

BRT oriented development and sites

Experience in other cities has shown that BRT thrives as a system when it is integrated with land use planning. Higher density-development at BRT stops serves many ends. First, it boosts ridership; second, it creates livelier neighborhoods at BRT stops; and third, it creates momentum to expand the BRT network. For these reasons, this study chose four sites in Newark where it proposes BRT stops: Springfield Avenue and South 10th Street; the Orange Street, the Bloomfield Avenue Newark Light Rail station and the Rail Train Station at Newark Airport. These were chosen because of their variety; the Springfield corridor site is in a low-rise residential neighborhood while the Airport site has regional if not international significance. Sites were also chosen because extensive planning work had been accomplished at each. As part of this effort, a graduate planning studio at Rutgers studied and proposed phased urban designs for each that included zoning recommendations and fiscal impact assessments. The analysis varies based on unique conditions at each site there. The particular interests of students involved also drove the research at a particular site, but this specific information can apply more generally to sites throughout Newark. A summary of each follows in this section.

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springfield avenue



orange street



bloomfield avenue

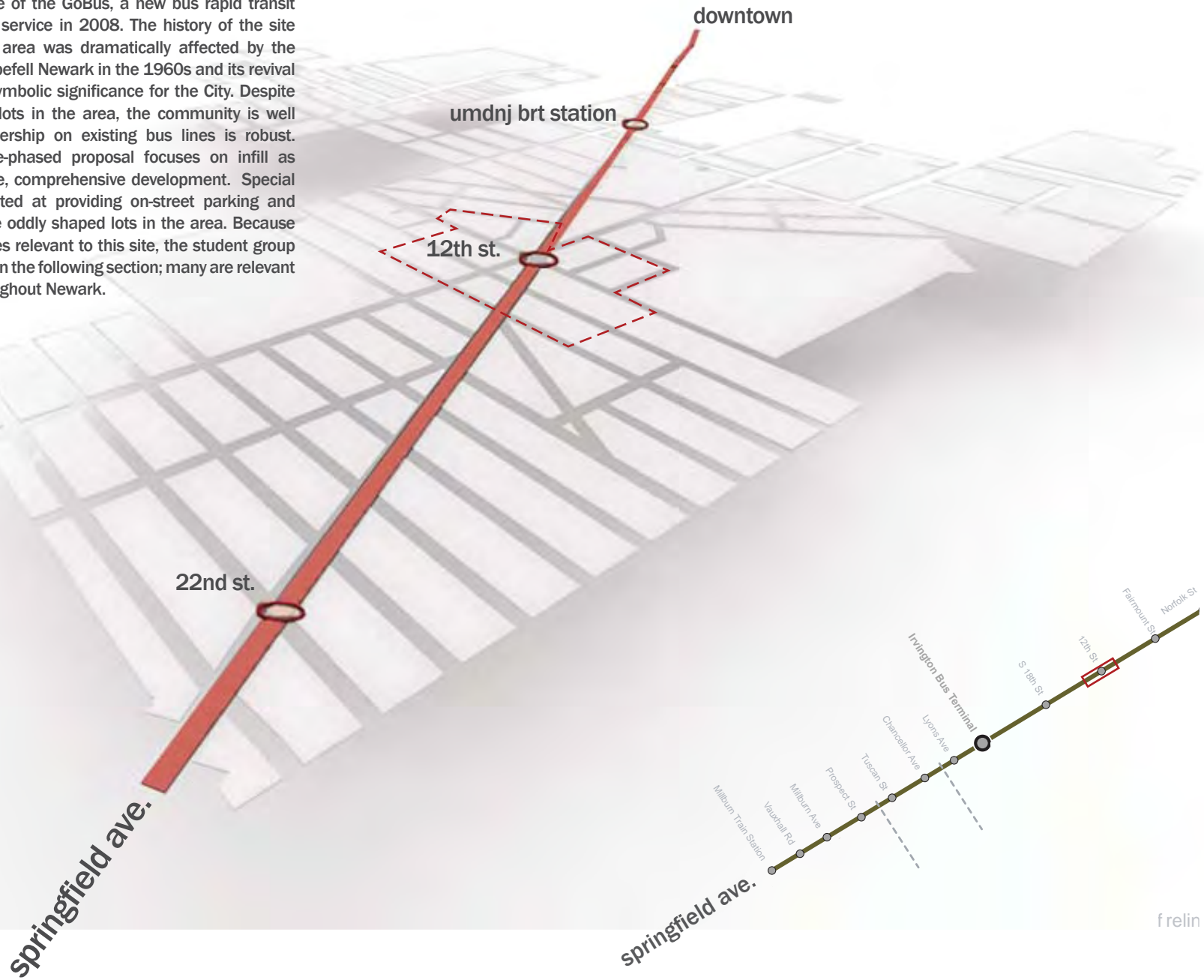


airport station



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The site at Springfield Avenue and South 10th Street straddles the route of the GoBus, a new bus rapid transit line, which began service in 2008. The history of the site is important. The area was dramatically affected by the social unrest that befell Newark in the 1960s and its revival holds important symbolic significance for the City. Despite the many vacant lots in the area, the community is well organized and ridership on existing bus lines is robust. The studio's three-phased proposal focuses on infill as well as larger-scale, comprehensive development. Special emphasis is directed at providing on-street parking and open space on the oddly shaped lots in the area. Because of the many studies relevant to this site, the student group summarizes each in the following section; many are relevant to other sites throughout Newark.



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area description

The area of this case study is approximately a quarter mile, or 45 acres, around the new bus stop at Springfield Avenue and South 10th Street in Newark's Kent-Brenner neighborhood. The site is bounded by South 12th Street on the west, 16th Avenue to the north, Jacobs Street and Woodland Cemetery to the east and Avon Avenue to the south. One quarter mile has been shown in transportation and land use studies to be approximately how far people are willing to walk for retail and public transportation purposes.

In April 2008, a new bus rapid transit line – the Go Bus – began providing rush hour express service from Irvington to Newark Penn Station, stopping at Springfield Avenue and South 10th Street. Access to improved transit infrastructure can serve as a strong catalyst for private investment. The bus stops are located on each side of Springfield Avenue, serving west and eastbound traffic. The stations are located on the far side of the intersection in each direction, where vehicles pull along the sidewalk and parking has been prohibited.



springfield ave. and s10th st.



springfield ave. and s10th st.

study zone



- study zone
- study zone
- 1/2 mi zone
- brt station

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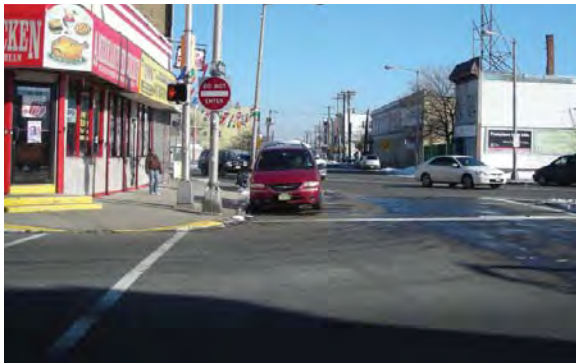
site goals

The main goal for the Springfield Avenue site is to create a safe, bustling, and lively environment. This can be accomplished through attracting investment that takes full advantage of vacant and abandoned properties.

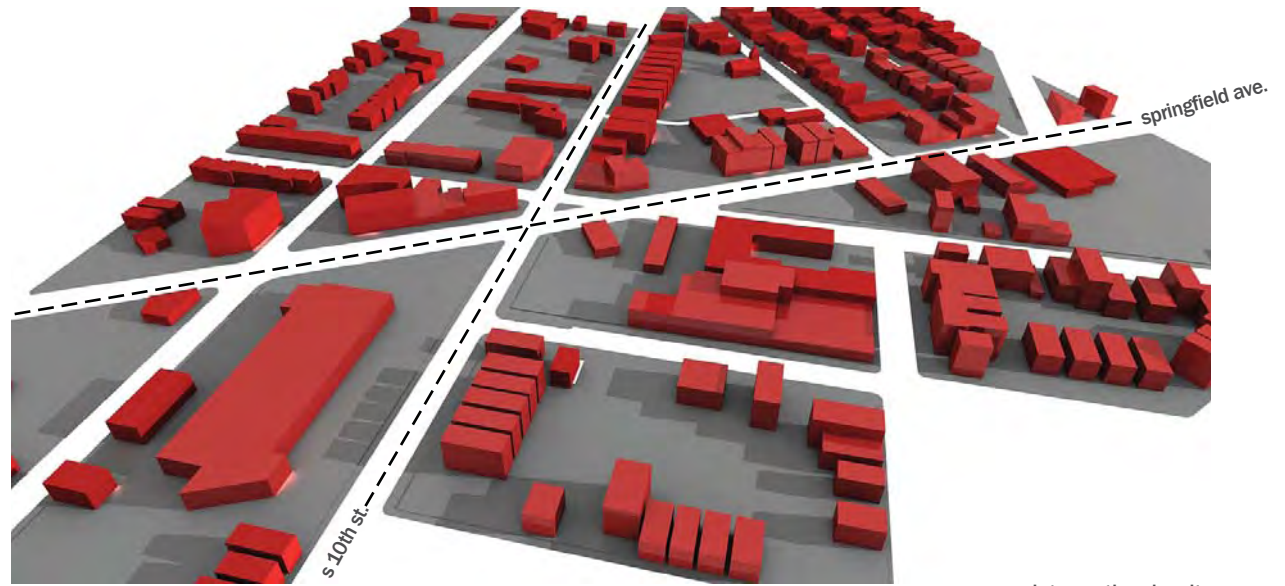
The Springfield Avenue planning team focused on the following site-specific goals:

- Ensure safety and security through enhanced infrastructure
- Increase development densities around the BRT station at Springfield Avenue and South 10th Street
- Enhance pedestrian connections to transit corridors
- Preserve the variation in building heights and mix of land uses

By creating a physical and regulatory landscape for a busier, livelier street environment, the City can encourage infill development and the upgrading of existing buildings. This includes removing zoning restrictions to allow for a greater number of business and residential units. The pedestrian environment can be made safe and attractive by placing buildings closer to sidewalks. Parking lots can be designed to minimize danger associated with vacant areas. A final goal is to enhance access to bus lines converging in the study area.



springfield ave. / s10th st.



intersection density

history

A key issue facing the Springfield Avenue area is the longstanding perception that it is unsafe. This is largely due to the high vacancy rates and volume of abandoned buildings along the corridor, a condition that was precipitated by the civic unrest in 1967. The recent mortgage foreclosure crisis has also negatively impacted the Springfield neighborhood. Despite these setbacks, the City of Newark maintains its efforts to revive the area, continuing a process that began over a decade ago. In 1998 the Newark Urban Enterprise Zone Program was created to attract new retailers to Newark's main commercial streets, including Springfield Avenue. The program offers sales tax exemptions/reductions, tax credits and other incentives to businesses choosing to locate in these zones. This program has had an impact on retaining and creating local businesses such as the Newark Screens movie theater and attracting national retailers such as Applebee's and Home Depot. However, because of outdated zoning, these were built according to a suburban style of commercial development that includes deep setbacks to accommodate surface parking and large,

stand-alone structures. The residential areas of the neighborhood have also been drifting toward a more suburban style as well, embracing the "Bayonne Box" residential unit. These developments incorporate two and three family detached houses fronted by driveways with two car garages, resulting in small yards. While these improvements may look good on paper, they add little value to the perception of the neighborhoods along Springfield Avenue, which still lacks activity along the sidewalk.

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past planning efforts

The neighborhoods along Springfield Avenue have attracted significant attention over the past ten years, with many studies focused on the corridor. These include commercial development strategies, design guidelines, park plans and transportation studies. Plans by nearby Irvington Township, the City of Newark, and Essex County, have also focused specifically on the area. The most recent and significant among these is the Kent/Brenner/Springfield Redevelopment Plan.

Each plan notes Springfield Avenue's potential as a commercial and mixed-use corridor, high bus ridership, a dedicated community, as well as ongoing struggles to attract investment after the unrest of 1967. Visioning efforts conducted resulted in calls for new and improved schools, small business support, aid for new homeowners, guidelines to improve streets, sidewalks and open spaces, and bringing in large retailers to anchor investment in the area.

regional plan association

Many previous studies were absorbed within the 2006 Newark Vision Plan developed by The Regional Plan Association (RPA). The RPA noted that the Springfield Avenue corridor has the highest volume of bus service in the city (about 14,000 daily trips), with at least 16 buses crossing or feeding into it. It also noted that recent investment in the Irvington Bus Terminal make it a logical point to terminate BRT service emanating from Penn Station in downtown Newark. The RPA strongly seconded the idea to make Springfield Avenue Newark's first BRT corridor. The symbolic importance of new development arising at the site of the 1967 disturbances could produce a great sense of local pride. Finally, the 2006 Newark Vision Plan encouraged the City of Newark to create "Transit Improvement Districts." These organizations could foster community involvement in locating stops and developing transit oriented plans, keep bus stops in good repair and work with law enforcement to both keep the stations safe and keep automobiles from blocking BRT stops.

rutgers university

A 1998 Rutgers University plan laid out a framework for improving the commercial environment along Springfield Avenue. Proposals include increased community outreach, building trust with local merchants, and creating financial resources for small businesses. The study suggests further research into improvement districts, including Business Improvement Districts.

west side park conservancy and essex county

The West Side Park Master Plan, created by the non-profit West Side Park Conservancy and Essex County, has had a significant impact along the corridor with over \$2.5 million invested in landscape and athletic structures in the last decade. These complement private residential investment on the surrounding blocks.

voorhees transportation center

Recent investment in the Go Bus express bus service is the result of multiple years of transportation studies. In 2005 the Voorhees Transportation Center at Rutgers University recommended strategies for the bus service in Newark. The study specifically cited the Springfield Corridor because of its opportunity and also because of its potential as a symbol for Newark's rebirth. It contributed other specific recommendations, such as less frequent stops between Newark Penn Station and the Irvington Bus Terminal, enhanced design of bus stops and clear route identification.

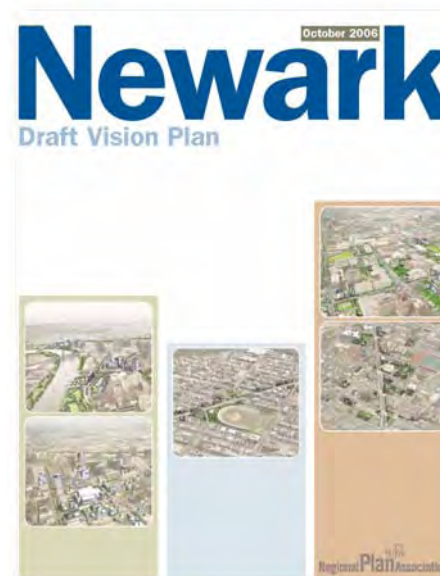
irvington township plan 2003

Irvington, New Jersey developed a township plan in 2003. Irvington is an adjoining community whose border is less than half a mile from the South 10th Street intersection. The plan presents design guidelines and the location for a new school to support and anchor residential development. Nearer to South 10th Street, the plan recommends encouraging higher-density commercial development using the Township's Urban Enterprise Zone. It also presents concepts for developer's agreements.

kent-brenner-springfield redevelopment plan

The most recent and comprehensive study has been the Kent-Brenner-Springfield Redevelopment Plan, initiated by the City of Newark and the Local Initiatives Support Corporation (LISC). The goals of the plan are to:

- Create a safe, attractive neighborhood streetscape
- Increase density to ensure safe and affordable housing for all residents
- Encourage minimal front yard setbacks
- Develop guidelines to ensure a diverse but architecturally appropriate housing stock
- Minimize presence and visibility of cars within the streetscape



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public transportation

Five New Jersey Transit buses stop within a half-mile of the intersection of Springfield Avenue and South 10th Street. These include the new BRT Go Bus, as well as the 1, 25, 42, 70 and 96. There are 42 bus stops within a half-mile area, and most of them are located on Springfield and 18th Avenues. Fifteen bus stops are on Springfield Avenue alone.

The number 1 bus runs from Jersey City to Irvington, passing through downtown Newark. The nearest stop is on 16th Avenue and South 10th Street, approximately 800 feet north of the South 10th Street BRT station.

The 25 bus travels from downtown Newark to Maplewood, running primarily along Springfield Avenue. It is one of the busiest lines in Newark, averaging 14,000 trips daily. The new BRT line parallels this route as express service with fewer stops between Newark Penn Station and the Irvington Bus Terminal during weekday rush hours.

The 42 runs from Broad Street in downtown Newark to the Irvington Bus Terminal, primarily along 18th Avenue. It passes directly through the Springfield Avenue and South 10th Street intersection. The route operates only on weekdays during morning and afternoon rush hours.

Route 70 operates between Newark Penn Station and Florham Park with connections to downtown Irvington, NJ TRANSIT's Morris and Essex Line and the Livingston Mall. It travels through the Kent-Brenner neighborhood on Avon Avenue with a stop approximately a quarter mile from the Go Bus stop at South 10th Street.

The 96 is a cross-town bus that passes on the edge of the study area, traveling on 18th and 19th Avenues. The line operates between Bloomfield and Irvington.

open space and civic institutions

The environs include six schools, two parks (Westside Park and West Hayes Park) and many religious buildings. Woodland Cemetery also adds a sense of open space to the neighborhood. The high quantity of schools in the area can be an asset for future residential development, although the Kent/Brenner Redevelopment Plan states that they are overcrowded and of low quality. Improvements to the school system are an important element for the redevelopment of the neighborhood and increased safety.

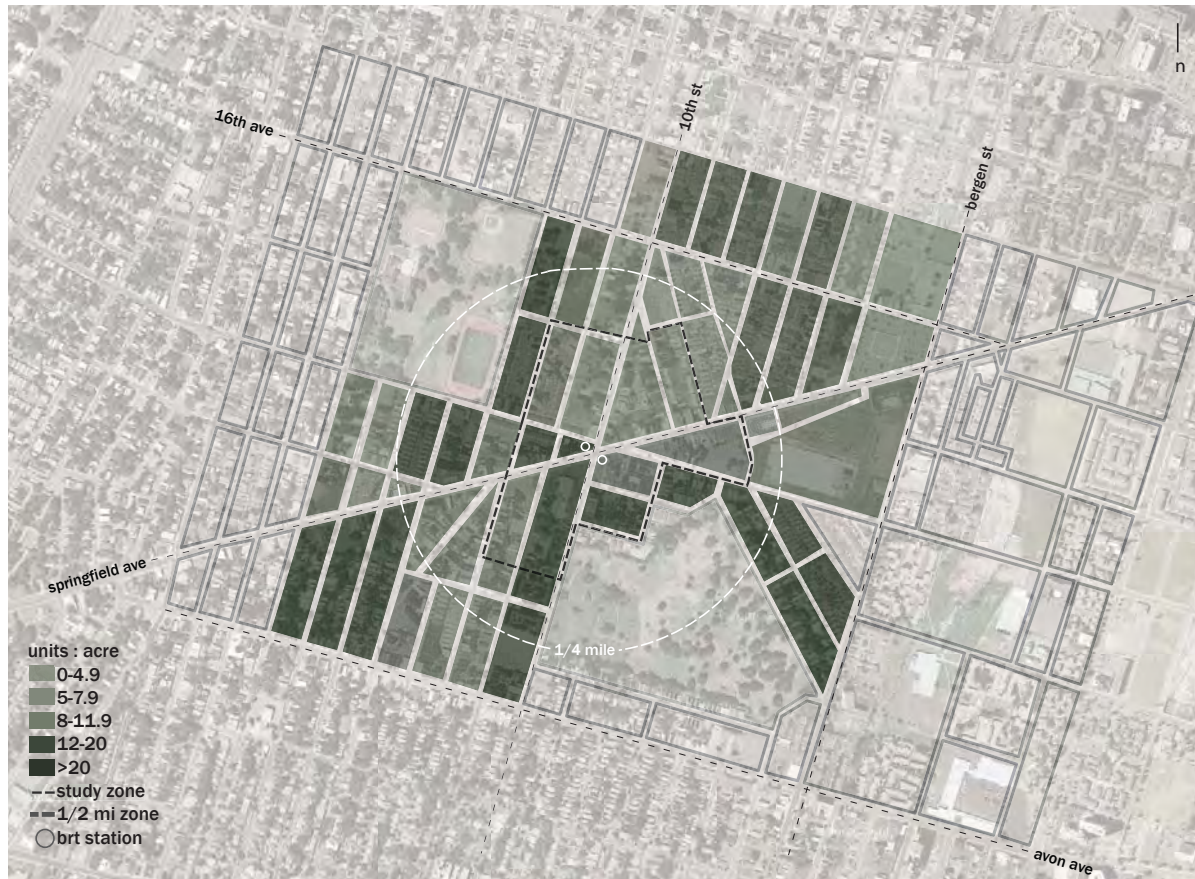
street network

The area includes a mix of street types and conditions. Springfield Avenue is a major commercial corridor and is generally in good condition. The road is 60 feet wide with parallel parking on both sides and wide sidewalks. These sidewalks provide ample space for retail access, awnings and maneuverability for a number of pedestrians. Building heights are between one and three stories high (12 to 35 feet) creating a 5:1 and 2:1 street width to height ratio. The recent developments of "big box" retailers with varying setbacks along Springfield Avenue are more typical of suburban environments.

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density



residential density

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The average density in the neighborhood is about 18 dwelling units per acre. Densities at this level are generally supportive of public transit. It is important, however, to remember that a large portion of the existing dwelling units are vacant. Densities along Springfield Avenue itself are generally low. The highest levels of dwelling units per acre exist around West Side Park and Woodland Cemetery, which

serve as excellent templates for the redevelopment of other residential areas. Densities of 12 to 15 dwelling units per acre would be sufficient to support light retail and shopping along Springfield Avenue.

population

According to the 2000 US Census, the Springfield Avenue study area has a population of 7,372, representing roughly 2.7% of the total population of Newark. The highest populations are in the blocks surrounding West Side Park and Woodland Cemetery. The population along Springfield Avenue is generally low because of its commercial zoning. Many of the older mixed-use buildings that front it include upper stories that were once residential, but these remain unoccupied.

businesses

Springfield Avenue has an assortment of national and local retailers. Many of these businesses depend heavily on the use of the automobile. Stores such as Home Depot, Strauss Discount Auto, as well as many car washes and gas stations are located on and around Springfield Avenue. Typically, these employ few residents.



springfield ave. / s10th st.

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existing zoning

Parcels currently zoned R3 residential can be found to the north and east sides of Springfield Avenue. This allows for up to three stories of detached and attached single-family homes. Multifamily housing in this zone is allowed in buildings up to three stories. Approximately one block to either side of Springfield Avenue is zoned B2 commercial, a designation that allows for up to five stories of commercial uses (office, retail, services, etc.). Multiple use buildings with residential units above ground floor uses are allowed to reach three stories in height with setbacks.

A pocket of industrial uses is located south of Springfield Avenue, bounded by South 14th Street to the west and Woodland Cemetery to the east (South 10th Street). Single and multi-family dwellings are permitted in this zone, but may not exceed 35 feet in height, or three stories. Front setbacks must be up to 35 feet for three-family dwellings. Only one- or two-story dwellings are allowed on lots less than 35 feet wide, with a minimum of 20 feet in width.

brt incentive zone

Incentive zoning can encourage transit and pedestrian-friendly development, and jump-start development. By creating an overlay district in the study area that allows for site-specific building and use regulations, this especially accessible area can grow around the BRT.

Overlay districts have the advantage of flexibility and speedy implementation. In addition, the increased densities allow for targeted growth without adversely affecting the character of surrounding residential neighborhoods.

The zoning overlay, or the BRT incentive zone, will allow for greater density of residential and commercial uses that now coexist in the study area. This zone, which extends roughly 500 feet in each direction from the intersection of Springfield Avenue and South 10th Street, is intended to become the core area of the neighborhood. The densest development will occur here and decrease gradually toward the peripheral parts of the study area. Height restrictions should be raised to at least 5 stories for mixed-use buildings. In addition, first-floor heights should be at least 15 feet and uses restricted to retail, walk-in office uses and residential lobbies.



Larger window requirements can increase safety by allowing more on-street visibility and provide for a more interesting pedestrian experience. Setbacks should be maintained at zero. Exterior lights, awnings and other building features should be ensured so that sidewalks are not blocked, with extruding features placed at least 10 feet above the sidewalk surface. New construction should include sidewalk improvement and tree plantings at a 40 foot maximum apart.

Building height bonuses may be granted to developers who contribute to the local neighborhood. This incentive zoning allows developers to contribute through a variety of means

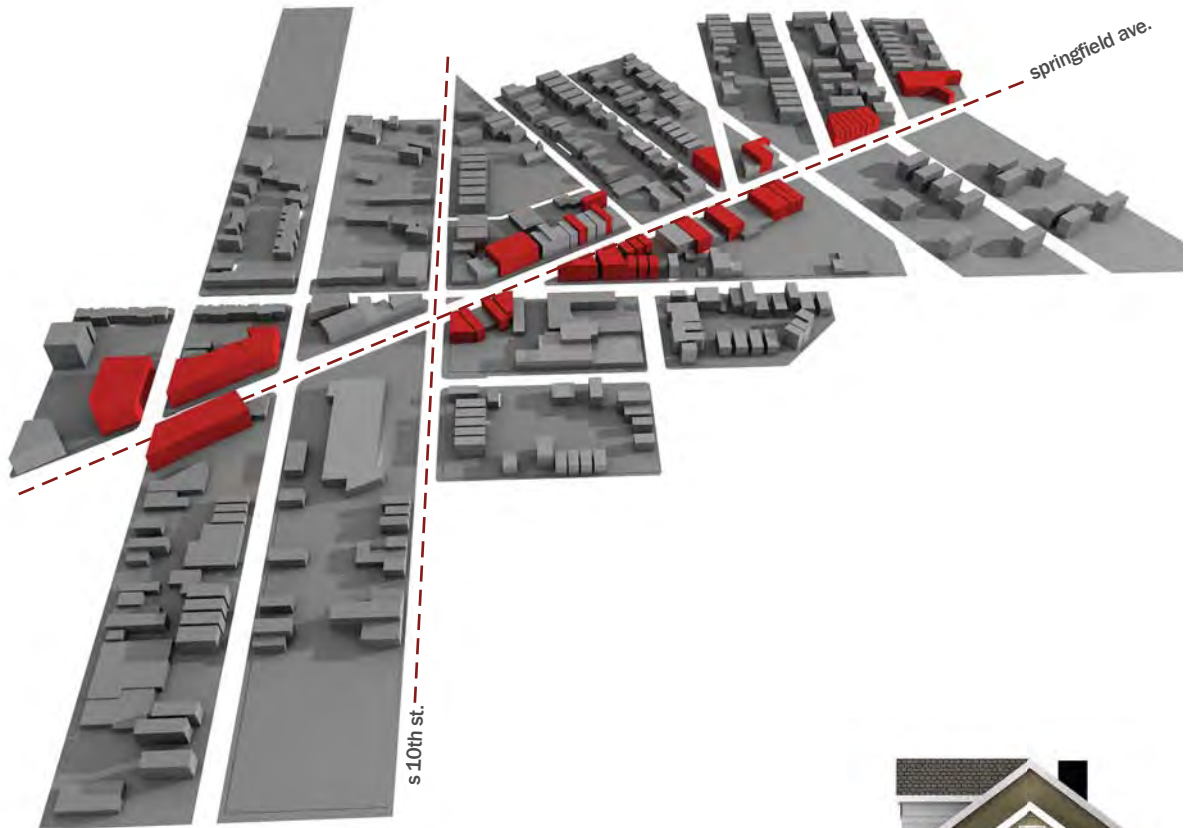
that should include (at minimum):

- Streetscape enhancements
- Transit station enhancements
- Support of local amenities such as libraries, parks and schools, as well as inclusion of greater-than-minimum affordable housing units and community space

Bonuses may also be granted to developers who assure the employment of Newark residents. This requirement has been used with other city initiatives such as the West Side Pilot Project.

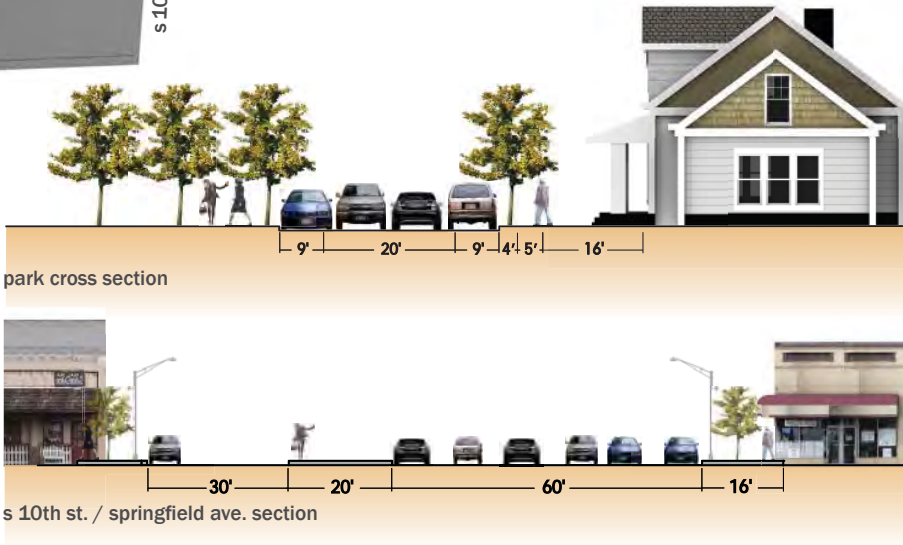
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vacant parcels



vacant lots

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vacancy

The Springfield Avenue study area includes many vacant lots of various sizes and shapes. While these lots are a strong indicator of the depressed condition of the local economy, they also offer an opportunity for redevelopment. They allow for future infill development that can be crucial to reviving the area. New development can set the standard for the necessary density, use and design that will attract valuable investment from local and national retailers.

The City of Newark recently initiated the West Side Pilot Project, a program that pairs developers with city-owned vacant parcels near Springfield Avenue and South 10th Street. The Kent-Brenner-Springfield Plan provides further information on vacant parcels. Their residential and mixed-use design recommendations aim to capitalize on the variety and location of these opportunities.



vacant lot springfield ave. / 12th st.



vacant lot springfield ave. / 11th st.

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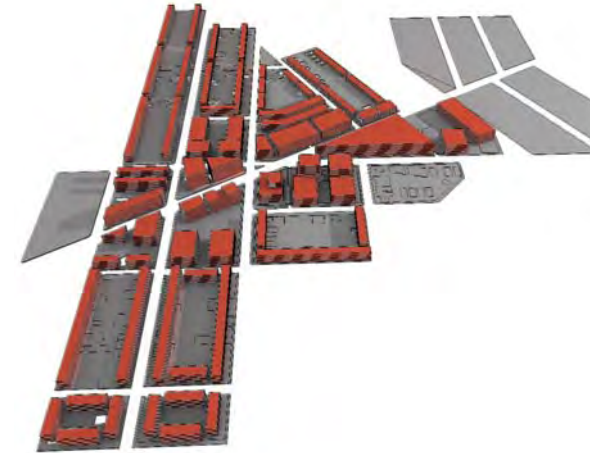
redevelopment plan



development

This report's long-term vision for the Springfield Avenue area includes development at the maximum building height of five stories with bonuses that can add up to three stories. In the short-term, infill development of vacant and unused lots can achieve the density to support the improved transit system. Three phases described on the following pages, can step up to full development.

maximum build out



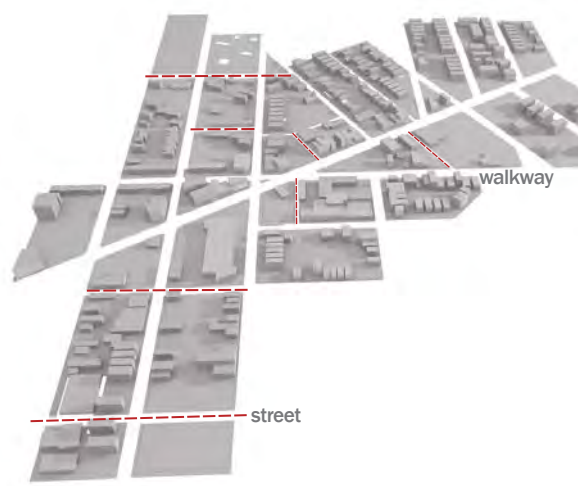
build out diagram

| Land Use | Minimum lot area | Minimum lot width | Minimum front setback | Minimum side setback | Minimum rear setback | Maximum residential density | Maximum building height |
|------------------------------|------------------|-------------------|-----------------------|----------------------|----------------------|-----------------------------|-------------------------|
| 1 family detached, attached | 1,200 | 20 | 0' | 0' | 25' | 1 family / 1,200 sq ft | 35' (3 story) |
| 2-3 family attached | 3,000 | 20 | 0' | 0' | 25' | 1 family / 1,200 sq ft | 35' (3 story) |
| Multifamily residential | 5,500 | 20 | 0' | 0' | 18' | 1 family / 1,200 sq ft | 60' (5 story) |
| Mixed use retail-residential | 2,000 | 20 | 0' | 0' | 18' | 1 family / 1,200 sq ft | 60' (5 story) |

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phase 1



secondary access roads

phase 2



development along springfield ave.

The foundation of a good streetscape, including well-illuminated sidewalks, street trees, vegetation buffers, distinctive crosswalks, and pocket parks, can be integrated into new development. By providing incentives for developers to contribute to the cost of street improvements, businesses grow and establish a presence in the neighborhood, thereby attracting further development.

Retail uses such as coffee shops, convenience/mini grocers and restaurants can populate the neighborhood at all times of the day.

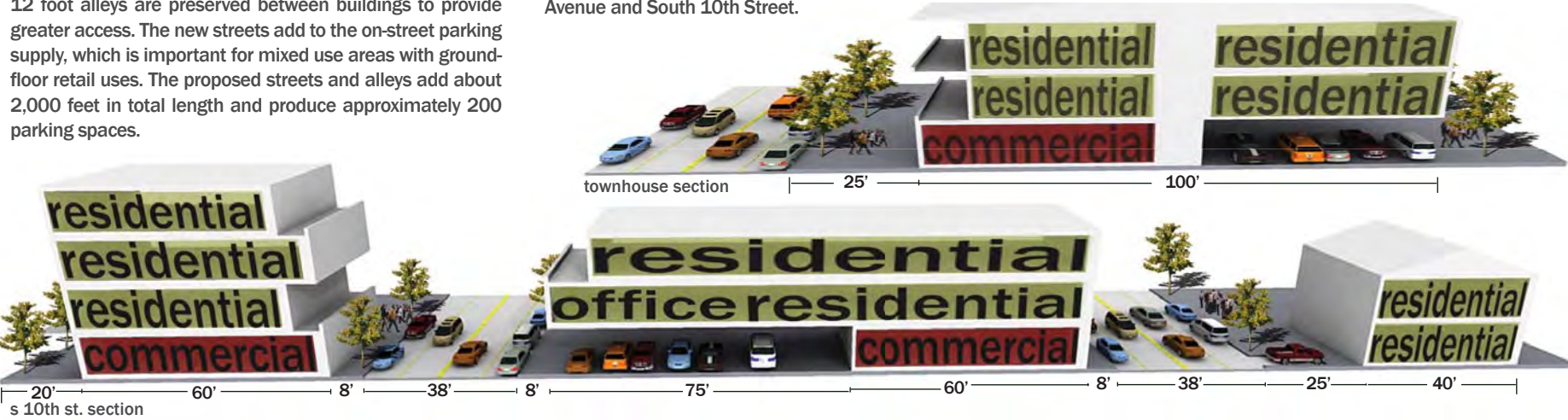
Because Springfield Avenue crosses the street grid at an odd angle, thin and oddly shaped parcels present unique opportunities for infill development. These can be grouped to provide adequate space for developers looking to capitalize on economies of scale and to produce larger development projects. Provided the building design fits in with surrounding uses, such developments can ensure unique yet consistent building aesthetics.

Irregularly shaped lots can also be used for pocket parks or community gardens, as suggested in the RPA Plan. These have been successfully implemented in many cities around the country and locally in Highland Park and Paterson, New Jersey.

Phase 1 focuses on creating a pedestrian-friendly street network that will complement local public transportation amenities. Since many of the blocks in the study area exceed 250 feet in length, four new streets can shorten walking distances in the area. In addition, pedestrian walkways or 12 foot alleys are preserved between buildings to provide greater access. The new streets add to the on-street parking supply, which is important for mixed use areas with ground-floor retail uses. The proposed streets and alleys add about 2,000 feet in total length and produce approximately 200 parking spaces.

Phase 2 incorporates the addition of commercial and mixed-use development in the primary incentive zone, infilling underutilized parcels and creating livelier streets. As part of this phase, development will incorporate a mix of residential and office uses with ground floor retail along Springfield Avenue and South 10th Street.

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phase 3



infill development site plan in three phases for mixed use, residential and commercial uses.

Phase 3 extends the focus to residential infill on vacant parcels further from the BRT station in the north and south sections of the study area. The Kent-Brenner-Springfield Redevelopment Plan outlines the variety of housing types that could be an asset to the area. This study recommends new residential infill endorsed by the Redevelopment Plan, specifically those in the form of two- to three-story townhouses. These are similar to those recently constructed in areas near West Side Park.

This study recommends that ground floor retail be built at the lot-line to encourage more pedestrian traffic and decrease the need for the automobile. Off-street parking should be kept behind businesses in order to keep walking distances short and convenient for transit riders and other pedestrians.

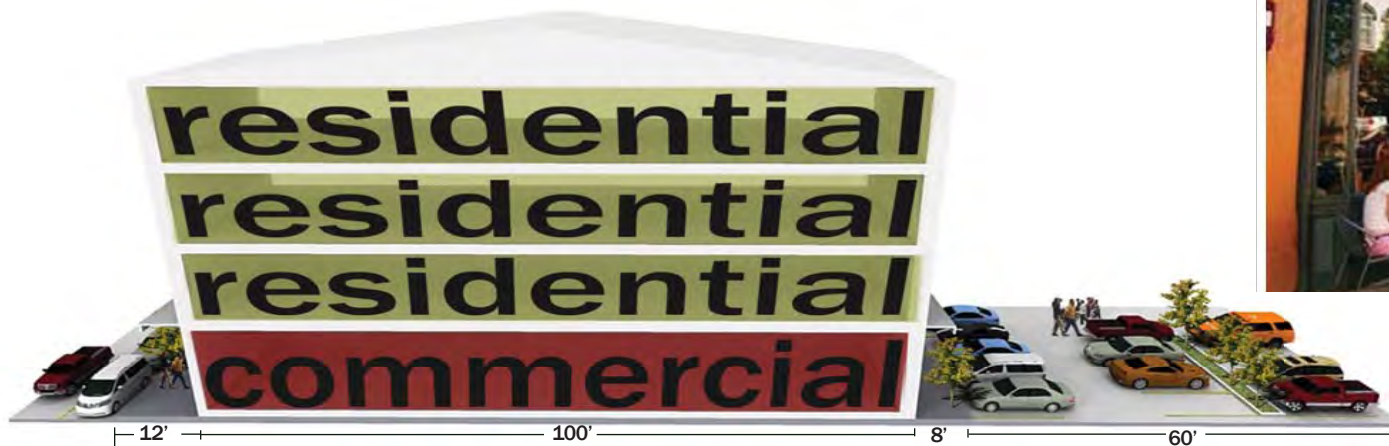
New development will maintain the variation in heights and styles found in the corridor currently. Retail store frontages with large windows will bring more eyes to the street and increase safety for the pedestrian and the transit rider.



possible downtown streetscape



possible downtown streetscape



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fiscal impacts - infill development

| | Municipal | School | Total |
|------------------------------|------------------|------------------|------------------|
| Retail | | | |
| Retail (Big Box) | \$0 | \$0 | \$0 |
| Retail (Medium Format) | \$0 | \$0 | \$0 |
| Retail (In-Line) | \$190,408 | \$191,069 | \$381,477 |
| Subtotal | \$190,408 | \$191,069 | \$381,477 |
| Office | \$16,409 | \$67,320 | \$83,729 |
| Food & Drink | \$27,590 | \$76,428 | \$104,018 |
| Convention | \$0 | \$0 | \$0 |
| Hotel | \$0 | \$0 | \$0 |
| Total Project | \$234,406 | \$334,817 | \$569,223 |
| Residential-Market | \$117,757 | \$132,906 | \$250,663 |
| Residential-Affordable | \$2,707 | -\$3,946 | -\$1,238 |
| Residential Component | \$120,465 | \$128,960 | \$249,425 |
| Total | \$354,871 | \$463,777 | \$818,648 |

The impacts of this development would not only improve the street environment and promote safety. They would also provide considerable revenue for the City of Newark.

Infill development would redevelop 34 vacant and unused parcels along Springfield Avenue and many to the north and south. By developing these lots, approximately 350,000 square feet of residential space and about 200,000 square feet of commercial space would be added. This translates to about 300 new housing units at approximately 1,200 square feet per dwelling unit. New businesses and economic activity due to residential development would bring approximately 400 jobs to the area. With an assumed parking ratio of approximately one space per dwelling unit and four spaces per 1,000 square feet of commercial space, approximately 250 parking spaces will be needed.



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totals
 commercial - 218,000 Ft² residential - 362,000 Ft² units - 300 parking - 250 jobs - 410

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fiscal impacts - long-term development

| | Municipal | School | Total |
|---------------------------|------------------|--------------------|--------------------|
| Retail | | | |
| Retail (Big Box) | \$0 | \$0 | \$0 |
| Retail (Medium Format) | \$0 | \$0 | \$0 |
| Retail (In-Line) | \$380,815 | \$382,139 | \$762,954 |
| Subtotal | \$380,815 | \$382,139 | \$762,954 |
| Office | | | |
| Office | \$32,818 | \$134,639 | \$167,457 |
| Food & Drink | \$55,180 | \$152,855 | \$208,036 |
| Convention | \$0 | \$0 | \$0 |
| Hotel | \$0 | \$0 | \$0 |
| Total Project | \$468,813 | \$669,633 | \$1,138,446 |
| Residential-Market | | | |
| Residential-Market | \$339,142 | \$382,769 | \$721,910 |
| Residential-Affordable | \$10,830 | -\$15,783 | -\$4,953 |
| Residential Component | \$349,971 | \$366,986 | \$716,958 |
| Total | \$818,784 | \$1,036,620 | \$1,855,404 |

The long-term, full development scenario calls for new developments to be built at five stories within the BRT incentive zone. Developing at this density will add approximately 400,000 square feet of commercial space and about 1,000,000 square feet of residential space. An estimated 600 additional parking spaces will be needed.

Given these recommendations, the complete long-term scenario would provide the City of Newark with over \$1,000,000 in school funding and \$800,000 in city tax revenue. Infill development alone would bring over \$800,000 in annual revenue to the City.



springfield ave.