. They could have a new moniker like "Railroad Shops" or whatever to be advertised for specialty shops all over the northeast.

    Adding a left turn as in into Gilbo Avenue would also alleviate traffic from traversing the downtown loop, to go from South to West on West Street, or turning left on Emerald and winding through the back streets.

13. **Bus stops … where are they**

    Where will they be located, by the proposed solution with single lane configurations. This includes for vehicles serving the handicapped and city buses.

14. **Sidewalk configurations - (Bicycle Traffic on the same plane as Pedestrians.)**

    Sidewalk configurations providing increased room and accessibility are a necessary upgrade. However, the integration with bicycle paths on the same level is very dangerous. There is no planned physical barrier, like a curb, providing safety to pedestrians. Additionally, people emerging from their cars with packages, infirmed occupants, and strollers are subject to the exposure of bike traffic.

    Proposed bike paths are single lane. A bike rally or small group of riders will be a hazard to all others. Riding with your friends or groups there will be lots of exposure using the single lane concept. Are bike riders going to ride less than 2 mph to respect the pedestrians?

    I would personally believe that where groups of riders are concerned, should they occupy a traffic lane while traversing downtown. This is infinitely safer that mixing with pedestrians.

    This is not ignoring the requirement to enable a co-operative environment so bike owners can traverse end access downtown Keene. Based on simple logic and seasonal volumes, the cars and people are higher a priority.

15. **Traffic north on Main to West Street.**

    Adding a left turn into Gilbo Avenue would alleviate traffic from traversing the downtown loop when coming north on Main Street to West Street going West. A wider crosswalk would be north of intersection. The new turn would enhanced access and awareness of the Gilbo Avenue business segment as it develops and provide traffic relief to the center of town. Today, this is

accomplished by many turning on to Emerald Street which is not as effective a route to West Street.

16. **Two lane parking issues on West and East single lane configurations.**

    As indicated above, the single lane configurations on the East and West side of the square are major problems. They will cause traffic backups, have no room for deliveries, or bus stops.

    Example, if I am going north on the East side of the square and would like to park:

    ----- If someone is backing up in the first few spots I would stop all traffic that could easily backup most of the traffic coming from the east and south into the roundabout.

    ----- if I can't find a spot I have to proceed up Washington Street and turn around, where, in the bank, or in some ones driveway?

    In the current configuration I do not stop traffic and I can go around the square for more options to park without impacting other traffic or private properties. None of the above are problems with the current configuration, with the exception of the crosswalk at the south end of the square. This could be fixed, from a safety perspective, with more intelligent lights or segmenting the crossing. The pedestrians may have to wait in the middle for the next light on some occasions.

    The south crossing should be widened. The center island expanded to allow for more pedestrians, that may be required to wait on the island. The crossing lights on the middle island should be relocated and reprogrammed, and therefore would be advantageous to control crossers who are rushing at the tail end of the crossing interval.

Summary

The Intangibles – the current configuration of the town square with the historic church, the central park, local shops and eateries provides the quintessential new England town, appealing to locals and drawing visitors. The proposed new configuration diminishes to a great degree this old New England historic environment. by adding modern traffic structures and lessening the availability for residents and tourists.

There is a **simple and easy solution**, remove the new design extended central park on the north end of the square, allowing the traffic flow to continue as it is today. This will …

1. Remove the need for the proposed round about. We already have one!
   (removing also the traffic flow restrictions inherent in the new design as articulated above, and

allowing access for growth in the downtown).

2. Provide multilane traffic around the loop, as it is today. The single lane elements of the new design significantly delay traffic and impede parking on many situations.
3. Add back the deleted parking.
4. Allow deliveries and public transport.
5. Need to provide a solution for the south end pedestrian crossing. (New Smart Middle-Signals)
6. Need to provide a safe solution for bike riders. (option 4)

There are certainly many changes that can be made to the current situation, including sidewalk enhancements (beautification and functionality), intelligent traffic signals, public bathrooms, etc.. The opportunity for a new shopping attraction on a Gilbo Avenue corridor (with the new left turn access) is of great benefit to the growth and reputation of the city.

The diagrams and measurements shown, the Keene City site, defining showing better queue times for the new roundabout and intersections are **an invalid comparison**. The times for the current traffic do not reflect the improvements that a new design, without the existing roundabout, would provide. The measurements provided also assume a steady state of traffic flow. In the discussion above there are many cases showing where traffic is impeded by the proposed new traffic flows. There are more programmable traffic lights and other improvements than can be designed to enhance traffic-flows. Counting the waiting vehicles **does not define the problem**, it is how many vehicles flow during the programmed light intervals!

In all fairness to the residents of Keene, the current traffic configuration, should be considered the primary solution as it is far less restrictive to traffic overall and **adds traffic growth potential** that will be required the growth of Keene downtown in the future.

The citizens of Keene deserve a creditable analysis of the solution above as the new solution. Most of the points of comparison and the inherent capabilities have been delineated above. A fair independent and evaluation should be made regarding these two solutions.