ATTACHMENT 1

Kleinburg Village Parking Strategy Review

Final Report

The Corporation of the City of Vaughan
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We would like to thank all the contributors and stakeholders who helped guide and complete this Kleinburg Village Parking Strategy Review.

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External Stakeholders

Kleinburg Business Improvement Area (KBIA)

Kleinburg Area Ratepayers Association (KARA)



EXECUTIVE SUMMARY

INTRODUCTION AND BACKGROUND

The Kleinburg Village Core ("Kleinburg Village") is a picturesque and historic village located within Ward 1 of the City of Vaughan ("City"). Supported by the Kleinburg Business Improvement Area (KBIA), Kleinburg is home to over 60 retail and service businesses, as well as schools, libraries, parks and art galleries. As its popularity grows, Kleinburg is experiencing ever-increasing demand, and parking has become a significant concern.

To assess immediate and long-term parking needs and develop a parking management strategy, the City completed the Kleinburg Parking Strategy Study ("Study"). Following quantitative data collection and analyses, as well as qualitative surveying and consultation, the Study identified and assessed alternative solutions. Assessed solutions are used to identify recommendations as part of a parking strategy addressing future parking needs. The project limits for the Study are shown in Figure ES - 1.

NEEDS AND OBJECTIVES

The overall goal is to develop a comprehensive and forward-looking parking strategy with the following objectives:

- Assess existing parking conditions and mobility options
- Engage the public and stakeholders
- Determine short - (**1 to 5 years**), medium - (**5 to 10 years**), and long-term - (**2041**) parking needs
- Provide parking management strategies and implementable solutions

The Study has been organized into two phases:

- **Phase 1**: Existing Conditions Review
- **Phase 2**: Parking Strategy Development

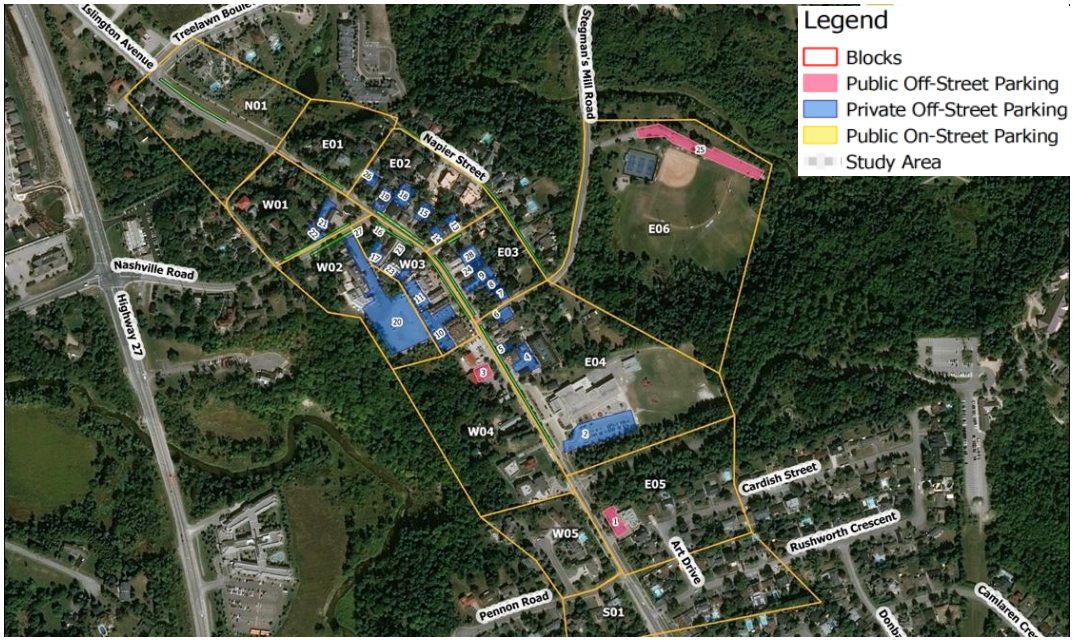

Figure ES - 1 Study Area Parking Supply

PUBLIC CONSULTATION

Phase 1 consultation involved introducing the Study to the public, agencies and stakeholders, informing them of survey results, gathering input on the existing conditions, and consulting on opportunities for Kleinburg Village.

Phase 2 consultation involved updating the public, agencies and stakeholders on the Phase 1 findings and the existing issues and opportunities in Kleinburg Village. Consultation also served as a means of presenting potential solutions to address existing parking needs, address longer-term goals, and to gather input from stakeholders to evaluate and refine the potential solutions.

PARKING SUPPLY AND DEMAND

Kleinburg Village currently provides a total of 690 non-residential core parking spaces (excluding Bindertwine Park [64 spaces], which is beyond a 5-minute walking distance of the Village core). Of the approximately 690 parking spaces available in Kleinburg Village, private off-street parking lots comprise the majority (**81%**). A total of 164 spaces are publicly owned, of which 129 public on-street parking spaces are free and available via unmarked spaces along Islington Avenue, Nashville Road, Kellam Street and Napier Street. Parking turnover and duration surveys were conducted during Fall and Summer weekdays and weekends in 2019, and during a special event. As shown in **Table ES-1,** the Village's peak parking demand across all survey periods is **55%**. Existing demand does not surpass "effective parking supply**" occupancy levels of 80%**, suggesting that a sufficient number of parking spaces are present within Kleinburg Village. Despite this, the existing configuration and management of the parking supply presents a number of challenges and concerns which are evaluated and addressed through this Study.

Table ES-1 Summary of Peak Parking Demand

	Survey Period	Peak Period	Total Occupancy	Off-Street		On-Street
				Private	Publicly Owned*	Public
Summer	Weekday - Aug 22, 2019	2:00 – 2:30 PM	49%	47%	60%	57%
	Weekend - Aug 24, 2019	2:00 – 2:30 PM	42%	39%	46%	50%
		8:30 – 9:00 PM	55%	53%	37%	68%
Fall	Weekday - Oct 24, 2019	1:30 – 2:00 PM	50%	46%	77%	60%
		8:30 – 9:00 PM	43%	36%	46%	70%
	Weekend - Oct 26, 2019	1:30 – 2:00 PM	55%	53%	20%	73%
Special Event	Weekday - Nov 29, 2019	7:30 – 8:00 PM	53%	47%	49%	75%

Based on the Study **Phase 1** findings, it is apparent that the current configuration of parking in Kleinburg Village results in an array of challenges, despite the demand for parking remaining within the available supply. Closer examination, specifically of the public parking space sub-group (on / off-street), shows a peak parking demand of **77%** which occurred during the Fall weekday survey.

Parking demand is greatest for public on-street parking, particularly within "hotspots" where a range of challenges were observed. Most of the residual parking was observed on private property. Residual on-street parking was observed, but outside of the core. Despite this finding, almost all Kleinburg's Village parking is within a 5-minute walk of the core. The parking surveys revealed several key observations:

1. **There are "hotspots", where peak parking occupancy is above 80%**
   - Former Starbucks and Kellam Street (all surveys)
   - Canada Post Plaza (most surveys)
   - East side of Islington Avenue, Kellam Street to John Street (Fall surveys)
   - South side of Nashville Road, Islington Avenue to Lester B. Pearson Street (Fall surveys)
   - Kleinburg Public School (Fall weekday survey)
2. **Hotspot areas feature limited public on-street parking**
   - Many of the businesses are concentrated near the Islington Avenue and Nashville Road intersection. Most reserve capacity is within private off-street lots. The low reserve capacity of public on-street parking contributes to the perception of parking scarcity.
3. **Signage and wayfinding in the Kleinburg Village is not legible and there is a lack of clarity of where parking is permitted**
4. **Special events could have improved organization and parking management**
5. **Recurring illegal parking in non-designated spaces was observed**
6. **The location of bicycle parking can be improved as demand for on-street facilities exists**

FUTURE PARKING DEMAND

Parking demand forecasts were based on future development within Kleinburg Village core for three future planning horizons, including short-term (1 to 5 years), medium-term (5 to 10 years), and long-term (beyond 10 years to 2041). Trip attraction rates were projected for each major land use type based on existing Gross Floor Areas (GFAs) and Summer and Fall Peak occupancy surveys completed in 2019. The rates were quantified by spaces per 100m^2 and were calibrated to match observed total peak occupancy.

Short-term GFA increases were based on development planning applications and planning policy information from the City of Vaughan's Official Plan (OP). It is anticipated that existing development applications will not capture all developments that will occur within the short-term horizon. In order to capture potential additional development, blocks containing commercial land uses with an existing Floor Space Index (FSI) significantly below the study area average were deemed overdue or prime candidates for redevelopment. Land use changes for the medium-term horizon were unknown during the study. As such, density increases for the medium-term horizon were based on Kleinburg Village study area development planning growth trends which assumed development density increase to an FSI of 0.4 for all commercial, restaurant, and service land uses.

Given that long-term planning targets for Kleinburg Village are unclear, forecasting assumptions were also made in the process of deriving long-term densities. The long-term GFA forecasting does not build directly on the medium-term assessment, however it considers a potential optimum development condition from present day (existing densities). Long-term densities were derived by evaluating trends in Kleinburg Village development applications, inferring a growth to an FSI of 0.6 for commercial, service and restaurant developments. It should be noted that the long-term forecast is highly conservative and intended to provide the City an understanding of parking solutions required to accommodate more intensive parking demand.

Parking demand for the Kleinburg Village core was forecasted as a product of trip attraction rate and corresponding horizon GFA. **Table ES-2** below shows the forecasted demand for the three horizons.

Table ES-2 Summary of Horizons Peak Parking Demand

Block	Key Site	Short-Term	Medium-Term	Long-Term
E01	North of John Street	5	6	9
E02	Former Starbucks	39	74	114
E03	Fitness Centre	46	76	116
E04	Kleinburg Public School	70	96	120
E05	Library	3	14	18
E06	Bindertwine Park	32	42	51
N01	North study limits	19	31	91
S01	South study limits	0	0	0
W01	RBC Bank	83	77	95
W02	Doctors House	116	129	235
W03	Post Office	62	118	186
W04	Pierre Berton Centre	63	68	68
W05	Residential	0	0	0
Total Parking Demand		**538**	**731**	**1,103**

ISSUES AND OPPORTUNITIES

Parking and related mobility issues were identified via input gathered from stakeholders, public consultation, survey data, as well as observations whilst on-site. Opportunities were identified to address the issues which formed the basis for developing future solutions. Issues and opportunities for the Study are defined below.

Issues

- High parking demand within high activity or “hotspot” areas
- Limited public parking spaces
- Private off-street lots are not available for general public use
- Inadequate signage and pavement markings
- Insufficient visibility or illumination of existing signage/restrictions
- Traffic volumes on Islington Avenue during peak periods
- Kleinburg Public School and YMCA daycare parking demand is high
- Safety concerns with respect to active transportation
- Special event communication to the general public can be improved

Opportunities

- Improve parking and travel efficiency by providing guidance (wayfinding, signage)
- Target and manage visitor groups to better utilize available parking
- Promote underused parking and review shared use of private parking spaces
- Improve or increase the supply of public parking using initiatives such as:
    - Delineating regular and accessible public on-street parking spaces
    - Review legalizing on-street parking spaces in restricted areas
    - Providing a centralized public parking facility

- Encourage Transportation Demand Management (TDM)
- Establish a pedestrian-oriented public realm
- Re-evaluate the role of Islington Avenue as a throughway versus a main street
- Explore new technologies in shared mobility and/or micro-mobility
- Consider implementing paid parking and a Parking Authority
- Update or change existing policies such as Cash-in-Lieu of parking
- Capitalize on and coordinate with the improvements planned for Islington Avenue

POTENTIAL SOLUTIONS

The potential solutions were developed responding to the issues and opportunities and were grouped into two main categories of **parking solutions** and **mobility / infrastructure improvements**. These solutions are intended to compliment and build on each other to continuously improve the parking dynamic in the Village. The potential solutions (**Table ES-3**) were evaluated using a number of criteria grouped into three main categories: **Technical, Social** and **Cost** with the criteria for each category measured using a scale of good, fair, and poor.

Table ES-3 Potential Parking Strategy Solutions

Solution Type	Short-term	Medium term	Long-term
Parking Solutions	Parking Restriction Signage	Parking Authority	Review/ Implement New Parking Technologies
	Public Parking Lot	Consolidated Private Parking	Redevelop Old Fire Hall (*if required*)
	Paid Parking (Village Core)	Paid Parking (Village Core)	Paid Village Wide Parking
	Parking Structure	Parking Structure	Parking Structure
	Parking Partnerships	Parking Partnerships	
	Parking Lay-by		
	Clear Delineation of Parking Spaces / Pedestrian Areas		
	Use of Bindertwine Park		
Mobility / Infrastructure Improvements	Wayfinding Strategy	Interconnected Bike / Pedestrian Paths	Mode-shift via Transit and TDM
	Canada Post Community Mailboxes	Village Square (Pedestrianized)	Pedestrian-only Village Core
		Real Time Parking / Dynamic Wayfinding Systems	
		Eco-mobility and Micro-mobility	

Legend **Good** **Fair** **Poor**

An average rating of all criteria measures was determined for each solution and used to identify the parking strategies recommended for each horizon.

PARKING SUPPLY AND DEMAND

To further understand the true benefit of the potential solutions, the parking supply and demand of the Village was evaluated, applying the recommended solutions at each study horizon. The short-term parking supply was estimated based on the existing supply, conversions of existing facilities, constructing of a new parking facility, engaging in public-private partnerships and parking forecasted for new developments per Zoning By-Law requirements. The medium-term parking supply was determined by adding the short-term planning horizon parking supply and parking forecasted per Zoning By-Law requirements for new non-residential developments. Long-term projections were based on parking supplies associated with the short-term horizon, the potential redevelopment of the Doctor's House, new Kleinburg Village developments, and a potential new parking facility at the Old Fire Hall (if required) north of the Village core. The redevelopment of the Fire Hall is subject to further monitoring, and is not recommended at this time. Total parking occupancy for the study area blocks within Kleinburg Village for the short-, medium-, and long-term were forecasted to be 59%, 72%, and 83% respectively. Parking occupancy is summarized in **Table ES-4**. Overall, the recommended solutions are anticipated to sufficiently accommodate parking demand in Kleinburg Village through the long-term (2041).

Table ES-4 Future Peak Parking Occupancy

Block	Key Site	Short-Term	Medium-Term	Long-Term
E01	North of John Street	33%	40%	60%
E02	Former Starbucks	38%	59%	75%
E03	Fitness Centre	58%	78%	93%
E04	Kleinburg Public School	69%	85%	87%
E05	Library	14%	67%	86%
E06	Bindertwine Park	50%	66%	80%
N01	North study limits	41%	67%	72%
S01	South study limits	0%	0%	0%
W01	RBC Bank	86%	80%	85%
W02	Doctors House	54%	60%	80%
W03	Post Office	57%	77%	87%
W04	Pierre Berton Centre	91%	99%	99%
W05	Residential	0%	0%	0%
Total Peak Occupancy (%)		**59%**	**72%**	**83%**



IMPLEMENTATION AND FUNDING STRATEGY

Implementation

The evaluation process was used to recommend solutions to develop the Study's parking strategy. An Implementation Plan was subsequently developed to deliver the parking strategy. The Implementation Plan will assist City staff by providing a framework of the steps needed to implement the recommended solutions. It will aid Council in making informed budget decisions in prioritizing solutions to be implemented and it will also seek input from stakeholder and service providers to reflect the growing needs of the Village community. Input will also be sought from stakeholders and service providers. A summary of the Implementation Plan is provided in **Table ES-5**. The Plan identifies that a number of the short-term solutions will be implemented through the Islington Avenue Streetscape Construction Project, which is scheduled to enter detailed design late 2020. The City can also engage Kleinburg Public School in the short-term to explore parking agreements for both vehicle and bicycle parking. The recommended method of implementation for the other solutions is identified as part of the Plan.

Table ES-5 Parking Strategy Implementation Plan Summary

Short-term
Parking Restriction Signage: an immediate measure with signage and temporary pavement markings to be implemented as early as possible (within year 1). Immediate measures are estimated to cost $4,400 for signage and pavement marking. Changes in parking restrictions, pavement marking and signage will be required as improvements to the streetscape take effect. Signage programme to be coordinated with supply changes and operating requirements i.e. school, library, partnership spaces, etc.
Parking Partnerships: require agreements to be made between the City and other parties. Establishment of parking partnerships will increase the Kleinburg Village parking supply providing new parking options for visitors. Implementation to be coordinated with signage restrictions and wayfinding.
Canada Post Community Mailboxes: implementation under the purview of Canada Post. City recommended to engage with Canada Post regarding implementation. City engagement process with Canada Post to be commenced immediately as duration of process is unknown. Notification of community mailboxes installation and operation would need to be provided to residents and business. Special arrangements will be required to be made for persons with disabilities and seniors with mobility challenges.
Parking lay-by: lay-by parking to be constructed as part of the **Islington Avenue streetscape improvement works**. Estimated to commence within the next two (2) years and is expected to progress as works proceed northwards on Islington Avenue.
Clear Delineation of Parking Spaces/Pedestrian Areas: delineation of parking spaces, improvement of pedestrian areas and provision of bicycle facilities to coincide and progress with implementation of lay-by parking and **Islington Avenue streetscape improvement works**.
Public Parking Lot: new parking lot in boulevard area north of John Street to be developed concurrently with **Phase 2** of the **Islington Avenue streetscape improvement works**.
Wayfinding Strategy: should be implemented concurrently with parking restriction signage. City to contact service provider to initiate terms and conditions to implement a **pilot program** for real-time parking technology. As parking supplies increases during the short-term, the wayfinding strategy must be dynamic to capture the evolving village parking.
Use of Bindertwine Park: parking spaces readily available. Use of spaces may initially become important due to streetscape works. City to engage KBIA and KARA to initiate and develop plan for short to long-term use of parking spaces. Development of bicycle facilities – repair stations, changing facilities, connections to trails to be explored.

Medium-term
Parking Partnerships: City to continue to pursue opportunities in the medium-term to deliver new parking partnership for the Village.
Consolidated Private Parking: consolidated parking assessments to be made on a case-by-case basis via the submission of parking justification studies. A review of the study would be used to determine feasibility and provide approval for a proposal to move forward.
Real-time Parking/Dynamic Wayfinding Systems: full roll-out of dynamic real-time wayfinding systems following completed pilot program. Supplemental technology to complement the system (webpage, mobile apps, payment options, etc.) would need to be established.
Interconnected Bike / Pedestrian Paths: identify and close prevailing gaps in pedestrian and cycle networks, integrate and expand networks where possible and include improvements along Stegman's Mill Road and connectivity to Islington Avenue.
Eco-mobility and Micro-mobility: City/parking authority to determine types of eco-mobility and micro-mobility to be implemented, docking station type, station locations, payment methods and options. Stations can be implemented gradually.
Village Square (Pedestrianized): engagement and agreement with property owners and KBIA to establish a pedestrian-oriented Village square / centre. Use, operation and maintenance of area coordinated and detail in established agreements for Village square.
Parking Authority: Not recommended as part of this study. Need for implementation subject to monitoring and future review
Paid Parking (Village core): Not recommended as part of this study. Need for implementation subject to monitoring and future review

Long-term
Review / Implement New Parking Technologies: New technology to be implemented would require cost-benefit assessments to identify those most suitable for the Kleinburg Village. Easily adaptable technologies requiring little infrastructural change such as Wi-Fi, can be incorporated into the development of a pedestrian-oriented core, micro-mobility stations, etc.
Mode-shift via Transit and TDM: The growth of alternative travel modes is anticipated via enhancement of existing measures to influence travel behaviour creating mode-shifts. Implementation of new measures (i.e. carpooling and car-share) can be introduced at new parking facilities and developments via agreements with relevant stakeholders.
Pedestrian-only Village core: Council approval required for closure of designated section of Islington Avenue to vehicle traffic. Consultation with stakeholders including KBIA and KARA required. Traffic calming measures required for surrounding road network, and coordination with York Region required. Policy guideline or by-law guidance for pedestrianized Kleinburg Village square to be developed.
Redevelop Old Fire Hall (at Grade Parking) or Parking Structure: Implementation to be determined by monitoring program with trigger for development proposed at 80% occupancy of Kleinburg Village parking supply. Redevelopment is not recommended at this stage. Alternatively, early redevelopment of the site to provide other City community facilities can also allow for an opportunity to provide public parking at the site.
Paid village wide parking: Not recommended as part of this study. Need for implementation subject to monitoring and future review



FUNDING

Sustainable funding measures will be needed to implement the solutions identified as part of this strategy. To fund the solutions of this strategy, the following tools can be explored:

- **Cash in Lieu** (CIL) – A policy tool that serves to reduce or waive the required number of on-site parking spaces, as mandated by the Zoning By-Law, via a payment to the City for said spaces. Fees to be paid by the developer are calculated via a formula specific to the Village.

  The current formula structure is used in Kleinburg Village:

  $$\$ = \{(P \times 40) + (S \times 28) + (L \times 12)\} \times M + \$m$$

  P = Land acquisition cost per m²

  S = Construction cost per m² of parking spaces

  L = Construction cost per m² of amenity/landscape/lighting

  M = multiplier (0.1 for conversions and renovations and 1.0 for new construction and additions)

  $m = Maintenance charge (recurring annual fee to be determined at time of agreement)

  It is recommended that a revision to the formula be implemented for the village.

  The following *revised formula* is recommended specifically for Kleinburg Village:

  Contribution = (**Construction** cost + (**Land** cost per m^2 x **Area** of parking space per m^2)) x **Number** of parking spaces x **Share** of contribution towards total costs.

  The revised formula discussed is more representative of the actual cost of construction and actual land acquisition required to provide parking. As well, the application of the "equity" factor of 50 percent is considered a means of demonstrating the City's willingness to work with and engage developers in having a shared a responsibility to provide parking for visitors to Kleinburg Village.

- **Development Charges (DCs)** – Are fees paid by developers for new development or redevelopment. The intention of the charge is to support the capital costs associated with growth and development within the City. This method of cost recovery is an equitable, consistent, and transparent way to recover costs. DCs specific to Kleinburg Village present an opportunity to fund parking improvements.

- **User Fees or Paid Parking** – Are funds gathered by charging the user a set rate to use a parking space. Paid parking could be implemented in Kleinburg Village in

the future to manage parking demand and to provide a revenue source. Alongside charged parking, parking enforcement could generate additional revenue, despite not being the primary intention of enforcement. While not recommended by this study for implementation, however, the potential for paid parking will be monitored and reviewed for the future consideration.

- **Parking Partnerships** – where the City sees an opportunity to meet parking demand but does not have the property or resources available, an agreement can be created with public or private entities to provide public parking.