

PICKLEBALL STUDY

Public Engagement Summary and Facility Provision Recommendations

March 9 2022



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Appendix I: Pickleball Site Selection Evaluation Matrix

1 Overview

1.1 Introduction



Pickleball is an emerging sport experiencing a popularity boom in Canada, particularly among older adults and seniors. Pickleball is a paddleball sport, combining elements of tennis, badminton, and ping-pong. It is played with a paddle and a wiffleball (a plastic ball with holes) on a badminton-sized court approx. 20 feet by 44 feet (6m x 13m) with a slightly modified tennis net (approximately 50 mm lower in height). The sport can be played as doubles or singles and can be enjoyed by all ages and skill levels. The sport has aspects of a social sport where several players congregate to participate in rotational play.

Outdoor Pickleball courts have been provided in two ways: dual use with tennis courts or as dedicated purpose-built courts. Additional information on both design layouts is provided under section 4.3 of this study.

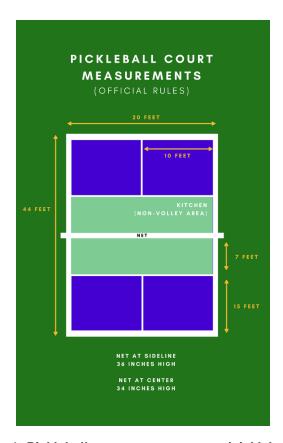


Figure 1: Pickleball court measurements (pickleballcanada.org)

1.2 Emerging Sport

With the number of older adults expected to increase at a faster rate than the overall population in the City of Vaughan, growing interest in pickleball has been noticed by City staff. The fact that players are largely seniors and retired persons (many are part of the more active baby boomer generation) has helped to support the proliferation of clubs across Canada. Most players are recreational, although there is a growing number of competitive members registered with Pickleball Canada. It is possible that the demographic may skew younger as the sport receives additional exposure. This has been amplified due to provincial COVID-19 pandemic gathering restrictions, temporary closure of municipal community centres, personal preference/perception of safety, the desire to be active, and the ability to play with more people outdoors.

The 2018 Active Together Master Plan (ATMP) was approved in principle by Council on May 23, 2018 and sets out a vision for a healthier and more mobile community. The vision, goals and objectives of the Pickleball Study reflects the following recommendation set out in the ATMP:

38. Undertake a pilot project to evaluate the feasibility of re-purposing existing tennis courts (relining) to share use between tennis and pickleball.

1.3 Study Objectives

The Study identifies suitable locations within municipal parks with existing tennis courts for pickleball lining, as well as establish a new level of service for outdoor facilities. The scope of the Study includes the following:

- 1. Measures interest and demand of existing user(s)/groups;
- 2. Identifies suitable locations that can be painted with pickleball court lines;
- 3. Establishes facility standards and specifications; and
- 4. Identifies a new service level provision for pickleball courts.

The results of the Study serve as a business case for the implementation of dedicated pickleball facilities and establish suggested facility provision standards. The Study helps inform Recreation Services on the opportunities to establish a future Vaughan Pickleball League and registered pickleball programs. Outdoor courts will complement current registered pickleball programs being offered by the City at Al Palladini Community Centre, Garnet A. Williams Community Centre and North Thornhill Community Centre.

2 Community Engagement

2.1 Online Survey

Staff solicited public input on the Study through an online survey. The survey ran from February 19, 2021 to March 15, 2021. Through the survey participants were able to provide feedback on the following:

- 1. Familiarity and general experience with the game;
- 2. Facility preferences (e.g., collocation, dedicated facility, etc.);
- 3. Gameplay preferences (e.g., time/day of play, length of play, etc.):
- 4. Interest in participating in leagues or City run programs; and
- 5. Demographics and general location of interest.

The online survey was advertised through City social media channels, digital signboards, Councillor e-letter and email distribution to key stakeholders. In total, the survey received positive responses, with 307 residents participating in the survey.

2.2 Notification

The online survey was promoted through the following social media channels:

- Facebook, Instagram, Twitter and LinkedIn
- Promotion through local Councillor eNewsletters
- Project website: vaughan.ca/Pickleball
- Public Service Announcement
- City-wide digital boards

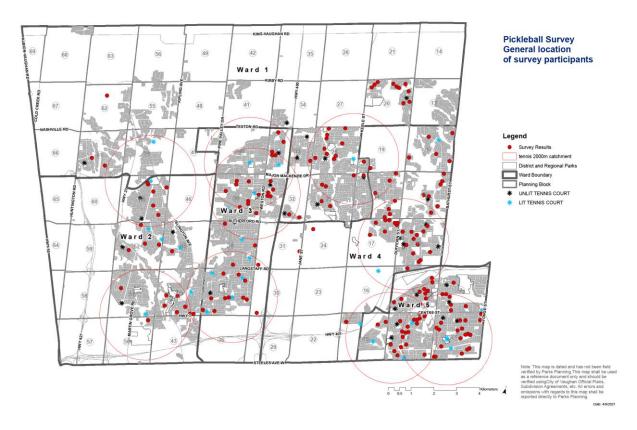




Figure 2: Outreach graphics

2.3 Visitor Summary

The survey ran on the Survey Monkey platform and recorded 307 responses to the survey. Of the 307 participants, 282 addresses were provided in the full six-letter code and are mapped below. Most respondents indicated they live in the Block 18 planning block or the southern Block 17 planning block. Responses were also collected from individuals living within the northeastern quadrant of the city, largely in the Maple and Carrville communities, with a lesser number of respondents from other parts of the city. 220 respondents indicated that they live in Vaughan; 46 were from Richmond Hill, Markham or Toronto, and 39 were from the wider GTA. Within Vaughan, the highest concentration of respondents reside in the Thornhill and Carrville communities. Map 1 below shows the distribution of respondents with Vaughan.



Map 1: Postal Code Survey Participant Mapping

2.4 Online Survey Summary Findings

The online survey results collected key information from a sample size of respondents which helped understand the general profile of pickleball users in the city:

Respondent profile:

- 219 (72%) of respondents are from Vaughan while the rest are from neighbouring cities;
- 214 (70%) of respondents are between the age of 35 to 64; and
- 46 (15%) of respondents are above the age of 65.

Familiarity with the game and sport:

- 269 (88%) of respondents are aware of or played pickleball;
- 183 (60%) of respondents identify as intermediate players;
- 183 (60%) of respondents play once or more per week for 1 to 3 hours;
- 244 (80%) of respondents are not part of a formal pickleball club; and
- 183 (60%) of respondents indicated an interest to be part of a Vaughan League.

Gameplay:

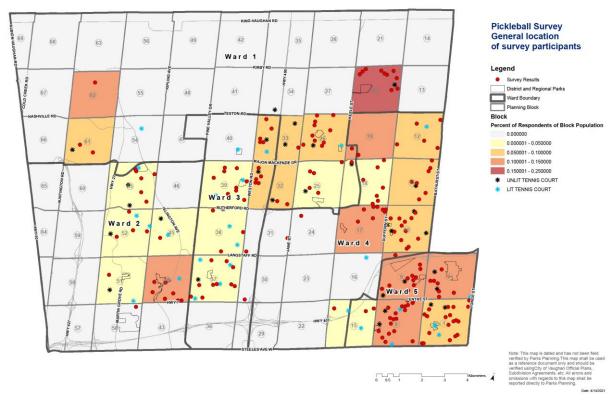
- Casual play is preferred followed by "city run drop in" program;
- An hour-long game allotment is preferred if shared with tennis;
- Suggestions on allowing longer time or to allow for a game up to 11 points;
- Play time preferred on weekdays spread throughout the day;
- The least preferred play time is between 4 and 6 pm; and
- On weekends, preference is from the morning up to 4pm.

Facility feedback:

- Support with sharing pickleball with tennis courts;
- Preference is to use existing tennis nets for a dual use-one court facility rather than paint 2 to 4 courts within the same tennis courts. This is due to the visually confusing and distracting linework.
- Dedicated facility is preferred by players;
- Equal mix of indoor and outdoor play is practiced;
- Preference to play at a facility fixed nets rather than portable nets;
- Respondents have equally played on both dedicated and shared courts;
- High support to participate in a focus group; and
- 125 respondents provided contact information for future updates.

Relative local interest in Pickleball:

• Based on respondents' postal codes, the number of respondents relative to 2016 population census by planning block to produce a 'heat map' of interest in the game throughout the city. Refer to Map 2.



Map 2: Survey participant heat map

A detailed summary of the survey results is provided in Section 4.

3 Site Selection Process

3.1 Process Overview

The site selection process involves four key steps based on criteria and checklist validated by City Staff.

The four steps include:

- 1. Identification of existing Tennis Courts. The city currently has 58 tennis court locations¹.
- 2. Potential location short list. City staff review identified locations to determine if they should generally be considered. If the identified location is deemed acceptable for consideration, the site is advanced as a potential location.

¹ Tennis locations have a range of 1 to 6 courts. As of 2021 total tennis courts are a total of 73 lit courts, and 61 unlit courts.

- 3. Recommended pilot locations. Evaluation of potential locations include three broad categories. The criteria within these categories include User Base, Existing Tennis Court Conditions, and Amenities. These are further described under Section 3.2. The potential locations are evaluated using these criteria and those that are deemed acceptable, advance as recommended pilot locations.
- 4. Final recommended pilot locations. City staff including Recreation Services and Park Operations evaluate recommended pilot locations based on ability for in-house implementation, programming potential, and geographical distribution by community. Facilities that are permitted for exclusive tennis club use are dismissed for pickleball use. The locations with the highest score within each of the respective community groups are advanced as final recommended pilot locations for implementation. Seven courts were identified as the maximum that could be implemented in the summer of 2021 based on limited in-house staff resources.

3.2 Criteria

Building upon the findings of the survey, background research on pickleball, and information collected through user group consultation, staff considered the following site selection criteria to identify potential sites:

User Base

- Service area population: Service area catchment considers the density of residents within a 500 m service radius of the location. A score of zero (0) applied to sites with no residential use in the area, low-density areas received a score of one (1) point, medium density areas received a score of three (3) points, and high-density areas received a score of five (5) points.
- Local interest: Interpreted through resident interest based on survey (interest vs block population) based on Figure 3. A score of ten (10) applied to sites with areas showing low interest, twenty (20) for medium interest and thirty (30) for high interest areas.
- Permitting restrictions: Tennis courts that are permitted for club use is taken into consideration. Locations that have exclusive or partial permitted use of the courts would restrict the use of the courts for Pickleball play. Permitted tennis courts receive zero (0) points, while non permitted courts receive ten (10) points. It is noted that permitted facilities were dismissed for this pilot location selection process.
- General level of facility usage (criteria not applied): Relative usage of the tennis courts would help determine potential conflicts with dual use. This criterion has not been applied due to inability to quantitatively determine usage through various observation methods through this study, and should be considered for future site selection processes. Additional equipment or staff resources would be required to measure court usage. Should this criterion be applied, ten (10) points would be given to courts with low relative usage, five (5) points for moderate relative usage, and one (1) point for low relative usage.
- Existing Tennis Court Conditions

- Number of tennis courts: the number of tennis courts with a specific location help to provide additional opportunities for pilot courts and mitigate potential conflict between pickleball and tennis users. One (1) point is given for single or double courts, five (5) points for locations that have 3 to 4 courts, and ten (10) points for locations that have over 5 tennis courts.
- Surfacing material: preference is given to courts with an acrylic surface for (preferred playing experience) as opposed to unpainted asphalt courts. Three (3) points is given to acrylic surfacing, and one (1) point is given to asphalt surfacing.
- Surface condition: Current condition of court surfacing in terms of evenness, cracks, undulations, and variations in surface quality is critical to the quality of play experience players. This is a visual assessment and given a score of one (1) point for poor, five (5) points for moderate and ten (10) points for good. Facilities that had surface cracks within the pickleball play area were dismissed for this pilot location selection process.
- Court wind exposure: Wind exposure is a critical factor to play experience given the lightness of the ball and therefore sensitivity to mild wind conditions. Minimal exposure to wind is preferred while noting that the exposures may be mitigated with wind screens installed along fencing and are more effective in smaller dedicated pickleball courts. Existing courts that were deemed to have minimal wind exposure are given five (5) points, moderate are given three (3) points, and full exposure to wind is give one (1) point. While the assessment made through this study is qualitative, future, more quantitative assessments of wind exposure would be recommended.

A. Amenities

- i. Court lighting: Tennis courts with existing lighting are preferred to non-lit courts due to the ability to provide extended play time during the day where dual use courts would receive higher relative usage. Lit courts are given three (3) points while unlit courts are given zero (0) points.
- ii. Access to parking: Tennis courts with access to public parking would be preferred. Courts that become dual use are likely to become destination facilities in the initial stages of this sport and its relative novelty and desirability. Tennis courts with access to public parking are given three (3) points while courts without access to public parking are given zero (0) points.
- iii. Access to washrooms: Surveys indicate that pickleball is popular among the older adult demographic. Anecdotal evidence as well as written submission collected through the survey indicate a preference for having courts with access to washrooms. While this requirement is not a precondition to providing future pickleball courts, it may be a beneficial criterion to consider as part of this pilot selection process. Typically, tennis courts with access to washrooms would be in district or regional parks that have standalone washroom buildings or have access to community centres. Tennis courts with access to public washrooms are given three (3) points while courts without access to public washrooms are given zero (0) points.

Table 1 summarizes the criteria associated with Step 3: Evaluation of recommended pilot locations.

Criteria	Criteria Description	Criteria Assessment and Score Allocation Details	Max. Score	
Potential User Base				
Service area population	Residents within a 500-m walking distance	1: Industrial 3: Low density 5: Moderate density 10: High density	10	
Local Interest	Express resident interest based on survey (interest vs block population)	10: Low 20: Medium 30: High	30	
Permitting restrictions	Tennis Facility is permitted	10: No 0: Yes	10	
Level of Facility Usage (criteria not applied in this study)	General level of facility usage.	10: Low usage (seldomly used)5: Moderate usage (commonly used)1: High usage (line up for use is common)	10	
Existing Tennis Court Conditions		,		
Number of tennis courts Number of available courts. Opportunity to provide additional pilot courts. Mitigate potential conflict between pickleball and tennis users by having the availability of more courts.		1: 1-2 tennis courts 5: 3-4 tennis courts 10: +5 tennis courts	10	
Surfacing material	Court surfacing material	3: Acrylic 1: Asphalt	3	
Surfacing condition	Existing condition of court surfacing (evenness)	1: Poor 5: Moderate 10: Good	10	
Court wind exposure	Court exposure to wind	 Full exposure (no wind blocking elements) Moderate exposure (some wind blocking elements) Minimal exposure (wind blocking elements present) 	5	

Amenities			
Court Lighting	Are the existing tennis court facilities lit?	0: No 3: Yes	3
Access to parking	Are parking facilities available on site?	0: No 3: Yes	3
Access to washrooms	Are washroom facilities available on site?	0: No 3: Yes	3
Total Score			97

Table 1: Evaluation criteria description

3.3 Evaluation of Pilot Locations

Following the desktop review of 58 tennis court locations across the city, 13 potential locations were evaluated using the site selection criteria. Locations with the highest scores within each of the communities were shortlisted. These recommended pilot locations were then inspected by City Staff and further evaluated based on the criteria to note any discrepancies, select courts and confirm surface conditions. Table 2 lists the 13 locations and corresponding scoring. Appendix I presents the detailed evaluation matrices.

LOCATION	WARD	COMMUNITY	SCORE
North Thornhill District Park	Ward 4	Carrville	67%
LeParc Park	Ward 4	Carrville	55%
Maple Community District Park	Ward 1	Maple	62%
Melville Park	Ward 1	Maple	45%
Dufferin District Park	Ward 5	Thornhill	77%
York Hill District Park	Ward 5	Thornhill	75%
Wade Gate	Ward 1	Thornhill	64%
Matthew Park	Ward 3	Vellore	63%
Giovanni Caboto Park	Ward 3	Vellore	62%
Chatfield District Park	Ward 3	Vellore	61%
Maxey Park	Ward 2	Woodbridge	80%
Rainbow Creek Park	Ward 2	Woodbridge	64%
Sonoma Community Park	Ward 2	Woodbridge	43%

Note: Locations in **bold** are highest scoring within corresponding community.

Table 2: Location criteria scores

3.4 Final Recommended Pilot Locations

Based on further inspections and consultation, a final list of recommended pilot locations was identified. For Recreation Services to be able to run the planned Pickleball league and associated Pickleball program in the summer of 2021 from Dufferin Clarke Community Centre, an additional court at Dufferin District Park was requested. Six (6) locations and seven (7)

courts were identified in the following communities: Thornhill (2), Vellore (1), Woodbridge (1), Maple (1), and Carrville (1). At the time of evaluating suitable sites, locations identified at Kleinburg/Nashville did not meet the criteria primarily due to that the most courts at Bindertwine Park are permitted to the Kleinburg Tennis Club (West Vaughan Tennis Club). However, it should be noted that future tennis courts in the Kleinburg/Nashville area may be considered in the future. Map 3 shows final selected location overlaid on survey participant heat map.

LOCATION	WARD	COURT	NUMBER	NOTE
Maple Community Park	1	Western (Asphalt)	1	Implemented on May 28, 2021
Maxey Park	2	Western (Acrylic)	1	Implemented on May 27, 2021
Giovanni Caboto Park	3	Western (Asphalt)	1	preferred location is Matthew Park. Substituted due to condition of Matthew Park courts Implemented on May 27, 2021. Registered program.
North Thornhill District Park	4	Eastern (Asphalt) at North Park	1	Implemented on June 15, 2021
York Hill District Park	5	Southeastern (Acrylic)	1	Implemented on May 6, 2021
Dufferin District Park	5	East and West Courts (Acrylic)	2	Location chosen to run Pickleball League program. Implemented on June 15, 2021
Total			7	

Table 3: Final Recommended Pilot Locations

Dufferin DP 3 acrylic courts Line paint 2 single pickle To run Pickleball League Line paint single pickleball (1) program Eastern and Western courts

Map 3: Pickle Pilot Locations (2021)

Level of Service Standard

Western court

The Level of Service Standard (LOS) establishes the minimum operational requirements that the City maintains for its facilities. This considers location, accessibility, layout, amenities, court usage as well as costs.

The ATMP (2018) recommends that the City should Undertake a pilot project to evaluate the feasibility of re-purposing existing tennis courts (re-lining) to share use between tennis and pickleball. The ATMP recommends that based on the findings of the pilot project, should the project prove to be successful, and significant demand for pickleball is found, this may warrant consideration of new purpose-built facilities.

Below are standard provisions to be considered for both dual use and dedicated facilities.

4.1 **Provision Level**

The City has implemented six (6) locations, which have been identified through consultation with citizens and city staff, as pilot locations. These pilot locations would be developed and reviewed over a one-year period.

The 2018 ATMP recommends a provision target of one tennis court per 5,000 persons in new residential areas (not to be applied retroactively to the city-wide population). This provision level is comparable to the GTA wide provision level. Given how relatively new pickleball is provided within the GTA, not enough data on GTA provision level for pickleball currently exists. However, several GTA municipalities have been combining pickleball with tennis courts as part of the

overall provision level. The expectation of the establishment of pickleball courts in the short-term is through re-lining projects based on demonstrated demand.

The provision of pickleball facilities may be continued to be addressed through refurbishment and lining projects on existing courts. Additional pickleball courts can continue to be provided on a case-by-case basis through the lining of existing tennis courts, in pairs at a minimum.

The purpose built pickleball courts provision level City-wide, will be determined based on the outcomes of the pilot study. However, it is recommended that moving forward, where three or more tennis courts are being provided through new parks or park redevelopment, that one of the courts be considered for purpose built pickleball courts. This will assist with the aim to provide courts equally throughout Vaughan's communities in the initial stages of this study. This would provide seven (7) pairs of purpose built pickleball courts by 2031, translating to a target provision level of 1 court per 30,000 residents.² A future level of service will be reviewed and refined concurrently with the implementation of the pilot program.

To be able to effectively monitor use and appropriately establish future needs, a comprehensive court usage and observation should be conducted. Under-utilized public courts in well-served areas for conversion to pickleball or multi-use sport courts.

4.2 Accessibility

All courts shall meet Accessibility for Ontarians with Disabilities Act requirements including appropriate accessible pathways and amenities such as benches.

For locations that are deemed to be a destination, access to public parking is required. These would be locations that are rolled out as part of a Phase 1 provision of either shared or dedicated pickleball courts. Therefore, initial roll out of pickleball courts would likely be located within district or regional parks. Future pickleball courts could be located within parks that do not have dedicated public parking such as neighbourhood parks.

4.3 Design

The LOS for design considers two facility types: dual use shared with tennis courts, and purpose built pickleball courts.

Dual use court

Several layouts have been examined for providing dual use tennis and pickleball courts. The size and proportions of a pickleball courts compared to a tennis court allows one, two, or four courts be lined within one tennis court. Refer to pictures below.

² Based on a population forecast of 424,500 by 2031



Figure 3: Dual use single pickleball on single tennis court



Figure 4: Dual use double pickleball on a single tennis court



Figure 5: Dual use four pickleball courts on a single tennis court



Figure 6: Purpose built quad pickleball court configuration

Based on feedback received through community and user group consultation, the preferred model to adopt for dual use courts would be to add linework for one pickleball court per tennis court for the following main reasons:

- 2 to 4 pickleball courts within the same tennis court are generally visually confusing and distracting to both sports.
- 2 to 4 pickleball courts within the same tennis court will require portable nets to be brought on court by users and therefore not in a ready state of play.

Figure 9 has been developed as the adopted design detail for dual use courts for the purposes of the pilot.

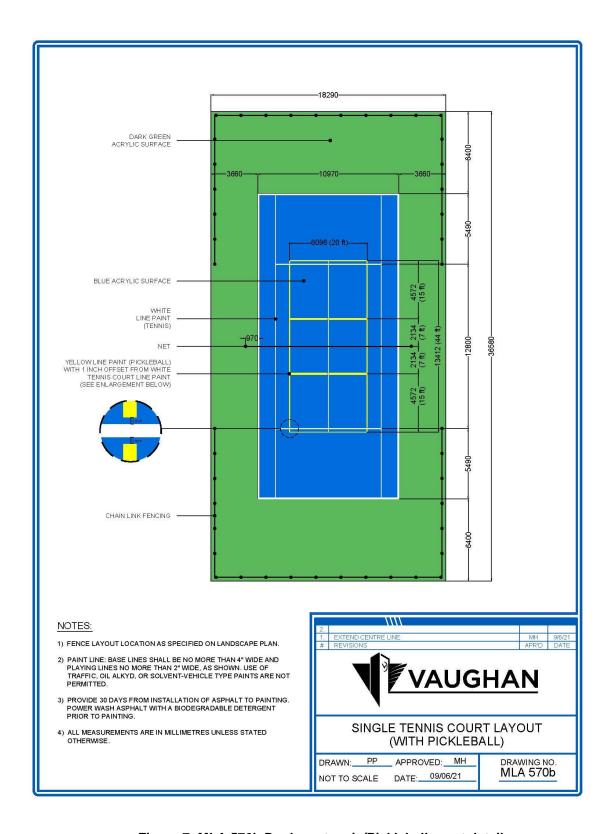


Figure 7: MLA 570b Dual use tennis/Pickleball court detail

Purpose built double pickleball court

Given the social aspect of the sport with rotational play being the most common way of participating in the game, providing courts pairs is common and the minimum provision level. The pickleball courts in Richmond Hill at King's College Park could be considered as a example to be reviewed when developing design details. These courts were frequently referred to through the online survey. The courts are side by side, include court chain-link fencing matching tennis court details, courtesy and rules signage, separating fence between courts, and benches. Due to the distinct popping sound that comes from the pickleball paddle, location of proposed pickleball courts should consider the potential noise nuisance to adiacent uses.





Figure 8: Kings College Park pickleball courts

It is recommended that dedicated outdoor Pickleball Courts be offered as part of the facilities to be considered in the future as part of park programming. This is to serve new growth areas or redevelopment of existing parks as guided by the Park Redevelopment Strategy. The following are to be considered when planning and implementing purpose built Pickleball courts:

- 1. Courts are to be developed in pairs;
- 2. Courts are to adopt provincial game standard dimensions;
- 3. Courts to include fixed pickleball net equipment;
- 4. Courts to include perimeter fencing and entry gates;
- 5. Court surfaces are to be painted acrylic on suitable hardscape; and
- 6. Due consideration is made on potential noise nuisance when locating courts.

4.4 Amenities

The standard LOS for amenities is typically provided as part of the general park features and furniture.

When developing the park layout, site furnishing should be considered in proximity to the pickleball courts including:

- Seating;
- Trash receptacles (3 stream); and

 Court lighting to be provided on a case-by-case basis and typically established based on park typology.

Enhanced Level of Service is provided when additional funding sources are secured. It is recommended that items associated with higher capital and maintenance costs may be considered through sponsorship or donations from an affiliated organization or through special funding or grants, which could include:

- Wind screens;
- Notice board; and
- Shade structure

4.5 Court Management

For court usage LOS considers routine court usage management and efforts to support use of tennis and pickleball by various user groups. With the current courts for pickleball being established as a dual use purpose, courts would be shared on a first come, first serve basis. If people arrive and are waiting to play, existing players must vacate the court within 30 minutes to allow others to play. Courtesy signage providing sport etiquette and rule of play are posted on site. Additional information would be posted to introduce the pickleball sport to park users. Below is sample signage implemented on at pilot locations and updated tennis court signs.

Dedicated pickleball courts will require similar signage related to rules and regulations.

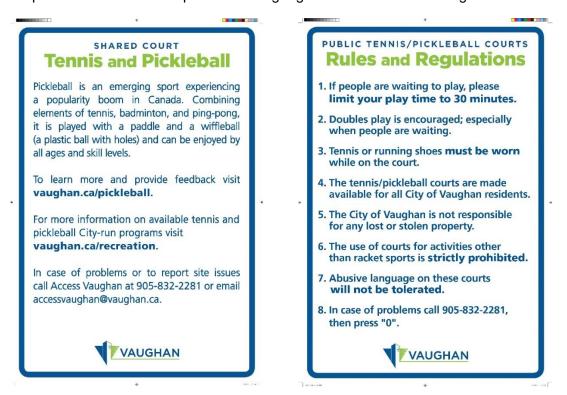


Figure 9: Shared court pickleball sign

Figure 10: Shared court rules and regulations

The use of the courts and any resulting conflicts due to shared use will be monitored by staff. Should an increase in conflict of use be noticed through an increased use of the courts,

consideration may be given for the development of a self-regulated booking system. Examples include additional instructions on self-organization rules which could be supplemented by booking notice boards.

The City currently uses a city run online booking system, fastcourts.com, to manage eight squash courts located at community centres. Fastcourts.com, which is a web-based application, allows members to pre-book courts once a user account is created. When members arrive at the centre, they check in and access the booked court. This service is supported by the onsite staff who would facilitate any resolution regarding booking issues.

Fastcourt.com may be an option to manage the 134 outdoor tennis courts within the City, however, further investigation would be required to review fees associated with the number of court locations utilized by the City. Other considerations regarding operating policy and how court users are supported at the various court locations could include but not limited to the following:

- · Managing disputes over court booked,
- Court users not respecting time slots,
- Managing late arrivals or no show,
- Reviewing call center resourcing for inquiries,
- Determining maximum number of bookings per week,
- · Managing associated documentation,
- Reviewing potential restrictions on users misusing or abusing privileges.

Expansion of the fastcourt.com or considering other web-based services will require a review of impact on additional resources required to implement and police the booking system.

4.6 Capital Costs

Capital costs relate to two aspects for new sited development.

Dual use court retrofit

Costs should consider costs associated with the incremental cost of adding line painting on existing or new tennis courts.

Applying line paint through qualified sports court paint suppliers and applicators ranges from \$3000 to \$4000 per double courts.

Purpose-built double pickleball court

Purpose-built courts would be constructed using established construction specifications and methodology used for installing acrylic surfacing on asphalt tennis courts.

Current cost estimate for a double tennis court is \$114,717. The cost for a double pickle ball court is established by applying the cost of a single tennis court with an additional allowance of 15% for additional fencing and court equipment resulting in a cost allocation of \$65,962. Capital costs should also consider annual contributions for lifecycle replacement costs over a 15-year period for park assets.

Based on above, purpose-built double pickleball courts capital costs per location is estimated to be in the order of \$86,410 inclusive of 10% contingency, 13% consultancy, 3% administration, 3% labour recovery, and 1.76% HST.

Detailed capital costs to implement purpose-built double pickleball courts will be determined through future capital projects and reviewed through future capital budget requests.

4.7 Operation and Maintenance

The Level of Service for operations and maintenance will be similar to the current guidelines applied to tennis courts and will include:

- · Routine inspection,
- Routine maintenance of fencing,
- · Removal and installation of nets per play season; and
- Routine surface maintenance.

5 Detailed Survey Results

5.1 Question 1: What best describes your knowledge of pickleball?

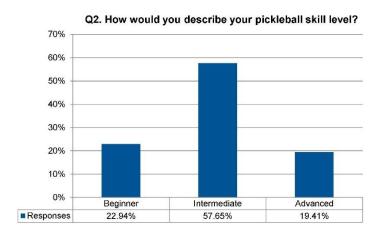


Figure 11: Question 1 results

Out of 307 responses, over 50% of the respondents indicated that they play pickleball and are familiar with the gameplay and rules.

Those survey respondents who indicated they play pickleball and are familiar with the gameplay and rules continued to question two (2); the remaining respondents were skipped ahead to question 23 of the survey.

5.2 Question 2: How would you describe your pickleball skill level?

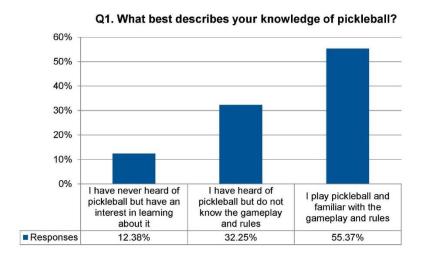


Figure 12: Question 2 results

Out of 170 responses, over 50% of the respondents indicated that they are intermediate players.

5.3 Question 3: How often do you play pickleball?

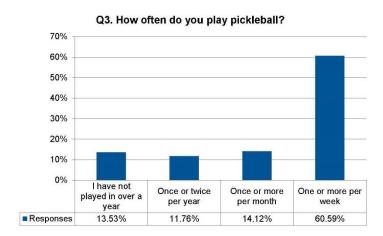


Figure 13: Question 3 results

Out of 170 responses, over 60% of the respondents indicated that they play one or more times per week.

5.4 Question 4: Do you generally play pickleball indoors or outdoors?

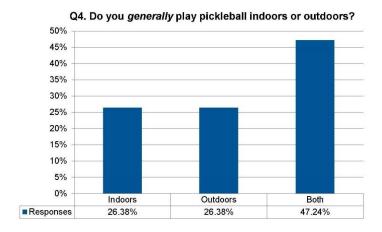


Figure 14: Question 4 results

Out of 163 responses, there is a general indication that there is an equal split between indoor and outdoor play.

5.5 Question 5: Do you prefer to play pickleball indoors or outdoors?

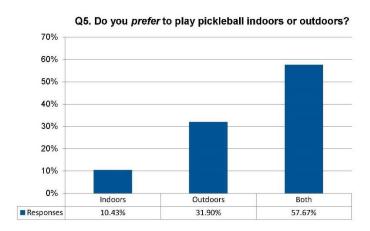


Figure 15: Question 5 results

Out of 163 responses, while approximately 57% have no preference, there is a higher preference for outdoor play of those who chose on of the options.

5.6 Question 6: Do you bring your own portable net to play pickleball?

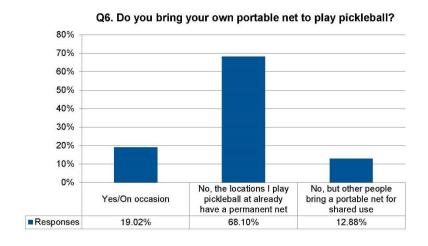


Figure 16: Question 6 results

Out of 163 responses, approximately 70% of respondents indicate that they play at locations with a permanent net.

5.7 Question 7: What type of facility have you been playing in?

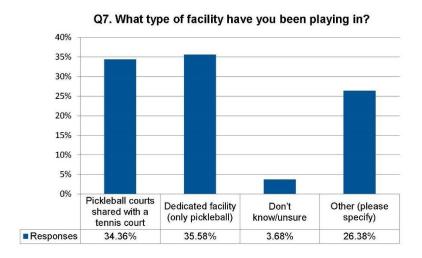


Figure 17: Question 7 results

Out of 163 responses, among those who indicated that play at a particular type of pickleball facility is of equal split between shared/dual use courts and purpose-built facility. Of the 26% who indicated 'other' as the type, most responses indicated that they play in indoor facilities.

5.8 Question 8: Where do you regularly play pickleball? Please select up to three answers.

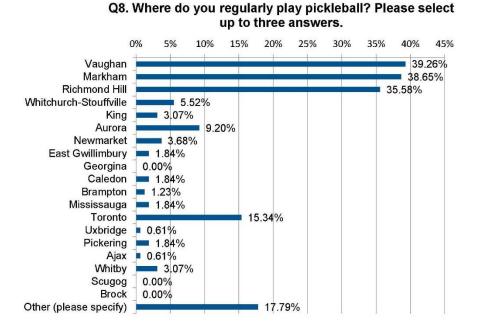


Figure 18: Question 8 results

Out of 163 responses, it is noted that the highest ranked location is collectively Vaughan, Markham, and Richmond Hill, with Toronto indicated as second. This result would correlate with participants residing within the general area. Under the option of other, approximately 30% (11/29) of participants indicated, referred to locations in Florida, most notably in Naples, Florida.

5.9 Question 9: What, in your opinion, is a good example of an existing outdoor pickleball facility that the city should consider? (Optional)

This is an open-ended question where 83 participants shared specific examples and locations. Below are suggested locations in order of popularity:

- King's College Park in Richmond Hill;
- Thornlea Secondary School in Markham;
- Thomas Coates Park in Aurora;
- · Radio Park in Oshawa;
- Danube Senior Centre, Bradford;
- Several references to locations in the USA, namely Florida.

5.10 Question 10: When do you normally play pickleball? Select all that apply.

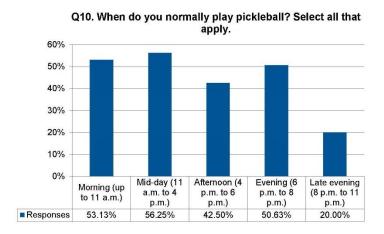


Figure 19: Question 9 results

Out of 160 responses, the preference to play is generally spread throughout the day until 8 pm. The least preferred is late evening (8pm to 11pm).

5.11 Question 11: How much time do you regularly spend at a pickleball facility in one visit (from arrival to departure)?

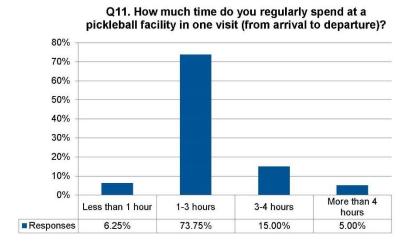


Figure 20: Question 11 results

Out of 160 responses, most participants indicated spending 1 to 3 hours per visit.

5.12 Question 12: Who/where do you play pickleball with? Please select all that apply.

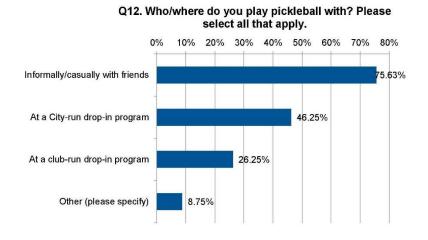


Figure 21: Question 12 results

Out of 160 responses, most participants (75%) indicated casual play with friends, followed by City-run programs and lastly, club run programs.

5.13 Question 13: Are you a member of an official pickleball player's club?

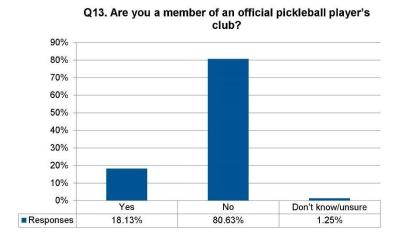


Figure 22: Question 13 results

Out of 160 responses, most participants (80%) indicated that they are not part of an official pickleball player's club. 29 participants indicated that they part of a club.

5.14 Question 14: Please specify the name(s) of the club(s) you belong to.

Following from question 13, 29 responses provided a name of a club. Below are top five clubs in order of popularity:

- Progress Pickleball Club,
- Mayfair Racquets,
- Stouffville Pickleball Club,
- Markham Pickleball Club,
- Wasaga Beach Pickleball Club.

5.15 Question 15: If there was an official Vaughan Pickleball League, operated by the City of Vaughan, would you be interested in joining?

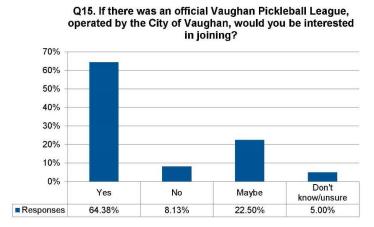


Figure 23: Question 15 results

Out of 160 responses, approximately 64% indicated an interest to joining a Pickleball League operation by the City of Vaughan.

5.16 Question 16: Do you have any additional comments you would like to share, if any? (Optional)

This is an open-ended question where 66 participants shared comments. Below are noteworthy comments by topic:

On sport popularity

Pickleball is such a fast growing sport, it demands the infrastructure to play that won't interfere with tennis players. Dedicated courts (both indoor and outdoor) would let this sport take off and provide a foundation for its growth within Vaughan.

Pickleball is the fastest growing sports in North America. It is easy to learn and appeal to all ages, even an 80 year old can pick up this game. It also a very social game and both a good outdoors and indoor game to play year round to keep fit. It is easier on the body compared to games like tennis or even badminton

On court design/provision

Courts should be designed/constructed with the input of current pickleball players. City officials who contract tennis court constructors do not have the same knowledge as avid players. I've seen too many new courts in places like Markham constructed without proper fencing planning which affects play because the 2 courts back onto each other.

To ensure signage says "tennis & pickleball courts". To have a board up on which you place your paddle to "reserve" your court. To provide dedicated pickleball courts with balls.

Need windscreens, lineup paddle holders to wait for next turn, sitting benches while waiting or watching.

Please consider constructing a centre with 8-10 courts in one location. Do not model the courts like tennis where only two are constructed in one place as many people play at different levels.

Dedicated courts with Centre belt to ensure the correct height in the middle of the net. Lights that come on at night and restrooms nearby. Seating area near courts for people waiting to play. Fencing between each court to prevent balls from coming onto the court from other courts. Entry points into each court so people don't have to cross through courts to get to their court. Ventu Park in Thousand Oaks CA or Rancho Simi Community Park in Simi Valley CA are good examples of this.

On organization

With increase players wanting to compete and to travel outside of Toronto and Ontario, consider to create more tournament at all levels in Ontario. People are willing to travel for House Leagues and intercounty play.

Whether or not I would be interested in joining a "League" would be determined by whether or not the league would adjust to various levels of player expertise, such as a beginner, intermediate or advanced skill level so competition would be fair to all levels of ability

On converting and current use of tennis courts

Many pickleball enthusiasts have their own portable net. Converting existing tennis courts to mutli-purpose courts by adding additional pickleball lines would help with the shortage of pickleball playing space.

It would be fantastic to have pickleball courts throughout the City of Vaughan. As a tennis player, it would be nice if there were dedicated pickleball courts because it can be hard to find a tennis court available during the warmer months.

I live in Thornhill and don't understand why the tennis courts don't accommodate pickleball. Senior citizens can no longer play tennis, pickleball is for all ages.

Please create a dedicated Pickleball location!!!

Adding lines to local tennis courts would be so easy and cheap... please do as much as possible!

Tennis is growing in Canada. Tennis courts are very busy. Pickle ball is new. If the city wants pickle ball courts they should make them separate from tennis courts. Tennis courts are busy all over the city. Many parks have lots of land to put in a few pickleball courts. Make new courts

Tennis Canada is on the rise, tennis courts are busy enough as it is. Sharing pickleball courts with tennis courts does not look good and is a mistake. Thank you

5.17 Question 17: For open play, how long should both tennis and pickleball players be allotted for gameplay before giving up the court?

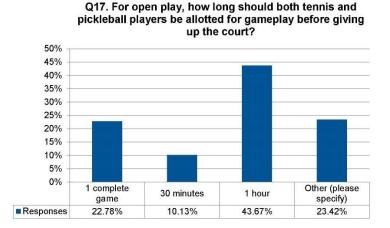


Figure 24: Question 17 results

Out of 158 responses, approximately 43% indicated one hour. However, 37 participants provided other an answer with following noteworthy written comments:

The rule of thumb at pickleball courts is place paddles on the fence and rotate every game which the community has accepted and works the best

Each game takes approximately 15 minutes to play. This is a difficult question to answer as it depends on the set up of the court. In Richmond Hill there are two great dedicated PB courts. The NET is permanent which is important because if there are people waiting then people rotate on and off the court after each game. The people waiting place there paddles on the ground in groups of four along the fence line and those groups go up in turn. In Peterborough they have built a simple shelf more like a long flower box) in which players place their paddles in order. This system is also done on some of the courts in Florida with the paddle box. Also in Naples (Pickleball capital of the world) there is a whiteboard gridded off (like a big tic-tax-toe, and people place their names in the grid squares (each grid square to have four names for doubles or two for singles). Each group of four (or 2 for singles) take their turn for a single game. When a court is finished their game they come off, their names are erased, and the next group in line goes up. They use this method with a whiteboard all over in Florida. It works extremely well for several reasons 1. It moves quickly 2. You can place your name in one of the squares on the grid if you come by yourself and be able to play as other people will add their names to make a group of four 3. You can play with the people you choose as you have four names per grid box 4. There is no mixing of the paddles as you hold onto your own paddle and go onto the court as your name on the grid comes up 5. Very inexpensive - all you need is a posted whiteboard with erasable markers (once people know the procedure they will bring an erasable marker with them to the courts 6. If there are no other people waiting you can stay on as long as you want 6. Allows a player to sign up with other players at their skill level so allows beginners to advanced players to have good recreational games or competitive games 8. Is fair way to play.

It depends on the facility you build. If it's 1-2 courts and there are not many courts elsewhere, you should limit play if courts are busy to one game and off. If you have a multi court facility of 6-12

courts, you can go with best 2/3 games or 3/5 games. With multi court faculties you will get ample turnover. Do not go with one hour or a time allocation unless they invite unnecessary disputes.

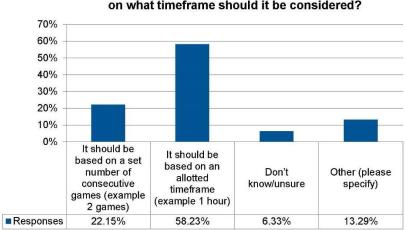
It is tough. Previously when we play tennis we rotate after 1hr. For Pb we rotate after a game that is typically 15 mins. With shared facilities how can 2-3 groups of Pb waiting an hour work. Prefer dedicated Pb courts

Most difficult thing to balance. Tennis usually one hour with 2 or 4 people per court. For pickleball on shared courts with tennis is 2-4 courts per tennis court, thus 8-16 players, and those usually rotate in and out for 3-4 hours at a time. So when 10 people are playing pickleball and 2 tennis people show up it seems unfair for the 10 people to give up exercise time so that 2 people can play. Best solution is dedicated courts. Radio Park Oshawa has 4 dedicated pickleball courts and 2 tennis courts. Rarely anyone playing tennis and pickleball courts almost always full.

In pickleball, points are racked up quickly and the timeframe per game can be quite short. I believe that allotting a timeframe would be a better measure, especially for scheduling.

Based on the input received above, pickleball game play should not be compared to tennis for a variety of reasons. Games could be shorter in length at 15 to 20 minutes long. However, given the social aspect of the game where a tendency of groups of players congregate to play, a session could last for longer than an hour.

5.18 Question 18: If dedicated pickleball times were to be established, on what timeframe should it be considered?



Q18. If dedicated pickleball times were to be established, on what timeframe should it be considered?

Figure 25: Question 18 results

Out of 158 responses, approximately 58% indicated a preference for an allotted timeframe. However, 21 participants provided other an answer with following noteworthy written comments:

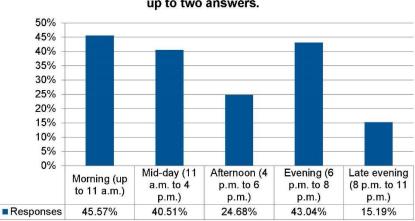
This depends on several factors. It will have to be organized and it might be best to work with a club or association. It will require coordination which is best left with club volunteers bless the city is prepared to run and coordinate activities. You might Start with drop ins and ladders then move to leagues.

Drop in style, taking turns. After 1 game, the next 4 players come up and you place your paddle down to determine your turn to play next.

All pickleball places allow one game then you rotate off. This is universal in North America.

Based on the input received above, given the social nature of pickleball, allotted time may not always work, and other methods of self-organization would be required.

5.19 Question 19: If dedicated pickleball times were to be established, what time of day is preferred on a weekday? Please select up to two answers.



Q19. If dedicated pickleball times were to be established, what time of day is preferred on a weekday? Please select up to two answers.

Figure 26: Question 19 results

Out of 158 responses, the majority responses indicate a preference for times up to 4 pm and a slot between 6 pm and 8 pm.

5.20 Question 20: If dedicated pickleball times were to be established, what time of day is preferred on a weekend day? Please select up to two answers.

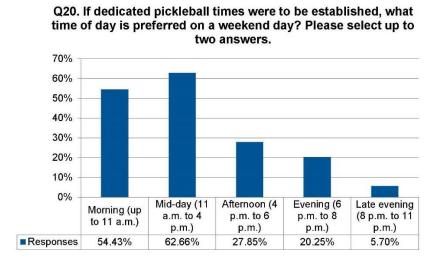
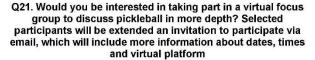


Figure 27: Question 20 results

Out of 158 responses, the majority responses indicate a preference for times up to 4 pm.

5.21 Question 21: Would you be interested in taking part in a virtual focus group to discuss pickleball in more depth? Selected participants will be extended an invitation to participate via email, which will include more information about dates, times and virtual platform.



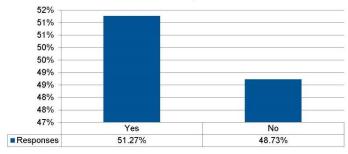


Figure 28: Question 21 results

Out of 158 responses, 81 participants expressed an interest to be part of a future focus group if it was held by the city.

5.22 Question 22: Please provide your contact information.

79 participants provided the city with their contact information based on their interest expressed to be part of a future focus group through question 21.

5.23 Question 23: To pilot a facility, would you support installing a pickleball court facility at one of the tennis courts in your neighbourhood?

Q23. To pilot a facility, would you support installing a pickleball court facility at one of the tennis courts in your neighbourhood?

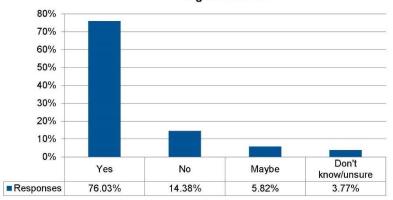


Figure 29: Question 23 results

Out of 292 responses, approximately 76% where in support of installing a pickleball court facility at one of the tennis courts in their neighbourhood.

5.24 Question 24: What is your postal code?

Out of 292 responses, 282 provided postal codes which have been mapped as part of this report. Refer to Map 1.

5.25 Question 25: What is your age?

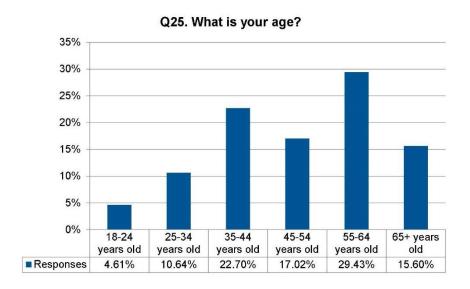


Figure 30: Question 25 results

Out of 282 responses, the highest age bracket of 55 to 64 is at approximately 29%, followed by 35 to 44 at 23%. We also note that approximately 45% of all respondents are above the age of 45.

5.26 Question 26: Would you like to be contacted by the City of Vaughan about other future conversations about City decisions or matters?

Out of 282 responses, approximately 45% or 126 participants indicated that they would like to be contacted by the city.

5.27 Question 27: Please provide your contact information.

As a follow to question 26, 125 provided contact information.

6 References

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pickleballcanada.org pickleballontario.org usapickleball.org

Appendix I Evaluation Matrix

Pickleball Site Selection Evaluation Matrix

Criteria	Criteria Description	Criteria Assessment and Score Allocation Details	Max. Score	York Hill District Park	ct Dufferin District Park	Wade Gate	Chatfield District Park	t Maple Community District Park	Maxey Park	Rainbow Creek Park	Giovanni Caboto Park	LeParc Park	North Thornhill District Park	Matthew Park	Sonoma Community Park	Melville Park
				Score	Score	Scare	Score	Score	Score	Score	Score	Score	Score	Score	Score	Score
User Base																
Residents within a 500-m Walking Distance	Potential site catchment service population	1: Industrial 3: Low density 5: Moderate censity 10: High censity	10	10	10	5	3	3	10	S	5	1	5	3	3	3
Resident Interest	Express resident interest based on survey (interest vs block population)	10: Low 20: Medium 30: High	30	30	30	30	20	36	36	30	26	30	30	20	10	20
Permitted	Tennis Facility is permitted	10: No 0: Yes	10	0	10	10	10	10	16	10	10	10	0	10	10	10
Level of Facility Usage	General level of facility usage.	10: Low usage (seldomly used) 5: Moderate usage (commonly used) 1: High usage (line up for use is common)	10	0	n	0	0	0	n	0	n	0	0	0	0	0
Existing Tennis Court Conditions																
Number of Available Tennis Courts	Number of available courts. Opportunity to provide additional pilot courts. Mitigate potential conflict between pickleball and tennic users by having the availability of more courts.	5: 3-4 tennis courts	10	10	5	1	5	1	1	1	5	1	5	5	1	1
Court Surfacing Material	Court surfacing material	3: Acrylic 1: Asphalt	3	3	3	3	1	1	3	3	1	1	3	1	1	1
Court Surfacing Condition	Existing condition of court surfacing (eveness)	1: Poor 5: Moderate 10: Good	10	10	10	10	10	5	10	1	E10	818	10	10	5	5
Court Wind Exposure	Court exposure to wind	Full exposure (no wind blocking elements) Moderate exposure (some wind blocking elements) Moderate exposure (wind blocking elements present)	S	1	1	3	1	al	5	3	3	3	3	3	- 3	1
Amenities																
Facility Lighting	Are the existing tennis court facilities lit?	0: No 3: Yes	3	3	0	0	3	3	3	3	3	3	3	3	3	0
Access to Parking	Are parking facilities available on site?	0: No 3: Yes	3	3	3	0	3	3	3	3	3	3	3	3	3	3
Access to Washrooms	Are washroom facilities available on site?	0: No 3: Yes	3	3	3	0	3	3	3	3	0	0	3	3	3	0
Y	Total Score		97	73	75	62	59	60	78	62	60	53	65	61	42	44
	Score Percenta	nge	100%	75%	77%	64%	61%	62%	80%	64%	62%	55%	67%	63%	43%	45%