

Key Action Strategies & Plan Recommendations

The follow recommendations represent the projects and actions that are most **immediately** required to advance the visions and goals of the Urban Redevelopment Plan. This list of recommendations focuses primarily on public-oriented aspects of the plan, although most actions require working in partnership with private property owners, developers and other public agencies. **All of these actions should be the focus of the Borough and its partners over the next three years.**

Public Policy, Economic Development and Administrative Actions

Refine the Borough's Urban Mixed Use Zoning Ordinance and Subdivision and Land Development Ordinance Regulations

The Borough recently adopted a mixed-use ordinance which set the stage for the character of new infill redevelopment within the study area. The redevelopment planning process included an evaluation of the current zoning requirements along with a review of other relevant land development requirements and identified the need to revisit the current regulations to ensure full consistency between the desired outcomes from the redevelopment plans and adopted ordinance requirements. The following elements should be considered to codify the proposed redevelopment plan through the Borough's ordinances and regulations:

- Mixed Use Zoning Ordinance Refinement
- Development of Design Criteria/Guidelines
- Preparation of Official Map/Specific Plan
- Review of Mixed Use Zoning District Boundaries
- Subdivision and Land Development Ordinance (SALDO) Revisions
- Collaborate with North Middleton Township on N. Hanover Street Corridor Zoning

Upon review of the Borough Zoning Ordinance and Subdivision and Land Development Ordinance (SALDO) several sections of the ordinances have been identified where the Borough-wide requirements and/or design standards may not be consistent with the intent of the vision developed through this planning process. This is especially true when compared to their specific application in conjunction with the intent of the Urban Mixed Use District. In some cases, these potential inconsistencies were identified through the study of specific design alternatives for development layouts on the former industrial properties or through comparisons of existing sections of the Borough, that the community identified as models for any new development, yet are specifically precluded from being replicated

based on the current regulations.

The following is a list of the zoning ordinance and SALDO sections that should be considered for modification and/or expansion in order to promote consistency between the Urban Redevelopment Plan recommendations and the Borough governing regulations that shape private development activities. These inconsistencies could be address directly within the various sections of the zoning ordinance and/or the SALDO or in some cases, through a set of Urban Mixed Use zoning district-specific urban design and performance standards.

Chapter 217. Stormwater Management

- In general this section of the ordinance follows the most current federal and state regulatory requirements. Opportunities exist to further define the application of "regional approaches" to stormwater management that would adhere to the regulatory requirements as well as provide greater opportunity to improve stormwater management and mitigate existing issues in the entire northwest neighborhood, beyond the specific limits of individual developments. As such, the addition of a new section to Chapter 217 should be considered which addresses the ability and requirements for regional stormwater management systems, possibly following the approach outlined in Section 271-16 which provides for special requirements at a subbasin level.
- A definition of "Brownfields" should be added to the list of definitions.
- A definition of "Pre-Treatment" should be added to the list of definitions.
- A definition of "Total Maximum Daily Load (TMDL) should be added to the list of definitions.
- A clarification under Section 217-12 stating the Brownfields sites qualify for pre-treatment performance exceptions as compared to Greenfield sites, as specified in "The Pennsylvania Stormwater Best Management Practices Manual."
- A section which cross references proposed additions to Chapter 226-24 defining flow-through planters and underground structural soil systems (Silva cells) should be added.

Chapter 226. Subdivision and Land Development - Article V Design Standards

Section 226-24 Streets - Subsection A General standards

- (5) A clause stating the Borough existing “street grid system” should be extended and replicated as a continuation of existing streets.
- (6) The Borough should consider discouraging cul-de-sacs throughout the entire Borough since they limit multi-modal connectivity and promote a suburban development patterns. This could be achieved by making them “conditional” as a street facility. Cul-de-sacs should be prohibited in the Urban Mixed Use zoning district.
- (8) The requirements in the section state that new streets should be widened even if they are extensions of existing narrower streets. The Borough should consider a review process to ensure that most desirable “character of an existing street should be maintained if the roadway is consistent with the land uses and urban design “form” and pattern along the street. This approach would eliminate the condition that occurs in the Borough where functional and attractive older streets suddenly widen and appear to be suburban streets “tacked on” to the historic street character.

Section 226-24 Streets – Subsections B Street classification and C Street widths

- The current requirements follow a very “engineered” approach to the function and design of streets. The exact cross section and design elements of a street should consider both the project volumes of traffic that will need to be served and the uses and pattern of land uses along those streets, i.e. a residential collector street may function and look differently from a mixed-use collector street which is handling the same volume of traffic. The Borough should consider developing specific street classifications with associated urban design guidelines, at least for the Urban Mixed Use zoning district. This effort could be used as a pilot for future application Borough-wide.

Section 226-24 Streets – Subsection D Cul-de-sac or dead-end streets

- See comment under Subsection A regarding cul-de-sac application.

Section 226-24 Streets – Subsection G Intersections

- Intersection design requirements for roadways within the Urban Mixed Use zoning district should be developed as part of a broader set of “form-based” design requirements and referenced in this subsection of the ordinance especially to limit wide curb turning radii and ensure that full pedestrian and multi-modal facilities are include in all intersection designs.
- Requirements of unnecessary or excessive widening and the use of turning lanes, etc. under Subsection G, especially within the Urban Mixed Use zoning district should be stipulated.

Section 226-24 Streets – Subsection K Driveways

- Driveways should allowed only by special exception within the Urban Mixed Use zoning district and only be allowed from alleyways.

Section 226-24 Streets – General Comments

- There appears to be no design standards for new alleyways in the SALDO. Alleyways should be promoted throughout the Borough and required in the Urban Mixed Use zoning district.
- Specific requirements for transit facilities within streetscape designs should be required.
- The Borough should adopt a palette of recommended traffic calming devices based on PennDOT’s Traffic Calming Handbook. The palette of approved devices could be developed through the pilot implementation on streets and thoroughfares located with the Urban Redevelopment Plan study area.

Section 226-26 Blocks – Subsection A

- A minimum and maximum block size should be required throughout the Borough to ensure the extensive of the tradition block structure is extended and infilled throughout the Borough.

Chapter 226. Subdivision and Land Development - Article VI Improvement and Construction Requirements

- Relying purely on PennDOT specifications for all roadway construction may not allow for the full integration of the most current stormwater management practices. An audit of current PennDOT roadway construction standards in conjunction with urban design and stormwater management guidelines developed for the Urban Mixed Use zoning district should be performed to determine if there are any conflicts or special exceptions that should be granted, should integrated green stormwater management techniques be utilized as part of a new street design.

Chapter 239. Trees – Attachment 2 and 3

- A statement should be added stating the native tree species should be considered whenever possible and plants considered invasive (using a standard such as “so designated by the Pennsylvania State University Agricultural Extension).
- Attachment 2 - #7 – The minimum tree pit size should be increased from three feet square to five feet square or utilize underground structural soil systems to provide adequate root growth for the long term survival of the street tree.
- A standard for a minimum bottom branch height for all street trees shall be 6’-0” should be added to the requirements.

- The list of approved street trees should be amended to further diversify the small trees (understory) and large (canopy) trees.
- Tree Lilac (*Syringa reticulata*) should be removed from the approved street tree list. This species is very weak wooded and grows naturally as a shrub, therefore requiring a nursery graft at the base of the tree to create a single stem plant. Communities that have utilized this species have found them to be prone to breaking at the bases and their survival rate is very low when subjected to harsh conditions of an urban street (high salt content, poor drainage and low soil oxygen levels).
- A list of approved street trees within streetscape flow-through planters should be developed.

Chapter 255. - Article XXV Off-Street Parking and Loading

Section 255-202 – Location of parking for dwellings

- The ability to allocate a certain percentage of on-street parking towards the overall residential unit parking generation should be considered within the Urban Mixed Use zoning district or a reference of the requirement as stated in the Mixed Use zoning ordinance.

Section 255-202 – Number of required spaces for dwellings

- A table which stipulates required parking spaces by unit type should be considered beyond the categorical two off-street spaces for all residential units.

Section 255-202 – Location of parking for nonresidential uses

- The ability to allocate a certain percentage of on-street parking towards the overall nonresidential use parking generation should be considered within the Urban Mixed Use zoning district or a reference of the requirement as stated in the Mixed Use zoning ordinance.

Section 255-205 – Number of required spaces for nonresidential uses

- A table with standards that allows for space sharing based on the type of use and the time of day of parking utilization should be included to limit the “over supply” of parking within the Urban Mixed Use zoning district.
- The parking generation for uses, especially in a traditional neighborhood, urban infill pattern such as the Urban Mixed Use zoning district should be considered using the ITE Parking Generation Manual, 4th Edition, which considers mixed use development models for parking generation.

Section 255-209 – Joint parking lots

- Standards for privately developed parking structures should be developed, including both parking management policies and a reference to urban design guidelines for the Urban Mixed Use zoning district.

- (B) A reference should be made to the space sharing table described above in the Section 255-205.

Section 255-210 Design standards

- Special buffering requirements, such as the use of aesthetic/architectural walls, green walls, etc. that allow for parking encroachment within the buffer yards within the Urban Mixed Use zoning district should be established to allow for the efficient and compact urban infill forms of development.
- The promotion of pervious paving for stormwater management within paved parking areas (spaces only) should be included and cross referenced with requirements in Chapter 217. Stormwater Management. This reference could also be stated in Section 255-213 Additional requirements for major uses.

Section 255-211 Paved area landscaping and screening

- As mentioned above in Section 255-210 architectural buffering and screening should be developed for the Urban Mixed Use zoning district.
- The inclusion of flow-through planters for stormwater management within medians in parking areas should be included and cross referenced with requirements in Chapter 217. Stormwater Management.
- (4)(a) The list of approved street trees should be expanded to include species which thrive in stormwater management/flow through planting areas within parking areas. This list should also be cross-referenced with the approved street list requirements in Chapter 239. Trees – Attachment 3.

Chapter 255. Article XVII UM Urban Mixed Use District

The following provisions and requirements which apply specifically to the Urban Mixed Use zoning district should be considered for revision, modification or replacement with a more detail set of urban design standards.

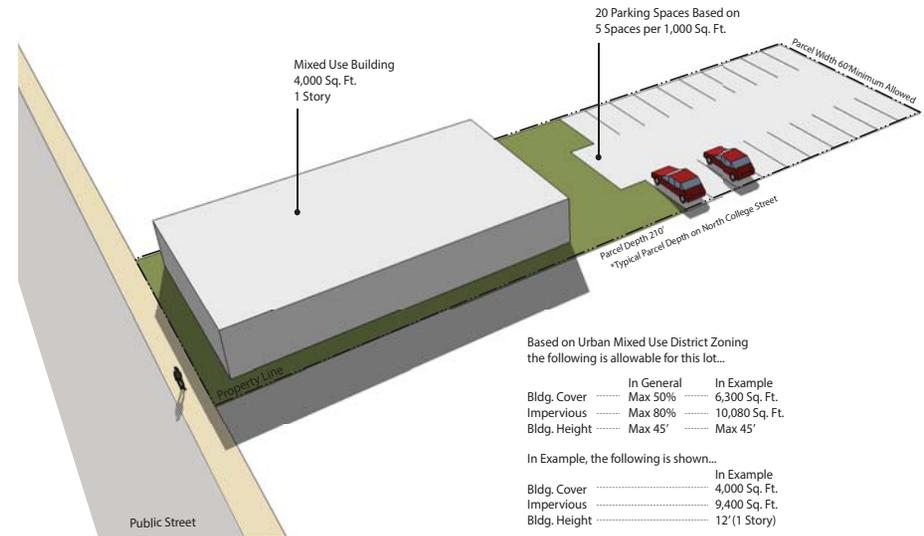
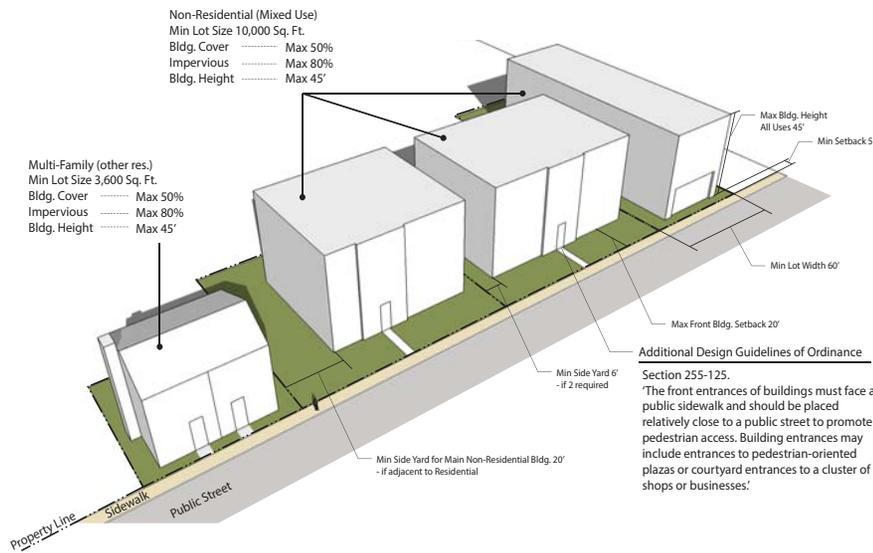
Section 255-.123 Area and Bulk Regulation

This table should be revised in the following manner:

- Minimum lot widths should be clarified for mixed-uses to allow for greater diversity of lot widths, depending on use.
- Building coverage should be increased based on meeting other site design criteria within a specified redevelopment area, yet beyond an individual parcel.
- Impervious coverage requirements should be considered on development-wide manner and not on a parcel-by-parcel basis to ensure that

concentrated density and urban form are promoted, especially along mixed-use retail/commercial corridors.

- Building height should be regulated by occupied floors and not by dimension height in order to allow for unoccupied space such as sloped roofs and architectural features which are in-keeping with the character of the Borough.
- A fifth story should be considered as a conditional use based on certain anchor uses, such as a hotel, based on meeting special architectural guidelines for upper floors, such as top floor setbacks and roof treatments.

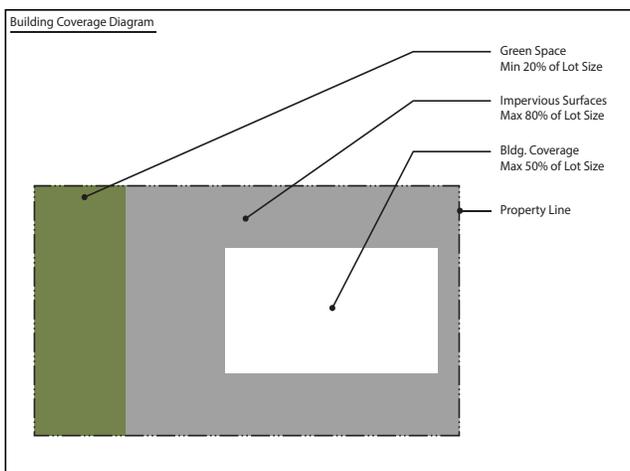


Based on Urban Mixed Use District Zoning the following is allowable for this lot...

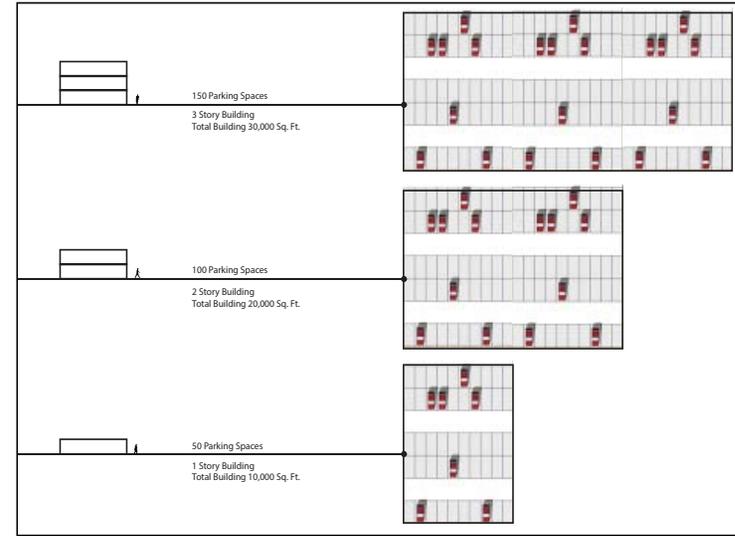
	In General	In Example
Bldg. Cover	Max 50%	6,300 Sq. Ft.
Impervious	Max 80%	10,080 Sq. Ft.
Bldg. Height	Max 45'	Max 45'

In Example, the following is shown...

Bldg. Cover	Max 50%	4,000 Sq. Ft.
Impervious	Max 80%	9,400 Sq. Ft.
Bldg. Height	Max 45'	12' (1 Story)



Summary of Current UM Zoning District Setback and Coverage Percentage Requirements.



Summary of Current UM Zoning District Off-Street Parking Requirements

Section 255-125. Design Guidelines

- The Borough should consider amending this section of the ordinance to include Urban Design Guidelines which illustrate mandatory or desirable massing and façade articulation formats in keeping with the overall character of the Borough. The guideline could address items such as: the relationship of height versus width of facades, entrance orientation in relationship to public spaces; the mixture and treatment of building materials, minimum requirements for ground floor glass along commercial streets; architectural lighting and signing; and the application of landscape elements.

Other Considerations for the Urban Mixed Use Zoning District Ordinance

- The Borough should establish a requirement that all dry utilities located along new streets be constructed within the Urban Mixed Use zoning district should be located underground or should be located above ground via rear alleyways or parking areas.
- The Borough should require that all new underground wet utilities within the Urban Mixed Use zoning district should be located within public rights-of-way unless no other alternative exists (such as grade/gravity requirements).
- A parking enforcement and management policy with supporting regulations for the entire northwest quadrant neighborhood should be adopted by the Borough which defines which streets within the Urban Mixed Use zoning district should be metered. This policy mostly applies to the redevelopment of the former IAC/Masland site in which case Carlisle Springs Road north to D Street and including B Street and south to the Norfolk Southern Railroad line should be metered. The Borough should also consider developing a resident parking permit program. In addition, parking regulations, most likely through resident permitting and time limits on meters to limit the ability of Fairground visitors from parking in spaces designated for residents or retail businesses.
- The triangular block located along of U.S. Route 11/N. Hanover Street from Penn Street to the Norfolk Southern Railroad tracks should be considered for rezoning as Urban Mixed Use to make it consistent with the adjacent UM district to the north of the railroad. The land uses in this area create the most significant “urban land use gap” between the proposed redevelopment areas and the downtown, along the N. Hanover Corridor.
- The Borough should consider adopting an official map or specific plan, as allowed by the Pennsylvania Municipalities Planning Code (MPC) under Article VII-A – Traditional Neighborhood Development. This provision would create a formal recording of the Urban Redevelopment Plan’s site specific plan as a regulatory document to guide the location of public infrastructure, parks and open space. It would also provide the ability, if the Borough so chooses, to designate the more specific distribution of land-use within the area of the specific plan’s boundaries. In order for

such a plan to be adopted, it would require the agreement of the property owners as well as the Borough, therefore more extensive review of the proposed site specific plans for each of the redevelopment sites would likely be required, prior to adoption.

Develop Private/Public Space Access and Maintenance Ordinance

The proposed redevelopment plan identifies the value of high-quality public parks, plaza and open spaces throughout the study area. The creation of ordinances which promote public/private partnerships in the design, development and long-term maintenance of these spaces should be prepared. An aspect of such ordinances should establish legal protocols that ensure that these public spaces, even if constructed and/or owned privately, be maintained as truly public spaces and determine what activities are legally acceptable to occur within them.

A model ordinance is provided in Appendix B.

Develop a Tax Increment Financing (TIF) District as Financing Mechanism to Fund Major Capital Projects

In effort to convey a positive message to the development community that the Borough is receptive to redevelopment investment, the Borough adopted a Local Economic Revitalization Tax Assistance (LERTA) District as an incentive to attract investment on the former industrial sites. The incentive of the LERTA is to partially reduce the tax burden to a potential developer to entice them to undertake a development, especially to balance out the cost when compared to development of a greenfield site. Based on the quality and intensity of development, a Tax Increment Financing (TIF) program will be a more effective tool to generate upfront financing to support the cost of highly desirable investments such as a parking deck, streetscaping and public spaces. TIF programs typically assist in providing financing for aspects of projects that are otherwise difficult to fund through typically private lending mechanisms and/or relying solely on public bonding.

Initiate Economic Development and Enhancement and Branding Strategies for the N. Hanover Street Corridor

The N. Hanover Street Corridor from the Square to the Penn Street/Fairground Avenue intersection is the critical piece of the downtown that connects to the redevelopment area of the former IAC/Masland site. In order for the redevelopment that occurs to the north of this corridor to fully connect and function as an extension of downtown, this corridor must be an economically vibrant and desirable place for business patrons, pedestrians and residents. Furthermore, the condition of this corridor could influence

the decision-making process of potential tenants in the redevelopment area; if it is considered in decline or economically stagnant, it could limit the attractiveness of the new redevelopments. There are several key initiatives that could comprise an economic enhancement strategy for the corridor:

- Consider developing a branding strategy which distinguishes the N. Hanover Street Corridor as a distinctive destination or district within the downtown. This could include creating a district branding name, logo and support graphics and signing for print and environmental graphic applications on banners and signing.
- Target a few critical under-utilized or vacant properties for redevelopment. This may include property acquisition and rehabilitation as a purely public endeavor or as a private/public partnership.
- Working with existing properties owners to improve facades and upgrade signing and ground level retail windows.
- Provide and promote seed capital for the creation of new retail businesses and link potential business tenants with vacant retail spaces.
- As key traffic improvements are made at the intersection of U.S. Route 11/N. Hanover Street/Penn Street/Fairground Avenue, extensive landscape improvements should be included to make this intersection an attractive node along the N. Hanover Street corridor. These improvements should include special landscaping, a public park or pavilion structure on the corner of the One West Penn Apartments Building, between W Penn Street and Fairground Avenue. This building is located so its back faces the prime street frontage and lacks urban design qualities.
- The Borough should work with the property owners on the west side of U.S. Route 11/N. Hanover Street from Penn Street to the Norfolk Southern Railroad tracks to determine if a strategy which consolidates curbs cuts and creates a single, interconnected parking lot can be undertaken. Eliminating curbs cuts will dramatically increase the pedestrian friendliness of the block. This could be done as a separate project or more likely as part of the proposed intersections at the Penn Street and PA Route 34/Carlisle Springs Road intersections.
- A signature gateway treatment should be considered for the large blank wall of Two West Penn Apartments which is directly on the visual axis as motorist travel south on U.S. Route 11/N. Hanover Street, entering the downtown. The treatment should be design to be engaging to pedestrian as well as motorists since this entire corner lacks pedestrian interest, despite its strategic location. This treatment could include special lighting to provide 24 hour interest.
- A pocket park or temporal landscape installation could be created in the undeveloped area located just south of Two West Penn Apartments. This treatment could extend to the curb line to create a visual attraction, which can be seen from a distance by pedestrians walking in either direction in a block with limited ground floor retail activity.

Develop Public Funding/Financing Resource Team

Due to the complex nature of the public financing that will likely be needed to support all of the public improvements as well as public/private partnership opportunities, a special financing and funding committee or “Resource Team” should be considered to lead this effort, possibly jointly formed by Carlisle Borough and Cumberland County. This small group of local leaders would work with consultants to develop, implement and maintain the funding strategy and efforts. This team should also invite a broader tier of advisors to participate in the team’s efforts and meetings at key junctures. These advisors can include staff from offices of state representatives and senators and the federal congressional delegation; staff from key state and federal agencies (*e.g.*, PADEP, EPA, PennDOT, U.S. DOT, PADCED, PennVEST, the Pennsylvania Infrastructure Bank); and key local/regional economic development and community organizations. This “Carlisle Revitalization Resource Team” can be convened once initially and then at key milestones to advise the Borough and Cumberland County on strategies for identifying and pursuing resources, and to provide key stakeholder and advocacy support. This action is described in greater detail in Section 5 of this plan.

Public Infrastructure Actions

Initiate Base Area-wide Traffic Impact Study (TIS) (Project T1)

The transportation improvements specified in the Project Implementation Matrix identify a number of opportunities to mitigate existing pedestrian safety and traffic mobility issues associated with the proposed urban redevelopment program and foster stronger pedestrian connections to downtown. Such improvements should be implemented in a phased approach to advance short-term “shovel ready” projects and long-term improvements that are capital-intensive and integral to larger redevelopment plans on the various former industrial sites (*i.e.*, parking structures, street extensions, etc.).

Many of the recommended transportation improvements impact the existing physical design and function of both state and local roadways. Prior to such improvements being implemented, a preliminary Transportation Impact Study (TIS) – as outlined under Transportation Recommendation #T1 -- should be performed in coordination with the Pennsylvania Department of Transportation (PennDOT) Engineering District 8-0. The TIS is necessary to further gain an understanding of the relationship between the trips generated from the redevelopment scenarios and the resulting traffic and pedestrian design improvements required to: (1) maintain or

improve the existing level of service (LOS); (2) mitigate impacts on existing neighborhoods, (3) and facilitate safe circulation for all modes of travel, including pedestrians and bicyclists.

The TIS development process will need to follow PennDOT’s “Policies and Procedures for Transportation Impact Studies (TIS) Related to Highway Occupancy Permits (HOP),” and the Borough’s first action will be to prepare for a District 8-0 TIS Scoping Meeting by conducting a baseline traffic data collection and existing conditions analysis of a few select intersections within the study area. Once completed, the Borough will then schedule and participate in a District 8-0 TIS scoping meeting to define the TIS study area, as well as the full data collection and traffic design evaluation elements. Subsequent to the TIS scoping meeting with PennDOT District 8-0, the TIS scope can be properly defined and Steps 2 – 12, as outlined below, can be executed.

The Traffic Impact Study Steps

Step 1: District 8-0 TIS Scoping Meeting

- » *Study Area*
- » *Data Collection and Traffic Design Evaluation Elements*

Step 2: Data Collection and Analysis

- » *Volume Counts/Data*
- » *Photographs, Site Analysis*
- » *Crash Data*

Step 3: Existing Conditions Scenario

Step 4: Background Traffic

- » *Growth Factor of Traffic*
- » *Planned and Permitted Development*

Step 5: Trip Generation

- » *Local Trip Generation Study*
- » *Diverted Link Trips*
- » *Existing Sites being Redeveloped*

Step 6: Modal Splints

- » *Standard Assumptions for Alternative Trips*
- » *Residential & Business Land Use*

Step 7: Trip Distribution

Step 8: Traffic Assignment

Step 9: Future Analysis

- » *With and Without Development Future Year Scenario*

Step 10: Level of Service Requirements

- » *Existing Intersections Re-analysis*
- » *New Intersections/Driveway Analysis*

Step 11: Mitigation Analysis

- » *Develop Mitigation Strategies based off of TIS findings*

Step 12: Submission to District 8-0 and Review Process

- » *Concurrence from District 8-0 on the proposed improvements that are necessary for the Borough to initiate (e.g. B Street extension, etc.) to facilitate private development.*

The TIS scope will also serve as a basis for private developers that will need to obtain a District 8-0 Highway Occupancy Permit (HOP) to support their land development approval process as required by the Carlisle Borough Code, Chapter 226, Subdivision and Land Development.

Preliminary Study of Redevelopment Traffic Impacts

Trip generation analyses were performed to achieve a greater understanding of the number of vehicle trips generated under the pre-development (industrial sites) and post-development (i.e., full build-out as conceptualized by his plan) conditions of each brownfield site. Moreover, the analyses help confirm the existing street network’s design capability to safely and adequately accommodate the post-development traffic volumes, and to provide an informational baseline for future traffic studies and redesigns of existing streets and intersections, as well as the design of new streets and intersections.

The results of the analyses, as presented in Appendix A and summarized in Table 2, demonstrate the existing street network’s likely inability to accommodate the increased traffic volumes. Each site’s redevelopment scenarios have the potential of generating a significantly greater number of vehicular trips than their respective former industrial site’s trip generation volumes. As such, the existing street network’s capacity must be appropriately designed to safely and adequately accommodate these potential volumes. Design considerations must increase the network’s

capacity and accessibility by expanding the existing street network (B Street extension, etc.), redesigning existing streets (e.g., U.S. Route 34/Carlisle Springs Road, Fairgrounds Avenue, W. Penn Street, etc.), and improving existing intersections to include proper traffic control measures.

It is important to note that the trip generation analyses show the projected volumes at full build out. As such, the total potential volume of 31,806 trips per day will likely be realized over time and through a phased development approach of each site as required by the Borough Subdivision and Land Development Ordinance approval process. Such a process also includes a traffic impact study requirement of certain land development proposals.

Table 2 - Trip Generation Analyses

Brownfield Site	Pre-Development Conditions*	Post-Development Conditions*
Tire & Wheel	Manufacturing @ 1,514 trips per day	Mixed Use @ 4,755 trips per day
IAC	Manufacturing @ 3,367 trips per day	Mixed Use @ 24,536 trips per day
Tyco	Manufacturing @ 254 trips per day	Commercial @ 2,515
TOTALS	5,135 trips per day	31,806 trips per day

Sources: Trip Generation Manual, 9th Edition, Institute of Transportation Engineers.

Wayfinding And Signage

Carlisle Borough continues to improve accessibility for users of both motorized and non-motorized transportation modes, but additional improvements are needed to increase users' ability to readily find their destinations within the community. More specifically, the existing transportation system, while physically connected, lacks a consistent wayfinding and signage program. As a result, the connections between properties are unclear, which is highlighted by the lack of wayfinding signage between the Carlisle Fairgrounds and Downtown Carlisle; a fact highlighted by downtown merchants that realize the lack of business opportunities realized during fairground events. As a result, a coordinated wayfinding "brand" – building off the Downtown Carlisle Association's downtown branding – should be established that defines a holistic and unified approach to the physical design standards, lighting, amenities, and wayfinding of existing and future pedestrian connections.

Public Transportation

Public transportation services within the Carlisle area are provided by Capital Area Transit, which currently operates fixed route service via its Carlisle Local and Commuter Express Route (Route C). The nearest Route C bus stop is located at the intersection of Hanover and High streets adjacent to the Cumberland County Courthouse.

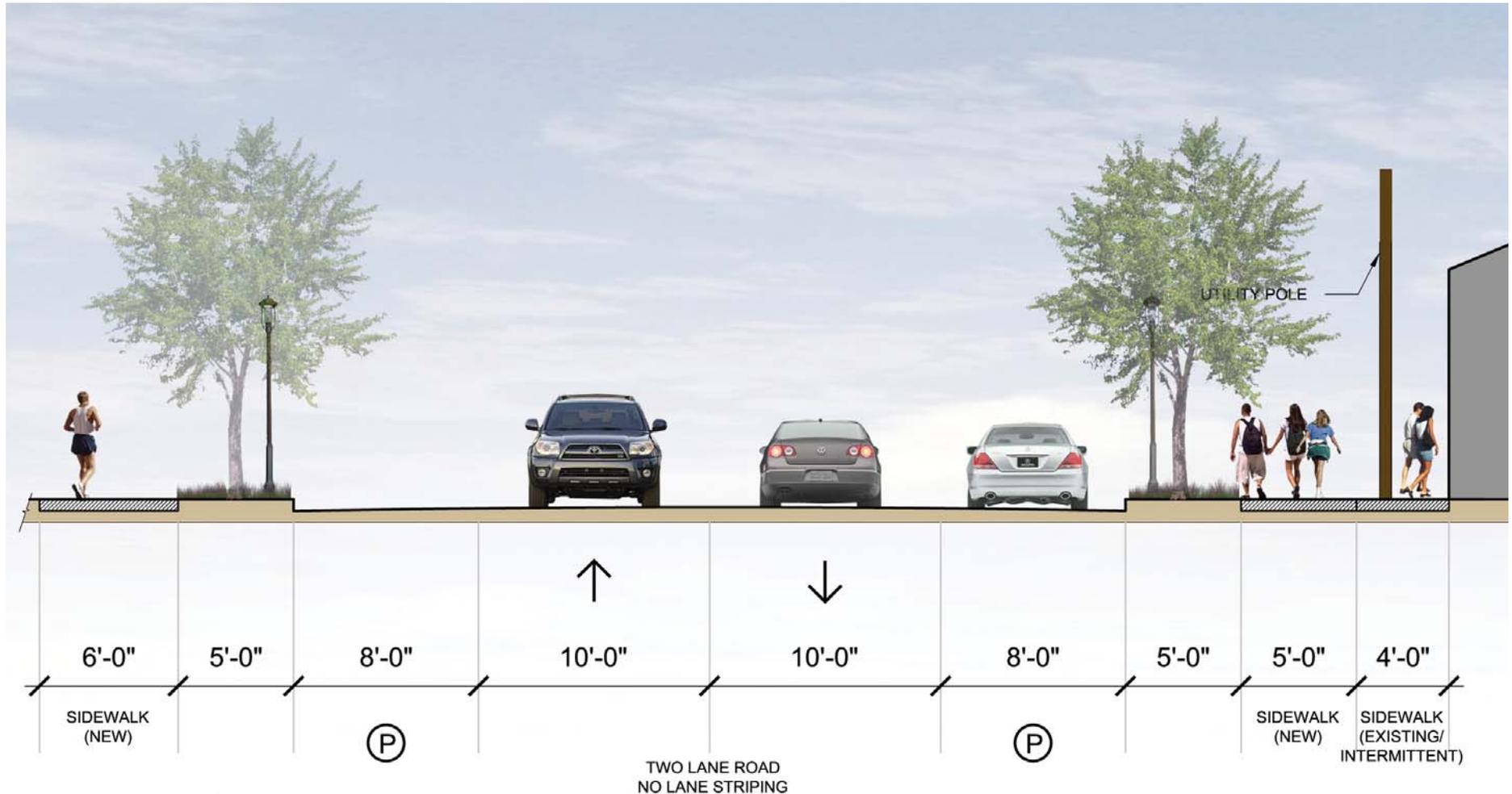
Capital Area Transit is also prepared to launch a new circulator service within the greater Carlisle community, but this service is on hold until a new transportation bill is passed by the Pennsylvania legislature (fall 2013).

Upgrade Fairground Avenue Improvements from Penn Street to B Street as a Complete Two-way Street (Project T2)

Upgrading Fairground Avenue represents a vital opportunity to improve the physical infrastructure and visual character of the existing residential area along the rear wall of the former IAC/Masland complex. Constructing a new full-cross section “complete” street to accommodate on-street parking and two way traffic along with sidewalks, street trees, and green infrastructure will provide an important first step improvement to the existing residential neighborhoods most impacted by the adjacent former industrial property.

Key implementation steps include:

- Working with existing property owners of IAC/Masland site to convey the public right-of-way needed to create the new street cross section.
- Performing a boundary and topographic survey to establish the legal right-of-way and to serve as the basis for design engineering of the new roadway and streetscaping.
- Preparing bidding and construction documents and construction cost estimates required to advance the project to construction.
- Capital project budgeting and funding strategy to secure funds for construction. Fairground Avenue Greenway/ Stormwater Management Park from Lincoln Street (future) to B Street (Project G1)



Proposed Cross-Section of Fairground Avenue Upgrades - Looking South

Fairground Avenue Greenway/Stormwater Management Park from Lincoln Street (future) to B Street (Project G1)

Linked to the improvements of Fairground Avenue, this is the first phase of the proposed chain of linear parks and stormwater management areas that form the Fairground Avenue Greenway. It is important to establish the overall green infrastructure framework in this segment to help support the character of the redevelopment area, buffer parking facilities and ensure the integration of the design of public spaces with the design of improvements to Fairground Avenue, even if the two projects are not constructed concurrently.

Key implementation steps include:

- Working with existing property owners of IAC/Masland site to determine long-term ownership, potential conveyance and cost sharing (such as impact/utility fees) for the construction of this facility.
- Performing a boundary and topographic survey to establish the legal site boundaries and to serve as the basis for design engineering of the new park and stormwater management facilities.
- Preparing bidding and construction documents and construction cost estimates required to advance the project to construction.
- Programming a capital project budget and funding strategy to secure funds for construction.

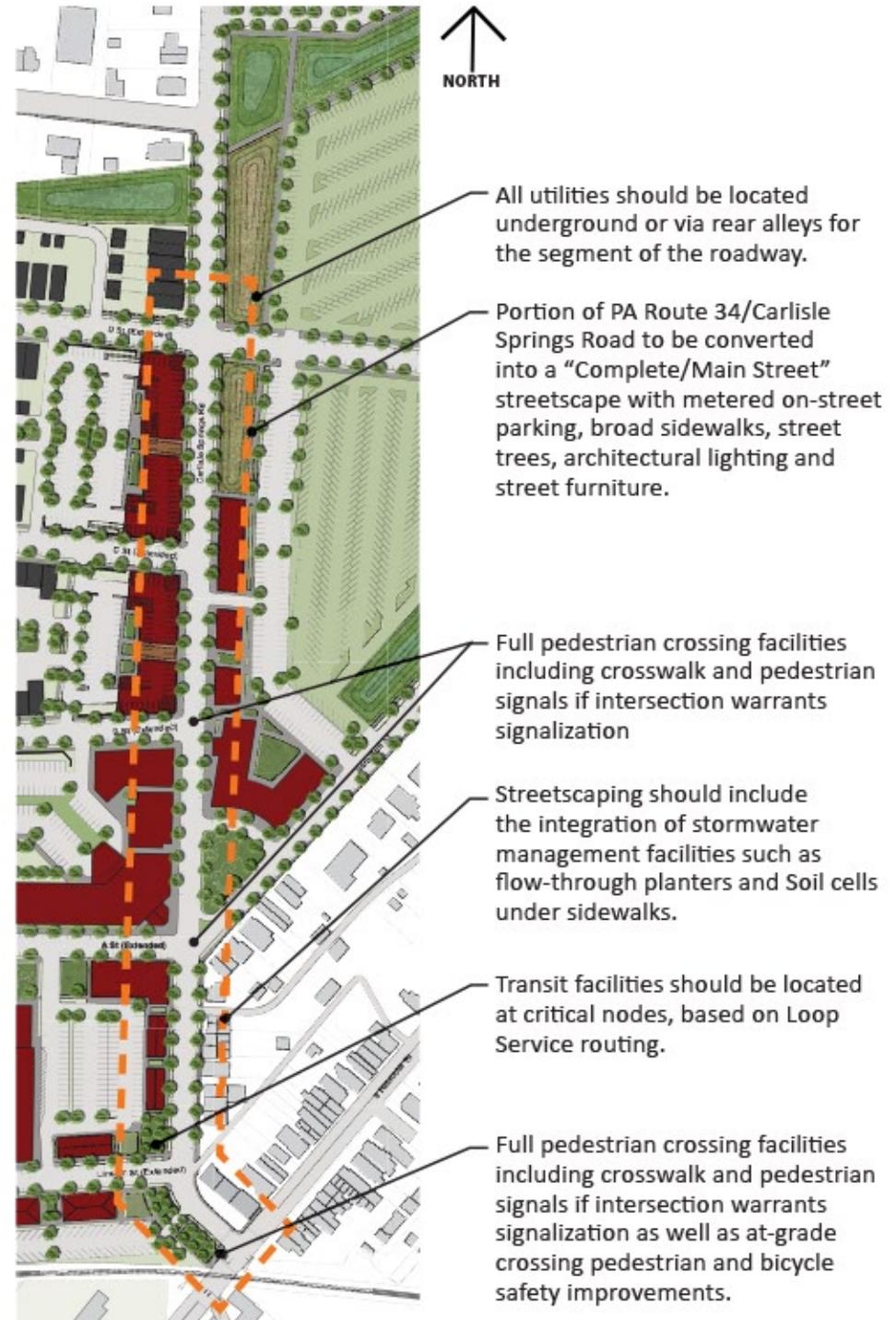


PA Route 34/Carlisle Springs Road Streetscaping and Green Infrastructure Improvements (Projects T4, T5)

PA Route 34/Carlisle Springs Road will require a transformation in order to set the stage as the spine of a future mixed-use corridor.

Key implementation steps include:

- Developing the desired typical cross section, based on the zoning ordinance design guidelines.
- Coordinating with PennDOT District 8-0 on the preferred approach to roadway ownership, management and maintenance based on the desired cross section required to create a complete street and especially create the setting of a highly walkable mixed-use pedestrian environment.
- Developing an implementation strategy with private developers for the deployment of the typical section on a block-by-block basis.
- Performing topographic survey and prepare construction bid drawings for the portions of Carlisle Springs Road frontage where existing development is to remain and preparing construction cost estimates required to advance the project to construction.
- Programming a capital project budget and funding strategy to secure funds for construction.





B Street Extension from Pitt Street to Carlisle Springs Road (Project T6) and B Street Extension from College Street to Factory Street (Project T7)

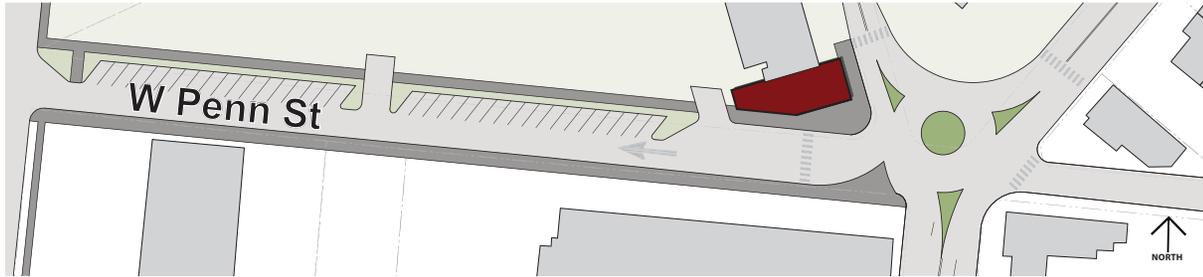
These are two interconnected projects that could be constructed in phases. It is important that B Street be designed and engineered as single, cohesive unit, even if it is constructed in phases. B Street from Pitt Street to Carlisle Springs Road will likely need to be constructed early than the portion between College and Factory Street, based on the readiness for the first phase of development.

Key implementation steps include:

- Developing the desired typical cross sections for each block from College Street to PA Route 34/Carlisle Springs Road (including the existing

sections), based on the zoning ordinance design guidelines and the type of development fronting each segment of the street. Coordinating with PennDOT District 8-0 on the intersection designs at College Street and Carlisle Springs Road, utilizing traffic modeling information collected as part of the TIS effort.

- Performing topographic survey.
- Working with existing property owners of sites to convey the public right-of-way needed to create the new street cross section if the street segments are not constructed by the private developer and convey to the Borough as a public street.
- Preparing construction cost estimates for the public portions of the project.
- Programming a capital project budget and funding strategy to secure funds for construction.



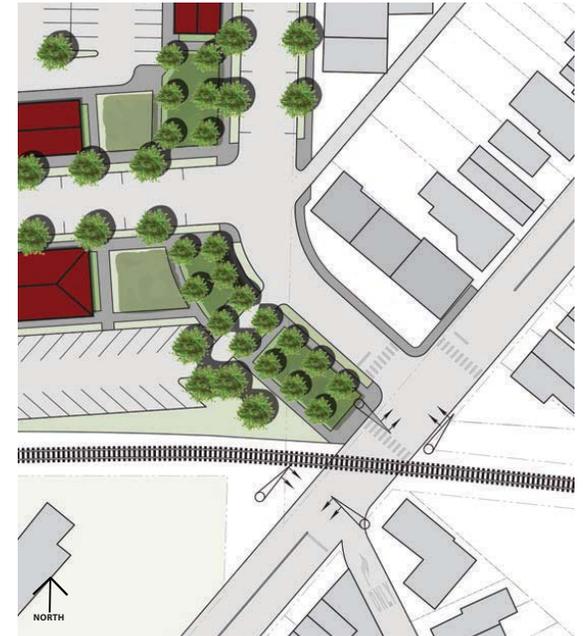
Proposed Traffic Roundabout and Intersection Improvements at Penn Street/Fairground Avenue and U.S. Route 11/N. Hanover Street

Area-Wide Transportation, Street and Intersection Improvements (specifically at North Hanover Street at Penn Street and at Clay Street). (Projects T3, T4, T8 and T9)

These key intersections and associated improvements were identified as requiring safety improvements and other enhancement to increase multi-modal connectivity. These improvements are also necessary to support other priority transportation projects needed to serve the first phases of redevelopment.

Key implementation steps include:

- Coordinating with PennDOT District 8-0 on each of the intersection designs; utilizing traffic modeling information collected as part of the TIS effort will be essential.
- Working with PennDOT District 8-0 to determine the leadership entity for each of the projects, in terms of funding, design, engineering, bidding and construction.
- Establishing specific urban design criteria for each intersection to ensure that traffic engineering requirements for turning lanes, signal phasing, etc., do not eliminate extensive pedestrian and bicycle facilities such as striped crosswalks, pedestrian signal heads, median refuges.
- Programming a capital project budget and funding strategy in partnership with PennDOT and other potential agency partners to secure funds for design, engineering and construction.



Proposed Intersection Improvements at PA Route 34/Carlisle Springs Road and U.S. Route 11/N. Hanover Street - Alternative A



Proposed Intersection Improvements at PA Route 34/Carlisle Springs Road and U.S. Route 11/N. Hanover Street - Alternative B



Legend

- Residential
- Office
- Retail/Commercial

Hamilton Plaza should be a signature urban public space

Hamilton Plaza (Project G5)

This plaza will be a signature public space for this portion of the overall Carlisle Springs redevelopment area. It is located at a key transportation intersection and is surrounded by existing and proposed development; therefore the Borough should play a leadership role in designing and construction this public space.

Key implementation steps include:

- Working with existing property owners of IAC/Masland site and PennDOT to convey the public right-of-way needed to create the park space.
- Performing a boundary and topographic survey to establish the legal right-of-way and to serve as the basis for design and engineering of the park/plaza space.
- Developing design and construction drawings for construction cost estimating and bidding purposes.
- Programming a capital project budget and funding strategy in partnership with PennDOT and other potential agency partners to secure funds for design, engineering and construction.

Private Partnership Actions

Parking Structure for Hotel, Restaurants and Retail Center at A Street and PA Route 34/Carlisle Springs Road (plus G8 Green Solar Array on Deck)

Constructing a parking deck (2-story structure) allow for a much greater concentration of development at the mixed-use core of the Carlisle Springs redevelopment area. This deck will likely be constructed as a privately owned and operated facility; however, the Borough should work closely with the developers to advocate for the construction of a parking deck versus expanded surface parking lots. In addition, the public sector could work with the developers to promote the utilization of extensive green technologies that are integrated into the design of the facility including: greenscreens and greenwalls, grey-water capture and solar array and charging stations.

Key implementation steps include:

- Working with existing property owners/developers of IAC/Masland site to pursue high-quality, integrated design in the parking deck.
- Acting as a conduit for special funding and financing to support green technology components.