

Memorandum

To: Mayor Robert Restaino, City of Niagara Falls Department of Planning
Prepared By: Cindy Wood, GObike
Date: May 23, 2022
Subject: Chasm & Monteagle Proposed Intersection Treatment

Summary.

Based on evaluation by the City of Niagara Falls (CNF) and GObike, GObike identified the Main Street intersection at Chasm Avenue and Monteagle Street as our project location for GObike's Healthy Streets Initiative work. This work is supported through the 2021-2022 Verizon Media Fund grant term. This project was selected to serve as a catalyst for improving safety and accessibility to Main Street and the Niagara Gorge. Improved accessibility for residents will contribute to greater utilization of the corridor and compound the benefits and outcomes of the DRI investments and improvements. Upon the completion of a speed study, as well as the ongoing community outreach process, GObike proposes a quick-build redesign of the intersection to reflect all of the above goals. GObike also proposes art installations within the re-designed bumpouts.

Analysis.

GObike followed a series of tasks to justify the need for treatment at this intersection, including:

- Identifying a project site to improve safety and accessibility for pedestrians and cyclists.
- Conducting a site analysis and evaluation to collect existing conditions data, including demographic data, speed study results, and existing behaviors along the corridor to identify challenges and opportunities.
- Directly reaching out to residents, community members and local businesses to receive feedback and comments, and constructive input on the proposed project.
- Developing a proposed design for the project intersection based on the feedback GObike received during the community outreach process. See Figure 1 for the proposed intersection design. The proposed design can also be found on Remix at bit.ly/NF_ProposedDesign.
- Presenting the proposed design to the Niagara Falls Traffic Safety Advisory board for approval.
- Identifying a local Niagara Falls artist to design and install the art within each bumpout of the proposed intersection treatment.

Memo Attachments.

- Frequently Asked Questions / Responses to Project Concerns
- Main Street Speed Study Summary
- Main Street Public Survey Results + Analysis / Interpretation



Figure 1: Main / Chasm / Montegale proposed intersection redesign by GObike.



Frequently Asked Questions / Responses to Project Concerns

What is the benefit of tapering lanes down at an intersection? What kind of impact does tapering lanes down at the intersection have on line of sight/grade issues?

Tapering down the lanes will slow down cars and make it safer for not only cars to proceed in any direction they choose to travel, but it will also make it safer for pedestrians to cross the street with the reduced vehicle speed through the intersection. The AASHTO Green Book offers substantial flexibility regarding lane widths, allowing a range of between 9 and 12 feet depending on desired speed, capacity, and context of a roadway (2011, p. 4-7). While 12-foot lanes have been used historically as motor vehicle travel lanes, the AASHTO Green Book allows 10-foot travel lanes in low speed environments (45 mi/h or less) (2011, pp. 4-7–4-8). Depending on the location, there may be line of sight / grade issues as a result of external factors, such as overgrown bushes on adjacent intersection properties. Otherwise, tapering lanes down at an intersection does not negatively impact any line of sight / grade issues.

This analysis highlights the issues that currently exist at this intersection - the line of sight / grade issues at Chasm creates a hazard for anyone turning in either direction onto Main Street / Lewiston Road. Tapering down the lanes will slow down cars and make it safer for not only cars to proceed in any direction they choose to travel, but it will also slow down cars and make it safer for pedestrians to cross the street. As for horizontal line of site issues, some comments we received in our survey show that there's limited visibility when turning onto Main/Lewiston from both Chasm and Monteagle as a result of overgrown bushes on adjacent intersection properties.



Are there any existing controls being used for speed enforcement? What constitutes the need for speed control at an intersection?

The need for speed control comes down to whether or not the street is designed to encourage drivers to follow the posted speed limit. If a street is overbuilt and has travel lanes that are wider than 12 feet, it encourages vehicles to travel at higher rates of speed. Another factor to consider is whether or not there are any other traffic control devices located nearby the intersection. If there are no signalized intersections or stop signs within a short distance from the intersection, it constitutes the need for traffic calming without the use of signalized intersections or stop signs.

We are unaware of any Niagara Falls Police Department enforcement activities or violation history at this location. However, GObike did a speed study at this intersection in February 2022. The results we received from this five-day speed study showed that just under 50% of drivers that traveled through this intersection were going above the speed limit. Please review the [summary](#) of our speed study. It's important to note that the highest speeds recorded were 80mph (moving in the direction towards Lewiston Road) and 57mph (moving in the direction towards Main Street). Having 20+ foot travel lanes encourages fast driving behaviors. Additionally, there are no signalized intersections or stop signs between Ontario Avenue and College Avenue, equating to one mile total. This gives drivers free reign to travel at high rates of speed for at least one mile, which includes a state park and an elementary school within that mile stretch. Introducing a traffic calming method between these two signalized intersections can help slow down traffic and make it safer for every mode of transportation.



What amenities can cause an increase in desire for pedestrian crossings at an intersection? What are the benefits of having pedestrian crossings at the entrance to a neighborhood?

Each street / neighborhood warrants improved pedestrian connectivity. A variety of amenities can cause an increase in desire for safe pedestrian crossings at an intersection. Some examples include accessing newly constructed local destinations, trails, parks, or improving safe access to the nearby local business district.

This location was chosen based on multiple meetings held with the City of Niagara Falls Planning Department. With the City of Niagara Falls receiving the Main Street Downtown Revitalization Initiative grant, we were encouraged by the City to pursue an intersection treatment project within that Main Street DRI boundary. Our project intersection location is at the northernmost point of the DRI boundary. With the introduction of the recently completed northern section of the Shoreline Trail, this intersection is expected to have an "uptick" in the desire for pedestrian crossings to safely access these amenities.

The Main Street intersection at Chasm Avenue and Monteagle Street directly connects two neighborhoods, Highland and Deveaux, to the Niagara Gorge and Shoreline Trail. While Deveaux Woods State Park is 600-700 feet north of this intersection, our proposed design still achieves the goal of providing safe, equitable access to nearby amenities.



How do we know a problem currently exists at an intersection?

A variety of methods can be used to determine whether or not an intersection has an existing problem. Traffic data, more specifically speed data and existing conditions, plays an important role in determining whether or not a problem currently exists. Community outreach and engagement is another method to determine whether or not the community that uses said intersection most frequently thinks there is an existing problem.

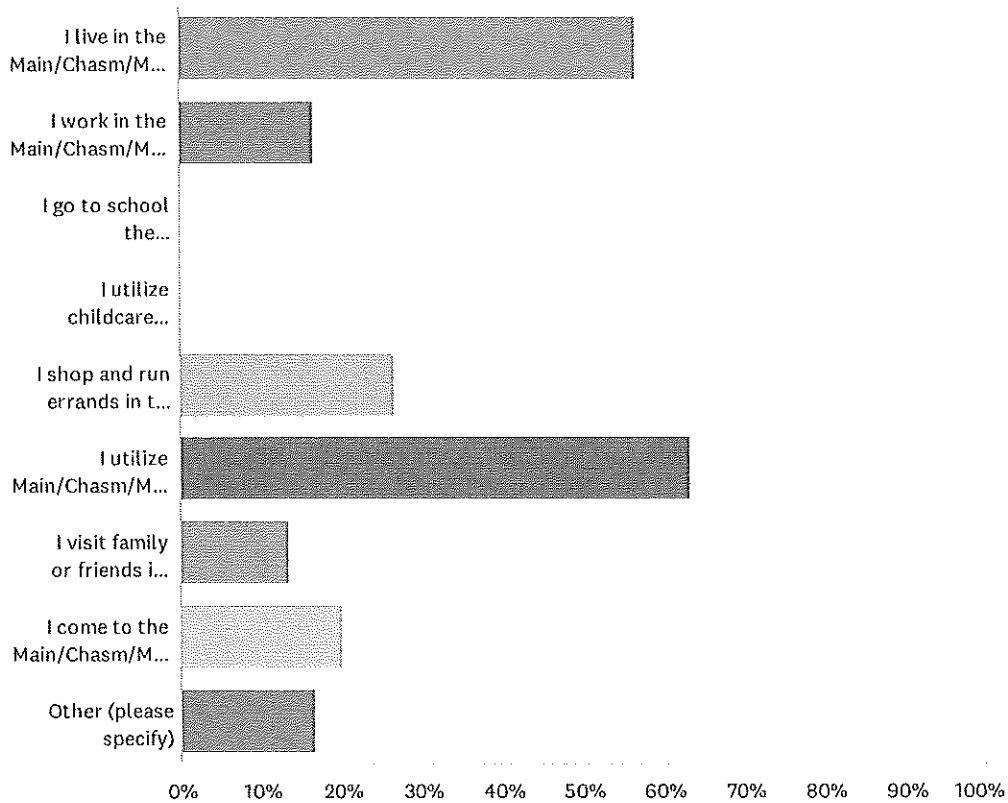
This does address a problem that currently exists. In order to cross Main Street or Lewiston Road at an intersection with crosswalks, pedestrians would either have to travel down to the intersection at Depot Ave West (0.3 miles south of our proposed intersection) or they would need to travel up to the intersection at College Avenue (0.6 miles north of our proposed intersection). With the lack of crosswalks on this route, there are no equitable access points for residents to safely cross Main Street or Lewiston Road to visit Deveau Woods State Park, the Niagara Gorge, or Shoreline Trail. We strongly believe that our proposal is an adequate solution. In terms of how the construction process was illustrated, we use a program called Remix to visualize what a redesign would look like within a street section or at an intersection and to assist GObike's implementation of the recommended treatment. If you haven't done so already, please visit bit.ly/NF_ProposedDesign to interact with the proposed design.

Traffic Analysis Report

Result Description		
File:	00000021.csv	
Study Title:	Main St, Niagara Falls	
Study Run Dates:	2022/02/02 11:23:27 to 2022/02/07 15:05:00	
Total Study Time:	5 Days 3 Hours 41 Minutes	
Study Download Time:	2022/02/07 17:49:57	
Study Location:	Main Street north of Chasm Ave on pole 2808	
Study GPS Location:	Unknown	
Study Timing Interval:	5 minute blocks	
Study Total # of Vehicles:	17618	
Study Posted Speed Limit:	30 mph	
Study Total # of Speeders:	8444	
Approaching Traffic	# of Vehicles:	8303
	# of Speeders:	4624
	Maximum Speed:	57 mph
	Average Speed:	30 mph
	Median Speed:	31 mph
	85th Percentile Speed:	37 mph
	10 MPH Pace:	26 to 35 mph
Receding Traffic	# of Vehicles:	9315
	# of Speeders:	3820
	Maximum Speed:	80 mph
	Average Speed:	28 mph
	Median Speed:	29 mph
	85th Percentile Speed:	34 mph
	10 MPH Pace:	26 to 35 mph

Q1 Check any that apply to your relationship to Main/Chasm/Monteagle:

Answered: 30 Skipped: 0



ANSWER CHOICES

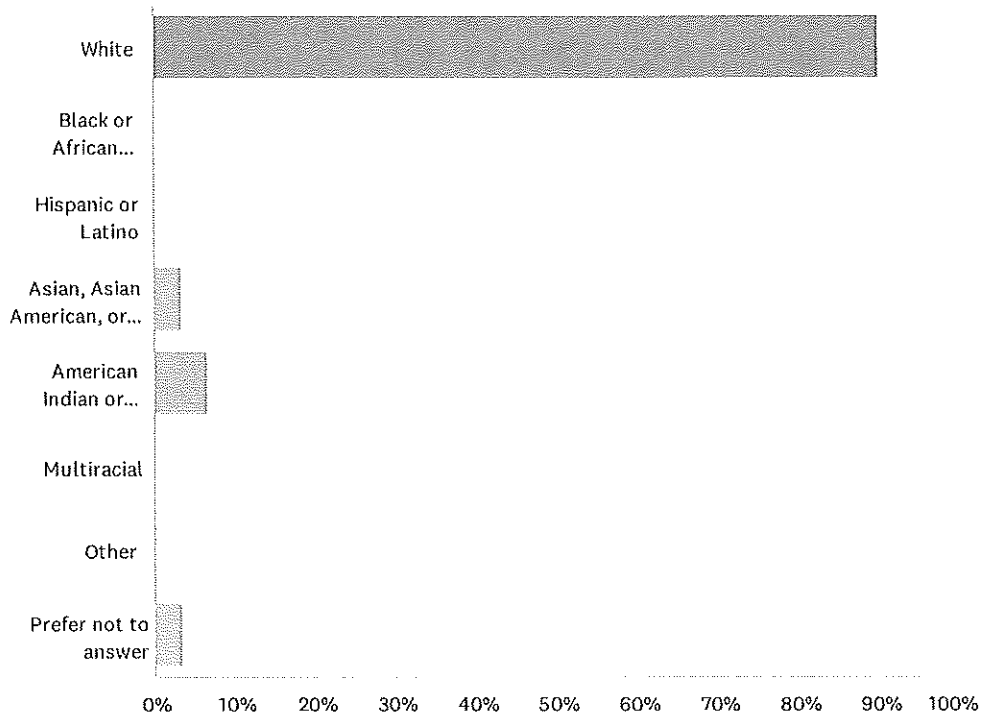
RESPONSES

I live in the Main/Chasm/Monteagle neighborhood.	56.67%	17
I work in the Main/Chasm/Monteagle neighborhood.	16.67%	5
I go to school the Main/Chasm/Monteagle neighborhood.	0.00%	0
I utilize childcare services in the Main/Chasm/Monteagle neighborhood.	0.00%	0
I shop and run errands in the Main/Chasm/Monteagle neighborhood.	26.67%	8
I utilize Main/Chasm/Monteagle to get to other parts of the city.	63.33%	19
I visit family or friends in the Main/Chasm/Monteagle neighborhood.	13.33%	4
I come to the Main/Chasm/Monteagle neighborhood for fun.	20.00%	6
Other (please specify)	16.67%	5

Total Respondents: 30

Q2 Which of the following best describes your ethnic/racial background?

Answered: 30 Skipped: 0



ANSWER CHOICES

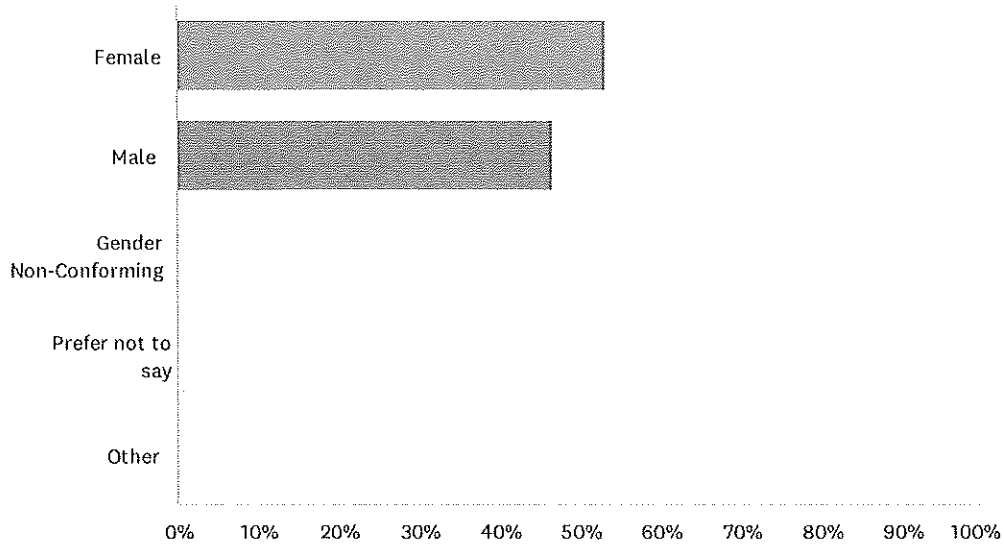
RESPONSES

White	90.00%	27
Black or African American	0.00%	0
Hispanic or Latino	0.00%	0
Asian, Asian American, or Pacific Islander	3.33%	1
American Indian or Alaska Native	6.67%	2
Multiracial	0.00%	0
Other	0.00%	0
Prefer not to answer	3.33%	1

Total Respondents: 30

Q3 I identify as...

Answered: 30 Skipped: 0



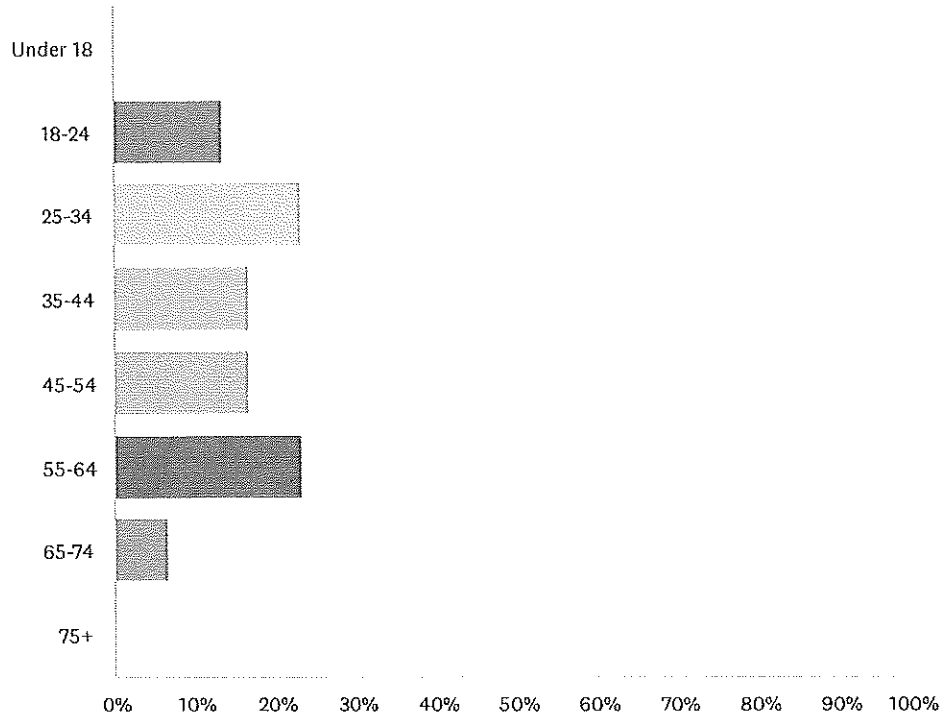
ANSWER CHOICES

RESPONSES

Female	53.33%	16
Male	46.67%	14
Gender Non-Conforming	0.00%	0
Prefer not to say	0.00%	0
Other	0.00%	0
TOTAL		30

Q4 What is your age?

Answered: 30 Skipped: 0



ANSWER CHOICES

Under 18

18-24

25-34

35-44

45-54

55-64

65-74

75+

TOTAL

RESPONSES

0.00%

13.33%

23.33%

16.67%

16.67%

23.33%

6.67%

0.00%

0

4

7

5

5

7

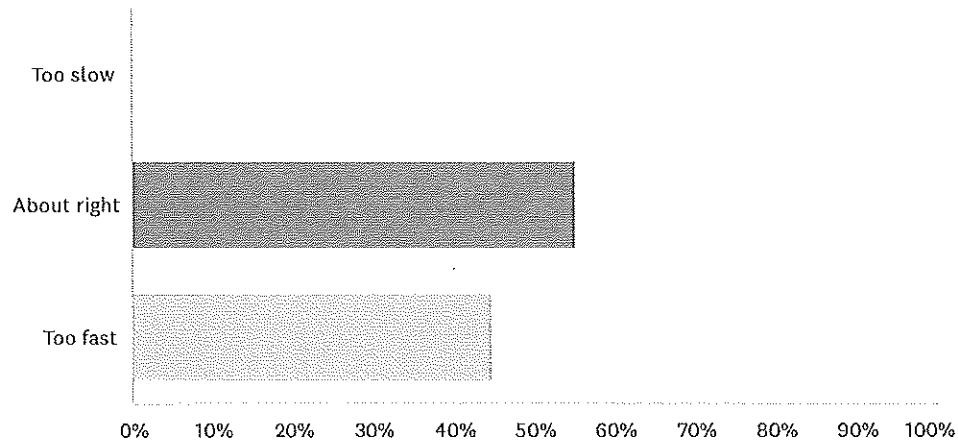
2

0

30

Q5 Traffic speed in the Main/Chasm/Monteagle neighborhood tends to be...

Answered: 29 Skipped: 1



ANSWER CHOICES

Too slow

About right

Too fast

TOTAL

RESPONSES

0.00%

55.17%

44.83%

0

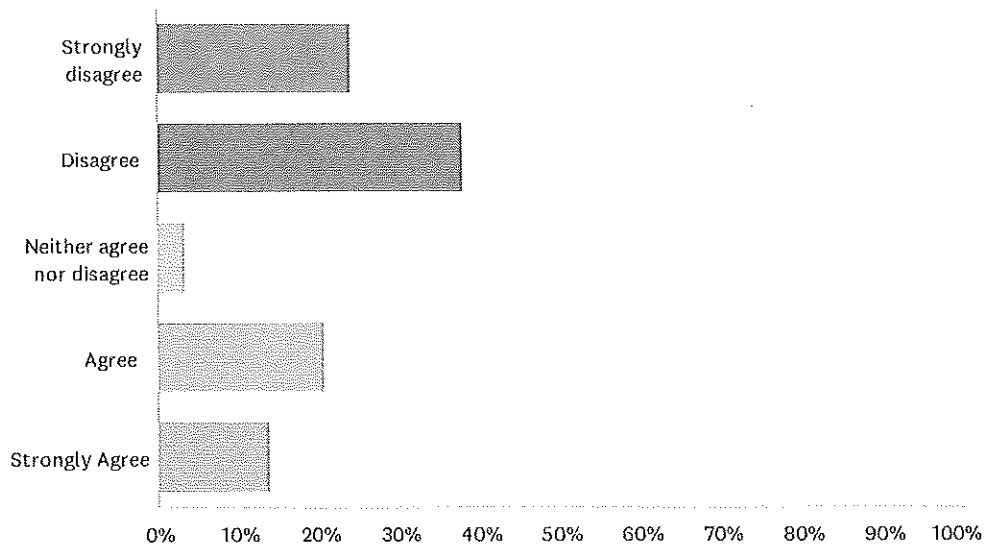
16

13

29

Q6 Current crosswalks, crossing signals, and signage make it comfortable to walk, drive, ride a bike or take the bus on or around Main/Chasm/Monteagle...

Answered: 29 Skipped: 1



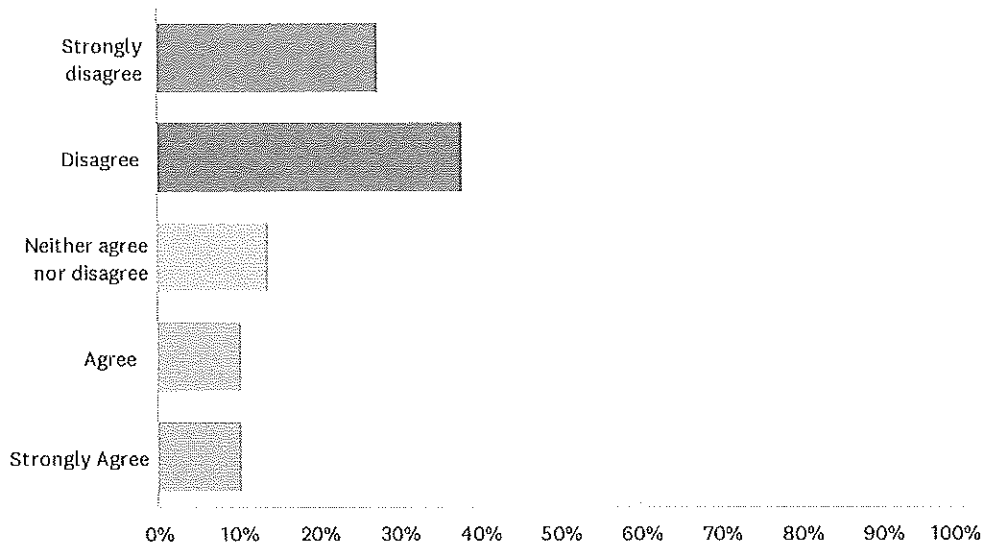
ANSWER CHOICES

RESPONSES

Strongly disagree	24.14%	7
Disagree	37.93%	11
Neither agree nor disagree	3.45%	1
Agree	20.69%	6
Strongly Agree	13.79%	4
TOTAL		29

Q7 Current street lighting and lighting fixtures make it comfortable to walk, drive, ride a bike or take the bus on or around Main/Chasm/Monteagle...

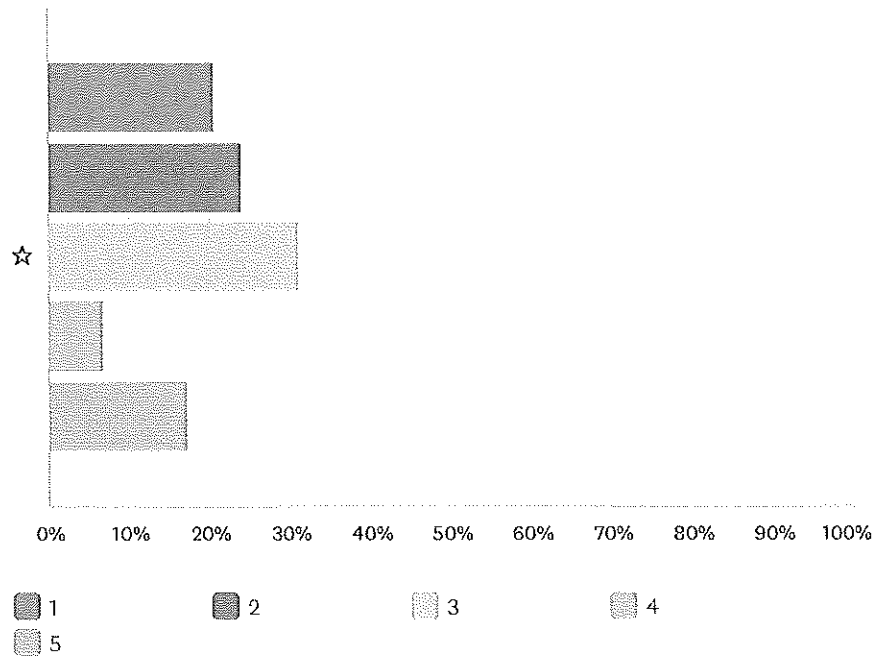
Answered: 29 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly disagree	27.59%	8
Disagree	37.93%	11
Neither agree nor disagree	13.79%	4
Agree	10.34%	3
Strongly Agree	10.34%	3
TOTAL		29

Q8 Please rate your comfort level when you are walking in the Main/Chasm/Monteagle neighborhood.

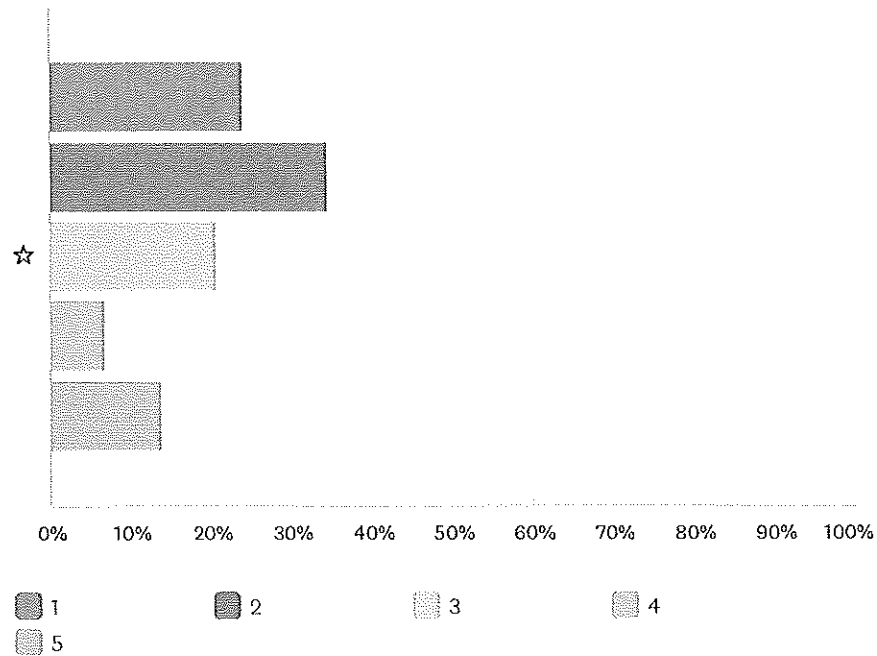
Answered: 29 Skipped: 1



	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE
☆	20.69%	24.14%	31.03%	6.90%	17.24%	29	2.76
	6	7	9	2	5		

Q9 Please rate your comfort level when you are biking in the Main/Chasm/Monteagle neighborhood.

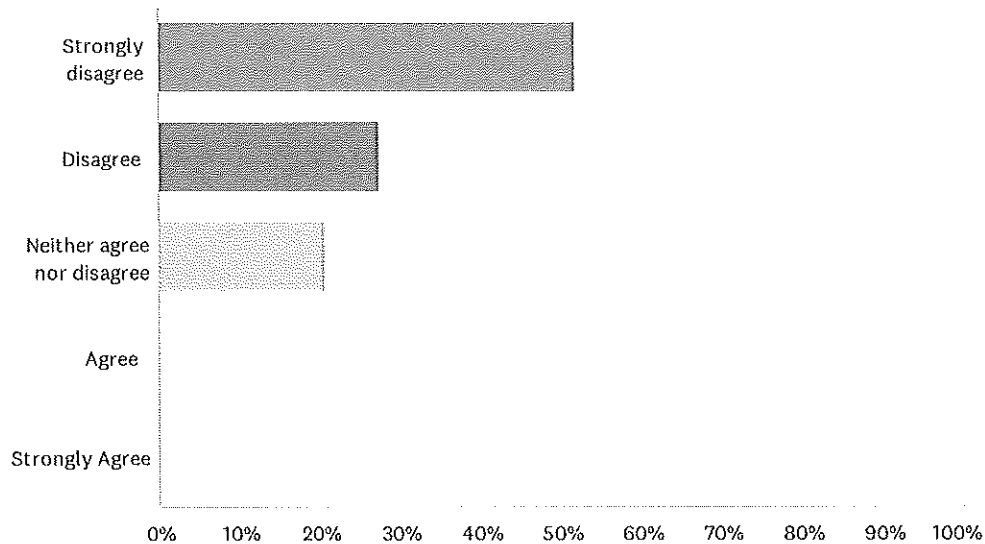
Answered: 29 Skipped: 1



	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE
☆	24.14%	34.48%	20.69%	6.90%	13.79%	29	2.52
	7	10	6	2	4		

Q10 There are enough benches, garbage cans, and other street furniture on or around Main/Chasm/Monteagle and they are in good condition...

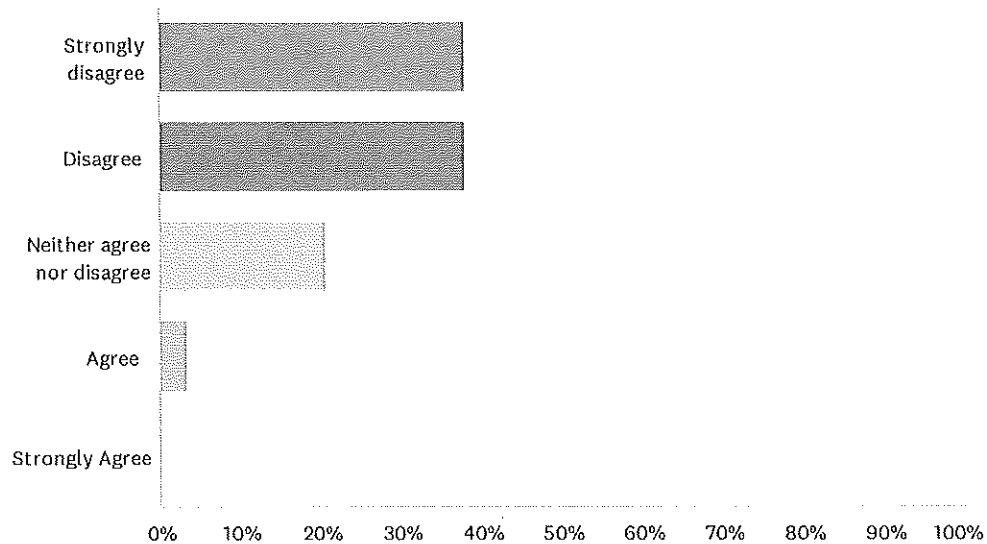
Answered: 29 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly disagree	51.72%	15
Disagree	27.59%	8
Neither agree nor disagree	20.69%	6
Agree	0.00%	0
Strongly Agree	0.00%	0
TOTAL		29

Q11 Trees, gardens, flower beds and common spaces on or around Main/Chasm/Monteagle are maintained and in good condition...

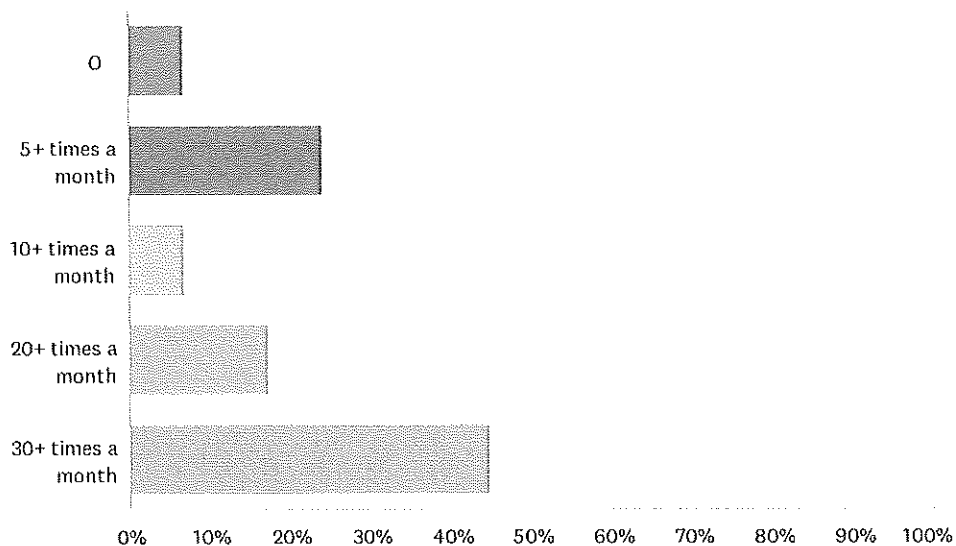
Answered: 29 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly disagree	37.93%	11
Disagree	37.93%	11
Neither agree nor disagree	20.69%	6
Agree	3.45%	1
Strongly Agree	0.00%	0
TOTAL		29

Q12 How often are you in the Main/Chasm/Monteagle neighborhood?

Answered: 29 Skipped: 1



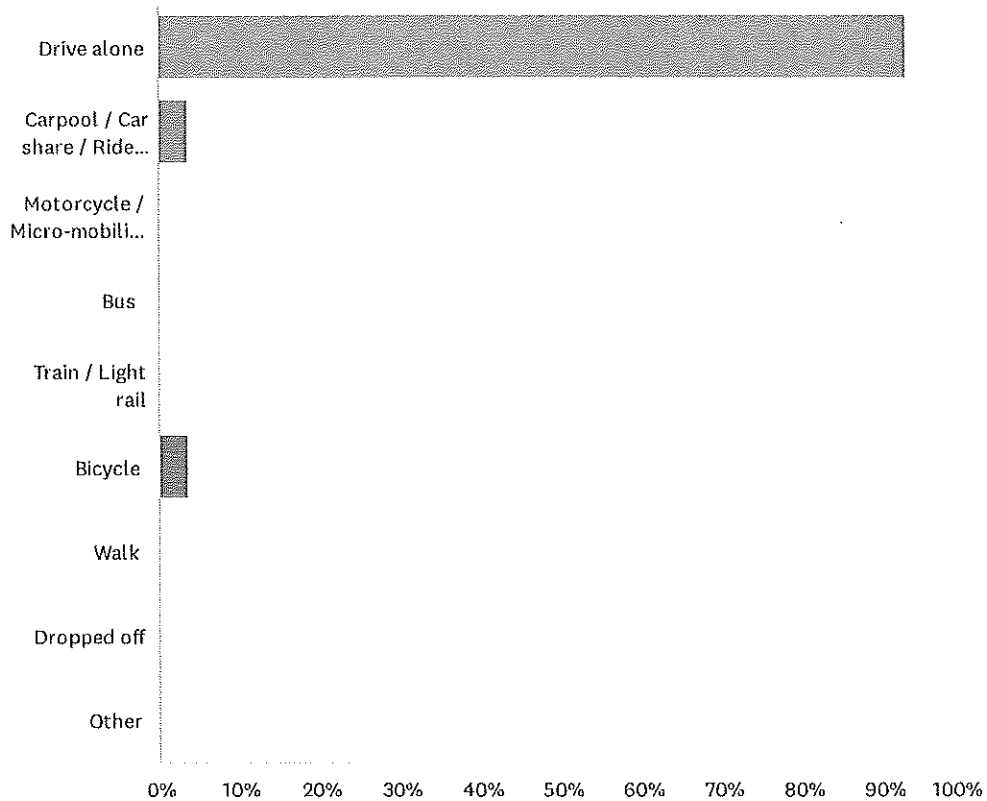
ANSWER CHOICES

RESPONSES

0	6.90%	2
5+ times a month	24.14%	7
10+ times a month	6.90%	2
20+ times a month	17.24%	5
30+ times a month	44.83%	13
TOTAL		29

Q13 What is your primary means of transportation?

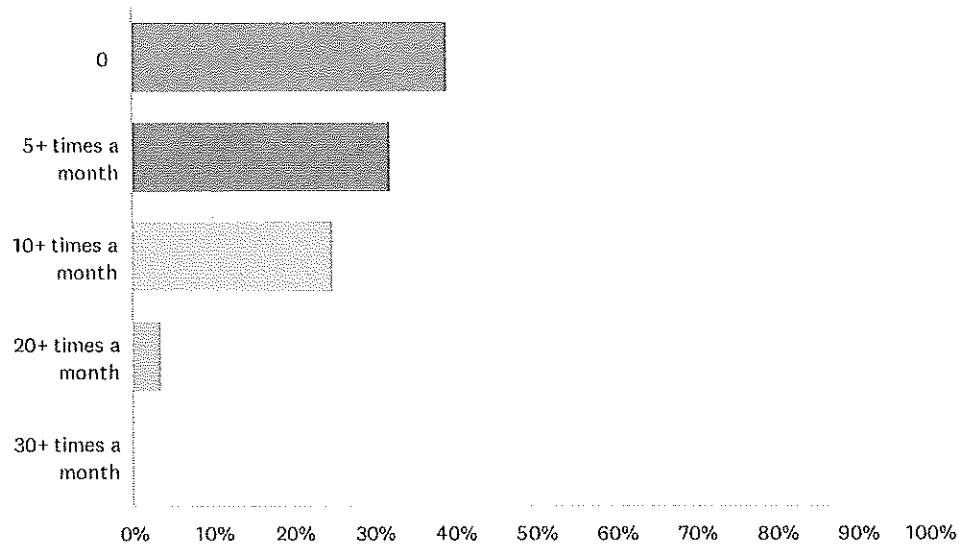
Answered: 28 Skipped: 2



ANSWER CHOICES	RESPONSES	
Drive alone	92.86%	26
Carpool / Car share / Ride hailing	3.57%	1
Motorcycle / Micro-mobility vehicle	0.00%	0
Bus	0.00%	0
Train / Light rail	0.00%	0
Bicycle	3.57%	1
Walk	0.00%	0
Dropped off	0.00%	0
Other	0.00%	0
TOTAL		28

Q14 How often do you bike per month?

Answered: 28 Skipped: 2



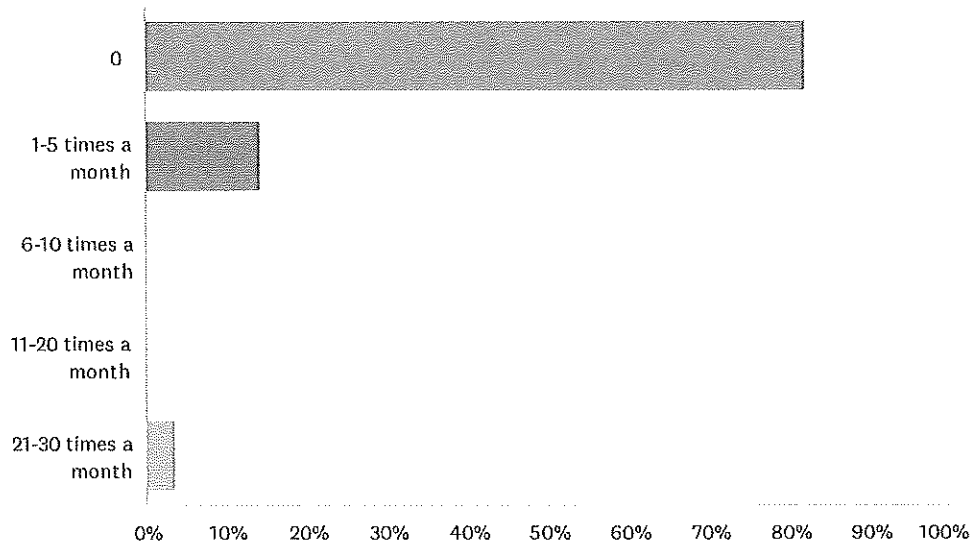
ANSWER CHOICES

RESPONSES

0	39.29%	11
5+ times a month	32.14%	9
10+ times a month	25.00%	7
20+ times a month	3.57%	1
30+ times a month	0.00%	0
TOTAL		28

Q15 How often do you use transit per month?

Answered: 28 Skipped: 2



ANSWER CHOICES

RESPONSES

0	82.14%	23
1-5 times a month	14.29%	4
6-10 times a month	0.00%	0
11-20 times a month	0.00%	0
21-30 times a month	3.57%	1
TOTAL		28

Q16 In what ZIP code is your home located?

Answered: 28 Skipped: 2

Q17 Tell us more about any specific concerns you have regarding pedestrian safety, transportation choices and facilities, and getting around the Main/Chasm/Monteagle neighborhood. What would make this intersection safer and more enjoyable for everyone?

Answered: 13 Skipped: 17

#	RESPONSES	DATE
1	In general it is not very safe to bike in most parts of the city because people driving cars do not understand that a bike is a vehicle with a right to be on the road. I try to bike on streets with bike lanes because I have been forced off the road several times but ignorant drivers. A PSA is needed before someone gets killed.	2/16/2022 9:05 PM
2	It tends to be too dark in this area at night, so attractive park-style lighting would go a long way to help drivers see pedestrians in this area. There doesn't seem to be a lot of pedestrian traffic here, and cars usually drive above the speed limit. It's very close to the new entrance to the newly created Gorge Section of the Niagara Falls State Park and Deveau Woods, so traffic might increase as these amenities and attractions are relatively new and improving.	2/16/2022 5:19 PM
3	The sidewalks are messed up, the traffic speeds through there and the city really doesn't do anything. Not to mention during the winter the sidewalks are blocked yet the city refuses to ticket homeowners who don't clear their sidewalks. I feel new concrete with increased spend enforcement would definitely help the neighborhood.	2/16/2022 3:50 PM
4	Most houses on that area especially on the McCune monteagle and main Street area are rentals there for the upkeep of the property is not good they don't bring back their garbage cans in a timely manner so the garbage is in the street I avoid going in that direction I live within a minute bike ride from that area. There is zero benches or garbage can receptacles in that area a lot of college housing which sadly equals a lot of trash misplaced outside of trash cans receptacles. A lot of overgrowth of bushes onto the sidewalk area I try to walk my granddaughter in a stroller during the summer and when I go around the entire block I have to go up in that area and it is more bothersome than a pleasant walk	2/16/2022 7:56 AM
5	Better lighting and also turning from monteagle on to main can be a bit unsafe	2/13/2022 8:50 PM
6	Streets are way too wide. Inadequate sidewalks. Drivers areed like crazy	2/13/2022 7:46 PM
7	Better lighting and make the house closest to the corner cut his bushes and trees so side street traffic (Monteagle) can have better vision when trying to enter the intersection	2/13/2022 4:40 PM
8	The area is less than a 1/4 mile from DeVeaux Woods a NYS park which has been greatly improved with amenities, landscaping and easy access to the Gorge and new paths. Findlay drive was just reconstructed by NYS is only a block away. This project should probably be further south down Main Street maybe the Willow/ Pierce Avenue area since good access already exists very near the proposed site.	2/11/2022 4:12 PM
9	As someone who used to live in that neighborhood and likes to hike/bike on a regular basis, while the sidewalks are fine for walking in the northern section (after it turns into Lewiston Road) the feeling of safety during biking in that neighborhood is nonexistent. I used to run around there and generally felt fine because of the availability of sidewalks, but to bike and or cross the road, there are no things that clearly display that those things are safe in that area.	2/11/2022 11:09 AM
10	I avoid crossing lewiston road on bike and do not let my kids cross it. It is not safe. There is only one designated cross walk (that is not at a 4 way intersection and does not have a stop sign or light). Walking my 3 year old across lewiston road to get to school is near impossible. There have been several close calls with drivers refusing to stop for walkers or bikes. There are not even cross walks to get to the state park. The Main/Chasm/Monteagle cross is just one of the issues... every corner on lewiston road is an issue. Especially with the speed of cars and tourist traffic directed that way instead of through whirlpool or hyde park.	2/10/2022 6:51 PM

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11	A crosswalk would help	2/10/2022 4:56 PM
12	Better lighting, an enclosure at the bus stop. Improved maintenance of common areas and decorative plantings.	2/8/2022 9:37 AM
13	If the town actually plowed the entire street pedestrians could actually travel. Every one who lives here is too lazy too shovel sidewalks.	1/29/2022 2:53 PM

TRAFFIC ADVISORY COMMISSION
MEETING OF: MARCH 28, 2022

PRESENT: Stephen Urbaniak, Ronald Ashker, Robert Ventry, Captain Angela Munn and Thomas Miklejn EXCUSED: Alysia Welch-Chester, Schurron Cowart, GUESTS: Cindy Wood and Jim Jones, representatives of GOBike
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The meeting was called to order by Stephen Urbaniak at 5:04 p.m. Roll was taken and the minutes from the previous meeting were read and approved by motion.

ITEM 1. A motion was made by Ronald Ashker, seconded by Robert Ventry to **APPROVE** a request to **INSTALL A 5' HANDICAPPED ACCESS SPACE AT 2499 WHITNEY AVENUE (27th STREET SIDE)** submitted by Lorrie Mazur, 2499 Whitney Avenue. Physician verification of wheelchair dependency and/or severe restriction of movement has been received, therefore Thomas Miklejn recommends approval.

VOTE: UNANIMOUS
REQUEST IS APPROVED.

ITEM 2. A motion was made by Robert Ventry, seconded by Ronald Ashker to **APPROVE** a request to **INSTALL A 5' HANDICAPPED ACCESS SPACE IN FRONT OF 1356 ASHLAND AVENUE** submitted by Lorri Yamamura, 1356 Ashland Avenue, Lower. Physician verification of wheelchair dependency and/or severe restriction of movement has been received, therefore Thomas Miklejn recommends approval.

VOTE: UNANIMOUS
REQUEST IS APPROVED.

ITEM 3. A motion was made by Ronald Ashker, seconded by Capt. Angela Munn to **APPROVE** a request to **INSTALL A 5' HANDICAPPED ACCESS SPACE IN FRONT OF 2743 GRAND AVENUE** submitted by Mary Ann Ditillio, on behalf of her husband Alfonso Ditillio, 2743 Grand Avenue. Physician verification of wheelchair dependency and/or severe restriction of movement has been received, therefore Thomas Miklejn recommends approval.

VOTE: UNANIMOUS
REQUEST IS APPROVED.

ITEM 4. A motion was made by Robert Ventry, seconded by Ronald Ashker to **APPROVE** a request to **INSTALL ALTERNATE OVERNIGHT PARKING ON HENNEPIN AVENUE BETWEEN S. 91ST STREET AND S. 93RD STREET** submitted by William Robertson, 9129 Hennepin Avenue. A Petition from the residents of this block was received with 61.5% signatures, therefore Thomas Miklejn recommends approval.

VOTE: UNANIMOUS
REQUEST IS APPROVED.

ITEM 5. INFORMATIONAL ITEM: Cindy Wood and Jim Jones, representatives of GOBike, gave a presentation concerning an upcoming project at the intersection of Lewiston Road, Chasm Avenue and Monteagle Street. The project, seeking to improve safety at this intersection and accessibility from the Main Street area to the Niagara Gorge, and based on feedback from a public survey and well as a speed study, proposes striping gradually tapered bump-outs to reduce roadway width and slow down speed; crosswalks with accompanying signage; plus a decorative art installation within the bump-out areas. Based on this presentation and subsequent discussion, the Commission expressed their support for this project. They felt the project was a positive step toward improving safety at this intersection and the use of striping, with it's inexpensive and temporary nature, could be fairly easily implemented (and later removed if deemed necessary).

There being no further business, the meeting was adjourned by motion at 6:15 p.m.
Jennifer L. Myers, Secretary