



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

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DRIVEWAY ENCROACHMENT PILOT STUDY REPORT

Background

The Department of Public Works' (DPW) Driveway Encroachment Pilot Study was active from April 15th 2016 through May 15th 2016 prohibiting parking within two feet of driveways on Henry Street, Weston Street, Loomis Street, Brookes Avenue, and North Williams Street affecting approximately 150 households. The purpose of this pilot study was to measure the positive and negative impacts to on-street parking, driveway ingress/egress, and to gauge residential support for this parking restriction.

During the study, Burlington Police Department (BPD) parking enforcement officers patrolled the area recording violations and issued citations when a complaint was received. After the study, staff distributed approximately 180 Driveway Encroachment Survey Questionnaires with accompanying cover letter. Residents could complete the questionnaire and return it via mail or could follow the link provided on the cover letter to fill out online. Residents were able to complete the questionnaire and return it to DPW on or before June 8th.

Observation Summary

There are currently 18 requests in queue from residents throughout the city to restrict parking around their driveways. These driveways are mainly located in densely populated mixed-unit residential streets where parking is at a premium and often when there is typically 30 to 40 feet of curb space between driveways. Most driver's perceive 35 feet as more space than one vehicle requires and often try to squeeze two vehicles in that space to maximize available parking – leading to driveway encroachment.

Of the 180 surveys distributed, Staff received and reviewed 31 responses from residents. These survey responses and comments are included in the following pages of this document.

The following is a summation of the feedback staff received.

Positive feedback for implementing a Driveway Encroachment Parking Restriction:

- Improved vehicle safety and maneuverability into and out of driveways
- Improved sightlines between vehicles, pedestrians, and vehicles in the travel lane
- Improved quality of life and residential atmosphere

Negative feedback and/or criticism to implementing a Driveway Encroachment Parking Restriction:

- The 2 foot restriction being inadequate in sufficiently improving vehicle encroachment to driveways, suggestions include 3 feet and 5 feet as well as measuring from the curb cut rather than the straight line edge of the driveway.
- Loss of on-street parking as a result of reduced available curb line.
- Loss of on-street parking due to people parking overly cautiously around driveways
- A perceived prejudice towards renters and lower income residents in favor of home owners and higher income residents
- Resident response unanimously supported the idea of line striping around driveways and parking stalls. Residents both for and opposed of the proposed parking restrictions felt that line striping



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the parking limit near driveways would improve awareness of the restriction, increase compliance and efficiency, and lead to more available spaces.

Driveway Encroachment Pilot Study Survey Results

Question #1: Overall, how severe would you describe the issue of vehicles parking too close to your driveway BEFORE the pilot?

Severe	5	17%
Significant	12	40%
Somewhat of an issue	5	17%
Not Significant	3	10%
Not an issue	5	17%

Question #2: Overall, how much improvement to this issue did you experience DURING the pilot?

Greatly Improved	10	32%
Somewhat Improved	7	23%
Could not tell	7	23%
No Improvement	7	23%
Condition Worsened	0	0%

Question #3: Do you feel that sight distances when exiting your driveway were improved?

Greatly Improved	10	33%
Somewhat Improved	7	23%
Could not tell	7	23%
No Improvement	6	20%
Condition Worsened	0	0%

Question #4: Was turning into and out of your driveway any easier?

A lot easier	11	37%
Somewhat easier	8	27%
Could not tell	5	17%
Wasn't any easier	6	20%
Condition worsened	0	0%

Question #5: Do you feel that having line striping around driveways would improve the effectiveness of this parking restriction?

Yes	18	60%
Maybe	4	13%
Neutral	3	10%



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Probably not	1	3%
No	4	13%

Question #6: Do you feel that the amount of available parking was negatively affected during the pilot?

Yes, greatly	6	19%
Yes, somewhat	1	3%
Could not tell	12	39%
Not really	6	19%
Not at all	6	19%

Question #7: If given the choice, would you like to have this parking restriction in effect in your area at all times?

Yes	22	71%
No	9	29%

Question #8: Please feel free to write any questions, comments, concerns, or recommendations you might have for DPW Staff regarding the Driveway Encroachment Pilot Study.

The following responses were submitted via online survey:

1. I have a roommate who I share one off street parking spot with. When the off street spot is unavailable, we rely on street parking. Our options for street parking were considerably reduced during this time, forcing us to drive to other streets to park. However, my off-street parking/house is not on the side of the street where the parking occurs. Therefore, I am unable to say whether it was easier or not to move in and out of the driveway. It seemed like a significant improvement for those residents, though.
2. Parking became even more limited. It seems individuals frequently chose to park in the middle of two spaces in order to make sure that they were not encroaching on a driveway. Also, many individuals who parked even slightly back from a driveway made another space unavailable by doing so. We are renters on Brooke's ave and do not have designated street spots or enough room in our driveway for all of our cars. Life became more annoying during the encroachment study, because of drastically more limited parking options, although we certainly feel for those who have their driveways encroached upon. I feel a potential way to remedy this would be to have clear designated parking spots. This would ensure that individuals both park far enough away from driveways but not too far as to make another spot unavailable
3. Please do not do this. This neighborhood needs to be accommodating of renters and tenants so people can afford to live here. And I say this as a homeowner! I think this driveway rule is prejudicial. You can contact me at 802 . 734.6731 if you have any questions. My name is Margaret Tamulonis and I live on north Willard street.
4. Thank you!! My driveway is opposite the side of the road vehicles can park on....having the 2ft clearance by the driveway allows me to back out more safely, going straight out of my driveway and not risking hitting a car opposite of me. I greatly appreciate this!



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5. Parking isn't that bad on upper Henry but it's nice to be able to park close during busy times so status quo seems fine. We live in the city!
6. This was not at all well advertised or explained. or at the very least it was entirely ignored on my street. I had to report at least two cars during the course of the study for parking way too close or hanging over into the line of entrance/egress from my driveway.
7. This tight parking at driveways is a constant problem on upper North Street, where renters and hospital employees vie for parking day and night. I had no idea there was a program to remedy the issue, and have seen no improvement as the mostly out-of-state young people who park so close to the driveway have no idea there's a program too. Painting lines or creating a fine for parking like this would be more effective.
8. Nothing is different here on north Winooski Ave...parking is still very bad and getting in and out of the driveway can be dangerous and difficult.. had no idea you were even trying this out. Was it in all neighborhoods?
9. Before this pilot, we had cars parked very close to our driveway which made it impossible to safely back out of the driveway into the street. Also, Brookes ave is such a narrow street that having the cars parked so close to the driveway makes turning onto the street from the driveway very cumbersome and challenging. I'm really hopeful that this change happens for we homeowners on the street.
10. My "yes" answer to question #7 is contingent upon the pavement markings. Without the markings, drivers are unsure what exactly is "2 feet", and overcompensated. When this occurred, the parking spaces in front of my home reduced from 3 to 2. Several other curbs have room for two cars, but during this pilot drivers were cautious and parked right in the middle, eliminating several opportunities to meet intended capacity. I also am concerned when I park / my bumper hangs across the end of my own driveway due to lack of available parking, that I would get ticketed/ towed. That is an existing concern regardless of Pilot, as I've been told by Parking Dept. that they do not verify whether the car is the property owners before they ticket/ tow - so anyone could call on my car being in violation of this new rule if they wanted to. Thank you for considering my feedback.
11. Two feet is not enough of a buffer. I live in an area where most residents park on the street and there is no resident only parking situation. People, before and now park at the edge of a driveway apron and sometimes even block part of a driveway apron. It should be a 5 foot setback and it should be enforced.
12. Bigger issue is not having resident permit parking on North Williams. Cars of strangers constantly circling and jockeying, squeezing in, unloading at all times of day and night degrades neighborhood feel.

The following responses were hand-written and sent in by mail:

13. I'm at 54 Brookes. We have historically had extreme difficulty getting out of our driveway especially in the winter. We're on the north side and pulling out is near impossible when the tenants across the street do not pull in close to the curb. I have been told that "if a police cruiser can navigate the street then there is nothing that can be



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done.” I have taken to parking in the street when it is snowy because I can’t access my very long and accommodating driveway. This is dangerous because I have MS and fall very easily. There is no handicap parking near my house on the street.

14. I wish that we had done this when my kids were little. We never could let them near the end of the driveway because of obstructed views – not that it wouldn’t still have been dangerous, but it would have been safer. We have had to drive up on the grass to access our driveway when it’s blocked, that’s not cool. Also, there are times we can’t get out and that’s a safety issue. We live with some elements that lend themselves to frequent emergencies. Also, I think most people are willing and understanding – they just don’t realize they’re blocking a driveway. So marking where to park (and not to park) is going to solve the problem, I think.
15. The minute the signs came down the encroaching began again. We’ve had two instances of blocking since the signs came down. Both cars were 2 feet over our driveway.
16. There is no parking on our side of Brookes Ave. The parking on the opposite side of Brookes already has “reduced parking” enforced to mitigate previous space issues (not enough egress for those of us with no driveway directly opposite).
17. Two feet is not enough – especially in the winter with snow banks. I am not sure how it will work in the winter at all with snow. How will someone see the lines? I still believe that residential parking for N. Williams would be the best solution, as Damian supported several years ago, but it was defeated at a meeting that N. Williams St. residents were not informed of.
18. Post permanent ordinance and add parking distance to curb. Adding a parking distance from curb would improve site distance up and down street! Limiting SUVs and trucks would help site distance also (within 20’ of a curb cut). I have a Toyota Prius that cannot see over SUVs and trucks when backing out of my driveway. Also, make permanent ordinance, add signage for residential parking, sign posts.
19. Why are you spending tax payer money on such studies?
20. Parking on the lower end of Loomis St. (between Weston and Willard) was severely impacted. Curbs where 2 cars should fit had only 1 car parked – generally because people were overly cautious (left 4’ of space rather than 2’). 95% of the time I am able to park my car directly outside of my house, whereas during the survey period this was reduced to 50% - I often had to park at the top of the block (near Prospect & Mansfield) where my car is both out of eyesight and earshot (it’s been broken into before). In my opinion, too many street parking permits are provided to students – why should every student who is squished into a 6-bedroom house receive a permit? There are not enough spaces on the street as it is to match the permits.
21. Isn’t the 2 foot restriction already part of city code? Lower Henry seems to have more issues than upper Henry but we’ve experienced more encroachment the past 6 months – usually depends on how many vehicle that renter have / amount of on-street parking.



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Quantifying the Affirmative versus the Negative.

Each question except questions #7 and #8 on the survey was designed to have five multiple choice answers, two answers in the affirmative, one neutral, and two in the negative. In order to derive a clear consensus from these questions, a point system can be applied to quantify overall public opinion of the Driveway Encroachment Pilot Study by assigning a number of points to each answer:

For Example, answering “Severe” to question #1 yields a +2 to the affirmative, “Significant” +1 to the affirmative, “Somewhat of an issue” 0 or neutral, “Not Significant” -1, “Not an issue” -2. These point values are then multiplied by the number of responses for that choice.

Question #1: Overall, how severe would you describe the issue of vehicles parking too close to your driveway BEFORE the pilot?

Severe	5	17%	(5x2) = 10 points
Significant	12	40%	(12x1) = 12 points
Somewhat of an issue	5	17%	(5x0) = 0 points
Not Significant	3	10%	(3x1) = 3 points
Not an issue	5	17%	(5x2) = 10 points

From this example we can derive 22 points in the affirmative for Driveway Encroachment and 13 points in the negative for Driveway Encroachment. Applying this system to the survey questions will yield the following:

Question #1: 22 points in the affirmative
13 points in the negative

Question #2: 27 points in the affirmative
7 points in the negative

Question #3: 27 points in the affirmative
6 points in the negative

Question #4: 30 points in the affirmative
6 points in the negative

Question #5: 40 points in the affirmative
9 points in the negative

Question #6: 18 points in the affirmative (note: affirmative/negative answers to question #6 are reversed)
13 points in the negative purposely)

The summation of these numbers show:

164 points in favor of applying the Driveway Encroachment Parking Restriction
54 points not in favor of applying Driveway Encroachment Parking Restriction

Based on this point system, DPW estimates that public opinion is 3 to 1 in favor of applying a Driveway Encroachment Parking Prohibition. This result is mirrored by Question #7 showing 71% in favor, 29% opposing – nearly a 3 to 1 ratio.



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Conclusions

Based on resident's feedback, the two foot parking restriction is a clear improvement for safe access into driveways and onto the street system when on-street parking is on the same side of the street. The restriction alleviates the challenge of having a driveway encroached or blocked resulting in severe inconvenience and diminished quality of life. Conversely for properties without off-street parking options, this restriction represents a direct reduction in available spaces. These residents also expressed a diminished quality of life as they are less likely to find parking close to their homes. These conflicting needs are the main source of disparity between these two groups.

All Burlington residents should have reasonable access to their homes and the street system. A blocked driveway or a driveway that is encroached such that it is impossible or unsafe to navigate is unacceptable. Staff would seek to both restrict parking away from driveways while minimizing the subsequent loss of parking. This may best be achieved through the practice of painting parking brackets around driveways on problematic streets. Several residents have commented that the total amount of available parking spaces were reduced when drivers parked too far away from driveways, exceeding the two foot restriction and further reducing the available number of parking spaces. Visually defining the parking restriction by painting brackets would provide drivers a visual reference that would promote more efficient parking and minimize the potential loss of parking.

To achieve this, Staff proposes to:

- Implement a city-wide ordinance restricting parking adjacent to all driveways and curb cuts by two feet as measured by the straight line edge of the driveway.

While this proposed ordinance would be in effect throughout the city, painting brackets would only occur on streets that meet certain characteristics and at locations where residents have expressed encroachment to be a significant issue. Staff has identified the two primary characteristics that lead to driveway encroachment and affect a resident's ability to safely access their driveway or the roadway to be:

- A high rate of parking occupancy during peak times, at or above 90%
- The street travel width 18 feet or less
- A documented history of multiple violations at a specific location

Note: This list can be expanded on if it is deemed to not adequately encompass enough streets experiencing chronic driveway encroachment.

Recommendation

Staff recommends the Commission adopt the following amendment to the Burlington Code of Ordinances Appendix C, §7 and to Chapter 20-55 General Prohibitions:

7 No-parking areas.

(a) No person shall park any vehicle at any time in the following locations:

(1) – (538) As Written.

(b) No person shall park any vehicle at any time in front of another person's driveway and within two feet of another person's driveway as measured from the straight-lined edge of the driveway.



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20-55 General Prohibitions.

(a) No operator or driver of any vehicle shall stop, stand or park the same in any of the following places, except when necessary to avoid conflict with other traffic or in compliance with the direction of a police officer or official traffic sign or except momentarily to pick up or discharge a passenger:

(1)-(3) As Written.

(4) In front of another person's driveway and within two feet of another person's driveway as measured from the straight-lined edge of the driveway.