



# West Pennway Street Redesign Plan

Technical Advisory Meeting 1, 7.9.21

Project Leadership



# Project Goals

STATED PURPOSE: Explore opportunities to redesign West Pennway between 17th and 21st Street for improved pedestrian and bicycling movements.

- Focus on improving problematic intersections at 17th Street and West Pennway and 21st Street and West Pennway to allow improved traffic flow, safer pedestrian and bicycling movements and stormwater runoff.
- Investigate the opportunities to construct sidewalks, bicycle lanes and bio-swales along the corridor.
- Provide recommendations for greater mobility options as well as additional greenspace.
- Recommendations should link Parks Department and Westside Housing properties and transform the corridor into a linear park.
- Recommend enhancements and amenities to the existing transit station at West Pennway, 21st and Summit Streets.



# Consultant Team



Christina Hoxie



Regan Tokos

**Hoxie**  
COLLECTIVE LLC

## SWT Design



Lance Klein



Chantal Block



Will Metcalf

## Wilson & Company



Jim Townsend



Drew Pearson



Rebeca Quiroz

## BikeWalkKC



Thomas Morefield



Michael Kelley

# Technical Advisory Group

Rodney Riffle (KCMO Parks /CLIENT)

Jill Erickson (Heartland Conservation Alliance)

Tom Jacobs (Mid America Regional Council, Environmental Programs)

Synthia Isah (Mid America Regional Council, Environmental Programs)

Alex Rotenberry (Mid America Regional Council, BPAC)

Mario Vasquez (Public Works/KC River Trails/Riverfront)

Maggie Green (KCMO Public Works)

Lisa Treece (KCMO Water Services)

Priya Iyengar (KCMO Water Services)

Laura Isch (KCMO Environmental Quality)

Kyle Elliott (KCMO Planning)

AJ Farris (KCATA)

Bernadette Gittings (Housing Authority)

Mike Hurd (Downtown Council, GreenLine)

# Meeting Agenda:

- Timeline
- Steering Committee
- Existing Conditions and Observations
- Feedback from Steering Committee
- Dialogue about current projects and potential funding streams
- Show flexible and scalable options for comment
- Dialogue on function, responsibilities, partnership and implementation
- Set next meeting date

# Project Schedule

	April	May	June	July	August	Sept	Oct	Nov	Dec
<b>Project Kick-off</b>	★								
<b>Phase 1: Discovery</b>		1.1	(1.2)	(1.3)					
<b>Phase 2: Strategy</b>				2.1	(2.2)	(2.3)			
<b>Phase 3: Implementation Planning</b>						3.1	3.2	(3.3)	(3.4)
								3.5	★

## Phase 1: Discovery

- 1.1 - Existing Condition Assessment
- 1.2 - Stakeholder Meeting
- 1.3 - Coordination Meeting with City Departments

## Phase 2: Strategy

- 2.1 - Scenario Development
- 2.2 - Stakeholder Meeting
- 2.3 - Public Meeting

## Phase 3: Implementation Planning

- 3.1 - Finalize Preferred Scenario
- 3.2 - Draft Implementation Plan
- 3.3 - Stakeholder + City Department Meeting
- 3.4 - Public Meeting
- 3.5 - Finalize Deliverables

★ - Kick-off / Delivery

# Steering Committee

Adam Jones (Fox & Pearl/Clay & Fire)

Amy Morris (Irene H. Ruiz Library)

Andres Chaurand (Guadalupe Center)

Angela Castro (Villa del Sol Resident)

Barbara Bailey (Westside CAN Center)

Brandon Strick (Westside Local)

Cady Seabaugh (McCormack Baron)

Jamie Jeffries

Jaqueline Tanner (Principal, Primitivo Garcia Elementary School)

Jenny Mendez (Mattie Rhodes)

John Fierro (Mattie Rhodes)

Lauren Thompson (Westside Neighborhood Association)

Marilyn De La Pena (KCMO Housing Authority)

Pancho Luna (Sacred Heart Neighborhood Association)

Richard Hernandez (Westside Neighborhood Association)

Tessa Ramirez (Student in KU's Master's of Urban Planning Program - former VISTA with HEDC)

Edgar Muniz (Hispanic Economic Development Center)



# Existing Conditions Assessment

Past Plans

Demographics, Land Use, and Property Ownership

Regional connections

Street and sidewalk conditions

Intersections and crossings

Mode share and traffic flow

Trees and park amenities

Stormwater flow and green infrastructure opportunities

# Past Plans

## **Local:**

West Pennway Plan 2011

Westside Green Infrastructure Study

Equitable Neighborhood Action Plan 2021

West 31st Street Corridor 2019

Safe Routes to Schools 2017

Reconnect Westside 2013

## **City:**

Greater Downtown Area Plan

Riverfront Heritage Trail

## **Regional:**

Complete Streets Handbook

Regional Wayfinding Plan

Greater KC Regional Bikeway Plan

# Demographics

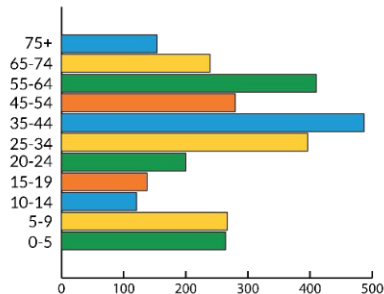
2015-19 Total Population Estimates:

2,956

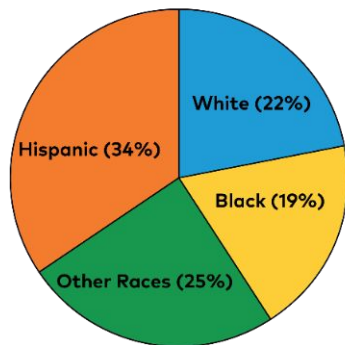
2015-19 Household Count:

1,271

2015-19 Age Breakdown:



Race of Neighborhood Residents:



2015-19 Median Income:

\$33,273

2015-19 Median Home Value:

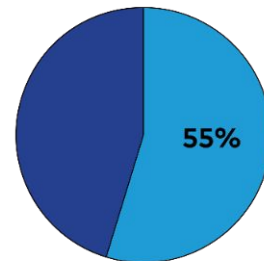
\$ 117,089

Average Rent:

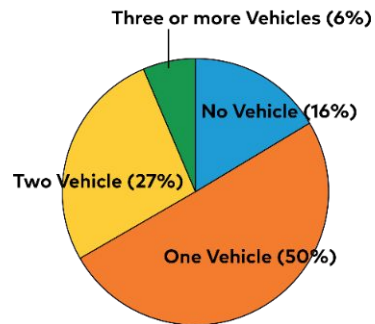
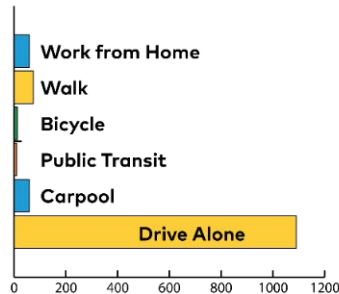
\$1381

Source: Rent Cafe

Homes Built before 1970:

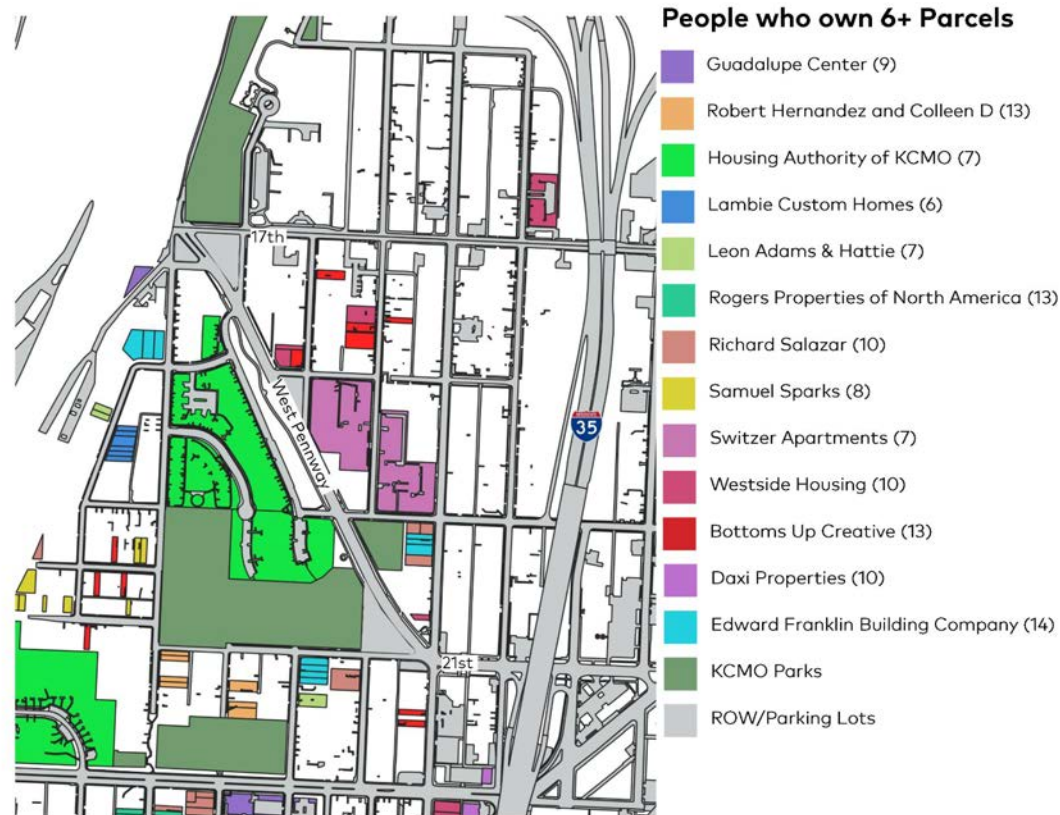


Transportation:



All data is from the 2015 - 2019 ACS estimates except Average Rent.

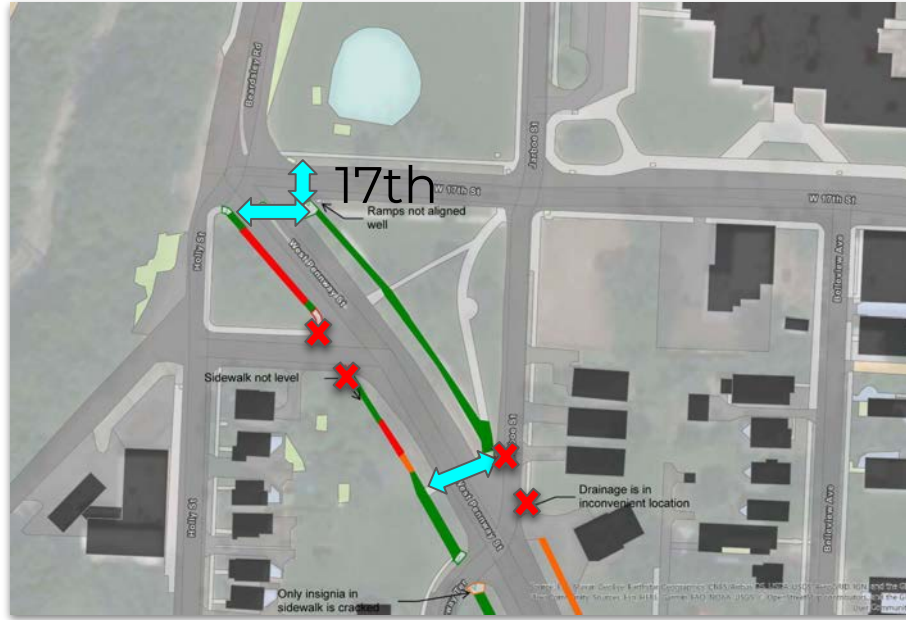
# Property Ownership



# West Pennway as a Linear Park



# Street and Sidewalk Conditions: *Primary Intersections*



Pedestrian Crossing



## Sidewalk Condition

Good:

Cracks:

Cracks with Heave:

## Ramps

Ramp Present:

Missing:

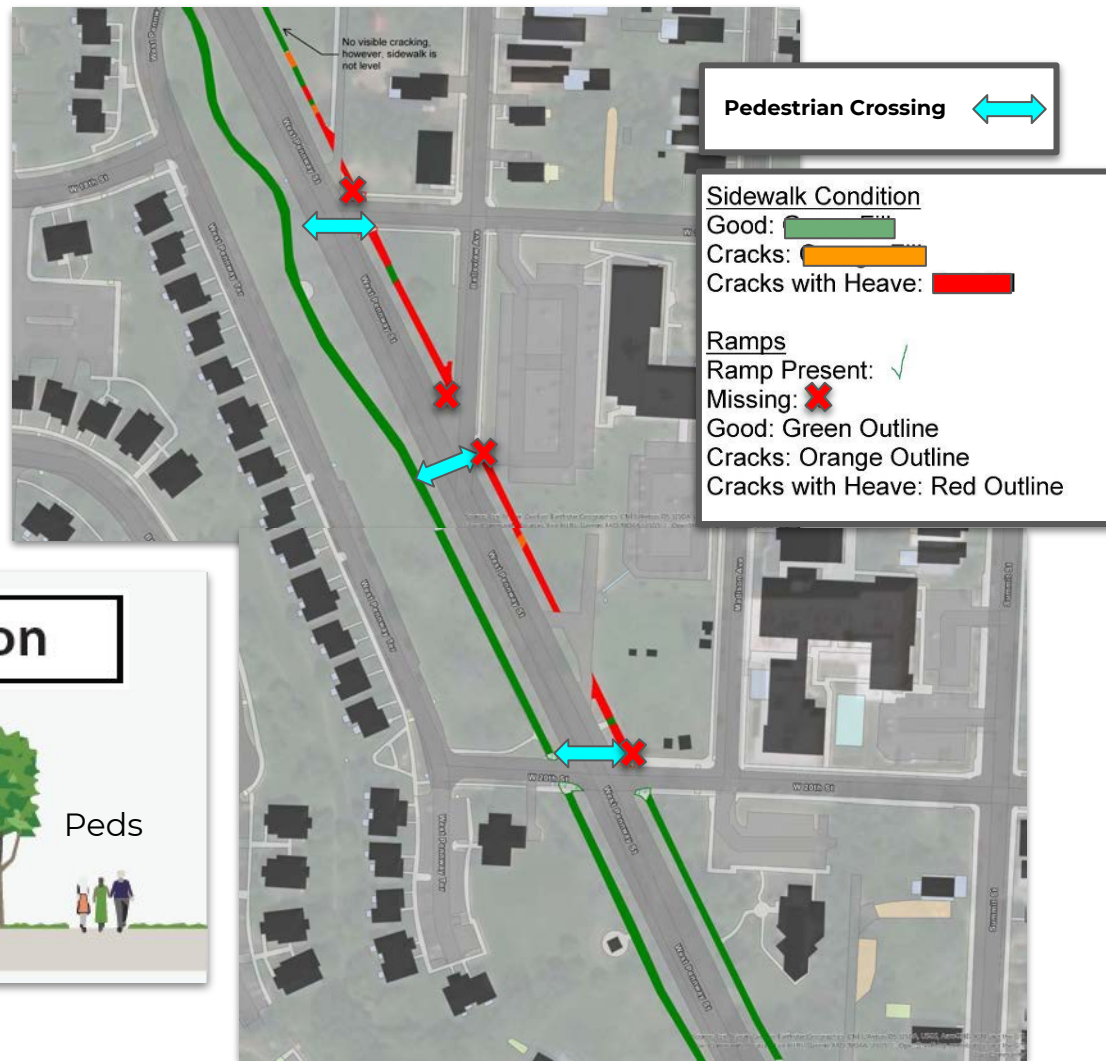
Good: Green Outline

Cracks: Orange Outline

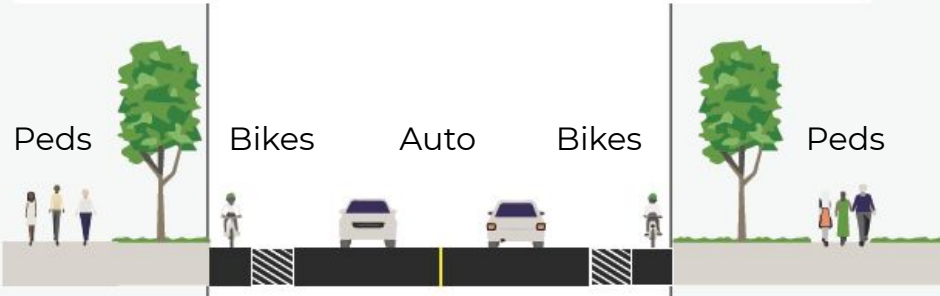
Cracks with Heave: Red Outline



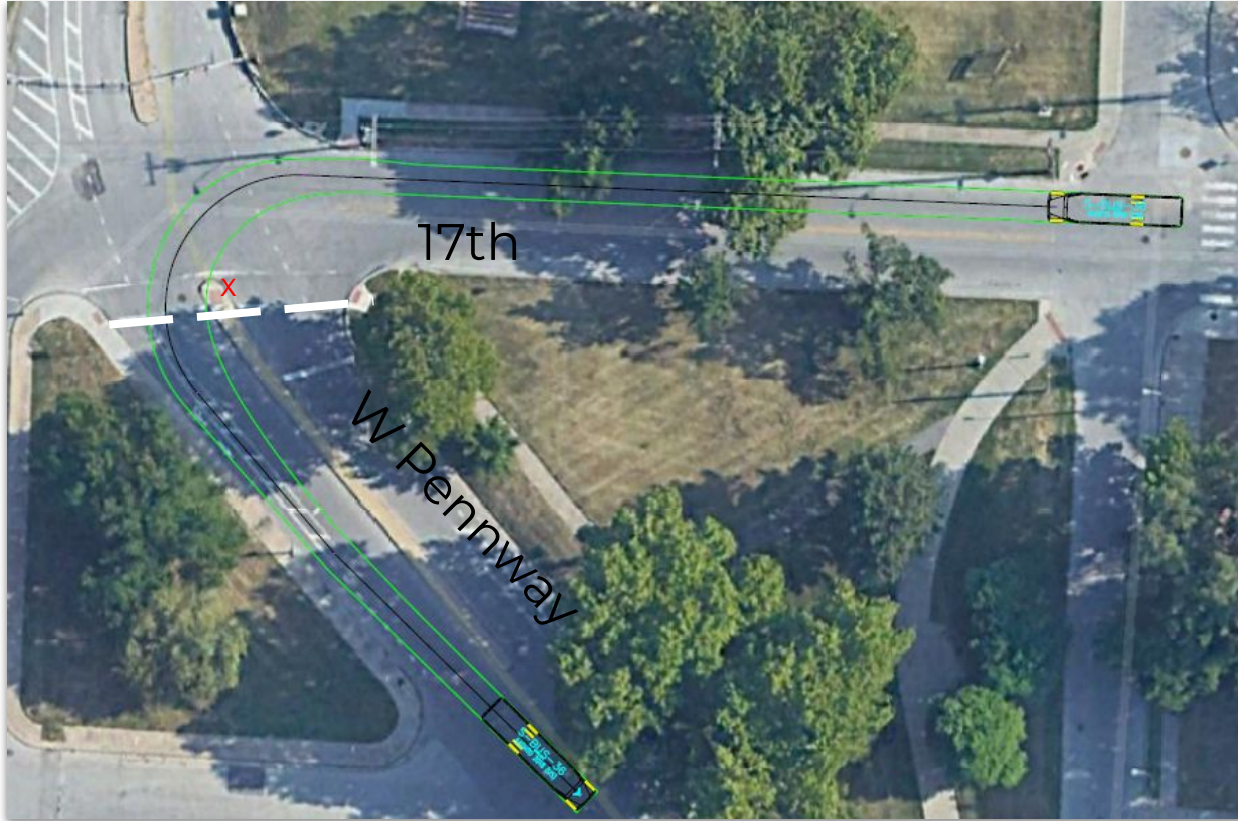
# Street and Sidewalk: *Corridor Conditions*



## W Pennway Existing Section



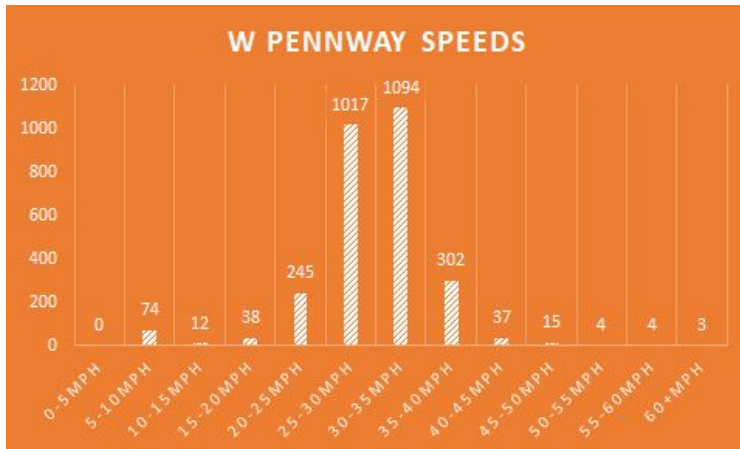
# Intersections and Crossings



- School Bus turning radius requires geometric considerations:
  - Remove “nose”
  - Still protect pedestrians

# Mode Share and Traffic Flow

- Low volumes - under 3,000/day
- Terrain doesn't primarily affect speeds
- 2% above 40 mph
- Potential enforcement - 60+mph from 9am to noon
- 31 Wrong Way eastbound at 21st



Direction Combined		West Penway North of 21st Street													Total
4/27/2021	Time	5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 MPH		
	5 - 5 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH		
12:50 AM	0	0	0	0	4	11	2	0	2	0	0	0	0	23	
1:00	0	0	0	0	5	4	2	0	0	0	0	0	0	11	
2:00	0	0	0	0	2	3	2	1	0	0	0	0	0	8	
3:00	0	0	0	0	5	7	9	1	0	1	1	0	0	24	
4:00	0	0	0	0	2	2	2	1	2	0	0	0	0	10	
5:00	0	0	0	0	8	7	12	5	1	0	0	0	0	27	
6:00	0	2	0	0	6	8	19	24	2	3	0	0	0	78	
7:00	0	7	0	7	50	62	20	2	0	1	0	0	0	151	
8:00	0	11	0	6	9	61	75	1	1	1	0	0	0	185	
9:00	0	3	0	13	57	54	23	1	0	1	0	0	0	154	
10:00	0	3	1	4	11	53	53	11	0	0	0	0	0	137	
11:00	0	4	0	2	12	81	60	14	2	1	0	0	0	177	
12:50 PM	0	4	7	82	79	20	1	0	0	0	0	0	0	196	
1:00	0	4	1	18	67	73	25	2	0	0	0	0	0	194	
2:00	0	4	0	3	22	55	72	19	4	2	0	0	0	154	
3:00	0	5	3	25	31	112	22	2	2	0	0	0	0	279	
4:00	0	5	1	0	17	77	91	31	4	1	0	0	0	227	
5:00	0	10	2	4	20	66	90	28	6	0	0	0	0	226	
6:00	0	6	1	2	14	45	62	12	1	1	1	0	0	144	
7:00	0	7	2	1	10	48	60	18	2	0	0	0	0	130	
8:00	0	2	1	1	8	43	31	9	4	0	1	0	0	100	
9:00	0	2	0	2	10	43	24	3	1	0	0	0	0	85	
10:00	0	0	1	1	10	20	15	5	0	0	1	0	0	55	
11:00	0	0	2	1	4	11	9	7	0	1	0	0	0	31	
Grand Total	0	74	12	38	245	1517	1944	300	37	15	4	4	3	2845	
Stats		Percentile	5th	5th	5th	5th	5th								
Speed		26	30.3	34.7	37.8										
Mean Speed (Average)		29.9													
10 MPH Pace Speed		26.35													
Number in Pace		5709													
Percent in Pace		74.0%													
Number > 35 MPH		365													
Percent > 35 MPH		12.8%													



# Auto Peak Hour Traffic Flow








# Tree and Amenity Inventory

## Existing Trees and Amenities

- Some succession plantings and gaps in original tree alignment
- Public Art
  - Westside Pequeño Miramide
  - Riverfront Trail Lighting
- Riverfront Trail Amenities
- Chess tables near library

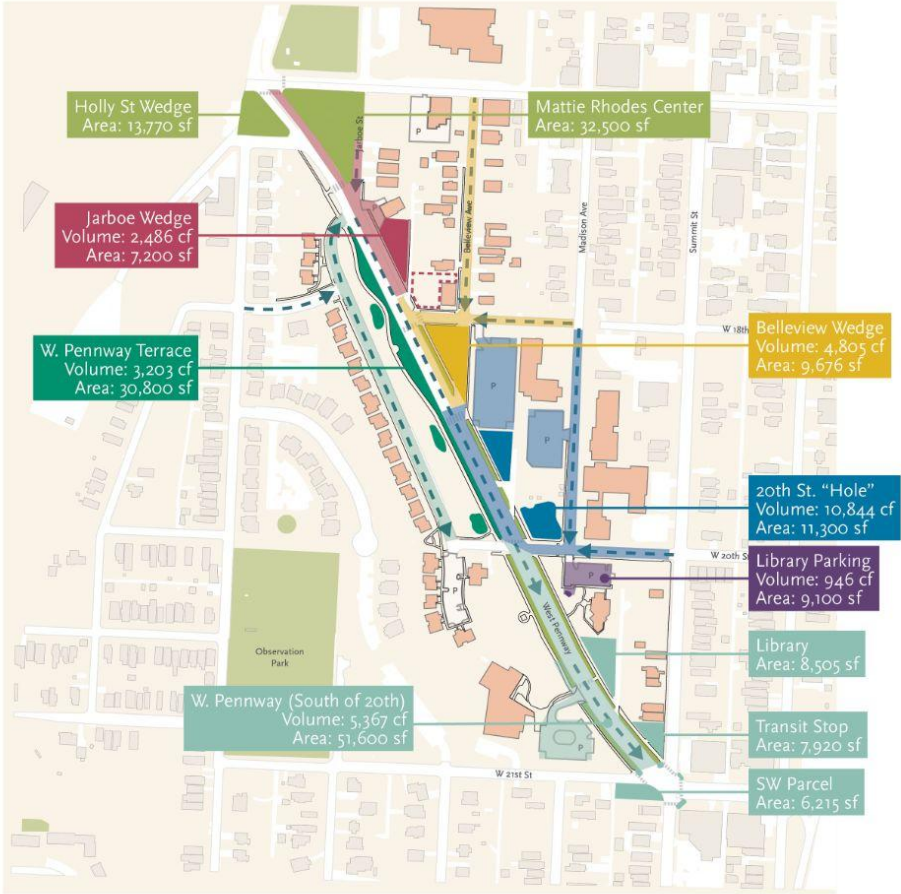


## LEGEND

- |   |                           |   |   |
|---|---------------------------|---|---|
|  | Civic/Community Buildings |    | Mature Tree                             |
|  | Other Structures          |    | Young Tree                              |
|   |                           |    | Riverfront Heritage Trail Benches/Nodes |
|   |                           |   | Riverfront Heritage Trail Lighting      |
|   |                           |  | Riverfront Heritage Trail               |

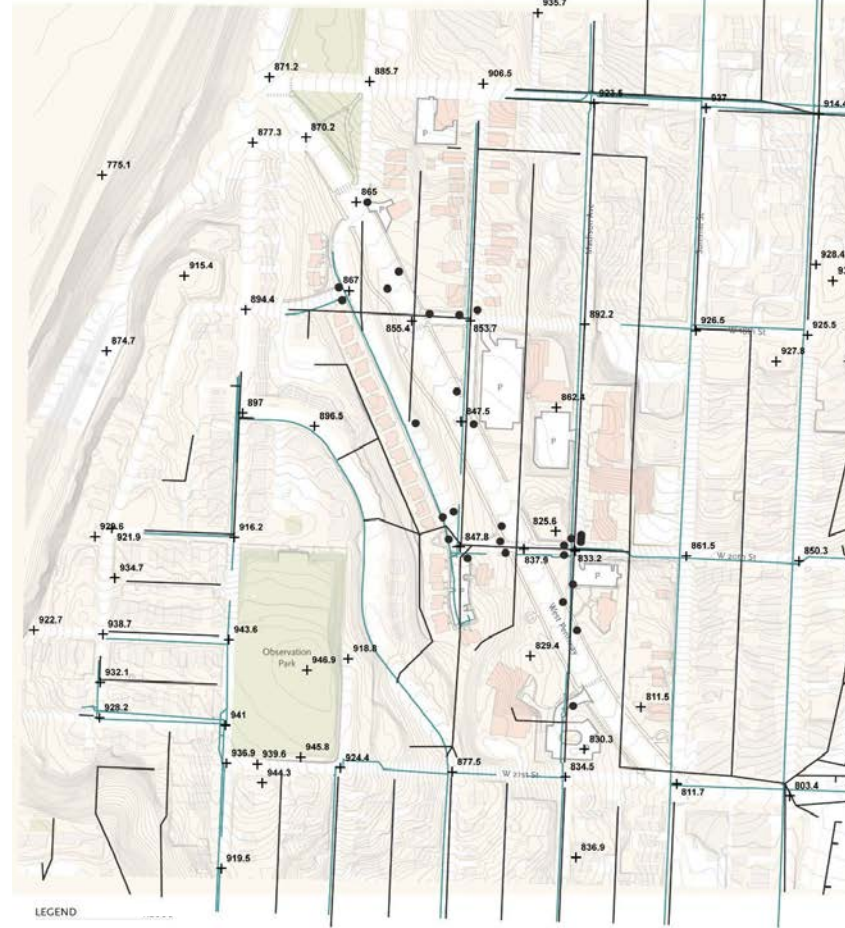






#### LEGEND

- Project Area Structures
- Existing Parks
- Stormwater Flow



#### LEGEND

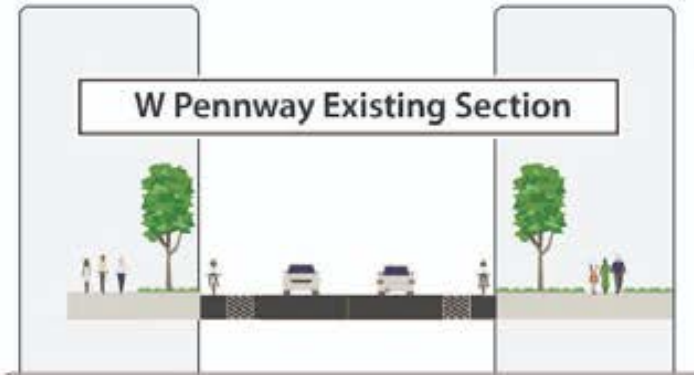
- Sewer Main
- Water Main
- Inlets
- 2ft Contour
- Index Contour

Infrastructure  
and Topography

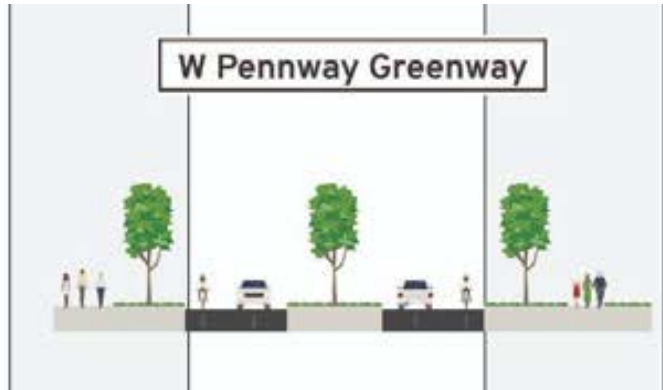
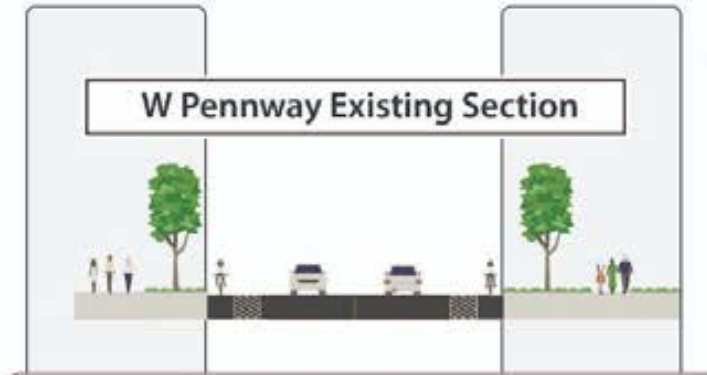
# Summary of Observations

- Vehicle **lanes are too wide** (15-25ft) - leads to unsafe behavior and space could be better utilized
- **Pedestrian crossings are non-compliant**, visibility and tripping issues
- **Curb and ramp issues** that make it difficult to use the multiuse path
- Multiuse path **forces two crossings**
- Sidewalks on east side of W Pennway in **need of repair**
- Some **speeding** traffic during AM (60+MPH)
- Over **50 pedestrians** per day (May week day)
- Over **20 bikes** per day (1/3rd Local) (May week day)
- **Wrong way** traffic at 21st
- Bike lanes and storm sewers fill with debris, need more regular **maintenance**
- Tree **preservation** and considerations for succession **replanting** needed
- 2 acres of existing public right-of-way to **capture stormwater** on east

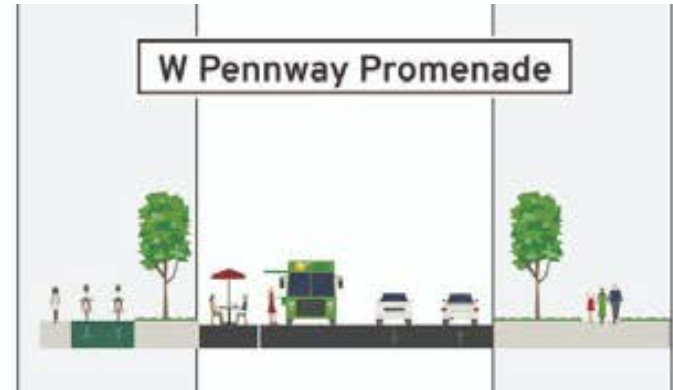
# West Pennway Road Sections - Future Options



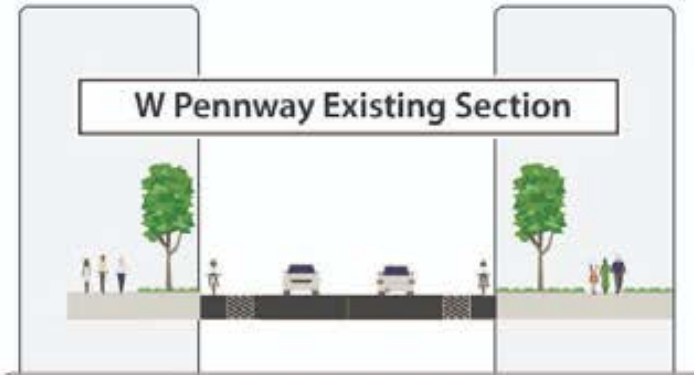
Existing



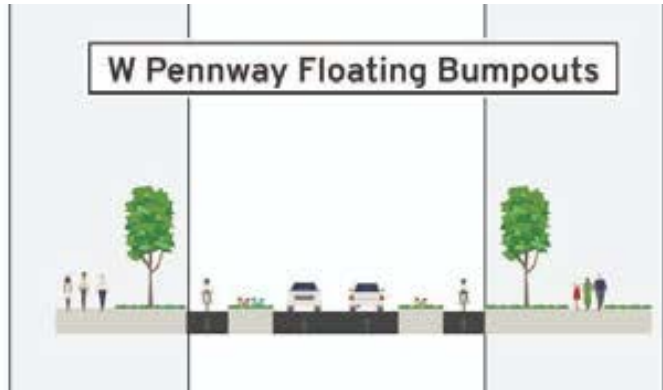
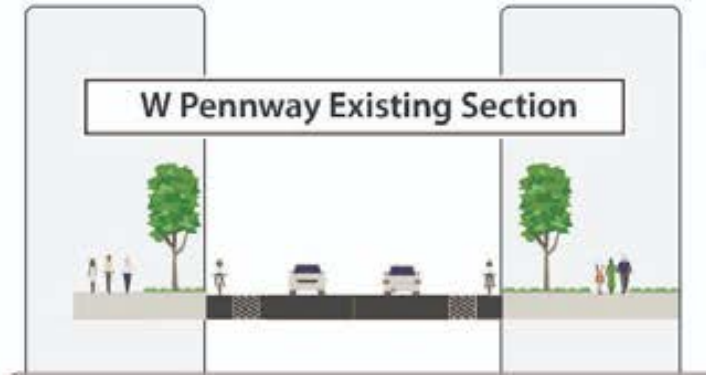
Option



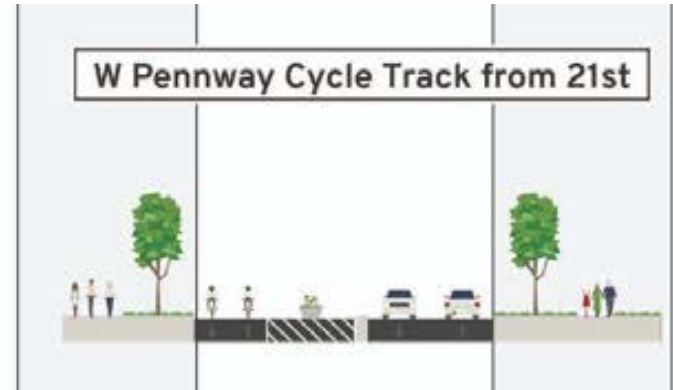
# West Pennway Road Sections - Future Options



Existing



Option



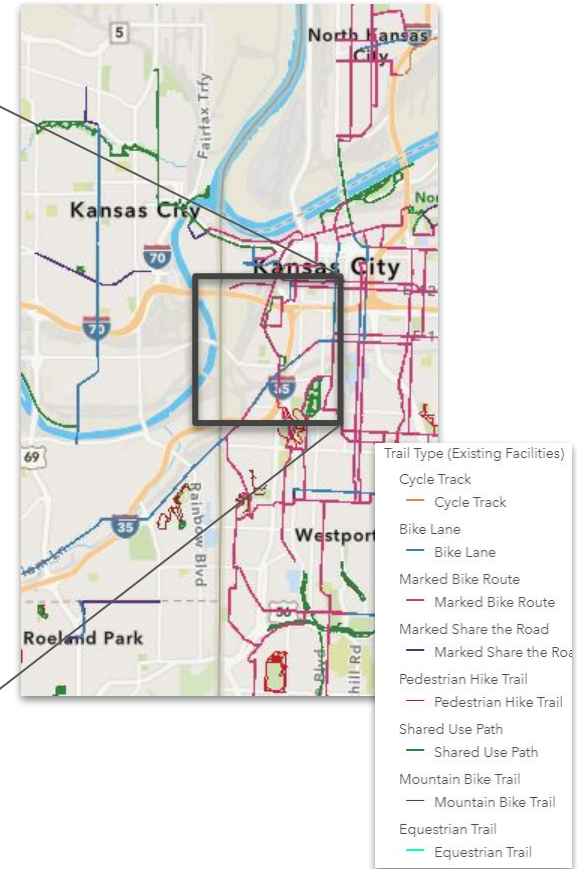
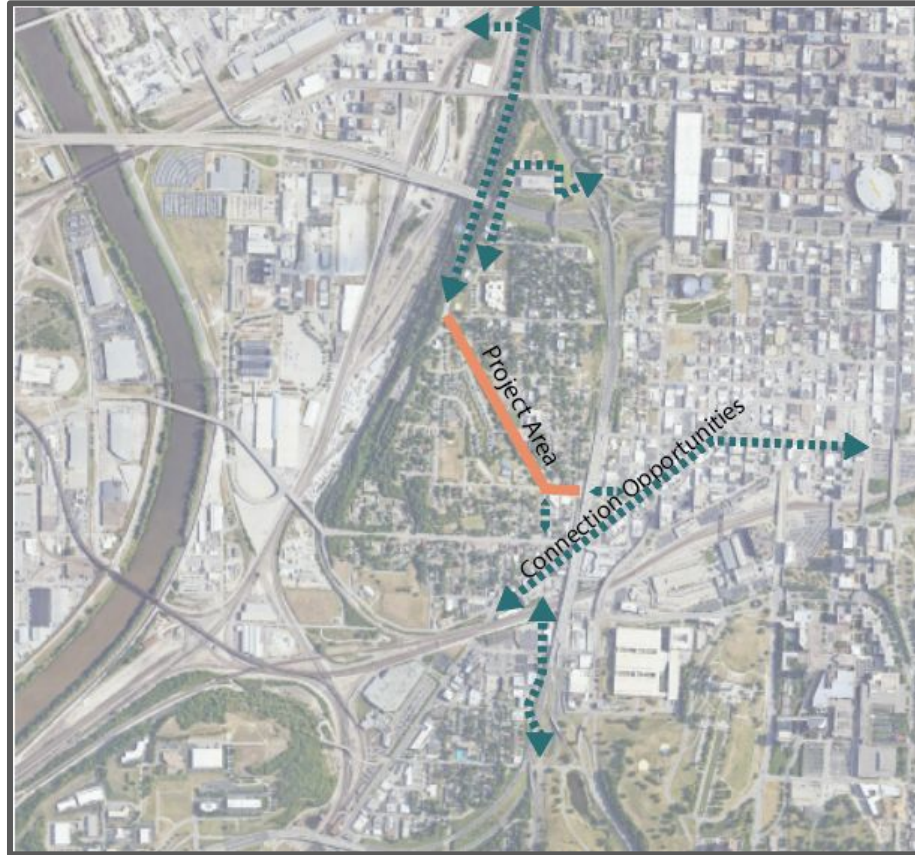
# Feedback from Steering Committee

- Focused on **implementation/maintenance** of potential changes
- Prioritize **sidewalk or pedestrian** improvements
  - Bike lanes are controversial in the area
- Community is interested in a street that **provides space to gather**
- There is a desire for **intersection improvements prioritizing pedestrian crossings.**
- There was some interest in a **median to promote pedestrian safety**, but not necessarily a continuous central greenway
- Some interest expressed in creating a local **conservancy group** (i.e. Friends of West Pennway)



# Preliminary Design Ideas: Outside Connections

## West Pennway Regional Connections





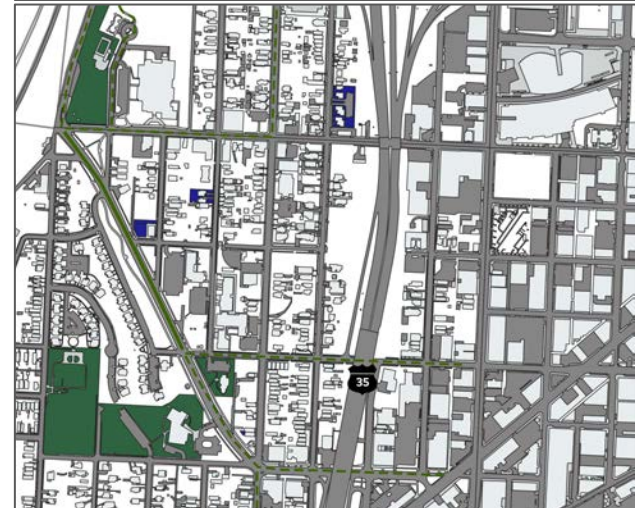
# Dialogue on Opportunities

Alignment for funding

Planned projects

Status of Vision Zero implementation

Future plans for Beardsley



# Approach to Preliminary Design Ideas

# Big Considerations for Integration

- What are opportunities to leverage area connections to other projects (i.e. Greenline, Riverfront Heritage Trail, 31st Street, other VZ projects)?
- Appropriate sizing of drive lanes for traffic flow?
- What is our approach to keeping pedestrians safer?
- Where do bikes go?
- What else should happen in the right of way that enhances safety and community use?
- How does an integrated approach to stormwater enhance each solution?
- What amenities and public art could be added to enhance the corridor as a linear park?

# West Pennway Roadway Considerations

## What is Vision Zero?

- In May 2020, KCMO City Council passed the Vision Zero resolution
- *Eliminate traffic fatalities and serious injuries on our streets by 2030, while increasing safe, healthy, equitable mobility for everyone.*

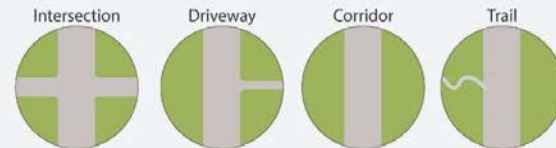


## Vision Zero Goals

- Create **safer streets for everyone**, in all neighborhoods
- **Eliminate** traffic **fatalities** and **serious injuries** by 2030
- Implement **low-cost, high-impact** pilot projects right off the bat to evaluate outcomes and gather feedback
- Develop a multi-year, comprehensive Vision Zero Action Plan to **integrate Vision Zero practices into every aspect of planning, design and engineering**

*Safety for all modes is at the core of the plan*

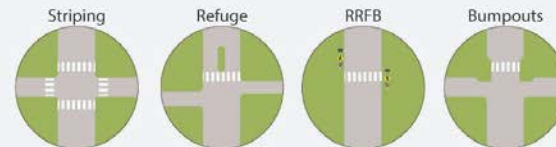
### Access Considerations



### Mode Considerations



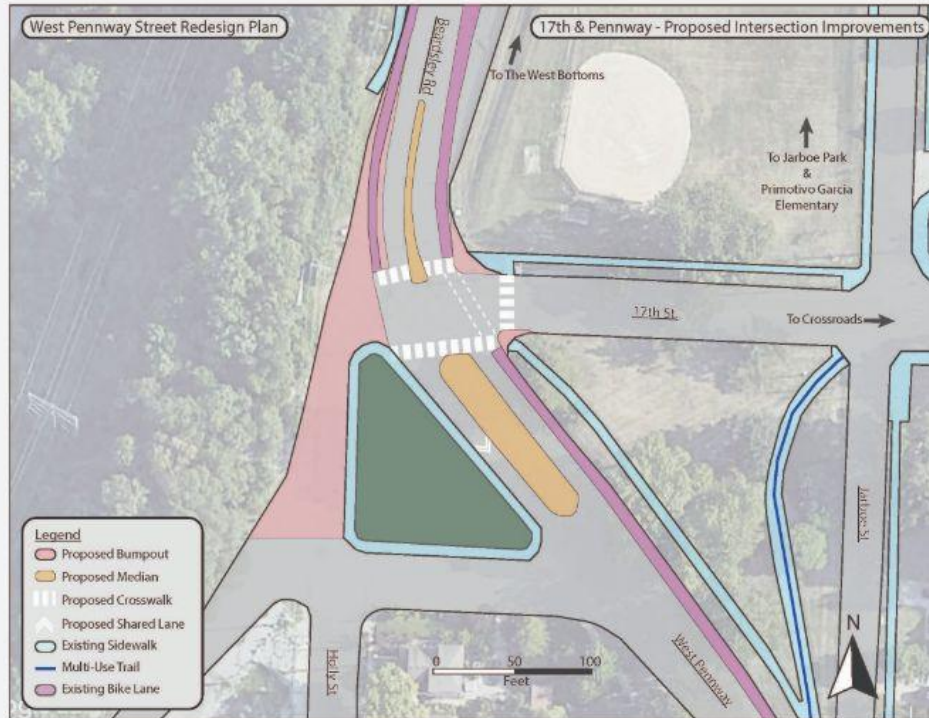
### Crossing Considerations



## Level of Traffic Stress by Speed, Traffic Volume, and Type of Bike Facility

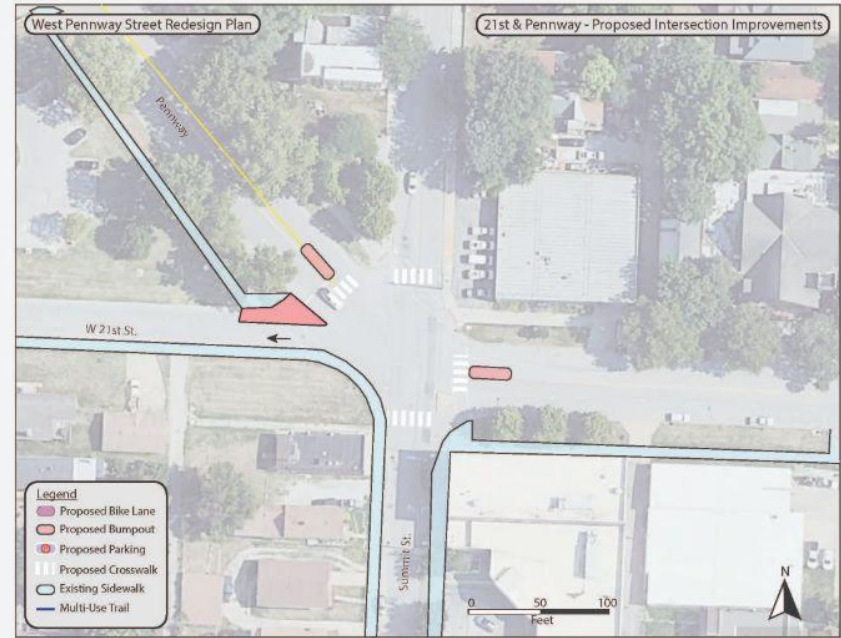
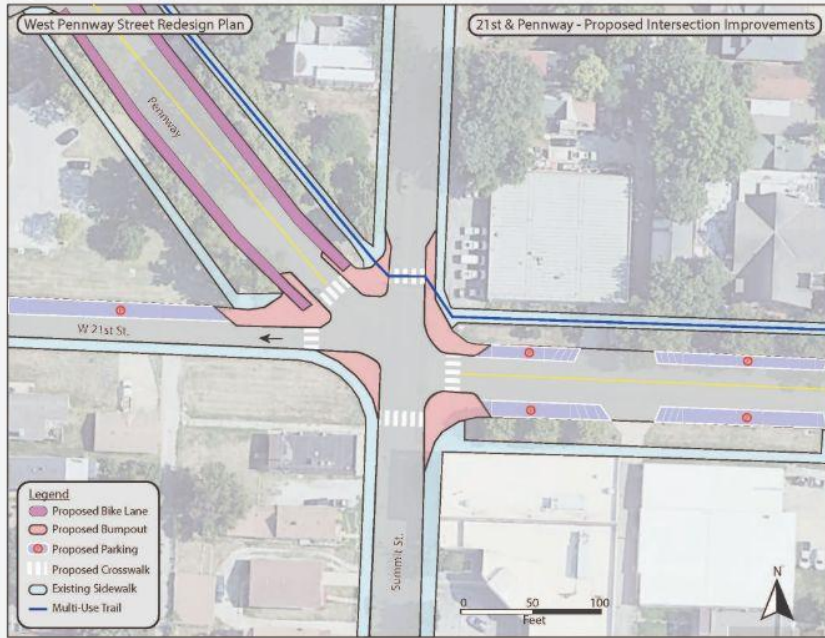
Street Characteristics				Bike Facility Type						
Typical Street Designation	Typical # of Lanes	Prevailing Speed	Traffic Volume	Mixed Traffic	Bicycle Boulevard	Bike Lane	Buffered Bike Lane	Protected Bike Lane	Two-Way Cycle Track	Separated Bike Facility
Residential Access	2-lanes	25	<500	1	1	1	1	1	1	1
Residential Local			500-1,500	2	1	1	1	1	1	1
Residential Collector			1,500-3,000	2	2	1	1	1	1	1
Commercial/Industrial Collector			3,000-10,000	3	3	2	1	1	1	1
Minor Arterial	3-4 lanes		10,000-20,000	4	4	3	2	1	1	1
Major Arterial	4+ lanes		>20,000	4	4	4	3	2	1	1
Residential Local	2-lanes	30	<1,500	2	2	2	1	1	1	1
Residential Collector			1,500-3,000	3	2	2	2	1	1	1
Commercial/Industrial Collector			3,000-10,000	3	3	2	2	1	1	1
Minor Arterial	3-4 lanes		10,000-20,000	4	4	3	3	2	1	1
Major Arterial	4+ lanes		>20,000	4	4	4	3	2	2	1
Residential Local	2-lanes	35	<1,500	3	2	2	2	1	1	1
Residential Collector			1,500-3,000	3	3	3	2	1	1	1
Commercial/Industrial Collector			3,000-10,000	4	4	3	3	2	1	1
Minor Arterial	3-4 lanes		10,000-20,000	4	4	4	3	2	2	1
Major Arterial	4+ lanes		>20,000	4	4	4	4	3	2	1

# 17th Street & W Pennway Design Considerations



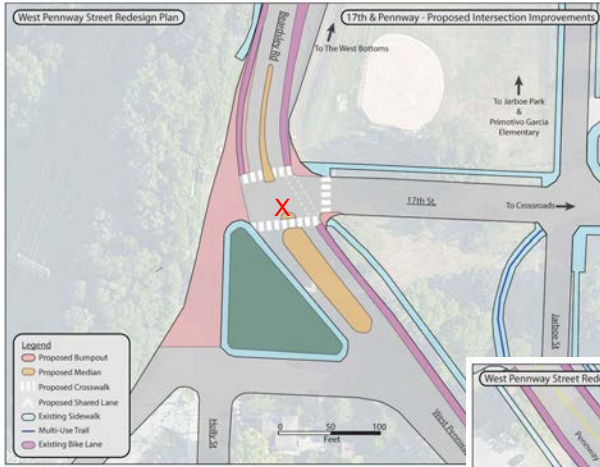


## 21st Street & W Pennway Design Considerations

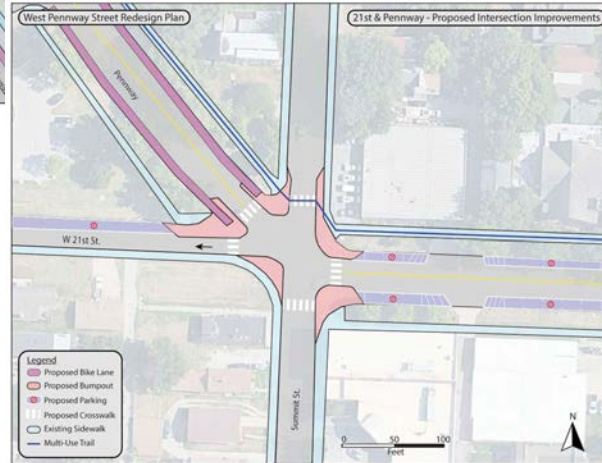


# Preliminary Design Ideas: Intersections

17th



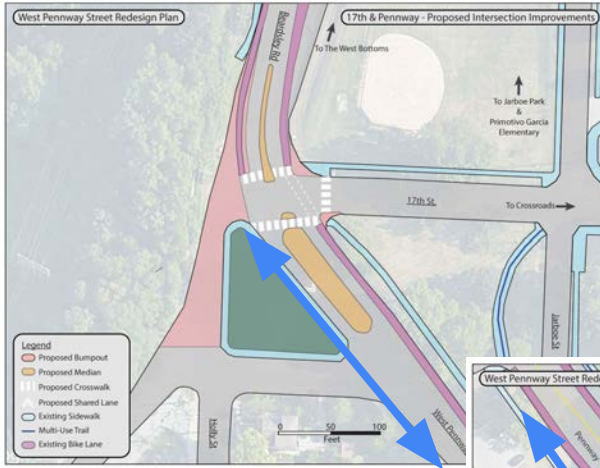
21st



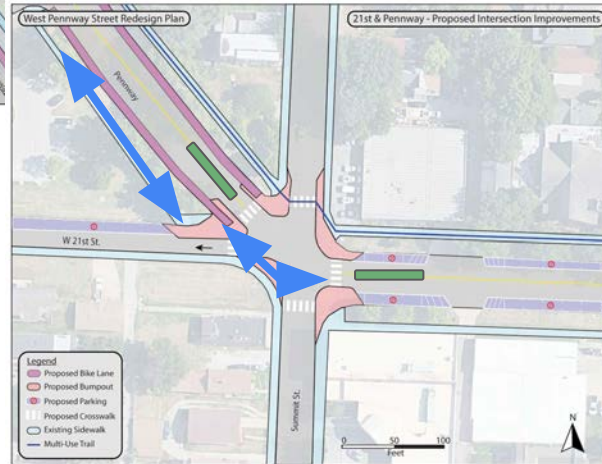
1. Crossing improvements
  - a. Sign & Continental
2. Sidewalk
  - a. Repair eastern sidewalk segments 20th - Jarboe
3. Ramp installations
  - a. New & Existing
  - b. Intersection/Mid-Block
4. Raised Pedestrian Refuges
  - a. 2 new along corridor
  - b. Remove nose at 17th
5. Close Auto Access
  - a. Holly St
  - b. Bellview Ave
6. 17th St Improvements
  - a. Median width

# Preliminary Design Ideas: Corridor

17th



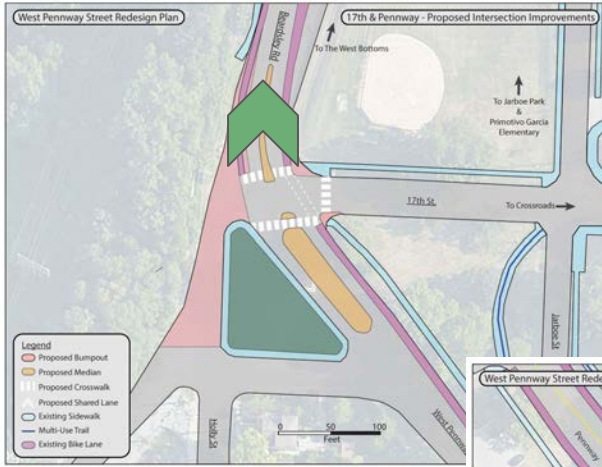
21st



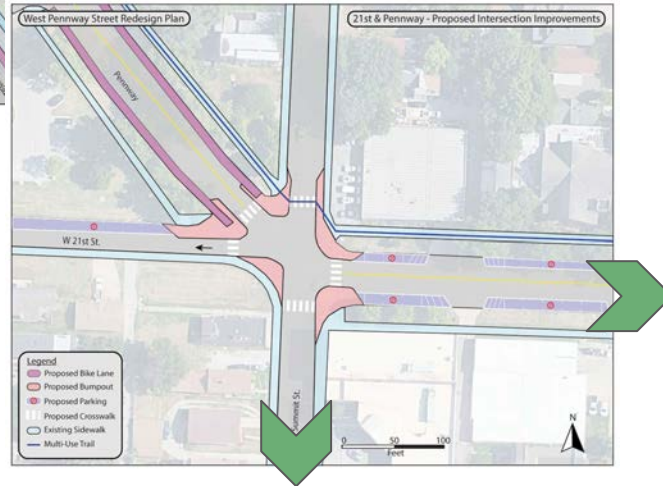
- Multiuse Path west alignment
- 21st Street improvements
  - One-way access improvement
  - Bumpouts or raised medians
  - On-street parking
- Bike Access
  - Re-sign/stripe at 21st for MUP vs on-street

# Preliminary Design Ideas: Outside Connections

17th



21st



- Connections
  - 21st/W Pennway east
  - 21st/W Pennway south
  - Beardsley Access (MUP vs auto)
- Places
  - Pedestrian Plaza
  - Green infrastructure placemaking
  - Bike/Ped Furniture



# Preliminary Design Ideas: Intersections

17th/W Pennway



21st/W Pennway

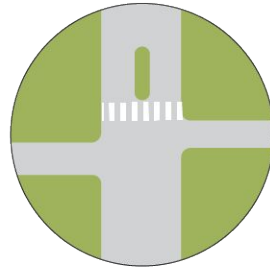


Bumpout



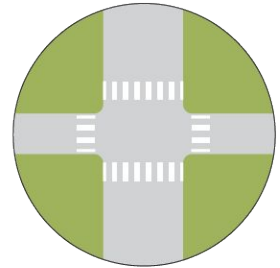
VS

Refuge



VS

Crosswalk



# Preliminary Design Ideas: Character/Feel



Stormwater and Placemaking along the roadway:

- Public Art
  - Unique Markers or signage
- Planted Stormwater Basins
- Stormwater Bumpouts at mid-block crossings



# Preliminary Design Ideas: Character/Feel



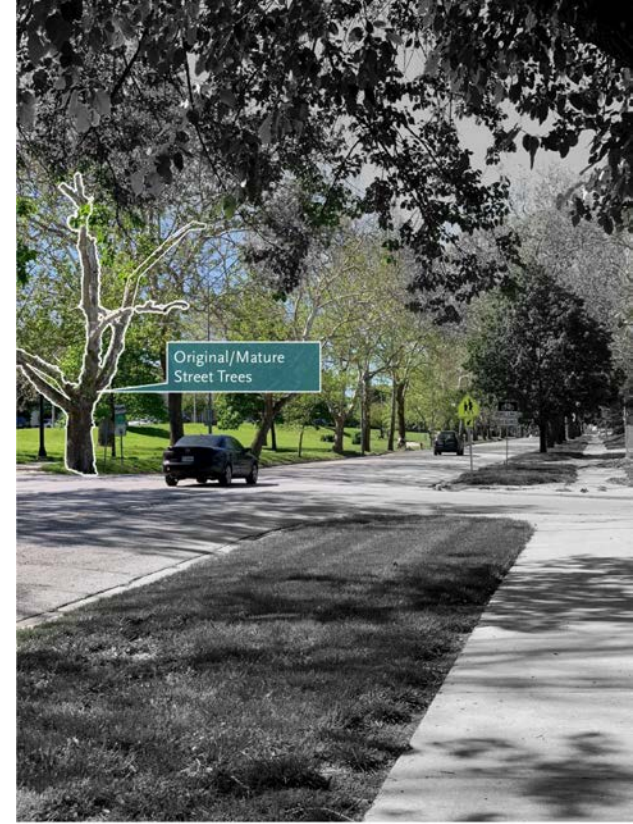
Stormwater and Placemaking at Intersections:

- Bumpouts/Stormwater Capture
- Planter Pots
- Paint/thermoplast

# Preliminary Design Ideas: Character/Feel







Existing Curb / Street Tree Relationships

# Preliminary Curb/Street Options

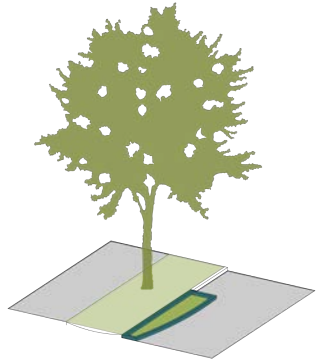


LEGEND 1:2000

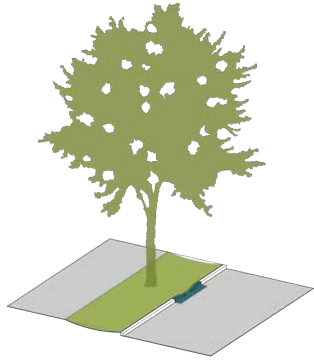
- Civic/Community Buildings
- Other Structures
- Existing Parks

- Collection Opportunities

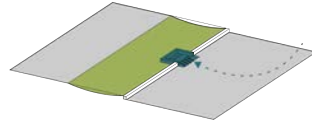
# Preliminary Curb/Street Options



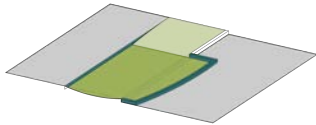
**Bumpout** - Existing Street Tree



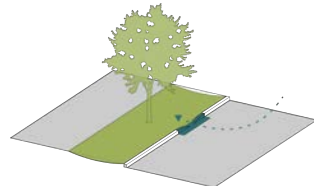
**Curb cut** - Existing Street Tree,  
Limited grading



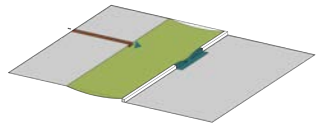
**Gutter Apron** - Turf Strip



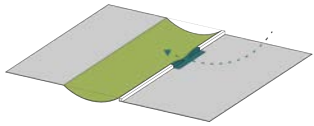
**Bumpout** - Turf Strip



**Curb cut** - proposed successional planting



**Trench Drain** to detention area (Turf  
Strip or future Wedge)



**Curb cut** - Turf Strip allows deeper basin

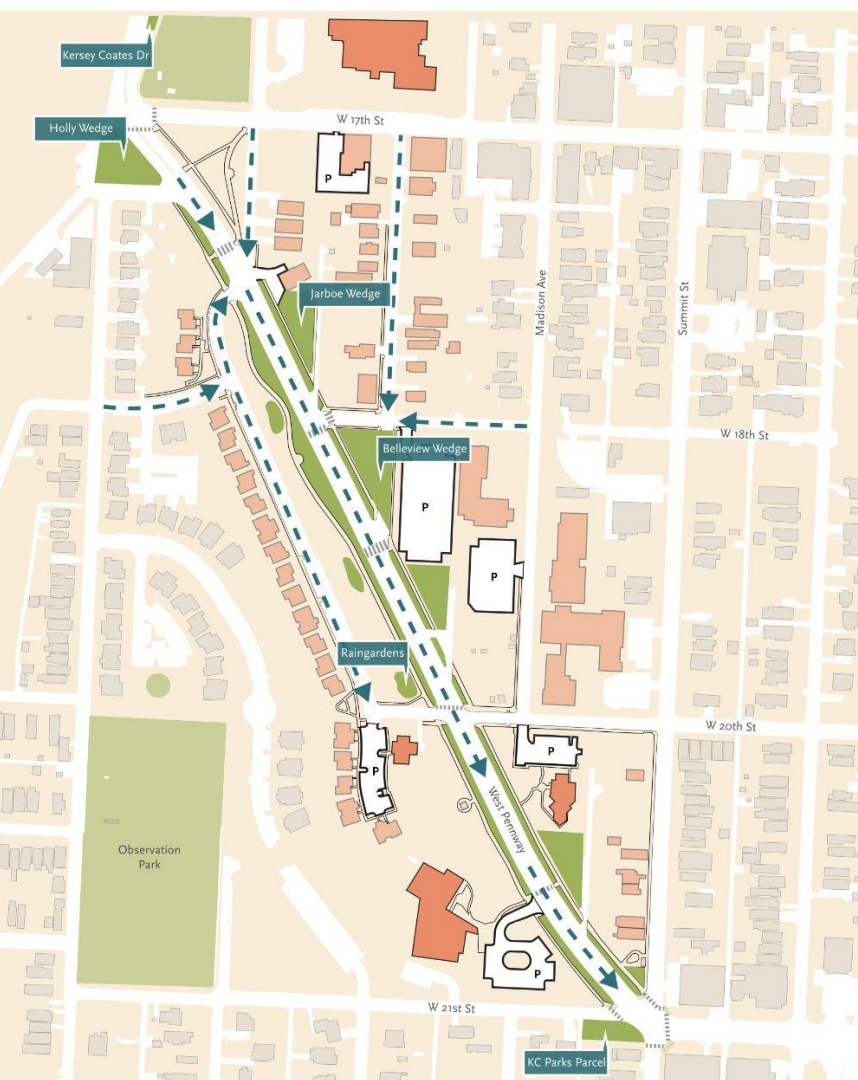
## Stormwater Phase 1 (SWT)

- “Surgical” Curb-cut strategies
  - Standard curb-cuts
  - Bumpouts
  - Trench Drains
  - Gutter aprons
- Opportunistic - Relying on bike/ped improvements and existing curb/tree condition
  - Lower capture volume
- Locations align with future phasing/improvements



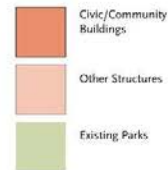
# Preliminary ROW Options

- Vacate ROW in some instances
- Use various Wedge spaces
- Activate KC Parks Parcel at 21st St
- Rain gardens adjacent to Riverfront Heritage Trail
- Stormwater Curb Extensions
  - Increased capacity for water capture



## LEGEND

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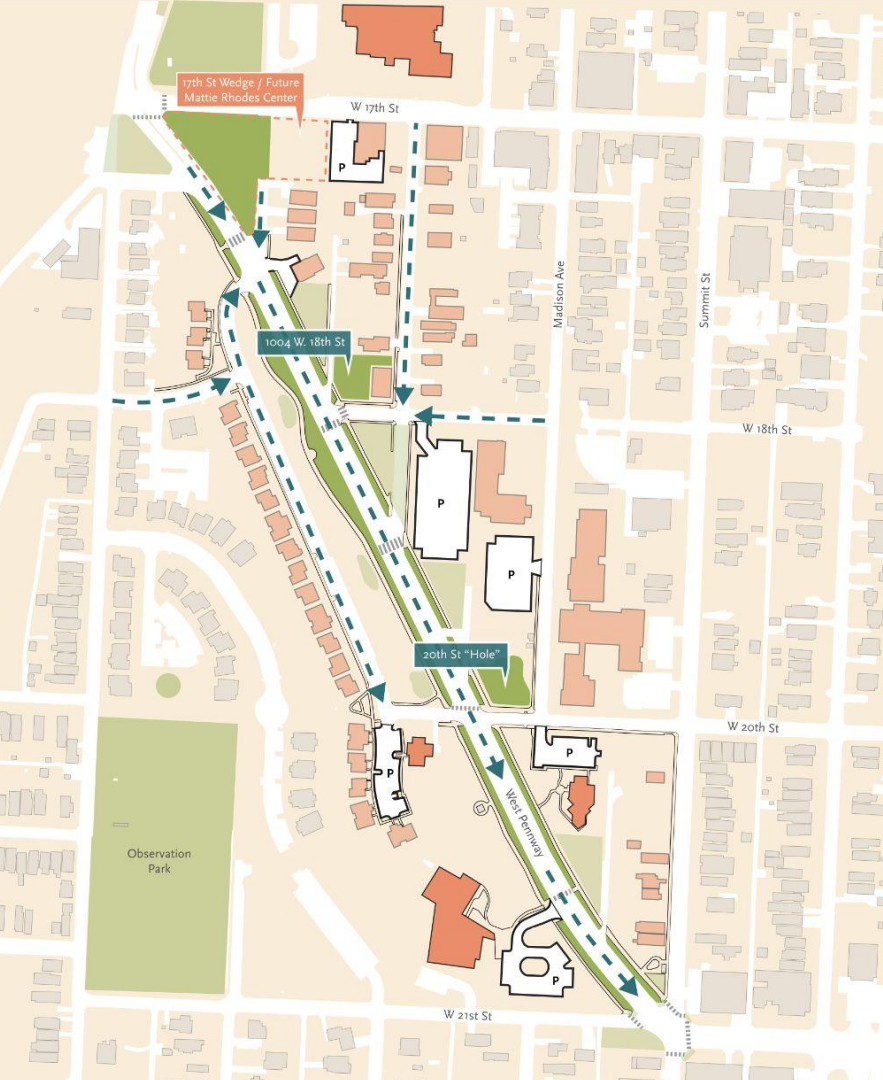
## Example - Belleview Wedge

- Vacate Belleview ROW south of 18th St
  - Increase water capture
  - Open to bikes/peds
  - Improve safety
  - Create gathering spaces



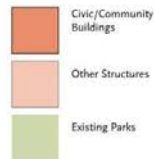
# Preliminary Public/Private Partnership Opportunities

- Public/Private Partnership Opportunities
  - 900 W 20th St (.52ac)
  - 1004 W 18th St
  - 17th St Wedge with Mattie Rhodes Cultural Center
- Dedicated capture opportunities, higher runoff volume
- Educational or recreational programming of GI spaces



## LEGEND

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Collection Opportunities (green square)



# Dialogue

1. Comments on flexibility and scalability of:
  - a. Intersection improvement
  - b. Function of right-of way and traffic calming
  - c. Green infrastructure - vision for watershed and consent decree
  - d. Placemaking
2. Opportunities for programming and shared maintenance
3. Potential for partnerships
4. Considerations for feasibility of implementation

Next meeting time  
October 7, 3-5p  
[Public Meeting in mid-September]



# Thank you!

