MULYI-LANE HYBRID OPTION – analysis and recommended design.
Keene City Council – MSRP Meeting – 07/12/2023

The following observations and recommendations are based on the Multi-Lane Hybrid Option provided by STANTEC at the July 6th Keene City Council Meeting.

The statements below are intended to provide further design analysis and recommended designs with base reference to the initial Stantec proposal.

*Additional information can be reviewed at **keenesquare.org**.*

1. Keene Central Square should remain in the **same shape** as it is today. The triangles should be the same size as today allowing bike lanes. Ample room for traffic lane management (now and the future) is the primary goal. The proposed enlargement provides for very little useful space. When more space is required for **large, planned events** the streets are blocked off, providing necessary space for attendees and vendors.

2. The **traffic lights are programmable** and can provide better traffic flow. Signaled right turns can be programmed in three locations when there is crosswalk traffic, ***see diagrams below***. The north bound lane of Main Street can be released early in the cycle. North bound main currently has the longest light delay and is one of the two high volumes of traffic.

   If there are no walk lights on the new cycle can start again without waiting for the full time. cycle.

3. The **main street turn-around** at the square is not shown and a left turn at Gilbo Ave is implied. A week-long collection of traffic statistics shows that over 95% of the traffic using the northbound Main Street turnaround proceeds south past Gilbo Ave, very few turn left on Gilbo Ave. The recommendation allows the turnaround at Gilbo Ave and left turn onto Gilbo Ave.
   This will:

   - alleviate the blocking of the left lane at Main Street and the square

   - provide an easy access for west bound traffic to West Street, reducing some traffic currently going to the square

   - allow the statue to be move south a bid expanding the middle waiting area for the main street cross walk at the south end of the square.

4. **Bicycle lanes** should be located in the street adjacent to and integrated with the right-hand traffic lane. Integration with the side-walk is dangerous to pedestrians and therefore basically unusable by most bike riders.

   - The slowest a bike can be ridden is about 3-5 miles per hour. A pedestrian walks 1 mph or less, serious bikers will ride in the street rather than run this gauntlet

*Note - In any case newer electrified two-wheel vehicles **will not be compatible with pedestrian traffic** and riders would not accept slow speeds so they would ride in the street.*

- Unloading example – drive puts his stroller on the curb (impeding bike traffic), returns to fetch his child or package goods etc. – other passengers entering and exiting their vehicles

- Pelotons or multiple riders will ride in right traffic lane not on the bike lane, this I OK.

There are currently bikes lanes poorly marked. The bike lanes should be marked in bright green, not for the bikers but for the recognition by drivers.

Note: This provides for more sidewalk commercial space and people enhancements… benches, planters, bike racks, street vendors, etc.

5. Vehicle Angled Parking

Vehicle parking is well delineated on the proposal. The current markings are angle at about 58.6 degrees.

- The proposal also states the angle of the should be 60 degrees. If the same length, 15.5 feet is used the new slots will use a total of approximately 4 feet more road space (2 on each side) due to the angle being changed. It will also make the exit of most medium to large vehicles impede traffic in both lanes. Visibility of oncoming traffic is also decreased.

- If the current slots are angled at 55 degrees, there is 2 more feet of length provided with no loss of traffic lane width. Visibility is considerably better for vehicles backing out and they will only be impacting use one traffic lane (in most cases) leaving the curbside lane free for traffic.

Note: the lateral space required is only 2-3 feet wider for a set of parking spaces (any number in length), so essentially this will not affect the number of spaces provided and does preserve valuable width of the roadway.

6. Crosswalks

All **crosswalks** should be widened. The center of the main street crosswalk can be expanded to allow plenty of room for pedestrians that are a bit slower and need to wait in the center. Ramps for curb to cross walk should be provided. Brick inlays should be bounded by very bright strips.

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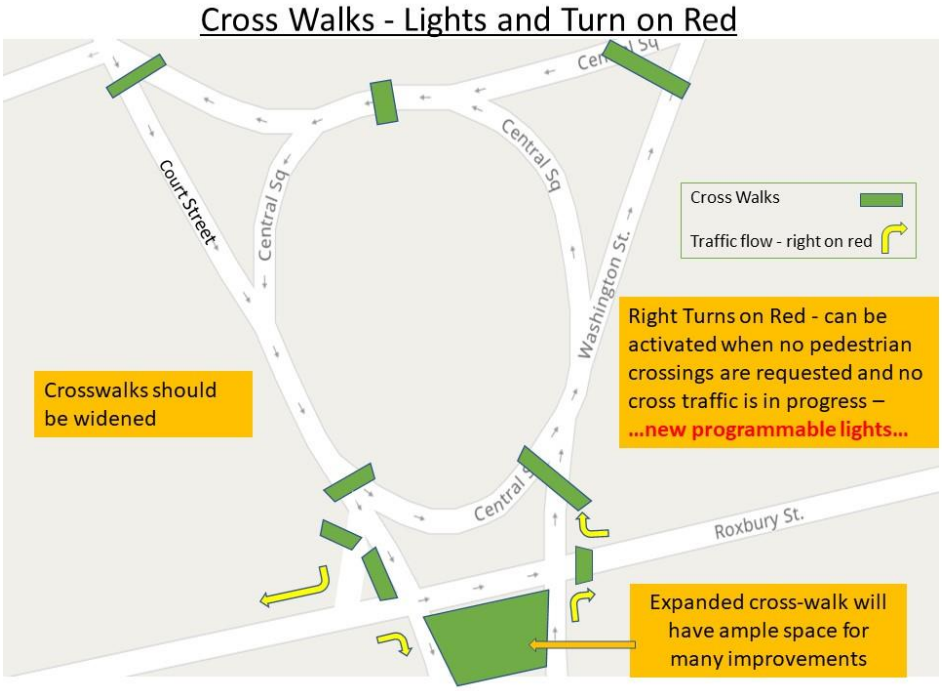
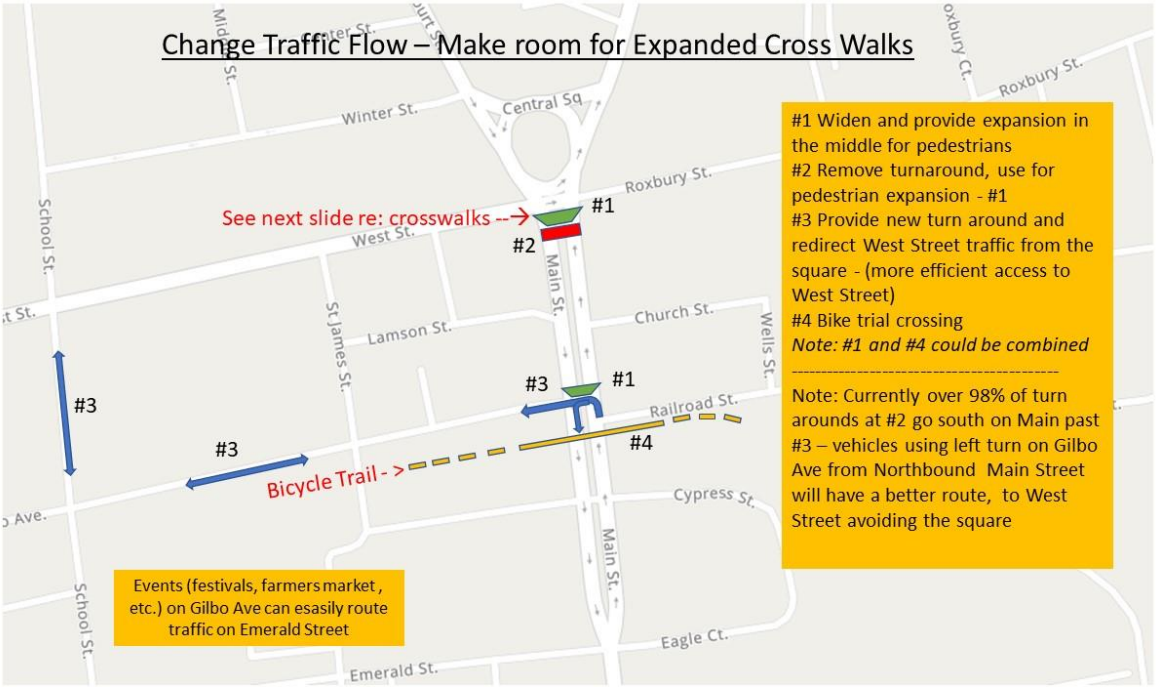
Attached are diagrams showing the square and turning options and the Gilbo Ave intersection.

Note: If there are no pedestrian crossings require the next cycle can begin early.





Recommendation for parking slots – 50-degree angle – easier back out better view – longer stalls – same road width as today. The 60-degree angle take up four feet of width tow on each side and provides a shorter stall.