CITY OF NEWTON

BOARD OF ALDERMEN

TRAFFIC COUNCIL REPORT

THURSDAY, APRIL 28, 2011

Present: Ald. Ciccone, Danielle Delaney, Committee Clerk; Jim Danila, Transportation Engineer; Jerome Grafe, Citizen Representative; David Koses, Transportation Planner and Sgt.

James Norcross, Newton Police Department Also Present: Ald. Albright, Lennon and Linsky

Jim Danila provided a PowerPoint presentation on these items, attached to this report.

TC32-10 GABE SMALLMAN, c/o Mark Schwarez, 600 California Street, requesting

Goddard Street be considered a one-way street to address speeding and to reduce

cut through traffic. (Ward 8) [09/07/10 @ 3:28 PM]

ACTION: DENIED (5-0), item may be appealed through May 18, 2011

NOTE: Gabe Smallman, a property owner on Goddard Street said that he believes that people use Goddard Street as a major cut-through street, and is concerned with the speed and high volumes of traffic. He estimates that traffic travels at speeds greater than 35 mph. He requests the reduction of speed and is hopeful to deter traffic to other streets. Mr. Koses stated his petition requested Goddard Street be considered a one-way street.

Mr. Danila said that the data collected showed the road width to be 24', classified as a local road with no parking restrictions. The average daily traffic is 2,900 vehicles, 2% being trucks. Over 60% of all traffic travels westbound. Speed limit is 30 mph, mean speed is 30 mph and the 85th percentile speed is 34 mph. He explained the advantages and disadvantages of one—way streets. An advantage is that it may reduce cut-through traffic. Disadvantages include potential hardship for residents and speed increases. A change in traffic circulation usually increases volumes on surrounding streets and one-way streets are usually (but not required to be) installed in pairs. He then said that the street could not be narrowed because it meets the minimum standards of 24'. If a one-way street were instituted on Goddard Street, Wallace Street would be considered as the "pair". Mr. Koses said that residents of Wallace Street were not notified and so a one-way on Wallace Street could not be considered at this time. If a one-way pair of streets was to be discussed. Wallace Street residents would be notified.

Mr. Koses opened the discussion for public comment. Linda Green, 54 Goddard Street, said traffic is slowed by two-way traffic and parking on both sides, if Goddard Street is made a one-way street towards Winchester Street visibility would be difficult. Arthur Dion, 409 Winchester Street, provided accident photos attached to this report. He feels that accidents have become more common at the intersection of Winchester Street, Goddard Street and Rachel Road. He recommends holding this item, docketing a 4-way stop sign. Zhang Xin, 72 Goddard Street, is concerned for children's safety. She feels that a one-way street or a 4-way stop sign would be beneficial because vehicles speed and traffic volumes are high making it difficult to enter her

driveway. David Israel, 33 Goddard Street, asked when and where data was collected. He believes traffic speeds are much higher than what data proves because it is a straight street, which encourages speeding. Mr. Danila said that data is typically collected on weekdays for 72 hours; this data was collected in late March, early April. A resident of Winchester Street feels that if Goddard Street is to be considered as a one-way street, it will only allow speeding to continue. Jean Bae, 42 Goddard Street, said that the width of the street and allowance of parking deters speeding. Mark Schwarez, 600 California Street, agreed that vehicles speed and requested that the speed limit be reduced to 25 mph. Mr. Danila said the City would have to make this request from MassDOT, which he feels that the state would deny the request because they would consider the 85% percentile speed.

Mr. Koses asked if a 4-way stop sign would meet the warrant requirements as a safety improvement. Mr. Danila answered that he did not know, a study would have to be conducted. Sgt. Norcross said that he is not favorable of making gated communities to deter cut-through traffic and data proves that people are not speeding; very few speeding tickets have been issued on Goddard Street. Ald. Ciccone expressed his concerns regarding the number of vehicles traveling on Rachel Road. He suggested inviting residents from Rachel Road. Mr. Grafe agreed with Sgt. Norcross, he agreed holding this item to invite residents from Wallace Street for a discussion of implementation of a one-way street(s). He is not favorable of a 4-way stop sign at the intersection of Winchester Street.

Mr. Koses entertained a straw poll for consideration of making Goddard Street a one-way street. Council members did not support the suggestion. Mr. Koses asked what type of traffic calming measures could be suggested. Sgt. Norcross re-iterated the 85th percentile speed is 34 mph. Mr. Koses asked if a 4-way stop should be considered. Council members disagreed because of the volume of traffic on Winchester Street unless an item is docketed. Sgt. Norcross made the motion to deny this item; Council members agreed 5-0. Mr. Koses briefly explained the 20-day appeals process and stated that Goddard Street is not eligible for a speed bump based on the revised City ordinances.

TC55-09 <u>ALD. CICCONE, LENNON AND MERRILL</u> requesting a safety analysis and

improvements at the intersection of Lewis Terrace, Lewis Street and Newtonville

Avenue. (Wards 1 & 2) [01/12/10 @ 10:44 AM]

HELD (5-0) on 09/30/10. DPW will add Speed Limit signage and alter street lighting, if appropriate, perform a speed study on Newtonville Avenue and

conduct tree trimming.

ACTION: NO ACTION NECESSARY (4-1, Grafe)

Mr. Danila said that DPW has completed the following since September 30, 2010: Additional speed limit signs have been added east and west of Lewis Terrace; Marc Welch, City Tree Warden, has cut vegetation on City property and a speed study was conducted west of East Side Parkway. Street lighting was not altered at Lewis Terrace and Lewis Street because they are positioned at their optimal locations providing adequate street lighting.

Mr. Danila reviewed with Council members the intersection traffic data. He said that there are approximately 6,500 entering vehicles per day; the area does not meet multi-way Stop warrants. In 2005-08, there were 11 reported crashes. Crash rate proves 1.15 crashes per million entering

vehicles. The district 4 Average unsignalized rate is 0.59. There has been no consistent trend in manner of collision or direction of travel. The roadway grade is 11%; MassDOT recommends the maximum grade of 11%. Newtonville Avenue will be repaved in the summer. He then provided daily traffic data. He said that there is approximately 2,300, 1% being trucks. The speed limit is 25 mph, mean speed is 25 mph and the 85th percentile speed is 32 mph. He suggests removing the Y intersection further away from Lewis Terrace and Lewis Street by squaring up the approach with the opportunity of adding a mini-roundabout, adding approximately 7,500 square feet of park space.

Mr. Koses opened the discussion for public comment. John Bliss, 9 Lewis Street, reported speed limit signs remain obstructed by trees on Newtonville Avenue. Heather Mehra, 217 Bellevue Street, said that vehicles continue to speed on Newtonville Avenue ignoring the stop sign at East Side Parkway. She is favorable of removing the Y intersection making drivers slow down. Bob Norcross, 255 Newtonville Avenue, said removing the Y intersection would allow large vehicles easy access to Newtonville Avenue. A resident suggested moving the speed limit signs to the top of Newtonville Ave. Ald. Lennon suggested hosting neighborhood meetings to discuss improvements in the area and to discuss removing the Y intersection. Suggestions may lead to a new docket item. Mr. Koses said that if consideration of the removal of the Y intersection was docketed, the Public Facilities and Finance Committees would discuss it for consideration. Mr. Danila said that the City would evaluate the signs to ensure they are not still obstructed by overgrown trees.

Sgt. Norcross made the motion for no action necessary. Council members agreed 4-1, Grafe opposed because he remains troubled by the high-rate of accidents in the area.

TC6-11 <u>CHIEF MATTHEW CUMMINGS</u>, requesting the installation of a pedestrian

traffic signal to replace the existing flashing yellow pedestrian light at the intersection of Crafts Street at Linwood Avenue. (Ward 2) [02/09/11 @ 10:59

AM]

ACTION: HELD 5-0

NOTE: This item was discussed with TC14-11, see note below.

TC14-11 PLANNING DEPARTMENT, requesting traffic and pedestrian improvements to

Crafts Street between Linwood Avenue and Walnut Street, which may include a traffic signal at the intersection of Crafts and Walnut Streets. (Wards 1 & 2)

[04/15/11 @ 3:29 PM]

ACTION: HELD 5-0

NOTE: The two e-mails received on these items are attached to this report. Items TC6-11 and TC14-11 were discussed together.

Mr. Koses stated the Executive Department has asked that these items be held.

Mr. Danila described the advantages and disadvantages of Traffic Signals.

Traffic Signal Advantages:

Provide for the orderly movement of traffic, can increase the traffic-handling capacity of the intersection, reduce the frequency and severity of certain types of crashes (especially right-angle collisions), used to interrupt heavy traffic at intervals to permit other traffic, vehicular or pedestrian, to cross.

Traffic Signal Disadvantages:

Improperly installed signals may add excessive delay, excessive disobedience of the signal indications, increased use of less adequate routes as road users attempt to avoid the traffic control signals and significant increases in the frequency of collisions (especially rear-end collisions).

<u>Installation of a traffic signal:</u>

By state law, for a traffic signal to be installed, at least one warrant must be met. Eight-hour data collection proves that Crafts Street and Linwood Avenue *do not meet* any of the required warrants to install a traffic signal that turns 'red". Warning beacons are not required to meet warrants. The City Law Department has advised Mr. Danila the City does not have the authority to install or design a traffic signal at this location. Mr. Danila said that Crafts Street could meet criteria for a horizontal device by bumping out the corners.

Pedestrian crashes:

On 11/8/10 a pedestrian was struck on Linwood Avenue, pedestrian was not in crosswalk and crossed between two stopped vehicles. Again, on 11/8/10 a pedestrian was struck in a crosswalk while the warning-light was activated. On 1/31/11 a pedestrian was struck south of the intersection, pedestrian was not in the crosswalk. Sgt. Norcross said that police presence has been implemented since the timing of these unfortunate accidents.

Possible improvements for schoolchildren crossing Crafts Street:

Upgrade warning device to a rapid flash beacon, remove push buttons and install passive detection, add a crossing guard and add a traffic signal at Crafts and Walnut Streets intersection.

Ald. Ciccone said the installation of a traffic signal at Crafts and Walnut Streets would only enhance traffic congestion. He is concerned with the number of pedestrian accidents in this location. He asked what safety improvements could be implemented because a traffic signal does not meet the warrants. Mr. Danila stated there is not enough traffic on Linwood Avenue to meet the state warrants.

Mr. Koses opened the discussion for public comment. Clare Leary, 242 Crafts Street, said people constantly speed on Crafts Street even with police presence. She suggests employees at the administration building park in the lot rather than Crafts Street because visibility is difficult to enter and exit her driveway. Mark Dooling, 253 Crafts Street, said he is thankful for the police presence because it has given children the ability to walk to school again. He suggests that employees continue to park on the street. He suggested that planting additional trees could be viewed as additional traffic calming measures. Ald. Linsky said that he is concerned with the street and is hopeful that traffic calming devices will be implemented to make the area pedestrian safe. He is also thankful and pleased with the police presence since these unfortunate accidents. A resident asked if police presence would continue permanently. Sgt. Norcross answered he did not know.

Ald. Ciccone moved hold on these two items. Council members agreed 5-0.

TC38-10 ALD. JOHNSON AND LINSKY requesting a lowering of the speed limit on

Cabot Street. (Wards 1 & 2) [11/01/10 @ 9:12 AM]

ACTION: DENIED (5-0)

NOTE: Ald. Linsky said that this item was docketed because of constituent concerns regarding the amount of traffic and accidents occurring on Walnut Street at Centre Street where there are difficult blind spots. The intersection at Harvard Street is also difficult even with the installation of a second stop sign.

Mr. Danila said that speed limits gradually decrease from Walnut to Centre Streets. He provided Council members with the following collected speed data:

<u>Walnut to Harvard Streets:</u> Speed limit is 30 mph, mean speed is 28 mph and the 85th percentile speed is 33 mph.

<u>Harvard to Langdon Streets</u>: Speed limit is 25 mph, mean speed is 27 mph and the 85th percentile speed is 33 mph. A section contains a school zone with a speed limit of 20 mph. This area is troublesome with speed; a vertical deflection could be docketed at this location as a traffic calming measure.

<u>Langdon to Centre Streets</u>: Speed limit is 20 mph.

Mr. Danila said that the City does not have the authority to set speed limits. To create speed limits the City would have to apply to MassDOT. MassDOT uses the 85th percentile speed to determine speed limits. Speed limit signs have very little effect on vehicle speeds, since cars travel at a rate of speed that feels "comfortable" to the driver.

Mr. Danila described the different alternatives to slow traffic. He suggested additional police enforcement, the addition of vertical deflections (raised crosswalk or raised intersection) or the addition of horizontal deflections (bump-outs, chicanes, modern or mini-roundabouts). The road width of Cabot Street prohibits the use of bump-outs, chicanes or modern roundabouts. Remaining options are a vertical device or a mini roundabout. The advantages of vertical deflections are that they slow all traffic, and provide defined pedestrian crossing. The disadvantages include the cost and emergency vehicle response time.

A mini-roundabout with a center island has not yet been constructed anywhere in the City. The island is 15-20' diameter, up to 5" sloped reveal, built with stamped concrete or textured colored pavement which larger vehicles can drive over. All approaches require the driver to yield in a roundabout indicated by warning signs and marked street arrows. Crosswalk locations would remain at the same location and Mr. Danila recommended that a mini-roundabout with a center island could be constructed at the intersection of Cabot Street & East Side Parkway. This would be a proper location because it is in a school zone and has adequate space. Mr. Danila said that a mini roundabout could be docketed for discussion at the Public Facilities and Finance Committee's consideration as it is a road modification. Traffic Council would need to approve the change from stop signs to yield signs. Mr. Danila said that the project cost would be minimal. Mr. Koses said that, if desired, the Ward 2 Aldermen could docket the request of a mini roundabout. Ald. Linsky feels the island would certainly benefit the area as a traffic calming measure.

TRAFFIC COUNCIL REPORT Thursday, April 28, 2011 page 6

Mr. Grafe suggested painting the shoulder, narrowing the travel lane where parking is restricted as a traffic calming measure. Mr. Danila said that he did not feel it would be beneficial, but that DPW would research this possibility.

Sgt. Norcross made the motion to deny this item. Council members agreed 5-0.

Respectfully submitted,

David Koses, Traffic Council Chair

Traffic Council

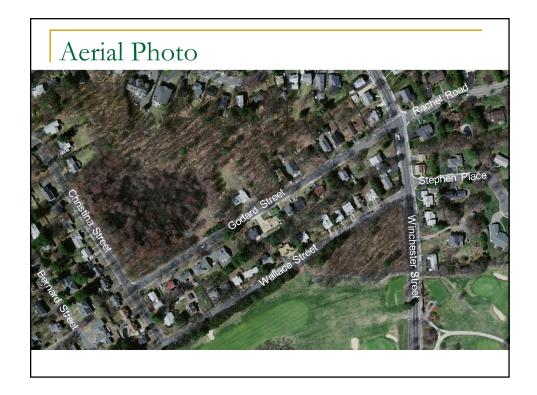
City Hall Room 222 Thursday, April 28, 2011 7:00 p.m.

Agenda

- TC32-10: requesting a oneway restriction on Goddard St. (Ward 8)
- 2. TC55-09: requesting safety analysis and improvements at Lewis Ter., Lewis St., & Newtonville Ave. (Wards 1 & 2) Held on 9/30/2010
- 3. TC38-10: requesting lowering of the speed limit on Cabot St. (Wards 1 & 2)
- TC6-11: requesting a traffic signal at Crafts St. & Linwood Ave. (Ward 2)
- 5. TC14-11: requesting traffic and pedestrian improvements to Crafts St. between Linwood Ave. & Walnut St. (Ward 2)

TC32-10

Requesting Goddard Street be considered a one-way street to address speeding and to reduce cut through traffic. (Ward 8)



Approach Photos





Data Collected

- Road Width: 24q
- Functional Classification: Local Road.
- No Parking Restrictions.
- Average Daily Traffic: 2,900 vehicles per day.
 - □ 2% Trucks.
 - □ >60% of all traffic travels westbound.
- Speed Limit: 30 mph.
 - □ Mean Speed: 30 mph.
 - □ 85th Percentile Speed: 34 mph.

Notes on One-Way Streets

- Advantages:
 - Reduces cut-through traffic.
- Disadvantages:
 - Hardship for residents.
 - May increase speeds.
 - Change in traffic circulation usually increases volumes on surrounding streets.
- Other:
 - Typically installed in pairs.

TC55-09

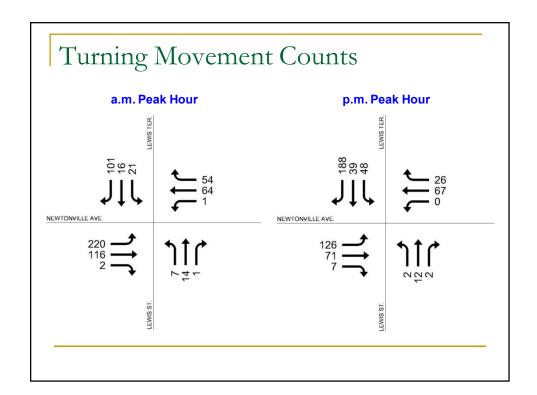
Requesting a safety analysis and improvements at the intersection of Lewis Terrace, Lewis Street and Newtonville Avenue. (Wards 1 & 2) Held on 9/30/2010

Aerial Photo



Intersection Traffic Data

- Approximately 6,500 entering vehicles per day.
 - Counts taken during Harvard St. Bridge closure.
 - Does not meet Multi-Way Stop warrants.
 - 17 pedestrians crossing Newtonville Ave. during highest peak hour.
- 2005-08: 11 reported crashes.
 - Crash Rate: 1.15 crashes per million entering vehicles.
 - District 4 Average Unsignalized Rate: 0.59.
 - No consistent trend in Manner of Collision or Direction of Travel.
- Roadway Grade: 11%.
 - MassDOT recommended maximum: 11%.
- Will be repayed in 2011 construction season.



Work done since last Traffic Council

- Added Speed Limit signage east and west of Lewis Terrace.
- Cut back vegetation on City property.
- Conducted speed study.

April, 2011 Newtonville Ave. Data

- Daily Traffic: 2,300 vehicle per day.
 - □ 1% Trucks.
- Speed Limit: 25 mph.
 - □ Mean Speed: 25 mph.
 - □ 85th Percentile Speed: 32 mph.
- Data Collected west of East Side Parkway.

Possible Improvement



- Remove Y-Intersection.
 - Moves intersection further away from Lewis Terr./Lewis St.
 - Squares up approach.
 - Opportunity to add Mini Roundabout.
- Add to existing park.
 - Approximately 7500q sq. feet of park space.

TC38-10

Requesting a lowering of the speed limit on Cabot Street. (Wards 1 & 2)

Aerial Photo



Cabot Street Speed Data

- Walnut to Harvard:
 - Speed Limit: 30 mph.
 - Mean Speed: 28 mph
 - □ 85th Percentile Speed: 33 mph
- Harvard to Langdon:
 - Speed Limit: 25 mph.
 - Mean Speed: 27 mph.
 - 85th Percentile Speed: 33 mph.
 - Contains a School Zone 20 mph section.
- Langdon to Centre:
 - □ Speed Limit: 20 mph.

Speed Limit Background

- The City does <u>not</u> have the authority to set Speed Limits.
 - To create a Legal Speed Zones, the City has to apply to MassDOT.
 - MassDOT uses the 85th Percentile Speed to determine the Speed Zone.
- Speed Limit signs have very little effect on vehicle speeds.
 - Cars will travel at a rate of speed that feels
 60 mfortable+to the driver.

Alternatives to Slow Traffic

- Increased Enforcement.
- Add Vertical Deflection.
 - Raised Crosswalk
 - Raised Intersection
- Add Horizontal Deflection.
 - Bump-Outs
 - Chicanes
 - Modern Roundabout
 - Mini-Roundabout

Cabot Street Design Limits



- Road width prohibits the use of:
 - Bump-outs
 - Chicanes
 - Modern Roundabouts
- Remaining options:
 - Vertical Device
 - Mini Roundabout

Vertical Deflection



Advantages:

- Slows all traffic
- Provides defined pedestrian crossing

Disadvantages

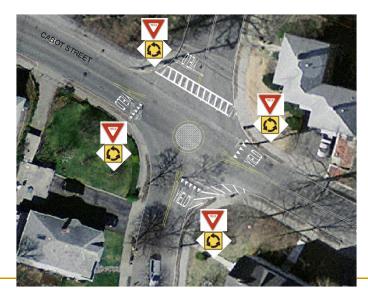
- Cost
- Emergency Vehicle response time

Mini Roundabout



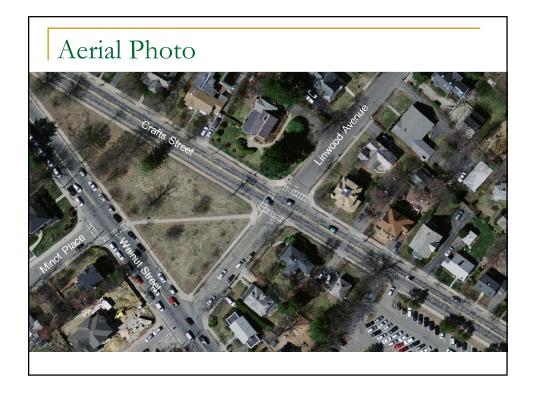
- Center Island:
 - □ 15-20qdiameter.
 - Up to 5+sloped reveal.
 - Built with stamped concrete or textured/ colored pavement.
 - Larger vehicles can drive over it.
- All approaches required to yield to vehicles in roundabout

Mini Roundabout Schematic



TC6-11

Requesting the installation of a pedestrian traffic signal to replace the existing flashing yellow pedestrian light at the intersection of Crafts Street at Linwood Avenue. (Ward 2)



Approach Photos









Traffic Signals

- Traffic Signal Advantages:
 - □ They provide for the orderly movement of traffic.
 - □ They can increase the traffic-handling capacity of the intersection.
 - □ They reduce the frequency and severity of certain types of crashes, especially right-angle collisions.
 - They are used to interrupt heavy traffic at intervals to permit other traffic, vehicular or pedestrian, to cross.

Traffic Signals, cont.

- Improperly installed signals may add:
 - Excessive delay;
 - Excessive disobedience of the signal indications;
 - Increased use of less adequate routes as road users attempt to avoid the traffic control signals; and
 - Significant increases in the frequency of collisions (especially rear-end collisions).
- By state law, in order to a traffic signal, at least one Traffic Signal Warrant <u>must</u> be met.
 - Crafts Street/Linwood Avenue does not meet any of the Warrants.

Pedestrian Crashes

- 11/8/10: Pedestrian struck on Linwood Ave.
 - Pedestrian was with mother.
 - Pedestrian was not in crosswalk and crossed between two stopped vehicles.
- 11/8/10: Pedestrian struck in crosswalk.
 - Driver admitted to being distracted by emergency vehicles.
 - Pedestrian Warning Light was activated.
- 1/31/11: Pedestrian struck south of intersection.
 - Pedestrian was not in crosswalk.
 - Driver complained of solar glare.

TC14-11

Requesting traffic and pedestrian improvements to Crafts Street between Linwood Avenue and Walnut Street, which may include a traffic signal at the intersection of Crafts and Walnut Streets. (Wards 1 & 2)

Possible Improvements for Schoolchildren Crossing Crafts St.

- Upgrade Warning Device to a Rapid Flash Beacon.
- Remove push buttons and install passive detection.
- Add crossing guard.
- Add traffic signal at Crafts Street/Walnut Street intersection.

Photo graphs of the Most Recent Series Accident

At the Interfection of Winchester Street with

Goddand Street and Rachel Road - March 20, 2011.

Substitled by Applied Diony 409 Winchester Street, Newton Highlands



TC32-10





a e e e a e

To: e a e e o ma. o
Subject: 4.2 . e a em
Date sent: o , 2 pr 2 2 4

----- Forwarded message follows ------From: Mark Dooling

To: "Traffic Council Dist List" <trafficcouncil@newtonma.gov>

u e 4.2 . e a em

Date sent: Fri, 22 Apr 2011 20:57:45 -0400

Hi, Danielle,

Charlotte & I are so pleased to see a police officer @ this notorious intersection. His presence has brought

a new environment of safety and trust for an increasing number of children walking to the Horace Mann & Day Schools.

I believe the public's safety would be further enhanced by the design & construction of appropriate traffic calming measures at this intersection. May we have a conversation about such measures & what they could involve on the 28th?

Thank you.

Mark

Sent from my iPhone
------ End of forwarded message -----Danielle Delaney
Committee Clerk
Board of Aldermen
617-796-1211
ddelaney@newtonma.gov

a e e e a e

Michael Fieleke

To: eae e o ma. o

Subject: ra a ra a oo

Date sent: o, 2 pr 2

----- Forwarded message follows ------

From: ae e eke

To: ra ou ra ou e o ma. o

Subject: ra a ra a oo

Date sent: r, 22 pr 2 4

Dear Council, I regret that I am unable to attend the Traffic Council Meeting, but I do have strong feelings about the issue of whether to put a traffic signal at the intersection of Crafts and Walnut Streets. My daughter was struck by a car at that intersection earlier this year, and while publicly it was suggested that students need to be instructed further on how to cross busy streets, my opinion is that this intersection is simply too complex for young people to cross without a crossing guard or a traffic light. Unfortunately, as I understand it, the last time there was a hearing on this intersection, the crossing quard spoke and said it was too dangerous of an intersection to have a crossing guard. First, the sun rises above the horizon directly in driver's eyes on Crafts Street. Because it is a four way intersection and is very busy in the mornings during rush hour, students have to keep track not just of the cars traveling down Crafts but of the many cars waiting for breaks in the traffic that want to turn onto Crafts from Linwood. The difficulty is that even when students press the button and wait for traffic to stop along Crafts, drivers on Linwood who see traffic pause do not know it is for pedestrians and often shoot out into the intersection when traffic pauses on Crafts. So students find themselves looking back and forth between Crafts and Linwood. This is what happened to my daughter. She said that the car that ultimately struck her was slowing down for her, so she stepped into the street, then was looking at the traffic on Linwood to ensure that they too had seen her and were not going to accelerate into her. That is when she was struck by the driver on Crafts, who had become distracted by an accident across the street. Even as an adult, I find myself having trouble keeping track of all of the traffic at that intersection. I know of three other young people who were struck by cars at this intersection (including Jessica Zabchek who was struck by the mirror on a bus, an elementary school boy whose wrist was broken, and the middle school boy earlier this spring). I have heard that there are others, but I do not know them personally. We are lucky no children have been killed at that intersection considering the number of pedestrians struck there. To me, it seems like it is a matter of time unless something is done. I want to voice my strong support for adding a traffic light to the intersection of Crafts and Linwood. Thank you for your attention to this issue. Sincerely,