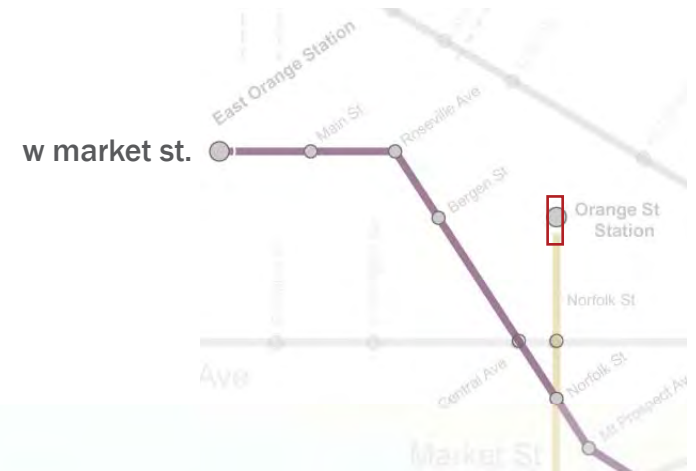


TOD - ORANGE ST.

The Orange Street site is located where many different infrastructures overlap. The site lies at the foot of a major on-off ramp from Interstate 280 and includes a stop on the Newark Light Rail. Branch Brook Park is immediately adjacent but without an entrance. It is also a gateway to the UMDNJ hospital. Prior studies call for large-format retail and an intercept parking garage. Because of direct highway access the site can absorb large numbers of bus passengers traveling to the west. The studio team offers three scenarios that increase in scope, although components from one scenario can be included in another. Each centers on an intermodal station that connects improved pedestrian circulation with structured parking, Light Rail, BRT and long distance buses. All proposals include large format retail as well as significant office and residential development. The Orange Street group focused specifically on sustainability standards that can be applied to this site and others throughout Newark.

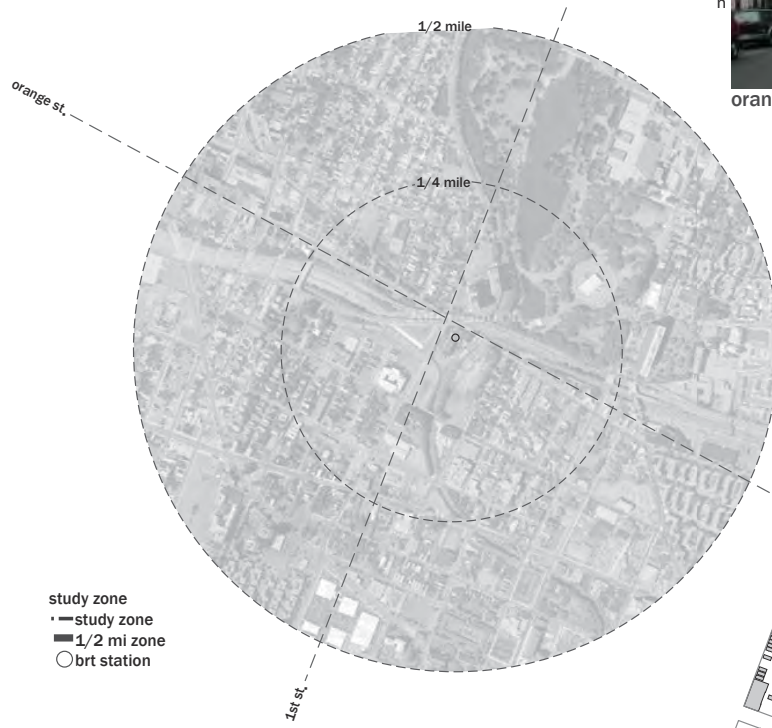


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orange st. site

study zone



orange st. site



The Orange Street site is located in Newark's Central Ward and is bordered by Dickerson Street to the south, Duryea Street to the east, First Street to the west, and Orange Street to the north. These boundaries are a refinement of the development area proposed in the New Jersey Transit Orange Street Station Vision Plan, prepared by Ehrenkrantz, Eckstut & Kuhn Architects (EEK) in February 2007.

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site goals

This study endorses two prior planning goals specific to the Orange Street TOD site. First, City officials have emphasized the importance of stimulating retail development at this site. Second, this site has been identified as a desirable location for a parking facility to intercept commuters bound for downtown Newark or University Heights.

retail

Newark is underserved in retail development. Decades ago, the exodus of retailers to the suburbs led to a larger cycle of disinvestment. The City of Newark and its business community are seeking to reverse this by revitalizing its downtown, encouraging private investment, and stimulating neighborhood development.

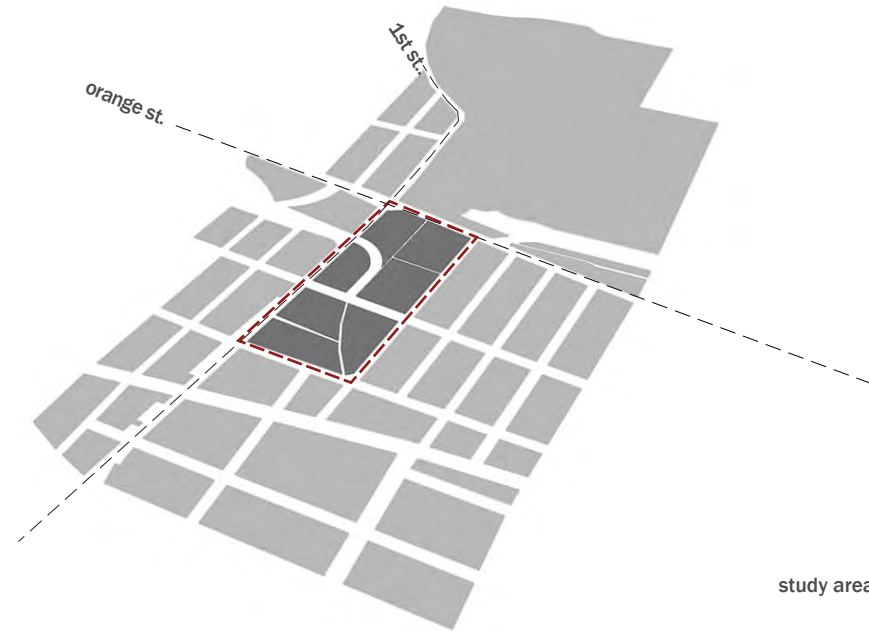
The current lack of retail opportunities in Newark is in part due to the assumption that residents lack spending potential. This assumption has been discredited, as Newark's Economic Development Department estimates that residents spend over \$550 million outside the city annually. Because of Newark's paucity of retail, many residents leave the city to shop in the surrounding suburban communities.

This unmet demand for retail within Newark presents a valuable opportunity for the Orange Street site, where both commuters and residents would benefit from retail development. Superior highway access, ample space for parking and excellent visibility make the Orange Street site an ideal shopping location for commuters, while the established surrounding residential neighborhood, with its lack of nearby shopping combined with a good transit network, make the site ideal for retail development for residents.

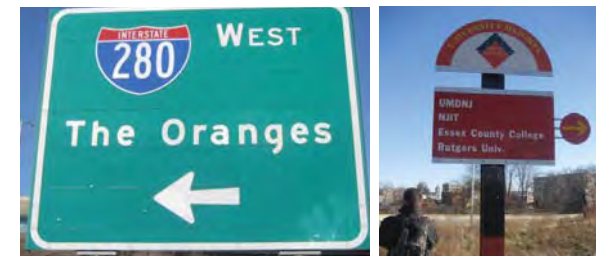
The Orange Street site offers many compelling advantages for retail development. It is well-positioned to capitalize on Newark's strong signs of revitalization and its large parcels of vacant land dramatically simplify development logistics.

intercept parking

The City of Newark and NJ TRANSIT have expressed interest in developing the Orange Street site as an intercept parking facility. Eastbound traffic from Interstate 280 exits onto First Street, adjacent to the light-rail station. Congestion at this interchange, especially heavy in the morning and evening peak periods, led to the construction of the Sussex Avenue Connector and also helped prompt the widening of First Street. The interchange is used by the staff and students of the three universities in the area: UMDNJ, NJIT and Rutgers-Newark. Many workers also enter the city on First Street, weaving through often-gridlocked city streets to access downtown. An intercept facility would divert car trips into a park-and-ride facility and help alleviate circulation problems both along the First Street corridor and in downtown Newark.



As it stands, the overwhelming majority of commuters from suburban Essex and Morris counties use automobiles to access jobs in Newark. Analysis conducted by the Voorhees Transportation Center shows that in 2000 more than 83% of these commuters drove their car to work. The rate is higher among those Essex and Morris County communities not served by NJ TRANSIT's M&E Line. From these two counties—the residents of which have the best access to Interstate 280—there are more than 10,000 work trips made into the city.

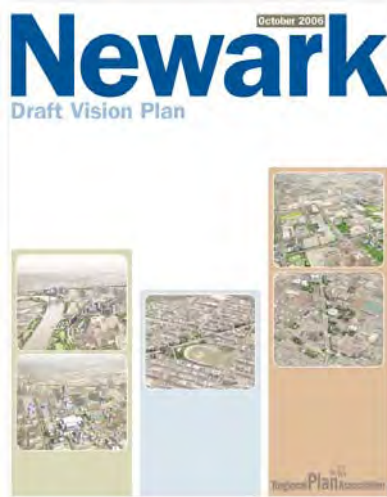


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past planning efforts

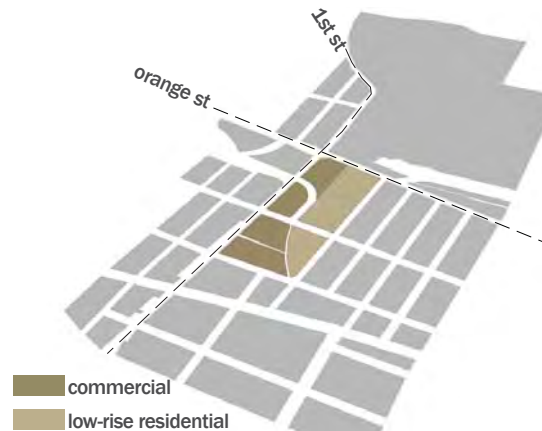
This investigation of TOD at Orange Street has been informed by two prior efforts: the New Jersey Transit Vision Plan, discussed above, and the University Heights Connector Study.

The New Jersey Transit Orange Street Station Vision Plan takes a cursory look at the development potential near the Orange Street station. The plan examines the existing limitations and opportunities, and recommends the creation of an intercept parking facility, retail development and improved pedestrian connections. The plan lays out seven conceptual design principles to guide planning at Orange Street. They include the “College Walk”, a pedestrian mews connecting Orange Street Station to the University Heights area, and a “Regional Parking Facility”. The plan then presents three options for development at the site.

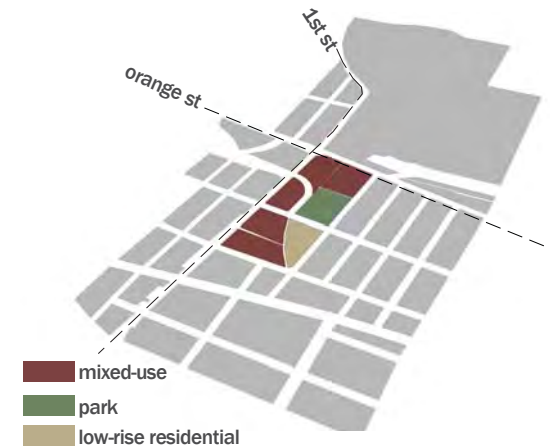


www.rpa.org

the future land use plan 2004



proposed land use



university heights connector study

The University Heights Connector Study illustrates the New Jersey Department of Transportation's intent to improve lane width and streetscaping along First Street south of Interstate 280. This project, completed in 2008, sought to alleviate vehicular and transit congestion in the corridor. The study concludes that traffic movement and safety will improve as a result of the widening and impacts to noise, air quality, ecology, hazardous-waste sites or land use resources are not likely to be significant.



university heights lane widening

TOD - ORANGE ST.

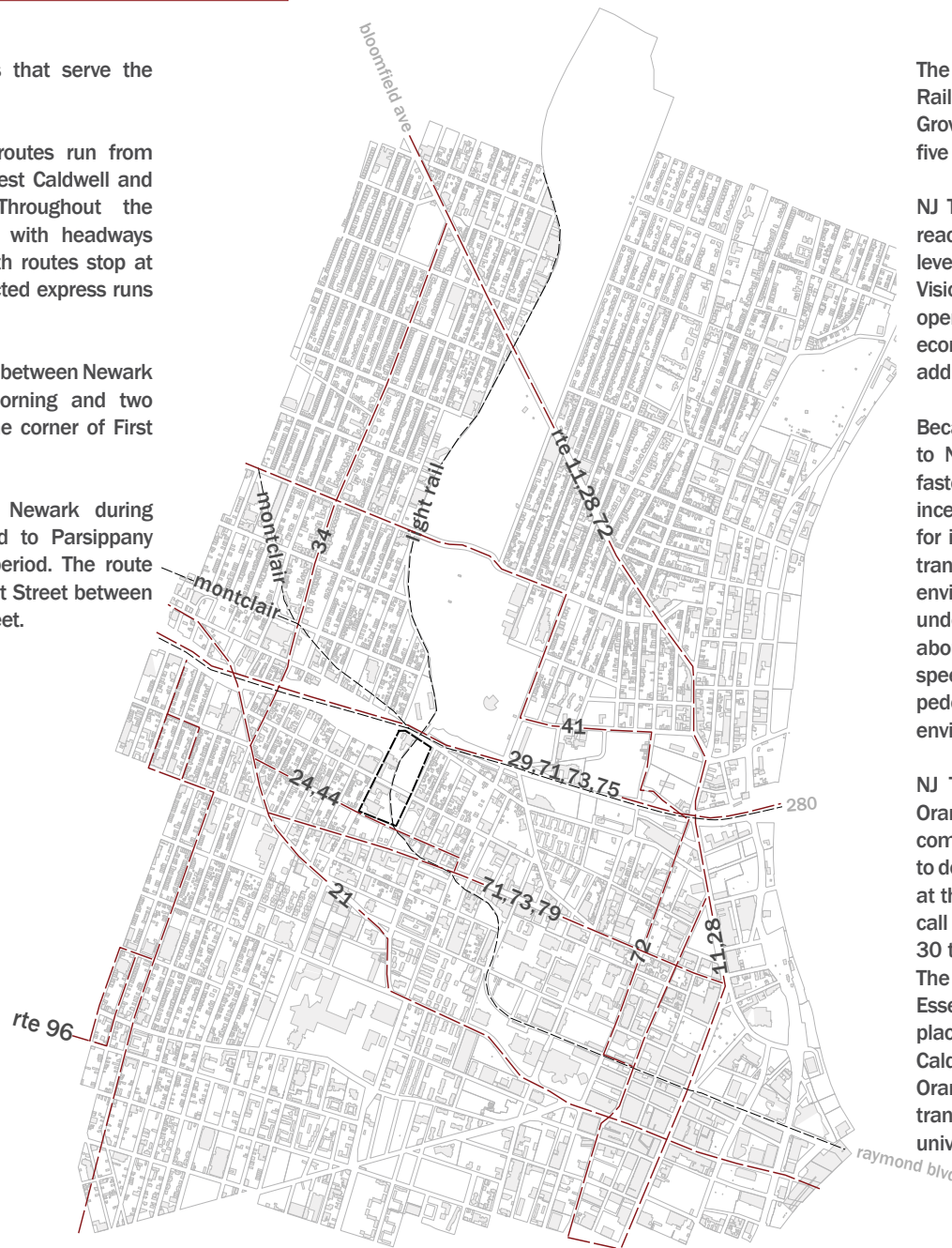
public transportation network

There are four bus routes that serve the surrounding area:

The number 71 and 73 routes run from Newark Penn Station to West Caldwell and Livingston, respectively. Throughout the day, these routes operate with headways of roughly 30 minutes. Both routes stop at Orange Street only on selected express runs into and out of Newark.

The 75 serves several towns between Newark and Butler during two morning and two evening runs. It stops at the corner of First and Orange Streets.

The 79 runs express to Newark during morning peak periods and to Parsippany during the evening peak period. The route operates along West Market Street between Bergen Street and 15th Street.



The Orange Street TOD site is served by the Newark Light Rail line that operates between Newark Penn Station and Grove Street in Bloomfield. The Orange Street station is only five stops and six minutes from Newark Penn Station.

NJ TRANSIT also operates several regional bus lines that reach areas not served by rail, but ridership and service levels on these routes are low. The Orange Street Station Vision Plan shows that the majority of area intersections operated at a service level grade of 'E' or 'F'. Further economic development in downtown Newark will place additional pressure on the vehicular capacity of this area.

Because the Orange Street station is in such close proximity to Newark Penn Station, trips to downtown Newark are faster by light rail than by automobile at peak times. This incentive could lead commuters, especially those paying for increasingly hard-to-find parking near their worksite, to transfer to the Newark Light Rail. Currently, the pedestrian environment around the Orange Street site is uninviting and underdeveloped. Community members have complained about unsafe conditions occurring when rush hour drivers speed through. Intercepting automobile trips will bolster pedestrian safety in the area, and provide a more welcoming environment.

NJ TRANSIT has further expressed interest in using the Orange Street station as a transfer station for local and commuter bus routes. Bus lines that would normally travel to downtown Newark would drop off and pick up passengers at the light rail station. NJ TRANSIT's preliminary estimates call for a facility that would accommodate anywhere from 30 to 50 buses per hour during the weekday peak periods. The routes using the facility would be a mix of Newark-Essex County local bus routes and commuter routes to places such as West Orange, Parsippany, Livingston, and Caldwell in western Essex and eastern Morris Counties. The Orange Street site has the potential to become a major transportation node enabling improved access to Newark's university and commercial districts.

existing conditions

The Orange Street site encompasses large vacant parcels of both private and public land and the Newark Light Rail line. The entire northern block is under state and city ownership. The southern portion of the site is privately owned.

right-of-way

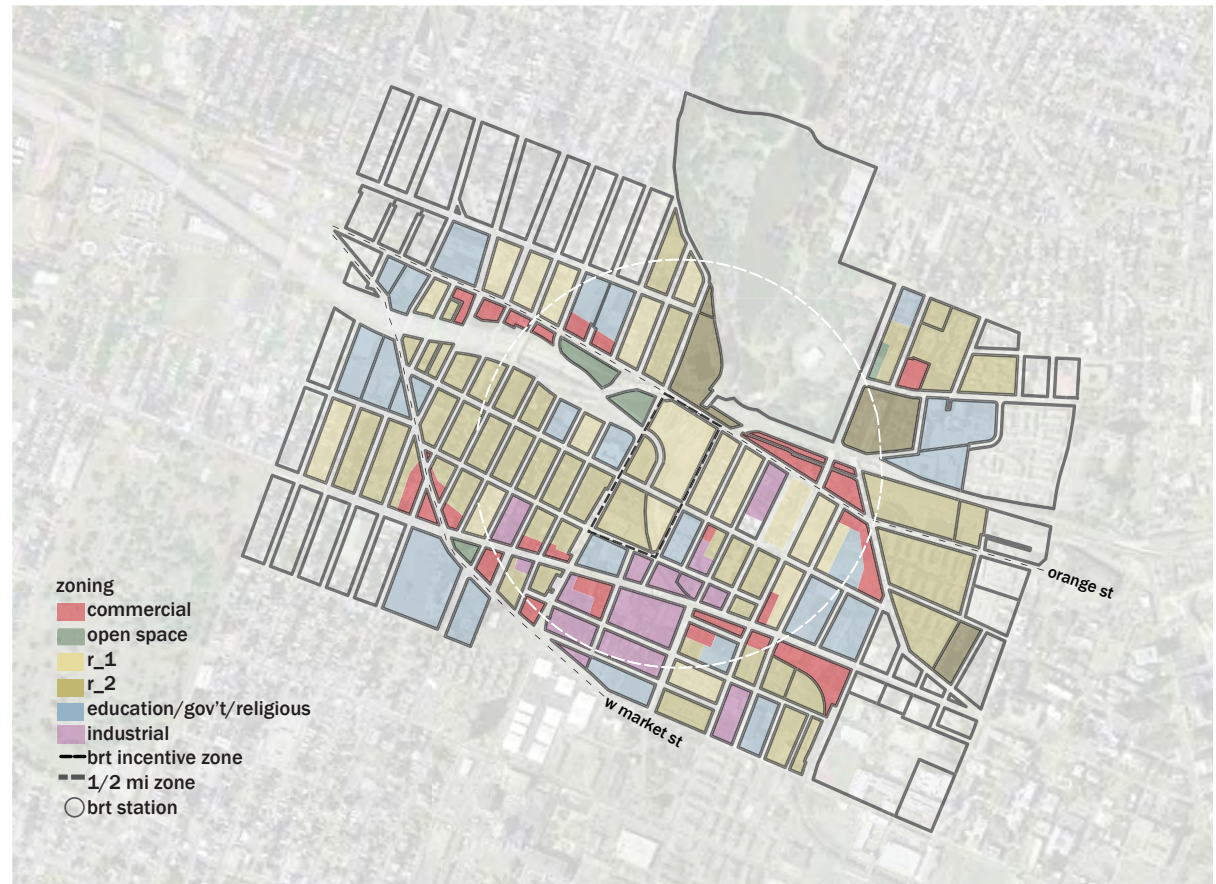
Though the transportation infrastructure is an asset to the site, its configuration presents some right-of-way conflicts. Interstate 280 is elevated at the western portion of the site, and then drops below grade to the east. The Morris-Essex regional rail line runs east-west and is submerged approximately 30 feet below grade. The Newark Light Rail runs through directly through the site; its tracks are below grade at the southern portion of the site and rise to grade in the middle of the site to meet the station.

zoning

Newark's zoning is in the process of being modified as of this writing. The prevailing City Zoning Ordinance has zoned the entirety of the study area I-1: Industrial. The 2004 Future Land Use Plan offered a revised framework for land use in Newark. With respect to the Orange Street site, the land west of the light rail is designated C-SC: Commercial Shopping Center. The land east of the light rail is designated as R-LM: Low-Rise Multi-family Residential.

These single-use designations do not accommodate the development scenarios proposed for the Orange Street site. It is proposed that the land use be changed to the flexible, mixed-use designation that would permit residential and nonresidential uses. The Future Land Use Plan allows for up to three-story buildings in the mixed-use designation. This study argues that these limitations will need to be revised in order to reach the full development potential of the Orange Street site.

This study further proposed that the Green Acres site be maintained with the S-P: Park and Open Space designation, and the existing residential apartment building on the southwest corner of Sussex and Duryea retain the R-LM designation.



zoning map

surrounding area

Development opportunities outside of the study area are limited. Branch Brook Park lies north of Orange Street, just beyond an elevated portion of Route 280 and a submerged portion of the Morris & Essex regional rail line.

The eastern side of Duryea Street is a stable residential block, and not susceptible to change at this time.

To the west, First Street has recently been widened, and the southern portion of First Street adjacent to the redevelopment site is in active use. The northern portion is underneath an elevated section of Route 280.

TOD - ORANGE ST.

parcels

- 1.The Tung-Sol parcel contains a factory adjacent to the Orange Street Station. Tung-Sol once manufactured light bulbs and vacuum tubes, and the building currently appears to be in limited use. An environmentally contaminated piece of land next to the building has been identified on EPA lists.
- 2.The parcel directly east of the station is vacant aside from storage containers and other construction materials.
- 3.The two acres on the corner of Duryea and Sussex have been previously dedicated to be a public park, as part of New Jersey's Green Acres program, the project is under construction as of this writing.



proposed green acres park



flea market currently in disuse



- 4.This parcel includes a 24-unit residential building that is fully occupied and in good condition.
- 5.The parcels at the southern portion of the site hold a one-story building that once held a flea market but is currently inactive.
- 6.The Tuck-It-Away building is a privately owned mini-storage facility.
- 7.The parcel surrounded by the Sussex Connector is entirely vacant.

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existing parcel layout

development scenarios

This study presents three development scenarios for the Orange Street site. Each scenario varies according to building height and the footprint at each development parcel.

While there is some interrelationship between the development intensity of the parcels in each scenario, they need not be considered in isolation. Concepts for a given site from Scenario A may fit well with those for a neighboring site from Scenario C. These scenarios are merely intended to present three cohesive visions for the future of the Orange Street site.



tuck-it-away warehouse facility



proposed – vibrant mix-use development

regional bus intercept

Scenarios B and C provide cross-platform transfers between light rail, regional bus, and BRT within close proximity to structured parking. This would also remove cars from the streets and bring investment into the neighborhood.

adaptive reuse

Adaptive reuse of both buildings and their materials is suggested in every scenario.

improve pedestrian access

Feedback, confirmed by site visits, reveals that crossing Orange Street is inhibited by its width and heavy traffic. There is no direct access to Branch Brook Park from the redevelopment site due to the physical barriers of the rail line and Interstate 280. Recommendations include improved signalization and pedestrian crosswalks, and widening of the light rail bridge across Orange Street for direct pedestrian access to the park.

create activity

Pedestrian activity around the site lessens after dark, and it has been suggested that a mix of commercial, residential, and retail uses can improve night time activity levels, creating a safer and more inviting pedestrian realm.

small business opportunities

Small-scale ground floor retail will provide opportunities for local entrepreneurs to do business in the neighborhood.

access to retail

The scenarios have all been designed to improve access to retail for Newark residents, who often travel outside of the city to shop.

access to food

The scenarios have all been designed with retail space appropriate for a grocery store; currently there are none within walking distance for neighborhood residents.

office space

Mixed-use development includes office space in all three development scenarios, and may benefit local universities and government institutions.

intercept parking

All three scenarios include a parking structure in close proximity to the light rail and future bus loading areas and make use of the entrance to the Sussex Connector.

TOD - ORANGE ST.



vehicular circulation - scenario a



rendering of proposed development

Scenario A envisions a minimal degree of disruption at the Orange Street site although the development of the vacant land east of the Light Rail tracks would be facilitated by the creation of two new streets, one parallel to the Light Rail tracks, and another north of the Green Acres Park. Both streets would have parallel parking on one side, and a single lane for auto traffic. The street parallel to the light rail tracks would generate activity on all four sides of the park, thereby encouraging passive surveillance within the park.

Currently, public safety is undermined by the presence of the Interstate 280 overpass. In all three scenarios, efforts to improve signal timing at the corner of First and Orange Streets and make the pedestrian environment more inviting would help to alleviate safety issues near the Light Rail/BRT station.

transit - scenario a

Scenario A would accommodate a platform enabling cross-platform transfers between the proposed BRT service and Penn Station-bound Newark Light Rail cars. This arrangement is illustrated in the diagram 1a. In conformance with the proposed Crosstown BRT line, the BRT would enter the site from First Street and terminate at Orange Street. The on- and off-ramps to Interstate 280 would allow drivers to access the parking structure at Site 8.

detailed plan view - scenario a



scenario a plan

TOD - ORANGE ST.

parcel development - scenario a

Although Scenario A touches the entire site, it is to a minimal degree. The eight development parcels (shown in the diagram at right) would take on the following characteristics:

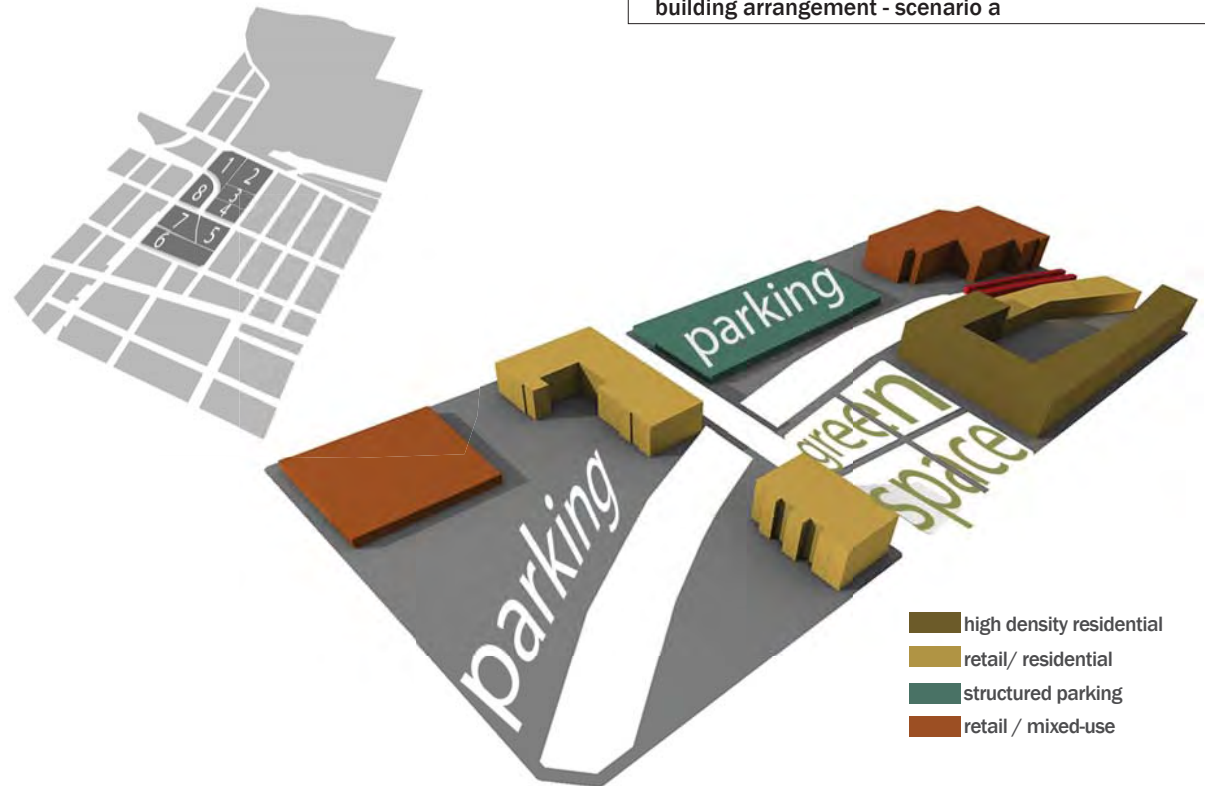
1. The underused five-story Tung-Sol factory would undergo adaptive reuse to take advantage of its solid construction and physical proximity to the Orange Street light rail platform. The factory building would house ground-floor retail near First Street and in the vicinity of the Light Rail station. Residential and/or cultural uses could be housed on the upper floors.

The building would benefit from a substantial addition on its west side, where it is set back from First Street by as much as 100 feet. This addition would ideally be wide enough to support double-loaded corridor residential use along the north-south axis of the structure, while allowing for a small surface parking lot on the site facing First Street.

2. The area east of the Light Rail/BRT station could accommodate a new structure with storefront retail uses facing the station, and small office uses above. It is proposed that the structure could rise to up to four stories in this scenario. University tenants such as UMDNJ may be interested in accessory office space at this site. A surface parking lot serving Sites 2 and 3 would be located adjacent to this structure.

3. The remainder of the northeast quadrant of the study area would be dedicated to residential development between three and four stories high. Although attached housing is recommended for this site in order to encourage an inviting street frontage, structures should be divided into architecturally distinctive “bays” of between 20 and 50 feet wide. Additionally, the prevailing building height of existing housing on the east side of Duryea Street should be respected. This site would be served by the shared parking lot located behind parcels 2 and 3.

building arrangement - scenario a



4. This site, in this and all other scenarios, is dedicated as a Green Acres park facility.

5. This existing residential building, already converted from prior industrial use, would remain unchanged in this scenario and all others.

6. Demand for retail options would be met by a single-story retail structure on this site, replacing the flea market building. This roughly 34,000 square-foot building would be situated on the corner of First and Dickerson Streets to enable easy pedestrian access. It could accommodate a variety of uses from a small grocery store to an electronics store. Most of the existing flea market surface parking would be retained to serve the site.

7. The Tuck-It-Away personal storage building, in this scenario and all others, would be adaptively reused for residential lofts. The accessory building south of the main Tuck-It-Away building would be removed in order to offer additional parking on the site.

8. This site, currently occupied by the Sussex Avenue Connector, would be built out with a large parking structure four to five stories high. This garage would primarily serve commuters utilizing BRT or Newark Light Rail at Orange Street. A bridge over the access lanes for BRT and vehicles entering and leaving the garage could provide pedestrian access to the station from the northern end of the structure.