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

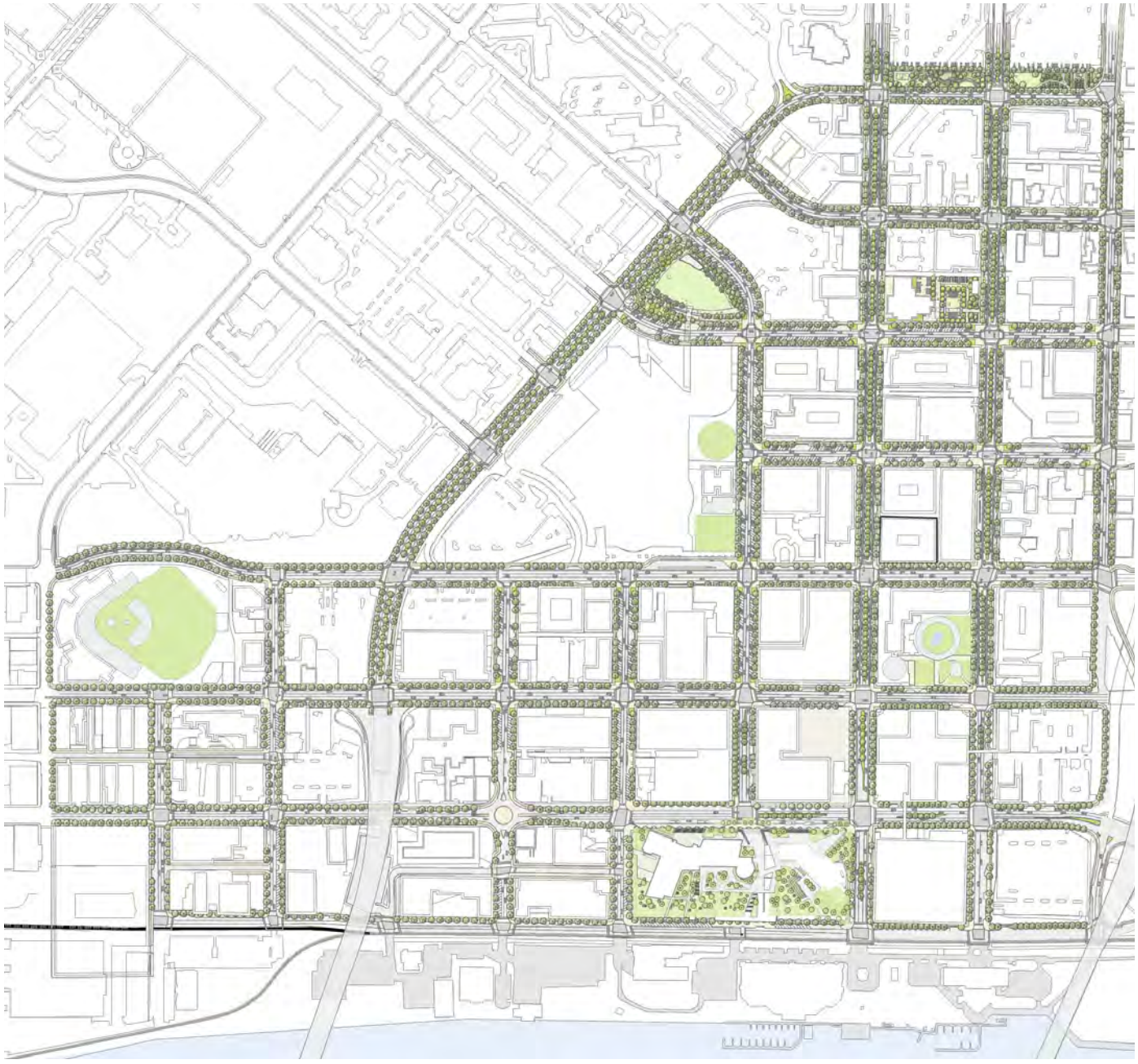
Transition the one-way pair of Jefferson Street and Adams Street to two-way streets. The roadway configuration will provide for one lane in each direction with a center turn lane. A second bike lane will be provide on each roadway alignment.

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

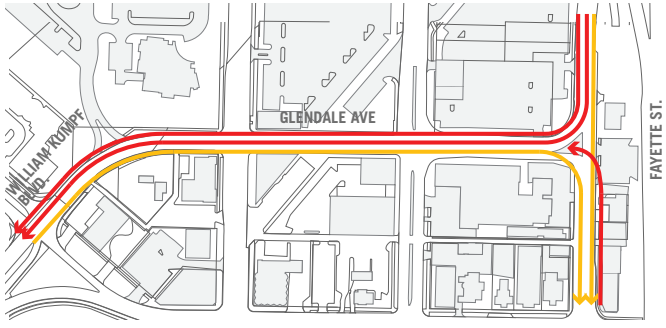
4.31

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

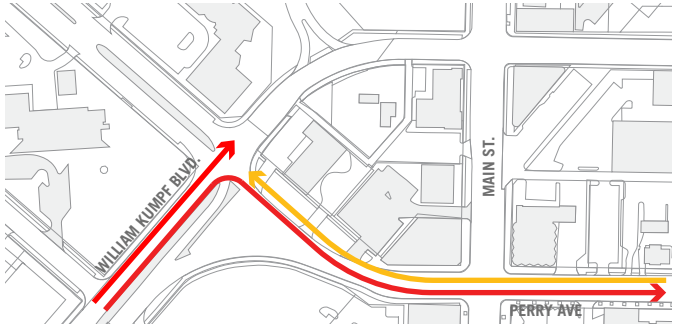
4.32

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

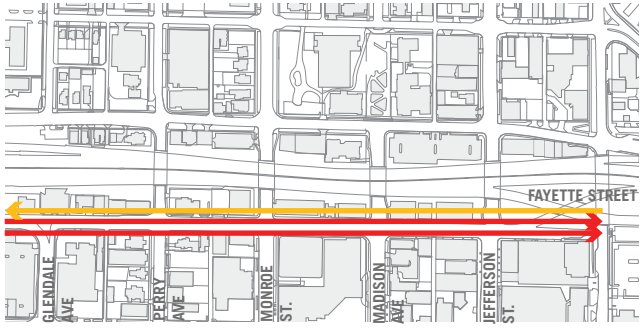
4.33

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.

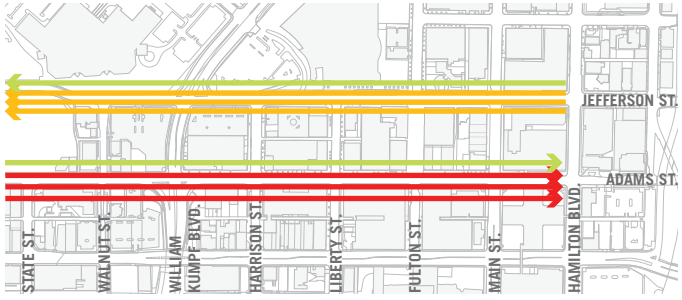
4.34

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.

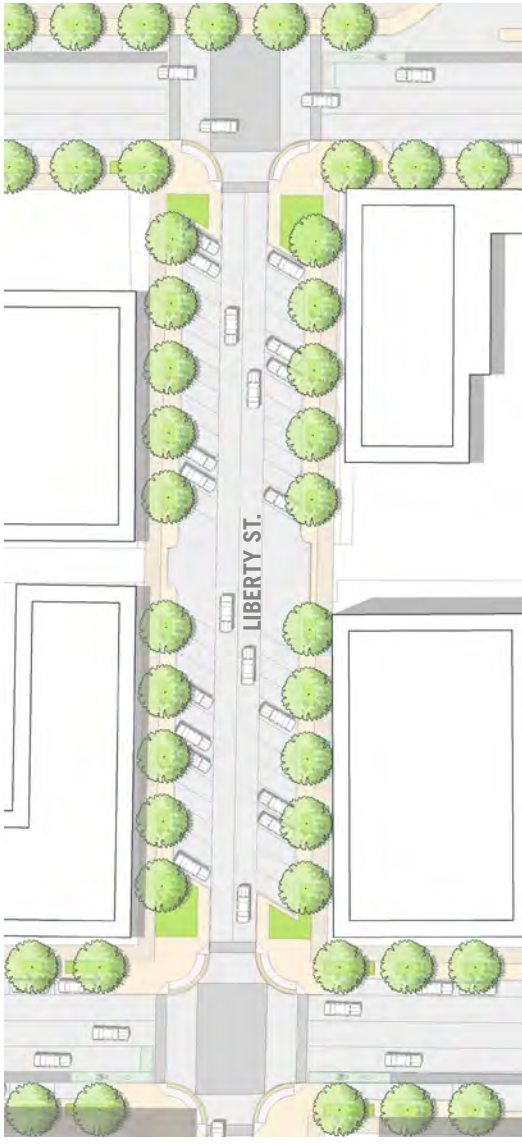
4.35

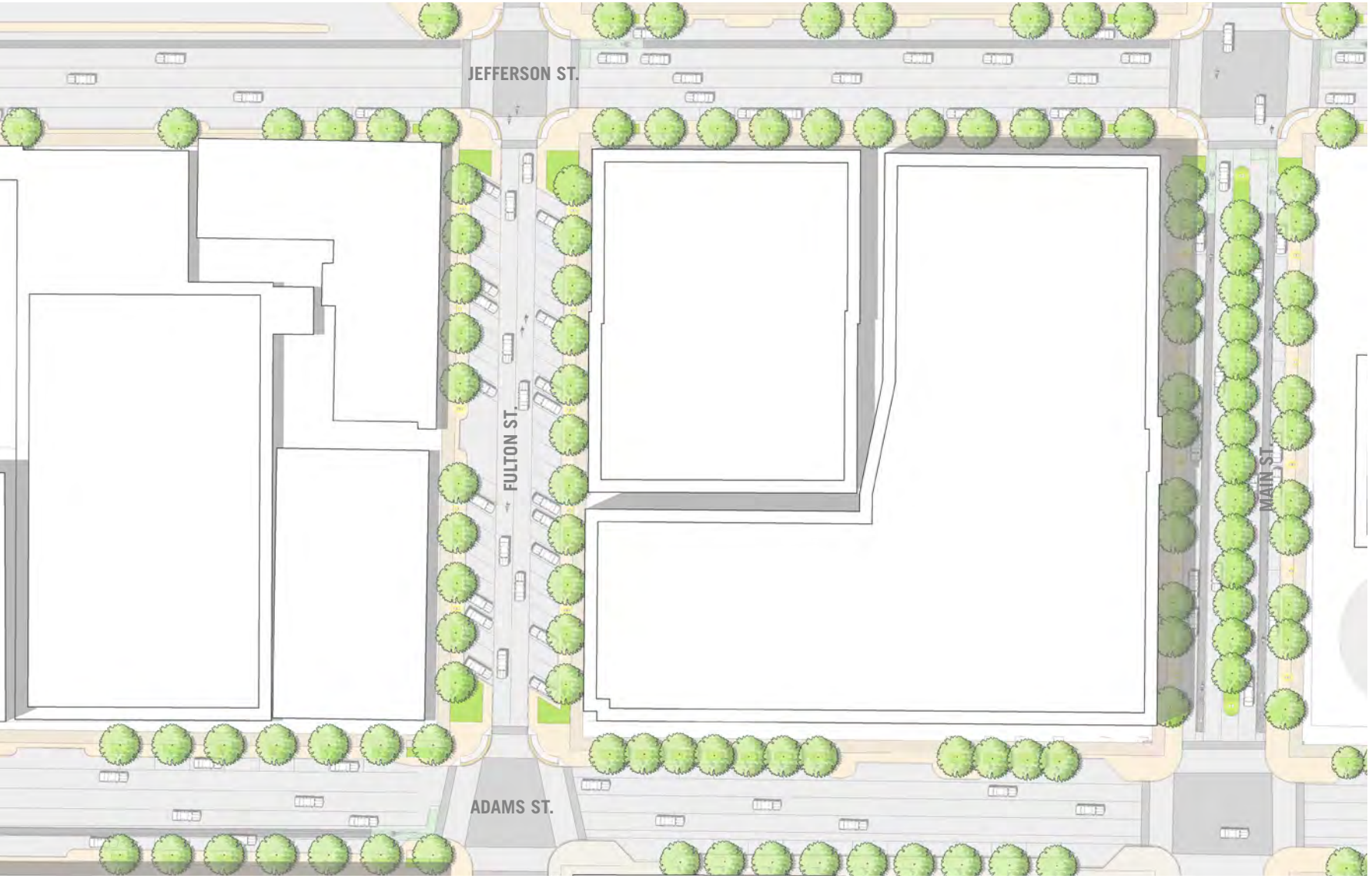
KEY TRANSITION

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