PLANNING AND ZONING COMMISSION REPORT

Meeting Date: August 21, 2025

Agenda Item: 4R

Case Name: Peoria Residential Multi-Family: Minor General Plan Amendment (GPA24-07)

General Application Information

Proposal:
Request to amend the General Plan Land Use designation from Traditional Residential (2-5 units per acre) to Urban Residential (12+ units per acre) on approximately 5 acres.

Location:
Northeast corner of 87th Avenue and Northern Avenue.

Project Acreage:
Approximately 5 acres

Applicant:
Peter Koliopoulos of Circle West Architects on behalf of Northern Ave Properties LLC

Key Items For Consideration:

This request has been proposed in combination with the associated rezoning request Case Z24-07. These cases will be presented together but will be considered in separate actions.

Please note that the associated staff report, exhibits, and findings are contained within Case Z24-07 to avoid redundancy.

ATTACHMENTS:

Description

Exhibit 1 - Vicinity Map

GPA2-07 Peoria Residential Multi-Family

Northeast Corner of 87th Ave and Northern Ave

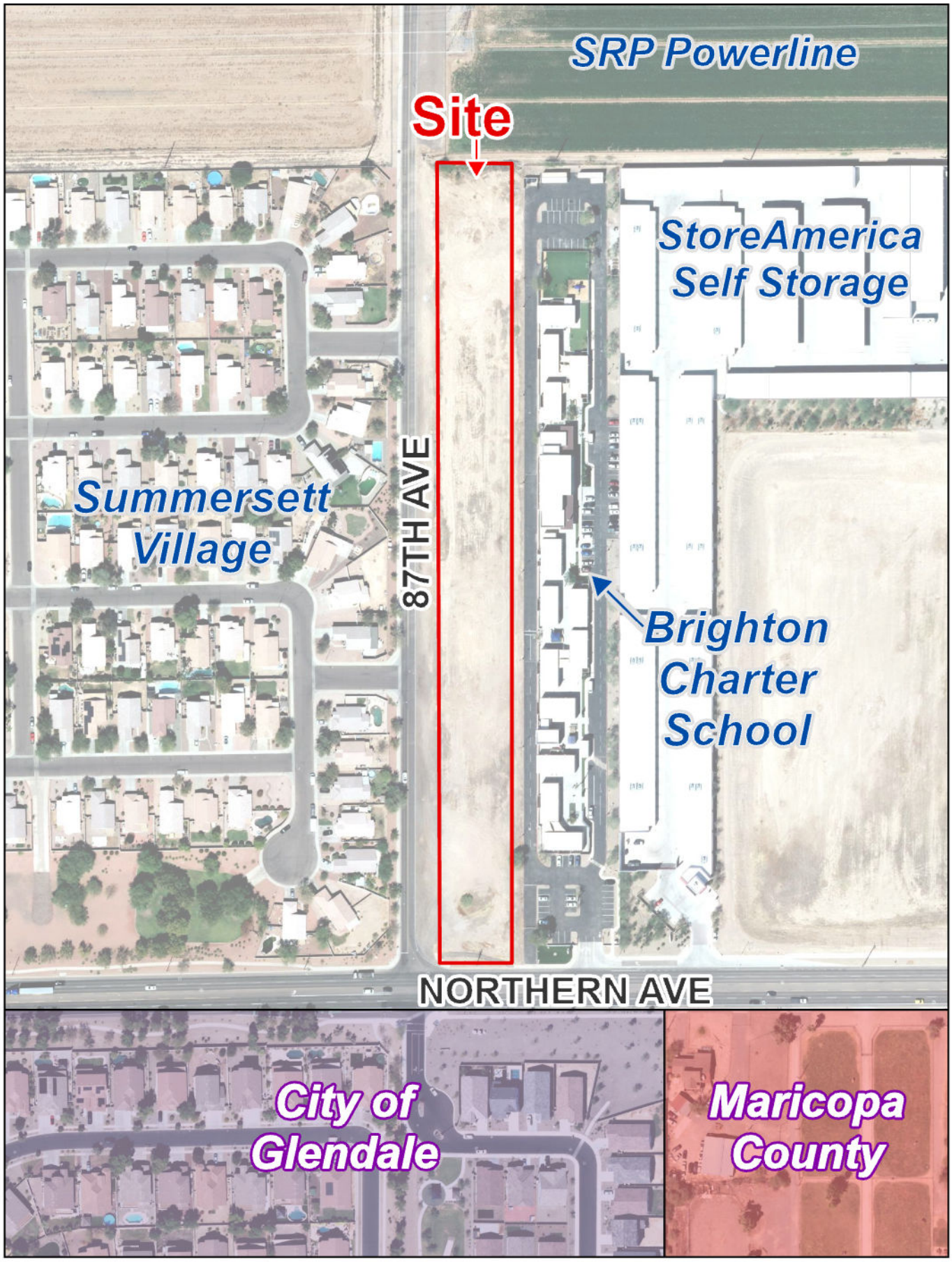

Exhibit 1 | Vicinity Map

PLANNING AND ZONING COMMISSION REPORT

Meeting Date: August 21, 2025

Agenda Item: 5R

Case Name: Peoria Residential Multi-Family: Rezone (Z24-07)

General Application Information

Proposal:
Request to rezone approximately five (5) gross acres from Convenience Commercial (C-1) to Multi-Family Residential (RM-1).

Location:
Northeast corner of 87th Avenue and Northern Avenue

Project Acreage:
Approximately 5 gross acres

Applicant:
Peter Koliopoulos of Circle West Architects on behalf of Northern Ave Properties LLC

ATTACHMENTS:

Description

Staff Report
Exhibit 1 - Conditions of Approval
Exhibit 2 - Vicinity Map
Exhibit 3 - Existing Land Use
Exhibit 4 - Existing Zoning
Exhibit 5 - GPA Narrative
Exhibit 6 - Rezone Narrative
Exhibit 7 - Conceptual Site Plan
Exhibit 8 - Citizen Participation Report Part 1
Exhibit 8 - Citizen Participation Report Part 2
Exhibit 9 - Support and Opposition

PLANNING & ZONING COMMISSION
STAFF REPORT

Meeting Date: 8/21/2025
Agenda Item(s): 4R & 5R

TO: Planning and Zoning Commission

THROUGH: Chris M. Jacques, AICP, Planning Director

FROM: Sarah Dircks, Senior Planner

SUBJECT: Peoria Residential Multi-Family: General Plan Amendment (GPA24-07) & Rezone (Z24-07) Northeast corner of 87th Avenue and Northern Avenue

PROPOSAL

The applicant has submitted a Minor General Plan Amendment and Rezoning to facilitate the development of a 72 unit multi-family residential development.

APPLICATION INFORMATION

Case Numbers	GPA24-07 and Z24-07
Applicant	Peter Koliopoulos of Circle West Architects on behalf of Northern Ave Properties LLC
Request(s)	1) **Minor General Plan Amendment (GPA24-07):** Request to amend the General Plan Land Use designation from Traditional Residential (2-5 dwelling units per acre) to Urban Residential (12+ dwelling units per acre) on approximately 5 acres. 2) **Rezone Request (Z24-07):** Request to modify the zoning from Convenience Commercial (C-1) to Multi-Family Residential (RM-1) on approximately 5 acres.

BACKGROUND AND CONTEXT

The subject site is a vacant approximately five (5) acre parcel and generally located at the northeast corner of 87th Avenue and Northern Avenue, as shown in more detail in **Exhibit 2.**

CONTEXT:

North of the site is a property owned by the Salt River Project (SRP) utility company that is encumbered by high voltage power lines. The powerline corridor is approximately 330 feet wide. On the other side of the powerline corridor is the Butler Place single family residential subdivision. To the east of the site is the Brighton Charter School, followed by StorAmerica Self Storage facility. Abutting the subject property to the south is Northern Avenue, which is designated as a limited access parkway. A parkway is intended to convey the highest volumes of traffic with limited access directly to the roadway. On the other side of Northern Avenue is a single-family residential subdivision located within the City of Glendale. To the west of the subject site is 87th Avenue, which is designated as a collector roadway. Collector roadways, often referred to as half-mile roads, serve to take traffic from lower order roadways (local roads) and feed it to the higher intensity arterial roadways. West of 87th Avenue is the Summersett Village single-family residential development.

APPLICANT'S PROPOSAL

The proposed development consists of five (5) two-story buildings, with a total of 72 units comprised of 48 one-bedroom units and 24 two-bedroom units. A total of three driveways on 87th Avenue are shown on the Conceptual Site Plan **(Exhibit 7)**. Two of the three driveways align with existing streets (Manzanita Drive and Royal Palm Road) across 87th Avenue. Upon entering, the two driveways terminate in front of

common area amenities and guest parking. A third driveway on 87th Avenue is proposed along the northern boundary of the site and is intended to provide vehicular access to the Brighton Charter School. All three driveways are connected by an internal drive running parallel along the length of the property. This internal drive provides access to resident garages, along with access to guest parking. Proposed amenities for community include pickle ball, pool/jacuzzi area, outdoor grills and ramadas, along with a dog run.

DEVELOPMENT INFORMATION:

Existing Use:	Vacant land
Existing General Plan Land Use:	Traditional Residential (2-5 dwelling units per acre)
Proposed General Plan Land Use:	Urban Residential (12+ dwelling units per acre)
Existing Zoning District(s):	Commercial (C-1)
Proposed Zoning Districts(s):	Multi-Family Residential (RM-1)
Site Area:	Approximately 5 acres

STAFF ANALYSIS

PROPERTY HISTORY:

The subject site was part of a larger annexation approved by the City Council on June 22, 1982 (*Ordinance #82-32*). The property was subsequently rezoned from General Agriculture (AG) to Convenience Commercial (C-1) on October 23, 1984 (*Ordinance #84-93*) **(Exhibit4)**. The site has remained vacant since that time.

GENERAL PLAN AMENDMENT:

As with any request to amend a General Plan land use category, staff evaluate the appropriateness of the amendment. This evaluation includes a number of facets such as the physical features of the site, availability of infrastructure, the needs of the community, and the character of the area. These measures are evaluated for compatibility with the City Council priorities which function as a proxy for the will of the citizens.

Land Use Perspective:

A General Plan is a long-range document that provides a vision and policies for the growth and development of the city. For development proposals such as the one in question, the evaluation of the goals and policies comes down to the question of context and whether or not the proposal represents the highest and best land use for the site.

Around 20 years ago, property located north of Northern Avenue, south of Olive Avenue, between 91st and 83rd Avenues was designated on the General Plan Land Use Map as *Low Density Residential*, which was the precursor to the *Traditional Residential* classification designated on the property currently **(Exhibit 3)**. Both classification had the same density range at 2-5 dwelling units per acre: however, prior provisions within the General Plan allowed commercial uses within the *Low Density Residential* without the need to amend the map. For this reason, the rezone to Convenience Commercial (C-1) in 1984 did not require a corresponding modification to the General Plan land use map.

Subsequent to the rezoning, the area surrounding the site began to develop. The Summersett Village residential community to the east was platted in 1998, with construction beginning soon thereafter. In 2002, Brighton Charter school was established east of the site. Construction of the self-storage facility began in 2019. In more recent major amendments to the General Plan Land Use Map, the charter school and self-storage land use classifications were altered to better reflect existing conditions; however, the classification for the site remained unchanged.

Analysis:

As noted, the existing zoning designation suggests a light commercial disposition, while the existing General Plan category suggests traditional single-family residential housing product. The feasibility of the site developing a *Traditional Residential* housing product is extremely limited due to the infrastructure improvements necessary for the site and the narrow parcel configuration. Additionally, the layout of the adjacent school limited compatibility with the property directly east of the site. If single family residential were to develop on the subject site, all homes would be forced to front directly on to 87th Avenue which creates a considerable amount of access conflicts on a collector roadway. Given the required infrastructure improvements along both 87th Avenue and Northern Avenue, the resulting parcel dimensions, practical application of requirements for things such as open space area; single family residential is not feasible on the subject site. Likewise, the existing physical constraints and access management requirements for commercial uses adjacent to an arterial/collector intersection significantly impact the viability of any meaningful commercial uses occurring onsite. These aspects are further discussed within the rezoning section below.

With the viability of commercial and single-family residential homes in question, the applicant is instead seeking an Urban Residential Land use designation (12+ dwelling units per acre) as an alternative land use designation to serve as a transition between the school and Summersett Village on the west side of 87th Avenue. In this regard, the proposed community layout and amenity package for the future residents appears to be better suited to work within the existing constraints while still maintaining compatibility with adjacent uses. Further, the proposal aligns with a number of goals and policies within the General Plan as noted below.

Within the adopted Peoria General Plan, several goals and policies aim to promote a diversity of housing types to meet the needs of residents of all income levels, ages, and lifestyles. The proposed request fosters sustainable development practices and integration of diverse land uses. The applicant identifies that the project supports general goals, and policies outlined in the General Plan including:

1. Smart Growth Goal – 4 Sustainable Development

   A goal of sustainable development practices is to promote local growth patterns and sustainable development practices that improve quality of life and reduce traffic congestion. The applicant explains, "The site's proximity to Pioneer Community Park and nearby bicycle trails makes it more appropriate for residential use, which aligns with the city's focus on livable, sustainable neighborhoods rather than additional commercial space" ***(Exhibit 5).***

2. Community Wellness Goals 10 & 14 - Encourage neighborhoods that support active living through pedestrian-friendly design.

   *The applicant notes, "The development is designed with walkable streetscapes, shaded walkways, and connections to nearby bicycle trails. This active infrastructure encourages residents to walk or cycle, aligning with Peoria's active living goals" (****Exhibit 5****).*

3. Land Use Policy LUC-5 - Encourage a diverse mix of housing types and densities.

*The applicant identifies, "by providing low-to-medium density housing, the development introduces a new residential option in the area, increasing housing diversity in Peoria. This aligns with the city's plan to offer varied housing options that can meet a range of needs and preferences" (**Exhibit 4**). They furthermore identify, "pricing ensures affordability, consuming only about 22% of the average Peoria household income, and meets the "Healthy Housing" goal by providing cost-effective living options without compromising quality" (**Exhibit 5**).*

When analyzing the goals and policies of the General Plan, staff also notes that the proposal advances the following policies and principles:

- Growth and Sustainable Development, Policy GS-2 - Direct dwelling unit density, and employment growth toward infill development sites within the city.
- Housing Stock, Policy HS-1 - Distribute a variety of housing types throughout the City to expand the choices available to meet the financial and lifestyle needs of Peoria's diverse population.
- Smart Growth Principles: Human Scale / Compatibility – A fundamental component of smart growth communities is design focus on human-scale and the resulting compatibility between land uses. Thoughtful and effective transitions in land use address visual and other impacts associated with land uses of a different intensity or character.

As referenced by the above goals, and policies, the proposed Minor General Plan Amendment to the Land Use Map from *Traditional Residential (2-5 du/ac)* to *Urban Residential (12+ du/ac)* provides an opportunity to address the aforementioned policies by providing a thoughtful transition land use between the residential to the west and non-residential uses to the east. The proposed in-fill project seeks to expand housing choice in the area on a small and challenging parcel. As such, staff find that the requested land use does align with the aforementioned goals and policies of the General Plan.

ZONING AND DEVELOPMENT STANDARDS

From time to time, a General Plan will identify a land use category that differs from the permitted zoning on a development. Despite having a *Traditional Residential* land use designation, the subject property has maintained the C-1 zoning for the past 40 years. As identified in the property history, the current commercial zoning was assigned shortly after annexation in the 1980s. In instances where land use designations and zoning districts differ, the development rights of the property follow the zoning district development standards.

In this case, the subject property is located in the Convenience Commercial (C-1) Zoning District. The C-1 District is intended to accommodate neighborhood-scale retail and service establishments that provide the incidental daily necessities for the local residential areas. Permitted uses include variety of small-scale commercial uses. However, when the typical constraints such as building setbacks, access restrictions, parking requirements, drainage, and refuse requirements are placed on a parcel such as this, the potential amount of commercial space supported at this site is likely considerably less than similar zoned parcels. Furthermore, the distance away from more prominently traveled access corridors is seen as a detour and as more visible properties with better access in the area continue to fill in. Given the evolution of surrounding land uses, the community's needs, and changing market conditions, the applicant argues that C-1 is no longer the most appropriate use for the property **(Exhibit 5).** Instead, the applicant is seeking to rezone the property to Multi-Family Residential (RM-1). The intention is to provide a compatible transition use between the adjacent school and the collector roadway (87th Avenue).

The Multi-Family Residential (RM-1) Zoning District is a district intended to fulfill the need for multi-family residences or attached single-family residences which are compatible with abutting single-family residential districts. Though the proposal under evaluation through case Z24-07 is to simply change the zoning designation to RM-1, there is a companion Site Plan currently under evaluation by City staff. That Site Plan would provide the physical composition of the proposed development in alignment with development standard for the zoning district. The proposed Site Plan includes a total of 72 multi-family units. The unit mix proposed on site includes 48 one-bedroom units and 24 two-bedroom units. The applicant is seeking to comply with the City's existing RM-1 development standards.

Based on the companion Site Plan materials, the buildings will be approximately 34 feet tall and as a result of the proposed placement will comply with all setback and height limitations within the RM-1 Zoning District. At 34 feet tall, the buildings would be similar in scale and height of traditionally single-family homes which have a maximum height of 30 feet. Additionally, as proposed, the development would exceed minimum parking requirements for multi-family development. The building design in the companion Site Plan includes first floor garages, with a second story building overhang that provides some shade to parking on the driveway in front of the garage. Lastly, the proposed range of amenities for the future residents is commensurate with other communities in the area. As a result, staff finds the proposed height, character and development standards to be compatible with area.

Traffic:

The subject site has limited street frontage along Northern Avenue and is not seeking vehicular access to Northern Avenue. The proposed access to the site along 87th Avenue is limited to a few access drives that would feed from 87th Avenue to the internal drive aisle. As proposed, the associated site improvements would meet the City of Peoria Traffic Impact Analysis (TIA) and Access Management Guidelines.

Water/Sewer:

Water and sewer facilities exist adjacent to the site and are sized appropriately with available capacity to serve the property as a multi-family use.

COMMUNITY INVOLVEMENT

Public Noticing:
The application was properly noticed pursuant to the Peoria Zoning Ordinance, which includes notification to all property owners within 600 feet of the site and registered HOAs within one (1) mile, posting of a sign on the site, and placing an ad in the Peoria Times prior to the Public Hearing.

Neighborhood Meeting:
There was a neighborhood meeting for this project held on April 28, 2025, at 6:00 pm. Approximately nine (9) residents, in addition to the Principal of Brighton Charter School, city staff, and the applicant team were present at the meeting. During the meeting, the applicant team provided a PowerPoint presentation and fielded several questions and concerns identified by the public, which are discussed in more depth within the Citizen Participation Report (**Exhibit 8**). The primary concerns from the residents were traffic, property values, crime levels, density, privacy levels for Summersett residents, student access through the site, and potential overflow parking along 87th Avenue. In particular, residents raised safety concerns related to the Northern Avenue and 87th Avenue intersection, pedestrian safety for students between Summersett and Brighton Charter School. After the neighborhood meeting, the applicant modified the layout to include a vehicular connection to Brighton. Where mitigation measures were appropriate or

possible, the applicant has provided a response on how they will address the areas of concern within the Citizen Participation Report .

Support / Opposition:
At the time of this writing, Staff received two (2) letters of written opposition and one (1) letter of inquiry as shown in **Exhibit 9**.

KEY FINDINGS

1. The proposed General Plan Land Use change from Traditional Residential (2-5 du/ac) to Urban Residential (12+ du/ac) represents an improvement to the land use designation for the site by providing context sensitive development on an infill parcel;
2. The proposed land use and zoning changes to the site advances Smart Growth goals and policies in the Peoria General Plan to diversify the City's housing stock and otherwise enables the development of an infill parcel;
3. The change in zoning designation to RM-1 would provide for development standards that represent an appropriate transition from the adjacent uses to the abutting roadway.

RECOMMENDATION

Staff recommend that the Planning and Zoning Commission take the following action:

1. Recommend **APPROVAL** of Minor General Plan Amendment Case **GPA24-07** to the City Council.
2. Recommend **APPROVAL** of Zoning Case **Z24-07** to the City Council, subject to attached **Exhibit 1** Conditions of Approval.

STAFF CONTACT

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Peoria Residential Multi-Family

NEC of 87th Avenue and Northern Avenue
Case Z24-07

The rezoning of the above mentioned property is subject to the following Conditions of Approval in order to protect the public health, safety, welfare, and the City of Peoria:

1. The Developer shall comply with all City of Peoria engineering design standards, policies, codes, and requirements at time of development and final engineering submittal.
2. The Developer shall dedicate 40-feet of right-of-way (R/W) and 8-feet of Public Utility Easement (PUE) along the subject site frontage of Northern Avenue and 35-feet of R/W and 8-feet of PUE along the subject site frontage of 87th Avenue. All dedications and easements shall be provided on the civil plan submittal, and any final plat or replat.
3. The Developer shall dedicate a 30-foot by 30-foot chamfer at the northeast corner of the intersection of 87th Avenue and Northern Avenue. All dedications shall be provided on the civil plan submittal, and any final plat or replat.
4. The Developer shall provide a Final Traffic Impact Analysis for review and approval with the civil improvement plan submittal.

GPA24-07 & Z24-07 Peoria Residential MFR

Northeast Corner of 87th Ave and Northern Ave

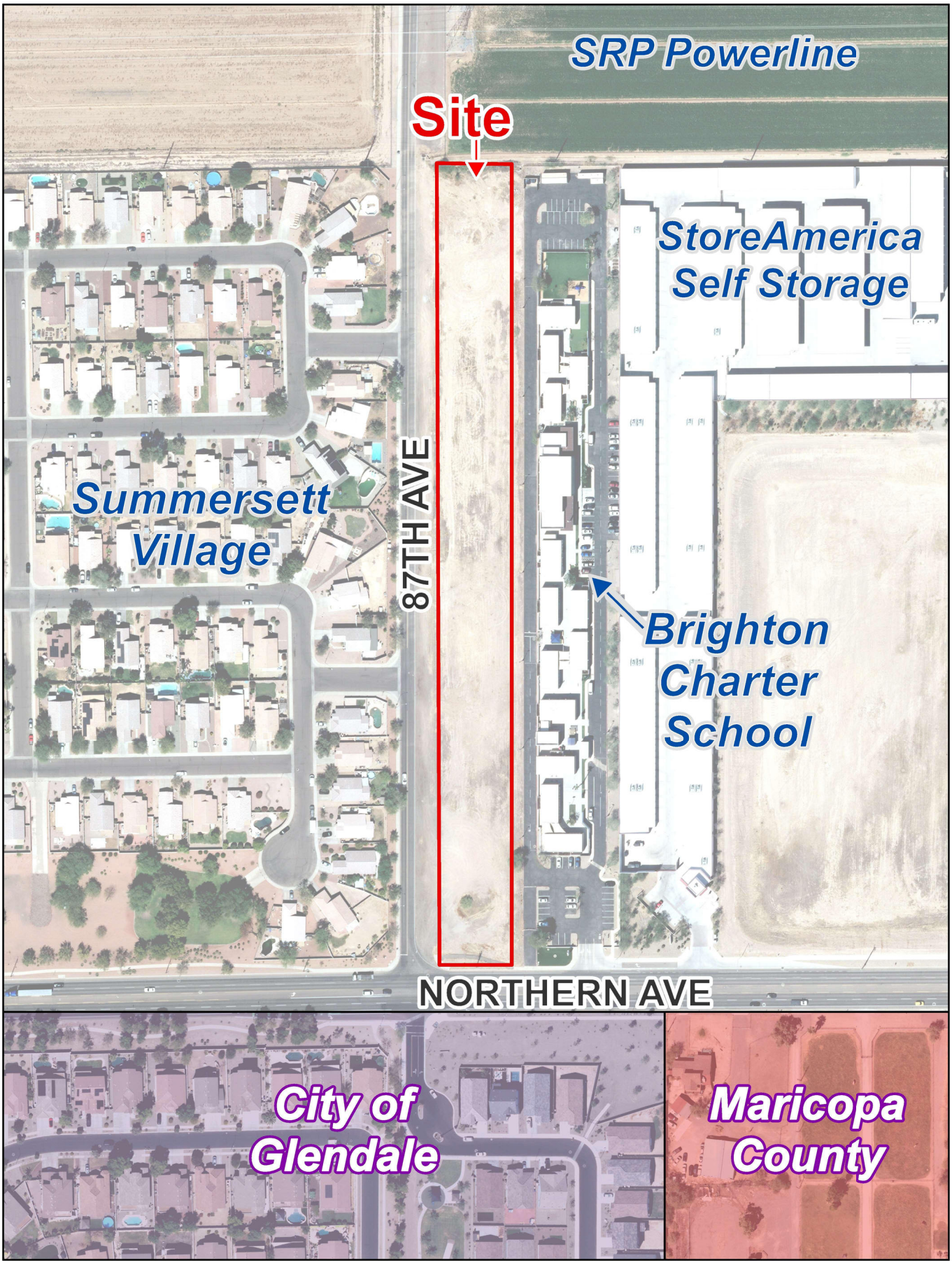


Exhibit 2 | Vicinity Map

GPA24-07 & Z24-07 Peoria Residential MFR

Northeast Corner of 87th Ave and Northern Ave

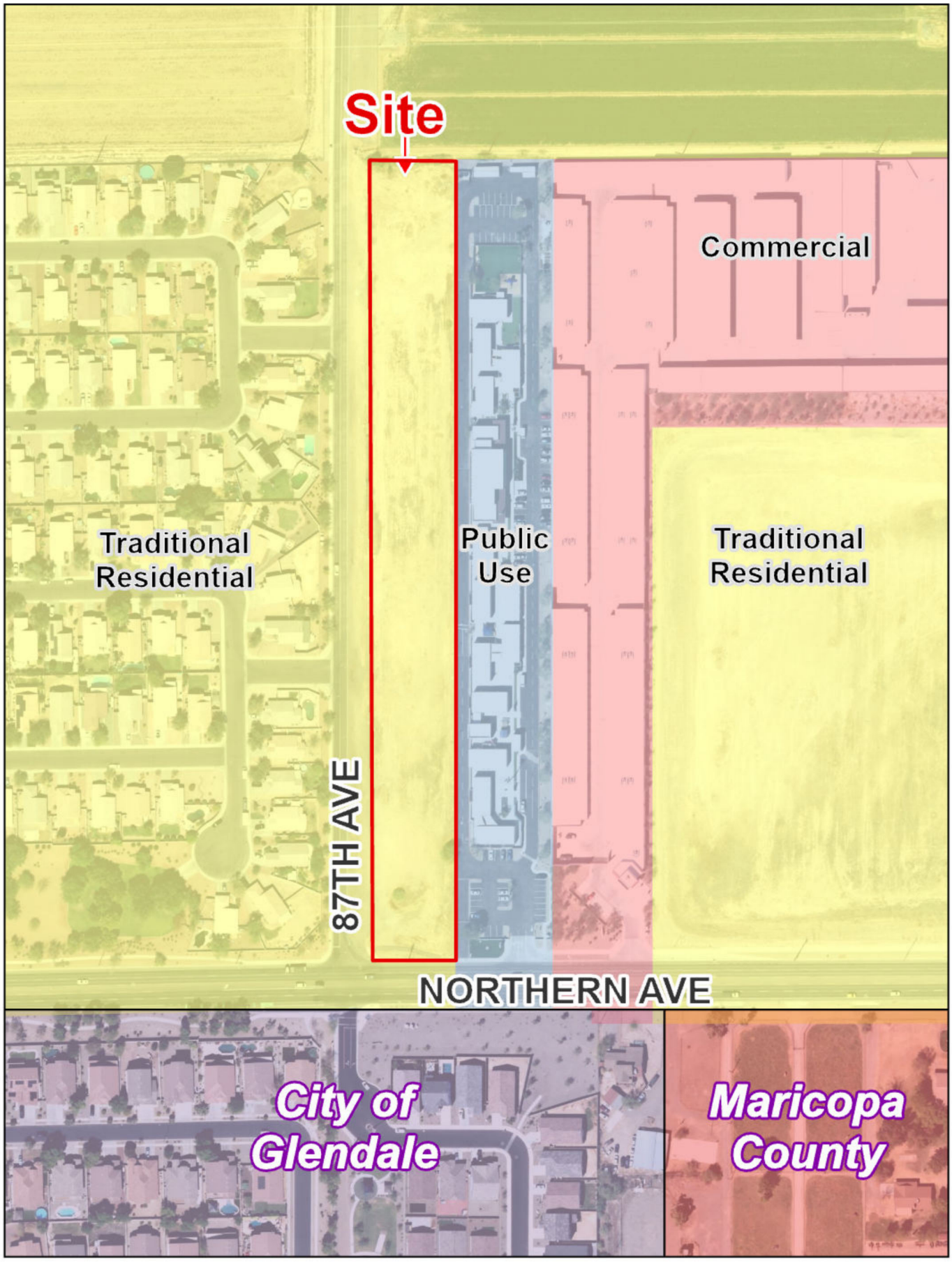


Exhibit 3 | Existing Land Use

GPA24-07 & Z24-07 Peoria Residential MFR

Northeast Corner of 87th Ave and Northern Ave

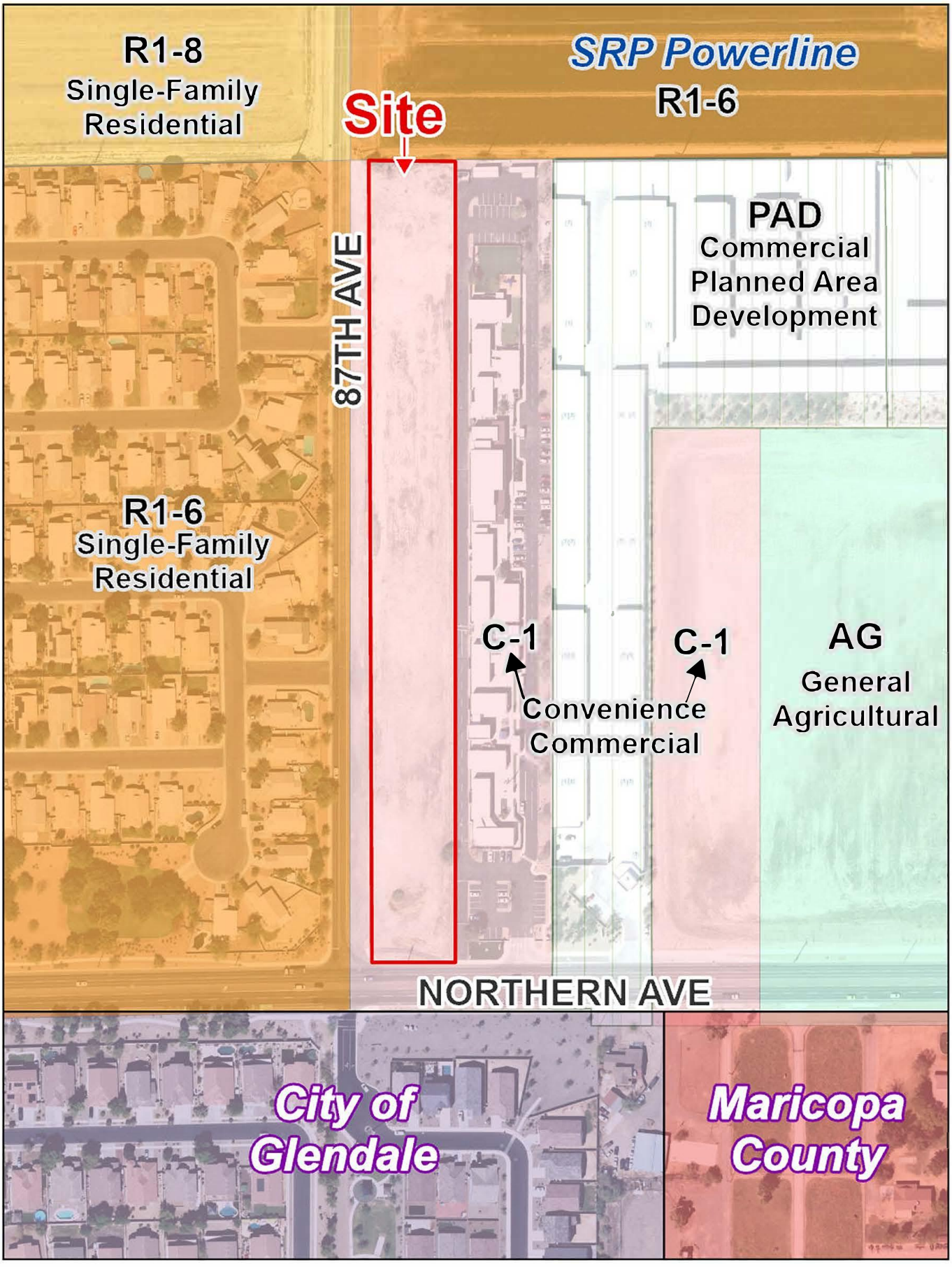


Exhibit 4 | Existing Zoning

Exhibit 5

PROJECT NARRATIVE
MINOR GENERAL PLAN AMENDMENT
CASE GPA24-07

Peoria Residential, Northeast corner of 87th Avenue and Northern Avenue
Request: Minor General Plan Amendment changing the Land Use Designation from Traditional Residential (2-5 DU/AC) to Urban Residential (12+ DU/AC) for approximately 4.8 acres

1. Provide a brief description and reason for the requested change. Provide supporting data.

   The request is to change the land use designation of approximately 4.8 acres from Traditional Residential (2-5 DU/AC) to Urban Residential (12+ DU/AC). The subject property is a long narrow parcel that fronts on the north side of Northern Avenue and the east side of 87th Avenue. Its north-to-south dimension is approximately one-quarter mile and its east-to-west dimension is approximately 165 feet comprising approximately 4.8 gross acres. Its current zoning district is C-1 Convenience Commercial, which was approved by the Peoria Mayor and Council Members 40 years ago in 1984. Initially, it was part of an approximate 10-acre parcel zoned C-1 Convenience Commercial. The east half of the larger parcel is developed with a K-12 Brighton Charter School comprised of 16 buildings with playgrounds, parking, and internal access roadways. Directly east of the Brighton Charter School is a StorAmerica Self Storage Facility.

   Across 87th Avenue to the west is the 25-year-old Summersett Village R1-6 subdivision. This is a community consisting of tract homes ranging in size from 1,250 square feet to 1,500 square feet. There are 15 homes in the subdivision which back onto 87th Avenue, together with a six-foot masonry fence, a landscaped greenbelt, curb, and sidewalk.

   The City of Peoria requires the dedication of the east one-half of the 87th Avenue collector street consisting of 35 feet and an adjacent public utility easement of 8 feet. Mirroring the homes in the R1-6 Summersett Village across 87th Avenue, there would be space available on the subject site to develop approximately 16 R1-6 residences. This subdivision design standard would not allow direct driveway access for the 16 homes to 87th Avenue. This would require a 15-foot-wide driveway frontage road with controlled access to 87th Avenue. These requirements would reduce the 165-foot depth of the site by 58 feet, leaving a development parcel of approximately 107 feet deep which fronts on a collector street and backs onto the Brighton Charter School. Considering the cost of improving 87th Avenue with asphalt paving, concrete curb, gutter, and sidewalk, together with landscaping and adding in the cost of the 15-foot frontage road and the undergrounding of power lines, allocating these substantial costs among 16 homes would be substantial and impractical for a residential builder. See letter dated March 10, 2025 from Universal Homes, Inc. which is attached hereto.

2. If map amendment, indicate the existing and the proposed General Plan Land Use designation(s).

   Existing General Plan Designation: Traditional Residential (2-5 DU/AC)
   Proposed General Plan Designation: Urban Residential (12+ DU/AZ)

3. In what way does the existing plan inadequately provide suitable alternatives for this request?

Traditional Residential would allow for approximately 16 homes to be developed on a long, narrow strip of land, sandwiched between a collector street on the west and a K-12 charter school to the east. However, due to the small size, unusual shape, and the extra cost for widening 87th Avenue, the site would not be attractive to a Traditional Residential builder. It would not create an integral neighborhood or a sense of community for its residents Whereas this small and narrow site is ideally suited for the development of 72 apartment homes with a resort-style swimming pool and outdoor BBQ area, together with two pickleball courts, and bicycle racks which will bring together a compact community with connectivity.

4. How will this amendment affect property values and neighborhood stability? Provide supporting data and/or case studies.

This amendment is not expected to affect neighborhood property values. The Massachusetts Institute of Technology Center for Real Estate published a report in April 2005 regarding the affects of mixed income, multi-family rental housing developments on single-family housing values. Attached is a copy of the report. The study was conducted in 7 municipalities in the Greater Boston area. In each study area, multi-family homes, each with an affordable housing component, were constructed in an established single-family neighborhood. The home values for the single-family neighborhoods over the study period of time were compared to home values in established single-family neighborhoods with no multi-family housing developments. The results in all 7 case study towns concluded that the introduction of large-scale, high-density mixed income rental developments in single-family neighborhoods does not affect the value of surrounding homes.

A more recent study published February 2021 by the University of Utah studied the impact of high-density apartments on surrounding single family home values in suburban Salt Lake County. The study found that there was no negative impact on values on single family homes located near high-density apartments. Rather, the study revealed that the median value of single family homes located in ¼ mile of new apartment construction realized 1.4% more in annual price appreciation than those located further away. A copy of the University of Utah's study is attached hereto.

The subject project consists of 72 apartment homes with no affordable housing component. Based on the MIT and University of Utah Studies, the 72 apartment units will not affect the values of the Summersett Village subdivision homes.

5. How will this amendment contribute to compatible neighborhood patterns? Provide supporting data.

The proposed apartment homes will provide a compatible transition from the commercial zoned parcels to the east of the parcel and to the single-family subdivision to the west. The subject site, after deducting the dedicated right-of-way for 35 feet of 87th Avenue and 8 feet for public utilities, results in 3.55 net acres, which is a 1/4 mile in length. Development

of this niche parcel of ground with 72 apartment homes will yield a compatible development pattern for the neighborhood.

6. How will this amendment contribute to an increased tax base, economic development, and employment opportunities? Provide supporting data.

The owner retained Elliott D. Pollack & Company to prepare a report of the economic and fiscal impact of a999 70-apartment-home development on the City of Peoria. Attached is a copy of that report dated January 2024. During the construction timeframe, the project will create 190 jobs, and produce $14.1 million in wages and nearly $30.7 million in economic activity. The fiscal impact of construction on the City of Peoria would equate to $366,300, broken out as follows:

City of Peoria	
Construction tax	$197,000
Development Impact Fees	$82,400
Use Tax	$56,700
Secondary impacts from employees	
Spending sales tax	$10,400
Property tax	$16,300
State shared revenues	$3,500
Sub-Total	**$366,300**

The annual production of tax revenues to the City of Peoria is projected to be $80,300, comprised of the following:

City of Peoria	
Property Tax	$15,800
Sales tax	$19,300
Utility Tax	$3,900
Increased state shared revenue	$37,500
Secondary impacts from employees	
Spending sales tax	$1,100
Property tax	$2,300
State shared revenues	$400
Sub-Total	$80,300

7. How will this amendment contribute to the City's goal of achieving balanced housing, shopping, employment, and recreational opportunities?

Due to the expansion of the computer chip manufacturing industry in Peoria, Buckeye, and Northern Phoenix, the City of Peoria will experience a growing demand from young professionals for accessible and affordable apartment living. The walkability and bikeability of the 4.8-acre site, two nearby parks and trail systems, and its proximity to a broad variety of shopping opportunities will be an overly attractive feature for young professionals to locate in Peoria. These attractive features will provide a secure niche of multi-family living to a predominantly single-family traditional neighborhood.

8. How will this amendment affect existing infrastructure of the area, specifically, the water, wastewater, and sewer systems?

There are existing water and sewer mains in 87th Avenue which are adequate to serve the needs of future apartment occupants. No significant infrastructure upgrades of existing public utilities are expected. The owner will dedicate 35 feet of right-of-way for the East half of 87th Avenue, which is a collector street. The owner will construct one additional travel lane, plus curb, gutter, and sidewalk. Peoria's official traffic count in 2024 for this segment of 87th Avenue is 1,863 (ADP). At the Northern Avenue frontage, the 2024 traffic count is 22,287 (ADP).

9. How will this amendment affect the ability of the school district to accommodate children? Indicate the specific schools to be attended and provide attendance and other data reflecting impacts to the specified schools, and district comments.

The 72 apartment homes are expected to house between 5 and 10 school-aged children. Each of the two-bedroom homes could accommodate two school-age children. It is difficult to envision how many of the one-bedroom homes would be occupied by a 5-year-old child. In any event, the Brighton Charter School has total attendance of 325 children, aged K through 12. Cotton Boll Elementary School's total attendance for grades K through 8 is 785 children.

10. Specifically, what Elements, Goals, Objectives, and Policies of the General Plan will be affected?

The subject 4.8-acre site is characterized as a "Tier 1 Growth Area" by Peoria's General Plan. The site is available and appropriate to accommodate immediate infill development and related infrastructure, and municipal service expansions. The site is served by existing infrastructure and parks, trails systems, and all other municipal services. Peoria's "Smart Growth Vision" recognizes that infill development and increased densities in developed areas result in efficient utilization of land, more compact areas, and more efficient delivery of municipal services. Guiding new development to existing developed areas of the community also preserves and enhances the vitality of existing neighborhoods.

Housing affordability is determined by how much of a person's or family's income is used for housing costs. Homeowners and renters are considered "cost burdened" if they spend more than 30% of their income on housing. The impact of higher housing costs reduces disposable income, leaving less available for preventative medical treatment, food, and other necessities. Higher costs may also require residents to maintain multiple jobs, live in unsafe conditions, and pay higher transportation costs. As the affordability not only influences the overall community health, it can also significantly impact the City's economic vitality.

11. How will this amendment support the overall intent and/or constitute an overall improvement to the General Plan?

This amendment supports the overall intent of the General Plan by fostering sustainable development practices that emphasize walkability, connectivity, and the integration of diverse land uses. By aligning with the City's goals for active living and balanced development, this project represents an improvement to the existing plan and meets the needs of a growing community.

General Plan Land Use Map:

Parcel Numbers:
142-33-006X

Existing Land-Use: Vacant
Proposed Land-Use: Urban Residential (12+ DU/Ac)

Exhibit 6
Rezoning Project Narrative

PROJECT NARRATIVE: ZONE CHANGE, CASE Z24-07

Peoria Residential, Northeast corner of 87th Avenue and Northern Avenue

Request: Rezone from Neighborhood Commercial (C-1) to Multi-Family (RM-1) for approximately 4.8 ac.

1. What type of development and uses are proposed by the rezoning request?

   The rezoning request proposes a multi-family residential development on a 4.761-acre site. This development will consist of five two-story buildings, housing a total of 72 units—48 one-bedroom units and 24 two-bedroom units. This low-to-medium density residential community aims to provide housing primarily for young professionals, offering rental rates that are affordable relative to the average household income in Peoria.

   The site design emphasizes a walkable, bicycle-friendly community with convenient access to nearby parks, regional bicycle trails, and public transportation options. Planned amenities include a resort-style outdoor pool, shaded walkways, and landscaped open spaces, aligning with Peoria's 2040 General Plan goals for active living and sustainable residential neighborhoods.

2. State how your proposal is consistent with the Land Use Plan and other goals, policies and objectives (list each goal, policy and objective and how they are met) of the Peoria General Plan.

   a. Land Use Compatibility and Transition (Land Use Plan)
      Goal: Promote compatible and efficient land use patterns.
      Consistency: The proposal transitions the commercial and industrial uses on the eastern side of the property to the existing single-family residential neighborhood on the western side. By creating a compatible, residential transition, the development offers a balanced land use pattern that complements surrounding areas.

   b. Active Living and Walkability (2040 General Plan – Active Living and Connectivity)
      Policy: Encourage neighborhoods that support active living through pedestrian-friendly design.
      Consistency: The development is designed with walkable streetscapes, shaded walkways, and connections to nearby bicycle trails. This active infrastructure encourages residents to walk or cycle, aligning with Peoria's active living goals.

   c. Accessible Transportation (2040 General Plan – Transportation and Mobility)
      Objective: Develop sites that are accessible to public transportation and major routes.
      Consistency: With proximity to SR101, Grand Avenue, and bus routes along 83rd Avenue, the development is strategically located for efficient vehicular access and public transportation options. These connections make it suitable for residents who prefer commuting options, reducing car dependency.

   d. Affordability and Healthy Housing (Healthy Housing Policy)
      Goal: Provide housing options that are affordable and promote a healthy lifestyle.
      Consistency: The project's rental rates are targeted at young professionals, with units priced at around $1,500 per month. This pricing ensures affordability, consuming only about 22% of the average Peoria household income, and meets the "Healthy Housing" goal by providing cost-effective living options without compromising quality.

e. Sustainability and Environmental Responsibility (Sustainability Policy)
   Policy: Incorporate sustainable design features in residential developments.
   Consistency: The project emphasizes energy efficiency and incorporates ample trees and green spaces for natural shade, contributing to Peoria's environmental goals. The sustainable design also reduces urban heat and promotes outdoor enjoyment for residents.

f. Neighborhood Character and Aesthetic Quality (Community Design Objective)
   Objective: Ensure new developments enhance neighborhood character and aesthetic quality.
   Consistency: Architectural choices include varied roof forms, recessed balconies, and modern design elements that contribute positively to the neighborhood's visual appeal. Landscape and building proportions are carefully designed to create a cohesive, inviting aesthetic.

g. Recreation and Open Space (Parks and Recreation Goal)
   Policy: Support access to parks and recreational amenities.
   Consistency: The development offers onsite amenities like a resort-style pool and deck while benefiting from nearby parks, including Pioneer Community Park. This access supports recreation for residents, encouraging a lifestyle that embraces outdoor activities and aligns with Peoria's goals for recreational access.

h. Residential Density and Housing Diversity (Housing Plan Goal)
   Objective: Encourage a diverse mix of housing types and densities.
   Consistency: By providing low-to-medium density housing, the development introduces a new residential option in the area, increasing housing diversity in Peoria. This aligns with the city's plan to offer varied housing options that can meet a range of needs and preferences.

i. Economic Vitality (Economic Development Goal)
   Goal: Support developments that enhance economic activity.
   Consistency: By attracting young professionals to the area, the project bolsters Peoria's economic vitality. The location's proximity to commercial areas, including retail centers and entertainment venues, means new residents will contribute to the local economy, aligning with Peoria's economic growth goals.

j. Safe and Secure Communities (Public Safety Objective)
   Policy: Design neighborhoods to promote safety and security.
   Consistency: The proposal includes well-lit walkways, open spaces, and well-placed building entrances, creating a secure, safe environment. These design elements meet the objectives of Peoria's public safety policy by fostering a sense of security in the community.

3. Discuss your proposal's compatibility with the surrounding land use and zoning patterns. Include a list of surrounding zoning designations, land uses and conditions.
   The proposed multi-family residential development on the 4.761-acre parcel at the northeast corner of 87th Avenue and Northern Avenue is compatible with the surrounding land use and zoning patterns.
   Here is a detailed analysis of the proposal's compatibility with the neighboring uses, zoning designations, and existing conditions.

a. Surrounding Zoning Designations and Land Uses

West of the Property

Zoning: R1-6 (Single-Family Residential)

Land Use: The Summersett Village subdivision, consisting of single-family homes ranging from approximately 1,250 to 1,400 square feet.

Condition: These homes are separated from the proposed development by an existing 6-foot masonry wall and a setback of approximately 170 feet from the new apartment homes. The additional landscaping and setback create a buffer that respects the character and privacy of the single-family residences.

East of the Property

Zoning: C-1 (Convenience Commercial)

Land Use: The adjacent uses include Brighton Charter Schools, which occupies a narrow 5-acre parcel, a StorAmerica self-storage facility, and a city-owned retention basin, followed by Harvest Church further to the east.

Condition: The proposal's multi-family zoning introduces a softer transition from the commercial and educational uses to residential, reducing potential conflicts with single-family homes and providing a more seamless residential environment.

West of the Property

Zoning: PAD + C-2 (Intermediate Commercial)

Land Use: The Peoria Crossing shopping center, located about a mile west, includes retail stores such as Target, Kohls, Michaels, and LA Fitness, among others.

Condition: The proposed residential use aligns with the commercial corridor along Northern Avenue, offering future residents nearby access to essential services and shopping facilities, enhancing livability without introducing heavy traffic or industrial impacts.

West of the Property

Zoning: RM-1 (Multi-family Residential) and C-2 (Intermediate Commercial)

Land Use: The Meadowood residential community, comprising one-story townhomes, lies immediately west, with additional commercial retail establishments further along Northern Avenue, including a Shell Minute Mart, Chase Bank, Discount Tire, and a Goodwill store.

Condition: The medium-density nature of the proposed development aligns well with the neighboring townhome community, preserving the residential character and supporting the mixed-use nature of this area.

b. Compatibility with Surrounding Land Uses and Zoning Patterns

The proposed multi-family development presents a thoughtful transition between the varied land uses surrounding the site:

Residential Transition:

The multi-family zoning introduces a compatible, medium-density buffer between the single-family homes to the west and the commercial/industrial uses to the east. This mitigates potential conflicts with the single-family homes while complementing the medium-density townhome community to the west.

Land Use Variety and Balanced Density:
The mix of housing types, including single-family, townhomes, and now apartments, supports housing diversity and balanced density in the area. This provides different housing options while aligning with Peoria's land use goals for varied residential types.

Accessibility and Convenience:
With nearby commercial, educational, and recreational facilities, the proposed development aligns with Peoria's goals for sustainable, connected communities. Residents will benefit from nearby retail and educational amenities, aligning with the existing urban fabric and contributing to neighborhood vitality.

c. Existing Conditions and Buffering Measures
The site plan's thoughtful buffering measures ensure compatibility:

Setbacks and Landscape Buffers:
The development's setbacks, enhanced landscaping, and separation from adjacent properties provide privacy and a visual buffer. These elements reduce the visual impact on nearby single-family homes and integrate seamlessly with the surrounding community's appearance.

Pedestrian Connectivity and Amenities:
The proposal includes pedestrian pathways and shaded walkways that connect to the existing bicycle infrastructure, enhancing neighborhood connectivity and supporting Peoria's active living initiatives.

Conclusion: The proposed multi-family development is designed to enhance the existing neighborhood, offering a compatible land use transition and supporting a harmonious blend of residential, commercial, and community uses. This balanced approach ensures that the new development fits within the neighborhood's established land use patterns and zoning designations while supporting Peoria's long-term goals for connected and sustainable communities.

4. Indicate why the current zoning is not appropriate given the surrounding land use, zoning, and factors which have changed since the current zoning was established.
The current zoning of the subject property, designated as C-1 (Convenience Commercial), is not the most appropriate use given the evolution of surrounding land uses, the community's needs, and changing market conditions. Here are key reasons that support the case for rezoning to a multi-family residential designation:

a. Transition to Predominantly Residential Land Use

Surrounding Residential Growth:
Since the original C-1 zoning was established in 1984, the area has transformed significantly, with substantial residential development now bordering the site. To the west lies the single-family Summersett Village subdivision, and to the west is the Meadowood townhome community. The area has seen an increased demand for housing options to support the residential character that has evolved around the site.

Incompatible Commercial Potential:
The existing C-1 zoning permits various commercial uses, including retail, hardware stores, and dry-cleaning facilities, which are less compatible with adjacent residential properties. Rezoning to multi-family will introduce a use more aligned with the surrounding homes, providing a softer, compatible transition to the residential neighborhoods.

b. Changes in Market Demand and Housing Needs

Demand for Housing:
The Peoria area has experienced increased demand for rental housing, particularly for young professionals and those seeking affordable options near employment hubs. By rezoning to multi-family, the project can meet this growing housing demand while offering a more compatible use that aligns with local and regional housing policies.

Economic and Market Shifts:
The commercial retail landscape has shifted in recent years, with less demand for smaller-scale commercial centers in favor of larger shopping and entertainment districts. Major commercial facilities, like Peoria Crossings and Tanger Outlets, are situated a mile or more away, concentrating commercial activity in those locations and reducing the need for additional smaller commercial spaces in this area.

c. Traffic and Accessibility Considerations

Traffic Reduction for Residential Use:
Commercial zoning would likely generate higher traffic volumes due to customer and delivery traffic, potentially creating congestion and noise for nearby residential areas. By transitioning to a residential use, the property will align better with the quieter residential character of the surrounding streets, particularly along 87th Avenue, which is primarily residential to the north.

Enhanced Connectivity and Access for Residents:
With convenient access to SR101, Grand Avenue, and nearby bicycle trails, a multi-family use would be well-served by the existing transportation infrastructure. This enhances the site's appeal for residential development while alleviating potential commercial traffic impacts.

d. Alignment with Peoria's Long-Term Vision and Planning Goals

Active Living and Walkability:
Peoria's 2040 General Plan emphasizes "active living" through walkable neighborhoods with access to parks, bicycle paths, and other recreational amenities. The site's proximity to Pioneer Community Park and nearby bicycle trails makes it more appropriate for residential use, which aligns with the city's focus on livable, sustainable neighborhoods rather than additional commercial space.

Affordable Housing and Community Balance:
The multi-family designation supports Peoria's goals for affordable and diverse housing options. With proposed rental rates that are accessible for the local workforce, this change addresses housing affordability and meets the needs of a broader range of residents, fostering a balanced community.

e. Compatibility with Existing Development Patterns and Land Use

Improved Land Use Transition:
Currently, the C-1 zoning allows for commercial uses that could lead to incompatible transitions with the surrounding residential areas. By shifting to a multi-family use, the project will serve as a buffer between higher-intensity commercial and industrial uses to the east and lower-density residential neighborhoods to the north and west, ensuring harmonious transitions and preserving the residential integrity of the area.

Support for Mixed Residential and Community Uses:
The nearby uses include single-family homes, townhomes, schools, parks, and religious institutions, which all point toward the appropriateness of a residential designation over commercial. The rezoning will enable a land use that blends seamlessly with the community-focused environment and contributes to a cohesive neighborhood.

Conclusion: Given these considerations, the current C-1 zoning no longer reflects the optimal use for this site. Rezoning to multi-family residential is more appropriate given the residential character of the surrounding area, current market demands, and the City of Peoria's vision for connected, sustainable, and vibrant communities.

5 Describe any proposed unique design considerations, beyond Zoning Ordinance requirements, which create compatibility between the proposed use and adjoining developments.
The proposed multi-family residential development incorporates several unique design considerations that go beyond basic zoning requirements, fostering compatibility with adjoining residential and community-focused developments. These elements enhance the project's integration with the surrounding area and add value to the neighborhood's character and livability.

a. Enhanced Setbacks and Landscaping Buffers

Generous Setback Distances:
The project includes a setback of approximately 87 feet from the centerline of 87th Avenue, significantly more than standard requirements. This extended setback creates a natural buffer, enhancing privacy for nearby single-family homes in Summersett Village and reducing visual impact on the surrounding area.

Lush Landscaping and Mature Trees:
Landscape design emphasizes the use of mature trees, shade elements, and dense vegetation along property boundaries. This greenery acts as a visual and acoustic buffer, integrating the development harmoniously with adjacent properties and providing shaded, comfortable pedestrian pathways.

b. Pedestrian-Friendly Design and Connectivity

Walkable Streetscapes:
The site plan includes shaded walkways, pedestrian pathways, and seating areas designed to encourage walking within the development and connectivity with nearby parks, trails, and community spaces. This pedestrian-friendly approach aligns with Peoria's active living objectives and fosters a welcoming neighborhood atmosphere.

Bicycle Access and Infrastructure:
Recognizing the nearby regional bicycle trail, the development provides direct bicycle access points and bike storage areas for residents. This consideration promotes alternative transportation and makes the property attractive to residents who prioritize active, sustainable lifestyles.

c. Architectural Variety and Visual Appeal

Scalable Building Proportions and Roof Forms:
The design incorporates varied building proportions and gable roof forms to avoid monotonous or overly imposing structures. These elements create a more dynamic

appearance that blends with the architectural style of nearby residential areas, providing visual interest and enhancing neighborhood character.

Sun Shading Features and Recessed Balconies:
Recessed balconies, shading fins, and strategically placed openings add both aesthetic and functional value, enhancing the building's energy efficiency while allowing natural light and airflow. These features are carefully placed to create privacy while still fostering a connection with the surrounding environment.

d. Thoughtful Parking Solutions and Reduced Visual Impact

Clustered Parking with Ample Shade:
Parking areas are designed in small clusters of four stalls or fewer, with shade trees and landscape elements between groups to soften the visual impact of parking spaces. This design contrasts with the typical large, open parking lots often seen in multi-family developments, aligning better with residential surroundings.
One-Car Garages and Tandem Parking:
Each residence includes a one-car garage and tandem parking, providing adequate parking without excessive surface space. The garages are integrated within the building form, partially covering tandem parking and creating a visually cohesive look.

e. Resort-Style Amenities and Open Space Integration

Outdoor Pool and Deck Area:
The development features a resort-style outdoor pool with an adjoining deck, surrounded by vegetation for privacy and shade. This amenity is intentionally placed to create a community gathering space that promotes relaxation and socialization without impacting neighboring properties.

Ample Open Spaces and Green Areas:
Open spaces between buildings, enhanced with landscaping and shaded seating, contribute to a community-oriented design. These areas provide gathering spots for residents and offer buffer zones that add to the compatibility with adjoining properties.

f. Materials and Color Scheme for Neighborhood Cohesion

Modern, Neutral Color Palette:
The selected materials and colors are carefully chosen to provide a rich, modern look that complements the area's residential character. Neutral colors and natural textures blend with the surrounding landscape, creating a subtle yet distinctive architectural presence.

Responsive Building Materials:
High-quality, durable building materials are used to ensure longevity and reduce maintenance needs. These materials support Peoria's sustainable development goals, contributing to a more stable and harmonious neighborhood appearance.

g. Noise Reduction and Privacy Measures

Acoustic Design Considerations:
Building orientation and landscaping help minimize noise transmission from the property to neighboring areas. The layout and thoughtful landscaping choices ensure that noise from parking areas, common areas, and resident activities is effectively mitigated.

Private Balconies and Patios:
By incorporating recessed balconies on upper floors and patios on the ground floor, the design offers privacy for residents while maintaining a visual connection with the surrounding environment. This approach balances the needs for resident privacy and neighborhood compatibility.

h. Environmentally Conscious Design Features

Sustainable Landscaping Choices:
Drought-resistant, native plant species are prioritized in the landscaping design, reducing water usage and supporting Peoria's environmental initiatives. These choices create a low-maintenance yet lush landscape, consistent with sustainable design principles.

Energy-Efficient Lighting:
Outdoor lighting is designed with energy efficiency in mind, using fixtures that reduce light pollution and avoid disrupting adjacent residential areas. The lighting design focuses on resident safety while minimizing its impact on neighboring properties.

Conclusion: These unique design considerations not only meet but exceed zoning ordinance requirements, creating a development that is aesthetically pleasing, environmentally conscious, and seamlessly integrated with the surrounding residential and community spaces. This thoughtful design fosters compatibility with adjoining developments, enhancing neighborhood cohesion and resident quality of life.

6. Provide general site information and describe unusual physical features or characteristics of the site which present opportunities or constraints for development.

General Site Information:
The proposed development site is a 4.761-acre parcel located at the northeast corner of 87th Avenue and Northern Avenue in Peoria, Arizona. It is a long, narrow piece of undeveloped land bordered by various land uses, including residential neighborhoods to the north and west, commercial and industrial properties to the east, and shopping centers to the west and south. The property benefits from direct access to major transportation routes, with SR101 one mile west and Grand Avenue approximately two miles east.

Unusual Physical Features and Characteristics of the Site:

a. Long, Narrow Shape
   - Opportunity: The elongated shape of the property creates a unique opportunity for a linear residential community layout, with buildings positioned to maximize privacy and separation from adjacent properties. This shape supports a design that feels spacious and connected while providing a natural transition between surrounding commercial and residential zones.
   - Constraint: The narrowness of the parcel can make it challenging to accommodate traditional development patterns, such as large parking lots or extensive open spaces, which require width. This necessitates careful site planning to optimize space usage and meet required parking and amenity standards.

b. Proximity to Major Roadways
   - Opportunity: Being adjacent to Northern Avenue, a Limited Access Parkway, the site benefits from excellent access to Peoria's commercial and employment hubs. This location is attractive to potential residents,

especially young professionals, due to its connectivity and convenience for commuting.

Constraint: The proximity to a busy roadway presents potential noise and traffic considerations for residents. This requires thoughtful placement of buildings, landscaping buffers, and noise mitigation strategies to create a comfortable living environment.

c. Existing 6-Foot Masonry Wall Along Existing Neighborhood to the West

Opportunity: The existing wall along the north boundary provides immediate privacy for the adjacent single-family homes and offers a natural buffer that can be integrated into the development's landscape plan. This buffer enables a smoother transition between the new apartments and neighboring residences, enhancing compatibility.

Constraint: The wall limits direct access or connectivity with the neighboring residential area, making the development a more self-contained community. This layout can, however, be offset by emphasizing pedestrian pathways within the site that connect to nearby trails and amenities.

d. Dedicated Right-of-Way for Future 87th Avenue Widening

Opportunity: The planned dedication of 35 feet of right-of-way for the future widening of 87th Avenue provides a generous setback between the development and the adjacent properties. This setback contributes to noise reduction, enhances privacy, and provides an opportunity to incorporate green landscaping and pedestrian pathways along the frontage.

Constraint: The right-of-way dedication reduces the buildable area, requiring efficient site planning to fit all necessary components, such as residential units, parking, and amenities, within the remaining footprint.

e. Proximity to Nearby Parks and Trails

Opportunity: The site is within a short distance of Pioneer Community Park and a regional bicycle trail, making it ideally situated for promoting active lifestyles and outdoor recreation. These nearby amenities enhance the property's appeal, aligning well with Peoria's General Plan emphasis on "active living."

Constraint: With such prominent nearby public amenities, the development must be designed to facilitate access while maintaining sufficient onsite amenities to ensure residents feel their community is complete.

f. Existing Utility and Infrastructure Connections

Opportunity: The site benefits from nearby utility infrastructure, which simplifies connections and reduces initial development costs. Its location near established commercial and residential areas also ensures that utilities are accessible and compatible with multi-family residential requirements.

Constraint: Certain areas within the site might require modification or reinforcement of existing infrastructure to support the proposed density and residential use, adding to initial development planning considerations.

Conclusion: These physical characteristics present both opportunities and challenges for the development. The long, narrow layout, proximity to major transportation routes, and existing privacy wall offer unique advantages, allowing for a design that maximizes connectivity and compatibility with surrounding land uses. However, the constraints posed by the site's shape, road adjacency, and right-of-way dedication require careful planning to optimize space, provide privacy, and create a cohesive, well-integrated residential community.

7. Other than the requested zoning approval, what other approval processes are required to accomplish the development proposal, i.e., variances, site plans, subdivision plats, conditional use permits, comprehensive master plan amendments, State or County licensing or permits, etc.?

   To accomplish the development proposal for this multi-family residential project in Peoria, Arizona, several additional approval processes and permits may be required beyond the requested zoning change. These include:

   a. Site Plan Approval
      Description: After rezoning approval, a detailed site plan must be submitted to the City of Peoria's planning department for review and approval. This process will involve the assessment of layout, landscaping, parking, building placement, and pedestrian connectivity to ensure compliance with local development standards and compatibility with surrounding areas.
      Purpose: Site plan approval ensures that the project adheres to design guidelines, public safety requirements, and neighborhood compatibility.

   b. Conditional Use Permit (if required)
      Description: If any aspect of the development includes uses or features that are not permitted by right in the final zoning designation, a Conditional Use Permit (CUP) might be necessary. Examples could include unique amenity structures, certain parking arrangements, or accessory uses not directly specified under multi-family zoning.
      Purpose: A CUP allows for special uses or conditions that are compatible but require additional review to assess their impact on surrounding properties.

   c. Variances (if applicable)
      Description: Should the development design require deviations from zoning ordinance standards—such as adjustments in building height, setbacks, or parking configurations—a variance application would need to be submitted to the city's Board of Adjustment.
      Purpose: Variances provide flexibility in site development where strict compliance with zoning standards may pose a challenge, particularly given the site's narrow shape and unique layout requirements.

   d. Subdivision Plat (if applicable)
      Description: If the site needs to be subdivided or reconfigured to accommodate the new layout, a subdivision plat would need to be submitted for review and approval. Although this is typically more common for larger developments, it may apply if adjustments to parcel boundaries or easements are necessary.
      Purpose: The subdivision platting process ensures that new lot configurations meet municipal codes and are suitable for the proposed development.

e. Building Permits
   Description: Before construction begins, the project must secure building permits from the City of Peoria's building department. This includes permits for grading, foundations, structural components, plumbing, electrical, mechanical systems, and landscaping.
   Purpose: Building permits ensure that all construction activities meet local and state building codes, safety standards, and environmental regulations.

f. Landscape and Irrigation Plan Approval
   Description: As part of the site development, a detailed landscape and irrigation plan will likely need approval to ensure it meets Peoria's water conservation requirements and landscaping standards.
   Purpose: Landscape approval ensures that the project aligns with city standards for greenery, shading, and water-efficient landscaping, enhancing site aesthetics and environmental sustainability.

g. Comprehensive Master Plan Amendment (if required)
   Description: If the project is found to be inconsistent with Peoria's Comprehensive Master Plan or if changes to the land use category are needed to accommodate the zoning request, a comprehensive plan amendment may be required.
   Purpose: Master Plan amendments address larger-scale land use or density changes, ensuring that the project aligns with Peoria's long-term vision for growth and development.

h. County and State Environmental Permits
   Description: Environmental permits may be required if the project impacts protected habitats, involves significant grading, or requires stormwater management under county or state environmental regulations.
   Purpose: These permits ensure that the project complies with environmental protection standards, managing impacts on water quality, soil erosion, and local ecosystems.

i. Right-of-Way Dedication and Infrastructure Agreements
   Description: Due to the planned widening of 87th Avenue, a right-of-way dedication will be required. Additionally, agreements may be needed for any infrastructure improvements, including utility connections, roadway enhancements, and sidewalk extensions.
   Purpose: These approvals ensure that public infrastructure meets city standards and supports both the development and surrounding community.

j. Public Safety and Fire Department Review
   Description: The fire department and public safety agencies may review the development for compliance with emergency access, hydrant placement, and fire safety measures.
   Purpose: This review ensures the project has sufficient fire access, safety measures, and emergency response capabilities to protect residents and surrounding areas.

k. State or County Licensing for Certain Amenities (if applicable)
   Description: If the project includes certain amenities, such as a swimming pool or fitness center, it may require county health department permits or state licensing.
   Purpose: Licensing for amenities ensures that all facilities meet health and safety codes, protecting residents and visitors.

Conclusion: By following these processes, the development will align with local, county, and state regulations, creating a well-integrated and compliant project that contributes positively to the community.

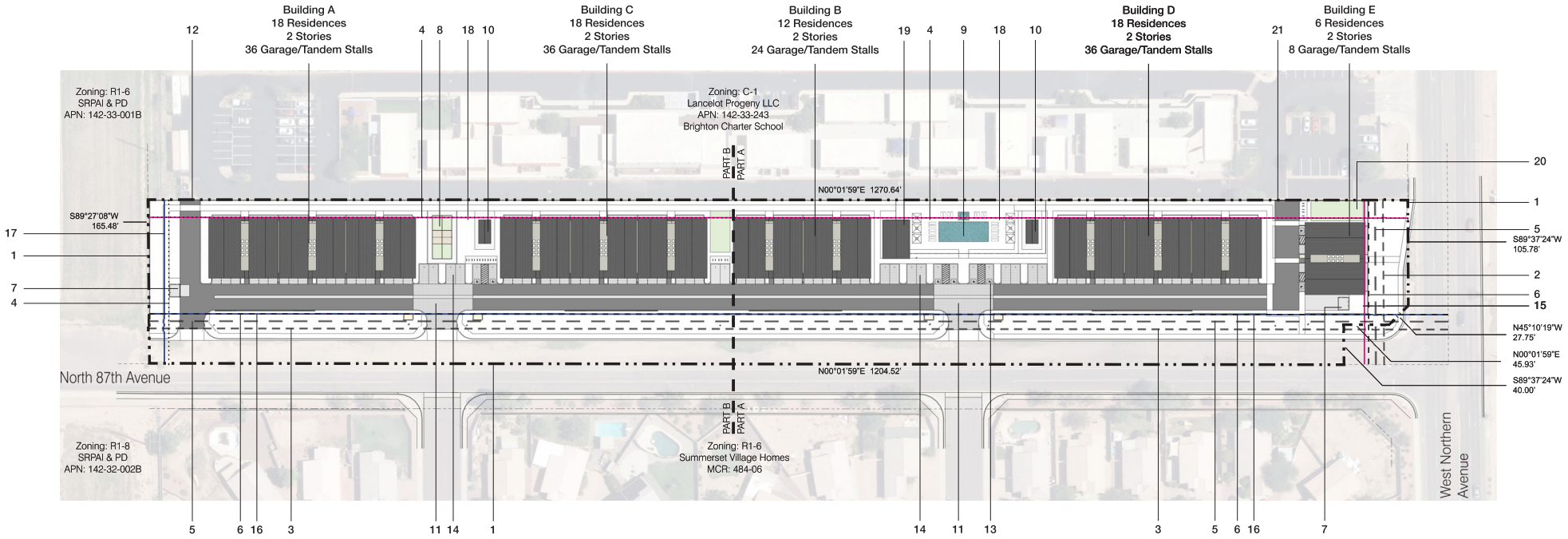
Zoning Map:

Parcel Numbers:
142-33-006X

Existing Zoning: C-1 (Convenience Commercial)
Proposed Zoning: RM-1 (Multi-Family Residential)

Exhibit 6 - Rezoning Narrative

Exhibit 7 - Conceptual Site Plan



Site Data:

Existing Zoning:	C-1 (Convenience Commercial
Proposed Zoning:	RM-1 (Multi-Family Residential)
Gross Site Area: (per ALTA survey)	± 4.761 acres (207,393 sf)
Net Site Area: (excludes dedicated ROW adjustments)	162,290 sf

Multi-Family Development Standards Table:

	Allowed	Provided	
Max. Lot Coverage	50%	23%	Building Footprint: 47,728 sf Gross Lot Size: 207,393 sf
Max. Density	18 du/ac	15 du/ac	(72du / 4.761ac)
Max. Principal Building Height *30' within 30' of residential then 1:3 step back up to 48' max	48'*	30'	
Min. Front Building Setback	20'	20'	
Min. Rear Building Setback	15'	15'	
Min. Side Building Setback	20'	20'	
Min. Corner Side Building Setback	15'	15'	

Parking Calculation:

One Bedroom: (48 units) x 1.5=	
72 Spaces Required	**96 Spaces Provided** 50 Garage/Covered 46 Tandem
Two Bedroom: (24 units) x 2.0=	
48 Spaces Required	**48 Spaces Provided** 24 Garage/Covered 24 Tandem
Guest: (72 units) / 10=	
7.0 Spaces Required	**12 Spaces Provided**
Leasing Office: (889 SF) / 200 =	
4 Spaces Required	**4 Spaces Provided**
131 Total Spaces Required	**160 Total Spaces Provided**
ADA Parking:(2% of each type)	
6 Spaces Required	**10 Van Spaces Provided**
2 Garage/Covered	2 Garage/Covered
2 Tandem	2 Tandem
1 Guest	5 Guest
1 Office	1 Office

Keynotes:

1. Property Line per A.L.T.A. Survey
2. 65' Right-of-Way Adjustment
3. 35' Right-of-Way Adjustment
4. 20' Landscape and/or Land-use Buffer
5. 8' New Public Utility Easement
6. 15' Collector/Major Arterial Street Frontage Area
7. Refuse Enclosure
8. Pickle Ball / Amenity Courts
9. Gated Amenity Pool + Jacuzzi
10. Community Outdoor Grill Area + Ramada, (Ref: Ramada + Grill Area Elevations and Plan)
11. Primary Entry
12. Brighton Charter School Vehicle Access
13. 20'x16' ADA Accessible Parking
14. Guest / Leasing Office Parking
15. 20' Front Building Setback
16. 15' Corner Side Building Setback
17. 15' Rear Building Setback
18. 20' Side Building Setback
19. Leasing Office
20. Dog Run
21. Gated Fire Department only Access

Legend:

- Property Line
- Right-of-Way
- Easement
- Street Frontage
- 20' Landscape and/or Land Use Buffer
- 15' Building Setback
- 20' Building Setback

Vicinity Map

NOT TO SCALE

N

Scale: 1" = 100' - 0"

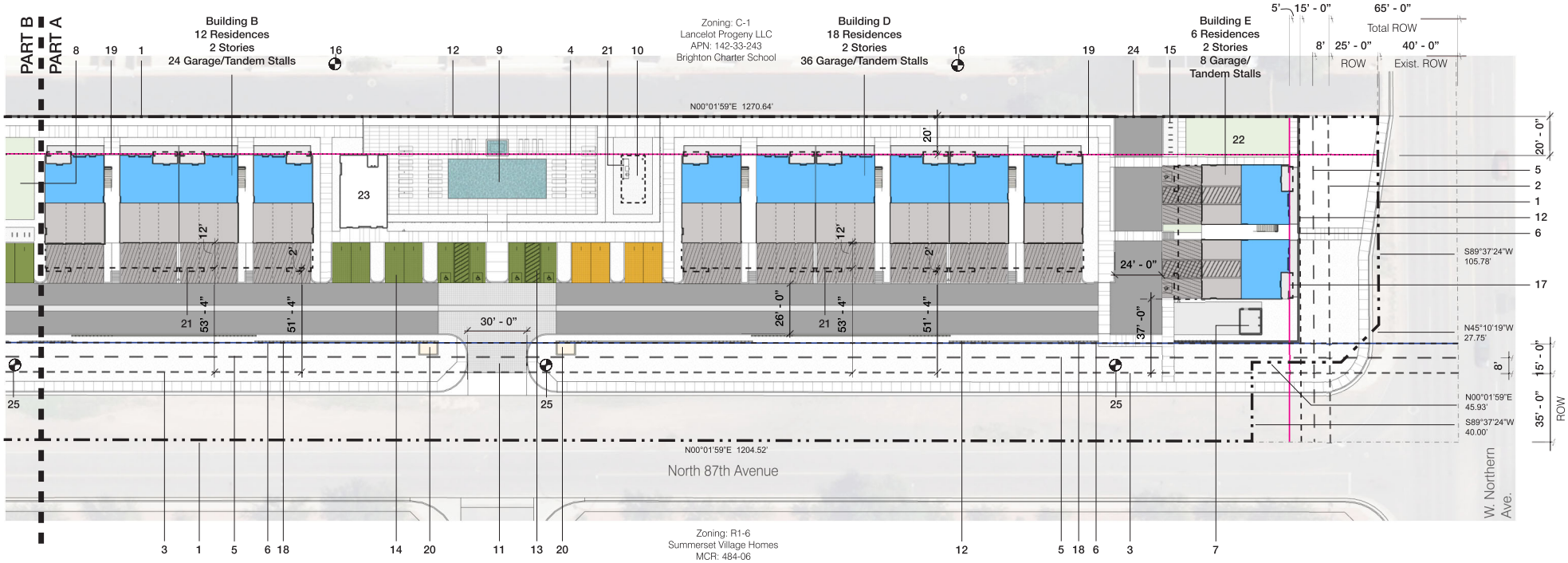
0 50 100

S2 - Site Plan

Peoria Residential | APN: 142-33-006X
West Northern Ave & North 87th Ave
Peoria, AZ | July 18, 2024
Case#SP24-20

CIRCLE WEST ARCHITECTS
500 East Thomas Road
Suite 2C
Phoenix, Arizona 85012
480.609.1000

Northern Ave Properties, LLC
Developer/Owner
500 North 56th Street
Suite #18
Chandler, Arizona
85226



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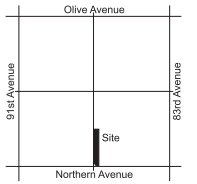
7. Refuse Enclosure
8. Pickle Ball / Amenity Courts
9. Gated Amenity Pool + Jacuzzi
10. Community Outdoor Grill Area + Ramada, (Ref: Ramada + Grill Area Elevations and Plan)
11. Primary Entry
12. Perimeter Walls
13. 20'x16' ADA Accessible Parking
14. Guest / Leasing Office Parking
15. Resident Bike Parking
16. Existing Fire Hydrant
17. 20' Front Building Setback
18. 15' Corner Side Building Setback
19. 20' Side Building Setback
20. Raised Planter
21. Line of Roof Overhang
22. Dog Run
23. Leasing Office
24. Fire Department only Gated Access
25. Proposed Fire Hydrant

Legend:

- Property Line
- Right-of-Way
- Easement
- Street Frontage
- 20' Landscape Buffer
- 15' Building Setback
- 20' Building Setback
- One Bedroom Units
- Garage w/ std. 20'x9.5'stalls
- Tandem Parking 20'x9.5'
- Leasing Office/Guest Spaces 20'x9.5' u.n.o.
- One-Bedroom Parking Stalls w/ std. 20'x9.5'stalls
- Fire Hydrant

Vicinity Map

NOT TO SCALE



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Scale: 1" = 50' - 0"

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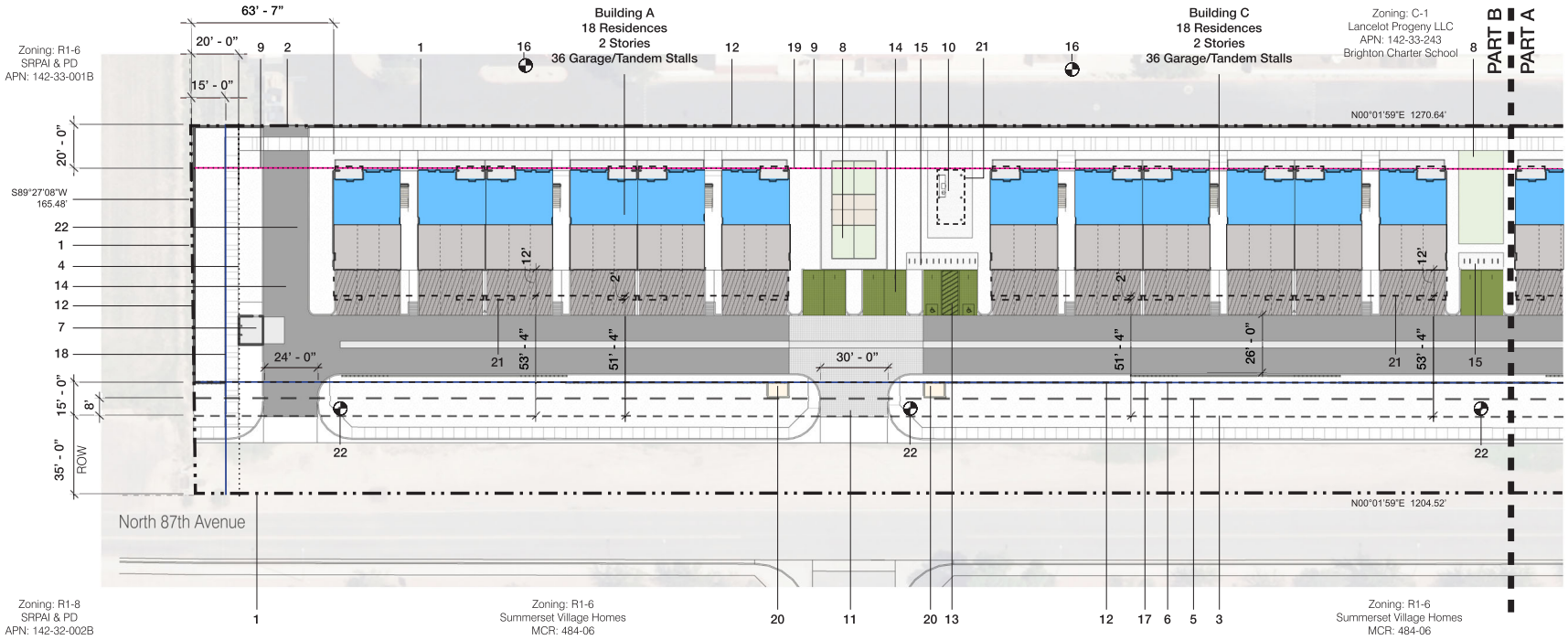
S2 - Site Plan
Part A - First Floor

Peoria Residential | APN: 142-33-006X
West Northern Ave & North 87th Ave
Peoria, AZ | July 18, 2024
Case#SP24-20

CIRCLE WEST ARCHITECTS
500 East Thomas Road
Suite 2C
Phoenix, Arizona 85012
480.609.1000

Northern Ave Properties, LLC
Developer/Owner
500 North 56th Street
Suite #18
Chandler, Arizona
85226



Site Data:

Existing Zoning:	C-1 (Convenience Commercial
Proposed Zoning:	RM-1 (Multi-Family Residential)
Gross Site Area: (per ALTA survey)	± 4.761 acres (207,393 sf)
Net Site Area: (excludes dedicated ROW adjustments)	162,290 sf

Multi-Family Development Standards Table:

	Allowed	Provided	
Max. Lot Coverage	50%	23%	Building Footprint: 47,728 sf Gross Lot Size: 207,393 sf
Max. Density	18 du/ac	15 du/ac	(72du / 4.761ac)
Max. Principal Building Height *30' within 30' of residential then 1:3 step back up to 48' max	48'*	30'	
Min. Front Building Setback	20'	20'	
Min. Rear Building Setback	15'	15'	
Min. Side Building Setback	20'	20'	
Min. Corner Side Building Setback	15'	15'	

Parking Calculation:

One Bedroom: (48 units) x 1.5=	
72 Spaces Required	**96 Spaces Provided** 50 Garage/Covered 46 Tandem
Two Bedroom: (24 units) x 2.0=	
48 Spaces Required	**48 Spaces Provided** 24 Garage/Covered 24 Tandem
Guest: (72 units) / 10=	
7.0 Spaces Required	**12 Spaces Provided**
Leasing Office: (889 SF) / 200 =	
4 Spaces Required	**4 Spaces Provided**
131 Total Spaces Required	**160 Total Spaces Provided**
ADA Parking:(2% of each type)	
6 Spaces Required	**10 Van Spaces Provided**
2 Garage/Covered	2 Garage/Covered
2 Tandem	2 Tandem
1 Guest	5 Guest
1 Office	1 Office

Keynotes:

1. Property Line per A.L.T.A. Survey
2. Brighton Charter School Vehicle Access
3. 35' Right-of-Way Adjustment
4. 20' Landscape / Land-use Buffer
5. 8' New Public Utility Easement
6. 15' Collector/Major Arterial Street Frontage Area
7. Refuse Enclosure
8. Pickle Ball / Amenity Courts
9. 20' Landscape Buffer
10. Community Outdoor Grill Area + Ramada, (Ref: Ramada + Grill Area Elevations and Plan)
11. Primary Entry
12. Perimeter Walls
13. 20'x16' ADA Accessible Parking
14. Guest / Leasing Office Parking
15. Resident Bike Parking
16. Existing Fire Hydrant
17. 15' Corner Side Building Setback
18. 15' Rear Building Setback
19. 20' Side Building Setback
20. Raised Planter
21. Line of Roof Overhang
22. Proposed Fire Hydrant

Legend:

- Property Line
- Right-of-Way
- Easement
- Street Frontage
- Landscape and/or Land Use Buffer
- 15' Building Setback
- 20' Building Setback
- One Bedroom Units
- Garage w/ std. 20'x9.5'stalls
- Tandem Parking 20'x9.5'
- Leasing Office/Guest Spaces 20'x9.5' u.n.o.
- One-Bedroom Parking Stalls w/ std. 20'x9.5'stalls
- Fire Hydrant

Vicinity Map

NOT TO SCALE

N

Scale: 1" = 50' - 0"

0 25 50

S2 - Site Plan
Part B - First Floor

Peoria Residential | APN: 142-33-006X
West Northern Ave & North 87th Ave
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CIRCLE WEST ARCHITECTS
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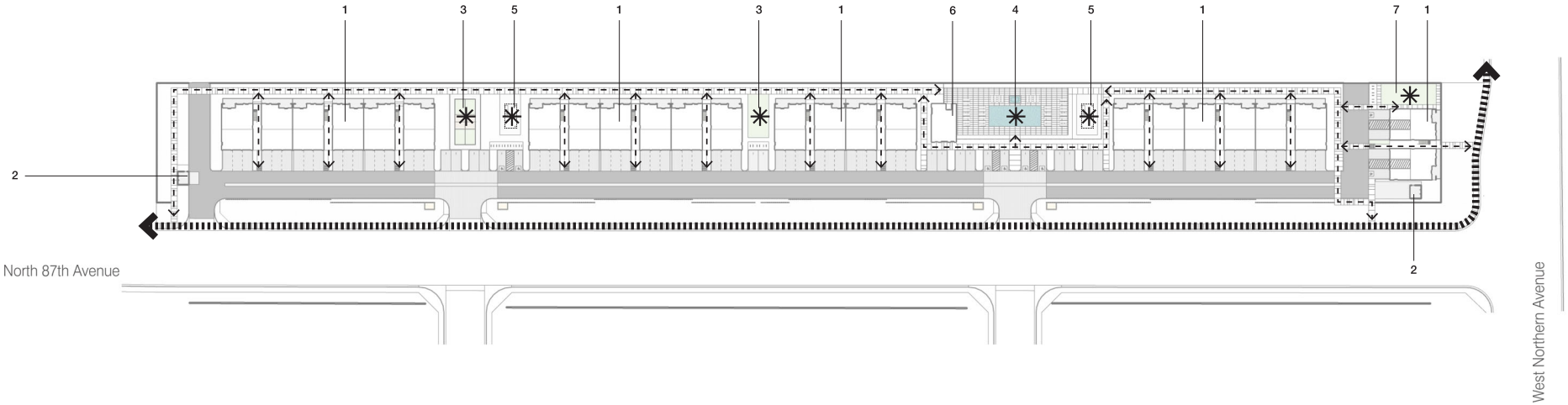

Keynotes:

1. Residences
2. Refuse Enclosure
3. Pickle Ball / Amenity Courts
4. Gated Amenity Pool + Jacuzzi
5. Community Outdoor Grill Area + Ramada, (Ref: Ramada + Grill Area Elevations and Plan)
6. Leasing Office
7. Dog Run

Legend:

- On-site internal non-vehicular pedestrian connectivity
- Off-site Pedestrian Walkways
- Amenity

N

Scale: 1" = 100' - 0"

0 50 100

S2 - Pedestrian Connectivity

Peoria Residential | APN: 142-33-006X
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Peoria, AZ | July 18, 2024
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500 East Thomas Road
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Chandler, Arizona
85226

LAW OFFICES
FRANCIS J. SLAVIN, P.C.

FRANCIS J. SLAVIN
DANIEL J. SLAVIN

2198 EAST CAMELBACK ROAD
SUITE 285
PHOENIX, ARIZONA 85016
(602)381-8700
FAX 381-1920

July 31, 2025

VIA Email to: chris.jacques@peoriaaz.gov
Mr. Chris Jacques
Planning Director, City of Peoria
9875 North 85th Avenue, First Floor
Peoria, AZ 85345

RE: AMENDED Citizen Participation Report – NE Corner of 87th Avenue and West Northern Avenue – Application Nos. GPA24-07 and Z24-07 – APN 142-33-006X – Size 4.76 Gross Acres

Dear Mr. Jacques:

Northern Ave Properties, LLC, in association with Circle West Architects, is proposing the development of "Peoria Residential," a thoughtfully designed, two-story apartment community comprising 72 units across 4.76 gross acres. The development will offer a mix of one- and two-bedroom units, promoting housing diversity in alignment with the City of Peoria's goals for quality infill development. The project incorporates intentional landscape buffering, architectural design elements that support privacy and safety, and an emphasis on community integration. This initiative will transform a 40-plus-year-vacant parcel into a vibrant residential community that enhances the neighborhood fabric.

Outreach Summary

To ensure transparency and invite public feedback, our team implemented a thorough outreach campaign. A total of 116 mailed notices were sent to property owners within 600 feet of the site—representing approximately 100 households—and 8 local homeowners associations (as provided by City staff). Additional notices were mailed to Cotton Boll Elementary School, Brighton Charter School, and Peoria High School. Furthermore, two on-site signs were posted on the subject property, detailing the date, time, and location of the neighborhood meeting. Signage was installed in advance of the meeting and remained in place per City standards.

Neighborhood Meeting

The neighborhood meeting took place on Monday, April 28, 2025, at 6:00 PM at Brighton Charter School. In total, 6 households attended (3 married couples and 3 individuals). Representatives from the City of Peoria—including Planning Department staff—and the principal of Brighton Charter School were also present.

Exhibit 8

The project team presented a detailed overview using foamcore boards featuring architectural renderings and landscape plans. A PowerPoint presentation was conducted, and attendees were invited to ask questions throughout the session. Supporting documentation including photos of posted signage and a sample notice letter is available upon request.

Summary of Community Feedback and Responses

1. **Traffic and Intersection Safety at Northern Avenue and 87th Avenue**
   - **Concerns:** Neighbors cited difficulty for southbound drivers turning left onto Northern Avenue and requested consideration of a traffic signal.
   - **Response:** A traffic impact statement was conducted by Erie & Associates, which recorded 27,270 vehicles/day on Northern Avenue and 1,997 vehicles/day on 87th Avenue. While traffic volumes do not meet the thresholds for a mid-block signal, the owner has proactively agreed to consult with the City's Engineering and Development Department to assess potential signal timing adjustments at 83rd and 91st Avenues to improve traffic gaps.
2. **Impact on Property Values**
   - **Concerns:** Residents were concerned that multifamily housing might depress nearby single-family home values.
   - **Response:** Two major academic studies—by Massachusetts Institute of Technology (2005) and the University of Utah (2021)—found no negative effect, and in some cases, a positive impact of multi-family development on surrounding home values. This is attributed to increased community investment, vibrancy, and the revitalization of underutilized properties. The owner is committed to quality construction and long-term management, ensuring that Peoria Residential is a neighborhood asset.
3. **Crime and Resident Stability**
   - **Concerns:** The transient nature of renters was perceived as a crime risk.
   - **Response:** The project will be professionally managed, with rigorous tenant screening procedures including income verification, credit history, and background checks. Projected rents of $1,500/month for 1-bedroom units suggest a tenant income threshold of $60,000/year, supporting a stable, working professional demographic. Design elements such as lighting, visibility, and secure access will enhance community safety.
4. **Occupancy and Density**
   - **Concerns:** Neighbors estimated 4 to 6 persons per 2-bedroom unit and raised concerns about over-occupancy.

- **Response:** All leases will specify maximum occupancy limits and management will monitor compliance. All vehicles must be registered with on-site management.

These steps are in place to ensure orderly and predictable community operations.

5. **Privacy for Summersett Village Residents**
   - **Concerns:** Residents were concerned about second-story balconies overlooking backyards.
   - **Response:** The project includes a 170-foot setback from Summersett Village homes across 87th Avenue, which exceeds standard requirements. A 24-foot-wide landscaped buffer along the east side of 87th Avenue with approximately 50 large trees (24" box) and existing subdivision mature trees, block walls, and right-of-way landscaping along the west side of 87th Avenue will provide multiple layers of visual screening and privacy.
6. **Student Access Through Site - AMENDED**
   - **Concerns:** Parents requested continued pedestrian access for their school-age children through the site to Brighton Charter School.
   - **Response:** We have given further consideration to this request, and have decided that we will not be providing the direct pedestrian access from our site to the adjacent Brighton Charter School, as we cannot adequately fit the access, entry, lighting, ADA requirements, security features and safety features into the current site plan and overall design. Instead, neighborhood students will be able to use the new concrete sidewalk to be installed by the owner along the east side of 87th Avenue and the north side of Northern Avenue to access Brighton Charter School.
7. **Parking Along 87th Avenue**
   - **Concerns:** Residents expressed concern about street parking overflow.
   - **Response:** The project provides 160 total parking stalls, including:
     - 144 stalls for residents (2.0 per unit average across 1- and 2-bedroom units),
     - 16 stalls designated for guest, ADA, and leasing needs.

   This exceeds City minimum requirements. Additionally, the owner is not opposed to the City considering a parking restriction along 87th Avenue, if warranted.

Conclusion and Commitment to Ongoing Communication

Northern Ave Properties, LLC is committed to fostering a collaborative relationship with neighbors and City staff. We view this project not just as a development, but as an opportunity to enhance the neighborhood's vitality and support the City of Peoria's vision for balanced housing growth. We will continue to engage with stakeholders throughout the entitlement and construction process and welcome additional feedback and dialogue as we move forward.

We enclosed with the initial report dated May 21, 2025, copies of the Massachusetts Institute of Technology and University of Utah published reports.

Yours very truly,

[redacted]

Francis J. Slavin

cc: Sarah Dircks
Sarah.dircks@peoriaaz.gov

MIT
CENTER FOR
REAL ESTATE
HOUSING AFFORDABILITY INITIATIVE

EFFECTS OF MIXED-INCOME, MULTI-FAMILY RENTAL HOUSING DEVELOPMENTS ON SINGLE-FAMILY HOUSING VALUES

Henry O. Pollakowski
David Ritchay
Zoe Weinrobe

April 2005

Center for Real Estate
Massachusetts Institute of Technology
77 Massachusetts Avenue
Building W31-310
Cambridge, MA 02139

Exhibit 8

Acknowledgments

We would like to thank the Housing Affordability Initiative at the MIT Center for Real Estate, Mass Housing, and Joe Mullins for financial support. We also thank Lynn Fisher, David Geltner, Andrew Jakabovics, Langley C. Keyes, and W. Tod McGrath for helpful suggestions and comments. Karl "Chip" Case, Aaron Gornstein, and Clark Ziegler provided useful comments on an earlier version. We are, however, solely responsible for the contents.

Contents

Exhibit 8

EXECUTIVE SUMMARY

Do mixed-income, high-density rental developments negatively impact nearby single-family property values? This question has been at the core of the controversies surrounding mixed-income housing in suburban Boston communities. Chapter 40B, enacted through the Comprehensive Permit Law and Anti-Snob Zoning Act, is a Massachusetts statute that enables developers to obtain state-authorized comprehensive permits in municipalities that are not in compliance with state affordability criteria: If less than ten percent of a municipality's housing stock is defined as affordable, developers with comprehensive permits can build developments that override local zoning regulations. Because zoning rules are viewed by some as regulatory mechanisms that protect property values by controlling local land use, the ability of developers to circumvent such regulations has given rise to fears that the values of homes surrounding these mixed-income, multi-family developments will decline. These fears are considered one of the strongest motives for residents' opposition to proposed 40B developments. But are such fears justified by the facts?

We designed a rigorous research methodology to examine the impact over time of introducing a large-scale, mixed-income, multi-family rental development into a neighborhood of single-family houses. We developed strict selection criteria that identified seven 40B developments located in six communities in the Boston metropolitan area—Littleton, Mansfield, Norwood, Randolph, Wilmington, and Woburn. These case studies represent some of the most dense and controversial Chapter 40B developments in Greater Boston, in other words, a suburban homeowner's worst nightmare.

After selecting the cases, we conservatively established impact areas, taking care to include only the single-family homes mostly likely to be affected by each respective 40B development. Our process for identifying impact areas essentially restricted the boundaries to abutters and immediate neighbors of each of the seven developments. The purpose of establishing such impact areas was to objectively measure single-family home price changes over time as 40B developments were

Exhibit 8

announced, approved, constructed, occupied, and integrated into the resident communities.

We then examined the relationship between the large-scale, high-density, mixed-income rental developments and single-family home values. Using hedonic modeling to create comparative house price indexes for each impact area and an appropriate control area (the remainder of the host community) determined how home values had changed over time within the impact and control areas. As will be demonstrated in the report, the results in all seven case study towns lead us to conclude that the introduction of large-scale, high-density mixed-income rental developments in single-family neighborhoods *does not* affect the value of surrounding homes. The fear of potential asset-value loss among suburban homeowners is misplaced.

CASE SELECTION

Our methodology was designed to ensure that our study would identify any relationship between the introduction of a large rental development and single-family house prices. First, we chose to limit our selection to projects within the Greater Boston region. Second, the projects were required to have received their comprehensive permit and have been fully developed between the mid-1980s and 2000. Third, we limited the selection to multi-family, mixed-income rental developments. Last, we generally selected larger developments that were very dissimilar in size, bulk, form, and density from the surrounding community. Our hypothesis was that these types of developments would be the most likely to impact the values of neighboring single-family houses. Two of the most controversial 40B projects in the study, Olde Derby Village and Kimball Court, are shown below (Figure 1).

Given that we wished to test whether these projects would adversely impact neighboring property values, it was necessary to construct detailed maps of the projects and their surroundings. For this step, we built digital maps that identified streets, rivers, open space, zoning, and land use designations. We analyzed these maps using Geographic Information Systems (GIS) technology to assure that the developments were not located at the edge of the town and were sited in residential neighborhoods. Additionally, we evaluated the siting of potential projects using aerial photographs in order to obtain a better sense of the degree to which projects were integrated into residential neighborhoods. The results of this analysis were striking: We found the overwhelming majority of potential case studies were either sited at the edges of towns or cut off from the nearest

community by large amounts of open space, interstate highways, rail corridors, or industrial and manufacturing uses. This step considerably reduced the number of potential case studies appropriate for more rigorous analysis.

Finally, we made site visits to each of the remaining potential projects. This exercise was instrumental in determining whether a project was actually integrated with the community. We also met with planners, building inspectors, assessors, and GIS specialists in order to obtain a better sense of the neighborhood context for each of the developments.

SELECTED SITES

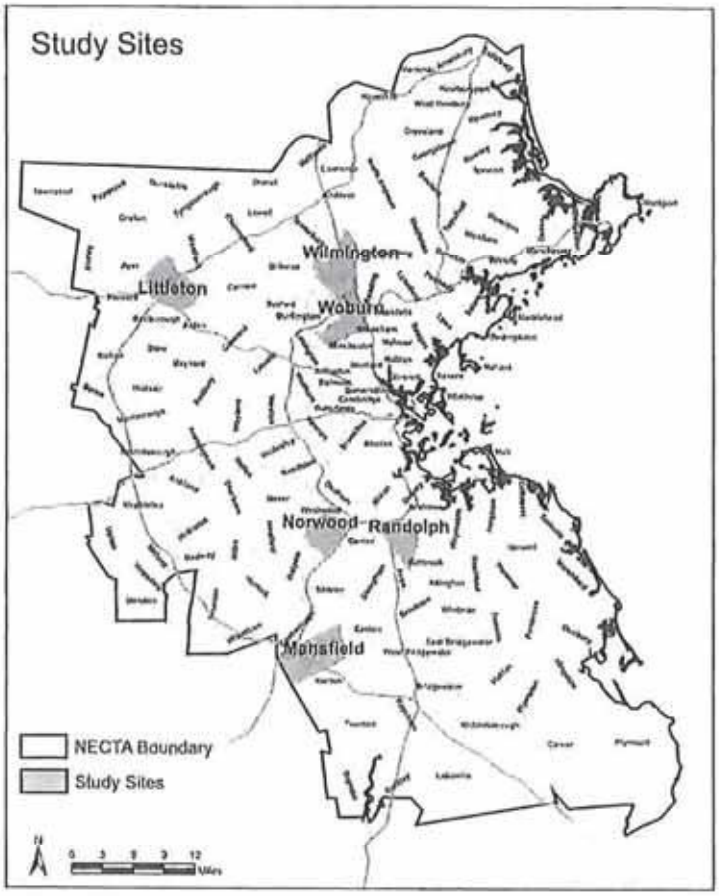
The selection process identified seven projects that are, in most cases, larger and denser than the typical 40B development. Our intention in choosing large multi-family rental projects was to find developments with the highest likelihood of creating negative impacts on the surrounding neighborhood. It could be argued that the projects selected as case studies are the types of developments that suburbanites fear most. If there were ever a development that would cause a negative impact on surrounding property values, it would be one of the large, dense developments examined in this study.

Figure 1. Two Controversial 40B Projects

Olde Derby Village, Norwood (top) and Kimball Court, Woburn (bottom)

Exhibit 8

Figure 2. Towns with Study Sites



As can be seen by Figure 2, the seven developments in the study are dispersed throughout the greater Boston metropolitan area. Woburn is bisected by Route 125/Interstate 95 northwest of Boston. Wilmington borders Woburn to the north along I-93. Littleton is further northwest of the city at the junction of Route 2 and I-495. Norwood and Randolph are south of Boston along the southern section of I-128. Finally, Mansfield is on the southwest edge of the region at the junction of I-95 and I-495.

Table 1 details the characteristics of each project including its location, developer, size, the number and percentage of affordable units, density, year permitted and completed, and comprehensive permit approval body.

IMPACT AREA DESIGNATION

The impact area for each case study is intended to represent the neighborhood within which the development is located. The single-family houses within this designation are the homes that can most likely be expected to be impacted by a large, dense development. For properties to be included in the impact area they must be either (1) direct abutters, (2) part of a contiguous network of streets radiating from the site, (3) in the direct line-of-sight of the development, or (4) adjacent to open space connections, via playing fields and dedicated walking or bike paths.

Table 1. Study Sites—Detailed Statistics

Development	Location	Developer	Total Units	Affordable Units	% Afford-able	Density (units/ acre)	Year Permit-ted	Year Com-pleted	Approval Body
Littleton Green	Littleton	Dementian Guschov	24	24	100%	10.0	1986	1987	Board of Appeals
Pond Side at Littleton	Littleton	First Littleton LP/State Street Development	90	32	35.6%	9.0	1987	1989	Mediation: ZBA, HAC, Developer
Mansfield Depot I/II	Mansfield	Keith Development	245	71	29.0%	16.6	1986 1987	1988 1989	Mediation: ZBA, HAC, Developer
Olde Derby Village	Norwood	Wilson Street Trust	193	35	25.2%	15.4	1985	1986	Superior Court
Liberty Place	Randolph	Liberty Place Associates	107	27	25.2%	9.2	1987	1989	Board of Appeals
Avalon Oaks	Wilmington	AvalonBay[1]	204	41	20.1%	9.1	1997	1999	MA Appeals Court
Kimball Court Apartments (I, II, III)	Woburn	Joseph Mullins	525	127	24.2%	19.3	1985 1989 1999	1988 1990 2002	MA Appeals Court

1. Initial permit request initiated by Wilmington Arboretum.

Exhibit 8

These criteria define an area where houses are more likely to be negatively impacted from the development than the municipality at large.

Ultimately, impact areas were determined on a case-by-case basis. It would have been inappropriate to apply a generic test such as drawing an arbitrary distance radius around the development capturing all the homes in the area. Our decisions were informed by analyses of zoning and land use maps, aerial photographs, road atlases, and site visits. Most importantly, we held discussions with town planners, building inspectors, tax assessors, GIS specialists, and town managers in order to gain their perspective of neighborhood impact of each development. In almost every case, these discussions reduced the size of our preliminary impact area. This study's careful and conservative treatment of each impact area limited its boundary to just slightly beyond the direct abutters of each development. Figure 3 shows photographs of the impact areas for three of the case studies. The top left, top right, and bottom right photographs were taken from the developments looking out to abutting properties. The bottom left photo was taken from an adjacent street looking into the development from the surrounding neighborhood. As can be seen below, all of these homes have direct sight lines into the developments and the projects are truly embedded in their neighborhoods. The houses deemed to be at the greatest risk of being affected by the mixed-income, multi-family development were included in the defined impact area for each

Figure 3. Impact Area Photographs

Kimball Court Apartments (Top Left), and Avalon Oaks (Top Right and Bottom)

development. The balance of the single-family houses in each town formed the control group.

The few related studies examining the relationship between affordable housing and residential property value that have been conducted in other parts of the US often define their impact areas as contiguous neighborhood areas extending between one-quarter mile and one-half mile from the site in question. This convention is not readily adaptable to our study or Boston's suburban metropolitan area. The former studies examined much more densely developed neighborhood areas comprised of a continuous urban fabric. In suburban Boston, however, an impact area dissolves quickly due to the large lot sizes and irregular street grids.

In addition, previous studies have typically not been longitudinal. That is, they attempt to discern property value effects at a single point in time. Following neighborhood property values over time is a much more powerful tool.

HEDONIC METHODOLOGY

Our methodology draws from the considerable body of spatial and longitudinal research in urban and housing economics. We used hedonic modeling techniques to create quality-controlled sales price indexes for both the impact area and control area (the remainder of single-family homes in that town). Hedonic modeling is based on the assumption that home buyers assign quantifiable values to the individual characteristics that make up a house (e.g., size, bathrooms, lot size). Our models estimate both the contributions to value of the characteristics of a house and the variations in value that occur over time. This allows us to "price" a typical house over time. We have isolated time in the equation to see how house prices within the impact areas move as affordable housing developments are announced, built, and occupied. That is, we build and compare house price indexes for the impact and control areas to determine if house prices within the impact areas were affected by the introduction of large, dense rental housing developments. By considering both spatial and longitudinal house price variation, we provide a comprehensive look at the micro-level valuation impacts associated with such development.

DATA AND MODEL SPECIFICATION

This study used sales transaction data for single-family houses. We obtained records for about 36,000 transactions between 1982 and 2003. In order to use transaction data in hedonic

Exhibit 8

modeling, the records must contain structural attributes of the house in addition to the sales price and the sale date. All the requisite information is not compiled by one agency in a uniform format. Transaction data including address, sales price, date, buyer, seller, and mortgage amount are collected by the Registries of Deeds in Massachusetts. Records containing information pertaining to property attributes are maintained by local municipal assessors. We purchased data from a third party vender, The Warren Group, to bridge the gap between registries' and assessors' records.

Drawing on the relevant economic literature, and guided by the availability of transaction data for individual houses, appropriate hedonic models were constructed for each case. In particular, thorough analyses of descriptive statistics were undertaken to construct appropriate explanatory variables.

The variables we included are all considered to be strong determinants of price. All of our models contain a combination of the following explanatory variables: house size, lot size, number of bedrooms, number of bathrooms, and the year the house was built. Our hedonic models also include explanatory variables to represent time. These allow us to measure the "effect" of the passage of time, while holding constant the characteristics of the house.[2]

For each of our seven cases, separate hedonic equations were constructed and estimated for both the control area and impact area. Using these results, we were able to "price" a typical house in each group over time. Comparisons of these price paths allowed us to see whether prices in an impact area deviated from those in a control area.

ANALYSIS PERIOD

Housing markets are very complex and information is absorbed differentially over time. As such, it is difficult to isolate the impact any one event has on sales price. The best way to capture the influence of an event is to observe impact area price paths or trends before, during, and after the event and look for substantial variations from a control path. We created house sales price indexes that begin before comprehensive permit approval and that extend beyond the initial occupancy of the projects. The twenty-year length of this study (1983-2003) provided a continuous time path that included cyclical changes in the larger market.

The analysis period for each development is designed to include the years in which the influence of the development was strongest. There are many competing factors affecting

sales price of single-family homes, and as time passes after the introduction of a large, dense development, other factors may dilute its influence. The length of each analysis period varies slightly as a function of the development process. Generally, the analysis period is three years long, beginning with comprehensive permit approval and ending the year the project was placed in service.

EMPIRICAL RESULTS—KIMBALL COURT APARTMENTS, WOBURN

For the purposes of this Executive Summary, we will give a thorough description of only one of the case studies, Kimball Court Apartments in Woburn. It is the largest development in our study and it is remarkably different from, and out of scale with, the surrounding neighborhood. As such, we might expect this development to be the most likely to affect single-family house prices.

The City of Woburn has seen not one but *three* phases of the Kimball Court housing development. All phases were permitted using Chapter 40B, and each phase has a separate analysis period. The three analysis periods are not all the same length (differences are related to the construction and development timeline of each phase) but the impact area and the control area are the same for all phases.

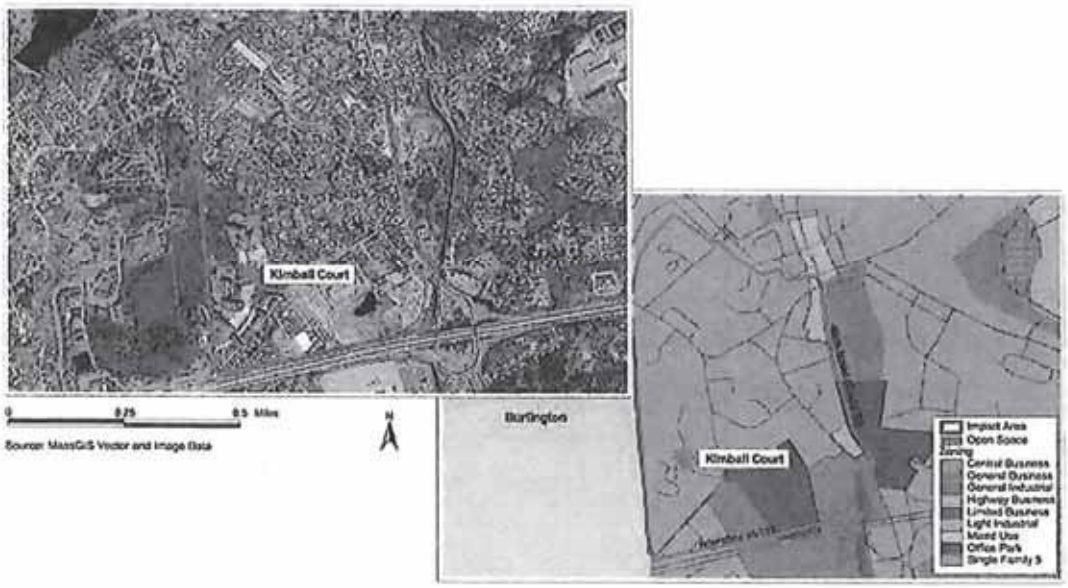
IMPACT AREA

Kimball Court is located on the western edge of Woburn adjacent to the Burlington border. We have only considered the single-family homes in Woburn as part of the impact area. The boundary is rectangular shaped with three definitive edges formed by Burlington to the west, Route 128 to the south, and Main Street on the east. The northern edge is marked where Merrimac Street intersects Main Street and winds west through residential streets to where Pearl Street crosses into Burlington. The Kimball Court impact area is one of the largest in the study, in part because the development is so dominating that its presence radiates deeply into the residential neighborhood. The topography of the impact area slopes from the north and east toward Kimball Court. The grade affords houses close to Main Street and farther north clear site lines of the seven-story buildings.

Figure 4 shows an aerial photograph and zoning map of the impact area and surrounding

Exhibit 8

Figure 4. Aerial Photograph and Zoning Map: Kimball Court, Woburn



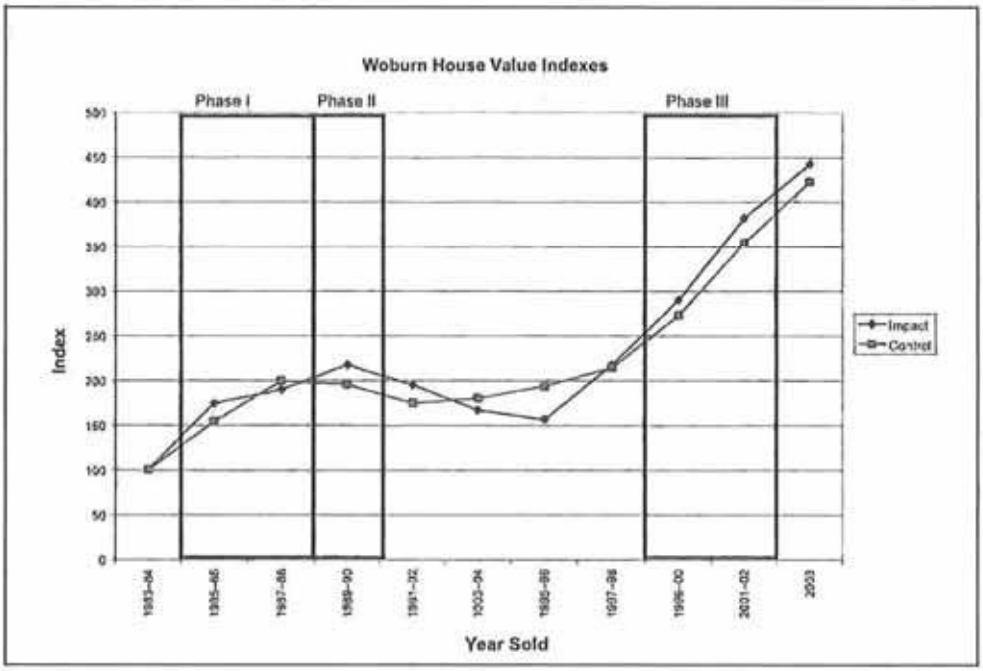
neighborhood. The photograph clearly depicts the mismatch between the form and scale of Kimball Court and neighboring single-family homes. Most of the open space adjacent to the development provides a buffer only to Burlington; Woburn residents face a sharp edge with little or no transition. The zoning map reinforces the point that Kimball Court is an island amid a single-family district. There are other non-residential uses to the south facing I-95/Route 128, but Kimball Court penetrates into the neighborhood as opposed to remaining on the periphery.

SALES PRICE INDEXES

Chart 1 shows the house price indexes for the control and impact areas. Both indexes track house price movements over time that are consistent with the Boston area's market experience. House prices rose strongly through the mid-1980's peaking in late 1988 and 1989. Prices generally declined during the early 1990s, but by 1996 the market had turned a corner and house prices rebounded sharply. Both the control area and the impact area followed the experience of the larger Boston market, with both indexes following very similar price paths.

In the years after the introduction of each Kimball Court phase, the impact area and control area experienced similar appreciation in sale price for single family homes. Over the

Chart 1. Woburn House Value Indexes



course of the entire study the compound annual growth rate for sale prices was 7.9% for the control area and 8.1% for the impact area.

PHASE I

The first phase was permitted in 1985 and completed in 1988. The appropriate analysis period using our price indexes begins at the two-year period preceding permitting (1983–84) and ends with the two-year period following completion. During this Phase I analysis period, the impact area experienced a 13.9 percent annual growth rate, slightly greater than the control area's 11.9 percent rate. (See Chart 2.) This was a turbulent period, with home prices doubling.

PHASE II

The second phase was permitted in 1989 and completed in 1990. The analysis period thus begins with 1987–88 and runs through 1991–92, the two-year period after completion. For the Phase II analysis period the impact area house values were essentially unchanged (growth rate of 0.6 percent). Over the same time period, house prices in the control area declined slightly, with an annual growth rate of -3.3 percent. House values around Kimball Court were not adversely impacted by the mixed-income, multi-family rental development.

Exhibit 8

PHASE III

The final phase was permitted in 1999 and completed in 2002. Our analysis period, therefore, runs from 1997–98 through 2003, the last year for which data were available. During the Phase III analysis period, the house values in the impact area rose 12.6 percent annually. The trend for the control area was nearly identical, with house values experiencing an average annual appreciation rate of 12.0 percent.

Overall, we see that there are no substantive differences between the two price paths. Sale prices for single-family homes in the impact and control areas moved nearly in tandem during the three development phases of Kimball Court.

CONCLUSION

To answer the question, "Do large-scale, high-density mixed-income rental developments negatively impact nearby single-family property values in suburban Boston?", we studied the relationship over time, within 8 separate communities, between single-family house prices directly impacted by such developments and those that were not. Our case selection criteria identified

Chart 2. Woburn Annual Growth Rates

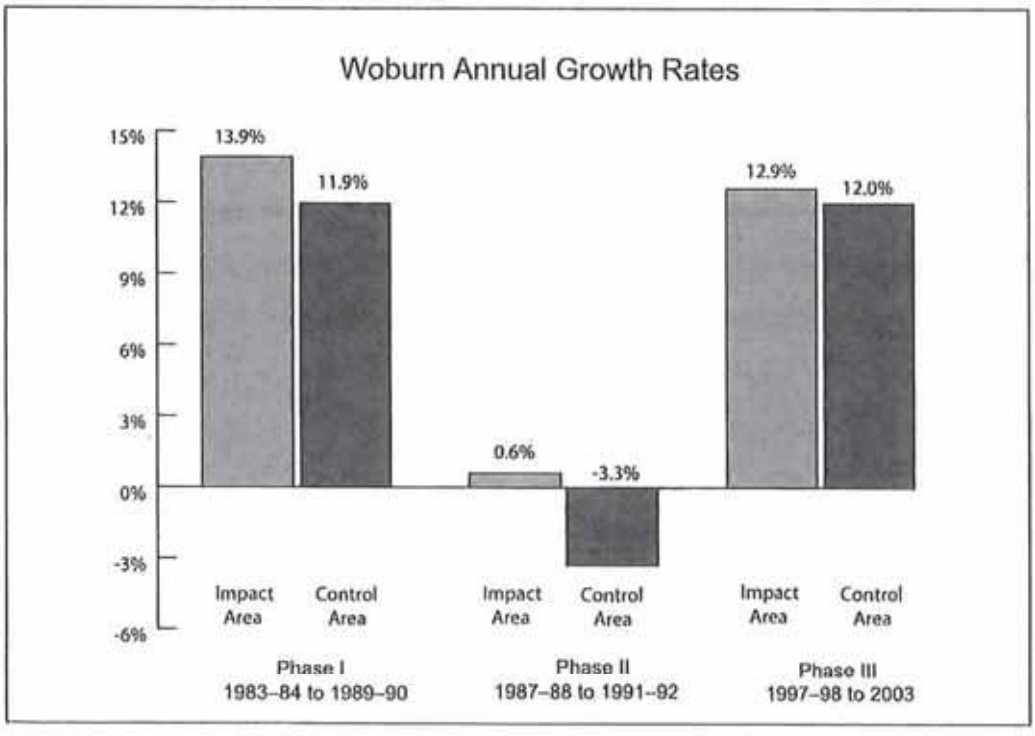


Exhibit 8

some of the worst-case scenarios of multi-family intrusion into a single-family neighborhood. As such, the developments we evaluated should have the greatest likelihood for negatively impacting adjacent residences. Moreover, given the often contentious nature of the comprehensive permit process, wherein fears of property devaulation and radical changes in neighborhood charcter were expressed, it seems readily apparent that many local residents would accept this premise.

The empirical analysis for each of the seven cases indicated that the sales price indexes for the impact areas move essentially identically with the price indexes of the control areas before, during, and after the introduction of a 40B development. We find that large, dense, multi-family rental developments made possible by chapter 40B do not negatively impact the sales price of nearby single-family homes. Our findings are transferable to similar developments in towns such as the ones studied.

Massachusetts-style mixed-income, multi-family developments need not be feared in terms of property value losses. The 40B developments considered in this study are high quality housing and, when built, represented the top of the local market. Nearly three-quarters of the housing units in our case studies are market rate. These 40B projects are not just affordable housing developments; they are market-rate multi-family rental communities incorporating an affordable component.

Our finding of the absence of negative property value effects associated with 40B developments should allay municipalities' and homeowners' fears with respect to approving high-quality projects. Given the severe shortage of affordable housing in the Boston metropolitan area, we hope the results of our research will contribute to increasing the rate at which municipalities are able to come into compliance with Massachusetts's affordable housing laws.

Exhibit 8

CHAPTER 1: INTRODUCTION

This report addresses an important question in the heated debate concerning higher-density, mixed-income development in neighborhoods comprised of single-family detached houses: Do multi-family mixed-income rental developments impact nearby single-family property values in suburban Boston communities? The fear of property value loss is often seen as a serious motive for resident opposition to higher-density mixed-income developments; in fact, there has been no research addressing this question for the Boston metropolitan area.

Our case studies are drawn from the set of developments made possible by Chapter 40B of the Massachusetts General Law, also known as the Comprehensive Permit Law and Anti-Snob Zoning Act. Chapter 40B is a Massachusetts statute that enables developers to obtain state-authorized comprehensive permits in municipalities that have not yet come in compliance with state affordability criteria. Developments seeking comprehensive permits can override local zoning regulations if (1) less than ten percent of a municipality's housing stock is defined as affordable; and (2) at least 20 or 25 percent of the housing units in the proposed development are affordable. The 20 percent figure applies when the affordable units are open to households earning less than 50 percent of the area median income (AMI), and 25 percent are set aside when the criterion is household income less than 80 percent of the AMI.

This study examines the relationship between seven predominantly large-scale, high-density, multi-family rental 40B developments and single-family house value in six communities in suburban Boston. Comparative house price indexes have been created for each development using hedonic modeling to determine whether home values decreased, stayed the same, or increased over time as the result of the 40B development. No effective differences were found between the home price indexes for the impact and control areas in all seven case studies. Property values of single-family homes adjacent to higher-density developments track values of homes that are not proximate to the high-density developments. The fear of relative decline

Exhibit 8

of nearby property values is not consistent with the empirical evidence.

The developments considered here were either "contentious" or "highly contentious." These categories relate (1) to the level of opposition the developments faced during the permitting process and (2) which entity granted the final permit decision: the town, Housing Appeals Committee, Superior Court, Appellate Court, or Supreme Judicial Court. These categories are used to show how the 40B process has been framed and re-framed over time.

The 40B process can be conceptualized in terms of three stages:

1. Introduction—The developer introduces a project to the town.
2. Debate—The permitting process negotiations and bargaining between the developer and municipality.
3. Resolution—Final permit decision.

The three-stage process emerged from our analysis of the highly contentious developments. We found that highly contentious projects often occur when towns are unprepared for new development. They either lack background for judging the costs and benefits to the town of the proposed development, or they simply do not want higher density development. Developers sometimes propose a project that may be larger than appropriate and are met with hostility. The permitting process puts the two parties at odds, setting the stage for a high-stakes, seemingly zero-sum game. In these highly contentious projects, the debate stage, which could be an opportunity for mutual revision of the development program, takes place with little negotiation or bargaining between developers and municipalities. Inevitably, it ends in a permit denial from the town. This denial leads to an extensive third stage with a long, expensive legal process. Fear of a protracted battle gives developers incentive to maximize project density in their initial proposals to compensate for anticipated extra costs, and the failure to resolve the question of density in earlier stages leaves towns with little leverage once the courts render the permit decision.

The approach to contentious developments approved as a result of 40B requirements has been reframed over time. Initially, the process was framed in such a way that resulted in a strictly dichotomous solution of receipt or non-receipt of a comprehensive permit. As a result of contentious projects, developers and towns began to re-frame how to proceed with Stage 2 of the 40B process by concluding that they could each have a better end result if they negotiated

Exhibit 8

and bargained during the permitting process. In these cases, the municipality ends up making the final permit decision in Stage 3 instead of forcing the developer to appeal the permit through the higher-stakes court system.

Non-contentious developments are possible but have been uncommon. In this report, only Littleton Green, a 24-unit age-restricted development, falls into this category. Because of the target population and small size, there was little community opposition to the development. Moreover, from the town's perspective, granting the comprehensive permit without intervention by state-level authorities who often restrict the scope of town behavior provided an opportunity for the town to negotiate for the incorporation of its own needs into the development program.

RESEARCH METHODOLOGY

This is the first study for Massachusetts of property values effects of multi-family affordable developments. We applied rigorous, state-of-the-art quantitative research methods to explore this issue as fully as possible.

We designed the research approach to focus on contentious and highly contentious development; our focus on numerous "worst-case" scenarios meant choosing developments that many would consider "most likely" to have negative impacts. The selected 40B mixed-income developments had to be: (1) located within the Boston metropolitan area, (2) permitted between the mid-1980s and 2000, (3) rental apartments, and (4) embedded in single-family residential neighborhood. This process identified a group of developments that are generally both larger and denser than the typical 40B development. It could be argued that most of the case studies are the types of developments that suburbanites fear most: the worst neighbor that one would hope to have. If there were ever projects expected to cause negative impacts on surrounding property values, it would be the large, dense developments examined in this study.

A crucial step in building the methodology was to identiy "impact areas" to use in the empirical analysis. How an impact area is defined is critical to achieving objective results. We carefully and conservatively drew impact area boundaries according to strict criteria, which resulted in impact areas that are almost exclusively abutters of the development. Impact area designation was done on a case by case basis; we did not simply apply a generic formula such as drawing a quarter- or half-mile radius around the development capturing all the homes in the

Exhibit 8

area. Our procedure included review of aerial photos, zoning maps, road maps, discussions with municipal officials, and site visits.

This study uses hedonic modeling techniques to create comparative sales price indexes for each impact area and its respective control area, defined as the remainder of single-family homes in a town. Implicit in hedonic modeling is the assumption that home buyers assign value to the individual characteristics that make up a house (e.g., size, number of bathrooms). Hedonic modeling is a statistical tool used to estimate the value of these structural attributes. Since home values change over time, our models also estimate effect of time on house value. This is allows us to use the hedonic results to price a typical house over time. We thus built and compared house price indexes for impact and control areas to determine if house prices were affected by the introduction of 40B developments.

CHAPTER 40B: A HISTORY, DESCRIPTION AND RESULTS

Massachusetts' Chapter 40B statute was written in 1969 partly in response to the form and consequence of twentieth-century suburbanization. Chapter 40B was "based on a remarkably early recognition by its proponents that exclusionary zoning practices, such as large minimum lot size requirements and bans on multi-family housing, play a significant role in driving up housing costs and causing the dominant spatial pattern of economic and racial segregation found in most metropolitan areas of the United States."[1] The law was intended to stem the tide of widespread income and recial segregation in Massachusetts by giving the state the authority to supercede local (suburban) exclusionary zoning regulations.

The 40B statute has two main objectives: housing production and household mobility. The production objective is to increase the supply of both affordable and multi-family housing in Massachusetts. The mobility objective is to provide opportunities for low- and moderate-income (particularly minority low-income) families to move out of the concentrated poverty of the inner city into suburban areas with increased educational and economic opportunities.

Specifically, General Law Chapter 40B "was enacted to provide expeditious relief from exclusionary local zoning by-laws and practices which might inhibit the construction of low and moderate income housing in the Commonwealth's cities and towns."[2] Pursuant to the statute, "a qualified builder wishing to build low or moderate income housing may file with a local board of

appeals an application for a comprehensive permit instead of filing separate applications with each local agency having jurisdiction over the project."[3] If a local zoning board denies an application for a comprehensive permit, the developer may appeal to the Housing Appeals Committee (HAC), and the HAC will review the decision "to determine whether the board's decision is reasonable and consistent with local needs."[4] The local zoning board has the burden of proving that the development will cause health, safety, environmental effects that outweigh the need for low and moderate income housing. If the HAC finds that the decision of the zoning board is not reasonable and consistent with local needs, it can direct the issuance of a comprehensive permit by the board. Chapter 40B is responsible for creating approximately 30,000 housing units to date, nearly 18,000 of which are privately owned rental housing units that are affordable to households earning at or below 80 percent of the AMI.[5]

HOUSING TRENDS

While the Boston area's population has been increasing, the number of housing units permitted annually in Massachusetts has declined significantly over the past few decades, from an average of 31,000 units per year during the 1970s to only 17,000 per year throughout the 1990s. Population and income growth and declining housing production are partly responsible for the recent major runup in housing prices and rents. Another contributory factor has been the constraints on land use throughout Boston's metropolitan area imposed by large lot single-family zoning in suburban communities.

The decline in permitting of multi-family housing is even more striking, dropping from an average of 14,000 per year in the 1970s to 1,300 per year for most of the 1990s.[6] Massachusetts ranked forty-seventh in the country in multi-family housing starts in 2002, in the same league as large rural states such as Wyoming and North Dakota with less than 10 percent of the population of Massachusetts.[7]

AFFORDABLE HOUSING TRENDS

A thorough assessment of housing affordability is the focus of a related project.[8] It is useful here, however, to note that the vast majority of Boston-area towns and cities have not met the ten percent requirement in the Chapter 40B legislation. (See Table 1.1.) Jurisdictions with low-

Exhibit 8

income neighborhoods dominate the "above 10%" group (Boston, Lawrence, Lowell, Springfield, and Worcester).

EXCLUSION AND OPPOSITION

Exclusionary zoning and local opposition in suburban communities have significantly hindered both market-rate and affordable multi-family housing production. Massachusetts has a strong tradition of home rule, and municipalities use exclusionary zoning practices such as large lot single-family zoning to effectively close the door to the suburbs for lower- and moderate income families.

Chapter 40B has been so contentious because it supercedes the control over the most significant power suburbs have—zoning. Residents resist 40B developments in their neighborhoods and expend considerable effort to block comprehensive permit applications.

The arguments presented in opposition to 40B developments are numerous and often pertain to traffic and congestion, architectural design and contextual sensitivity, property value, municipal budgeting, and environmental impacts. Many believe, however, that most citizen opposition can be distilled to a fear of neighborhood devaluation. Thus, residents are acting in what they believe to be the interest of wealth preservation by protecting the value of their homes—the asset that is most often the largest component of their investment portfolios.[10] This study examines whether this self-interest is well founded.

Table 1.1 Boston Area Municipalities Subsidized Housing Inventory

Boston Metropolitan Area Municipalities' Affordable Housing Share	Number of Municipalities	Percent
0-2.5%	24	15%
2.5-5.0%	69	45%
5.0-7.5%	33	21%
7.5-10.0%	16	10%
Above 10%	13	8%
Total	155	100%

Source: MA Dept of Housing and Community Development, Subsidized Housing Inventory, April 2002.

REPORT ORGANIZATION

In the following chapters we present our research methodology and empirically examine the impact of 40B developments on surrounding property values.

Chapter 2 describes the case selection process and identification of each impact area. Our treatment of these issues sets this study apart from most previous work.

Chapter 3 outlines the theoretical framework for using hedonic modeling and presents the specific econometric methodology used in this study.

Chapter 4 presents our empirical findings. We review the results of each case study by discussing the price indexes.

Notes

[1] Krefetz, Sharon Perlman. *The Impact and Evolution of the Massachusetts Comprehensive Permit and Zoning Appeals Act: Thirty Years of Experience with a State Legislative Effort to Overcome Exclusionary Zoning*, 22 Western New England Law Review, 2001.

[2] Stonefield, Sam. *Symposium: Affordable Housing in Suburbia: The Importance but Limited Power and Effectiveness of the State Override Tool*, 22 Western New England Law Review, 2001.

[3] *Zoning Board of Appeals of Greenfield v. Housing Appeals Committee*, 1983.

[4] *Zoning Board of Appeals of Wellesley v. Housing Appeals Committee*, 1982.

[5] *Ibid.*

[6] Heudorfer, Bonnie. *The Record on 40B: The Effectiveness of the Massachusetts Affordable Housing Zoning Law.* Citizens' Housing and Planning Association, June 2003.

[7] *Ibid.*

[8] Hindman, Matthew. "A worthy strategy for affordable housing," *The Boston Globe*, March 27, 2004.

[9] Boston Affordability Index forthcoming, May 2005.

[10] Fischel, William. *The Homevoter Hypothesis.* Cambridge, MA: Harvard University Press, 2001.

Exhibit 8

Exhibit 8

CHAPTER 2: CASE STUDIES: METHODOLOGY AND DESCRIPTION

The research methodology employed was designed to maximize the likelihood of finding a negative impact on single-family housing prices from large-scale rental developments. If negative impacts are not found for the cases studied here, it is highly unlikely that they would be found in other cases.

CASE SELECTION PROCESS

The case selection process began with an examination of developments having used Chapter 40B to obtain zoning relief. The Citizens' Housing and Planning Association (CHAPA), in their June 2003 report on the effectiveness of Chapter 40B, assembled a list of all 40B developments, totaling 491 projects. Table 2.1 is a compilation of summary statistics for the complete 40B project list. The mean project size is 58 units with a standard deviation of 60 units; the overwhelming majority of projects are 120 units or less in size. The median of the inventory list is a 37-unit project, and the most common sized project is only eight units.

This inventory of projects was broken down by a number of selection criteria to find an appropriate group of cases studies. First, only projects within the Boston metropolitan area[1] were eligible for the study. Second, the projects were required to have received their comprehensive

Table 2.1 Summary Statistics: Chapter 40B Developments

	Total Development Size
Mean	58
Median	37
Mode	8
Standard Deviation	60
Range	311
Minimum	1
Maximum	312
Count	491

Exhibit 8

permit and have been fully developed between the mid-1980s and 2000. This time frame was necessary to satisfy the data requirements for the analysis.[2] Third, we only examined multi-family rental developments, not homeownership, and projects that were mixed income. Fourth, we tried to select larger projects that were very dissimilar in size, bulk, form, and density from the surrounding community. Our intention here was to find developments with a high likelihood of engendering community opposition. We felt that these larger projects that were generally out of scale with surrounding housing would be the most likely to create a perception of negative externalities and subsequent property devaluation.

After applying these selection criteria to CHAPA's 40B inventory list, the number of possible projects to examine was significantly reduced. With this shortened list of developments, we then proceeded to identify the projects on GIS maps with data layers of streets, rivers, open space, zoning, and land use designations to assure that the developments were not located at the edge of the town and were sited in residential neighborhoods. Additionally, we used aerial photographs in order to obtain a better sense of whether projects were incorporated in residential neighborhoods or isolated. The results of this analysis were striking (but not surprising to anyone who has closely followed 40B): we found the overwhelming majority of the developments either placed at the edges of towns, or cut off from the community by large amounts of open space, interstate highways, high-tension power lines, rail corridors, and industrial and manufacturing uses.

Finally, we made site visits to all the potential projects that remained after the previous analysis was complete. This exercise was instrumental to determining whether or not a project was actually integrated with the community. We also met with planners, building inspectors, assessors, and GIS specialists in order to obtain a better sense of the neighborhood context for

Table 2.2 Summary Statistics: Subject Sites

	Total Development Size
Mean	198
Median	193
Mode	N/A
Standard Deviation	163
Range	501
Minimum	24
Maximum	525
Count	7

each of the developments. This phase of the case selection process was extremely important in determining the final list of projects for the study.

CASE STUDY SITES

We successfully identified seven mixed-income, multi-family developments that matched our criteria. Table 2.2 shows a compilation of the summary statistics for these developments. These seven projects have a median size of 193 units, and fall in a range from 24 units to 525 units. The mean size of the projects in the study is 198 units, and there is a large standard deviation of 163 units: our case projects vary substantially in size. The mean, median, standard deviation and range of our sample are all higher than the values for the entire group of 40B developments described above. This stems in part from treating each multi-phase project as a single large development.

As can be seen by the map of the study sites (Figure 2.1), the nine developments in the study are dispersed throughout the greater Boston metropolitan area. Woburn is bisected by Route 128/Interstate 95 northwest of Boston. Wilmington lies just north along Interstate 93. Littleton is further northwest of the city at the junction of routes 2 and 495. Norwood and Randolph are south of Boston along the southern section of Route 128. Finally, Mansfield is southwest of the city at the junction of Interstates 95 and 495.

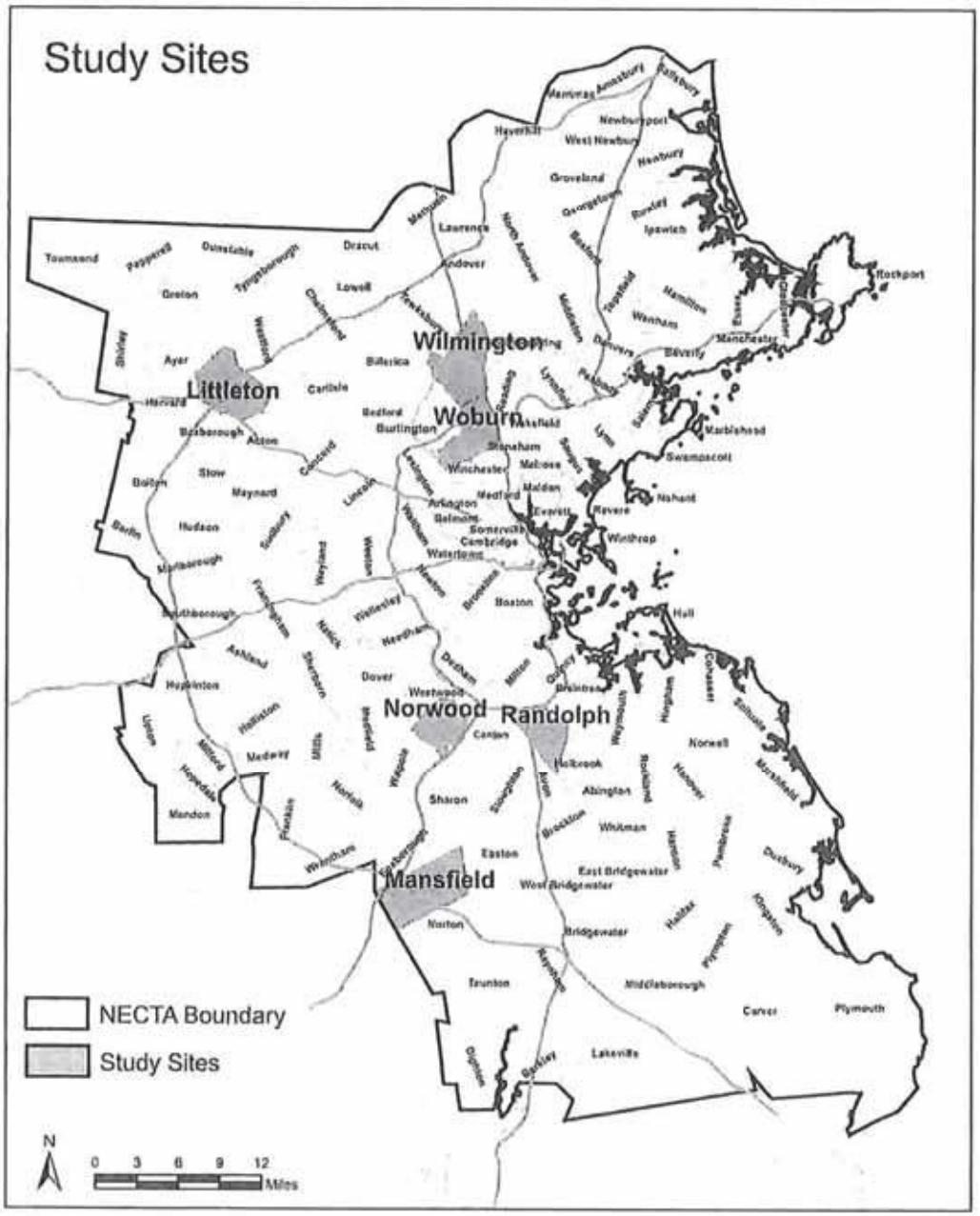
Table 2.3 presents the characteristics of the individual developments including their location, developer, total size, the number and percentage of affordable units, density, year permitted and completed, comprehensive permit approval body, and category of opposition.

IMPACT AREA DESIGNATION

The impact area for each case study is intended to represent the neighborhood within which the development is located. The single-family houses within the impact area boundary are the ones that can realistically be expected to be directly impacted by the development. Impact areas are designed to incorporate a continuous network of roads and social interaction while taking into account barriers such as geographic features and major infrastructure, zoning, and local political divisions such as school districts. A specific set of criteria were used to identify impact areas. For properties to be included in the impact area they must satisfy one of the following: (1) be direct

Exhibit 8

Figure 2.1 Map of Study Sites



abutters; (2) be part of a contiguous road network of primary and secondary streets radiating from the development site; (3) have a visual connection and direct line-of-sight to the development;

Exhibit 8

Table 2.3 Study Sites – Detailed Statistics

Development	Location	Developer	Total Units	Affordable Units	% Afford-able	Density (units/ acre)	Year Permit-ted	Year Com-pleted	Approval Body
Littleton Green	Littleton	Dementian Guschov	24	24	100%	10.0	1986	1987	Board of Appeals
Pond Side at Littleton	Littleton	First Littleton LP/State Street Development	90	32	35.6%	9.0	1987	1989	Mediation: ZBA, HAC, Developer
Mansfield Depot I/II	Mansfield	Keith Development	245	71	29.0%	16.6	1986 1987	1988 1989	Mediation: ZBA, HAC, Developer
Olde Derby Village	Norwood	Wilson Street Trust	193	35	25.2%	15.4	1985	1986	Superior Court
Liberty Place	Randolph	Liberty Place Associates	107	27	25.2%	9.2	1987	1989	Board of Appeals
Avalon Oaks	Wilmington	AvalonBay[1]	204	41	20.1%	9.1	1997	1999	MA Appeals Court
Kimball Court Apartments (I, II, III)	Woburn	Joseph Mullins	525	127	24.2%	19.3	1985 1989 1999	1988 1990 2002	MA Appeals Court

1. Initial permit request initiated by Wilmington Arboretum.

Exhibit 8

or (4) be adjacent to open space connections, via playing fields and dedicated walking or bike paths. These criteria define an area where all neighbors potentially experience a perception of an imposing new higher-density development.

Ultimately, impact areas were determined on a case-by-case basis. It would have been highly inappropriate to apply a generic test such as drawing an arbitrary distance radius around the development capturing all the homes in the area. Our decisions were informed by analyses of GIS maps, zoning, aerial photographs, road atlases, and site visits. Most importantly, we held discussions with local municipal officials such as planners, building inspectors, tax assessors, GIS specialists, and town managers in order to gain their perspective of neighborhood impact by each 40B development. In almost every case these discussions reduced the size of our preliminary impact area. This study's careful and conservative treatment of the impact area limited its boundary to slightly beyond the direct abutters of each development. Figure 2.2 shows photographs of the impact areas for three of the case studies. As can be seen in the photographs, all of these homes have direct site lines to the developments and the projects are wholly embedded in single-family home neighborhoods.

Studies examining the relationship between affordable housing and residential property

Figure 2.2 Impact Area Photographs

Top L- View from Kimball Court Apartments, Top R View from Avalon Oaks, Bottom R- Avalon Oaks, looking out on neighborhood

value that have been conducted elsewhere in the U.S. define the impact areas as contiguous neighborhood fabrics ranging from 500 feet to one-half mile from the site in question.[3] These definitions are not readily adaptable to our study. These previous studies examined much more densely developed neighborhood areas. Urban neighborhood boundaries are rarely clearly delineated, as locations several blocks from a subject site may still maintain strong visual sight lines and social connections to the site. Well-connected urban neighborhoods allow the relative feeling of proximity to extend farther away from an impact site than in suburban Boston, where impact areas dissolve quickly due to large-lot zoning and irregular street patterns.

CONTROL AREAS

This study defines the control area as the municipality in which the development is located. All but one development examined in this study are located in municipalities organized as towns with a public-meeting form of government. The strong allegiance to home rule and the marked differences in the range and quality of public services provided by each municipality imply that houses are not always close substitutes among municipalities.

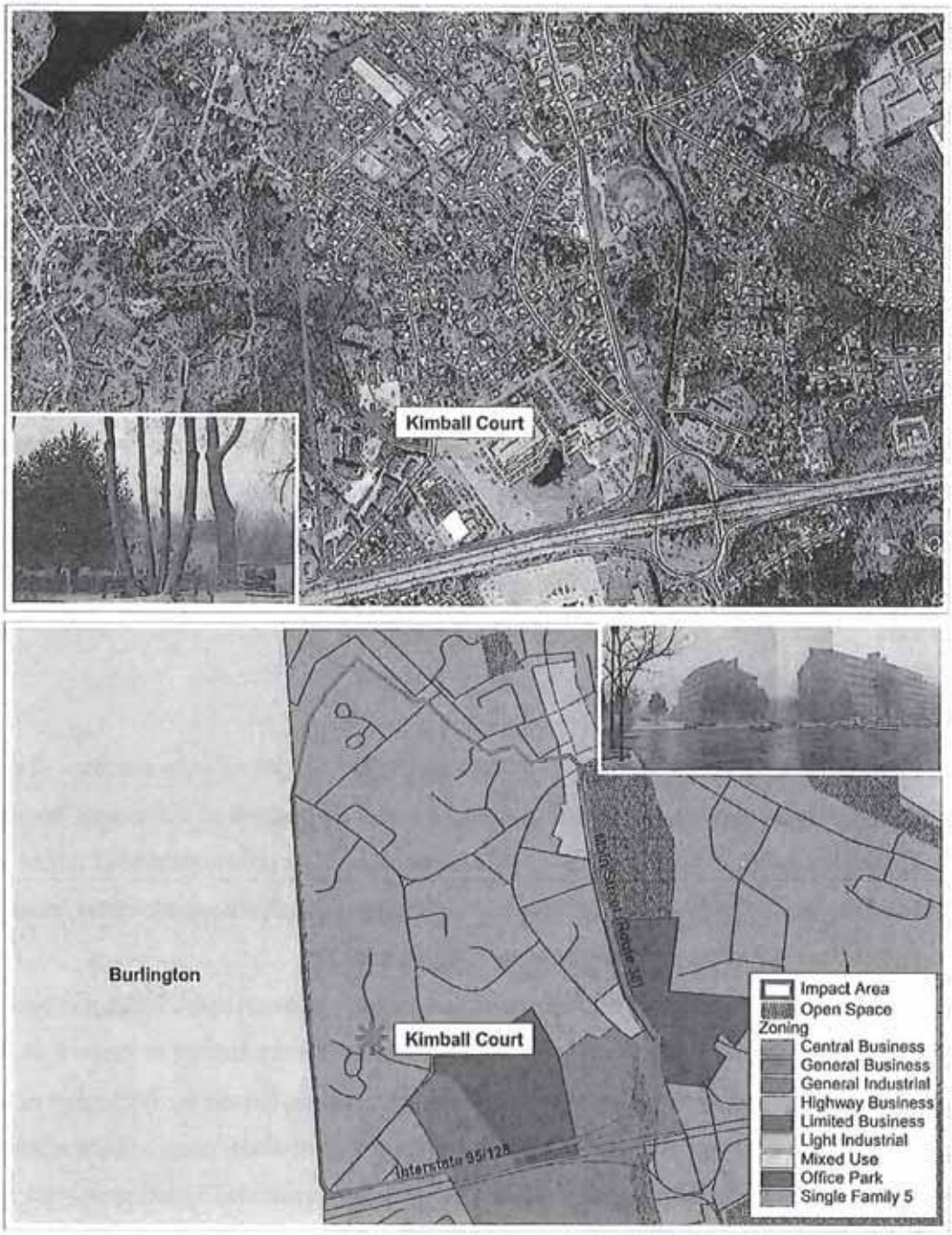
WOBURN

Woburn is the densest community in the study with 1.9 housing units per acre. It also has one of the highest rates of renter-occupied housing, 39 percent of the overall housing stock. In addition to Woburn having the lowest median income (approximately $55,000) of the studied communities, it also has one of the lowest percentages of subsidized affordable housing, accounting for only 5.7 percent of the city's total housing stock.

Kimball Court is located on the western edge of Woburn adjacent to the Burlington border, as indicated in Figure 2.3. We only consider the single-family homes located in Woburn as the impact area. The boundary is rectangular with three clear edges formed by Burlington to the west, Route 128 to the south and Main Street on the east. The northern edge is marked where Merrimac Street intersects Main Street and winds west through residential streets to where Pearl Street crosses into Burlington. The Kimball Court impact area is one of the largest in the study, in part because the development is so dominating that its presence radiates deeply into the residential neighborhood. In fact, the *Boston Business Journal* lists Kimball Court as the sixth

Exhibit 8

Figure 2.3



Source: MassGIS Vector and Image Data

Exhibit 8

largest apartment complex in Massachusetts, with 525 units in the first three phases.

Figure 2.3 shows an aerial photograph and zoning map of the impact area and surrounding neighborhood. Most of the open space adjacent to the development provides a buffer only to Burlington; Woburn residents face a sharp boundary with little or no transition. The topography of the impact area slopes from the north and east toward Kimball Court. The grade affords houses close to Main Street and farther north clear site lines of the seven-story buildings. The photographs clearly depict the mismatch between the form and scale of Kimball Court and neighboring single-family homes. The zoning map reinforces the point that Kimball Court is an island amid a single-family district. There are other non-residential uses to the south facing I-95/Route 128, but Kimball Court penetrates into the neighborhood as opposed to remaining on the periphery.

Kimball Court's density is 19.34 units per acre, by far the densest development in the study and over ten times more dense than Woburn's average density of 1.9 units per acre. This was likely the cause of some resident opposition.

In the case of Kimball Court, there was significant resistance to the development from the beginning. Kimball Court's developer, Joseph Mullins, properly filed a complete application for a comprehensive permit on October 6, 1983. The Woburn Zoning Board of Appeals (ZBA) issued a denial of the comprehensive permit on December 14, 1983, after having failed to hold a public hearing within 30 days of receipt of the application and inadequately advertising the December meeting at which a vote was held.

The board based its decision to deny the permit based on its inconsistency with local needs and that the proposed development "would have an adverse effect on the health and safety, not the occupants of the proposed housing but the residents in general."[4] Additional concerns cited by the ZBA were drainage, flooding, inadequate water pressure, and that the access road to the site was unsafe. In short, the board believed that the development would have a "deleterious effect" on the health and safety of town residents.

In October of 1984, the Superior Court decided in favor of granting the permit to Kimball Court primarily because the Woburn Board of Appeals failed to act within the statutory time period. According to a previous court decision, the Chapter 40B was enacted "to provide *expeditious* relief from exclusionary local zoning by-laws and practices which might inhibit construction of low and moderate income housing in the Commonwealth's cities and towns."[5] [Authors' emphasis]

Exhibit 8

Additionally, the Superior Court found that proper notice was not given for the public hearing; the notices were late and were not posted in the appropriate locations.

Proper notice is designed to promote the general welfare of the community and give citizens the chance to voice questions, concerns, or support for projects. The ruling stated that the decision granting of the permit to Kimball Court was not based on a technicality of the statute, "but a legislative and jurisdictional policy that citizens in the town are entitled to notice and the opportunity to be heard and that this policy [would] be strictly enforced."

On May 24, 1985, the Massachusetts Appeals Court affirmed the decision of the Superior Court and in doing so ordered the issuance of the comprehensive permit for Kimball Court Apartments. Subsequently, the second and third phases of the Kimball Court apartments were both approved by the Woburn Board of Appeals, in 1989 and 1999 respectively, without significant opposition.

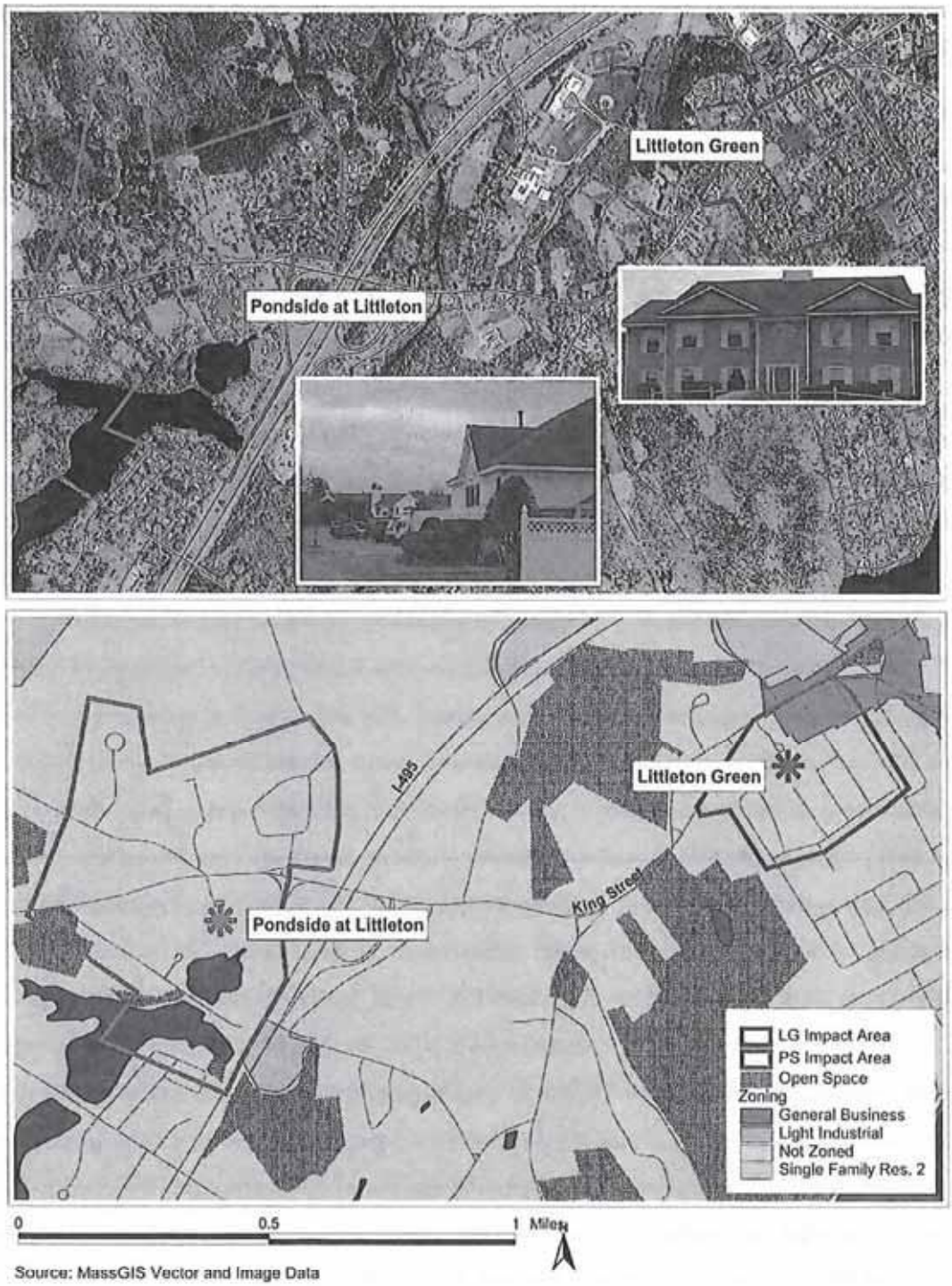
LITTLETON

This study evaluates two 40B developments located in the town of Littleton. Each development has an independent impact area. The two developments received comprehensive permit approval in successive years. The analysis periods for the two impact areas overlap, and in an effort to better isolate the influences of the two 40B developments a single control area is used. The control area includes all single-family homes in the town of Littleton minus the homes in the two impact areas.

Figure 2.4 shows the extents of both impact areas. Pond Side and Littleton Green are located relatively close to one another, but not close enough to be considered part of the same residential neighborhood. In addition to distance, they are separated by I-495. Both developments are surrounded by single-family residences: Littleton Green is embedded in relatively dense, contiguous neighborhood, and Pond Side is in the middle of a looser, diffuse residential area. Littleton Green is a 24-unit, 100-percent affordable elderly housing development made up of three buildings with eight one-bedroom units per building. Pond Side is larger, with 90 units. Although 90 units is still relatively small, Littleton's entire housing supply is only slightly more than 3,000 units. Pond Side alone therefore represented a 3 percent increase in Littleton's housing stock.

The impact area surrounding the Littleton Green development is compact and shaped like a square. The development is situated close to the center of the impact area and the majority of

Figure 2.4



Source: MassGIS Vector and Image Data

Exhibit 8

houses in the area are abutters. The boundary is defined by King Street (Route 2A) to the north, Goldsmith Street on the east, Lochslea Street along the south and both Edsel Road and Baldwin Hill Road on the west. All the properties in the impact area are part a tight road network and have sight lines to Littleton Green.

The Pond Side 40B is also located on King Street, a few miles west of Littleton Green. Pond Side's impact area is more spread out and the surrounding land use pattern is dispersed. There are few direct abutters, but the lay of the land combined with the orientation of the site plan make the project very visible. All the houses on Mill Street and those contained by the triangle of Mill Street, King Street and Interstate 495 are considered abutters. Homes on Pleasant Street have a clear view of Pond Side across mill pond, and as such are considered to be impacted even though they are outside of the contiguous street network. The Wychwood Drive neighborhood and the homes off of New Estate Drive are on the opposite side of the busy King Street. These two streets, and their tributary roads, are included in the impact area because they connect with King Street across from the only entrance to Pond Side: so neighbors are constantly confronted with the development. The left inset in Figure 2.6 depicts the view from Wychwood Drive.

The histories of the two developments are quite different. There was no substantive resident or town opposition to the Littleton Green development. This was likely due to the project's small scale and age restriction. Generally speaking, developments that are limited to elderly residents are much easier to find approval as they serve a "deserving" population and by their nature do not raise concerns regarding the impact of the development on potentially crowded school systems and congested roads. The fact that the project had only 24 units likely made it significantly more acceptable for nearby residents. It is worth noting, however, that Littleton Green's density of 10 units per acre is considerably higher than Littleton's overall denisty of only 0.3 units per acre.

The project was granted a comprehensive permit in May of 1986 after three Board of Appeals hearings at which some questions and concerns regarding the development were raised, but not enough to halt or stall the development process. The concerns raised during the comprehensive permitting process focused primarily the environmental impact of the development on the surrounding community. Even without controversy, it still took over six months from the initial application submission to get final approval from the Board of Appeals.

The story of the approvals process for Pond Side is unique among the case studies in that

it was a case in which local residents felt that the developer was taking advantage of the town's lack of affordable units to push through an unwanted market-rate development that would have otherwise been rejected by the zoning board. Pondside was proposed shortly after the town had approved three other comprehensive permits, one of which was Littleton Green, and the town was feeling inundated with permit applications. This led the Planning Board to argue that "the Board of Appeals ha[d] granted such permits in the past and a project which only has twenty percent subsidized units is greatly lacking and is not a legitimate override of the zoning." At a subsequent hearing, a member of the ZBA commented that he didn't think the town "would swallow seventy-five percent not subsidized" housing. In short, because Littleton was quite close to meeting the state-mandated 10 percent affordable threshhold, the town wanted to encourage more affordable housing so that it would be released from its obligation to grant comprehensive permits to non-conforming development projects. Pondside's permit application was originally denied by the ZBA, but it was ultimately granted after mediation sessions overseen by the HAC in April 1987.

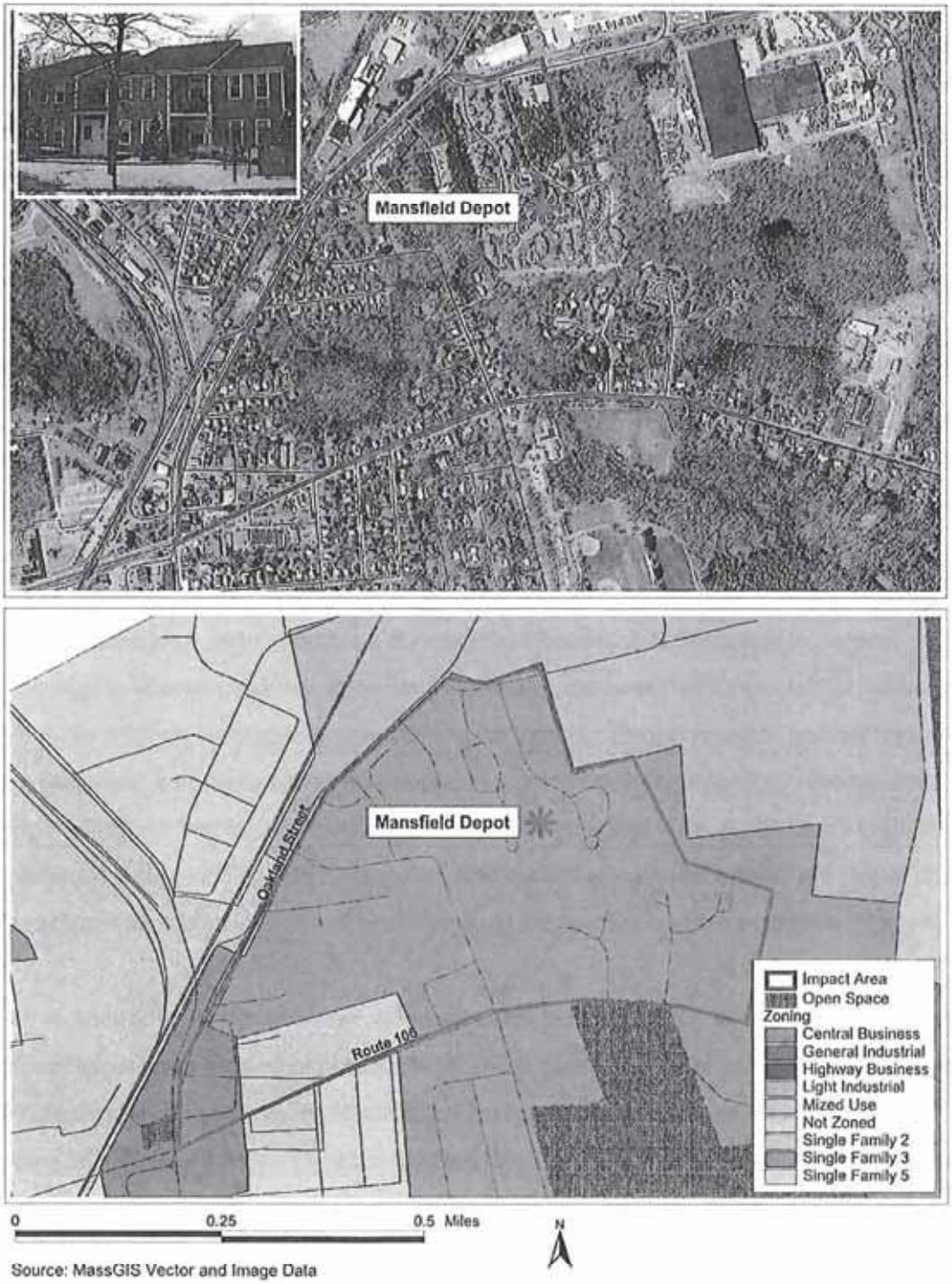
MANSFIELD

The town of Mansfield, 26 miles south of Boston, is a relatively small, rural community with a population of roughly 22,000 residents. Mansfield's economy consists primarily of agricultural and manufacturing firms, and the town has attempted to zone significant portions of land for industrial use with varying degrees of success. Despite its perceived small size, Mansfield grew substantially from 1980 to 2000 with a population increase of over 66 percent, by far the highest growth rate of the studied communities. Even with its large increase in population, Mansfield is still one of the least dense communities in the study, with an average density of 0.62 housing units per acre.

Located in an area originally zoned industrial and surrounded by industrial uses on three sides, Mansfield Depot consists of a total of 245 units of mixed-income multifamily rental housing, nearly 30 percent of which is affordable. Phase I of Mansfield Depot, permitted in October of 1986, includes 150 units, 25 percent of which are affordable to residents earning less than 80 percent of the area median income. Permitted in December of 1987, Phase II includes 95 units with 35 percent of the units affordable. The units in both phases have a comparatively large number of family-sized units, with 63 three- and four-bedroom apartments. Mansfield Depot consists of

Exhibit 8

Figure 2.5



Source: MassGIS Vector and Image Data

Exhibit 8

primarily two and three story buildings and provides a number of services for residents including on-site child care, an exercise room, club house, sauna, and playground. The entire development was completed in July 1989.

Mansfield Depot is located close to the Foxborough border just north of the thickly-settled town center. The impact area is triangular shaped with two long sides formed by Oakland Street on the west and Route 106 on the south. The eastern border captures two residential cul-de-sacs before connecting back with Mansfield Depot to the north. The development is surrounded by forest. Because of the open space, there are not many single-family abutters and no contiguous road network. The project footprint is large and many of the buildings are visible from adjacent properties. The inset in Figure 2.5 shows the size of a typical building in the development. A formal bike and walking path extends from the south west corner of Mansfield Depot through the wood behind many houses to the playing fields and elementary school south of Route 106. The bike and walking path strengthens the development's connection to its neighbors. The actual extent of the impact was established after consulting the Director of Planning and building department officials.

A ZBA hearing regarding the proposed comprehensive permit was held on May 22, 1986. The Mansfield Housing Authority offered "complete support" for the project, citing the need for low-cost rental housing "in a town that is experiencing a great deal of growth." At the time there were 300 applicants on MHA waiting list. The planning board, on the other hand, was not as supportive of the project; in their memorandum to the ZBA, they noted a number of concerns regarding the proposed development, including drainage, site lighting, means of access, sidewalks, and safety concerns regarding residential development in an industrial zone. The Industrial Development Commission commented that they did not oppose the project, "however, it is *not* the best use of our industrial land" [emphasis in original].

The ZBA's denial of the comprehensive permit was filed in July 1986 after another hearing. According to the decision, the permit was denied for a number of reasons, including that the "applicant did not present a convincing case that the Town of Mansfield hampers the construction of low or moderate income housing." Additionally, since the project site was located in an industrial zoned area, the "Board felt that this was not the best use of the industrial land and the project may be incompatible with industrial uses." Concerns regarding deflated property values in the

Exhibit 8

surrounding industrial area were also specifically raised in the ZBA decision: "This concern was also voiced by industrial abutters who are concerned it may depreciate industrial land values and limit the further development of the Ryan and Elliot Industrial Park." Additional concerns regarding whether or not the developer had properly searched for property in multi-family residential zones, traffic, drainage, flooding, access roads, accessibility, and proximity to amenities and services were also raised.

Following an appeal to the HAC, the ZBA and developer reached a settlement agreement in October of 1986 with a number of conditions, including construction of a secondary access, fencing, suitable drainage, sidewalks, and a school bus shelter.

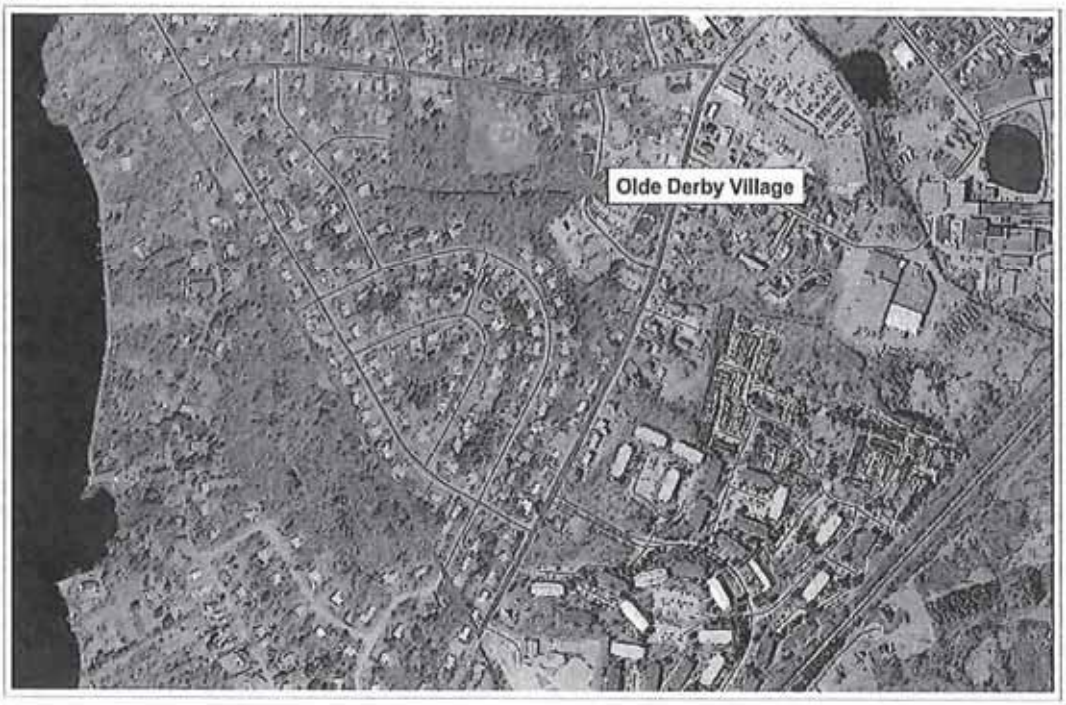
As with the first phase of Mansfield Depot, the second phase had the support of the Mansfield Housing Authority but was opposed by the planning board. At the hearing, a letter was entered into the record from an abutter who was opposed to the first phase, but was now writing in support of Phase II stating that the "developer of the complex has been a good neighbor, and we are working together to maximize the positive aspects of this development and to minimize any negative effects. If I can in some way assist some people who are less advantaged in this town and in this region through this letter, then I will be most pleased." The second phase was approved in December 1987 subject to certain conditions including maintaining 35 percent of the units affordable in perpetuity.

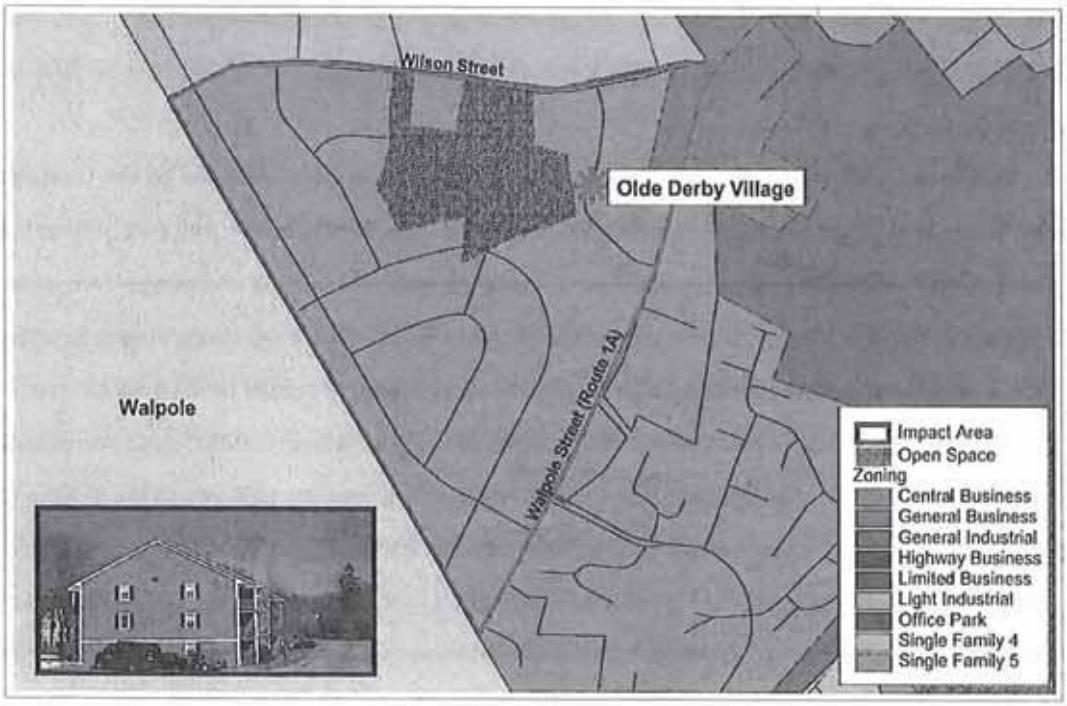
NORWOOD

The Town of Norwood, 14 miles south of Boston, is an economically diverse community consisting of manufacturing, suburban residential, and retail trade centers. With a population of nearly 30,000 residents, it has one of the highest densities in the study with 1.78 housing units per acre. From 1980 to 2000, Norwood's population decreased by 3.8 percent. It also has a comparatively low fraction of affordable housing, 5.4 percent of the total housing stock, the lowest percentage of the communities in the study. On the other hand, the town has the highest ratio of renter-occupied housing in the study, at 43 percent. Interestingly, Norwood also has the largest percentage of homeowners without a mortgage—36 percent—in the study.

Olde Derby Village, previously known as Countryside Village and Wilson Street, consists of 139 units, 35 of which (25 percent) are designated affordable. The development is made up of

Figure 2.6





0 0.25 0.5 Miles

Source: MassGIS Vector and Image Data

Exhibit 8

six buildings and is centrally located within Norwood, close to public amenities such as schools, churches, playgrounds, and the public library. The project is relatively dense with 15.4 units per acre on a nine acre site.

The impact area surrounding the Olde Derby Village 40B development is shaped like an equilateral triangle. Olde Derby Village occupies the eastern point of the triangle. The impact area is contained by three streets: Wilson on the north, Garden Parkway to the southwest and Walpole Street to the southeast. Houses located on both sides of these boundary streets are considered in the impact area. The area is not defined by an interconnected street network, but all the single-family houses are nearby and many are abutters.

Figure 2.6 depicts the relationship of Olde Derby Village to the surrounding area. Walpole Street is a major thoroughfare that separates the impact area. The development mediates between the adjacent commercial and industrial uses to the east and the isolated single-family district. Olde Derby Village is situated on a small hill, with building terraced up the hill. The site elevation increases the development's visibility to residential neighbors. Figure 2.6 also includes a photograph of the transition between the development and the residential neighborhood. It shows that buildings in the development are quite a bit larger than adjacent homes and that neighbors are close.

Despite a need for over 1,000 low and moderate income housing units at the time Olde Derby Village was proposed, the project faced vehement opposition. Norwood was able to hold up the development process for more than 13 years despite having a comprehensive permit granted and confirmed by the HAC and then the Superior Court. Norwood was still able to control the development through conditions attached to the comprehensive permit that stipulated that the project was to comply with Norwood's building code and that the town had to approve detailed construction plans and specifications. The permit was written by the HAC in 1974, in Chapter 40B's infancy. It is logical to conclude that not only was the town not very 40B-savvy, but the HAC and Superior Court were likely not very savvy at this point in time as well. The HAC and Superior Court's allowance of Norwood to stall the development for over a decade without any intervention points to some significant problems with the 40B process.

Among the reasons for opposing Olde Derby Village noted in the Superior Court documents were health and safety hazards, traffic, drainage, school impact, and water supply issues, as

cited by the Board of Appeals, School Committee, Planning Board, and the Board of Health. *The Patriot Ledger* at the time, however, indicated that what town residents really cared about, first and foremost, was stopping the project from happening and that they were seeking every possible option for complaint to get rid of the project.

RANDOLPH

Randolph is an economically and ethnically diverse community located 15 miles south of Boston. The town has a population of 31,000, and is the most ethnically diverse community. It has a population that is approximately 62 percent white, with 23 percent and 11 percent of residents African American and Asian, respectively. In addition to being the most diverse of the studied communities, Randolph is also one of the densest communities in the study with nearly 1.8 housing units per acre. The housing stock is largely owner-occupied with only 28 percent rental-occupied housing units. The town also has a relatively small percentage of subsidized affordable housing at 5.7 percent of the total housing stock.

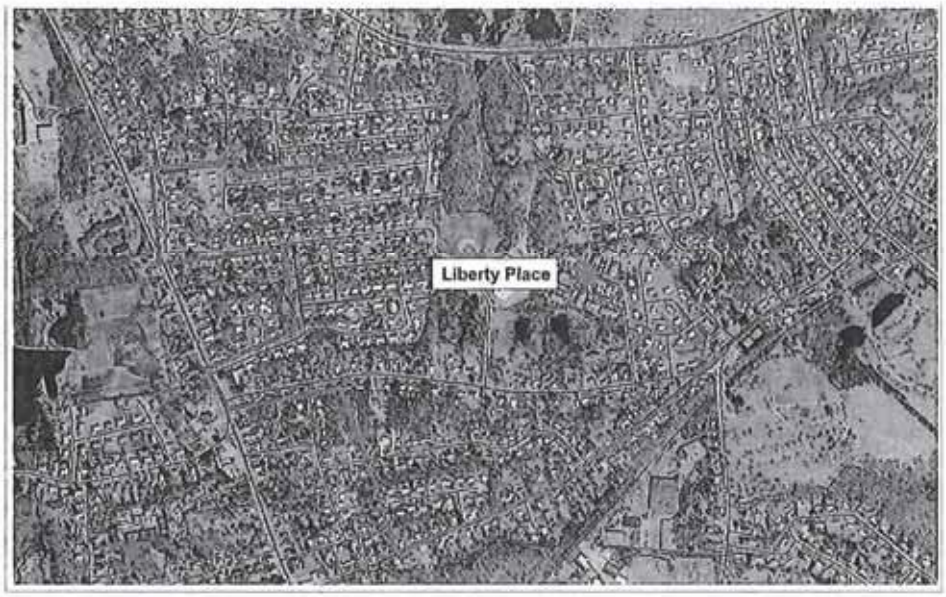
Liberty Place consists of 107 multi-family rental units, 27 of which are set aside for households earning 50 percent of the area median income. The project consists of three- and four-story buildings spread over the site surrounded by a significant amount of open space. Liberty Place abuts a local elementary school and a single-family residential neighborhood.

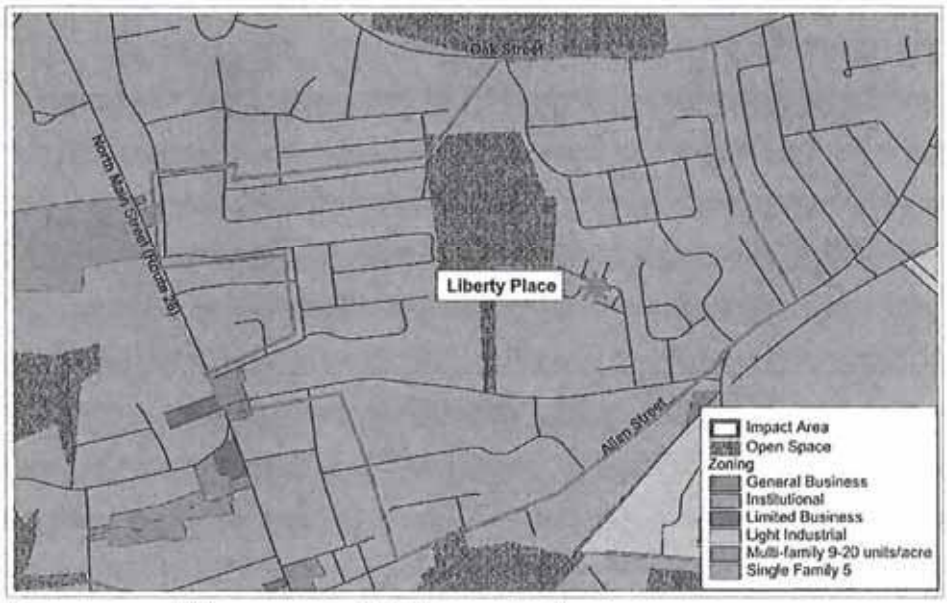
The impact area encircles part of a contiguous residential district. The boundary weaves through streets and is defined more by proximity than distinct features. In determining the extent of the impact area we visited the site and met with town official in the Department of Public Works and the Zoning Board of Appeals. Figure 2.7 reveals how Liberty Place straddles two neighborhoods. Both neighborhoods are thickly settled and defined by block-like street patterns. The two neighborhoods are knit together by the playing fields around Lyons School. The neighborhood to the west is connected to secondary roads and the playing fields. The fields create site lines to the project and a conduit for residents of Liberty Place to enter the neighborhood. Many of the homes in the eastern neighborhood are abutters of Liberty Place. The development is located on a rise making it more visible to these residents.

The comprehensive permit for the Liberty Place development was ultimately approved by the Randolph Zoning Board of Appeals in July of 1987, but not without an extensive and often

Exhibit 8

Figure 2.7





Source: MassGIS Vector and Image Data

Exhibit 8

controversial four-month public hearing process. Throughout the permitting process, residents, ZBA members, and other municipal officials strongly opposed the proposed development for many reasons, with property value concerns among the long list. However, in the end, the town did approve the comprehensive permit in a relatively short time frame and was able to negotiate with the developer for a 12 percent decrease in project size, maintenance of affordable units in perpetuity, and major changes in the site plan including reducing the number of buildings, increasing setbacks, and incorporating more green space.

WILMINGTON

Wilmington is a suburban industrial town 15 miles north of Boston. The town's population grew by more than 21 percent between 1990 and 2000, and currently has approximately 21,000 residents. Despite this population growth, Wilmington's density is only 0.65 housing units per acre—relatively low in comparison to the other communities in the study. The town's housing stock is primarily owner-occupied, with more than 90 percent homeownership in the study. Wilmington is also one of the least diverse communities in the study, with only 4 percent of its residents identified as non-white in the 2000 census.

Completed in 1999, Avalon Oaks, a 204-unit, garden-style apartment development (including 41 affordable units), is the most recent project examined in this study. The project includes a community center, an outdoor swimming pool, and a small playground. Consisting of primarily two- and three-bedroom units, the development is spread across eight three-story walk-up buildings. With 20 percent of the units set aside for households earning at or below 50 percent of the AMI, Avalon Oaks has the lowest percentage of affordable units in the study.

Avalon Oaks is located in the north east quadrant of the municipality, away from downtown. It is situated adjacent to an exit for Interstate Highway 93. The impact area is primarily comprised of a contiguous and clearly defined residential neighborhood to the west. Abutters to the east and single-family houses south of the elementary school are also included. We set the impact area after discussions with town officials in the planning and building departments.

Like the Kimball Court development in Woburn, Avalon Oaks is built directly in the backyard of many abutters. Figure 2.8 is a photograph taken from the side yard of an abutter in the neighborhood to the east. The portion of Avalon Oaks that faces this neighborhood is

Exhibit 8

not as overwhelming as in Woburn. The scope of the development is out of proportion with the surrounding land use pattern (see figure 2.8), but the site planning and context sensitive design effectively mitigates the bulk and density. The development is split into two sections. A northern portion clusters larger buildings close to I-93 and away from residents. The other section stretches smaller buildings along a curvilinear road parallel to the adjacent neighborhood.

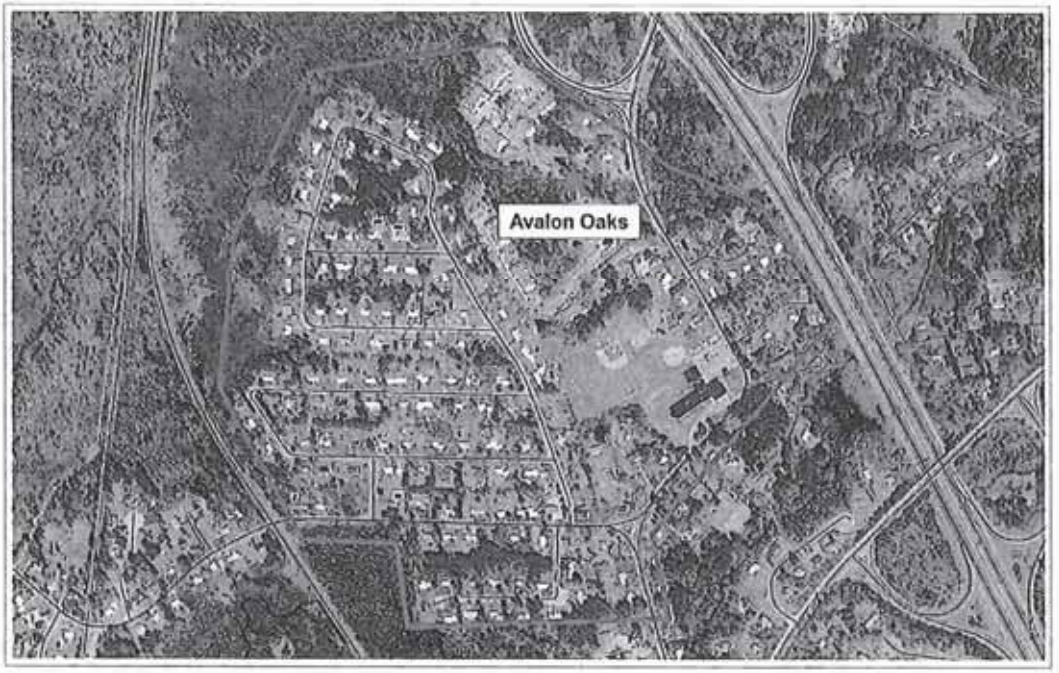
Avalon Oaks in Wilmington was also a highly contested project during its first iteration in the late 1980s. The site was initially proposed for the Wilmington Arboretum development in 1987, but the town denied the comprehensive permit, and the decision was appealed to the HAC. The HAC ordered the granting of the permit, but Wilmington appealed the decision first to the Superior Court and then to the Massachusetts Appeals Court. The comprehensive permit was decisively granted by the Appellate Court in September of 1995.

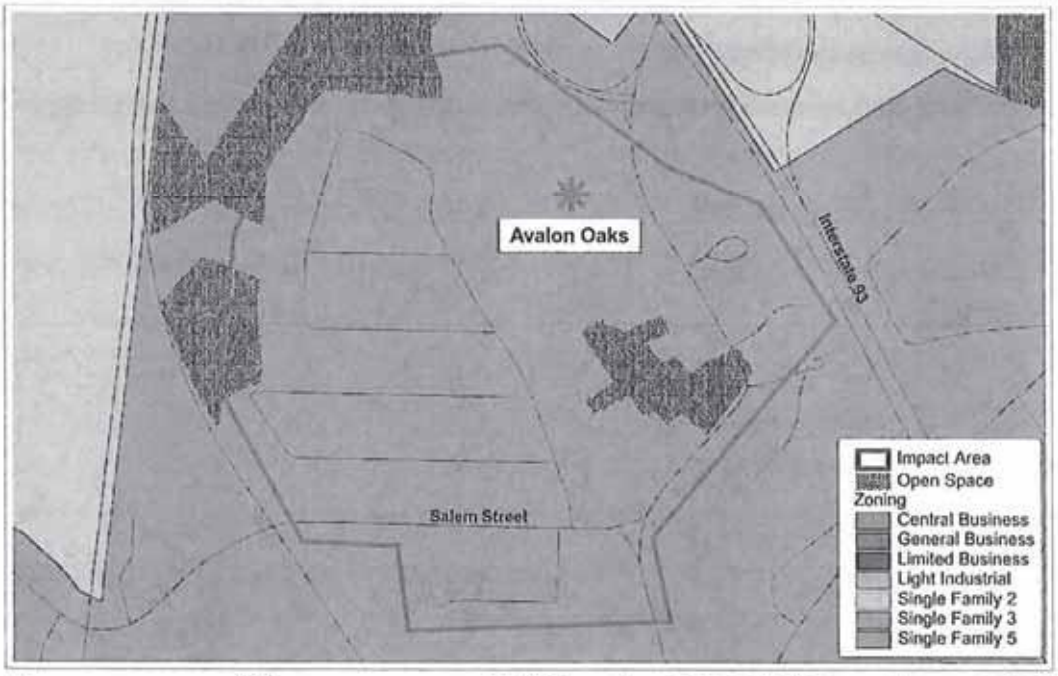
During the eight-year court battle with Wilmington, the original developer of the property, Wilmington Arboretum Associates, went bankrupt and was forced to transfer the rights to develop the site to its mortgagee in 1992. The mortgagee oversaw the appeals process through to the Appellate Court decision in 1995. In 1996, Avalon Bay Communities purchased the site and requested a transfer of the same comprehensive permit. The Wilmington Board of Appeals granted the transfer but held all of the requirements and conditions of the initial permit the same, including an identical number of housing units and affordability requirements.

It is interesting that the Avalon Oaks project was not nearly as controversial as the initial proposal for Wilmington Arboretum. According to Wilmington's director of planning and conservation, one of the reasons for this was that the new developer "sat down with the town and redesigned the project." The project became an "an entirely different animal from what people typically imagine when they think of affordable housing." Not only was Wilmington able to at least contribute to the design (if not the overall density) of the project, the project itself evolved from what residents originally perceived as a large affordable housing development to a well-designed market rate project with a percentage of affordable housing. Even with the redesign and change in perception about the anticipated residents, Avalon Oaks' density of 9.1 units per acre is 14 times more dense than Wilmington's average.

The analysis period starts when Avalon Bay took control and ends in the year the development was occupied.

Figure 2.8





0 0.25 0.5 Miles

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Source: MassGIS Vector and Image Data

Exhibit 8

Notes

[1] As described in the introductory chapter, the Boston Metropolitan Area for the purposes of this study is defined as the 155 Massachusetts cities and towns in the Boston-Cambridge-Quincy New England Metropolitan City and Town Area (NECTA) Census designation.

[2] For this study we obtained every single-family home sale recorded between1982 and 2003. We wanted to have data for a few years prior to the granting of the comprehensive permit and several years after the development was complete to establish long and continuous price indexes.

[3] Lyons and Loveridge, (1993) use ¼ and ½ mile; Galster, Tatian, and Smith (1999) and Galster, Tatian, and Smith (2001) use distance intervals from 500 feet to 2,000 feet; Lee, Culhane, and Wachter (1999) use ¼ and ½ mile.

[4] Muller, Carol J. Letter to the Housing Appeals Committee from the Woburn City Solicitor, dated January 12, 1984.

[5] Zoning Board of Appeals of Greenfield v. Housing Appeals Committee, 1983; Board of Appeals of Hanover v. Housing Appeals Committee, 1973.

[6] Quill, Ed. "SJC: Town bid aimed at blocking low-income housing," The Boston Globe, May 1, 1987.

CHAPTER 3: QUANTITATIVE METHODOLOGY

This chapter discusses the methodology employed to investigate the impact of large, multi-family mixed-income rental developments on the value of surrounding single-family homes. The first section of the chapter provides a theoretical framework for the use of a hedonic modeling approach. The second section describes our econometric methodology.

THEORETICAL FRAMEWORK

We seek to determine the response of housing consumers, and hence the housing market, to the presence of an amenity or disamenity in a local housing market. Some opponents of Chapter 40B claim that mixed-income multi-family rental housing developments constitute a neighborhood disamenity; we investigate this claim.

Our strategy is to measure and compare house price behavior for a control area and an impact area. To do this, we need to build quality-controlled house price indexes for the impact and control areas. We use a hedonic modeling approach in order to make use of all house transactions. We chose not to use repeat sales because of the requirement that only houses that sell twice during the study period be used; this would require eliminating too many sales observations in our impact areas.

An alternative strategy is to focus on distance to a disamenity. This method attempts to measure the effect of distance between individual houses and the disamenity, holding constant other determinants of house value. We do not take this approach because our site visits and discussions with local officials indicated that sight lines varied considerably based on topography, street layouts, and other similar factors that led us to conclude that identifying the impact area based on a fixed radius would have been inappropriate.[1]

Exhibit 8

HEDONIC MODELING FOR HOUSING MARKETS

For the purpose of the model, we assume the sales price of a house is the sum of a "bundle of goods and services,"[2] including the structural attributes of the house and the neighborhood in which the house is located. Examples of structural attributes include house size, lot size, and the number of bathrooms and bedrooms. The hedonic model uses multivariate regression analysis to estimate the value, or "implicit price," of each of these attributes.

To specify a hedonic equation, we use sales price as the dependent variable. Each of the attributes hypothesized to be determinants of sales price are explanatory or independent variables. The estimated coefficient or parameter for a given explanatory variable represents its effect on value or "implicit price." The standard practice in the hedonic literature is to represent the dependent variable house price is as a natural logarithm.[3] In addition to being a method that has been found to be useful in the economic literature, it also provides a convenient interpretation of the coefficients of the explanatory variables. These coefficients can be interpreted as the percentage change in house value resulting from an additional unit of an explanatory variable. Knowing the contribution of each attribute to house value makes it possible to examine how the price of a house changes by altering the quantity of a structural attribute or other explanatory variable.

We are interested in tracking how the sales price for a typical house changes with time. To accomplish this goal a hedonic model requires two stages. The first stage estimates a hedonic price equation to establish a relationship between house value and housing attributes, including year sold. The effect of time on sales price is estimated by including the year a house sold as an explanatory variable in the hedonic model. In the second stage, the hedonic results are used to "price" a typical house over time. Separate hedonic models and indexes are created for both the impact area and control area in each case.

In a perfectly efficient market, information about a negative event would disseminate quickly and prices would react to this new information immediately. In this case, when the appearance of a disamenity is anticipated, prices for homes near the disamenity would instantly fall; that is, the (hypothesized) capital loss would occur at one point in time, with no further effects occurring in the future.

In reality, housing markets are not perfectly efficient; buyers and sellers lack perfect information. In the context of this study, some home buyers and sellers may not be aware of a

Exhibit 8

mixed-income, multi-family development slated for construction nearby. More likely, some players in the market may know that mixed-income housing is being developed, but they may not really understand the nature of the project. Furthermore, even if someone has been fully informed throughout the process that led to the development, uncertainty could still remain about the final product and the identity of the actual residents. Imperfect information is reflected in the variation in sale prices achieved in the market.

The various issues regarding information comprehension and dissemination imply that the assimilation of knowledge about a particular event in the local housing market will occur differentially over time. Selling a house takes time. There are also high transaction costs associated with the sale of a house, which may prolong a decision to sell. The impact of an announced multi-family development will presumably be strongest in the time interval from announcement to after the units are rented. Thus our evaluation of price change over time focuses this time period.

APPLIED QUANTITATIVE METHODOLOGY

Our empirical research methodology is thus designed to best answer the question of whether mixed-income, multi-family developments influence the sales price of adjacent single-family houses. This methodology draws on the considerable related research in the field of housing economics.[4] With one exception, hedonic modeling has not been used to construct impact and control house price indexes to measure the effect of mixed-income, multi-family development.[5]

We conducted a thorough examination of the neighborhood of each development to establish a realistic impact area. We then purchased transaction data from a third-party vendor to obtain a reliable data set of all single-family home sales in our case towns.

DATA

This study uses sales transaction data for single-family houses. We obtained records for all transactions between 1987 and 2003, and most of the transactions between 1982 and 1986. In order to use transaction data in hedonic modeling, the records must contain information about the structural attributes of the house in addition to the sales price and the date it sold. All the requisite information is not compiled by one agency in a uniform format. Transaction data including address, sales price, date, buyer, seller, mortgage amount, etc. are collected by the Registries of Deeds in

Exhibit 8

Massachusetts. Records containing information pertaining to property attributes are maintained by local municipal assessors. We purchased data from a third party vender, The Warren Group, to bridge the gap between registries' and assessors' records. The Warren Group collects data from both sources and assembles it into one database.[6]

The data sets for each case were cleaned to eliminate incomplete records and statistical anomalies. We also filtered for non–arm's length transactions and lot sizes with extremely high values. All identifiable non–arm's length transactions were removed.[7] Lot size is the only structural valuable with extreme outliers. These were systematically selected and removed.[8]

Woburn Example

HOUSING PROFILE

We use the Woburn case to demonstrate our methodology. Table 3.1 provides descriptive statistics for Woburn's housing stock in both the control area and impact area. The mean and standard deviations for each variable in the model are provided. The mean of a dummy variable is its percentage of the whole variable set. Looking at bathrooms, the mean for bath1 is 0.38; thirty-eight percent of the houses in the control sample have one bathroom. On average, houses in the impact area are slightly more expensive, larger, and situated on bigger lots than houses in the control area. Additional description statistics about each sample are provided in the Appendix.

ANALYSIS PERIOD

As indicated above, housing markets are very complex, and information is absorbed over time. The best way to capture the influence of an event is to observe price trends before, during, and after the event and look for substantial variations from the overall trend. We create sales price indexes that begin before comprehensive permit approval and that extend well beyond the initial occupancy of the projects. The twenty-year time frame of this study (1983–2003) provides a dynamic perspective on the cyclicality of prices.

The analysis period around each mixed-income, multi-family development is designed to include the years in which the influence of the development was strongest. The length of each analysis period varies slightly, but the definition is the same for all. It begins with comprehensive

permit approval and ends in the year when the project was placed in service, generally three years. Small projects that were constructed quickly have shorter analysis periods, while large, complex projects tend to have longer analysis periods.

THE HEDONIC MODEL

For a useful hedonic model, it is important that the coefficients for the explanatory, or "independent," variables to exhibit a realistic relationship with the house price dependent variable, and that these coefficients be measured precisely, i.e., have low standard errors. Analyses of descriptive statistics were undertaken to construct sensible explanatory variables.

The first stage of our hedonic models involves specifying the attributes that are considered to be important determinants of home price.[9] All of our models contain a combination of the

Table 3.1

Descriptive Statistics				
	Control		Impact	
Variable	Mean	Std. Dev.	Mean	Std. Dev
Price	*188,250*	*86,583*	*195,064*	*80,874*
Intersf	*1,471*	*486*	*1,561*	*433*
Lotsize	*11,774*	*5,889*	*12,138*	*6,592*
Bathrooms	*1.61*	*0.61*	*1.61*	*0.62*
1	**0.38**	**0.48**	**0.37**	**0.48**
1.5	0.23	0.42	0.25	0.43
2	0.24	0.43	0.25	0.44
>=2.5	0.16	0.36	0.13	0.33
Bedrooms	*3.18*	*0.78*	*3.36*	*0.78*
<=2	**0.15**	**0.35**	-	-
3	0.58	0.49	-	-
<=3	-	-	**0.68**	**0.47**
>=4	0.28	0.45	0.32	0.47
Year Built	*1946*	*40*	*1935*	*54*
<=1919	**0.20**	**0.40**	-	-
1920-59	0.43	0.49	-	-
1960-79	0.18	0.38	-	-
1980-89	0.09	0.29	-	-
1990-03	0.10	0.30	-	-
<=1899	-	-	**0.19**	**0.39**
1990-46	-	-	0.19	0.39
1947-54	-	-	0.21	0.41
1955-90	-	-	0.20	0.40
1991-03	-	-	0.20	0.40

Bold Independent variables are base case (omitted)

Exhibit 8

following explanatory variables: house size, lot size, number or bedrooms, number of bathrooms, and the year the house was built. To explain the empirical methodology more thoroughly, we use Woburn as an example. In Chapter 4, we will present the house price indexes constructed from the hedonic models.

Independent variables were selected after examination of the sample's descriptive statistics. House size (intersf) and lot size (lotsize) are entered as continuous variables; that is, the actual square footage of the attribute is used in the model (Table 3.2). House size is usually the strongest predictor of sales price. Lot size is also typically important.

Bathrooms and bedrooms are entered as dummy variables. The number of bathrooms is divided into four categories; one bathroom or less (bath<=1), one and one-half bathrooms (bath1.5), two bathrooms (bath2), and two and one-half or more bathrooms (bath>=2.5). Bath1 is used as the base case and thus omitted from the equation. The coefficients for the remaining

Table 3.2

Control					
Dependent variable equals the natural log of price					
Independent variables	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.195	-	0.031	364.970	0.000
intersf	0.000	N/A	0.000	6.560	0.000
lotsize	0.000	N/A	0.000	10.680	0.000
bath1.5	0.081	8.41%	0.013	6.080	0.000
bath2	0.061	6.32%	0.014	4.500	0.000
bath>=2.5	0.160	17.35%	0.019	8.270	0.000
bed3	0.089	9.27%	0.014	6.170	0.000
bed>=4	0.095	9.96%	0.018	5.280	0.000
yrblt1920-'59	0.113	11.99%	0.013	8.520	0.000
yrblt1960-'79	0.199	22.01%	0.016	12.090	0.000
yrblt1980-'89	0.212	23.57%	0.020	10.670	0.000
yrblt1990-'03	0.260	29.73%	0.021	12.580	0.000
yrsold1983-'84	-0.434	-35.21%	0.031	-14.060	0.000
yrsold1987-'88	0.258	29.38%	0.026	9.800	0.000
yrsold1989-'90	0.238	26.88%	0.027	8.660	0.000
yrsold1991-'92	0.124	13.16%	0.026	4.720	0.000
yrsold1993-'94	0.155	16.72%	0.025	6.080	0.000
yrsold1995-'96	0.228	25.55%	0.025	9.040	0.000
yrsold1997-'98	0.329	38.90%	0.025	13.160	0.000
yrsold1999-'00	0.570	76.75%	0.025	22.790	0.000
yrsold2001-'02	0.831	129.65%	0.026	32.400	0.000
yrsold2003	1.008	173.92%	0.028	36.020	0.000
N	4762	Adjusted R-Squared	0.5553	Std. Error of the Estimate	0.32387

Omitted variables: bath1, bed<=2, yrblt<=1919, yrsold1985-'86

bathroom variables relate each of them to the one bathroom case. For Woburn, we find the coefficients for the bath1.5 and bath2 behave plausibly, increasing price by 8.4 percent and 6.3 percent, respectively, compared to a house with only one bathroom. The 17.4 percent standardized coefficient for bath>=2.5 is not uncommon in hedonic equations. This fairly large coefficient most likely indicates that bath>=2.5 is correlated with, and acting as a proxy for, other "quality" features not available in the data.

To find the change in house value for having, say, 1.5 baths instead of one bath, we proceed as follows: We use the regression results to "price" a house that is typical in every dimension, except that it has one bathroom. We then repeat this calculation for the 1.5 bathroom case. The latter case will have an estimated value 8.4 percent higher. This percentage change may be quickly found by looking at the standardized coefficient.

Bedrooms are split into three categories, with houses containing two or less bedrooms used as the base case. Bed3 (three bedrooms) and bed>=4 (four or more bedrooms) have very similar positive coefficients: 9.3 percent and 10 percent, respectively. One might expect the presence of more bedrooms to exhibit a greater positive influence on sales price. Remember, however, that our hedonic equations hold the size of the house constant. So this increase in bedrooms means a decrease in other living space. Sometimes the coefficient of the dummy variable with the most bedrooms is lower than (and sometimes negative) the coefficient of the dummy variable representing fewer bedrooms. In this case, the bedroom dummy variables have nearly identical coefficients, indicating that the two configurations are equally valued.

The influence of age is captured by the year in which a house was built. The year built variable is divided into quintiles that are roughly adjusted to reflect housing vintages. The dummy variable yrblt1919 (homes built in 1919 or earlier), representing the oldest homes, is omitted from the model. In general we expect newer houses to have higher sales prices, holding other characteristics constant. This is the case here: Each successively newer category of houses adds more value to the sales price than the previous. Deviations from this pattern can occur because year built is often a proxy for house style. Often it is the case that specific house styles are unique to different time periods. Sometimes a style of house built several decades (or even one hundred years ago) is more desirable than that of the types of house built recently.

The final set of explanatory variables consists of dummy variables representing time.

Exhibit 8

The year in which a house sold is used to trace price movements over time. Relatively small sample sizes in the impact areas drove the construction of the year sold independent variables. It was necessary to pair years to have enough observations for each (two-year) period to obtain reasonably precise coefficient estimates. It should be noted that the designation of time intervals is an arbitrary assignment. It does not matter how time is captured (months, quarters, year etc.) as long as it is appropriate to the context of the model. Pairing years is perfectly acceptable as long as we are willing to accept the "cost" of looking at two-year effects. Given the impact area sample sizes, this is the best path to follow. All houses that sold in adjacent years were thus combined into one time interval. An attempt was made to avoid pairing years when behavior of the larger market changed abruptly. The year sold interval 1985–86 was omitted from the regression and serves as the model's base time period. For Woburn, the coefficient of yrsold1987–88 is 29.4 percent, implying that houses in this two-year interval sold for almost 30 percent more than houses in the omitted base year interval.

Separate hedonic equations are constructed and estimated for both the control area and impact area models. To obtain a price index, we use the results to "price" a typical house over time. See the Appendix for the regression coefficients for the other case studies.

HEDONIC MODEL: WOBURN CONTROL AREA

The control area sample consists of all single-family homes in the City of Woburn other than those located within the impact area. The hedonic model is estimated using 4,762 house sales observations during the period 1983–2003. The model performs well, providing precise estimates of the regression coefficients. As indicated above, for bedrooms, bathrooms, and age, the regression coefficients show the difference from a base case. The base case for year sold is having sold in 1985–86. The standardized coefficients indicated in Table 3.2 show the effect on home price for each characteristic.

HEDONIC MODEL: WOBURN IMPACT AREA

The results for the impact area model are given below in Table 3.3. The impact area contains 157 observations. The equation is not estimated as precisely, since sample size is smaller than the area control case. Nonetheless, the results are the best that could be obtained, given our

Table 3.3

Impact					
Dependent variable equals the natural log of price					
Independent variables	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.344	-	0.117	97.270	0.000
intersf	0.000	N/A	0.000	2.200	0.029
lotsize	0.000	N/A	0.000	2.530	0.012
bath1.5	0.135	14.43%	0.052	2.570	0.011
bath2	0.003	0.25%	0.053	0.050	0.962
bath>=2.5	0.057	5.89%	0.080	0.720	0.474
bed>=4	0.084	8.75%	0.046	1.810	0.072
yrblt1900-'46	0.016	1.62%	0.061	0.260	0.793
yrblt1947-'54	0.165	17.95%	0.062	2.640	0.009
yrblt1955-'90	0.146	15.69%	0.059	2.470	0.015
yrblt1991-'03	0.382	46.49%	0.069	5.550	0.000
yrsold1983-'84	-0.558	-42.74%	0.133	-4.190	0.000
yrsold1987-'88	0.084	8.76%	0.101	0.830	0.408
yrsold1989-'90	0.221	24.76%	0.097	2.270	0.025
yrsold1991-'92	0.109	11.55%	0.113	0.970	0.335
yrsold1993-'94	-0.044	-4.29%	0.103	-0.430	0.671
yrsold1995-'96	-0.111	-10.54%	0.097	-1.150	0.252
yrsold1997-'98	0.218	24.34%	0.087	2.510	0.013
yrsold1999-'00	0.507	66.05%	0.092	5.530	0.000
yrsold2001-'02	0.784	119.08%	0.096	8.130	0.000
yrsold2003	0.930	153.44%	0.106	8.770	0.000
N	157	Adjusted R-Squared	0.742	Std. Error of the Estimate	0.21462

Omitted variables: bath1, bed<=3, yrblt<=1899, yrsold1985-'86

conservative definition of impact area. (In the "town group" regressions reported later, we are able to use larger sample sizes.) There are fewer variables for structural attributes because houses in the impact area are more homogeneous than houses in the control area. The homogeneity of the impact area meant that the base case for number of bedrooms became three bedrooms, while the base case for year built became "built in 1899 or before."

GROUPED TOWNS

In some cases, it was necessary to "group" cases and use the grouped results to provide price indexes. Grouping increases sample size, which reduces standard errors and noise (random variation) in the year sold variables, thus generating more precise indexes. In Littleton, we

Exhibit 8

grouped the two developments. We also constructed a group consisting of Mansfield, Norwood and Randolph. In grouping towns or developments, we considered geographic proximity similarity in control area price movements, and roughly simultaneous introductions of mixed-income, multi-family rental developments.

Notes

[1] See Case, Pollakowski, and Wachter on comparisons of price index methods.

[2] Rosen 1974.

[3] Lusht 1997 and Malpezzi 2002.

[4] As in Case, Pollakowski, and Wachter.

[5] Weinstein 2002.

[6] The Warren Group maintains an active database of complete transactions records from 1987 through the present. They also have an inactive database of just sales records from 1982 to 1986. This inactive database does not include any structural attributes of the property. We wanted to use records from the inactive database to extend the length of our sales indexes. However, to make the records in the inactive database useful we had to merge them with the active database. The merging process identified houses that sold in both databases and attached the structural attributes of the house from the active database to the corresponding, incomplete sales record in the inactive database. The merge was accomplished using the Select Query function in Microsoft Access setting property address as the common field.

Merging the structural attributes of a house from the active database to the same house in the inactive database assumes the characteristics of the house have remained constant over time (i.e. no additions were made or the house was not replaced); or put another way the bundle of goods that produced a sale price in 1982 is the same bundle that produced the sale price for the same house in 2003. This merging process certainly caused some inconsistencies matching transaction records with structural characteristics over time, but the likely degree of error is low. The resulting merge was successful; however, the conversion rate for matching records was around 50% percent; meaning half of the houses sold in the inactive database resold in the active database. The quantity of transactions per year for the inactive database is about half the number of transactions in the active database. The two databases were combined once each sales record contained the same types of information.

[7] Sale price data were skewed to the right, meaning there was an abnormally high frequency of low sale prices. This skewness is due in part to the presence of "non-arms length" transactions. The removal of low price transactions representing "non-arms length" required subjective review; statistical testing, graphic representation and common sense were used to screen records. All transactions with a sale price equal to or less than $50,000 were selected for review. Scatter plots of price and year sold were created to identify whether previously flagged transactions were outliers for the year in which they sold. The identified outliers were also compared against two standard deviations from the sample mean. The identified outliers and suspected non–arm's length transactions were compared to other structural attributes of the property and assessor information the see if the price seemed appropriate. We considered the buyer and seller, mortgage amount, year built, interior square feet and lot size. The sale of many low-priced homes were transactions between family members or had mortgages considerably larger than the sale price. Examples of these two scenarios would be a house that sold for $30,000 but had a mortgage of $225,000; or a larger-than-average-sized house on a three-quarter acre lot that sells for $25,000 between family members. In one instance, the same house sold for $15,000 five times on the same day to different individuals all with the same last name. Seeming abnormally low sales transactions and outliers that failed the non–arm's length subjective test were removed.

[8] The average lot size in many of the towns is around one-half acre (20,000 square feet), yet all towns had some transactions with lot sizes of several acres (200,000+ square feet, and in one instance 2.5 million square feet or 57 acres). All transactions with lot sizes over three standard deviations were removed from the impact areas.

[9] The independent variables are included in the models in one of two forms; as a continuous number or as a dummy variable. A dummy variable represents a dichotomous relationship. Either a house contains two bedrooms or not. For each dichotomous possibility (one bedroom/not one bedroom; two bedrooms/not two bedrooms; etc.), there is a separate dummy variable. When dummy variables are used, one of the possible variables is omitted from the model to establish a base case. As mentioned earlier in the chapter, a dummy variable coefficient is interpreted as the percent change in price compared to the excluded variable. Let's look at an example from Woburn to interpret the coefficient of the independent dummy "bath1.5." This dummy variable represents all houses in the sample that contain one and one-half bathrooms. The standardized coefficient of "bath1.5" in the control area hedonic model is 8.4%. This means that having one and half bathrooms in a house adds eight point four percent more value

Exhibit 8

than only one bathroom, the excluded variable, holding all other variables constant.

Dummy variables are constructed by separating the values for each variable into bins. Each bin then becomes its own dummy variable. We tried for each bin to contain similar numbers of observations. To clarify this procedure let us look again at Woburn for an example. Houses in Woburn contain as few as one bathroom or as many as five. Houses with one bathroom became dummy variable "bath1," houses with one and a half bathrooms became dummy variable "bath1.5," etc. Dummy variable "bath>=2.5" contains all houses with two and a half or more bathrooms.

CHAPTER 4: FINDINGS

This study's findings are presented in terms of house price indexes for impact and control areas in each study town. Looking at these index pairs for each of the towns, it can be seen that the impact area indexes track the control area indexes. There is neither a tendency for the impact areas to do better or worse.

We begin with a thorough examination of price behavior for the Kimball Court Apartments development in Woburn. The assessment of subsequent case studies will be more brief, with more detailed results presented in the Appendix. The hedonic regression results used to construct the price indexes are presented in Chapter 3 and in the Appendix.

WOBURN

Chart 4.1 shows the house price indexes for the control and impact areas. As described in Chapter 3, these indexes are constructed from the hedonic equation results. Both indexes track house price movements over time that are consistent with the Boston area's market experience. House prices rose strongly through the mid-1980's peaking in late 1988 and 1989. Prices generally declined during the early 1990s, but by 1997–98, the market had turned a corner and house prices rebounded sharply. Both the control area and the impact area followed the experience of the larger Boston market, with both indexes following very similar price paths.

The City of Woburn has seen three phases of the Kimball Court mixed-income, multi-family housing development. All phases were permitted using chapter 40B, and each phase has a separate analysis period. The analysis period for each phase begins with the issuance of the comprehensive permit and concludes in the year each phase was placed in service. The three analysis periods are not all the same length; these differences are related to the construction and development timeline of each project phase. The impact area and the control area remain the same for all phases.

Exhibit 8

Chart 4.1

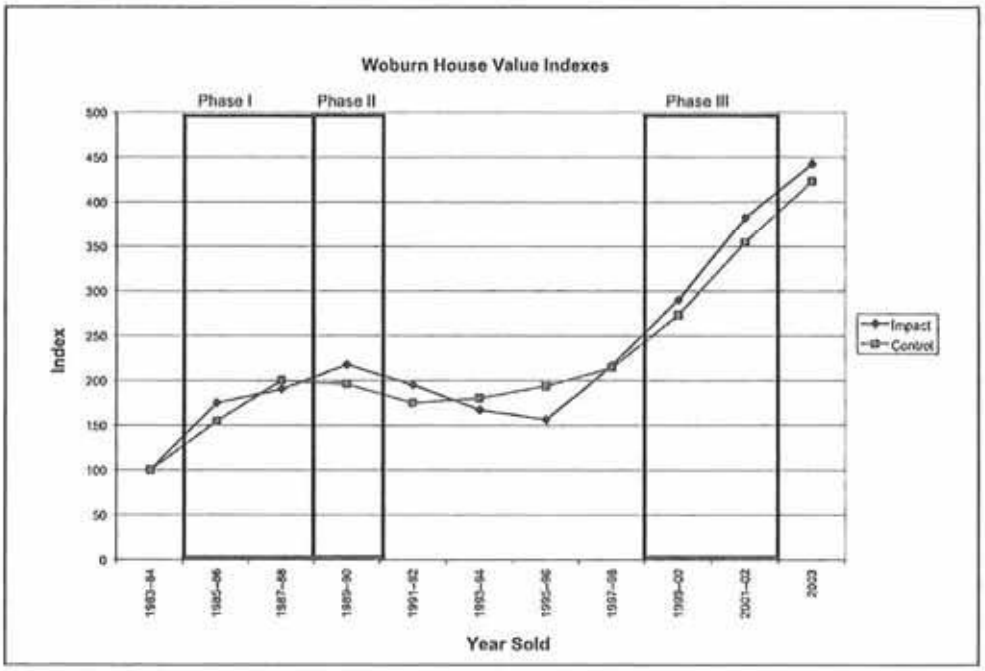


Chart 4.2

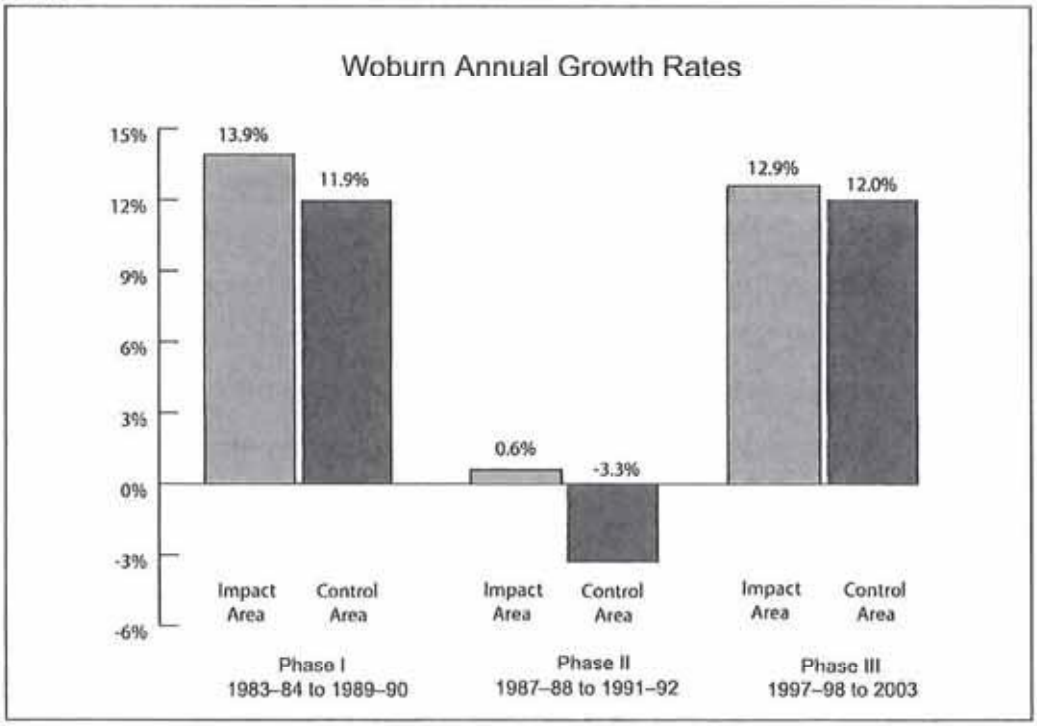


Exhibit 8

In the years after the introduction of each Kimball Court phase, the impact area and control area experienced similar appreciation in sale price for single family homes. Over the course of the entire study the compound annual growth rate for sale prices was 7.9 percent for the control area and 8.1 percent for the impact area.[1]

PHASE I

The first phase was permitted in 1985 and completed in 1988. The appropriate analysis period using our price indexes begins at the two-year period preceding permitting (1983–84) and ends with the two-year period following completion. During this Phase I analysis period, the impact area experienced a 13.9 percent annual growth rate, slightly greater than the control area's 11.9 percent rate. (See Chart 4.2.) This was a turbulent period, with home prices doubling.

PHASE II

The second phase was permitted in 1989 and completed in 1990. The analysis period thus begins with 1987–88 and runs through 1991–92, the two-year period after completion. For the Phase II analysis period the impact area house values were essentially unchanged (growth rate of 0.6 percent). Over the same time period, house prices in the control area declined slightly, with an annual growth rate of -3.3 percent. House values around Kimball Court were not adversely impacted by the mixed-income, multi-family rental development.

PHASE III

The final phase was permitted in 1999 and completed in 2002. Our analysis period, therefore, runs from 1997–98 through 2003, the last year for which data were available. During the Phase III analysis period, the house values in the impact area rose 12.6 percent annually. The trend for the control area was nearly identical, with house values experiencing an average annual appreciation rate of 12.0 percent.

Overall, we see that there are no substantive differences between the two price paths. Sale prices for single-family homes in the impact and control areas moved nearly in tandem during the three development phases of Kimball Court.

Exhibit 8

LITTLETON

There were two separate developments in Littleton that were analyzed. The first case is Littleton Green, a smaller elderly rental 40B development. The Pond Side mixed-income, multi-family development is a much larger and more noticeable rental community, and its impact on the surrounding neighborhood might be expected to be more significant. For reasons of sample size, these two developments are considered together. The analysis period for Littleton begins in 1984–85 and continues through 1990–91 (Chart 4.3). Over that time, house values in the impact area experienced a 16.0 percent annual appreciation rate. For the same period, the control group saw a smaller 7.5 pecent annual growth. Due to random fluctuations in the impact area index (reflecting modest sample size), we consider it unlikely that the impact area did so "well." We thus examined a slightly longer period, 1982–83 through 1992–93. Over that time period, the impact area experienced an annual appreciation of 6.9 percent, while the control area appreciated at an annual rate of 7.7 percent.

Chart 4.3

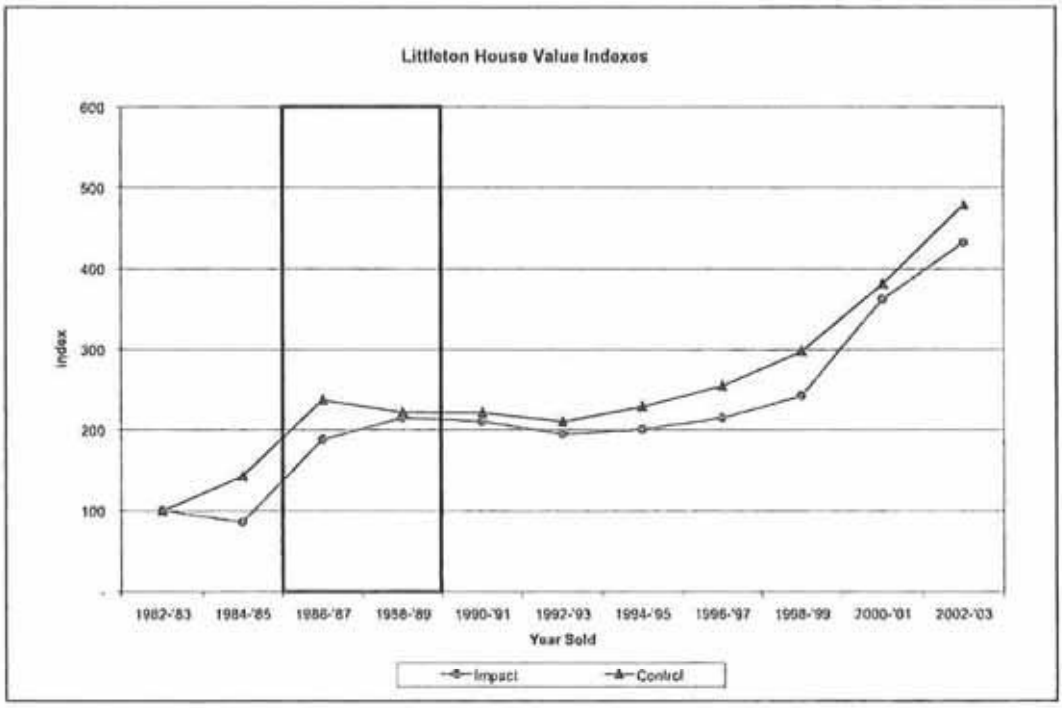
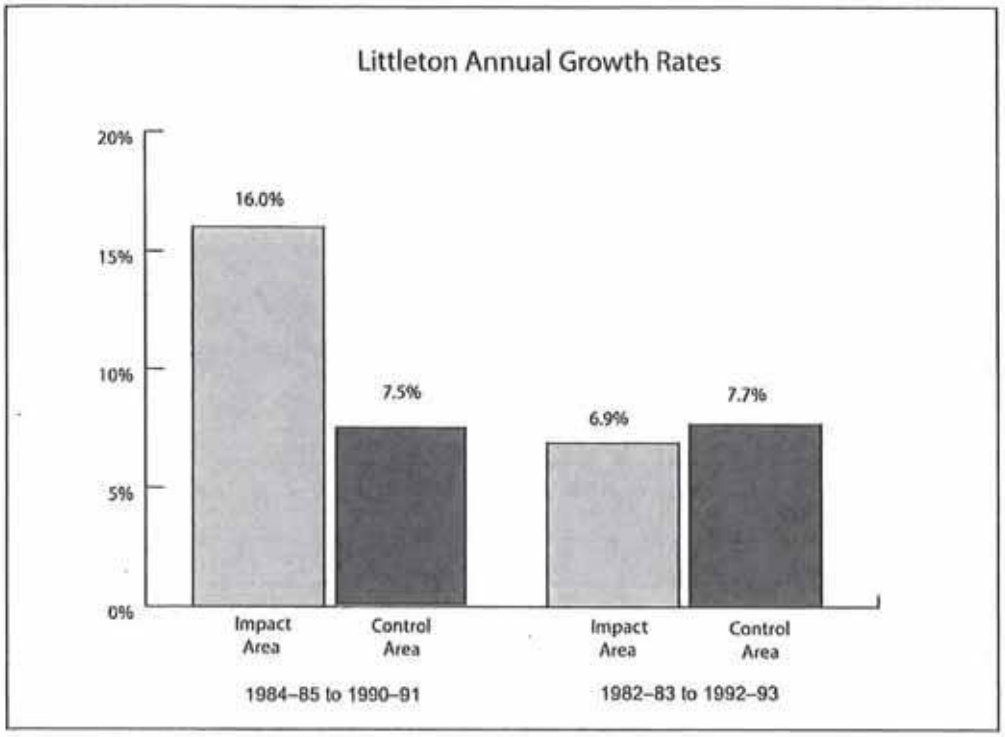


Exhibit 8

Chart 4.4



NORWOOD

Chart 4.5 displays the sales price indexes for the impact and control areas. The comparative indexes follow very similar price paths. The compound annual growth rates for the two areas are comparable for the development period and the entire study period. Taking 1983–84 as the base period for both indexes, the change in index values from the base period through the period just after construction was completed (1989–90) reflects an average annual growth rate of 13.9 percent for the impact area versus 13.2 percent for the control area (Chart 4.6). Again, the are no effective differences between the impact area and control area indexes. We conclude that the introduction of Olde Derby Village did not negatively impact the sales price of nearby single-family homes.

Exhibit 8

Chart 4.5

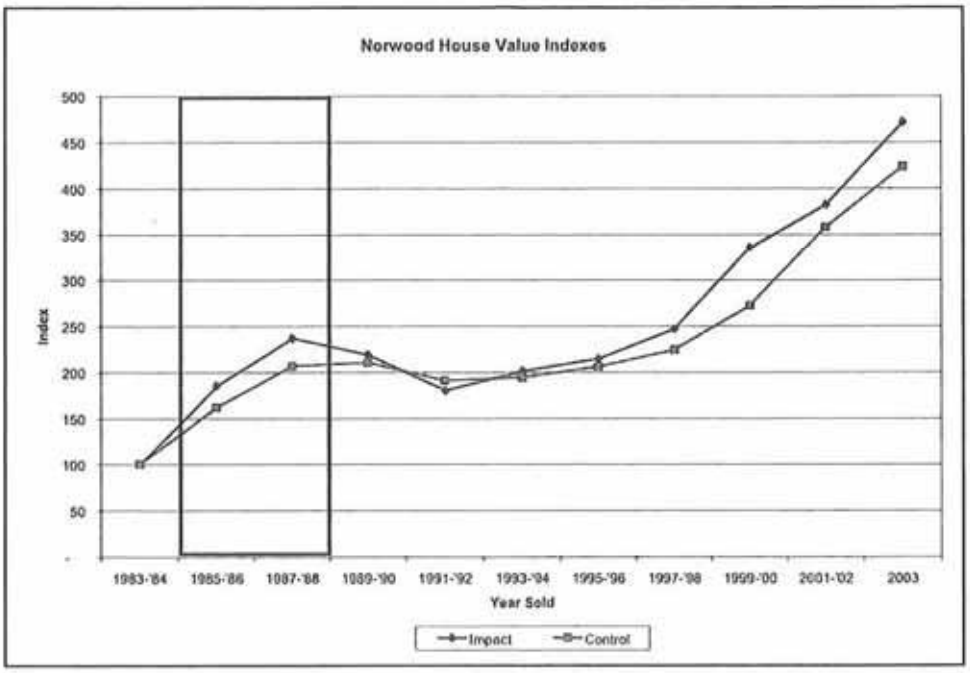


Chart 4.6

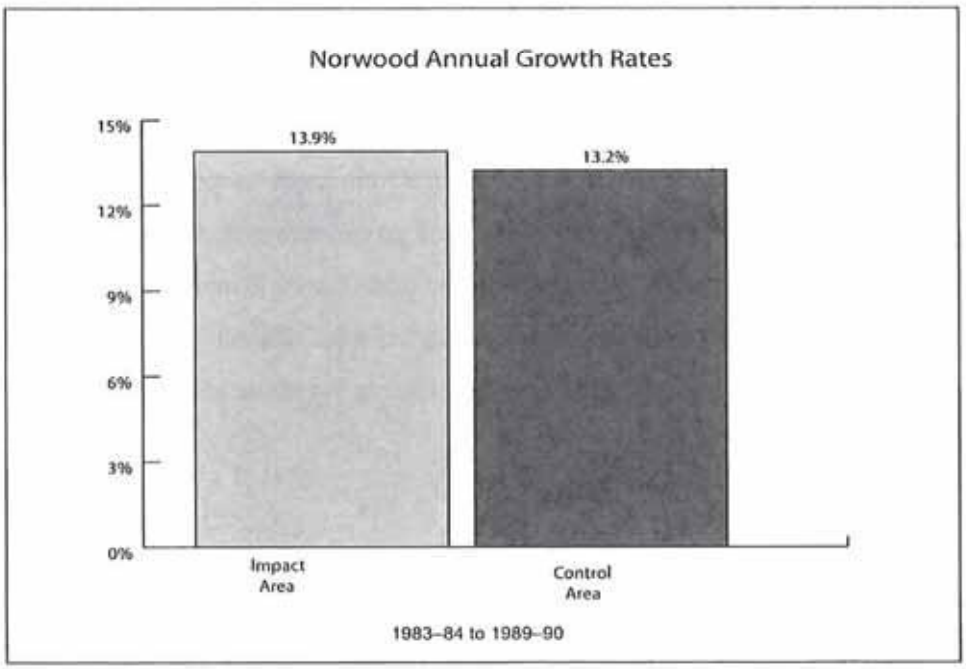


Exhibit 8

MANSFIELD AND RANDOLPH

The Mansfield Depot 40B development was constructed in two phases. The two phases were permitted in consecutive years; they were also completed in consecutive years. The first phase was permitted in 1986. The second phase was competed in 1989. The permitting for Liberty Place in Randolph occured during 1987–88, and the construction was completed during 1989–90. Our analysis period, therefore runs from 1985–86 through 1991–92.

The sample size in several two-year periods for the impact areas in Mansfield and Randolph were too small to provide sufficiently robust estimate of house values in the impact areas. The analysis period for the two developments coincides with that for Olde Derby Village in Norwood. Because the three developments line up closely, we are able to calculate a single price index for the three towns as a group.

GROUP: MANSFIELD, NORWOOD AND RANDOLPH

The analysis period for Mansfield, Norwood, and Randolph as a group is defined by the complete development period for all three towns. In begins in 1983–84, the two-year period prior

Chart 4.7

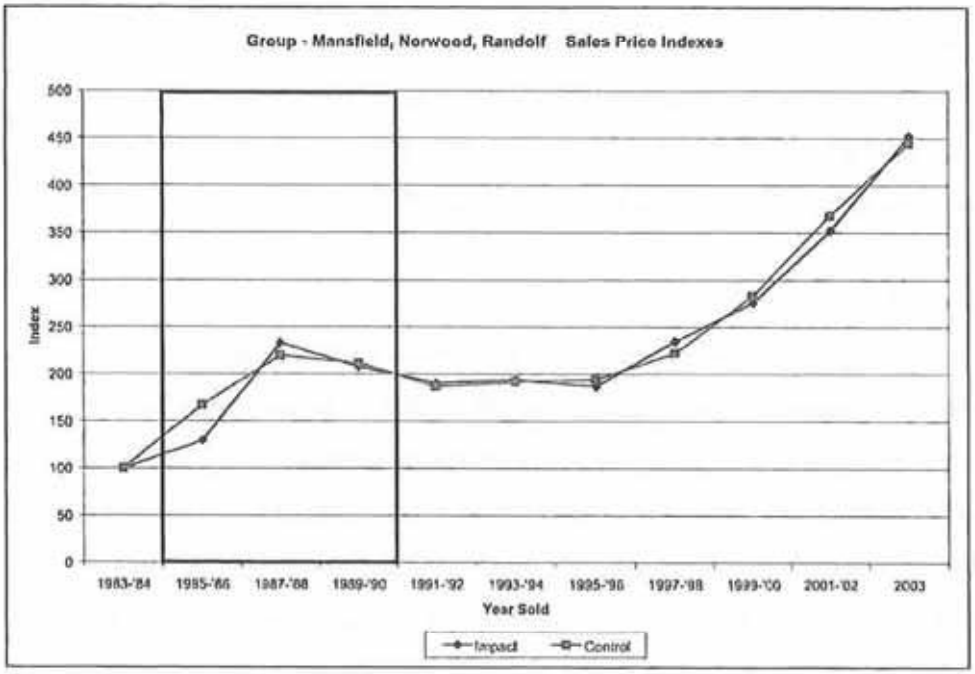
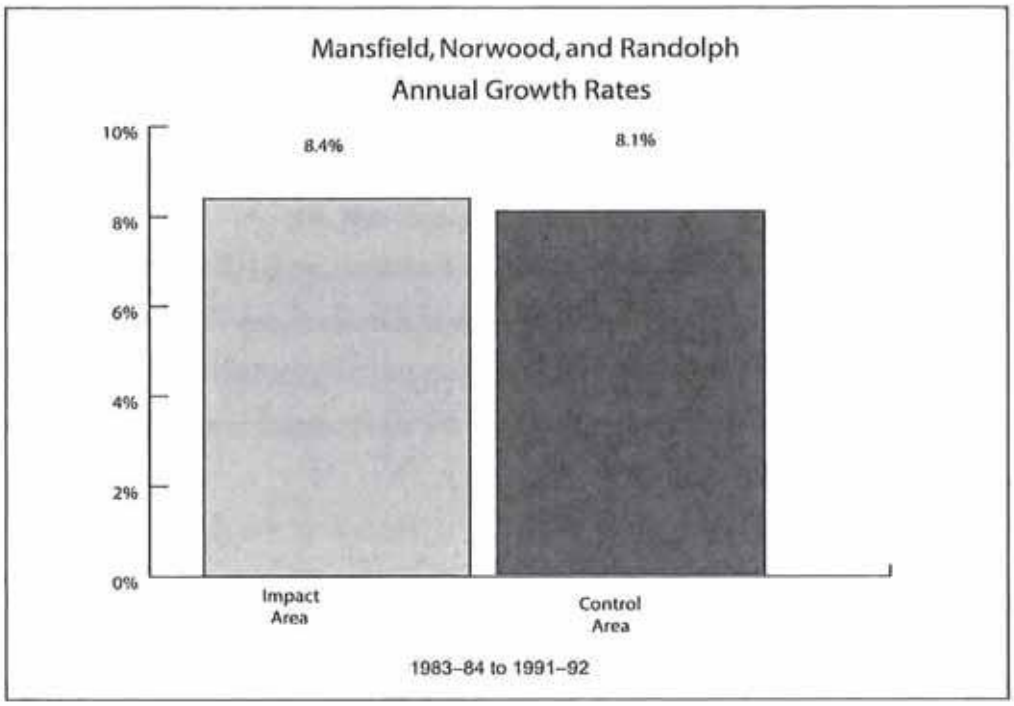


Exhibit 8

Chart 4.8



to when the earliest development, Norwood's Olde Derby Village, received its comprehensive permit, and it ends in 1991–92 after the last developments were completed. Both Liberty Place and Mansfield Depot were placed in service the same year.

The indexes for the impact sample and control sample move similarly over time (Chart 4.7). The two samples have effectively identical compound annual growth rates, 8.4 and 8.1 percent for the impact and control areas, respectively (Chart 4.8).

WILMINGTON

Price indexes for the impact area and control area track nearly identically throughout the entire data series. It is worth noting that the development was originally proposed as the Wilmington Arboretum and was denied a comprehensive permit in 1987. The permit denial was overturned on appeal in 1990 and the HAC decision was upheld by the Superior Court in 1993. The decision was reaffirmed by the Appeals Court in 1995. The judicial history of the development should have been an indication that the question of building a mixed-income, multi-family rental development in Wilmington was a matter of when, not if. As such, we would have expected to

find a siginificant deviation in the impact area from the control area sometime around 1990, when the HAC overturned the local zoning board, if there were to be a negative impact on neighboring single-family house values.

Our analysis period begins with the two-year interval before the permit was issued (1995–96) and ends in 2001–02 following completion of construction (Chart 4.11). For the period between 1995–96 and 2001–02, annual growth rates were 8.0 percent and 10.0 percent for the impact area and control area, respectively (Chart 4.12). The two percentage point difference in annual growth rates for the impact area and control area over the analysis period disappears when measuring from the period before permitting through 2003. When house values are compared through 2003, the impact area experienced an annual growth rate of 11.2 percent, compared to 11.0 percent for the control area (Chart 4.12). We conclude that the introduction of the large, dense, multi-family Avalon Oaks development did not negatively affect the sales price of single-family homes in the impact area.

Chart 4.11

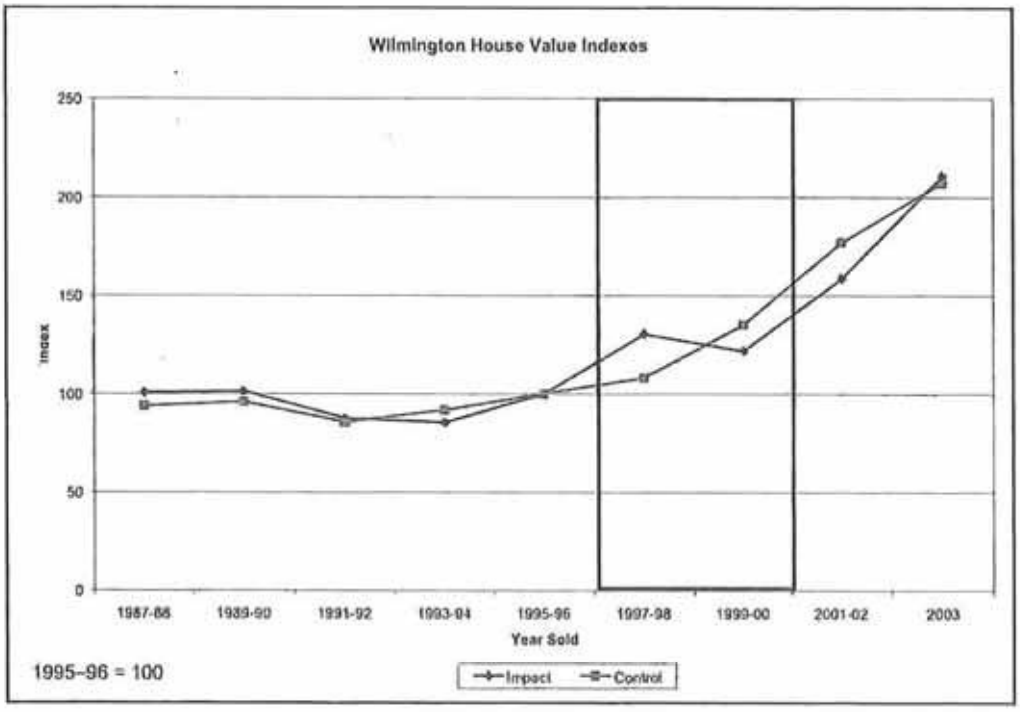


Exhibit 8

Chart 4.12

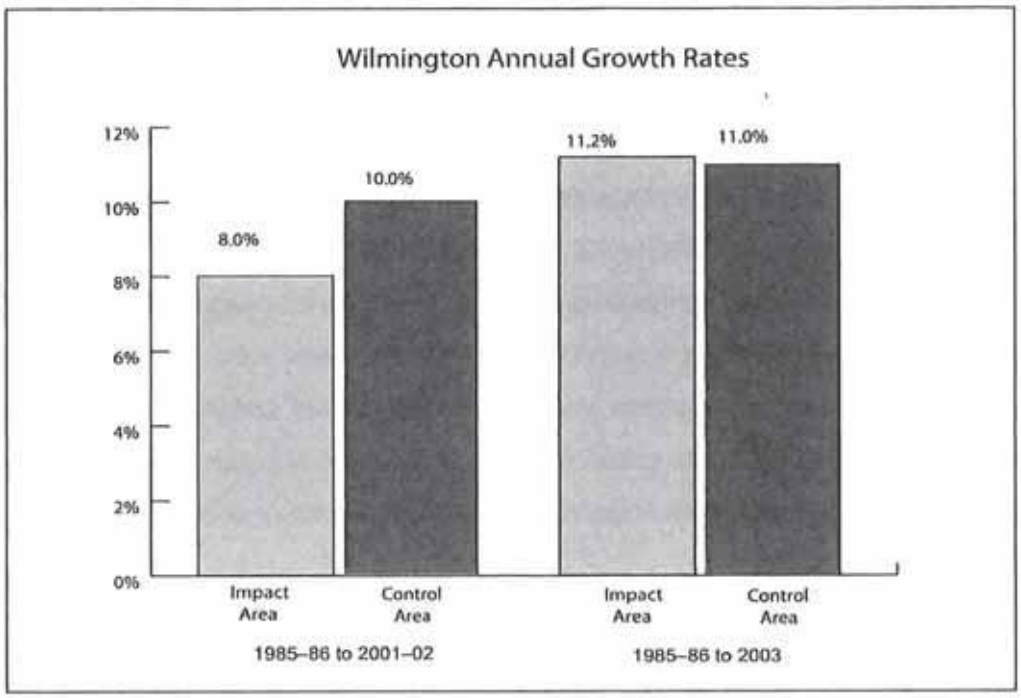


Exhibit 8

APPENDIX

WOBURN

Descriptive Statistics				
	Control		Impact	
Variable	Mean	Std. Dev.	Mean	Std. Dev
Price	*188,250*	*86,583*	*195,064*	*80,874*
Intersf	*1,471*	*486*	*1,561*	*433*
Lotsize	*11,774*	*5,889*	*12,138*	*6,592*
Bathrooms	*1.61*	*0.61*	*1.61*	*0.62*
1	**0.38**	**0.48**	**0.37**	**0.48**
1.5	0.23	0.42	0.25	0.43
2	0.24	0.43	0.25	0.44
>=2.5	0.16	0.36	0.13	0.33
Bedrooms	*3.18*	*0.78*	*3.36*	*0.78*
<=2	**0.15**	**0.35**	-	-
3	0.58	0.49	-	-
<=3	-	-	**0.68**	**0.47**
>=4	0.28	0.45	0.32	0.47
Year Built	*1946*	*40*	*1935*	*54*
<=1919	**0.20**	**0.40**	-	-
1920-59	0.43	0.49	-	-
1960-79	0.18	0.38	-	-
1980-89	0.09	0.29	-	-
1990-03	0.10	0.30	-	-
<=1899	-	-	**0.19**	**0.39**
1990-46	-	-	0.19	0.39
1947-54	-	-	0.21	0.41
1955-90	-	-	0.20	0.40
1991-03	-	-	0.20	0.40

Bold Independent variables are base case (omitted)

Exhibit 8

Control

Dependent variable equals the natural log of price

Independent variables	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.195	-	0.031	364.970	0.000
intersf	0.000	N/A	0.000	6.560	0.000
lotsize	0.000	N/A	0.000	10.680	0.000
bath1.5	0.081	8.41%	0.013	6.080	0.000
bath2	0.061	6.32%	0.014	4.500	0.000
bath>=2.5	0.160	17.35%	0.019	8.270	0.000
bed3	0.089	9.27%	0.014	6.170	0.000
bed>=4	0.095	9.96%	0.018	5.280	0.000
yrblt1920-'59	0.113	11.99%	0.013	8.520	0.000
yrblt1960-'79	0.199	22.01%	0.016	12.090	0.000
yrblt1980-'89	0.212	23.57%	0.020	10.670	0.000
yrblt1990-'03	0.260	29.73%	0.021	12.580	0.000
yrsold1983-'84	-0.434	-35.21%	0.031	-14.060	0.000
yrsold1987-'88	0.258	29.38%	0.026	9.800	0.000
yrsold1989-'90	0.238	26.88%	0.027	8.660	0.000
yrsold1991-'92	0.124	13.16%	0.026	4.720	0.000
yrsold1993-'94	0.155	16.72%	0.025	6.080	0.000
yrsold1995-'96	0.228	25.55%	0.025	9.040	0.000
yrsold1997-'98	0.329	38.90%	0.025	13.160	0.000
yrsold1999-'00	0.570	76.75%	0.025	22.790	0.000
yrsold2001-'02	0.831	129.65%	0.026	32.400	0.000
yrsold2003	1.008	173.92%	0.028	36.020	0.000
N	4762	Adjusted R-Squared	0.5553	Std. Error of the Estimate	0.32387

Omitted variables: bath1, bed<=2, yrblt<=1919, yrsold1985-'86

Impact

Dependent variable equals the natural log of price

Independent variables	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.344	-	0.117	97.270	0.000
intersf	0.000	N/A	0.000	2.200	0.029
lotsize	0.000	N/A	0.000	2.530	0.012
bath1.5	0.135	14.43%	0.052	2.570	0.011
bath2	0.003	0.25%	0.053	0.050	0.962
bath>=2.5	0.057	5.89%	0.080	0.720	0.474
bed>=4	0.084	8.75%	0.046	1.810	0.072
yrblt1900-'46	0.016	1.62%	0.061	0.260	0.793
yrblt1947-'54	0.165	17.95%	0.062	2.640	0.009
yrblt1955-'90	0.146	15.69%	0.059	2.470	0.015
yrblt1991-'03	0.382	46.49%	0.069	5.550	0.000
yrsold1983-'84	-0.558	-42.74%	0.133	-4.190	0.000
yrsold1987-'88	0.084	8.76%	0.101	0.830	0.408
yrsold1989-'90	0.221	24.76%	0.097	2.270	0.025
yrsold1991-'92	0.109	11.55%	0.113	0.970	0.335
yrsold1993-'94	-0.044	-4.29%	0.103	-0.430	0.671
yrsold1995-'96	-0.111	-10.54%	0.097	-1.150	0.252
yrsold1997-'98	0.218	24.34%	0.087	2.510	0.013
yrsold1999-'00	0.507	66.05%	0.092	5.530	0.000
yrsold2001-'02	0.784	119.08%	0.096	8.130	0.000
yrsold2003	0.930	153.44%	0.106	8.770	0.000
N	157	Adjusted R-Squared	0.742	Std. Error of the Estimate	0.21462

Omitted variables: bath1, bed<=3, yrblt<=1899, yrsold1985-'86

Exhibit 8

LITTLETON

Descriptive Statistics				
	Control		Impact	
Variable	Mean	Std. Dev.	Mean	Std. Dev
Price	*213,779*	*118,143*	*177,111*	*94,639*
Intersf	*1,866*	*708*	*1,832*	*752*
Lotsize	*46,663*	*92,369*	*33,365*	*36,533*
Bathrooms	*1.79*	*0.68*	*1.66*	*0.68*
1	-	-	*0.39*	*0.47*
<=1	**0.32**	**0.47**	-	-
<=1.5	-	-	-	-
1.5	0.16	0.37	0.18	0.41
2	0.19	0.39	0.19	0.38
>=2	-	-	-	-
>=2.5	0.32	0.47	0.23	0.46
Bedrooms	*3.11*	*0.83*	*3.02*	*0.45*
<=2	**0.20**	**0.40**	-	-
2	-	-	0.10	-
3	0.50	0.50	-	-
<=3	-	-	**0.77**	**0.38**
>=4	0.30	0.46	0.13	0.38
Year Built	*1950*	*33*	*1956*	*34*
<=1942	**0.28**	**0.45**	-	-
1943-'55	0.29	0.45	-	-
1956-'74	0.22	0.42	-	-
1975-'91	0.15	0.36	-	-
1992-'03	0.06	0.24	-	-
<=1949	-	-	**0.16**	**0.39**
1950-'65	-	-	0.59	0.37
1956-'63	-	-	0.25	0.44

Bold Independent variables are base case (omitted)

Control					
Dependent variable equals the natural log of price					
lnprice	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.375	-	0.042	273.740	0.000
intersf	0.000	N/A	0.000	11.020	0.000
lotsize	0.000	N/A	0.000	3.480	0.001
bath1.5	0.041	4.14%	0.027	1.500	0.134
bath2	0.039	4.02%	0.026	1.530	0.126
bath>=2.5	0.192	21.20%	0.032	6.000	0.000
bed3	0.126	13.39%	0.022	5.590	0.000
bed>=4	0.171	18.59%	0.029	5.830	0.000
yrblt1943-'55	0.054	5.52%	0.024	2.220	0.026
yrblt1956-'74	0.115	12.24%	0.026	4.510	0.000
yrblt1975-'91	0.157	17.01%	0.028	5.700	0.000
yrblt1992-'03	0.114	12.04%	0.030	3.780	0.000
yrsold1982-'83	-0.864	-57.85%	0.056	-15.530	0.000
yrsold1984-'85	-0.505	-39.65%	0.047	-10.820	0.000
yrsold1988-'89	-0.065	-6.33%	0.043	-1.530	0.126
yrsold1990-'91	-0.070	-6.74%	0.043	-1.620	0.106
yrsold1992-'93	-0.121	-11.41%	0.039	-3.100	0.002
yrsold1994-'95	-0.036	-3.53%	0.041	-0.890	0.376
yrsold1996-'97	0.070	7.20%	0.039	1.800	0.071
yrsold1998-'99	0.227	25.49%	0.038	5.920	0.000
yrsold2000-'01	0.473	60.47%	0.039	12.210	0.000
yrsold2002-'03	0.702	101.77%	0.039	18.050	0.000
N	2031	Adjusted R-Squared	0.6312	Std. Error of the Estimate	0.3485

Omitted variables: bath<=1, bed<=2, yrblt<=1942, yrsold1986-'87

Exhibit 8

Impact					
Dependent variable equals the natural log of price					
lnprice	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
_cons	10.956	0.00%	0.150	72.900	0.000
intersf	0.000	N/A	0.000	1.280	0.201
lotsize	0.000	N/A	0.000	1.550	0.123
bed2	0.076	7.86%	0.097	0.780	0.438
bed4	-0.108	-10.26%	0.091	-1.190	0.237
yrblt_50	-0.092	-8.82%	0.091	-1.010	0.312
yrblt_8090	-0.082	-7.92%	0.094	-0.880	0.381
bath15	0.226	25.40%	0.096	2.370	0.019
bath2	0.061	6.26%	0.085	0.710	0.478
bath25	0.187	20.60%	0.122	1.530	0.128
yrsold1982-'83	-0.149	-13.82%	0.150	-0.990	0.324
yrsold1984-'85	0.633	88.29%	0.153	4.140	0.000
yrsold1988-'89	0.767	115.41%	0.155	4.960	0.000
yrsold1990-'91	0.744	110.51%	0.158	4.720	0.000
yrsold1992-'93	0.668	95.08%	0.154	4.350	0.000
yrsold1994-'95	0.697	100.83%	0.148	4.700	0.000
yrsold1996-'97	0.765	114.79%	0.144	5.300	0.000
yrsold1998-'99	0.885	142.21%	0.139	6.350	0.000
yrsold2000-'01	1.286	261.69%	0.152	8.480	0.000
yrsold2002-'03	1.463	332.08%	0.150	9.730	0.000
N	176	Adjusted R-Squared	0.5892	Std. Error of the Estimate	0.34998

Omitted variables: bath1, bed=3, yrblt<=1950-1965, yrsold1982-83

NORWOOD

Descriptive Statistics				
	Control		Impact	
Variable	Mean	Std. Dev.	Mean	Std. Dev
Price	*203,612*	*85,087*	*212,842*	*86,544*
Intersf	*1,522*	*536*	*1,399*	*348*
Lotsize	*12,095*	*8,115*	*14,002*	*5,569*
Bathrooms	*1.66*	*0.59*	*1.69*	*0.46*
1	**0.28**	**0.45**	**0.12**	**0.33**
1.5	0.35	0.48	0.52	0.50
2	0.19	0.39	0.23	0.42
>=2.5	0.18	0.38	0.13	0.34
Bedrooms	*3.12*	*0.81*	*2.98*	*0.50*
<=2	**0.18**	**0.38**	**0.08**	**0.28**
3	0.57	0.49	0.84	0.37
>=4	0.25	0.43	0.08	0.27
Year Built	*1946*	*27*	*1953*	*24*
<=1923	**0.20**	**0.40**		
1924-'49	0.18	0.38	-	-
1950-'54	0.19	0.39	-	-
1955-'62	0.24	0.43	-	-
1963-'03	0.20	0.40	-	-
<=1959	-	-	**0.34**	**0.48**
1960-'65	-	-	0.55	0.50
1966-'03	-	-	0.11	0.32

Bold Independent Variables are base case (omitted)

Exhibit 8

Control

Dependent variable equals the natural log of price

lnprice	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.232	-	0.028	395.600	0.000
intersf	0.000	N/A	0.000	15.140	0.000
lotsize	0.000	N/A	0.000	5.730	0.000
bath1.5	0.047	4.81%	0.012	3.880	0.000
bath2	0.048	4.90%	0.014	3.320	0.001
bath>=2.5	0.074	7.66%	0.018	4.210	0.000
bed3	0.060	6.18%	0.013	4.580	0.000
bed>=4	0.094	9.86%	0.017	5.690	0.000
yrblt1924_'49	0.120	12.79%	0.015	7.840	0.000
yrblt1950_'54	0.120	12.75%	0.015	7.780	0.000
yrblt1955_'62	0.192	21.11%	0.015	12.890	0.000
yrblt1963_'03	0.300	34.97%	0.016	18.460	0.000
yrsold1983-'84	-0.480	-38.14%	0.032	-15.030	0.000
yrsold1987-'88	0.245	27.77%	0.026	9.570	0.000
yrsold1989-'90	0.263	30.09%	0.026	10.040	0.000
yrsold1991-'92	0.164	17.88%	0.026	6.420	0.000
yrsold1993-'94	0.184	20.18%	0.025	7.410	0.000
yrsold1995-'96	0.240	27.15%	0.025	9.500	0.000
yrsold1997-'98	0.327	38.66%	0.024	13.720	0.000
yrsold1999-'00	0.520	68.29%	0.024	21.470	0.000
yrsold2001-'02	0.795	121.45%	0.024	32.660	0.000
yrsold2003	0.963	161.86%	0.029	33.560	0.000
N	3593	Adjusted R-Squared	0.6082	Std. Error of the Estimate	0.27808

Omitted variables: bath1, bed<=2, yrblt<=1923, yrsold1985-'85

Impact

Dependent variable equals the natural log of price

lnprice	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.107	-	0.129	86.220	0.000
intersf	0.000	N/A	0.000	2.610	0.011
lotsize	0.000	N/A	0.000	1.910	0.059
bath1.5	0.288	33.33%	0.067	4.280	0.000
bath2	0.211	23.44%	0.080	2.630	0.010
bath>=2.5	0.359	43.13%	0.089	4.020	0.000
bed3	0.124	13.24%	0.072	1.720	0.089
bed>=4	0.152	16.39%	0.110	1.380	0.171
yrblt1960_'65	0.174	19.00%	0.043	4.000	0.000
yrblt1966_'03	0.097	10.14%	0.071	1.350	0.180
yrsold1983-'84	-0.691	-49.90%	0.125	-5.520	0.000
yrsold1987-'88	0.246	27.92%	0.097	2.540	0.013
yrsold1989-'90	0.167	18.13%	0.105	1.580	0.118
yrsold1991-'92	-0.030	-2.92%	0.101	-0.300	0.768
yrsold1993-'94	0.083	8.70%	0.096	0.870	0.388
yrsold1995-'96	0.147	15.89%	0.099	1.490	0.140
yrsold1997-'98	0.287	33.30%	0.103	2.800	0.006
yrsold1999-'00	0.595	81.30%	0.101	5.910	0.000
yrsold2001-'02	0.726	106.65%	0.100	7.290	0.000
yrsold2003	0.936	154.89%	0.107	8.780	0.000
N	106	Adjusted R-Squared	0.8295	Std. Error of the Estimate	0.1762

Omitted variables: bath1, bed<=2, yrblt<=1959, yrsold1985-'86

Exhibit 8

GROUP: MANSFIELD, NORWOOD, RANDOLPH

Descriptive Statistics				
	Control		Impact	
Variable	Mean	Std. Dev.	Mean	Std. Dev
Price	*186,889*	*89,253*	*169,628*	*76,871*
Intersf	*1,565*	*572*	*1,390*	*353*
lotsize	*18,495*	*13,890*	*13,026*	*6,009*
Bathrooms	*1.696*	*0.625*	*1.555*	*0.523*
1	**0.318**	**0.466**	0.329	0.471
1.5	0.263	0.440	0.371	0.484
2	0.167	0.373	-	-
>=2			0.300	0.459
>=2.5	0.253	0.435	-	-
Bedrooms	*3.135*	*0.730*	*3.098*	*0.561*
<=2	**0.143**	**0.351**	-	-
3	0.599	0.490	-	-
<=3	-	-	**0.828**	**0.378**
>=4	0.257	0.437	0.172	0.378
Year Built	*1956*	*35*	*1947*	*36*
<=1945	**0.247**	**0.432**	-	-
1946-'59	0.241	0.428	-	-
1960-'83	0.254	0.435	-	-
1984-'92	0.149	0.356	-	-
1993-'03	0.108	0.311	-	-
<=1919	-	-	**0.175**	**0.381**
1920-'51	-	-	0.223	0.417
1952-'60	-	-	0.193	0.395
1961-'77	-	-	0.211	0.408
1978-'03	-	-	0.199	0.400

Bold Independent variables are base case (omitted)

Control					
Dependent variable equals the natural log of price					
lnprice	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.232	-	0.028	395.600	0.000
intersf	0.000	N/A	0.000	15.140	0.000
lotsize	0.000	N/A	0.000	5.730	0.000
bath1.5	0.047	4.81%	0.012	3.880	0.000
bath2	0.048	4.90%	0.014	3.320	0.001
bath>=2.5	0.074	7.66%	0.018	4.210	0.000
bed3	0.060	6.18%	0.013	4.580	0.000
bed>=4	0.094	9.86%	0.017	5.690	0.000
yrblt1924_'49	0.120	12.79%	0.015	7.840	0.000
yrblt1950_'54	0.120	12.75%	0.015	7.780	0.000
yrblt1955_'62	0.192	21.11%	0.015	12.890	0.000
yrblt1963_'03	0.300	34.97%	0.016	18.460	0.000
yrsold1983-'84	-0.480	-38.14%	0.032	-15.030	0.000
yrsold1987-'88	0.245	27.77%	0.026	9.570	0.000
yrsold1989-'90	0.263	30.09%	0.026	10.040	0.000
yrsold1991-'92	0.164	17.88%	0.026	6.420	0.000
yrsold1993-'94	0.184	20.18%	0.025	7.410	0.000
yrsold1995-'96	0.240	27.15%	0.025	9.500	0.000
yrsold1997-'98	0.327	38.66%	0.024	13.720	0.000
yrsold1999-'00	0.520	68.29%	0.024	21.470	0.000
yrsold2001-'02	0.795	121.45%	0.024	32.660	0.000
yrsold2003	0.963	161.86%	0.029	33.560	0.000
N	3583	Adjusted R-Squared	0.6082	Std. Error of the Estimate	0.27808

Omitted variables: bath1, bed<=2, yrblt<=1923, yrsold1985-'86

Exhibit 8

Impact					
Dependent variable equals the natural log of price					
Inprice	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	10.602	-	0.126	84.280	0.000
intersf	0.000	N/A	0.000	1.950	0.052
lotsize	0.000	N/A	0.000	1.540	0.125
bath1.5	0.203	22.52%	0.045	4.550	0.000
bath>=2	0.213	23.73%	0.052	4.070	0.000
bed>=4	-0.031	-3.07%	0.052	-0.600	0.551
yrblt1920-'51	0.088	9.20%	0.056	1.580	0.116
yrblt1952-60	0.285	33.02%	0.057	4.980	0.000
yrblt1961-'77	0.341	40.60%	0.059	5.800	0.000
yrblt1978-'03	0.135	14.50%	0.063	2.140	0.033
yrsold1985-'86	0.258	29.44%	0.115	2.240	0.026
yrsold1987-'88	0.846	132.92%	0.099	8.570	0.000
yrsold1989-'90	0.732	107.95%	0.097	7.570	0.000
yrsold1991-'92	0.645	90.57%	0.096	6.700	0.000
yrsold1993-'94	0.661	93.71%	0.095	6.950	0.000
yrsold1995-'96	0.626	87.07%	0.095	6.580	0.000
yrsold1997-'98	0.854	134.98%	0.095	8.960	0.000
yrsold1999-'00	1.014	175.74%	0.097	10.420	0.000
yrsold2001-'02	1.260	252.50%	0.094	13.360	0.000
yrsold2003	1.509	352.00%	0.108	14.000	0.000
N	337	Adjusted R-Squared	0.5935	Std. Error of the Estimate	0.30611

Omitted variables: bath1, bed<=3, yrblt<=1919, yrsold1983-'84

WILMINGTON

Descriptive Statistics				
	Control		Impact	
Variable	Mean	Std. Dev.	Mean	Std. Dev
Price	*201,526*	*89,119*	*225,817*	*80,090*
Intersf	*1,570*	*555*	*1,693*	*701*
Lotsize	*20,702*	*14,499*	*25,593*	*8,972*
Bathrooms	*1.66*	*0.60*	*1.63*	*0.59*
1	**0.32**	**0.47**	**0.29**	**0.46**
1.5	0.28	0.45	0.39	0.49
2	0.21	0.40	0.33	0.47
>=2.5	0.20	0.40	-	-
Bedrooms	*3.13*	*0.70*	*3.26*	*0.50*
<=2	**0.13**	**0.33**	-	-
3	0.64	0.48	**0.23**	**0.42**
>=4	0.23	0.42	0.23	0.42
Year Built	*1968*	*29*	*1958*	*34*
<=1949	**0.20**	**0.40**	-	-
1950-'64	0.23	0.42	-	-
1965-'84	0.16	0.37	-	-
1985-'92	0.19	0.39	-	-
1993-'03	0.22	0.42	-	-
<=1955	-	-	0.27	0.45
1956-'64	-	-	0.21	0.41
1965-'72	-	-	0.21	0.41
1973-'03	-	-	0.30	0.46

Bold independent variables are base case (omitted)

Exhibit 8

Control

Dependent variable equals the natural log of price

Independent variables	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.409	-	0.026	438.130	0.000
intersf	0.000	N/A	0.000	7.970	0.000
lotsize	0.000	N/A	0.000	11.050	0.000
bath1.5	0.009	0.91%	0.015	0.620	0.538
bath2	0.039	3.94%	0.016	2.430	0.015
bath>=2.5	0.185	20.29%	0.021	8.760	0.000
bed3	0.081	8.40%	0.017	4.880	0.000
bed>=4	0.121	12.82%	0.022	5.580	0.000
yrblt1950-'64	0.145	15.60%	0.015	9.450	0.000
yrblt1965-'84	0.230	25.81%	0.018	13.030	0.000
yrblt1985-'92	0.234	26.30%	0.018	13.260	0.000
yrblt1993-'03	0.138	14.82%	0.018	7.550	0.000
yrsold1989-'90	0.022	2.19%	0.024	0.890	0.372
yrsold1991-'92	-0.091	-8.67%	0.023	-4.020	0.000
yrsold1993-'94	-0.022	-2.17%	0.022	-1.020	0.310
yrsold1995-'96	0.065	6.76%	0.022	3.040	0.002
yrsold1997-'98	0.144	15.44%	0.021	6.770	0.000
yrsold1999-'00	0.366	44.17%	0.022	16.940	0.000
yrsold2001-'02	0.636	88.93%	0.023	28.270	0.000
yrsold2003	0.793	121.01%	0.025	31.140	0.000
N	4431	Adjusted R-Squared	0.5015	Std. Error of the Estimate	0.32431

Omitted variables: bath1, bed<=2, yrblt<=1949, yrsold1987-'88

Impact

Dependent variable equals the natural log of price

Independent variables	Coefficients		Std. Error	t	Significance
	Unstandardized	Standardized			
constant	11.843	-	0.145	81.880	0.000
intersf	0.000	N/A	0.000	0.440	0.662
lotsize	0.000	N/A	0.000	1.400	0.168
bath1.5	-0.023	-2.29%	0.071	-0.320	0.747
bath>=2	0.086	9.01%	0.083	1.030	0.306
bed>=4	0.030	3.01%	0.076	0.390	0.697
yrblt1956_'64	0.052	5.35%	0.078	0.670	0.509
yrblt1965_'72	0.183	20.08%	0.082	2.220	0.030
yrblt1973_'03	0.211	23.46%	0.075	2.830	0.007
yrsold1989-'90	0.005	0.49%	0.111	0.040	0.965
yrsold1991-'92	-0.140	-13.10%	0.115	-1.220	0.229
yrsold1993-'94	-0.165	-15.20%	0.131	-1.260	0.213
yrsold1995-'96	-0.006	-0.56%	0.109	-0.050	0.959
yrsold1997-'98	0.259	29.55%	0.127	2.040	0.046
yrsold1999-'00	0.192	21.15%	0.105	1.820	0.074
yrsold2001-'02	0.455	57.69%	0.124	3.680	0.001
yrsold2003	0.740	109.53%	0.127	5.800	0.000
N	70	Adjusted R-Squared	0.6153	Std. Error of the Estimate	0.20459

Omitted variables: bath1, bed3, yrblt<=1955, yrsold1987-'88

Exhibit 8

Dejan Eskic
Senior Research Fellow

The Impact of High-Density Apartments on Surrounding Single-Family Home Values in Suburban Salt Lake County

New, dense housing continues to be a point of conflict in growing communities as concerns over negative impacts to home values dominate the discussion. This study quantifies how new apartment construction has impacted single-family home price acceleration over the last decade.

February 2021

Kem C. Gardner
POLICY INSTITUTE
THE UNIVERSITY OF UTAH
DAVID ECCLES SCHOOL OF BUSINESS

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POLICY INSTITUTE
THE UNIVERSITY OF UTAH
DAVID ECCLES SCHOOL OF BUSINESS

The Impact of High-Density Apartments on Surrounding Single-Family Home Values in Suburban Salt Lake County

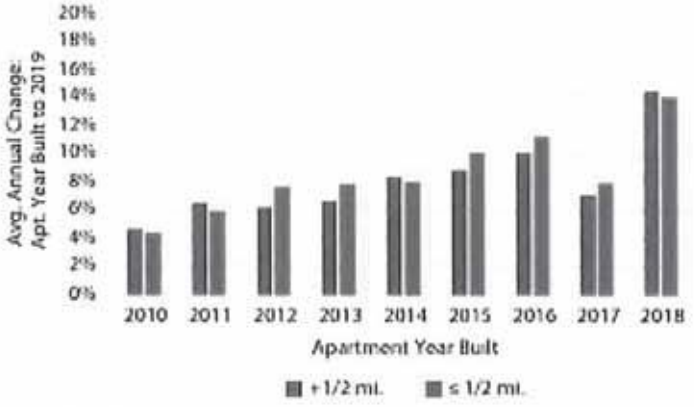
Analysis in Brief

This study found apartments built between 2010 and 2018 have not reduced single-family home values in suburban Salt Lake County. In response to accelerating housing prices over the last decade, the market continues to shift to denser development to slow this trend. However, denser development continues to be a politically controversial topic on city council agendas as existing residents often bring up negative impacts on home values. Single-family homes located within 1/2 mile of a newly constructed apartment building experienced higher overall price appreciation than those homes farther away.

Key Findings

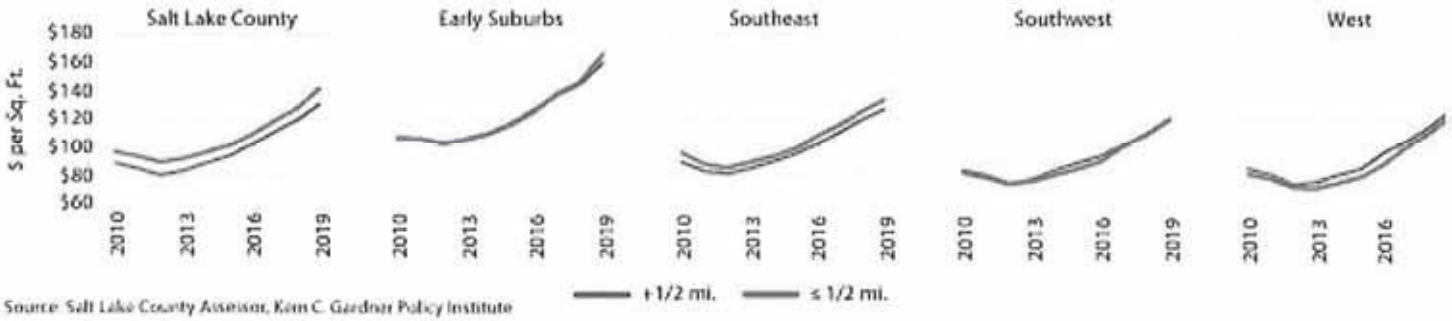
- **New Apartments Have Not Reduced Single-Family Home Values**—Between 2010 and 2019, homes located within 1/2 mile of a newly constructed apartment building experienced a 10.0% average annual increase in median value, while the value of those farther away increased by 8.6%. Only in the Southeast part of the county did homes more than 1/2 mile away from new apartment construction experience higher average price appreciation than those located ≤1/2 mile.
- **Negative Impacts**—The only occurrence where negative price trends followed apartment construction was for homes near apartments built in 2010 and 2011. This resulted from the negative economic impacts brought on by the housing crash of the prior decade.
- **Higher Value per Square Foot**—Between 2010 and 2019, homes that are located ≤ 1/2 mile of new apartments averaged an 8.8% higher median value per square foot compared with those farther away. However, the total median market value of single-family homes averaged 4.7% greater for those that are located more than 1/2 mile away from new apartments.
- **Homes Near Apartments Are Smaller and Older**—In suburban Salt Lake County overall, homes located within 1/2 mile of new apartments are approximately 270 sq. ft., or 11.1%, smaller than those farther away. Homes that are located ≤1/2 mile of new apartments are seven years older on average than those located farther away and lot sizes average 0.02 acre smaller for homes located ≤1/2 mile of new apartments.

Average Annual Change in Median Price, Year of Apartment Built to 2019, Salt Lake County



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Median Market Value per Square Foot of Single-Family Homes by Distance to Nearest Apartment



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Access full report at gardner.utah.edu

Introduction

Over the last decade, Utah has led the nation in the rate of population growth, resulting in a record demand for housing. While the housing oversupply of the 2000s was absorbed as the economy recovered from the recession in the early 2010s, supply in the new decade has struggled to keep up, leading to a housing shortage of 53,000 units in 2020. According to the National Association of Realtors, the year-over median sales price of a home in the Salt Lake metropolitan area increased by 12.3% in the first quarter of 2020. The Salt Lake metropolitan area ranked 16th of 182 metropolitan areas surveyed for a year-over price increase. Housing price increases were lower in 90% of the metropolitan areas surveyed.[1] Additionally, land improvement costs, such as excavation and utility work, increased by approximately 40% between 2007 and 2017, and building costs grew 23% in the same period.[2] Land prices have also soared with a limited supply across the Wasatch Front. The Wasatch Mountains to the east and the Oquirrh Mountains to the west limit the availability of developable land in Salt Lake County.

The combination of soaring demand and supply shortages continues to push the market to provide a more affordable housing product. This is typically done through density because the price of land is distributed across more units. Over the last decade, the market has shifted to denser development, with nearly 48% of all units being built as something other than single-family.

As denser projects continue to appear on city council agendas, opposition to them has grown, manifested in a rising Nimby (not in my back yard) sentiment.[3] Amongst the grievances aired by those opposing denser development is an expected negative impact on property values. The question, "Does new apartment construction negatively impact single-family home values?" is challenging to answer because the housing market, over the last decade, has experienced historic price accelerations—it is rare to find a home whose value has decreased. Rather, this study attempts to quantify how new apartment construction has impacted single-family home price acceleration.

This study found apartments built between 2010 and 2018 have not reduced single-family home values. Compared by distance, single-family homes located within 1/2 mile of a newly constructed apartment building experienced higher overall price appreciation than those homes farther away. Measuring the median value of homes from the year the apartment was built to 2019 shows that homes located within 1/2 mile of an apartment experienced a 10.0% average annual increase, while the value of those farther away increased by 8.6%. This implies an additional 1.4 percentage points in annual price appreciation for homes closer to new apartment buildings (see Table 1). Similar results are seen in most of the county, with the likely driver being that new apartment construction brings new demand and new dollars to a community and redevelops an older piece of property, thus bringing more vibrancy and "buzz" to the area.[4]

Table 1: Average Annual Change in Median Price, Year of Apartment Built to 2019

Area	≤1/2 mi.	>1/2 mi.
Salt Lake County	8.6%	10.0%
Early Suburbs	7.6%	10.7%
Southeast	7.3%	6.8%
Southwest	7.7%	9.7%
West	10.5%	13.7%

Note: See Figure 1 for area designations.
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Literature Review

The academic literature leans towards showing multifamily, denser development having either no impact or a positive impact on single-family residential values. A study in King County, Washington, shows an increase in single-family home values for those located near denser development. The study also showed an increase in access to other land uses and parks, adding additional benefits.[5]

A study completed by the National Association of Homebuilders found that between 1997 and 1999, single-family values increased 2.9% for those homes within 300 feet of an apartment building, compared with an increase of 2.7% for those that weren't located next to an apartment.[6] Based on data from 1970 to 2000, a study published in 2003 by Harvard's Joint Center for Housing Studies concluded that apartments posed no threat to surrounding single-family house values.[7]

A study from researchers at Virginia Tech University concluded that apartments with attractive design and landscaping increased the overall value of nearby detached housing, citing three possible reasons.[8] These include, first, new construction serves as a potential indicator of positive economic growth; second, new apartments increase the pool of future homebuyers for current homeowners; and third, apartments with mixed-use development often increase the attractiveness of nearby communities as they provide more housing and amenity choices.[9]

An additional benefit is a decrease in traffic, not an increase as often thought. A study by the National Personal Transportation Survey found that doubling density decreases vehicle miles traveled by 38% since denser households typically own fewer vehicles.[10]

Methodology & Overview

The Salt Lake County Assessor's market value data is used to measure new apartment construction effects on single-family homes. Two measures are used. First, the average annual rate of value change from the year the apartment was constructed to 2019 is used to measure the overall impact. Second, the year-over percent change of median market value is used to estimate annual fluctuations.

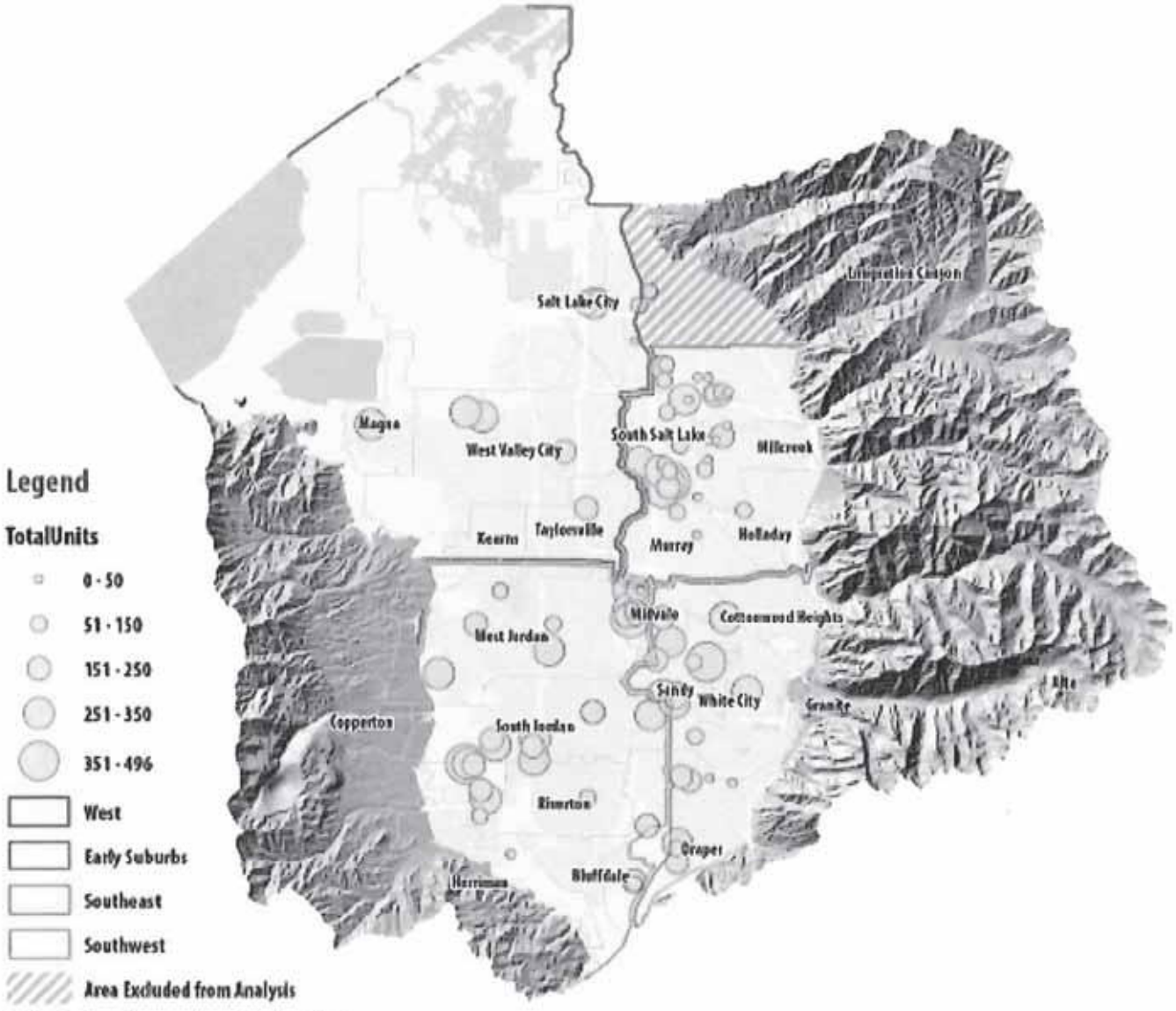
Because of data availability, only apartments built between 2010 and 2018 are used to measure these impacts. Single-family homes are divided into two categories, homes that are less than or equal to one-half mile (≤1/2 mi.) from new apartment construction, and those that are farther away (+1/2 mi.).

The five geographies covered by this study are shown in Figure 1. Because of a range of development activity and multiple factors not present in the suburban parts of the county, the greater Salt Lake City downtown area is excluded from this study. The five geographies are based on Census tracts and consist of the following cities and townships:

- **Suburban Salt Lake County:** consists of the four geographies mentioned below.
- **West:** includes a part of Salt Lake City, Magna, West Valley City, Kearns, and Taylorsville.
- **Early Suburbs:** includes a part of Salt Lake City, South Salt Lake, Millcreek, Murray, and Holladay.
- **Southeast:** includes part of Midvale, Cottonwood Heights, Sandy, and part of Draper.
- **Southwest:** includes Bluffdale, Harriman, Riverton, South Jordan, West Jordan, and part of Midvale and Draper.

Apartment construction boomed in Salt Lake County during the last decade. Between 2010 and 2018, 7,754 units were

Figure 1: Areas of Analysis and Location of Apartments by Number of Units, 2010–2018



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

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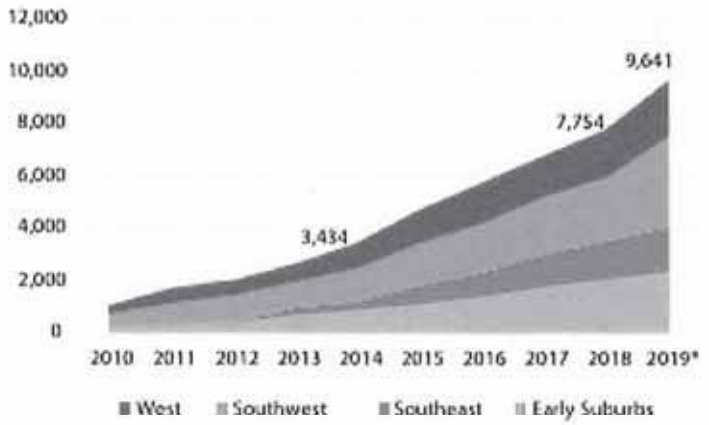
Figure 2: Cumulative Apartment Units Built, Salt Lake County
(Excluding greater downtown area)



*The data to measure impacts of apartments constructed in 2019 was unavailable at the time of this study.
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

completed (see Figure 2). Another 1,887 units were delivered to the market in 2019 but are not included in this analysis as the data to measure their impacts are not yet available. By 2018, the county's Southwest area accounted for 32.2% of total apartment units built since 2010, followed by the Early Suburbs area, accounting for 26.9%. The West area held 21.5% of new units built since 2010, and the Southeast area had the lowest share with 17.1% of units.

In suburban Salt Lake County, 1,887 new apartment units completed construction and began leasing in 2019, a single-year record surpassing the 1,250 new units constructed in 2015 (see Table 2). In the Early Suburbs area, 2017 was a record year with 378 new units constructed. The Southeast area set its record in 2015, with 416 new units. The Southwest area holds the record for any single year, adding 1,048 new apartment units in 2019. The West area also reached its record in 2019 for single-year construction with the delivery of 300 units.

Key physical characteristics distinguish single-family units based on their proximity to new apartment construction and impact their value (see Table 3). The size of a home is a major factor driving market value. In suburban Salt Lake County overall, homes located within 1/2 mile of new apartments are approximately 270 sq. ft., or 11.1%, smaller than those farther away. The size difference is even greater for those homes located in the Early Suburbs area; homes ≤1/2 mile of new apartments are 640 sq. ft., or 26.0%, smaller than those that aren't. Homes located in the Southeast area are 438 sq. ft. smaller or 15.3%, while those located in the Southwest area are nearly identical, with a size difference of only 88 sq. ft., or 3.0%. The difference in size for homes in the West area is 142 sq. ft., or 7.4%.

Home age is another factor influencing value, although remodeling and updates often negate this effect. Homes in suburban Salt Lake County that are located ≤1/2 mile of new apartments are seven years older on average than those located

Table 2: Annual Apartment Units Built by Geographic Area
(Excluding greater downtown area)

Area	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Salt Lake County	1,008	693	292	647	794	1,250	1,027	1,038	1,005	1,887
Early Suburbs	256	100	40	307	211	210	288	378	293	300
Southeast	0	0	0	228	42	416	181	330	211	239
Southwest	496	315	252	0	258	334	270	330	238	1,048
West	256	278	0	112	283	290	288	0	263	300

*The data to measure impacts of apartments constructed in 2019 was unavailable at the time of this study.
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

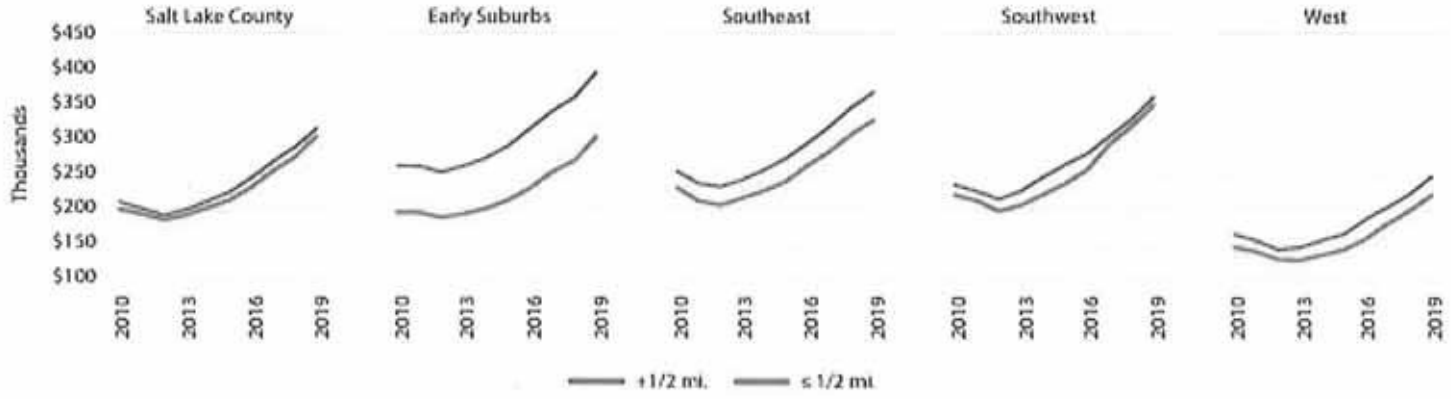
Table 3: Single-Family Characteristics by Geographic Area and Distance to New Apartments

Area	Distance to Apartment	# of Single-Family Homes	Median Bldg. Sq. Ft.	Median Age	Median Parcel Size (Acres)
Salt Lake County	+1/2 mi.	129,564	2,403	41	0.21
	≤1/2 mi.	27,829	2,134	48	0.19
Early Suburbs	+1/2 mi.	30,063	2,464	63	0.21
	≤1/2 mi.	11,383	1,824	77	0.16
Southeast	+1/2 mi.	28,378	2,866	41	0.23
	≤1/2 mi.	7,293	2,428	41	0.21
Southwest	+1/2 mi.	29,471	2,980	23	0.24
	≤1/2 mi.	5,005	2,892	19	0.22
West	+1/2 mi.	41,652	1,930	42	0.18
	≤1/2 mi.	4,148	1,788	61	0.18

Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

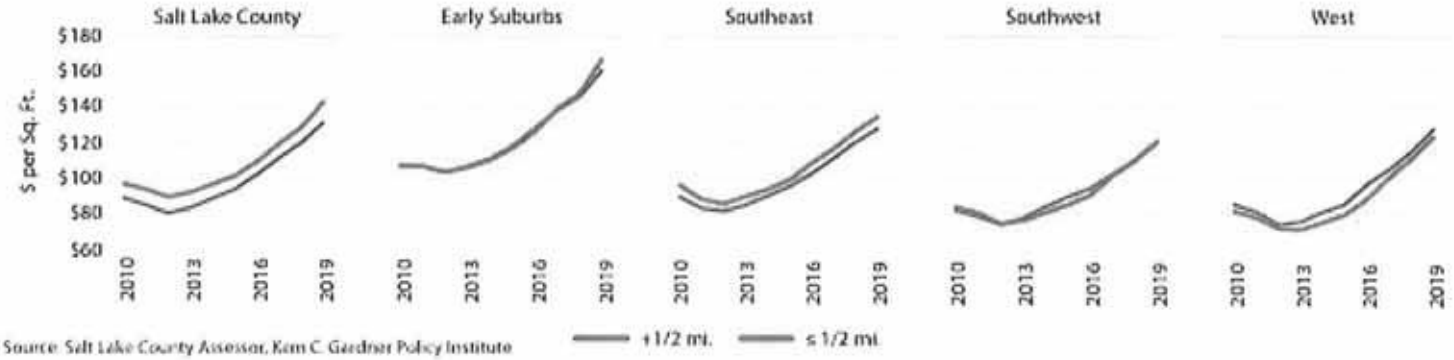
Exhibit 8

Figure 3: Median Market Value of Single-Family Homes by Distance to Nearest Apartment



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 4: Median Market Value per Square Foot of Single-Family Homes by Distance to Nearest Apartment



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

farther away. Homes located ≤1/2 mile in the Early Suburbs area are 14 years older than those that aren't. Southeast area homes are the same age, while those in the Southwest area that are located ≤1/2 mile of new apartments are four years newer than those located farther. Homes in the West area average 19 years older, the largest age difference between homes that are ≤1/2 mile of new apartments and those that are farther away.

Lot size is another key category that influences overall value. In suburban Salt Lake County, lot sizes average 0.02 acre smaller for homes located ≤1/2 mile of new apartments. For homes located in the Early Suburbs area, lots are 0.05 acre smaller for homes ≤1/2 mile from new apartments. Home lots in the Southeast, Southwest, and West areas are 0.02 acre smaller for those located ≤1/2 mile of apartments.

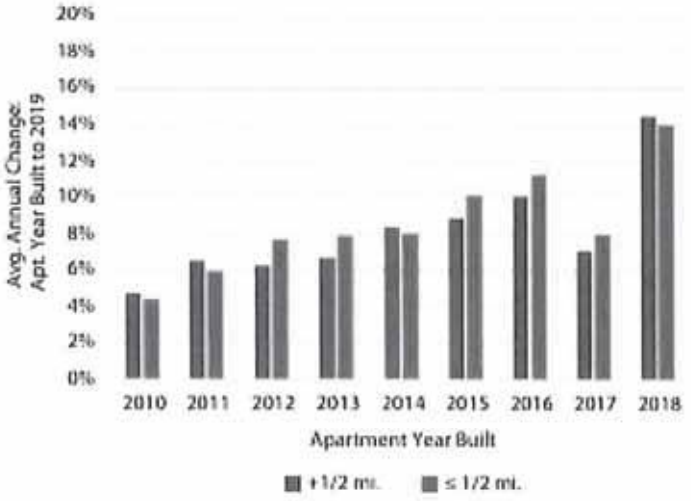
Results

The median market value of single-family homes is greater for those that are located more than 1/2 mile away from new apartments. Between 2010 and 2019, those that are farther than 1/2 mile averaged a 4.7% higher median value (see Figure 3). Homes located in the Early Suburbs area have the greatest discrepancies in values when compared by distance, with the difference averaging 34.6%. This is due to the fact that some of the most expensive and largest homes are located in the areas of Sugar House and Holladay. The average difference in value for homes located in the Southeast area over the last decade is 12.3%. Homes in the Southwest area show the median value disparity lessening with time. Between 2010 and 2016 the difference by distance was 9.1%; however, the disparity narrowed to 3.5% between 2016 and 2019. This was driven by a 10.4% increase in median building square feet for homes within 1/2 mile of an apartment, leading to an overall increase in home values. The median value for homes in the West area has averaged 13.6% between 2010 and 2019.

While the total median market value is greater for those single-family homes farther than 1/2 mile from new apartment construction, the opposite is true when measuring the median value per square foot (PSF). Between 2010 and 2019, homes

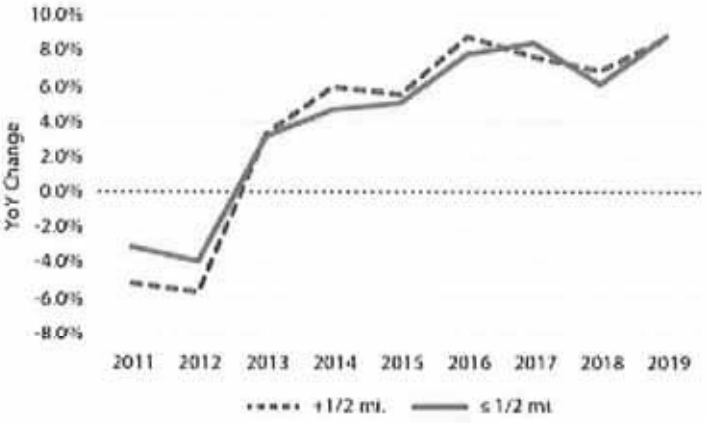
Exhibit 8

Figure 5: Average Annual Change in Median Price, Year of Apartment Built to 2019, Salt Lake County



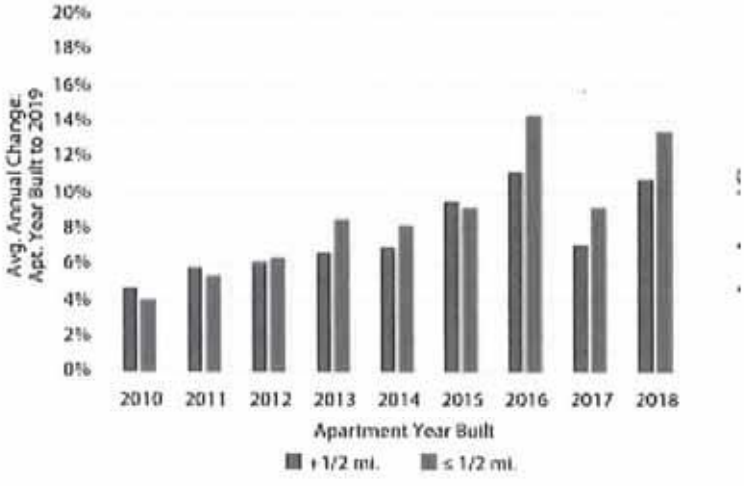
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 6: Year-Over Change of Median Market Value, Salt Lake County



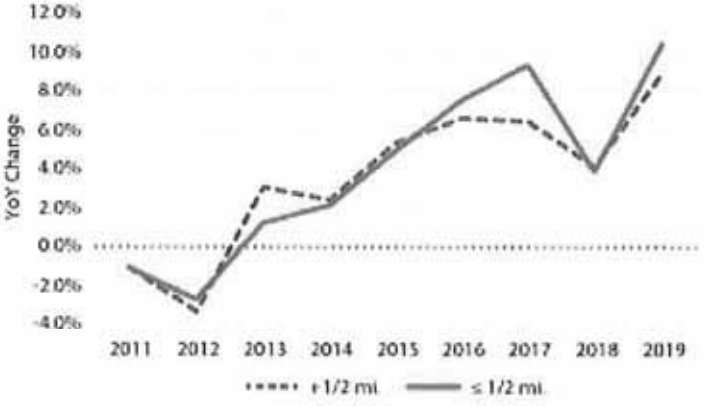
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 7: Average Annual Change in Median Price, Year of Apartment Built to 2019, Early Suburbs



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 8: Year-Over Change of Median Market Value, Early Suburbs



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

that are located ≤1/2 mile averaged an 8.8% higher PSF median value compared with those farther away (see Figure 4). Although the Early Suburbs area shows the highest discrepancy in total median market value in Figure 3, comparing values on a PSF basis shows there to be little to no difference between the two distances. PSF home values in the Southeast area averaged 5.3% higher for homes located ≤1/2 mile over the last decade. Similar to the trend seen in total median values, the PSF discrepancies in the Southwest favored homes that were farther away between 2013 and 2016, but shows no substantial difference since. The West area shows homes located ≤1/2 mile of a new apartment averaged 5.2% less in median value PSF over the decade when compared with homes farther away. The reason for this disparity is likely due to the homes' age. Homes located ≤1/2 mile of new apartments in the West area average 19 years older than those farther away.

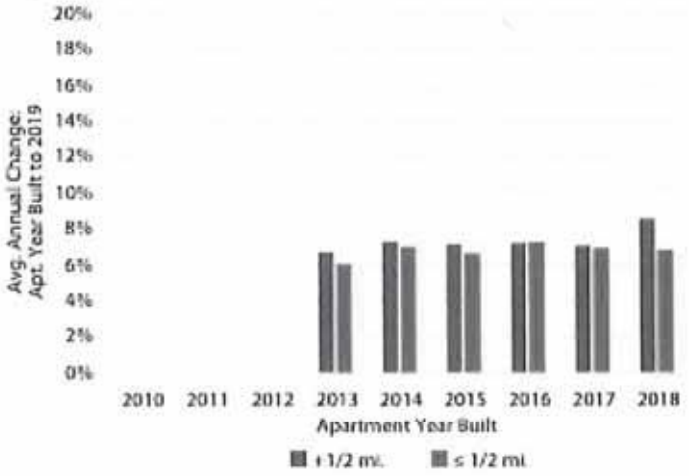
The following sections present a summary of each individual study area's findings, starting with a summary for Salt Lake County.

Figures 5, 7, 9, 11, and 13 measure the average annual rate of value change from the year the nearest apartment was constructed to 2019. This measure is used to understand the overall impact new apartments have on existing single-family homes. Figures 6, 8, 10, 12, and 14 show year-over percent change of median market value to measure annual fluctuations.

In suburban Salt Lake County, from the year of construction to 2019, single-family homes located ≤1/2 mile of a new apartment experienced a 10.0% average annual increase in value, while the value of homes farther away increased 8.6% on average annually (see Figure 5). Homes that were located more than 1/2 mile in 2010 and 2011 experienced a 1.9-percentage-point larger decline in their value than those that were closer to

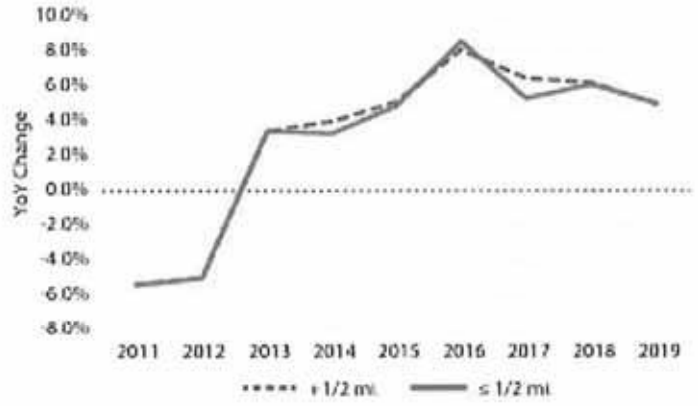
Exhibit 8

Figure 9: Average Annual Change in Median Price, Year of Apartment Built to 2019, Southeast



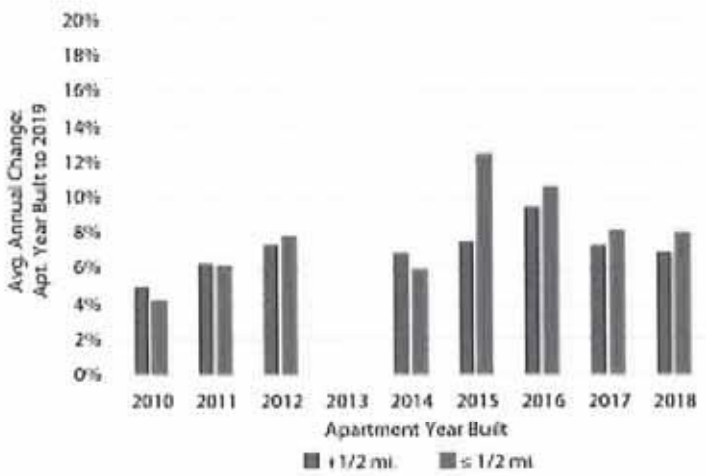
Note: There was no new apartment construction between 2010 and 2012.
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 10: Year-Over Change of Median Market Value, Southeast



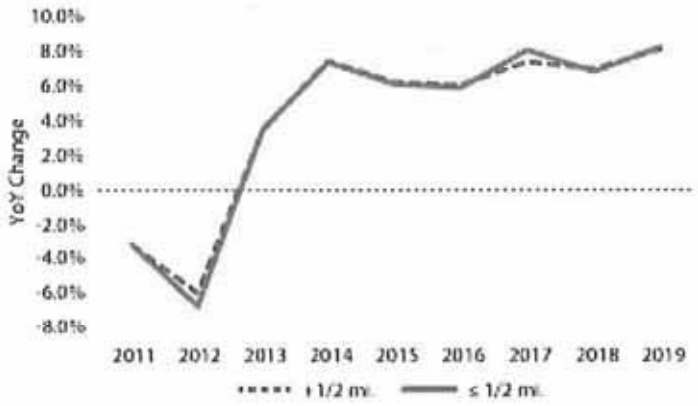
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 11: Average Annual Change in Median Price, Year of Apartment Built to 2019, Southwest



Note: There was no apartment construction in 2013.
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 12: Year-Over Change of Median Market Value, Southwest



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

a new apartment building, showing that apartment proximity had a positive impact overall on preserving value during the recession (see Figure 6).

From the year of construction to 2019, homes in the Early Suburbs area that are located ≤1/2 mile of a new apartment experienced a 10.7% average annual increase in value, while the value for homes farther away increased 7.6% annually on average (see Figure 7). Year-over changes have shown some disparities over the last decade. Homes farther than 1/2 mile saw a more positive appreciation from 2012 to 2015, while homes located ≤1/2 mile outperformed those farther away between 2016 and 2019 (see Figure 8).

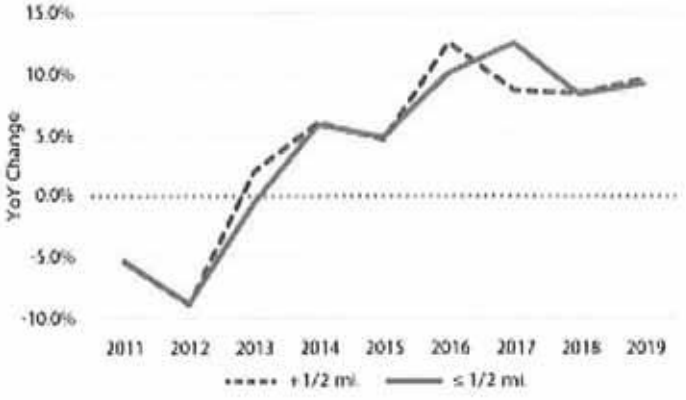
The Southeast area is the only instance where homes that are more than 1/2 mile away from new apartment construction experienced higher average price appreciation than those located ≤1/2 mile (see Figure 9). Homes farther away experienced an annual appreciation of 7.3% between year the apartment was constructed to 2019, and those located ≤1/2 mile saw their values increase 6.8% annually. The likely explanation for this discrepancy is that there is a higher concentration of larger retail development near those homes that are located ≤1/2 mile of apartments than in any other study areas. In the other three study areas, homes located ≤1/2 mile of an apartment were near an average of 20% less retail space when compared with homes farther away. In the Southeast area, there is 84% more retail space near homes that are closer to new apartment construction compared with those farther away. Year-over annual trends stayed similar for both distance categories with the exception of 2014 and 2017, when homes farther than 1/2 mile experienced slightly greater annual growth (see Figure 10).

Exhibit 8

Figure 13: Average Annual Change in Median Price, Year of Apartment Built to 2019, West

Note: There was no new apartment construction in 2013 and 2017.
Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

Figure 14: Year-Over Change of Median Market Value, West



Source: Salt Lake County Assessor, Kem C. Gardner Policy Institute

In the Southwest area, from the year of construction to 2019, single-family homes located ≤1/2 mile of a new apartment experienced a 9.7% average annual increase in value, while the value for homes farther away increased 7.7% on average annually (see Figure 11). Median value year-over trends in the Southwest area show little or no difference between apartment proximities (see Figure 12).

Homes in the West area that are located ≤1/2 mile of a new apartment experienced a 13.7% average annual increase in value, while the value for homes farther away increased 10.5% annually on average (see Figure 13). Year-over trends show some fluctuation through the last decade. Homes farther than 1/2 mile outperformed annual price growth in 2013, 2016, and 2019, while homes located ≤1/2 mile outperformed in 2017, with the remaining years showing relatively similar year-over price shifts (see Figure 14).

Conclusion

The public perception about high-density housing continues to be a point of conflict in growing communities across Utah and the country. While many stereotypes and generalizations about negative impacts are brought up in public settings, high density development does not actually appear to depress home values.[11] From the year an apartment was constructed to 2019, in Salt Lake County, single-family homes that were located within 1/2 mile of new apartment construction realized 1.4% more in annual price appreciation than those single-family homes that were located farther away. This is likely because new apartment construction brings new demand and new dollars to a community and redevelops an older piece of property, thus bringing more vibrancy and "buzz" to the area.

The challenges of housing affordability are not going away anytime soon. While density is a solution to alleviate costs, zoning is the mechanism that allows or denies it. Zoning regulations, more than any other local policies, govern the annual supply of single-family and multifamily housing. In recent years, the supply of housing has not met the demand, creating a housing shortage.[12] This shortage has tremendous impacts on Utah's future. The shortage has also excluded many from homeownership, added to substantial increases in doubling-up of households, delayed marriages, and discouraged young people from forming new households.

Exhibit 8

Endnotes

1. National Association of Realtors
2. https://gardner.utah.edu/wp-content/uploads/May2018HousingReport.pdf
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Exhibit 8

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Exhibit 9-
Public Comment

11/19/2024

Peoria Planning Department
9875 N 85th Ave
Peoria, AZ 85345

Dear Members of the Peoria Planning Department,

I hope this letter finds you well. My name is Sandra, and I am a property owner at _____ which is located in close proximity to the property in question, Multi-Family Residential NEC of 87th Avenue and Northern Avenue. I am writing to formally express my opposition to the proposed rezoning request for multi-family development in this area.

As a resident and owner in the neighborhood, I have several concerns regarding how the proposed zoning change could affect the character, safety, and quality of life in our community. Specifically, I am concerned about:

1. **Increased Traffic:** The addition of multi-family units in this area could lead to a significant increase in traffic, particularly along Northern and 87th Ave. This may create more congestion and safety issues, especially given the current infrastructure and lack of capacity for additional vehicles along these streets.
2. **Impact on Property Values:** As a property owner, I am concerned that the construction of multi-family units could have a negative impact on property values in the area. The increased density and potential changes in the neighborhood's aesthetics may make our community less attractive to future buyers or renters.
3. **Increased Overlooking of Private Spaces:** Multi-family buildings, particularly if they are taller or more densely populated, will likely lead to an increased number of windows facing directly into our private yards, gardens, and living spaces. This loss of privacy could make us residents feel exposed in our own homes, which is a significant concern for me, my family and neighbors.
4. **Vandalism and Property Damage:** With a greater number of residents, particularly in areas with higher turnover rates, there is a higher likelihood of vandalism or damage to surrounding properties. This is a concern not only for my own property but also for the value and integrity of the entire neighborhood.
5. **Change in Neighborhood Character:** Our neighborhood is currently characterized by Summerset Village, a single-family homes. I believe that introducing multi-family zoning would alter the composition of our community, leading to potential conflicts between different types of housing, and may not be consistent with the desires of the majority of residents.

While I understand that there is a demand for more housing, I feel strongly that this proposed development would not be the best solution for our neighborhood. I encourage the zoning board to consider these concerns in your deliberations and explore other avenues that may better serve the needs of the community without compromising its established character.
Thank you for taking the time to consider my thoughts. I respectfully request that you take my concerns into account when making your decision on this rezoning request.

Sincerely,
Sandra Basulto

Exhibit 9 - Public Comment (Opposition)

From: [redacted]
To: Sarah Dircks
Subject: NEC of 87th Ave and Norther Ave. GPA24-07 and Z24-07
Date: Thursday, August 7, 2025 11:24:09 AM

You don't often get email from [redacted] Learn why this is important

Hi Sarah,

I live in the residential community of Summerset just to the West of the property in question.

I have a few concerns mainly the safety of the children in the Charter School that these apartments will be built right on top of. Apartments bring a transient group of people and being multiple stories, that would allow them to look right into the school's playgrounds and pickup locations. Children walking to school would have to walk past the apartments. This sets up the opportunity for pedophiles, and other unsavory criminals that victimize children to be right next to them.

In 20 years when these apartments will be run down then who will be living in them; near our kids and residences adding to the crime and making us all unsafe?

The traffic on 87th Ave. (which is two lane) with no traffic control lights is already difficult to get onto Northern Avenue during morning school drop offs, when school lets out or when there are events. I can't image more traffic affecting our ability to get out of our community with only two exits to the east that would be adjacent to the apartment traffic.

Also, many of us chose this community because it's all single level so we'd have the privacy of not having multilevel homes looking into our yards and windows this will put a multilevel apartment right on top of us. Removing our privacy.

I'm really not at all in favor of the riff raff that comes with apartments that could depreciate our property values, endanger our children, increased traffic, and traffic noise. We're already dealing with Northern Ave. that was changed to a "super street" making our once quiet neighborhood noisy as cars race with obnoxious exhausts between 83rd Ave and 91st all hours with no enforcement by the police and we also get to hear the trucks jake brakes at all hours.

Thank you,

Renee Hull

Exhibit 9 - Public Comment (Opposition)

From: [redacted]
To: Sarah Dircks
Subject: Regarding project planned on NEC of 87th/ Northern avenue
Date: Friday, August 1, 2025 5:31:39 PM

You don't often get email from [redacted] Learn why this is important

Hello,

I received your postcard today regarding a public hearing for The above location. If this location is the one next to the school, I literally live right across the street from there in the Palermo gated community subdivision.

Is it going to be planned for traditional residential housing? Are they apartments or condos or single family homes?

Is circle West architects the builder?

Thank you in advance!

Kindly,

Marie B.
[redacted]

Exhibit 9 - Public Comment (Inquiry)