

NOTICE
SPECIAL MEETING OF COUNCIL

Clerk's Office, Brook Park, Ohio

June 16, 2025

TO: COUNCIL MEMBERS TROYER, MENCINI, ROBERTS, SCOTT, DUFOUR, POINDEXTER, McCORKLE, COUNCIL PRESIDENT SALVATORE, AND MAYOR ORCUTT, LAW DIRECTOR HORVATH, AND FINANCE DIRECTOR McGANN

YOU ARE HEREBY NOTIFIED THAT A SPECIAL MEETING OF COUNCIL
HAS BEEN CALLED FOR THE PURPOSE OF:

_____ COUNCIL MEETING

___XXX___ CAUCUS MEETING

_____ EXECUTIVE SESSION

_____ OTHER (Specify)

Such special meeting will accordingly be held on WEDNESDAY the 17th day of June, 2026 AT 6:00P.M. at the place of holding regular meetings. (*Refer to Rules of Council, No. 4, if applicable.)

I. ROLL CALL OF MEMBERS:

II. PLEDGE OF ALLEGIANCE:

III. DISCUSSION:

1. DETERMINING THAT THE ESTABLISHMENT OF THE BROOK PARK NEW COMMUNITY AUTHORITY WILL BE CONDUCTIVE TO THE PUBLIC SAFETY, CONVENIENCE, AND WELFARE AND IS INTENDED TO RESULT IN THE DEVELOPMENT OF A NEW COMMUNITY AND DECLARING THE NEW COMMUNITY AUTHORITY TO BE ORGANIZED AND A BODY POLITIC AND CORPORATE, AND DEFINING THE BOUNDARY OF THE NEW COMMUNITY DISTRICT; APPOINTING BOARD MEMBERS AND APPROVING RELATED MATTERS. Introduced by Mayor Orcutt.- PER COUNCIL PRESIDENT SALVATORE.

IV. ADJOURNMENT



MAYOR



CLERK OF COUNCIL

P / C _____
CA Special 6/17/26
1st R _____
2nd R _____
3rd R _____
B/C _____

CITY OF BROOK PARK, OHIO

ORDINANCE NO. _____

INTRODUCED BY: MAYOR ORCUTT

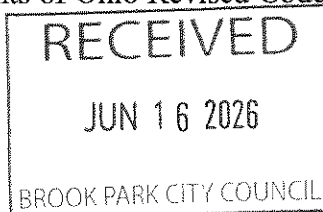
DETERMINING THAT THE ESTABLISHMENT OF THE BROOK PARK NEW COMMUNITY AUTHORITY WILL BE CONDUCTIVE TO THE PUBLIC SAFETY, CONVENIENCE, AND WELFARE AND IS INTENDED TO RESULT IN THE DEVELOPMENT OF A NEW COMMUNITY AND DECLARING THE NEW COMMUNITY AUTHORITY TO BE ORGANIZED AND A BODY POLITIC AND CORPORATE, AND DEFINING THE BOUNDARY OF THE NEW COMMUNITY DISTRICT; APPOINTING BOARD MEMBERS AND APPROVING RELATED MATTERS.

WHEREAS, HSG BP Development, LLC, in its capacity as the “developer” within the meaning of Section 349.01(E) of the Ohio Revised Code (the “Developer”), plans to establish a new community development program for the purposes of encouraging and supporting well-balanced and diversified land use patterns within the territory of the City, including facilities for the conduct of industrial, commercial, residential, cultural, educational, and recreational activities, all as described in Ohio Revised Code Chapter 349; and

WHEREAS, on June 12, 2026, the Developer submitted to the Council of the City of Brook Park, Ohio (respectively, the “Council” and the “City”), pursuant to Ohio Revised Code Section 349.03, a Petition for Establishment of the Brook Park New Community Authority under Chapter 349 of the Ohio Revised Code (the “Petition”), a copy of which Petition is on file with the Clerk of Council; and

WHEREAS, the Brook Park New Community Authority is located entirely within the municipal corporate boundaries of the City, a municipal corporation, and this Council, as the legislative authority of the City, is the “organizational board of commissioners” for the Brook Park New Community Authority pursuant to Ohio Revised Code Section 349.01(F)(3); and

WHEREAS, on [_____], pursuant to Ohio Revised Code Section 349.03, this Council adopted its Ordinance No. [_____], which determined that the Petition is sufficient and complies with the requirements of Ohio Revised Code Section 349.03 in form and substance; and



WHEREAS, pursuant to Ohio Revised Code Section 349.03, this Council held a public hearing on the Petition on [July 15, 2026], notice of which was published as required by Ohio Revised Code Section 349.03, and the date of which hearing was not more than thirty (30) nor more than forty-five (45) days after the filing date of the Petition; and

WHEREAS, this Council has determined that the Petition will be conducive to the public health, safety, convenience, and welfare, and is intended to result in the development of a new community.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Brook Park, Ohio, that:

Section 1. Establishment of New Community Authority. The Petition is hereby accepted and approved by this Council as the “organizational board of commissioners” for the purposes of Ohio Revised Code Chapter 349. This Council hereby determines that the Brook Park New Community Authority will be conducive to the public health, safety, convenience, and welfare, and is intended to result in the development of a new community, as defined in Ohio Revised Code Section 349.01(A). The Brook Park New Community Authority is hereby organized as a body politic and corporate with the corporate name designated in the Petition (such name being the “Brook Park New Community Authority”), and the boundaries of the District are consistent with the boundaries described in the Petition.

Pursuant to Ohio Revised Code Section 349.14, this Council may, as the organizational board of commissioners pursuant to Ohio Revised Code Section 349.01(F)(3), provide for an alternative method for the dissolution of the Brook Park New Community Authority and may approve one or more resolutions or ordinances regarding such method.

Section 2. Appointment of Board of Trustees. The Board of Trustees of the Brook Park New Community Authority (sometimes referred to as the “Board of Trustees”) is hereby organized. The Council determines that, because the Brook Park New Community Authority is a separate political subdivision and body corporate and politic of the State of Ohio, (i) the Board of Trustees is not a board or commission of the City, and (ii) service as an appointed member of the Board of Trustees does not constitute holding public office with the City or employment with the City. The Board of Trustees shall initially be comprised of nine (9) members selected and appointed as provided in the Petition, as follows:

- (i) This Council, as the “organizational board of commissioners” under Ohio Revised Code Section 349.01(F)(3), shall appoint four (4) citizen members of the Board of Trustees of the Brook Park New Community Authority to represent the interests of present and future residents and employers of the District (the “Citizen Members”):

Citizen Member 1 shall be Mary Maykut.

Citizen Member 2 shall be Scott Shari.

Citizen Member 3 shall be Gregory Cingle.

Citizen Member 4 shall be John Hurst.

Citizen Members shall not be employees of or have a financial interest in the Developer.

- (ii) In addition, this Council shall appoint one (1) member of the Board of Trustees of the Brook Park New Community Authority to serve as a representative of local government (the “Local Government Representative”):

The Local Government Representative shall be the individual holding the office of Mayor of Brook Park.

- (iii) The Developer, as the “developer” in connection with the Brook Park New Community Authority, and through its authorized officer, has appointed or will appoint four (4) members to serve on the Board of Trustees of the Brook Park New Community Authority as representatives of the Developer in its capacity as “developer” (the “Developer Representatives”).

Developer Representative 1 shall be [_____].

Developer Representative 2 shall be [_____].

Developer Representative 3 shall be [_____].

Developer Representative 4 shall be [_____].

The members of the Board of Trustees of the Brook Park New Community Authority shall serve two-year (2) overlapping terms, with Citizen Member 1, Citizen Member 2, Developer Representative 1, and Developer Representative 2 serving initial one-year (1) terms. Citizen Member 3, Citizen Member 4, the Local Government Representative, Developer Representative 3, and Developer Representative 4 shall serve initial two-year (2) terms.

Section 3. Alternative Selection of Successor Board of Trustees. Pursuant to Ohio Revised Code Section 349.04, this Council may adopt a method for the selection of successor members of the Board of Trustees of the Brook Park New Community Authority. This Council further adopts an alternative method of selection of successor members of the Board of Trustees of the Brook Park New Community Authority. No elections shall be held for the selection of successor members of the Board of Trustees members. Successor members of the Board of Trustees are to be selected as follows:

- (i) Until such time as this Council shall determine that the development of the Overall Project within the District (as defined in the Petition), including any Additional Properties (as defined in the Petition), is substantially complete, the Mayor shall select successor Citizen Members and the successor Local Government Representative of the Board of Trustees by appointment, and the Developer shall

continue the selection of Board of Trustees members by appointment. The successor Local Government Representative may continue to be the individual holding the office of Mayor of Brook Park or may be another representative of local government selected by the Mayor.

- (ii) Upon the earlier to occur of (a) a determination by Council that the initial planned development of the Overall Project within the District (as defined in the Petition), including any Additional Properties, is substantially complete, or (b) the expiration of the initial thirty-year (30-year) term of the Stadium Lease (as defined in the Petition), Council may further modify the process for selecting Board of Trustees members to be determined by Council, and may, in Council's sole discretion, determine to reduce the size of the Board of Trustees from nine (9) to seven (7) members by removing one (1) Citizen Member (to be selected by the Mayor from among the then-seated Citizen Members of the Board of Trustees) and one (1) Developer Representative (to be selected by the Developer from among the then-seated Developer Representatives of the Board of Trustees).
- (iii) Notwithstanding anything to the contrary, in the event that the Mayor or the Developer fails to replace any member of the Board of Trustees of the Brook Park New Community Authority pursuant to this Section, then the prior, duly appointed member of the Board of Trustees of the Brook Park New Community Authority, shall continue to hold over as a member of the Board of Trustees of the Brook Park New Community Authority until such time as the Mayor or the Developer takes additional action pursuant to this Section.

Council may make the additional determinations required by this Section 3 by resolution or ordinance of this Council.

Section 4. Additional Approvals. The Seat Rights Agreements (as defined in the Petition), the Stadium Lease (as defined in the Petition), and any bonds, notes or other obligations issued by the Brook Park New Community Authority in connection with the initial development of the District (as defined in the Petition) may not be approved by the Brook Park New Community Authority without the prior approval of the City. This Council hereby authorizes the Mayor, on behalf of the City, to provide approval of the Seat Rights Agreements (as defined in the Petition), the Stadium Lease (as defined in the Petition), any revenue bonds, notes or other obligations issued by the Brook Park New Community Authority in connection with the initial development of the District (as defined in the Petition), and any other consents, acknowledgments, determinations, or certifications that may be required to be given by the City in connection with the new community development program identified in the Petition from time to time and at the times when such approvals are required pursuant to the Petition, Ohio Revised Code Chapter 349, and Ohio law.

Section 5. Dissolution. This Council determines that the Brook Park New Community Authority may be dissolved by a vote of this Council under the following circumstances:

- (i) prior to the issuance of any revenue bonds issued by the Brook Park New Community Authority to fund any portion of the capital cost of the Stadium (as defined in the Petition); and
- (ii) when no community authority bonds or notes are outstanding and all other legal indebtedness of the Brook Park New Community Authority has been discharged or otherwise provided for.

If dissolved, any property of the Brook Park New Community Authority shall vest with the City, subject to acceptance of the property by legislation of this Council. If this Council declines to accept the property, the property vests with the Developer or the Developer's designee. Any funds of the Brook Park New Community Authority at the time of dissolution shall be transferred to the City.

Pursuant to the Petition, prior to the execution and effectiveness of the Stadium Lease (as defined in the Petition), the Seat Rights Agreements (as defined in the Petition) may not cause the Brook Park New Community Authority to incur a bond, note, or other legal indebtedness. Any obligations of the Brook Park New Community Authority under the Seats Rights Agreements shall be discharged by termination or assignment of the Brook Park New Community Authority's obligations under such Seat Rights Agreements if the Brook Park New Community Authority is dissolved pursuant to this Section 5.

Section 6. Required Bonds. Pursuant to Ohio Revised Code Section 349.04(C), there shall be posted for each member of the Board of Trustees of the Brook Park New Community Authority a bond in the amount of ten thousand dollars (\$10,000.00) for the faithful performance of his or her duties. The bond shall be provided by a company authorized to conduct business within the State of Ohio as a surety and shall be deposited with and preserved by the Clerk of this Council.

Section 7. Further Authorizations. This Council determines that the Mayor, or the Mayor's designees, shall have the authority to take such actions as are not adverse to this Council, as evidenced by the signature of the Mayor, or the Mayor's designees thereupon, all in order to carry out the terms of this Ordinance pursuant to the Petition and Ohio Revised Code Chapter 349, including, but not limited to, the execution and recording in the records of the Cuyahoga County Recorder, of one or more Declarations of Covenants and Restrictions for the Brook Park New Community Authority, Cuyahoga County, Ohio and any approvals, consents, acknowledgments, determinations, or certifications that may be required to be given by the City in connection with any contracts entered which may be entered into by the Brook Park New Community Authority from time to time and any bonds, notes, or other obligations which may be issued or incurred by the Brook Park New Community Authority from time to time.

Section 8. Open Meetings. This Council finds and determines that all formal actions of this Council and any of its committees concerning and relating to the passage of this Ordinance were taken in an open meeting of this Council, and that all deliberations of this Council and any of its committees that resulted in those formal actions were in meetings open to the public, all in compliance with the law including Ohio Revised Code Section 121.22.

Section 9. Effective Date. This Ordinance shall take effect at the earliest date permitted pursuant to the Charter of the City of Brook Park and as otherwise permitted by law.

[Balance of Page Intentionally Left Blank]

PASSED: _____, 2026

President of Council

ATTEST:

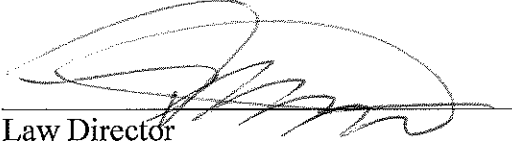
APPROVED

Clerk of Council

Mayor

Certificate

APPROVED AS TO FORM:



Law Director

CERTIFICATE

The undersigned, Clerk of the Council of the City of Brook Park, Ohio, hereby certifies that the foregoing is a true and correct copy of Ordinance Number [____], passed by the Council of the City of Brook Park, Ohio on the [____] day of [____], 2026].

Clerk of Council

TO THE CITY COUNCIL OF THE CITY OF BROOK PARK, OHIO:



**PETITION FOR THE ORGANIZATION
OF THE
BROOK PARK NEW COMMUNITY AUTHORITY**

In accordance with Ohio Revised Code Chapter 349 (the “Act”), **HSG BP DEVELOPMENT, LLC**, a Delaware limited liability company (the “Developer”), whose address is 76 Lou Groza Blvd., Berea, Ohio 44017, hereby submits this petition (this “Petition”) to the City Council of the City of Brook Park (the “City Council”) as the organizational board of commissioners under Ohio Revised Code Section 349.01(F), in order to initiate proceedings for the organization and establishment of a new community authority (the “Authority”) as described in this Petition. All terms set forth herein and not defined shall have the respective meanings assigned thereto in the Act unless context so requires a different meaning.

For purposes of the establishment of the Authority, Developer is a developer within the meaning of Ohio Revised Code Section 349.01(E), and the City of Brook Park (the “City”) is the only proximate community as defined in Ohio Revised Code Section 349.01(M).

Developer further states in fulfillment of Ohio Revised Code Section 349.03 as follows:

1. The Authority is to be named the “Brook Park New Community Authority”.
2. The principal office of the Authority shall be located at 6161 Engle Rd., Brook Park, Ohio, 44142 or such other location as may hereafter be determined by the board of trustees of the Authority.
3. Attached to this Petition as Exhibit A-1 is a map of all the land comprising the Authority’s new community district (the “District”), all of which is located within the corporate boundaries of the City. Legal descriptions of all the parcels in the District (collectively, the “Property”) are attached as Exhibit A-2, a full and accurate description of the boundaries of the District is attached as Exhibit A-3, and a map showing the Property in relation to the broader region is attached as Exhibit A-4. All properties within the boundaries depicted on Exhibit A-3 will be included in the District. The total acreage to be included in the District is approximately 177.7089 acres.

Pursuant to Ohio Revised Code Section 349.03(B), the City and the Developer acknowledge that from time to time additional territory may be added to the District (collectively, the “Additional Properties”) to further the purposes of the Authority as set forth in this Petition. Additional Properties shall be able to be developed consistent with the development of the District as part of a “new community authority” pursuant to a “new community development program,” as such terms are defined in Ohio Revised Code Section 349.01(A) and (B). Additional Properties shall be owned or controlled by the Developer pursuant to Ohio Revised Code Section 349.01(E) or shall be owned or controlled by the City, by one or more property owners, or by one or more persons pursuant to Ohio Revised Code Section 349.01(E) or Section 349.03(B)(4). Nothing in this Petition precludes the City, one or more owners, or one or more other persons from adding real property to the District through additional proceedings authorized under the Act.

4. All of the Property is currently owned by the Developer. Accordingly, the Developer owns or controls the Property within the meaning of Ohio Revised Code Section 349.01(E).
5. The area within the boundaries of the District is currently zoned under Planned Unit Development District zoning authorized by Ordinance No. 11478-2025, adopted on August 21, 2025, and

Chapter 1128 of the Brook Park Codified Ordinances, and such zoning supports the comprehensive development of such area as a new community as such term is defined in Ohio Revised Code Section 349.01(A). A certified copy of the applicable zoning regulations for such area are attached to this Petition as **Exhibit B**. The current plans for the development of the proposed District comply with the applicable zoning regulations.

6. The Developer and the City have executed a Pre-Development Agreement, dated April 29, 2026, related to the development of the District and the formation of this Authority. The Developer and the City are currently negotiating, and anticipate entering into, one or more additional development agreements by and among the Developer, the City, and the Authority (each a “Development Agreement” and collectively the “Development Agreements”), pursuant to which the Developer, the City, and the Authority will develop and own an approximately 67,500-seat, domed, multi-purpose sports and entertainment stadium facility, including all architectural elements, features and improvements attached thereto or forming an integral part thereof (as further described in the Development Agreements, the “Stadium”). The Developer will transfer to the Authority a portion of the Property currently owned by the Developer consisting of not more than 42.5681 acres labeled as Parcel “1” as shown on **Exhibit A-1** (the “Stadium Project Site”), and the Authority, as lessor, will lease the Stadium Project Site to an affiliate of the Developer, Primacy Development, LLC, a Delaware limited liability company (such affiliate being referred to herein as “StadCo”), as lessee, pursuant to a long term lease and operating agreement consisting of a minimum term of thirty (30) years (the “Stadium Lease”). The Authority shall not approve or execute the Stadium Lease without the prior written approval of the City.

As the owner of the Stadium, the Authority shall retain the sole and exclusive right to enter into agreements (“Seat Rights Agreements”) to provide for the sale, license or other transfer of personal seat location rights (“Seat Rights”) with respect to certain specific seats in the Stadium in order to generate revenues to be applied by the Authority to fund the construction of the Stadium. The Authority shall, in the Development Agreements or in other agreements, retain StadCo or StadCo’s designee to act as the Authority’s agent in marketing and selling, licensing or otherwise transferring Seat Rights. Seat Rights will include priority purchase rights with respect to certain ticketed events in the Stadium, subject to enumerated terms and conditions in the Seat Rights Agreements. Proceeds from the sale, license or other transfer of Seat Rights will be collected by or on behalf of the Authority for the benefit of the Stadium and must be unequivocally dedicated to and used to fund the construction of the Stadium. Upon termination or expiration of any Seat Right, including upon the full performance of any Seat Rights Agreement, the Authority as the owner of the Stadium shall retain the sole and exclusive right to enter into additional Seat Rights Agreements to provide for the sale, license or other transfer of Seat Rights with respect to the relevant seats in the Stadium. The Developer represents and warrants to the City that, prior to the execution and effectiveness of the Stadium Lease, the Seat Rights Agreements will not cause the Authority to incur a bond, note, or other legal indebtedness and that any obligations of the Authority under the Seats Rights Agreements can be discharged by termination or assignment of the Authority’s obligations under such Seat Rights Agreements.

7. Consistent with Ohio Revised Code Section 349.04, the board of trustees governing the Authority (the “Board”) shall initially consist of nine (9) members.

The initial members of the Board shall be appointed as follows:

- (a) One (1) local government representative shall be appointed by resolution of City Council, which resolution shall be consented to by the Mayor, to serve as a representative of local government;

- (b) Four (4) citizen members shall be appointed by resolution of City Council, which resolution shall be consented to by the Mayor, to represent the interests of present and future residents and employers within the District; and
- (c) Four (4) developer members shall be appointed by the Developer to represent the interests of the Developer; provided, that no more than two (2) developer members appointed by the Developer may be individuals who are not actually employed by the Developer, an affiliate of the Developer, or StadCo.

No elections shall be held for the selection of successor Board members. City Council, in its capacity as the organizational board of commissioners, shall establish an alternative Board selection process through City Council legislation, pursuant to Ohio Revised Code Section 349.04, to continue the selection of Board members by appointment. The alternative Board selection process for Board members that succeed to the initial members of the Board shall provide as follows:

- (a) Until such time as City Council shall determine that the initial planned development of the Overall Project (as defined in Section (A) of Exhibit C) within the District, including any Additional Properties, is substantially complete, the Mayor shall select successor local government and citizen members of the Board by appointment and the Developer shall select successor developer members of the Board by appointment; and
- (b) Upon the earlier to occur of (I) a determination by City Council that the initial planned development of the Overall Project within the District, including any Additional Properties, is substantially complete, or (II) the expiration of the initial thirty-year (30-year) term of the Stadium Lease, City Council may further modify the process for selecting Board members to be determined by City Council, and may, in its sole discretion, determine to reduce the size of the Board from nine (9) members to seven (7) members by removing one (1) citizen member (to be selected by the Mayor from among the then-seated citizen members of the Board) and one (1) developer member (to be selected by the Developer from among the then-seated developer members of the Board).

8. Attached to this Petition as Exhibit C is a current plan indicating the proposed “new community development program” (as that term is defined in Ohio Revised Code Section 349.01(B)) for the District, the land acquisition and land development activities, community facilities, services proposed to be undertaken by the new community authority under such program, the proposed method of financing such activities and services, including a description of the bases, timing, and manner of collecting any proposed community development charges, and the projected total residential population of, and employment within, the District (the “Development Program”). The Authority shall have the legal authority to carry out the Development Program as a “new community development program” defined in Ohio Revised Code Section 349.01(B), but shall not have authority to undertake activities other than the Development Program contemplated by this Petition unless such activities are expressly authorized by City Council.

The development period for the Stadium to be constructed by the Authority will commence upon Authority formation and will continue until the later of the following: (a) the expiration of the Stadium Lease and all renewal terms; or (b) any bonds, notes, or other obligations issued by the Authority or another governmental issuer of bonds to fund costs of Stadium construction are retired and are no longer outstanding (the “Stadium Development Period”).

The Stadium Lease shall require that capital repairs and improvements (“Stadium CapEx”) and ordinary maintenance and repair will be executed by StadCo on behalf of the Authority. StadCo shall

prepare an annual capital repairs and improvements budget (the "Capital Repairs and Improvements Budget") based upon, among other things, a facility audit and capital asset management plan prepared every five (5) years during the term of the Stadium Lease by an independent, nationally recognized and experienced inspecting engineer (the "Inspecting Engineer"). The facility audit and capital asset management plan will identify the capital repairs and improvements recommended by such Inspecting Engineer in order for the Stadium to meet the standard for capital repairs and improvements under the Stadium Lease (the "Stadium Capital Asset Management Plan"). The Capital Repairs and Improvements Budget will address the capital repairs and improvements required by the Stadium Capital Asset Management Plan as well as (a) any other capital repairs and improvements deemed necessary or desirable by StadCo as operator of the Stadium, and (b) any other capital repairs and improvements required by the Authority in accordance with the last sentence of the following paragraph. The Capital Repairs and Improvements Budget will include such reserves as may be required in connection with any capital repair or improvement included in the Stadium Capital Asset Management Plan or any future capital repair or improvement schedule determined as necessary by StadCo to maintain compliance with the standard for capital repairs and improvements under the Stadium Lease, all as reasonably determined by StadCo.

During the Stadium Development Period, a Stadium CapEx committee of the Board (the "Stadium CapEx Committee") will have the authority to approve or reject the Capital Repairs and Improvements Budget and such approval will not be unreasonably withheld, conditioned or delayed. The Authority, upon favorable recommendation from the Stadium CapEx Committee, will reasonably approve all capital repairs and improvements included in such Capital Repairs and Improvements Budget. The Stadium CapEx Committee shall consist only of trustees (a) appointed by the City, and (b) appointed by the Developer and actually employed by the Developer, an affiliate of the Developer, or StadCo; provided, however, upon approval of the Board, such Stadium CapEx Committee may include other employees of the City, Authority or Developer in lieu of, or in addition, to the Board members included upon the Stadium CapEx Committee. Trustees appointed by the Developer who are not actually employed by the Developer, an affiliate of the Developer, or StadCo will not participate in Stadium CapEx Committee decisions. The Stadium CapEx Committee and the Authority shall have the right to require that capital repairs and improvements be added to the Capital Repairs and Improvements Budget, including capital repairs or improvements not contemplated by the Capital Repairs and Improvements Budget or the Stadium Capital Asset Management Plan, if (a) (i) any such additional capital repairs or improvements do not materially impact the Stadium structure or operations and (ii) there exists a funding commitment from the City for such additional capital repairs or improvements, or (b) HSG approves such additional capital repairs or improvements.

Authority funding for Stadium CapEx, the Stadium Capital Asset Management Plan, the Capital Repairs and Improvements Budget, and any required reserves are subject to approval by the Authority as provided in the Stadium Lease and the Development Agreements and such approval will not be unreasonably withheld, conditioned or delayed. The Development Agreements shall contain necessary provisions to implement the requirements of this Section 8. The bylaws of the Authority shall contain necessary provisions to implement the requirements of this Section 8 in accordance with Ohio Revised Code Section 349.04.

9. Attached to this Petition as Exhibit D-1 is a preliminary economic feasibility analysis, including the area development pattern and demand, location and proposed District size, present and future socio-economic conditions of the area comprising the District, a description of public services to be provided with respect to the area including the District, a financial plan with respect to the area including the District, and a statement of the Developer's management capability. The development of the Property will occur in accordance with the PUD Ordinance (defined below), will complement the Brook Park Master Plan, attached to this Petition as Exhibit D-2, as set forth in Section (B)(i) of Exhibit C, and will comply with the Traffic Impact Study for the Property, attached to this Petition as Exhibit D-3.

10. The development of the Property will comply with all applicable environmental laws and regulations. Current and future environmental remediation of the Property, including the issuance of a Covenant Not to Sue (23NFA849) by Ohio EPA, supports a determination by City Council that the development of the Property will be conducive to the public health, safety, convenience, and welfare. The Developer agrees, for the benefit of the Authority and the City, to comply with all Federal and state environmental laws and regulations applicable to the Property and to maintain compliance with the terms and conditions of the Covenant Not to Sue (23NFA849) issued by Ohio EPA pertaining to the Property and any revisions or amendments thereto, and the Developer shall include, in all conveyance documents of all or any portion of the Property (other than conveyance documents to the Authority or City) entered into by Developer or any affiliate of Developer, an obligation, benefitting the Developer, the Authority and the City, to comply with all Federal and state environmental laws and regulations applicable to the Property and to maintain compliance with the Covenant Not to Sue (23NFA849) issued by Ohio EPA pertaining to the Property and any revisions or amendments thereto. The Developer shall cause one or more parties other than the City and the Authority to assume all environmental liabilities arising out of or related to the Property. The Developer shall indemnify the City and the Authority with respect to all environmental liabilities arising out of or related to the Property. The Authority, prior to owning any portion of the Property, shall have the right to obtain a Phase I environmental site assessment with respect to such portion of the Property, and the Developer shall advance funds to the Authority to pay such costs. In the event the Phase I environmental site assessment finds recognized environmental conditions or recommends further action or investigation, the Authority shall have the right to conduct additional due diligence and complete such further action or investigation in its sole discretion, and the Developer shall advance funds to the Authority to pay such costs.

11. Pursuant to the Act and subject to obtaining any necessary legislation and appropriation of funds, the City, through its appropriate director, officer, or official, is authorized to enter into one or more contracts with the Authority to carry out the Development Program authorized by this Petition, including, without limitation, contracts authorized pursuant to Ohio Revised Code Section 349.06(I), 349.06(N), 349.06(S). Pursuant to Ohio Revised Code Section 349.13, the City and any governmental entity or agency may, notwithstanding any contrary provision of law, lease, lend, grant, or convey to the Authority at the Authority's request, or lease, borrow, accept, or receive from the Authority upon such terms as the City, such governmental entity or such agency deem reasonable and fair and without the necessity for and advertisement, auction, order of court, or other action or formality other than the regular and formal action of the entity concerned, any real property or interests therein including improvements thereto or personal property which is necessary or convenient to the carrying out of the Development Program authorized by this Petition, including public roads, community facilities and other real property or interests therein, including improvements thereto, or personal property already devoted to public use; and provided further that, the City may enter into any and all contracts and agreements with the Authority for the provision by the Authority of coordination and management service, for all or any portion of the activities and other matters relating to carrying forward the Development Program.

12. The City may elect to have the Developer assign its responsibilities as "developer" of the Authority, as such term is defined in Ohio Revised Code Section 349.01(E), to the City upon the later to occur of (I) City Council's determination that the development of the District, including any Additional Properties, is substantially complete, and (II) the expiration of the initial thirty-year (30-year) term of the Stadium Lease. Following the election of the assignment by the City, the Developer shall execute any necessary instruments to effectuate such assignment and the City will subsequently perform the responsibilities of the "developer" of the Authority under the Act. The City may determine to perform the responsibilities of the "developer" of the Authority directly or to assign such responsibilities to another party eligible under the Act. Such assignments shall not alter or abrogate the responsibilities of the Developer to perform its obligations under this Petition or any other agreements that it may have now or at such time with the City or the Authority.

13. In accordance with Ohio Revised Code Sections 349.03 and 349.14, the Authority may be dissolved by formal request of the Board by resolution and with the concurring approval of City Council by resolution or ordinance. Unless otherwise agreed by all obligees of the Authority, the Authority may not be dissolved by request of the Board so long as (a) any bond, note or other legal indebtedness of the Authority remains outstanding, (b) the Authority owns any portion of the District, or (c) the Development Program remains incomplete, as determined by the Board. The Authority shall provide not less than thirty (30) days' written notice to the City and City Council of consideration by the Board of formal action regarding dissolution of the Authority. In accordance with Ohio Revised Code Section 349.14, the Authority may also be dissolved by City Council under certain circumstances identified in one or more resolutions of City Council; provided, that in no event shall the Authority be dissolved so long as any bond, note or other legal indebtedness of the Authority remains outstanding.

Attached Exhibits A-1, A-2, A-3, A-4, B, C, D-1, D-2 and D-3 are incorporated and made a part of this Petition.

In consideration of the foregoing, the Developer hereby requests that City Council, as the organizational board of commissioners under Ohio Revised Code Section 349.03, determine that this Petition is sufficient and complies as to form and substance with the requirements of Ohio Revised Code Section 349.03, and further requests that City Council fix the time and place of a hearing on this Petition for the establishment of the Authority. That hearing must be held not less than thirty (30) nor more than forty-five (45) days after the filing of this Petition with the Clerk of Council.

Notwithstanding the foregoing, the Developer reserves the right to withdraw this Petition and terminate the proceedings for the creation of the Authority at any time at least twenty-four (24) hours prior to the commencement of the City Council meeting at which an ordinance declaring that the Authority is to be organized and a body corporate and politic under Ohio Revised Code Section 349.03(A) is scheduled for approval. Accordingly, if City Council timely receives written notice from the Developer exercising its right to withdraw this Petition, then this Petition shall be deemed withdrawn, City Council shall take no further action upon this Petition, and the proceedings for the creation of the Authority shall be null and void.

[Signature page follows]

EXHIBIT A-2

LEGAL DESCRIPTION OF PARCELS WITHIN DISTRICT

Situated in the City of Brook Park, County of Cuyahoga and State of Ohio, and known as being Parcels "1", "2", "3", "4", "5", and "6" on that certain Brook Park Stadium Plat prepared by Terrence E. Worsech (Registered Survey No. 8138-Ohio) of Neff & Associates for HSG BP Development, LLC, dated February 24, 2026 executed by City Council on February 26, 2026 , and recorded on May _____, 2026, among the Cuyahoga County Records as Instrument No. _____.

EXHIBIT A-3

DESCRIPTION OF BOUNDARIES OF DISTRICT



Level 1 Survey • Fieldwork • Engineering • Planning • Construction

Legal Description
18300 Snow Road
Overall Parcel B-1 & CEI Parcels
September 11, 2025
File No. 14541C-LD001
Page 1 of 3

Situated in the City of Brook Park, County of Cuyahoga, State of Ohio and being known being Parcel "B-1" in the Lot Split Plat made for and at the instance of DROF BP LLC, being part of Original Middleburgh Township Lot Nos. 4 & 5 in Section 10 and Lot Nos. 2, 3 and 5 in Section 11, as shown by the recorded plat in AFN 202209190343 of Cuyahoga County Records and other land of Original Middleburgh Township Lot Nos. 3, Section 11 and Lot No. 4 Section 10 and also and is further bounded and described as follows:

Beginning at a 3/4" iron pin monument found at the intersection of the centerline of Henry Ford Road (A.K.A. Engle Road) (State Route 291) (90 Feet Wide) and the centerline of Hummel Road (40 Feet Wide);

Thence North 89°30'10" West, along the extension of the centerline of said Hummel Road, a distance of 44.52 feet to the Westerly right of way of said Henry Ford Road;

Thence North 02°37'42" East, a distance of 1.56 feet to a MAG Nail found at the point of curvature and being the principal place of beginning of the parcel hereinafter described:

- Course 1 Thence by the arc of a curve deflecting to the right, along the Westerly right of way of said Henry Ford Road, a distance of 660.52 feet to a point of tangency and witnessed by a capped iron pin (MSG) found North 15°57'11" West, a distance of 0.64 feet. Said arc having a radius of 909.93 feet, a central angle of 41°37'55" and a chord which bears South 23°22'20" West, a distance of 646.08 feet;
- Course 2 Thence South 44°10'05" West, continuing along the Westerly line of said Henry Ford Road, a distance of 1081.56 feet to a point of curvature and witnessed by a capped iron pin (MSG) found North 60°42'34" West a distance of 0.58 feet;
- Course 3 Thence by the arc of a curve deflecting to the right, along the Northerly right of way of Snow Road Extension (Width Varies), a distance of 833.02 feet to a point of tangency and witnessed by a MAG nail in concrete found North 64°07'46" West, a distance of 1.06 feet. Said arc having a radius of 1001.66 feet, a central angle of 47°40'16" and a chord which bears South 67°59'35" West, a distance of 809.22 feet;

Legal Description
18300 Snow Road
Overall Parcel B-1 & CEI Parcels
September 11, 2025
File No. 14541C-LD001
Page 2 of 3

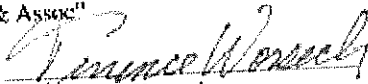
- Course 4 Thence North $88^{\circ}10'56''$ West, along the Northerly right of way of said Snow Road Extension, a distance of 981.52 feet to a MAG nail found at the Southeast corner of Parcel B-2 as shown in the said Lot Split Plat for DROF BP I LLC;
- Course 5 Thence North $01^{\circ}49'04''$ East, along the Easterly line of said Parcel B-2, a distance of 1742.63 feet to a capped iron pin (Bohning) found at the Northeast corner of said Parcel B-2;
- Course 6 Thence North $88^{\circ}10'46''$ West, along the Northerly line of said Parcel B-2, a distance of 630.26 feet to a capped iron pin (Bohning) found at the Northwest corner of said Parcel B-2 and on the Easterly line of a Pennsylvania Lines LLC parcel;
- Course 7 Thence North $31^{\circ}40'37''$ East, along the Easterly line of said Pennsylvania Lines LLC parcel a distance of 1288.36 feet to the Southwest corner of Parcel "A" as shown in Lot Split and Consolidation Plat for Ford Motor Co. as shown in recorded plat in AFN 202103050651 of Cuyahoga County Records and witnessed by a capped iron pin (illegible) found South $86^{\circ}57'00''$ East, a distance of 2.00 feet;
- Course 8 Thence South $86^{\circ}57'00''$ East, along the Southerly line of said Parcel "A", a distance of 1287.15 feet to a MAG nail found at an interior corner of said parcel;
- Course 9 Thence North $02^{\circ}29'31''$ East, along a Easterly line of said Parcel "A", a distance of 491.02 feet to a MAG nail found at an interior corner of said parcel;
- Course 10 Thence South $87^{\circ}15'27''$ East, continuing along the Southerly line of said Parcel "A", a distance of 1405.03 feet to a MAG nail found at the Southeast corner of said parcel and on the Westerly right of way of said Henry Ford Road;
- Course 11 Thence South $02^{\circ}34'44''$ West, along the Westerly right of way of said Henry Ford Road, a distance of 1573.67 feet to the principal place of beginning and containing **177,7239 Acres (7,741,655 Square Feet)** of land according to a survey by Terrence E. Warsech, Ohio Registered Surveyor Number 8138, dated November, 2024.

Legal Description
18300 Snow Road
Overall Parcel B-1 & CEI Parcels
September 11, 2025
File No. 14541C-LD001
Page 3 of 3

Be the same more or less, but subject to all legal highways and easements of record.

Basis of bearing for this survey is Grid North as established by NAD83 (2011) Ohio State Plane Coordinate System, North Zone (3401) as observed by GPS Observations.

Monuments described as "iron pin set" are 5/8" x 30" rebur capped
"Neff & Assoc"


Terrence E. Worsch
Registered Surveyor No. 8138-Ohio

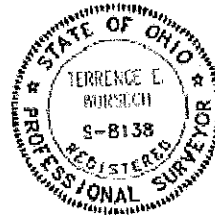


EXHIBIT A-4
REGIONAL MAP

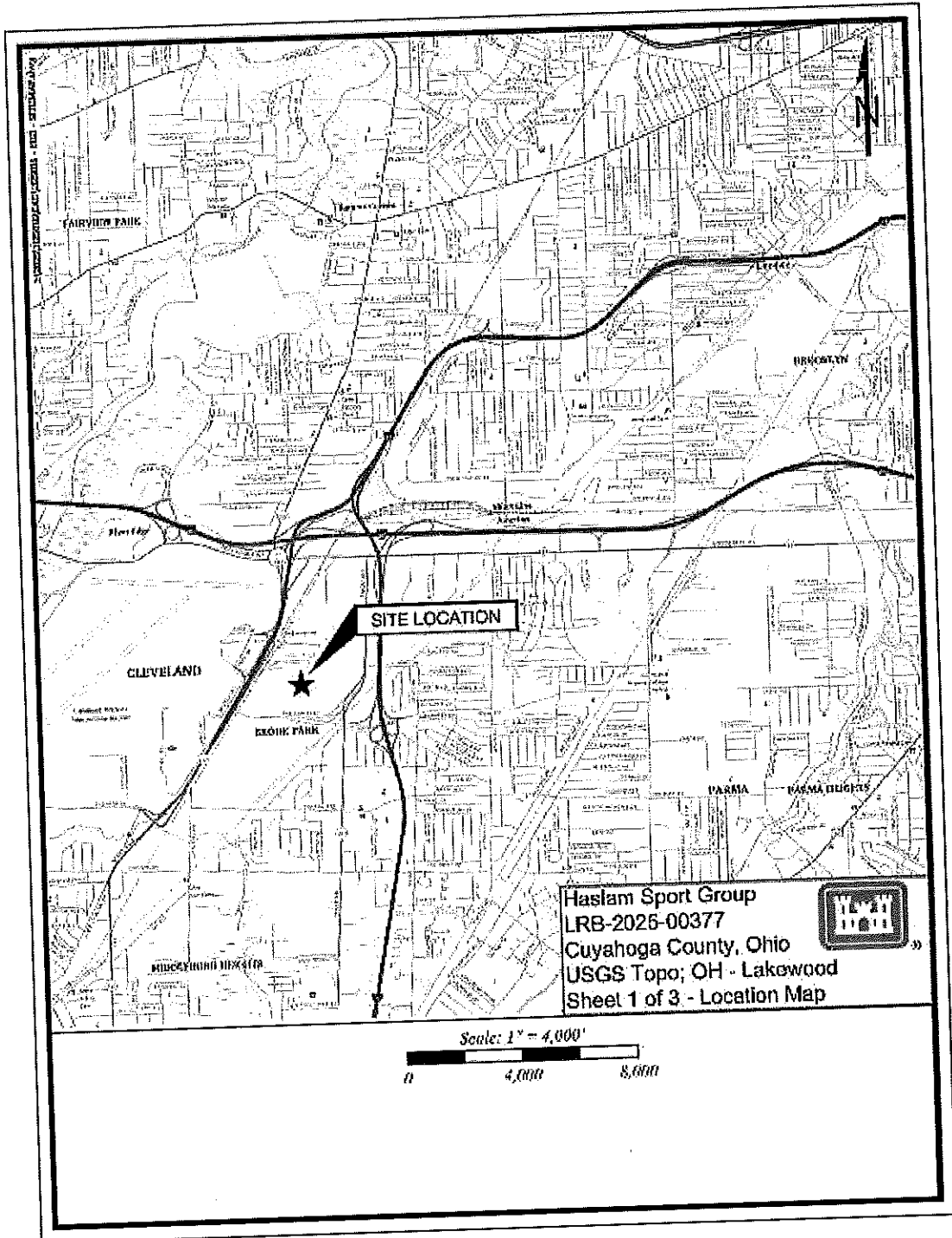


EXHIBIT B
ZONING REGULATIONS APPLICABLE TO DISTRICT

CITY OF BROOK PARK, OHIO

P/C _____
CA SP 7/21/25
1st R 7/21/25
2nd R 9/19/25
3rd R _____
C/L _____

ORDINANCE NO: 11478-2025

INTRODUCED BY: COUNCILMEMBERS MENCINI, ROBERTS, SCOTT, DUFOUR, McCORKLE,
POINDEXTER AND COUNCIL PRESIDENT SALVATORE

**AN ORDINANCE
ENACTING CHAPTER 1128
OF THE BROOK PARK CODIFIED ORDINANCES, ENTITLED
'PLANNED UNIT DEVELOPMENT DISTRICT'**

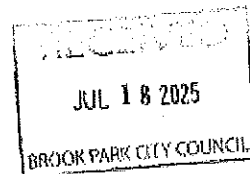
WHEREAS, the planning commission met on July 8, 2025 regarding the rezoning of 343-02-003, 342-07-002, and 342-18-005, and approved the proposed planned unit development district and the rezoning.

NOW THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: That Chapter 1128 of the Brook Park Codified Ordinances, entitled "Planned Unit Development District" is hereby enacted to read as follows:

**CHAPTER 1128
Planned Unit Development District**

- 1128.01 Planned Unit Development.
- 1128.02 Intent.
- 1128.03 Permitted Uses.
- 1128.04 Prohibited Uses.
- 1128.05 PUD Planning Guidelines.
- 1128.06 Building Height Limitations.
- 1128.07 Signs.
- 1128.08 Design Standards.
- 1128.09 Preliminary Development Plan.
- 1128.10 Final Development Plan.
- 1128.11 PUD plan modification procedure.



1128.12 Appeals, Modifications, and Miscellaneous.

1128.01 PLANNED UNIT DEVELOPMENT.

(a) Establishment of PUD District. The PUD District is hereby established for and applied to the area described on Exhibit A attached to Ordinance No. 11478-2025, passed August 21, 2025, and incorporated herein by reference as if fully set forth herein.

(b) Definitions. For the purposes of this Chapter 1128, the following definitions shall apply:

1. "PUD District" shall mean a Planned Unit Development District, established in accordance with the terms and conditions of this Chapter 1128.
2. "Preliminary Development Plan" shall mean a preliminary development plan reflecting the conceptual master plan for all or any portion of the PUD District.
3. "Final Development Plan" shall mean a final development plan for all or any portion of the Preliminary Development Plan reflecting the confirmed location, use, density and height of buildings, access drives, plazas and public spaces, parking areas, landscaping, and the other information required under this Chapter 1128.
4. "Sports Facility" shall mean any stadium, arena, sports complex, forum or dome and all architectural features or improvements attached thereto or forming an integral part thereof, including, parking facilities, public plaza areas and improvements, security and media facilities and other associated improvements, and any stadium-related retail or commercial use improvements approved by the Planning Commission; but excluding any mixed-use development such as retail, residential, hotel, and office and parking uses unrelated to the stadium.
5. "Project" shall mean any phase of development pursuant to the Final Development Plan.
6. "Zoning Ordinance" shall mean Chapters 1121-1128 of the Brook Park Codified Ordinances

1128.02 INTENT.

The purpose of the PUD District is to promote innovative, creative, and efficient land development designs that may not be feasible under existing Brook Park Building and Zoning guidelines and standards. This objective is achieved by permitting a mixture of allowed and complementary uses and/or allowing modifications or variations from otherwise applicable guidelines and standards.

In exchange for this flexibility, the PUD District is expected to deliver a high-quality sports entertainment district, featuring creative designs in building layouts, open spaces, and circulation and providing greater efficiency in the layout and provision of roads, utilities, and other infrastructure features.

Due to the large scale and complex nature of the PUD District, this Chapter 1128 acknowledges that the development of infrastructure and improvements may occur in multiple parts or phases over many years. During this time, the initial approvals and rights will remain in full force and effect, subject to the terms and conditions outlined in this Chapter 1128.

In the event of a conflict between the provisions contained in this Chapter or approvals granted under this Chapter and other provisions in the Codified Ordinances of The City of Brook Park or approvals required thereunder, the provisions, regulations and approvals within, and provided under, this Chapter shall take precedence and shall govern and control.

1128.03 PERMITTED USES.

- (a) Any land use or combination of uses may be considered for inclusion in the PUD District, except as provided in Section 1128.04. Without limiting the generality of the foregoing, any property located in the PUD District may be used, in whole or in part, for any combination of the following uses and purposes: (i) a Sports Facility and all uses and purposes ancillary thereto; (ii) commercial, restaurant and retail, hotel, hospitality, entertainment, health care, hospital, residential, office, warehouse, governmental, and public; (iii) any land use currently permitted under the following Use Districts: Class U-1 Use District, Class U-2 Use District, Class U-3 Use District, Class U-3A Use District, Class U-3B Use District, Class U-3C Use District, Class U-3D Use District, Class U-4 Use District, Class U-5A Use District, Class U-5B Use District, Class U-5C Use District and Class U-6 Use District; (iv) uses not permitted in this Section and not prohibited by Section 1128.04, only after issuance of a Conditional Use Permit therefor pursuant to Section 1121.34; and (v) any uses accessory thereto or compatible with all of the foregoing, all subject to the standards, restrictions and conditions of this Chapter 1128, and in accordance with the plan of uses per the approved Final Development Plan.
- (b) All buildings and uses proposed shall be designed, constructed, occupied and maintained as per the approved Final Development Plan in accordance with this Chapter 1128.

1128.04 PROHIBITED USES.

- (a) Adult entertainment businesses as defined in Section 1121.021 of this Zoning Ordinance shall be prohibited in the PUD District.
- (b) Smoke shops as defined in Section 1121.23(o) (1) (d) (1) shall be prohibited in the PUD District.

1128.05 PUD PLANNING GUIDELINES.

The following planning guidelines are established to guide the planning, development and use of the land in a PUD District:

- (a) The proposed uses shall be consistent with the planning goals, policies, objectives, and standards provided in this Chapter 1128.
- (b) Building arrangements shall encourage variety in the bulk and shape of the buildings, open space and landscape features. The structures may be arranged in various groups, courts or clusters with open spaces related to the buildings so as to provide privacy and form a unified composition of buildings and open spaces. While flexibility in design is encouraged, design standards shall be incorporated in the Final Development Plan.
- (c) Developments shall be designed to utilize the natural contours of the land, economize in the construction of utilities, reduce the amount of grading, and to maximize the conservation of trees and topsoil. Within the PUD District, permanent utility service including gas, electric, cable, and telephone shall be installed underground; provided, that high voltage electric transmission lines owned and maintained by a utility provider and providing electricity to the PUD District are excluded from this requirement and may be installed above ground. Water and sewers shall be installed in compliance with Chapter 1410 and Title Three of Parts Nine, Eleven and Thirteen of the Brook Park Codified Ordinances; provided, however, that nothing in this Section 1128.05(c) shall prevent the construction and operation of temporary above-ground utility services during development of the PUD District.
- (d) Storm water management basins, if required, shall be designed to be an integral part of the development. The storm water management plan shall be sufficient to meet Chapters 921, 922, and 1410 of the Brook Park Codified Ordinances.
- (e) The uses within the PUD District may be mixed within the district or within a single structure located in the PUD District.
- (f) Recognizing the physical characteristics of property in the PUD District, and the needs of a developer for flexibility, any project contemplated in a Preliminary Development Plan may be developed in multiple phases or parts over a period of years.
- (g) Any proposed development shall provide for adequate service of essential public services including water, sewer, gas, and electric.
- (h) Any proposed development shall provide how it will be adequately served by essential public road systems, and all internal streets and thoroughfares shall be suitable and adequate to carry anticipated traffic; and the development shall provide adequate and appropriate ingress and egress to public thoroughfares adjacent to the development.
- (i) The proposed development shall allow for safe and efficient pedestrian access within the development.

- (j) Adequate provision shall be made for the ownership and ongoing maintenance of designated public open spaces and buffer zones, as well as any private drives, pedestrian walkways, and storm water management facilities.
- (k) The proposed development shall provide a landscaping plan that complies with any applicable design standards and includes plans for interior parking areas, common areas, and perimeter buffer zone landscaping.
- (l) The proposed open space and public improvements to be publicly dedicated shall be constructed in accordance with applicable design standards and in a manner appropriate for public acceptance.
- (m) The proposed development shall provide for open spaces, potentially including pedestrian walkways and paths, outdoor dining areas, public plazas and gathering areas, public art or exhibitions, and other items for passive or active recreation uses.
- (n) It is intended that the terms and conditions of an approved Preliminary Development Plan or Final Development Plan (including the design standards that are a part of the approved plan) shall govern and control over any other provision of the Zoning Ordinance. Without limiting the generality of the foregoing, unless otherwise expressly provided in this Chapter 1128, (i) no features of any Project approved under a Preliminary Development Plan or Final Development Plan shall be limited or restricted by any other provisions of the Zoning Ordinance, (ii) the terms and conditions of an approved Preliminary Development Plan or Final Development Plan shall exclusively control all matters within the PUD District addressed therein, such as site layout (e.g. lot size, width, lot coverage, setbacks, buffer areas, open spaces, entrances and drives, sidewalks, circulation and similar matters), design and architectural standards, density, massing, landscaping, height, signage, parking and loading, storm drainage, utilities and equipment design and location, screening, fencing, noise and other similar or related features, and (iii) to the extent questions arise on any Project that concern the subject matter covered in an approved Preliminary Development plan or Final Development Plan, such questions shall be addressed under the terms and processes established in this Chapter 1128, including, as needed, minor or major modifications, rather than by referring the matter to superseded provisions of the Zoning Ordinance.

1128.06 BUILDING HEIGHT LIMITATIONS.

- (a) The height of any building in a PUD District shall satisfy applicable fire and safety regulations.
- (b) The height limits established shall not exceed those limits that are set by the Federal Aviation Administration unless a variance is permitted by the Federal Aviation Administration.

1128.07 SIGNS.

Any signs shall be approved as part of the approval of the Preliminary Development Plan or Final Development Plan Approval, subject to any modifications approved in accordance with Section 1128.11 below, and subject to any applicable design standards created pursuant to Section 1128.08.

1128.08 DESIGN STANDARDS.

- (a) Establishment of Design Standards. Design standards shall be established through the Preliminary Development Plan and Final Development Plan process. The design standards shall include, but are not limited to, architectural character and buildings massing, exterior finish materials of buildings, basic design of streets, street furniture and fixtures, street lighting, standards for all street and exterior building signage, general landscaping design, sidewalk and pedestrian plaza design criteria. Except for those specifically applicable to this PUD District, no other design standards and/or guidelines in the Codified Ordinances shall be applicable to the PUD District, provided that standards regarding public streets and public services must be in accordance with Part 9, Chapters 901-942 of Brook Park Codified Ordinances.
- (b) Prior Application Process. Prior to preparing or submitting a complete application for a Preliminary Development Plan pursuant to Section 1128.09, an applicant should meet with the Building Commissioners and/or other administering officials designated by the City to present the concept of the proposed development and to discuss the purpose, intent, objective, scope and requirements of this Chapter 1128 and the standards for development plan approval.
- (c) Application Process. An applicant for approval of a Preliminary Development Plan shall file an application on a form or forms provided by the City. The applicant shall include evidence of the authority to file the Preliminary Development Plan. The applicant shall include the information required for a Preliminary Development Plan as set forth in Section 1128.09.

1128.09 PRELIMINARY DEVELOPMENT PLAN.

- (a) Review of Preliminary Development Plan. Within forty-five (45) days after receipt of the application and Preliminary Development Plan, the Planning Commission shall either approve, approve with conditions, or deny the Preliminary Development Plan for the proposed PUD District. The Planning Commission shall prepare a report and recommendation on matters of conditional use permits, rezoning, lot split/consolidation, antennas, and cell towers and deliver it to the Clerk of City Council within forty-five (45) days of Planning Commission approval. Within thirty (30) days following receipt of the report and recommendation of the Planning Commission, City Council shall review and

consider such report and recommendation and take final action by either approving, approving with conditions, or disapproving the items in said report and recommendation.

- (b) Preliminary Activity. No construction activity, including tree/vegetation removal or grading, on property in the PUD District shall be permitted until a Preliminary Development Plan for such property has been approved in accordance with this Chapter, except that tree/vegetation removal, demolition, grading, site preparation and remediation and utility installation and/or relocation may be permitted upon approval of the Building Commissioner, City Engineer, and City Fire Prevention and in compliance with applicable provisions of the Brook Park Codified Ordinances.
- (c) Preliminary Development Plan Contents. The applicant shall present evidence of authority to present the Preliminary Development Plan. An application for approval of a Preliminary Development Plan shall include the following information and shall be accompanied by the required fee:
- (1) A narrative description of the proposal including how the development contemplated by such Preliminary Development Plan is consistent with this Chapter and shall specifically set forth preliminary information concerning the anticipated plan for proceeding with the development in phases, or developing the area covered by the Plan, in phases.
 - (2) A conceptual master site plan for the area included within the Preliminary Development Plan identifying the following: proposed building footprints, uses and height; public and private roads and drives; parks; plaza development structures; plaza aesthetics; open spaces; landscape plans; parking structures and parking areas; and any adjacent or included public transit facilities.
 - (3) The design standards relating to the buildings and other structures located within the Preliminary Development Plan area.
 - (4) Building and way-finding signage design standards.
 - (5) The amount of land area intended to be dedicated for each type of land use shall be indicated. Calculations of planned density and open space area shall be indicated. A table summarizing the various uses contemplated by the Preliminary Development Plan and the maximum permitted density and square footage of each such use within the Preliminary Development Plan area.
 - (6) Location of all existing structures, if any, located within the Preliminary Development Plan area as of the application date, and within twenty-five (25) feet of the boundary of the proposed Preliminary Development Plan area.
 - (7) Location of existing and proposed public and private streets, parking, pedestrian walkways, storm water management facilities and storm/sanitary sewer, water and

other utility lines and facilities where such lines and facilities first enter the Preliminary Development Plan area.

- (8) Approximate location of preliminary open space areas, including calculation of the area of such open space.
 - (9) A delineation of all known wetlands within the Preliminary Development Plan area.
 - (10) A traffic study relating to the Preliminary Development Plan area.
 - (11) A topographic survey and engineering drawings of the area included in the Preliminary Development Plan.
 - (12) Existing parcels contained within the Preliminary Development Plan area.
 - (13) Preliminary plan of interior open space, including calculation of the area of such open space.
 - (14) The plan for minimum peripheral setbacks and buffer zones around the perimeter of the Preliminary Development Plan area.
 - (15) Contact information and proof of ownership or of a contract, option or agreement showing control of the property.
 - (16) Location, type and size of any easements, covenants, deed restrictions and other restrictions proposed or recorded.
 - (17) Any other documents requested by the Building Commissioner, Engineer, and Fire Department including but not limited to the previously listed items.
- (d) Expiration. The approval of a Preliminary Development Plan shall expire if a Final Development Plan has not been submitted, for any phase of the Preliminary Development Plan, consistent with the requirements of Section 1128.10 prior to the fifth (5th) anniversary of the date of approval of the Preliminary Development Plan. This period may be extended for up to twenty-four (24) calendar months by the Planning Commission, after an extension request has been submitted and approved by the Planning Commission. If at the end of the above referenced five (5)-year period, as the same may be extended, a Final Development Plan has not been submitted for any phase of the development, then the approval of the Preliminary Development Plan shall expire and shall be of no effect unless resubmitted and approved in accordance with the previous provisions of this Section 1128.09.
- (e) Appeals. A denial of the Preliminary Development Plan by the Planning Commission may be appealed to City Council by written notice within thirty (30) days of the date such denial was issued. Unless extended by mutual agreement of the applicant and City Council, City Council shall hold a hearing on the appeal within thirty (30) days of receipt of written

notice of appeal and will issue a decision within thirty (30) days of the hearing affirming or reversing the denial. Any decision by City Council shall be a final appealable order, and the appealing party may seek judicial review of such administrative action in a court of competent jurisdiction.

1128.10 FINAL DEVELOPMENT PLAN.

- (a) Submission of Final Development Plan. After approval of the Preliminary Development Plan, a Final Development Plan shall be submitted to the Planning Commission. The Final Development Plan shall be in substantial conformance with the Preliminary Development Plan, including all the information as set forth in Section 1128.09, and shall comply with the following:
- (1) All the conditions imposed by the Planning Commission in the approval of such Preliminary Development Plan.
 - (2) All applicable design standards.
 - (3) All deed restrictions, dedications and covenants contemplated by the terms and conditions of the Final Development Plan are in acceptable form.
- (b) Review of Final Development Plan. The Planning Commission shall review the Final Development Plan and may make recommendations and conditions as to the placement and design of buildings, location of streets and driveways, amount and type of buffering, landscaping, lighting, and signs; provided, however, that the scope of any such review by the Planning Commission shall be limited to ensuring substantial conformance with the applicable Preliminary Development Plan. Within sixty (60) days of receipt of the Final Development Plan, the Planning Commission shall determine whether the Final Development substantially conforms to the applicable Preliminary Development Plan, and if so, approve the Final Development Plan. If the Final Development Plan is not in substantial conformance with the Preliminary Development Plan, then the Planning Commission may either approve or disapprove of the Final Development Plan, or request the applicant revise the Final Development Plan in conformance with the foregoing.
- (c) Phases. A Final Development Plan shall be submitted and approved prior to the application for building permits. The Final Development Plan may be phased for portions of the development. Each phase of development shall contain all necessary improvements to support that phase including but not limited to: storm water management, retention, access, fire protection, parking, lighting, landscaping, buffering and required trees. Each phase shall also comply with all other codes and ordinances of the City to the extent not inconsistent with the specific terms contained in this Chapter of the Brook Park Codified Ordinances.
- (d) Final Development Plan Contents. The following additional information, to the extent not previously provided in the application for approval of the Preliminary Development Plan, shall be submitted with the Final Development Plan:

- (1) Proposed parcels contained within the Final Development Plan area, including proposed parcel boundary lines, area dimensions, and parcel numbers to the extent available.
 - (2) Architectural plans for the proposed development showing project design, exterior elevations and building floor plans, and site construction materials, prepared and certified by a professional engineer, architect or surveyor.
 - (3) Verification of availability of all utilities, including water, sanitary sewer, gas, and electric.
 - (4) Final storm water management plan as part of a finish grading plan, and the location of all storm/sanitary sewers, water and other utilities including fire hydrants.
 - (5) General lighting plan for streets, parking areas and outside activity and/or storage areas, including the location, intensity, direction and shielding of outdoor lighting.
 - (6) Location and layout of all proposed and existing outdoor storage areas including storage of waste materials and location of trash receptacles.
 - (7) Landscape plan, with particular emphasis on perimeter buffer landscaping, park and open space landscaping, and parking area landscaping.
 - (8) Any applicable design standards, including but not limited to the following: (A) the location, size, height and arrangement of all proposed buildings and computations showing height in stories and feet, floor area ratio, total floor area, total square feet of ground area coverage of proposed and existing buildings which will remain, if any; (B) the number and size of dwelling units and the number of bedrooms in residential uses; (C) building separations and setbacks; and (D) a summary table analyzing the amount of common open space proposed within the Final Development Plan area, with a designation of any land intended to be publicly dedicated.
 - (9) Location, type and size of any easements, covenants, deed restrictions and other restrictions which will be imposed upon the use of the land, buildings and structures, including proposed easements or grants for public utilities.
 - (10) Location, height, size and arrangement of all outdoor signs.
 - (11) A soil erosion control plan for the period of project construction.
 - (12) Any other additional information deemed necessary by the Building Commissioner, Planning Commission, City Engineer, or other authorized official.
- (e) Binding Effect of Approved Final Development Plan. An approved Final Development Plan shall become a binding commitment as to the specific elements approved for development, and shall be binding on the owner, and its successors and assigns.

- (f) Concurrent Submissions. Notwithstanding any provision of this Chapter 1128 to the contrary, a Final Development Plan, or any element thereof, may be submitted concurrently with a Preliminary Development Plan for any phase of any Project, thereby eliminating duplicative review and approval under this Chapter 1128.
- (g) Appeals. A denial of the Final Development Plan by the Planning Commission may be appealed to City Council by written notice within thirty (30) days of the date such denial was issued. Unless extended by mutual agreement of the applicant and City Council, City Council shall hold a hearing on the appeal within thirty (30) days of receipt of written notice of appeal and will issue a decision within thirty (30) days of the hearing affirming or reversing the denial. Any decision by City Council shall be a final appealable order, and the appealing party may seek judicial review of such administrative action in a court of competent jurisdiction.

1128.11 PUD PLAN MODIFICATION PROCEDURE.

- (a) Modification to an Approved Preliminary Development Plan or Final Development Plan. Before or during the development of any Project, it may become apparent that certain elements of an approved Preliminary Development Plan or Final Development Plan are not feasible and are in need of modification. These plan modification requirements shall apply to both an approved Preliminary Development Plan and an approved Final Development Plan. An applicant must submit the revised Preliminary Development Plan or Final Development Plan to the Building Commissioner following the procedure set forth in this Section 1128.11.
1. Minor PUD Plan Modification. The Building Commissioner or another official authorized by City Council shall review the request for plan modification and may authorize the following types of modifications: (i) modifications necessary to overcome a particular project impediment or challenge, or to achieve a more functional and desirable use of the property than was initially anticipated; or (ii) any other modifications that are not inconsistent with the applicable Preliminary Development Plan. Such modifications may become necessary, by way of example, on account of field conditions, receipt of more detailed engineering data, or unusual topographical conditions, refinement of critical design criteria, or market driven relocation of approved use areas. Such modifications may also be authorized to: (A) adjust the final size and location of buildings and utility facilities, including without limitation drainage ways, detention basins and sewers, as well as circulation elements, retaining walls, landscaping, signage and similar features; (B) substitute landscape and/or building materials; (C) implement structural dimensional changes; or (D) make adjustments to square footages and densities not inconsistent with the use and building coverage criteria set forth in the applicable Preliminary Development Plan.
 2. Major PUD Plan Modification. If the Building Commissioner determines that the requested modification is major, then the Building Commissioner shall refer the

modification to Planning Commission for review and consideration according to the procedures and criteria outlined herein for approval of a Preliminary Development Plan. Major plan modifications shall only be reviewed by Planning Commission and are not subject to review by City Council unless a denial by Planning Commission is appealed in accordance with Section 1128.09(e).

1128.12 APPEALS, MODIFICATIONS, AND MISCELLANEOUS.

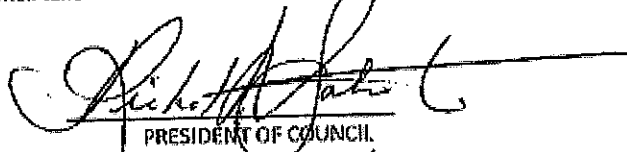
- (a) Appeal of Decision of Building Commissioner or Other Authorized Official. Any party aggrieved by an administrative decision of the Building Commissioner or other authorized officer may appeal the decision to the Board of Zoning Appeals by written notice within thirty days of the date such decision was issued. Unless the appealing party requires a longer period, the Board of Zoning Appeals must hold a hearing on the appeal within thirty (30) days of receipt of written notice of appeal and must issue a decision affirming or reversing the denial within thirty (30) days after the hearing.
- (b) Appeal of Decision of City Council. Any decision by City Council shall be a final appealable order, and the appealing party may seek prompt judicial review of such administrative action in a court of competent jurisdiction.
- (c) Sports Facility. Notwithstanding any provision to the contrary contained in this Chapter 1128 or the Brook Park Code of Ordinances, but excepting storm/sanitary water management, in consideration of the unique program for the design, development and construction of a Sports Facility in the PUD District, no element of a Preliminary Development Plan or Final Development Plan pertaining to the design, development or construction of a Sports Facility shall be subject to approval by the Planning Commission or City Council or the Building Commissioner, but shall be submitted to the Planning Commission for review of design aesthetics only and to provide non-binding, advisory review and comment pursuant to Sections 1128.09 and 1128.10.
- (d) Exceptions. A request for an approval of an exception, variance or deviation from the requirements of this Chapter 1128 shall be submitted to the Board of Zoning Appeals and reviewed consistent with Section 1121.20 of this Zoning Ordinance.
- (e) Amendments to this Chapter. No subsequent change or amendment to this Chapter or any other governing ordinance shall be applied to affect adversely the right of the applicant to proceed with any aspect of a Preliminary Development Plan or Final Development Plan which has been previously approved pursuant to this Chapter.
- (f) Fees. All fees shall be paid as set forth in the Brook Park Codified Ordinance fee schedules.

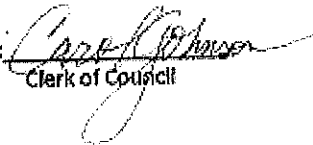
SECTION 2: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in


meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 3: This Ordinance is hereby necessary for the preservation of the public peace, health, safety and welfare of said City, and for the further reason to create a planned unit development district within our City; therefore, this Ordinance shall take effect and be in force immediately from and after its passage and approval by the Mayor.

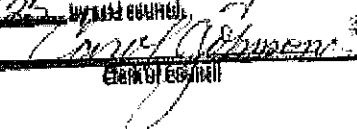
PASSED: August 21, 2025


PRESIDENT OF COUNCIL

ATTEST: 
Clerk of Council

APPROVED: 
MAYOR

August 21, 2025
DATE

CERTIFICATE
Carol Johnson, Clerk of Council, of the City of Brook Park, Ohio, do hereby certify that the foregoing is a true and accurate copy of Ordinance Resolution No. 1978-2025 passed on the 21 day of August 2025 by said council.

Clerk of Council

	Yea	Nay
Troyer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mencini	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roberts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Scott	<input checked="" type="checkbox"/>	<input type="checkbox"/>
McCorkle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Polindexter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dufour	<input checked="" type="checkbox"/>	<input type="checkbox"/>

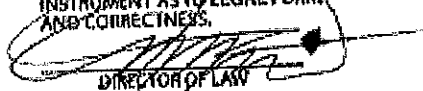
I HEREBY APPROVE THE WITHIN INSTRUMENT AS TO LEGAL FORM AND CORRECTNESS.

DIRECTOR OF LAW

EXHIBIT A

Legal Description for Planned Unit Development District

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF CUYAHOGA, STATE OF OHIO, AND IS DESCRIBED AS FOLLOWS:

Tract 1:

Situated in the City of Brook Park, County of Cuyahoga and State of Ohio, and known as being Parcel "B-1" in Map of Lot Split made for and at the instance of DROF BP I LLC, of part of Original Middleburgh Township Lot Nos. 4 and 5 in Section 10 and Lot Nos. 2, 3, and 5 in Section 11, as shown by the recorded plat in/as Instrument No. 202209190343 of Cuyahoga County Records, and containing 174.9389 acres of land, be the same more or less but subject to all legal highways.

Tract 2:

Parcel No. 1

Situated in the City of Brook Park, County of Cuyahoga, and State of Ohio:

And known as being parts of Original Middleburgh Township Lot No. 3, in Section 11, and Lot No. 4 in Section 10, and being a strip of land 90 feet in width, bounded and described as follows:

Beginning at a point in the Easterly line of that certain parcel of land described as Parcel Twenty-One in the deed from The Cleveland Trust Company, an Ohio corporation, to The New York Central Railroad Company, dated October 21, 1938, and recorded in Volume 4878, page 19, of the deed records of said County, distant South $01^{\circ}08'26''$ East, along said Easterly line, 86.05 feet from the point at the Northeastly corner of said land in the center line of Hummel Road, 40 feet wide, now vacated;

Course 1: Thence South $54^{\circ}35'59''$ East, a distance of 1527.24 feet to a point;

Course 2: Thence South $56^{\circ}17'41''$ East, a distance of 63.41 feet to a point in the dividing line between the land of The Cleveland, Cincinnati, Chicago, and St. Louis Railway Company, and the land which was conveyed to The Cleveland Trust Company, an Ohio corporation, as the Second Parcel in the deed from Elsie Rhode, et al., dated as of February 27, 1950, and recorded in Volume 6886, page 391, of the deed records of said County, said point being distant North $42^{\circ}49'09''$ East, along said dividing line, 875.26 feet from its point of intersection with the center line of Engle Road, the same being the line between said Section 10 and 11;

Course 3: Thence South $42^{\circ}49'09''$ West, along said dividing line, a distance of 91.15 feet to a point in a line parallel with, and distant 90 feet, by rectangular measurement Southwesterly from Course 2;

Course 4: Thence North $56^{\circ}17'41''$ West, along said parallel line, a distance of 50.31 feet to a point, in a line parallel with, and distant 90 feet, by rectangular measurement Southwesterly from Course 1;

Course 5: Thence North $54^{\circ}35'59''$ West, along said last mentioned parallel line, a distance of 1461.88 feet to a point in the Easterly line of Parcel Twenty-one conveyed aforesaid;

Course 1: Thence South $54^{\circ} 35' 59''$ East, 143.78 feet to a point in the Easterly line of land conveyed as aforesaid, said point being distant South $01^{\circ} 08' 26''$ East, 86.05 feet along said Easterly line, from said point at the Northeasterly corner of land so conveyed;

Course 2: Thence South $01^{\circ} 08' 26''$ East, along the Easterly line of the land conveyed as aforesaid, a distance of 112.02 feet to a point, in a line parallel with, and distant 90 feet, by rectangular measurement, Southwesterly from Course 1, and its prolongation;

Course 3: Thence North $54^{\circ} 35' 59''$ West, along said parallel line, 331.00 feet to a point in said centerline of Hummel Road, now vacated;

Course 4: Thence North $88^{\circ} 38' 49''$ East, along said center line of Hummel Road, 150.41 feet to the place of beginning, and containing 0.490 of an acre, more or less, according to the survey made by The Cleveland Electric Illuminating Company.

EXHIBIT C

PROPOSED CURRENT DEVELOPMENT PROGRAM AND PLAN

A. Proposed Development Program

The Development Program is the “new community development program” identified in Ohio Revised Code Section 349.01(B) for the development of the District, and includes (a) the land acquisition and land development activities to be undertaken within the area including the District, (b) the acquisition, construction, operation, and maintenance of community facilities and other public infrastructure improvements for the District (as defined in this Petition, the “Community Facilities”), (c) the provision of District services to be undertaken by, or on behalf of, the Authority, which services may be provided in cooperation with one or more other governmental or non-governmental entities or agencies, (d) the proposed method of financing such Community Facilities and District services, including a description of the bases, timing, and manner of collecting Community Development Charges, (e) the projected total employment within the District, and (f) the projected total population of the District.

The primary goals of the Development Program for the Authority are to, pursuant to the Development Agreements and the Stadium Lease, (i) facilitate the development, construction, and maintenance of an approximately 67,500-seat, domed, multi-purpose sports and entertainment stadium facility, including all architectural elements, features and improvements attached thereto or forming an integral part thereof (as further described in the Development Agreements, the “Stadium”), along with surface parking facilities adjacent to and primarily serving the Stadium, and other associated public plaza areas, improvements, security and media facilities and any Stadium-related retail or commercial use improvements (together with the Stadium, collectively, the “Stadium Project”); (ii) facilitate the development and construction of a phased lifestyle, entertainment, mixed-use development project located adjacent to the Stadium Project, including associated parking facilities (collectively, the “Mixed-Use Project”); and (iii) cause construction and maintenance of the public infrastructure projects supporting the Stadium Project and the Mixed-Use Project (the “Public Infrastructure Projects”). The Stadium Project, the Mixed-Use Project and the Public Infrastructure Projects are herein collectively referred to as the “Overall Project”.

An additional goal of the Development Program for the Authority is to develop new Community Facilities (as defined in this Petition) and provide services necessary to fulfill the current and future development, construction, and maintenance needs of this area of the City. The Authority and its agents are authorized to engage in land acquisition and land development, occupy, operate, and maintain Community Facilities, provide services to the District, provide community activities (as defined in the Act), collect and administer Community Development Charges (as defined in this Petition), and contract with service providers, including professional services providers, for the same, all on behalf of the Authority. The Board may determine, from time to time, to appoint other entities, which may include the City and other public or private entities, to assist with the management of the Development Program.

B. Proposed Land Acquisition and Land Development Activities, Community Facilities and Services

(i) Land Development and Community Facilities

The Developer owns or controls (within the meaning of Ohio Revised Code Section 349.01(E)) all land within the proposed District as depicted in Exhibit A-1 and described in Exhibits A-2 and A-3. As authorized by Ohio Revised Code Section 349.06(B), it is expected by the Developer that the Authority

will improve, maintain, sell, lease or otherwise dispose of real and personal property and Community Facilities, as described in further detailed in this Development Program.

The Overall Project is designed to create a vibrant and sustainable community by promoting well-balanced and diversified land use patterns throughout the District in accordance with the City's Planned Unit Development District (or "PUD District") regulations and standards established by Ordinance 11478-2025 ("PUD Ordinance") and is expected to thoughtfully integrate a mix of uses—including recreational, residential, commercial, and public spaces—to ensure that the area meets the varied needs of residents, visitors, and businesses alike. The goal is to foster a dynamic environment where people can live, work, and play, all within a thoughtfully planned setting that encourages community interaction and long-term growth.

Development of the Overall Project will proceed in stages, beginning with essential infrastructure improvements such as roads, utilities, and stormwater management systems, which will lay the groundwork for subsequent construction of buildings and community spaces. Throughout this process, the Authority will coordinate closely with public and private partners to ensure that each phase aligns with the broader goals of the Overall Project, in harmony with the City's goals under the PUD District rules and regulations established by the PUD Ordinance, and maximizes overall benefits for the community.

The Development Program contemplates a plan for Community Facilities. The Development Program for the District is expected to require the construction of facilities, roadways, infrastructure, parks, and other amenities for the benefit of all residents and users of real property within the District. The Community Facilities shall include all real property, buildings, structures, or other facilities, including related fixtures, equipment, and furnishings, to be owned, operated, financed, constructed, and maintained under the Act. As provided in the Act, the Community Facilities consist generally of (i) any real property, buildings, structures, or other facilities, including related fixtures, equipment, and furnishings, to be owned, operated, financed, constructed, and maintained by the Authority; and (ii) any Community Facilities that are owned, operated, financed, constructed, or maintained for, relating to, or in furtherance of community activities within the meaning of Ohio Revised Code Section 349.01(N).

The Authority's primary Community Facility is expected to be the Stadium. The Authority will own and maintain the Stadium, subject to acquisition of the Stadium Project Site by the Authority and construction by the Authority of the Stadium. The Authority is also expected to own and maintain certain Public Infrastructure Projects within or in support of the District. The Public Infrastructure Projects (such as, without limitation, on and off-site streets, park space and park improvements, community spaces and recreational facilities, parking garages and other parking facilities, transmission lines for on-site and off-site utility improvements, on and off-site storm water management facilities, energy efficiency improvements, and site preparation for those improvements) will be made to support the Stadium Project and the Mixed-Use Project. The Public Infrastructure Projects will be designed to be accessible and beneficial to all members of the community, providing opportunities for recreation, socialization, and cultural enrichment. The Authority will ensure that the Public Infrastructure Projects are not only built to high standards but are also maintained and operated effectively over time, so that they continue to serve the community's needs well into the future. The Authority may, as may be determined by the Board from time to time, engage in such other land development activities and provide such other Community Facilities and services as are not inconsistent with any obligations of the Authority under the Development Agreements and as are permitted under the Act.

Specifically, the proposed Community Facilities, as defined in Ohio Revised Code Section 349.01(I), may include the following improvements and costs:

- Roadway construction and improvements necessary to support the District (including associated bike paths and pedestrian paths);
- Pedestrian overpasses to the District;
- Park and recreational improvement costs, including recreational space that is free and open to the public;
- Construction of sanitary sewer, storm sewer, and water improvements;
- Water, storm water, and sewer improvement costs;
- Biking and hiking trails and sidewalks designed to make the entire District easily accessible by foot or bike;
- Excavation and grading;
- Landscaping of public or community property;
- Streetscaping of public or community streets;
- Street lighting;
- Common area gathering park benches;
- Design amenities and public art installations;
- Public, community, village, neighborhood, or town buildings, centers and plazas, auditoriums, amphitheaters, stadiums, arenas, sports facilities, child care centers;
- Municipal facilities;
- Educational facilities;
- Cultural facilities;
- Recreational facilities, natural resource facilities, including parks and other open space land;
- Parking-related assets and off-street parking facilities, including structured parking facilities;
- Telecommunications facilities;
- Energy facilities including those for renewable or sustainable energy sources, and steam, gas, or electric lines or installation;
- Land acquisition within the meaning of Ohio Revised Code Section 349.01(G);
- Land development within the meaning of Ohio Revised Code Section 349.01(H);
- Expenses for the continued operation of applicable public or private entities in connection with the management of implementing the Development Program;
- Other costs of the Development Program within the meaning of Ohio Revised Code Section 349.01(J), as the same may be amended, from time to time, including inspection costs, testing, water, storm water, and waste water connection fees, contractor fees, general contractor fees, legal fees, property taxes, appraisals and market studies, civil engineering and staking fees, development fee, environmental engineering, geotechnical engineering, and permitting; and costs of issuance of, debt service reserve funding of, and capitalized interest relating to any bonds, notes or other obligations issued pursuant to Ohio Revised Code Section 349.08, and any necessary contingency amounts; and
- Costs of permanent improvements within the meaning of Ohio Revised Code Section 133.15(B) related to the Community Facilities.

The Developer intends that Community Facilities will be owned by the City, the Authority, another governmental entity, or another public or private entity determined by the Board in accordance with the Development Agreements.

The Authority may undertake plans for the acquisition of real property and interests in real property and the direct development of the District in accordance with this Development Program, including, without limitation, the acquisition of fee interests, easements, rights-of-way, licenses, leases and similar property interests necessary to complete the Community Facilities, including such interests which may be provided by the City or other governmental entities or agencies in support of the Development Program.

Development within the District will be required to complement the Brook Park Master Plan (attached hereto as Exhibit D-2). The Brook Park Master Plan is a comprehensive document guiding the City's urban redevelopment plan. The Brook Park Master Plan addresses key development parameters for areas of the City that include the parcels comprising the District. Key goals of the Brook Park Master Plan, which are consistent with the Development Plan, include:

- redevelopment of the Ford Casting and Engine Plant site into a regional destination;
- construction and maintenance of the Overall Project; and
- unlocking economic development opportunities by repurposing vacant and underutilized land.

The land currently comprising the entire District is controlled by the Developer, so no additional site acquisition is expected to be necessary. The new Community Facilities that will be developed as a part of the Development Program will be operated and maintained by partners from the public and private sector that will be vetted for experience and capacity. Public space will be maintained and operated by the Authority or the City or another public or private entity determined by the Board in accordance with the Development Agreements.

The redevelopment will consist of a number of public and private uses. Public uses include public park and green space, sidewalks and bike trails within or in support of the District. The Development Program also may include the construction of approximately 525-1,180 residential units, accounting for a total proposed area of approximately 2,000,000 square feet; retail space with a proposed area totaling approximately 260,000 square feet; an approximately 3,000-4,000-capacity event venue, comprising approximately 40,000 square feet; office space with a proposed area totaling approximately 330,000 square feet; hotel and hospitality space with approximately 450 individual rooms and a proposed area estimated to be approximately 330,000 square feet; parking; and other necessary public infrastructure and appurtenances thereto. The Developer, the Authority, and the City intend to work collaboratively to identify off-site parking for event days at the Stadium.

Future development will be dependent on market conditions and partnership with the private sector. Public Infrastructure Projects are expected to be built to accommodate future uses within or in support of the District.

(ii) Services

Pursuant to the Act, the Authority is authorized to provide services within or in support of the District, including, but not limited to, landscaping, street and sidewalk cleaning and maintenance, maintenance of parking facilities, and any other community improvement services. The Authority is further authorized to provide, engage in, or otherwise sponsor recreational, educational, health, social, vocational, cultural, beautification, and amusement activities and related services primarily for residents of, visitors to, employees working within, or employers operating businesses in the District, or any combination thereof. The Authority may determine from time to time to allocate a portion of its budget to the costs of such services.

The Authority may cooperate with other governmental entities and agencies as provided in the Act, including the City, for the provision of District services or otherwise. The Developer intends that the Authority will provide, engage in, or otherwise sponsor recreational, educational, health, social, vocational, cultural, beautification, and amusement activities and related services primarily for residents of, visitors to, employees working within, or employers operating businesses in the District. These services are presently expected to include, without limitation, programming, and place-making improvements. Programming will result in increased traffic to the District, create a heightened sense of community, and generate revenue for

local retail locations. Programming will also serve to enhance the overall pedestrian experience in the District. The Developer envisions the programming efforts to include a range of activities from large scale, signature multi-day events to lower budget reoccurring weekly events. The Developer also envisions the Authority will engage in place-making initiatives such as beautification enhancements, seasonal décor, and provide required infrastructure to support the programming efforts such as lighting, sound, and other elements. These services are expected to enhance the resident, employee and visitor experience in the District and increase users of businesses in the District, thus increasing the vitality of those businesses and the District development as a whole. The Authority may retain the Developer or one or more third-party professionals to assist the Authority in providing services within or in support of the District.

C. Proposed Method of Financing

(i) Financing Plan

The Authority expects to generate funds for its operations and its activities through the levy of one or more “community development charges,” as defined in the Act (the “Community Development Charges”). Community Development Charges may be levied on certain parcels within the District or may be collected with respect to certain properties or certain activities within the District.

Community Development Charges may be used by the Authority (i) to pay debt service charges on revenue bonds (including the Bonds as defined below) issued to pay for certain Authority costs, including the costs of Community Facilities; (ii) to pay operating, maintenance, and administrative expenses of the Authority and the City; and (iii) a source of revenue to pay for certain Authority costs, including the costs of Community Facilities, land acquisition, land development or District services. The City or the Developer may elect to pay certain costs of Community Facilities, land acquisition, land development or District services on a current expense or operating expense basis with user fees, governmental contributions, or other revenue. The use of Community Development Charges shall be determined in one or more Development Agreements. Notwithstanding the foregoing, the City reserves the right, to the extent feasible from time to time, to cause the Authority to pay or reimburse costs of the Authority using any reasonable method, which may be a combination of any of the foregoing methods or an alternative method determined by the Authority Board.

The Developer proposes to finance certain costs of acquisition, construction, maintenance, and operation of certain of the Community Facilities, the costs of the provision of Community Activities and District services, the costs of land acquisition, and the costs of land development through the issuance of one or more series of bonds, notes issued in anticipation of the issuance of bonds, or bonds issued to refund such bonds or notes (the “Bonds”), either by the Authority, by the City, by an Ohio port authority, or by one or more governmental entities or agencies in cooperation with the Authority, the City or an Ohio port authority. Bonds may be secured through the levy and collection by the Authority of Community Development Charges. Additional security to secure Bonds may be contributed to the Authority by one or more governmental entities and third parties. Any Bonds issued by the Authority or secured with Community Developments Charges may be issued only with the prior written approval of the City, which approval may be given in one or more Development Agreements.

The Overall Project is expected to be funded from a variety of sources, including those generally set forth as follows:

- The State of Ohio is expected to fund \$600,000,000 (Six Hundred Million Dollars) toward costs of the Stadium in accordance with Ohio Revised Code 123.281(H) (the “Major Sports Facility Statute”); provided, that:

- It is expected that the Authority will enter one or more agreements with the Developer and the Ohio Office of Budget and Management concerning the use of such State of Ohio public funding in accordance with the Major Sports Facility Statute; and
- It is expected that the Authority will receive such State of Ohio public funding for the purposes of paying for or otherwise reimbursing the Developer and StadCo for the costs of the construction of the Stadium in accordance with the Major Sports Facility Statute; and
- The Developer will fund equity or will otherwise provide for funding necessary to pay the costs of the Stadium in accordance with the Major Sports Facility Statute; and
- Additional amounts toward the costs of the Stadium Project and other portions of the Overall Project are expected to be funded by the Authority, the City, and other public sources to be identified pursuant to the Development Agreements; and
- The Development Agreements shall include provisions acceptable to the Authority and the City concerning the funding of the balance of the costs of the Overall Project; and
- The Development Agreements or Stadium Lease, as the case may be, shall include provisions acceptable to the Authority and the City regarding maintenance of the Stadium, the maintenance of any Public Infrastructure Projects, and a capital repair or replacement fund for the Stadium during the Stadium Development Period.

To support the development of the Overall Project, including the costs of the Development Plan, the Authority and the City expect to expend public funds including intergovernmental grant funds, tax revenues, tax increment financing service payments, minimum service payments, and community development charges or other Authority revenue. The City expects to have operational expenses and a variety of municipal service costs due to the development and operation of the Overall Project in variable amounts (the “City Expenses”). Any funds generated through the Assessed Valuation Charge (defined below) and any other funds constituting generally applicable taxes within the meaning of Treasury Regulation §1.141-4 and otherwise paid by the Authority to the City for City Expenses may be used by the City for any lawful purpose, and covenants required in connection with the issuance of Authority Bonds shall not require the City to track or report its uses of such funds to the Authority. The Authority expects to have annual Authority administrative expenses in support of the Authority’s operations in variable amounts. The City Expenses and the Authority administrative expenses shall all be deemed to be costs of land acquisition, land development, Community Facilities, or Authority services under the Act and this Petition in accordance with the Development Agreements. The Development Agreements shall provide for payment of certain City Expenses in amounts to be agreed upon by the City and all of the Authority administrative expenses.

All funding associated with the costs of the Overall Project shall be specified in one or more Development Agreements. All public funding associated with the costs of the Overall Project shall be approved by the Authority Board and shall be approved in writing by the City which may be evidenced by one or more Development Agreements properly authorized by the City. The Authority shall not approve or execute any Development Agreements or any other contracts or agreements where the Authority is required to expend Authority funds associated with the costs of the Overall Project without the prior written approval of the City.

(ii) Bases of Determining Community Development Charges

The Board may approve, impose, and collect Community Development Charges as authorized by the Act and this Petition; provided, that such charges may not be levied on the basis of rentals received from leases of real property. The Board shall, prior to approving Community Development Charges, obtain the approval of the City, the Developer, and the affected property owners, which approval may be evidenced by the Development Agreements and one or more declarations of covenants and restrictions pursuant to Ohio Revised Code Section 349.07. No minimum Community Development Charges are required under this Petition; provided, however, the Developer and the City expect that Community Development Charges shall be agreed upon in the Development Agreements and shall be charged and may be used in the manner approved by the Board as follows:

(a) a charge on the basis of amounts paid for admission to ticketed events in the District, including admission by season ticket or subscription (excluding, however, all NFL-ticketed events and all license fees or premium charges derived from amounts paid in connection with luxury suites, private suites and club seats for NFL events at the Stadium Project Site) in an amount determined by the Authority Board but not exceeding three and one-half percent (3.5%), which charge shall apply to every non-NFL event admission ticket within the District for which a charge is applicable, notwithstanding that the sale of such ticket or other evidence of right of admission thereto may be made outside of the District (the "Non-NFL Admissions Charge");

(b) a charge on the basis of gross receipts of restaurants and other retail businesses operating in the District (excluding gross receipts from the Stadium except as approved by the Developer in the Development Agreements), in an amount determined by the Authority Board but not exceeding ten percent (10%) (the "Sales Charge"); and

(c) a charge on the basis of gross receipts of hotels operating in the District, in an amount determined by the Authority Board but not exceeding eight percent (8%) (the "Hotel Charge").

The Community Development Charges may, with the approval of the Developer and the Authority Board, include a charge based on the portion of the assessed valuation of the Stadium and the Stadium Project Site that is otherwise exempted or abated from real property tax pursuant to Ohio Revised Code Section 5709.081 ("Assessed Valuation Charge"). If authorized, the Assessed Valuation Charge is intended to constitute a payment in lieu of a generally applicable tax within the meaning of Treasury Regulation §1.141-4 and shall not exceed the amount of ad valorem real property taxes that would be imposed on the Stadium if it were not exempt from taxation under general law. Such payments shall be determined in a manner consistent with, and no more favorable than, the method used to determine generally applicable ad valorem taxes applicable to real property within the City and Cuyahoga County, Ohio. If authorized, the Developer and the Authority Board intend that the Assessed Valuation Charge does not constitute private payments or security within the meaning of Section 141(b) of the Internal Revenue Code.

The Community Development Charges may, with the approval of City Council, the Authority Board, the Developer, and the affected property owners also include one or more charges based on the assessed valuation or other fees on parcels within the District.

The Community Development Charges may, with the approval of City Council, the Authority Board, the Developer, and the affected property owners, also include one or more charges on the parcels within the District, excluding the Stadium Project Site, to pay for capital repairs and operating expenses for the Stadium Project.

The Community Development Charge actually levied and collected shall be determined by the Authority Board on a schedule no less frequently than annually. One or more Development Agreements may specify the initial Community Development Charges to be levied or may specify time frames over

which, all subject to the authorizations granted within or required by this Petition and the Act. All Community Development Charges implemented by the Authority will be and remain consistent with any obligations of the Authority under the Development Agreements and will comply with the Act. The amount of the charges may, consistent with the Development Agreements, vary for each tax parcel based on product type located on the parcel (e.g., office, retail, hotel, rental residential and for sale residential, each of which may have different rates) or other factors deemed appropriate by the Developer and the Board. It is expected that the Community Development Charges, together with other funds provided from the State of Ohio, the Developer, and the City, will be sufficient to pay for the acquisition, construction, operation, and maintenance of Community Facilities, including the Stadium Project and the Public Infrastructure Projects located within the District.

(iii) Timing and Manner of Collecting Community Development Charges

Collections of any Community Development Charges will be administered under the direction of the Board. Any Community Development Charges are expected to payable on due dates to be determined by the Board on a schedule no less frequently than annually. The Non-NFL Admissions Charge is expected to be collected periodically as Stadium events or other events occur, the Sales Charge is expected to be collected monthly, and the Hotel Charge is expected to be collected monthly. As permitted by Ohio Revised Code Section 349.07, the Authority may certify Community Development Charges agreed upon by the affected property owners and levied by the Board to the Cuyahoga County Fiscal Officer, who will enter the charges on the tax list and duplicate of real property and certify the charges to the Cuyahoga County Treasurer for collection with the tax bills. Delinquent payments of any such Community Development Charges certified are expected to be collected in the same manner provided for the collection of delinquent real property taxes. The Authority may also undertake separate collection actions if and to the extent authorized by applicable agreements with property owners. The Authority may retain a charge administrator to assist in the billing, collection, or tracking of any Community Development Charges.

D. Projected Total Residential Population of, and Employment Within, the District

The projected total population of, and employment within, the District is variable and depends on the growth and development of the District.

The 2020 U.S. Bureau of the Census Report estimated a City population of 18,359. The District currently has a population of zero (0). Prior to implementation of the Development Program there are no residents within the District; however, the District is currently expected to include at least 1,200 residential units and an estimated 1,619 residents upon completion of the Mixed-Use Project. Prior to the implementation of the Development Program, there are no employees or employers within the District; however, an estimated 3,386 employees are currently expected to be located within the District upon full build-out of the Overall Project. The Community Facilities will be designed to benefit any new residents and employees working in the District.

[Balance of Page Intentionally Left Blank]

EXHIBIT D-1

PRELIMINARY ECONOMIC FEASIBILITY ANALYSIS

A. Area Development Pattern and Demand

The primary uses of land in and near the District are industrial and commercial. The District is principally located on the land generally bounded by Brook Park Road to the North, Engle Road to the East, Snow Road to the South, and Ohio State route 237 to the West. The City's 2012 Master Plan, attached hereto as Exhibit D-2, and Traffic Impact Study, attached hereto as Exhibit D-3, provide further information as to the City's area development pattern and demand.

B. Location and Proposed District Size

The District is located in Cuyahoga County, Ohio, in the municipal corporation of the City as shown on the map attached as Exhibit A-1. The District is approximately 177.7246 acres in size. The Developer may request that the District be expanded to include property located adjacent to the District, which it deems necessary for or in support of the Overall Project, and such expansion shall comply with the provisions of this Petition regarding Additional Properties. The City Council of the City may request that the District be expanded in accordance with Ohio Revised Code Section 349.03(B), and such expansion shall comply with the provisions of this Petition regarding Additional Properties.

C. Present and Future Socio-Economic Conditions

The City is located in Cuyahoga County, Ohio, southwest of downtown Cleveland. According to the U.S. Census Bureau, Brook Park had a population of approximately 18,595 as of the 2020 Census.¹ The city covers an area of about 7.52 square miles. Brook Park is primarily residential, with a mix of single-family homes, apartment complexes, along with a number of commercial and industrial areas.

The City is home to several significant employers, including the Ford Motor Company's Cleveland Engine Plant, which has long been a major source of local employment. The largest industries in the City, according to the U.S. Census Bureau, are manufacturing, health care & social assistance, retail trade, construction, and transportation and warehousing. Other notable employers in and around the City include aerospace and logistics companies, as the city is adjacent to Cleveland Hopkins International Airport and NASA's Glenn Research Center.

The City is characterized by a stable, family-oriented population. The City has a mix of age groups, with a median age of 44.² The median household income in the City is around \$67,000.³ Housing is predominantly owner-occupied, with a homeownership rate of about 82%.⁴ The City has seen modest new housing development, with most growth focused on maintaining and improving existing neighborhoods.

¹ United States Census Bureau, American Community Survey, S1101: Households and Families - Census Bureau Table.

² United States Census Bureau, American Community Survey, S0101: Age and Sex - Census Bureau Table.

³ United States Census Bureau, American Community Survey, S1903: Median Income in the Past 12 ... - Census Bureau Table.

⁴ United States Census Bureau, American Community Survey, S1101: Households and Families - Census Bureau Table

Brook Park is known for its strong community services, including parks, recreation centers, and local events. The City has focused on maintaining infrastructure, supporting local businesses, and encouraging redevelopment of underutilized commercial and industrial properties. The City has access to major transportation corridors, including Interstate 71 and the Cleveland Hopkins International Airport.

Brook Park's development and economic trends are closely linked to those of the greater Cleveland area, with a stable population, strong industrial base, and ongoing efforts to revitalize and modernize the community.

D. Public Services Provision

The City provides the District with fire and EMS, police, refuse, water, sanitary sewer and storm sewer services. While the Authority may provide funding for infrastructure necessary for some of these services, the Authority is not expected to directly provide any public services or utilities. The District is served by the Berea City School District. Gas and communications services are available from various providers.

E. Financial Plan

The financial plan for the Project is outlined in Exhibit C. The development of the District's private improvements is expected to be primarily financed by private funds. Property developers are expected to utilize a mix of private debt and equity. Property sale proceeds and rental income are typical sources used by property developers to repay any private debt borrowed to fund its development and provide an adequate return to attract equity investment and undertake the planned private development of the District.

F. Developer's Management Capability

The Developer is an affiliate of Haslam Sports Group ("HSG"), which is owned primarily by Jimmy and Dee Haslam. The Developer has partnered with LPC Commercial Investments LLC ("Lincoln") for the development of the Mixed-Use Project to be located within the District.

HSG:

HSG is an affiliate of the owner of the Cleveland Browns NFL franchise, as well as the Columbus Crew MLS franchise and Milwaukee Bucks NBA franchise. HSG has extensive experience in the ownership, management and operation of sports franchises and facilities. Lincoln is a multinational corporation engaged in the business of owning, developing and managing retail, residential and multifamily, and mixed-use properties in major global markets around the world. Both HSG and Lincoln are experienced in similar stadium and mixed-use projects within the State of Ohio and across the United States.

Dee and Jimmy Haslam, along with Whitney and JW Johnson, founded Haslam Sports Group in 2020. Through the Haslam and Johnson families' network of industry experience and relationships, their mission is to create world class organizations that achieve sustainable success, provide a best-in-class fan experience, and give back to their region. HSG looks to invest in strategic sports and entertainment opportunities, with our current portfolio including ownership of the Cleveland Browns, operating rights to Major League Soccer's Columbus Crew, and co-ownership of the Milwaukee Bucks, as well as investments in HSG Ventures, HSG Facilities and other entities.

The Haslams have established three primary focus areas to shape the team's culture in Northeast Ohio, guiding all key processes and decisions within the organization. The club's standard is centered on providing a consistently winning team on the football field, taking exceptional care of the team's fans by providing a premier experience throughout the year and striving to make a positive impact in the Northeast Ohio community with an emphasis on education, youth football and equitable opportunity.

In addition to the Browns, Dee and Jimmy also serve as the CEO and Chairman of HSG. After the family acquired the Columbus Crew in 2019, they formed HSG. In 2023, the family secured a controlling interest in the Milwaukee Bucks, as the NBA Board of Governors approved an HSG ownership share purchase, giving the family-run business, ownership stakes in three of the five major North American professional sports leagues. The Bucks investment also includes control and operation of Fiserv Forum; the Froedtert and the Medical College of Wisconsin Sports Science Center; the team's training center; the Wisconsin Herd, the Bucks G League affiliate; and Bucks Gaming, the team's 2K League affiliate.

HSG's mission is to engage and unite communities through premier sports and entertainment experiences. It strives to create world-class organizations that achieve sustainable success but also redefine the fan experience and give back to their region while serving as stewards of true community assets. HSG's current portfolio includes the Cleveland Browns, operating rights to the Columbus Crew, a controlling interest in the Milwaukee Bucks, and current investments in Misfits Gaming Group, StatusPro, Jackpot.com, Lyte, Cast Iron Media, Wicket, ChargeFUZE, WNBA, ManCan and Courtside VC.

Creating a Transformational Stadium and Mixed-Use Development for Northeast Ohio

For the 2029 season, with unprecedented private investment, the Browns plan to open a new era for their fans that will bring a world-class stadium experience to Northeast Ohio with the opening of a new enclosed Huntington Bank Field. The \$3+ billion economic development project, Northeast Ohio's largest to date, will include Ohio's first dome stadium and an adjacent mixed-use development just 12 miles from downtown Cleveland in Brook Park, Ohio. The public-private partnership will leverage \$2+ billion in private investment to generate the fiscal impact necessary for the project to pay for itself while also bringing unparalleled economic opportunity to the region. The new stadium will be a first-of-its-kind and will set out to redefine the fan experience, all with the intent to draw the world's biggest concerts and most significant sporting events year-round to Northeast Ohio.

Expanding the CrossCountry Mortgage Campus

In June of 2025, the Browns broke ground on their CrossCountry Mortgage Campus Expansion. An extension of the existing footprint of the Cleveland Browns in Berea, this new neighborhood will be over 16 acres and utilized for a variety of spaces benefiting the region with an anticipated opening in early 2027.

The CrossCountry Mortgage Campus Expansion will include a mixed-use neighborhood adjacent to the existing Cleveland Browns facility, and will include a community field lined for multiple sports for youth, high school and adult participation, The Barker Hotel – a Tribute Portfolio Hotel by Marriott developed in partnership with Crawford Hoying and operated by Shaner Hotel Group, a sports medicine facility operated by the team health-system partner, University Hospitals (UH), market-rate apartments, office space and 15k square footage of retail space to support the new pedestrian-friendly neighborhood.

Columbus Crew

In January 2019, the Haslams expanded their sports interests and investments when they reached an agreement with Major League Soccer to operate the Columbus Crew. After only two seasons as investor

operators, the club captured MLS Cup 2020, their second championship in league history. In 2023, the Crew brought the second championship to the Haslam family when they captured another MLS Cup, their third overall, with a 2-1 victory over LAFC. The Crew opened their newly constructed downtown Columbus stadium, Lower.com Field, in July of 2021. Designed to complement the city of Columbus' modern, dynamic, and diverse characteristics, Lower.com Field anchors a mixed-use development neighborhood called Astor Park. The club also completed construction of a world-class training facility named the Ohio Health Performance Center in June 2021. Dee serves on the MLS's Board of Governors and Jimmy serves on the MLS Governance Committee.

Away from Professional Sports

Jimmy is also Executive Chairman of Gate City Energy (GCE). GCE is a group of energy investors with a long-term track record of investing in and managing physical infrastructure assets across the energy ecosystem. The mission of GCE is to identify investment opportunities that support a transition to cleaner forms of energy.

Jimmy was chairman of the board for Pilot Company from 2020-2023 and CEO from 1996-2020. A native of Knoxville, Jimmy began his career at Pilot Corporation in 1976. In 1980, he was named vice president of sales, development, and operations. He grew Pilot to be the largest travel center company in the US, from 96 travel centers in 1996 to over 800 fueling locations in 2023, selling ~14 billion gallons of fuel a year and ~\$3 billion in food and merchandise. Jimmy Haslam became CEO in 1996 and, later, chairman of the board for Pilot Company from 2020 to 2023. Jimmy led the Company through a series of transformational milestones that strengthened its capabilities, and Pilot became the fifth largest private Company in the US with \$3.2bn EBITDA in 2022 (17% CAGR). These milestones included the merger of Pilot with Flying J and transactions with Marathon Ashland Petroleum, Williams, Speedway, Mr. Fuel and Speedway-Wilco, which grew the Company's network and established Pilot Flying J as an industry leader. In January 2024, Pilot Corporation was sold to Berkshire Hathaway.

Dee, an Emmy-nominated TV producer, was the executive producer and CEO of RIVR Media Companies. Since launching RIVR Media in 1999, Dee has been the executive producer for groundbreaking series such as "Trading Spaces," "Whale Wars," "World Series of Poker," "Renovation Realities," "Fat Guys in the Woods" and "Escaping Polygamy." RIVR was named a Realscreen's Global 100 TV production company. In June 2012, Dee started Nest Features, an independent film company producing films in and about the American South. Before RIVR's launch, she worked in various production roles with Bagwell Communications and Cinetel Productions. Dee transitioned from her role as CEO at RIVR Media in early 2018 to devote more of her time to Cleveland but remains a partner and executive producer. Dee's professional association memberships include the Academy of Television Arts and Sciences, In Counsel with Women, Women in Cable Telecommunications, International Women's Forum, C200, and the Society of International Business Fellows.

More information about HSG can be found on its website: <https://haslamsports.com/>

Lincoln:

Founded in 1965 as a developer of multi-family housing, Lincoln diversified into commercial property in the late 1970s by investing in office, industrial, and retail opportunities. In the 1980s, the company expanded its commercial footprint into the Northeast and Southeast U.S. markets, followed by a focus on growing third-party services and expanding into European markets during the late 1990s and 2000s. In 2003, the firm established "Lincoln Sports", a dedicated practice area for sports, motorsports, and eSports facilities, which has become one of the firm's strongest growth areas and most successful practice areas. The 2010s saw increased investments across 35 markets in the U.S. and Europe, while the 2020s

brought a strategic investment from Stone Point Capital and the appointment of Clay Duvall and David Binswanger as Co-CEOs to lead future growth.

Today, Lincoln Property Company or LPC is a full-service real estate firm with over \$30 billion in assets under management and leases and manages over 671 million square feet of real estate. To date, they have developed over 170 million square feet of real estate, with over 53 million square feet currently in development valued at over \$21 billion, and more than \$15.4 billion of development in their future pipeline. LPC has over 8,000 units in the multifamily space under construction or in development.

LPC possesses deep mixed-use expertise, creating “live-work-play” districts that combine housing, hospitality, retail, research labs, and academic space, with over \$7.4 billion in active mixed-use projects. The firm offers a fully integrated platform covering the entire real estate lifecycle, including building, managing, leasing, occupying, and investing. Their scope includes leading entitlement strategies, site investigations, zoning, and government coordination for complex projects. LPC also provides owner’s representation services, managing design, construction oversight, budgets, and schedules on behalf of clients to ensure cost control and quality.

The firm is supported by a wide network of institutional equity partners including major players such as Morgan Stanley, J.P. Morgan, Goldman Sachs and Invesco. In addition, the firm partners with corporations like Aetna and MetLife, and AIG, adding value to their existing investments, or providing them with opportunities to invest in ground-breaking developments.

Existing and Ongoing Developments include:

- 1) The Star in Frisco, Texas, a \$2 billion, 91-acre partnership with the Dallas Cowboys featuring 1.6 million square feet of office space and a 12,000-seat event center.
- 2) Station Hill in Reading, UK, an £850 million district with 625,000 square feet of office space and over 1,200 residential units.
- 3) Waterline in Austin, Texas, a 74-story tower set to be the tallest in the state with 1.5 million square feet of hotel, office, and residential space.
- 4) Point of the Mountain in Draper, Utah, a 600-acre site slated for over 2 million square feet of office space and 3,000 residential units.
- 5) Circuit of the Americas in Austin, Texas, a 1,000-acre complex featuring an F1 track, amphitheater, and observation tower.
- 6) Legacy Union in Charlotte, North Carolina, a two-block, 10.2-acre site adjacent to Bank of America Stadium. Phase 1 of this multi-phase development sits on the former site of The Charlotte Observer. Once all phases are complete, the site will feature offices, retail shops, restaurants, hotels, residences, a parking garage, public green space and a pedestrian promenade leading to Bank of America Stadium. Current anchor tenants include Bank of America, Honeywell, and Deloitte.

Future Developments include:

- 1) 2500 Cedar Springs in Dallas, Texas, a mixed-use high-rise project with three towers (Building 1 being an office tower, Building 2 being a residential tower, and Building 3 being a hotel and

condominium tower), complemented by sub-surface parking, ground floor retail, and a landscaped plaza.

- 2) The Hornets Performance Facility in Charlotte, North Carolina, which will encompass more than 160,000 square feet, housing elite basketball training spaces.
- 3) Administrative offices, retail, and on-site orthopedic and sports medicine care provided by Novant Health.

More information about Lincoln can be found on its website: <https://lpc.com/>

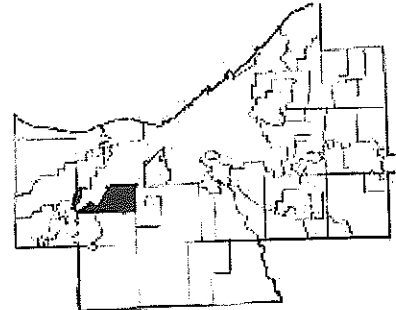
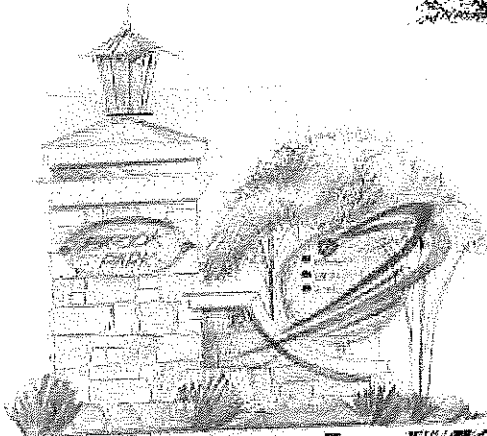
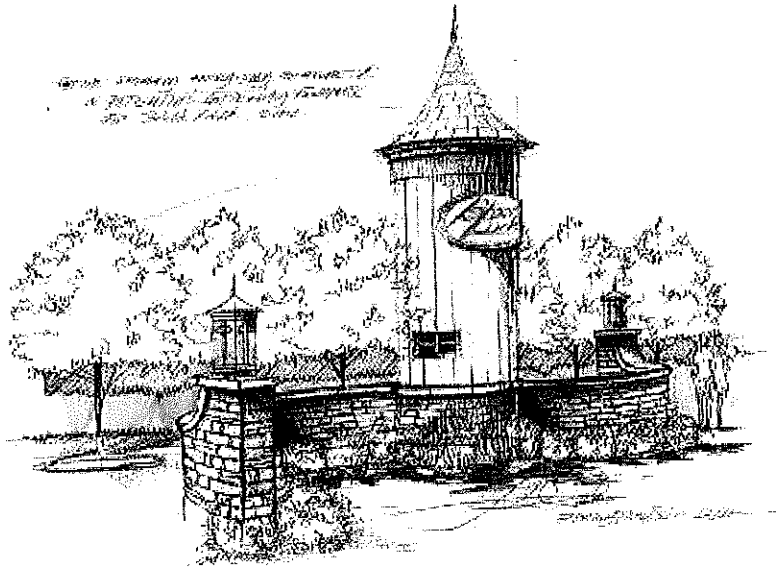
[Balance of Page Intentionally Left Blank]

EXHIBIT D-2

2012 CITY OF BROOK PARK MASTER PLAN

BROOK PARK MASTER PLAN

Brook Park Master Plan, 2012
A Comprehensive Strategic Framework
for Brook Park, Ohio



JANUARY 2012

Reville
PLANNING + GIS +
ECONOMIC DEVELOPMENT

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
ACKNOWLEDGEMENTS	3
SECTION II: EXECUTIVE SUMMARY	4-10
SECTION III: PUBLIC PARTICIPATION	11-16
SECTION III: POPULATION AND DEMOGRAPHICS	17-20
SECTION IV: ECONOMIC DEVELOPMENT	21-31
SECTION VI: LAND USE AND DESIGN	32-61
SECTION VII: HOUSING	62-69
SECTION VII: COMMUNITY SERVICES AND FACILITIES	70-79
SECTION VIII: IMPLEMENTATION	80-82

Acknowledgements

The Brook Park Master Plan developed with the assistance of the Brook Park Master Plan Steering Committee, elected officials, department heads, residents and business owners. The Plan was funded from a Community Development Block Grant from Cuyahoga County.

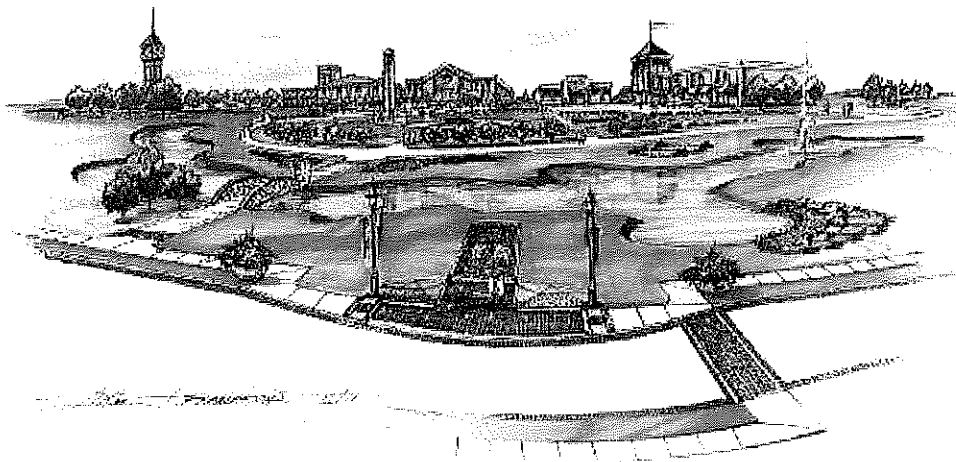


Illustration: Parcels formerly home to the Ford Casting and Engine plants could be redeveloped into a regional destination site accommodating a variety of mixed uses. Its prime location to the Cleveland Hopkins Airport and I-71 make it well-suited to accommodate future growth for the community.

Section I: Executive Summary

Brook Park has experienced various levels of progression from a small settlement, to a burgeoning post- World War II community, to the "built-out" community that it is today. There is no doubt that the City's proximity to Cleveland, Cleveland Hopkins Airport, Ford Motor Company, and key thoroughfare routes resulted in defining Brook Park's built and social landscape.

Today, Brook Park's has 12,000 residents fewer than its 1970 peak population of 30,774, and much of its built environment is aging. But the pride and perseverance of residents is not. They desire to rejuvenate their community to remind the region they're still a player in the economic game, and still one of the most affordable and safest places to raise a family. They want to remind the business world that Brook Park does have spending power and a solid base of consumers.



For this message to occur, Brook Park will have to make creative and efficient use of their fiscal and land resources, and most importantly, strategically plan for the redevelopment of targeted areas. Zoning, transportation and infrastructure investments, public facilities, and community services will need to be carefully evaluated and modified in the most cost effective manner.

A. Purpose of the Plan

The Brook Park Master Plan is a decision-making guide regarding the future of Brook Park. The Plan identifies a general overview of the current state of the City's demographics, built and economic environment, and community services, and highlights a variety of strategies and recommendations that could be used to help Brook Park better position itself in the future. Changes in demographics, aging infrastructure, and the need to advance energy efficiency and other sustainability initiatives are also other important issues facing the community. The purpose of this Master Plan is to address many of these issues.

B. Planning Themes

Many planning themes and "Opportunities" emerged from Brook Park's master planning process.

Ensure Neighborhood Quality of Life

Brook Park's neighborhoods are absolutely vital to the future the community. Safe and tranquil neighborhoods attract and retain residents, and residents are central in attracting employers and commercial service.

providers. Neighborhoods should be buffered from incompatible uses and continually improved. To make the best use of limited resources, some pockets of residential land uses predominately surrounded by other land uses should possibly be rezoned and made non-conforming uses. These resources can then be allocated to other neighborhoods..

Over 90% of the survey respondents indicated their quality of life in Brook Park was either "good" or "excellent", primarily because of park and recreational programs, community and safety services, schools, and regional location. However, some residents indicated a strong desire to see their neighborhoods receive additional code enforcement attention to help abate property maintenance and other nuisance issues. More attention and resources may be needed to ensure neighborhood vitality. To assist in this endeavor, more grassroots and neighborhood building efforts could also be encouraged. Vacant and blighted properties should continue to be land banked or possibly granted to local neighborhood associations for use as community gardens or other community uses.

Revitalize Commercial Centers

Residential land uses consume a majority of Brook Park. Because of this, other land uses play a vital role the community. This is especially true for Brook Park's commercial land uses located primarily on Snow and Brookpark Roads, and at the Brookgate Shopping Center. The last decade has been particularly difficult for these commercial corridors.



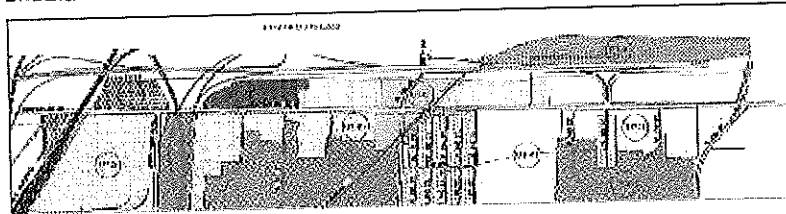
This is especially true for Brookgate, which lost a grocery store and other vendors. However, this shopping plaza's excellent placement and land mass in the community could play a vital role in tapping into the unmet consumer demand as indicated in the market analysis developed for this Plan.

The market analysis also indicates that Brook Park residents and consumers are spending their money outside the community. It is hoped that City officials will use this Master Plan in cooperation with business and property owners to reverse this trend.

In addition, neighborhood commercial nodes at key intersections throughout the community play a vital role in promoting social interactivity and quality of life. These land uses should be revitalized and encouraged.

Update the Zoning Ordinance

Brook Park's zoning ordinance and map should be considered for a future priority for the community. Brook Park currently has 26 zoning classifications and many of these zoning districts have overlapping similarities. Requirements of each district are often linked to other sections of the code, making it difficult to implement properly. Many requirements, like access management, parking, and design and signage standards should be similar across most zoning districts.



Develop a Community Core

For the purposes of planning, Brook Park was divided into distinct "Concept Areas" that can be used to define a vision for future growth and redevelopment of the community. These areas were developed with similarities in mind and should be used when deciding land use, zoning, and infrastructure decisions, and promoting a sense of community.

One common theme that emerged from the community survey was the need to promote more social interaction in the community. This "community core" should be pursued and promoted, as this location already exists in function and footprint. It could be expanded to include a variety of other mixed uses (See *Map: Concept Areas*).

Heighten Community Planning Efforts

Economic development and community planning are vitally important to future of Brook Park. Both important activities should be properly integrated and have sufficient resources allocated to them so that they can be as proactive as possible. Some of these efforts could include Berea and Middleburg Heights, as residents overwhelmingly indicated a desire to see Brook Park increase planning and economic development efforts with communities that comprise the school district.

Promote Efficient Redevelopment

There is limited amount of land for new development in Brook Park, and redevelopment will be the primary means to expand the City's tax base. It is absolutely important that land is redeveloped in ways that provides a fiscal benefit and enhances City revenues.

Strategic locations should be rezoned to permit land uses that generate the highest and best economic return for Brook Park. This would include properties located adjacent to the Airport and key thoroughfare like I-71.

Older industrial areas and areas adjacent to the Airport are vital to economic growth of the city. Some industrial areas, like those on Henry Ford Boulevard, Eastland, Holland, and off Brookpark Road should be reviewed to investigate potential redevelopment opportunities. Current land ownership on these corridors, especially on Brookpark Road, is dominated by small parcels in individual ownership, that could be hampering redevelopment. Resources should be allocated to assemble land parcels when feasible. Incentives for commercial redevelopment should be targeted to support ideas presented in the Master Plan.

Promote Mixed Use Development

Mixed-use development could be extremely valuable to a community like Brook Park that is dominated primarily with single oriented land uses. Multi-family and other diverse housing options should be incorporated into the mixed use context to help increase the City's tax base. New development and redevelopment should specifically address mobility issues, with particular emphasis on non-automobile modes of transportation and visual attractiveness.

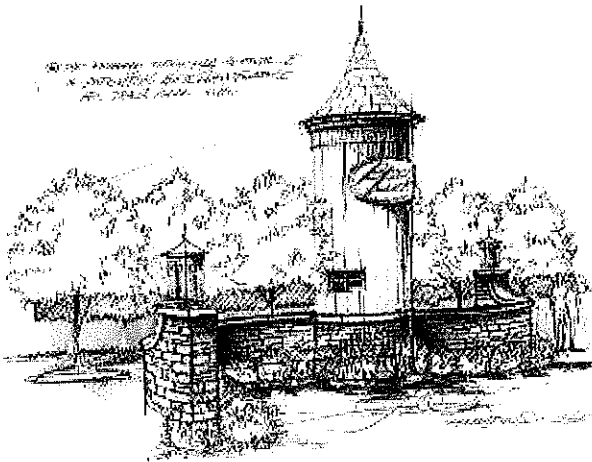
Improve Community Image and Identity

Citizens ultimately reinvest in a community that evokes a "sense of place" and contributes to their own personal sense of identity.

To some residents, however, Brook Park's visual appearance and aesthetics is not too appealing. Many residents indicated a desire during the planning process to overhaul this image. They indicated that Brook Park exudes a mentality that appears to be "locked in the 1970's," and this thinking is represented by its outdated appearance.

While Brook Park's appearance may have more to do with budget than beliefs, one element to their argument is absolutely true. A product must be continually re-branded to survive the attention span of finicky consumers. An attractive and rejuvenated City image should allow for better competition with other regional markets in attracting and retaining residents and businesses.

To this end, City officials should take a slow and systematic approach to rejuvenate its image to residents and visitors through encouraging community design elements. The visual aesthetics of Brook Park should be improved in the areas of gateways, signage, way finding, landscaping, and lighting. A planned and systematic process of enhancing the community's image will promote community pride and reinvestment. Several design renderings and ideas are highlighted in this Master Plan to help stimulate this goal.



Promote Corridor Planning

Brook Park is blessed with a very accessible transportation grid and network. The accessibility of the community's main corridors has historically helped to promote their vitality, while their land use composition was often dictated by their immediate surroundings.

For example, some land uses on Brookpark Road are reflective of the presence of Ford Motor Company. As the community's primary commercial corridor, Snow Road is more reflective of land uses that service the adjacent neighborhoods and the overall community. Both corridors could benefit from additional planning, design, and access management elements to increase their economic development potential, image, and appeal. Updating the zoning ordinance should assist in this endeavor.

Encourage Housing Diversity and Density

Changing demographics may require more diversity in housing options to promote residents that wish to "age-in-place" and to recruit young professionals to the community. Multi-family housing options are limited and a range of housing choices should be encouraged in Brook Park. Existing multi-family land uses could be revitalized or converted into mixed uses with multi-family options. Some of these areas are located on Glenway Drive and W. 130 Street.

Promote and Enhance Community Facilities and Services

Quality, timing and accessibility are key components to planning for adequate community facilities, utilities and services. Because a significant amount of the community was developed some time ago, the City has an aging infrastructure and facilities that may need upgraded.

While substantial investments are made annually, there is still a need, not only to maintain, but also upgrade facilities to account for changes in residential preferences and demographics. Improvements to the transportation network should be continually improved to promote safety and traffic flow.

Brook Park also has a rich array of cultural resources. These are factors that contribute to keeping Brook Park a great place to raise a family and live. Cultural resources not only enrich and improve the quality of life for existing residents, but they also play an important role in the economic development and social livelihood of Brook Park.

Encourage Alternative Energy Programs

Brook Park is one of 17 Cuyahoga County communities that have formed the Advanced Energy Special Improvement District to promote the use of solar, geothermal, wind power and other forms of alternative energy by industry and business. Eventually, the program will be extended to residents.

Promoting and adopting sustainable practices that reduce energy consumption will allow residents, businesses, and City Officials to allocate fiscal resources to other areas that have a better return on investment, like infrastructure, neighborhood revitalization, parks, and other public amenities most desired by residents.

Section II: Public Participation

A. Introduction

The community survey and its results have a solid role in the planning of Brook Park's future, and in the continual redefining of the City's commitment to its residents and businesses. Several elements of the survey have usefulness in shaping the direction of the several organizations and entities that comprise Brook Park's public and private sectors. It is recommended that the City continue to periodically use surveying methods in estimating the needs of residents and businesses, and to ascertain the interests of these constituents when developing programs and policies.

B. Community Survey

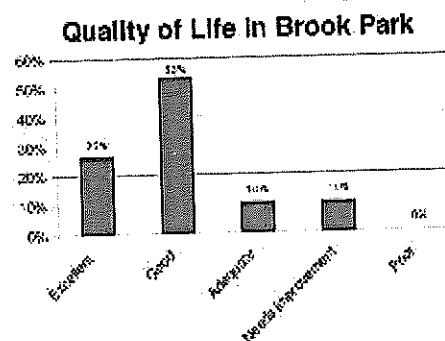
An interactive website (www.yourcommunity.me) and online community survey was developed and customized by the steering committee to assist in the collection of public opinion. Beginning in September 2011 and lasting for the duration of the planning process, over 500 residents completed the survey. Information on the planning process was posted to the site to inform and invite residents and businesses to participate in planning their community. Some of the main results of the survey were:

Demographics of Respondents

Ninety-one percent of respondents were Brook Park homeowners, with the remaining nine percent being renters or non-resident business owners and/or employees. Seventy-one percent were female, and 37% were 54 years of age and under. Sixty-three percent of respondents were 55 and older. Thirty-five percent (35%) of the respondents work in Cuyahoga County, but outside the city limits of Brook Park, and 19% of respondents work in Brook Park.

Quality of Life

A majority of respondents indicated that the quality of life in Brook Park is "Good". In fact, Fifty-three percent (53%) of the residents who were surveyed said that was the case. Twenty-six percent (26%) of residents said their quality of life was "Excellent", compared to only ten percent (10%) that said the City "Needs Improvement" or the ten percent (10%) that said their quality of life in the City was "Adequate". None of the survey respondents indicated having a "Poor" quality of life.

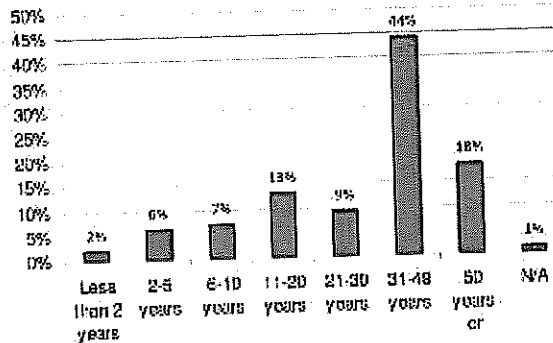


Length of Residency

A majority of Brook Park residents surveyed noted living in Brook Park for over 20 years (72%) with the largest percentage living in Brook Park between 31 and 49 years (44%). Twenty-eight (28%) percent of the residents surveyed indicated living in Brook Park for less than 20 years.

Approximately 15% of the respondents lived in Brook Park for less than 10 years indicating a good range of tenure by residents.

Length of Residency in Brook Park



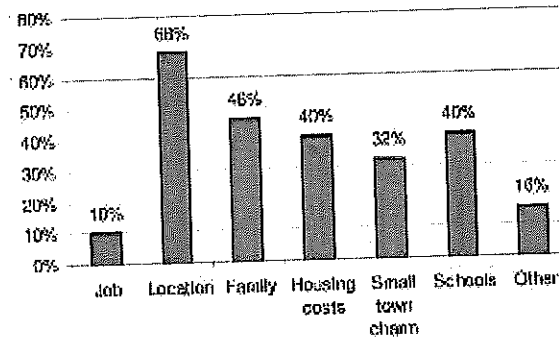
Reasons for Living in Brook Park

The most popular/prominent reason why people noted living to Brook Park was its location (68%). The second most popular reason respondents noted was family (46%) with housing costs and schools tied for a close third (40%). The small town charm of Brook Park was also an important factor: Thirty-two percent (32%) of the surveyed residents believed this to be true.

The 'Other' category was a reason for sixteen percent (16%) of those surveyed and these included reasons such as property taxes or the people of the

community. The job of the residents surveyed was less important with approximately ten percent (10%), respectively.

Reasons for Residing in Brook Park



Development in Brook Park

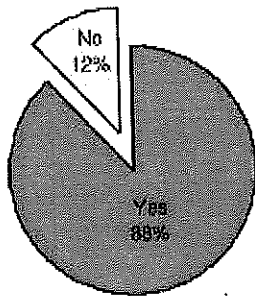
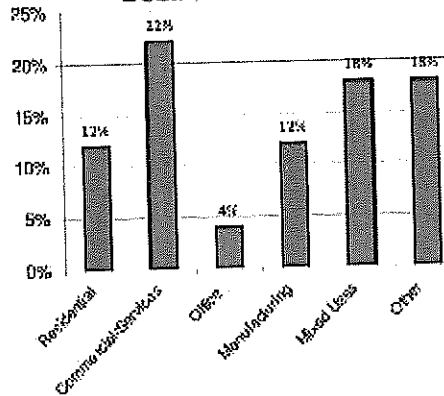
The type of development most respondents would most like to see is commercial and services (22%). Mixed uses and 'Other', which included comments like parks and senior housing, were tied at 18%.

Residential and manufacturing development was desired by 12% of respondents. Four percent of respondents wanted more office development.

The majority of respondents felt it was necessary to bring more of the following type of developments to Brook Park to enrich the community and help to alleviate the existing gaps within the existing consumer market.

Some of the comments they made note of more retail industries, a larger variety of restaurants, grocery store, and superstores such as Target or Wal-Mart. Other non-development related comments included improving the sewer system and increasing property inspection or maintenance programs.

Type of Development/Redevelopment Desired in Brook Park



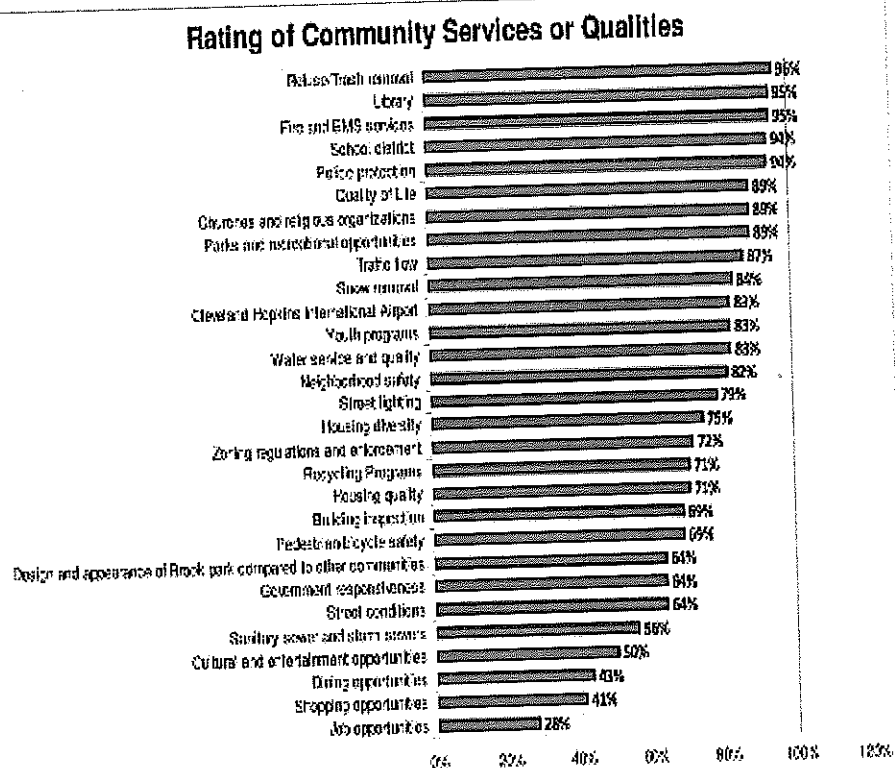
Planning with Berea School District Communities

When asked if it makes sense to begin planning with the communities that comprise the Berea School District (Berea and Middleburg Heights) in looking for additional ways to promote growth, redevelopment and encourage efficiency, 88% of respondents said yes.

Ranking of Community Services and Qualities

Brook Park residents were asked to rate the City's services from "Strongly Support" to "Strongly Oppose". Of the 30 services surveyed, only three of them had ratings lower than 50%, while 16 of these variable had ratings of 75% or higher.

Services that received the highest ratings were the Refuse/Trash removal (98%), the Library (95%), the Fire/EMS services (95%), the school district (94%), and police protection (94%) of Brook Park. Services with the lowest ratings included dining (43%), shopping (41%), and job opportunities (28%) in Brook Park.



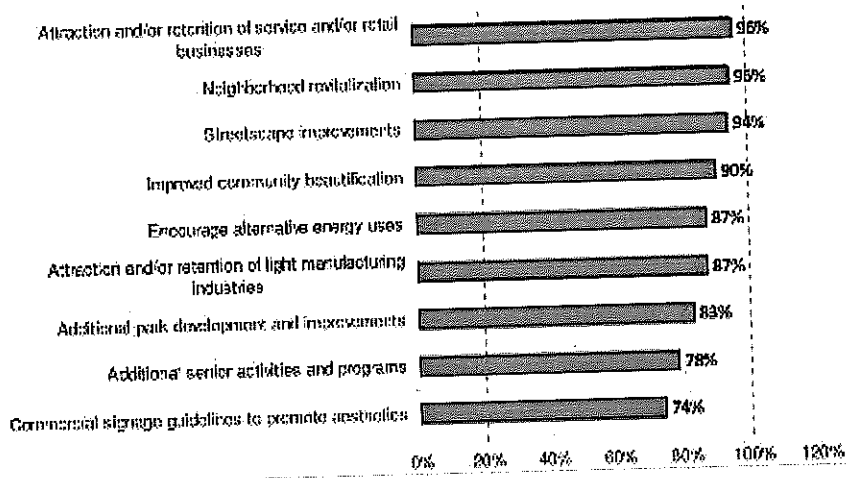
Need for Future Community Activities

Residents were also asked to rank Brook Park's need for activities on a scale from "Strongly Support" to "Strongly Oppose".

Residents noted a desire to support most activities; all activities listed received more than a 70% support rating. The highest ranked activities include attraction and/or retention of service and/or retail businesses (98%), neighborhood revitalization (95%), streetscape improvements (94%), and improved community beautification (90%).

Activities receiving the least support were additional senior activities and programs (78%) and commercial signage guidelines to promote aesthetics (74%). It appears that those surveyed desire additional movement in most of the activities.

Desired Community Activities



Open Ended Questions

The remaining portion of the survey asked residents to respond to several open-ended questions ranging from Brook Park's main strength, to Brook Park's greatest weakness and from the most needed improvement, to the greatest challenge. Although the results varied, several common themes emerged from them.

When asked what the citizens felt the greatest strengths of the community were, the most popular responses included prominent strengths that Brook Park hold

are: Location to nearby cities and easy access to local highways; city services; snow removal; police department; fire/EMS services; public library.

It was felt by the respondents and citizens of Brook Park that the city's greatest challenge is that it is aging and outdated, and needs a change in culture to move beyond the "70's" glory-days mentality. Improved architectural design should be taken into consideration when constructing new buildings and modernizing existing ones, survey respondents noted.

When asked what was thought to be needed improvements in the City of Brook Park, respondents provided many comments, such as: The need to fill empty storefronts and to update them, such as Brookgate; City facilities need beautified; many streets are also unkempt and need to be maintained, such as Brookpark Road; unkempt houses and other property nuisance issues.

There was an abundance of positive feedback concerning the most attractive developments located in the city. These included the City's recreational center, local parks and their new equipment, improvements made on Snow Road, and Kennedy Park.

C. Public Forums

The public embraced the planning process through several avenues which included two public community forums and the continual use of the interactive online survey linked to the City's website. During the course of the Plan's development, many groups and organizations participated including the Berea School District, the Brook Park branch of the Cuyahoga County Library, the Senior Center and Office on Aging, and the Cleveland Sun News.

Section III: Population and Demographics

A. Introduction

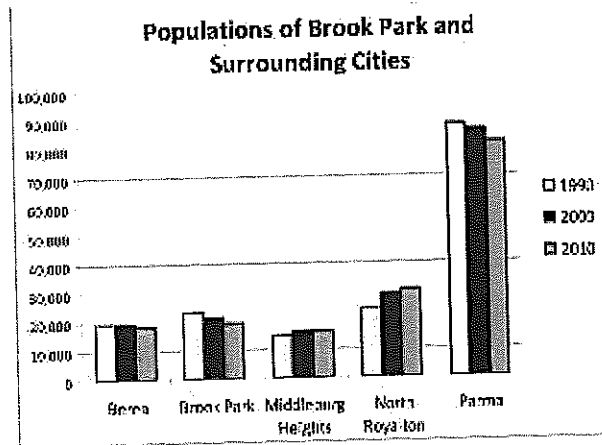
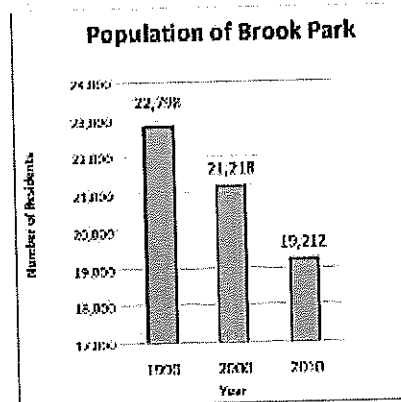
Demographics information is the foundation of a well designed comprehensive plan. Using the most current information possible is imperative to understand what forces are driving the current policies and understanding the composition of the city helps to guide future changes. It is important the officials utilize accurate population, demographic, and socio-economic data in developing sound public policies and land use decisions. City officials should continue to update this information to assess demographic shifts and trends.

B. Planning Issues and Trends

Population

According to the 2010 Census, Brook Park's population was 19,212, a decrease of 9.5% since 2000. Since 1990, Brook Park has witnessed a population decrease of 15.7%.

A population decrease of 8.2% occurred in Cuyahoga County from 2000 to 2010. There has been a total population decrease of 9.4% in the last 20 years in the County.



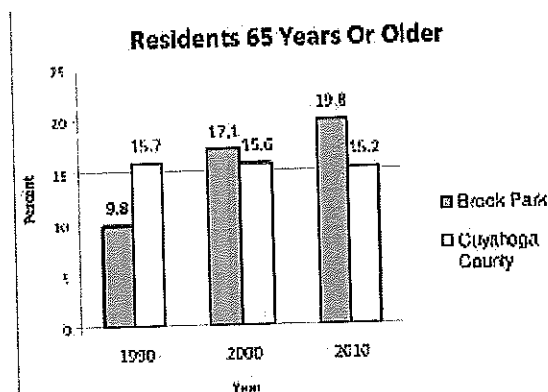
Surrounding cities such as Parma and Berea have also experienced a decline in population, whereas Middleburg Heights, Olmsted Township, Olmsted Falls, and North Royalton experienced increases in population.

Other surrounding communities have witnessed similar fluctuation in residents.

Population rank 2010	Population rank 2000	Community	Population 2000	Population 2010
24	22	Bay Village	16,087	15,651
20	20	Berea	18,970	19,093
17	23	Broadview Heights	15,967	19,400
33	32	Brooklyn	11,586	11,169
49	50	Brooklyn Heights	1,558	1,543
18	17	Brook Park	21,218	19,212
23	24	Middleburg Heights	15,542	15,946
8	7	North Olmsted	34,113	32,718
9	11	North Royalton	28,648	30,444
29	35	Olmsted township	10,575	13,513
36	37	Olmsted Falls	7,962	9,024
2	2	Parma	85,655	81,601
15	16	Parma Heights	21,659	20,718
16	18	Rocky River	20,735	20,213
6	6	Strongsville	43,858	44,750
7	8	Westlake	31,719	32,729

Age Composition

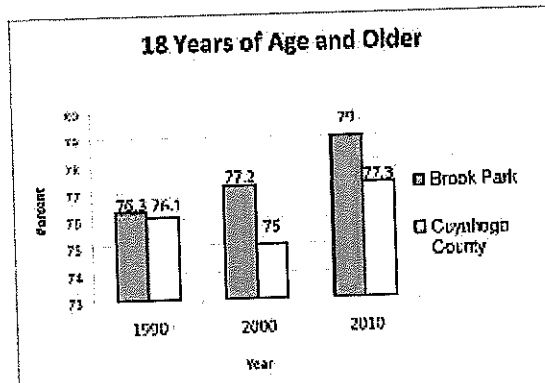
Compared to Cuyahoga County (15.2%), Brook Park has a higher percentage of residents 65 years or older (19.8%), according to the 2010 Census. The percent of residents 65 and older has increased roughly 10% in the last 20 years.



This was also true in 2000 with Brook Park having 17.1% of its residents 65 years or older while Cuyahoga County only had 15.6%.

The year 1990 was a different case although, Cuyahoga County had 15.7% of its residents 65

years or older, while Brook Park only had 9.8%.



Brook Park has a higher percentage of residents over 18 years old (79%) compared to Cuyahoga County (77.3%). This was also the case over the last twenty years, with very close percentages between Brook Park and Cuyahoga County.

According to the 2010 Census, 16.5% of Brook Park's population is "school

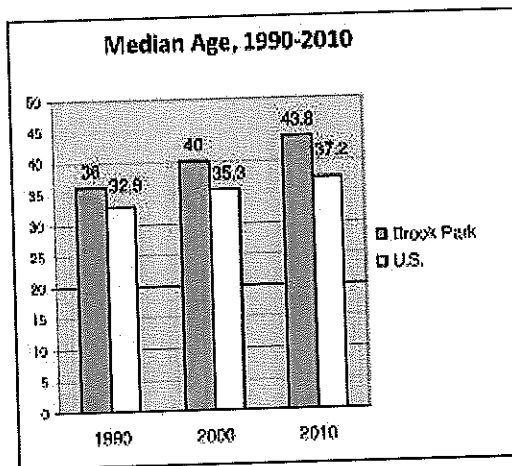
age" or between the ages of 5 and 17. The percentage of school age residents in Brook Park has been slightly declining over the past 20 years (18% in 1990).

Cuyahoga County's percentage of residents in the same age category has been inconsistently increasing and decreasing each decade from 1990. In 2010, 16.8% of county residents were ages 5-17.

Median Age

According to the 2010 Census, the median age of Brook Park was 43.8 years old. This is an increase of nearly four years since 2000 (median age: 40) and eight years since 1990 (median age: 36). This is a dramatic difference compared to the national median age of 37.2 years in 2010. The national median age increased about 2 years from 2000 (median age: 35.3), with the proportion of older Americans increasing.

The aging of the baby boomers population, along with stabilizing birth rates and longer life expectancy, have contributed to the increase in median age.



Households and Families

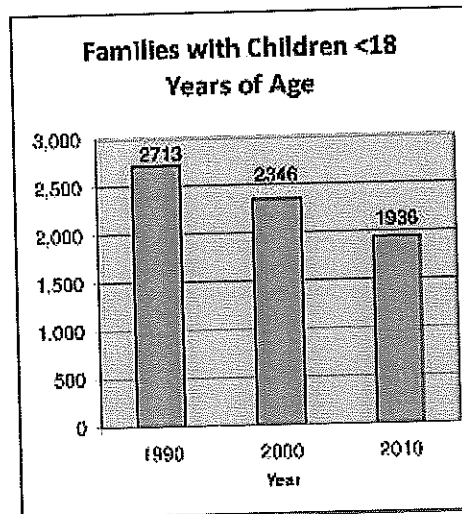
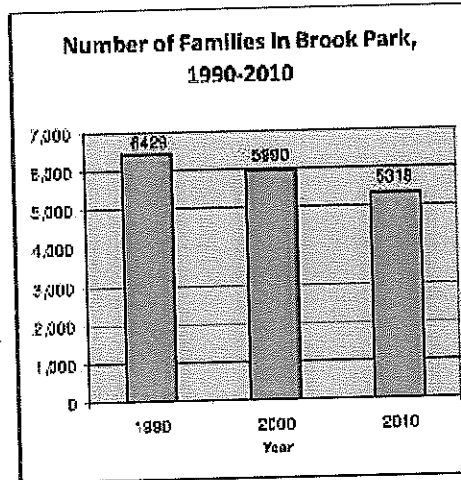
While the City has experienced a slight decline in housing units (199) and the number of households (394) over the last decade, it continues to witness a steeper decline in families.

Since 1990, there has been a 17% decrease in family households in Brook Park. This trending is not new: Since 1970, households with five people or more has fallen in half.

Today, non-family households account for 31.8% of the City's 7,799 households, a five percent or more increase since 2000. This has helped to reduce household size to roughly 2.5 persons.

The number of families with school age children also has declined by 29% over the last twenty years.

While there has been a slight decline in school age children in Brook Park, many of these children are now sheltered in non-family homes, primarily headed by a female.



Section IV: Economic Development

A. Introduction

A healthy economy is essential to Brook Park's continued and future growth. Without a strong economic base, the City will not have the fiscal strength to provide the kinds of services desired by existing and future residents. A healthy economy means more than just new jobs; it means an engaging quality of life for residents, a welcoming and flexible business environment, and increased fiscal capacity and financial stability for Brook Park.

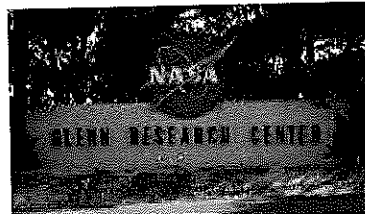
B. Planning Issues and Trends

The City continues to focus on business retention, redevelopment opportunities, infrastructure improvements and prospecting for new business investment. Another main economic development focus is to work with regional retailers and local businesses to dispel the myth that the community has a lack of spending power.

Business Retention and Expansion (BRE) Progress

Major retention efforts helped to retain 750 employees at Ford with the new work generated at Engine Plant One and PNC Bank retaining 125 jobs when they moved their human resource service delivery department to Aerospace Technology Park. GXS, Inc., a local data center, expanded operations at their existing Brook Park location, generating an additional 50-75 new high income jobs.

Continual efforts also ensue to assist the NASA Glenn facility remain as one the community's greatest economic assets. NASA Glenn's on or near-site employment has grown by 32% since 2006. Total compensation for NASA Glenn's civil service employees was \$221.7 million in FY 2010. The average wage per NASA Glenn employee increased from \$96,504 in FY 2006 to \$107,455 in FY 2010 after adjusting for inflation. Total number of employees at NASA Glenn, including both civil service employees and local contractors, was 3,570 in FY 2010.



In 2010, the city of Brook Park withheld \$3.3 million in income tax from NASA Glenn employees, which was an 11% increase compared to 2009. Over the past 5 years, NASA Glenn employees paid \$14.4 million to the City of Brook Park.

Economic development officials were also successful in helping RGL Express find a new location within the City. They retained 40 employees and created 5 new jobs. SPX Service Solutions and National Office also created an estimated 20 new jobs each.

On the redevelopment front, Anchor Enterprises purchased a vacant building and made \$1.3 million in property improvements to the site, creating 11 new jobs. O'Reilly Auto Parts built a new \$1.5 million dollar facility at the vacant Ponderosa site. Advanced Auto Parts moved into a vacant storefront that had been previously occupied by Hollywood Video, making over \$1 million in property improvements. Best Western Hotel completed \$1 million in renovations of the lobby and all guest rooms.

Other economic development efforts include the expansion and attraction of several other businesses including, but not limited to: Big 'Z Sandwich Shop, M&S Auto Service, American Natural Stone, Subway, Cycle Analysis, and Johns-Carabelli Monuments.

Regional Economic Development Progress

Brook Park is continually engaged in regional economic development efforts.

For the past several years, City officials have been working closely with the Greater Regional Transit Authority (GRTA) and the City of Cleveland on the redevelopment of the Brookpark Road Rapid Station. This station is one of the busiest in Cuyahoga County. The new station and the potential mixed use development surrounding the project could spur growth for other companies in the area. RTA officials continue to market this site to the development community.

As a member of the First Suburbs Development Coalition (FSDC), Brook Park has grouped together with 17 other communities to create the Advanced Energy District which will help to finance energy-saving improvements for commercial and industrial businesses located within the district. Those communities hope that residents and home owners could someday be part of the program.

City officials continue to work with the cities of Cleveland, Parma, Berea and Olmsted Falls to create an "Aerotropolis" using the Cleveland Hopkins Airport as the economic generator. The goal of the project is to enhance and generate new economic activity for designated areas within each of the participating communities. In Brook Park, these areas would consist of Aerospace Technology Park and possibly the "Ford Forward" Concept Area, located at the site of the former Ford casting and engine plants.

C. Market Analysis

A market analysis was developed in October 2011 to estimate consumer spending and overall "spending power" of the community. The analysis estimated the surpluses and gaps related to 37 different merchandise lines. The conclusion of the analysis indicated that opportunity gaps exist in 30 of 37 merchandise lines within the community (See: *Table One, Market Analysis*). This means that residents are leaving the community to make many purchases either because of the lack of service or shopping diversity.

The top ten merchandise lines with opportunity gaps are:

<u>Merchandise Line</u>	<u>Gap</u>
Groceries and Other Foods	\$27,554,959
Drugs, Health Aids and Beauty Aids	\$19,203,562
All Other Merchandise	\$8,582,428
Kitchenware and Home Furnishings	\$4,155,460
Women's, Juniors' and Misses' Wear	\$3,076,446
Lawn, Garden, and Farm Equipment & Supplies	\$2,988,396
Cigars, Cigarettes, Tobacco, Accessories	\$2,768,381
Curtains, Draperies, Blinds, Slipcovers Etc	\$2,665,522
Pets, Pet Foods and Pet Supplies	\$2,031,171
Jewelry	\$2,030,335

Data for this market analysis was derived from two major sources of information. The demand data is derived from the Consumer Expenditure Survey (CE Survey), which is fielded by the U.S. Bureau of Labor Statistics (BLS). The supply data is derived from the Census of Retail Trade (CRT), which is made available to the U.S. Census. Additional data sources are incorporated to create both supply and demand estimates.

The difference between supply and demand represents the opportunity gap or surplus available for each merchandise line. When the demand is greater than (less than) the supply, there is an opportunity gap (surplus) for that merchandise line. For example, a positive value signifies an opportunity gap, while a negative value signifies a surplus.

D. Strategies

Develop an Economic Development Plan

Before any future development of considerable impact can occur it must first be planned so that it can occur smoothly and in the best location and interests of residents. A plan, regardless if established through ad-hoc measures or by new processes completely aside from the economic development component in the Master Plan, should analyze the current strengths, weaknesses, opportunities, and outside threats facing Brook Park and its economic base. This analysis should form the basis and the exact suitability of growth anticipated to occur in the redevelopment areas identified in the Master Plan, with the capital improvement program modified accordingly to accommodate this growth. The capital improvement program and Economic Development Plan should reiterate the economic development priorities that surfaced during the master planning process and highlighted within this Plan's Section.

The Plan should include the following elements:

1. Specific economic development goals and objectives (should compliment those addressed in the Master Plan; if different, the Master Plan should be amended to include these new goals and objectives);
2. Economic analysis, to include workforce characteristics and other related demographics;
3. Type of growth and redevelopment desired;
 - Can it be supported by the City's existing base or anticipated new base of employees? If yes, the process of identifying specific businesses in this growth type should be pursued. If no, a list of businesses and industries friendly to the City's existing base of employers should be developed. Brook Park officials should be open to think collectively with economic development officials from surrounding cities.
 - Will the desired new growth adversely impact upon existing employers?
4. Specific growth/redevelopment areas (other than those already delineated in this Plan), where specific development (by type) should occur. This should be developed through some sort of public input and review process;
5. Economic Assessment, to include an inventory of existing businesses and preferred new businesses;

6. Identify existing infrastructure (water, sewer, and thoroughfare) capabilities of these areas;
7. Identify existing infrastructure (water and sewer, and thoroughfare) constraints of these areas;
8. If mitigating these constraints is found to be economically not feasible, it should be recommended that growth occur at another suitable location (unless private sector investments offset public expenditures).
9. If constraints can be mitigated, the capital improvement program should be modified to promote the selective growth desired.
10. Economic Development Strategies (to include marketing and promotion strategies);
11. Inventory of funding sources and economic incentives; and,
12. Implementation and timing of economic development priorities through the use of the Capital Improvement Plan (CIP).
13. A change in the zoning ordinance so that the zoning is reflective of the economic development initiatives.

Review the Economic Development Incentives Program

Many communities utilize the Enterprise Zone (EZ) program and the Community Reinvestment Area (CRA) program to promote economic development. Both programs offer businesses property tax abatement for business creation, expansion, and retention projects that create or retain jobs. These incentives are currently utilized by many of the surrounding communities including Brook Park, North Olmsted, Middleburg Heights, Parma and Parma Heights.

The City of Brook Park has one enterprise zone (Currently Zone 134C). The active EZ agreement in place is with Ford Motor Company and will expire in 2012. It also utilizes the CRA program to offer property abatement, but any changes to the boundary will bring the program into post-1994 standards as required under Ohio Revised Code. When the CRA was developed, the entire city was designated as a CRA.

Also, since the passage of H.B. 66 and the dissolving of personal property taxes, there is no difference between both programs with the exception of how they're administered. The CRA program is a local program, promoted, administered and monitored locally. By statute, the Enterprise Zone program requires county approval, and is therefore administered by the Cuyahoga County Department of Development. To streamline the economic development process it is

recommended that the City use the CRA program as the primary tool for property tax abatement over the EZ program.

Revitalize Existing Commercial Shopping Nodes

Certain areas in Brook Park are being underutilized. The Brookgate Shopping Plaza is one such area. The City should work with the property owner to ensure the facility is currently being actively marketed. Site selection consultants often look at commercial vacancies in a community's main shopping hub as an indicator that the local economy is not good for investment. However, the Market Analysis prepared for this Plan indicates that Brook Park consumers are shopping outside of Brook Park because of the lack of shopping diversity. Revitalizing these areas could help the community greatly by allowing residents to shop local.

There are a variety of other shopping areas off of main thoroughfare routes like Snow Road that should continued to be updated and renovated through economic planning, incentives and programs like the County's storefront renovation program, which produced over \$25,000 in façade improvements for two Snow Road businesses in 2009: Automotive Technologies and The Garden Restaurant. The partnership with Cuyahoga County also produced over \$70,000 in façade, infrastructure and signage improvements for five other Brook Park businesses: Car Wash Express, American Natural Stone, SuperCharger LLC, Athens Foods and DBS Communications.

Businesses located at neighborhood commercial nodes, like those present at the intersections of Holland/Engle Road and Smith/Sheldon Road would be good candidates for these programs because of the value they provide to the adjacent neighborhoods and community.

Develop a Niche Marketing Strategy

Successful communities often have two or three successful niches. Typically, the more niches that can be developed, the more a community will be able to support multi-purpose visits. These communities also benefit from an expanded trade area because their specialization often draws customers from more distant communities. Once a niche is established, other businesses are often attracted to the community as they are interested in selling to the same consumer market.

A niche can be based on a certain type of consumer who works, resides or visits your community. These different and unique types of consumers may demand a wide range of goods and services. All of these consumer types can be found within Brook Park or in close proximity to Brook Park.

Promote Brook Park

Communities are like merchandise, in that their success largely depends upon branding and reputation. Attaining market share of each variable requires tedious planning and resources. Brook Park, as seen by many of the residents

that participated in the planning process, is outdated and needs a facelift. City officials should look to do "small things in a great way" to improve this image through additional beautification methods, and façade and other capital improvements to its current public facilities.



Establish Community and Neighborhood Linkages to the Metroparks

The Cuyahoga County Metroparks lies in the western portion of Brook Park, yet few linkages in the community exist. Establishing linkages via signage, bike lanes, and other pedestrian connectivity methods to the parks would have recreational value and enhance the cultural value of many of Brook Park's neighborhoods.

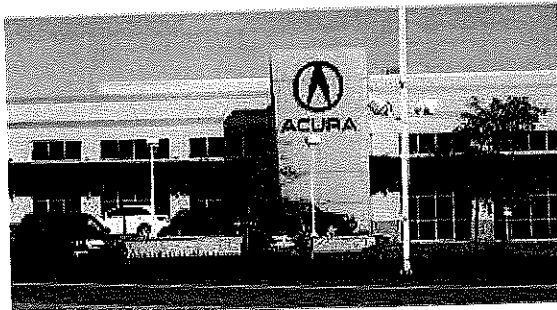
Promote Entrepreneurial Activities and Enterprises

New businesses, including home-based, that meet local market needs should be encouraged. These types of activities could include those that assist already established local and regional businesses in the service, manufacturing, or entertainment sectors, or could be business ventures completely new to the Brook Park service sector.

Pursue the Feasibility of Developing a Special Improvement District for Brookpark Road

Brookpark Road is a major feeder street within the region and is a main corridor for many visitors entering the community.

There has been over \$40 million of private funding invested into the North Side of Brookpark Road since the acquisition of this area from Cleveland. Numerous storefront renovation projects have enhanced the visual quality of the commercial corridor. The City of Brook Park continues to meet with building owners and developers to find creative opportunities for new projects along this important corridor.



To provide additional visibility to this area, the City and interested businesses should consider establishing a Special Improvement District (SID) to generate

funds to undertake and support additional infrastructure, marketing, economic development, and other activities. The SID, if agreed upon by the majority of the property owners, would assess a fee to properties within the SID. The formula to determine that fee would be decided upon and agreed to by the property owners. Please see *Map: Opportunities and Themes Map*, for the general location of this district.

Keep Capital Local

The Market Analysis prepared for this Plan indicates that consumers spend more money outside the locality, therefore providing an opportunity gap in 30 of 37 merchandise areas (See *Table One: Market Analysis*). While this may stem from the non existence of local purveyors of these goods and services, leaks can also begin from not patronizing local businesses.

Developing a "Shop Local" campaign and a Local Business Preference Program could help minimize these leaks and help to retain businesses and keep capital local. Both programs could be spearheaded with the assistance of the Brook Park Chamber of Commerce and the City's Economic Development Department. The Local Business Preference Program, which would provide a preference to local businesses bidding for City services and contracts, would need to be authorized by ordinance. One good example of this program has been adopted by the County of Los Angeles.

Promote the Advanced Energy District and Aerotropolis District

As a member of the First Suburbs Development Coalition (FSDC), Brook Park should continue to work toward finding meaningful programs that can be administered by the FSDC. Sixteen communities banded together to create the Advanced Energy District to help finance energy-saving improvements for commercial and industrial businesses located with the AED. It provides for property owners to finance the cost of installing and operating energy efficiency systems and allow the cost to be repaid over 25 years through a special voluntary assessment tax on their property tax bill.

Brook Park should also continue working with the cities of Cleveland, Parma, Berea and Olmsted Falls to create an "Aerotropolis" geared toward nurturing businesses that have business models linked to the Cleveland Hopkins International Airport. This idea "stitches" airport-reliant businesses and transit routes together with the Airport functioning as a central business zone.

The goal of the project is to generate economic activity for designated areas within each of the communities. Additional economic growth could be born from this endeavor once logistical and marketing of such an entity is solidified, and especially if the Cleveland Hopkins Airport expands to accommodate larger aircraft. Some area companies are forced to ship goods by truck to airports in Detroit and Chicago that have planes with bigger cargo holds than aircraft using Hopkins. The City of Detroit and five other cities have Aerotropolis communities.

Pursue Additional Resources to Promote Economic Development

There are a variety of additional resources that can be used to encourage and promote economic development and redevelopment in Brook Park. Many of these programs are already being pursued, but others could be utilized for the potential redevelopment of vacant properties and brownfields

The Competitive Municipal Grant Program

This grant assists municipalities with a variety of projects that meet one of the HUD National Objectives: Benefit low/moderate income persons; Aid in the prevention of slums and blight; or other urgent community needs. Planning and streetscape projects are eligible.

The Storefront Renovation Rebate Program (SRRP)

This program assists property owners and/or business tenants within the Urban County with making façade improvements and/or the correction of exterior code violations to their property. These improvements lead to revitalized neighborhood commercial areas, elimination of blight and enhanced livability of surrounding neighborhoods.

Brownfield Redevelopment Fund (BRF)

The Brownfield Redevelopment Fund (BRF) is designed to help communities remove environmental barriers so that underutilized properties can become viable.

Clean Ohio Fund

The Clean Ohio Fund helps to preserve green space and farmland, improve outdoor recreation, and revitalize blighted neighborhoods by cleaning up and redeveloping polluted properties. Two specific programs of the Clean Ohio Fund include the Clean Ohio Revitalization Fund (CORF) and the Clean Ohio Assistance Fund (COAF). A CORF Project with a Known End User can receive up to a \$3 million grant. A CORF Project without an end user, Redevelopment Ready, can receive up to a \$2 million grant. A 25% match is required.

A COAF Project can also receive up to a \$300,000 grant for assessment or up to a \$750,000 grant for clean up. A 10% match is required and County Assessment grants and/or Brownfield Redevelopment Fund loans can be utilized as match. Brook Park, as of December 2011, was identified as a Priority Investment Area by the State of Ohio, and is eligible for COAF grants. This fund could be a possible avenue to help redevelop lands within the Ford Forward Concept Area.

Commercial and Industrial Redevelopment Program

This program provides subsidized loan assistance to help promote the full reuse of abandoned, idled or underutilized commercial, industrial, and

institutional properties. Job creation and an increase in property values are expected outcomes of remediation and redevelopment.

Brownfield Prevention/Site Expansion Program

This program is a forgivable loan that helps private businesses expand onto an adjacent abandoned, idled or underutilized parcel (s). Parking lot expansions will not be considered. The borrower is eligible for \$35,000 in loans for every new fulltime, or new fulltime equivalent job created at the project site. An additional five percent (5%) of the loan amount may be forgiven if certain green/sustainable features are incorporated into the project. A project's funding requires the recommendation of the Cuyahoga County Community Improvement Corporation and/or final approval by the County Executive or County Council.

HUD Brownfield Economic Development Initiative (BEDI) Grant

BEDI grant funds are targeted for the redevelopment of brownfield sites that facilitate create jobs for low-and moderate-income persons as part of the business creation or retention project. Funds are used as the stimulus for local governments and private sector parties to commence redevelopment or continue phased redevelopment efforts on sites where either potential or actual environmental conditions are known. There is a cap of \$2 million per BEDI grant award.

Jobs Ready Site Program

The Ohio Job Ready Sites Program was created to bolster the State of Ohio's portfolio of commercial and industrial developable sites. Grants are capped at either \$3 million or \$750,000, depending on the site development intensity, and may be used to offset costs traditionally incurred in industrial and commercial site development, from acquisition of real property, infrastructure upgrades, and construction build-out of speculative facilities.

Section V: Land Use and Design

A. Introduction

This Section helps to provide a basis of future zoning revisions and reflects the long-term vision of the community. It was developed broadly and reviews the community in "Concept Areas" with the intention to help accentuate or alleviate the conditions and trends that pertain to each of these unique areas.

While it is appropriate to update the zoning ordinance following the adoption of the Master Plan, many of the desired changes reflected in the Plan are dependant on market forces and may take many years to materialize. The key is for the community to have the vision and tools in place to guide development as it happens, rather than reacting after it is finished.

B. Planning Issues and Trends

The development trending over the last several years illustrates that new property investments are slowing, with developers and property owners being more selective. This trend is not new to Brook Park as new development has been limited on a national basis due to current issues in the financial sector, the housing market, and the general economy. According to some analysts, some regions are 50-60% over-commercialized. This has helped to suppress rents and lower the profit margins of developers and property owners. The lack of lending has also stalled development and reinvestment.

These issues are evident in the trending of Brook Park's assessed valuation of all development and with temporary increase of vacancies along commercial corridors. Total assessed valuation of Brook Park's land in 2011 was \$441,325,290, down slightly from 2008's valuation of \$463,468,690. The decline in value was primarily due to the required triennial reappraisal from the County Auditor and property value readjustments from the Board of Revision.

However, due to Brook Park's location and stable residential base, it is expected that local businesses will continue to make slow, but sustained investments.

Residential

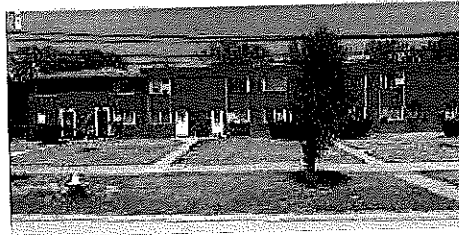
Residential uses occupy the greatest amount of land by major land use category (see *Map: Existing Land Use*). Most of Brook Park's residential neighborhoods were built after World War II and up to 1970. These neighborhoods are generally built on a grid pattern with narrow, tree-lined streets. The homes are a variety of styles that include bungalows and ranch style



homes. Over the last decade, sporadic infill development has occurred throughout the City. In 2011, assessed valuation of residential properties was \$291,695,680, down from \$315,453,260 in 2008.

Some neighborhoods, like those located on W. 139th Street off Brookpark Road, are isolated and generally surrounded by commercial and industrial land uses. This would also include the neighborhoods south of the Airport and north of Sheldon Road. Located in a noise abatement area and under the control of the City of Cleveland, many of the homes in these neighborhoods were purchased with federal monies and razed. The project was halted due to insufficient funding and is currently on hold.

Multifamily land uses exist in Brook Park but on a limited fashion. While examples of newer multi family developments do exist, such as Cambridge Court Apartment Homes and Liberty Bell Condominiums, the majority of these developments may be suffering from a lack of reinvestment. There are two senior living centers in Brook Park, North Park retirement community and East Park retirement community.



Most neighborhoods in Brook Park have excellent pedestrian connectivity, with the exception of the neighborhoods located west of the airport, adjacent to NASA and the Metroparks.

Commercial

In 2011, assessed valuation on commercial land uses was determined by the Cuyahoga County Auditor at \$95,861,330, up from \$87,793,070 in 2007. The majority of commercial land uses are located along Snow Road and Brookpark Road. While more industrial and highway commercial related land uses exist on Brookpark Road, more professional services and retail-oriented development is located on Snow Road. Brookgate Shopping Center is the largest commercial retail facility in the community. It is currently plagued with a high vacancy rate due to the loss of a large grocery store and other tenants.

There are nodes of neighborhood commercial land uses. These land uses can be found that the intersections of Holland/Engle, Sheldon/Smith, and Hummel and Smith Roads. Nodes of neighborhood commercial land uses are located around the community, primarily at key intersections like Holland/Engle, Smith/Sheldon, and Smith/Hummel Road.

Industrial and Professional Offices

Industrial uses are primarily located in the northwestern and southwestern portions of the community with the largest industrial user being Ford Motor Company. In 2011, assessed valuation on industrial land uses was \$53,762,780, down from \$54,904,060 in 2008.

As one of the largest employers in the region, Ford Motor Company once employed over 15,000 employees. Its workforce is now estimated at approximately 1300. Other areas of manufacturing land uses exist along Brookpark Road, Holland Road west of the railroad tracks, and on the Eastland Road corridor, adjacent to the Airport.

Upscale, professional office land uses exist adjacent to the Airport and the NASA Glenn Research Center. Aerospace Technology Park features a large capacity and upgraded telecommunications infrastructure to serve office and research and development operations.

Most of Brook Park's industrial/light manufacturing land uses are located in the Brook Park Corridor Concept Area and the Revitalization Concept Area (see *Map: Concept Areas*). Brook Park's industrial land uses are supported by Brook Park's proximity adjacent to Hopkins International Airport, rail access and the I-X Center and all of the major highways and interchanges. The I-X Center is the 3rd largest convention and exhibit center in the country, 9th largest in the world.

Public and Institutional

Brook Park is home to a variety of public and institutional land uses, such as the NASA Glenn Research Center, the Metroparks, Holy Cross Cemetery, and a variety of public facilities, parks, religious organizations, and the Berea City Schools. The Army National Guard and Marine Corps also have a presence in Brook Park. Many of these public and institutional land uses are typified by an urban design form reminiscent of the 1960s and 1970s and may be in need of updating.



Approximately 25% or more of the City's land mass is devoted to this type of use. Land and property owned by the Metroparks, NASA, and the City of Brook Park are the greatest contributors to this land use category. It is important to note that these parcels are tax-exempt and do not pay real estate taxes to the City or other local governmental service providers.

BROOK PARK MASTER PLAN

EXISTING LAND USE



LEGEND

- UTILITY
 - HIGH DENSITY RESIDENTIAL
 - PARK
 - RESIDENTIAL
 - HIGH DENSITY RESIDENTIAL
 - COMMERCIAL
 - INDUSTRIAL
 - PUBLIC AND INSTITUTIONAL
 - URBAN
- BRONX, CALIFORNIA COUNTY PLANNING AND DESIGN



C. Strategies

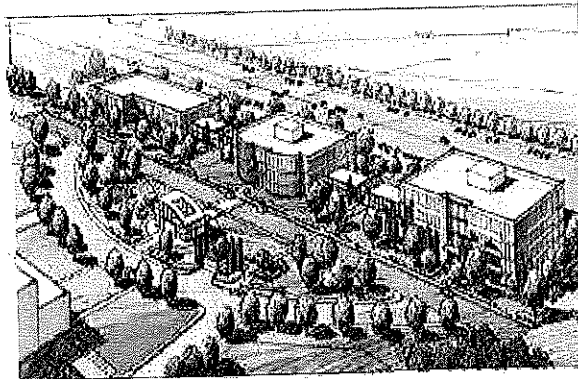
Plan Brook Park as Concept Areas

For the purposes of planning, Brook Park was divided into distinct "Concept Areas" that can be used to define visions for future growth and redevelopment of the community. These areas were developed with similarities in mind and should be used in the future when deciding land use, zoning, and promoting a sense of community. For a better understanding of the location of these areas, please see the Map: *Concept Areas*, located at the end of this Section.

Aerospace Concept Area

This concept area, located adjacent to the Airport and Metroparks, is home to NASA's Glenn Research Ctr., Aerospace Technology Park, and diverse residential neighborhoods located primarily on Cedar Point Road and Ruple Parkway. Land uses are primarily professional office and research related, and residential. It is also a stone's throw away from the International Exposition and Tradeshow Center. Future land uses should look to complement this concept area's strategic location and improved technology infrastructure.

NASA's recently approved Master Plan for the Glenn facility envisions a new office building located on the main campus. It is anticipated that this facility will be home to additional employees and contractors assisting NASA in developing broader deep space technology. A key feature of the Master Plan at Lewis Field calls for creating a campus center that would function as "downtown" Glenn.



Zoning in this concept area should be flexible especially if the market deems residential land uses less appropriate. To accentuate the employment capacity, City officials may wish to encourage retail services in this area, such as restaurants and eateries, and other outlets that may be value-added assets to adjacent employers and neighborhood residents.

Pedestrian connectivity is limited in this area and could be improved through a combination of bike lanes and sidewalks. Two primary gateways

into the area located at Cedar Point and Ruple roads should be enhanced and beautified. A variety of strategies presented in this plan could help to promote many of these ideas.

Airport Growth and Revitalization Concept Area

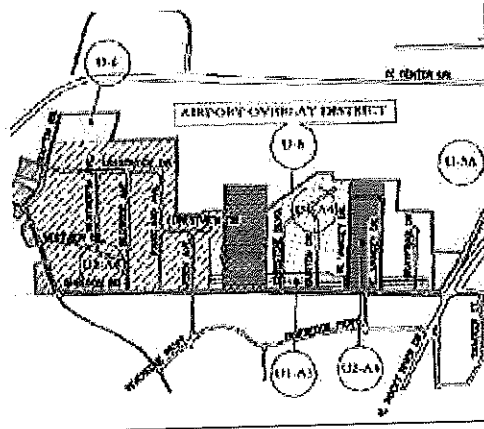
This concept area is located directly south of the Cleveland Hopkins International Airport and north of Sheldon Road is typified by residential, multifamily and utility-related land uses. Fire station #2 is also located in this area off of Grayton Road.

This area is located in the Residential Acquisition Program. Phase I of the Acquisition Program officially ended on April 26, 2009. City of Brook Park and Airport Officials agreed to move the remaining Phase I Zones (Zones 5 and 6) into Phase II of the program to protect those residents under the umbrella of the Settlement Agreement. Per the Settlement Agreement, Cleveland has seven years from the end of Phase I to decide whether they want to purchase the homes in Phase II, which now includes the homes on Parkland Avenue through Grayfriar Drive along Sheldon Road.

Although this area is located in Brook Park it is under the control of the City of Cleveland, and may be a future expansion area for the "South Campus" portion of the airport used for cargo, airline maintenance, and corporate aviation. Through the use of federal monies, properties have been acquired and demolished on Westview Dr., Wentworth Avenue, and portions of Crestridge Drive and Wildwood Avenue.

However, the plan to remove all residential land uses from this area, from Wildwood Avenue, east to Grayfriar Drive, fell short due to a lack of funding.

This area still remains designated by the Airport as an expansion area. Because of this designation, future land uses should be limited types of development compatible with the expansion plans of the airport. Zoning of this area should be in accordance with these plans.



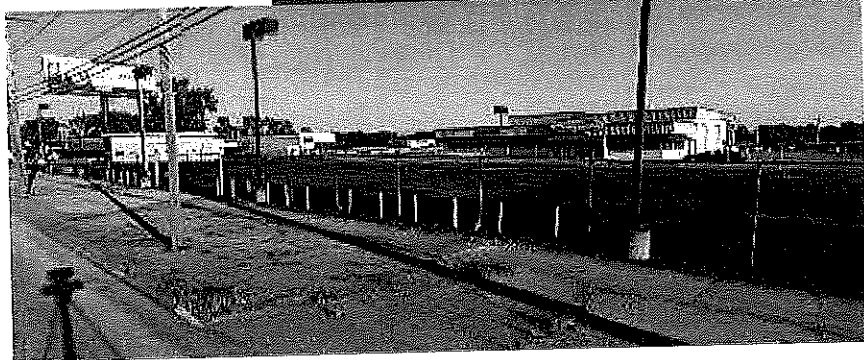
Brookpark Road Corridor Concept Area

Brookpark Road is one of the community's primary commercial and industrial employment corridors. It has excellent access to key thoroughfare routes in the region and is home to the second busiest RTA station in Cuyahoga County. As the corridor feeding into Ford Motor Company, its land uses are varied, diverse, and antiquated.

Large seas of underutilized, impervious parking lots and vacant properties are intertwined with taverns, gentlemen's clubs, motels, automotive related businesses, and Brook Park's oldest neighborhood and one of the region's largest cemeteries (holy cross cemetery). A variety of other commercial and light manufacturing businesses are located off of four cul-de-sac access streets, and Henry Ford Blvd., Smith Road, and W. 130th St. There are seven different zoning classifications present on the Brookpark Road corridor.

Pedestrian connectivity is sporadic as well as the corridor's aesthetic and visual appeal. However, sections of the corridor in front of Metro Lexus and Airport Infinity, and other car dealerships have been improved with landscaping and decorative fencing.

The RTA is planning a major renovation to its second busiest station in 2012.



In addition to property renovation and improved pedestrian connectivity, RTA officials are also marketing the adjacent 12 acres for mixed use development.

The future viability of this corridor will require that several key issues are addressed:

- Resources should be pursued that help to mitigate blighted and vacant parcels. These parcels would be more marketable if assembled into larger parcels. The City of Brook Park should continue to partner with the Cuyahoga County Land Bank to accomplish this or utilize a local community improvement corporation, if one existed.
- The City should continue to utilize and recharge the funds used to revitalize the corridor. The city set up a fund with \$200,000 to spur private investment here. This investment helped to spur an additional \$1 million for visual and other property improvements.
- Residential land uses located on W. 139th Street are incompatible with the surrounding land uses and should be made nonconforming in the future.
- The zoning districts that guide development on this corridor should be consolidated into the fewest number of districts as possible. Doing so would certainly render some land uses nonconforming, but may be absolutely necessary in promoting the highest and best use of the corridor. An overlay district should also be developed to guide aesthetics, site access, lighting, signage, and pedestrian connectivity.
- Access management should be better planned and reduced where feasible to promote traffic flow and safety.
- Defining gateways should be developed at key entryways and locations.



Community Core Concept Area

Brook Park suffers from a lack of an identifiable core, otherwise known in most communities as their "downtown." Thriving downtown areas are typified by a combination of land uses, retail stores, various attractions, live – work accommodations, identifiable destinations, and of course, an invigorating, walkable and pedestrian friendly atmosphere. Many residents indicated on the community survey a desire for such an area.

Such an area does exist in Brook Park, although it may lack the architectural detail of a traditional downtown. West of I-71 and east of Engle Road is situated the majority of Brook Park's public and institutional facilities. They include the library, City Hall, the community recreational center, the police and fire stations, Kennedy Park, Brook Park Memorial Elementary School, Ford Middle School, Ohio National Guard Armory, and other institutional land uses. Due to the public nature of many of these properties, they are accessed by residents year-round making it attractive to commercial businesses.



It may be possible to reconfigure this area over time so it may benefit from this residential synergy. Increasing this area's "destination" value could occur by taking a slow systematic approach by doing the following things:

- Reutilizing impervious surfaces for other land uses. This area is consumed by impervious surfaces used for parking. Many of these parking areas reside on the frontage of Holland and Engle Roads. While having the right amount of parking is critical to the functionality of any land use, too much parking can be detrimental in promoting the optimal return on investment. A policy of co-location or shared parking between the various institutional users could free some parking areas for other uses that will generate economic value.
- Pursue the feasibility of diversifying the land uses in the area. Upon further study, it may be found that these parking areas can be used for other retail land uses. These land uses could help to spark

Community Green Concept Area

These concept areas in Brook Park comprise primarily of the Metroparks located on the western edge of the community and the various parks and recreational outlets located within Brook Park's neighborhoods.

Brook Park should look to remove the disconnect that may exist between their community and the Metroparks by increasing way finding and signage, and creating additional pedestrian linkages, such as bike lanes, on Sheldon and Grayton Roads. This could link the community to existing pedestrian linkages on Aerospace Technology Park and onward to additional roads that access the Metroparks. Impervious surfaces should also be minimized in this area to minimize runoff and other environmental issues.



Parks and open spaces within the community have both economic and humanistic attributes. They add value to the community, enhancing both the experience of living and value of property.

Brook Park's base of existing parks, open spaces, and recreational areas, can play a major role in the stabilization and beautification of the existing neighborhoods, and in the redevelopment and promotion of other types of residential development. Studies find that a high quality, diverse

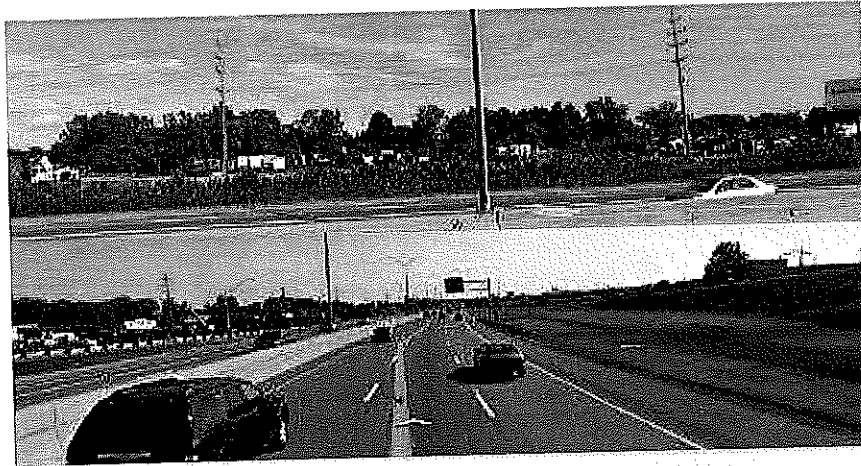
recreational system ranks second only to the educational system in attracting new residents to the community.



Parks, socially-functional public spaces, and pedestrian connectivity should be integrated into the future development and redevelopment framework.

Corridor Image Improvement Area

Brook Park is accessible by several key thoroughfare routes, including I-71, I-480 and State Route 237. The visual appearance of the community from these corridors can leave a long-lasting impression on outsiders, visitors, and most especially Brook Park residents themselves. This unsightliness was noted by several residents during the planning process and on the community survey.



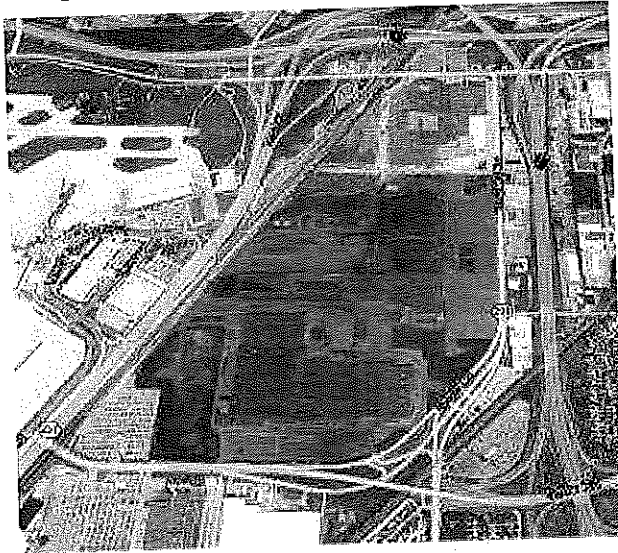
Improving the visual appeal of Brook Park from these corridors could assist in promoting economic development and recruiting new residents to the community. Continuing to leave it unsightly could further damage the community's image within the region.

City officials could work with ODOT officials and property owners in promoting a variety of cost-effective beautification methods which could include a combination of trees, lighting, ornamental grasses and

vegetation, fencing, land mounding, and other innovative techniques. A public and private partnership, in conjunction with the city's beautification committee, could be taken to help accomplish this task.

Ford Forward Concept Area

This concept area was once home to over 15,000 Ford employees working at the casting plant or engine plant number two. Ford closed the casting plant in 2010 and began demolishing the 1.6 million-square-foot plant in the summer of 2011. Ford's engine plant number two that once produced the company's biggest engine will be closed in 2012 leaving the 1.5 million-square-foot plant vacant. Combined, both sites are comprised of 230 acres. Its location adjacent to the airport and linked to an unparalleled transportation and rail network could possibly make it one of the most sought after redevelopment areas in the county and even the state of Ohio.



This area represents one of Brook Park's most vital areas to promote job growth and increase property valuation vital for community services.

A multitude of diverse land uses could possibly be accommodated in this concept area. Among all land uses, mixed uses like professional offices higher density residential and properly buffered light industrial uses will generate the highest fiscal return for the city. But revitalizing this area in a manner that provides the best return on investment for the city will most definitely require additional and proactive planning.

The City of Brook Park should update their zoning for this area to promote these planning goals and also to encourage a pedestrian and transit friendly environment. The zoning should also utilize a consistent site plan review process that addresses architectural design, signage, exterior lighting, site landscaping and off-street parking and loading requirements.

Parking standards should be flexible and environmentally-innovative to reduce impervious surfaces and promote the best use of land resources.

Neighborhood Commercial Concept Areas

There are a variety of local neighborhood commercial outlets within Brook Park. These outlets are located at the intersections of key corridors and provide residents with easy access to commercial services used most often in the community. These uses help to provide a more human scale to the community and help to decrease traffic.

Existing examples of these commercial nodes are located at the intersections of Holland/Engle roads, Smith/Sheldon, Smith/Hummel, Smith/Holland, and several locations along West 130th St.

Additional neighborhood commercial development could be pursued at other collector and arterial intersections in Brook Park, as long as the development can be properly buffered. In some cases it may be appropriate to place the developments directly on the road frontage and provide rear access parking, designed to minimize access to arterial streets while maintaining pedestrian linkages from arterial corridors. It could be feasible to increase the density and height requirements of these developments.



The design of such projects should undergo individual review to assure appropriate neighborhood scale and effective design for the junction between commercial and residential use.

Neighborhood Concept Area

These areas are Brook Park's residential areas and neighborhoods, and represent the community's most precious amenity. Brook Park's neighborhoods coexist on a well integrated and connected transportation grid, providing easy access to amenities, services, and parks.

Because these areas contain the most residential valuation relative to all other concept areas, it is vital that capital improvements and investments are continued to promote healthy neighborhoods. City officials should be timely in implementing the various tools at their disposal to ensure neighborhood stability. This would include the proactive enforcement of property maintenance and vacant property ordinances, and other related tools. Other strategies highlighted in this plan should be reviewed and implemented when feasible to minimize the blight caused due to the lack of property upkeep, foreclosures, and residential turnover.



The use of special and residential improvement districts, and other special assessments could be useful tools in helping to promote additional residential reinvestments. Allowing property owners to modify their existing building footprints to "upsized" may help to attract and retain new residents.

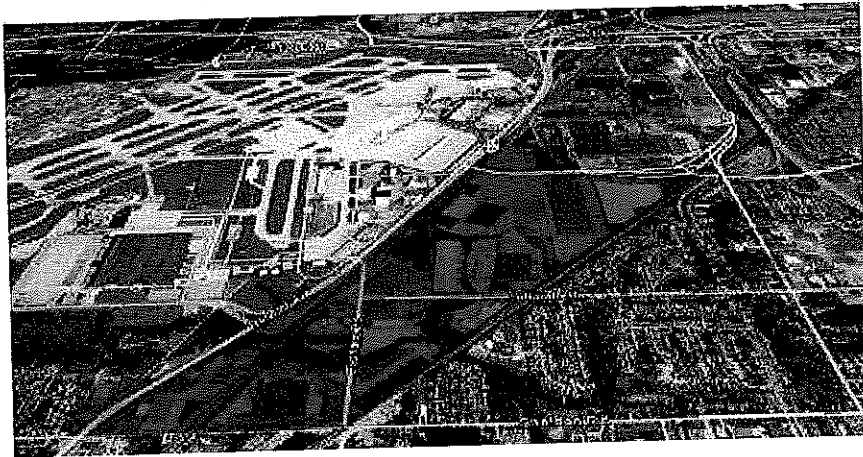
Other methods that may be used to keep these areas vital could be:

- Pursuing the feasibility of increasing housing density and type. This would help to maximize vital land resources and capitalize upon people wishing to live in Brook Park. The 2010 census indicated that gross rents are higher in Brook Park than in some of its adjacent communities. This may indicate that an unmet demand for more multi-family units in the community.
- The base population of Brook Park residents has aged dramatically over the last 20 years. Taking additional steps to make Brook Park elder friendly and more accommodating to the "residential life cycle." This could be done by examining four critical areas: community design, neighborhood services, business practices, and social and health services.

For additional methods to help promote these areas, please see the Housing Section of this Plan.

Revitalization Concept Area

The Master Plan designates a portion of Brook Park has a revitalization concept area. A majority of this area is bounded by snow road to the north, State Route 237 to the West, Sheldon Road to the south, and the CSX rail line that diagonally traverses the community. The Park & Fly facility and parcels on the east side of Henry Ford Boulevard are also included in this area. The area has excellent access to rail and other key thoroughfare routes that also include Eastland and Holland Roads. Recent infrastructure improvements in this area include the underpass and pedestrian connectivity upgrades at Eastland/Sheldon Road and the intersection improvement of the Eastland/Holland Road.



Land uses in this area are primarily commercial and industrial related, and may be associated with large areas of impervious surfaces. Most of Brook Park's privately owned Airport-related parking businesses are located here, comprising approximately 25% of all land mass. Impervious surfaces account for approximately 70% or more of all land mass in this concept area.

This plan supports the rehabilitation of appropriate industrial sites and the further investigation of additional opportunities for rehabilitation and remodeling of these businesses in this area.

The redevelopment of properties in this area should over time incorporate design principles, including:

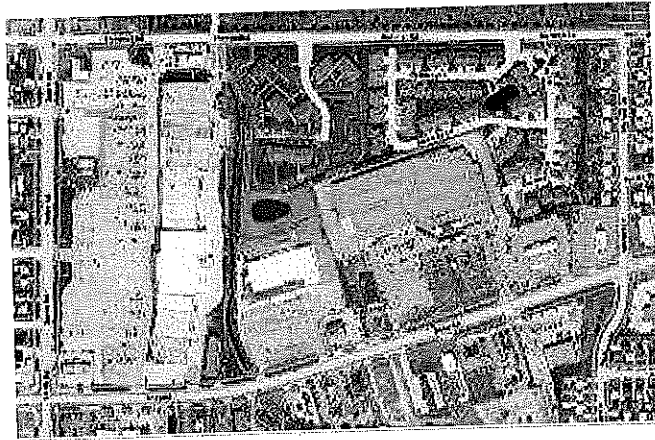
- Offices in the enclosed structures oriented toward street frontages.
- Building façades that provide visual interest.
- The screening of outside storage and loading areas.
- Visually appealing fences and walls, where appropriate.

- The use of landscape buffers around parking lots and industrial structures.
- Impervious surfaces should be reduced and or pervious services promoted, when feasible, to minimize storm water, flooding, and other environmental impacts especially to the Abram Creek watershed.
- Where industrial development abuts non-industrial uses, appropriate buffering techniques shall be employed such as, enhanced architecture, increased setbacks, screening landscaping, or some combination of these features.
- Additional lighting and pedestrian connectivity enhancements especially on Holland Road and Eastland Road to Sheldon. City officials could work with the Metroparks to link this area with the Lake to Lake Trail and the Lake Abram Metropolitan Reservation directly to the South on Eastland Road.

Snow Road Concept Area

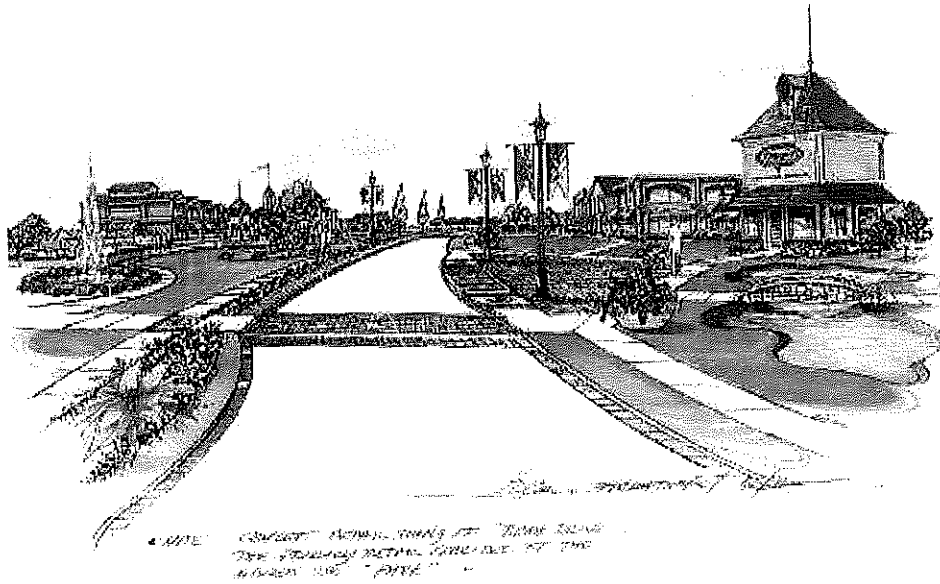
As one of Brook Park's major east-west corridors and accessible to I-71, it is home to the majority of Brook Park's commercial and retail services. It is generally well connected to the adjacent neighborhoods and to Cambridge Court Apartments, one of Brook Park's newest multi-family developments. The development of the corridor is typified primarily by single use one-story retailers and other service providers, each with their own curb out and parking lot. Brookgate Shopping Center, situated at the northeast corner of Snow and Smith roads, is partially vacant due to several business closures.

Like Brookpark Road, it is also riddled with hundreds of thousands of square feet of impervious surfaces that were promoted partially from outdated zoning techniques.



The future of this corridor will be dependent upon many things: an increased public-private partnership, heightened awareness of available matching grants and property incentives, improved zoning, and access management techniques, to name a few. A historical review of aerial

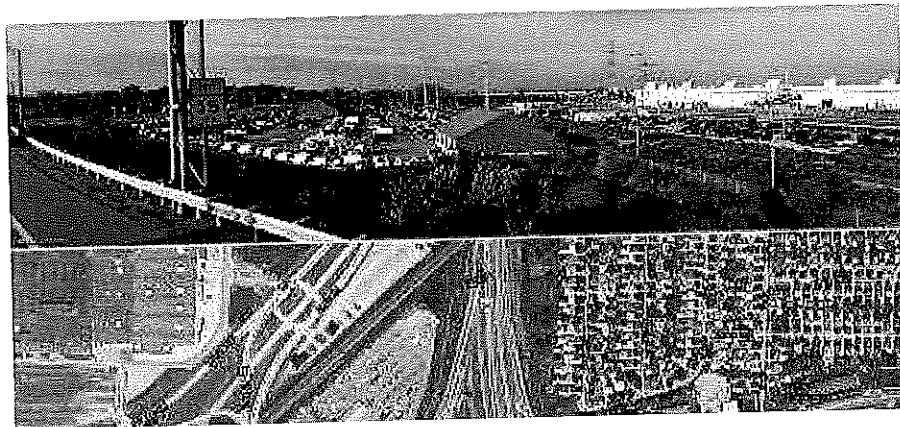
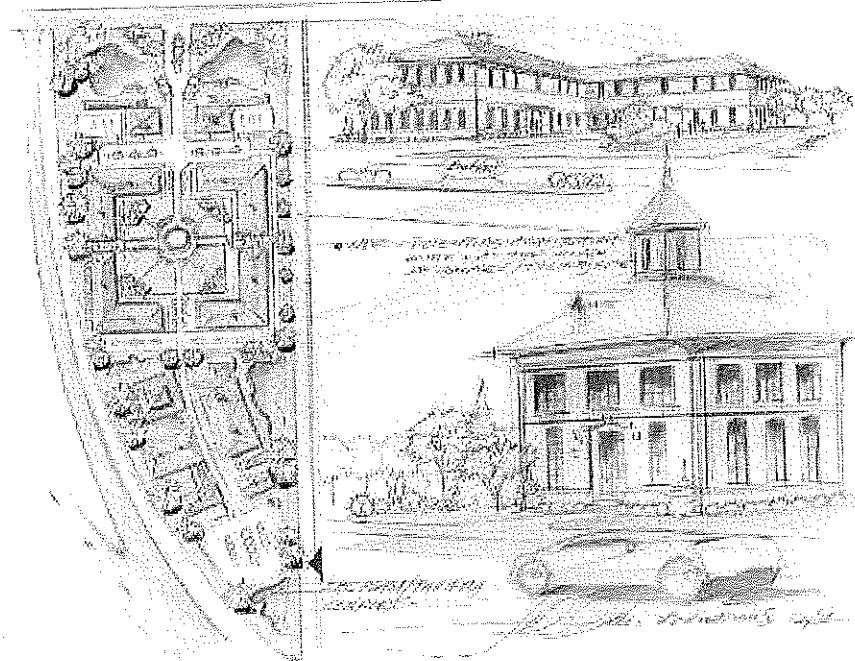
imagery indicated that some areas, especially Brookgate, may be "over parked" for its current use, and could possibly have their parking areas reduced by as much as 30%. Freeing up these areas could allow the corridor to accommodate additional economic growth and property valuation that would be beneficial to residents, businesses and property owners. The site could also be reconfigured to provide for more human interaction, greening, increased densities and mixed uses.



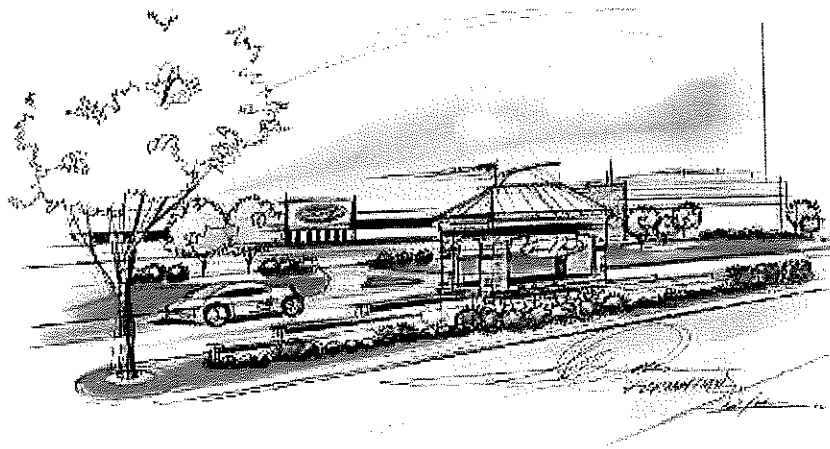
Above: Brookgate Shopping Plaza reconfigured with less impervious surfaces, increased mixed uses, and more social interactivity and green spaces.



One primary area that should have its land uses revisited could be the portion of Snow Road adjacent to I-71. Currently home to lower density multi-family on Snow/Glenway, and parking-dependent land uses on Snow/Engle, these uses may be underutilized and better suited to accommodate higher density multi-family and other planned mixed uses.



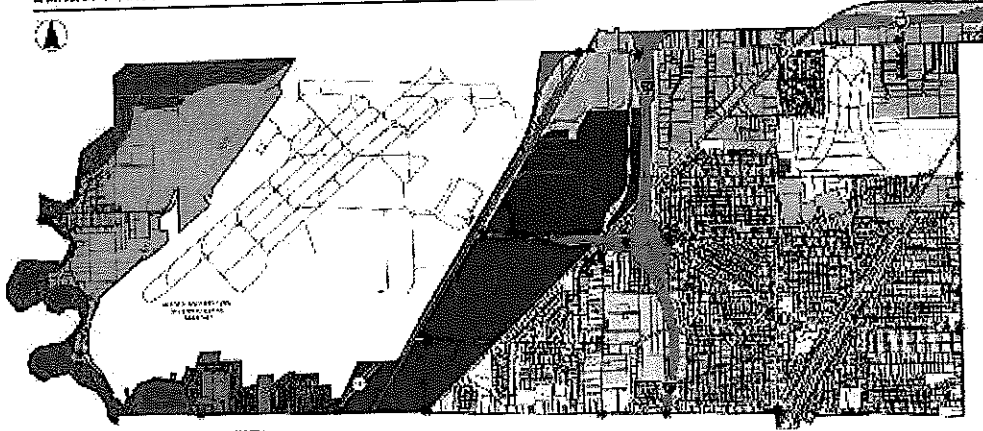
Most importantly, the promotion of the Snow Road corridor may occur over time simply from the business community and local economic interests understanding information that the Market Analysis made apparent, and that there are "opportunity gaps" in many merchandise lines in the community. This is forcing many residents to shop outside the community, instead of a better suited location like the Snow Road commercial corridor. Strategies to help promote this Concept Area can be found in the Economic Development Section.



The median on the Snow Road Corridor, adjacent to the Ford site, could be improved and accentuated with additional landscaping and signage.

CONCEPT AREAS

BROOK PARK MASTER PLAN



SCALE: 1" = 100'

- LEGEND**
- RESIDENTIAL SINGLE-FAMILY
 - RESIDENTIAL MEDIUM-DENSITY
 - RESIDENTIAL HIGH-DENSITY
 - COMMERCIAL GENERAL
 - COMMERCIAL OFFICE
 - COMMERCIAL RETAIL
 - INDUSTRIAL
 - PARKS AND RECREATION
 - OPEN SPACE
 - UTILITY
 - TRANSPORTATION



Update the Zoning Ordinance and Map

Brook Park's zoning ordinance and map should be considered for a future update to include recommendations included in the Master Plan. Issues to address could include:

1. Streamline the number of zoning classifications. Brook Park currently has 26 zoning classifications. Many of these zoning districts have overlapping similarities. It is possible that the Snow Road Commercial Corridor from W. 130 to I-71 (as identified on the Concept Areas map) could be one zoning classification.
2. Clean-up the zoning map. It has not been updated since 2002 and many areas along major corridors have commercial land uses but are zoned U1-A3 Residential. Other inconsistencies on the map exist in other locations as well.
3. Upzone certain areas to support more mixed-use activities.
4. Utilize overlay districts that help promote planned development and redevelopment, gateways, visual aesthetics and pedestrian friendly amenities.
5. Visualize the zoning process by displaying zoning regulations and design goals with pictures and renderings.

Promote Infill Development

Infill refers to development that takes place on land within built-up areas that have been passed over for various reasons during previous development phases and have remained vacant or underutilized.

Infill incentives can produce new housing units, reduce blight, preserve open space, reduce traffic, and encourage retail development that serves the needs of existing residents. There are currently a variety of locations in Brook Park that can accommodate infill residential development.

Brook Park can encourage infill development as part of a strategy to revitalize and bring new activity to older neighborhoods. This type of development can also provide opportunities for the construction of multi-family housing, a land use that is limited in the community. Infill development can range from construction of single-family housing on one or two adjacent lots, to an entire block containing mixed residential and commercial uses.



Careful design, with particular attention to enhancing compatibility with surrounding buildings, parking, and traffic problems, will help to increase neighborhood acceptance. There are a variety of methods Brook Park could use to encourage infill development. Some of these methods are:

- Prepare an inventory of potential infill sites and making it available to developers, area real estate agencies and residents;
- Work with surrounding property owners to generate ideas and acceptance;
- Sponsor a workshop for developers to demonstrate infill development opportunities and tour potential sites. The type of development required on small infill parcels may be unfamiliar to some developers;
- Adopt flexible zoning and building regulations which allows for increased density, increased height requirements, and the development of irregular or substandard infill lots;
- Allow mixed uses for infill developments which may enhance the economic feasibility of projects;
- Assist in the consolidation of infill lots into larger, more easily developed sites. Assembling large parcels can be difficult if there are different owners who may be holding out for higher prices.

Encourage the Use of GIS Technology to Promote Planning and Development

Several new tools, like geographic information systems, exist that may be beneficial for City Officials to help promote growth and redevelopment, and assist with zoning issues and neighborhood revitalization. The use of this technology could be expanded so that residents, the planning commission, and other individuals and groups can use the systems to access specific information concerning their property, school district, and other information.

GIS could be used to assist with issues such as:

- Compiling a detailed database of properties/assets in the City
- Identify nonconforming lots and uses
- Maintain/update maps of vacant land and properties for sale or lease
- Building code, property, and nuisance violations
- Capital improvements
- Infrastructure in need of repair

Encourage the Development of Neighborhood Associations

In the battle to help promote neighborhood quality of life, the use of neighborhood groups should not be overlooked. They could be active assisting City officials on activities and decisions that affect their neighborhoods.

Many residents noted a preference in the community survey that maintenance of private properties and code enforcement were needed in their neighborhoods. With budget and staff cuts at the City, private efforts could help make the job a bit easier and result in greater impact and more successful enforcement.

The partnership proposed to be created in the Housing chapter could work with the building/zoning department, the City's beautification committee, and other interested parties to identify all rental units within the various neighborhoods so that the City can properly address issues related to rental housing. Per H.B.294, which went into effect Sept. 28, 2006, all rental property owners must register their contact information with the County Auditor. The neighborhood groups could assist the City to ensure that the rental property owners are abiding by the law and report all rental properties to the County Auditor.

The neighborhood groups could also work closely with their Ward Councilperson and the City's Police Department to enhance existing Block Watch groups, or to start new ones, until every neighborhood in the City is covered. The City could earmark a small pot of funds to support the neighborhood groups with mailings, newsletters, flyers, announcements, and other communication and administrative tasks.

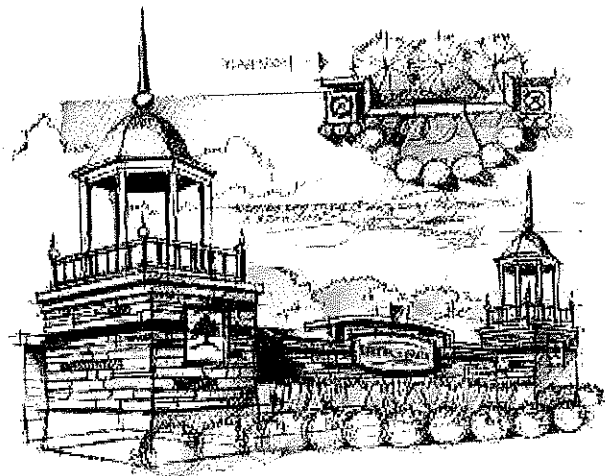
Promote Brook Park Using Effective Banner, Way Finding, and Gateway Signage
Improving the visual appearance of Brook Park ranked highly for those that participated in the community survey and planning process. One inexpensive method to improve the look of the community is through the use of gateways and signage.

Currently, visitors can enter Brook Park from several fronts, most of which have basic green sign or the official Brook Park pole mounted sign. The Plan supports enhancing the gateways from 20 different entrances into the community (See *Map: Concept Areas*).

The City's gateways should be revisited and updated. The condition of gateway areas is also closely tied to residents' sense of pride and the lasting identity of a place.

Some possible themes could include a transportation-related theme based upon the City's rich heritage linked to planes, trains, automobiles, and astronauts!

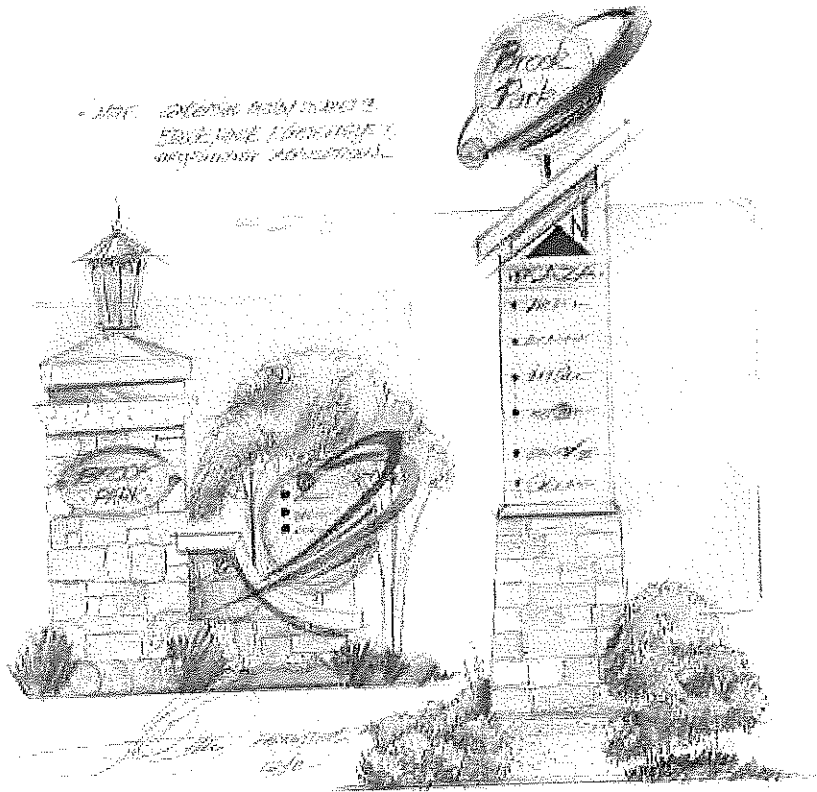
Each potential location will need detailed analysis to ensure driver's site lines are not blocked, vehicle safe zones are respected and to



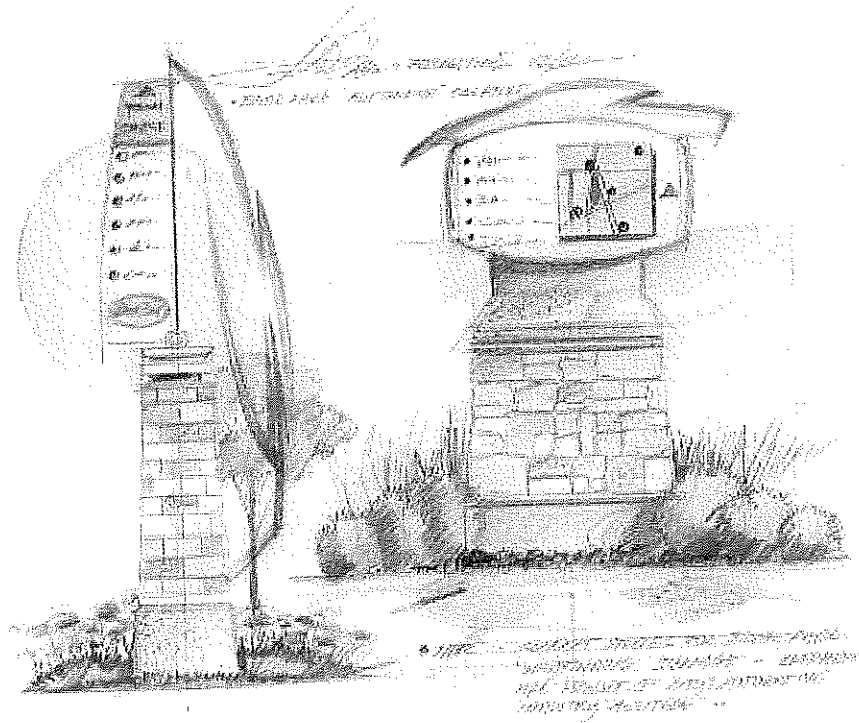
These large-scale monuments could be placed at key entry points into the City.

avoid existing utilities.

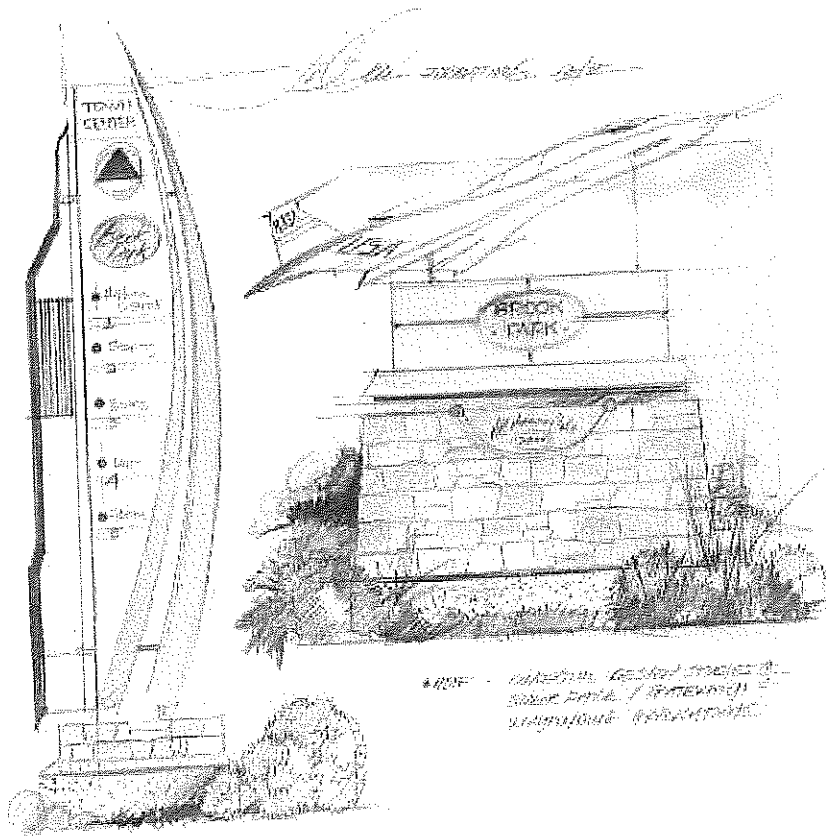
Small and medium-scale monuments and way finding signage could be placed at key entry points and other key neighborhoods throughout Brook Park. These provide a consistent theme and help give residents and visitors a sense of place and location.



Brook Park Way Finding and Small Monument Gateway Example #1



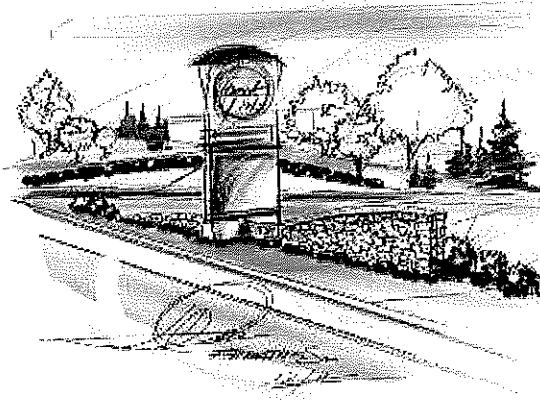
Brook Park Way Finding and Small Monument Gateway Example #2



Brook Park Way Finding and Small Monument Gateway Example #3

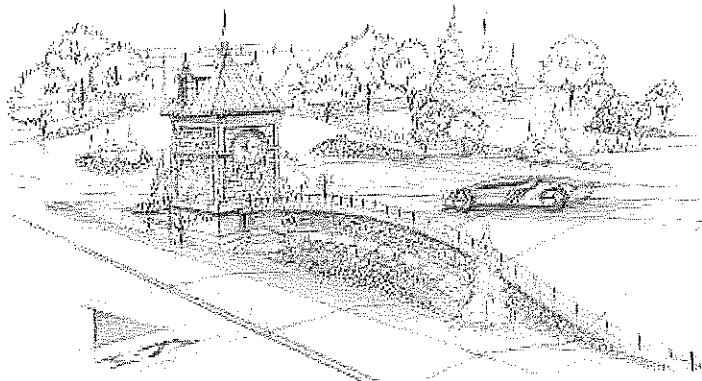
Develop an Interstate Beautification Plan

The impression that visitors get from Brook Park from the images off of I-71, I-480, and SR 237 are very important to the community's overall marketability. The City, in conjunction with the beautification committee and other interested parties, should embark upon an effort to incrementally enhance the aesthetic and visual characteristics of the City's periphery as seen off these major corridors. A combination of greening and landscaping, mounding, fencing, signage, and increased code enforcement could be used:



Encourage the "Complete Streets" Model into Future Redevelopment

Another issue with which the City struggles is access management along major transportation corridors. A major contributor to traffic congestion is the abundance of driveways feeding onto major road corridors, each introducing turning movements that not only slow traffic but create multiple conflict points and can result in a higher incidence of traffic accidents.



While the automobile will continue to be the primary source of transportation for years to come, City officials can make strides to offer improved transportation alternatives that will help to maintain road capacity, decrease demand for new parking, improve pedestrian design elements, and create opportunities for healthy lifestyles, such as walking and biking.

Future land use and zoning decisions should consider enhancing the transit-friendly environment through promoting Transit and Pedestrian-Oriented

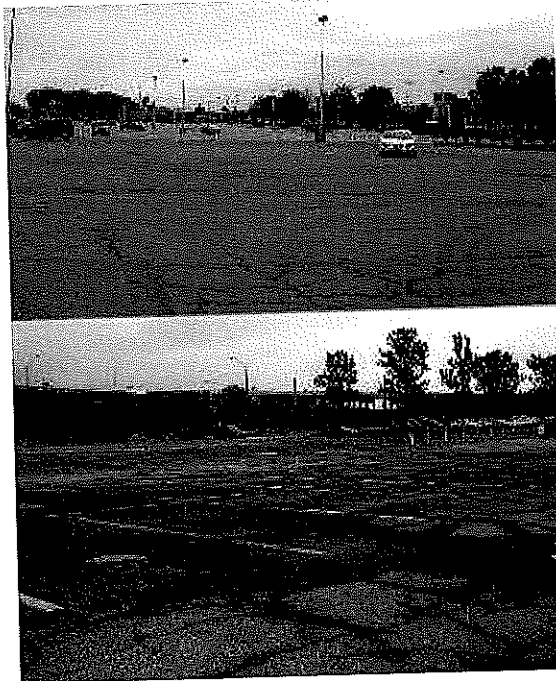
Development (TPOD) standards, especially within the Brookpark Road, Snow Road, Ford Forward, and Community Core concept areas.

TPOD should be used when and if resources are available or redevelopment at these locations makes it possible. Future redevelopment and building design along Brook Park's main thoroughfare routes should support pedestrian connectivity and future transit services by increased intensity of development, improved pedestrian connections and appropriate locations of buildings, and flexible parking standards.

Sites should be designed so that multiple buildings are oriented to each other and focus toward pedestrian connections. Surface parking should be located to the sides and back of buildings in a manner that still offers convenient vehicle parking without becoming the dominant feature of the site.

Encourage Less Impervious Surfaces

Impervious surface refers to anything that prevents water from soaking into the ground. Common examples include roofs, driveways, sidewalks, streets, and parking lots. It is important for Brook Park to consider the reduction of impervious surfaces during the development or site planning process to help alleviate issues caused from storm water and other sewer issues.



Because impervious surfaces do not allow water to soak into the ground, the amount and distribution of these surfaces can promote flooding, ruin water quality and increase storm water management costs. During storms, excess water flows across impervious surfaces and sweeps these pollutants into the Abrams and Big creeks and into the watershed.

The method of "Low Impact Development" could be used to help in reducing impervious surfaces. LID is a comprehensive land planning and engineering design approach that works well in highly urbanized areas and offers a wide

variety of structural and nonstructural techniques to provide for both runoff quality and quantity benefits.

Land use methods that emphasize the saving of green space and the redevelopment of existing urban regions, can utilize LID to promote infill and redevelopment in areas that would otherwise be inappropriate for conventional site design. In addition, the full LID process starts with many of the same conservation and impact minimization principles inherent in other strategies.

Promote Neighborhood Commercial Land Uses

Brook Park has dotted throughout the community neighborhood commercial land uses. These areas, like those present at the intersections of Holland/Engle Road and Smith/Sheldon Road, play an important role in neighborhood quality of life by helping to promote human interaction, healthy lifestyles, and reducing street traffic. These uses could be targeted by a variety of programs that help to promote their attractiveness, viability and usage.



Some of these areas may be currently underutilized and could be redeveloped to provide for a larger building footprint, less parking, and smaller setbacks from the road. This could provide for additional commercial and retail diversification, such as local small scale grocery stores.



One such entity, the Healthy Corner Stores Network (HCSN), has developed a business model around these commercial nodes supporting efforts to increase the availability and sales of healthy, fresh, affordable foods through small-scale stores. It is very similar to Cleveland's Nutrition Initiative.

Section VI: Housing

A. Introduction

Neighborhoods are the building blocks of Brook Park. Over the next ten or more years, pressures created by changing demographics could require a modification of the existing housing composition to meet the needs of future residents, young professionals without families, and seniors that want to age-in-place. Also, a lack of property maintenance by some property owners could pose a threat to the integrity of neighborhoods. Additional resources for code enforcement may be necessary.

The City of Brook Park may have little or no control over many of the factors that affect housing prices, including national and international economic trends, private lending practices, interest rates, labor and materials costs, and other factors that are subject to change. However, some predicted housing trends may be beneficial to some of Brook Park's neighborhoods. They are:

1. First-time home buyers will continue to account for a larger than normal share of home purchases as potential repeat buyers wait to regain some of their equity before jumping back into the market.
2. Repeat buyers who are in the market generally have less equity to roll over and will be more judicious about the price of their next home. Smaller down payments will push buyers to purchase smaller homes, perhaps with fewer upgrades as well.
3. House prices will recover eventually and housing equity will grow but many potential home buyers will remember the first ever national experience in house price declines and will be less motivated to purchase because of appreciation and more because of actual need.
4. Home buyers are growing more concerned about energy use and environmental sensitivity. The heightened concern for "green" homes will give an advantage to new homes over existing homes but will push buyers to consider less space as one very straightforward way to reduce energy use.
5. Younger home buyers are showing preferences for more compact housing, more dense neighborhoods that are closer to entertainment and recreation opportunities.

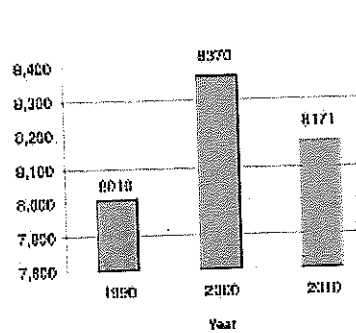
Brook Park can exercise clear control in promoting safe and tranquil neighborhoods by developing innovative zoning regulations and tools. This Section outlines a variety of techniques that can be used to assist in this goal.

B. Planning Issues and Trends

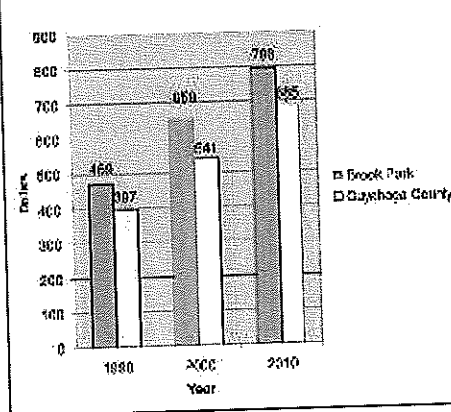
From 1990-2000, the number of housing units in Brook Park increased by 360, but decreased from 2000 (8,370) to 2010 (8,171) by 199 units. This is primarily due to the units that were purchased and demolished by the City of Cleveland under the residential acquisition program for purposes of the Airport expansion or demolished by the City.

Over the last decade, the percentage of vacant homes in Brook Park has doubled, from 2.1% in 2000 to 4.6% in 2010. According to the 2010 Census, the County residential vacancy rate is 12.3%

Number of Housing Units



Median Gross Rent, 1990-2010



Gross rents in Brook Park have exceeded countywide rent averages since 1990, which is generally a good reflection on the demand of apartments and multi-family housing units in Brook Park. In 2010, gross rent was \$796, compared to the county average of \$685.

The lack of available land resources has constrained residential development in Brook Park over the last decade. However, some examples of residential development have occurred. The Neeley Phase II development, starting in 2006, was completed in 2010 with 47 new

homes constructed. Fireside Builders also began their new 14 home subdivision. Another great example of infill residential development, Engle Court, is directly across from City Hall on Engle Road.

In 2010, there are approximately 80 homes in foreclosure and 30 homes that were vacant and/or abandoned. This was a slight increase from 2009 when there 65 homes fell into foreclosure and 25 home were vacant. A parcel review of residential foreclosures over the last five years indicates that the foreclosures have been equally dispersed throughout the community and not confined to particular neighborhoods.

In 2011, 36.3% of Brook Park's households were classified as "low-to-moderate" (LMI) income households, as compared to the Cuyahoga County average of 29.5% or the City of Euclid's LMI average of 47.3%.

Although Brook Park neighborhoods have not been completely insulated from the national housing crisis, it does benefit dramatically from the fact that an estimated 60 – 70% of its homeowners are mortgage-free. This has helped the community greatly to reduce the various residual effects of the mortgage and lending crisis that still ensues in many communities in Cuyahoga County and nationally.

Heavy flooding from rainfall was problematic for several neighborhoods over the last year, and homes located on Champaign, Doris, Engle, Hummel, Lindmont, Michael, Robert and Shelby were witness to bad flooding. Homes along Sheldon Road at Abrams Creek also were witness to flooding issues.

C. Strategies

Continue to Ensure Neighborhood Quality of Life

Brook Park cannot thrive unless its neighborhoods do. Thriving neighborhoods are supported from a variety of policies and programs that work in unison. Programs that help promote affordable mixed-income housing, targeted property tax incentives, pedestrian mobility, and local employers, and provide access to community and transit services all are vital ingredients in keeping and attracting a diverse group of residents.

Promote Building and Maintenance Standards and Enforcement

Brook Park should continue to utilize its existing building and property maintenance codes. Brook Park's building department is busy ensuring neighborhood quality and heightened building standards including interior and exterior point of sale inspections, and also rental inspections to promote neighborhood quality of life and improve property values. However, some residents indicated during the planning process that they wanted more inspection activity in their neighborhoods.

For this to occur, the City may want to pursue the feasibility of increasing the resources for additional inspection activity, as there are currently only two inspectors for the entire community. A more interactive and proactive inspection approach may require the City to enlist the assistance of neighborhood associations, volunteers, private contractors, or hire additional inspectors.

Continue to Utilize the Cuyahoga County Land Bank

In 2008, Brook Park City Council approved joining the Cuyahoga County Land Bank, a land reutilization program that gives the City direct control over the maintenance of abandoned properties.

As part of the program, a list of abandoned homes would be generated by the county, and City officials would then select homes of interest. If those properties are not bid on in two rounds at Sheriff sales, the City can acquire them after paying back taxes.

A major key to a land bank is that the program provides a faster timeline to take troubled properties and turn them around. What normally takes up to two years, the land bank can acquire tax-foreclosures properties in a shorter period of time. Through its authority, the program can erase debt on property titles.

It can acquire, manage and dispose of vacant lots across the County. It can purchase tax-delinquent property wholesale from banks and other similar companies, turning them into community gardens, water-retention areas that absorb runoff and ease the burden on storm water systems or create urban parks. The program could be used to allow Brook Park homeowners and neighborhood associations to acquire land next to them that they can use as side yards, turning an eyesore into a potential community garden or other neighborhood benefit.

Utilize the Community Reinvestment Area Abatement Program to Spur Neighborhood Reinvestment

The City should continue to utilize the community reinvestment abatement program to spur residential investments in areas where reinvestment is encouraged. To help promote the revitalization of certain neighborhoods, it is recommended that this abatement tool be used, although judiciously, to promote several of the redevelopment ideas generated in this Plan, and possibly to spur the selective development of multi-family land uses and/or the revitalization of older multi-family land uses.

Promote Neighborhood Traffic Calming and Quiet Zones

The intent of traffic calming is to reduce the speed and volume of traffic to levels acceptable for the functional class of the street and the nature of the neighborhood. Traffic calming measures are meant to be self-enforcing as opposed to traffic control devices such as stop signs and speed limit signs, which are regulatory and require enforcement. Elements of such an approach may include traffic roundabouts, narrower streets, curves, shorter blocks, table-top intersections and other measures. The City should establish guidelines for the use and appropriate selection of traffic calming measures, identify priority streets for their application, and redirect truck traffic away from residential neighborhoods.

Brook Park officials should also continue to work with CSX officials in setting up rail "quiet zones" when and where feasible. Officials are currently working on establishing a quiet zone at the rail crossing area near Middlebrook and Holland Road.

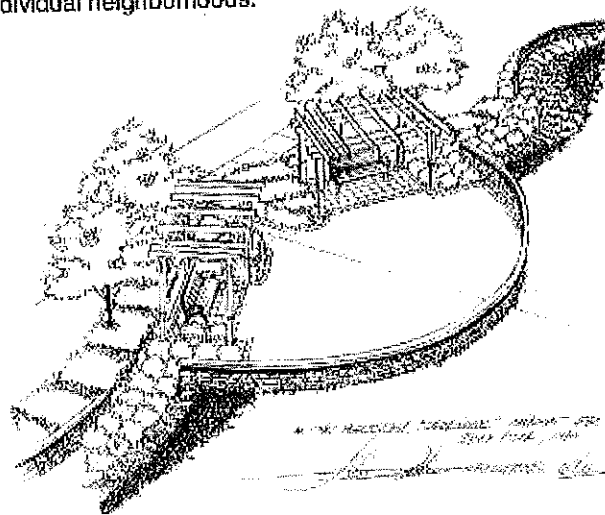
Promote Neighborhood Character

Brook Park's neighborhoods are the fundamental building block for developing and redeveloping residential areas of the City. These residential areas should be developed, redeveloped and revitalized as cohesive sets of neighborhoods, sharing an interconnected network of streets, schools, parks, trails, open spaces, activity centers, and public facilities and services.

Signage has a great impact on Brook Park's visual attractiveness. Creating aesthetically pleasing neighborhood gateways can help to promote neighborhood pride. These can be designed around decorative signage, special street tree plantings or street pavement treatments that provide a sense of arrival and distinction for individual neighborhoods. Some amenities in neighborhoods, like pocket parks and seating, could also be added.

New landscape requirements should provide enhanced guidelines for setbacks and the screening and buffering of commercial and other non-residential land uses from neighborhoods.

The City could also consider creating additional linkages to parks and recreation facilities, and other key areas of the City with way finding and signage, and bike lanes and trails.



Existing neighborhood seating areas could be improved to encourage more interaction and design elements.

Create a Housing Trust Fund to Promote Neighborhood Revitalization

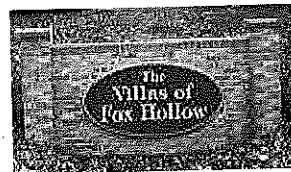
A housing trust fund could be pursued to help promote a variety of housing needs in Brook Park. Most housing trust funds provide for many diverse uses, although most housing trust funds are used to support affordable housing. These funds can be used for acquisition, new construction, rehabilitation, emergency repairs, housing-related services, adaptive re-use, accessibility modifications and more. While less common, some trust funds make dollars available for foreclosure prevention and mixed-income and mixed-use developments.

Revenue sources for a housing trust fund could include:

- Registration fees (e.g., application fees for municipal programs, permit and registration fees, demolition and conversion fees, abandoned and rental registration programs)
- Possible creation of additional conveyance fees (e.g., real estate transfer tax, document recording fee, excise tax)
- Developer fees
- Property taxes, sales taxes, hotel/motel taxes
- Tax increment funds from redevelopment districts
- Payments in Lieu of Taxes (PILOTs)
- Repayments on various loan programs and other kinds of program income
- Interest from government-held and market-based accounts

Increase Housing Diversity

Some of Brook Park's neighborhoods consist of small housing units that may not provide the space needed by today's homeowners. To accommodate this need, it may be possible to modify the existing building and zoning code to adjust the minimum square footage for residential units, among other requirements to provide for "upsizing." The problem coming from this is the number of smaller lots that are unable to have larger homes built on them. New zoning requirements can be implemented to create a more diverse housing environment.



Also, a variety of senior housing options will become more important as the baby boomers age in Brook Park and the region and change the demographic makeup. At some point, every community needs to encourage and accommodate attractive housing types to this portion of the market to prevent residents from "moving out" to find desirable housing that meets their needs.

The housing stock should also be diverse enough to provide residents the ability to downsize. However, these types of residents, albeit looking for a smaller housing unit, may still crave the amenities of their former larger home.

Utilize Federal and State Programs in Conjunction with Local Resources to Promote Targeted Neighborhood Improvements

The City of Brook Park utilizes numerous local and county programs to promote neighborhood redevelopment. In addition to these programs, local leaders often embrace the residents of various neighborhoods using grassroots efforts and public meetings.

The following programs are available and/or utilized in Brook Park:

- Community Development Home Program for Senior Citizens (Adopt-A-Senior): A one-time income-based program that provides local home improvement grants for Senior Citizens.
- Home Enhancement Loan Program (H.E.L.P): Home loans 3% below market rate for alterations, repairs, maintenance or improvements. There is no income qualification and includes single-family, two-family, and multi-family dwellings. Single-family and multi-family dwellings can be valued up to \$250,000.00 and there is no value limit on multi-family dwellings. Loans can be used to correct code violations and to upgrade properties. The program is offered by the Cuyahoga County Treasurer.
- Housing Rehabilitation Loan Program: Low interest loan program that is income-based, allowing homeowners to make a variety of home repairs. This program is offered through the Cuyahoga County Department of Development.
- Senior Deferred Loan Program: Low interest loan program for senior citizens 62 or older who meet eligibility and income criteria. The loan is deferred until the title transfers. This program is offered through the Cuyahoga County Department of Development.
- Housing Emergency Loan Programs: Low interest loan that is income-based and designed to fund repairs for health-related water and sewer problems. This program is offered through the Cuyahoga County Department of Development.
- Energy Assistance Program: Assistance to income-eligible households to help pay energy bills.
- Down Payment Assistance Loan Program: Income based program to help pay the down payment on a home for those who have not owned a home in the past three years.
- The Home Weatherization Assistance Program: Provides free energy efficiency improvements to eligible homeowners and renters at no cost to the household. This program is offered through the Cuyahoga County Department of Development.
- The Cuyahoga County Lead Safe Program: This program provides grant funds to eligible low-and-moderate income homeowners and renters to make their homes a lead safe environment for young children. This program is offered through the Cuyahoga County Department of Development.
- Homestead Exemption: Lowers property taxes for homeowners 65 and older or those permanently disabled. This program is offered through the County Auditor.

Utilize Neighborhood Organizations

Neighborhood groups could be active at the administration level on activities and decisions that affect their neighborhoods.

The neighborhood groups could work with the Building Department staff to identify issues and concerns, and suggest solutions to the City. Residents that participated in the community survey during the planning process noted a strong desire to have additional code enforcement in their neighborhoods. Private efforts could help make the job a bit easier and result in greater impact and more successful enforcement.

This new partnership could work with the designated city departments to identify all rental units within the various neighborhoods and ensure the rentals are properly registered.

Neighborhood groups could be engaged to work with their elected officials and the Building Department to provide input on the activities in the various neighborhoods. These neighborhood groups could work not only with City officials, but also with the School District; businesses, churches and agencies within their neighborhoods; civic and fraternal groups in the community; the city's police, parks, electric, streets, and utilities departments; local banks (which have federal Community Reinvestment Act requirements to meet); and residents of the neighborhoods. The City could earmark funds to support the neighborhood groups with mailings, newsletters, fliers, announcements, and other communication and administrative tasks.

Promote an Elder-Friendly Community

The 2010 Census confirmed once again that the Brook Park's median age is increasing. Brook Park's median age is now approximately seven years higher than the national median age of 37.2. This demographic shift and changing values is expected to increase demand for pedestrian-friendly, mixed-use communities in both urban and suburban settings. This will be especially true in Brook Park.

As the American population ages, the next 10 years are critical for senior housing and services. According to the Administration on Aging, from 2010 to 2030, the U.S. population aged 65 and over is expected to grow by 75 percent to over 69 million. Many will live longer, have more education and have more financial resources than any previous senior generation, so it is imperative that Brook Park's housing and zoning policies be modified to address those living patterns.

During the planning process, the discussion ensued about providing Brook Park residents with more options to remain in the community and "age in place." Getting to this point will ultimately require that residents can attain housing units that meet their needs. It will also occur by examining four critical areas: community design, neighborhood services, business practices and social and health services.

Section VII: Community Services and Facilities

A. Introduction

The variety of community services and facilities the City of Brook Park provides its residents and businesses provide the general basis for its existing quality of life. While parks and recreation opportunities provide residents and employees with an outlet to embrace healthy activities and spend "quality" time with family and friends, the several safety services ensure that residents and businesses can be relatively sure that assistance is nearby in times of need. Most important in defining Brook Park's quality of life and preserving the City's link to prosperity is its school district. Brook Park has a rich heritage of providing its residents with good, clean educational facilities and well-trained teachers and educational staff. A good school district indirectly assists in the funding and provision of many other community services and facilities because it's key to attracting new families.

A discussion of these services and facilities in the Master Plan is important because they provide the skeleton for servicing the community (water, sewer) and because land use and changes created by land use impact the community's services and facilities. Growth and redevelopment tends to follow the location and quantity of public services and the effectiveness of the schools. In the future, the planning of community services and facilities should be coordinated with economic development, housing, transportation, and land use trends.

B. Planning Issues and Trends

Because "quality of life" is often an important factor in retention and relocation decisions of residents and businesses, the City of Brook Park has a clear interest in ensuring that the several services and facilities that assist in promoting Brook Park's quality of life are properly planned and implemented. Ensuring that the several layers of infrastructure is in functional condition and properly maintained is directly linked to this quality of life.

According to the recent community survey that accompanied this Plan and the planning process, most variables that comprise Brook Park's quality of life are well regarded by residents. (see Chapter: Community Survey). Almost 90% of survey respondents noted their quality of life in Brook Park was either "good" or "excellent." Some of the trends of the various community services are:

Berea City School District

As the third largest school district in Cuyahoga County, the Berea City School District provides an outstanding education to the students in the communities of Brook Park, Berea, Middleburg Heights and part of Olmsted Falls. The district currently has over 7,500 students with two high schools, two middle schools, seven elementary schools and a special needs school on the campus of the

Berea Children's Home. The preschool and community education programs are among the largest in the state.

The Berea City School District has been rated "excellent" by the State Board of Education, and has received numerous local, state, and national awards, and it is consistently ranked in the Top 100 districts in the nation for music education. Because of recent state funding cuts, in addition to increased local and transportation costs, the school district has placed a levy on the ballot several times in the past few years to replenish its coffers. The November 2011 levy failed and the school administration is currently deciding which services and programs will need to be reduced or eliminated.

Fire Department

The Fire Department offers excellent fire protection, as well as 24-hour emergency ambulance service; the rescue squad operation is a Paramedic Unit, staffed by State Certified Paramedics. All ambulances have the capability for voice and data transfer communications with emergency room physicians. The emergency department of Southwest General - University Hospital provides medical direction and patient care protocols. The Emergency Medical Service department of the hospital coordinates medical education for the Fire Division members. Transportation is available to Southwest General Health Center, Parma General, Fairview General and Kaiser Permanente Hospitals.

All division members are state certified firefighters. Twenty-six members of the division are certified at the level of Paramedic with the remainder certified at the Emergency Medical Technician level. The Brook Park Fire Department responds to more than 2500 emergency calls annually. Several Fire Division members are certified instructors and assist in training programs for local professional and civic groups.

The Fire Department regularly inspects all commercial buildings in the City for fire and safety hazards which include the Ford Motor Engine facility, and NASA's Glenn Research Center. There are two members assigned full time to fire inspection and investigation. It also works closely with area fire departments through mutual aid agreements, and is also part of the Regional Technical Rescue Team, comprised of nineteen communities. This highly trained team called the Southwest Emergency Response Team or S.E.R.T. consists of professionals that specialize in hazardous materials, high angle rope rescue, confined spaces, trench rescue and water rescue.

An annual fire hydrant maintenance program is conducted each Spring. This includes flushing, greasing hydrants, and their caps and stems. This program insures that the hydrants are in working order and that the water available from the hydrant is of sufficient quantity should a fire occur nearby. Daily updates on the fire department can be found on the Internet or on Twitter.com at BrookParkFire.

Police

The Brook Park Police Department has approximately 40 or more sworn officers serving the community. They teach Drug Abuse Resistance Education (D.A.R.E) and seat belt safety programs in the school system. They also offer crime and prevention and awareness programs for community groups, and provide safety education to preschoolers in the John J. Walsh Safety Town.

The Police Department utilizes innovative technologies, including visual imaging, mobile data terminals, laser speed detection, computerized data collection survey station/animation package for accident and crime scenes and computerized dispatch. The Department has accident "reconstructionists" and evidence technicians who have advanced specialized training. Many community policing to aid first responders, speed trailers, residential speed enforcement and sign campaigns, neighborhood water and Project Safe gunlock programs.

Library

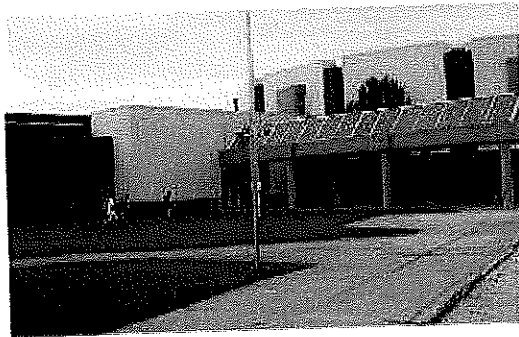
The Cuyahoga County Library, Brook Park Branch, is located next to the City Hall complex at the corner of Engle Road and Sylvia Drive. An interior renovation was completed in 1996 and houses approximately 85,000 books and 19,000 audio-visual materials.

Recreational Services

Brook Park is a strong recreational community, reflected by the 125,000 square foot Community Center, 11,000 square foot Water Park and 13 parks and playgrounds. Five of these parks are full-service parks, which feature running tracks; rentable pavilions, ball diamonds, restrooms, playgrounds, horseshoe pits and basketball, bocce and sand volleyball courts.

The Community Center includes a multi-purpose community room with stage, two wood-floored gymnasiums, a four-lane elevated track, indoor diving and eight-lane competition pools, a cardiovascular exercise room, a free-weight room, separate steam/sauna/whirlpool facilities for men and women, family changing rooms, a snack bar, game room and additional meeting rooms.

The outdoor Water Park is complete with a snack bar, separate bathhouses, waterslide and wading pool. A variety of year-round activities are offered for all interests, from organized team sports to educational, craft, and exercise programs. Community activities like Community Days and other holiday events



are also planned by department staff. Recreational programs for residents ages 60 and up are assisted by the Office of Aging and our Senior Club.

Utilities

The City's infrastructure provides a basis upon which all other community services can be provided. The utility services that it provides to its various residential, commercial, and industrial end-users are a critical element to the progression of overall quality of life, economic development, and public health and safety.

Because Brook Park's evolution as a community primarily peaked in the 1970s, a majority of its water and sewer/storm utilities and road infrastructure is dated. Approximately 96% of the City's water lines were rated in fair, poor, or critical condition, while 88% of the waste water lines were rated in the same condition. Almost 60% of the City's roads and 71% of culverts, used to allow water to pass underneath a road, railway, or embankment, were rated in fair, poor, or critical condition. Storm water and wastewater facilities, due to recent improvements, are in better condition.

According to the most recent report filed with the Ohio Public Works Commission, the City's infrastructure was rated as follows:

Infrastructure Type	Excellent	Good	Fair	Poor	Critical
Roads	13.1	18.4	35.6	7.3	1.9
Culverts	0	2	4	1	0
Water Lines	8.5	6.2	235	111.7	7.6
Wastewater Facilities	2	5	4	2	0
Sewer Lines	34.8	4.5	10.1	265.4	10.4
Storm Water Lines	24.7	263	23.2	24.7	0

Source: 2011 Capital Improvement Report, Ohio Public Works Commission

The City has incrementally worked to improve its infrastructure. More recently, the City has undertaken several large scale storm and sanitary sewer projects that included:

- Smith/Hummel Road Sanitary Sewer Project. This \$1.4 million dollar project improved the storm water infrastructure in this area to address neighborhood flooding issues. The project was completed in 2010.
 - In 2010, the first phase of the West 150th-Brookpark Road project began that connected the 60 inch waterline on Brookpark Road with an interceptor line on the north side of I-480. The second phase of the project will place a new line between Hummel and Brookpark roads.
- Other planned storm water improvements include:

- Smith Road Sanitary Relief Sewer phases 2 & 3. Over \$9 million will be spent improving these facilities over the next two to three years.
- A \$3.7 million dollar retention basin at Wedo Park.
- Cleaning of Kolleda Ditch, also known as Countryman Creek, to improve the flow of storm water between Hummel and Brookpark roads.

To help mitigate flooding issues in Brook Park, the Northeast Ohio Regional Sewer District developed a storm water assessment program in 2010. As part of the program, property owners will begin paying \$4.75 per month in 2011.

It is anticipated that revenue generated from this fee could help to improve this infrastructure and minimize flooding and other environmental hazards to Abrams and Big Creek, improve the Puritas storm water basin near W.140th Street, and to possibly construct a storm water retention basin at Wedo Park.

In 2005, the City of Brook Park received a Transportation for Livable Communities Initiative (TLCI) Grant to provide thoroughfare recommendations to issues on Engle Road, from Snow Road to Hummel Road. Eight alternatives were developed, all with the intention to improve the outdated road configuration, improve safety and pedestrian connectivity, and promote future economic growth.

Recent and planned roadway improvements include:

- Resurfacing Brookpark Road, from 1000 feet west of SR 237 to the City's eastern boundary. This project began in 2011 and will be completed in three phases which will include asphalt milling and resurfacing, catch basins and curb repair, and base paving repair. The project cost is estimated at \$3.3 million.
- Eastland/Sheldon Road Improvements
- West 150th road widening
- West 130th Street road improvements
- The resurfacing of portions of Engle and Hummel roads
- The reconstruction of Calvin and Heatherwood streets; and,
- Another \$3 million will be spent over the next five years improving neighborhood streets such as Calvin and Heatherwood.

C. Strategies

As Brook Park continues to evolve it is important to understand the changing needs of the community. The following strategies outline actions to maintain high quality services that meet the City's evolving demography, economy, and other conditions.

Develop a Parks and Recreation Master Plan

Park and recreational services are very desirable in the City of Brook Park, with programming and services provided to residents through several methods and facilities. A discussion has transpired in the past concerning the need to update the current community center and other facilities that provide services to youth and seniors.

Recreational programming and the development of recreation programs can be controversial because of the resident's diverse interests. Programming can often be dictated or "pushed" by a small, yet collective population. However, if developed properly, programs can be developed that spike the interests of every resident. To first do so, it is important to engage in an active recreation planning process that assesses needs that are based in demographics as well as interests, as the two are often different and conflicting.

A Park and Recreation Master Plan could include pedestrian and multi-modal design guidelines for all future redevelopment areas. These guidelines could include sidewalks, separated bike and pedestrian paths and trails, and an on-street bike path system.

The City should also continually determine if current services and facilities meet the needs of its residents. City staff could develop and administer a community survey as a means to monitor satisfaction with the level and types of services provided.

Pursue Additional Funding Avenues

Brook Park officials could seek alternative means and techniques of capital financing, private investment, partnerships, and other available resources for recreational programs when appropriate.

Yearly operating costs for recreational facilities will - at some point in time - exceed the current tax revenue for the Department. User fees may also have to be raised in order to provide the same or heightened level of recreational programs and services in the future.

Citizens have also expressed a desire for additional recreational opportunities including improved pedestrian connectivity, bike lanes, a "face-lift" to some existing parks, and a possible updated recreational facility. An updated or new facility will pose budgetary challenges to the City. The current recreation monies

provide enough funding to make slow, steady progress on maintenance and repairs, while providing staff for programs and services. New recreational facilities will require creative funding solutions.

Provide Community Services in an Environmentally-Friendly Manner

As the City continues to grow and develop it should work to integrate environmentally friendly practices when possible. New community facilities should incorporate green technology when feasible, and the City should work to increase energy efficiency in service provision. Existing buildings could be adapted to incorporate more energy-efficient technologies when economically feasible.

Maintain an Excellent Educational System

Although the City of Brook Park is not involved with the daily activities and administration of the city's school district, it is clearly in the best interests of city staff to engage district leadership and to collectively pursue opportunities and address challenges. One of the most evident facts in community planning and economic development today is that schools, neighborhoods, and a community's economic vitality are clearly linked. It is important that officials that comprise the Berea School District understand and convey this message throughout their respective communities.

Support the Cuyahoga County Public Library

Brook Park should continue to support the library, so it remains an effective institution in the community. It was highly praised by residents during the planning process and in the community survey. Good libraries complement a strong educational system and enhance community-wide access to learning resources. The City should continue to raise awareness of the resources it offers to residents and businesses in the community. The City should continue to coordinate with library staff on planning and development issues to ensure the library is able to meet the needs of the City's evolving population.

Align Infrastructure Improvements with the Master Plan

The utility services that the City of Brook Park provides to its various residential, commercial, and industrial end-users are a critical element to the progression of overall quality of life, economic development, and public health and safety. It is very important that if growth/redevelopment is to occur that utility improvements should also be developed in conjunction with the ideas enumerated within the Land Use, Economic Development and Housing sections of this Plan. More importantly, expenditures for capital improvements should be allocated in a planned, proactive manner supportive of the Plan's planning themes and strategies.

Promote Additional Infrastructure Planning

Water, storm water, and sewer infrastructure systems in many communities like Brook Park are reaching the end of their functional life. Approximately 40% or

more of the community's infrastructure was reported in adequate or poor condition, according to the most recent report filed to the State of Ohio. Brook Park does not currently have a model of the sanitary sewer collection system. It is recommended that the City pursue the feasibility of completing flow monitoring and develop a model of the system to aid in the evaluation of alternatives to direct additional resources for the removal of other hydraulic limitations in the system. A system-wide evaluation could include cleaning and televising of significant segments of the collection system.

The City does not currently have a model of the water distribution system. It is recommended that the City work with a consultant to complete fire flow monitoring as well as address several other areas of concern. The City could also pursue the feasibility of completing a storm sewer master plan (coordinating with the Northeast Ohio Regional Sewer District) and implement a cleaning program to ensure capacity in the system and to reduce flooding issues.

The City should continue to upgrade its storm water collection system to provide adequate outlets for surface water. Almost 40% of the current storm water infrastructure was rated in fair or poor condition in 2008. To help mitigate flooding issues in Brook Park, the Northeast Ohio Regional Sewer District developed a storm water assessment program in 2010. It is anticipated that revenue generated from this fee could help to improve this infrastructure and minimize flooding.

Promote Green Infrastructure

Brook Park could also pursue green infrastructure methods to reduce costs for maintaining and replacing this aging infrastructure.

Green infrastructure planning and design approaches help communities reduce demands on existing infrastructure, extend its functional life where possible, and provide cost-effective and sustainable solutions that conserve and protect water resources while improving the quality of life of Brook Park residents and businesses.

This planning endeavor could include a discussion of green infrastructure, an approach to wet weather management that is cost-effective, sustainable, and environmentally friendly. Green infrastructure management approaches and technologies capture and reuse storm water to maintain or restore natural hydrology.

Green Infrastructure Design Approaches

SITE

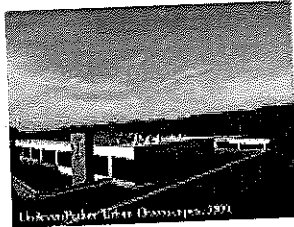
- Green Roofs
- Rain Harvesting
- Downspout Disconnection
- Planter Boxes
- Rain Gardens
- Permeable Pavements
- Vegetated Swales
- Natural Retention Basins

NEIGHBORHOOD

- Green Parking
- Green Streets & Highways
- Pocket Wetlands
- Trees & Urban Forestry
- Brownfield Redevelopment
- Infill and Redevelopment

WATERSHED

- Riparian Buffers
- Habitat Preservation & Restoration



Other methods to minimize storm water problems include:

- Promote shared parking and land banking;
- Incorporation of compact parking spaces as a means of reducing impervious cover;
- Setting maximum parking space dimensions rather than specifying minimum dimensions (a minimum stall size of 10' x 20' or 9' x 18' are the most commonly cited dimensions) could also reduce impervious area as can decreasing driveway widths;
- Incorporation of bioretention or rain gardens into existing requirements for landscaped islands and revising landscaping requirements to require a set percentage of landscaping of the total paved area can help to offset some of the impervious surfaces;
- Incorporation of storm water best management practices such as sand filters and filter strips into perimeter and interior landscaping can also help in offsetting impervious surfaces; and
- Incorporation of porous pavement in overflow parking areas can reduce the runoff generated by parking lots as well as decreasing impervious surfaces.

The Ohio EPA's Surface Water Improvement Fund grant program and the Ohio Public Works Commission are both candidates for green infrastructure projects. The most recent bioswale project in South Euclid is an excellent storm water

mitigation project funded with OPWC funding. The Northeast Ohio Regional Sewer District's (NEORS) also provides grants for small scale storm water demonstration projects.

Pursue Additional Funding Sources for Infrastructure

The City of Brook Park should continue to actively pursue additional funding sources to assist in their infrastructure programs.

These sources include local revenues, tap charges and assessments, as well as grant and loan funds administered by the Ohio EPA Division of Environmental and Financial Assistance (DEFA), the Ohio Water Development Authority (OWDA), the Ohio Public Works Commission (OPWC), the U.S. Department of Housing and Urban Development (HUD), the Ohio Water and Sewer Rotary Commission, the Economic Development Administration, and the Ohio Department of Development (ODOD).

In addition, the City should annually evaluate the current water and sewer rates to ensure that the respective enterprise funds remain "in the black" and generate sufficient reserves for emergencies, as well as fund balances to aid in debt for future improvements.



Photo: Snow Rd. Bridge I-71 to Berea Freeway, 1974.

Section VIII: Implementation

A. Introduction

One of the most important considerations that the reader, user, proponent, or opponent of this unique planning document should understand is that any plan is only as effective as the level of communication that exists between local government officials and community residents. In this special case, the Plan will only be effective if the level of interaction between Brook Park's public officials, representatives, and respective business and residential constituencies remains high. It is very important that this Plan becomes a continuous process in which one accomplishment is a general understanding and appreciation of planning.

Planning success may not occur through embracing one strategy, but through the use of several strategies in unison. Successful implementation will require a dedication toward each planning area's goals and not its strategies. Therefore, if success can be attained using other means, then it should be encouraged and incorporated within the respective sections of this document.

B. Use of Plan

This Plan provides public and private officials with a cafeteria style menu of strategies that can be used to promote community growth and redevelopment. The Plan's strategies are by no means completely exhaustive: They were developed in conjunction with public input and take into account past, current and projected problems. Over time, each strategy may need to be revised or amended to reflect the current environment. To ensure a type and level of growth consistent with the public's preferences, it is encouraged the Plan is used during the following situations:

Citizen Participation

City officials should continue to encourage the participation of citizens at all levels of planning and implementation of this Master Plan. The Planning/Zoning Commission and Council should continue to work with local interest-based associations. They should also seek to expand the use of the City's capable, interested, dedicated residents in discovery groups, working groups, task forces, steering committees, and advisory groups. The City could also survey the community on an annual basis to receive additional feedback to either validate existing planning preferences or to establish new ones.

Planning and Zoning

The Master Plan sets a future tone for growth and redevelopment based upon best practices, and the desire of residents and city officials. One of the principal means of obtaining this desired future is through the zoning ordinance and subdivision regulations.

The Planning and Zoning Commission, and City Council should closely evaluate individual applications for rezoning and special use permits to determine whether they are consistent with the philosophical tone set in the Master Plan. The adjustment of the Zoning Ordinance, the use of conditional zoning and proffers, and the use of various types of incentives are encouraged as implementation tools.

Capital Improvement Projects

This Plan assists in highlighting areas that were identified throughout the planning process as those most preferred or suitable for future development. Whether promoting the redevelopment of economic areas, developing signage or gateways, fixing infrastructure, or making other important repairs, it should be done in accordance with the Plan's ideas and planning themes, especially in specific areas like Economic Development, Land Use, Housing.

Economic Development

Expanding economic development opportunities in accordance with the public's desires will require the assistance of a variety of public and private organizations. These organizations should be privy to the Plan and its preferred outcomes. Areas deemed most suitable for development- as well as the



The former Holiday Inn, once located at 16501 Brookpark Road.

type of growth affiliated with these selected areas- should be clearly defined so that those organizations may help facilitate this growth. Once the above conditions are established, smooth and efficient zoning and permit procedures- as well as correlating incentives- should be implemented to help facilitate this growth.

Intergovernmental Relations

In addition to the authority vested in the City Planning/Zoning Commission and by City Council, many ideas and strategies in the Master Plan can be achieved through cooperative and joint activities with local, regional, State, and Federal governments or agencies. Of primary importance regionally is maintaining an open line of communication between the City's adjacent neighbors, the Berea School District, and Cuyahoga County.

While school district issues may continue to dominate the list of local mutual interests of Brook Park, Berea and Middleburg Heights, community facility and infrastructure concerns are of increasing concern due to budgetary and fiscal issues, and the promotion of the economic development opportunities. All three political jurisdictions should maintain a continued dialogue on matters of mutual interest to promote economic growth and the efficient use of resources.

C. Updating the Master Plan

Because of the ongoing nature of community development, this Plan is not a static document, but one in constant need of revision and review. It is recommended that the Plan be updated or reviewed in the following manner:

New Information

The Master Plan should be amended or updated when new data, like the Census or other demographic, population, and economic data, provides new insight important to existing City policies. This data plays a vital role in planning and the public policy decisions that derive from it. For public and business officials to make rational and informed decisions, it is necessary that they utilize current information when making these decisions.

Annual Review

City Officials, department heads, and other interested parties should have an annual meeting where all development and governmental activities are reviewed in accordance with the Plan and the philosophical tone it sets. A discussion and analysis should identify the Plan's beneficial impacts to the community, and recognize any circumstances where the Plan failed to assist City and business officials. Revisions based upon these discussions should occur as needed.

Critical Review

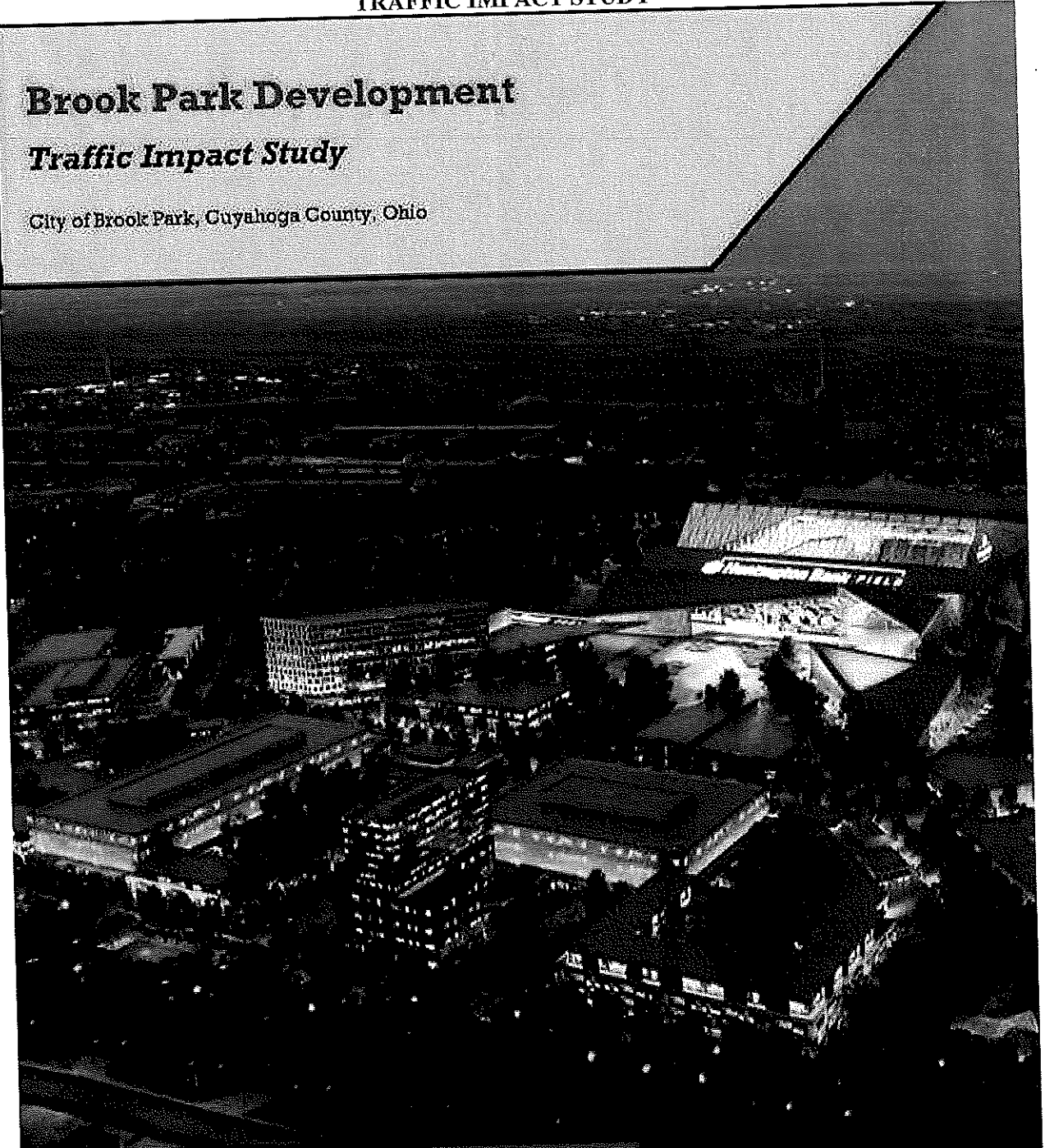
Because many conditions that affect community growth- and ultimately a comprehensive plan- may change every three to five years, it is recommended above all else that City officials take the necessary steps to review the Plan over time. Conditions that could have major effects on this Plan could be: national or regional economic expansions or recessions, natural disasters, new housing development, new industrial growth, the extension of water and sewer services, increased water and sewer capacity, rezoning, new state legislation affecting planning and zoning authority, and transportation related projects to name a few.

EXHIBIT D-3

TRAFFIC IMPACT STUDY

Brook Park Development
Traffic Impact Study

City of Brook Park, Cuyahoga County, Ohio



PREPARED BY:

DAVEY 
Resource Group

JULY 2025



Corporate Headquarters
295 South West Street, Suite 200
Kent, OH 44240
800-628-8312

Local Office
1310 Sharon Copley Rd
PO Box 37
Sharon Center, OH 44274
330-590-8004

Traffic Impact Study

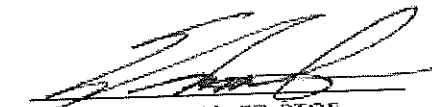
Brook Park Development

City of Brook Park, Cuyahoga County, Ohio

Prepared For:

Haslam Sports Group, LLC

July 2023



Eric William Smith, PE, PTOE
Registration No. 58426
Certification No. 015



Table of Contents

1. Introduction.....	1
Interchange Modification Study (IMS).....	1
Feasibility Study (FS).....	1
Brook Park Traffic Impact Study (TIS).....	1
2. Site Development.....	2
Trip Generation.....	2
Proposed Roadway Configuration.....	4
Intersection Traffic Control.....	4
3. Capacity Analysis.....	5
Traffic Capacity.....	5
Signalized Intersection Capacity.....	5
Unsignalized Intersection Capacity.....	5
4. Conclusions.....	9

List of Appendices:

- Appendix A: Site Development Plan & Development Schedule
- Appendix B: Trip Generation Reports
- Appendix C: Internal Trip Capture
- Appendix D: Design Year Traffic Volumes
- Appendix E: Schematic Roadway Configuration & LOS Diagram
- Appendix F: Unsignalized Intersections HCS Reports
- Appendix G: Signalized Intersection HCS Reports

List of Tables

Table 1 : Proposed Development Program	2
Table 2: Trip Generation Summary.....	3
Table 3: HCM Exhibit 19-8: LOS Criteria	5
Table 4: HCM Exhibit 20-2: LOS Criteria	5
Table 5: Unsignalized Future Conditions LOS Capacity Summary.....	6
Table 6: Design Year PM Peak.....	7
Table 7: Design Year PM Peak.....	7

1. Introduction

In association with the Haslam Sports Group, Osborn Engineering and other entities, Davey Resource Group (DRG) has prepared this traffic study for purposes of gaining City of Brook Park approvals to proceed with development of the site as proposed, with additional studies forthcoming.

This traffic study is the first of many being prepared for the well-publicized construction of a new Cleveland Browns domed stadium (Stadium) and integral mixed-use development (Development) fronting Snow and Engle Roads in the City of Brook Park. The focus of this first traffic study is to analyze traffic impacts to the local, City of Brook Park, roadways and to identify roadway needs to accommodate traffic on a typical day. Subsequent traffic studies will be prepared to evaluate impacts to Interstate 71 (I-71) from the I-180 interchange to Bagley Road, including the Snow Road interchange. That study is being prepared under the auspices of the Ohio Department of Transportation (ODOT) for their use in evaluating interstate access to the site and takes the form of an Interchange Modification Study (IMS). The IMS will make recommendations for interchange improvements. Both studies will consider Build and No-Build highway improvements in a year 2050 scenario.

Stadium event day studies also are being conducted that will evaluate traffic operations associated with an event such as a football game, concert or similar regional attraction. The purpose of those studies (both weekend and weekday) will be to forecast traffic congestion locations and establish traffic management procedures.

Interchange Modification Study (IMS)

The IMS is a document used by ODOT to receive approval from the Federal Highway Administration (FHWA) for roadway improvements along interstates and their interchanges. This study examines only the Development traffic and its impact to the typical day. This follows all procedures and methodologies required by ODOT & FHWA to receive approval for the funding and construction of interchange improvements. This will be submitted directly to ODOT District 12 and Central Office for approval once it is completed.

Feasibility Study (FS)

The FS is a document that examines the traffic impacts of several scenarios with the traffic impact of both the typical day (only Development) and event days (Stadium and Development). While this document will also follow the standard ODOT procedures and regulations, this study examines a broader study area that encompasses multiple jurisdictions and agencies. It will examine both everyday travel patterns and provide traffic management suggestions for event day traffic. This will be submitted to all jurisdictions within the study and will be readily available to any interested parties.

Brook Park Traffic Impact Study (TIS)

This document, a traffic impact study, is typically used to evaluate new traffic generated by new developments such as single-family houses or commercial buildings and their impact on the adjacent roadway network. This study will summarize the analysis and findings of the IMS and FS above, specifically for the City of Brook Park, examining the impact of the traffic generated by the development portion of the site on the traffic operations at the internal site drives and their connections to Engle Road, Hummel Road and Snow Road. Background traffic volumes used in this study are based upon the assumptions and methodologies presented in the IMS. As such, this report will not provide the full documentation of the calculation of the traffic volumes, only the final volumes and capacity analysis results along site drives.

2. Site Development

The proposed Development portion of the Brook Park site contains elements of residential, retail/commercial, office buildings and hotels which are found primarily along the outer ring of the parcel, adjacent to Engle Road and Snow Road. A three-dimensional rendering of the proposed development is attached in **Appendix A**. This rendering also includes a projected schedule of phasing for this development. Seen below in **Table 1 – Proposed Development Program** is a summary of the proposed Developments. As the design year is in 2050, all analysis will include the full buildout of the proposed Development.

Table 1: Proposed Development Program

Phase	Program	Size
1	Event Venue	83,000 sqft
	Hotel	405 rooms
	Operations Office	102,000 sqft
	Residential	645 units
	Retail	279,500 sqft
	Team Store	38,000 sqft
2	Office	495,700 sqft
	Residential	535 units
	Retail	78,800 sqft

Trip Generation

Vehicular trip generation was completed for the proposed Development using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. Using this manual, trip generation volumes for each land use were estimated for the PM Peak hour. Land Use Codes (LUC) were assigned to each type of development within the site. Multifamily Housing, Mid-Rise (221) was selected for the residential portions, Shopping Center, >150k (820) was selected for the commercial/retail portions, Hotel (310) was selected for the hotels on site and General Office Building (710) for the office buildings. Each land use in the manual has different independent variables to generate trips for the respective land use. Seen in the table below is the Land Use, its LUC, independent variable and proposed size. The trip generation reports are attached in **Appendix D**.

With mixed use developments such as this project, trip generation can overestimate the volume of trips generated by the whole development. To account for this, ITE and the National Cooperative Highway Research Program (NCHRP) has developed a methodology that reduces trip generation based upon symbiotic land uses on the same mixed-use development. This *Internal Trip Capture* uses a multi-step and multi-variable approach to identify the volume of trips 'captured' onsite. An example of a 'captured' trip would be an entering trip generated by an apartment building also serves as an exiting trip of a commercial building. This Internal Trip Capture estimates the capture rates using unconstrained national land use demand rates, constrained site-specific demand rates and a balanced demand model based upon onsite land use pairs. NCHRP Report 684 was used to calculate the Internal Trip Capture expected for this development and is attached in **Appendix C** and shown in the **Table 2 – Trip Generation Summary** on the next page.

¹ Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, 2021

Table 2: Trip Generation Summary

Land Use	Size	PM Peak Hour	
		Enter	Exit
Residential Multifamily (221)	1,180 Dwelling Units	281	180
Internal Capture Reduction	% Reduction	50%	47%
	Trip Reduction	141	85
Net New External Trips		141	95
Commercial / Retail (820)	390.3 (1,000 sqft)	722	782
Internal Capture Reduction	% Reduction	20%	22%
	Trip Reduction	144	172
Net New External Trips		578	610
Hotel (310)	405 keys	139	133
Internal Capture Reduction	% Reduction	21%	11%
	Trip Reduction	29	15
Net New External Trips		110	118
General Office (710)	597.7 (1,000 sqft)	125	607
Internal Capture Reduction	% Reduction	18%	11%
	Trip Reduction	23	67
Net New External Trips		103	540
Total Development New External Trips		930	1,364

These new external trips were then overlaid into the background volumes to create a typical day. Development traffic volume set. The distribution of these external trips is based upon a Trip Allocation Model which is being used for both the IMS and FS. This allocation model is not being provided with this report, however a volume diagram, provided in Appendix D, shows the design year volumes at the adjacent roadways of Engle Road, Hummel Road and Snow Rd, within the vicinity of the site.

Proposed Roadway Configuration

For a typical traffic impact study, an evaluation of the existing roadway conditions overlayed with the new development's trip generation would provide the basis for roadway improvements necessary to mitigate the new development. Since this project, a new football stadium and development associated with the new stadium, is a non-typical development, major roadway improvements are being proposed along the Engle Road and Snow Road. A new, above-grade, intersection is being proposed which connects Snow Road and Engle Road on the southeast side of the development. Additional signalized intersections at the certain site drives along Engle Road and Snow Road are proposed, with varying lane configurations at each intersection. Roadway geometry is also being proposed for the internal private roads of the site. Attached in Appendix E are schematic drawings of the proposed roadway improvements including signalized intersection locations, roadway lane configurations and new proposed intersections.

Intersection Traffic Control

With major changes to the roadway configurations and new site drives along Engle Road and Snow Road, signalized intersections and stop controlled intersections needed to be established. As seen on the Internal Lane Configuration Diagram, several site drives are proposed to operate as signalized intersections while other intersections are proposed as two-way stop-controlled intersections. All internal intersections are proposed as two-way stop-controlled intersections.

Signalized Intersections

- Snow Road & Site Drive 1 (Existing)
- Snow Road & Site Drive 2
- 'T' intersection (Snow Road & Ring Road)
- ♦ Engle Road & Main Entrance
- ♦ Engle Road & Hummel Road (Existing)
- ♦ Engle Road & Site Drive 9

Unsignalized Intersections

- Snow Road & Site Drive 3
- Snow Road & Site Drive 4
- Snow Road & Site Drive 5
- Snow Road & Site Drive 6
- Snow Road & Site Drive 7
- Snow Road & Site Drive 8

Based upon the geometry of the proposed roadway, traffic signals were placed at expected major intersections for the development. The spacing of the signalized intersections was also considered, as vehicles queuing through intersections can negatively affect the operations of the signalized intersection.

3. Capacity Analysis

To determine if the correct lane configuration, lane widths and intersection control were proposed, capacity analysis was conducted using the typical day, Development 2050 design year traffic volumes.

Traffic Capacity

Capacity analysis techniques contained in The Highway Capacity Manual¹ and the Highway Capacity Software (HCS)² was used to evaluate the ability of the intersections to process the traffic demand. The engineering industry uses a rating system referred to as Level of Service (LOS) to describe traffic operational efficiency. These service conditions are defined by the letters "A" through "F", with "A" being excellent traffic conditions and very little delay while "F" equates to congested, unstable traffic flow with long delays. Operational goals for LOS as defined by Chapter 5.9 of the ODOT Analysis and Traffic Simulation (OATS) Manual³ will apply.

Signalized Intersection Capacity

At signalized intersections, right-of-way to traffic is allocated by traffic signal. Essentially, intersection capacity is measured by the number and types of lanes, and the amount of "green time" allocated to those lanes. LOS can be calculated for individual lanes, individual intersections, and the intersection as a whole. Control delay and volume-to-capacity ratios are used to establish LOS. Control delay measures the entire delay a motorist is anticipated to experience and includes slow down, stop and start up time. The LOS Criteria for corresponding conditions can be seen in Table 2: HCM Exhibit 19-8: LOS Criteria.

Table 3: HCM Exhibit 19-8: LOS Criteria

Control Delay (s/veh)	LOS by V/C Ratio	
	≤ 1.0	> 1.0
≤ 30	A	F
> 10 - 20	B	F
> 20 - 35	C	F
> 35 - 55	D	F
> 55 - 80	E	F
> 80	F	F

Unsignalized Intersection Capacity

At stop-controlled intersections, drivers on the stop-controlled approaches are required to select gaps in the major-street flow to execute crossing or turning maneuvers. In the presence of a queue, each driver on the controlled approach must also spend time moving to the front-of-queue position and prepare to evaluate gaps in the major-street flow. Thus, the capacity of the controlled legs is based primarily on three factors: the distribution of gaps in the major-street traffic stream, driver judgment in selecting gaps through which to execute the desired maneuvers, and the follow-up headways required by each driver in a queue.

Table 4: HCM Exhibit 20-2: LOS Criteria

Control Delay (s/veh)	LOS by V/C Ratio	
	≤ 1.0	> 1.0
0 - 10	A	F
> 10 - 15	B	F
> 15 - 25	C	F
> 25 - 35	D	F
> 35 - 50	E	F
> 50	F	F

According to the Highway Capacity Manual, LOS for a Two-Way Stop Control (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement), as well as the major-street left turns, by using the criteria given in Table 3: HCM Exhibit 20-2: LOS Criteria. LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons: (a) major-street through vehicles are assumed to experience zero delay; (b) the disproportionate number of major-street through vehicles at a typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay for all vehicles; and (c) the resulting low delay can mask LOS deficiencies for minor movements.

¹ Highway Capacity Manual, 7th Edition, The national Academy of Sciences, Transportation Research Board, 2022

² Highway Capacity Software, University of Florida, 2021

³ ODOT Analysis and Traffic Simulation Manual - Office of Roadway Engineering, January 2025

Table 5: Unsignalized Future Conditions LOS Capacity Summary

Intersection & Traffic Control		Approach	2050	
			LOS	Delay (sec)
TWSC	Snow Rd & Site Drive 3	EB LT	A	9.2
		SB	E	45.4
TWSC	Snow Rd & Site Drive 4	EB	B	12.6
		NB LT	B	11.9
TWSC	Snow Rd & Site Drive 5	EB	B	11.6
		NB LT	A	9.0
		SB LT	B	11.9
TWSC	Snow Rd & Site Drive 6	EB	C	15.0
		NB LT	A	9.0
TWSC	Snow Rd & Site Drive 7	EB	C	15.1
		NB LT	A	9.1
TWSC	Snow Rd & Site Drive 8	EB	D	25.1
		NB LT	A	9.2
TWSC	Inner Rd & Site Drive 1	WB	A	8.6
		SB LT	A	7.2
TWSC	Inner Rd & Site Drive 2	WB LT	A	7.6
		NB	A	8.9
TWSC	Inner Rd & Site Drive 3	EB LT	A	7.3
		WB LT	A	7.4
TWSC	Inner Rd & Main Entrance	NB	B	11.7
		SB	B	11.1
TWSC	Inner Road & Hummel Rd	WB RT	A	8.6
		WB LT	C	15.4
TWSC	Inner Road & Site Drive 8	SB LT	A	7.9
		WB	A	8.7
TWSC	Inner Road & Site Drive 9	SB LT	A	7.4
		WB	A	9.2
TWSC = Two Way Stop-Controlled			LOS D or E	

As seen by the table above, it is expected that all proposed unsignalized intersections along Engle Road, Snow Road and the internal road will operate with acceptable levels of service. The Highway Capacity Software unsignalized intersection analysis sheets are attached in Appendix F.

Table 7: Design Year PM Peak

Snow Rd & Site Drive 1	2050 PM Peak				
	LOS	Delay (sec)	V/C	QSR	95th % (ft)
EB L	A	3.7	0.058	0.01	6
EB T	A	3.2	0.268	0.06	59
EB Approach	A	3.2	-	-	-
WB T	A	9.1	0.222	0.25	124
WB R	A	8.1	0.06	0.07	26
WB Approach	A	9.0	-	-	-
SB L	D	41.3	0.795	0.60	165
SB T	D	36.6	0.291	0.18	49
SB Approach	D	40.1	-	-	-
Intersection			-	-	-
Snow Rd & Site Drive 2	2050 PM Peak				
	LOS	Delay (sec)	V/C	QSR	95th % (ft)
EB L	A	9.1	0.055	0.03	10
EB T	B	10.6	0.428	0.41	182
EB R	B	10.8	0.428	0.41	180
EB Approach	B	10.6	-	-	-
WB L	A	9.6	0.032	0.01	4
WB T	B	17.6	0.295	0.55	202
WB R	B	12.9	0.164	0.24	76
WB Approach	B	16.6	-	-	-
NB L	D	37.8	0.101	0.30	20
NB T	D	41.2	0.332	0.49	32
NB Approach	D	39.8	-	-	-
SB L	C	33.8	0.633	0.87	218
SB T	C	31.4	0.168	0.16	39
SB Approach	C	33.4	-	-	-
Intersection	B	17.0	-	-	-
Signalized	LOS: D or E				

Snow Rd & Ring Rd	2050 PM Peak				
	LOS	Delay (sec)	V/C	QSR	95th % (ft)
EB L	A	9.2	0.315	0.37	48
EB T	A	7.7	0.311	0.77	158
EB Approach	A	8.0	-	-	-
WB T	B	10.5	0.350	0.21	172
WB R	B	10.6	0.351	0.20	157
WB Approach	B	10.5	-	-	-
SB L	D	36.3	0.801	0.51	224
SB R	C	32.4	0.335	0.32	72
SB Approach	D	35.3	-	-	-
Intersection	B	16.4	-	-	-
Ring Rd & Engle Rd	2050 PM Peak				
	LOS	Delay (sec)	V/C	QSR	95th % (ft)
EB L	C	28.4	0.060	0.02	12
EB T	C	31.4	0.668	0.4	239
EB Approach	C	31.2	-	-	-
WB T	C	31.7	0.085	0.03	22
WB R	C	28.9	0.423	0.19	132
WB Approach	C	29.3	-	-	-
NB L	A	9.8	0.050	0.03	12
NB T	B	15.1	0.261	0.30	126
NB R	B	15.7	0.269	0.29	120
NB Approach	B	15.1	-	-	-
SB L	B	11.0	0.205	0.23	45
SB T	B	12.3	0.216	0.48	97
SB R	B	12.3	0.216	0.48	95
SB Approach	B	11.9	-	-	-
Intersection	B	18.2	-	-	-
Signalized	LOS: D or E				

Table B: Design Year PM Peak

Ring Rd. & Hummel Rd.	2050 - PM Peak				
	LOS	Delay (sec)	V/C	QSR	95th % (ft)
EB L	C	33.3	0.051	0.04	11
EB T	C	34.6	0.266	0.19	58
EB Approach	C	34.4	-	-	-
WB T	D	35.1	0.559	0.16	135
WB Approach	D	35.4	-	-	-
NB L	A	8.4	0.203	0.06	26
NB T	A	9.9	0.369	0.29	128
NB R	A	9.0	0.370	0.26	110
NB Approach	A	9.3	-	-	-
SB L	C	20.2	0.305	0.43	85
SB T	B	11.9	0.296	0.37	123
SB Approach	B	13.4	-	-	-
Intersection	B	14.5	-	-	-
Ring Rd. & Site Drive 9	2050 - PM Peak				
	LOS	Delay (sec)	V/C	QSR	95th % (ft)
EB L	C	33.8	0.370	0.63	94
EB R	C	32.6	0.181	0.26	40
RB Approach	C	33.5	-	-	-
NB L	A	7.0	0.102	0.07	14
NB T	A	6.2	0.275	0.27	107
NB Approach	A	6.2	-	-	-
SB T	B	10.5	0.313	0.30	151
SB R	B	10.5	0.315	0.29	141
SB Approach	B	10.5	-	-	-
Intersection	B	10.8	-	-	-
Signalized	LOS: D or E				

As seen by the signalized intersection capacity analysis, all of the proposed signalized intersections are expected to operate with acceptable levels of service. The HCS analysis worksheets are attached in Appendix C.

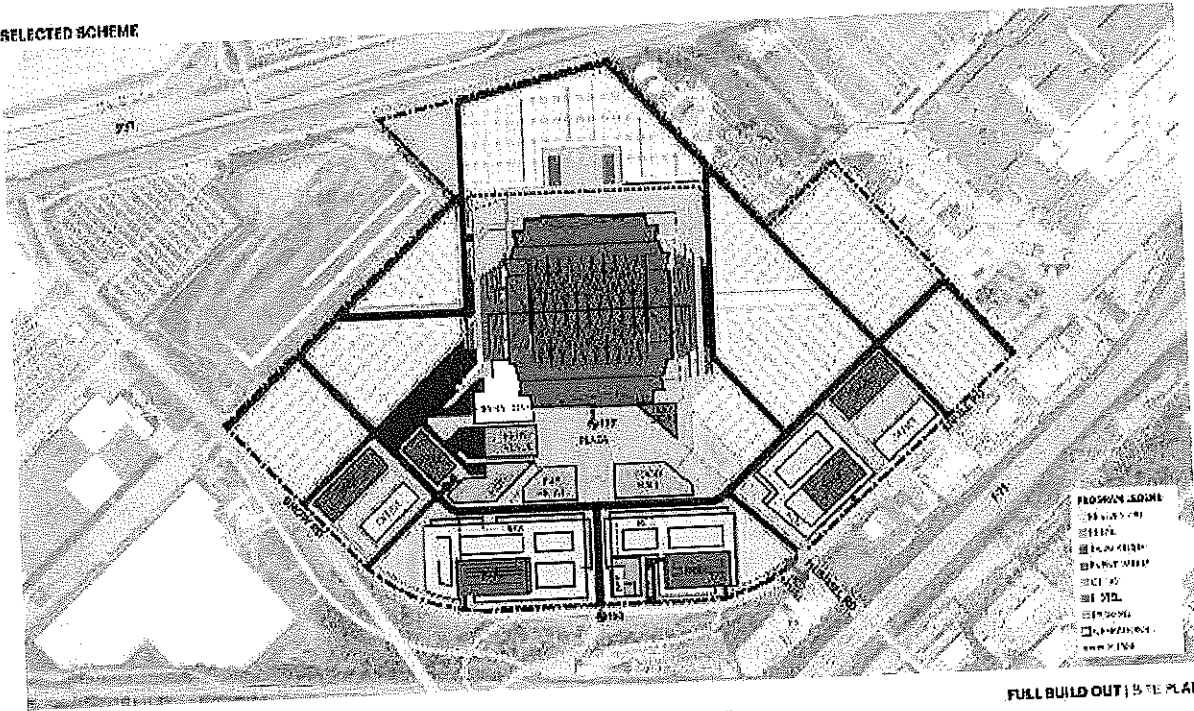
4. Conclusions

In association with the Haslam Sports Group, Osborn Engineering and other entities, Davey Resource Group (DRG) has prepared this traffic study for purposes of gaining City of Brook Park approvals to proceed with development of the site as proposed, with additional studies forthcoming. The roadway design and access plan has been established to accommodate the development and to be functional during an event period. The following conclusions have been reached with regard to the proposed site plan and site drive access points:

- The proposed lane configurations described in the report above and shown in the Roadway Conditions Diagram should be sufficient to adequately process the *Build* traffic volumes,
- Acceptable levels of service are expected in the *Build* traffic volume scenarios at all study intersections, with traffic control devices as proposed in the report.

APPENDIX A
SITE DEVELOPMENT PLAN & DEVELOPMENT SCHEDULE

SELECTED SCHEME



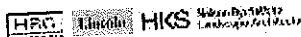
FULL BUILD OUT SITE PLAN



03 Oct 2024 10:02

Phase	Program	Gross Area	Yield	Unit/Rooms	Parking Ratio	Parking Req'd (Per Program)	Parking Provided	
Full Build Out	1	Office	2,200,000	0.15	2,200	1:1000	2,200	0
		Hotel	2,200,000	0.15	2,200	1:1000	2,200	0
		Residential	2,200,000	0.15	2,200	1:1000	2,200	0
		Retail	2,200,000	0.15	2,200	1:1000	2,200	0
		Public	2,200,000	0.15	2,200	1:1000	2,200	0
	2	Office	2,200,000	0.15	2,200	1:1000	2,200	0
		Hotel	2,200,000	0.15	2,200	1:1000	2,200	0
		Residential	2,200,000	0.15	2,200	1:1000	2,200	0
		Retail	2,200,000	0.15	2,200	1:1000	2,200	0
		Public	2,200,000	0.15	2,200	1:1000	2,200	0
Total Required Parking - Mixed Use						2,200	0	
Garage Parking (Residential)						0	2,200	
Garage Parking (Hotel, Office, Venue, Retail, Town Store)						0	2,200	
Surface Parking						0	2,200	

FULL BUILD OUT PROGRAM DATA



APPENDIX B
TRIP GENERATION

Land Use: 221 Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is $\frac{1}{2}$ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITE TripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

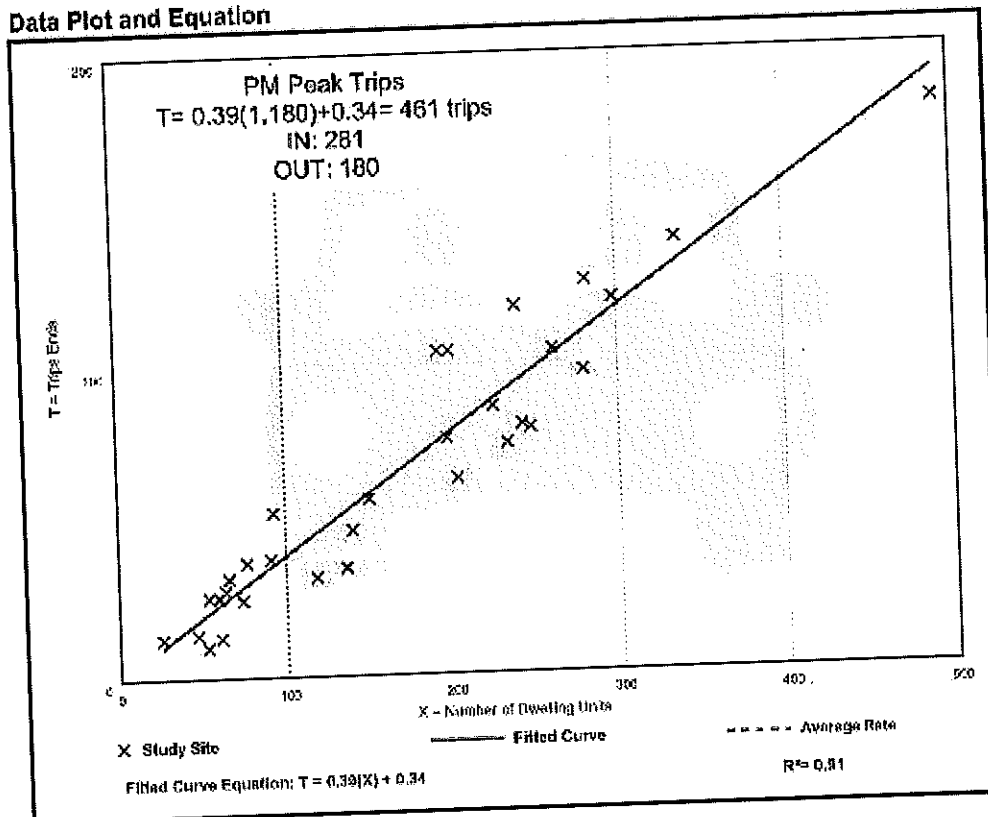
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.18 - 0.57	0.08

Data Plot and Equation



Land Use: 310 Hotel

Description

A hotel is a place of lodging that provides sleeping accommodations and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities. A hotel typically provides a swimming pool or another recreational facility such as a fitness room. All suites hotel (Land Use 311), business hotel (Land Use 312), motel (Land Use 320), and resort hotel (Land Use 330) are related uses.

Additional Data

Twenty-five studies provided information on occupancy rates at the time the studies were conducted. The average occupancy rate for these studies was approximately 82 percent.

Some properties in this land use provide guest transportation services (e.g., airport shuttle, limousine service, golf course shuttle service) which may have an impact on the overall trip generation rates.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITE TripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, District of Columbia, Florida, Georgia, Indiana, Minnesota, New York, Ontario (CAN), Pennsylvania, South Dakota, Texas, Vermont, Virginia, and Washington.

For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately predict trip generation characteristics for the site.

Trip generation at a hotel may be related to the presence of supporting facilities such as convention facilities, restaurants, meeting/banquet space, and retail facilities. Future data submissions should specify the presence of these amenities. Reporting the level of activity at the supporting facilities such as full, empty, partially active, number of people attending a meeting/banquet during observation may also be useful in further analysis of this land use.

Source Numbers

170, 260, 262, 277, 280, 301, 306, 357, 422, 507, 577, 728, 867, 872, 925, 951, 1009, 1021, 1026, 1046

Hotel (310)

Vehicle Trip Ends vs: Rooms

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

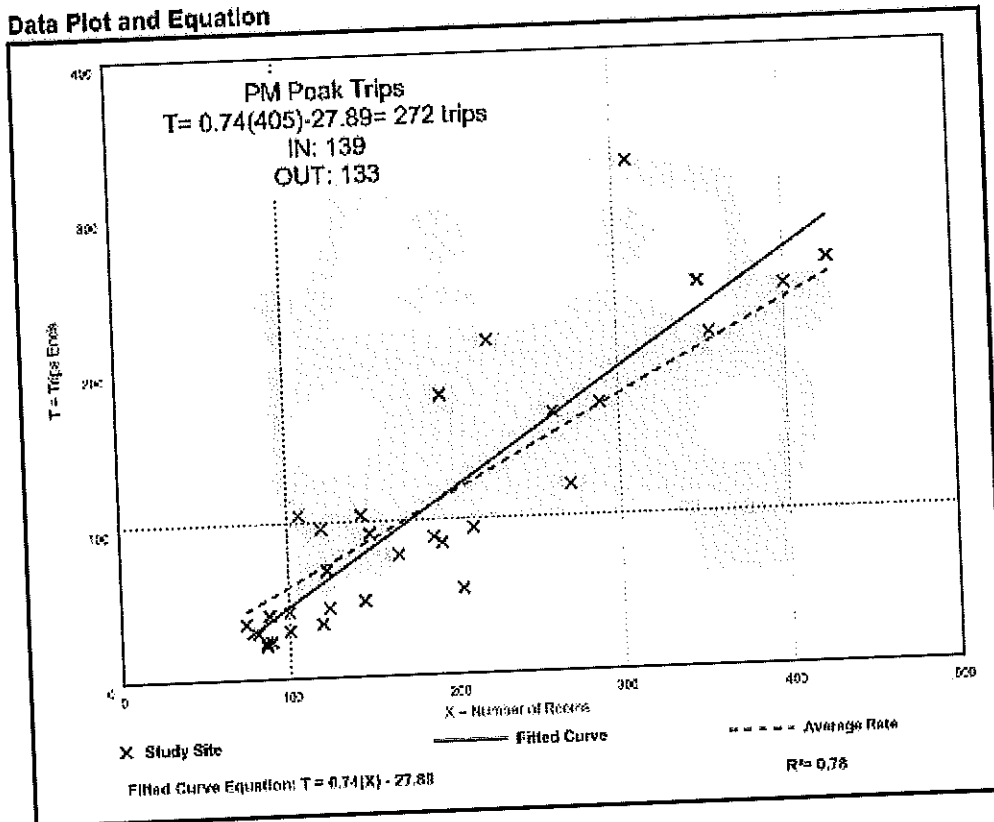
Avg. Num. of Rooms: 186

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.58	0.26 - 1.08	0.22

Data Plot and Equation



Land Use: 710 General Office Building

Description

A general office building is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building houses multiple tenants that can include, as examples, professional services, insurance companies, investment brokers, a banking institution, a restaurant, or other service retailers. A general office building with a gross floor area of 10,000 square feet or less is classified as a small office building (Land Use 712). Corporate headquarters building (Land Use 714), single tenant office building (Land Use 715), medical-dental office building (Land Use 720), office park (Land Use 750), research and development center (Land Use 760), and business park (Land Use 770) are additional related uses.

Additional Data

If two or more general office buildings are in close physical proximity (within a close walk) and function as a unit (perhaps with a shared parking facility and common or complementary tenants), the total gross floor area or employment of the paired office buildings can be used for calculating the site trip generation. If the individual buildings are isolated or not functionally related to one another, trip generation should be calculated for each building separately.

For study sites with reported gross floor area and employees, an average employee density of 3.3 employees per 1,000 square feet GFA (or roughly 300 square feet per employee) has been consistent through the 1980s, 1990s, and 2000s. No sites counted in the 2010s reported both GFA and employees.

The average building occupancy varies considerably within the studies for which occupancy data were provided. The reported occupied gross floor area was 88 percent for general-urban/suburban sites and 96 percent for the center city core and dense multi-use urban sites.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The average numbers of person trips per vehicle trip at the eight center city core sites at which both person trip and vehicle trip data were collected are as follows:

- 2.8 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 2.9 during Weekday, AM Peak Hour of Generator
- 2.9 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 3.0 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 18 dense multi-use urban sites at which both person trip and vehicle trip data were collected are as follows:

- 1.5 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.5 during Weekday, AM Peak Hour of Generator
- 1.5 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.5 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 23 general urban/suburban sites at which both person trip and vehicle trip data were collected are as follows:

- 1.3 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.3 during Weekday, AM Peak Hour of Generator
- 1.3 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.4 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New York, Ontario (CAN) Pennsylvania, Texas, Utah, Virginia, and Washington.

Source Numbers

161, 175, 183, 184, 185, 207, 212, 217, 247, 253, 257, 260, 262, 273, 279, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 419, 423, 562, 734, 850, 859, 862, 867, 869, 883, 884, 890, 891, 904, 940, 944, 946, 964, 965, 972, 1009, 1030, 1058, 1061



General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 232

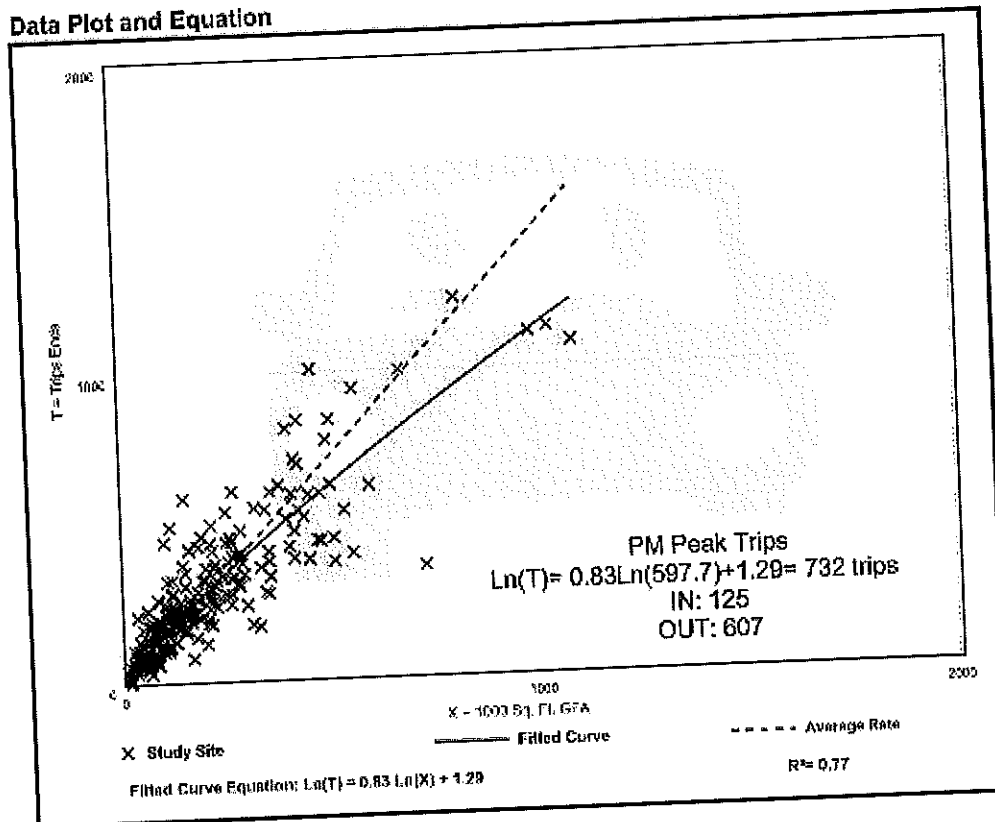
Avg. 1000 Sq. Ft. GFA: 199

Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



Land Use: 820 Shopping Center (>150k)

Description

A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has at least 150,000 square feet of gross leasable area (GLA). It often has more than one anchor store. Various names can be assigned to a shopping center within this size range, depending on its specific size and tenants, such as community center, regional center, superregional center, fashion center, and power center.

A shopping center of this size typically contains more than retail merchandising facilities. Office space, a movie theater, restaurants, a post office, banks, a health club, and recreational facilities are common tenants.

A shopping center of this size can be enclosed or open air. The vehicle trips generated at a shopping center are based upon the total GLA of the center. In the case of a smaller center without an enclosed mall or peripheral buildings, the GLA is the same as the gross floor area of the building.

The 150,000 square feet GLA threshold value between community/regional shopping center and shopping plaza (Land Use 821) is based on an examination of trip generation data. For a shopping plaza that is smaller than the threshold value, the presence or absence of a supermarket within the plaza has a measurable effect on site trip generation. For a shopping center that is larger than the threshold value, the trips generated by its other major tenants mask any effects of the presence or absence of an on-site supermarket.

Shopping plaza (40-150k) (Land Use 821), strip retail plaza (<40k) (Land Use 822), and factory outlet center (Land Use 823) are related uses.

Additional Data

Many shopping centers—in addition to the integrated unit of shops in one building or enclosed around a mall—include outparcels (peripheral buildings or pads located on the perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied include peripheral buildings, it can be assumed that some of the data show their effect.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky,

Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

Source Numbers

77, 110, 154, 156, 159, 190, 199, 202, 204, 213, 251, 269, 294, 295, 299, 304, 305, 307, 308, 309, 311, 314, 315, 316, 317, 319, 365, 385, 404, 414, 423, 442, 446, 562, 529, 702, 715, 728, 868, 871, 880, 899, 912, 926, 946, 962, 973, 974, 978, 1034, 1040, 1067



Shopping Center (>150k) (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 128

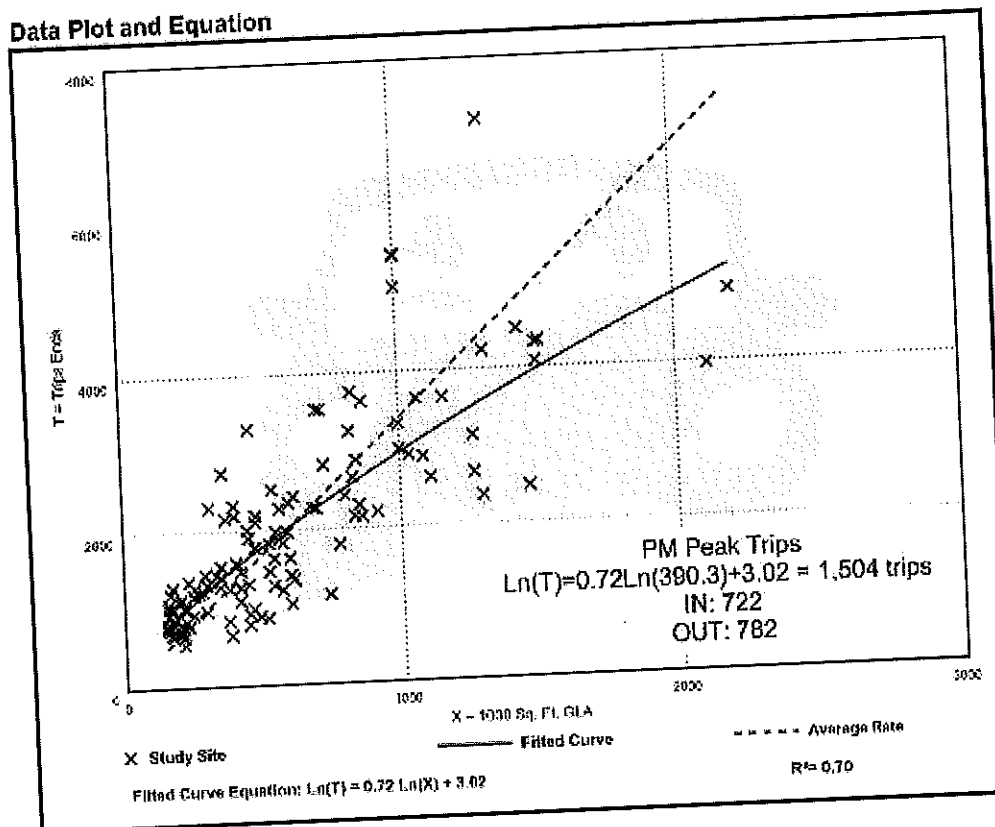
Avg. 1000 Sq. Ft. GLA: 581

Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.40	1.57 - 7.58	1.26

Data Plot and Equation



APPENDIX C
INTERNAL TRIP CAPTURE

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Bank Park Station Development	Organization:	Looney Resource Group
Project Location:	City of Bank Park Station	Performed By:	Shirley N. N. N. N.
Scenario Description:	PM Full Build Development	Date:	4/28/2025
Analysis Year:		Checked By:	Benjamin Morgan
Analysis Period:	PM Street Peak Hour	Date:	5/5/2025

Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ¹		
	ITE Trips ²	Quantity	Units	Total	Entering	Exiting
Office				792	126	666
Retail				534	722	782
Restaurant				0		
Cinema/Entertainment				481	28	180
Residential				772	535	133
TOTAL				2,599	1,407	1,762
All Other Land Uses ³						

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ²	% Transit	% Non-Motorized	Veh. Occ. ²	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
All Other Land Uses ²						

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office	18	0	0	0	11	0
Retail	0	0	0	0	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	5
Residential	7	72	0	0	0	0
Hotel	0	14	0	0	0	0

	Total	Entering	Exiting
All Person-Trips	2,008	1,267	1,762
Internal Capture Percentage	23%	27%	20%
External Vehicle-Trips ¹	2,297	901	1,398
External Transit-Trips ²	0	0	0
External Non-Motorized-Trips ³	0	0	0

Land Use	Entering Trips	Exiting Trips
Office	16%	11%
Retail	20%	22%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	66%	47%
Hotel	24%	11%

1. Land Use Codes (LUCs) from Trip Generation Manual, p.44 listed by the Institute of Transportation Engineers.

2. Total estimate for all other land uses at proposed development site is not subject to internal trip capture computations in this estimate.

3. Enter trip assuming no transit or non-motorized trip loss assumed in ITE Trip Generation Manual.

4. For more info on occupancy assumptions used in Table 4-P, please refer to ITE Trip Generation Manual.

5. Vehicle-Trip capture percentages for each land use and vehicle occupancy assumptions used in Table 2-P.

Person-Trips

Internal capture percentage has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2019

Project Name:	Brook Park Station Development
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (E): Exiting Trips		
	Vehicle-Trip	Person-Trip	Person-Trip	Vehicle-Trip	Person-Trip	Person-Trip
Office	1.00	125	125	1.00	807	807
Retail	1.00	722	722	1.00	782	782
Restaurant	1.00	0	0	1.00	0	0
Community/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	201	201	1.00	183	183
Hotel	1.00	130	130	1.00	133	133

Origin From	Destination To					
	Office	Retail	Restaurant	Community/Entertainment	Residential	Hotel
Office	125	0	0	0	0	0
Retail	0	722	0	0	0	0
Restaurant	0	0	0	0	0	0
Community/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	183	0
Hotel	0	0	0	0	0	130

Origin From	Destination To					
	Office	Retail	Restaurant	Community/Entertainment	Residential	Hotel
Office	0	0	0	0	0	0
Retail	0	722	0	0	0	0
Restaurant	0	0	0	0	0	0
Community/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	183	0
Hotel	0	0	0	0	0	130

Destination Land Use	Person-Trip Estimates			Person-Trip by Mode		
	Internal	External	Total	Vehicle	Transit	Non-Motorized
Office	125	0	125	102	0	0
Retail	144	578	722	578	0	0
Restaurant	0	0	0	0	0	0
Community/Entertainment	0	0	0	0	0	0
Residential	140	141	281	141	0	0
Hotel	29	110	139	110	0	0
All Other Land Uses	0	0	0	0	0	0

Origin Land Use	Person-Trip Estimates			Person-Trip by Mode		
	Internal	External	Total	Vehicle	Transit	Non-Motorized
Office	88	538	626	538	0	0
Retail	189	513	702	513	0	0
Restaurant	0	0	0	0	0	0
Community/Entertainment	0	0	0	0	0	0
Residential	88	88	176	88	0	0
Hotel	19	110	129	110	0	0
All Other Land Uses	0	0	0	0	0	0

*Vehicle trips computed using the mode split and vehicle occupancy values provided in Table 2-P

**Person-Trip

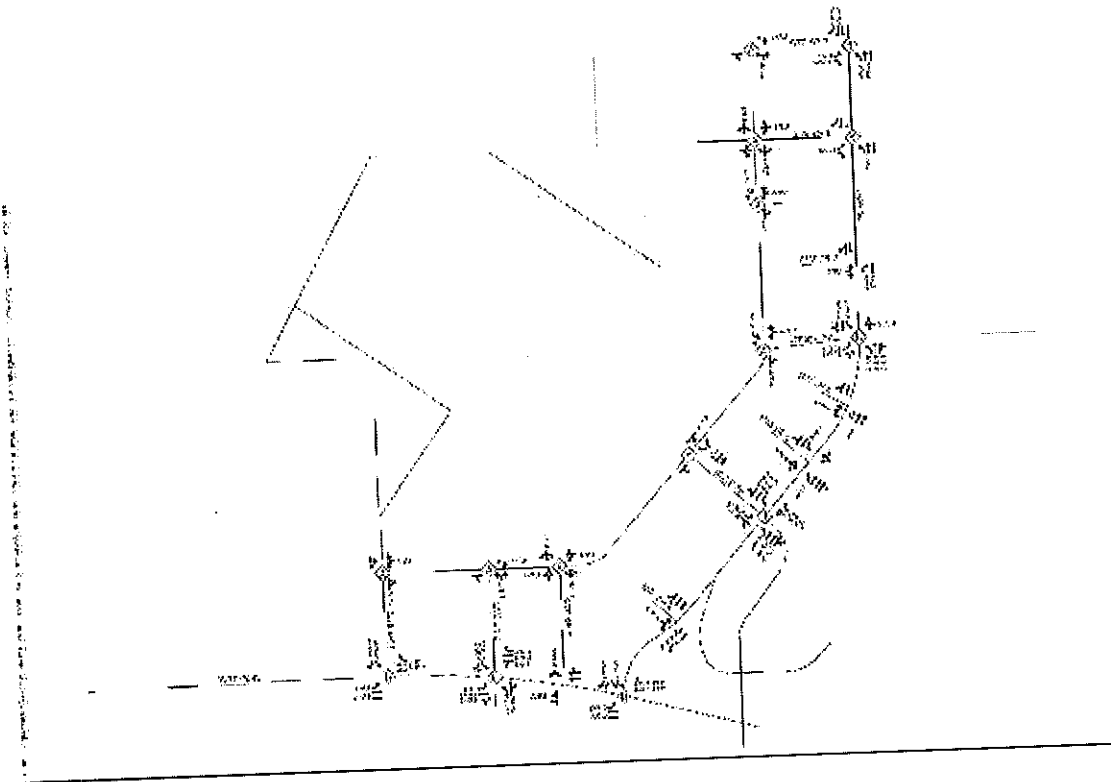
†Total estimates for all other land uses at mixed-use development site is not subject to external trip capture computations in this estimator

‡Vehicle occupancy values that have been rounded to the nearest whole number

APPENDIX D
DESIGN YEAR TRAFFIC VOLUMES

APPENDIX E
SCHEMATIC ROADWAY CONFIGURATION & LOS DIAGRAM

0 10 20 30 40 50 60 70 80 90 100



INTERNET LANE CONFIGURATION DIAGRAM
BRIDGE PARK FEASIBILITY STUDY

Scale: 1" = 100'

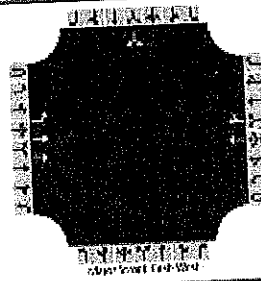
North Arrow

APPENDIX F
UNSIGNALIZED INTERSECTION LOS REPORTS

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Shaw Rd & Site Drive 3
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	07/22/2025	East/West Street	Shaw Rd
Analysis Year	2025	North/South Street	Site Drive 3
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	10	1	2	8	40	4	5	8		7	8	9		10	11	12
Priority	10	1	2	8	40	4	5	8		7	8	9		10	11	12
Number of Lanes	1	1	2	0	0	0	2	0							LR	
Configuration		L	T				T	TR								TR
Volume (veh/h)	0	16	1011				505	80						3		3
Percent Heavy Vehicles (%)	3	3														
Proportion Time Blocked															0	
Percent Grades (%)																
Right Turn Channelized																
Median Type / Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)	4.1														7.5		6.8
Critical Headway (sec)	4.16														6.86		6.96
Base Follow-up Headway (sec)	2.2														3.5		3.3
Follow-up Headway (sec)	2.23														3.53		3.33

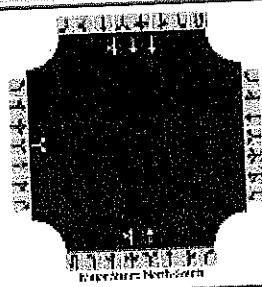
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	17																102
Capacity, c (veh/h)	851																187
v/c Ratio	0.02																0.55
95% Queue Length, Q ₉₅ (veh)	0.1																2.9
95% Queue Length, Q ₉₅ (ft)	2.5																74.2
Control Delay (s/veh)	9.2																15.4
Level of Service (LOS)	A																A
Approach Delay (s/veh)	0.1																
Approach LOS	A																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Ring Rd & Site Drive 4
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Site Drive 4
Analysis Year	2025	North/South Street	Ring Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Volume		10	11	12		7	8	9	10	1	2	3	4	5	6	7	8
Number of Lanes		0	1	1		0	1	1	0	1	1	1	1	1	1	1	1
Configuration			LR							LR	LR					LR	LR
Volume (veh/h)		5		22						3						582	7
Percent Heavy Vehicles (%)		3		3													
Proportion Time Blocked																	
Percent Goods (%)				0													
Right Turn Channelized																	
Median Type / Storage																	Undivided

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4		7.1						5.3								
Critical Headway (sec)	5.76		7.16						5.36								
Base Follow-up Headway (sec)	3.8		3.9						3.1								
Follow-up Headway (sec)	3.83		3.93						3.13								

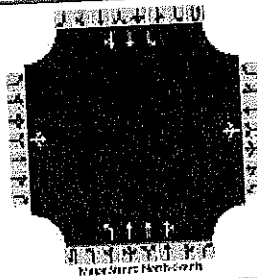
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			41														54
Capacity, c (veh/h)			513														577
v/c Ratio			0.08														0.09
95% Queue Length, Q ₉₅ (veh)			0.2														7.7
95% Queue Length, Q ₉₅ (ft)			7.7														11.9
Control Delay (s/veh)			12.6														11.9
Level of Service (LOS)			B														A
Approach Delay (s/veh)			12.6														A
Approach LOS			B														A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Ring Rd & Site Drive S
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Site Drive S
Analysis Year	2050	North/South Street	Ring Rd.
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9		10	11	12		4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/hr)		3	0	28		0	0	0		0	37	670		0	0	579
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3	3			3	3	
Proportion Time Blocked																
Percent Sinds (%)			0				0									
Right Turn Channelized																
Median Type / Storage																

Critical and Follow-up Headways

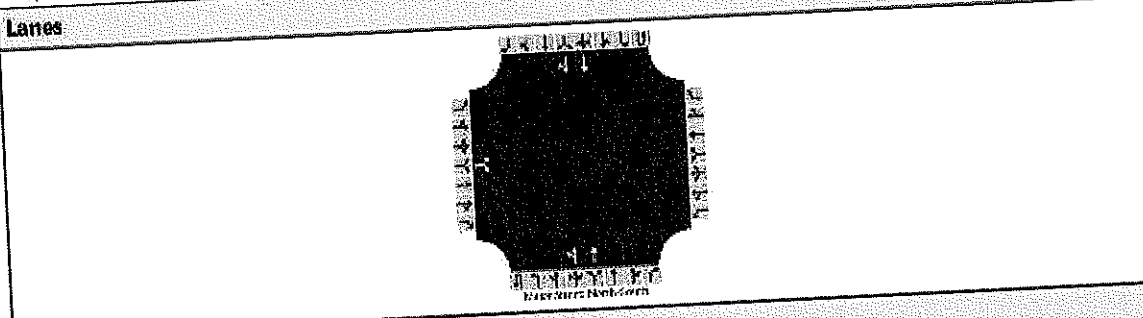
Base Critical Headway (sec)		6.4	6.5	6.9		6.4	6.5	7.1		4.1						5.8
Critical Headway (sec)		6.46	6.56	6.96		6.46	6.56	7.16		4.16						5.16
Base Follow-up Headway (sec)		3.8	4.0	3.3		3.8	4.0	3.9		2.2						3.1
Follow-up Headway (sec)		3.83	4.03	3.33		3.83	4.03	3.93		2.23						3.13

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			35				0			04						0
Capacity, c (veh/h)			582				0			038						525
v/c Ratio			0.06							0.04						0.00
95% Queue Length, Q ₉₅ (veh)			0.2							0.1						0.0
95% Queue Length, Q ₉₅ (ft)			5.1							2.6						11.0
Control Delay (s/veh)			11.6							0						0
Level of Service (LOS)			B							A						A
Approach Delay (s/veh)			11.6							0.4						0.0
Approach LOS			B							A						A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Ring Rd & Site Drive E
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Site Drive E
Analysis Year	2025	North/South Street	Ring Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		



Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	10	11	12	13	14	15	16	17	18
Number of Lanes		0	1	0		0	0	0		1	1						
Configuration			LR							RL	RL					RL	
Volume (veh/h)		15		98						3							
Percent Heavy Vehicles (%)		3		3													
Proportion Time Blocked																	
Percent Green (%)				0													
Right Turn Channelized																	
Median Type / Storage																	Undivided

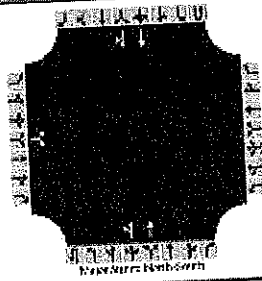
Critical and Follow-up Headways																	
Base Critical Headway (sec)		7.5		6.9													4.1
Critical Headway (sec)		6.88		6.96													4.16
Base Follow-up Headway (sec)		3.3		3.3													2.2
Follow-up Headway (sec)		3.53		3.33													2.23

Delay, Queue Length, and Level of Service																	
Flow Rate, v (veh/h)				98													90
Capacity, c (veh/h)				416													956
v/c Ratio				0.14													0.05
95% Queue Length, Q ₉₅ (veh)				0.5													5.1
95% Queue Length, Q ₉₅ (ft)				12.6													9.0
Control Delay (s/veh)				15.0													A
Level of Service (LOS)				C													A
Approach Delay (s/veh)				15.0													1.1
Approach LOS				C													A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Ring Rd & Site Drive 7
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Site Drive 7
Analysis Year	2050	North/South Street	Ring Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Bronc Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9		10	11	12		13	14	15
Number of Lanes		0	1	0		0	0	0		0	0	0		0	0	0
Configuration			LR							LT	TR					TR
Volume (veh/h)		10		19						3	615					595
Percent Heavy Vehicles (%)		3		3												
Proportion Time Stopped																
Percent Grade (%)			0													
Right Turn Channelized																
Median Type / Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)	7.5	6.9					4.1
Critical Headway (sec)	6.25	6.96					4.16
Base Follow-up Headway (sec)	3.5	3.9					2.2
Follow-up Headway (sec)	3.53	3.33					2.23

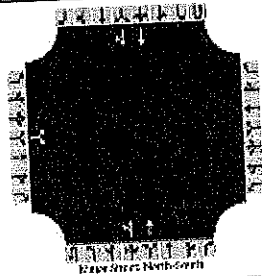
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32					113
Capacity, c (veh/h)		368					916
v/c Ratio		0.08					0.03
95% Queue Length, Q ₉₅ (veh)		0.2					0.1
95% Queue Length, Q ₉₅ (ft)		7.7					2.6
Control Delay (s/veh)		15.1					9.1
Level of Service (LOS)		C					A
Approach Delay (s/veh)		15.1					9.1
Approach LOS		C					A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Frigle Rd & Site Drive B
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Site Drive B
Analysis Year	2025	North/South Street	Frigle Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Bronc Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Volume	13	11	12		7	8	9		10	11	12		13	14	15	
Number of Lanes	2	1	1		2	1	1		2	1	1		2	1	1	
Configuration			LR													TR
Volume (veh/hr)	53		99						3							
Percent Heavy Vehicles (%)	3		3													
Proportion Time Stopped																
Percent Sided (%)	0															
Right Turn Channelized																
Median Type / Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)	7.5	6.9	4.1
Critical Headway (sec)	6.26	6.96	4.16
Base Follow-Up Headway (sec)	3.5	3.3	2.2
Follow-Up Headway (sec)	3.53	3.33	2.23

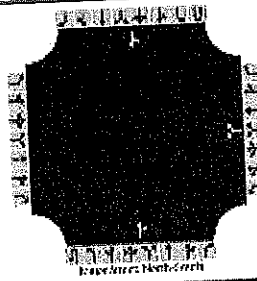
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	165	128
Capacity, c (veh/h)	341	373
v/c Ratio	0.49	0.34
95% Queue Length, Q ₉₅ (veh)	2.5	10.2
95% Queue Length, Q ₉₅ (ft)	61.0	9.2
Control Delay (s/veh)	25.1	9.2
Level of Service (LOS)	D	A
Approach Delay (s/veh)	25.1	9.2
Approach LOS	D	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Inner Ring Rd & Site Drive 1
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Inner Ring Rd
Analysis Year	2050	North/South Street	Site Drive 1
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement					7	8	0		11	1	2		4	4	3	
Priority	10	11	12		0	1	0		0	11	1	0	11	0	1	0
Number of Lanes	0	0	11				1					TR		LT		
Configuration							0				0	11		0	0	
Volume (veh/h)					11		0							3		
Percent Heavy Vehicles (%)					3		3									
Proportion Time Blocked																
Percent Sinds (%)																
Right Turn Channelized																
Median Type / Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)					7.1		5.2									4.1
Critical Headway (sec)					6.43		6.23									4.13
Base Follow-Up Headway (sec)					2.5		3.3									2.2
Follow-Up Headway (sec)					3.53		3.33									2.23

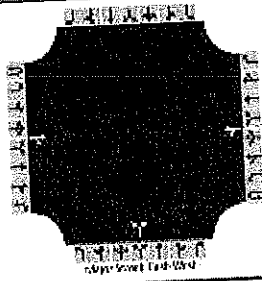
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					12											0
Capacity, c (veh/h)					1813											1500
v/c Ratio					0.01											0.00
95% Queue Length, Q ₉₅ (veh)					0.0											0.0
95% Queue Length, Q ₉₅ (ft)					0.0											7.2
Control Delay (s/veh)					8.6											A
Level of Service (LOS)					A											A
Approach Delay (s/veh)					A											
Approach LOS					A											

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SOM	Intersection	Inner Ring Rd & Site Drive 2
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Inner Ring Rd
Analysis Year	2050	North/South Street	Site Drive 2
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movements	1,2	1	2	3	4,5	4	5	6	7	8	9		10	11	12	
Priority	0	0	1	0	0	0	1	0	0	1	0		0	0	0	
Number of Lanes	0															
Configuration				TR	LT						RL					
Volume (veh/h)			85	0	82		83		3		3					
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grdn (%)																
Right Turn Channelized																
Median Type / Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					4.1				7.1		6.7					
Critical Headway (sec)					4.13				6.43		6.23					
Base Follow-Up Headway (sec)					2.2				3.5		3.3					
Follow-Up Headway (sec)					2.23				3.53		3.33					

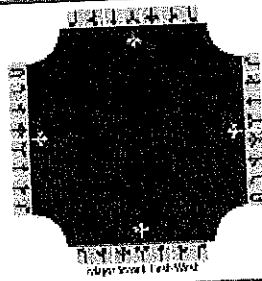
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					89						41					
Capacity, c (veh/h)					1496						952					
v/c Ratio					0.06						0.04					
95% Queue Length, Q_{95} (veh)					0.2						0.1					
95% Queue Length, Q_{95} (ft)					5.1						2.5					
Control Delay (s/veh)					7.6	0.5					8.9					
Level of Service (LOS)					A	A					A					
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Inner Ring Rd & Site Drive 3
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Inner Ring Rd
Analysis Year	2050	North/South Street	Site Drive 3
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound			Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	10	1	2	3	40	4	5	6						10	11	12
Priority	0	0	0	0	0	0	0	0						0	0	0
Number of Lanes	0	0	1	0	0	0	1	0						0	0	0
Configuration			LTR				LTR							0	0	0
Volume (veh/h)		2	32	20		38	38	0		39	27	0		0	66	11
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Stopped										0				0		
Percent Signal (%)																
Right Turn Channelized																
Median Type / Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)	4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)	4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)	2.2				2.2				3.3	4.0	3.3		3.3	4.0	3.3
Follow-Up Headway (sec)	2.23				2.23				3.33	4.03	3.33		3.33	4.03	3.33

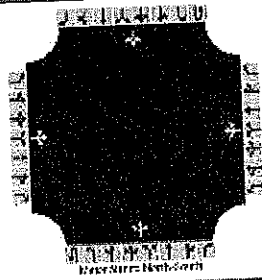
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	7				64					79					86
Capacity, c (veh/h)	1551				1540					605					675
v/c Ratio	0.00				0.04					0.12					0.12
95% Queue Length, Q ₉₅ (veh)	0.0				0.1					0.4					0.4
95% Queue Length, Q ₉₅ (ft)	0.0				2.5					19.2					10.2
Control Delay (s/veh)	7.3	0.0	0.0		7.4	0.3	0.3			11.7					11.1
Level of Service (LOS)	A	A	A		A	A	A			B					B
Approach Delay (s/veh)	0.3				4.6				11.7			11.1			
Approach LOS	A				A				B			B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Inner Ring Rd & State Lake 8
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Inner Ring Rd
Analysis Year	2050	North/South Street	Inner Ring Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement		10	11	12	7	8	9		10	1	2	3	4	5	6	7	
Priority		0	1	0	0	1	0		0	0	1	0	0	0	1	0	
Number of Lanes		0	1	0		1	0			0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR		
Volume (veh/h)		0	0	0	12	0	0		0	0	0	0	0	0	0	0	
Percent Heavy Vehicles (%)		3	3	3	3	3	3		3								
Proportion Time Blocked																	
Percent Green (%)		0				0											
Right Turn Channelized																	
Median Type / Storage		Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1			
Critical Headway (sec)		7.13	6.53	6.23	7.13	6.53	6.23	4.13				4.13			
Base Follow-Up Headway (sec)		3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2			
Follow-Up Headway (sec)		3.53	4.03	3.33	3.53	4.03	3.33	2.23				2.23			

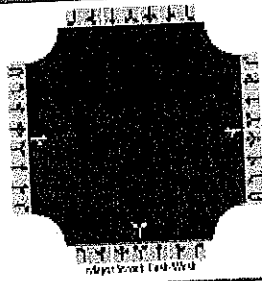
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0				14				0				0	
Capacity, c (veh/h)			0				873				1536				1500	
v/c Ratio							0.02				0.00				0.00	
95% Queue Length, Q ₉₅ (veh)							0.0				0.0				0.0	
95% Queue Length, Q ₉₅ (ft)							0.0				0.0				0.0	
Control Delay (s/veh)							9.2				7.3	0.0	0.0	7.4	0.0	0.0
Level of Service (LOS)							A				A	A	A	A	A	A
Approach Delay (s/veh)							9.2				0.0				0.0	
Approach LOS							A				A				A	

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Inner Ring Rd & Site Drive 9
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Site Drive 9
Analysis Year	2025	North/South Street	Inner Ring Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Branch Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1	1	2	3	4	4	5	6	7	8	9		10	11	12	
Priority	1	1	2	3	4	4	5	6	7	8	9		10	11	12	
Number of Lanes	1	1	1	1	1	1	1	1								
Configuration				TR	LT						RL					
Volume (veh/h)			0	0	36	0			3		3					
Percent Heavy Vehicles (%)					3											
Proportion Time Blocked																
Percent Green (%)																
Right Turn Channelized																
Median Type / Storage	Individed															

Critical and Follow-up Headways

Base Critical Headway (sec)					4.1				7.1				6.2			
Critical Headway (sec)					4.1				6.4				6.2			
Base Follow-Up Headway (sec)					2.2				3.5				3.3			
Follow-Up Headway (sec)					2.2				3.5				3.3			

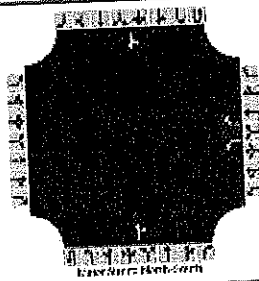
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					49								41			
Capacity, c (veh/h)					1617								1080			
v/c Ratio					0.03								0.04			
95% Queue Length, Q ₉₅ (veh)					0.1								0.1			
95% Queue Length, Q ₉₅ (ft)					2.6								2.5			
Control Delay (s/veh)					7.3	0.2							8.5			
Level of Service (LOS)					A	A							A			
Approach Delay (s/veh)					7.8				8.5							
Approach LOS					A				A							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	EDM	Intersection	Inner Ring Rd & Main Entrance
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Inner Ring Rd
Analysis Year	2050	North/South Street	Main Entrance
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority	10	11	12		7	8	9		10	11	12		13	14	15	16
Number of Lanes	1	1	1		1	1	1		1	1	1		1	1	1	1
Configuration													TR		LT	
Volume (veh/h)					40		5						23	48		23
Percent Heavy Vehicles (%)					3		3									
Proportion Time Blocked																
Percent Sinds (P)																
Right Turn Channelized																
Median Type / Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					7.1		6.7									4.1
Critical Headway (sec)					6.43		6.23									4.13
Base Follow-Up Headway (sec)					2.5		3.3									2.2
Follow-Up Headway (sec)					3.53		3.33									2.23

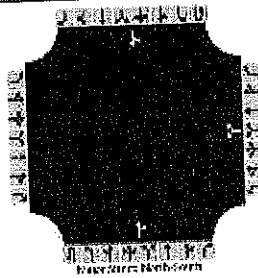
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					41		7									258
Capacity, c (veh/h)					380		1014									1515
v/c Ratio					0.11		0.01									0.17
95% Queue Length, Q ₉₅ (veh)					0.4		0.0									0.6
95% Queue Length, Q ₉₅ (ft)					10.2		0.0									15.4
Control Delay (s/veh)					15.4		8.0									7.0
Level of Service (LOS)					C		A									A
Approach Delay (s/veh)	14.9															
Approach LOS	B															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SDM	Intersection	Lower Ring Rd & Hummel Rd
Agency/Co.	DRG	Jurisdiction	City of Brook Park
Date Performed	7/22/2025	East/West Street	Hummel Rd
Analysis Year	2050	North/South Street	Lower Ring Rd
Time Analyzed	PM Peak	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Brook Park Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement					7	8	9		10	1	2	3	4	5	6	7
Priority		10	11	12	0	1	0	0	0	0	1	0	0	0	1	0
Number of Lanes		0	0	0												
Configuration						LR						TR		LT		
Volume (veh/h)					1		24				2	23		49	238	
Percent Heavy Vehicles (%)					3		3							5		
Proportion Time Blocked																
Percent Grade (%)							0									
Right Turn Channelized																
Median Type / Storage					Undivided											

Critical and Follow-up Headways

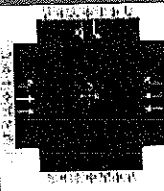
Base Critical Headway (sec)					7.1		8.7									4.1
Critical Headway (sec)					6.42		8.23									4.13
Base Follow-Up Headway (sec)					2.5		3.3									2.2
Follow-Up Headway (sec)					3.53		3.33									2.23

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							82									58
Capacity, c (veh/h)							1051									1580
v/c Ratio							0.08									0.03
95% Queue Length, Q ₉₅ (veh)							0.3									0.1
95% Queue Length, Q ₉₅ (ft)							7.7									2.6
Control Delay (s/veh)							8.7									7.4
Level of Service (LOS)							A									A
Approach Delay (s/veh)					8.7								15			
Approach LOS					A								A			

APPENDIX G
SIGNALIZED INTERSECTION HCS REPORTS

HCS Signalized Intersection Results Summary

General Information				Intersection Information												
Agency	ORG			Duration, h	0.250											
Analyst	SDM	Analysis Date	Jul 22, 2025			Area Type	Other									
Jurisdiction	City of Brook Park			Time Period	PM Peak							PHF	0.92			
Urban Street	Snow Rd			Analysis Year	2050							Analysis Period	1> 7:00			
Intersection	Site Drive 1			File Name	1_Snow Rd PM.xm											
Project Description	PM Peak															
Demand Information				EB			WB			NB			SB			
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R	
Demand (v), veh/h				36	684		483	58					155	0	50	
Signal Information																
Cycle, s	90.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	3.7	60.7	10.3	0.0	0.0	0.0	0.0					
Uncoordinated	No	Simult. Gap C/W	On	Yellow	3.0	3.0	3.0	0.0	0.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.0	2.0	0.0	0.0	0.0	0.0					
Timer Results				EBL	EPT	WBL	WBT	NBL	NBT	SBL	SBT					
Assigned Phase				5	2		6					4				
Case Number				1.0	4.0		7.3					10.0				
Phase Duration, s				8.7	74.5		65.7					6.0				
Change Period, (Y+R), s				5.0	5.0		5.0					3.2				
Max Allow Headway (MAH), s				3.1	0.0		0.0					10.2				
Queue Clearance Time (g+), s				2.5								0.4				
Green Extension Time (g+), s				0.1	0.0		0.0					1.00				
Phase Call Probability				0.62								0.00				
Max Out Probability				0.00												
Movement Group Results				EB			WB			NB			SB			
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement				5	2		6	10					7	4	14	
Adjusted Flow Rate (v), veh/h				39	743		571	69				168	54			
Adjusted Saturation Flow Rate (s), veh/hln				1796	1796		1795	1698				82	28			
Queue Service Time (g+), s				0.6	5.4		10.9	3.0				8.2	2.8			
Cycle Queue Clearance Time (g+), s				0.6	5.4		10.9	3.0				8.2	2.8			
Green Ratio (g/C)				0.74	0.77		0.67	0.67				0.12	0.12			
Capacity (c), veh/h				625	2770		2421	1078				212	187			
Volume-to-Capacity Ratio (X)				0.063	0.269		0.236	0.064				0.796	0.290			
Back of Queue (Q), ftln (95 th percentile)				6	69		211	42				6.8	2.0			
Back of Queue (Q), vehln (95 th percentile)				0.2	2.4		8.4	1.7				0.60	0.18			
Queue Storage Ratio (RO) (95 th percentile)				0.01	0.00		0.44	0.11				38.7	36.3			
Uniform Delay (d), s/veh				4.1	3.0		14.2	12.4				2.6	0.3			
Incremental Delay (d2), s/veh				0.0	0.2		0.2	0.1				0.0	0.0			
Initial Queue Delay (d3), s/veh				0.0	0.0		0.0	0.0				41.2	36.6			
Control Delay (d), s/veh				4.1	3.2		14.4	12.5				D	D			
Level of Service (LOS)				A	A		B	B				D	D			
Approach Delay, s/veh / LOS				3.2	A		14.2	B				40.1	D			
Intersection Delay, s/veh / LOS				12.5			B			B						
Multimodal Results				EB			WB			NB			SB			
Pedestrian LOS Score / LOS																
Bicycle LOS Score / LOS																

HCS Signalized Intersection Results Summary

General Information					Intersection Information				
Agency	ORG				Duration, h	0.260			
Analyst	SDM	Analysis Date	Jul 22, 2025		Area Type	Other			
Jurisdiction	City of Brook Park				Time Period	PM Peak			
Urban Street	Snow Rd				Analysis Year	2050			
Intersection	Silo Drive 2				File Name	1_Snow Rd PM.kus			
Project Description	PM Peak								

Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement	25	765	50	10	477	118	20	0	30	233	0	44
Demand (v), veh/h												

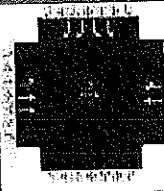
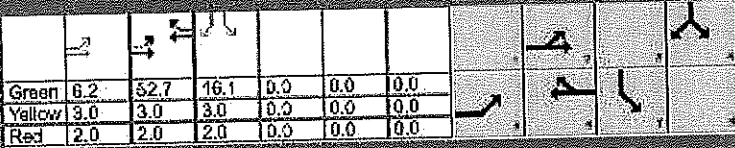
Signal Information				Phase Diagrams											
Cycle, s	90.0	Reference Phase	Z												
Offset, s	45	Reference Point	End	Green	1.0	1.1	48.3	2.5	6.5	6.5					
Unconstrained	No	Simult. Gap E/W	On	Yellow	3.0	0.0	3.0	3.0	3.0	3.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	0.0	2.0	2.0	2.0	2.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phase Duration, s	8.0	54.9	6.5	53.5	7.5	10.5	18.0	21.0
Change Period, (Y+R), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Hoopway (MAH), s	3.1	0.0	3.1	0.0	3.1	3.4	3.1	3.4
Queue Clearance Time (g+), s	2.6		2.3		3.0	3.8	13.3	4.3
Green Extension Time (g+), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Phase Call Probability	0.49		0.28		0.42	0.92	1.00	1.00
Max Out Probability	0.00		0.00		0.00	0.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB					
	L	T	R	L	T	R	L	T	R	L	T	R			
Approach Movement	5	2	12	1	6	16	3	8	18	7	4	14			
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14			
Adjusted Flow Rate (v), veh/h	27	447	438	12	570	141	22	33		253	48				
Adjusted Saturation Flow Rate (s), veh/hln	1795	1885	1844	1795	1795	1698	1810	1598		1810	1598				
Queue Service Time (g+), s	0.6	10.8	10.9	0.3	10.5	4.7	1.0	1.8		11.3	2.3				
Cycle Queue Clearance Time (g+), s	0.6	10.8	10.9	0.3	10.5	4.7	1.0	1.8		11.3	2.3				
Green Ratio (g/C)	0.57	0.55	0.55	0.58	0.54	0.54	0.09	0.06		0.23	0.18				
Capacity (c), veh/h	487	1046	1023	371	1935	861	215	98		410	284				
Volume-to-Capacity Ratio (X)	0.065	0.428	0.428	0.032	0.299	0.164	0.101	0.332		0.633	0.168				
Back of Queue (Q), ft (95 th percentile)	10	157	160	2	202	78	20	32		218	39				
Back of Queue (Q), veh (95 th percentile)	0.4	7.2	7.2	0.2	8.0	3.0	0.8	1.3		8.7	1.6				
Queue Storage Ratio (RQ) (95 th percentile)	0.03	0.41	0.41	0.01	0.55	0.24	0.30	0.49		0.87	0.19				
Uniform Delay (d), s/veh	9.1	9.4	9.5	9.8	17.2	12.5	37.8	40.5		31.3	31.3				
Incremental Delay (d2), s/veh	0.0	1.2	1.2	0.0	0.4	0.4	0.1	0.7		2.5	0.1				
Initial Queue Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Control Delay (d), s/veh	9.1	10.6	10.8	9.8	17.6	12.9	37.8	41.2		33.8	31.4				
Level of Service (LOS)	A	B	B	A	B	B	D	D		C	C				
Approach Delay, s/veh / LOS	10.6	B			16.6	B			39.8	D			33.4	C	
Intersection Delay, s/veh / LOS	17.0												B		

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS Signalized Intersection Results Summary

General Information				Intersection Information											
Agency	ORG			Duration, h	0.250										
Analyst	SDM			Analysis Date	Jul 22, 2025										
Jurisdiction	City of Brook Park			Time Period	PM Peak										
Urban Street	Snow Rd			Area Type	Other										
Intersection	Ring Rd			Analysis Year	2050										
Project Description	PM Peak			File Name	1_Snow Rd PM.xus										
Demand Information				EB			WB			NB			SB		
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				210	875		509	175					480		156
Signal Information															
Cycle, s	90.0	Reference Phase	2	Green	6.2	52.7	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	55	Reference Point	End	On	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On												
Timer Results				EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT				
Assigned Phase				5	2		6				4				
Case Number				1.0	4.0		8.3				0.0				
Phase Duration, s				11.2	88.9		57.7				21.1				
Change Period, (Y+R), s				5.0	5.0		5.0				5.0				
Max Allow Headway (MAH), s				3.1	0.0		0.0				3.2				
Queue Clearance Time (qc), s				5.8							14.4				
Green Extension Time (ge), s				0.4	0.0		0.0				1.7				
Phase Call Probability				1.00							1.00				
Max Out Probability				0.00							0.00				
Movement Group Results				EB			WB			NB			SB		
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				5	2		6	16					7	14	
Adjusted Flow Rate (v), veh/h				216	910		388	355				500	170		
Adjusted Saturation Flow Rate (s), veh/hln				1703	1703		1885	1720				1743	1414		
Queue Servant Time (qs), s				3.8	8.7		21.4	9.7				12.4	4.7		
Cycle Queue Clearance Time (qcc), s				3.8	8.7		21.4	9.7				12.4	4.7		
Green Ratio (gC)				0.68	0.71		0.59	0.59				0.16	0.18		
Capacity (c), veh/h				455	2548		1104	1007				624	505		
Volume-to-Capacity Ratio (X)				0.475	0.353		0.351	0.353				0.801	0.338		
Back of Queue (Q), ltn (95th percentile)				60	117		173	159				5.9	2.8		
Back of Queue (Q), veh/hn (95th percentile)				2.4	4.6		6.9	6.4				0.51	0.32		
Queue Storage Ratio (RQ) (95th percentile)				0.40	0.57		0.21	0.20				0.35	0.32		
Uniform Delay (d), s/veh				10.3	5.0		9.7	9.7				35.4	32.3		
Incremental Delay (di), s/veh				0.3	0.3		0.9	1.0				0.9	0.1		
Initial Queue Delay (di), s/veh				0.0	0.0		0.0	0.0				0.0	0.0		
Control Delay (d), s/veh				10.5	5.3		10.6	10.7				36.3	32.4		
Level of Service (LOS)				B	A		B	B				D	C		
Approach Delay, s/veh / LOS				6.3	A	10.7	B	0.0			35.5	D			
Intersection Delay, s/veh / LOS				15.3						B					
Multimodal Results				EB			WB			NB			SB		
Pedestrian LOS Score / LOS															
Bicycle LOS Score / LOS															

HCS Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	DRG			Duration, h	0.260		
Analyst	SDM	Analysis Date	Jul 22, 2025	Area Type	Other		
Jurisdiction	City of Brook Park			Time Period	PM Peak		
Urban Street	Ring Rd	Analysis Year	2050	PHF	0.92		
Intersection	Ring Rd & Engle Rd	File Name	2_Ring Rd PM.xus				
Project Description	PM Peak						

Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement	15	81	184	7	17	190	27	495	115	208	399	1
Demand (v), veh/h												


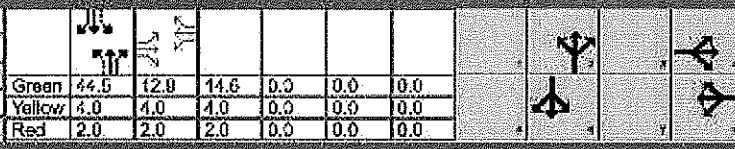
Signal Information				Signal Phases											
Cycle, s	90.0	Reference Phase	2	Green	3.6	3.3	41.7	2.3	16.0	0.0	Yellow	4.0	0.0	4.0	0.0
Offset, s	0	Reference Point	End	Green	3.6	3.3	41.7	2.3	16.0	0.0	Yellow	4.0	0.0	4.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	0.0	2.0	2.0	2.0	0.0	Red	2.0	0.0	2.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On												

Timer Results	EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
	7	4	14	3	8	18	5	2	12	1	8	16	1	8	16	
Assigned Phase	1.0	4.0		7.3	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Case Number	0.3	29.3		21.0	9.6	47.7	12.9	51.0								
Phase Duration, s	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Change Period, (Y+R), s	3.1	3.3		3.3	3.1	0.0	3.1	0.0	3.1	0.0	3.1	0.0	3.1	0.0	3.1	0.0
Max Allow Headway (MAH), s	2.7	16.0		9.8	2.7		4.4									
Queue Clearance Time (g+), s	0.0	0.8		0.8	0.0	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0
Green Extension Time (g_e), s	0.33	1.00		1.00	0.62		0.99									
Phase Call Probability	0.07	0.01		0.02	0.00		0.00									
Max Out Probability																

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement	7	4	14	3	8	18	5	2	12	1	8	16
Assigned Movement	16	288		26	163	29	463	210	188	181	181	
Adjusted Flow Rate (v), veh/h	1781	1683		1628	1685	1781	1870	1690	1730	1870	1869	
Adjusted Saturation Flow Rate (s), veh/hln	0.7	14.0		0.0	7.8	0.7	6.6	6.9	2.4	4.7	4.7	
Queue Service Time (g+), s	0.7	14.0		5.6	7.8	0.7	6.6	6.9	2.4	4.7	4.7	
Cycle Queue Clearance Time (g_c), s	0.21	0.28		0.17	0.24	0.54	0.46	0.46	0.54	0.50	0.50	
Green Ratio (g/C)	272	431		308	386	608	1734	783	1026	936	936	
Capacity (c), veh/h	0.080	0.665		0.085	0.422	0.048	0.261	0.269	0.184	0.194	0.194	
Volume-to-Capacity Ratio (X)	12	239		22	132	12	126	120	40	89	88	
Back of Queue (Q), (ft) (95th percentile)	0.6	9.4		0.9	5.2	0.5	4.8	4.8	1.8	3.5	3.5	
Back of Queue (Q), (veh) (95th percentile)	0.02	0.40		0.03	0.19	0.03	0.30	0.29	0.20	0.46	0.46	
Queue Storage Ratio (RQ) (95th percentile)	28.3	29.8		31.7	28.7	9.8	14.7	14.8	10.8	12.1	12.1	
Uniform Delay (d_u), s/veh	0.0	1.5		0.0	0.3	0.0	0.4	0.6	0.0	0.4	0.4	
Incremental Delay (d_i), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Initial Queue Delay (d_1), s/veh	28.4	31.4		31.7	29.0	9.8	15.1	15.6	10.9	12.6	12.6	
Control Delay (d_c), s/veh	C	C		C	C	A	B	B	B	B	B	
Level of Service (LOS)	31.2	C		29.3	C	15.0	B	B	12.0	B	B	
Approach Delay, s/veh / LOS	18.5			18.5			B			B		
Intersection Delay, s/veh / LOS	18.5											

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				

HCS Signalized Intersection Results Summary

General Information				Intersection Information																							
Agency	DRG			Duration, h	0.260																						
Analyst	SDM			Analysis Date	Jul 22, 2025																						
Jurisdiction	City of Brook Park			Time Period	PM Peak																						
Urban Street	Ring Rd			Analysis Year	2050																						
Intersection	Ring Rd & Hummel Rd			File Name	2_Ring Rd PM.xus																						
Project Description				PM Peak																							
Demand Information				EB			WB			NB			SB														
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R												
Demand (v), veh/h				12	30	30	30	1	105	74	519	50	111	503	0												
Signal Information																											
Cycle, s	90.0	Reference Phase	2	Green	44.0	12.0	14.6	0.0	0.0	0.0																	
Offset, s	13	Reference Point	End	Yellow	4.0	4.0	4.0	0.0	0.0	0.0																	
Uncoordinated	No	Simult. Gap E/W	On	Red	2.0	2.0	2.0	0.0	0.0	0.0																	
Force Mode	Fixed	Simult. Gap N/S	On																								
Timer Results				EBL			EBT			WBL			WBT			NBL			NBT			SBL			SBT		
Assigned Phase				4			8			2			6														
Case Number				10.0			12.0			0.0			0.0														
Phase Duration, s				18.9			20.0			50.5			50.6														
Change Period, (Y+R), s				6.0			6.0			6.0			6.0														
Max Allow Headway (MAH), s				3.2			3.3			0.0			0.0														
Queue Clearance Time (g_s), s				6.0			9.5																				
Green Extension Time (g_e), s				0.1			0.3			0.0			0.0														
Phase Call Probability				0.06			0.08																				
Max Out Probability				0.00			0.00																				
Movement Group Results				EB			WB			NB			SB														
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R												
Assigned Movement				7	4	14	3	8	18	5	2	12	1	6	16												
Adjusted Flow Rate (v'), veh/h				13	65			148		35	341	332	107	485	0												
Adjusted Saturation Flow Rate (s'), veh/h/m				1781	1716			1626		910	1870	1812	765	1870	0												
Queue Service Time (g_s), s				0.6	3.0			7.5		2.4	7.3	6.7	6.0	6.3	0.0												
Cycle Queue Clearance Time (g_c), s				0.6	3.0			7.5		8.5	7.3	6.7	14.1	6.3	0.0												
Green Ratio (g/C)				0.14	0.14			0.16		0.49	0.49	0.49	0.49	0.49	0.0												
Capacity (c), veh/h				255	246			264		476	925	895	395	1848													
Volume-to-Capacity Ratio (X)				0.061	0.266			0.659		0.184	0.369	0.370	0.270	0.262	0.000												
Back of Queue (Q), ft/m (95 th percentile)				11	58			135		24	125	110	49	93	0												
Back of Queue (Q), veh/m (95 th percentile)				0.4	2.3			5.3		1.0	4.8	4.3	1.9	3.6	0.0												
Queue Storage Ratio (RQ) (95 th percentile)				0.04	0.19			0.16		0.06	0.29	0.20	0.25	0.28	0.00												
Uniform Delay (d_u), s/veh				33.3	34.3			34.7		6.7	8.8	7.9	11.9	9.7													
Incremental Delay (d_i), s/veh				0.0	0.2			0.7		0.8	1.1	1.1	1.6	0.3	0.0												
Initial Queue Delay (d_s), s/veh				0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0												
Control Delay (d_c), s/veh				33.3	34.8			35.4		7.6	9.9	9.0	13.5	10.0													
Level of Service (LOS)				C	C			D		A	A	A	B	B													
Approach Delay, s/veh / LOS				34.4	C		35.4	D		9.3	A		10.7	B													
Intersection Delay, s/veh / LOS				13.5						8																	
Multimodal Results				EB			WB			NB			SB														
Pedestrian LOS Score / LOS																											
Bicycle LOS Score / LOS																											

HCS Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	ORG			Duration, h	0.250		
Analyst	SDM	Analysis Date	Jul 22, 2025		Area Type	Other	
Jurisdiction	City of Brook Park		Time Period	PM Peak		PHF	0.92
Urban Street	Ring Rd	Analysis Year	2050		Analysis Period	1 > 7:00	
Intersection	Ring Rd & Silo Dr 9		File Name	2_Ring Rd PM.xus			
Project Description	PM Peak						

Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	99		43				40	514			502	105

Signal Information				Phase Diagram													
Cycle, s	90.0	Reference Phase	2														
Offset, s	0	Reference Point	End														
Uncoordinated	No	Simult. Gap E/W	On														
Force Mode	Fixed	Simult. Gap N/S	On														
				Green	5.2	52.2	14.7	0.0	0.0	0.0							
				Yellow	4.0	4.0	4.0	0.0	0.0	0.0							
				Red	2.0	2.0	2.0	0.0	0.0	0.0							

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		8
Case Number		9.0			1.0	4.0		8.3
Phase Duration, s		20.7			11.2	89.3		58.2
Change Period, (Y+R), s		6.0			6.0	6.0		6.0
Max Allow. Headway (MAH), s		3.2			3.1	0.0		0.0
Queue Clearance Time (q_c), s		6.8			3.0			
Green Extension Time (g_e), s		0.2			0.1	0.0		0.0
Phase Call Probability		0.98			0.74			
Max Out Probability		0.00			0.00			

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7		14				5	2		6		16
Adjusted Flow Rate (v), veh/h	108		47				54	688		334		321
Adjusted Saturation Flow Rate (s), veh/hln	1781		1585				1781	1781		1870		1788
Queue Service Time (q_s), s	4.8		2.3				1.0	7.4		12.3		6.4
Cycle Queue Clearance Time (q_c), s	4.8		2.3				1.0	7.4		12.3		8.4
Green Ratio (g/C)	0.16		0.16				0.65	0.70		0.58		0.58
Capacity (c), veh/h	291		259				625	2595		1084		1019
Volume-to-Capacity Ratio (X)	0.370		0.181				0.102	0.276		0.313		0.315
Back of Queue (Q), ftln (95 th percentile)	84		40				14	107		151		141
Back of Queue (Q), vehln (95 th percentile)	3.7		1.5				0.5	4.2		5.9		5.6
Queue Storage Ratio (RQ) (95 th percentile)	0.63		0.20				0.07	0.27		0.30		0.29
Uniform Delay (d_u), s/veh	33.5		32.5				6.9	6.9		9.7		9.7
Incremental Delay (d_i), s/veh	0.3		0.1				0.0	0.3		0.8		0.8
Initial Queue Delay (d_q), s/veh	0.0		0.0				0.0	0.0		0.0		0.0
Control Delay (d), s/veh	33.8		32.6				7.0	6.2		10.5		10.5
Level of Service (LOS)	C		C				A	A		B		B
Approach Delay, s/veh / LOS	33.5		C		0.0		6.2	A		10.5		B
Intersection Delay, s/veh / LOS	10.8						E					

Multimodal Results	EB	WB	NB	SB
Pedestrian LOS Score / LOS				
Bicycle LOS Score / LOS				