Greening Reading’s Penn Street

June 15, 2017
Greening Reading’s Penn Street

Environmental and public health impacts affect people most significantly where they live. The Environmental Protection Agency (EPA) is committed to providing better support to communities, especially in environmentally overburdened, underserved and economically distressed areas where the needs are greatest.

The EPA is coordinating technical assistance and other resources across EPA programs, with States, Tribes, and local governments, and with other federal agencies to support more than 50 communities to help pursue environmental improvements that enhance economic opportunity and quality of life. This specific project was informed by a dialogue on the environmental and public health issues that matter most to the city of Reading. Lessons learned through this work will be used to improve the support the EPA provides to all communities in the future. Through this technical assistance, the EPA is working with cities to foster a strong sense of place by incorporating sustainable design strategies into the public realm in the form of streets, parks, waterfronts, town squares, walking and biking trails, and/or civic buildings.
Acknowledgments

U.S. Environmental Protection Agency
At the request of the city of Reading, the United States Environmental Protection Agency has provided financial assistance for preparation of this Greening Reading’s Penn Street study through a technical assistance grant.

City of Reading Project Team and Members of the Community
The Reading Redevelopment Authority (RRA), headed by Adam Mukerji, and the Office of Mayor Wally Scott are the contact agencies within the city of Reading. Representatives from other city agencies as well as local non-governmental agencies also participated in the planning process.

Consultant Team
The team of Floura Teeter Landscape Architects and Kittleson Associates provided expertise for the project. Both firms provided expertise in the design and planning of unique and vibrant urban spaces as well as multi-modal street environments.
# Contents

- Executive Summary .................................................. vi

1 Introduction .......................................................... 1

2 Goals of the Project .................................................. 4

3 Existing Conditions ................................................... 7

4 Areas of Emphasis ..................................................... 11

5 Focus Area Design Options ........................................... 15
  - Connection to the River ........................................... 16
  - Second and Penn Gateway ....................................... 18
  - Third and Penn Infill ............................................. 20
  - Penn Square Festival Space—4th Street to 6th Street ....... 22
  - Market Square Festival Park—7th Street to 8th Street ...... 25
  - Historic District/City Park ...................................... 27

6 Next Steps .............................................................. 29

Appendix 1. Previous Plans for Reading ............................ 33
Appendix 2. Cross-Sections ............................................. 34
Appendix 3. Detailed Alignment Plan ................................. 40
Appendix 4. Resources ................................................... 53
Figure 1. Reading, Pennsylvania's Penn Street Corridor
Penn Street is the main artery and historic Main Street of Reading, Pennsylvania. This planning study was initiated through a request from the city of Reading, who identified the Penn Street corridor as a priority area and specifically selected six key locations where efforts should be focused.

The goal of Greening Reading’s Penn Street is to develop an innovative and implementable vision for a distinctive and ecologically functional streetscape which incorporates green infrastructure within the context of the city’s history, culture, and commercial evolution. The development of the final design options in this report were informed after extensive community input in a three-day charrette as well as a follow up Open House. The design solutions serve as a symbol for the identity and values of the city of Reading, Pennsylvania and reflect the city’s rich historic context as well as the emerging cultural, fiscal and community values.

A main design element includes creating a bicycle connection between the Schuylkill River and City Park by providing a buffered two-way cycle track along the entire alignment of Penn Street. This bike amenity would serve both the residents of the city and visitors who use the existing bike trails along the River or the mountain biking amenities on the mountains to the east of the city.

Creating the cycle track necessitates new curb alignments and revitalizing historic Penn Square in the 400-600 blocks. Narrowing travel lanes, decreasing the raised medians and raising the level of the road to the same elevation of the sidewalk all serve to create a comfortable yet flexible space for both daily gathering and programmed events. Integration of a public art project which focuses on lighting is also identified as an attraction to re-establish Penn Square as the heart of the city.

A new park serving the community is identified as a design option in the 700 block of Penn Street. Named “Market Square,” this park would serve as a permanent home to the farmers’ market, community gardens and a lawn for informal gathering as well as small performances. Market Square would also be the home of a community building which could house and provide meeting space for local non-profits and community groups.

In addition to the cycle track, properties suitable for infill were identified. Guidelines should be established to be sure the re-development of these parcels is compatible with the existing architecture as well as requirements for sustainability.

The creation of a cohesive street tree network, improved transit amenities, bike amenities, street furniture and improved lighting are also identified as design options.

The report provides Reading with a plan that identifies a number of small projects when, taken together, will create momentum for larger revitalization of the Penn Street Corridor and Downtown Reading. Phasing and potential funding sources are also identified.

Momentum is building for the revitalization and re-visioning of Downtown Reading, Pennsylvania as a vibrant, multi-cultural city which serves both its citizens and visitors. Implementation of the design options in Greening Reading’s Penn Street will set the stage for this revitalization.
I Introduction

This planning effort was initiated through a request from the city of Reading, who identified the Penn Street corridor as a priority area and specifically selected six key locations where efforts should be focused. At the project onset, the city of Reading identified the Reading Redevelopment Authority (RRA) as the primary point of contact on the project. The city of Reading and RRA facilitated coordination on all aspects of this project.

The goal of Greening Reading’s Penn Street is to develop an innovative and implementable vision for a distinctive and ecologically functional streetscape which incorporates green infrastructure within the context of the city’s history, culture, and commercial evolution. The development of the final design options in this report were informed by extensive community input in a three-day charrette as well as a follow up Open House. The design options are symbolic of the identity and values of the citizens of the city of Reading, Pennsylvania and reflect the city’s rich historic context as well as the emerging cultural, fiscal and community values.

Figure 2. Penn Street in Reading, Pennsylvania, looking east towards the iconic Pagoda
History

Reading, Pennsylvania was founded in 1733 by the sons of William Penn, and is an historic city on the banks of the Schuylkill River. Strategically situated as a commercial center and the seat of Berks County, Reading emerged as a manufacturing center for textiles, steel, and iron. The Reading Railroad, made famous by the Monopoly board game, was an important connector between Reading, Philadelphia, and points west serving those industries. As manufacturing in the United States declined, so did the city’s fortunes, and the once thriving retail corridor of Penn Street was abandoned to the suburban mall. According to the 2010 census, Reading has the highest share of citizens living in poverty (32.9%) in the nation, as well as one of the nation’s highest crime rates (Wikipedia).

Such stressors are evidenced by the fact that the city of Reading is currently operating under the Financially Distressed Municipalities Act (Act 47). Act 47 empowers the Pennsylvania Department of Community and Economic Development to declare certain municipalities as financially distressed, provides for the restructuring of debt, and limits the ability of municipalities to obtain government funding.

There is a perception among the people who live outside of Reading that it is unsafe and offers very little in the way of night life and culture. Although the city of Reading does have its challenges, downtown and Penn Street offer an impressive number of cultural events and venues, beautiful residential neighborhoods, and accessible natural resources in the Schuylkill River and City Park.

The goal of Greening Reading’s Penn Street is to lay the foundation for a broader revitalization and provide solutions that address the “low hanging fruit”—strategies which can be implemented with tactical investments and leveraged primarily through grants.

---

Figure 3. Reading, Pennsylvania selected demographics per the 2010 Census

- 58.2% Hispanic
- 10% African American
- 1.1% Asian
- 28.7% Caucasian
- 0.2% Other
- 1.7% Two or More Races

- 49.7% Male
- 50.3% Female

- 7% are Unemployed
- 32.9% Live in Poverty
- 14.5% Live in Poverty

USA
- 50.3% Female
- 49.7% Male
- 14.5% Live in Poverty
Previous Studies

Greening Reading’s Penn Street is not the first plan for the revitalization of this important urban corridor. As context and background to Reading’s journey to revitalization, several previous studies have put forth design options for the revitalization of Penn Street and Reading as a whole. These plans offer many solutions and good ideas for Reading’s revitalization and redevelopment, but they have not been implemented due to the city’s financial constraints and a lack of community support. The scope of these plans is extensive and requires investments beyond the current capability of the city.

The design team for Greening Reading’s Penn Street reviewed the previous studies, and allowed them to inform the current effort. However, rather than duplicate previous work, the team incorporated those ideas that resonate in the context of the current financial climate, community capabilities, and the desire to create a practical and implementable plan that will serve as a catalyst for more ambitious redevelopment. A complete summary of the previous studies is included in Appendix 1.

Momentum is building toward this revitalization. Several institutions have been built downtown in recent years which provide evening events that attract patrons from the suburbs, as well as residents from within the city, adding new vibrancy to the downtown corridor.

Community groups are also very active in changing the landscape of Penn Street. The Reading Bike Hub, ReDesign Reading, the Downtown Improvement District, and Main Street are all investing energy and money to improve Penn Street. As interest in city living increases among millennials and others, Reading has a great opportunity to take a fresh look at this important urban corridor to improve the vitality of the city and reestablish Reading as the central attraction of Berks County.
2 Goals of the Project

The overarching objective of Greening Reading’s Penn Street is to lay the foundation for the revitalization of both Penn Street and Downtown Reading to create a lively, vibrant community where all are welcome. As discussed, many of the grand visions of previous revitalization plans for Penn Street and the city of Reading have gone unfulfilled due to the city’s fiscal constraints. The proposals in this study, therefore, are relatively modest and focus on options that are cost effective and implementable within the city’s resources in order to meet the project goals:

- Integrate the principles of sustainable design
- Encourage walking, biking, and public transit per Reading’s Complete Streets Policy
- Enhance the aesthetics of Penn Street while respecting the values, desires, and culture of the community
- Prioritize implementation of design options based on community feedback and values to create visible indicators of progress

Sustainability

Typically, sustainability in the urban context involves improved energy efficiency of buildings and lighting, improved water and air quality, improved pedestrian access to outdoors and infrastructure that supports car-free living and promotes a vibrant commercial district.

In the streetscape, sustainable design employs strategies such as decreased impervious area and stormwater best management practices. During initial meetings with the Stakeholders, it became evident to the team that the city’s capacity to maintain planted areas is very limited. Therefore, proposed planted areas are minimized in the final plan. However, the plan identifies areas where planting and green infrastructure such as integrated stormwater management could be implemented as the capacity to maintain it evolves.

Support of local and organic food systems is another aspect of sustainability which is addressed in the plan. Identifying a permanent location for the Farmers’ Market and possible integration of community gardens, food trucks and/or pop up locations for local food vendors as requested by the community.

Food systems are also an aspect of the STAR Community Network. In September of 2014, the city of Reading joined the STAR network as a Leadership Community. STAR Communities is a non-profit organization that works
to evaluate, improve and certify sustainable communities. As a member of the Leadership Program, the city worked towards certification with a cohort of other communities from across the country. The city received a rating of 3 out of 5 Stars. The scorecard is available at https://reporting.starcommunities.org/communities/93-reading-pennsylvania.

An analysis of Reading’s STAR Communities scorecard reinforces the challenges that Downtown Reading faces in the effort for revitalization. However, many of the design options and shortcomings of the STAR ranking can begin to be addressed through the Greening Reading’s Penn Street plans. For example, the category of Infill & Redevelopment requires that the “percentage of new development in locally-designated infill redevelopment areas” be increased. The Greening Reading’s Penn Street plan identifies locations for potential infill along Penn Street.

The STAR Communities checklist can provide a valuable framework for establishing baselines and evaluating progress as well as prioritizing future improvements along Penn Street.

**Complete Streets**

Reading has an award winning Complete Streets Policy. Complete Streets are streets that provide safe and attractive multi-modal transportation options to all users including walkers, bicyclists, public transit and motorized vehicles. Reading has established a series of performance measures to determine the success of the policy but has not yet developed guidelines for implementation. Penn Street will be the first project in the city to implement the Complete Streets Policy.

**Promoting a Bike Culture**

Reading’s Complete Streets Policy encourages multi-modal transportation, specifically the addition of bike lanes to the city’s street network. Penn Street has been designated as a location for a demonstration bike lane as there are currently no other dedicated bike lanes in the city. It is the design team’s understanding that many children in Reading travel to school via bicycle so providing a safe and connected network of bike lanes is important. Making Penn Street more usable for all levels of cyclists as well as pedestrians is also one of the stated goals of this project. Encouraging a “bike culture” and making streets bike friendly also benefits pedestrians and businesses as streets become more attractive and safer with slower traffic.

A bike culture is already emerging in the Reading area. The Berks Area Mountain Biking Association was established in 2012 as an International Mountain Biking Association Chapter. Reading offers numerous off road trails including the Schuylkill River Trail, the Thun Trail, and mountain biking trails on Mt. Penn and Neversink Mountains.

Penn Street connects the off-road bicycle trails in City Park and Mount Penn with those along the Schuylkill River. Providing a safe and convenient bike lane on Penn Street will enhance these off-road amenities. It would also serve to draw off road riders to the food and beverage and retail establishments on Penn Street, supporting those businesses and attracting new businesses.

Establishment of the Reading Bike Hub is more evidence of an emerging bike culture. The Bike Hub is a non-profit community bike shop and advocacy center in Downtown Reading that offers bike products, services, training and social activities. Their mission is to promote biking as a mode of transportation and creating a community in which “biking is safe enjoyable and affordable” (www.redesignreading.org).

![Figure 6. The Reading Bike Hub provides access to bicycles and repair facilities (ReDesign Reading)](image)
Community Gardens/Food Systems
The resurgence of the Farmers’ Market is one success story in Reading’s revitalization. While there has been a continuously operating Farmers’ Market in Reading for 250 years, its popularity has risen and fallen. The Penn Street Market supports local food systems, engages healthy community initiatives and fosters economic development. Currently held on Thursdays in Penn Square, the market, which is hosted by ReDesign Reading, features locally grown fresh fruit, vegetables, produce, dairy products, artisan cheeses, breads and more. The Market hosts a wide range of family and nutritional programs, live entertainment, healthy cooking demonstrations, Art in the Open community art projects, youth activities and more (www.redesignreading.org).

Public Art
Reading has a vibrant local arts scene anchored by the Goggleworks Center for the Arts, which is two blocks from Penn Street. The local creative community is very much involved in the vitality of Penn Street and the city as a whole and should be promoted.

There are several pieces of significant public art currently installed on Penn Street. The corridor should continue to be used as a showcase for local artists. Temporary installations can also enliven the streetscape, and create a community conversation and visual interest. Local colleges could be encouraged to display their students’ sculpture and artwork on a rotating basis.

Figure 7. Penn Street Market (ReDesign Reading)

Figure 8. “The River Speaks” at 2nd Street and Penn Street
3 Existing Conditions

The design team of Floura Teeter Landscape Architects and Kittleson Associates visited Reading in August of 2016 to evaluate the existing conditions of the streetscape. The entire alignment between City Park and the Schuylkill River was walked and existing conditions and issues that are preventing vitality on Penn Street were identified.

The existing streetscape is in relatively good condition with standard concrete sidewalks and a 3-foot wide paver band along the curb throughout most of the corridor. In most cases, the dimensions of the sidewalks are a generous 10-foot minimum width. In the Penn Square area, between the 400 and 600 blocks, the sidewalks are 24 feet wide, and there is substantial potential for creating a flexible, pedestrian and bike friendly streetscape.

The curb in Penn Square has saw tooth alignment, a remnant of the transit center that once was located there. There are also a number of remnant and dated bus shelters which are unused and should be removed.

Penn Street boasts a significant number of mature street trees in various states of health, but the soil volumes for the trees are universally inadequate. The condition of the trees reflects the lack of soil and the tree roots have displaced the pavement, creating accessibility challenges in several locations.

Street lights are consistent throughout the corridor although the style and color of the light fixtures do not enhance the historic structures nor the recent additions. Stakeholders commented that a lack of consistent light along the Penn Street corridor is an issue of concern.

The Stakeholders also commented on a lack of trash cans along the corridor. Cleanliness is an issue which is impacting the vitality of the retail environment and the satisfaction of both residents and visitors.

Portions of Penn Street are within the Penn’s Commons and the Callowhill Historic Districts. The historic architecture has been preserved intact in many
places, particularly Penn Square and the eastern edge of the corridor near City Park. Though these historic buildings are in various conditions, they create character and interest that is unique to Reading. In addition to the historic fabric, there are numerous large institutional buildings that are recent additions with more modern architectural styles, including Santander Arena, the DoubleTree Hotel, the Wells Fargo Bank buildings, the I Lead School (formerly Cigna Insurance Company offices), and the Miller Center.

Community Priorities

From the outset, Greening Reading’s Penn Street was envisioned as a project that would have extensive community involvement with the final design options reflecting the needs and desires of the business and residential communities. The Reading Redevelopment Authority identified a number of Stakeholders to participate in the charrette and design process. Mayor Wally Scott and several representatives from his office, Glenn Steckman, the City Manager, Adam Mukerji from the Reading Redevelopment Authority, representatives from the Public Works Department, Office of Community Development, City Council, Berks Area Regional Transportation Authority (BARTA), and other agencies represented the city interests. Representatives from ReDesign Reading and the Downtown Improvement District were also invited.

The charrette was also publicly advertised and a number of community members attended to provide feedback.

In addition to the charrette, an informal Open House was held on April 6, 2017 to collect additional feedback from the public on the proposed designs.

In the initial meetings with the Stakeholders, several issues rose to the forefront as needing to be addressed:

- Quality of life issues such as trash not being picked up, a persistent homeless population along Penn Street, drug dealing and use, and vandalism are major impediments to revitalization and tourism. A perception that Reading is not safe is also a deterrent for many who could patronize the downtown cultural institutions and businesses.
- This plan must be implementable. A number of community members and city staff cited the previous plans which are “sitting on a shelf” and noted the lack of progress and visible improvement to the corridor.

Community Feedback

A three-day charrette was held in the City Council chambers November 15–17, 2016, to collect feedback from city Stakeholders as well as the community.

The design team first met with a targeted group of Stakeholders identified by the Reading Redevelopment Authority. These Stakeholders included city staff from Public Works, Community Development, Zoning and the Mayor’s Office as well as several citizens who are involved in local non-profits including ReDesign Reading, the Downtown Improvement District and others.
The first activity of the charrette was to conduct a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis to understand how the Stakeholders perceive Penn Street. SWOT analysis is a tool used to evaluate the benefits and challenges of an organization (in this case Penn Street). It provides a framework to identify strengths, weaknesses, opportunities and threats with the ultimate goal of turning strengths into opportunities and mitigating weaknesses and threats as a plan for success is developed.

In summary, the strengths and opportunities outweighed the weaknesses and threats. Despite some significant issues, the Stakeholders were generally positive about the potential for revitalization and the opportunities for community supported design.

**STRENGTHS**

a. Historic Architecture  
b. Anchor Institutions—Wells Fargo, Santander, RACC, Goggleworks  
c. Nature: River and mountains  
d. Culture and diversity  
e. Railroad history  
f. Strong local artist community  
g. Infrastructure  
h. Library Park  
i. Santander Arena  
j. Doubletree Hotel  
k. The Pagoda  
l. Knowing our weaknesses  
m. Waterfront area  
n. Jazz Fest  
o. Film Festival  
p. Bike Races  
q. History including the Monopoly game

**WEAKNESSES**

a. Too many bus stops and shelters  
b. On-street parking is not free  
c. Lack of proper signage  
d. Lack of culture and diversity  
e. Need more lighting on street  
f. Railroad cuts downtown into separate neighborhoods  
g. Poor streetscape maintenance: landscaping, trash, sidewalks  
h. Lack of participation and engagement with businesses on Penn Street  
i. Parking enforcement impedes business loading

**OPPORTUNITIES**

a. There are five area colleges  
b. Public bathrooms exist and could be renovated  
c. 2 hour parking zones can provide access to businesses  
d. Additional street parking can be provided  
e. Family-oriented food venue  
f. Additional Festivals and Programming  
g. Main Street Program  
h. Better access to the River

**THREATS**

a. Need to make Penn Street more accessible  
b. The City’s financial situation makes it difficult to fund improvements  
c. Perception that Reading is not safe or clean  
d. Lack of cleanliness  
e. Land use along riverfront is not compatible with 24/7 activities  
f. Lack of developers willing to invest in revitalization
**DESIRED PROGRAM ELEMENTS**

Following the SWOT analysis exercise, there was some discussion about what should be included in the plans. The Stakeholders indicated that the following program elements were desired:

- Resurgence of Penn Square as a central gathering space
- More appreciation of cultural diversity — especially the Latino residents and businesses
- A coffee shop
- Better lighting
- More sustainable features including photovoltaic panels on roofs and street-lights, green roofs
- Educational public art
- Better trash cans and cleaner city
- More people living downtown particularly young people
- More evening activities and events
- Better connections between downtown and colleges
- Better bike connections around the city and to the existing bike trails.
- Installation of bike racks and bike repair stations.
- Better connections east/west across the railroad tracks.
- Maintenance of street trees

**VISUAL PREFERENCE SURVEY**

To determine preferences for typical streetscape improvements, participants were shown several images of “imagined future” for Penn Street. These images illustrated various techniques for improving the streetscape and included non-structural improvements such as programing, pop-ups, etc. They were given dot stickers — orange for images they preferred and black for images they did not prefer — to vote.

Mixed-use infill development was ranked very highly as were images that depicted bike amenities and vibrant streetscapes filled with pop ups. Two images which were not preferred were the planted curb bump outs and roundabouts.
4 Areas of Emphasis

After the initial site visit and discussions with the Stakeholders at the charrette, it became apparent that physical improvements are only one strategy which should be employed to revitalize Penn Street. Three areas of emphasis were established to focus future efforts:

1. **Infrastructure Improvements** — Infrastructure improvements consist of physical changes to Penn Street.

   Site specific changes include:
   • A two-way cycle track to connect the River to City Park
   • Alterations to Penn Square

   The following strategies should be employed throughout the entire corridor:
   • Improved bicycle facilities and connections
   • Cohesive design vocabulary
   • Better parking
   • Streamlined transit
   • Street tree enhancements
   • Lighting enhancements
   • Quality of life improvements

   Greening Reading’s Penn Street will only address infrastructure improvements in this study but the other two strategies are equally important to success and should be considered by the city government as revitalization efforts move forward.

2. **Programming and Events** — There are already several significant events held in Reading every year. The goal of this plan is to create flexible venues that can enhance both large festivals and smaller, community driven events.

   Examples of existing and potential events include:
   • Jazz Festival, bike races and Concerts in the Park
   • Pop Up Events such as beer gardens
   • Food Trucks
   • Celebrations of Cultural Heritage

   Multi-pronged promotion and social media should be used to attract regional visitors to Downtown Reading.

3. **Governance and Finance** — Policy changes and government incentives can encourage redevelopment and remove barriers for small business along the Penn Street corridor.

   Examples of these strategies are:
   • Revisions to the zoning code to encourage live/work or mixed-use development in the historic buildings on Penn Street
   • Tax incentives for historic preservation
   • Expedited and low cost permitting for community events
   • Expedited and low cost permitting for startup businesses
   • Quality of life improvements — trash removal, providing social services for the homeless, etc.
   • Targeted economic development to attract specific businesses — coffee shops, gyms, grocery stores, etc.
   • Safety — continue to provide Main Street Ambassadors to increase perception of safety
   • Sustainability standards
   • Architecture review

   In order to keep the plan affordable and practical, existing curbs and drainage systems are retained to the greatest extent possible to minimize the need to relocate utilities and replace sidewalks.

   Existing trees should be retained where they are in good condition. New trees should be planted where trees are missing or in poor condition to create a consistent street tree canopy. Tree pits should be enlarged to provide additional soil volume for both existing and new trees.
Cohesive Design Vocabulary

A cohesive design vocabulary of paving, planting, and street furniture will create a strong identity for the Penn Street corridor and it will brand it as a place which is the central corridor of the city of Reading. Added seating encourages “eyes on the street” and improved safety as more people gather for positive purposes. The following have been identified as improvements:

- New light fixture families
- Family of street furniture
- Additional trash cans including recycling receptacles
- Both fixed and movable seating
- New bus shelters

In addition to providing consistent furnishings throughout the corridor, it will be important for the city to provide regular trash pick up to ensure that the corridor stays clean.

Better Parking

Downtown Reading has an ample supply of parking in a combination of parking garages, on street parking and surface lots. However, the community expressed the need for accessible short term parking to serve the businesses along Penn Street. Parallel parking is currently provided for the majority of the corridor. In addition, there is existing front-in angled parking between in the 400–600 blocks. The configuration of the curb allows these spaces to be very deep which results in people double parking behind legally parked cars.

As part of the installation of the cycle track and realignment of the curb in Penn Square, back-in angled parking is identified as an improvement. The cartway and parking space dimensions have been narrowed, which will serve to both slow traffic speeds and also prevent double parking. Angled parking is the most efficient parking and will maximize the number of spaces. Back-in parking is also the safest mode to prevent conflict between both pedestrians and cyclists. Where parallel parking is provided, the parking spaces are buffered by curb bump outs.

Timing of meters to provide optimum access to businesses should also be explored as well as enforcement of parking violations.

Streamlined Transit

One of the comments heard from the Stakeholders was that there were too many bus stops on Penn Street. A representative from the South Central Transit Authority (SCTA)/BARTA transit system attended the meetings and has worked with the design team to identify locations for a streamlined number of bus stops. This reduction in stops is for conceptual discussion only, with the final location of bus stops to be confirmed during the design/implementation phase. Stop locations would be based on an analysis of the SCTA/BARTA route network, nearby service needs and trip generators and the ability to create a bus stop at that location. While SCTA/BARTA is open to streamlining the number of bus stops on Penn Street, it should be noted that bus stops that are convenient and nearby to riders’ destinations is important to attract and retain riders.

In addition to streamlining the location of bus stops, Greening Reading’s Penn Street seeks to improve the quality of the bus stops by providing new shelters at as many stops as possible, additional seating where needed, and trash and recycling receptacles at each stop. New bus shelters will provide a consistent aesthetic which is compatible with the furniture families presented in this report for Penn Street.
Street Tree Enhancements

Numerous studies espouse the benefits of street trees in the urban environment. Street trees provide numerous environmental benefits such as improved water quality, improved air quality, heat island mitigation and habitat. In addition, trees have been proven to reduce crime and improve property values (Frances E Kuo and William Sullivan, “Environment and Crime in the Inner City — Does Vegetation Reduce Crime?” Journal of Environment and Behavior, 2001).

The Greening Reading’s Penn Street project proposes to retain existing street trees where they are in good condition and improve soil volumes for all trees. Increased soil volume decreases stress on the trees, improves the infiltration capacity of the streetscape, and increases the longevity of trees.

New trees should be planted in enlarged 7’x10’ tree pits with new manufactured soil designed to increase tree longevity and reduce stress and maintenance. Existing trees should also have increased tree pits, and they should be put into a regular pruning and fertilization program to prevent decline into hazardous conditions. The goal is to create a healthy and high performing street tree canopy which can also create a habitat corridor connecting City Park to the Schuylkill River.

Lighting Enhancements

Adequate lighting and perceptions of night time safety are critical to creating a vibrant 24/7 urban core. Stakeholder feedback indicated that the lighting is inadequate on the Penn Street corridor.

A diverse approach to lighting should be explored. The first tier is improved street lighting which includes both cartway lighting through the use of energy efficient LED cobra heads and pedestrian scale fixtures which light the sidewalk and provide an attractive fixture at human scale. This approach will provide more than adequate lighting for safety as well as comfort. These lights are both energy efficient and dark skies compliant.

In addition to functional lighting needs, public art lighting will further enhance the street experience. Commissioning a public art lighting piece for Penn Square would enliven the space during the evening hours and create a “beacon” to reinforce Penn Square’s position as the focus of Reading’s downtown.

Stormwater Management

Typically, stormwater treatment is integrated into the design of the streetscape through the creation of planted micro-bioretention areas as part of a green infrastructure plan. The design team received feedback from the Stakeholders within city government that the city does not currently have the capacity to maintain large planted areas so proposals for this type of treatment have been limited. However, the configuration of the streetscape lends itself to future planted areas and those locations are indicated on the plans. The feasibility of converting these areas to plantings should be evaluated as future plans are developed.

Improved Bicycle Facilities and Connections

One of the primary goals stated by the city and the community is to create a bike trail for Penn Street which connects the two anchors — the Schuylkill River and City Park.

The signature recommendation of this aspect of the plan is to create a two-way cycle track on Penn Street which connects the two anchors. Several options were discussed for implementing bike lanes and it was determined that the
generous right-of-way of Penn Street will accommodate a two-way cycle track which is the best and most comfortable way to encourage bike access for riders of all levels. The cycle track should be 12 feet wide and placed on the south side of the street. It primarily runs within the existing curb-to-curb right-of-way, rising to the level of the sidewalk between the 400 and 600 blocks where the right-of-way is wider. The cycle track dissipates in Penn Square to encourage dismounts and lingering.

Steps to implement the cycle track include:
1. Identify funding to create final design plans and cost estimates
2. Create final design plans
3. Identify funding for the milling, repaving, re-stripping, flex post installation, and ramp reconstruction associated with project
4. Create maintenance plans for keeping project clear of debris and snow
5. Construct project
6. Form partnerships for possible future beautification of facility, such as adding and maintaining low planters in buffer space

Two-way cycle tracks have been very successful in other locations, including Baltimore, Maryland. In addition to the cycle track, improved bike amenities such as bike racks, bike sharing systems, and repair stations are features that could be implemented throughout the corridor.

### PROS AND CONS OF A CYCLE TRACK

<table>
<thead>
<tr>
<th>PRO</th>
<th>CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>This facility feels safe to most inexperienced and experienced riders</td>
<td>Requires 12 feet or more within the curb to curb right-of-way (except on 400 to 600 blocks where it is located within the sidewalk)</td>
</tr>
<tr>
<td>Creates a main street “trunk” low stress facility to which future low stress facilities can connect</td>
<td>Possible conflicts at bus stops (but likely to occur at low, relatively safe speeds)</td>
</tr>
<tr>
<td>Provides the most direct connection from river to park</td>
<td></td>
</tr>
<tr>
<td>Likely to calm and slow traffic</td>
<td></td>
</tr>
<tr>
<td>Has a visible impact on Penn Street</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Twelve feet is the bare minimum recommended width for a safe and comfortable two-way cycle track. If the community and/or officials are unwilling to provide 12 feet, consider another approach. If the transit agency is comfortable moving to 10'-6" wide lanes, provide 13 feet of width for the cycle track. This is preferable. A 12' cycle track has been shown on the plans with 11' travel lanes.

Figure 18. Cycle track in Baltimore, Maryland

Figure 19. Pros and cons of a cycle track
5 Focus Area Design Options

Six locations were identified by the city of Reading as focus areas:

1. Connection to the River
2. Second and Penn Gateway
3. Third and Penn Infill Zone
4. Penn Square Festival Space
5. Market Square Festival Space
6. Historic District/City Park

Figure 20. The six locations identified by the city of Reading as focus areas
Connection to the River

There is currently no formal connection between the valuable resource of the Schuylkill River and Penn Street. With the Thun Trail running along the River and making connections to Philadelphia, creating a gateway to Penn Street for the bike trail is an obvious solution. Currently, the riverfront is bordered by parking lots for Reading Area Community College (RACC).

The plan proposes to create a gateway at the terminus of the cycle track and the River. The overlook will create views to the river and signal to bicyclists that a bike/pedestrian connection to the city can be made.

Enhancements through the campus, including the planned renovation of the Penn Street Bridge and improved crossing of the railroad tracks will benefit RACC as well as the city.

Public art, signage, lighting, seating and other amenities should be provided to create an activated gathering space. The proximity of this location to the RACC campus will make this gateway an amenity for the campus as well as the city.
Figure 22. Front Street pedestrian and cyclist crossing. Public art and lighting can enhance the Penn Street Bridge.
2 Second and Penn Gateway

The cycle track emerges from the RACC campus at 2nd Street and the terminus of the Penn Street Bridge, which connects West Reading and Route 422 to Downtown. This intersection is the main gateway into the city, so it is important functionally and visibly.

An existing right turn onto 2nd Street would intersect the cycle track and create a very hazardous crossing for both bikes and pedestrians. Reconfiguring the turning lane to create a minimized turning radius would require motorists to slow down for the turn. Signage and pavement markings for both the cycle track crossing and the crosswalk will further alert motorists to the crossing. The Penn Street Bridge is about to undergo an extensive renovation with the potential addition of a bike lane across the bridge which will further enhance the emerging bicycle network.

A pedestrian oriented plaza is shown on the southwest corner of the intersection. This plaza will serve both the RACC campus and trail/cycle track users as they emerge from the riverfront and orient themselves to the Penn Street corridor. The plaza will provide additional seating, could be a location for public art and can also feature an informational kiosk or signage to alert visitors of ongoing events, historical information or other important information.

The existing plaza on the northeast side of this prominent intersection features a large sculpture, “The River Speaks.” There is currently a planting bed between Penn Street and this plaza which separates the street from this gathering space. The plan proposes to remove this planting bed and create a stepped grade transition which will open the view and provide informal seating for office workers, patrons of the Miller Center and the IMAX across the street. Movable seating should also be provided in the plaza to further enliven the space.

Figure 23. Plan enlargement, focus area 2, 2nd and Penn Gateway
Figure 24. 2nd Street and Penn Street improvements, looking west towards the Schuylkill River.
Third and Penn Infill

There are a number of surface parking lots and breaks in the architectural fabric between 2nd Street and 4th Street. These lots are potential locations for mixed use infill with retail/office uses activating the streetscape and residential/studio space on the upper levels. Parking would be provided as part of the redevelopment, either at the back of the lots or underneath the buildings.

Future infill is shown as set back slightly from the face of the adjacent buildings to allow for café seating or other activated gathering spaces along the streetscape.

As these parcels are re-developed, the city should require developers to adhere to both architectural review and sustainability standards to ensure that the new development is compatible with both the aesthetic quality of the street and the performance requirements laid out by LEED or other sustainability rating systems.
Figure 26. 3rd Street and Penn Street improvements, including proposed infill buildings on existing surface parking lots.
Penn Square Festival Space—4th Street to 6th Street

Penn Square is and always has been the heart of Reading. The significant architecture and generous dimensions of the sidewalk make it a perfect location for civic events and daily gathering. One critical component is stabilizing and revitalizing the existing historic buildings and attracting tenants to activate the Square.

The design includes raising the grade of Penn Square to the level of the sidewalk. This unifies the square as one public space. At approximately 200’ x 200’, which is comparable to significant public plazas in Europe such as the Augustplatz in Leipzig, Germany or the Piazza del Duomo in Milan, Italy, Penn Square could achieve the vibrant atmosphere of a European plaza. Although traffic is still intended to flow through the Square, it can be closed for festivals and the raised table makes it ideal for a stage and gathering space. Movable seating should be provided on all four corners of the square to activate the Square both day and night.

The design identifies trees only at the perimeter of the Square to provide shade while they reinforce the border of Penn Square. The Square itself has been kept free of trees to allow for maximum flexibility.

A dismount zone for the cycle track encourages the bike traffic to dissipate through the Square and bike riders to stop and patronize the local businesses.

Dramatic and significant lighting for the Square is a key component of the design. This lighting will not only highlight the architecture but will also make Penn Square a beacon for the city and mark its place as city center. A call for artists should be issued to solicit proposals for artistic lighting to create this dramatic treatment which could become an attraction for the region.

Figure 27. Penn Square can take on the character of a vibrant European city.
Figure 28. Penn Square festival example
Figure 29. Artistic lighting identifies Penn Square as a beacon and heart of the city.
Market Square Festival Park—7th Street to 8th Street

During the charrette, the community voiced a need for gathering space and a new home for the farmers’ market. Market Square is shown on an existing surface parking lot to the west of the Santander Arena. This new park could house the Farmers’ Market and provide a community center and gathering space for community groups such as the Downtown Improvement District, ReDesign Reading and the Centro Hispano. The proximity to the Santander Arena and Doubletree Hotel also makes this a great location for a pre-event gathering space during events at the Santander Arena. Market Square is also in close proximity to residential uses.

Connection to the adjacent plazas and the surrounding government office buildings can also make this a gathering place for office workers. Creating a public amenity in this location can mitigate the division created by railroad tracks by creating a community anchor and strengthening the potential for programming which spans the tracks.

Penn Street between the proposed Market Square and the Hotel is an ideal location for large festivals, food truck rallies and pop ups. Aesthetic improvements to the facade of the hotel and the Santander Center as well as increased seating, additional public art, planters and designated areas for food trucks provide the setting for the large festivals already taking place.

For large city-wide festivals, the area between Penn Square and the Hotel/Arena can be utilized as a multi-tiered festival space, providing venues for a variety of programs and events.

Figure 30. Market Square transforms a surface parking lot into a community asset, gathering space and event venue.
Figure 31. The creation of Market Square Park would expand festival space, provide a central location for community groups to meet, and serve as an amenity space for office workers.
6 Historic District/City Park

The eastern terminus of the Penn Street corridor is the connection to the beautiful City Park. The architecture in this location, consisting primarily of single family homes, is largely historic and intact. Numerous street trees and a sidewalk in good condition contribute to the bucolic scene.

At this location, Penn Street intersects with Perkiomen Avenue and 11th Street, creating a busy three-way intersection that makes crossing into the park challenging for both pedestrians and cyclists. A senior housing complex sits on the southwest corner of this intersection, and Stakeholders indicated that there is a need for additional seating at this location.

The plan identifies curb bump outs at the intersection of 11th and Perkiomen to slow traffic and shorten the crossing distance to facilitate access into the Park for pedestrians and students walking and biking to Reading High School. The bump outs will also enable safe crossing for the cycle track into the Park.

This location is the eastern gateway to Penn Street, and it should be marked by public art and/or signage to celebrate the beginning of the corridor and direct visitors to the attractions on Penn Street.
Figure 33. Improvements to the intersection of Penn Street and Perkiomen Avenue create a gateway as well as an important bike connection to City Park and mountain biking trails.
6 Next Steps

These design options are based on the best available base information that was provided to the design team by the city of Reading. The feasibility of all design options should be confirmed with the city of Reading, with the communities and by the design team who is tasked with advancing the design to the next phases.

While the design options for Penn Street strive to minimize changes to curbs and other infrastructure, some re-alignment of curbs and alterations to the turning lanes at some locations will be required. Without turning movement counts for study area intersections, final conclusions cannot be reached as to whether the removal of turn lanes throughout the corridor will have intolerable traffic impacts. However, the relatively low total volume on the corridor suggests that the design should be feasible in most places. Further traffic study can be conducted at intersections where there is particular concern about high turning volumes, and modifications to the cross section at these locations can be made in the design phase of this project.

As the plan moves forward toward implementation, several other strategies should be developed in tandem with the streetscape plans:

- **Design Guidelines for Penn Street**—as the next phase of drawings are developed, guidelines to ensure design uniformity should be included as part of the planning process. This will ensure a consistent design vocabulary is implemented as the cycle track and other improvements are installed.

- **Criteria for Infill**—Several locations for mixed-use infill are identified in the plan. Criteria should be developed to ensure mixed use in these locations. Perhaps development incentives could be provided through increased density or height allowances. These criteria should address the relationship to the street, including setbacks, to create space for public gathering such as outdoor cafés at the street level.

- **Architectural Review**—for new developments to preserve the character of the street and historic context and ensure that new architecture fits into the vision for a unified Penn Street corridor.

- **Minimum Standards for Sustainability**—for both new development and renovations. Numerous communities utilized the LEED Green Building rating system as a guideline but there are many options including the adoption of the International Green Construction Code, further utilizing the STARS rating system, Green Globes and the Sustainable Sites Initiative which can all be tools to improve sustainability within the city.

- **Track Ecosystem Services**—Ecosystem services is a term that refers to the economic value provided by natural systems which would be a cost to municipalities if they had to be provided by constructed systems. Examples are stormwater management, air filtering, or cooling which is provided by the shade of street trees. Tracking ecosystem services can provide a balanced understanding of the value natural systems provide and justify investment for their installation. Tracking ecosystem services can provide valuable data which can be used to apply for grant funding.
Prioritization

Design elements have been prioritized based on the project goals, community input and implementation of elements that can be installed with minimal impact to existing infrastructure. These elements are identified below.

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PRIORITY</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Way Cycle Track</td>
<td>Immediate</td>
<td>Some curb realignment in Penn Square and 700 block required. The cycle track will provide a large visual impact and meet the goals of the project and the community.</td>
</tr>
<tr>
<td>Penn Square Improvements</td>
<td>Immediate</td>
<td>Penn Square curb realignments are required to install the cycle track. Pavement improvements to Penn Square will attract new businesses to the block and re-establish the Square as the symbolic and functional heart of the city.</td>
</tr>
<tr>
<td>Lighting Improvements</td>
<td>Moderate</td>
<td>Increased lighting is a need voiced by the community. The recommended two tiered lighting plan should be installed consistently throughout the alignment.</td>
</tr>
<tr>
<td>Street Furniture</td>
<td>Moderate</td>
<td>Providing consistent street furniture will improve aesthetics and activate the street, providing “eyes on the street”.</td>
</tr>
<tr>
<td>Street Trees</td>
<td>Moderate</td>
<td>Street trees are existing on many parts of the alignment. Tree pit improvements and new trees should be incrementally installed as other improvements are implemented.</td>
</tr>
<tr>
<td>Market Square Park</td>
<td>Low</td>
<td>The creation of Market Square Park involves property acquisition and should be developed in close consultation with community groups.</td>
</tr>
<tr>
<td>Green Infrastructure</td>
<td>Low</td>
<td>Convert paved bump outs and islands to planted areas to provide additional stormwater management when maintenance capabilities evolve.</td>
</tr>
</tbody>
</table>

Figure 34. Design element prioritization
Funding
In order to apply for grants, an “order of magnitude” cost estimate should be developed to provide an understanding about how much funding is required and what each proposed element might cost. Preparation of an estimate was outside the scope of this study.

The following sources of funding should be explored as the next phase of the project moves forward:

**FOUNDATION GRANTS**
Reading has been fortunate to have several foundation benefactors including:
- The Wyomissing Foundation
- The Berks Community Foundation
- Our City Reading Foundation
- Colonial Oaks Foundation

These foundations have provided funding for both planning as well as implementation of projects.

**FEDERAL FUNDING**
The Federal Government offers numerous grant programs, particularly as they apply to transportation related projects:
- Federal Livability Grant Proposals
- Federal Sustainable Communities Partnership
- National Endowment for the Arts Our Town Program for Public Art
- FHWA Bicycle & Pedestrian Funding
- FHWA Recreational Trails Program
- FHWA Safe Routes to School
- FHWA Transportation Enhancements
- FTA Grant Programs

**STATE FUNDING SOURCES**
The State of Pennsylvania also offers numerous grant programs. The cycle track, in particular, is very appealing to transportation funding agencies.
- PennDOT Transportation Alternatives Program Grants
- DCED Keystone Communities Program
- DCNR/PennDOT collaborative projects (sustainability & economic development)
- PennDOT Public Transportation Grants
- Tri-County Regional planning commission Transportation Assistance Program
- DEP Growing Greener Grants- environmental stewardship
- DEP Nonpoint Source Implementation Program Grants (Section 319)
- DCED Community Development Block Grant (CDBG)

**FUNDING FOR BICYCLE FACILITIES**
Bicycle and pedestrian projects can be eligible for funding from highway, transit safety, and other programs funded by the Federal government under TEA-21, the Transportation Equity Act for the 21st Century, which funds non-vehicular transportation (Berks County Bike Master Plan). The Bicycle and Pedestrian Transportation Plan for Berks County outlines a number of funding sources for Bicycle Facilities. It may be downloaded at http://www.co.berks.pa.us/Dept/Planning/Documents/Transportation/BikePed/Reading_MPO_Bike-Ped_Plan.pdf.

**LEVERAGING COMMUNITY RESOURCES**
There are a number of mechanisms for leveraging funding with community input and action that can be considered “in kind” donations or matching funds. There are many active organizations within the city which are already doing important work to improve city life.
- Downtown Improvement District/Main Street
- ReDesign Reading
- Community Redevelopment Agencies
- Transportation Management Areas
- Project-specific Public/Private Partnerships
• Anchor institutions such as RACC, the Reading Hospital, Santander Bank, Wells Fargo Bank, Alvernia College
• City and County governments

The success of this plan lies in the support and commitment of the local communities. Community resources cannot be underestimated as assets to assist with implementation of these proposals. These groups could include:
• Business Owners
• Neighborhood Groups
• College students — there are 5 local institutions of higher education near Penn Street
• School Children — Reading High School, I-LEAD
• Master Gardeners

Summary

The rich history of Penn Street and the city of Reading create the foundation for a vibrant future. Great infrastructure, rich natural resources, cultural diversity, and committed communities and government will ensure that the improvements proposed in the report will be implemented. Those improvements will serve as a catalyst for a renewed business community, increased residential uses and the upper floors of the historic buildings being occupied by artists and residents enthusiastic to embrace city living and experience everything Reading has to offer.

COMMUNITY VISION

These comments represent the vision of the community for the center of Reading.
• Lots of people walking around and riding bikes
• Things to do 24/7, nightlife
• Walkable, vibrant, livable
• Access for the younger people
• Late bus
• Vibrant lighting, flowers, sidewalk cafes
• Indoor playground
• Holiday decorations
• Facade improvements
• College student activities
• A city with a vibrant urban center with arts and entertainment that serves as a gateway to the outdoors
• Downtown apartments

Figure 35. Community vision for the future.
Appendix 1. Previous Plans for Reading

The following plans have been prepared by various consultants and were provided to the design team for review.

**Reading’s Complete Streets Policy** (2015) city of Reading
Developed to give guidance for the creation of multi-modal and multi-functional streets.

**2020 Plan** (2012) Barry Isett and Associates
Advocated for a roundabout in Penn Square and reconfiguring Penn Street to create permanent farmers’ market pavilions in the center of the road.

Evaluated Penn Street from West Reading through Downtown. The plan created a chain of distinct districts along Penn Street, each with a unique identity.

Addressed redevelopment of the Riverfront creating development opportunities and festival spaces.

**Berks County Bicycle Master Plan** (2002) Gannett Fleming
Provides a vision for an interconnected bike network for Berks County including the city of Reading.
Appendix 2. Cross-Sections

PENN STREET: EXISTING TYPICAL CROSS-SECTION

Figure 36. Existing typical right-of-way of Penn Street. Existing conditions vary at specific locations.
Figure 37. The cycle track is raised at bus stop locations, allowing passengers to access the bus at curb elevation.
Figure 38. The cycle track is shown on the south side of the street within the existing curb line. The cycle track is buffered from existing traffic with a 3’ wide lane and flex posts.
Figure 39. Bus stops on the north side of Penn Street do not cross the cycle track. There are opportunities to add planted buffers where space allows a wider buffer at the cycle track.
Figure 40. Penn Square has a very generous right-of-way. The existing condition has head-in angled parking and a generous aisle behind, which encourages double parking.
Figure 41. Reconfiguring Penn Street allows narrow drive lanes, which slows traffic and improves the pedestrian experience. Back-in angled parking and the cycle track located within the sidewalk increase safety for all.
Appendix 3. Detailed Alignment Plan

Figure 42. Key to the Penn Street plan enlargements
Figure 43. Creating a strong connection to the Schuylkill River is an important way to attract cyclists to the Penn Street corridor.
ALIGNMENT PLAN #2

Cross-section A

Figure 44. The cycle track connects to Penn Street at the terminus of the Penn Street Bridge. The plan proposes improvements to the intersection to protect cyclists and pedestrians.
Figure 45. The block between Second and Third Streets has many surface parking lots which could be transitioned to mixed use developments.
ALIGNMENT PLAN #4

Cross-section A

Figure 46. At the intersection of Penn Street and 4th Street, the cycle track transitions to sidewalk level.
Figure 47. The blocks between 4th and 7th Streets represent the Penn Square district - the heart of the City.
ALIGNMENT PLAN #6
Cross-section E

Figure 48. The existing parking in the Penn Square district is proposed to become back-in angled parking. This configuration is safer for drivers and is very space efficient.
Figure 49. Market Square Park could become part of an open space network of two existing plazas and resource for downtown office workers.
Figure 50. The area between the Double Tree Hotel and the Santander Center is envisioned as a festival space and location for pop up activities.
Figure 5.1. The area east of the festival space features and existing plaza which could be joined with a future park in a lot which is currently vacant.
ALIGNMENT PLAN #10
Cross-section A/B

Figure 52. The blocks between 9th Street and City Park become residential in both use and character. The cycle track can provide a safe route to school for the children attending Tenth and Penn Elementary School.
ALIGNMENT PLAN #11

Cross-section B

Figure 53. Opportunities exist for mixed use infill to service residents
ALIGNMENT PLAN #12

Cross-section B

Figure 54. Enhancing the connection to City Park and creating a gateway to Penn Street is important at this intersection.
Appendix 4. Resources

The following resources can provide information, information and resources to assist the city of Reading in creating a vibrant and sustainable downtown.

Reading Complete Streets Policy

National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide
https://nacto.org/publication/urban-bikeway-design-guide/

STAR Communities
http://www.starcommunities.org/

DC Vibrant Retail Streets Toolkit

The LEED Green Building Rating System
http://www.usgbc.org/leed

EcoDistricts
https://ecodistricts.org/

The Center for Active Design
https://centerforactivedesign.org/

Latino Urbanism

Latino Urbanism: The Politics of Planning Policy and Redevelopment
https://nyupress.org/books/9780814784051/

The Sustainable Sites Initiative
http://www.sustainablesites.org/
Greening Reading’s Penn Street
Connection to the River

Greening Reading’s Penn Street
Greening Reading’s Penn Street

2nd and Penn Gateway

3rd and Penn Infill
3rd and Penn Infill

Penn Square

Greening Reading’s Penn Street
Penn Square

Greening Reading’s Penn Street
Greening Reading’s Penn Street
Market Square

Festival District

Greening Reading’s Penn Street
The Historic District / City Park

Greening Reading’s Penn Street
The Historic District / City Park

Greening Reading’s Penn Street
Greening Reading’s Penn Street
Penn Street Bridge at Front Street

Greening Reading’s Penn Street
Greening Reading’s Penn Street

Penn Street Bridge at 2nd Street
Greening Reading’s Penn Street

Penn Street at 3rd Street
Penn Street at 5th Street (Penn Square)
Penn Street at 5th Street (Penn Square)

Greening Reading’s Penn Street
Greening Reading’s Penn Street
Greening Reading’s Penn Street

Penn Street at 11th Street