PEORIA
COMPLETE STREETS GREEN STREETS

OJB
LANDSCAPE
ARCHITECTURE

ACKNOWLEDGEMENTS

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1.0

EXECUTIVE SUMMARY

PROCESS

The Peoria Streetscape Master Planning process began with the formation of a project Steering Committee. This committee included representative from the Mayor's Office, the City Manager's Office, Public Works, the City Engineer, and City Planning Department, the Park District, key Community Stake Holders and members of the design team (The Office of James Burnett, Magnusson Klemencic Associates and Farnsworth Group). The Steering Committee participated in 8-charette style meetings over a 6-month period. Parallel to the Steering Committee Meetings a series of Public Meetings were held that allowed for citizen input. These Public Meetings included project presentation, walking tours, design charettes, question and answer and one-on-one discussions with the design team and members of the steering committee.

This Master Plan represents a summary of the process findings along with design recommendations. A proposed Traffic Diagram recommends a transitioning street network from one-way and two-way streets to a two-way system. Six key transitions are outlined in 3.3 of Chapter 3. Streetscape typologies illustrate the proposed street configurations. Environmental issues related to stormwater management led to the development of a proposed Eco-Street design that is explained and illustrated in Chapter 9.

1.1

STREET DESIGN METHODOLOGY AND PLANS

PROJECT

The Peoria Streetscape Master Plan Project encompasses 302 acres across 4 districts with 28 street alignments. The planning effort included a three phase process; 1 - Data Collection and Analysis, 2 - Synthesis and Alternative and 3 - Master Plan Development. This document is intended as a design narrative and framework for an initial Complete Streets Peoria Pilot Project to be followed by a phased implementation throughout the balance of the Central Business District.

DATA COLLECTION AND ANALYSIS

The Data Collection and Analysis phase helped the design team and the steering committee understand the existing conditions and identify issues, opportunities and constraints. An extensive photo inventory was made for each of the 28 street alignments within the study area. Each street and intersection was walked to allow for a clear understanding of context and proportion. Each alignment was

OPPORTUNITY

"The more successfully a city mingles everyday diversity of uses and users in its everyday streets, the more successfully, casually (and economically) its people thereby enliven and support well-located parks that can thus give back grace and delight to their neighborhoods instead of vacuity. "

Jane Jacobs, The Death and Life of Great American Cities

documented with photos, narrative and a summary of findings.

Additional analysis was collected from a series of discussions and interviews with the steering committee members and key stakeholders. A review of existing City of Peoria Planning documents was also made. These documents include the Peoria 2029 Update, draft of Manual Practice prepared by the Public Works Department, Heart of Peoria Form Based Districts Document, CityLink Bus Routes and Washington Street Improvements Documents.

In addition to current plans and urban overlays the design team reviewed common streetscape design references including the American Association of State Highway Transportation Officials Manuel (AASHTO), Manual of Uniform Traffic Control Devices (MUTCD), Landscape Architecture Graphic Standards, Guide for the Development of Bicycle Facilities (AASHTO), Complete Streets Local Policy Workbook and Precedent Studies identified by the team.

During the data collection and analysis phase project goals were established. These goals served as guiding principles during the Synthesis and Alternatives Phase and the Master Plan development.

PROJECT GOALS

- *"A streetscape for Peoria" - Activates Downtown Districts*
- *"A Streetscape that is Green and Environmentally Sensitive" - Smart Systems, Low Maintenance, Smart Systems*
- *"Walkable Complete Streets" - Streets for Pedestrians, Bicycles, Automobiles and Accessibility for all Users*
- *"Peoria - Safe Streets" - Organized Network with a Unified Design*

wAt the completion of the Data Collection and Analysis Phase several Key Findings identified needs and opportunities within the Central Business District Framework. It was identified that Complete Streets could help the city address current needs associated with the Combined Sewer Overflows (CSO) issues downtown. A review of the recently completed parking study identified an overabundance of surface parking. Stakeholder and public input identified the need to connect pedestrian and bicycling with corridors through the central business district.

SYNTHESIS AND ALTERNATIVES

The Synthesis and Alternatives Phase began with the establishment of a set of Design Methodologies. These guiding methodologies allowed the team to begin testing each of the urban overlays. The design and planning technique for the street framework and ultimate streetscape design does not follow a series of consecutive steps. The process was a progression of developing alternatives while concurrently processing a number of variables that required the design and technical considerations to be adjusted and retested. This process will include equal parts art and science as initial concepts are developed and revisions are vetted by the design team and updated in the plan.

The initial overlay began with a study of the existing traffic network and then testing alternatives to this system of one-way and two-way alignments. In parallel, a second alternative explored the option of redefining the traffic network as a two-way system. The planning also included a detailed study of key intersections and alignments where issues had been identified related to vehicular and pedestrian movements or unique configurations.

The final traffic diagram recommends a two-way system. This plan transitions Glendale Avenue, Perry Street and Fayette Street with Perry Street from full and partial one-way streets to two-way configurations. Jefferson Street and Adams Street were modified to reduce the current number of 5 one-way lanes down to 3 one-way lanes. A second phase for these two alignments reconfigures the 3 one-way lanes to a center turn lane and median to one-lane in each direction.

Concurrent with the traffic planning, additional layers were overlaid to vet parking, bicycle connectivity, walkability and open space. This layering allowed the steering committee to make informed adjustments to each of the layers for a composite integrated street

network. As each of the urban overlays was in the process of being analyzed, the design team explored options for intersection configurations, lane-widths, bicycle facilities, street sections along with street elevations and accessibility considerations.

The Synthesis and Alternatives Phase included the establishment of a Design Methodology, Testing of Urban Overlays and the study of Preliminary Plans, Intersection Layout, Street Elevations and Sections. This process allowed the team to study user relationships and balance level of service for vehicles and pedestrians.

DESIGN METHODOLOGIES

Develop a traffic plan for the existing one-way / two-way system within the Central Business District and the Warehouse District. Provide an alternative traffic plan that establishes a one-way system with the Central Business District and the Warehouse District.

- Establish a provision for an appropriate level of service to the downtown environment.
- Encourage a system in which alternative transportation, mass transit, walking and bicycling are encouraged.
- Minimize travel lane widths. Provide for 11'-0" wide vehicular lanes where possible.
- Minimize turning radii at intersections. Provide for a 15'-0" radius at intersections.
- Provide for automatic "walk" signalization on all pedestrian crosswalks.
- Eliminate right-hand turn lanes from the traffic system. This recommendation would also encourage the incorporation of signage to promote a no-right-on-red policy. This practice has been effective in reducing vehicular/pedestrian conflicts at intersections.
- Eliminate or minimize left-hand turn lanes from the traffic diagram.
- Maximize on-street parking within the Central Business District, Warehouse District and Riverfront.
- Provide provisions for an integrated bicycle system in the Central Business District, Warehouse District and Riverfront.
- Introduce bike lanes between on-street parking spaces and vehicular traffic lanes when allowed by street widths. Provide sharrow lanes to allow for continuous bike routes within the district and beyond.
- Provide a clear delineation between the pedestrian, bicycle, and vehicular travel paths.
- Provide for pedestrian walkability and accessibility for all users.
- Develop a maintenance friendly street section that considers weather conditions and future flexibility.
- Create a continuous canopy throughout the Central Business District, Warehouse District and Riverfront.

URBAN OVERLAYS

Urban overlays provide a framework that allowed the design team to look at each of the key streetscape components. The urban layers can be reviewed for design criteria and best practices. Each overlay is then worked into the preliminary plans and sections for a test fit into the existing conditions. Key overlays include:

- Existing Traffic Circulation – Baseline Plan
- Existing Transit Routes – Current Routing
- Street Network Planning Diagram

- Parking Facilities Diagram
- Bike Facilities Diagram
- Walkability Diagram
- Open Space Diagram

MASTER PLAN DEVELOPMENT

With the finalization of key urban overlays completed, the design team was able to prepare a comprehensive street framework plan. The plan laid out the roadway alignments for 16 downtown streets, as follows:

1. Fulton Street has been proposed as a two-way alignment that strengthens north-south connectivity to existing businesses located on the east side of the street.

2. Hamilton Avenue has been developed as a core-to-shore connection for the historic Randolph-Roanoke neighborhoods to the north and through the Medical Center down to the river front park along the Illinois.

3. The Main Street alignment has been proposed as a pedestrian and bicycling corridor connecting the Central Business District with Bradley University to the northwest.

4. Fulton Street has been designed to allow for a vehicular connection from William Kumpf Boulevard past City Hall and proposes the re-connection of the street between Jefferson Avenue and Adams Street. This revised alignment will eliminate the circulation challenges of the super block associated with the Peoria Civic Center.

5. Liberty Street improvements include the incorporation of back-in angled parking to reduce the overall wide right-of-way condition. Maximized on street parking will serve transitioning retail on the edge of the Central Business District and Warehouse Districts.

6. The Harrison Street improvements propose the same types of improvements as Liberty Street.

7. Walnut Street improvements propose the same conditions and improvements as Liberty Street.

8. State Street improvements propose the same conditions and improvements as Liberty Street.

9. Glendale Avenue / William Kumpf Boulevard is proposed as a true two-way street connecting all streets within the city center to this cross-town connector.

10. Perry Street has been designed to become and two-way alignment with bike lanes serving as a connection between the neighborhoods on the east and west of downtown.

11. Monroe Street has been proposed with back-in angled parking to reduce the right-of-way width and to maximize on street parking within the heart of the city.

12. Madison Street has been proposed with improvements similar to Monroe Street.

13. Jefferson Street which is currently a one-way pair with Adams Street has been right-sized by eliminating 2 lanes of travel and adding a bike lane in a first phase. A second phase proposes two-way traffic with bike lanes in both directions.

14. Adams Street has been designed to match the improvements of Jefferson Street.

15. Washington Street has been as an extension of the existing Washington Street Tiger II improvements. The street sections amenity zone and sidewalk will be updated to match the revised details of this plan.

16. Water Street proposes an extension of the streetscape that has been completed as part of the Peoria Riverfront Museum and the Caterpillar Experience.


"Walkable Complete Streets,
Streets for Pedestrians, Bicycles,
Automobiles and Accessibility for
all Users"

The Master Planning further developed the street framework plan by completing a series of sections for each of the roadway, amenity zone and sidewalk conditions. Parking studies looked at the details associated with parallel parking along with the proposal of back-in angled parking for streets with wide right-of-way widths. Bike lanes, sharrow lanes and cycle track plans and sections were studied and developed as part of each applicable roadway section. An open space framework was studied in detail and developed to connect key corridors through the city with plazas, parks and open space. Walkability in the plan looked at details studies giving proportion and scale to the amenity zone and sidewalks. Intersections were also laid out to ensure clarity of pedestrian users including accessibility.

The final master plan proposes the development of an "Eco-Street" that addresses the Combined Sewer Outflow (CSO) issues in Peoria. Detailed studies explored the collection of storm water and developed detailed plans and sections that can address this key environmental challenge.

NEXT STEP / PHASING

The Master Plan recommendations were presented and accepted by the Steering Committee. This plan was then presented in the Final Public Meeting. The final plan will be presented to the City Council and Mayor with the recommendation of a pilot project followed by a phased implementation throughout the Central Business, Medical Center and Warehouse Districts found in the last chapter of this plan.

PRELIMINARY DESIGN SCHEDULE

	PHASE	DURATION (WEEK)	Month 1				Month 2				Month 3					Month 4				Month 5				Month 6					Month 7			
			1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4
MASTER PLANNING	1. Data Collection / Analysis	8 weeks																														
	2. Synthesis and Alternatives	10 weeks																														
	3. Master Plan Development	4 weeks																														
KEY MILESTONES	a. Client Meetings / Design Presentations																															
	b. Site Visits																															
	c. Public Workshops																															
	d. Stakeholder Meetings / Presentations																															
	e. Release of Final Documentation																															

KICK-OFF MEETING 1
MEETING 2
MEETING 3
MEETING 4
MEETING 5
MEETING 6
MEETING 7
FINAL MEETING
PUBLIC WORKSHOP 3

1.2

PROJECT GOALS

Project Goals were established by the Steering Committee and presenters as part of the public workshop process. Each goal was carefully considered to address current planning needs and to establish a design focus for a re-envisioned Peoria. Project Goals serve as the overriding principles to which all decisions will be scrutinized. These goals provide a way of measuring success moving forward.

"A **STREETSCAPE** for Peoria"
Activates Downtown District

"**GREEN & ENVIRONMENTALLY SENSITIVE** Streetscape."
Smart Systems, Low Maintenance,
Flexible Systems

"**WALKABLE** Complete Streets"
Streets for pedestrians, bicycles,
automobiles and accessibility for all users.

"Peoria - **SAFE STREETS**"
Organized network with a unified design

1.3

PROJECT METRICS

Project Metrics identify the existing conditions and scope of work within the City of Peoria. Project Data represents an itemization of design components developed and incorporated into the master plan urban overlay diagrams and street network layout plan.

PEORIA METRICS

PROJECT DATA

SITE Area	13,186,250 sq. ft. 302 acres
HUMAN Population	115,700 City 379,000 Metro
US Rank	230th
STREET Alignments	28
BLOCK Faces	106
INTERSECTIONS Primary	64

DESIGN DATA

DEMOLITION Area	2,000,000 sq. ft.
STREET Improvements	36,785 linear feet 6.97 miles
SIGNAL/ PEDESTRIAN Poles	250
STREET PARKING Stalls	1,700 Street
STREET Light	256 Street Light 256 Pedestrian Poles
CURBS Gutters	110,000 linear feet
STREET Trees	1,840
BIKE Lanes/Facilities	4.3 miles
Racks	240
Share	5 locations
BENCHES	160
WASTE Receptacles	132


HOUR
P

2.0

DATA COLLECTION AND ANALYSIS

INTENT

During the Data Collection and Analysis Phase the Design Team surveyed the existing conditions of the project boundary, adjacent districts and neighborhoods. The Steering Committee provided valuable historic insight along with current and proposed community planning efforts and thought processes.

The team walked each of the 28 street alignments to gain an understanding of Peoria's character. This analysis looked at the figure-ground relationships, topography, open space, building scale and character, street wall and gaps, key activity nodes and view corridors. This walking analysis also allowed the team to understand accessibility, urban amenities and overall walkability. The city was then driven to allow the team to experience the city from the viewpoint of a motorist. This driver's perspective helped to identify the contrasting circulation challenges and opportunities of the differing user groups. Each corridor was carefully documented with notes and photographs to record these first impressions of the Peoria streetscape.

Additional data was collected as part of the public workshop process;

#1 Site walk/ team presentations

#2 Preliminary intervention diagramming and discussion

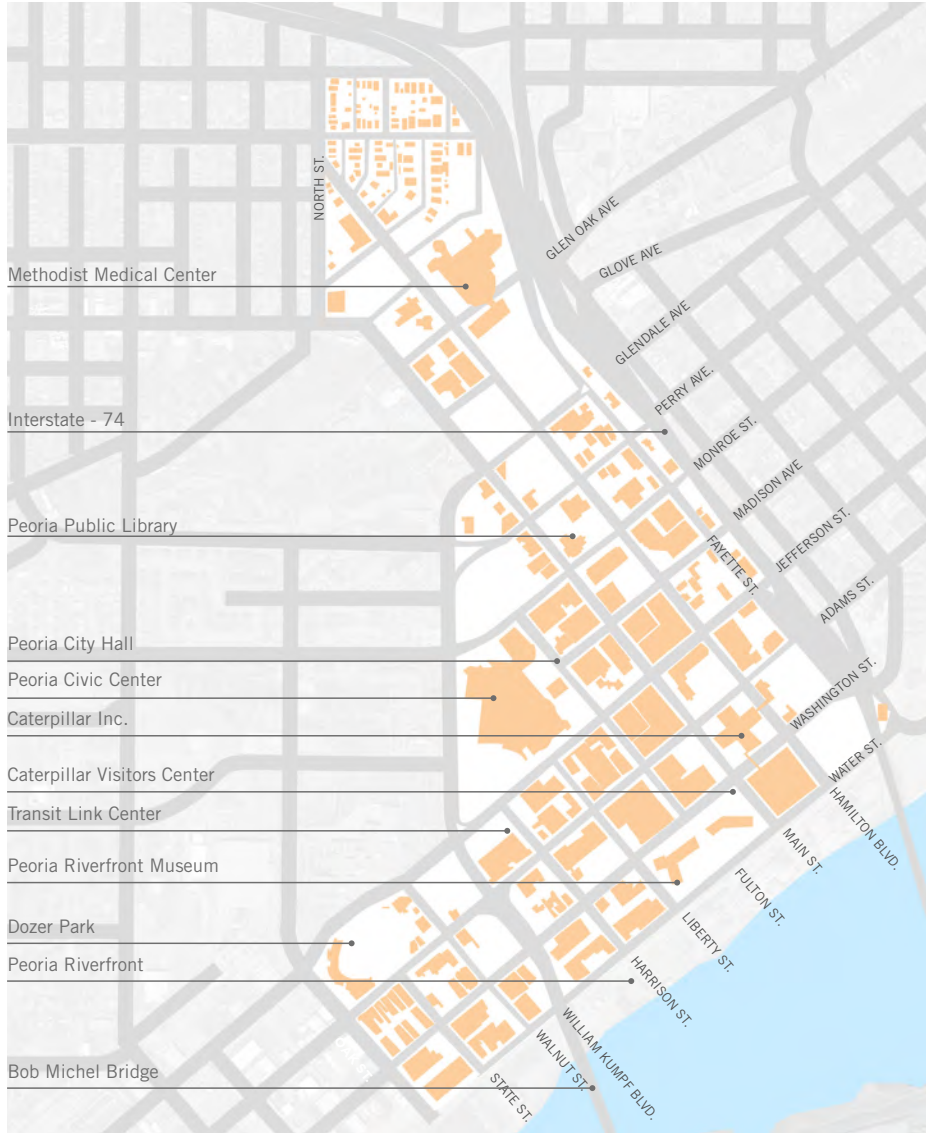
#3 Public comment

2.1

PEORIA EXISTING CONDITIONS

The documenting of the street character also looked at street widths, building patterns, the urban forest, and existing design and lighting features. One of the tours was made after a winter storm event. This storm helped the team understand the process required in dealing with snow removal, storage and management.

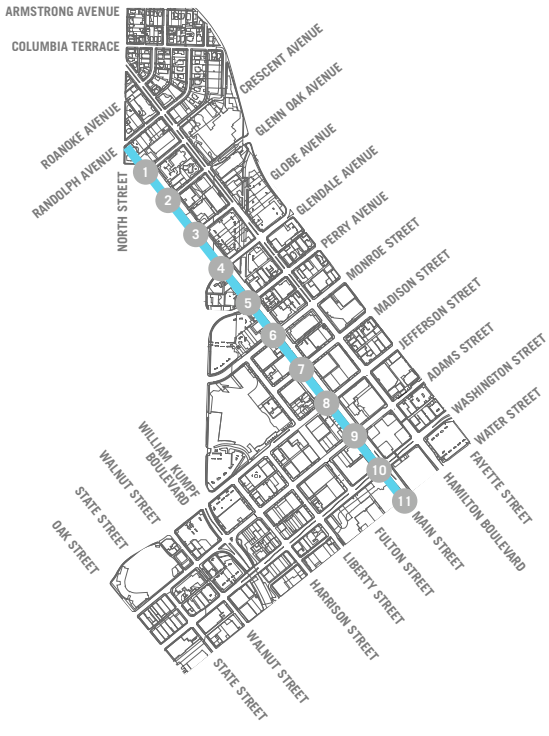
Street sections were prepared for each alignment to illustrate the proportion of the storefront zone, pedestrian zone, amenity zone, parking condition, lane widths and median widths. This documentation established a baseline for contrasting the existing with proposed street typologies.



Peoria Existing Condition Plan

2.2

SITE ANALYSIS



MAIN STREET

Main street plays an important role in the connection between residential neighborhoods in the West, as well as students at Bradley University, to downtown Peoria. Main street meets the Illinois Riverfront, as well as intersects main North-South roads and downtown attractions. It needs to be pedestrian and vehicle friendly.

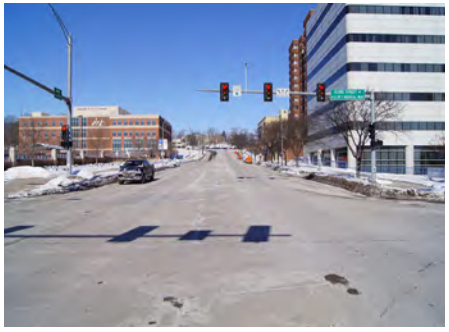
SUMMARY FINDINGS

1. Connection to the Central Business District from Bradley University, the Cottage District and the Orchard District.
2. Peoria Riverfront connection, core-to-shore corridor.
3. CityLink Transportation corridor.
4. Consistent street wall through the Central Business District.
5. Mature tree canopy along the corridor.
6. The bollards at the court house are a dominant feature in the streetscape.
7. Elevation change from north street through the medical center.
8. Key connections include center stage on the Riverfront, Caterpillar museum, Main Street Retail corridor, downtown library and the medical center.

1 MAIN - NORTH

2 MAIN- GLENN OAK

3 MAIN - GLOBE



4 MAIN - GLENDALE

5 MAIN - PERRY

6 MAIN - MONROE

7 MAIN - MADISON

8 MAIN - JEFFERSON

9 MAIN - ADAMS

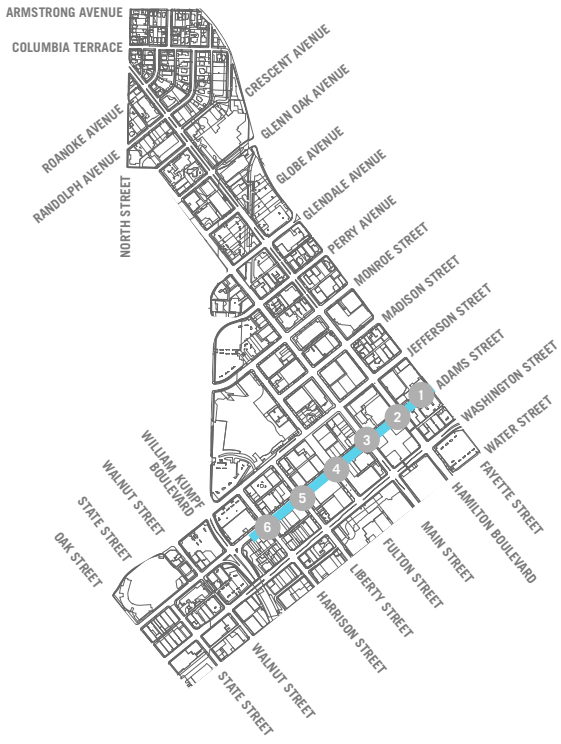
9 MAIN - ADAMS

10 MAIN - WASHINGTON

11 MAIN - WATER

2.3

SITE ANALYSIS



ADAMS STREET

Adams is currently a northbound one-way street. It's wide presence makes it less pedestrian friendly than it's surrounding roads. High speed car traffic makes parking along this road difficult, despite parallel parking spots being plentiful. Creating a safe access route to the CityLink transportation corridor and entertainment venues such as Dozer Park is vital for pedestrian safety.

SUMMARY FINDINGS

1. Adams Street serves as the typical inbound route to the central business district.
2. The one-way street has a three lane condition west of N William Kumph Boulevard and a four lane condition to the east.
3. On-street parallel parking exists on both sides of the street.
4. The travel lanes seem wide and the four lane one-way section makes pedestrian crossings uncomfortable.
5. Adams Street is part of the CityLink transportation corridor.
6. A number of block faces are missing street trees.
7. The southwest intersection of Adams Street and Franklin Street lack pedestrian scale and pedestrian vehicular separation.
8. The sidewalk amenity zone conditions are generous and wide .
9. Key connections include Dozer Park, the CityLink Transit Center, Fulton Plaza, Illinois Central College and Courtyard Square.

1 ADAMS - FAYETTE

1 ADAMS - FAYETTE

2 ADAMS - HAMILTON

2 ADAMS - HAMILTON

3 ADAMS - MAIN

3 ADAMS - MAIN

4 ADAMS - FULTON

4 ADAMS FULTON

5 ADAMS - LIBERTY

5 ADAMS - LIBERTY

6 ADAMS - HARRISON

6 ADAMS - HARRISON

2.4

PEORIA DISTRICTS

The study area is comprised of five (5) distinct districts with consideration given to the historical Near Northside District and its key project adjacency. The Design Team and Steering Committee noted that a cohesive plan could unify downtown Peoria but the unique character of each district should be maintained. The team identified that the transition between the Medical District and Central Business District needed to be strengthened.

Randolph - Roanoke District
11 City Blocks
17 Intersections
38 Block Faces

Medical Center District
8 City Blocks
14 Intersections
34 Block Faces

Central Business District
35 City Blocks
42 Intersections
140 Block Faces

Warehouse District
11 City Blocks
18 Intersections
49 Block Faces

Waterfront District
5 City Blocks
5 Intersections
9 Block Faces

Peoria District Diagram


HISTORY


RIVERFRONT


CHARACTER


CULTURE

RANDOLPH ROANOKE

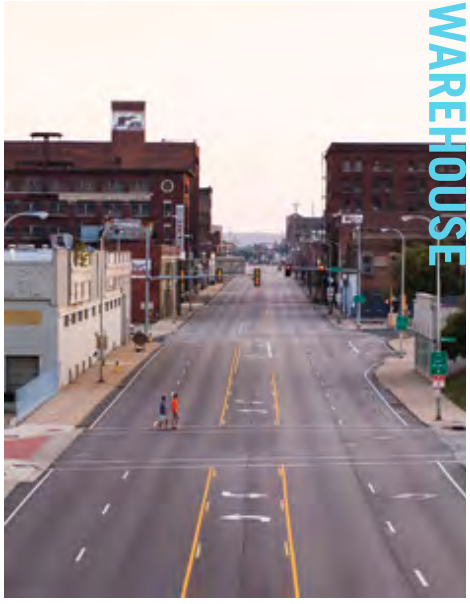
- Predominantly residential neighborhood
- Strong presence of historical homes-- Banners used to identify their district
- Randolph Roanoke Residential Association located in district off of Hamilton Boulevard on Randolph Avenue
- Traffic drawn from Hamilton Boulevard and North Street off of freeway

MEDICAL CENTER

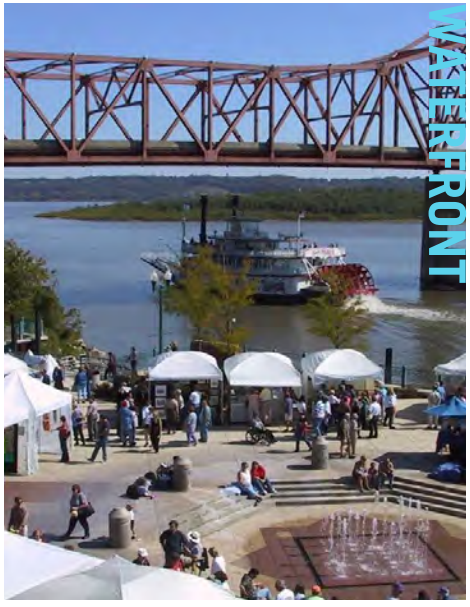
- Synergy across two established hospital campuses. Other key 'users' in the district are the University of Illinois College of Medicine at Peoria, Cancer Research Center, Jump Trading Simulation Education Center, and Illinois Medical Center
- Currently a 'drive to' destination with a need for residential
- Great opportunity for pedestrian/bike connections to Central Business District and 'up' into Main Street/Bradley
- The district somewhat 'bleeds' into the Main Street Form District (Peoria Next Innovation Center and over to Bradley University)

CENTRAL BUSINESS DISTRICT

- Illinois Central College is pulling out of downtown
- Development activity occurring in area that extends towards Medical District.
- Water Street hub of activity balance of Central Business District currently a 9-5 destination
- Summertime food vendor carts enliven street life
- Great potential for increased pedestrian activity within this 'drive to' destination
- Museum, CAT, Riverfront, Civic Center
- New headquarters will definitely bring needed vibrancy for this area



- City of Peoria Form District (one of four)
- The district was added to the National Register of Historic Places on September 17, 2014
- City wants to retain historic character, and build upon it as the 'brand' for this area
- Dozer Park is a prominent destination in this area. Its envisioned to become a small scale version of Wrigleyville (24/7 neighborhood, with residential lofts, bars, restaurants, etc)
- Ongoing streetscape improvements
- Intended to be a neighborhood that will serve the Central Business District. City strongly committed to this area



- Home to Hooters Restaurant, Edgewater Warehouse Building, Power Station, Pavilion, Rock Island Depot, Riverfront Village, Peoria Fire/Rescue Marine Station, The Spirit of Peoria, Powell Press Building, and the Gateway Building
- All buildings along the Riverfront are a mixture of Commercial, Public, and Private spaces
- Railroad divide Water Street and downtown Peoria from bike path and Riverfront Park amenities
- Existing Park on north side of Murray Baker Bridge, as well as between Riverfront Village and Ameren Cilco Heliport

- North of Murray Baker Bridge
- Included Taft Homes - prime redevelopment parcel. Peoria Housing Authority currently seeking development for this site
- Tough neighborhood, but historically significant residential area adjacent to Central Business District
- Provides 'bookend' to Central Business District as Warehouse District does on the other end
- TIF (East Village Growth Cell)

2.5

EXISTING TRAFFIC CIRCULATION

An Existing Traffic Circulation Diagram was prepared to document the existing conditions of the street network. Key on-ramp and off-ramp connnections along I-74 were identified. Two-way street alignments and one-way. were reviewed. Reviewing lane counts and turning movements helped in understanding the levels of service and street network capacities.

This diagram is used as the base diagram for proposed street framework alignments, number of lane adjustments, on-street parking planning, bicycle facility planning and connectivity for local, community and regional connections to the Central Business District. Current bus routes within the study area and to and from the CityLink Transit Center were reviewed as a subset to this diagram.

1 ONE-WAY AND TWO-WAY STREETS

The current traffic plan has both one-way and two-way streets in the Central Business and Warehouse Districts.

2 OVERSIZED TRAFFIC LANES

Many of the traffic lanes are oversized based on the posted traffic speeds.

3 ALIGNMENTS WITH FREEWAY CONDITIONS

Several of the one-way alignments have 4 lanes with near freeway conditions.

4 LOUD SIGNALIZATION

In the Central Business District pedestrian crosswalk signalization is accentuated with sound.

5 NO BICYCLE FACILITIES IN CENTRAL BUSINESS DISTRICT

Bicycle facilities are non-existent within the Central Business District and study area with the exception of a three (3) block bike lane pair along Hamilton Boulevard in the Medical Center.

6 LACKS STANDARD

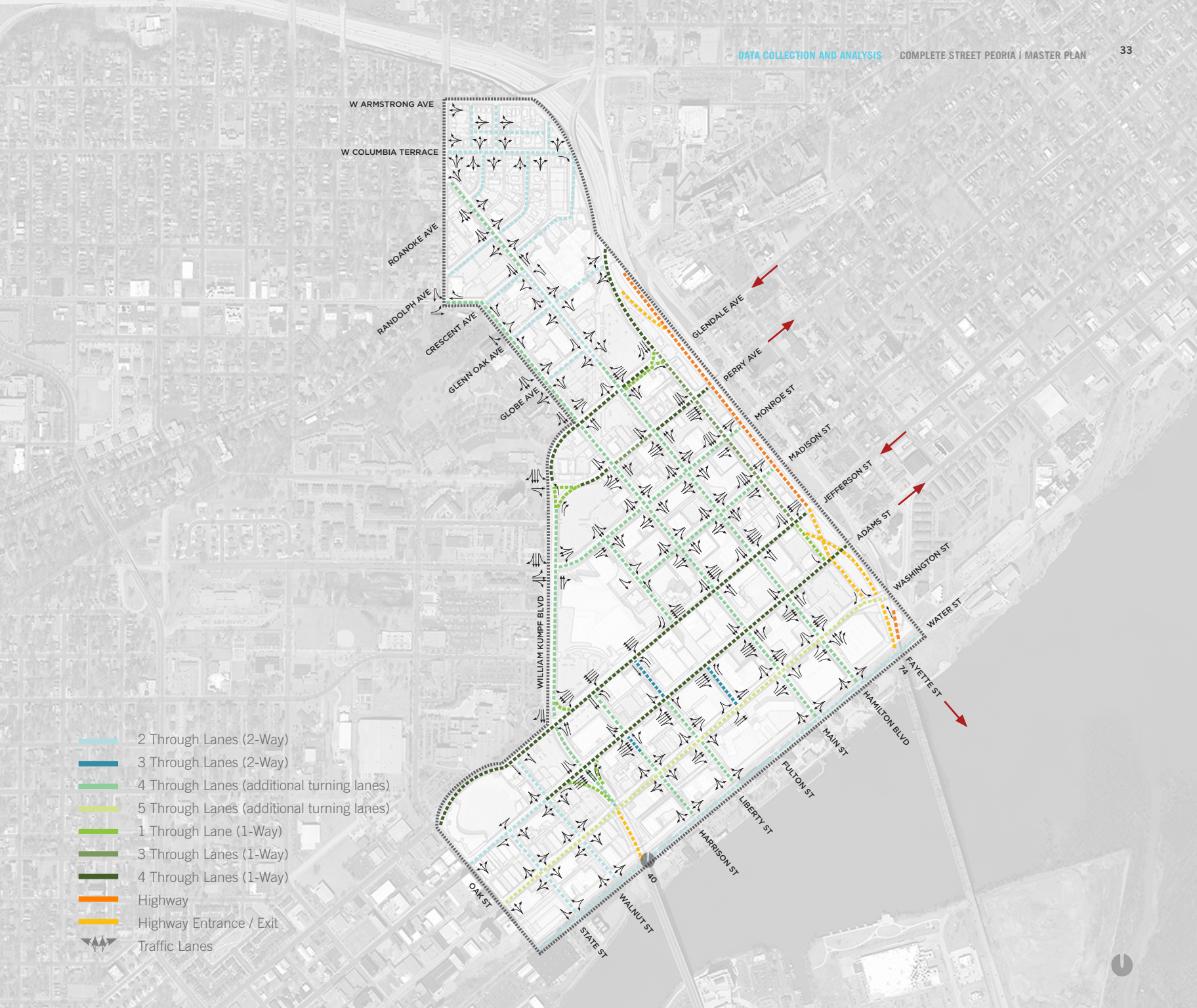
Curb ramps, accessible routes and accessible parking lack an overall standard.

7 STREETSCAPE LACKS STANDARDIZATION

The streetscape amenity zone lacks standardization (lighting, parking meters, benches, trash receptacles and urban amenities). Many conditions require maintenance and are missing in parts of the districts.

8 TREES IN NEED OF CARE

The urban canopy consists of a number of trees that require arbor care,or replacement. A number of gaps, including full blocks, are missing trees.


W ARMSTRONG AVE
W COLUMBIA TERRACE
ROANOKE AVE
RANDOLPH AVE
CRESCENT AVE
GLENN OAK AVE
GLOBE AVE
GLENDALE AVE
PERRY AVE
MONROE ST
MADISON ST
JEFFERSON ST
ADAMS ST
WASHINGTON ST
WATER ST
FAYETTE ST
74
HAMILTON BLVD
MAIN ST
FULTON ST
LIBERTY ST
HARRISON ST
40
WALNUT ST
STATE ST
OAK ST
WILLIAM KUMPF BLVD
2 Through Lanes (2-Way)
3 Through Lanes (2-Way)
4 Through Lanes (additional turning lanes)
5 Through Lanes (additional turning lanes)
1 Through Lane (1-Way)
3 Through Lanes (1-Way)
4 Through Lanes (1-Way)
Highway
Highway Entrance / Exit
Traffic Lanes

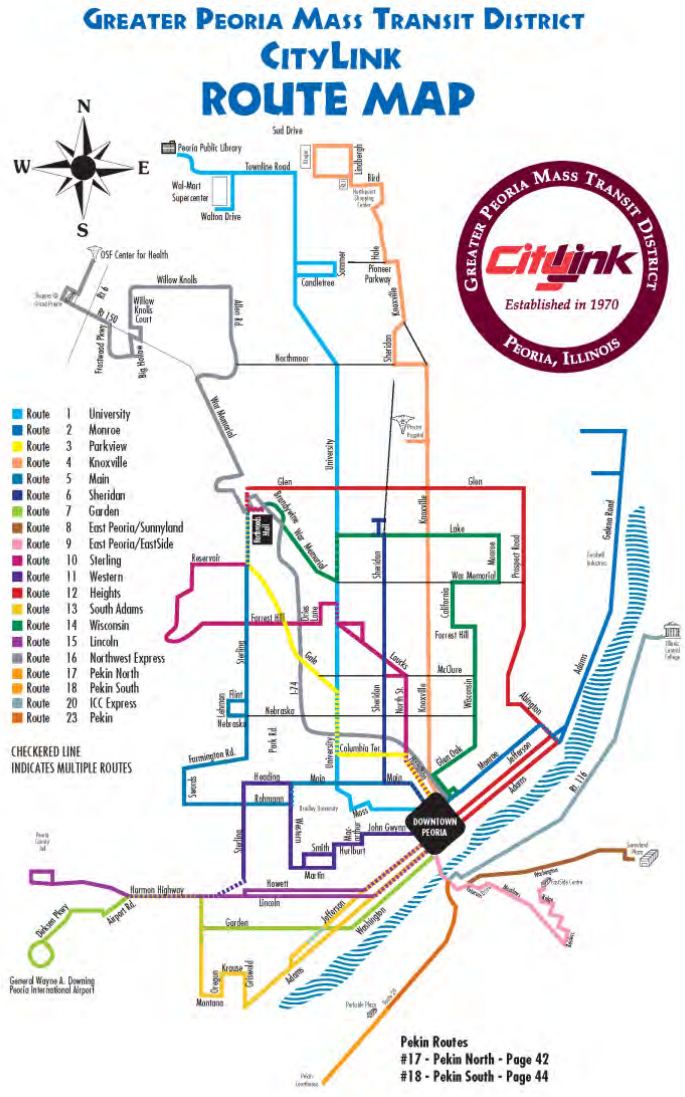
2.6

EXISTING PUBLIC TRANSIT

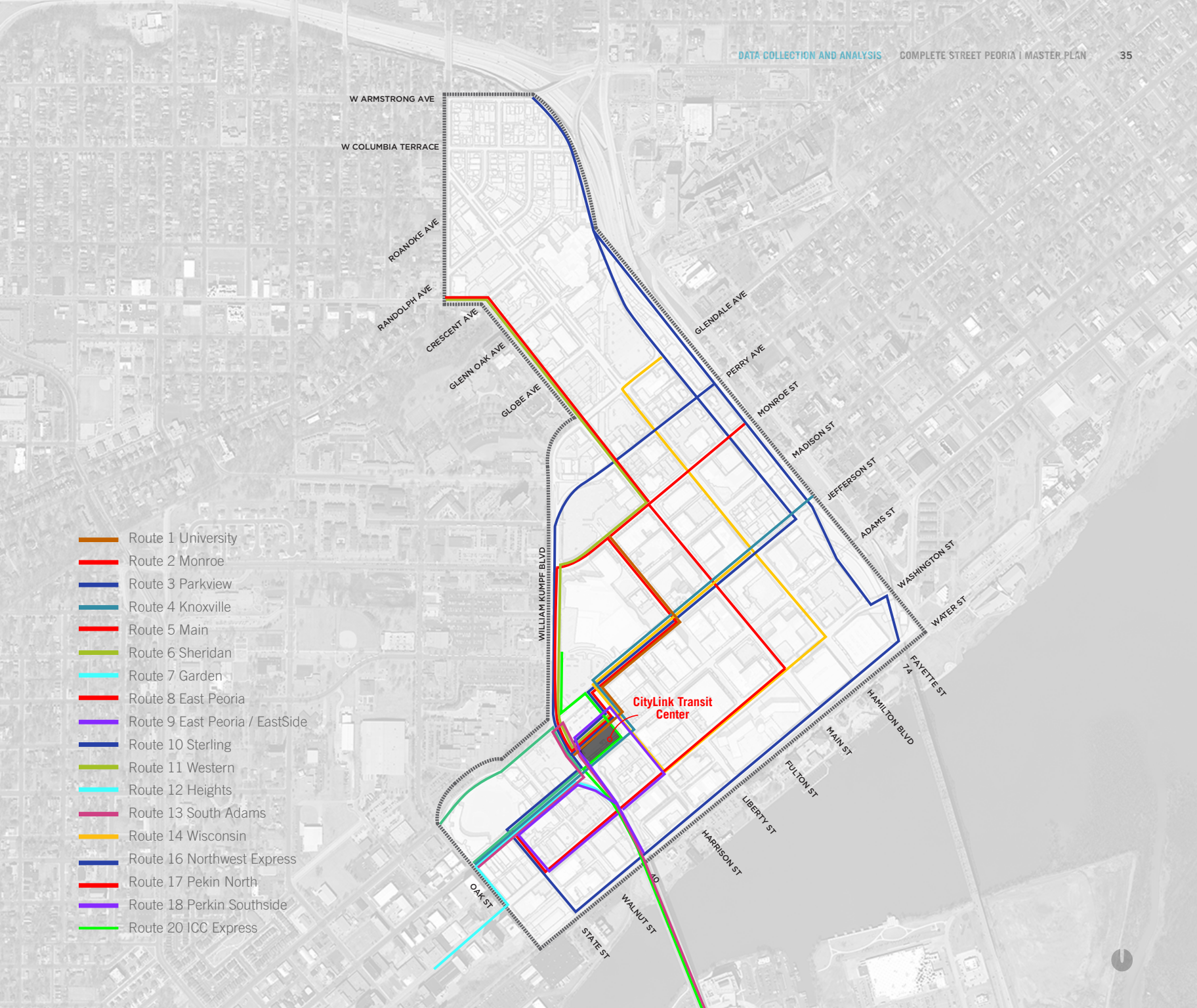
The Greater Peoria Mass Transit District operates the CityLink which is a regularly scheduled bus service that includes 23 routes throughout the greater metro area. CityLift operates in tandem with CityLink and offers transportation services to citizens with paratransit needs. CityLink services cover Peoria, Peoria Sunnyland, Peoria EastSide and West Peoria.

The CityLink Transit Center is located at Harrison St. and SW Adams St. In addition to CityLink and CityLift, a Peoria charter bus service also provides connections to Chicago, Lake Champaign and other regional destinations.

A study of the existing transit routes was overlayed by the design team so that the proposed traffic plan and bicycle facilities could be reviewed for potential conflicts, overlap and access. CityLink buses have been outfitted with bike racks that offer citizens a multimodal transit option.



CityLink Route Map ridecitylink.org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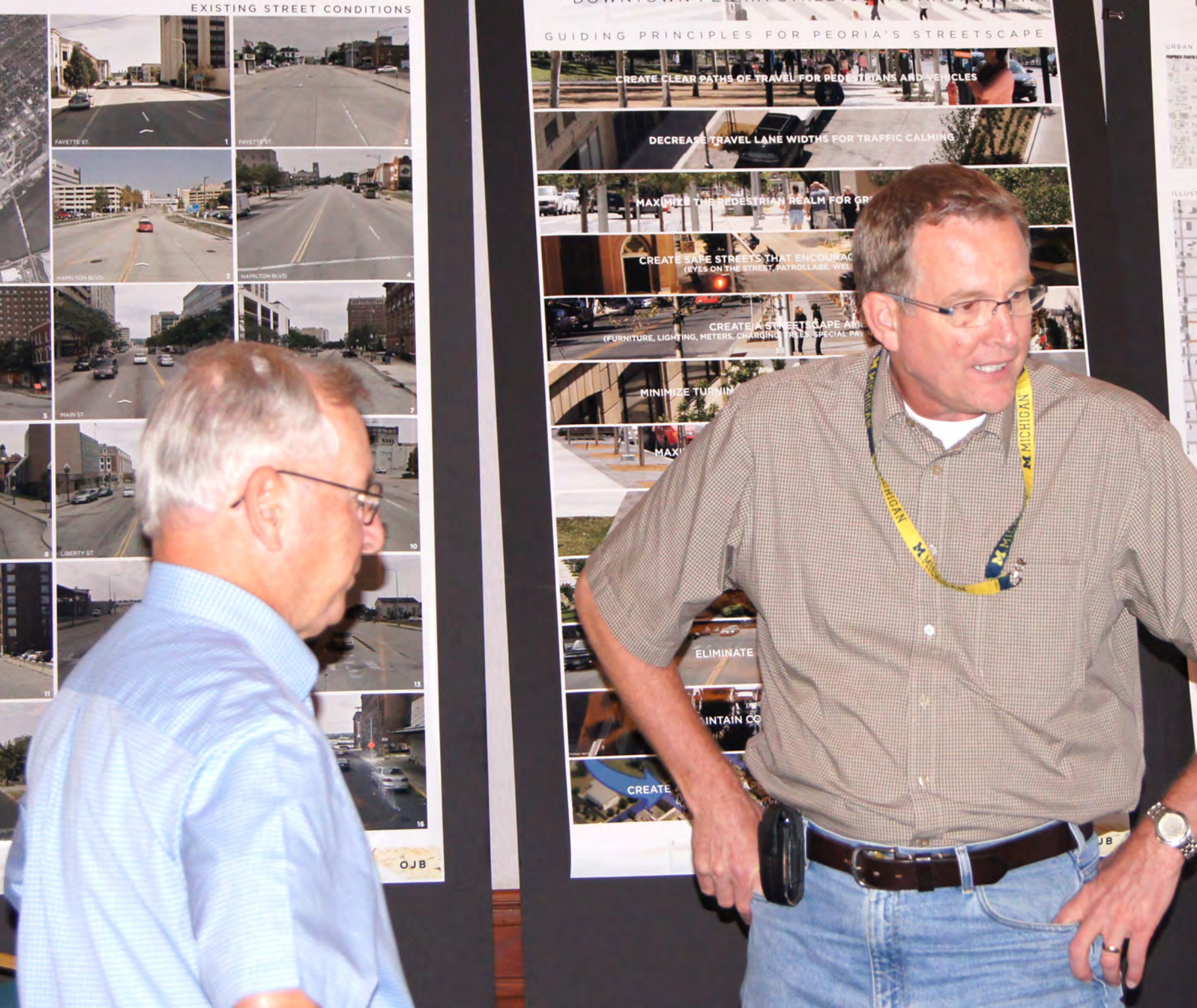
HAMILTON BLVD
MAIN ST
FULTON ST
LIBERTY ST
HARRISON ST
WALNUT ST
STATE ST
OAK ST
CityLink Transit Center
Route 1 University
Route 2 Monroe
Route 3 Parkview
Route 4 Knoxville
Route 5 Main
Route 6 Sheridan
Route 7 Garden
Route 8 East Peoria
Route 9 East Peoria / EastSide
Route 10 Sterling
Route 11 Western
Route 12 Heights
Route 13 South Adams
Route 14 Wisconsin
Route 16 Northwest Express
Route 17 Pekin North
Route 18 Perkin Southside
Route 20 ICC Express


EXISTING STREET CONDITIONS
FAYETTE ST. 1
FAYETTE ST. 2
HAMILTON BLVD. 3
HAMILTON BLVD. 4
MAIN ST. 7
LIBERTY ST. 10
13
16
OJB
GUIDING PRINCIPLES FOR PEORIA'S STREETSCAPE
CREATE CLEAR PATHS OF TRAVEL FOR PEDESTRIANS AND VEHICLES
DECREASE TRAVEL LANE WIDTHS FOR TRAFFIC CALMING
MAXIMIZE THE PEDESTRIAN REALM FOR GR
CREATE SAFE STREETS THAT ENCOURAG
(EYES ON THE STREET, PATROLLABE, WEL
CREATE A STREETSCAPE AM
(FURNITURE, LIGHTING, METERS, CHARGING
MINIMIZE TURNIN
MAXI
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CREATE
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OJB

3.0

PUBLIC PROCESS

INTENT

As part of the Master Planning Process a series of Public Meetings and Design Charettes were hosted by the City of Peoria and the Steering Committee. These open forum meetings included citizens, downtown stakeholders, members of the design team, steering committee and representatives of the Peoria Transportation Commission. The meetings were hosted by the City Managers Office and were held in the Gateway Building and also at the Peoria River front Museum.

This series of meetings allowed for the sharing of project information, public input and an opportunity for questions and answers to key ideas and information that was presented to the group.

To ensure that public comment was received, each meeting included time for breakout group work sessions where informal teams discussed key issues related to site visits, mapping exercises or group questionnaires. After these breakout sessions a spokesperson from each team presented key discussion points and ideas to the entire group.

These community meetings were invaluable as key information was shared by those public partners who offered thoughtful insight and clarification into the complexities of the study area.


PUBLIC


TIMELESS DESIGN
SAFE CROSSINGS
BIKE FACILITIES
SHARING VISIO


KELLY SEED
PEORIA
EXPLORE


N


COLLABORATE


BRAINSTORM

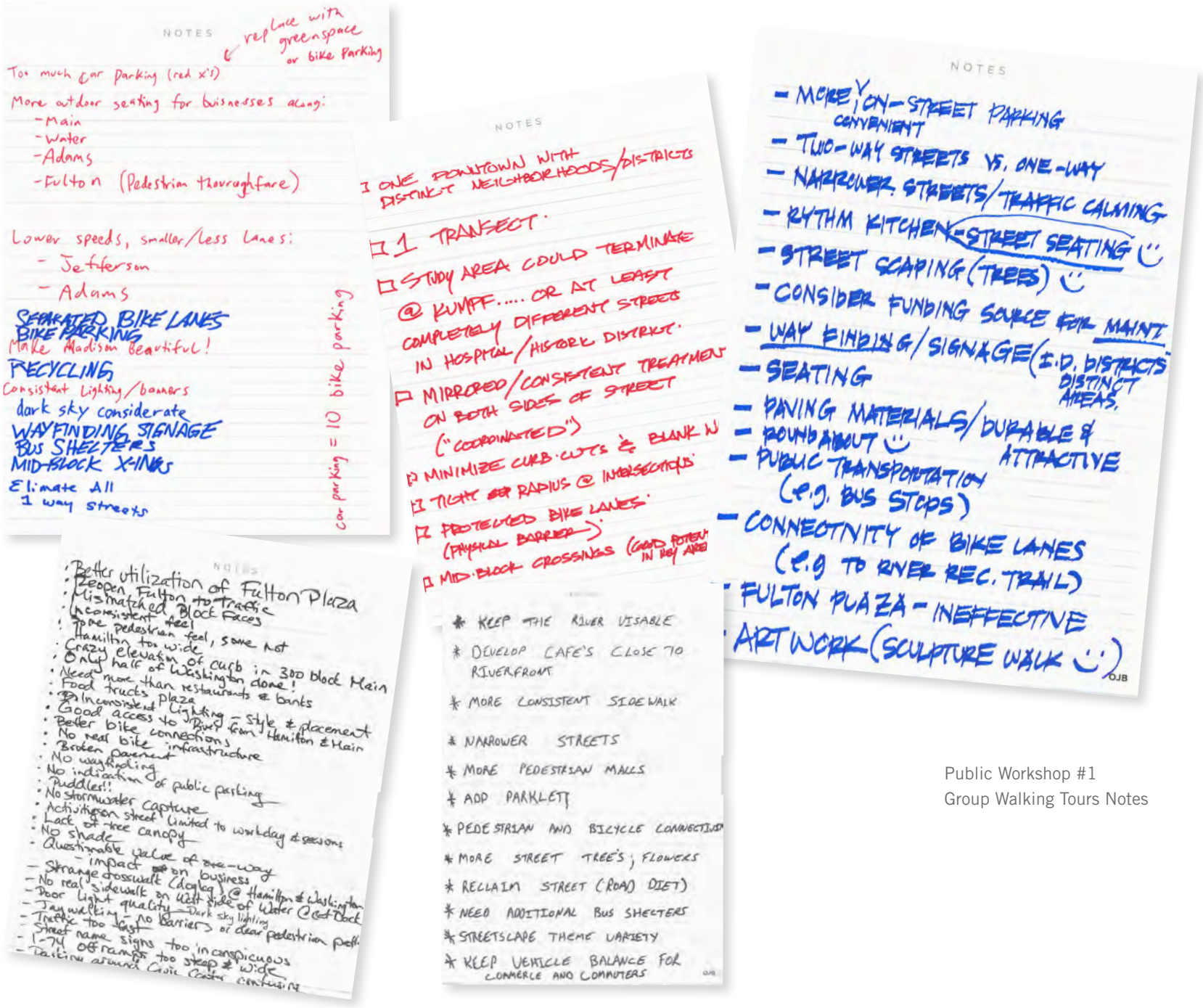
3.1

PUBLIC WORKSHOP #1

The first public meeting was held in the Gateway Building and served as an introduction to the master plan and process. The workshop agenda included team introductions, a history and background of Complete Streets, preliminary design methodologies, a review and discussion of preliminary Project Goals, walking tours, a visioning session and group presentations.

Walking tours were lead by a member of the design team or steering committee and allowed for in-the-field discussion of existing conditions. Each group was able to identify conditions that are working well, areas of concern and the discussion of potential improvements and enhancements to the existing streetscapes.

Public Workshop #1 Boards



Public Workshop #1
Group Walking Tours Notes

PUBLIC INPUT

FROM PUBLIC WORKSHOP 1

After the walking tours each group returned to summaries key finds. Groups were also given study area maps that they could mark up with questions or comments identifying areas to be studied or considered by the design team.

A spokesperson from each team then presented a summary of finding along with any key points identified during the table discussions and mapping exercise. This interactive presentation along with questions and answer lead to the identification of several existing conditions and community designers Summary reports were given by a member of each group. This information was then documented for vetting and incorporation into the preliminary traffic plans, urban overlays and design studies.

WALKING TOUR OBSERVATIONS

STREET TYPOLOGY

PARKING

BIKE INFRASTRUCTURE

WAYFINDING/DISTRICT IDENTIFICATION

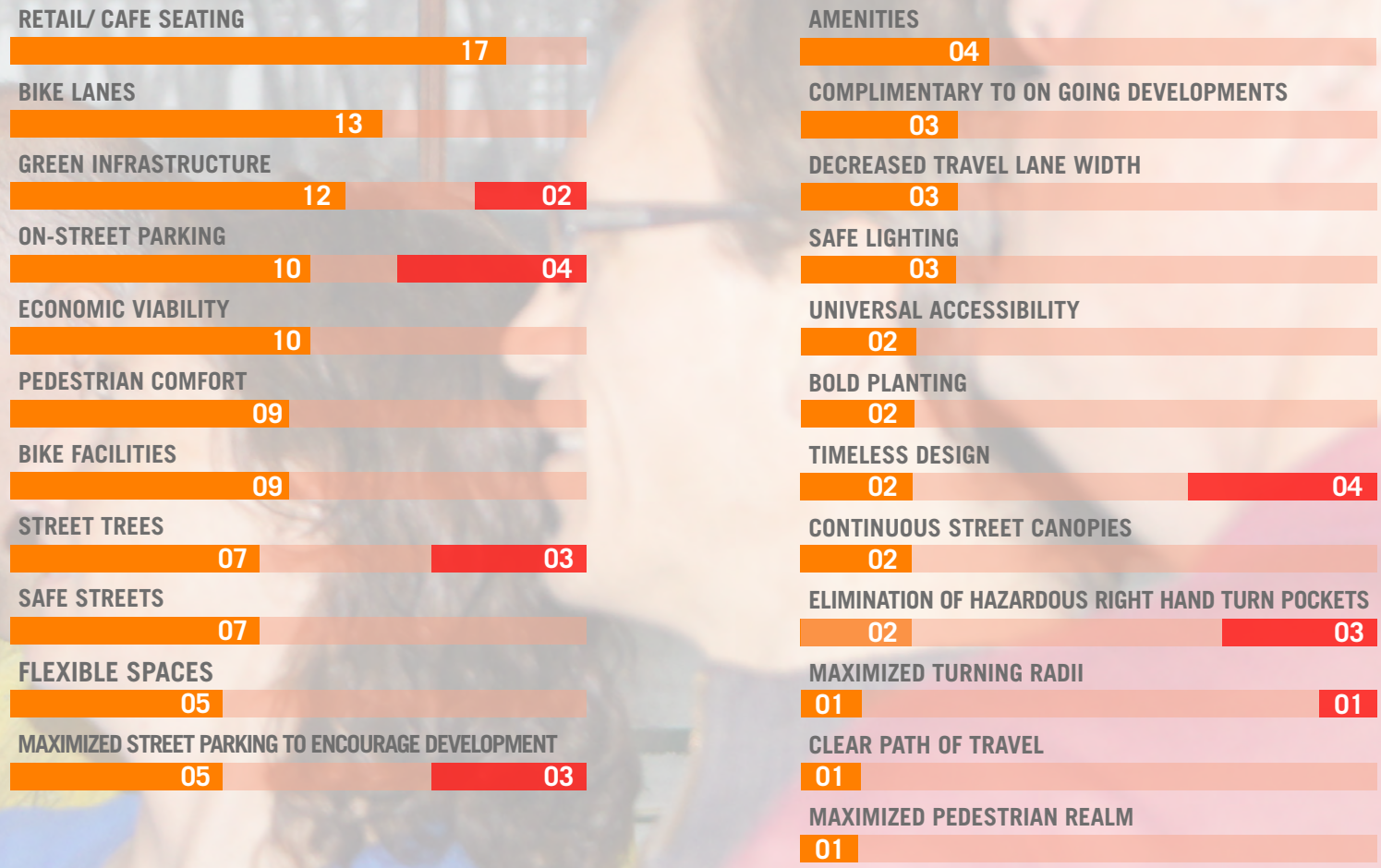
LIGHTING

STREETSCAPING

STREETSCAPE CONSIDERATIONS

GUIDING PRINCIPLES FOR PEORIA'S STREETSCAPE

Presentation Boards were displayed that included the study area, Complete Streets Principles, Existing Street Conditions, Preliminary Urban Overlays, Visioning Imagery and Proposed Guiding Principals. Attendees were given a set of red and green stickers that allowed them to visit each board and to identify concepts and imagery that they felt was important or less important. A summary of this exercise is listed below.



Summary of Priorities

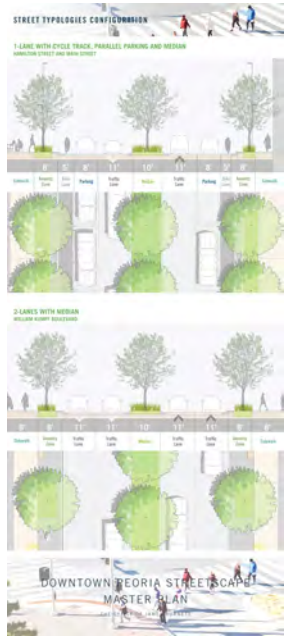
3.2

PUBLIC WORKSHOP #2

The second Public Workshop was held at the Peoria Riverfront Museum. The agenda included a recap of Workshop #1, Peoria Streetscape Goals, a full site analysis review, Transportation Planning Methodologies, Proposed Urban Overlays and group charettes to study key street transition points.

The focus of the meeting was to discuss and work through a series of boards and slides that focus on connecting streets and people. The design team presented existing street sections for each of the study area alignments. These sections also identified constraints and opportunities for proposed improvements. At this point in the discussion 6 key street alignment transition points were presented. These alignments along with base maps of the street network were discussed, sketched on and diagramed in smaller breakout groups.

This interactive session allowed for an open dialog that validated the steering committee recommendations as well as clarified and recommended additional areas of study to the design team. These alignments included Fulton Plaza, Jefferson and Adams Street realignments as well as bicycle facilities and routing options.



Public Workshop #2 Boards

PUBLIC INPUT

FROM PUBLIC WORKSHOP 2

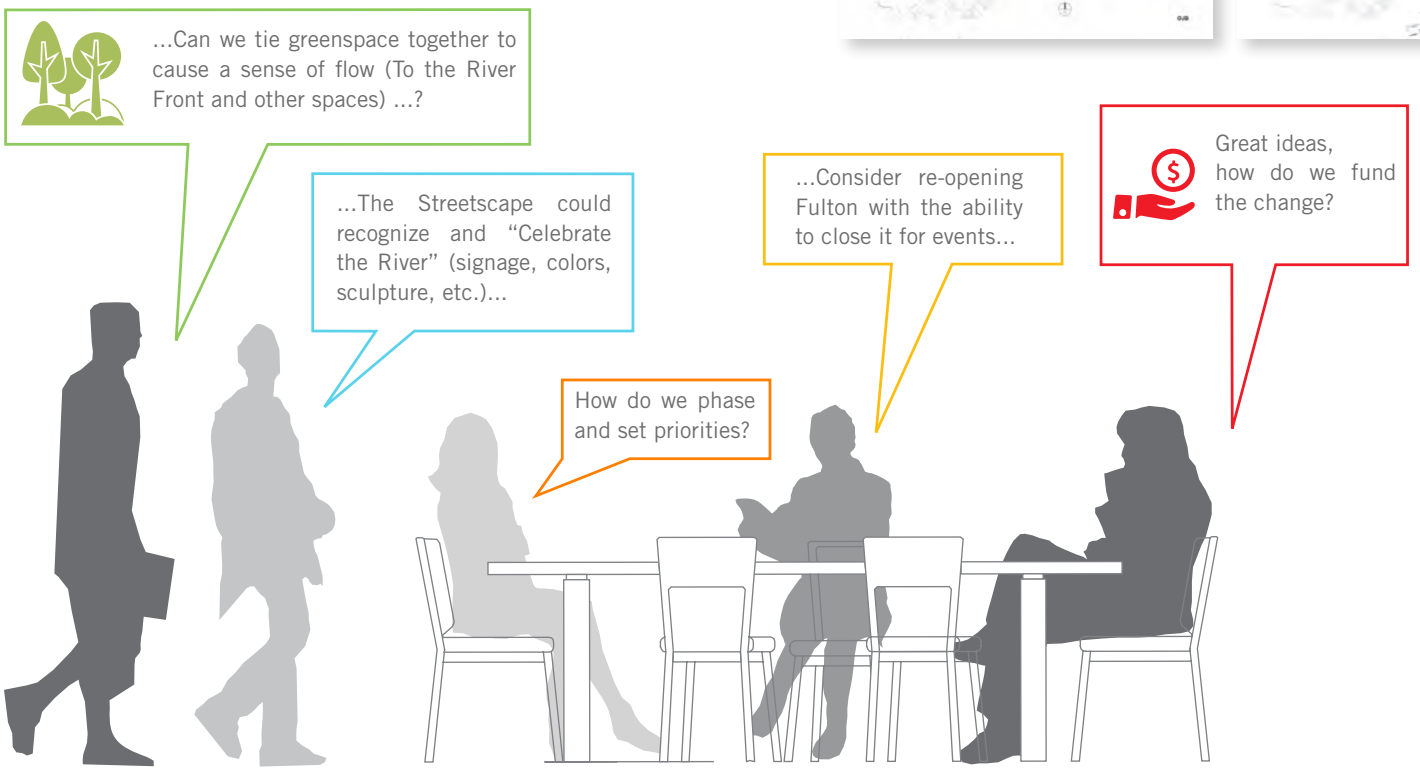
With preliminary Traffic Plans and Key Streetscape Transition locations identified, each of the breakout groups were able to have meaningful discussions and conversations related to the proposed traffic plan, parking overlay, bicycle plan, walkability, openspace and the proposed idea of an eco-street for stormwater collection and filtration.

A number of comments and diagrams were articulated by the groups during the team presentations. These comments ranged from maintenance, to phasing, to roadway realignment.

Public Workshop #2 Meeting Comments







...Can we tie greenspace together to cause a sense of flow (To the River Front and other spaces) ...?
...The Streetscape could recognize and "Celebrate the River" (signage, colors, sculpture, etc.)...
How do we phase and set priorities?
...Consider re-opening Fulton with the ability to close it for events...
Great ideas, how do we fund the change?

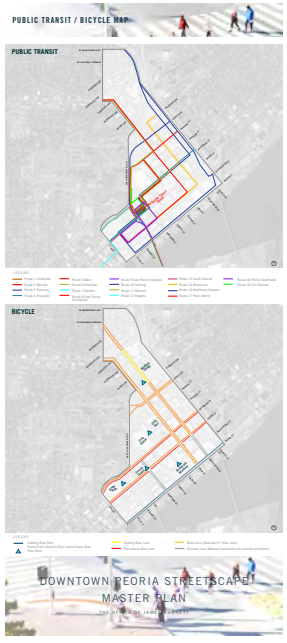
3.3

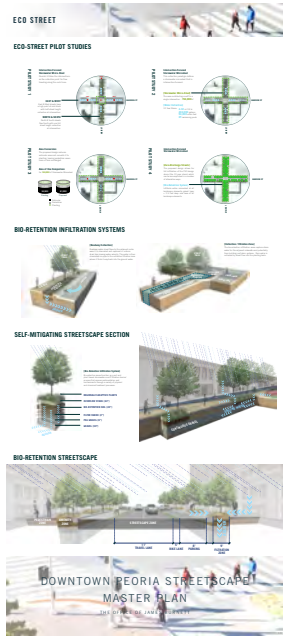
PUBLIC WORKSHOP #3

In the final Public Workshop the Design Team presented the draft Peoria Complete Streets Master Plan. This plan included the proposed planning diagrams, street typologies, parking facilities, bicycle facilities, walkability and open space suggestions, eco-street detailing, and project phasing recommendations.

During the presentation of the plan questions and comments were addressed, clarifications were given and notes were taken for inclusion and consideration in the final document. The workshop concluded with the design team sharing a short video titled “Peoria Complete Streets,” that summarized the process, plans, illustrations and recommendations.

After the meeting the design team and steering committee fielded one-on-one questions and discussed plan specifics in greater detail.





Public Workshop #3 Boards

4.0

PLANNING CONCEPT

INTENT

The Master Planning Development began with the creation of a series of street framework design iterations. These preliminary schemes considered combined one-way, two-way frameworks and a two-way framework. These initial traffic circulation plans were then overlaid with parking, bicycle facilities, walkability and open space. Each initial plan was then vetted by the design team and steering committee to ensure that the Project Goals were met.

This iterative process included the discussion of Peoria adopting a Peoria Complete Streets Policy. Transportation Planning Methodologies were also established and included 15 key points of best practice based on context discovered in the initial Data Collection and Synthesis Phases.

The resulting recommended Traffic Circulation Plan included a phased street framework that transitions the current street network to a two-way system. The plan also identified the design realignment or transition of 6 key street, intersection or lane configurations.


HOTEL
PERE
MARQUETTE

“The best streets are those that can be remembered. . . Thinking of a city, including one’s own, one might well think of a particular street and have a desire to be there; such is a memorable street”

Allan B. Jacobs, Complete Streets

4.1

COMPLETE STREETS POLICY

COMPLETE STREETS

For decades, transportation planning has been focused solely on able-body and automobile traffic for Americans. However, the need for transportation outside of that group has grown tremendously.

The Complete Streets movement aims to develop integrated, connected networks of streets that are safe and accessible for all people, regardless of age, ability, income, ethnicity, or chosen mode of travel.

The Complete Streets program starts at the beginning of the project when funding decisions are being made and continues throughout the planning and design phases. This ensures the creation of an environment where every resident can travel safely and conveniently.

1 SETS A VISION

A strong vision, unique to its geography, can inspire a community to follow through with Complete Streets. Determine how and why the community wants a complete street. For example, Decatur, GA - Promoting health through physical activity and active transportation.

2 SPECIFIES ALL USERS

Complete Streets policy must apply to everyone traveling along the road which includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.

3 ALL PROJECTS

The Complete Street approach is different because it views transportation improvements as opportunities to create better streets. The process includes design, planning, maintenance, and operations for the entire right of way.

4 EXCEPTIONS

Maximize on-street parking within the Central Business District, Warehouse District and Riverfront Park.

5 CREATES A NETWORK

Minimize turning radii at intersections. Provide for a 20'-0" radius at intersections.

6 ALL AGENCIES AND ALL ROADS

Provide a clear delineation between the pedestrian, bicycle, and vehicular travel paths.

7 DESIGN CRITERIA

Provide for automatic "walk" signalization on all pedestrian crosswalks.

8 CONTEXT-SENSITIVE

Provide for pedestrian walkability and accessibility for all users.

9 PERFORMANCE MEASURES

Develop a maintenance friendly street section that considers weather conditions and future flexibility.

Prepared by Smart Growth America and the National Complete Streets Coalition

4.2

TRANSPORTATION PLANNING METHODOLOGIES

1 TRAFFIC PLAN

Develop a traffic plan for the existing one-way / two-way system within the Central Business District and the Warehouse District. Provide an alternative traffic plan that establishes a two-way system with the Central Business District and the Warehouse District.

2 A BALANCED LEVEL OF SERVICE - ALL USERS

Establish a provision for an appropriate level of service to the downtown environment. Understand when the peak times are during the traffic cycle.

3 ALTERNATIVE TRANSPORTATION

Encourage a system in which alternative transportation, mass transit, walking and bicycling are encouraged.

4 MAXIMIZE PARKING

Maximize on-street parking within the Central Business District, Warehouse District and Riverfront.

5 MINIMIZE VEHICULAR PEDESTRIAN CONFLICTS

Eliminate right hand turn lanes from the traffic system. This recommendation would also encourage the incorporation of signage to promote a no-right-on-red policy. This policy has been effective in reducing vehicular/pedestrian conflicts at intersections.

6 REDUCE DEDICATED TURN LANES

Eliminate or minimize left hand turn lanes from the traffic diagram.

7 DEVELOP A COMPREHENSIVE BIKE PLAN

Provide provisions for an integrated bicycle system in the Central Business District, Warehouse District and Riverfront. Introduce bike lanes between on-street parking spaces and vehicular traffic lanes where street widths allow. Provide sharrow lanes to allow for continuous bike routes within the district and beyond.

8 CONSIDER APPROPRIATE LANE WIDTHS

Minimize travel lane widths. Provide for 11’-0” wide vehicular lanes where possible.

9 ESTABLISH APPROPRIATE INTERSECTION RADII

Minimize turning radii at intersections. Provide for a 20'-0" radius at intersections, 15'-0" radius for narrower right-of-way conditions.

10 CLEARLY DEFINED TRAVEL PATHS

Provide a clear delineation between the pedestrian, bicycle, and vehicular travel paths.

11 CLARITY OF SIGNALIZATION

Provide for automatic "walk" signalization on all pedestrian crosswalks.

12 UNIVERSAL ACCESSIBILITY

Provide for pedestrian walkability and accessibility for all users.

13 MAINTENANCE STRATEGIES

Develop a maintenance friendly street section that considers weather conditions and future flexibility.

14 STREET TREES - ESTABLISH THE URBAN CANOPY

Create a continuous canopy throughout the Central Business District, Warehouse District and Riverfront. Street trees at 22'-0" on center or 33'-0" on center.

15 CLEAR DESIGN VISION

Develop a true complete street section.

16 WAY FINDING

Develop a signage program for the central business district.

4.3

PROPOSED TRAFFIC CIRCULATION (COMPOSITE)

KEY TRANSITIONING RECOMMENDATIONS

Provide for one and two-way traffic on all streets in the Central Business and Warehouse Districts, transitioning to a two-way system.

1 Glendale Avenue William Kumpf Alignment

Provide for a two-way street on Glendale Avenue and William Kumpf Boulevard. Provide a single north turning to northeast bound lane between Perry Avenue and Fayette Street.

2 Perry Avenue Connection

Provide for a two-way street on Perry Avenue connecting the Near Northside Neighborhood on the east to the Goose Lake Neighborhood on the west.

3 Fayette Street Access

Provide for a two-way street on Fayette street by adding a single northbound lane between Glendale Avenue and Jefferson Street.

4 Jefferson Street Adams Street - Street Diet

Reduce the number of one-way lanes on the pair of Jefferson Street and Adams Street down to 3 lanes with a dedicated bike lane. Lane width should be expanded to accommodate an additional bike lane in the future two-way configuration.

5 Jefferson Street Adams Street Re-configuration

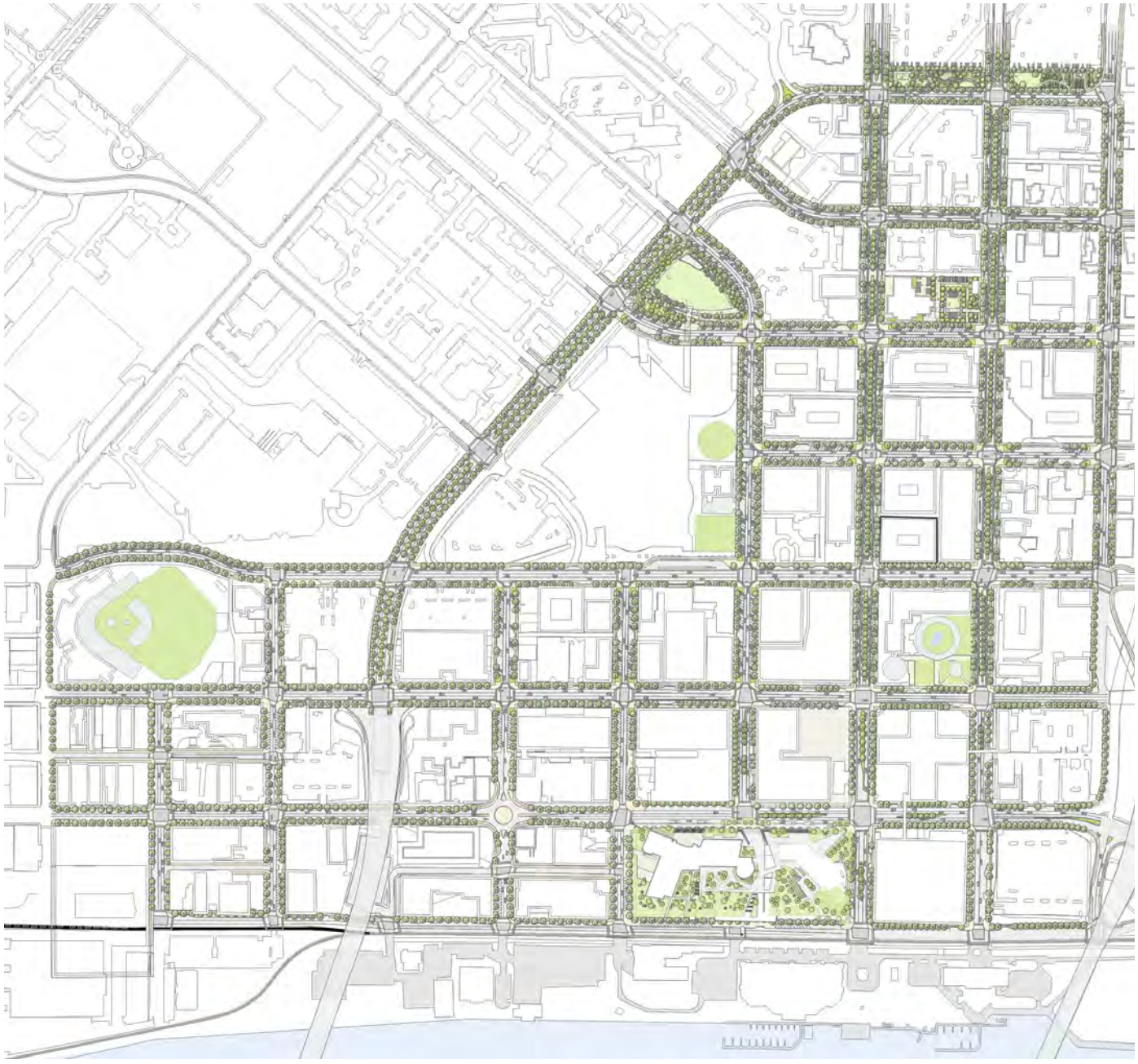
Transition the one-way pair of Jefferson Street and Adams Street to two-way streets. The roadway configuration will provide for one lane in each direction with a center turn lane. A second bike lane will be provide on each roadway alignment.

6 Fulton Street Connections

Provide for a two-way street on Fulton Street between Adams Street and Jefferson Street to accommodate two-way traffic from Monroe Street to Washington Avenue.


W ARMSTRONG AVE
W COLUMBIA TERRACE
ROANOKE AVE
RANDOLPH AVE
CRESCENT AVE
GLENN OAK AVE
GLOBE AVE
WILLIAM KUMPF BLVD
OAK ST
STATE ST 1/1 TWO WAY LANES
WALNUT ST 1/1 TWO WAY LANES
HARRISON ST 1/1 TWO WAY LANES
LIBERTY ST 1/1 TWO WAY LANES
FULTON ST 1/1 TWO WAY LANES
MAIN ST 1/1 TWO WAY LANES
HAMILTON BLVD 1/1 TWO WAY LANES
FAYETTE ST 2/1 TWO WAY LANES
WATER ST 1/1 TWO WAY LANES
WASHINGTON ST 2/2 TWO WAY LANES
ADAMS ST 4/3 LANES ONE WAY
JEFFERSON ST 3 LANES ONE WAY
MADISON ST 1/1 TWO WAY LANES
MONROE ST 1/1 TWO WAY LANES
PERRY AVE 1/1 TWO WAY LANES WITH PARKING
GLENDALE AVE 2/1 TWO WAY LANES
74
40
2 Through Lanes
4 Through Lanes (additional turning lanes)
1 Through Lane (1-Way)
3 Through Lanes (1-Way)
3 Through Lanes (2-Way)
Highway
Highway Entrance / Exit
Traffic Lanes

AutoCAD Linework



Illustrative Master Plan

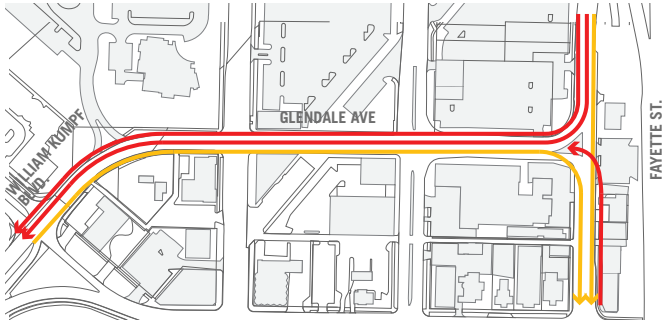
4.31

KEY TRANSITION

GLENDALE AVENUE AT FAYETTE STREET

PROPOSED ALIGNMENT

Provide for a two-way street on Glendale Avenue and William Kumpf Boulevard. Provide a single north turning to northeast bound lane between Perry Avenue and Fayette Street.



Travel Lane
Travel Lane

Medical Center Park


MEDICAL CENTER PARK WEST
MAIN STREET
GLENDALE AVENUE

Medical Center Park

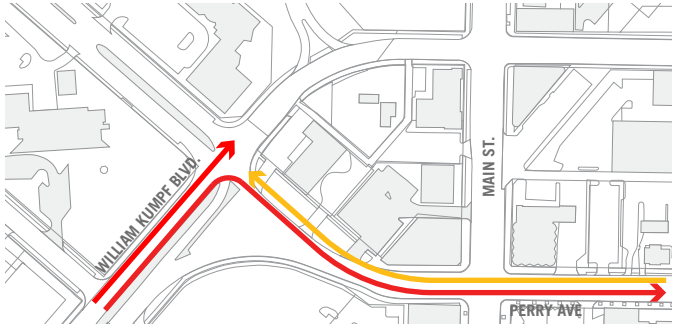
4.32

KEY TRANSITION

PERRY AVENUE AT WILLIAM KUMPF BOULEVARD

PROPOSED ALIGNMENT

Provide for a two-way street on Perry Avenue connecting the Near Northside Neighborhood on the east to the Goose Lake Neighborhood on the west.



Travel Lane
Travel Lane

Cross Town Connector

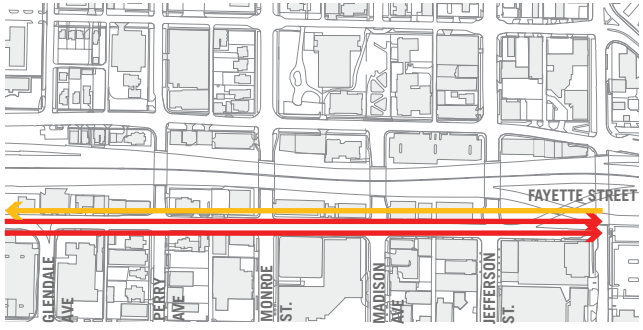
4.33

KEY TRANSITION

FAYETTE STREET

PROPOSED ALIGNMENT

Provide for a two-way street on Fayette Street by adding a single northbound lane between Glendale Avenue and Jefferson Street.



Travel Lane
Travel Lane


FAYETTE ST.
MONROE ST.
MADISON AVE
JEFFERSON ST.

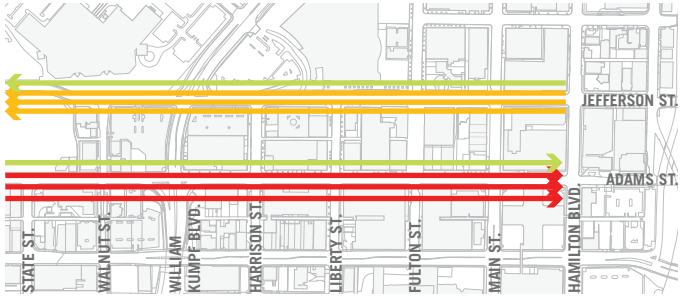
4.34

KEY TRANSITION

ADAMS STREET & JEFFERSON STREET

PROPOSED ALIGNMENT (PHASE ONE)

Reduce the number of one-way lanes on the pair of Jefferson Street and Adams Street down to 3 lanes with a dedicated bike lane. Lane width should be expanded to accommodate an additional bike lane in the future two-way configuration.



Travel Lane
Travel Lane
Bike Lane

PROPOSED ALIGNMENT (PHASE TWO)

Transition the one-way pair of Jefferson Street and Adams Street to two-way streets. The roadway configuration will provide for one lane in each direction with a center turn lane. A second bike lane will be provided on each roadway alignment.

Travel Lane
Travel Lane
Center Turn Lane
Bike Lane


MONROE ST.
MADISON AVE.
JEFFERSON ST.
ADAMS ST.
STATE ST.
WALNUT ST.
WILLIAM KUMPF BLVD.
HARRISON ST.
LIBERTY ST.
FULTON ST.
MAIN ST.
HAMILTON BLVD.

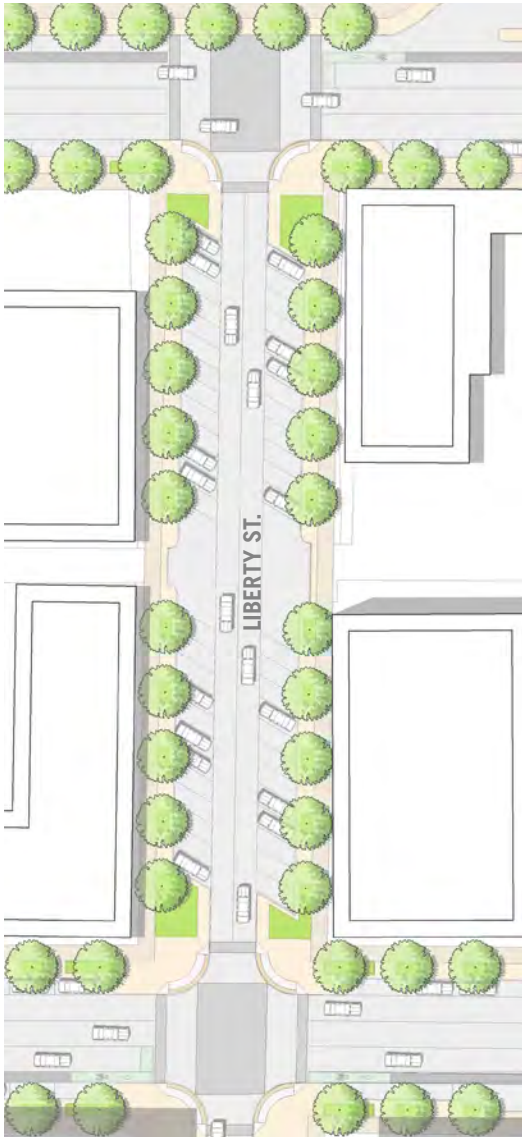
4.35

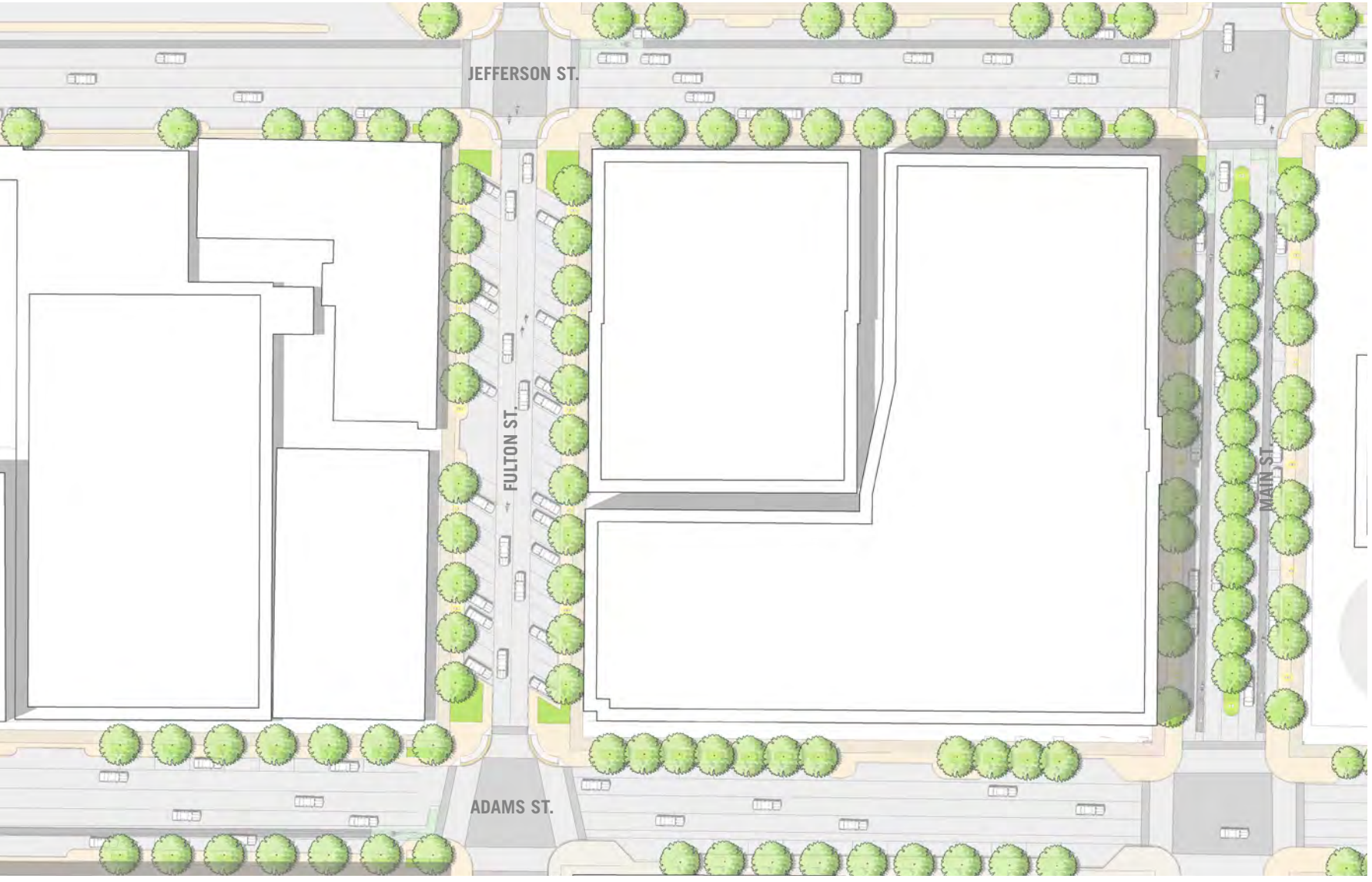
KEY TRANSITION

FULTON PLAZA

PROPOSED ALIGNMENT

Provide for a two-way street on Fulton Street between Adams Street and Jefferson Street to accommodate two-way traffic from Monroe Street to Washington Avenue.




JEFFERSON ST.
FULTON ST.
MAIN ST.
ADAMS ST.

4.4 STREETSCAPE TERMINOLOGY

Amenity Zone
Technical definition

Bio-retention
The collection of rain or stormwater in a planting bed, swale or greenspace and the process of slowly filtering and processing the water back into the underlying soil.

Bio-filtration
The process of removing contaminants and sedimentation from stormwater runoff. A bio-filtration soil treatment section often includes native and adaptive plants, specialty soil mix, pea gravel and gravel layer.

Bike Box (Advanced Stop Box)
Mark zones at signalized intersections giving cyclists a head start safety zone ahead of traffic at a green light.

Bike Facilities
The term denoting any improvements by municipalities or transportation agencies to promote or accommodate bicycle use, including bike racks, storage facilities or sharrow.

Bike Lane or Bicycle Lane
A portion of a lane or a designated lane that is striped and marked to be designated for bicycle use.

Bike Plan or Bike Route System
A network of bikeways designated by a municipality, department of transportation or jurisdiction with appropriate markings, and signage both directional and informational.

Bike Share / Bike Sharing System
A system where bicycles are made available for individuals to use for a short term period.

Bikeway
A road, street or thoroughfare designated for bicycle travel.

Bulb-Out
A location where the sidewalk is extended from the parking curb line into the roadway to increase pedestrian or planting area. Sometimes called a Curb-Extension.

Combined Sewer Outflow (CSO)
A combined sewer is a type of sewer system that collects both sanitary sewage and storm water in a single pipe. This type of system can cause serious water quality issues due to the combined sewer overflows from peek flow variations caused by wet conditions or rain events. During such events water can overflow into lakes, rivers or clean water bodies.

Complete Streets
Complete streets are designed to accommodate safe and easy access for all users including pedestrians, bicyclists, vehicles and people of all abilities. Many cities and transportation agencies are adopting Complete Streets policies to improve their street networks and enhance communities.

Conveyance
The means of moving surface water from one location to another.

Crosswalk
A location typically at intersection corners or mid-blocks designed and designated for pedestrians to cross a roadway. Crosswalks often include elements of accessibility, signage and roadway demarcation.

Curb Radius
The radius defining the curve of the curb or accessible ramp edge of the sidewalk at intersection corners.

Curb Ramp
The depressed area of a curb that is designated typically as an accessible crossing. A transition point between the sidewalk level and the roadway or intersection.

Design Vehicle
The type of vehicle used to determine the appropriate roadway design characteristics, such as lane width or curb radius.

Detectable Warning
A paver or mat surface with patterns of truncated domes applied to walking surfaces that help the visually impaired detect a change from pedestrian to vehicular traffic, like at curb ramps or transit platforms.

Detention
Rain or stormwater runoff that is collected and stored for a slower release into the system.

Driveway
A private road for local access to a public roadway. A driveway typically crosses a sidewalk with a depressed curb apron to the roadway.

Highway
A term used to describe a public roadway for the use of vehicular traffic.

Level of Service
Also known as LOS, it is the qualitative measure used to rate the quality of traffic service. LOS rates wait time, traffic flow, speed and vehicle density. LOS is measured from 'Level A' free flowing traffic to 'Level F' forced flow.

Median
The dividing portion of the roadway that separates opposing lanes of traffic. Medians are typically continuous from intersection to intersection and may be striped, paved or planted.

Mid-Block Crossing
A marked pedestrian crossing at a non-intersection location often at the middle of a larger street block.

Multi-Use Path
A path that may be used by walkers, runners and cyclists. Sometimes called a Shared Use Path.

Pedestrian Signal
A traffic signal specific to pedestrian travel at intersections of mid-block crossings. Pedestrian signals typically include symbols indicating when to walk and not walk, along with an audible sound to assist the visually impaired.

Retention
The capture and management of stormwater runoff which temporarily stores water and slowly releases it back into the groundwater or utility system.

Reverse Angle Parking
Instead of pulling into the parking spot, drivers, back into their spot. This allows drivers to make eye contact with oncoming traffic when exiting the parking spot.

Right-of-Way
A path or roadway of a given dimension for the right to access a travel route.

Right on Red / Right Turn on Red
A law permitting vehicles at a signalized intersection to turn right after a complete stop at a red light.

Roadway
The portion of the street, including the shoulder, for vehicular traffic use.

Sharrow
A Sharrow or shared-lane is a street lane marked to signify that bicyclists or vehicles may use the full lane. The lane is designated and marked with a chevron arrow combined with a bike symbol placed in the center of the travel path.

Shoulder
The portion of the roadway that is parallel to the traveled way, typically reserved to accommodate stopped vehicles or for emergency use.

Shy Zone
Defined as the area of sidewalk adjacent to a building face where pedestrians maintain a certain distance from the structure. A dimension of 18" is often used to help establish an effective width of a sidewalk.

Sidewalk
A path along the side of the roadway. Typically located between the building face and the amenity zone.

Site Furnishings
Elements typically located within the amenity zone, including parking meters, bike racks, benches, litter receptacles and other streetscape components.

Streetscape
The street environment comprised of the travel way, bike facilities, parking, amenity zone, pedestrian zone and associated amenities.

Structural Soil
A designed soil medium comprised of angular stone and top-soils with aerated voids to allow for tree root growth beneath paving sections.

Travel Way
The portion of the street used for vehicular traffic, not including the shoulder.

Traffic Calming
Any number of design strategies incorporated into the roadway to encourage vehicles to drive at slower speeds. Typical applications include narrower lane widths, speed tables, changes in materials and a strengthening of vertical elements along the roadway.

Tree Basin
An opening in the sidewalk where trees are placed with understory planting, mulch or gravel that allows for a healthier root zone.

Tree Guard
A vertical structure surrounding a tree's trunk that protects it from damage.

Tree Grate
A covering for street trees the is typically flush and accessible with the adjacent sidewalk.

Walkability
Walkability is the measure of how comfortable and friendly an area is to walking.

Wayfinding signage
Informational and directional signage located on the sidewalk or amenity zone. Wayfinding signage identifies key pedestrian routes and helps with general orientation.


2 HOUR
P
2 HOUR
P

5.0

STREET TYPOLOGIES

INTENT

A series of Street Typologies has been developed to accommodate each of the user groups, pedestrians, those with accessibility needs, bicyclists, and vehicles. Elements and desirable proportions have been outlined and a complete street section, street elevations and typical layout plans have been illustrated. The street sections have been broken down into a series of zones including the Street Zone, Amenity Zone, Pedestrian Zone and Storefront Zone.

Nine unique Street Typologies have been identified through The Traffic Planning and Urban Overlay vetting. Each typology has been laid out in sections to include medians, traffic lanes, bicycle facilities including bike lanes and a cycle track, parallel and angled parking, defined amenity zones, pedestrian friendly sidewalks, clearly defined accessible paths and store front zones. Each unique section identifies the streets within the study to which it applies. The sections have been supplemented with an enlarged intersection configuration along with a perspective rendering showing the proposed condition.

5.1

COMPLETE STREET SECTION

A Complete Street Section can be defined by describing key elements that denote general characteristics. The Street Section can be broken down into four key zones each of which contribute to the function and aesthetic.

KEY ELEMENTS

1. Places for people to walk with some leisure space
2. Physical comfort definition, boundaries and edges
3. Qualities that engage the eye and offer visual interest
4. Transparency (elevation); the ability to see from space to space
5. Complementary elements (a family of materials)
6. Maintenance of systems, plant materials and snow removal
7. Quality of construction

STOREFRONT ZONE ELEVATION

1. Context or location specific
2. Opportunity for increased / enhanced landscape
3. Movable seating
4. Creation of public / private spaces
5. People watching
6. Night life opportunities (24 Hours street life)
7. Scaling element for the sidewalk
8. Street layering of richness

PEDESTRIAN ZONE

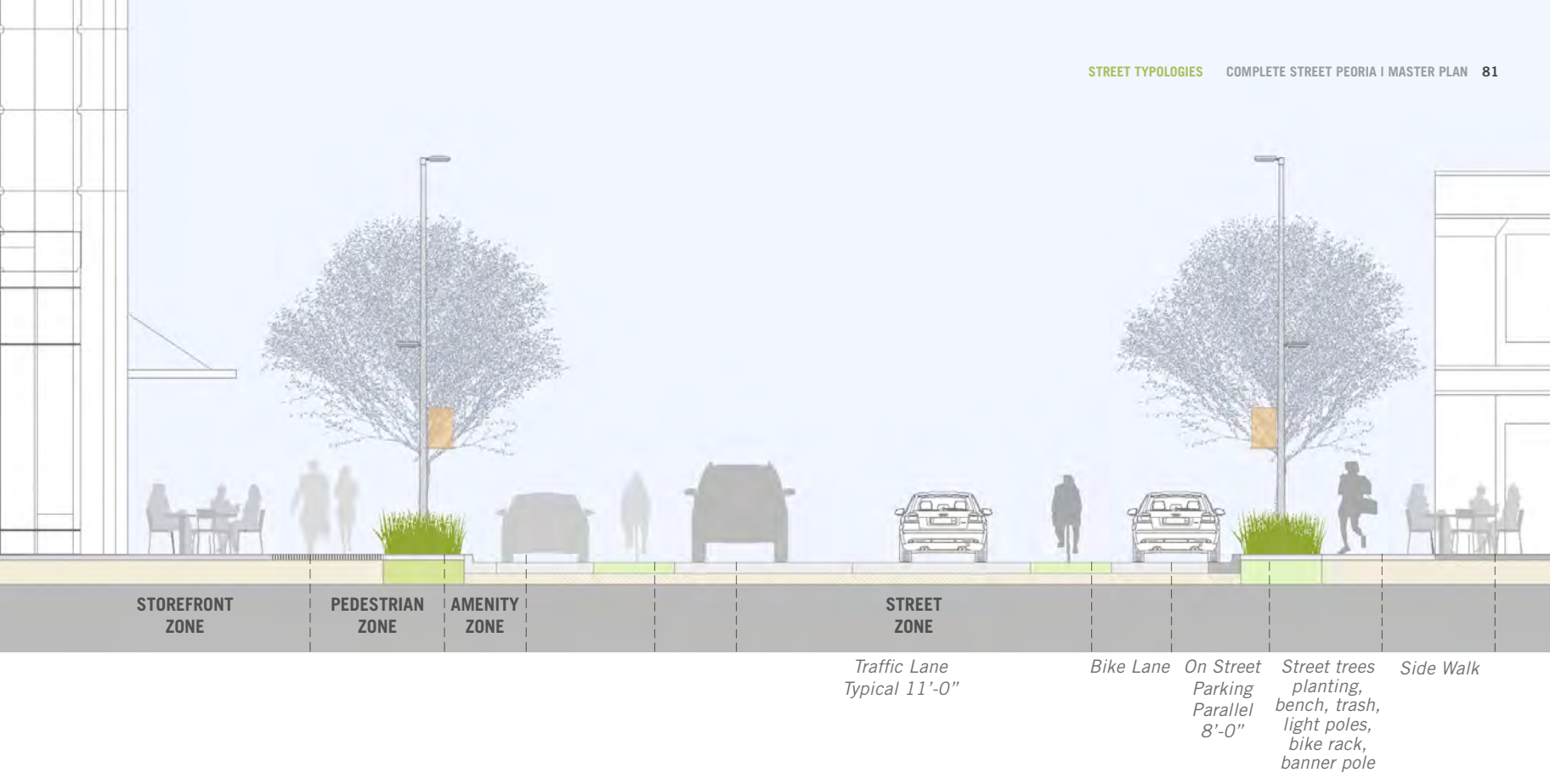
1. Sidewalk of comfortable walking width for single user or groups
2. Clean walking surfaces of uniform paving
3. Clearly defined path for accessibility

AMENITY ZONE CONTRIBUTING QUALITIES

1. Tree Canopy
2. Beginning and ending
3. Diversity
4. Special design features (lights)
5. Vertical separation from the street
6. Places, moments of interest
7. Slope, comfortable and easy navigate
8. Parking, availability, accessible
9. Visual contrast

STREET ZONE

1. Maximized on street parking
2. Bicycle facilities that are clearly identified and signed
3. Right-sized traffic lanes that promote slower speeds
4. Planted medians with street trees where possible



Storefront Zone (Cafe Zone)

- Dining zone - 6'-0" to 8'-0" for tables and chairs
- Railing in areas serving adult beverages

Pedestrian Zone (Clear Zone)

- 8'-0" with 6'-0" minimum width for pedestrian circulation
- Maximum 2% cross slope
- Detectable warning at crosswalks

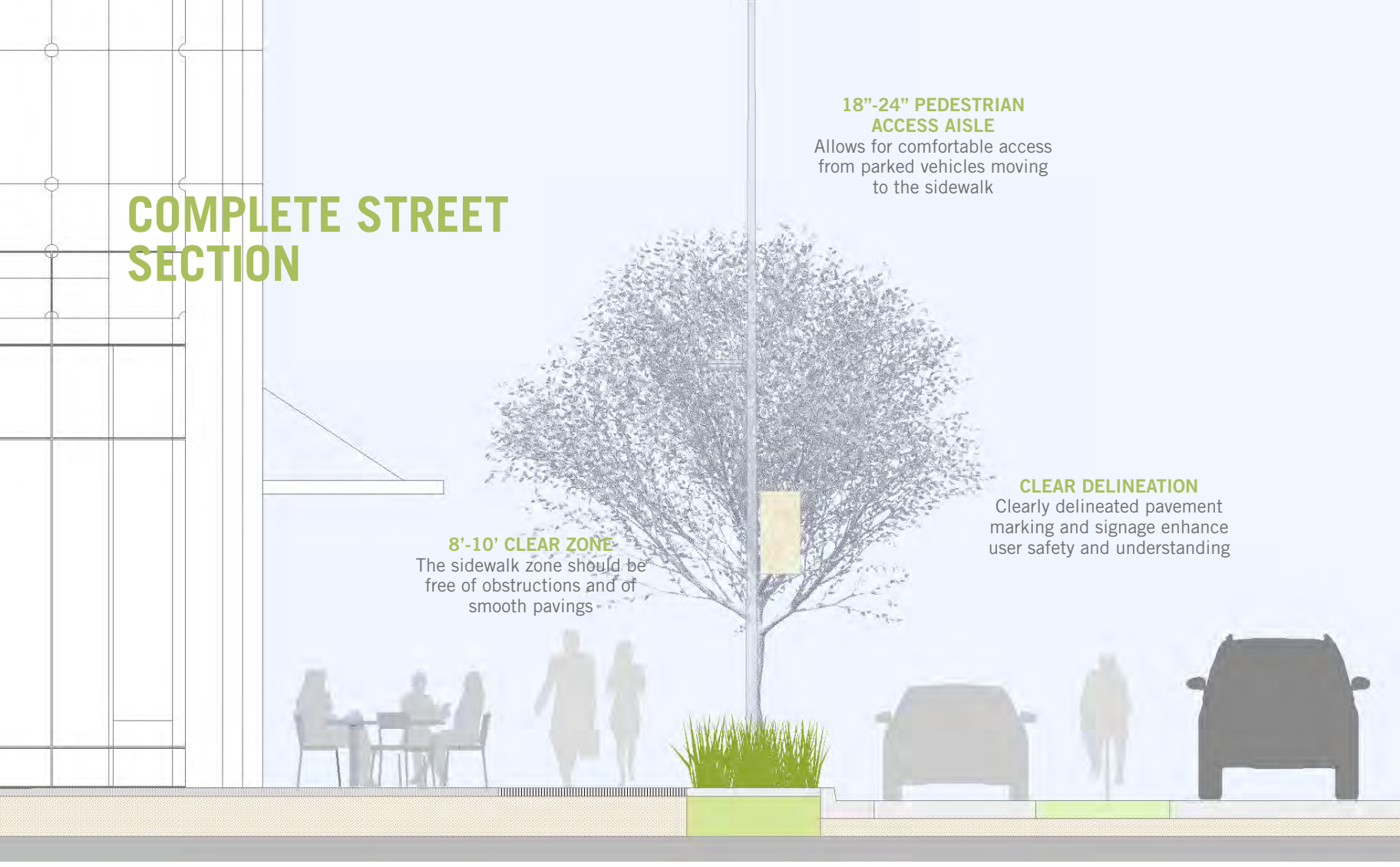
Amenity Zone

- 6'-0" minimum width (8'-0" preferred)
- Trees at 22'-0" on center minimum
  Option A or 33'-0" on center Option B
- Ornamental planting (native and adaptive)
- Bike racks
- Benches
- Waste receptacles
- Light standards for roadways and pedestrian

Street Zone

- On-street parallel parking, 22'-0" length 8'-0" width
- On-Street 60 degree angled parking at 18'-6" length 9'-0" width
- 5' minimum width striped bike lane
- Sharrow bike lane if no dedicated lane is possible
- 11'-0" minimum width traffic lanes

COMPLETE STREET SECTION

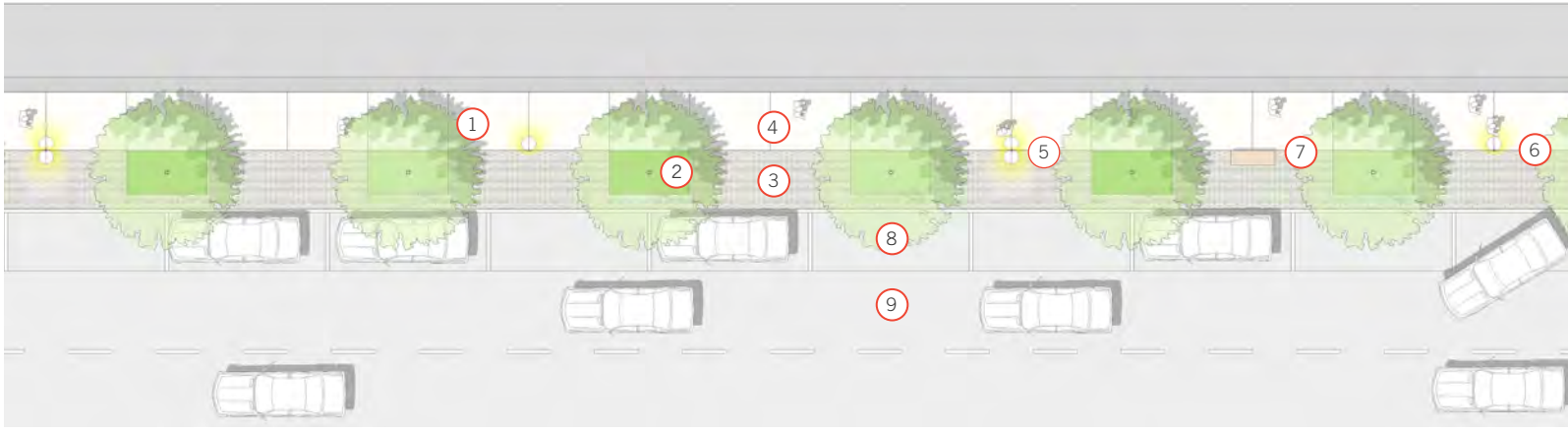


STOREFRONT, PEDESTRIAN AND AMENITY ZONE

Sidewalk cafes, planter pots and storefront seating are highly encouraged to promote activity and interest. The sidewalk zone should be kept clear to allow for comfortable pedestrian circulation. The amenity zone includes a number of vertical elements that provide separation between the sidewalk and the roadway. This zone should include enhanced paving along with native and adaptive planting.

COMPLETE STREET PLAN AND ELEVATION

Street configurations were studied in plan and section to help the design team understand the spacial layout of parking layout and access, street and pedestrian lighting, street tree layout and perennial planting, as well as streetscape amenities including parking meters, benches and bike racks.



1 Street Trees 2 Ornamental Planting 3 Amenity Zone 4 Pedestrian Zone 5 Street Light 6 Pedestrian Light 7 Bench 8 Parking Lane 9 Travel Lane

PARALLEL PARKING - PLAN AND ELEVATION

Parallel parking stalls have been developed at a 22'-0" module with street trees at 33'-0" on center. Street lighting has been proposed to include pedestrian scale fixtures at 66'-0" on center with street light fixtures as 132'-0" on center. Street trees spaced at 33'-0" on center also allow for temporary snow storage within the amenity zone.

1 Street Trees 2 Ornamental Planting 3 Amenity Zone 4 Pedestrian Zone 5 Street Light 6 Pedestrian Light 7 Bench 8 Parking Lane 9 Travel Lane

REVERSE ANGLED PARKING - PLAN AND ELEVATION

60 degree angled spaces have been recommended for wide street rights-of-way to maximize on street parking. The stalls have been shown at 18'-6" by 9'-0". Street and pedestrian lighting have been proposed at roughly a 66'-0" spacing. Street trees have been shown to be centered on every third parking stall.

1 Street Trees 2 Ornamental Planting 3 Amenity Zone 4 Pedestrian Zone 5 Street Light 6 Pedestrian Light 7 Bench 8 Parking Lane 9 Travel Lane 10 Bike Lane

PARALLEL PARKING WITH DOUBLE TREES - PLAN AND ELEVATION

Parallel parking stalls have been developed at a 22'-0" module with street trees at 33'-0" on center. Street lighting has been proposed to include pedestrian scale fixtures at 66'-0" on center with street light fixtures as 132'-0" on center. Street trees spaced at 33'-0" on center also allow for temporary snow storage within the amenity zone.

5.2

STREET TYPOLOGIES CONFIGURATION

KEY STREETSCAPE PLANS AND SECTIONS

1 1-Lane with Parallel Parking and Bike Lane

Two-way traffic provides for 1 travel lane in each direction with a designated bike lane and a bike box at the intersection, on street parallel parking and street trees with native and adaptive planting.

2 2-Lanes with 1-Lane

Two-way traffic provides for 1 travel lane eastbound and 2 travel lanes westbound. On-street parallel parking and street trees with native and adaptive planting.

3 2-Lanes with 1-Lane and Parallel Parking

Two-way traffic provides for 1 travel lane northbound and 2 travel lanes southbound with on-street parallel parking and street trees with native and adaptive planting.

4 3-Lanes with Parallel Parking and Bike Lane

One-way traffic provides for 3 travel lanes that form a one-way pair. A designated bike lane with a bike box at the intersection, on-street parallel parking and street trees with native and adaptive planting. Phase 1

5 1-Lane with Parallel Parking and Center Turn Lane

Two-way traffic with 1 traffic lane and median / turn lane. Designated bike lanes with a bike box at the intersection, on-street parking and street trees with native and adaptive planting. Phase 2

6 1-Lane with Back-in Angled Parking and Sharrow Lane

Two-way traffic provides for 1 travel lane in each direction with 60 degree back-in angled parking and street trees with native and adaptive planting. Traffic lane my be marked as a sharrow lane.

7 1-Lane with Parallel Parking, Bike Lane and Median

Two-way traffic with 1 travel lane in each direction with a planted median. Designated bike lanes with a bike box at the intersection with on-street parallel parking and street trees with native and adaptive planting. A designated Core-to-Shore route with doubled up street trees.

8 1-Lane with Cycle Track, Parallel Parking and Median

Two-way traffic with 1 travel lane in each direction with a planted median. On-street parallel parking with a cycle track lined with street trees with native and adaptive planting. A designated Core-to-Shore route with doubled up street trees.

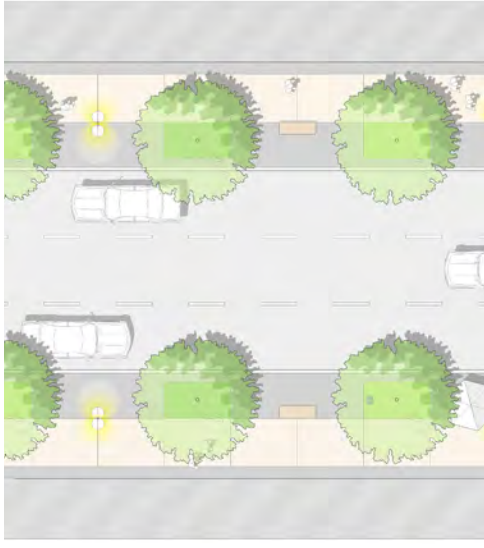
9 2-Lane with Median

Two-way traffic provides for 2 travel lanes in each direction with a planted median and potential left-turn lane. On-street parallel parking and street trees with native and adaptive planting.


1 HOUR
1 HOUR
P

2-LANES WITH 1-LANE

GLENDALE AVENUE

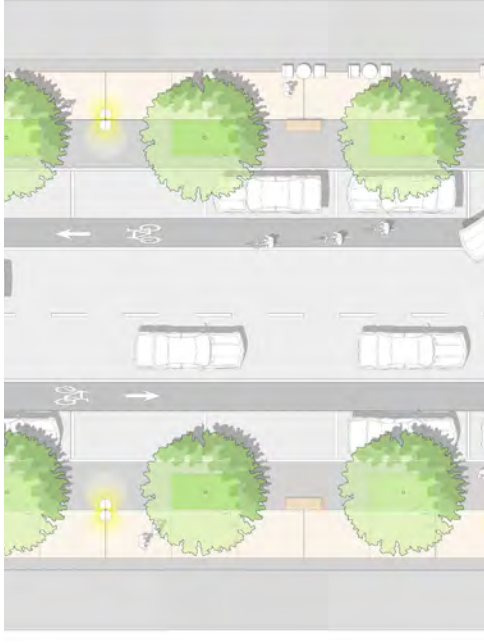


1 Planted Median
2 Travel Lane
3 Turning Lane
4 Bike Lane
5 Sharrow Lane
6 Cross Walk
7 Accessible Parking
8 Accessible Ramp
9 Street Tree
10 Ornamental Planting
11 Traffic Signal Pole
12 Pedestrian Signal Pole
13 Street Light
14 Pedestrian Light
15 Bench

Glendale Avenue at Main Street

1-LANE WITH PARALLEL PARKING AND BIKE LANE

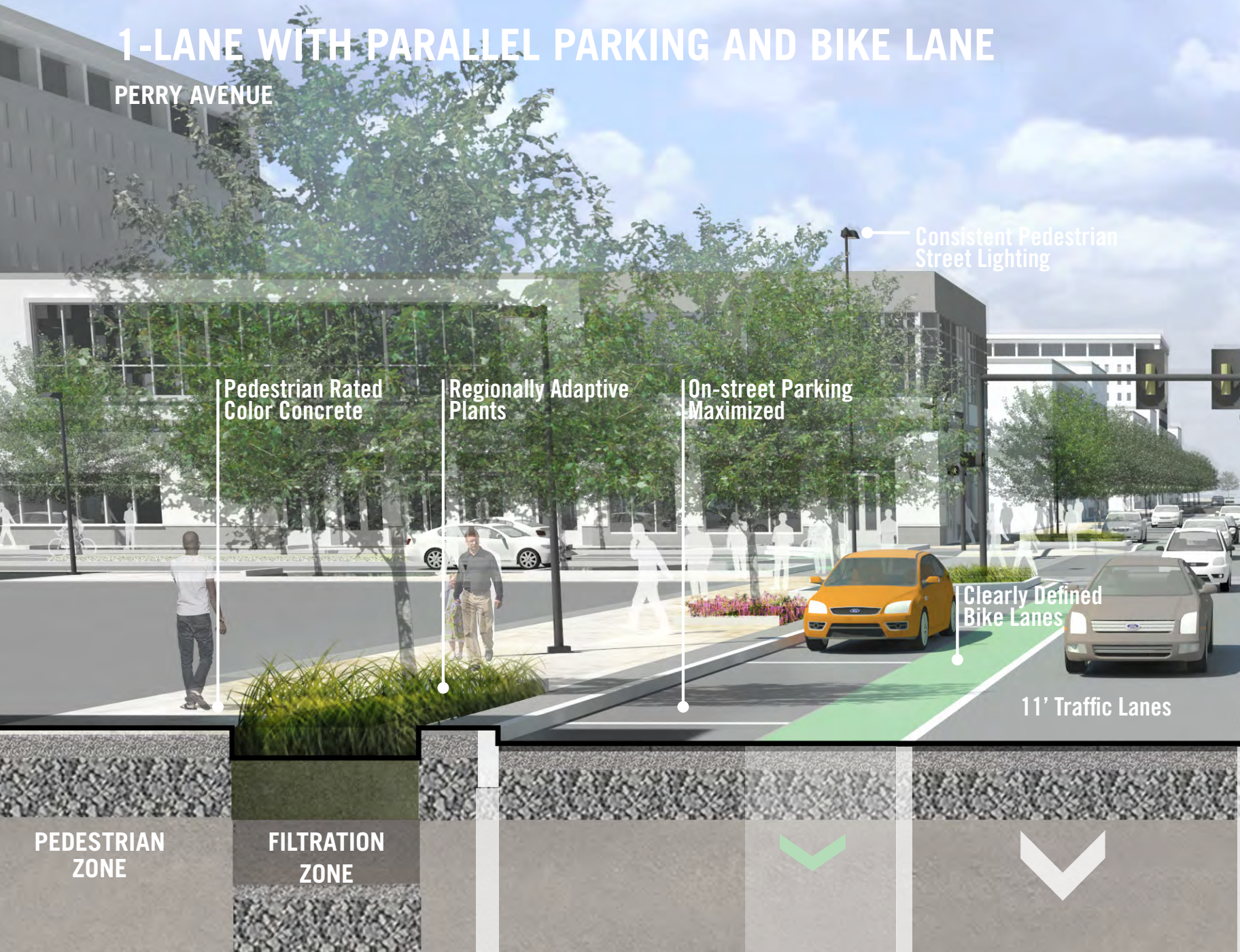
PERRY AVENUE

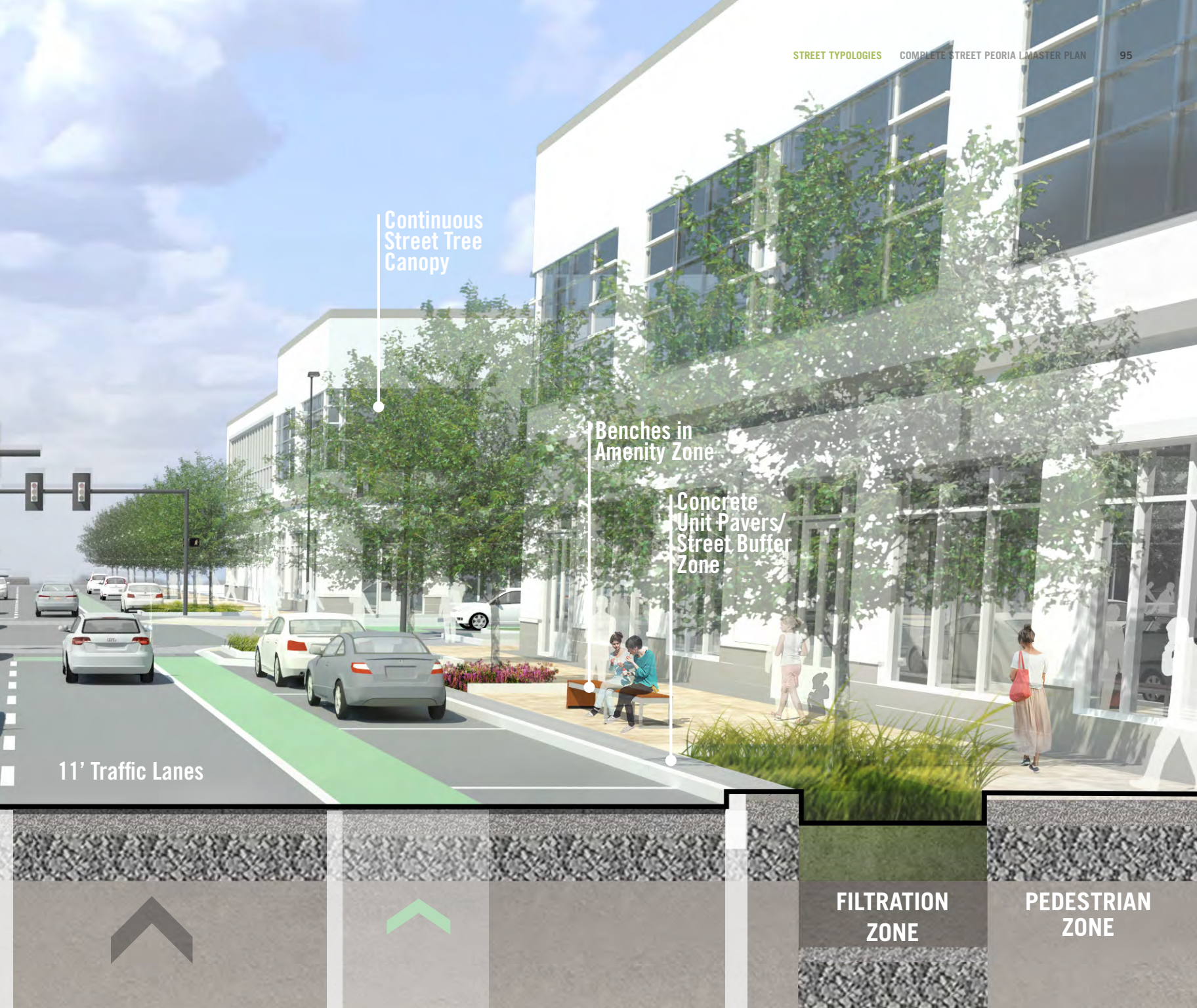


1	Planted Median	4	Bike Lane	7	Accessible Parking	10	Ornamental Planting	13	Street Light
2	Travel Lane	5	Sharrow Lane	8	Accessible Ramp	11	Traffic Signal Pole	14	Pedestrian Light
3	Turning Lane	6	Cross Walk	9	Street Tree	12	Pedestrian Signal Pole	15	Bench

1-LANE WITH PARALLEL PARKING AND BIKE LANE

PERRY AVENUE

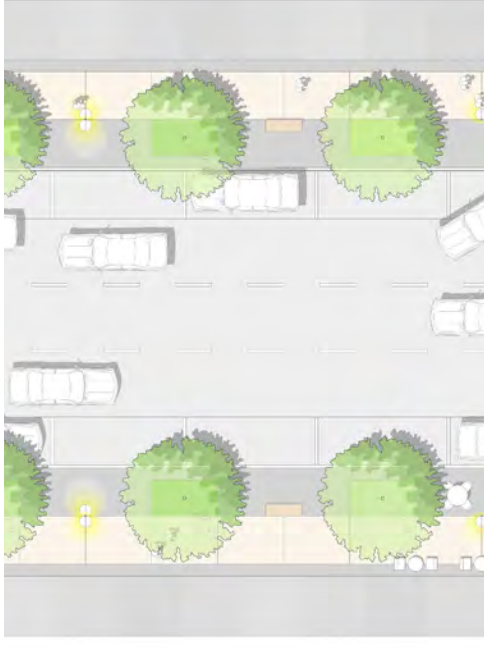



Continuous Street Tree Canopy
Benches in Amenity Zone
Concrete Unit Pavers/ Street Buffer Zone
11’ Traffic Lanes
FILTRATION ZONE
PEDESTRIAN ZONE

Perry Avenue at Main Street

2-LANES WITH 1-LANE AND PARALLEL PARKING

FAYETTE STREET



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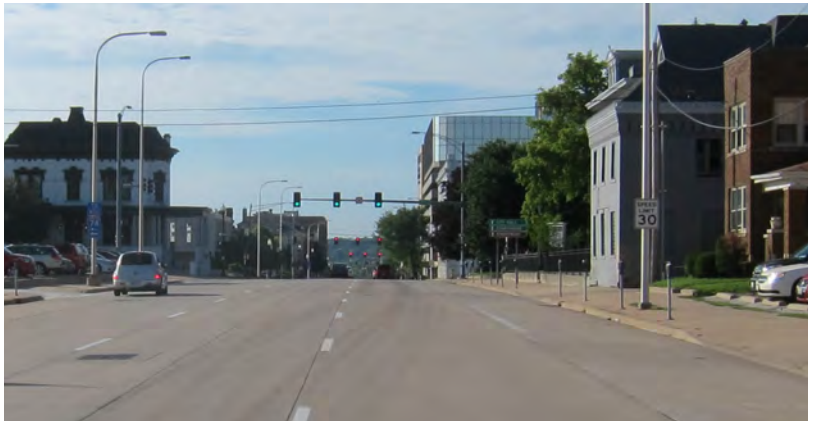
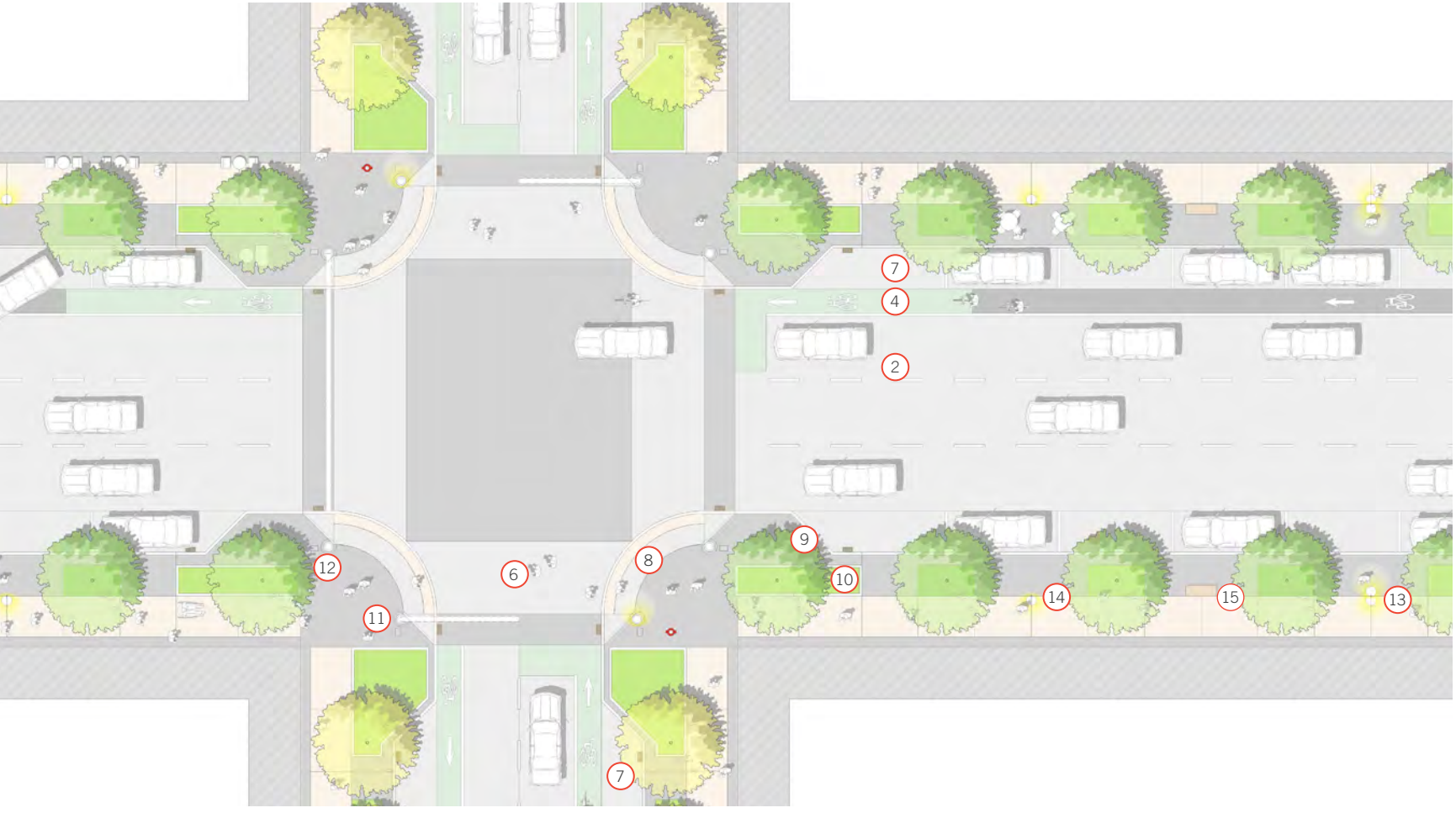


Fayette Street at Perry Avenue

3-LANES WITH PARALLEL PARKING AND BIKE LANE

ADAMS STREET AND JEFFERSON STREET (PHASE ONE)



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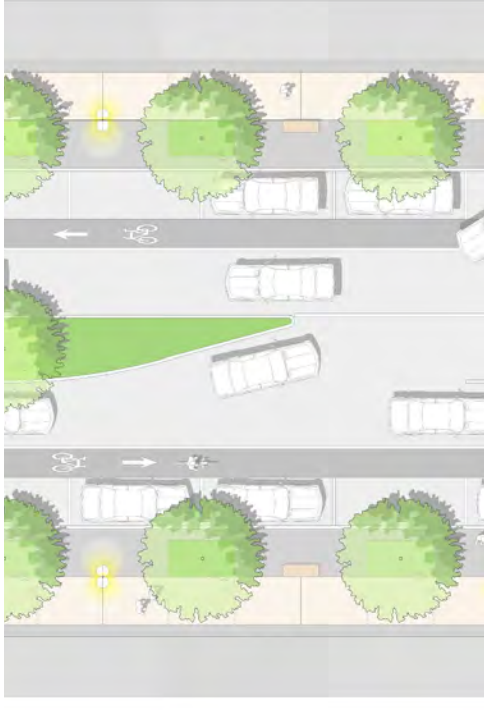
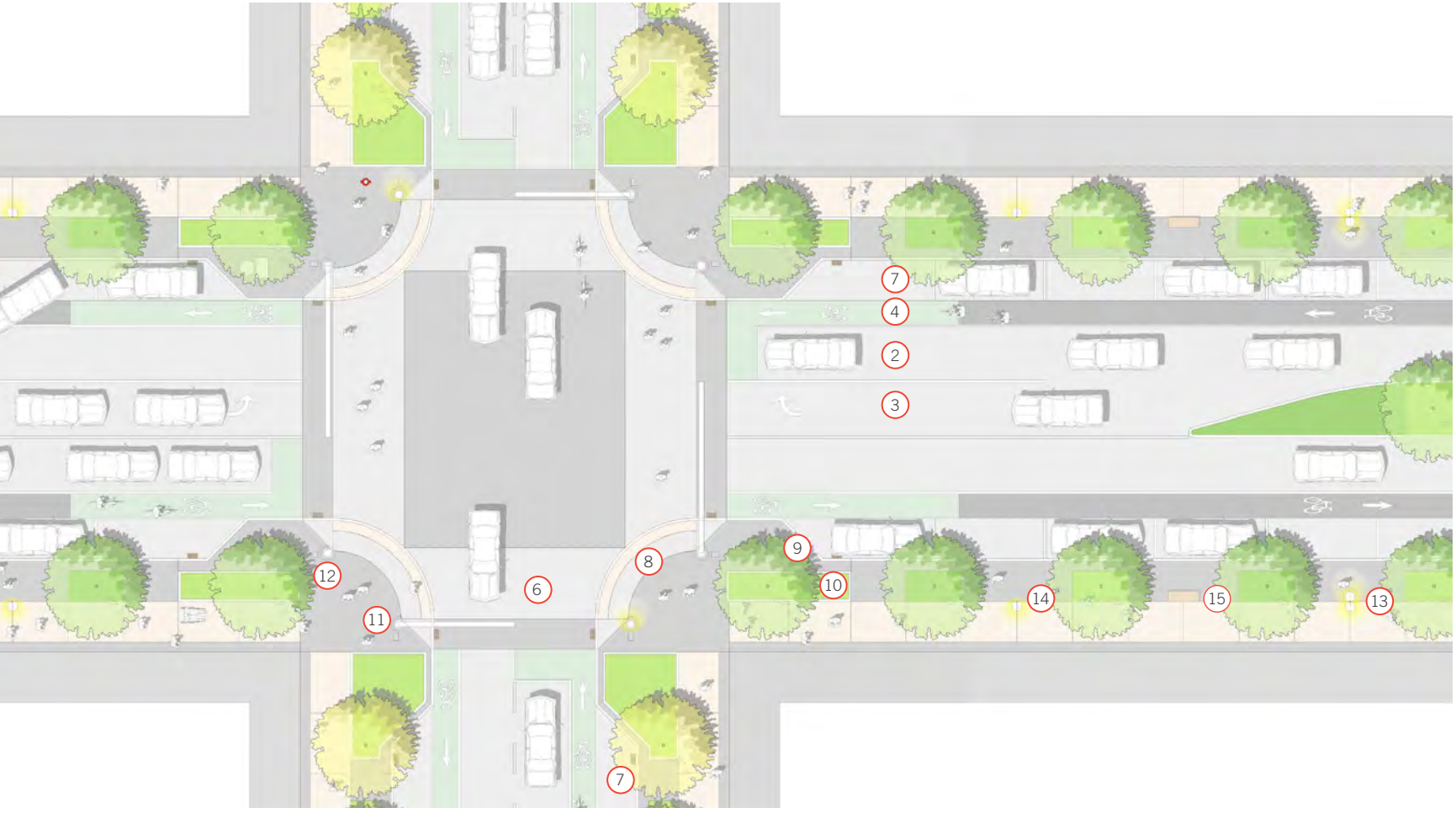
2	Travel Lane	5	Sharrow Lane	8	Accessible Ramp	11	Traffic Signal Pole	14	Pedestrian Light
3	Turning Lane	6	Cross Walk	9	Street Tree	12	Pedestrian Signal Pole	15	Bench

Adams Street at Liberty Street (Phase I)

1-LANE WITH PARALLEL PARKING, BIKE LANE AND CENTER TURN LANE

ADAMS STREET AND JEFFERSON STREET (PHASE TWO)





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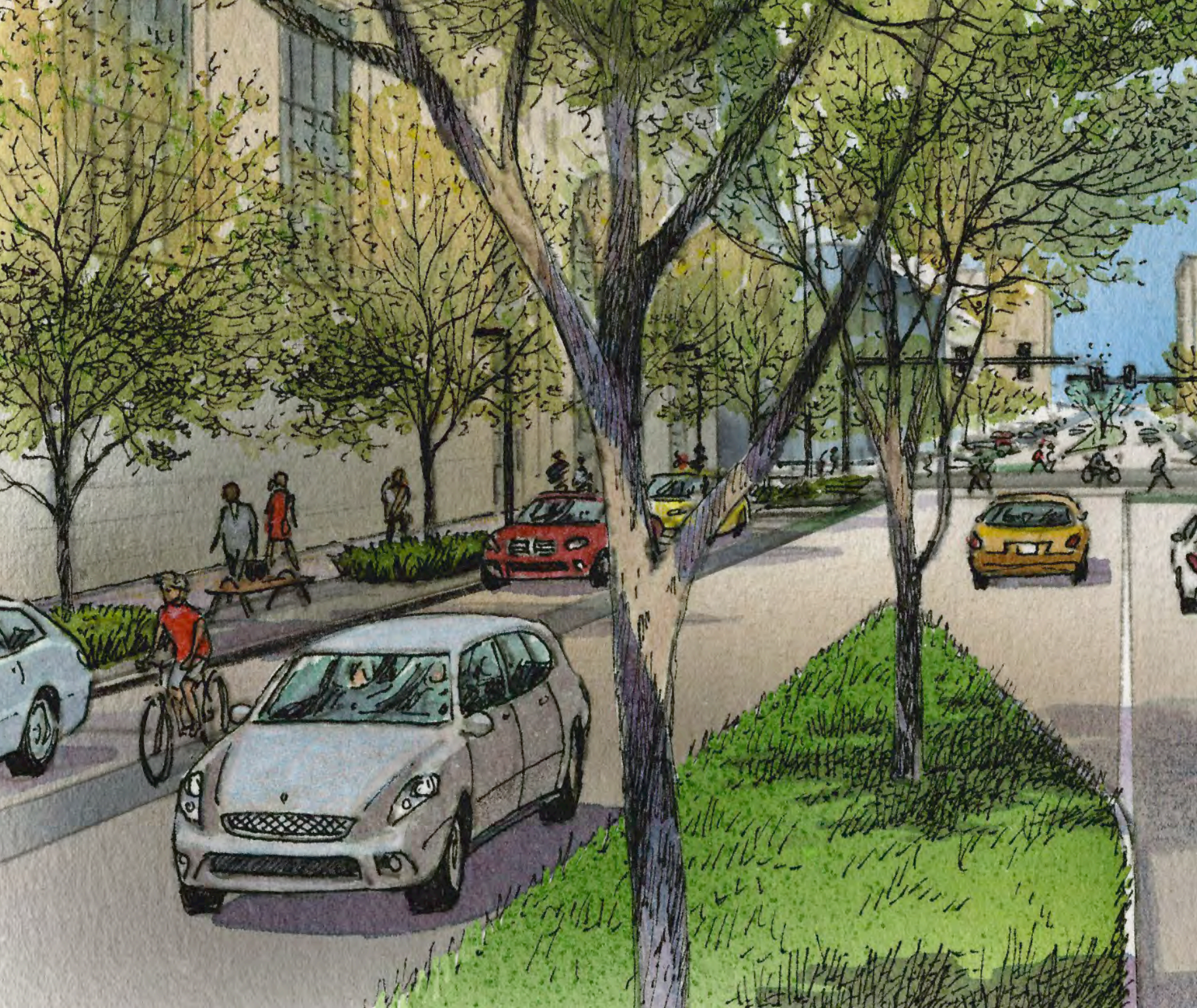
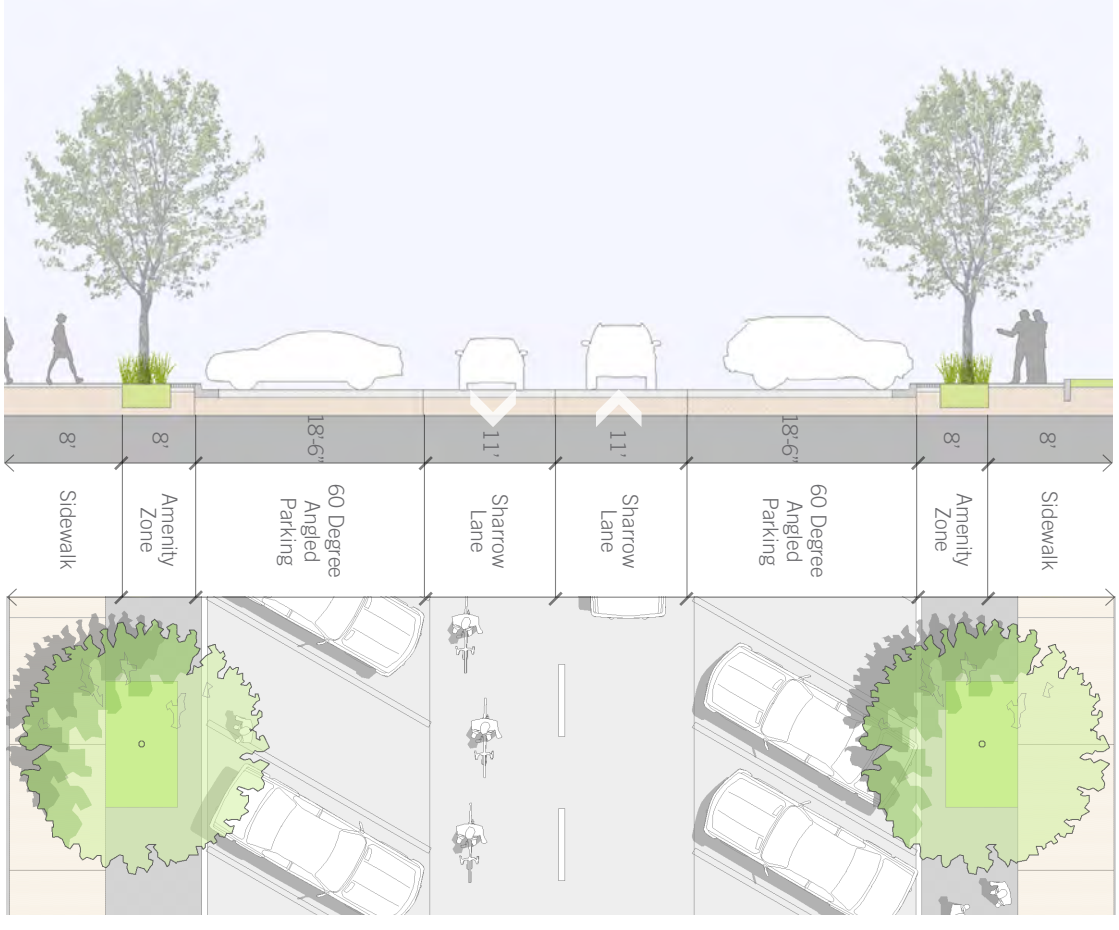
3	Turning Lane	6	Cross Walk	9	Street Tree	12	Pedestrian Signal Pole

13	Street Light
14	Pedestrian Light
15	Bench



1-LANE WITH BACK-IN ANGLED PARKING AND SHARROW LANE

MADISON, MONROE, FULTON, LIBERTY



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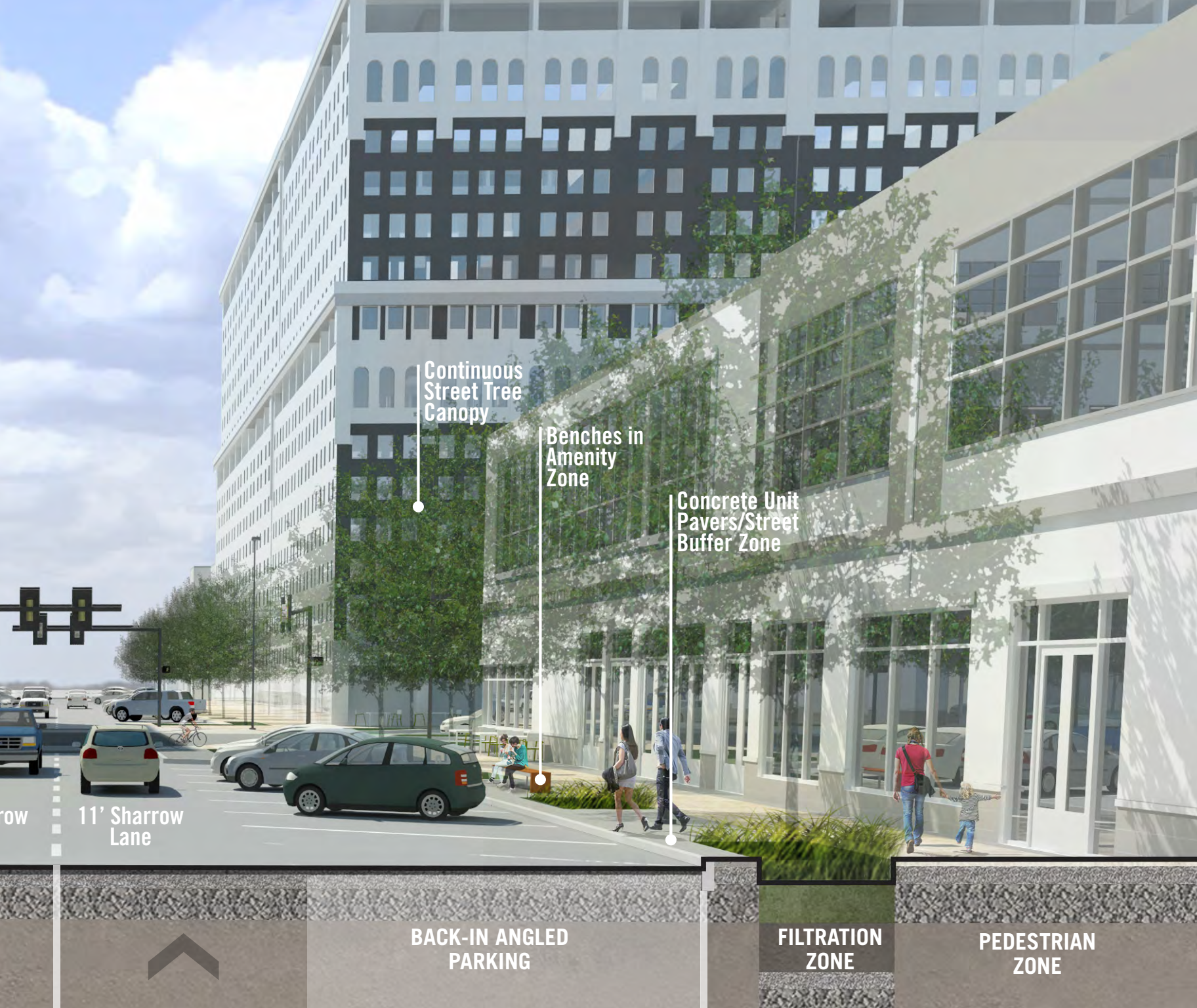
3	Turning Lane	6	Cross Walk	9	Street Tree	12	Pedestrian Signal Pole	15	Bench

1-LANE WITH BACK-IN ANGLED PARKING AND SHARROW LANE

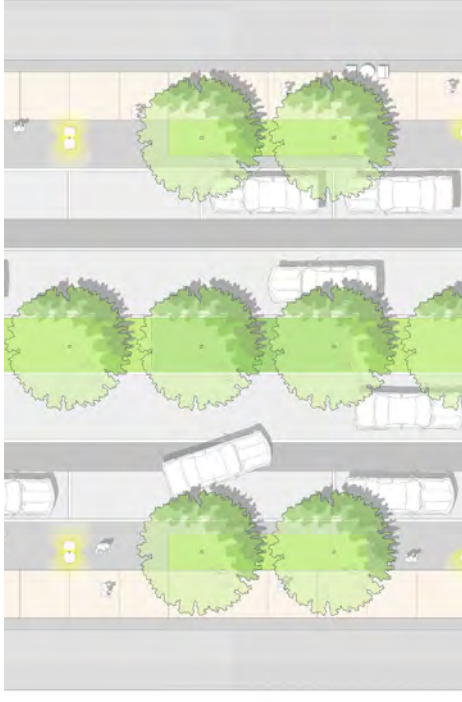
MADISON, MONROE, FULTON, LIBERTY


Continuous Street Tree Canopy
Benches in Amenity Zone
Concrete Unit Pavers/Street Buffer Zone
row
11' Sharrow Lane
BACK-IN ANGLED PARKING
FILTRATION ZONE
PEDESTRIAN ZONE

Fulton Street at Madison Avenue

1-LANE WITH PARALLEL PARKING, BIKE LANE AND MEDIAN

HAMILTON STREET AND MAIN STREET



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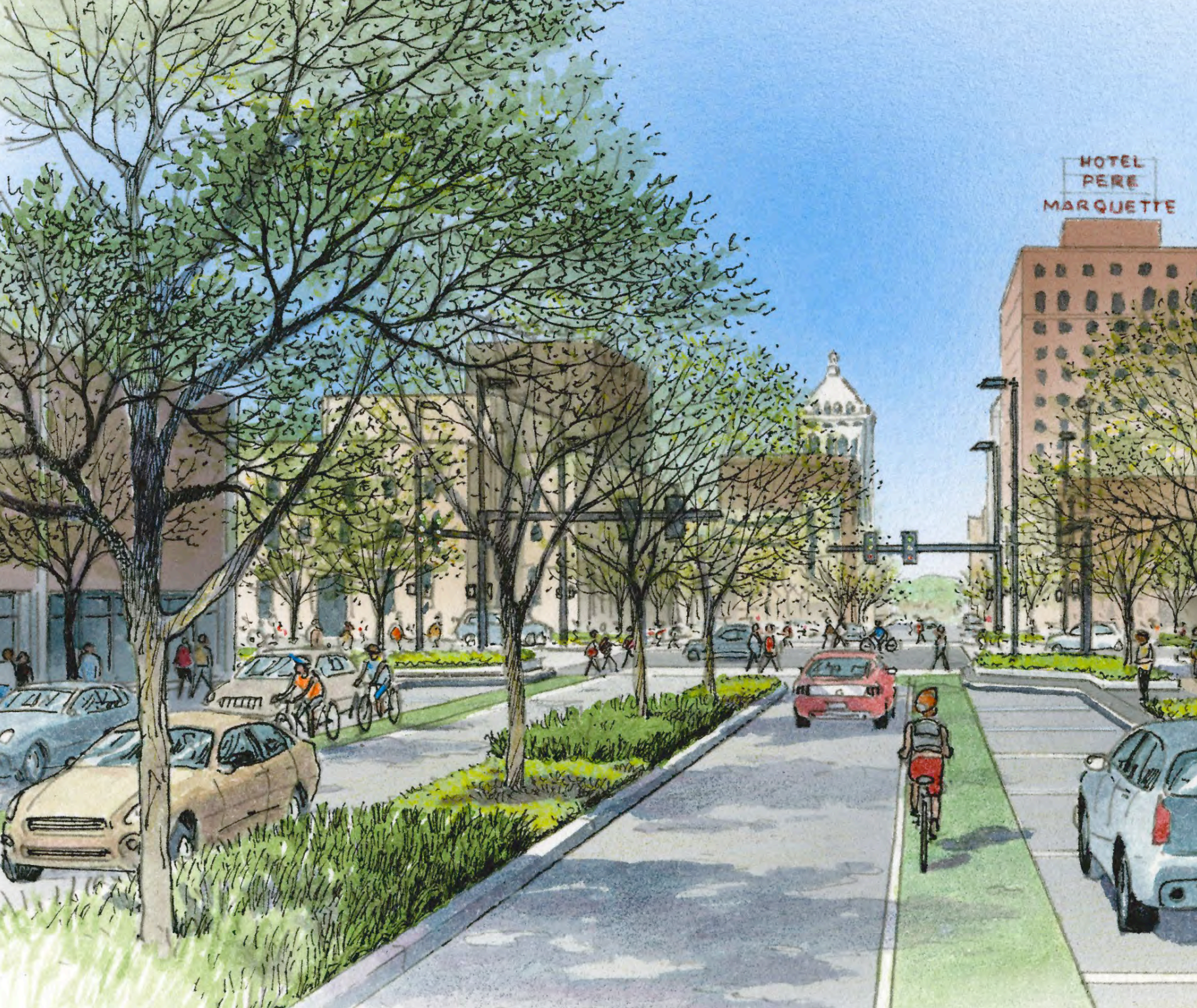
2	Travel Lane	5	Sharrow Lane	8	Accessible Ramp	11	Traffic Signal Pole	14	Pedestrian Light
3	Turning Lane	6	Cross Walk	9	Street Tree	12	Pedestrian Signal Pole	15	Bench

1-LANE WITH PARALLEL PARKING, BIKE LANE AND MEDIAN

HAMILTON STREET AND MAIN STREET

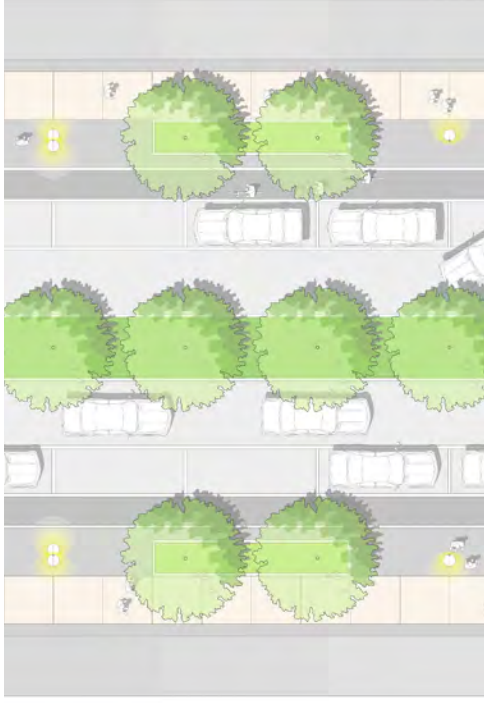

Continuous Street Tree Canopy
Concrete Unit Pavers/Street Buffer Zone
Outdoor Seating
tral Median as a dscape Boulevard
Clearly Defined Bike Lanes
FILTRATION ZONE
PEDESTRIAN ZONE


HOTEL
PERE
MARQUETTE

Main Street at Monroe Street

1-LANE WITH CYCLE TRACK, PARALLEL PARKING AND MEDIAN

HAMILTON STREET AND MAIN STREET



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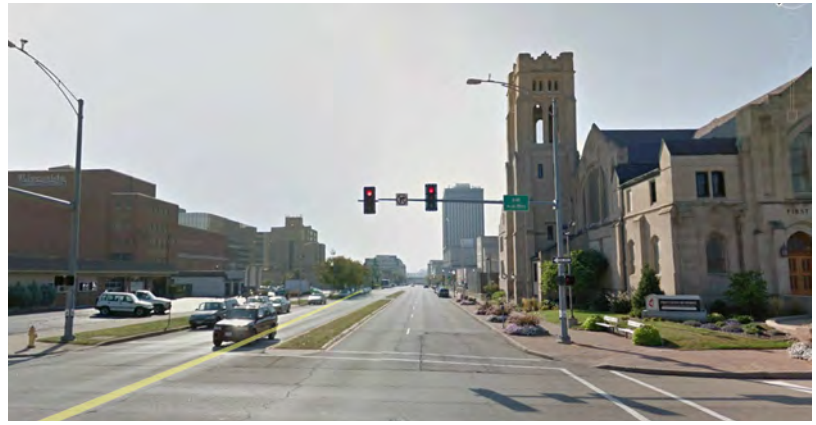
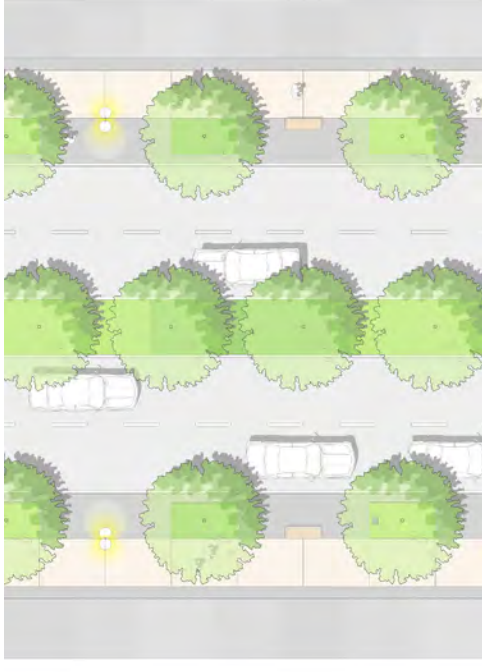
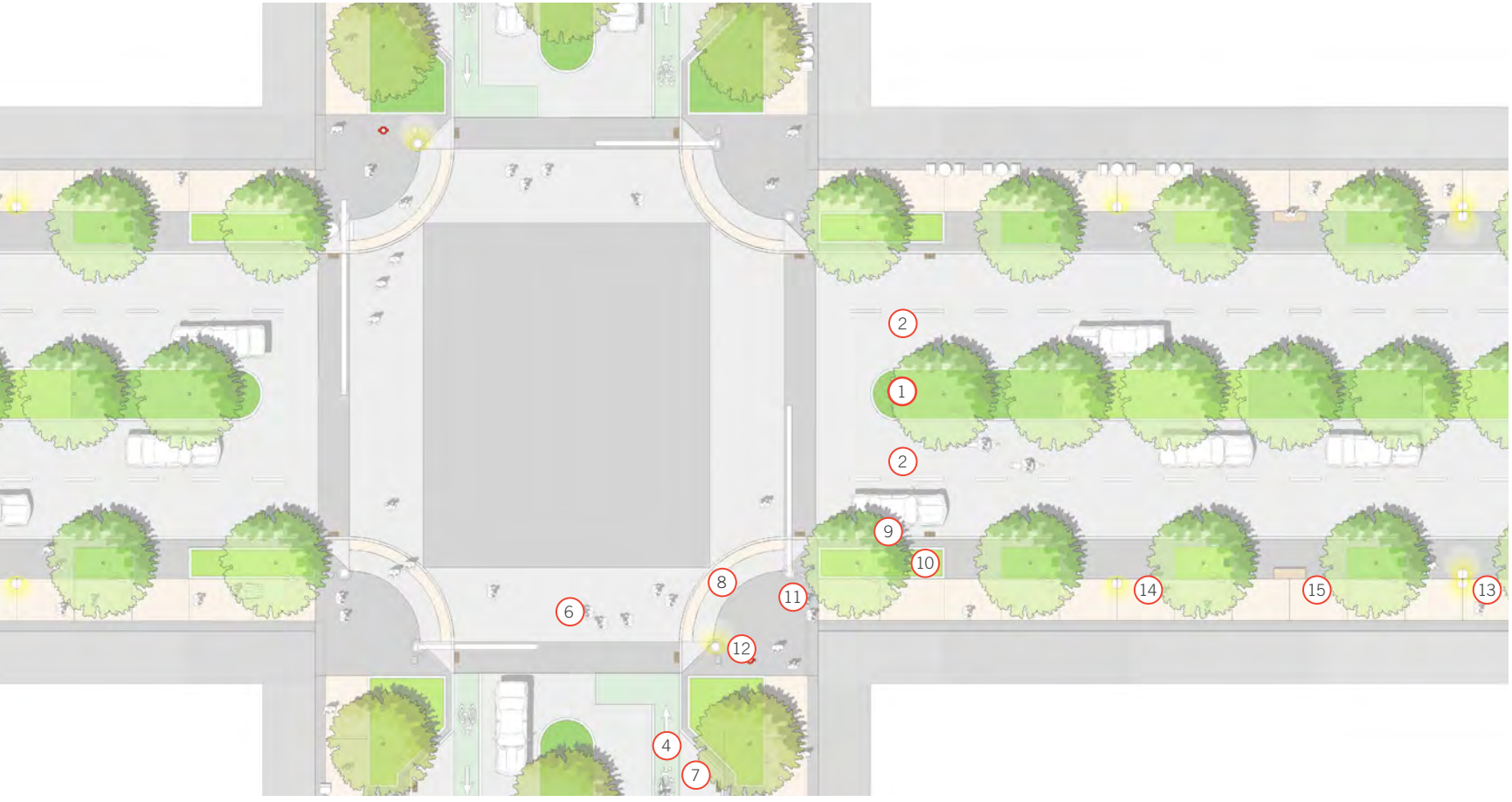


Hamilton Boulevard at Perry Avenue

2-LANES WITH MEDIAN

WILLIAM KUMPF BOULEVARD





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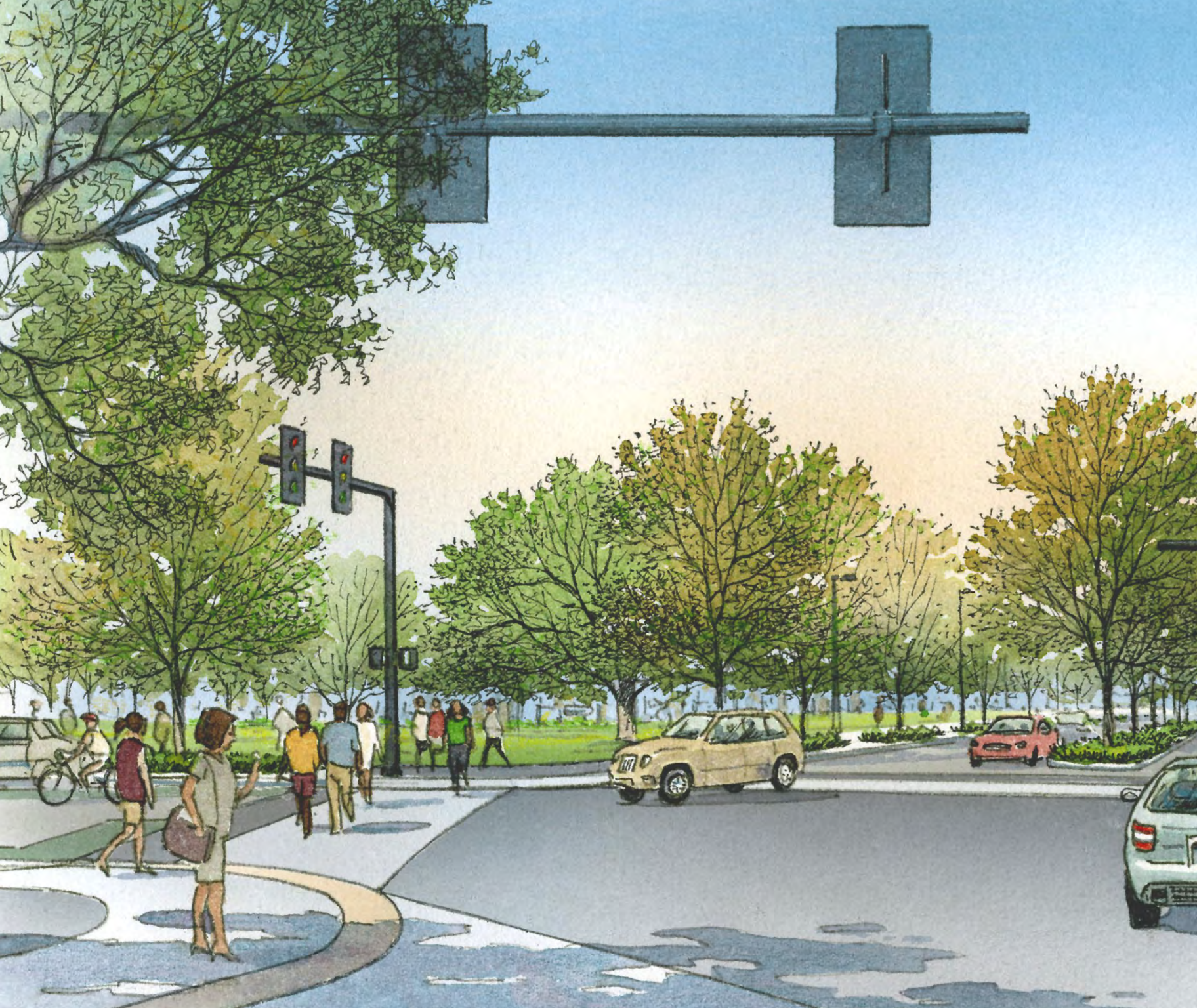


William Kumpf Boulevard at Perry Avenue


1 HOUR
P

6.0

PARKING FACILITIES

INTENT

The incorporation and inclusion of abundant on-street parking will be a key ingredient in the transitioning and development of vibrant pedestrian oriented central business district. On-street parking typically experiences the highest level of turn over and contributes to the activity of streetscape. On-street parking contributes to pedestrian safety by slowing typical driving speeds. On-street parking is also a key feature in creating separation and pedestrian comfort between the sidewalk and amenity zone.

This plan promotes maximized on-street parking and recommends both parallel and angled parking configurations. In the study of parking layout configurations the design team visited with a number of City Planning Departments to understand best practices and case studies. To accommodate snow removal and storage during winter conditions, parking facilities and bulb-outs at intersections have been reviewed in the master plan drawing and are being considered.

6.1

PROPOSED PARKING

PARKING BENEFITS

"We showed conclusively that drivers tended to travel at significantly slower speeds in the presence of features such as on-street parking and small building setbacks. Slower vehicle speeds provide pedestrians, cyclists and drivers more time to react, and when a crash does occur, the chance of it being life-threatening is greatly reduced. In short, on-street parking can help to create a safer environment."

What Street Parking Can Do for Downtowns, Norman W. Garrick in The Hartford Courant

"Each on-street parking spot that is lost costs an adjacent business about $10,000 a year in sales."

National Main Street Program

PARKING CONSIDERATIONS

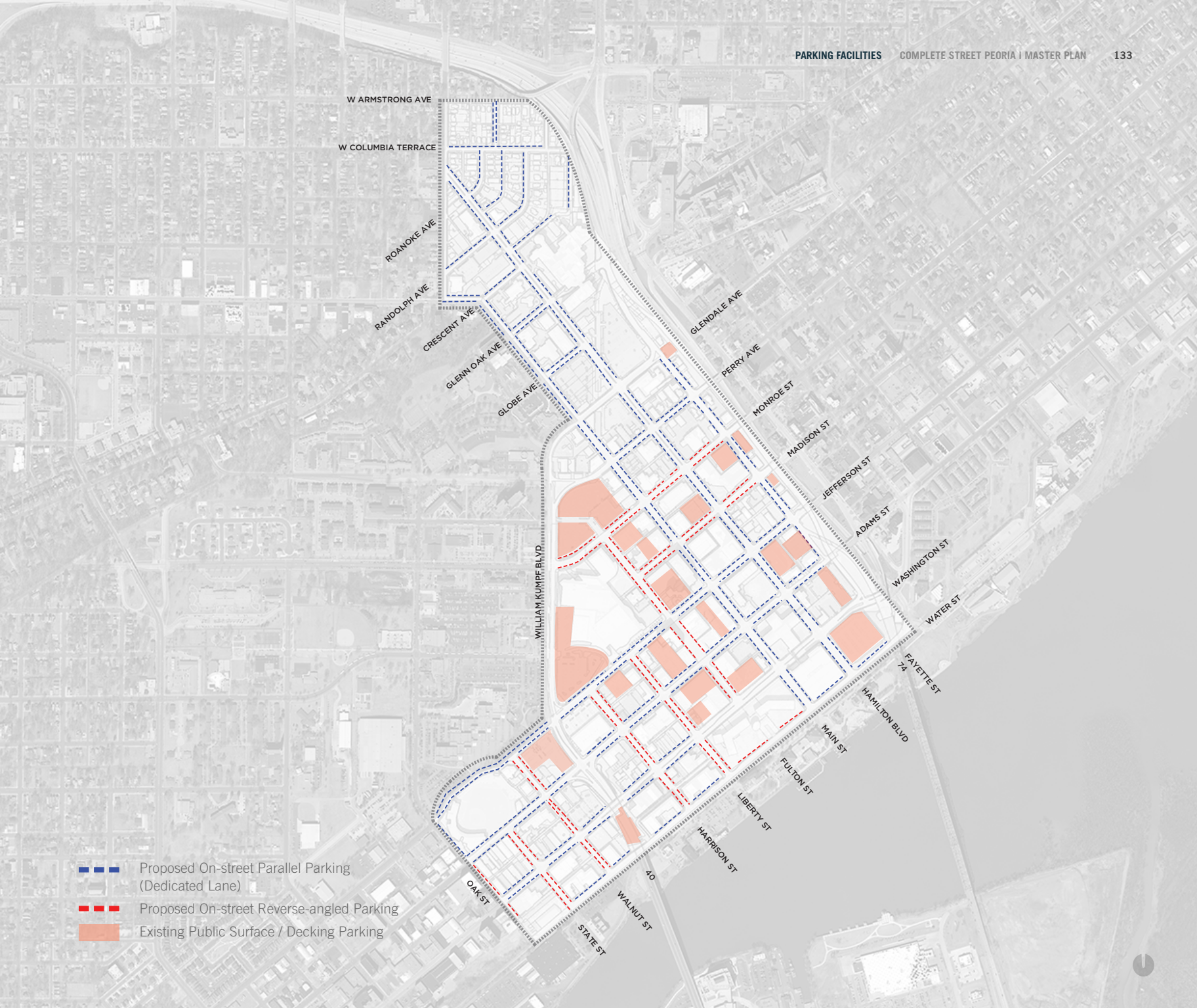
1. Maximize on street parking in the Central Business District.
2. Provide and maintain parking (angled and parallel in the Central Business District.
3. Provide parking to create a buffer between the cart path and pedestrian realm.
4. Incorporate parking for parallel parking, accessible parking, green parking, flexible parking.
5. Parallel parking stalls to be 8'-0" wide by 22'-0" long.
6. Angled parking stalls to be 60 degrees - 9' x 18'-6" long.

ACCESSIBLE PARKING CONSIDERATIONS

1. Maximized parking spaces must have space for the vehicle and additional space to accommodate an access aisle.
2. Should be the closest space to an accessible entrance or access point.
3. A clearly defined accessible route must be provided.
4. One accessible parking stall for every 25 parking stalls based on both sides of the block.
5. Sets a new standard that incorporates best practices.

ACCESSIBLE RAMP CONSIDERATIONS

1. Meets all federal, state, and local titles, acts and guidelines.
2. Landing minimum of 36" with 48" as best practice.
3. Ramp and flare have a 1:12 maximum slope. Free from obstruction, pull boxes.
4. Detectable warning of 24" is incorporated into the design.
5. Ramp and gutter are flush.
6. Each ramp is designed to site specific grades and conditions.


W ARMSTRONG AVE
W COLUMBIA TERRACE
ROANOKE AVE
RANDOLPH AVE
CRESCENT AVE
GLENN OAK AVE
GLOBE AVE
GLENDALE AVE
PERRY AVE
MONROE ST
MADISON ST
JEFFERSON ST
ADAMS ST
WASHINGTON ST
WATER ST
FAYETTE ST
HAMILTON BLVD
MAIN ST
FULTON ST
LIBERTY ST
HARRISON ST
WALNUT ST
STATE ST
OAK ST
WILLIAM KUMPF BLVD
74
40
Proposed On-street Parallel Parking (Dedicated Lane)
Proposed On-street Reverse-angled Parking
Existing Public Surface / Decking Parking

6.2

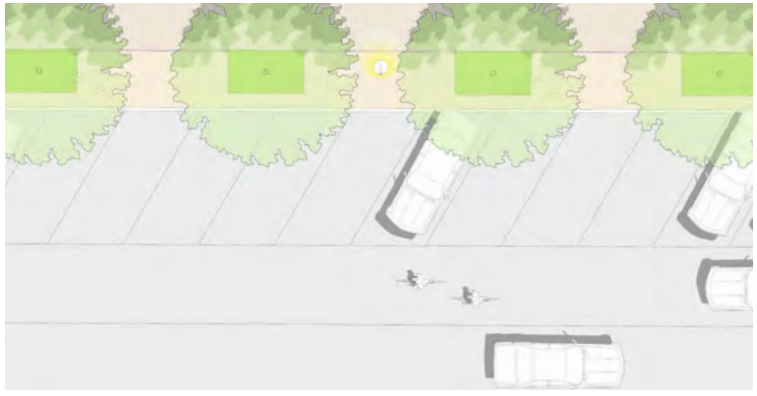
RECOMMENDED PARKING

PARALLEL PARKING

Description

The preferred width of a parallel on-street parking lane is 8'0" on commercial streets or where there is an anticipated high turnover of parking, and 7'0" wide on residential streets. These dimensions are inclusive of the gutter pan.

REVERSE-ANGLED PARKING



Description

The use of reverse (back-in) angled parking is desirable since it overcomes sight distance concerns and is considered safer for bicyclists traveling adjacent to angled parking.

ACCESSIBLE PARKING

Description

The Americans with Disabilities Act, ADA requires that public and commercial places have accessible parking space available for those with disabilities. Accessible parking spaces should consider the proper identification of spaces, size requirements, location of parking stalls and compliant signage.

6.3
CASE STUDIES

PHILADELPHIA (Laura Spina, City Planning)

Back-in Angled Parking was considered on wide streets in commercial areas with lower volumes and speeds (can provide more parking spaces than parallel parking).

BOSTON (Denise Dabney, City Planning)

Boston's Complete Street's Plan addressed their high volume of foot and vehicular traffic, combined with relatively short blocks and numerous irregular intersections in downtown commercial space as a safety issue. Their resolution was to create a more balanced environment by widening the sidewalks, provide accessible parking for the businesses with high turn-over, and to make vehicular and bike friendly roads.

For lanes with peak hour parking restrictions, 12' is the minimum width to accommodate shared use by parked vehicles and bicycles during off-peak times.

Decisions regarding parking lane width when adjacent to bicycle lanes should consider parking turnover rates and vehicle types.

SALT LAKE CITY (Complete Streets Policy, SLC)

Salt Lake City's goal was to promote more off-street parking for visitors, while reducing on-street parking and providing two-way left turn lanes and/or bike lanes where space was available.

SAN FRANCISCO (Adam Varat, City Planning)

San Francisco's Better Streets document recommends using 10' radii at most intersections and 15' radii for larger industrial streets.

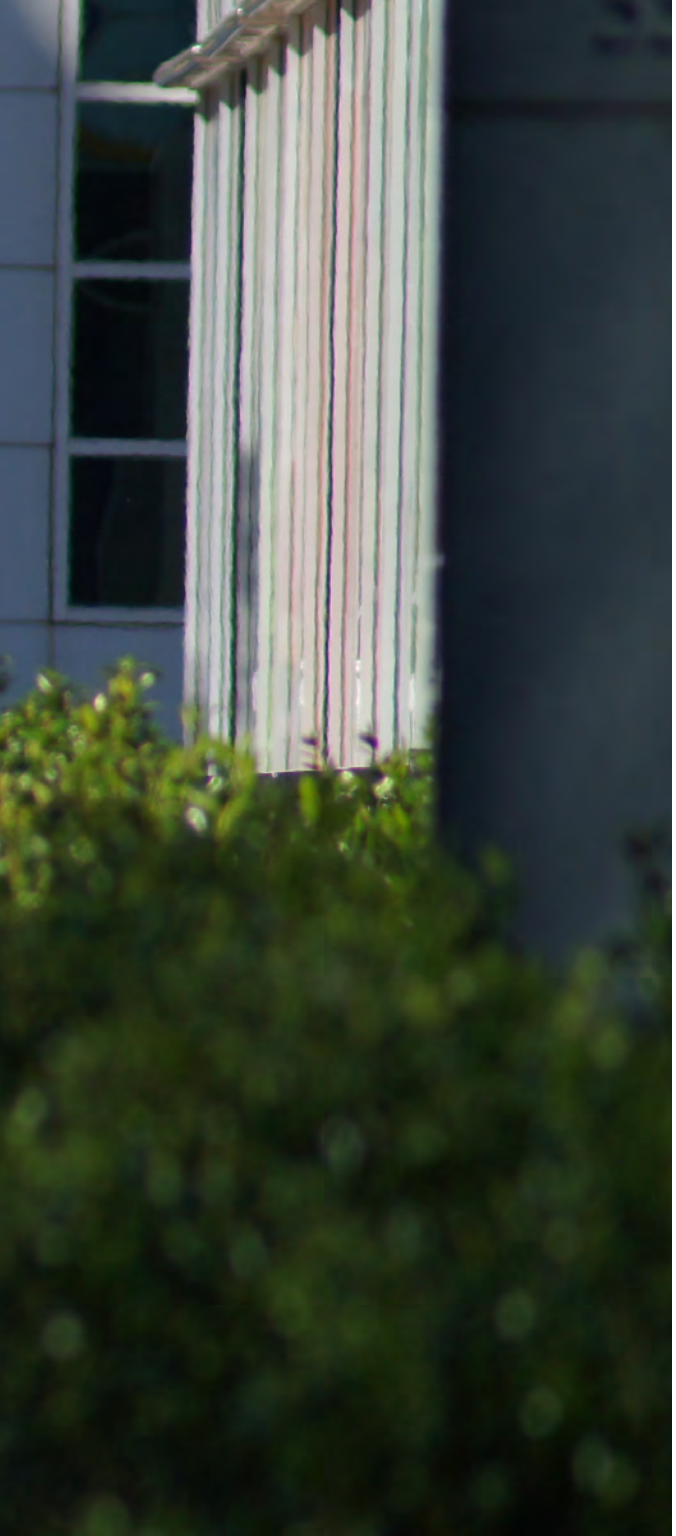
Street corner extensions are used in San Francisco on streets with high pedestrian volumes and/or high traffic volumes and speeds, on wide streets with long crossing times, on streets with a history of pedestrian safety concerns, where neighborhood streets intersect with busier through-ways, and on transit priority streets where shortening crossing cycles would improve transit flow.

CHICAGO (David Smith, CDOT Bikeways Planner)

At intersections of local streets with other local streets, the standard corner curb radius is 10'. Large radii designed to accommodate large trucks are avoided. However, at intersections of local streets with preferential streets, the standard corner curb radius is 15'.

"Walkable Complete Streets" Streets for Pedestrians, Bicycles, Automobiles and Accessibility for all Users"


CAUTION



7.0

BICYCLE FACILITIES

INTENT

This Master Plan recommends a connected framework of clearly delineated bicycle facilities. Key considerations in the development of the plan included connecting Bradley University, The Medical Center and the historic neighborhoods to the Central Business District, Warehouse District and the Riverfront. This Core-to-Shore connection contributes to the renewed sense of community and human scale of Peoria.

The bike facilities of the plan include dedicated bike lanes clearly delineated with roadway markings and signage and a color change to create a bike box at intersections that clarify vehicular bicycle circulation. Sharrow lanes have been included in the plan to allow connectivity along corridors and travel routes. A cycle track has been shown as an option for the Core-to-Shore routes along Hamilton Avenue and Main Street.

The design team interviewed City Planning and Bicycle Planning Teams from around the country to ensure that best practices and lessons learned could be considered in the layout and development of the plans and diagrams.

7.1

PROPOSED BICYCLE LANE

GENERAL RECOMMENDATION

"The way to get more people riding is to make them feel safe. The way you make them feel safe is to build better facilities that separate bicycles from automobile traffic."

Kyle Wagenshultz, Memphis Bicycle-Pedestrian Coordinator

"Cycling studies have shown that adding bike lanes motivates more people to get out and bike. New Orleans saw a 57% increase just six months after bike lanes were marked. Los Angeles also saw a 52% jump in cyclists on their new lanes."

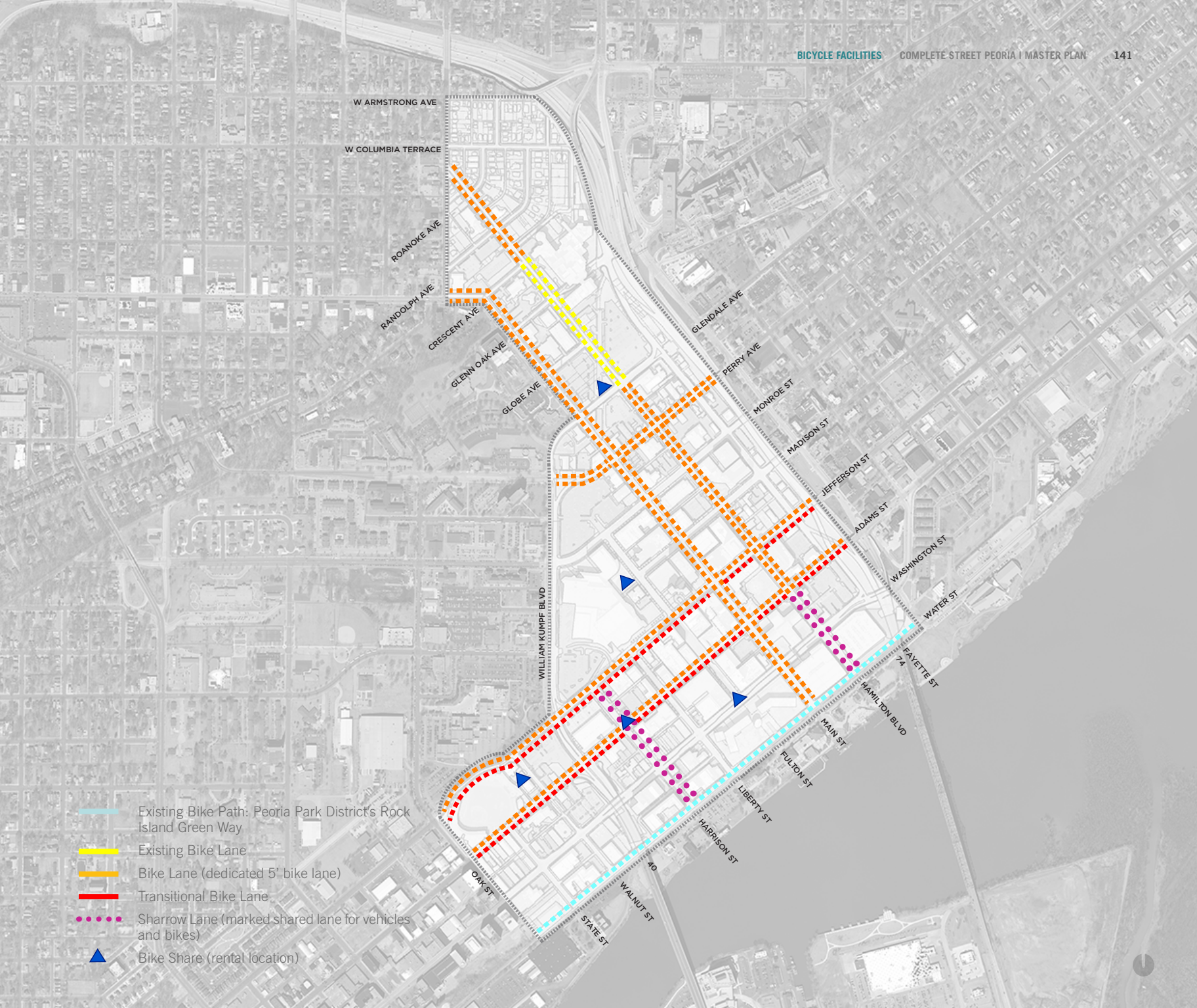
5 Reasons We Need to Add More Bike Lanes, Kevin Mathews

BIKE LANE CONSIDERATIONS

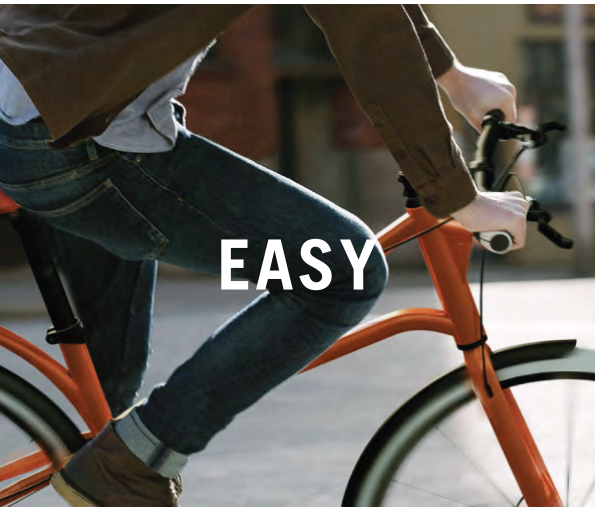
1. Reference the "Guide for the Development of Bicycle Facilities" American Association of State Highway and Transportation Officials (AASHTO.)
2. Site lines, bike lane widths, intersection design, bike route demarcation.
3. Bike lane width to be between 4'-0" and 6'-0" with 6'-8" pavement strip on each side of the lane.
4. Signed Shared Roadway or Sharrow lane should be delineated on 11'0" lanes. Sharrow lanes provide continuity of bike facilities and connect key routes and destinations.
5. Bike facilities should be free from obstructions, grates, or drains. Surfaces should be well marked and delineated and of smooth continuous finishes.
6. Introduce Bike Share program for short distance trips in downtown providing users the ability to pick up a bicycle at any self-serve bike station and return it to any other bike station located within the system's service area.

"Safe convenient and well designed bicycle facilities are essential to encourage bicycle use. "

Guide for the Development of Bicycle Facilities


W ARMSTRONG AVE
W COLUMBIA TERRACE
ROANOKE AVE
RANDOLPH AVE
CRESCENT AVE
GLENN OAK AVE
GLOBE AVE
GLENDALE AVE
PERRY AVE
MONROE ST
MADISON ST
JEFFERSON ST
ADAMS ST
WASHINGTON ST
WATER ST
FAYETTE ST
HAMILTON BLVD
MAIN ST
FULTON ST
LIBERTY ST
HARRISON ST
WALNUT ST
STATE ST
OAK ST
WILLIAM KUMPF BLVD
74
40
Existing Bike Path: Peoria Park District's Rock Island Green Way
Existing Bike Lane
Bike Lane (dedicated 5' bike lane)
Transitional Bike Lane
Sharrow Lane (marked shared lane for vehicles and bikes)
Bike Share (rental location)


DEFINED


EASY


CONVENIENT


ACCESSIBLE


SAFE

BIKE PEORIA

TRAVEL TIMES

from BRADLEY UNIVERSITY

to Riverfront Museum
13 MIN
(2.1 miles)

to Dozer Park
9 MIN
(1.6 miles)

to Methodist Medical Center
9 MIN
(1.8 miles)

from RANDOLPH-ROANOKE DISTRICT

to Riverfront Museum
5 MIN
(1.5 miles)

to Dozer Park
3 MIN
(1.2 miles)

to Methodist Medical Center
2 MIN
(0.4 miles)

from WAREHOUSE DISTRICT

to Riverfront Museum
4 MIN
(0.4 miles)

to Dozer Park
4 MIN
(0.3 miles)

to Methodist Medical Center
10 MIN
(1.84 miles)

from PEORIA HEIGHTS

to Riverfront Museum
17 MIN
(3.6 miles)

to Dozer Park
18 MIN
(3.8 miles)

to Methodist Medical Center
15 MIN
(3.0 miles)

from EAST PEORIA

to Riverfront Museum
14 MIN
(2.2 miles)

to Dozer Park
14 MIN
(2.1 miles)

to Methodist Medical Center
20 MIN
(2.9 miles)

7.2

RECOMMENDED BICYCLE FACILITY TYPES

RECOMMENDED BICYCLE FACILITY TYPES

The plan recommends a network of different types of "bikeways," a term that refers to on-road or off-road facilities designed and designated for travel by bicycle. Bikeway design may include pavement markings, signage, signals and geometric features.

Additional resources in the community include the CityLink (ridecitylink.org) resources provided by the Greater Peoria Mass Transit District and Bike Peoria a community resource promoting active safe biking advocacy.

BIKE LANE

A bike lane is established by marking a portion of a roadway for the preferential or exclusive use of bicycles. Bike lanes are recommended on two-way arterial, collector, and local streets where there is enough width to accommodate a bike lane in both directions, and on one-ways streets, where there is enough width for a single bike lane. Implementation considerations include the following:

- Bike lanes should be a minimum of 5' wide when next to on-street parking, or when prevailing operating speeds are 30 mph or higher.
- Additional bike lane width increases separation from parked and moving vehicles, improves user comfort, and allows for bicycles to pass without leaving the bike lane.
- A striped hatched area may be provided between the bike lane and the travel lane to provide additional separation and buffering between bicyclists and motorists.

SHARROW LANE

The pavement marking is used to designate a bicycle facility on a street without sufficient width for bike lanes. A marked shared lane (sharrow) is a pavement marking symbol that is used to indicate the most appropriate position for a bicyclist to ride. Marked shared lanes direct bicyclists away from the door zone of parking cars and alert motorists of appropriate bicyclist positioning. The markings also provide a way-finding benefit to bicyclists on routes that have numerous turns or changes in direction. Marked shared lanes are not appropriate on street with speed limits greater than 35 mph.

CYCLE TRACK

A cycle track is a bicycle facility that is physically separated from both the roadway and the sidewalk. A cycle track may be constructed at the same grade as the street by using a combination of physical barriers such as on-street parking and/or flex posts to define the bicycle space, or it may be constructed at the elevation of the sidewalk typically adjacent to the curb. Cycle tracks can provide users with a higher level of comfort and may be appropriate on wider streets where double parking and/or higher vehicle speeds are a concern. On two-way streets, cycle tracks should generally be designed for one-way operation in the same direction as adjacent traffic. On one-way streets, a cycle track on the left side of the street can allow for two-way bicycle operation, and the reverse allows for two-way bicycle operation, with the direction operating as a contra-flow lane. Implementation considerations include the following:

- Successful use of this design typically requires removal of parking spaces near intersections to provide adequate sight distance and, depending on operations, may require separate bicycle signals.
- Cycle tracks are most successful on wide, busy streets with high traffic speeds, as the parking stalls and curb/tree boundary act as safety barriers for the biker.

BICYCLE FACILITY TYPES

BICYCLE LANES

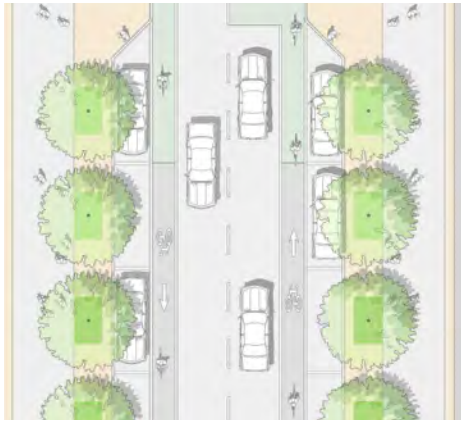
Description

Experimental striped or colored treatment to deter parking where parking/stopping in bike lane may be an issue.

Use

Typically installed by reallocating existing street space (i.e. narrowing other travel lanes, removing travel lanes, and/or reconfiguring parking lanes).

BIKE BOX



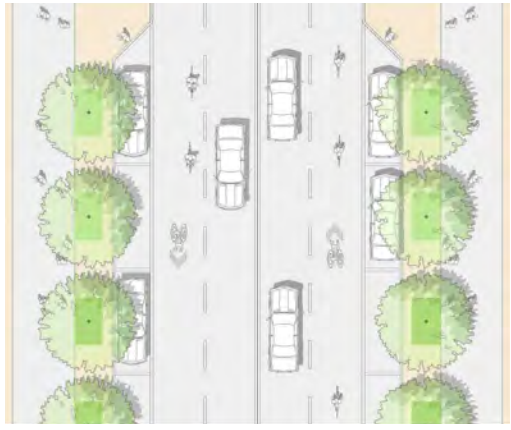
Description

Used at Intersections to give bikers the right of way. This also allows for drivers to be more aware of bikers when stopped at an intersection. This also gives bikers more of an opportunity to make a safe turn.

Use

Typically used with bike lanes at intersections. Could be used on one and two-way roads.

SHARROW LANES



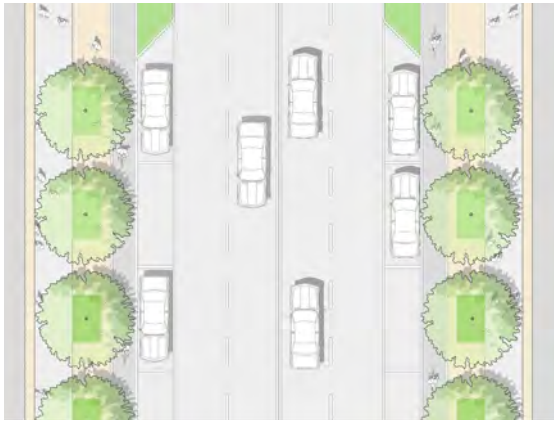
Description

Shared-use; marking used to indicate positions; Marking may be on left side or both sides; often one-way pairs for routing.

Use

Typically installed on streets where space constraints make it impossible to provide bicycle lanes. Shared lane markings should not be used on streets with speed limits higher than 35 mph.

CYCLE TRACK
(MAIN STREET / HAMILTON BOULEVARD)

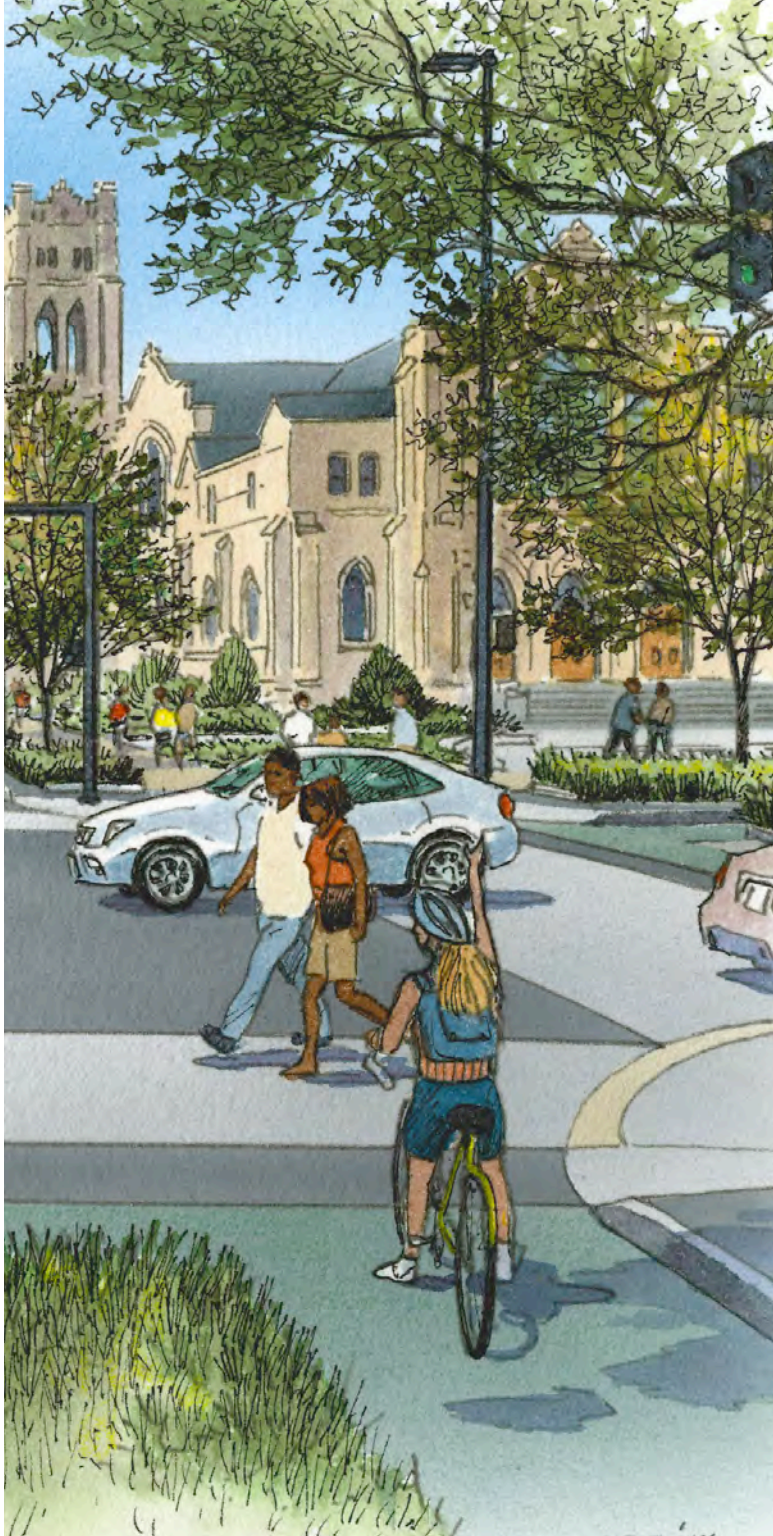


Description

Shared-use; Marking used to indicate positions; marking may be on left side or both sides; often one-way pair for routing.

Use

Typically installed on streets with higher traffic volume and/or speeds, with long blocks and therefore fewer intersections.



7.3
CASE STUDIES

PHILADELPHIA (Laura Spina, City Planning)

Philadelphia's Complete Streets handbook states that bike lanes are more helpful on streets with average daily motor vehicle traffic equal to over 3,000 or posted speeds of 25 mph or greater.

Cycle tracks are used to help provide Philadelphia bikers with a higher level of comfort by mitigating the risk of 'dooring', or collisions with over-taking vehicles. Cycle tracks do take up more space than normal bike lanes, therefore they should only be implemented on streets with the appropriate width.

BOSTON (Denise Dabney, City Planning)

Boston's Boston Bike Network Plan suggests bike facilities such as way-finding and other municipalities to coordinate regional way-finding and signage (primary routes, transit routes, neighborhood centers and squares, parks and institutions, and other major destinations).

Streets with angled parking and bike lanes are to be switched to reverse-angled parking (back-in) to increase visibility of bicyclists when exiting spaces.

SALT LAKE CITY (Complete Streets Policy, SLC)

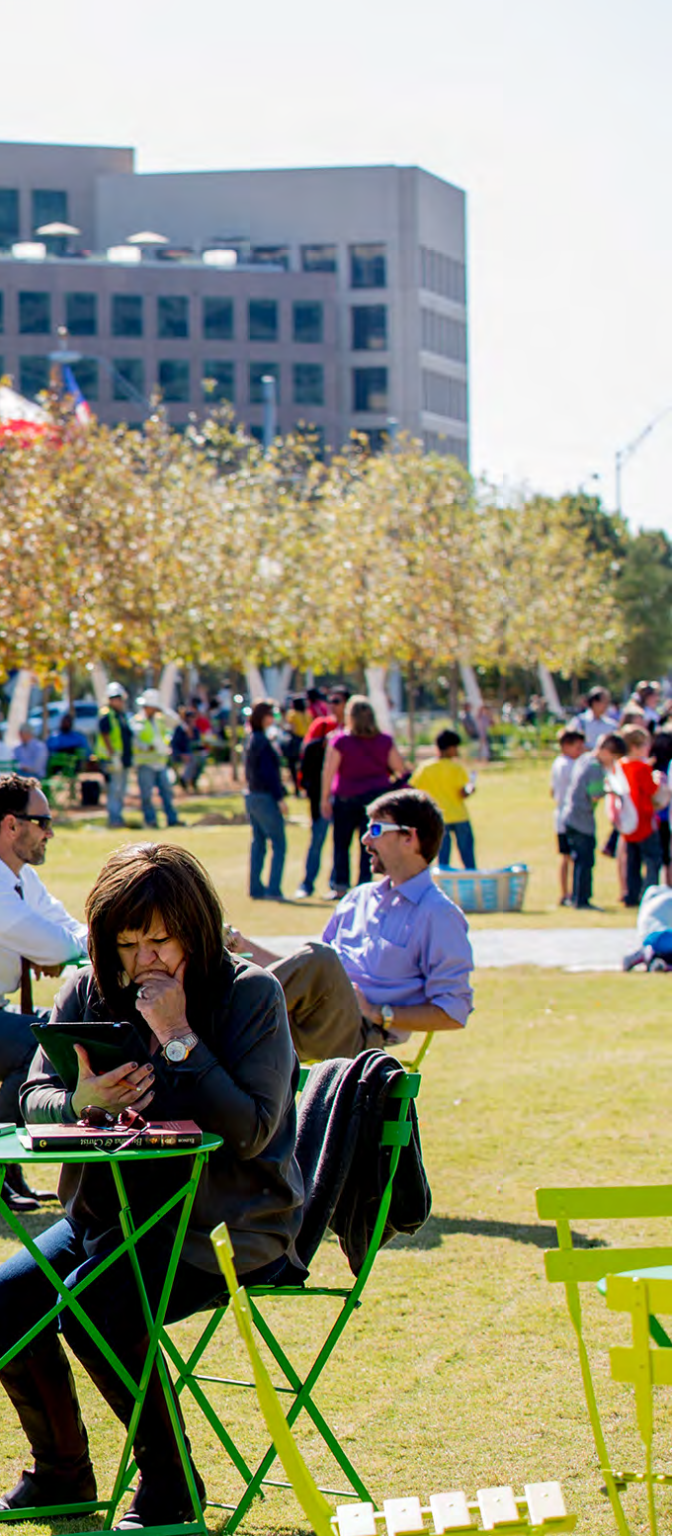
Salt Lake City found that with their downtown's wide and long roads, vehicular traffic speed was high, and therefore dangerous for bicyclists. In this case, the city promoted safe operation of bicyclists in mixed traffic and motorists' awareness of bicyclists, since bicycles were forbidden from riding on the sidewalks.

SAN FRANCISCO (Adam Varat, City Planning)

San Francisco's Better Streets plan emphasizes the importance of bulb-outs, not only to provide more significant public space for the pedestrian, but also as a barrier to vehicular traffic.

PORTLAND

Portland's Neighborhood Greenway Initiative converted and expanded existing Bicycle Boulevards into a network of Neighborhood Greenways, or residential streets designed to prioritize bicycles and pedestrians over automobile traffic. Typically, greenway speed limits are 20 mph. The Neighborhood Greenways initiative uses speed bumps to achieve the desired 20 mph operating speed.



8.0

WALKABILITY AND OPEN SPACE

INTENT

"Walkable Complete Streets" is one of the Project Goals and guiding principles directing the focus of this Master Plan. Pedestrian friendly streets are designed to include a number of comfortable urban amenities (seating, lighting, art), that enhance the user experience and accommodate all user groups. Contributing factors include user comfort, safety, convenience, connectivity, access to a mixture business and retail amenities and access to open space.

Key walkable corridors have been developed to encourage connectivity between the Central Business District and each of the districts adjacent to downtown. Greenspace has been identified as a key contributor to encourage walkability in downtown Peoria. The plan identifies existing open space and proposes a series of additional greenspaces that connect people with nature. Greenspace offers Peorians a number of health benefits along with enhancing the general quality of life.

8.1

WALKABILITY AND OPEN SPACE

GENERAL RECOMMENDATION

"Each additional hour spent in a car per day was associated with a 6% increase in the odds of being obese, while each additional kilometer walked per day was associated with a 4.8% reduction in the odds of being obese."

R.E. Andersen, 2003, from the U. S. Department of Health and Human Services

"A walk has to satisfy four main conditions: it must be useful, safe, comfortable, and interesting."

Walkable City, How Downtown Can Save America One Step at A Time, Jeff Speck

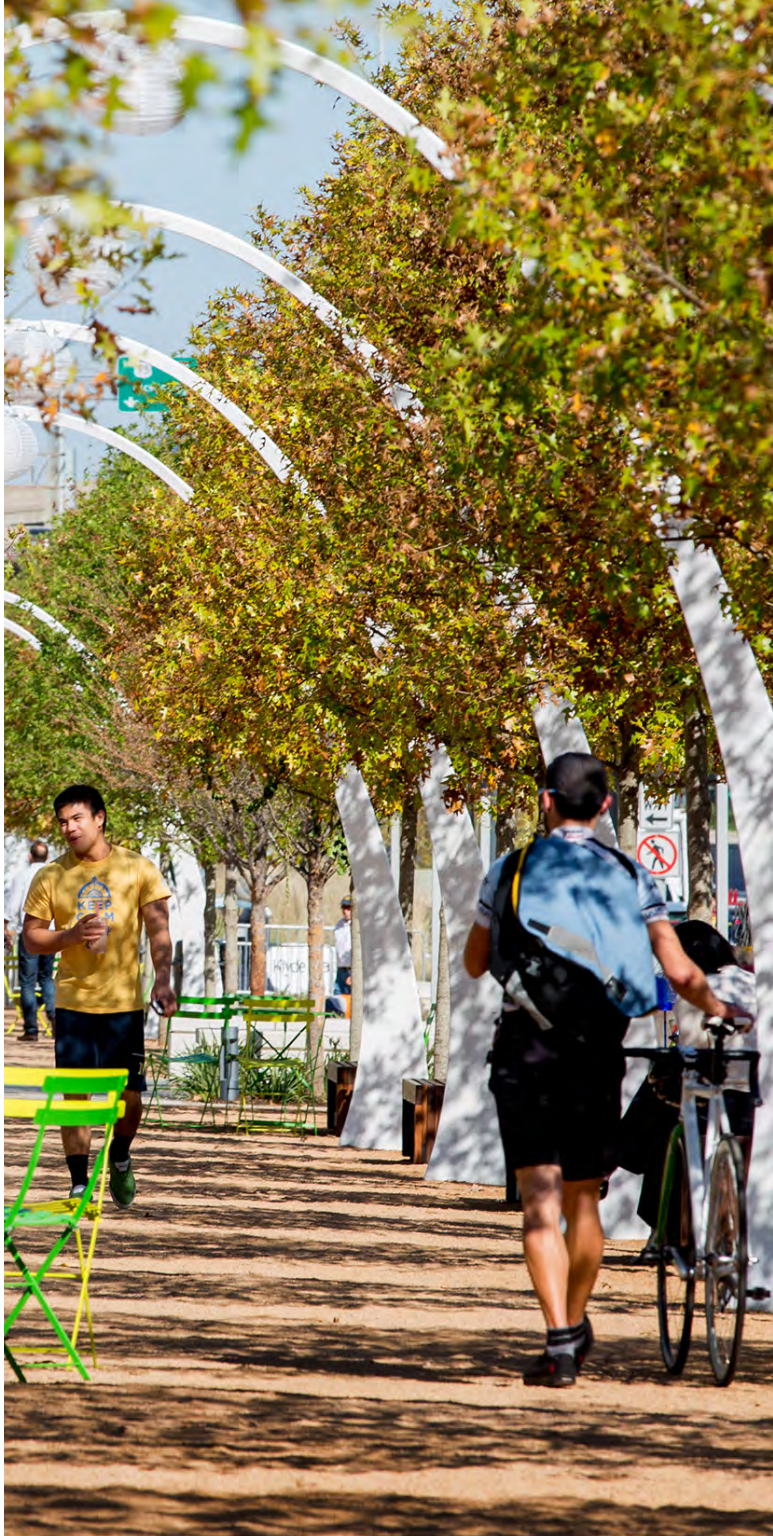
WALKABILITY

1. The average pedestrian walks approximately 3'-4' per second. This translates to about 2.0 to 2.75 miles per hour.
2. The average person will walk a maximum of 700' or 3-4 minutes.
3. Safe pedestrian streetscapes have roadway speeds of 25 mph or less.
4. Great streets should consider grade, cross slope, comfortable width, passing space, vertical clearance, and changes in level, grates and gaps, be free of obstacles and protruding objects and employ a comfortable walking surface.
5. Physical comfort definition and boundaries.
6. Concentrate amenities near corners and mid-block crossings.

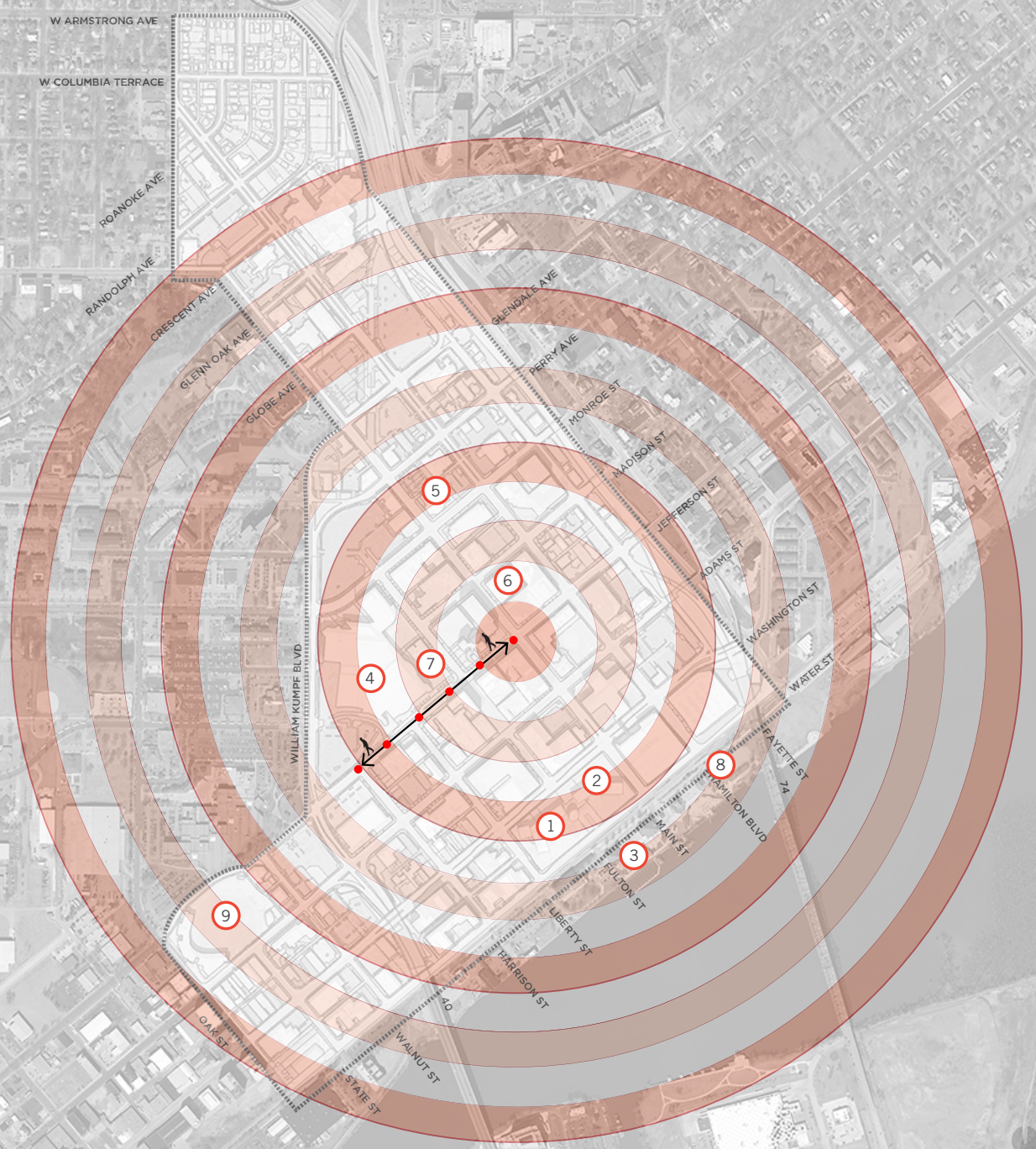
OPEN SPACE/ GREEN SPACE

1. Spaces should be safe, comfortable and interesting - they must give people a reason to walk.
2. Spaces must provide people with a sense of place, community, identity and pride, and may be found in distinctive architecture and landscapes, which can make a place unique, special and attractive.
3. Street trees and planting to be used to create sense of enclosure and comfort on sidewalks and streets.
4. Green space networks can include parks and recreation system.

5. Animal habitats, plant growth zones, production lands, recreation experiences and wetlands are open and green spaces that support quality of life experiences.
6. Minimize exposed surface parking lots.
7. Open space to contribute to the (CSO) Combined Sewer Outflow water management strongly.
8. Streetscape Principles.
9. Defined Streetscape Zones, Cart Path, Amenities Zone, Pedestrian Realm and Building/Retail Zone.
10. Smooth comfortable walking surfaces.
11. Landscaping in both the vertical and horizontal streetscape.
12. Comfortable lighting levels for both the roadway traffic lanes (1 foot-candle/10 lux) and the pedestrian realm (.5 foot-candle/5 lux).
13. Comfortable amenities and street furnishings include benches, waste receptacles, bike racks, specialty design features and landscaping.
14. Convenient facilities, signalization, environmental graphics, transit shelters.
15. Streetscape/retail zones that offer, context, opportunities for enhanced movable seating and landscaping, people watching, nightlife opportunities and a layering of street richness.



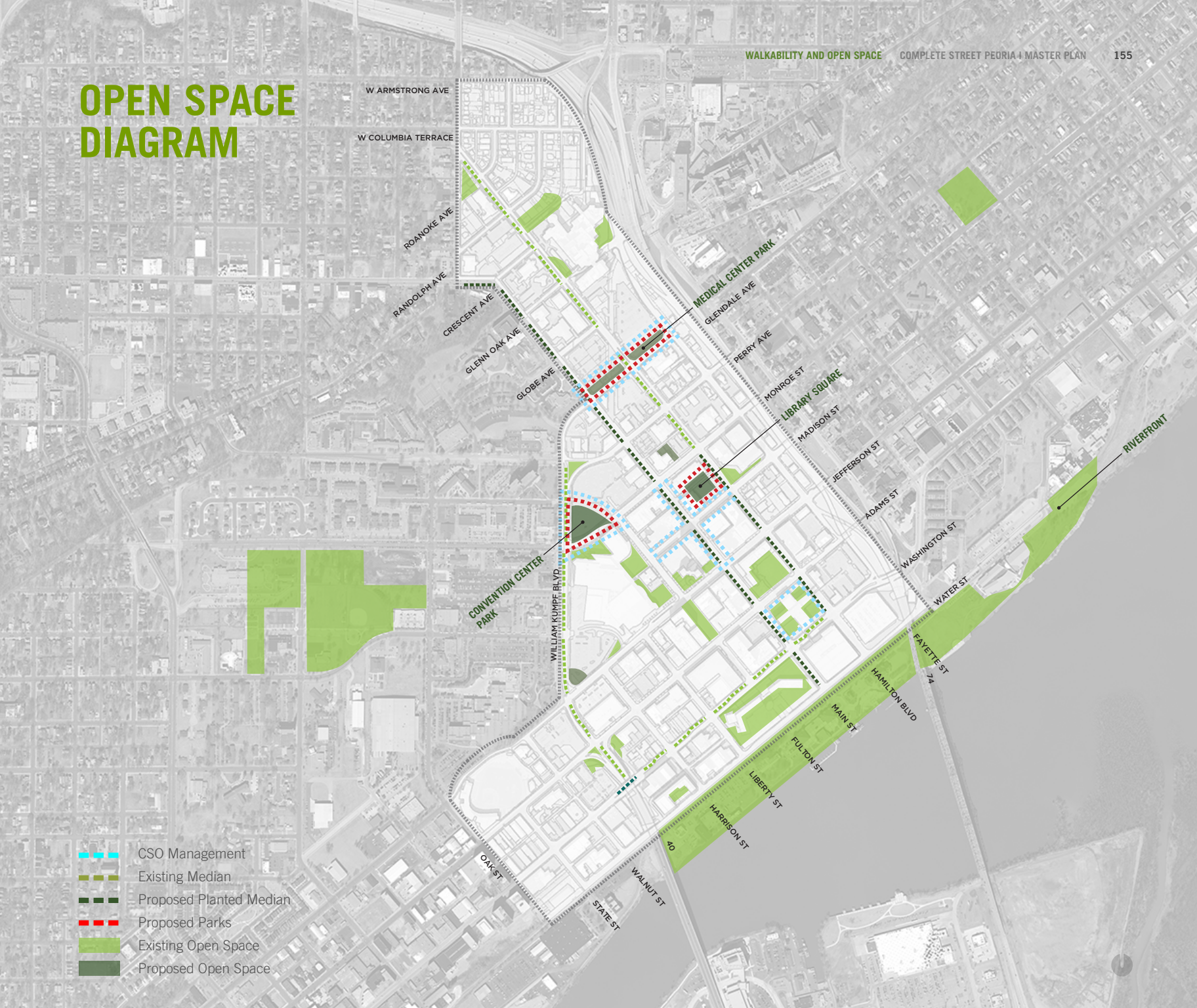
WALKABILITY DIAGRAM



5 min. Walking Radius

1. Peoria Riverfront Museum
2. Caterpillar Visitors Center
3. Spirit of Peoria
4. Civic Center
5. Peoria Public Library
6. County Courthouse Plaza
7. Peoria City Hall
8. Gateway Building
9. Dozer Park

OPEN SPACE DIAGRAM



“The availability of park and recreation facilities is an important quality-of-life factor for corporations choosing where to locate facilities and for well-educated individuals choosing a place to live“

Why America Needs More City Parks and Open Space, Paul M. Sherer

WALKABILITY


RECREATION


EXPERIENCE


INTEREST

CONVENTION CENTER PARK

1 Travel Lane
2 Accessible Parking
3 Cross Walk
4 Planted Median
5 Street Trees
6 Ornamental Trees
7 Architectural Canopy
8 Sculpture
9 Courtyard
10 Water Feature
11 Event Lawn

MEDICAL CENTER PARK WEST

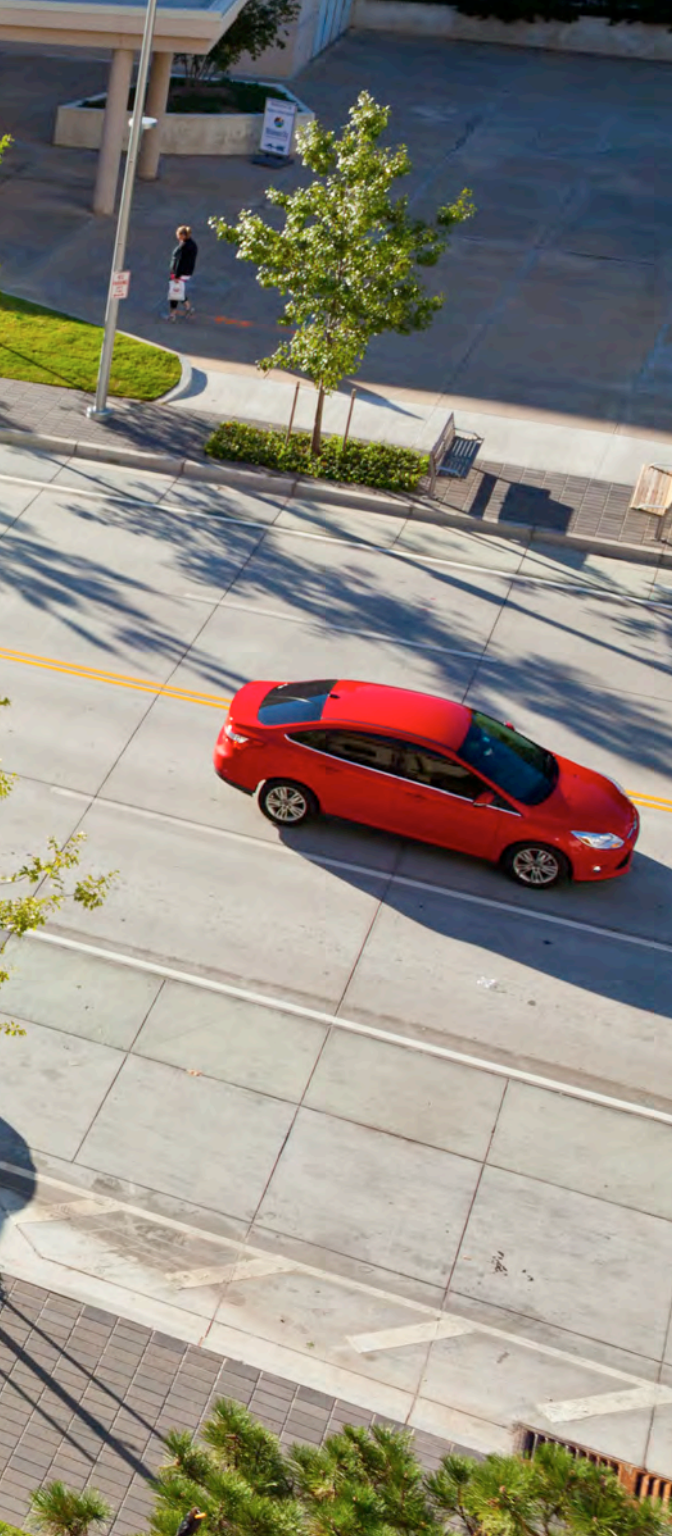
1 Travel Lane
2 Accessible Parking
3 Cross Walk
4 Bike Lane
5 Planted Median
6 Street Trees
7 Ornamental Trees
8 Ornamental Planting
9 Sports Field
10 Courtyard
11 Children's Play Area
12 Event Lawn

MEDICAL CENTER PARK EAST

Medical Center Park

LIBRARY SQUARE

1 Travel Lane
2 Accessible Parking
3 Cross Walk
4 Bike Lane
5 Planted Median
6 Street Trees
7 Street Light
8 Ornamental Trees
9 Ornamental Planting
10 Architectural Canopy
11 Event Lawn
12 Courtyard



9.0

ECO STREET

INTENT

Discovery during the Master Planning process identified the great need to deal with storm water in Peoria. The existing system during peak times at maximum capacity relies on untreated overflow to the Illinois River. The renovation of Peoria's downtown streets at their surface level also provides an opportunity to retrofit the streets below ground so that they can manage rainfall right where it lands. In short, since the streets will already be demolished for curb, paving, earthwork and planting renovations, it will be a small additional cost to install very low-tech stormwater cleansing and infiltration infrastructure at the same time. This type of stormwater infrastructure is often referred to as Green Stormwater Infrastructure (GSI). Currently two alignments have been anticipated as pilot projects.

9.1

ECO-STREET

WATER QUALITY

"Stormwater from urban areas delivers many pollutants to our streams, lakes, and beaches - including pathogens, nutrients, sediment, and heavy metals. In cities with combined sewer systems, high stormwater flows can also send untreated sewage into our waters. By retaining rainfall from small storms, green infrastructure reduces stormwater discharges. Lower discharge volumes translate into reduced combined sewer overflows and lower pollutant loads."

United State Environmental Protection Agency, Why Green Infrastructure? *water.epa.gov/infrastructure*

THE BENEFIT OF GETTING THE STREETS OFF THE GRID

Most of the downtown streets currently drain to a "combined sewer" wherein rainfall runoff is combined with building sanitary sewage in a single pipe under the street. This combined flow is conveyed many blocks to the city's wastewater treatment plants. When a rain storm creates more runoff than can safely be treated at the plant, the combined sewer overflows to Illinois River. This occurs with as little as 3 inches of rain. The city of Peoria plans to implement a number of GSI projects around the city to reduce combined sewer overflows with the intent of ultimately achieving a no overflow situation for all storms up to the 10-year storm (4.32 inches of rain). The streetscape renovations present an excellent opportunity to render the street network self-sufficient relative to rainfall runoff by leveraging the new planting and underlying soil materials to first cleanse runoff and then direct it into the ground rather than into the combined sewer. The street network could be "off the grid" for all storms up to the 10-year storm goal of the city, and would be consequently no longer a part of the city's Combined Sewer Overflow (CSO) problem. A network of "Eco-Streets" that take care of themselves.

AN ECO-STREET PILOT

Creating a demonstration of the above-described Eco-Street could be very simple, with the Green Stormwater Infrastructure elements surgically inserted into the existing right-of-way fabric of the city. A single block pilot would accomplish a variety of goals including:

- Allow the city to show the EPA that Peoria is serious about installing Green Stormwater Infrastructure to reduce CSOs.
- Show the public how Green Stormwater Infrastructure and Eco-Streets work.
- Showcase all the other master planned elements of a Complete Street.
- Refine the means and methods for inserting Green Stormwater Infrastructure elements.
- Inform cost models for a wider roll-out of Complete Streets and Eco-Streets.
- Inform how Eco-Streets could be created in more suburban parts of the city; if you can fit Green Stormwater Infrastructure into downtown streets then you can fit it anywhere.

HOW WOULD IT WORK?

Like most urban street networks, Peoria's utilizes the street intersections as the collection point for flow travelling along the street curb line. Consequently a pilot area centered on an intersection would allow the most seamless conversion of the existing drainage collection method to the new Eco-Street method. In addition, this would allow study and showcasing of how main streets, side streets and the intersection itself would be renovated.

What is an **ECO-STREET**?

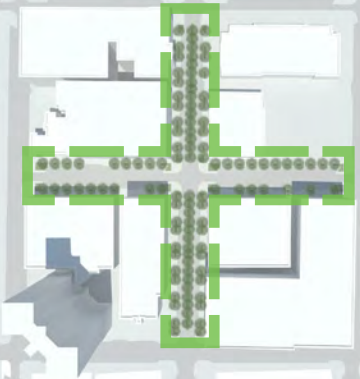
An Eco-Street involves utilizing plants and underlying soils and gravels to manage street runoff where it lands.

Why do **WE NEED** it?

Eco-Streets will eliminate Peoria's street contribution to the city's combined sewer overflow problem.

How will it benefit the **PEORIA COMMUNITY**?

Not only will Eco-Streets solve a serious public health issue, they will convert street ecology to function more like Mother Nature where plant uptake, evaporation and infiltration dispose of rainfall while creating a healthy ecosystem on every block.

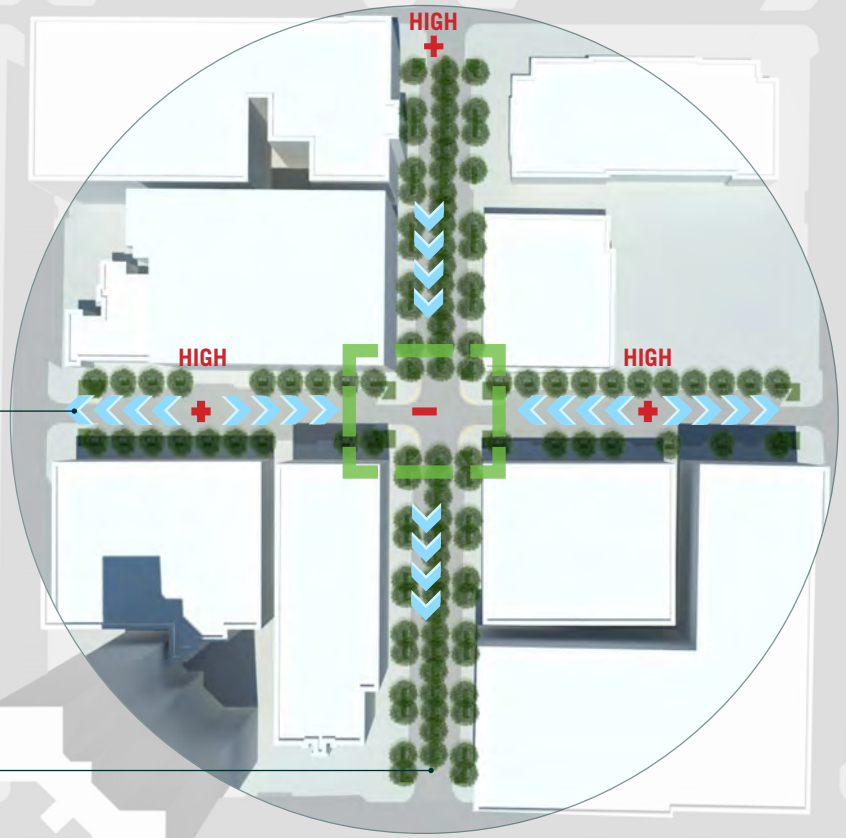


ECO-STREET

PILOT STUDY

Intersection-Focused Stormwater Micro-Shed

Like most urban street networks, Peoria's utilizes the intersections as the collection point for flow traveling along the curb lines.



EAST & WEST

East & west streets have a high point at mid-block with half-street length collection at intersections.

NORTH & SOUTH

North & south streets flow south with one full street length collection at intersections.

MONROE ST.

MADISON ST.

JEFFERSON ST.

FULTON ST.

MAIN ST.

HAMILTON BLVD.

ECO-STREET

PILOT STUDY

Intersection-Focused Stormwater Microshed

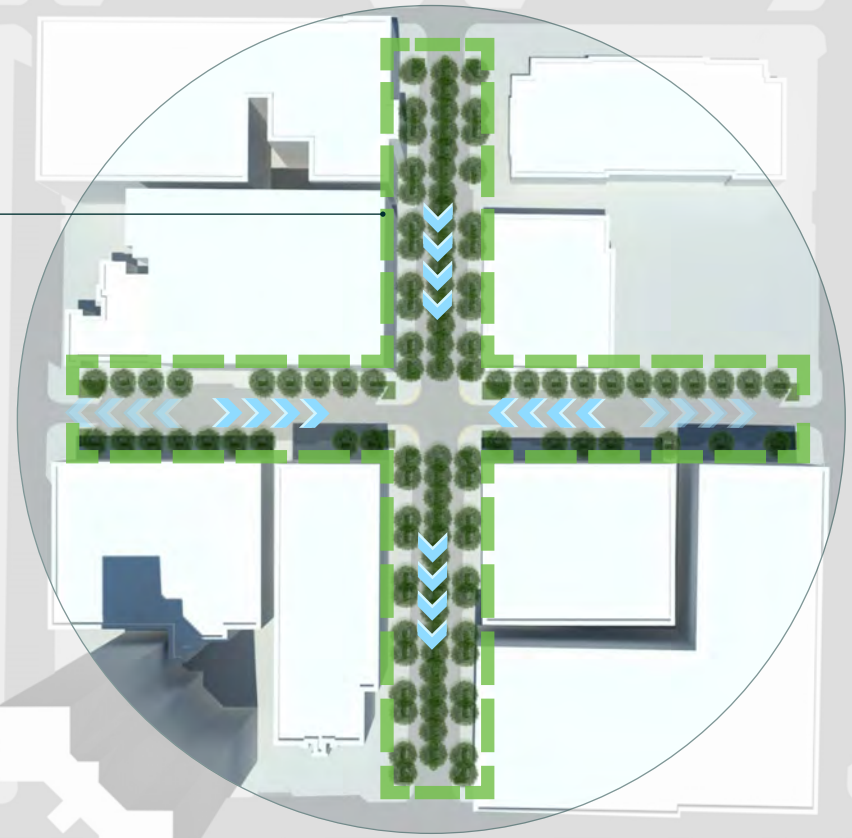
This collection paradigm defines a stormwater microshed that is intersection-focused.

[Stormwater Micro-Shed]

The area contributing runoff to a single intersection - **154,000** sf

[Water Collection Comparison]

10 Year Storm: **4.32** in/ 24 hr.
404,000 gallons
54,000 cubic feet
25 swimming pools



ECO-STREET

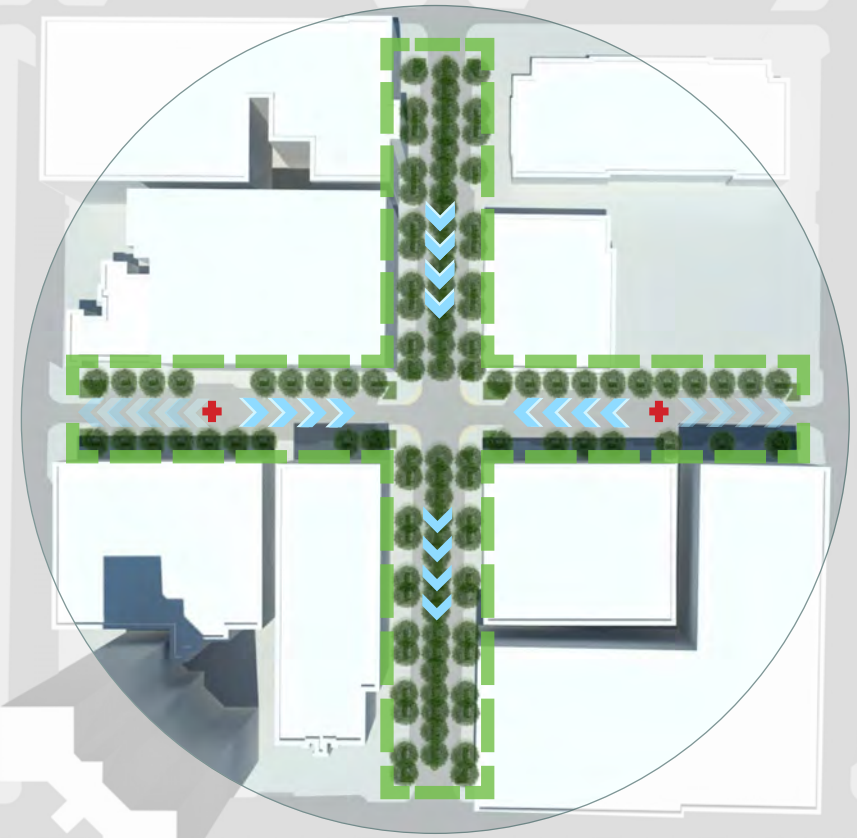
PILOT STUDY

Area Conversion

The proposed design reduces vehicular area and converts it to planting, leaving pedestrian areas more or less unchanged.

Area of Use Comparison

for **150,000** sf Stormwater Microshed



MONROE ST.

MADISON ST.

JEFFERSON ST.

FULTON ST.

MAIN ST.

HAMILTON BLVD.

ECO-STREET

PILOT STUDY

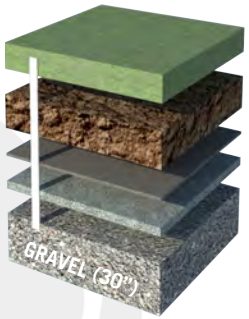
Intersection-Focused Stormwater Microshed

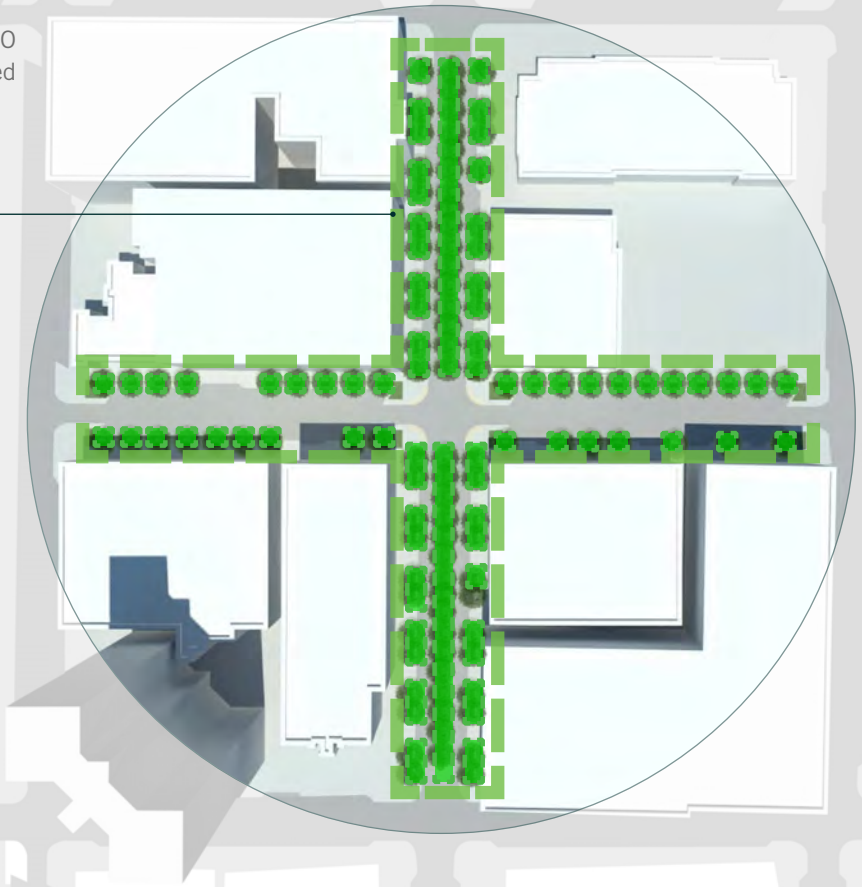
[Zero-Discharge Streets]

The proposed design allows for full infiltration of the CSO design storm (the 10 year storm) which can be accomplished in a number of alternative ways.

[Bio-Retention System]

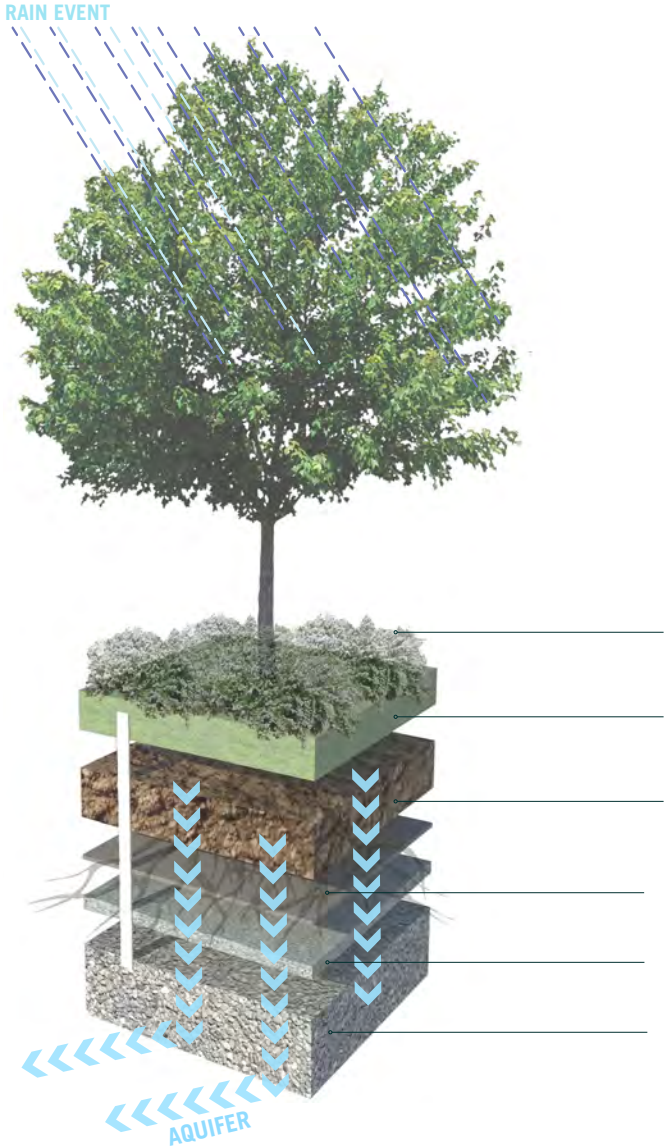
Infiltrate entire microshed at all landscape elements; gravel layer = 2.5 feet deep over area of all landscape elements.





ECO-STREET

SELF-MITIGATING STREETSCAPE SECTION



[Bio-Retention Infiltration System]

Bio-retention areas function as a soil and plant based stormwater runoff filtration device/process that remove sedimentation and contaminants through a variety of physical and chemical treatment processes. This process includes the capture or routing, collection of water and the infiltration of water back into the groundwater system. Filtration will include plant material, a treatment soil profile, geotextile fabric, pea gravel layer, and gravel infiltration facility. Overflow stacks will provide relief to the system should excessive amounts of stormwater pass through basins.

REGIONALLY-ADAPTIVE PLANTS
Natives and adapted species reduce maintenance & water needs and create habitat.

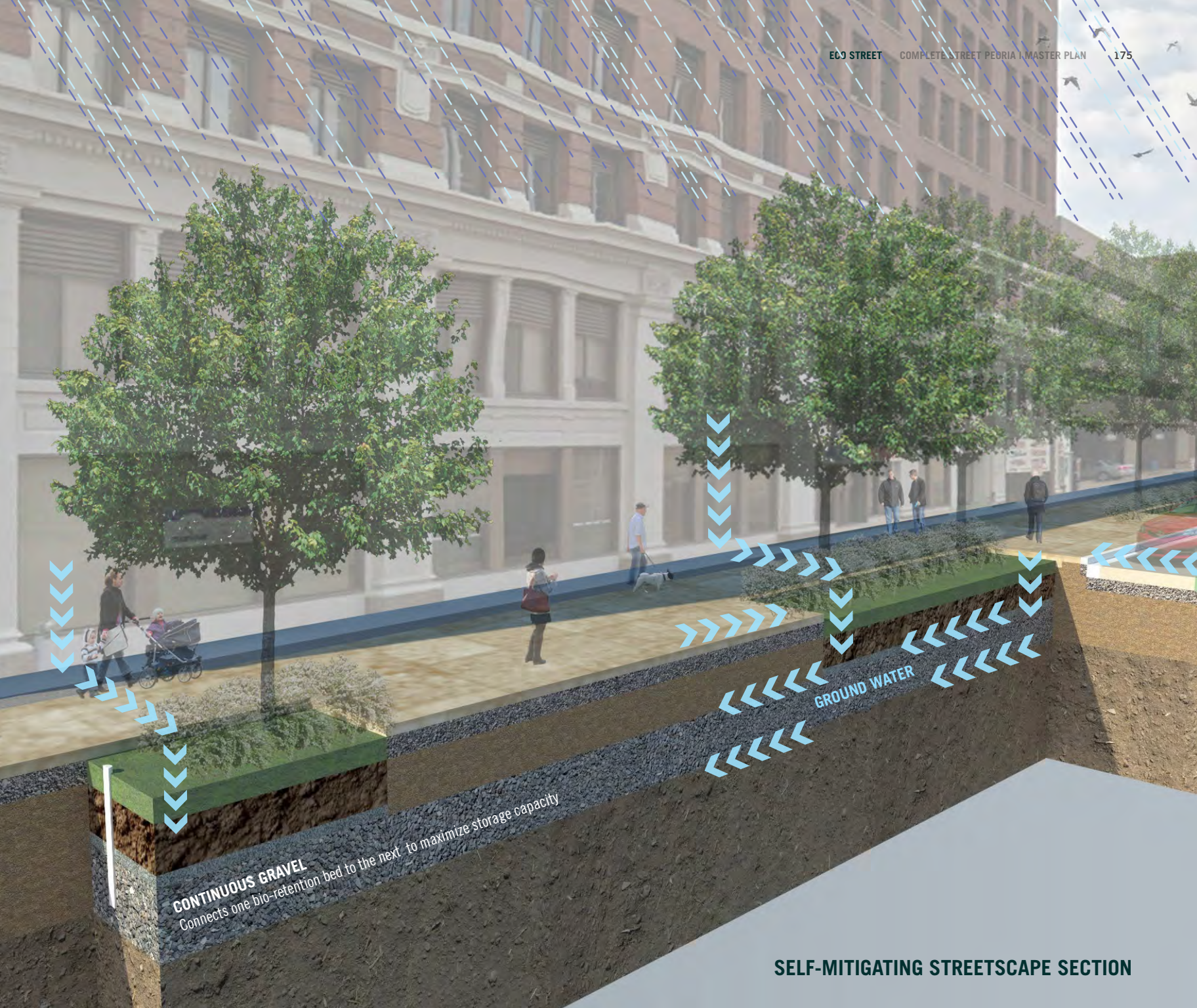
OVERFLOW STACK (24")
Provides relief to the system should excessive amounts of stormwater pass.

BIO-RETENTION SOIL (24")
Soil mix used in bio-retention systems for determining flow control and water quality treatment performance.

FILTER FABRIC (2")
Filters and treats runoff

PEA GRAVEL (6")
Filters and treats runoff

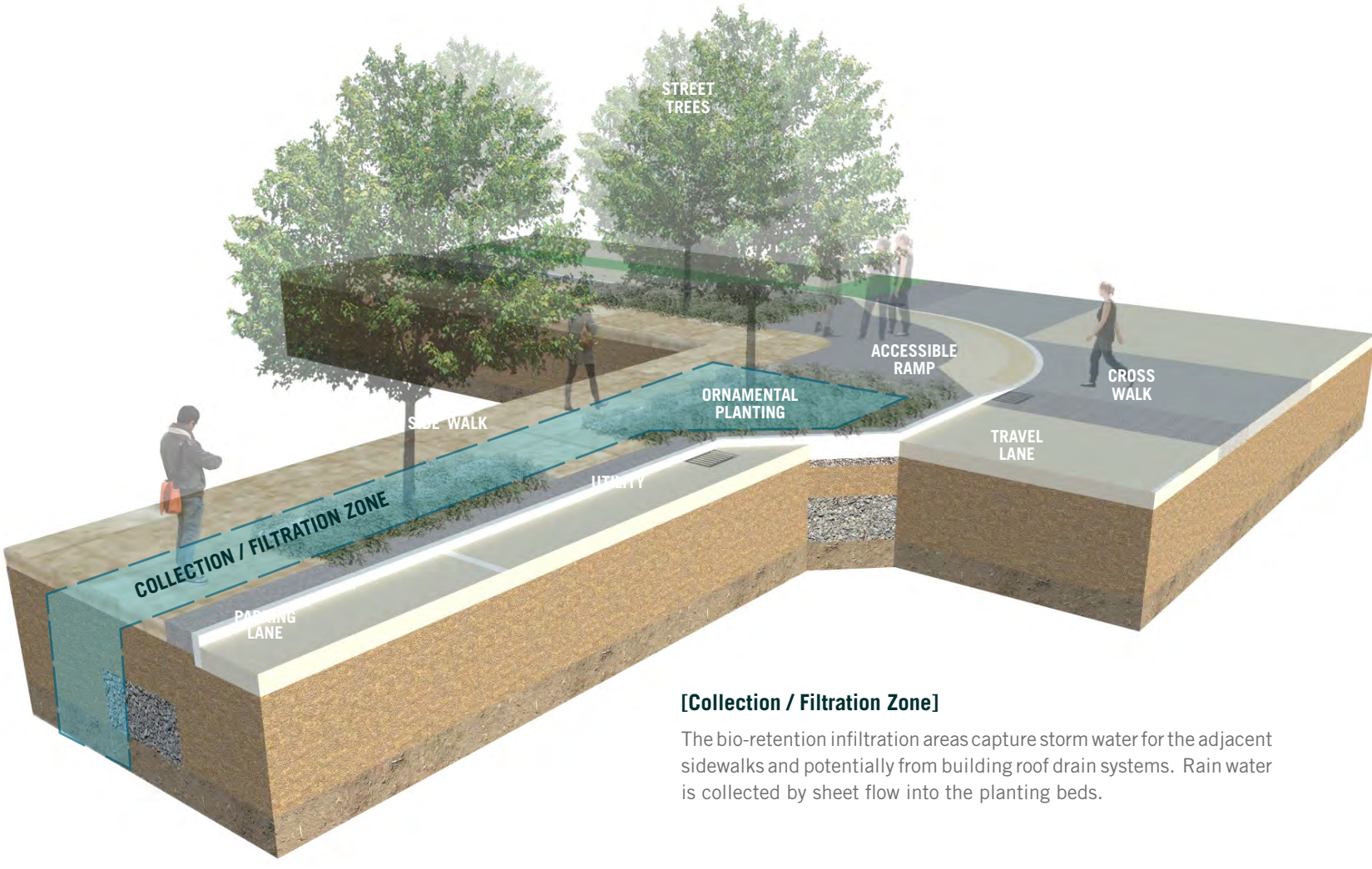
GRAVEL (30")
Functions as a second filter and treatment to the runoff



SELF-MITIGATING STREETSCAPE SECTION

ECO-STREET

BIO-RETENTION INFILTRATION SYSTEM

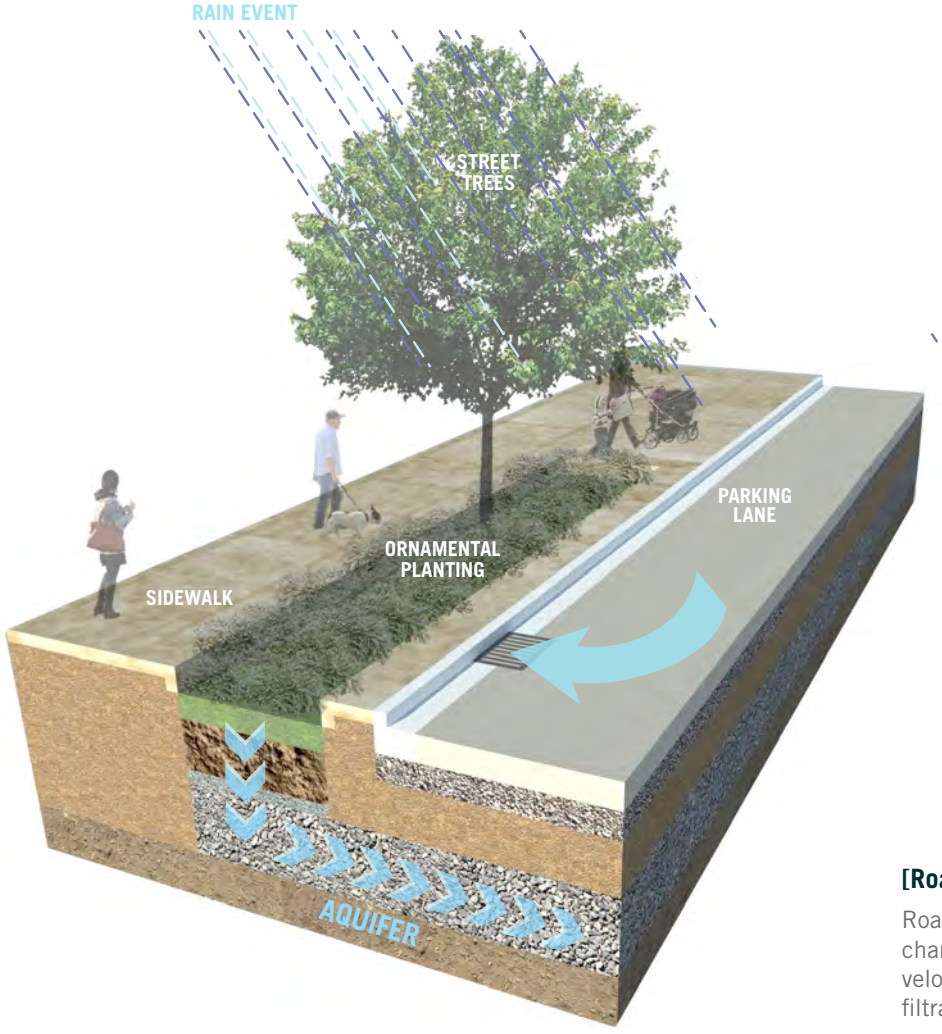


[Collection / Filtration Zone]

The bio-retention infiltration areas capture storm water for the adjacent sidewalks and potentially from building roof drain systems. Rain water is collected by sheet flow into the planting beds.

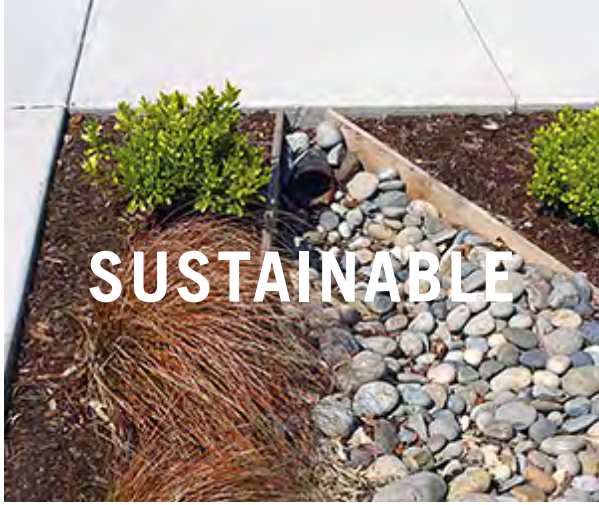
ECO-STREET

BIO-RETENTION INFILTRATION SYSTEM



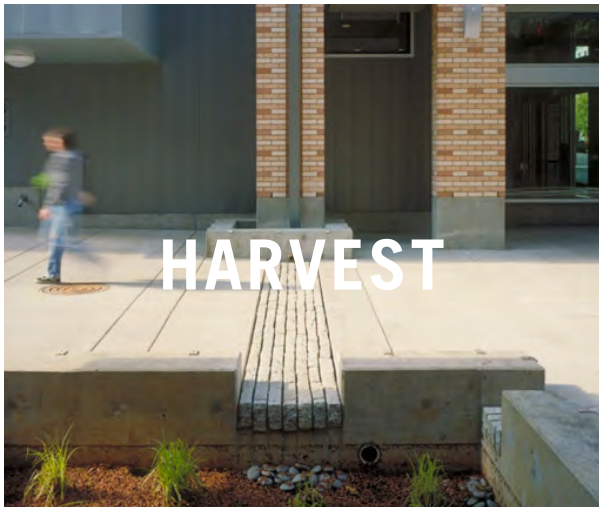
[Roadway Collection]

Road way water sheet flows to the adjacent curbs were it is channeled and captured in a storm drain box slowing water velocity. The water is then channeled via pipe to the collection filtration zone where it finds it way back into the ground water.


SUSTAINABLE


MITIGATE


GREEN

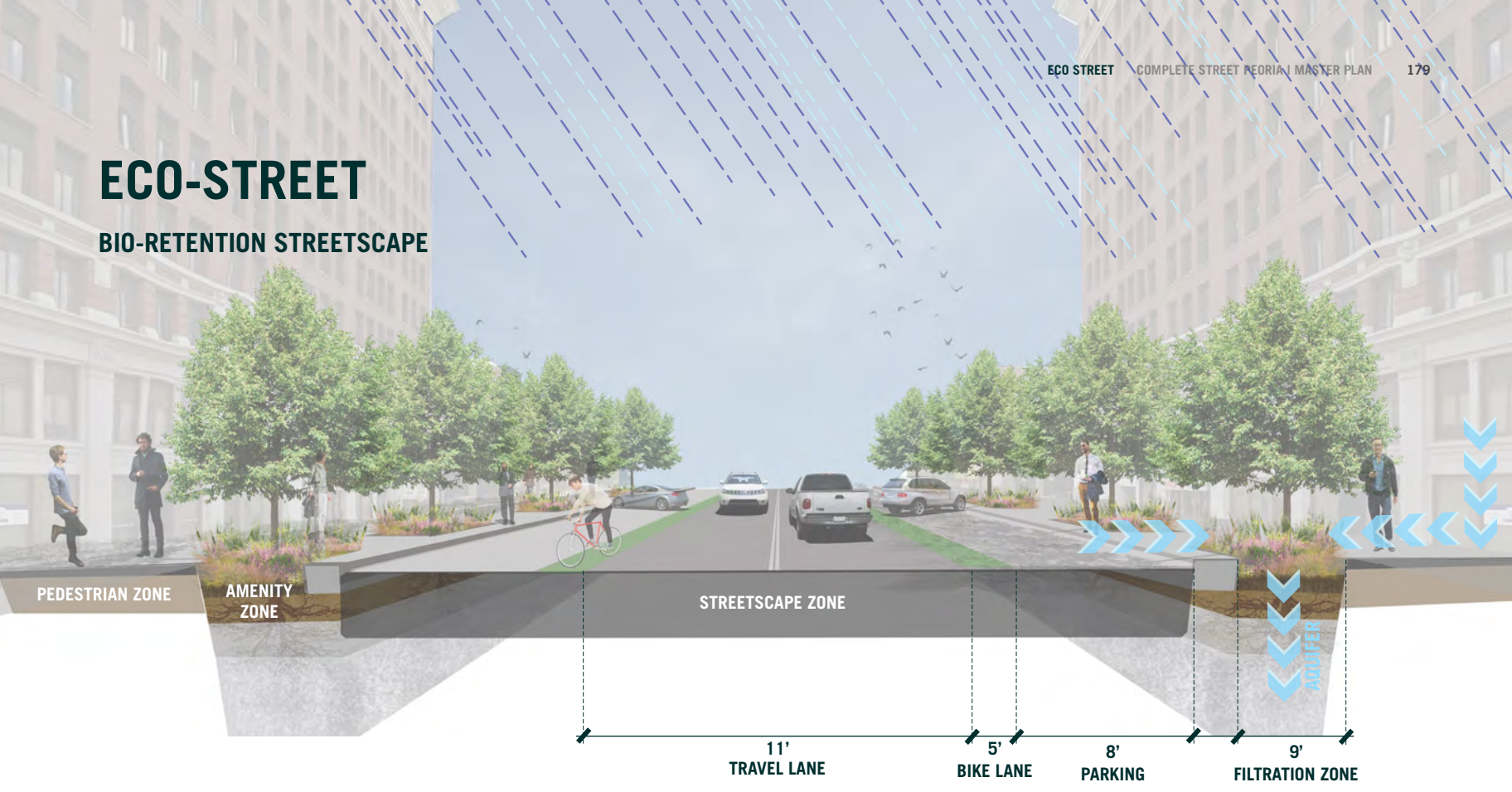

HARVEST


ENVIRONMENTAL


COLLECT

ECO-STREET

BIO-RETENTION STREETSCAPE



[Eco-Street Section]

The Eco-Street Section or Green Stormwater Infrastructure will allow the City of Peoria to reduce or even eliminate the current stormwater. This shift will serve as a model for other communities who face similar water quality issues related to Combined Sewer Overflow (CSO.) With an Eco-Street Framework, Peoria will lighten the environmental footprint of the city and enhance the quality of life and Peoria Riverfront.


SECRET POSTURES

10.0

SUMMARY OF RECOMMENDATIONS

INTENT

In summary the design team, with input from the Steering Committee and Public Workshop, recommends that the City of Peoria move forward with the funding and implementation of this plan. This plan promotes the phased transition from a 1-way/2-way traffic model to a 2-way traffic system of complete streets including developed accessible pedestrian zones, amenity zones that provide user amenities, updated lighting and a continuous tree canopy, maximized on-street parking, bicycle facilities, right-sized traffic lanes, planted medians on key street alignments and the implementation of an eco-street system that can minimize or eliminate the current combined sewer overflow conditions.

We would like to thank everyone from the City of Peoria, stakeholders, citizens and Transportation & Downtown Advisory Commission who contributed generously to make this comprehensive plan. Their time, thoughtful insights and ideas captured an understanding of existing conditions and guided a vision that can truly reshape the Central Business, Medical Center and Warehouse Districts of Peoria. This collective collaboration has been documented and illustrated in this comprehensive master plan.

10.1

PHASING PLAN

GENERAL RECOMMENDATION

Complete Streets Peoria recommends that the City of Peoria approve and accept this plan and then move forward with an initial pilot project. It is recommended that the first section include the streetscape and intersections on Fulton Street between Jefferson Avenue and Adams Street.

This alignment will open a previously closed plaza section of street and serve as a model for future street infrastructure projects in Peoria.

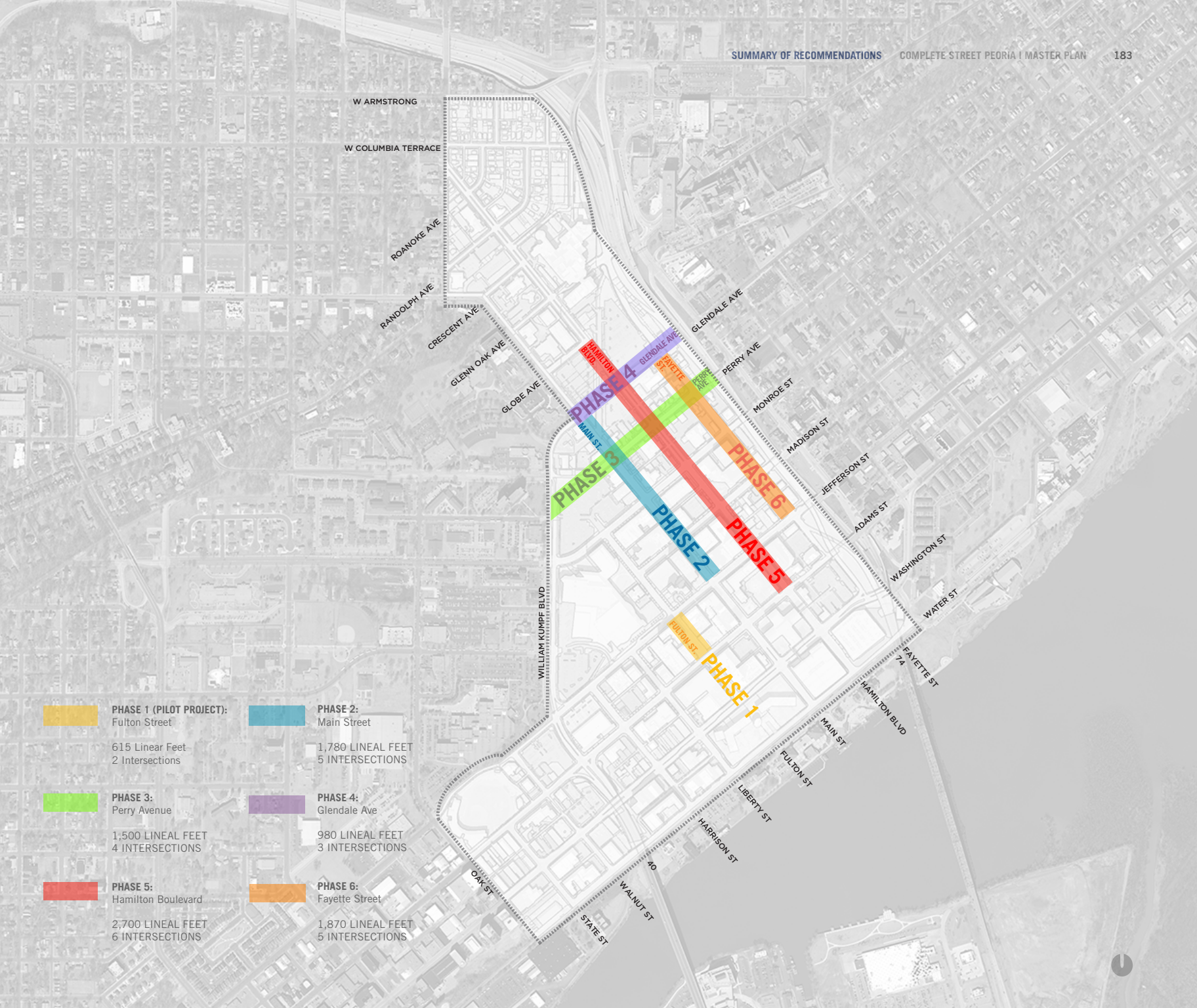
This alignment will allow for the implementation of a clearly identified pedestrian zone, amenity zone with street trees, lighting and street furniture, back-in angled parking, and eco-street improvements. This section will allow the City to monitor and evaluate the effectiveness of stormwater collection, filtration and infiltration. It will also serve as a case study for a new standard of design and implementation of systems.

PROJECT PHASES

1. Phase 1 - Fulton Street (Pilot Project) reopening the street to a two-way alignment including pedestrian zone, amenity zone, back-in angled and 2-traffic lanes.
2. Phase 2 - Main Street a core-to-shore connection including pedestrian zone, amenity zone, parallel parking, bike lane, planted median and 2-traffic lanes. A true boulevard condition.
3. Phase 3 - Perry Avenue a conversion to a two-way alignment including pedestrian zone, amenity zone, parallel parking, bike lane and 2-traffic lanes.
4. Phase 4 - Glendale Avenue realignment to a true two-way street including, pedestrian zone, amenity zone, parallel parking and 3-traffic lanes. This alignment also proposes a potential greenscape opportunity for downtown Peoria.
5. Phase 5 - Hamilton Boulevard including pedestrian zone, amenity zone, parallel parking bike lane, planted median and 2-traffic lanes. A true boulevard condition and neighborhood connection to the river.
6. Phase 6 - Fayette Street a conversion to a 2-way alignment including pedestrian zone, amenity zone, parallel parking, bike lane and 3-traffic lanes.

"Peoria is an outstanding place to live, work and play. Spread the word."

Mayor Jim Ardis



PHASE 1 (PILOT PROJECT):
Fulton Street

615 Linear Feet
2 Intersections

PHASE 2:
Main Street

1,780 LINEAL FEET
5 INTERSECTIONS

PHASE 3:
Perry Avenue

1,500 LINEAL FEET
4 INTERSECTIONS

PHASE 4:
Glendale Ave

980 LINEAL FEET
3 INTERSECTIONS

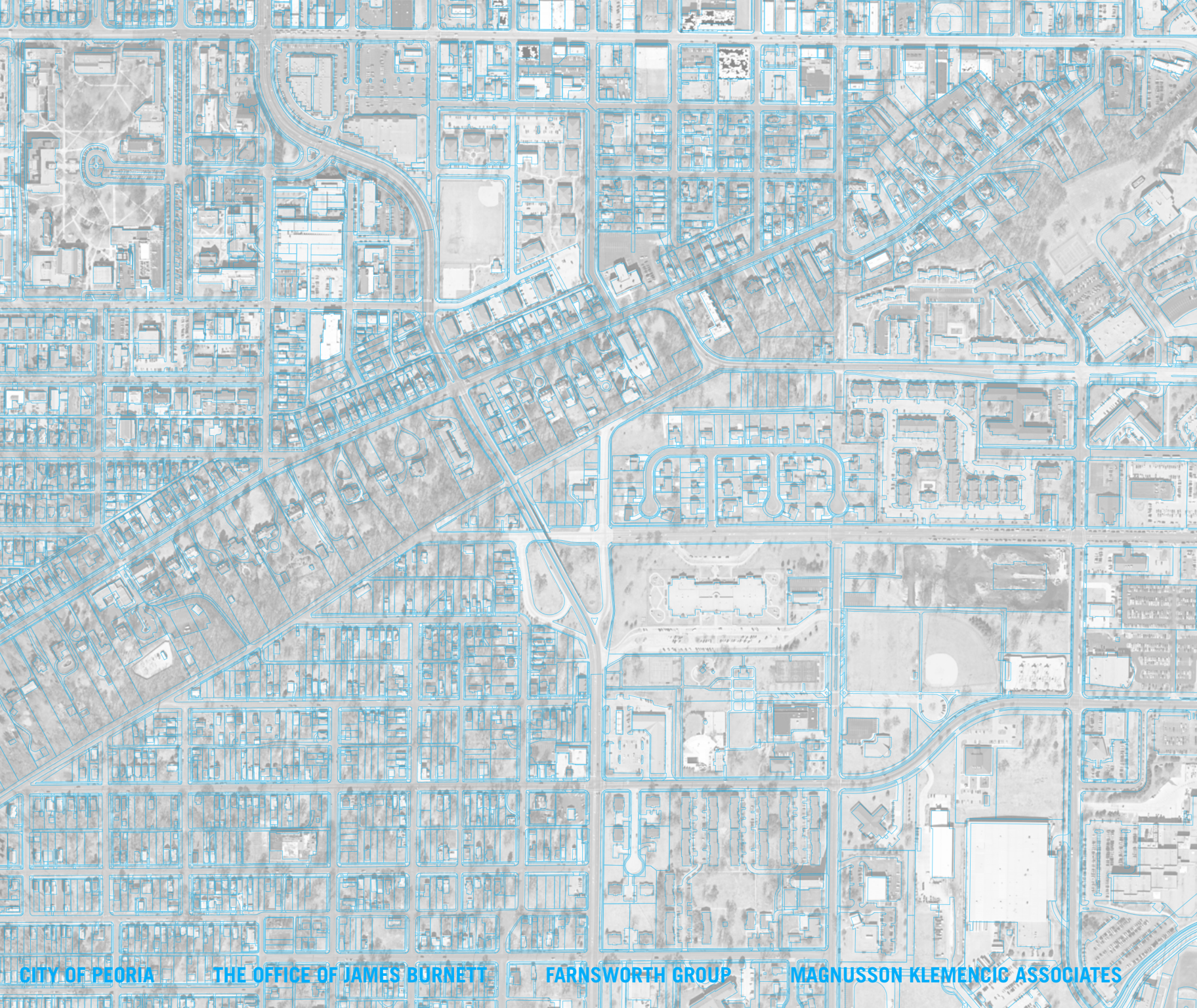
PHASE 5:
Hamilton Boulevard

2,700 LINEAL FEET
6 INTERSECTIONS

PHASE 6:
Fayette Street

1,870 LINEAL FEET
5 INTERSECTIONS


“Streets are places of social and commercial encounter and exchange. They are where you meet people”
Allan B. Jacobs, Complete Streets



CITY OF PEORIA THE OFFICE OF JAMES BURNETT FARNSWORTH GROUP MAGNUSSON KLEMENCIC ASSOCIATES