TRANSPORTATION AND LAND USE PLAN

Pittsburgh, Pennsylvania

THE STRIP
Transportation
& Land Use Plan

PROJECT SPONSORS

Honorable Luke Ravenstahl, Mayor
Noor Ismail, AICP, Director of City Planning

CITY OF PITTSBURGH
"AMERICA'S MOST LIVABLE CITY"
LUKE RAVENSTAHL, MAYOR

pittsburgh city planning

ACKNOWLEDGMENTS

The Transportation and Land Use Plan is the work of many people and organizations who contributed their time, thoughts and ideas.

Federal Highway Administration
Pennsylvania Department of Transportation
Southwestern Pennsylvania Corporation
Port Authority of Allegheny County
City of Pittsburgh
Urban Redevelopment Authority of Pittsburgh
Neighbors in the Strip
Pittsburgh Downtown Partnership
Pittsburgh Cultural Trust
Lawrenceville United
Lawrenceville Corporation
Polish Hill Civic Association
Society for Contemporary Craft
BikePGH
Pittsburgh Community Reinvestment Group
Hill House Association
Allegheny Conference
Regional Industrial Development Corporation
Senator John Heinz Regional History Center
and Western Pennsylvania Sports Museum
Pittsburgh Ballet Theatre
Riverlife
10,000 Friends of Pennsylvania
Cork Factory Lofts
Otto Milk Lofts
Marty's Market
Robert Wholey & Company Inc.
Bar Marco
Enrico Biscotti
Rothschild Doyno
Guardian Storage

Cover Art by:
Joe Skibba,
Urban Design Associates

Funded by the Pennsylvania Community Transportation Initiative (PCTI)

FOREWORD

Achieving Complete Streets in a constrained urban context forces us to think outside of the block. A complete system of streets supports the future vision for areas of change while preserving that which is held dear. We are adding capacity to our constrained network by shifting modes, providing the safe and healthy connections people have been asking us for and preparing for those of the future.

The City that transforms steel mills into neighborhoods does so by realizing their potential value and capturing it so that it is focused and effective. In the Strip District we are acknowledging the current value placed upon its character while weaving in the enhancements. Moving forward we seek to partner public stakeholders with private investors to ensure that additional value is captured - and focused according to plan.

PROJECT LINKS

http://pittsburghpa.gov/stripconnect

CONSULTANT TEAM

HDR

In Collaboration with:

Mizrahi, Inc.
Olszak Management Consulting, Inc.
RCLCO
Sci-Tek Consultants, Inc.
Sprinkle Consulting, Inc.
Urban Design Associates

August 2013

TABLE OF CONTENTS

A Place of Character 1

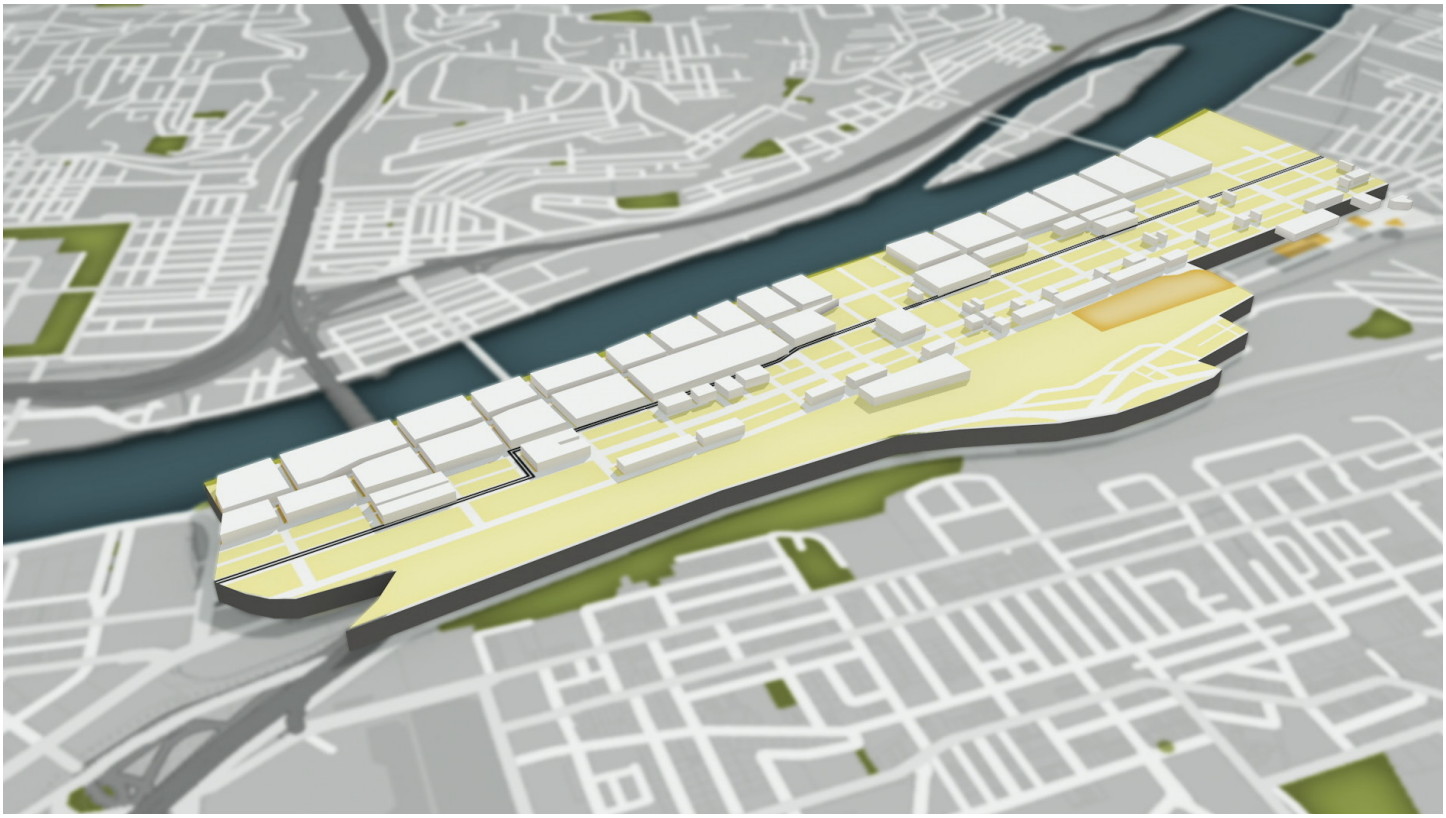
A Place of Yesterday and Today 2
- Change and Opportunity 3
- Issues and Concerns - Recognizing the Functions and Character 4
- Setting Goals to Sustain Success 7
- The Concept - Linking Community and Mobility 7

A Place for Tomorrow 9
- The Charrette - Interactive Planning in the Strip 9
- Applying Best Practices 10
- The Framework Plan 11
- The Five Ways - A Complete System of Streets 12
- The Program of Projects 19

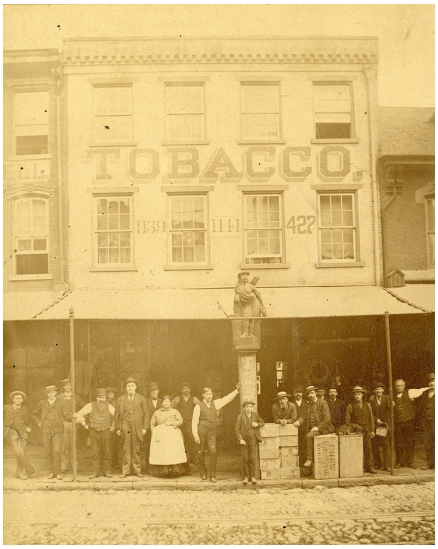
Moving the Plan Forward 21

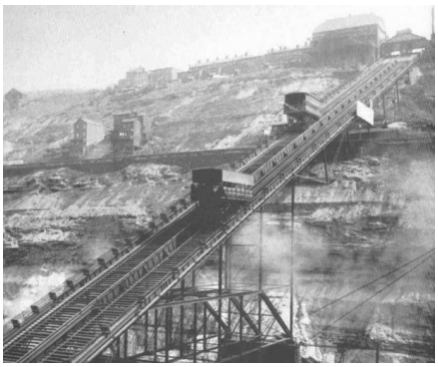
A PLACE OF CHARACTER

The City of Pittsburgh has a robust planning process that is addressing new opportunities while overcoming historic challenges. There is a place in Pittsburgh - two miles long that runs along the Allegheny River from Lawrenceville into Downtown - the Strip. This is one of the special places where the City has a concerted planning focus. With a series of vision and framework plans in place, The Strip District Transportation and Land Use Plan is about implementing, accommodating, and accessing future investments. With implementation, however, even as growth is accommodated, there is an imperative that the soul and energy of the Strip's be sustained. The Strip will always be…***A Place of Character***.



A PLACE OF YESTERDAY AND TODAY



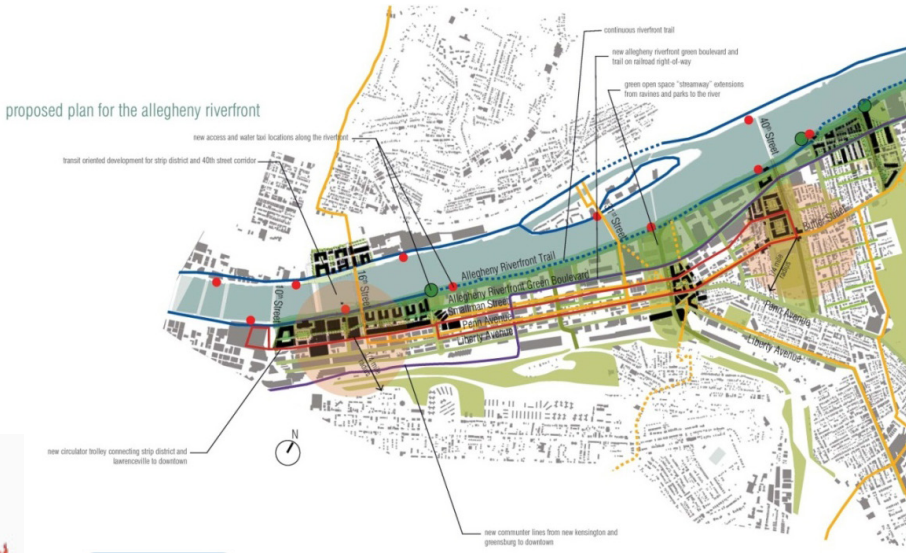


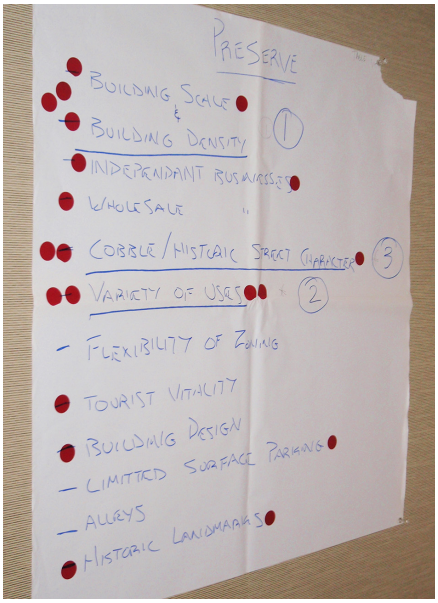
The Strip has a rich and storied history. Dating as far back as the 1800s, the Strip was forged from industry, built with grit and alive with spirit. The Strip District played a significant role in Pittsburgh's development, beginning with its early industrial roots in iron, steel and glass. In fact, Andrew Carnegie's first iron and steel mills and both ALCOA and Westinghouse were all initially located in the Strip District. The H.J. Heinz Company followed later. It transformed into a wholesale produce and retail district, all housed within the historic buildings and urban pattern - the Heart of the Strip. By the 1920s, the Strip District was the economic center of Pittsburgh.

Now it is further emerging as a shopping, dining, dancing district, and residential district. A common response from Pittsburghers when asked to describe the Strip would be "…a food district" or "…a place of hustle and bustle but at the same time…a celebration of the ethnic diversity…" ***The Strip is a place that never stands still***.

CHANGE AND OPPORTUNITY

Even today, positive changes are underway in the Strip. One local business owner summed the Strip's dynamic present as "…one of public life. It's vibrant, it's bustling, there's something for everyone here, there's…old school shops that have been around for a long time, but there's new condos that are going in, there's new restaurants that are going in". With change comes challenges and opportunities. Challenges came in the way of increasing numbers of trucks, cars, bicycles and pedestrians - all vying for limited roadway and pedestrian options. As change met challenge, opportunity emerged. The Transportation and Land Use Plan as envisioned confronts the challenges and embraces the opportunities. The Plan took transportation and land use changes from previous plans, then field checked, tried and tested them through a modeling and a collaborative public process before applying them in the Strip.





ISSUES AND CONCERNS – RECOGNIZING THE FUNCTIONS AND CHARACTER

There were two different sources of recognizing the function and character of the Strip. The first source was ***previous plans and studies*** that included the Strip. By taking advantage of the past efforts, the focus could move more quickly to implementation. The issues broke into two categories – ***mobility and urban design***.

The second source was the public forums held in the district. These sessions, held both in the afternoon and evening, were designed to affirm previous ideas and explore others in a fresh manner. Concerns also were split into two groups – what to preserve and how to invest.

Mobility Issues

- Over-reliance on the auto led to congestion on key corridors
- Liberty Avenue among highest crash rates in City
- Upward trend of pedestrian related crashes on Smallman Street
- Lack of facility continuity for bicyclists/pedestrians
- Bus and truck operations impact travel
- Need to improve internal/external connectivity
- Inability for people with mobility issues to fully enjoy all the Strip District has to offer

Urban Design Issues

- Riverfront is underutilized and disconnected
- Preserve the heritage and grit of the Strip
- Need infill sensitive to the Strip's context
- Lack of central public/green space

Preservation Concerns

- Diverse/independent businesses
- Diversity of people
- Historic character
- Building scale and density
- Riverfront trail access
- Business district

Investment Concerns

- Roadway, sidewalk, safety, and accessibility improvements
- Streetcar and transit
- Connect parks, riverfront, and green systems
- Affordable housing
- Enhanced bicycle/pedestrian facilities
- Keep locally-owned businesses

SETTING GOALS TO SUSTAIN SUCCESS

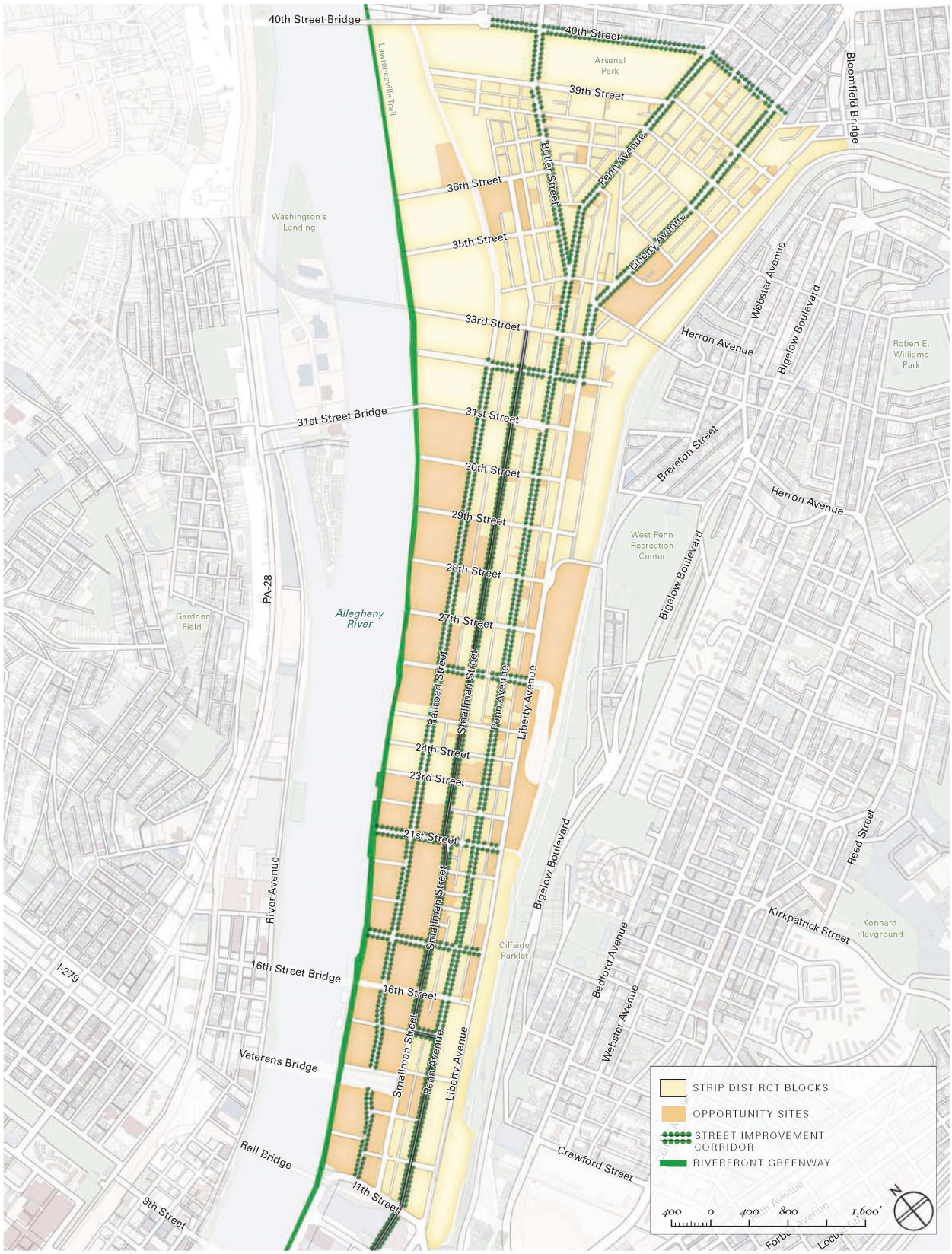
With an understanding of the Strip's history and context, identified issues and a series of interactive public meeting sessions documenting concerns, a set of goals was developed for the Strip. The central idea was to move from planning to implementing solutions for the identified issues. To that end, the plan's goals were to:

- Implement transportation improvements within public rights-of-way
- Identify selected land use opportunities that impact transportation investments
- Develop a complete system of streets with connectivity and introducing a streetcar, cycle tracks, incline, and accessibility features
- Prepare a program of projects and implementation strategy
- Collaboratively plan for the Strip's future

THE CONCEPT – LINKING COMMUNITY AND MOBILITY

The goals for sustainable development in the Strip are to offer transportation solutions that address *current and future* conditions. This means there must be balance between all the ways people can move within and through the Strip. The Strip needs to be a "to place" first, because it will always be a "through place". The counter-balance is allowing strategically-placed future development that is served by transit, foot, boat and bike - not only by cars and trucks. In this concept, the positives are maximized and the weaknesses are minimized. Moving from a Place of Yesterday and Today to a Place of Tomorrow collaboratively links the community and its mobility needs in a dynamic fashion. The facing map illustrates this balance.

The Community and Mobility Concept



A PLACE FOR TOMORROW

Given the unique qualities of the Strip and the commitment of local business owners, merchants, residents and visitors, the natural progression was to develop the plan with the community. The development of the plan was multi-dimensional. During the week, a framework plan and a series of transportation projects were prepared to depict the Strip's future.

THE CHARRETTE – INTERACTIVE PLANNING IN THE STRIP

Using the charrette process was the approach to developing the plan. That format was chosen as a means to accelerate the plan's development and to effectively incorporate local involvement – all within one week. To foster accessibility - and to keep the planning Strip-focused – the charrette was held at the Society of Contemporary Craft at 21st and Smallman. The accompanying process graphic illustrates how the plan emerges from strong community feedback.

Throughout the week, the team interacted with City staff, the project steering committee and community stakeholders. The interaction had four clear steps:

- Present alternatives to affected stakeholders
- Talk with and listen to the stakeholders opinions to create alternatives
- Field-check, try and test the alternatives
- Prepare a revised set of alternatives recommendations

APPLYING BEST PRACTICES

As a guide to developing the plan, the City identified a series of Best Practices that represented the state-of-the-art for applications across a range of technical issues. They were used in preparing recommended improvements for the Strip.

Urban Transit Applications

- Transit Stop Consolidation
- Universal Design for Transit
- Small Shuttle/Community Circulator
- Streetcar Alignment Planning
- Operating and Maintenance Costs
- Streetcar Capital Cost Estimation
- Funiculars and Inclines

Value Capture, Finance and Special District Applications

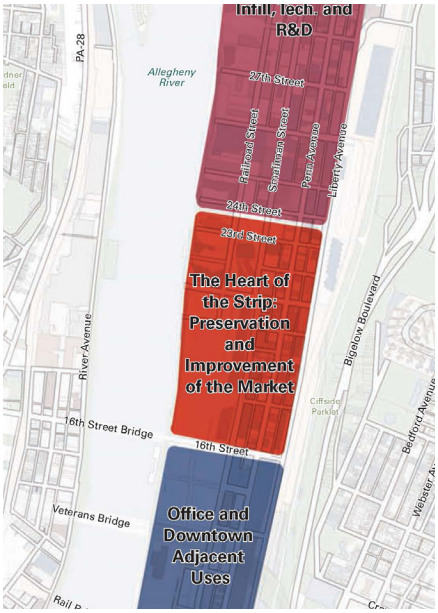
- Public and Private Value Capture Options

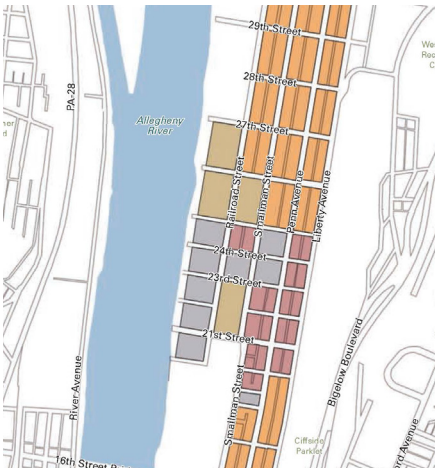
Bicycle and Pedestrian Applications

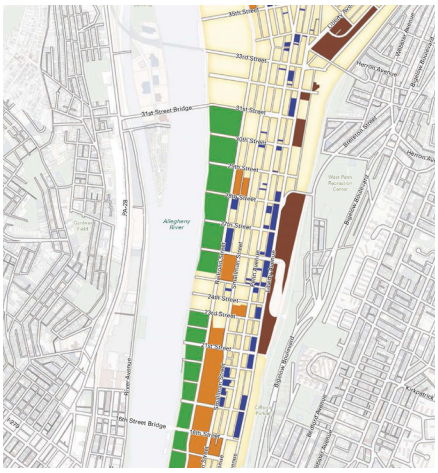
- Bicycle and Pedestrian Accommodation
- Cycle Tracks
- Community and Individual Health Benefits

Roadway and Parking Applications

- Universal Design at Intersections
- Complete Streets
- Parking Strategies
- Technology Innovations and ITS
- Enforcement Programs
- Network Connectivity
- Sustainability and Urban Design Standards







THE FRAMEWORK PLAN

The Framework Plan centers around the multi-modal transportation improvements and the resulting, supportive land use development. The Framework illustrates the major corridors where improvements will occur. It also highlights the opportunity sites and how they relate to the transportation improvements. The Framework includes the Strip's:

- **Three sub-districts.** The designation of the Lower Strip, Heart of the Strip and Upper Strip recognizes the complexity of the Strip it is not a "single" place.
- **Fundamental block structure.** The analysis of the form and pattern of the Strip is based on its varied block structure – the smaller the block type, the higher the activity level.
- **Proposed Character Areas.** The next step is defining locations for new opportunities based on the sub-district and block types as a guide to future development types.
- **Future Development Program Potential.** To better understand how and where new development would occur, a market study defined the future potential type, and size of future uses.
- **Transit-supportive Opportunity Sites.** The new streetcar emphasis in the Strip led to the location of sites that could support – and be supported by – the streetcar.
- **Transit-supportive Development Types.** Likewise, the type and placement of new development should "meet the street", offering a true urban context that generated pedestrians.

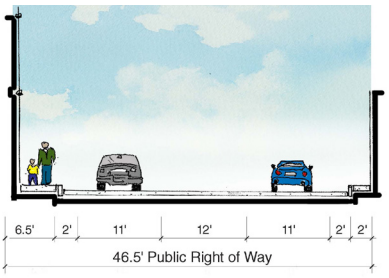
The Framework represents how the traditional Strip enterprises are retained, while allowing new functions and continuing growth. New opportunities are discretely placed within the historic context, patterns and forms. The mobility network is supportive and complementary.

THE FIVE WAYS -—
A COMPLETE SYSTEM OF STREETS

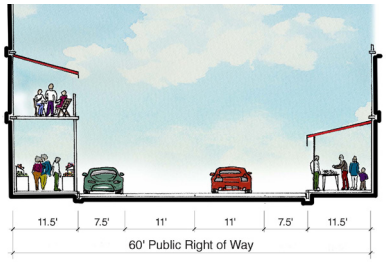
To help wean the Strip from the strict reliance on the automobile, businesses, employees, resident and visitors need multi-modal options. For the users of the automobile, the daily uses may vary from commuter "through" trips to residents and businesses "to" trips. The system is designed to balance the two conditions - through traffic and to traffic.

However, the Strip is tight - only four streets wide and the river - so the ability to take advantage of the land use opportunities and solve the transportation issues required a unique solution. While there is much attention nationally given to the Complete Streets approach, the Strip's tightness and limited rights-of-way led to a variation on that theme - the concept of a **Complete System of Streets**.

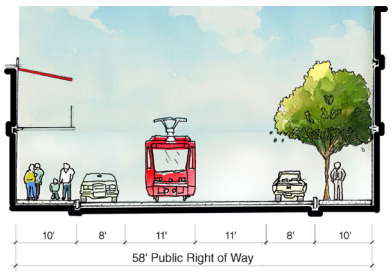
The solution is an interrelated set of five "Ways":



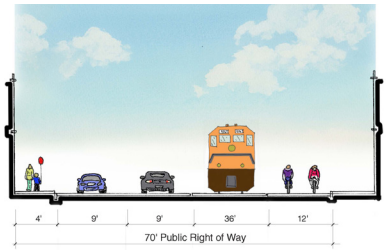
"The Through Way"
Liberty Avenue



"The Pedestrian Way"
Penn Avenue

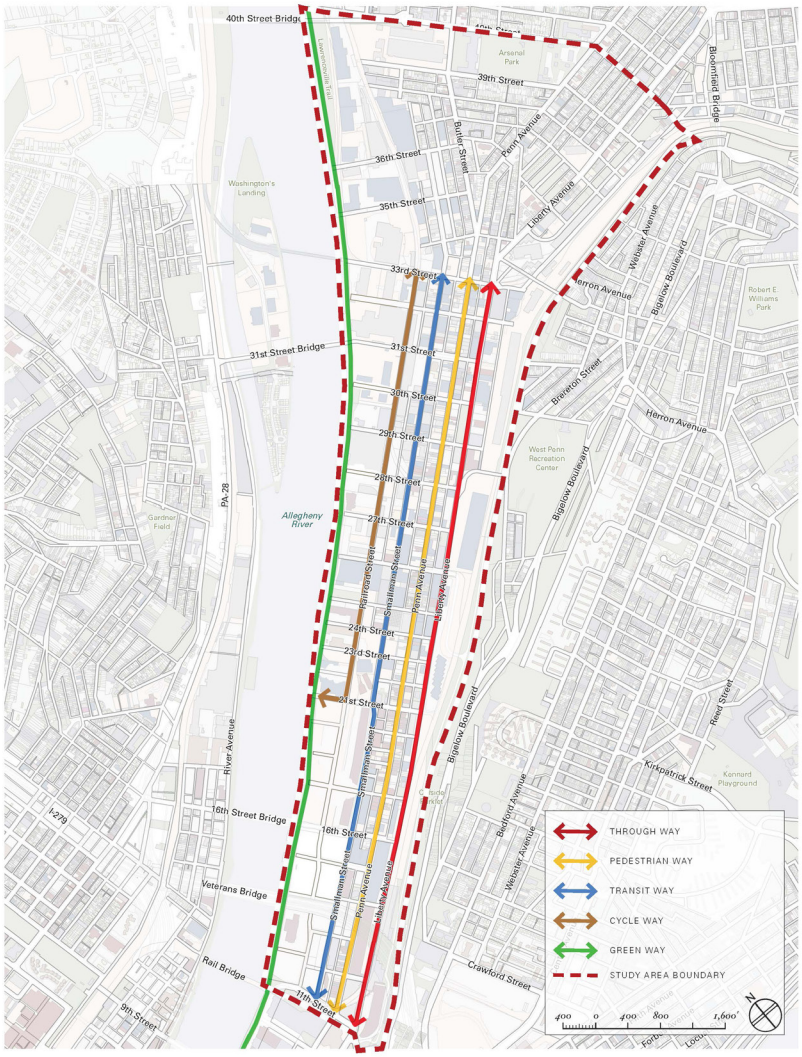


"The Transit Way"
Smallman Street



"The Cycle Way"
Railroad Street

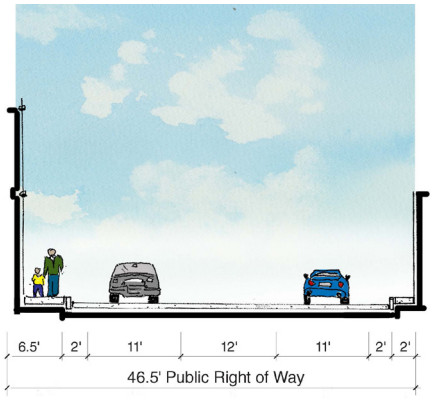
"The Green Way"
Supporting the Allegheny Riverfront Green Boulevard Proposals



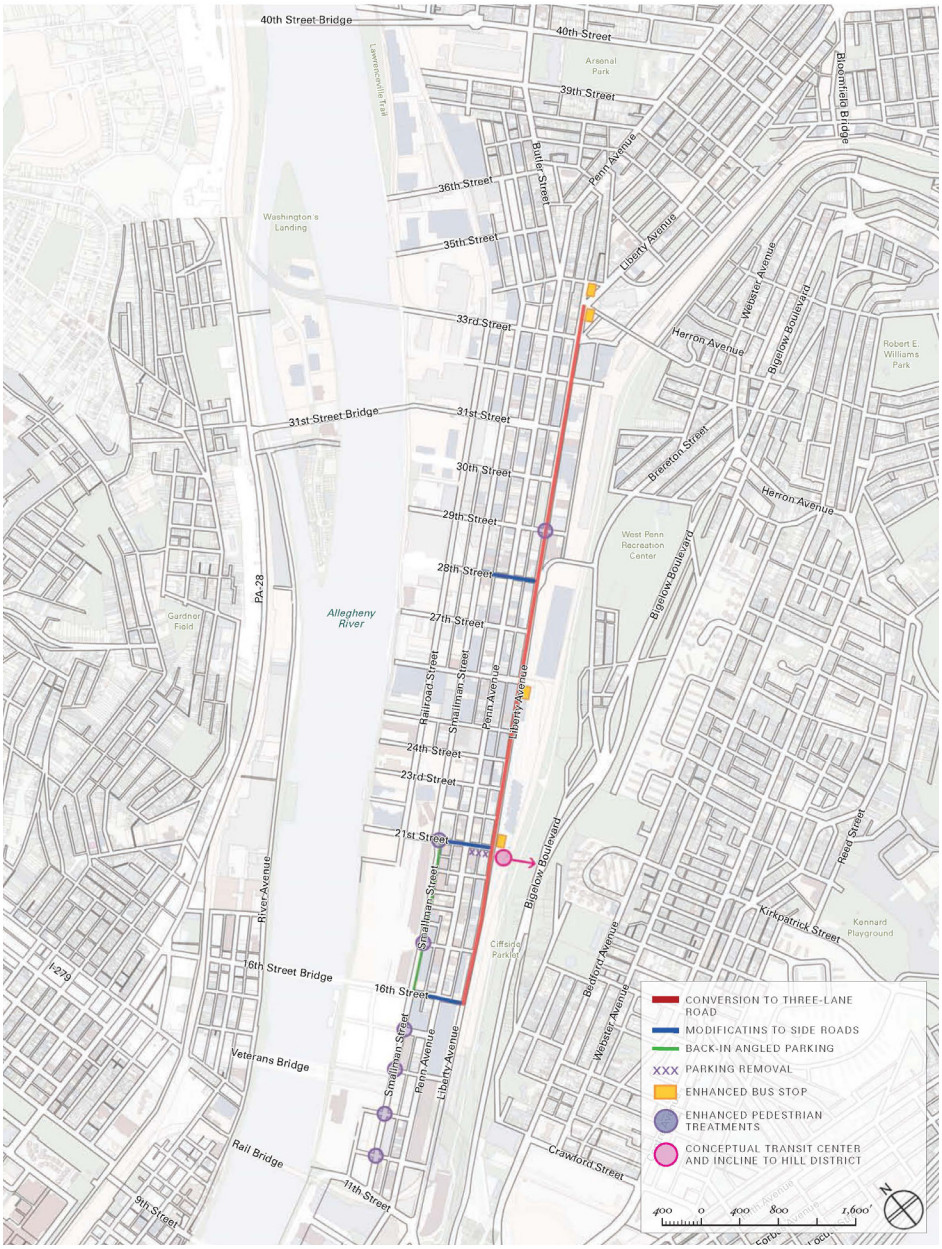
The Through Way

Liberty Avenue is a high volume through route - connecting Downtown to the East End. High speeds, narrow lanes, a cluttered streetscape, conflicts with buses and poor pedestrian amenities all contribute to the high number of accidents on this road. A critical factor for Liberty is improving safety of drivers, pedestrians and transit riders.

The plan recommends that Liberty Avenue be reduced to three lanes with two outbound lanes and one inbound lane - providing fewer, but wider lanes to improve traffic flow and safety. The plan also includes improvements for pedestrians, bus stops and left-turn lanes at key intersections. The Through Way, is just one of the five ways. To improve traffic flow and safety along Liberty Avenue we must rely on the adjacent streets to enhance pedestrian, transit, and cycling opportunities.

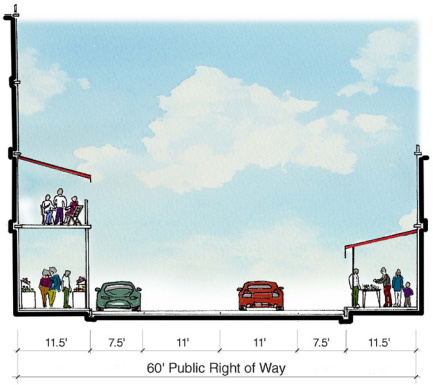


"The Through Way"
Liberty Avenue



The Pedestrian Way

Penn Avenue is the Strip's premier pedestrian street, especially in the heart of the Strip. Heard loud and clear was "pedestrian first!" The daily and weekend foot traffic reflects its status as a destination. Even if people arrive by car or bike, they are pedestrians at one end of their trip or the other. Penn Avenue - the Pedestrian Way - is about wholesale and retail access just as much as the pedestrian. The parking and loading help buffer the chaotic sidewalk shopping experiences that draw people from all over. It's part of what makes it "The Strip" but it narrows options for cycling and transit. To accommodate the pedestrians, enhancements are recommended for safety improvements, slowing down the traffic, putting safe pedestrian crosswalks and lights where they're needed, and sidewalks on every block.



"The Pedestrian Way"
Penn Avenue

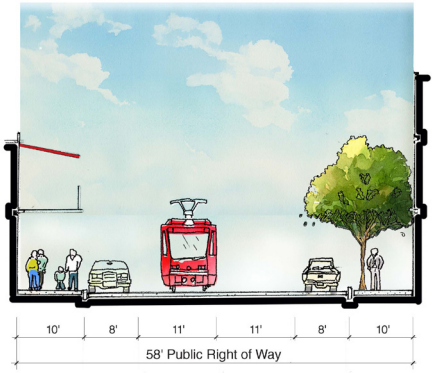
The Transit Way

The streetcar is the center piece of the Transit Way. The new signature transit service for the Strip – centered on Smallman Street, is the central spine of the Strip. It serves the entire Strip District, including the Heart, while forging the connection to Downtown. This new ability to link to the Convention Center and the Cultural District strengthens the Strip as a destination for visitors of Pittsburgh. Likewise, by joining the light rail system at the Wood Street T stop, accessibility was expanded.

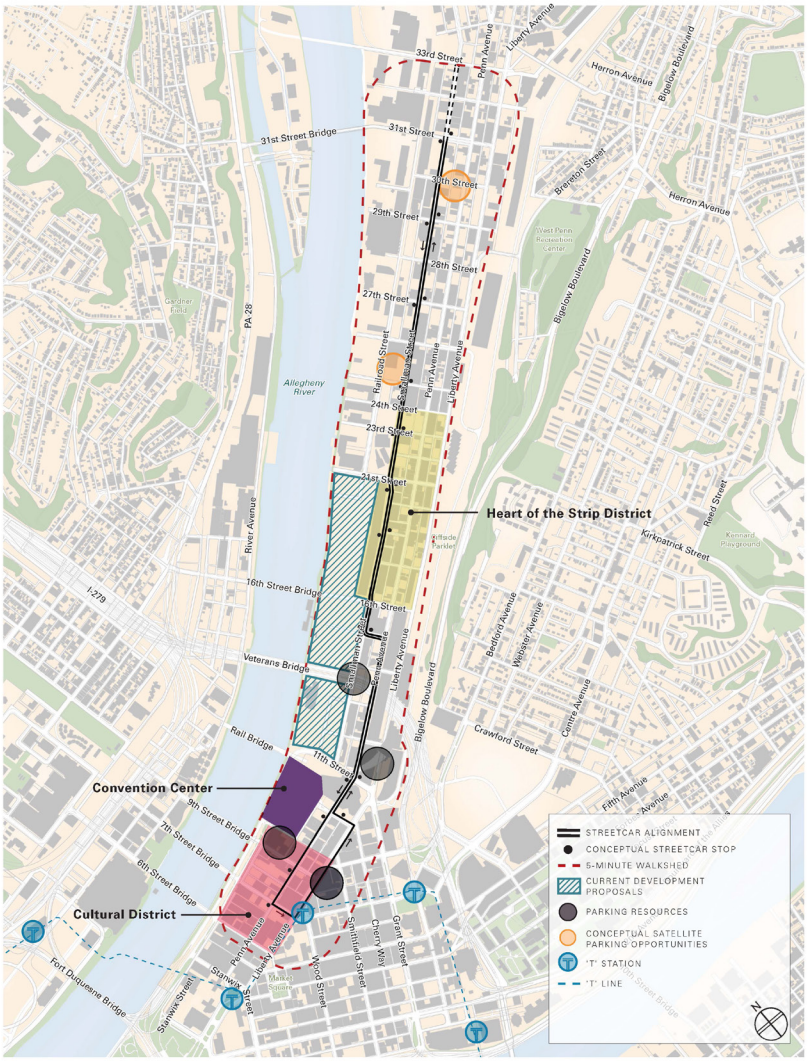
As part of a national movement, the modern streetcar in cities is proving to be a mode that increases mobility, accessibility and civic pride. Streetcars are:

- District circulators - serving current and larger future needs
- Pedestrian accelerators - extending movement beyond the car in a people friendly way and
- Development generators - offering access to new development while respecting the historic Strip pattern and form.

The Smallman Street transformation illustrates - in a dramatic fashion - these three benefits.



"The Transit Way"
Smallman Street



Smallman Street Transformation

1. Existing Street Conditions, at 26th Street, looking at Downtown

3. New streetscape, parking, and trees bring dining and life to the street

1a. Existing Street Conditions, at 26th Street, looking at Downtown

4. New infill buildings on vacant lots complete urban fabric

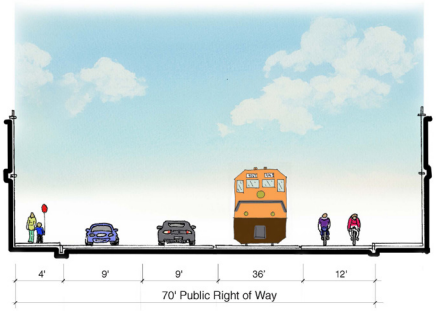
2. Renovation and improvement to existing buildings

5. Street car supports and reinforces improvements in the Strip District

The Cycle Way

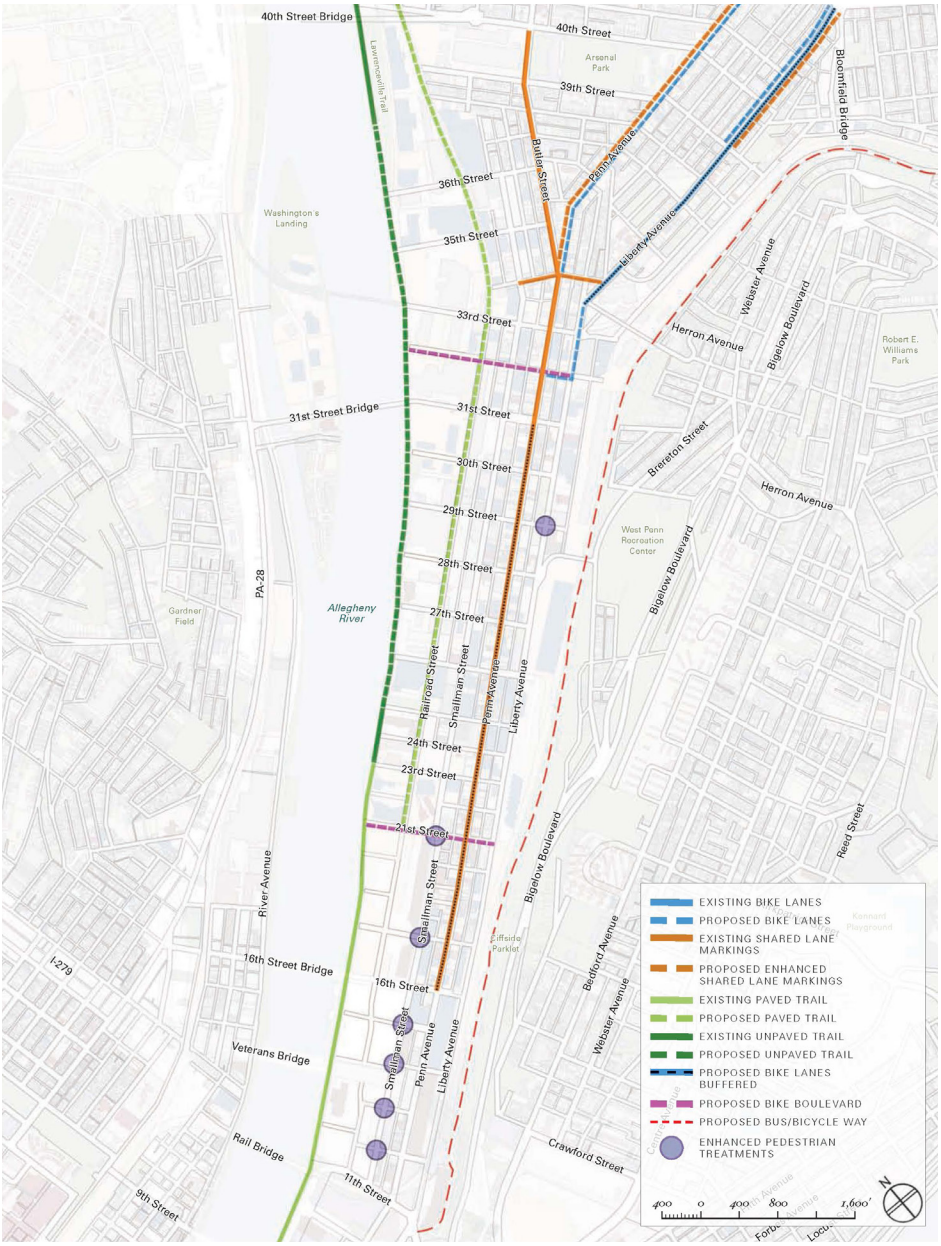
Railroad Street is the recommended location for the Cycle Way, which is a dedicated cycle track for commuter bikers. Given the narrow width of the Strip, the facility is only about 600' west of Penn Avenue. Railroad Street is part of an uninterrupted, flat roadway stretching over six miles. This single street serves as a potential link for regional commuter rail and offers an immediate opportunity to service thousands of pedestrians, cyclists, and persons with limited physical abilities every day. There is no other stretch of right of way that offers that degree of access and connectivity - from adjacent counties, neighboring municipalities, and City neighborhoods to the Allegheny Riverfront, the Strip and Downtown.

The plan envisions a paved, lighted commuter bicycle path and the regional commuter rail both accommodated along the entire length of this street within the City for a positive future of healthy, sustainable transportation.



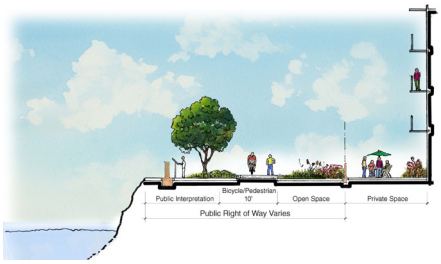
"The Cycle Way"
Railroad Street

Railroad Street
Transformation

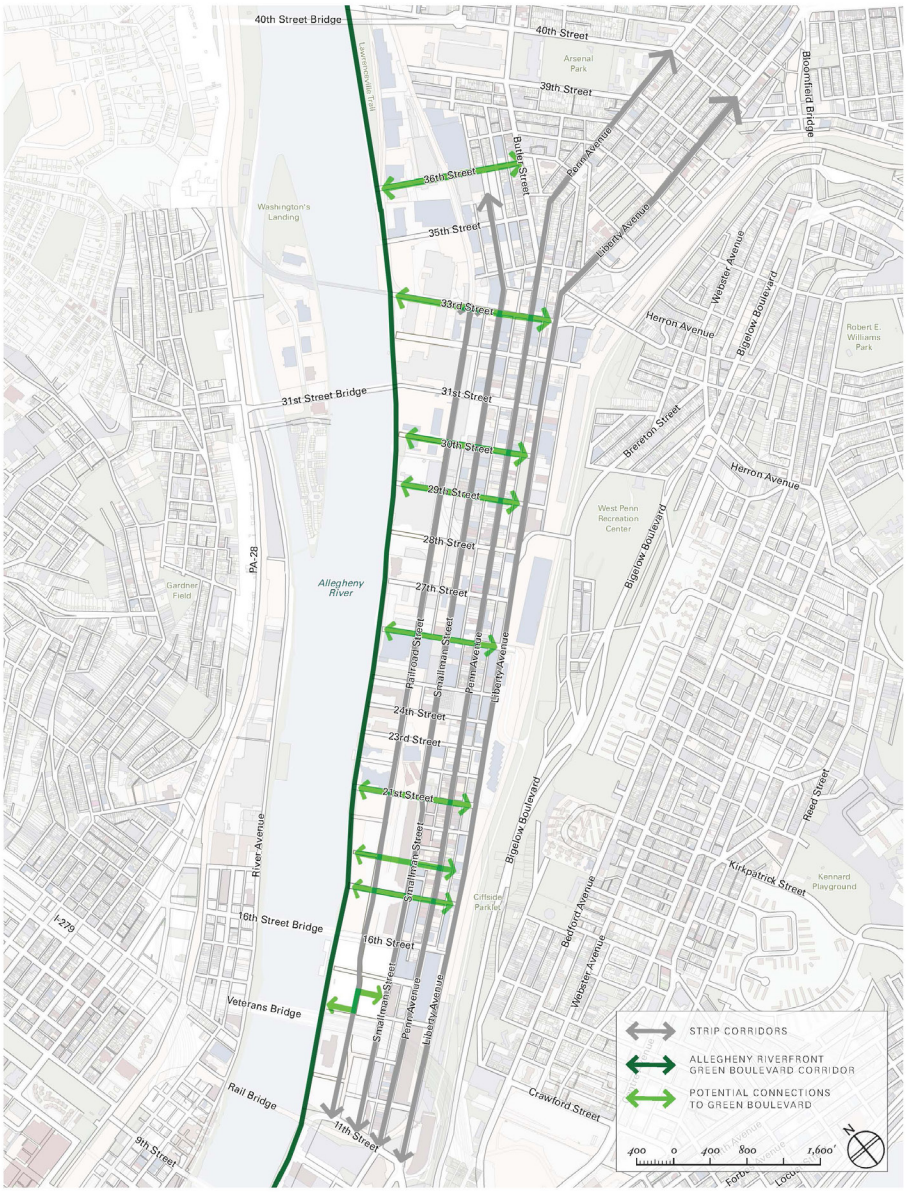


The Green Way

A key vision for the Strip is to maximize the connection to the river. The Riverfront Trail constitutes the Green Way and supports the recommendations of the Allegheny Riverfront Vision Plan and the Allegheny Riverfront Green Boulevard Plan concept. City transit like the streetcar and a commuter bicycle path can change how we move, but what progress we make along the riverfront can help change the way we live.



"The Green Way"
Supporting the Allegheny Riverfront
Green Boulevard Proposals



THE PROGRAM OF PROJECTS

The program of projects is laid out according to the Five Ways and is summarized in the following chart. In support of the program, a series of finance tools was prepared that includes local, state, and federal sources.

	Short-Term < 3 Years	Mid-Term 3-7 Years	Long-Term > 7 Years	Cost Estimate	Financing Option: Local Public	Financing Option: Local Private	Financing Option: State	Financing Option: Federal
Through Way								
Liberty Avenue / Smallman Street Reconfiguration	X			$2,970,000	Tax/fee options; parking revenues; and other local transportation funds/bonds.	Joint Development or Public-Private Partnership; Ancillary Revenues		
Enhanced Bus Stops / Signal & Ped Improvements on Liberty Avenue		X		$880,000	Tax/fee options; parking revenues; and other local transportation funds/bonds.	Joint Development or Public-Private Partnership; Ancillary Revenues	General Subsidy and PTTF	
Lane / Intersection Reconfigurations & Traffic Detection	X			$700,000	Tax/fee options; parking revenues; and other local transportation funds/bonds.	Joint Development or Public-Private Partnership; Ancillary Revenues	General Subsidy and PTTF	
Remove Fixed Objects, Liberty Ave.	X			$370,000	Tax/fee options; parking revenues; and other local transportation funds/bonds.	Joint Development or Public-Private Partnership; Ancillary Revenues		
Pedestrian Way								
Penn Avenue (16th Street to 23rd Street) Improvements	X			$1,680,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues	General Subsidy and PTTF	
Penn Avenue (11th Street to 16th Street) Improvements		X		$1,400,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues	General Subsidy and PTTF	
Sidewalk Improvements	X			$7,180,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues		
Transit Way								
Streetcar Planning	X			$1,500,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues	General Subsidy and PTTF	Small Starts/ New Starts; Other Formula Grants
Streetcar Design		X		$1,500,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues; TRID	General Subsidy and PTTF	Small Starts/ New Starts; Other Formula Grants
Satellite Parking		X		$10,000,000				
Streetcar Construction & Operations			X	$112,300,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues; TRID	General Subsidy and PTTF	Small Starts/ New Starts; TIGER; TIFIA; Other Formula Grants

The final component of the plan is a recommended program of projects the City can undertake over three periods of time:

- **Short-term** – one to three years
- **Mid-term** – three to seven years
- **Long-term** – seven years and beyond

	Short-Term < 3 Years	Mid-Term 3-7 Years	Long-Term > 7 Years	Cost Estimate	Financing Option: Local Public	Financing Option: Local Private	Financing Option: State	Financing Option: Federal
Cycle Way								
Install Bike Corrals	X			$37,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues; Grants		
Liberty Avenue Bike Lanes/Enhanced Bike Lanes (North of 32nd Street)	X			$45,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership		
32nd Street Bike Boulevard/ Contraflow Bike Lane	X			$3,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership		
21st Street Bike Boulevard/ Contraflow Cycle Track		X		$43,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership		
Railroad Street Trail (Phase 1)	X			$496,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership; Ancillary Revenues	General Subsidy and PTTF	
Railroad Street Trail (Phase 2)		X		$495,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership	General Subsidy and PTTF	
Penn Avenue Bike Lanes/Shared Lane Markings			X	$39,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership		
Green Way								
Riverfront Trail Completion			X	$1,600,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership	General Subsidy and PTTF	
Green Streets		X		$7,860,000	Public-Private Partnership through tax/fee options, parking revenues, and other local transportation funds/bonds	Joint Development or Public-Private Partnership	General Subsidy and PTTF	
Other Improvements								
Incline to Hill District			X					
21st Street Transit Center		X						

MOVING THE PLAN FORWARD

THE TIME IS NOW – THE TIME TO MOVE FORWARD

Implementation of the Five Ways and the Program of Projects can start in the short run, with others following in an orderly fashion. The Strip District Transportation and Land Use Plan was shaped by those with significant investments of time, love and financial resources. They all helped drive the Strip from a general vision and hoped-for opportunities to an action-based agenda. A clear direction and path forward is set.

The Plan can work because it recognizes the Strip's dynamics and intrinsic qualities and characteristics. The Plan:

- Surfaced a myriad of concerns and issues from those who own, invest, work, shop and live in the Strip
- Respects the Strip's historic context in proposing selective land use changes - while looking to the future
- Introduces new and exciting means of moving through, around and within the District
- Spells out design strategies for new private investments
- Examines public, private and innovative financial approaches
- Identifies specific short-mid- and long-term transportation improvements

Rest assured that as the Plan is implemented – the Strip's grit is retained and it will always be…***A Place of Character***.

THE STRIP

Transportation & Land Use Plan

A PLACE OF CHARACTER

CITY OF PITTSBURGH
"AMERICA'S MOST LIVABLE CITY"
LUKE RAVENSTAHL, MAYOR

pittsburgh city planning