TRAFFIC CALMING FOR VILLAGE OF WILLIAMSWILLE
FOLLOW UP CONTENT

REVIEW OF THE LOCATION

IDENTIFY POTENTIAL PROBLEMATIC INTERSECTIONS

REMEDIAL MEASURES

IMPACT ON TRAFFIC AND QUALITY OF LIVING
IDENTIFY POTENTIAL PROBLEMATIC INTERSECTIONS (AM PEAK)

Delay at the intersection would be the best performance measure to evaluate the performance of an Intersection.

Based on this criteria, intersections with higher delays are identified. For the network considered Evans Street @ Eagle Street has a higher delay than the defined standards with an Intersection delay of 120 sec for every 15 minutes of analysis period.

The through traffic filling up the local streets is responsible for the higher delays at this Intersection. Heavy left and right turns.
IDENTIFY POTENTIAL PROBLEMATIC INTERSECTIONS (AM PEAK)

Intersection delay aggregates the delay over all the legs of the intersection. This sometimes end up giving the delay owing to the dominant leg. So, a further scrutiny on each leg will determine if any individual legs are bound to higher delays.

The Intersection delay is 3.1 sec but the delay on East Bound lane is pretty high 79 sec.
OCCURRENCE OF TRAFFIC RE-ROUTING

Evans Street @ Eagle Street (AM Peak)
OCCURRENCE OF TRAFFIC RE-ROUTING

Evans Street @ Belmont Pl (AM Peak)

Heavy Traffic on N-S direction and No-Stop signs on N-S direction impeding the traffic on East Bound direction causing higher delays.
TRAFFIC CALMING MEASURES

FEW MEASURES

Changes in On-Street parking Configuration
Turn Restrictions (only during peak hours)
Cul-de-sacs and Street Closures
One way Streets

REQUIREMENTS FOR THE MEASURES

Reduce the access for the Through traffic to the Local Streets.
Restrict the access during the Peak hours to the Local Streets.
Completely cut the through traffic from the Local streets
CHANGES PROPOSED TO THE NETWORK

- No turns on to the West bound lane from N-S direction.
  - Achieved by Half lane Closure of EB (peak hours)

The Stop Signs in N-S direction would be removed and No-turn restrictions would be imposed on N-S direction. This would ensure traffic only onto Evans St. Half Lane Closures of the West and East Bound lanes will result in no turns on to them. In addition to this we ensure no turns from EB and WB onto Evans St during peak hours. This will be able to steer most of the traffic away from neighborhood streets. Speed limit reduction on N-S direction may be safe. Cross-walks can be widened and radiated to ensure pedestrian safety.

As there is a stop sign Delay would be very high and so better of making the vehicle to take the other direction in peak hours.

This intersection will now have more traffic diverted towards it. So, this should be re-timed and coordinated with the intersection of Evans St @ Essjy road to have the vehicles moving in platoons. This will also make the neighborhood through movements easy.

No turns will be allowed on Eagle Street (WB) from Academy Street (NB) during the peak hours by half lane closure and traffic from academy street would be re-directed towards the Main street.
Evans & Main Intersection - Delay per Vehicle (AM)
Evans & Main Intersection - Delay per Vehicle (PM)
Evans & Main Intersection – Queue Lengths (PM)
ALTERNATE MEASURES

Change the On-Street Parking regulations or increase the median width or shoulder width and one can narrow down the width of the accessible street. This would deviate the motorist away from the local streets.

Cul-de-sacs or Full lane Closures to cut the traffic completely away from the streets. This would ensure only residents get the access to the local streets. This may impede the emergency services and away from the peak hours there is not much traffic to close the streets completely.
IMPACT ON TRAFFIC AND QUALITY OF LIFE

- External Traffic from the local streets will be eliminated during the peak hours. This would ensure safety and noise free surroundings for the Community.

- Emergency vehicles functions might be impacted. So, proper communication between the Community and Emergency Response System will smoothen the process.

- During the peak hours vehicles move in platoons allowing safer cross walks for pedestrians and bicyclists.

- A periodic inspection of the impact of the Traffic diversions would be a better way to identify any problems and find out a suitable solution.

- Neighborhood speed reduction and safety programs, police enforcement to ensure proper enforcement of the regulations will help the cause.