

NO: **R201**

COUNCIL DATE: **October 21, 2019**

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **October 17, 2019**

FROM: **Acting General Manager, Engineering**

FILE: **5480-01**

SUBJECT: **East Clayton Parking Strategy**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information; and
2. Endorse staff to proceed with a residential engagement and queuing street conversion pilot project for up to four streets for a one-year term in East Clayton.

INTENT

The purpose of this report is to update Council on staff's review of the parking strategies for East Clayton and to seek Council approval of a one-year queuing street pilot project to help alleviate parking challenges facing the neighbourhood.

BACKGROUND

East Clayton was designed based on the sustainable development principles established by the Clayton General Land Use Plan (1999), emphasizing narrow streets and lots to enhance affordability, reduce development costs, conserve land, and preserve the natural environment. The neighbourhood was also planned with the expectation that convenient public transit would connect East Clayton to the surrounding region.

By 2013, as the neighbourhood approached build-out, it became evident that demand for on-street parking was high in many areas, primarily due to unanticipated proliferation of secondary suites, both legal and illegal. There are other factors that contribute to the problem, such as:

- Garage space use for goods storage rather than vehicles;
- Large vehicles and trailers being parked on-street;
- Under-use of tandem parking stalls;
- Laneway parking pads being converted into yard space; and
- Some local streets only having parking on one side.

Since 2012, the City has undertaken numerous initiatives to respond to concerns regarding parking supply:

Initiative Description	Year
Updated Off-street Residential Parking Requirements	2012 & 2016
Inventory of Transitional Parking Supply	2013
Issue Survey on East Clayton Parking Concerns	2014
Give Your Car a Home Contest	2014
Information Brochures on City Parking Regulations	2014/2015
Queuing Street Conversion Survey	2014/2015
Analysis of Boulevard Conversion	2015/2016
Exploration of use of School District Parking	2017
Amended Design Standards	2017

Unfortunately, most of these efforts had only limited success, with the exception of the implementation of queuing street where supported by the residents. As a result, the on-street parking challenges facing East Clayton still persist.

The updates to minimum parking requirements in 2016 and amendments to road design standards in 2017 have ensured that the problem will not expand and that the same challenges will not emerge in other neighbourhoods in the City.

DISCUSSION

In general, in East Clayton, on-street parking is available on all roads. On portions of arterial roads that have yet to be fully utilized, future travel lanes have been temporarily designated as parking lanes. On collector roads, parking is available in parking pockets interspersed throughout the road network leading to some streets with parking on both sides and some with very limited on-street parking. On local roads, some roads have been constructed as queuing streets since the neighbourhood's inception, and thus have a high number of parking spaces. On other local roads, parking has only been provided on one side of the street, leading to situations where the number of houses exceed the number of available on-street parking spaces.

Surveys show that on a typical weekday evening, 75% of all available parking spaces across the neighbourhood are filled, and therefore there are 1,300 on-street parking spaces free out of a total of 5,200. However, parking supply and demand varies on a street-by-street basis. In areas with generally smaller lots and more coach houses and suites, on-street parking can become completely filled overnight and spill over onto surrounding streets. On roads with larger lots with large driveways, demand for on-street parking is much lower.

In April 2019, staff re-evaluated possible solutions to East Clayton's parking problems, including evaluating the merits of a residential parking permit ("RPP") program, use of queuing streets and other potential strategies. Over the past several months, staff have conducted an examination of potential parking strategies for East Clayton, including analysis of East Clayton road design and land uses, parking complaints and violations, and research into parking management best practices.

Residential Parking Permit Program Considerations

An RPP program employs a parking management system where permit holders are authorized to park in designated permit-only areas. Those without permits must park in non-permit spaces or in off-street spaces on private property. Permit programs can be an effective tool to protect residential on-street parking supply from high external demand from non-residential users in certain areas, such as near hospitals, adjacent to rapid transit stations, or bordering popular commercial areas. An RPP program does not increase the supply of parking, but rather manages who may utilize the available parking spaces.

East Clayton does not possess any of the traditional characteristics suitable for an RPP program, as the on-street parking issues are related exclusively to residential demand. In this context, in order to impact parking demand, an RPP program would rely on two key elements:

1. Market pricing for permits; and
2. Strict enforcement.

As a permit program does not increase parking supply, to have any impact on the challenges being experienced in East Clayton the permit program must limit the demand for parking. In order to achieve this, households must choose to have fewer vehicles or modify their parking behaviour to fully utilize their off-street supply (driveways, garages, and parking pads) instead of on-street parking. To effect that change, a sufficiently high monthly fee for a parking permit would be required. Without such an economic incentive, households are unlikely to alter their parking behaviour, which would simply preserve the status quo. Strict enforcement is necessary to ensure compliance and would likely be unpopular with residents. Enforcement is also very costly, requiring regular vehicle patrols 12-14 hours a day. The most cost-effective way to conduct enforcement is using electronic permits and license plate recognition technology mounted on Bylaw Enforcement vehicles, which the City does not currently have.

Equity of Residential Parking Permit Program

In the course of staff's analysis of parking permit program designs, it proved very difficult to design an equitable RPP program that works for all of East Clayton due to the diversity of housing types and street design. As noted above, there are many streets in East Clayton where the number of houses exceed the number of on-street parking spaces. Under an RPP program, where each household is eligible for one permit, permit holders would be competing for a limited supply of parking, resulting in spillover onto adjacent blocks, which is precisely what is happening now. If households were allowed to have two permits or more, the spillover effect would be even worse, and the neighbourhood's parking challenges would continue.

Scale of Residential Parking Permit Program

The primary issue with implementation of an RPP program within a small area of East Clayton is that residents within the permit area would be able to park in the designated area, but could also park in the adjacent areas outside the permit area. As a result, there could be increased competition for parking spaces on the streets outside the pilot area, thus increasing parking issues for residents on those streets.

Resident Consultation

As part of the evaluation, staff initiated some initial consultation with resident groups on streets with limited parking supply. These discussions provided insight into the neighbourhood's parking challenges, how an RPP program could be received by the neighbourhood, and other potential solutions. Specific feedback included:

- Fees for permits would be unpopular;
- A permit program will be divisive and could pit suite-owners against non-suite owners;
- A one-size fits all permit program (e.g., one permit per lot) would not be effective; and
- The City should proceed with queuing street conversions in all possible locations.

Based on the analysis and resident feedback, staff concluded that an RPP program would not likely improve the parking situation in East Clayton. The two essential components of a permit system, fees and enforcement, would not likely be supported by residents, and the annual costs of such a program would be very high.

Increasing Parking Supply Option – Queuing Street Conversions

A queuing street conversion is the process by which a street with narrow roadway width is converted from “parking one side” to “parking both sides”, resulting in a queuing street with a single traffic lane such that vehicles sometimes have to pull over to the side and stop to wait for opposing traffic to pass.

Queuing streets were planned on a number of the local roads in the East Clayton Neighbourhood Concept Plan, but to date have only been implemented in limited locations. Queuing street conversions not only increase on-street parking supply, but they also improve neighbourhood safety by reducing traffic speed on local roads, consistent with key elements of the Vision Zero Surrey Safe Mobility Plan.

Staff previously explored queuing streets as a solution to East Clayton parking issues in 2014-2015. Residents of several potential queuing street locations were surveyed to assess support. The majority of these residents initially did not support a conversion on their street, with 40% supporting and 60% opposing. However, one year later in March 2015, a subsequent survey of East Clayton residents living on queuing streets indicated that support increased to 65% in support of a queuing street. After living with queuing streets for a period of time, the majority of residents (65%) prefer living on a street with on-street parking on both sides and queuing operation.

Queuing Streets and Traffic Flow

There are some concerns that adding queuing streets in East Clayton will reduce road capacity, and therefore increase congestion. However, staff do not anticipate this being the case, as all streets originally planned to be queuing streets are local roads with relatively low traffic volumes. East Clayton was designed with a fine grain road network, including collector and arterial roads, that will continue to be primary means of conveying traffic throughout the neighbourhood.

Queuing Street Pilot Project

Staff recommend proceeding with converting up to four potential streets in East Clayton to queuing streets for a one-year pilot. A queuing street pilot presents numerous advantages over an RPP program:

- Queuing street conversions will increase parking supply in areas where demand is high;
- There are no direct costs to residents (i.e., no permit fees);
- There are no additional enforcement costs;
- Resident support for queuing streets is proven to increase after having experienced them;
- Project costs are low and limited to costs of surveys, signage and staff time; and
- Queuing streets reduce traffic speed and improve road safety, consistent with the City’s Vision Zero Surrey Safe Mobility Plan.

Staff have 14 potential streets in East Clayton that could be candidate pilot locations. The potential queuing street locations are shown in Appendix “I” and the number of additional parking spaces are shown in Appendix “II”.

Prior to implementing a pilot, residents will receive a communication package by mail explaining queuing streets, outlining the benefits and trade-offs of queuing street conversions, and providing a summary of the queuing street pilot project. The package will also include a simple survey question that asks residents if they support a queuing street conversion on their street. The results of the surveys will be reviewed by staff and queuing street conversions will be undertaken on up to four streets that have the highest support. Each queuing street conversion will be designed to ensure there are sufficient passing areas to minimize inconvenience to residents. Prior to initiating the pilot project, affected residents will receive a communication package explaining the pilot project, how it affects them, and including departmental contact information if they have any questions or concerns.

A survey of on-street parking demand will be conducted before and after the projects on pilot streets and surrounding blocks to measure changes in parking demand. Similarly, affected residents will be surveyed before and after the pilot project to measure any changes in support for queuing streets and to identify any concerns.

The proposed pilot project timeline is as follows:

Action	Timeline
Pre-pilot peak parking demand survey	Mid-November
Pre-pilot survey of all affected residents	Mid-November
Resident follow up and assessment of survey results	December
Pilot communication/mailout to all affected residents	January 2020
Install new signage and initiate pilot project	February 2020
Mid-year parking demand survey	June 2020
Post-pilot peak parking demand survey	February 2021
Post-pilot survey of all affected residents	February 2021
Post-pilot report	March 2021

Increasing Parking Supply – Redundant Fire Hydrants

In addition to expanding on-street parking supply through a queuing street pilot, there may be an opportunity to increase supply through the decommissioning of redundant fire hydrants in the neighbourhood. Staff have identified eight potential redundant fire hydrants and will consider removal of the hydrants when they are scheduled for maintenance and/or replacement, or in conjunction with other capital work in the immediate area.

Fire Services Review

The content of this report has been reviewed by Fire Services and Engineering will be coordinating with Fire Services on the implementation to ensure that there will be sufficient space and opportunities for fire trucks to deploy their equipment within the roadway in the case of an emergency.

FUNDING

The work and costs associated with this pilot project will be absorbed under the existing functions and operating budget of Parking Services.

SUSTAINABILITY CONSIDERATIONS

Increasing the supply of parking in East Clayton supports the objectives of the City's Sustainability Charter 2.0. In particular, this work relates to Sustainability Charter 2.0 theme of Infrastructure. Specifically, this project supports the following Desired Outcomes ("DO"):

- All Infrastructure DO2: Infrastructure systems provide safe, reliable and affordable services; and
- Transportation DO11: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations.

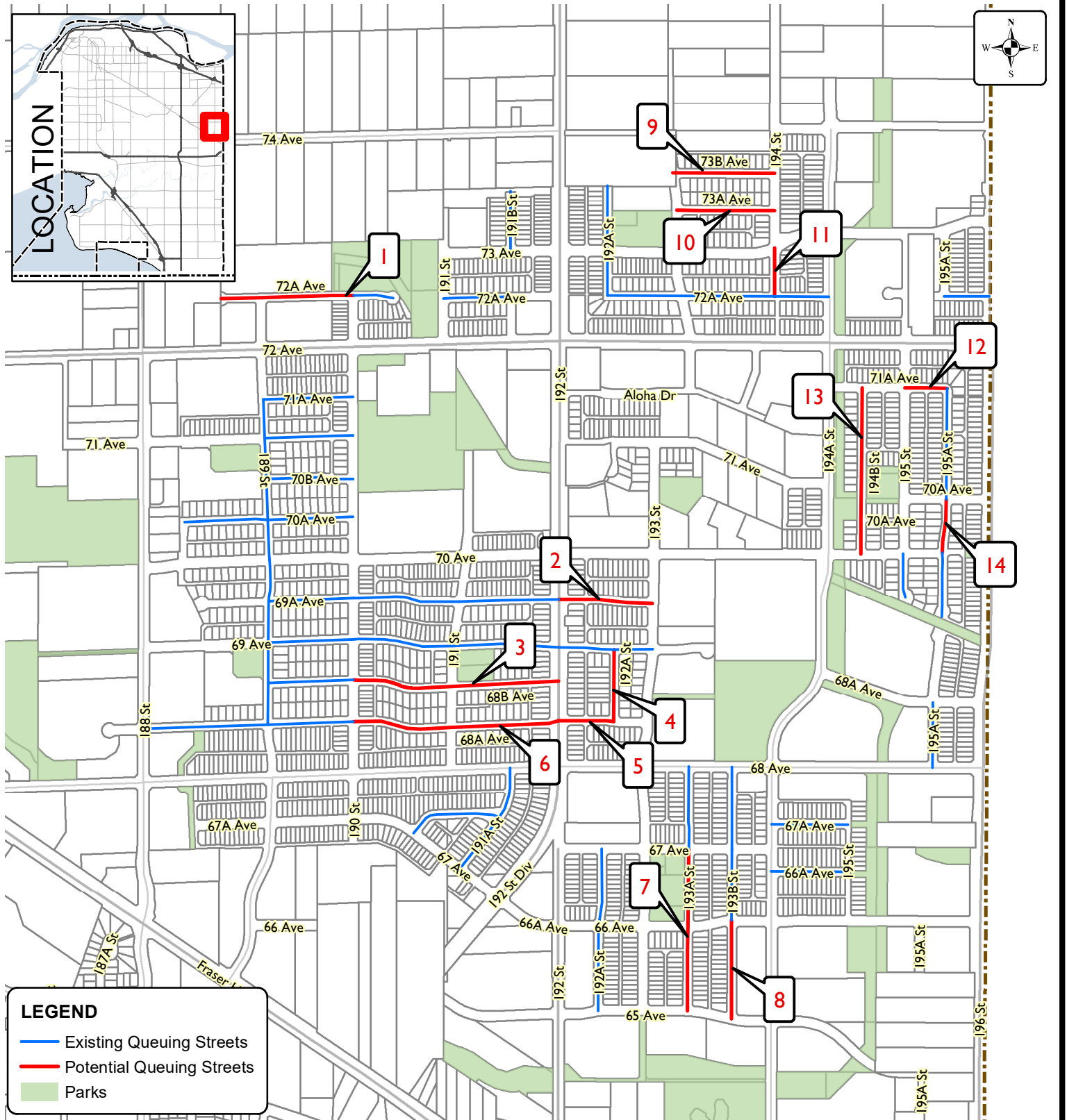
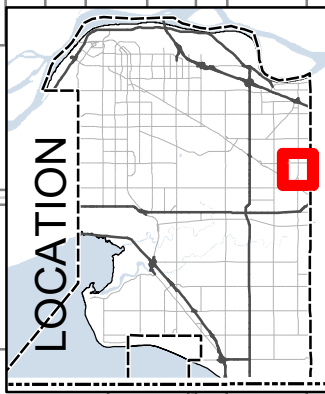
CONCLUSION

Based on the above discussion, implementation of a public engagement and one-year queuing street pilot on up to four streets in East Clayton could provide a significant increase in on-street parking supply.

Scott Neuman, P.Eng.,
Acting, General Manager,
Engineering

JB/RG/AK/cc

Appendix "I" – East Clayton Potential Queuing Street Conversion Pilot Locations
Appendix "II" – East Clayton Potential Queuing Street Conversions Data Table



LEGEND

- Existing Queuing Streets
- Potential Queuing Streets
- Parks

Produced by GIS Section: 16-Oct-2019, P205934

Scale: 1:10,000 0 100 M



East Clayton Potential Queuing Street Conversion Pilot Locations

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.

APPENDIX "II"

East Clayton Potential Queuing Street Conversion Pilot Locations

Map Number	Road	Segment	Existing Spaces	Approx. Additional Spaces	Percent Increase
1	72A Avenue	18800 Block - 190 Street	21	17	81%
2	69A Avenue	192 Street - 193 Street	15	13	87%
3	68B Avenue	190 Street - 192 Street	27	22	81%
4	192A Street	68A Avenue - 69 Avenue	15	8	53%
5	68A Avenue	192 Street - 192A Street	10	3	30%
6	68A Avenue	190 Street - 192 Street	34	17	50%
7	193A Street	65 Avenue - 67 Avenue	38	32	84%
8	193B Street	65 Avenue - 66 Avenue	25	22	88%
9	73B Avenue	193 Avenue - 194 Street	23	10	43%
10	73A Avenue	193 Avenue - 194 Street	16	10	63%
11	194 Street	72A Avenue - 73 Avenue	6	6	100%
12	71A Avenue	195 Street - 195A Street	9	4	44%
13	194B Street	70 Avenue - 71A Avenue	40	18	45%
14	195A Street	70 Avenue - 70A Avenue	10	4	40%
		Total:	289	186	64%