GATEWAY TO THE GAP

UK ®
UNIVERSITY OF
KENTUCKY ®
College of Agriculture,
Food and Environment
Department of Landscape Architecture

Presentation Outline

Q&A

Wayfinding

Greenway

Canal Walk

Downtown

Design Focus

Inventory, Analysis, & Research

Community Accomplishments

Project Objectives

Today's Process

Introductions
Who is UKLA?

Who is UKLA?

- Students in the University of Kentucky's Department of Landscape Architecture
- We learn to create human environments that are sustainable, socially relevant, artful, and functional.
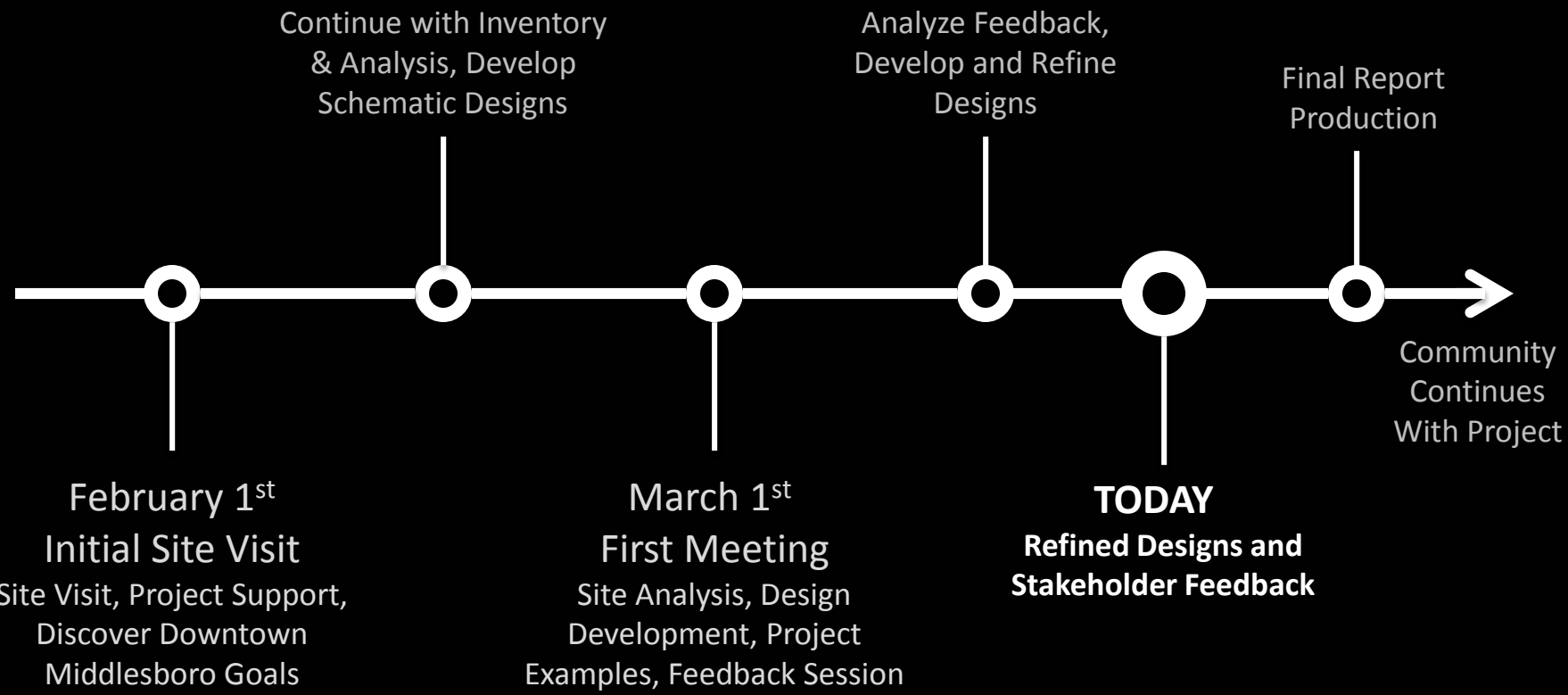
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Who is UKLA?

Today's Process

- Brief on project background
- Present inventory, analysis, and research
- Walk through potential ideas
- Receive feedback from the community

Project Timeline

Continue with Inventory & Analysis, Develop Schematic Designs

Analyze Feedback, Develop and Refine Designs

Final Report Production

Community Continues With Project

February 1st
Initial Site Visit
Site Visit, Project Support, Discover Downtown Middlesboro Goals

March 1st
First Meeting
Site Analysis, Design Development, Project Examples, Feedback Session

TODAY
Refined Designs and Stakeholder Feedback

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Who is UKLA?

Project Objectives

- Work with the community to identify challenge areas
- Propose design solutions that address the community's needs and goals
- Improve connections to regional trails (Cumberland Gap National Park & Boone Trace)
- Make Middlesboro a regional hub for tourism
- Offer design solutions that appeal to a younger generation, closing the generation gap
- Make Middlesboro the "Gateway to the Gap"

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Who is UKLA?

What You've Already Accomplished:

- Grants
  - River, Trails, Conservation Assistance (NPS)
  - Recreational Trail Program (KY Transportation Cabinet)
- Downtown Development Plans
  - Short Term:
    - Trail Town Initiative
  - Long Term:
    - Attract tourism and events
    - Preserve the history of Middlesboro
    - Stream/Canal restoration
    - Trail system improvement: Boone Trace and the Canal Walk

Current Community Growth Strategies

- Develop and attract "location neutral" retail businesses
- Make Downtown Middlesboro the city's priority location for new retail businesses and small industries
- Expand the arsenal of downtown property rehabilitation and development tools
- Focus on developing locally owned businesses rather than trying to attract national retail chains
- Attract and retain young entrepreneurs
- Create a small downtown hotel or inn
- Conduct further research on where downtown customers come from

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UK

Today's Process

Introductions
Who is UKLA?

150 Mile Radius

50 Mile Radius

Lexington

Middlesboro

Knoxville

KY

TN

VA

N
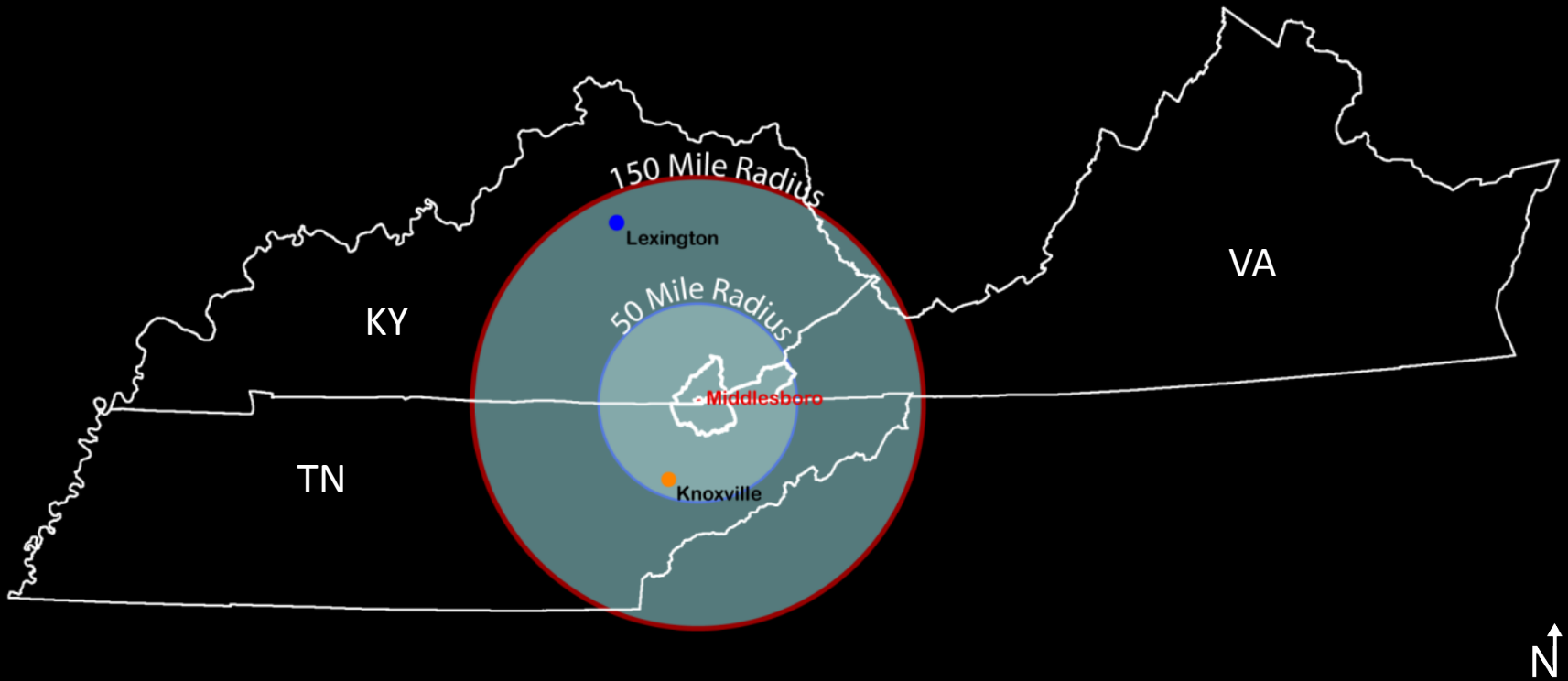
(Data Source: Kentucky Geography Network, 2014)

Regional Connection Opportunities

(Data Source: Kentucky Geography Network, 2014)

Inventory, Analysis, & Research

Land Use

Legend:
- Residential
- Commercial
- Institutional
- Private Green space
- Public Green space
- Industrial

(Map Source: Google Maps, 2014)

Population Density

Legend
Population range

- 300+
- 275 - 299
- 250 - 274
- 225 - 249
- 200 - 224
- 175 - 199
- 150 - 174
- 125 - 149
- 100 - 124
- 75 - 99
- 50 - 74
- 25 - 49
- 0 - 24

US 25E

Cumberland Ave

N
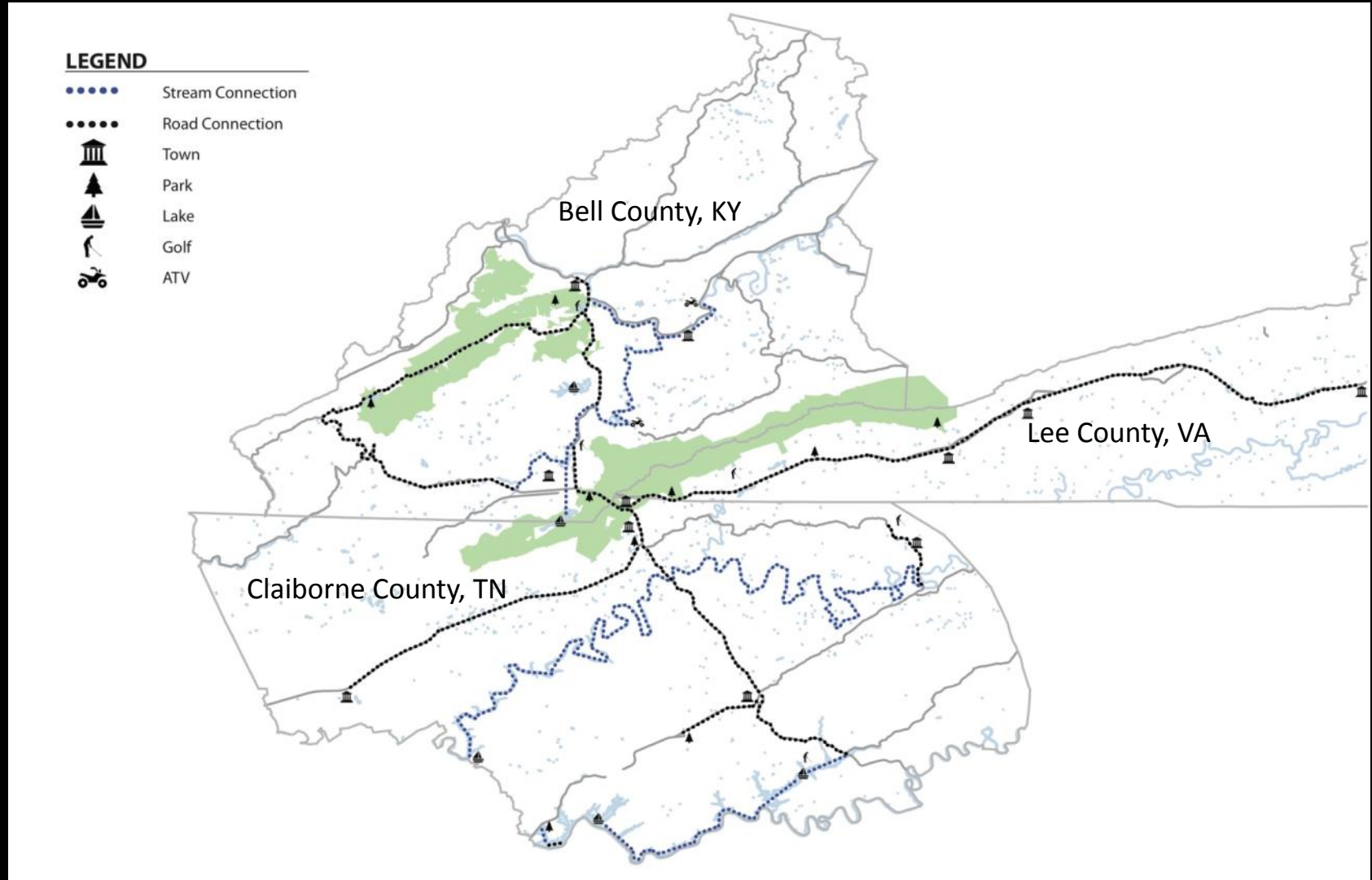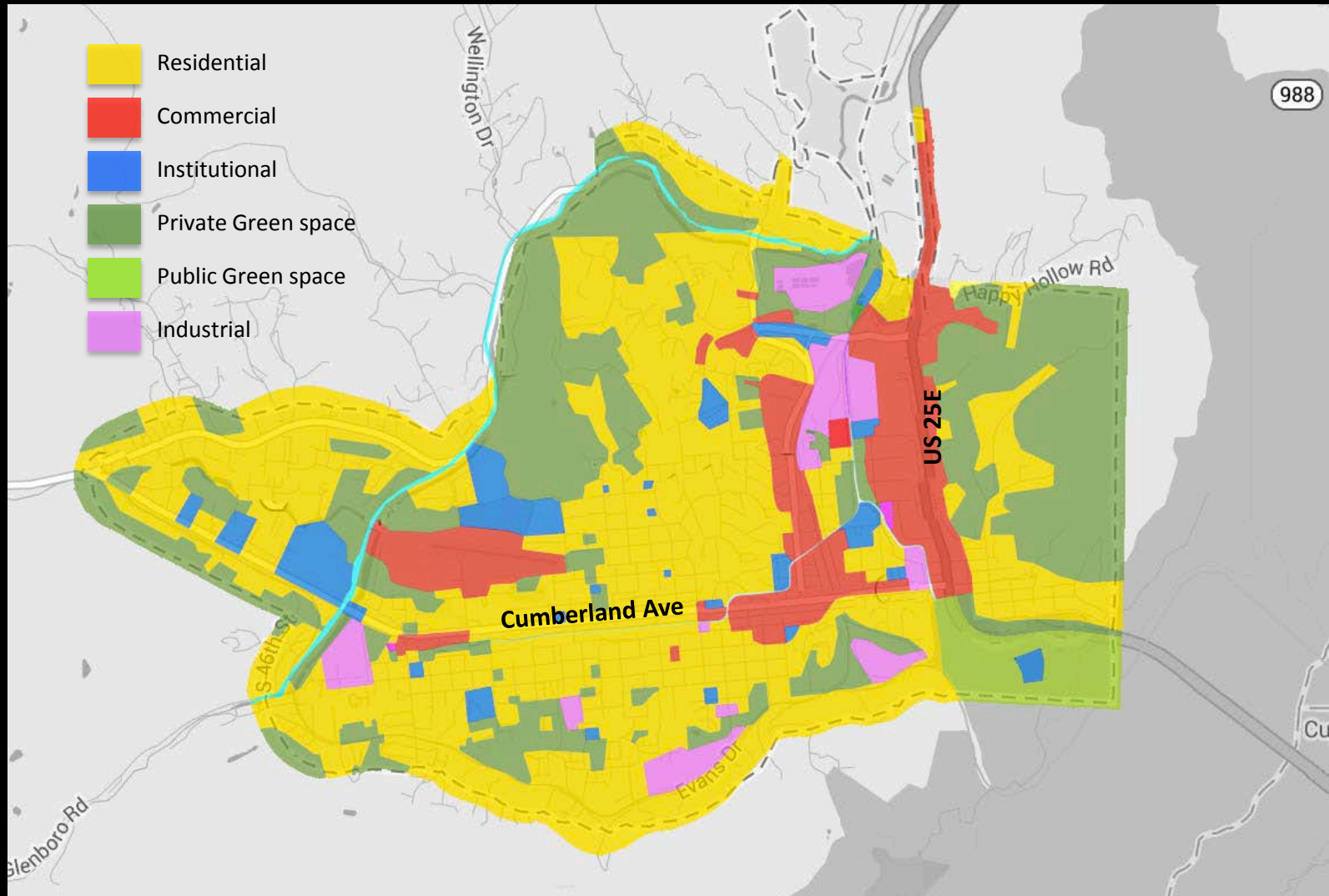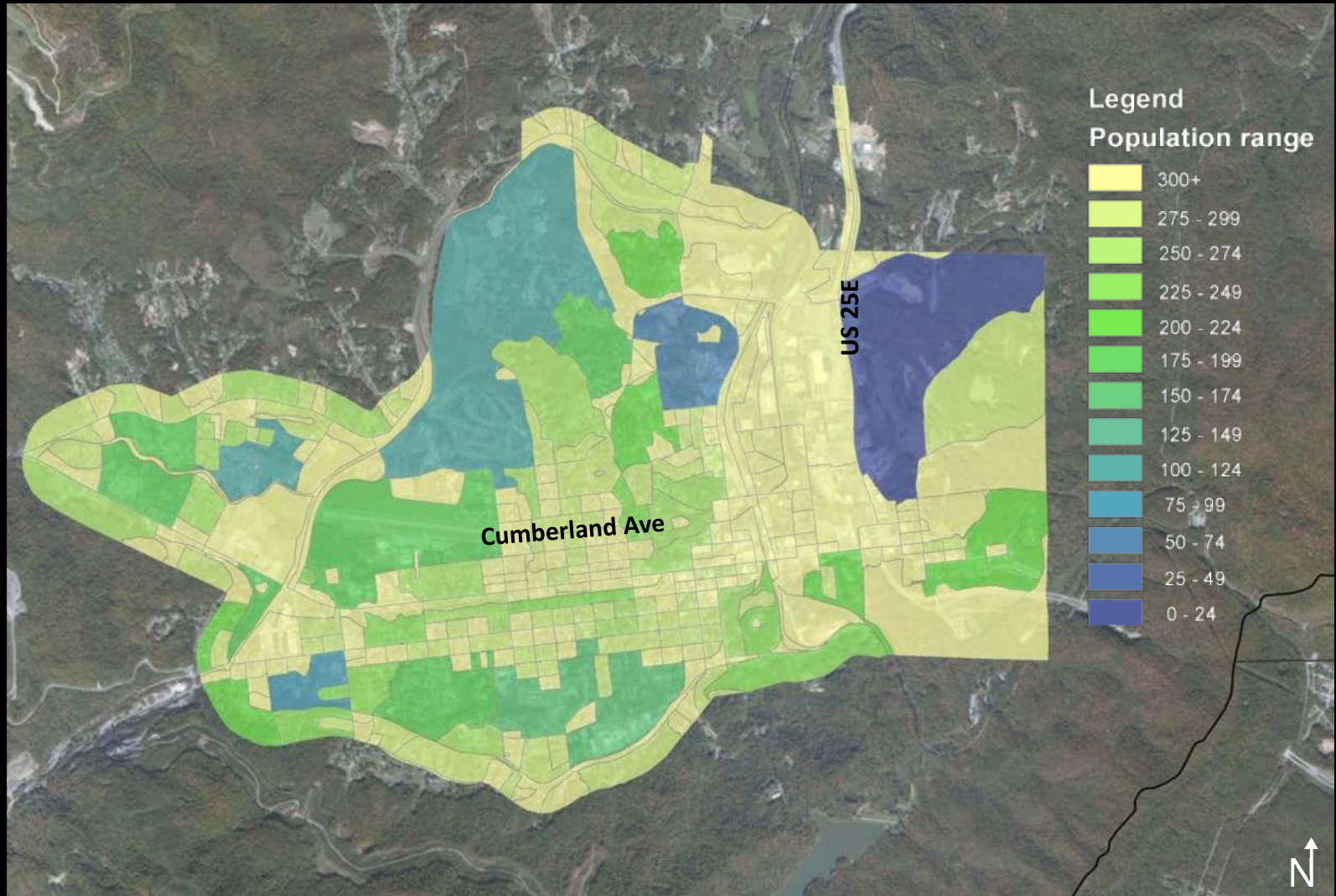
(Data Source: Kentucky Geography Network, 2014)

Existing Tourism Amenities
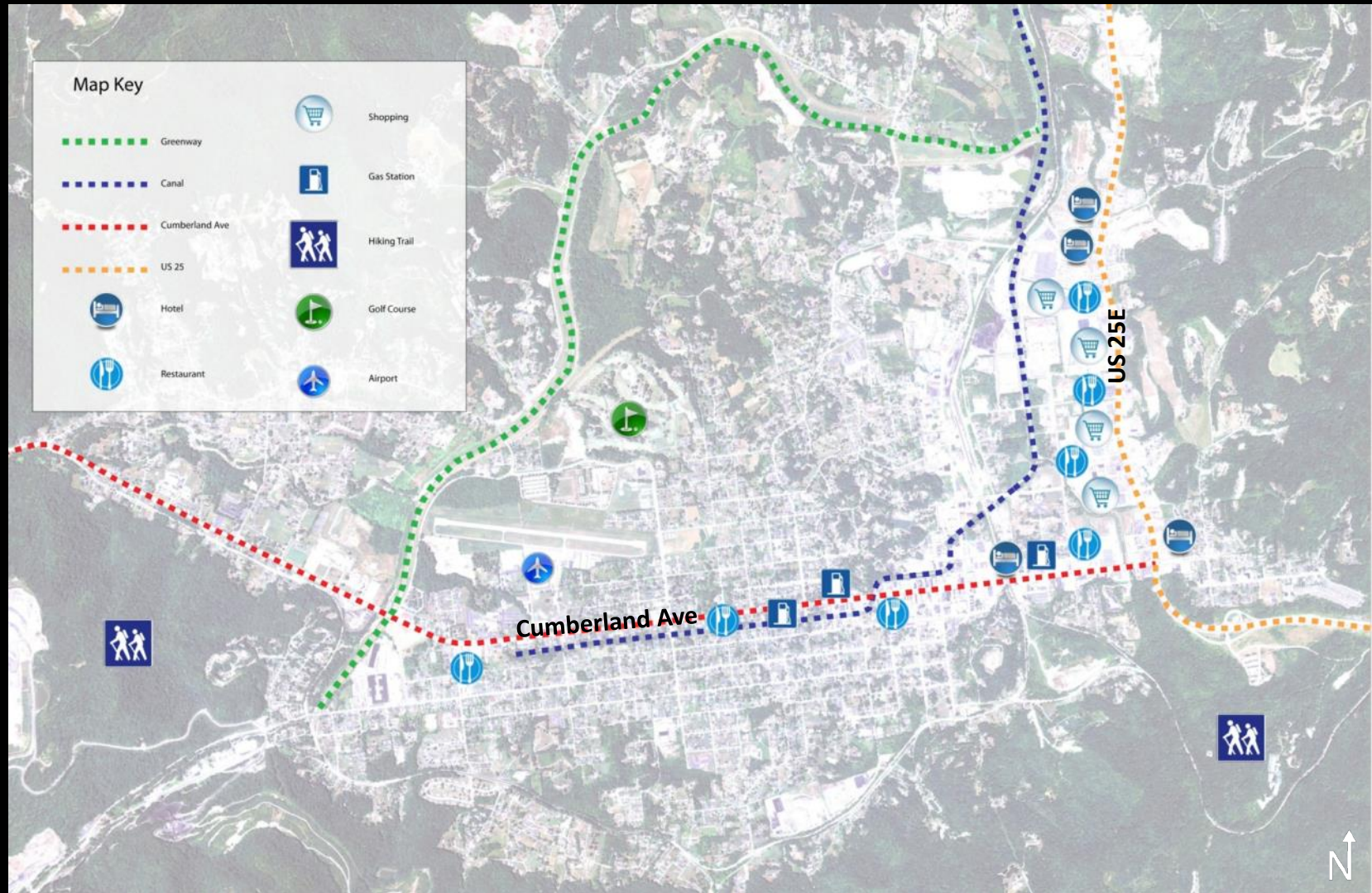
(Data Source: Kentucky Geography Network, 2014; Google Maps, 2014)

Boone Trace

- March 19, 1775
- Historically significant for Kentucky
- First road west of Appalachian Mountains
- Allowed settlements to be formed in the West
- Trail passes through Middlesboro
- Important Trail Markers
    - Stone atop Flat Lick
    - Colson House (Oldest House in Bell County)
    - Pyramid at the Saddle of the Gap
    - Indian Rock
    - The Narrows Marker

(Source: Boone Trace 1775, 2013; The Boone Society, 2012)

(Source: http://www.danielboonetrail.com/history.php)

(Source: http://www.everytrail.com/trip_pictures.php?trip_id=1489835&code=)

(Source: http://www.boonetrace1775.com/history/significance.php)

Inventory, Analysis, & Research

Potential Trail System

Legend
- Community Proposed Trails
- Waterways
- Boone Trace
- UKLA Proposed Trail System
- Extended Trail Connections
- Trails within CGNHP

US 25

Cumberland Ave

N

(Data Source: Kentucky Geography Network, 2014; US Department of Interior, National Park Service, 2014)
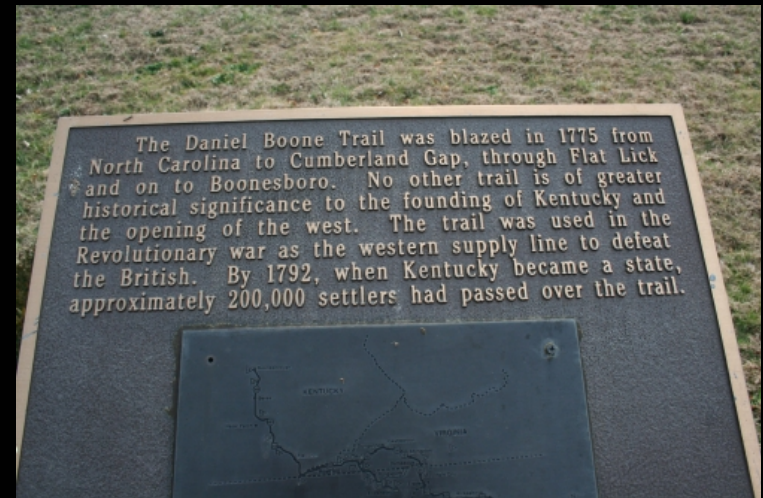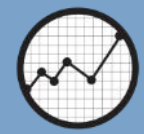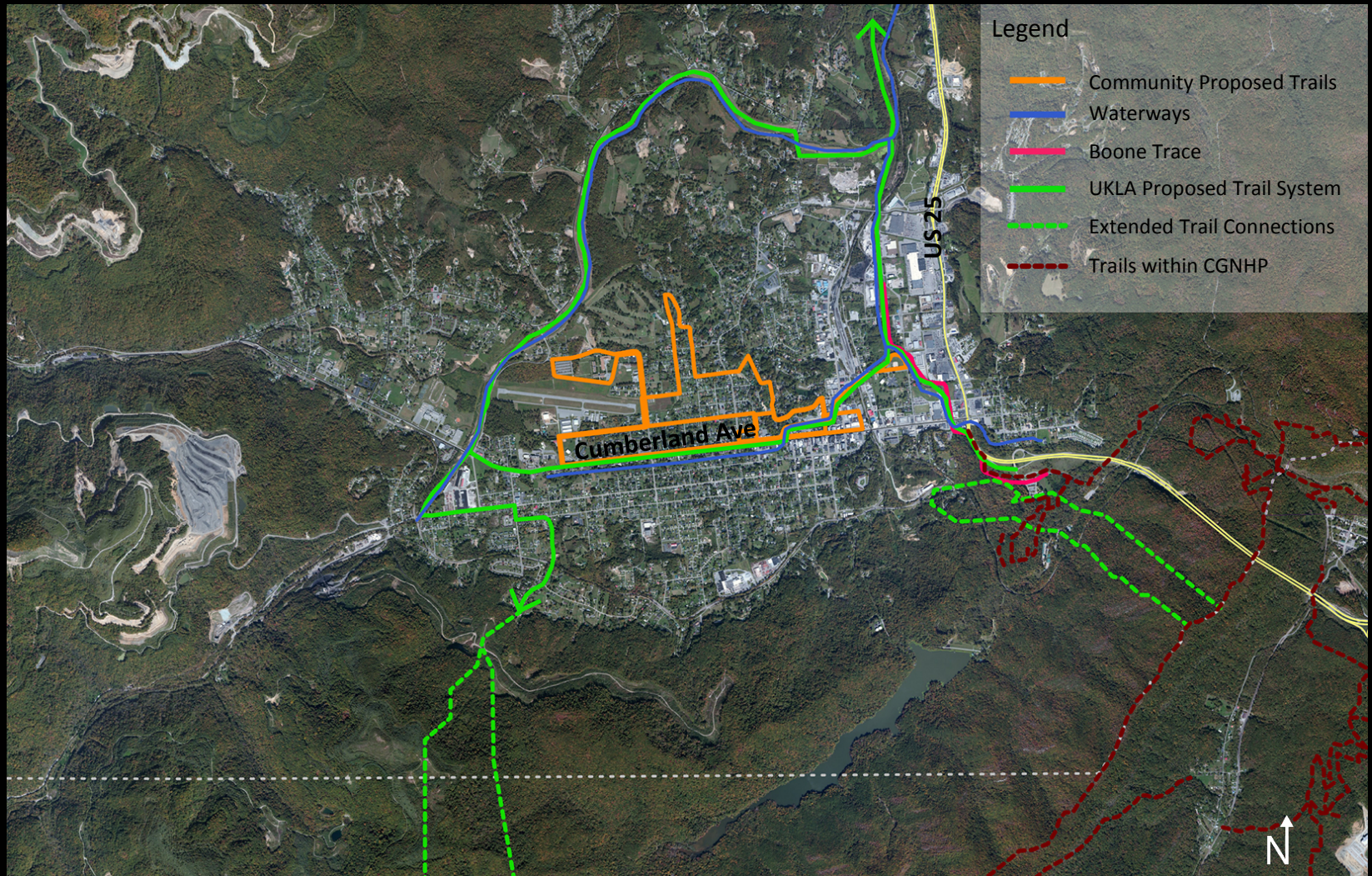
Cumberland Gap National Historical Park Connectivity Opportunities

Legend

- - - - Potential Trail Connections
──── Existing Trails
──── CGNHP Boundary

(Data Source: Kentucky Geography Network, 2014; US Department of Interior, National Park Service, 2014; US Geological Survey, 2014)
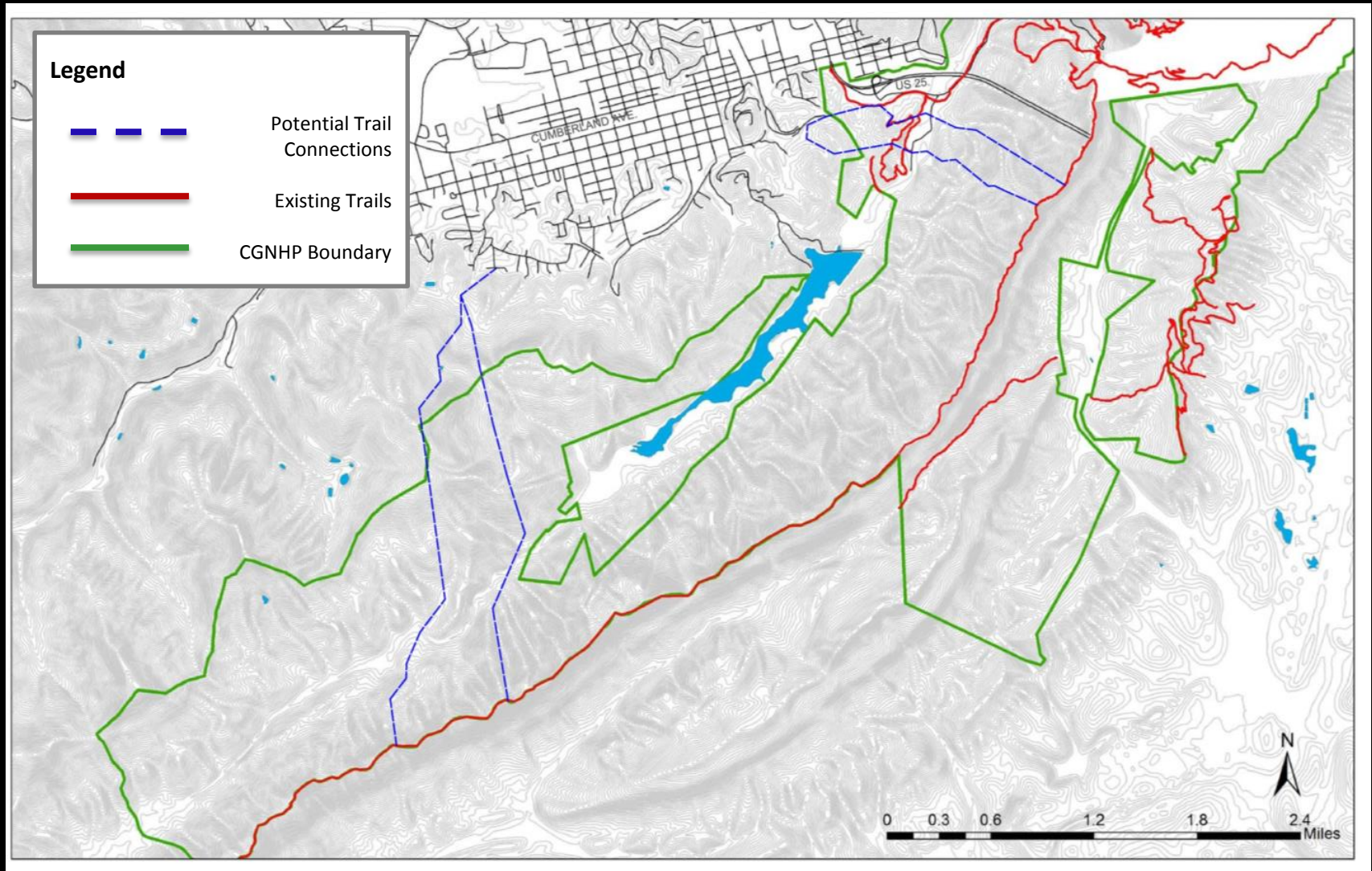
Summary

- Connections
  - Historical
  - Regional
  - Local
  - National Park

- Revitalization
  - Downtown Core
  - Tourism
  - Boone Trace
  - Public Green Space

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(Data Source: Kentucky Geography Network, 2014)

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(Data Source: Kentucky Geography Network, 2014)

Downtown – Indianapolis Cultural Trail Case Study

Project Name
Indianapolis Cultural Trail

Location
Indianapolis, Indiana (USA)

Date Designed
2001-2005

Construction Completed
May 2013

Construction Cost
$63 Million

Landscape Architect
Rundell Ernstburger Associates

Developer|Client
City of Indianapolis Department of Public Works

Manager
Brian Pierso & Carl Kincaid
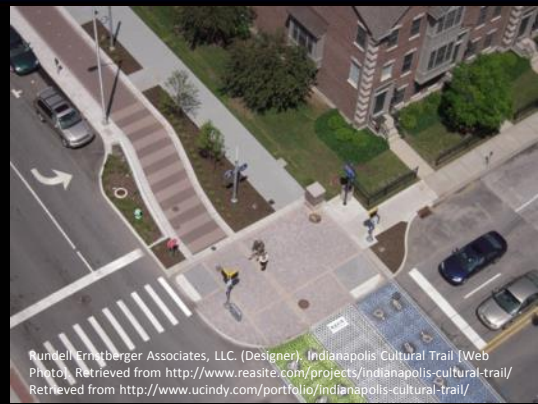
Rundell Ernstberger Associates, LLC. (Designer). Indianapolis Cultural Trail [Web Photo]. Retrieved from http://www.reasite.com/projects/indianapolis-cultural-trail/ Retrieved from http://www.ucindy.com/portfolio/indianapolis-cultural-trail/

Rundell Ernstberger Associates, LLC. (Designer).Glick Peace Walk [Web Photo]. Retrieved from http://www.reasite.com/projects/glick-peace-walk/
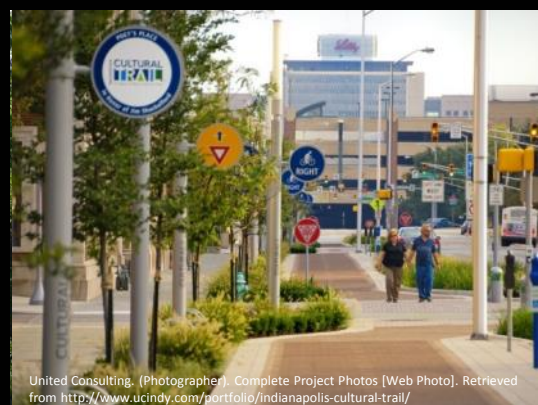
United Consulting. (Photographer). Complete Project Photos [Web Photo]. Retrieved from http://www.ucindy.com/portfolio/indianapolis-cultural-trail/
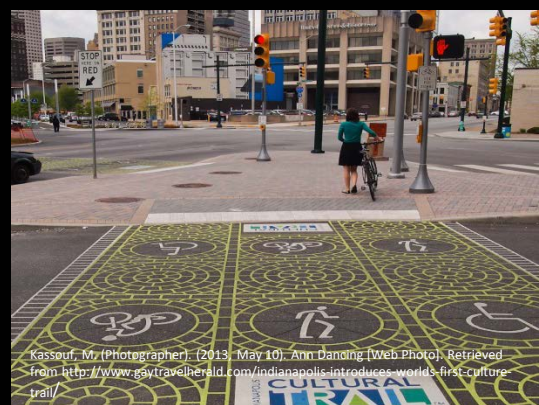

Kassouf, M. (Photographer). (2013, May 10). Ann Dancing [Web Photo]. Retrieved from http://www.gaytravelherald.com/indianapolis-introduces-worlds-first-culture-trail/

Kassouf, M. (Photographer). (2013, May 10). Ann Dancing [Web Photo]. Retrieved from http://www.gaytravelherald.com/indianapolis-introduces-worlds-first-culture-trail/
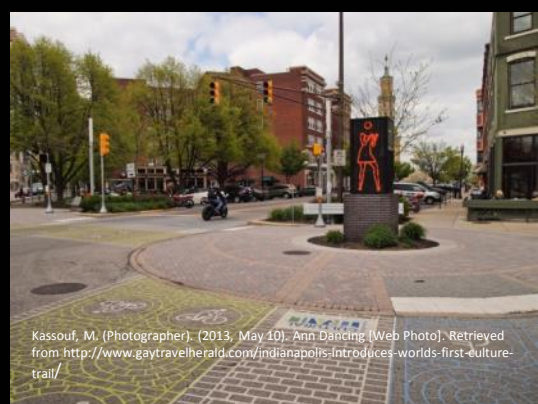
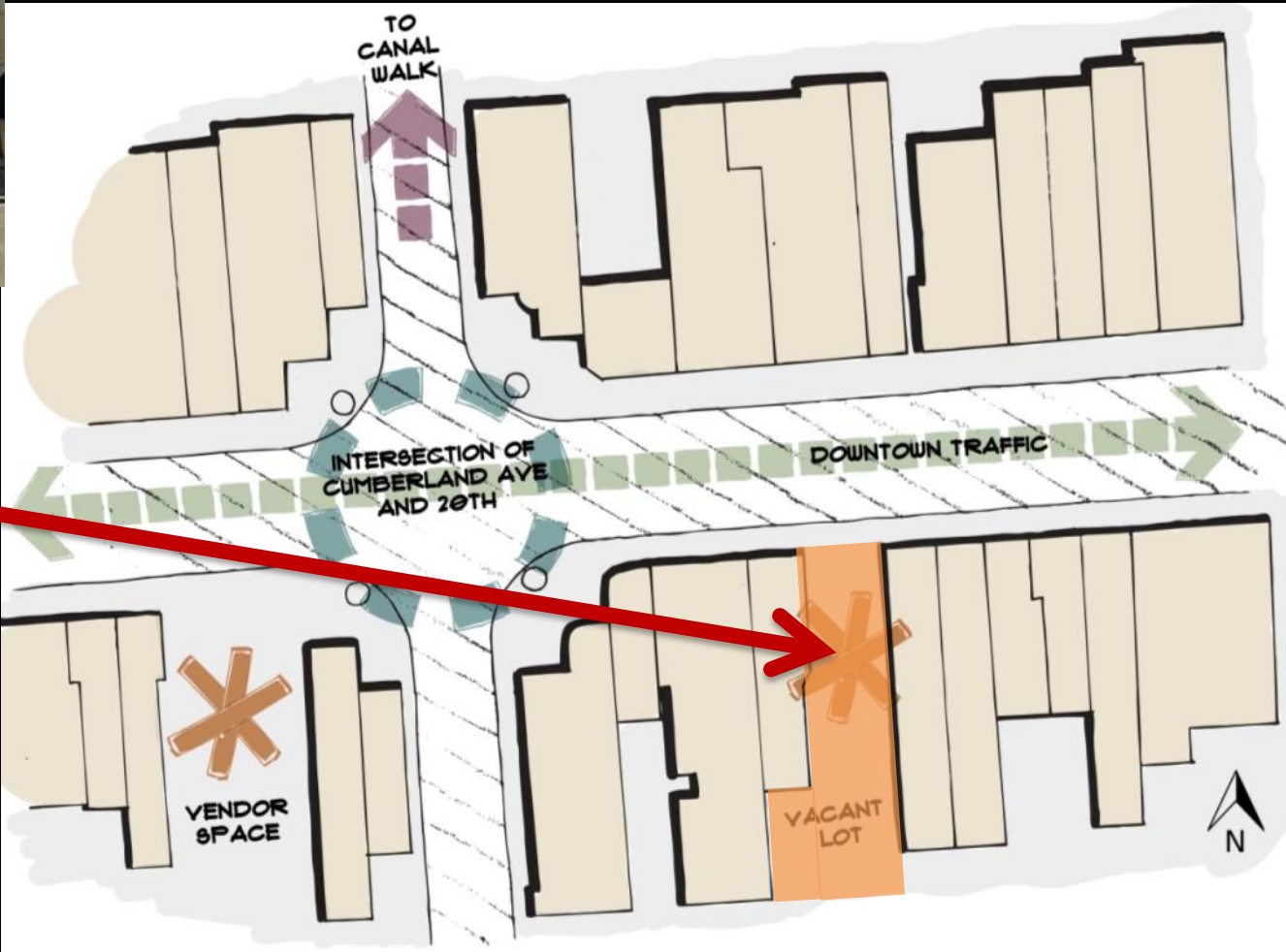Rundell Ernstberger Associates, LLC. (Designer).Glick Peace Walk [Web Photo]. Retrieved from http://www.reasite.com/projects/glick-peace-walk/
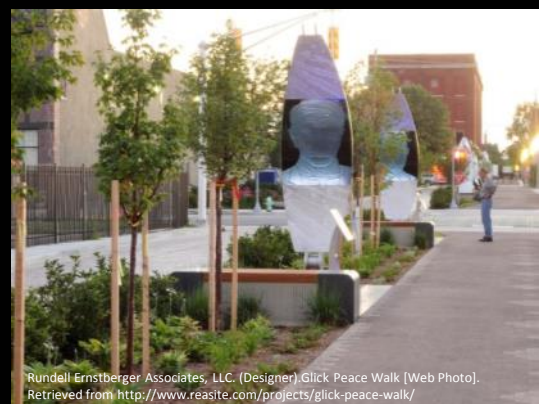
Areas of Interest
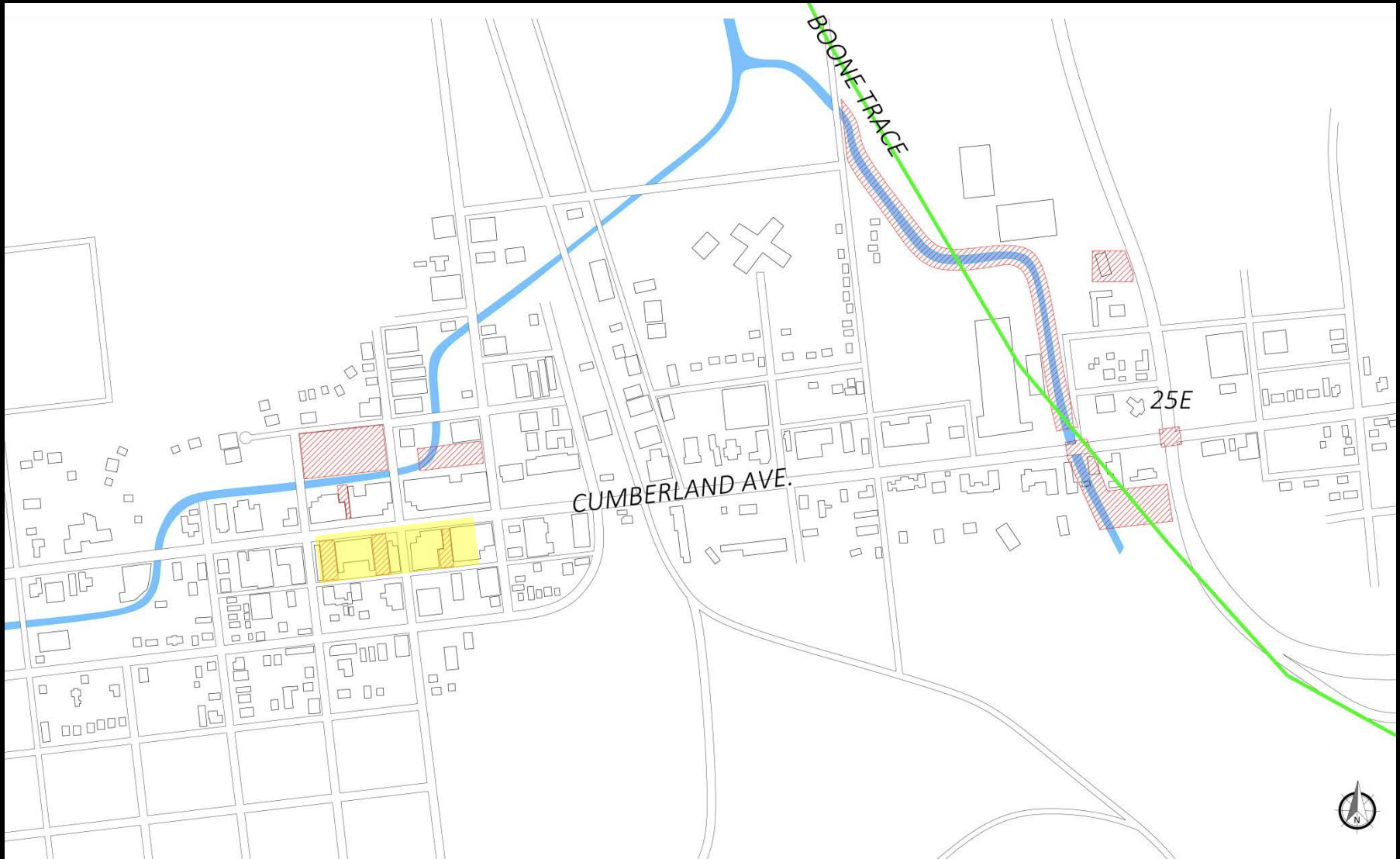
Pocket Park Concept Diagram

Existing Site

Vacant lots with potential for development were identified including an infill lot, which is an ideal place for a small pocket park.
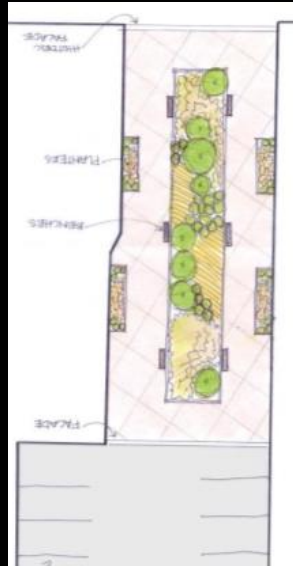
Analysis: Intersection of 20th and Cumberland Ave.

Pocket Park Refined Concept Diagram

Proposed Design

http://www.fairfaxcounty.gov/tysons/desi gn/download/6_udg_parks.pdf

Inspiration

Alternative Design

Small Flowering Trees

Movable Furniture

Seat Wall Planters

CUMBERLAND AVENUE

N

http://www.google.com/earth/

zzhttp://www.cityofcorsicana.com/Facilities/Facility/Details/Downtown-Pocket-Park-10

Inspiration

Proposed Pocket Park

Placing a façade veneer at the entrance to this park creates a unique feature and streetscape building continuity

http://www.google.com/earth/

Community Garden Concept Diagram

Existing Site

Identified vacant lot at 21st and Cumberland Ave. between two mixed use buildings. Ideal space for a <u>community garden</u>
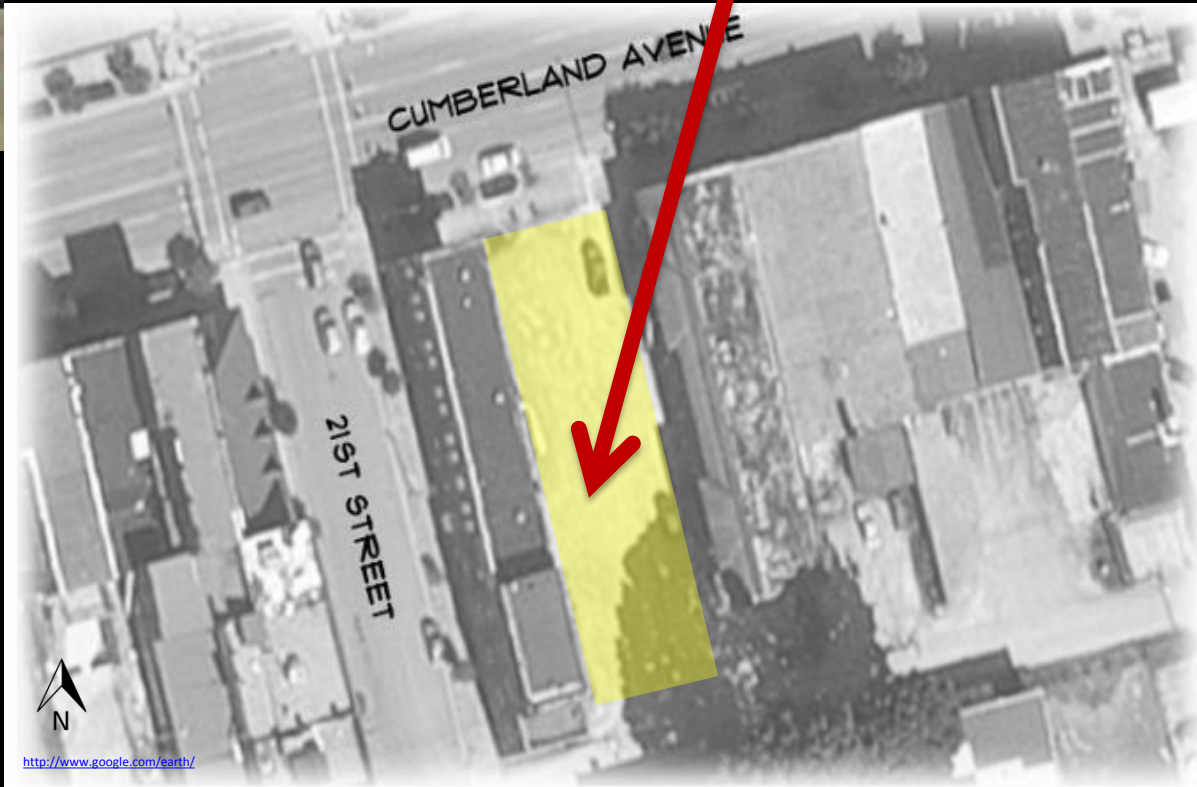
- Provide sense of community
- Educational opportunity
- Produce food
- Added green space
- Inexpensive development
- Easy maintenance

Downtown

Refined Community Garden Concept Diagram

Gateway Entrance

Raised Planters

Pergola Structure

Concrete Path for Tenants of Building

Educational Work Stations

Low Maintenance Pathway

http://www.google.com/earth/
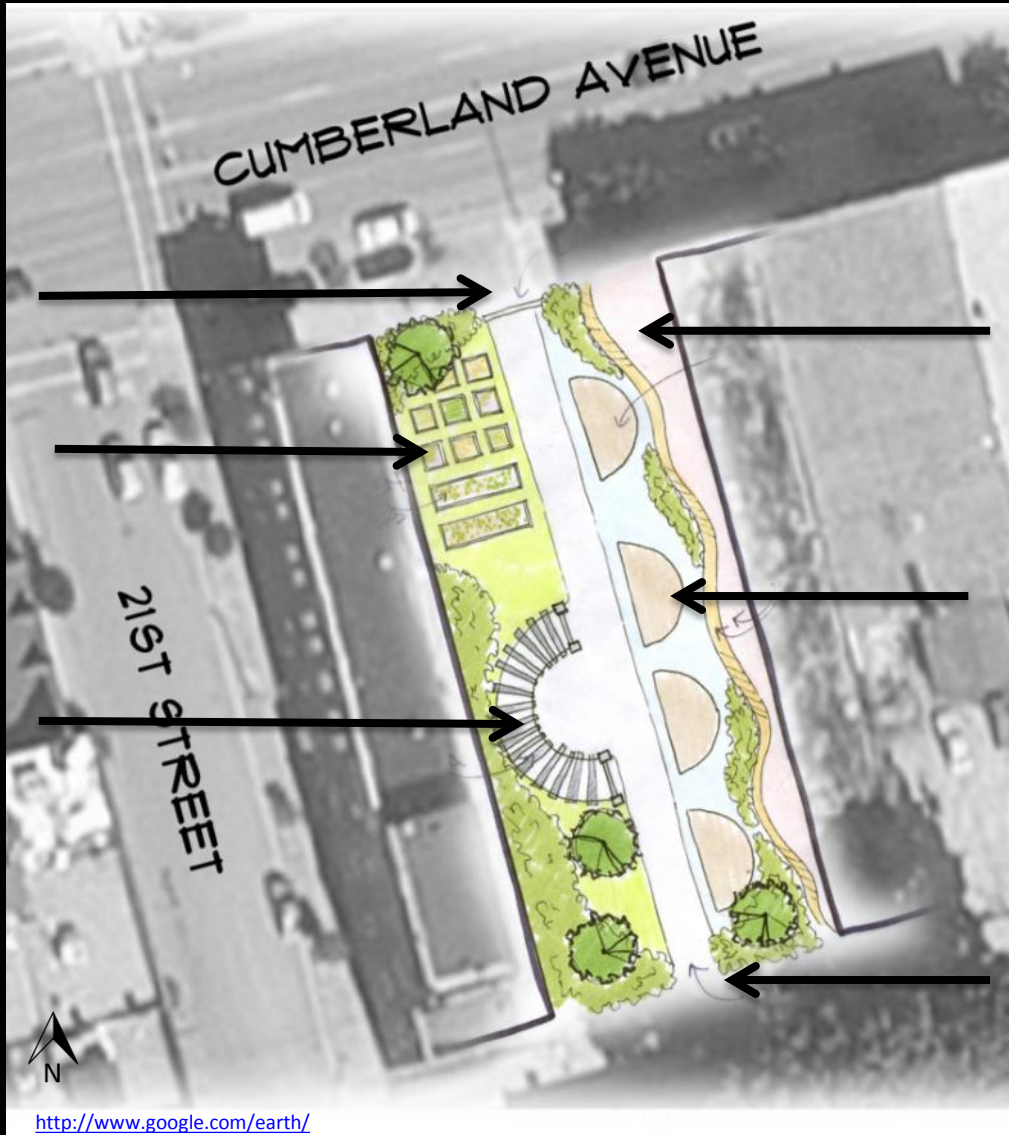
Proposed Community Garden

Community Garden Sketch

Alternative Design View

http://www.google.com/earth/

Vendor Site Concept Diagram

Cumberland & 20th St.

(Data Source: Google Earth, 2014)

Currently this site is mostly parking.

Small food vendor located on site.

Underutilized space.

Potential for gathering area for children in downtown Middlesboro.

Downtown

Existing appearance of Vendor site

Before

Parking retained
In back portion

Playground Potential
for downtown

(Data Source: Google Earth,2014)

Street View from other side of Cumberland Ave.

Proposed Vendor site

After

Existing Food Vendor

Vegetated Traffic Buffer
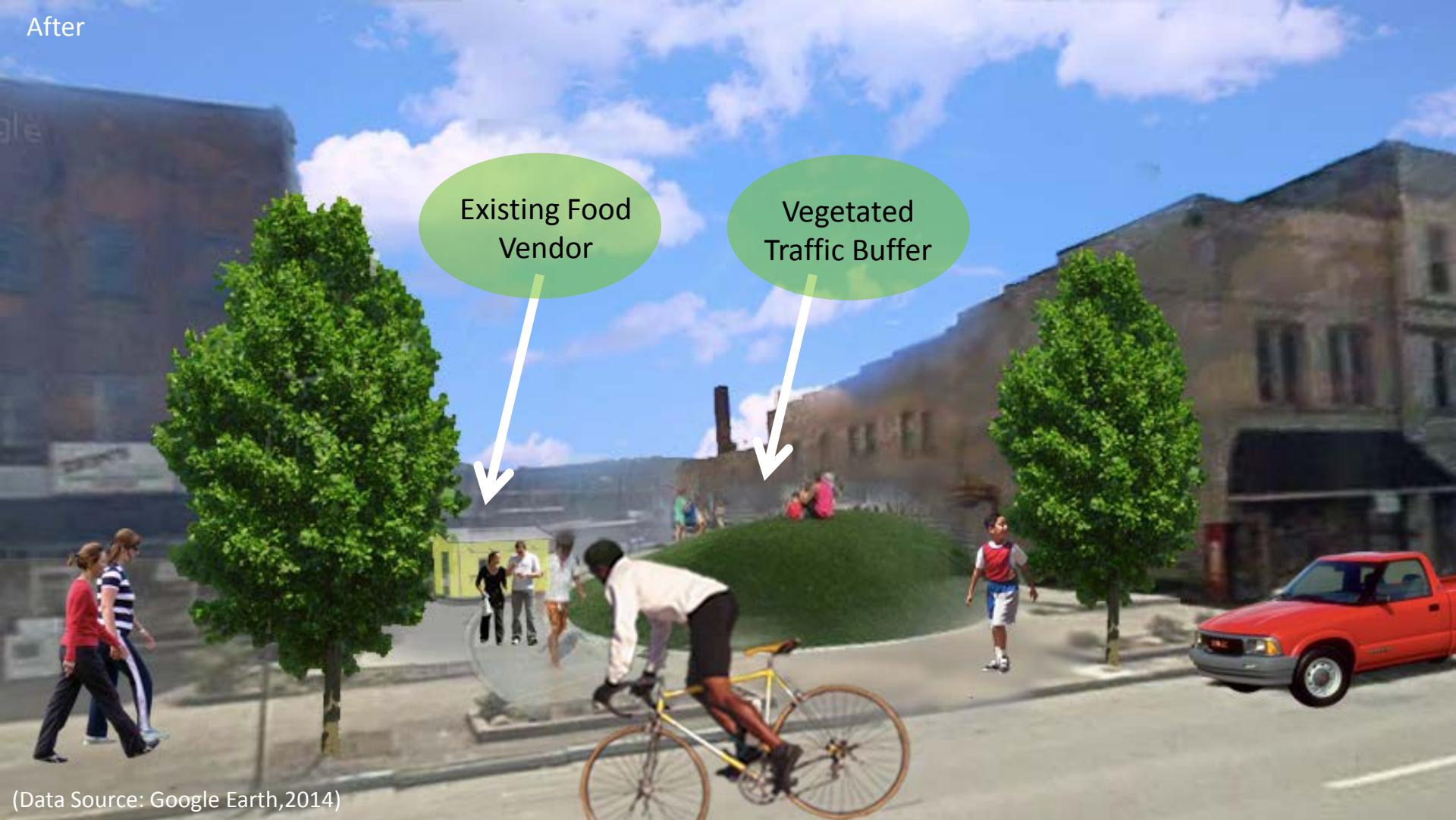
(Data Source: Google Earth, 2014)

Canal Walk Area

Downtown
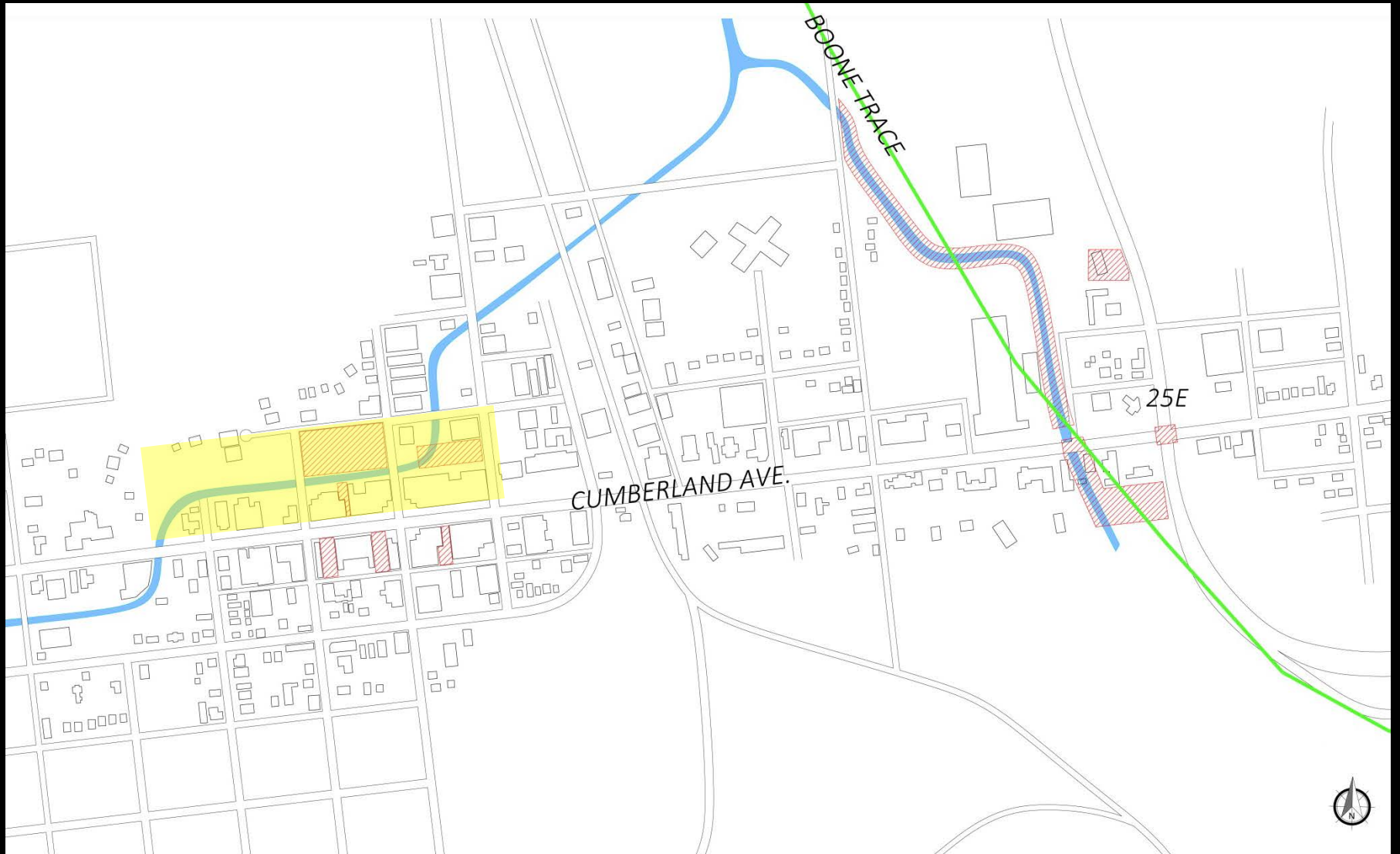
Canal Walk Area Concept Diagram

(Data Source: Google Earth, 2014)

Concept 1

- Provide access from Cumberland Ave
- Provide one area for programmable event space
- Create two access points to the Canal Walk which act as trail heads
- Create linkage from Court House to the Canal Walk
- Create clear and concise pathway along Canal Walk

Canal Walk Area Concept Diagram

(Data Source: Google Earth, 2014)

N
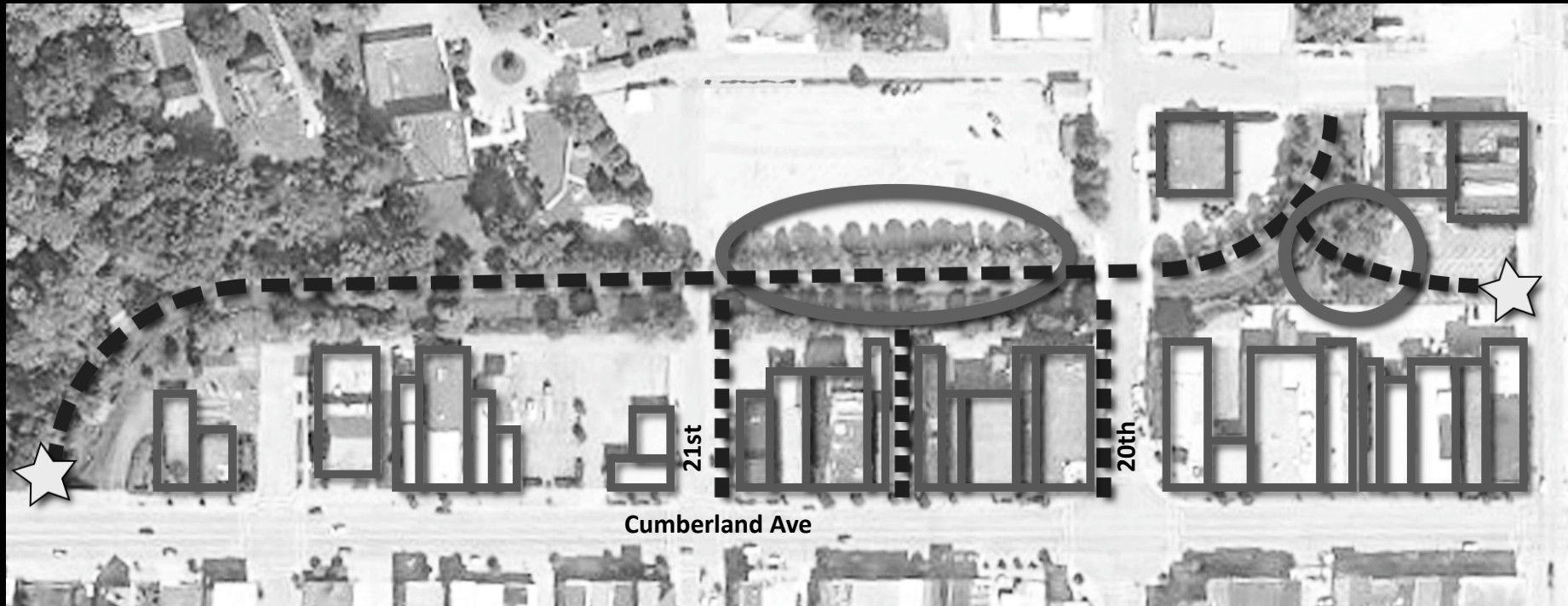
Concept 2

- Provide access from Cumberland Ave
- Provide two areas for programmable event space
- Create two access points to the Canal Walk which act as trail heads
- Create clear and concise pathway along Canal Walk

Refined Canal Walk Area Concept Diagrams

(Data Source: Google Earth, 2014)

Concept 2 Refined

- Linkages from either side of the Canal Walk
- Trail Heads to act as a formal entrance
- Areas for programmable event space
- Access to Canal Walk from Cumberland Ave

Refined Canal Walk Area Concept Diagram

(Data Source: Google Earth 2014)

Pavilion Section

Proposed Canal Walk Area

Possible Trail Head
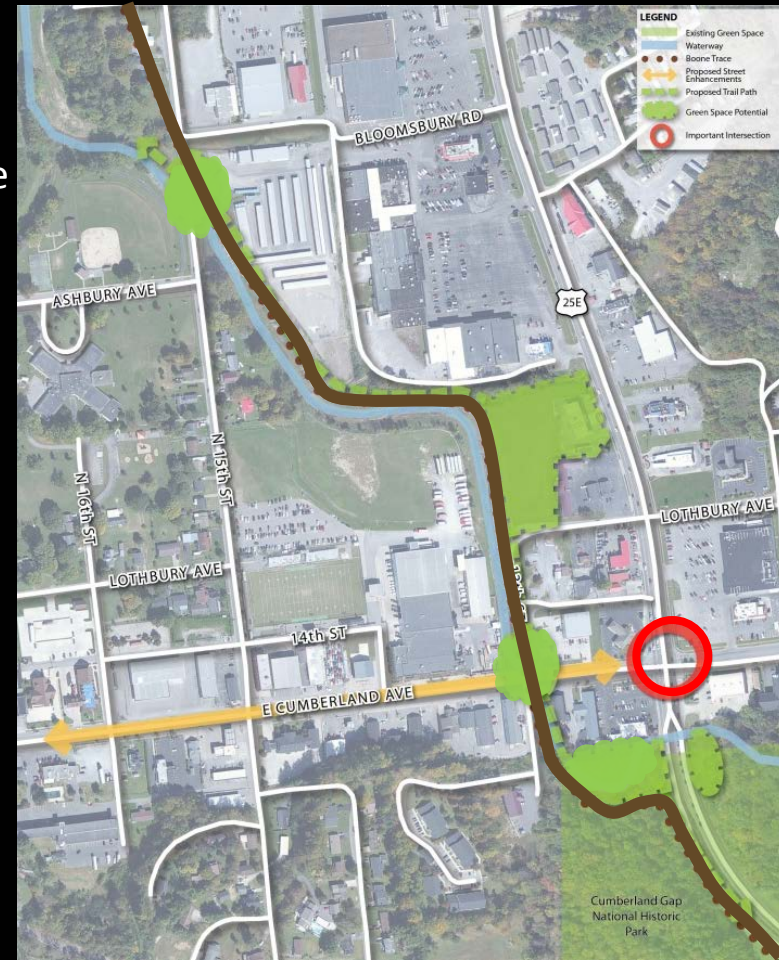

Pedestrian Bridge & Event Area

Boone Trace/CGNHP Connections
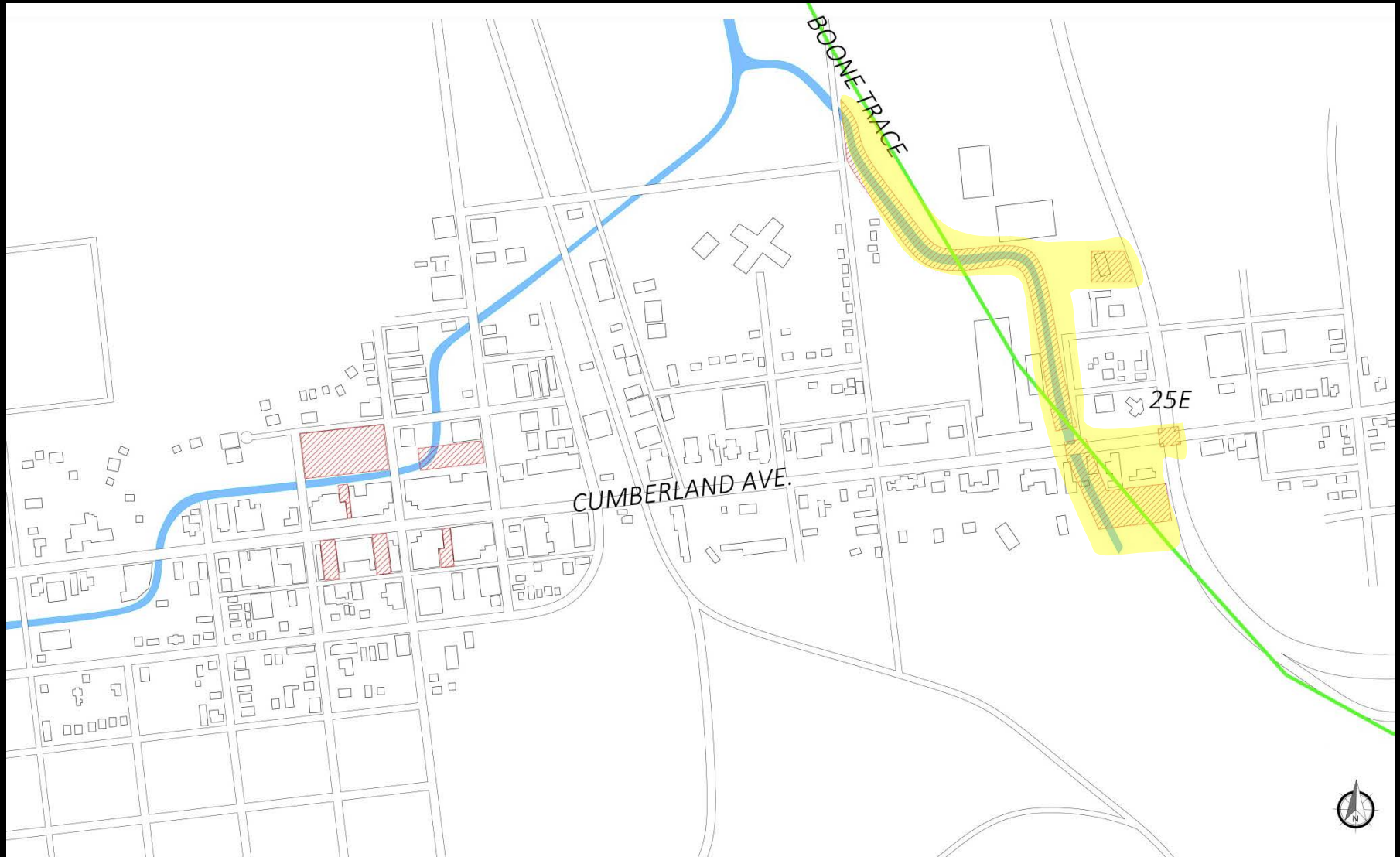
Boone Trace/CGNHP Connection Concept Diagrams
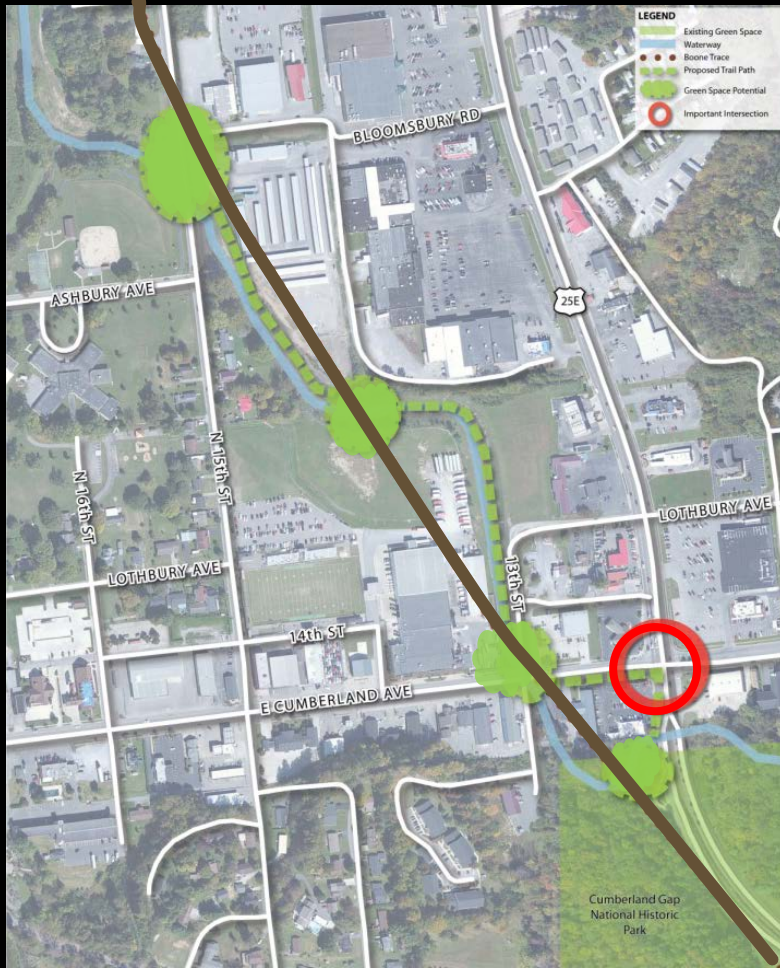
Original Boone Trace route

Boone Trace Intersection
Major intersection opportunity

Canal Walk Connection
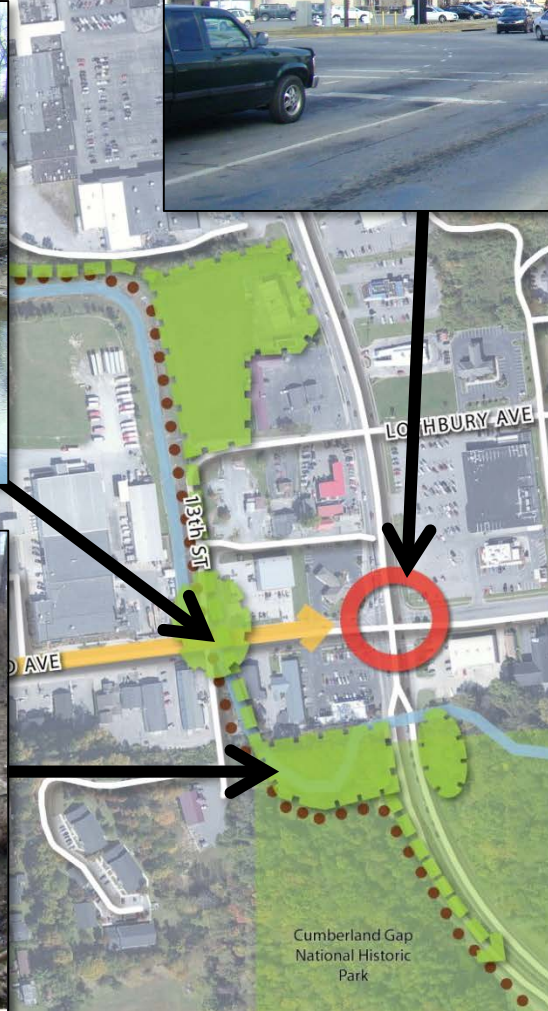
N

Concept 1

Concept 2

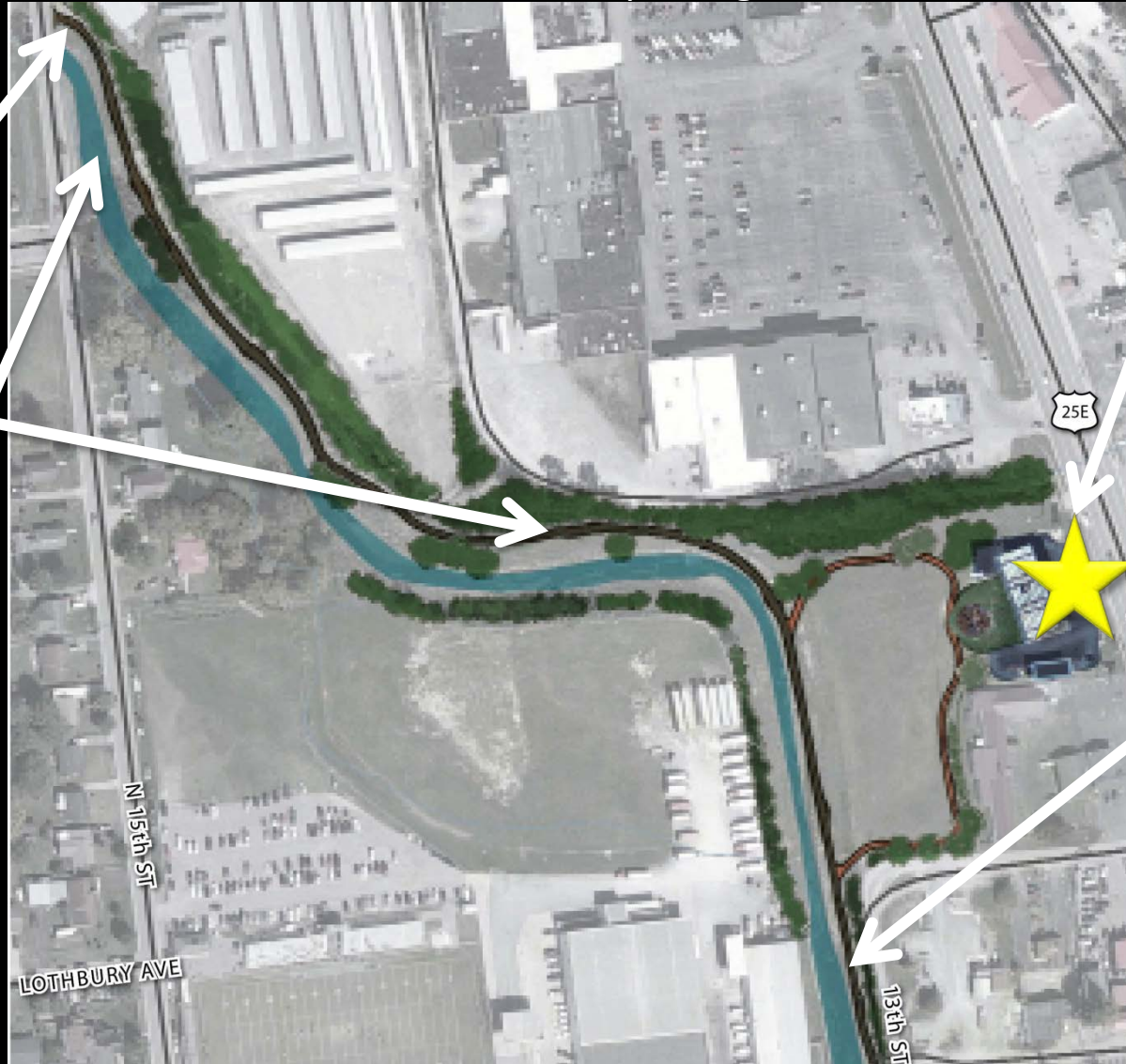(Data Source: Google Earth, 2014)

Existing Conditions

(Data Source: Google Earth, 2014)

Existing Conditions

BLOOMSBURY RD

LOTHBURY AVE

13th ST

LOTHBURY AVE

Cumberland Gap National Historic Park

N

(Data Source: Google Earth, 2014)

Refined Boone Trace/CGNHP Connection Concept Diagram

Connection to Canal Walk

Boone Trace Connections

Public Green Space/ Visitor Center Opportunity

Connection to Downtown & CGNHP

(Data Source: Google Earth, 2014)

Existing Shell lot

Vacant Shell Station
Building/Lot

Empty Car
Wash Building

Unused Field
No Marked Canal Walk/
Boone Trace Trail

Proposed Shell lot

Food Vendor

Culturally Relevant Public Green Space

Covered Public Gathering Space
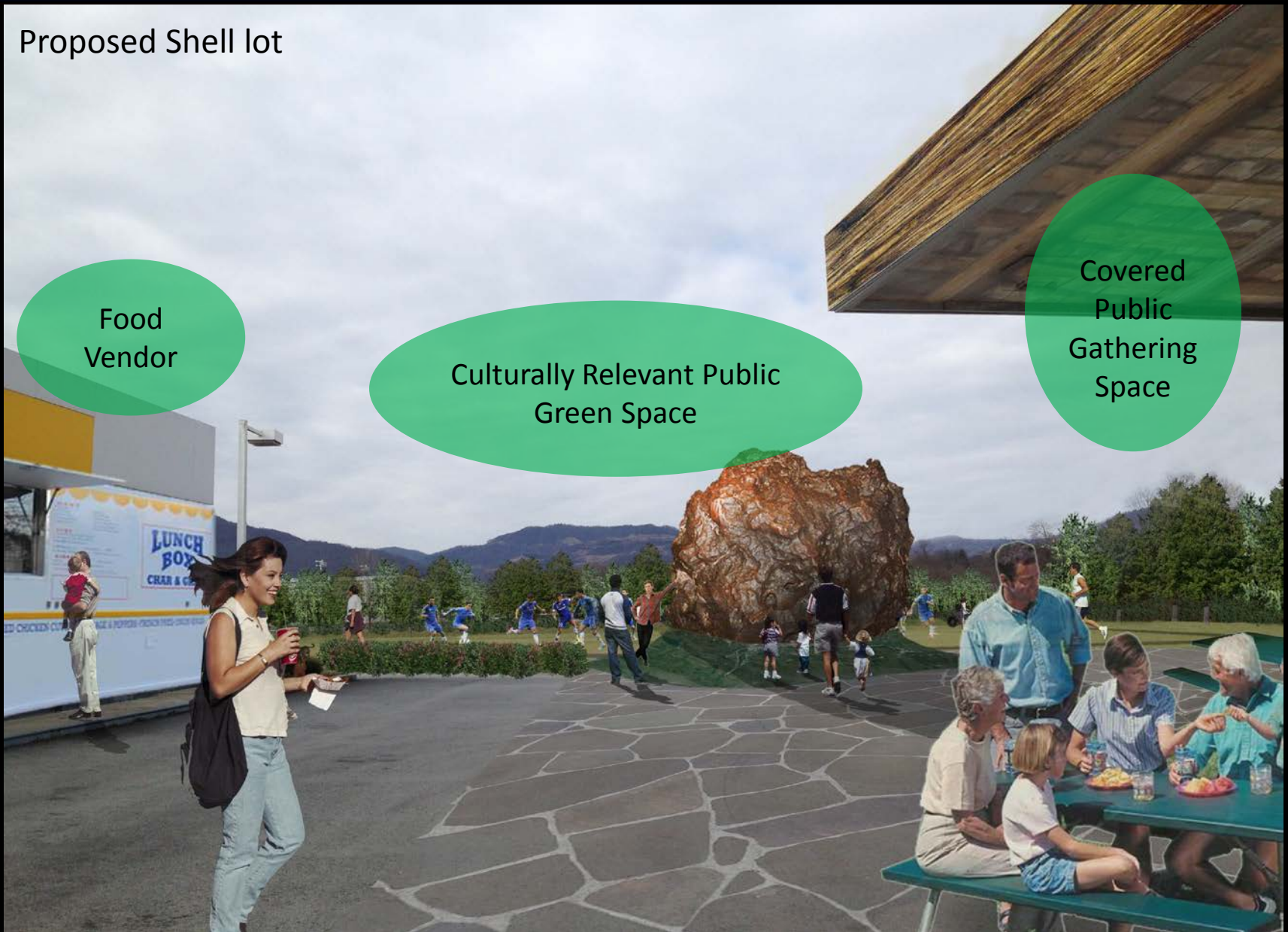
Refined Boone Trace/CGNHP Connection Concept Diagram

Canal Walk
Connection

Public Art
Opportunities

13TH ST

E CUMBERLAND AVE

25E

(Data Source: Google Earth, 2014)

Existing 13th Street Conditions

Blank Walls
No Visual Interest

Unsightly
Traffic Buffer

No Boone Trace
Reference

Inaccessible
Canal Walk Trail

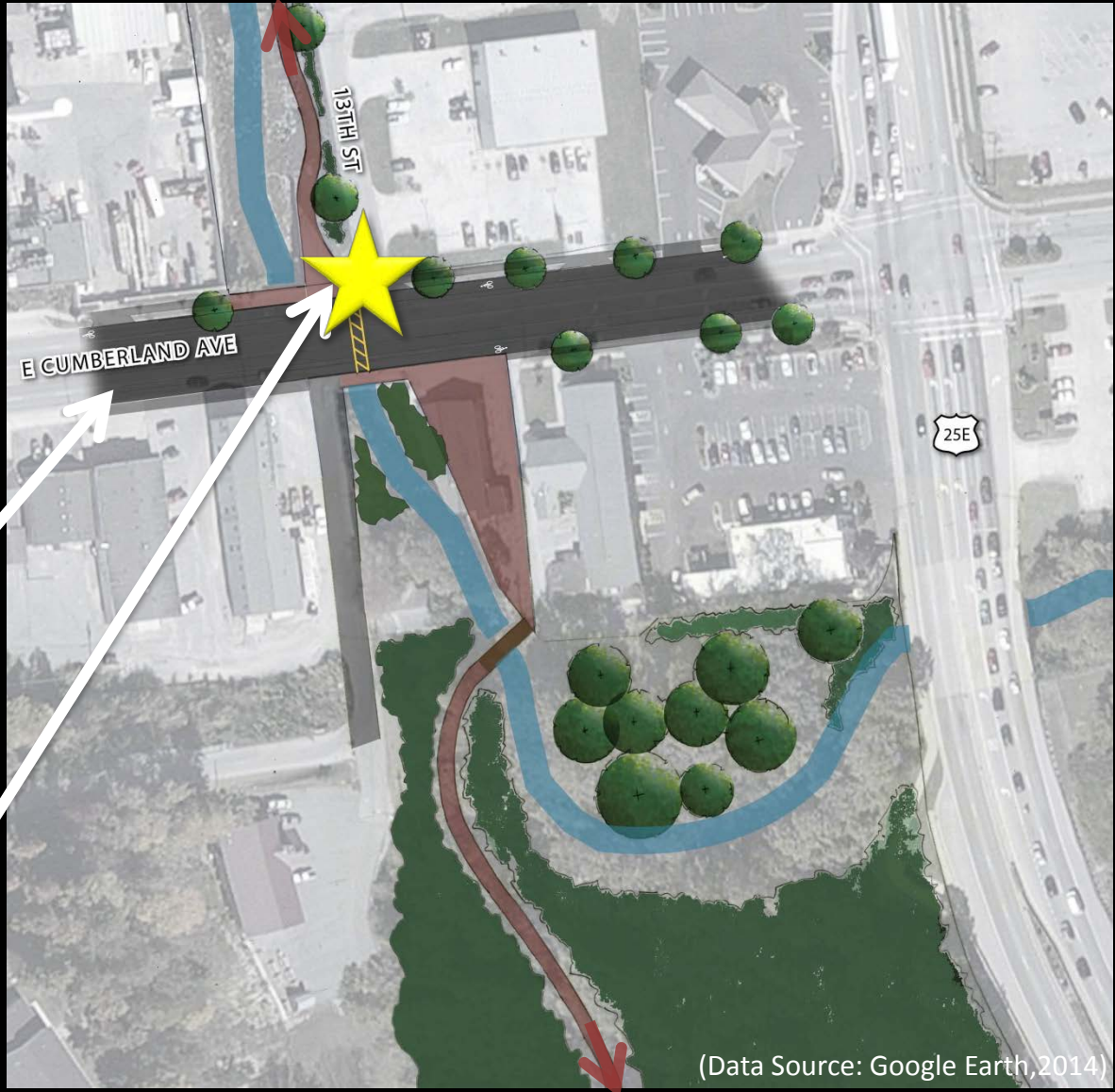Proposed 13ᵗʰ Street Conditions
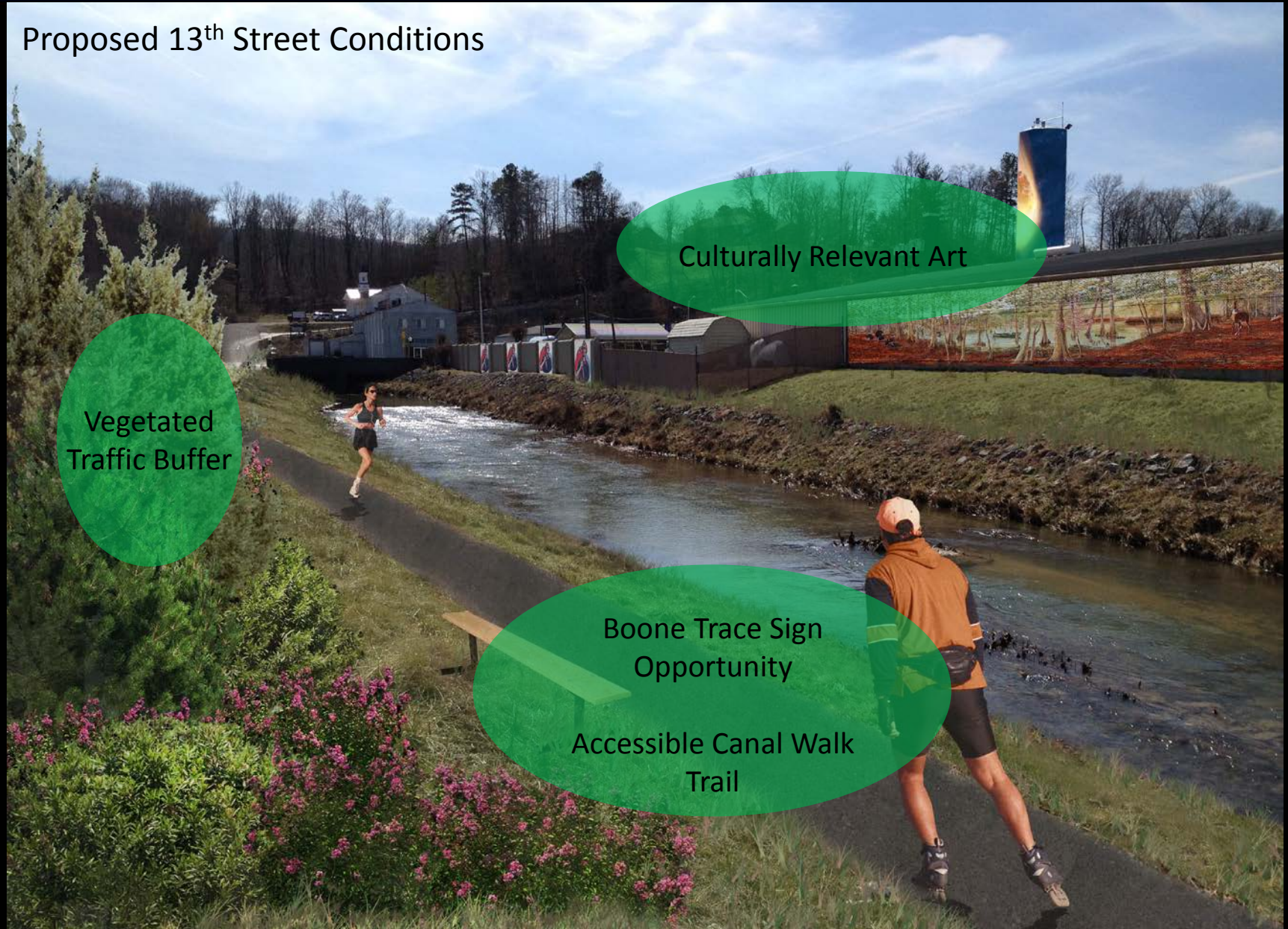
Culturally Relevant Art

Vegetated Traffic Buffer

Boone Trace Sign Opportunity

Accessible Canal Walk Trail

Refined Boone Trace/CGNHP Connection Concept Diagram

Streetscape
Improvement
Opportunities

Boone Trace
Connections

(Data Source: Google Earth,2014)

Downtown

Existing Cumberland Ave Boone Trace Connection

Blank Walls
No Visual Interest

Inaccessible Sidewalks

No Pedestrian Crossing

No Trail Network Reference

No Directional Information

Proposed Cumberland Ave Boone Trace Connection

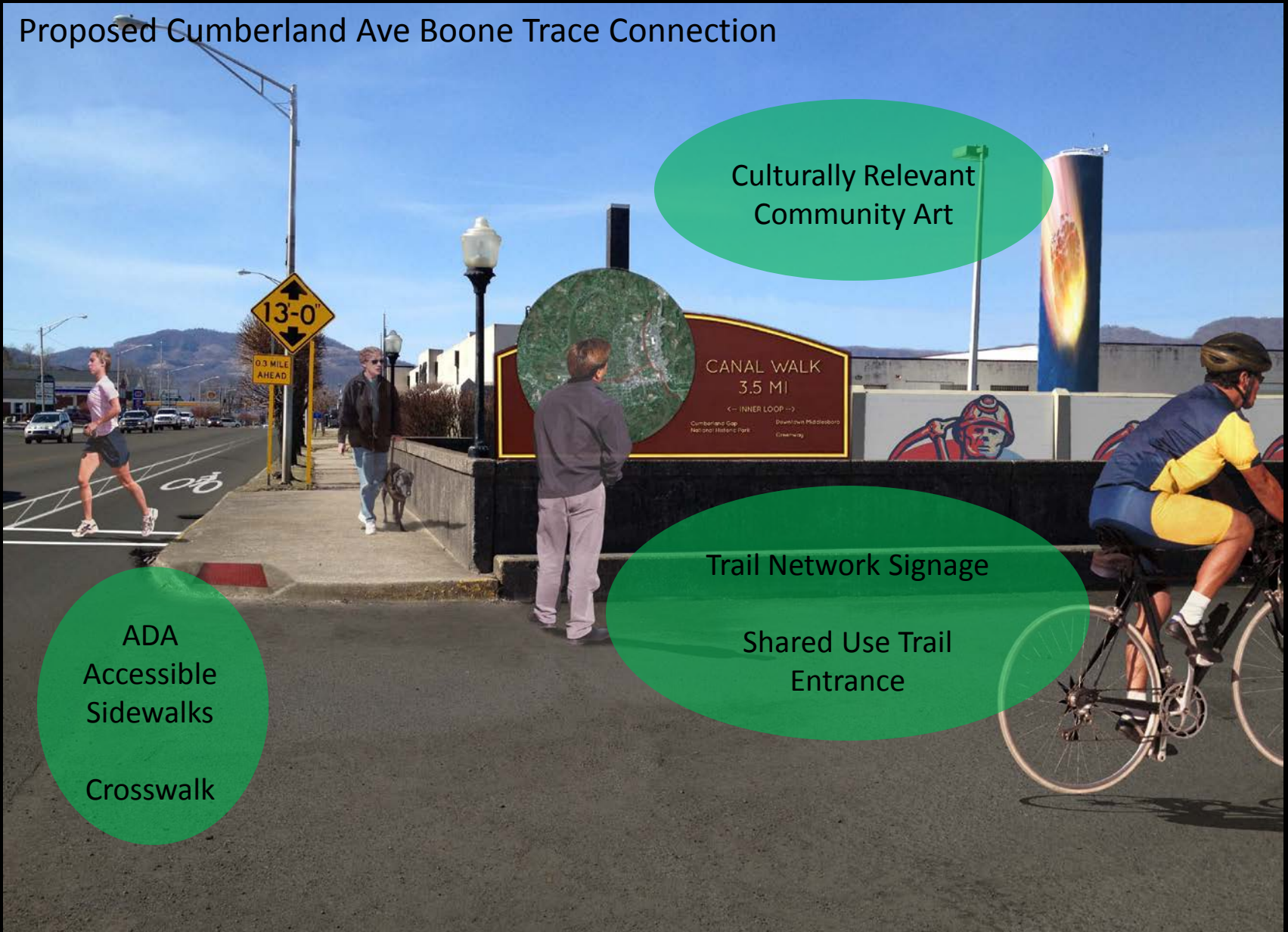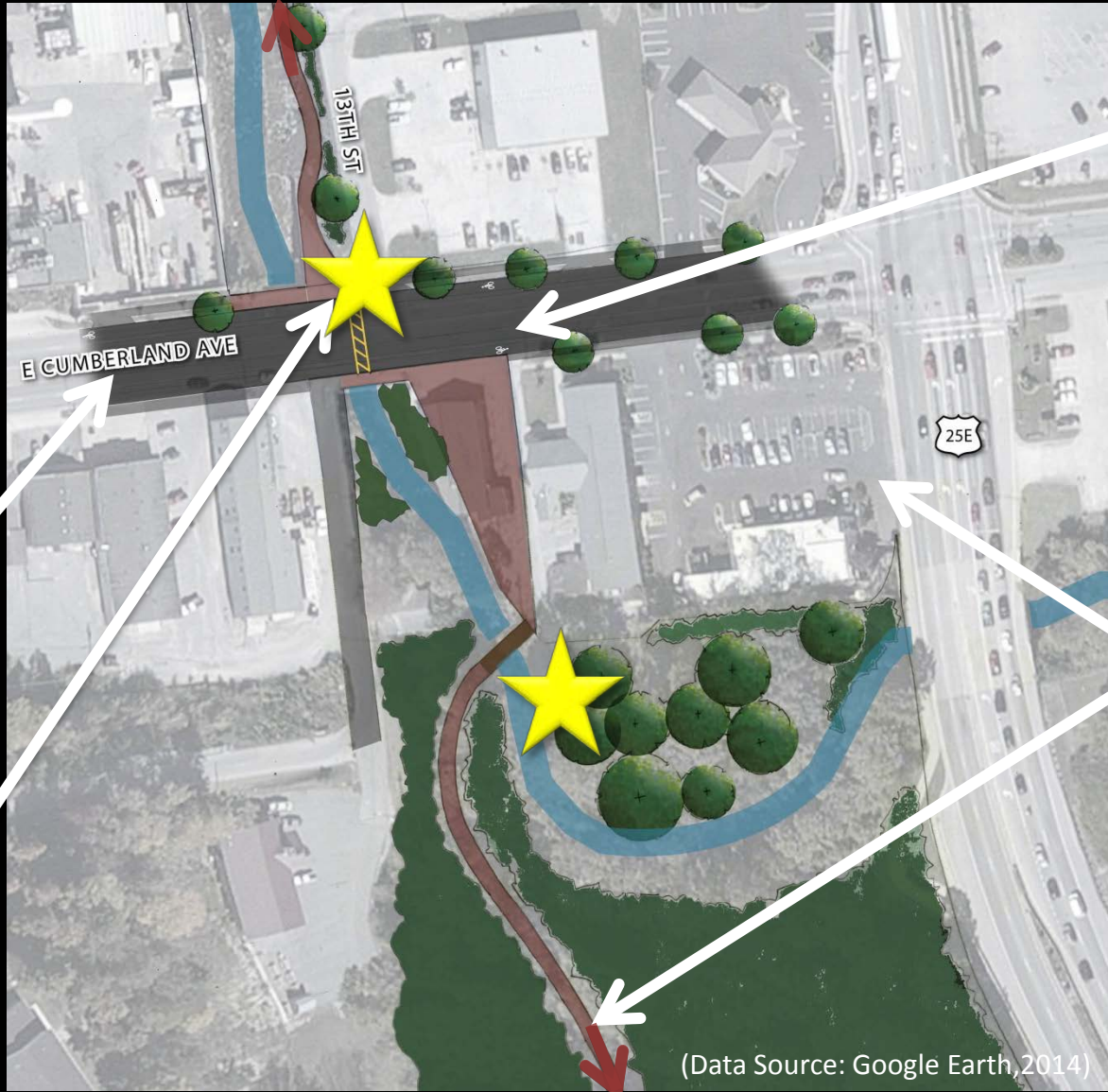Culturally Relevant Community Art

CANAL WALK
3.5 MI

13'-0"

0.3 MILE AHEAD

Trail Network Signage

Shared Use Trail Entrance

ADA Accessible Sidewalks

Crosswalk

Downtown

Refined Boone Trace/CGNHP Connection Concept Diagram

Signage Wayfinding Opportunity

Streetscape Improvement Opportunities

Boone Trace Connections

Cumberland Gap Connections

E CUMBERLAND AVE

13TH ST

25E

(Data Source: Google Earth, 2014)

Existing CGNHP Trail Connection

Underutilized Open Space

Unkempt Structures and Paths

No Boone Trace Reference

Inaccessible Canal Walk Path

Downtown

Proposed CGNHP Trail Connection

Safe Access to CGNHP

Opportunity for Signage and Boone Trace Markers
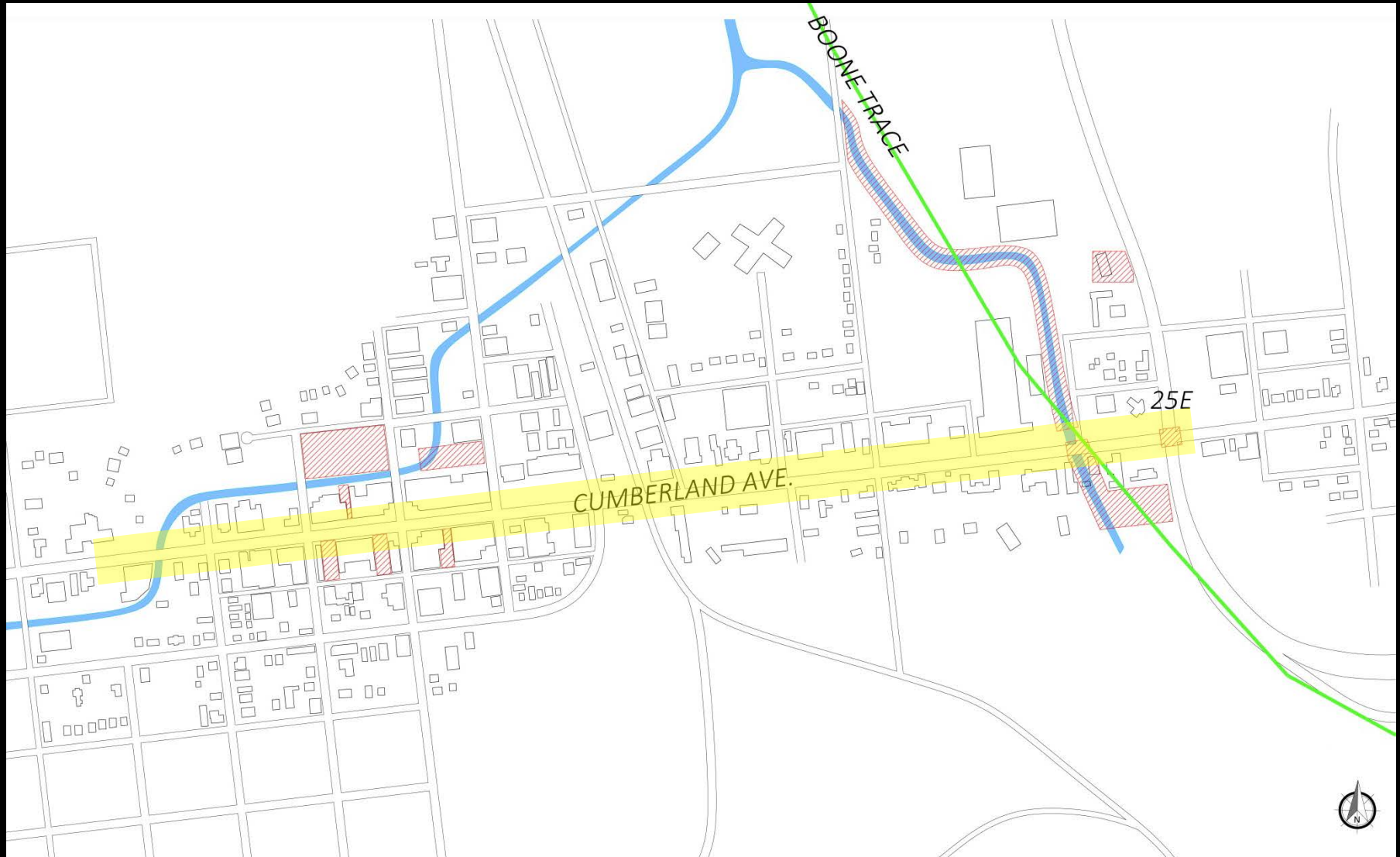
Canal Walk/Boone Trace Connections

Park Maintenance Access

Potential Icon Statue

Source: Community Member

Cumberland Ave Complete Street

Downtown - Walkability

Walkability Analysis

Walkability Analysis

(Data Source: Google Earth, 2014)
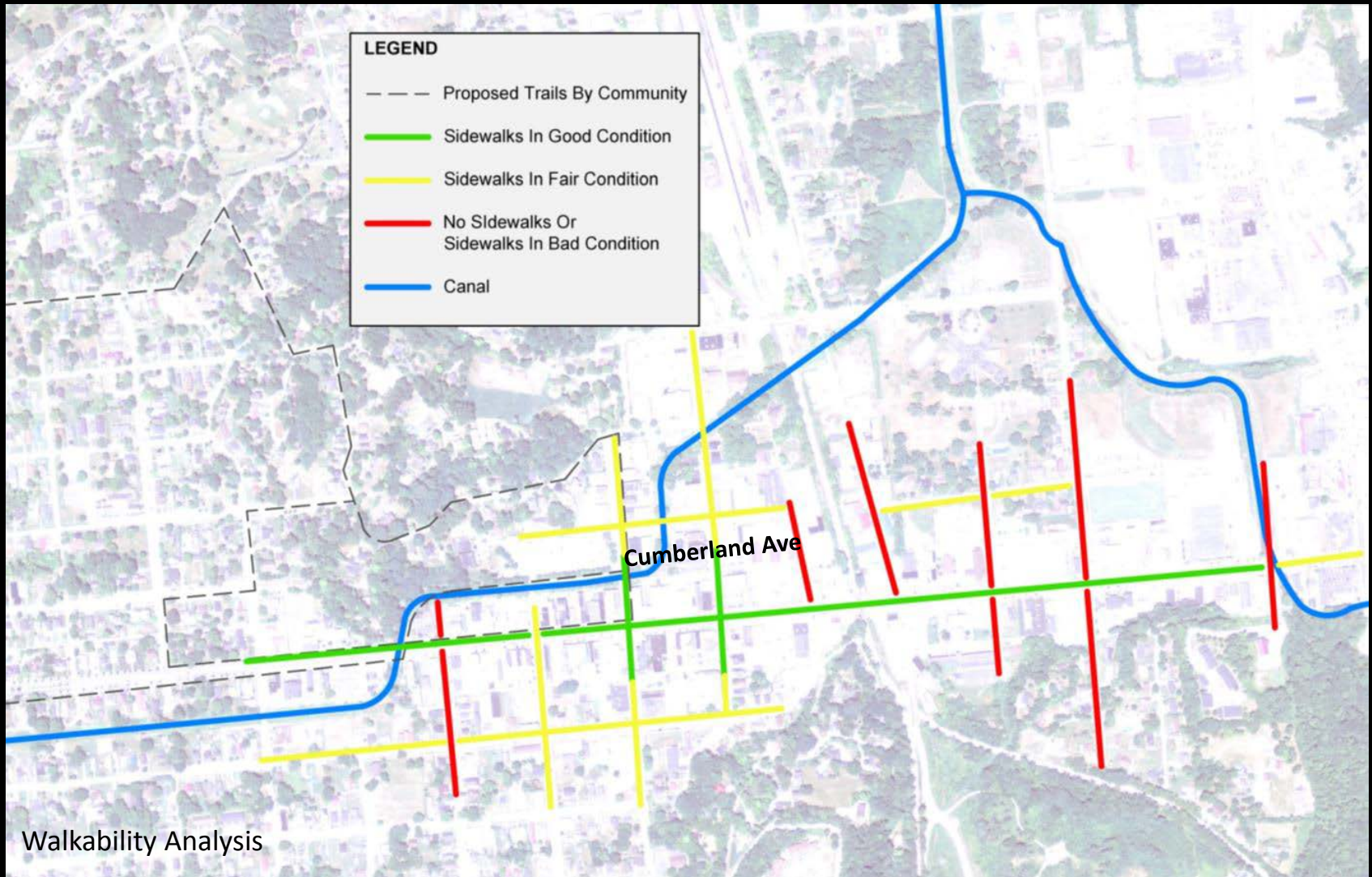
Green features of Complete Streets

Increased cycling accessibility through bike lanes. Offers users greater comfort along busy roadways.

http://sf.streetsblog.org/wp-content/uploads/2010/5_10/Market_St._green_2_small.jpg

ADA standards allow for increased safety and Universal access for Pedestrians.

http://water.epa.gov/infrastructure/greeninfrastructure/images/gi_greenstreet_1.jpg

Allows for less vehicular traffic on roads. Slower vehicular traffic can allow for increased safety and lower risk of accidents.
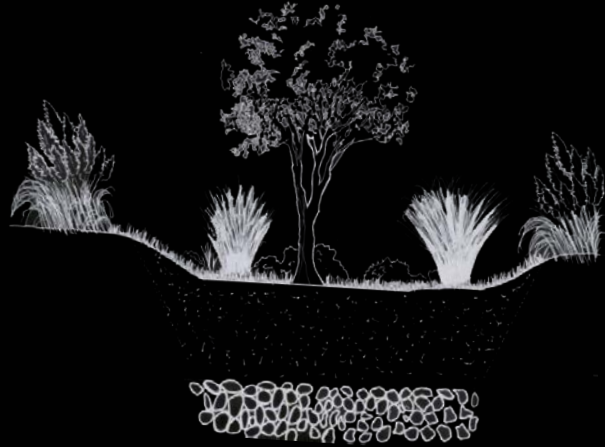
http://www.ca-city.com/Images/CS_Fundamentals.jpg

Green features of Complete Streets

Features such as rain gardens, bio-swales and other green space help to accommodate rain water.

http://www.tececo.com/images/photographs/permecocrete/PerviousPavement.JPG

Alternative hardscape materials such as permeable pavers, pervious concrete and grass-crete help with water runoff as well.

http://www.nativescapellc.com/images/projects/farmhills_big.jpg

Planting native species to the area can help to reduce cost and maintenance while still being aesthetically pleasing.

Downtown- Complete Streets

Existing site conditions along Cumberland Ave.

Cumberland & 22nd

Cumberland & 25E

N

(Data Source: Google Earth, 2014)

Downtown- Complete Streets

Cumberland Ave Complete Streets Concept Diagram

Residential Portion

Retail Portion

Industrial Portion

25 E

Cumberland Ave.

Fountain Square

N

(Data Source: Google Earth, 2014)

Downtown- Complete Streets

10' Vegetated Median

5' Sidewalk

12' Vehicular Lane

5' Bike Lane

Residential Portion

Angled Parking

5' Sidewalk

5' Bike Lane

12' Vehicular Lane

Retail Portion

10' Vegetated Median

(2) 12' Vehicular Lanes

5' Sidewalk

5' Bike Lane
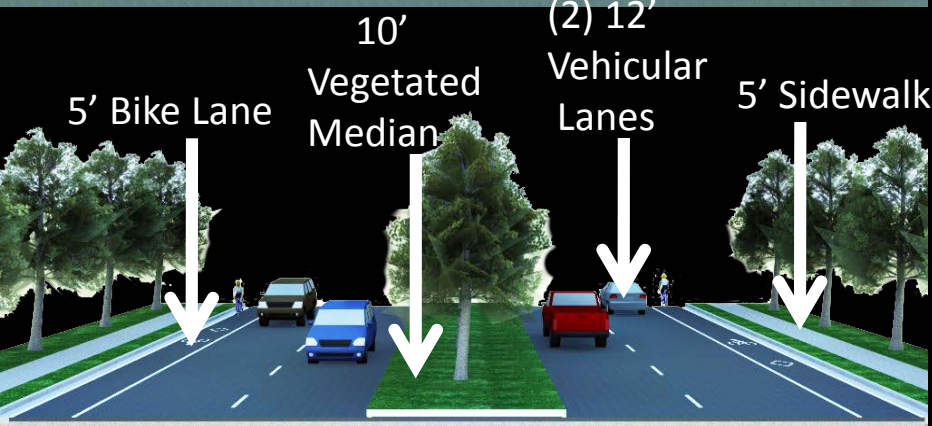
Industrial Portion

25 E Intersection Bulb Outs

Cumberland Ave.

25 E

(Data Source: Google Earth, 2014)

Fountain Square

Bulb Out Rendering

Downtown Summary

Summary

Connect Downtown to the Trail Systems through:
- Complete, walkable streets
- Increasing signage and directional design
- Beginning a connection to Cumberland Gap National Historical Park
- Enhancing public safety through pedestrian-priority paths
- Providing a historically relevant trail recognizing Boone Trace
- Creating a series of interactive and educational spaces

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Canal Walk

(Data Source: Kentucky Geography Network, 2014)
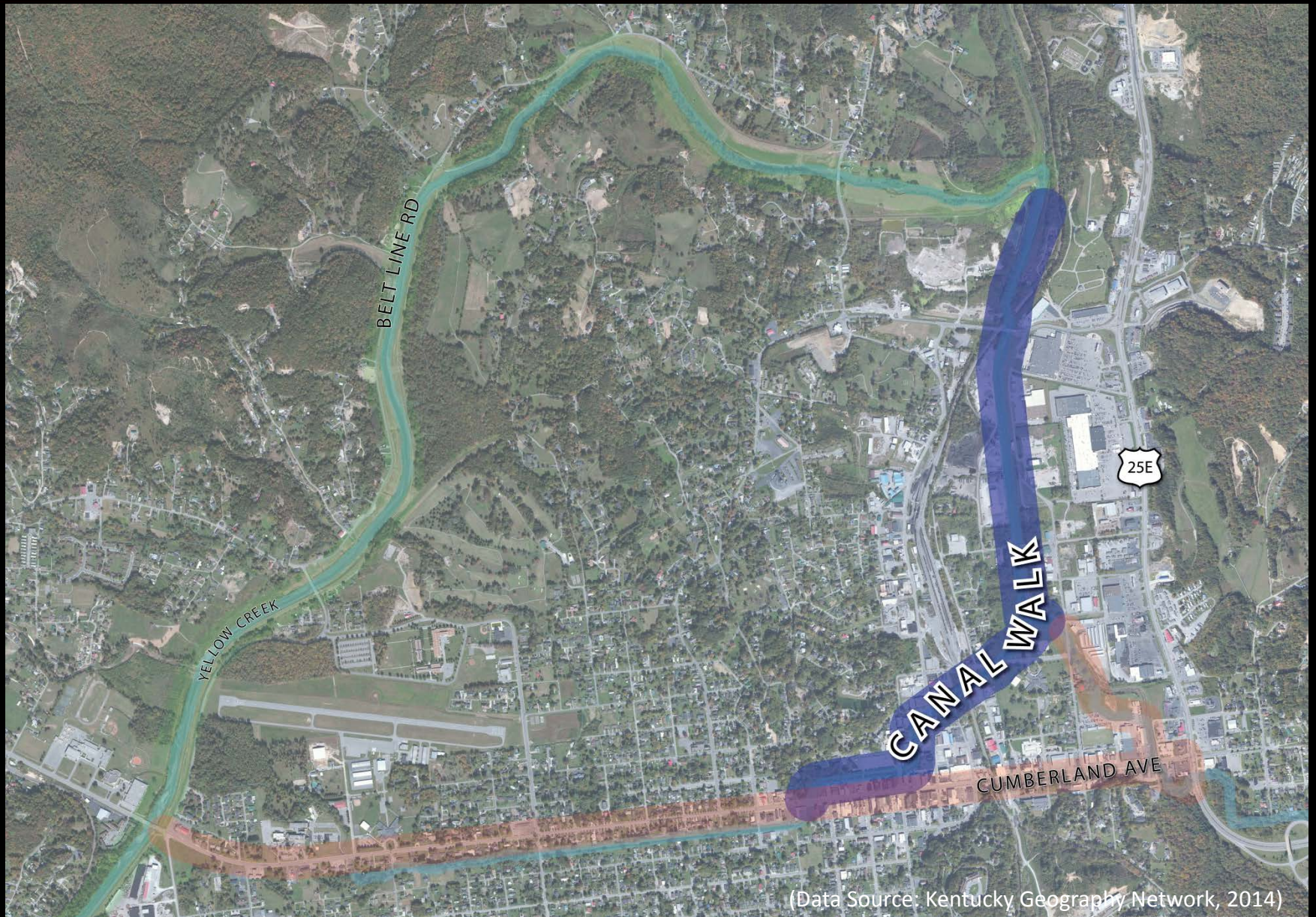
Canal Walk – San Antonio Case Study

Project Name
The San Antonio River Improvement

Location
San Antonio, Texas (USA)

Date Designed
-The Museum Reach
     (Opened May 30, 2009)
-Downtown Section
     (Completed in Oct,2002)
-The Mission Reach
      (Under construction)
The Mission Reach
      (Under construction)

Construction Cost
$358.3 Million [To Date]

Landscape Architect
-     City of San Antonio,
-     U.S. Army Corps of Engineers

Manager
[Varies]

http://www.boomsbeat.com/articles/2559/20140409/37-dreamy-photos-of-san-antonio-river-walk-in-texas.htm

http://streetcarvote.com/elected-official-positions/city-attorney-issues-streetcar-referendum-opinion-from-mysa/#prettyPhoto/0/

http://thehomemakingarts.blogspot.com/2011/09/facing-challenges-of-restaurant.html

Canal Walk

Bridge Analysis

Cumberland Ave Bridge

21st Bridge

20th Bridge

West Lothbury Bridge

Alyesford / Amesbury Bridge

Single lane Bridge

Salisbury Ave Bridge

Canal Walk Bridge Analysis
- Along the Canal Walk you will encounter 8 bridges.
- Each bridge is different in height, character, and condition.
- The Canal Walk crosses under only one bridge.

Possible Bridge Treatments
- Use the bridges as a canvas for art work.
- For the bridges that allow it; design the path to travel under rather than over the bridge.
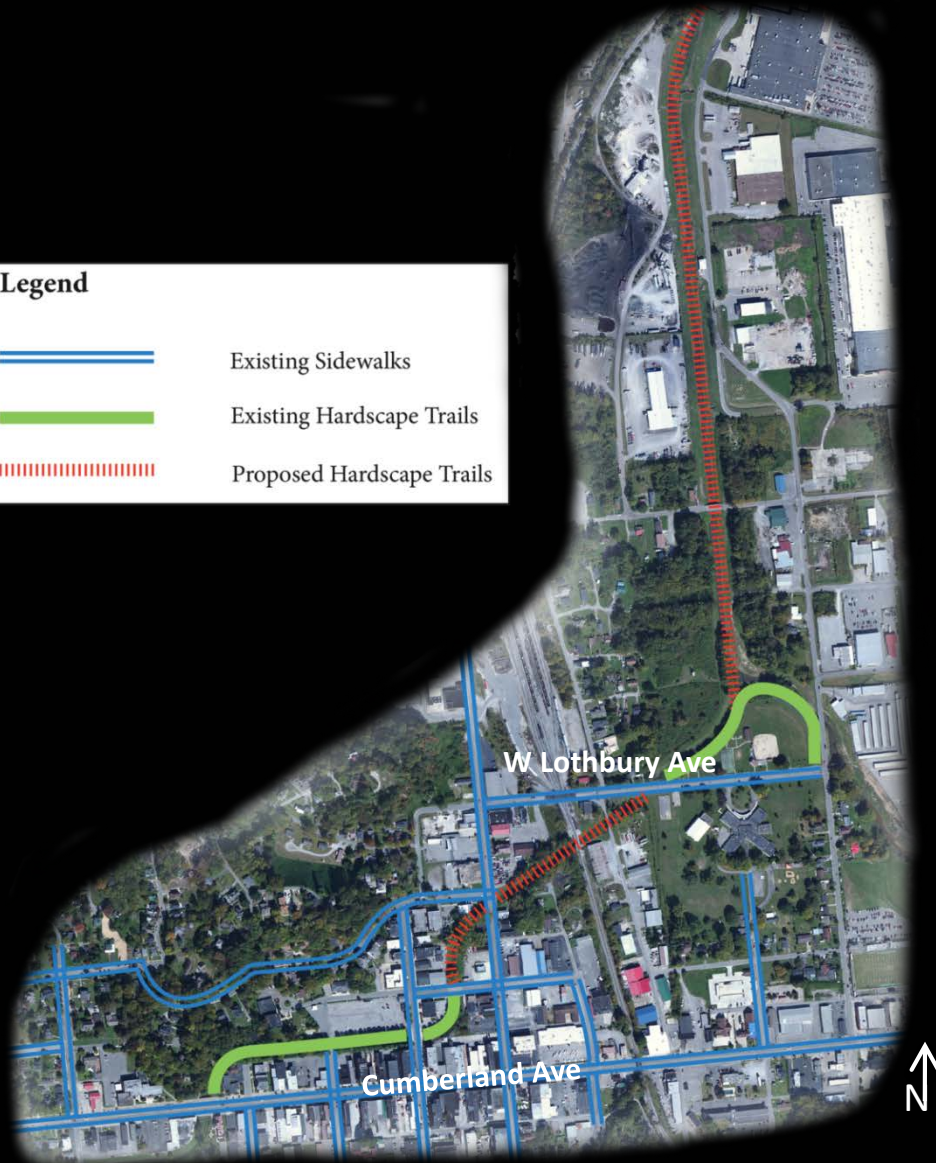
(Data Source: Google Maps, 2014)

Canal Walk

Hardscape Analysis

Legend

Existing Sidewalks

Existing Hardscape Trails

Proposed Hardscape Trails

W Lothbury Ave

Cumberland Ave
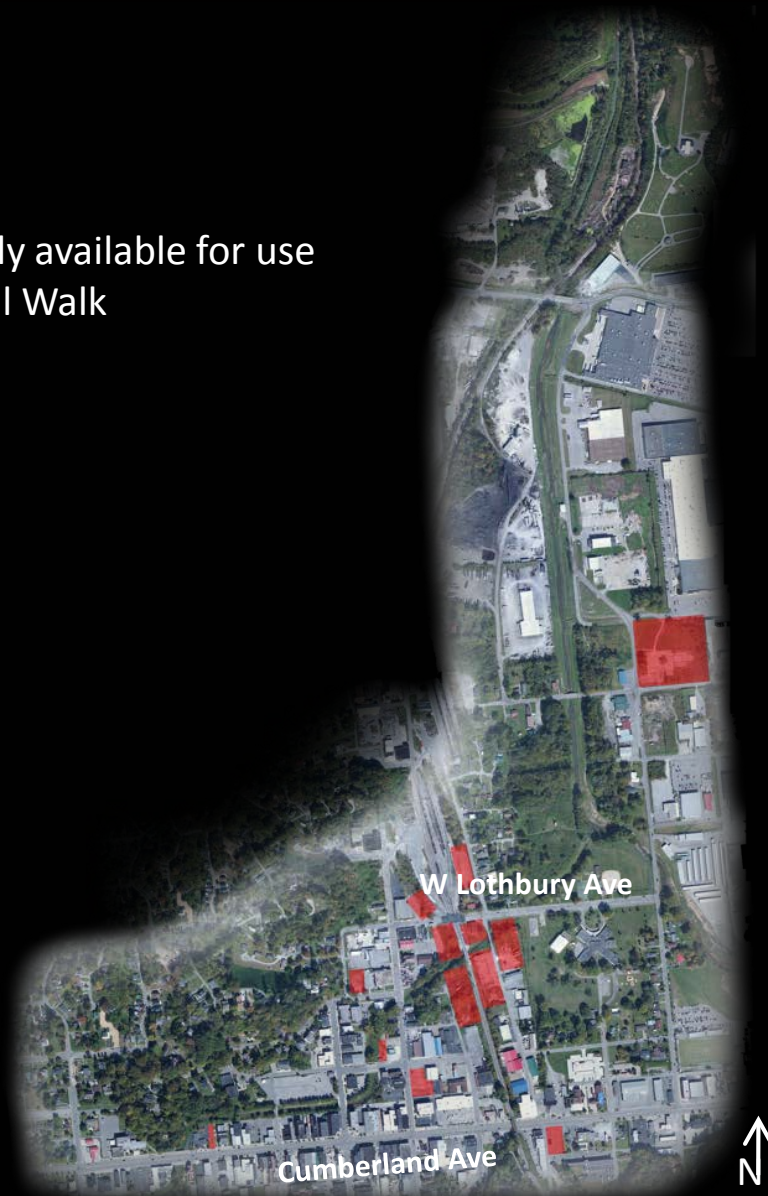
(Data Source: Google Maps, 2014)

Canal Walk

Vacant Lots

*Vacant lots potentially available for use near the existing Canal Walk

W Lothbury Ave

Cumberland Ave

N

Legend
Vacant area

(Data Source: Google Maps, 2014)

Canal Walk

Potential Trailheads

Important Trailheads

Connecter points

North 15th St.

Ashbury Ave. & 15th St.

Fitzpatrick Ave.

Aylesbury Ave.

Pedestrian Bridge

Cumberland Ave. Entry

W Lothbury Ave

Cumberland Ave.

(Data Source: Google Maps, 2014)

Canal Walk
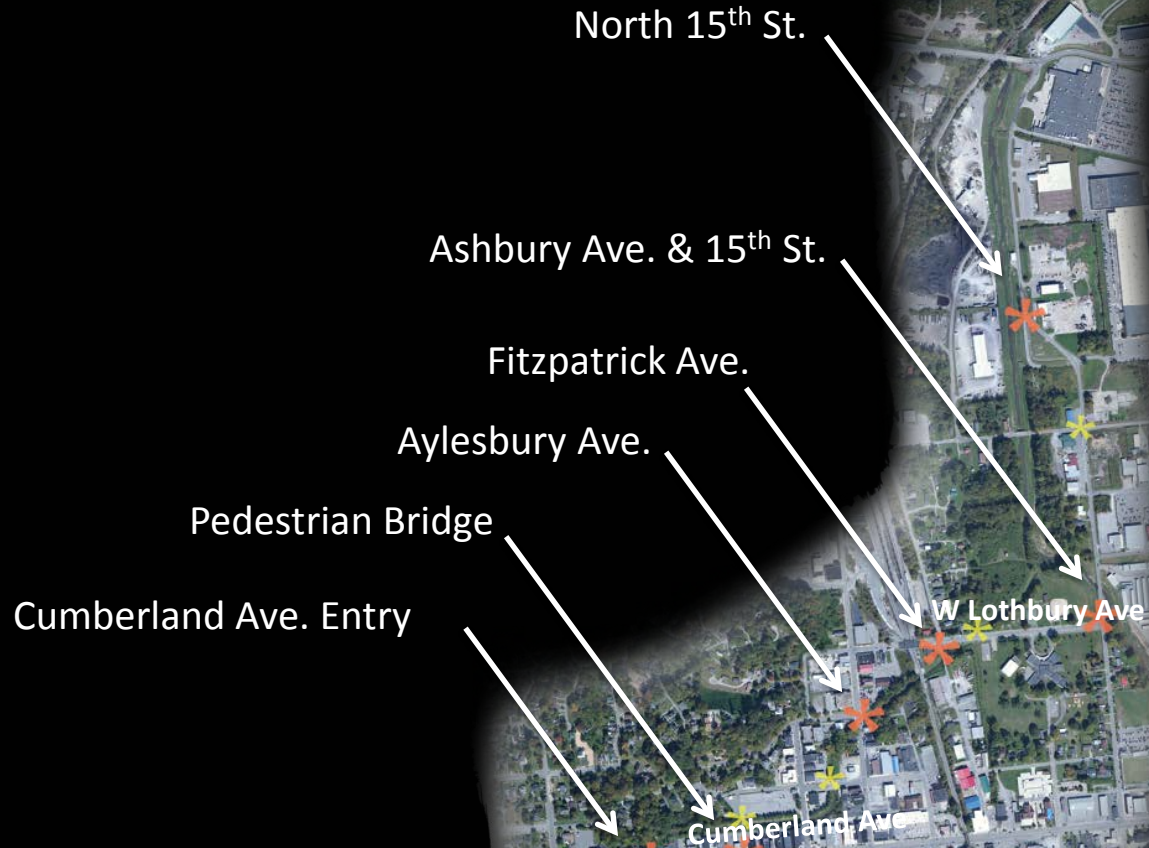
Traffic/Connection Points

Legend

Canal Connection Points

City Connection Points
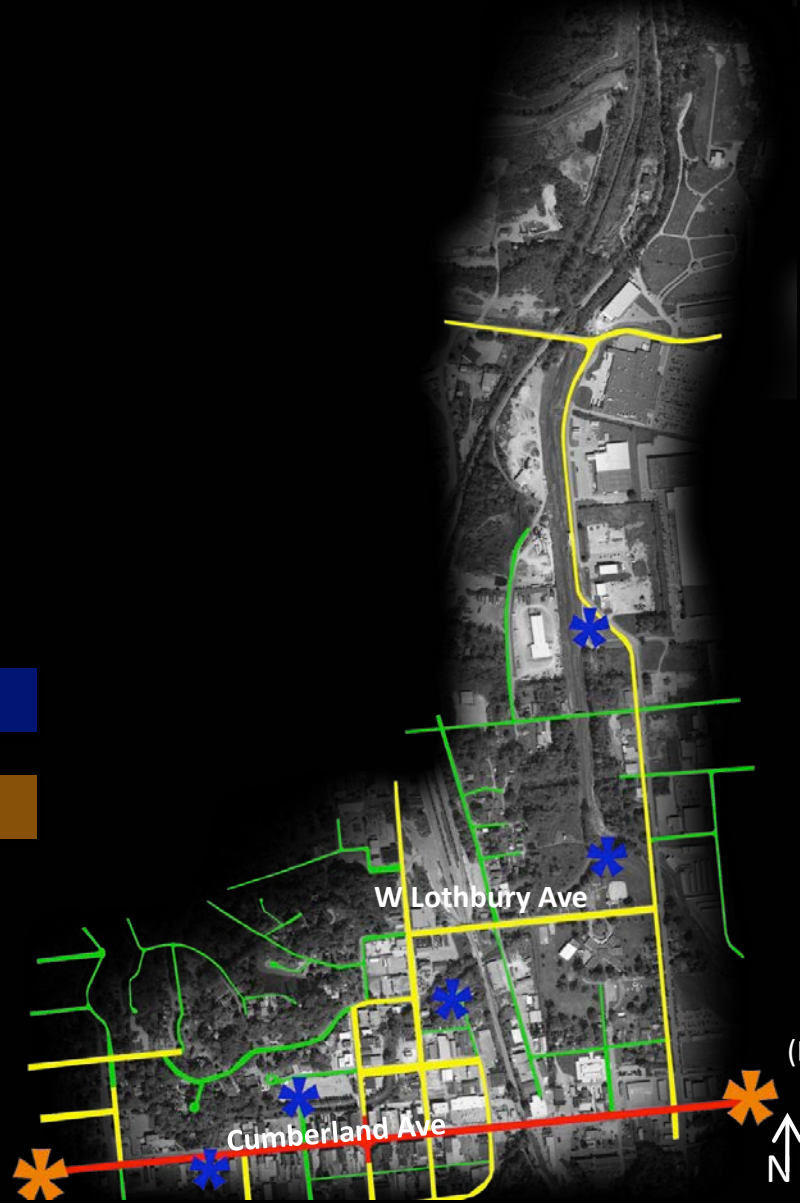
Traffic Congestion

- No congestion
- Moderate
- Heavy
- Stop and go
- Closed
- No data

W Lothbury Ave

Cumberland Ave

(Data Source: Google Maps, 2014)

set of algorithms to calibrate roadside traffic management cameras and process the images to estimate mean vehicle speed.

Entrance to the Canal Walk

Cumberland Ave

(Data Source: Google Maps, 2014)

Conceptual Diagrams

Concept 1

Concept 2

(Data Source: Google Maps, 2014)

Programmatic Elements

1. Trail Head
2. Public Green Space
3. Pedestrian Street
4. Pocket Park
5. Bridge
6. Complete Street

Refined Diagram

Parking Lot

Courthouse Park

Park

Nature Trail

Bridge

Pocket Park

Pedestrian Street

Complete Street

Cumberland Ave

(Data Source: Google Maps, 2014)

Pedestrian Bridge

Pocket Park

Refined Diagram

1. Reshape the Canal

2. Green space on both sides of the canal

3. Wooden bridge to cross

Wood Bridge

Trail

Wood Bridge

Green Buffer Zone

Canal

Green Corridor

Cumberland Ave

(Data Source: Google Maps, 2014)

Section A

Wood Bridge
Trail
Wood Bridge
A
Canal
Green Buffer Zone
Green Corridor
Cumberland Ave

(Data Source: Google Maps, 2014)

PARKING | GREEN BUFFER ZONE | BIKE LANE | TRAIL | RELAX | ENGAGE | PLAY | CANAL | PLAY | ENGAGE | RELAX | GREEN BUFFER ZONE

Canal Walk Trail - Before

Canal Walk Trail - After

The Link

Cumberland Ave

(Data Source: Google Maps, 2014)

Canal Walk – The Link

Regional Connection Opportunities

Concept 1

Concept 2

W Lothbury Ave

Aylesbury Ave

N
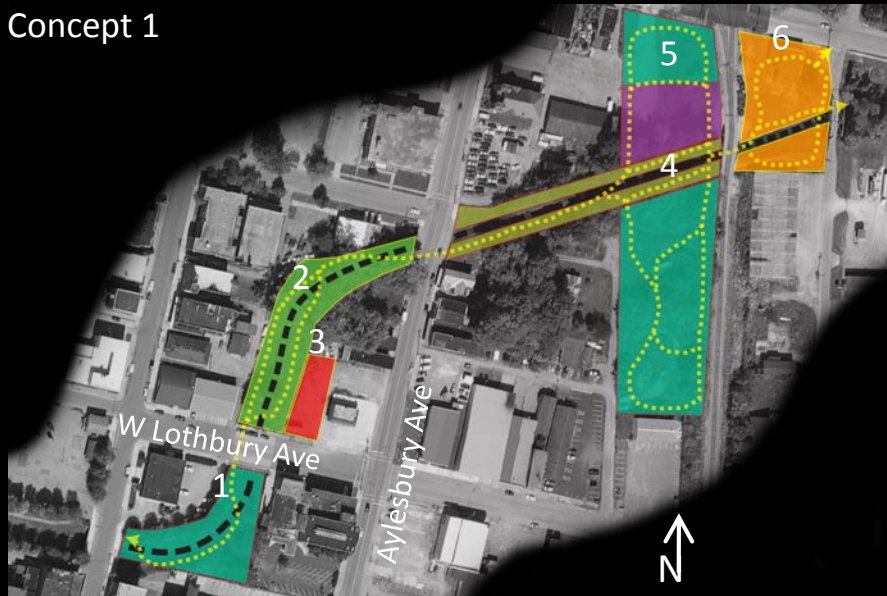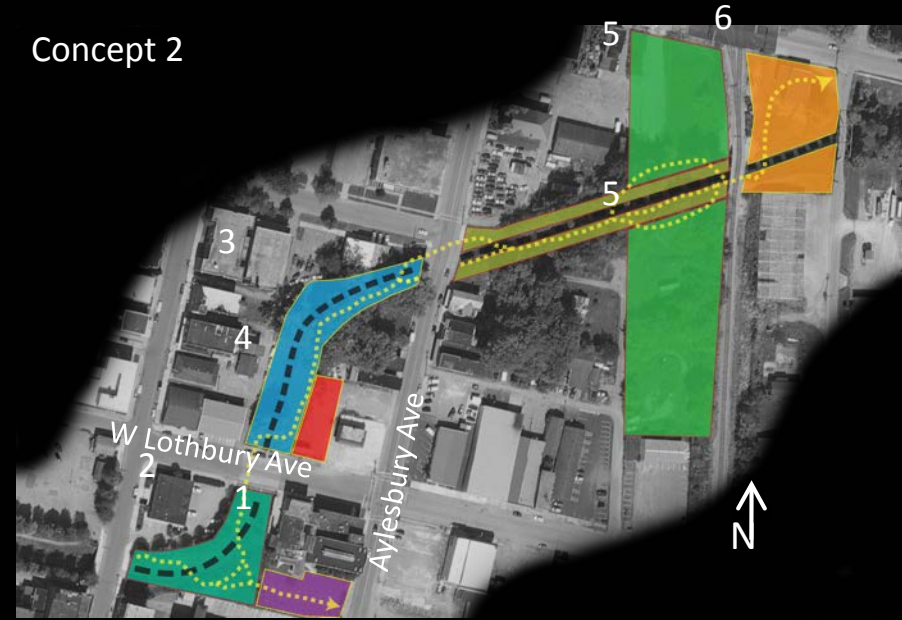
(Data Source: Google Maps, 2014)

Programmatic Elements

Concept 1
1) Leisure Lawn
2) Green Walkway
3) Food truck Plaza
4) Wetlands
5) Educational Plaza
6) Rest Area

Concept 2
1) New Entry
2) Wetlands
3) Detention Basin
4) Event Plaza
5) Recreational Lawns
6) Rest Area

Canal Walk – The Link

Refined Diagram

Prairie Grass Educational Walk

Rest Area

Detention Basin

Wetlands

Recreational Lawn

Canal Pavilion

S 20th Street

W Lothbury Ave

Aylesbury Ave

Picnic Area

N
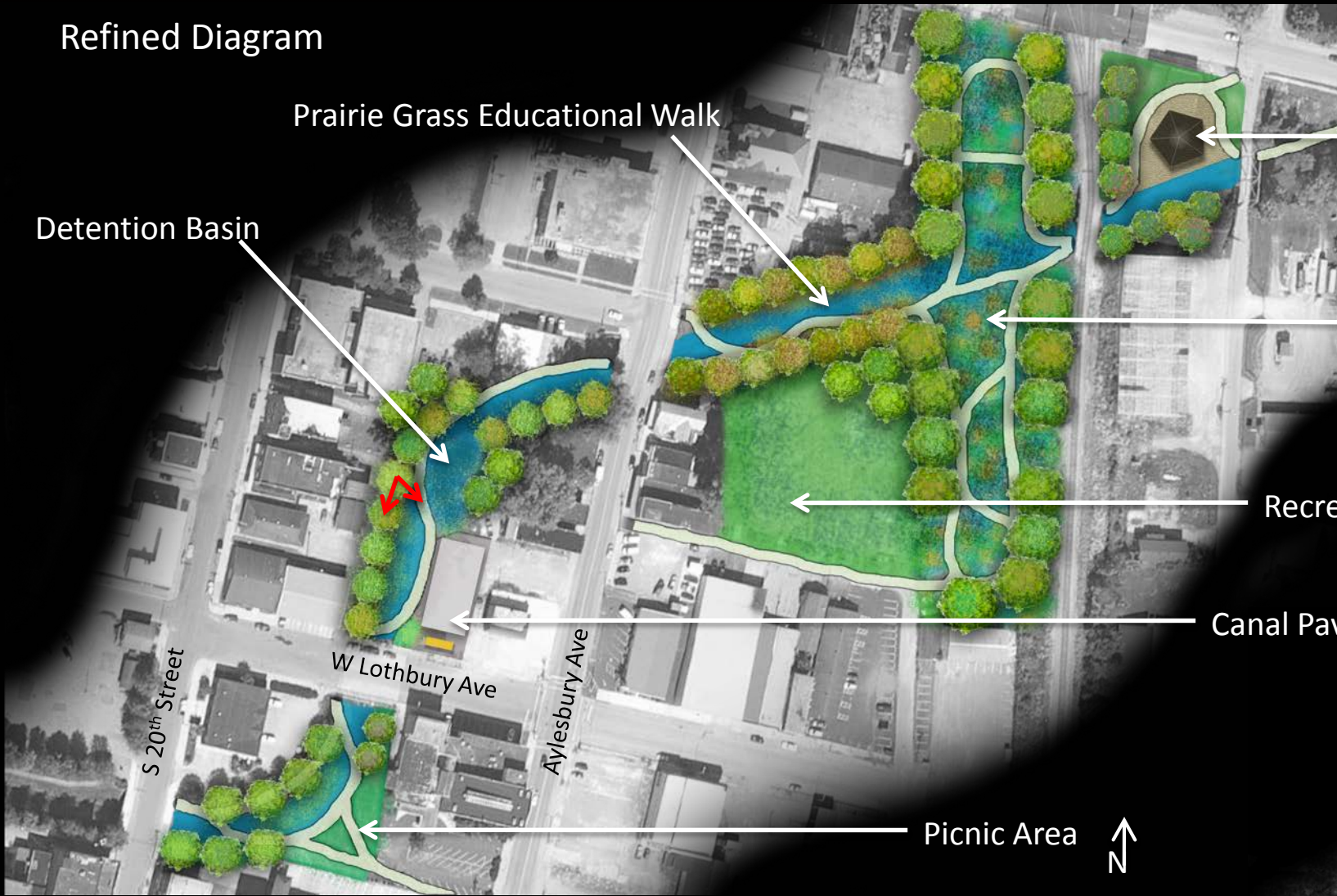
(Data Source: Google Maps, 2014)

Lothbury Ave. Pavilion

Canal Walk – Sports Park

Sports Park

Cumberland Ave

(Data Source: Google Maps, 2014)

Canal Walk – Sports Park

Conceptual Diagrams

Concept 1

Concept 2

Concept 3

(Data Source: Google Maps, 2014)

Programmatic Elements

★ Trail Head

■ Public Arboretum

■ CSA Organic Farm

■ Athletic Fields

■ Parcourse (Outdoor Fitness Stations)

■ Picnic Area

■ Complete Street

■ Community Garden

■ Nature Center/Trail Information Center/Organic Grocery Store

Canal Walk – Sports Park

Refined Diagram 3

Picnic Area

CSA Organic Farm

Athletic Field

Parcourse
(Outdoor Fitness Stations)

Boone Trace Connection

Trail Head

Complete Street

W Lothbury Ave

Public Arboretum

Cumberland Ave.
Connection

Nature & Trail Info
Center/Organic
Grocery

Public Arboretum

Community Garden

N

(Data Source: Google Maps, 2014)
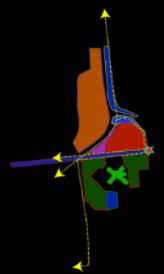
Cumberland Ave Connection Trail

Canal Walk – Sports Park

Refined Diagram 3

Picnic Area

CSA Organic Farm

Athletic Field

Parcourse
(Outdoor Fitness Stations)

Boone Trace Connection

Trail Head

Complete Street

W Lothbury Ave

Public Arboretum

Cumberland Ave.
Connection

Nature & Trail Info
Center/Organic
Grocery

Public Arboretum

Community Garden

N
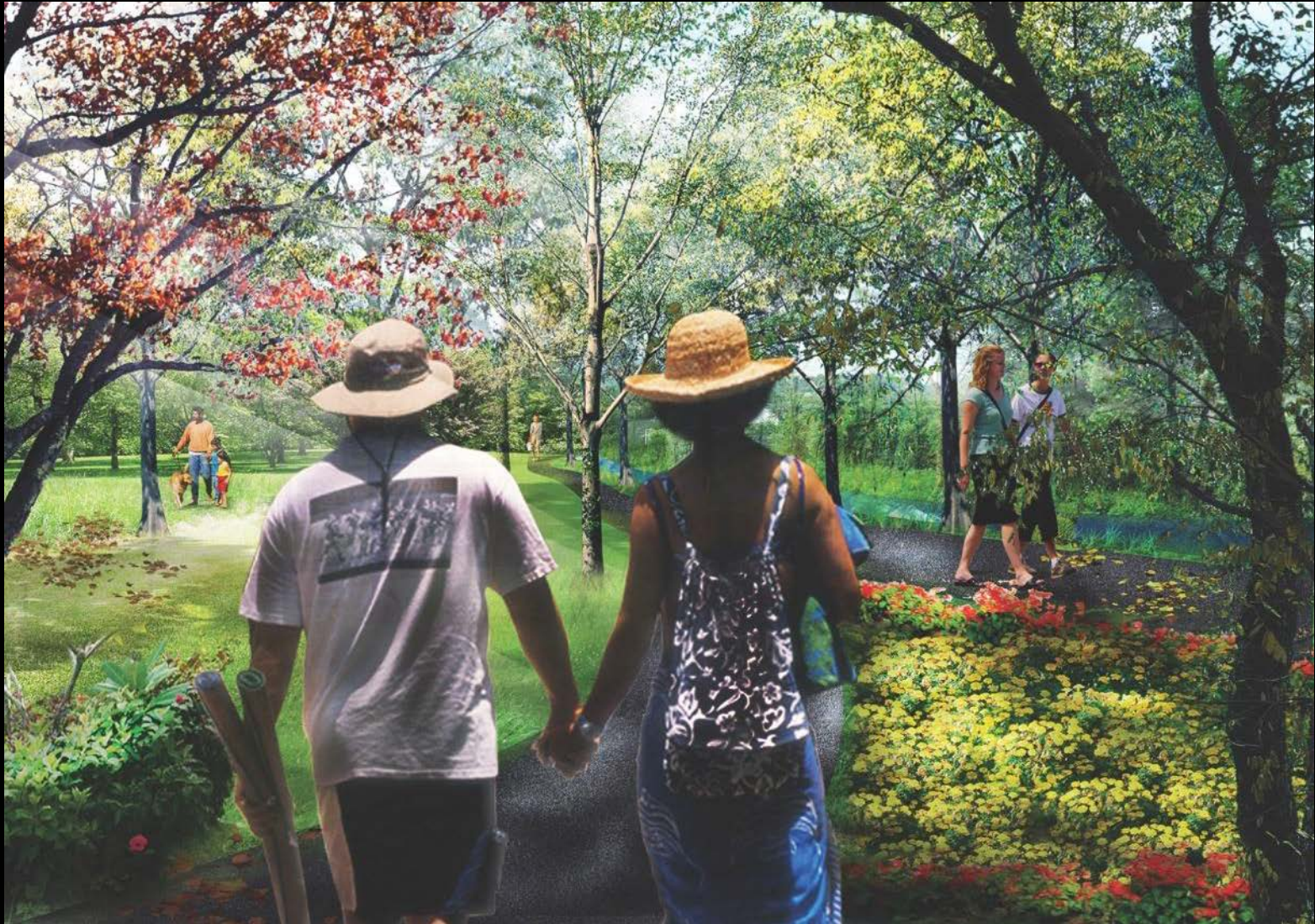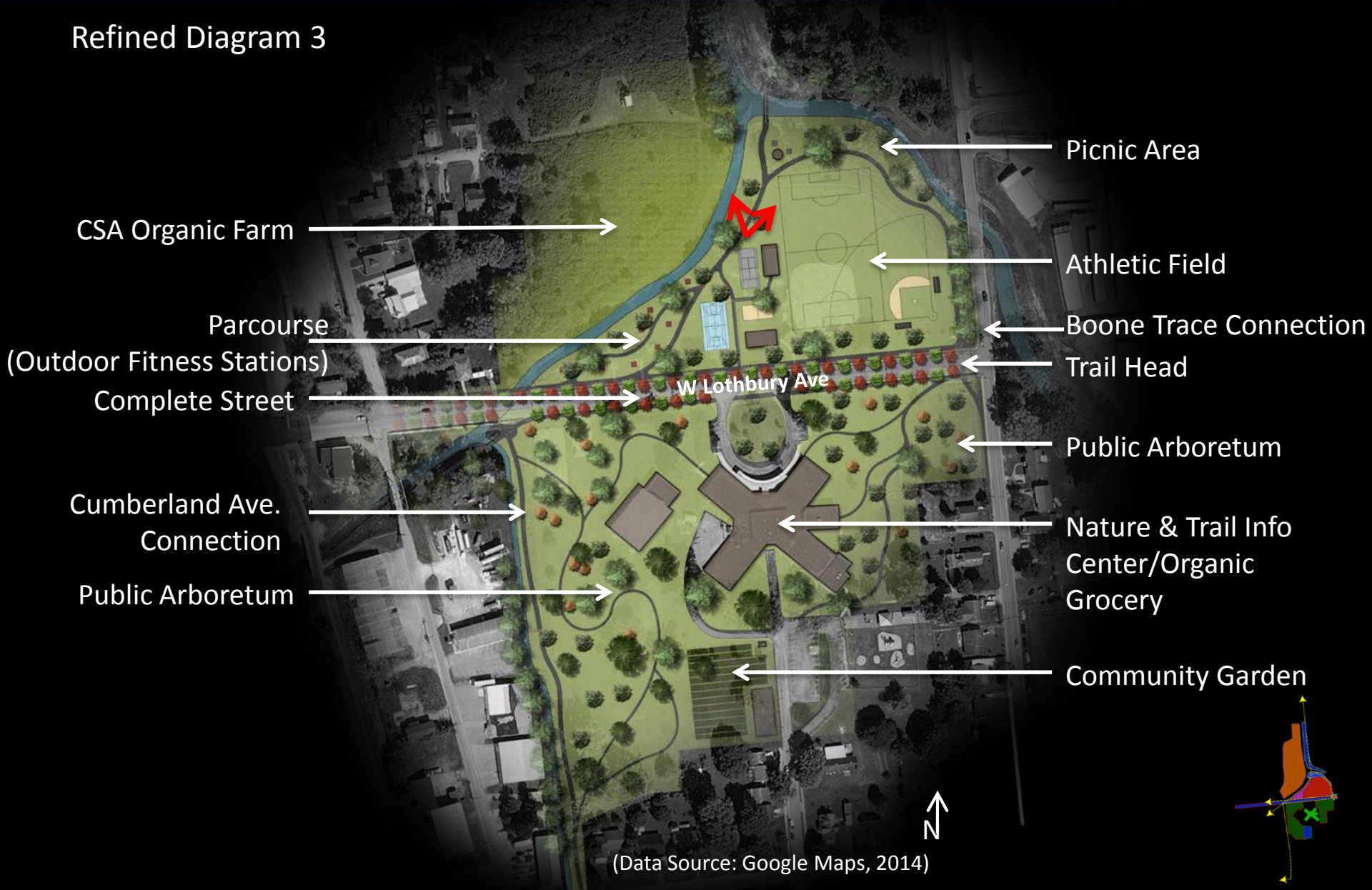
(Data Source: Google Maps, 2014)
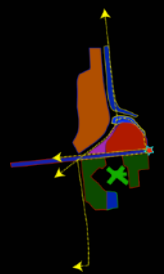
Canal Walk – The Link

Walking trail around athletic field

Canal Walk – The Daniel Boone Connection

The Daniel Boone Connection

Cumberland Ave

N

(Data Source: Google Maps, 2014)

Canal Walk – The Daniel Boone Connection

Conceptual Diagrams

Concept 1

-Focuses on enlarging event and public spaces

-Integrates fitness stations into the Canal Walk

Concept 2

-Places event space and activity along the road, making the canal a peaceful setting

Concept 3

-Places event space and activity along the canal

-Integrates fitness stations throughout the entire site

Programmatic Elements

- **Ecological Focus**
- **Event Space/ Amphitheatre**
- **Fitness Area**
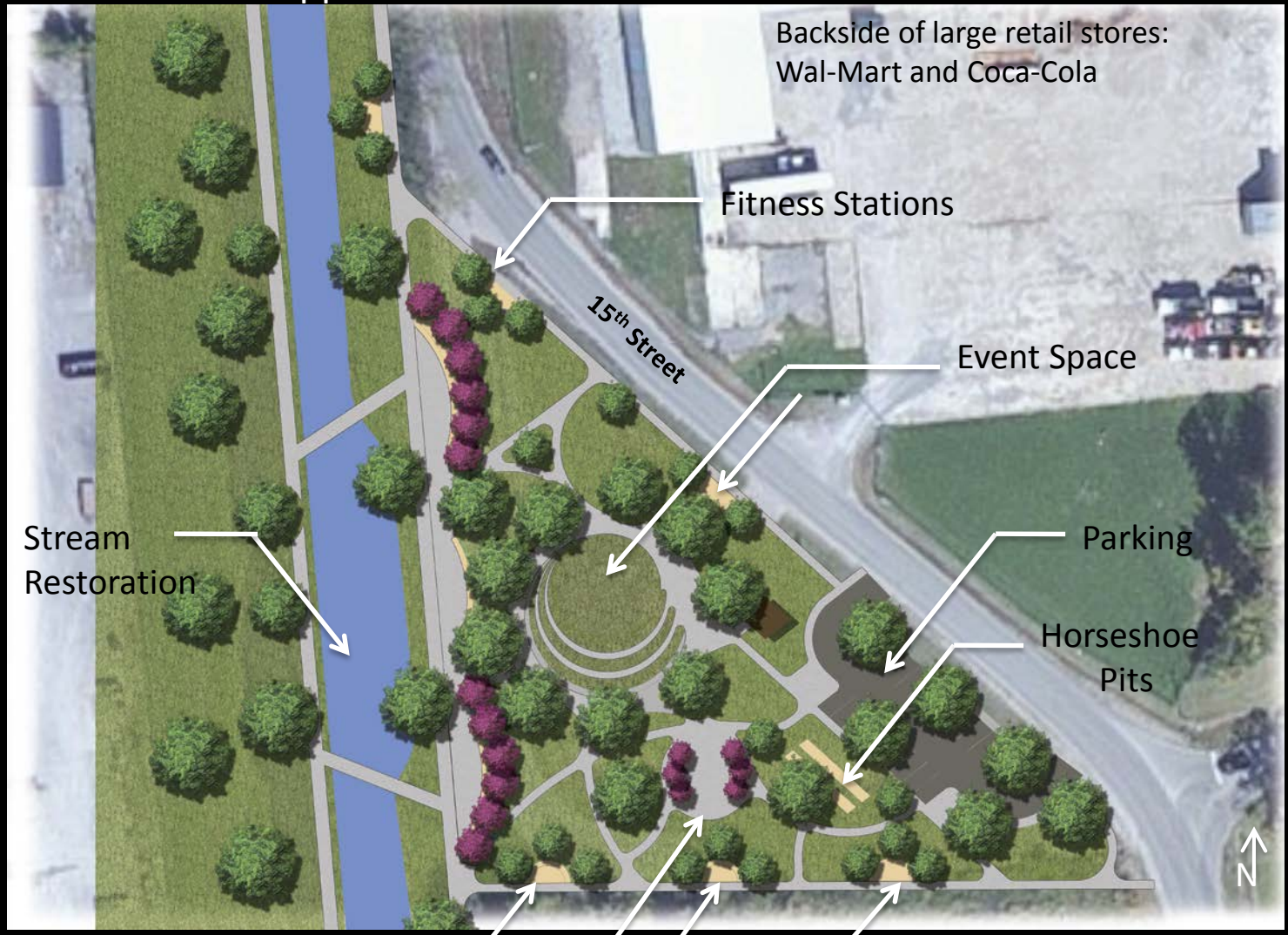- **Picnic & Horseshoes**
- **Parking**

Canal Walk – The Daniel Boone Connection

Regional Connection Opportunities

Backside of large retail stores: Wal-Mart and Coca-Cola

Fitness Stations

15th Street

Event Space

Stream Restoration

Parking

Horseshoe Pits

Picnic Area

(Data Source: Google Maps, 2014)
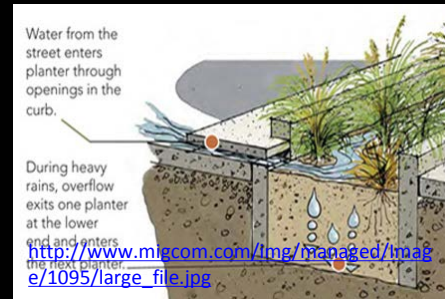
Amphitheatre Perspective

Storm Water Management

Stormwater planters

- Stormwater planters use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve water quality.
- Stormwater planters are typically a few square feet of surface area.

Permeable Pavers

- Permeable pavement is an alternative to asphalt or concrete
- Allows stormwater to drain through the porous surface

http://www.portlandonline.com/shared/cfm/image.cfm?id=124848

http://www.portlandonline.com/shared/cfm/image.cfm?id=124849

Water from the street enters planter through openings in the curb.

During heavy rains, overflow exits one planter at the lower end and enters the next planter.

http://www.migcom.com/Img/managed/Image/1095/large_file.jpg

http://www.portlandoregon.gov/shared/cfm/image.cfm?id=160419

http://www.wilkeseastna.org/files/stormwater_planter03.jpg

https://www.wycokck.org/uploadedImages/Departments/Public_Works/porous%20pavement.JPG

http://www.lastormwater.org/wp-content/plugins/magic-fields/thirdparty/phpthumb/phpThumb.php?src=http://www.lastormwater.org/wp-content/files_mf/1333738552_magicfields_text_main_image_1_1.jpg&w=594&h=224&zc=1

Storm Water Management

Green Parking

- Reducing the contribution of parking lots to total impervious cover.
- Setting maximums for the number of parking lots created.
- Minimizing the dimensions of parking lot spaces.
- Utilizing alternative pavers in overflow parking area.
- Using bioretention areas to treat stormwater.
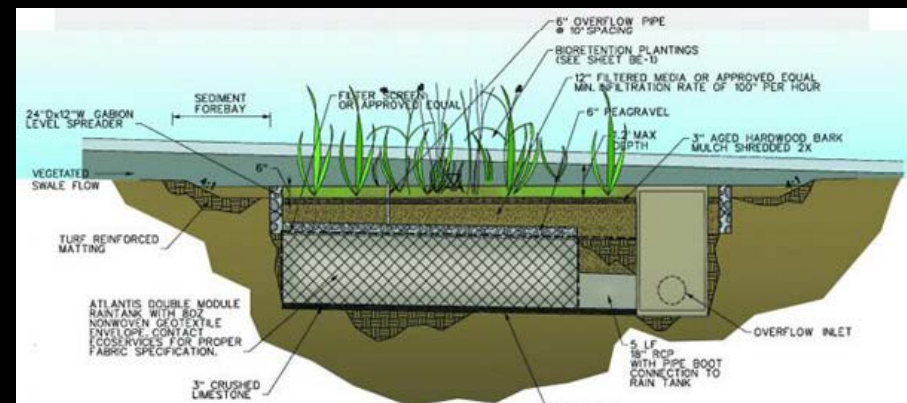- Encouraging shared parking.

Bioretention Cells

- An underdrain to encourage filtration and infiltration.

http://www.examiner.com/images/blog/wysiwyg/image/pavement(3).jpg

http://globalwater.ehclients.com/images/uploads/Figure1-386x290.jpg

http://iswm.nctcog.org/Documents/iTools/Case_Studies/Merritt_Road/Bioretention_sm.jpg
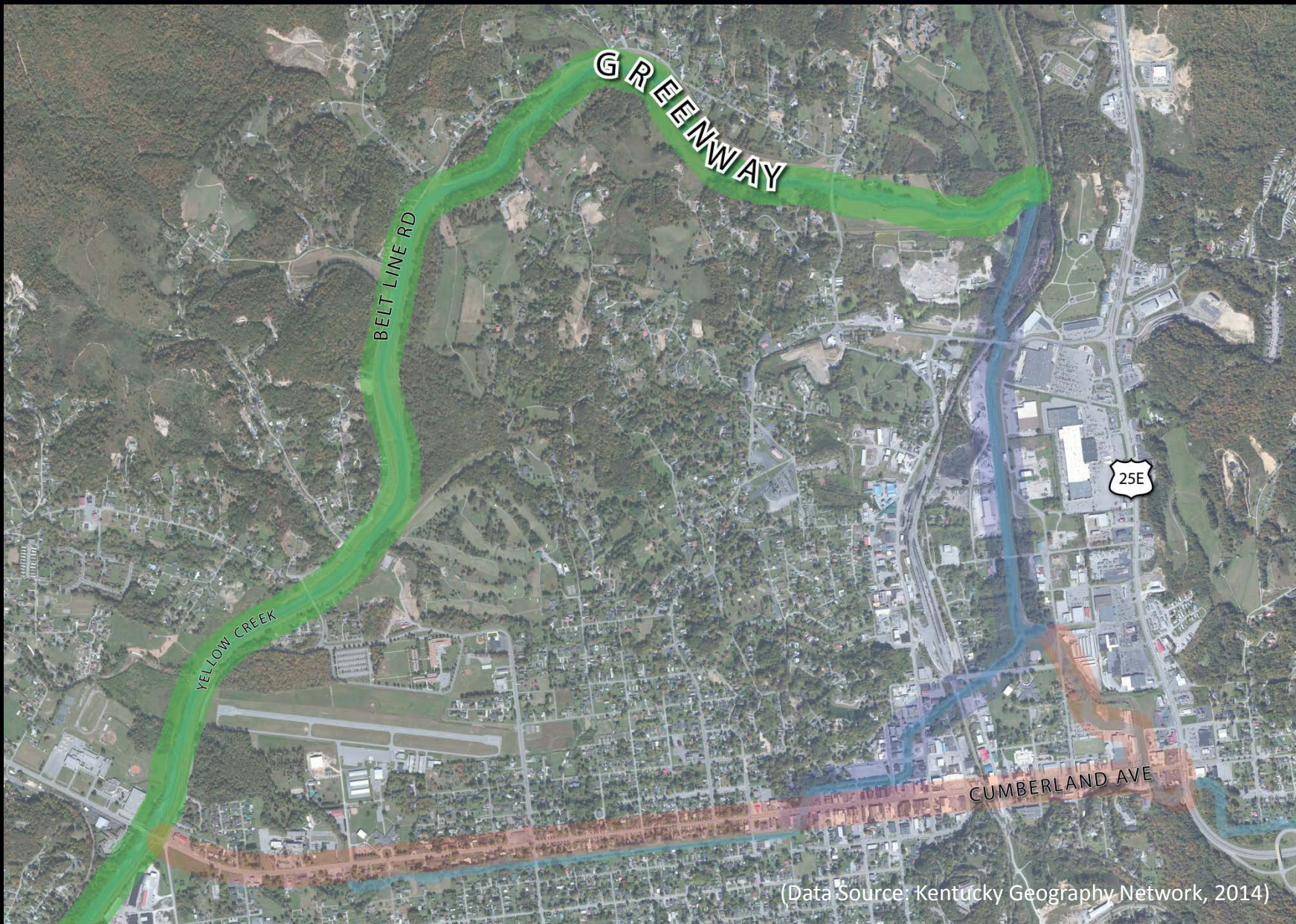
Canal Walk

Summary

Canal Walk key points:
- Provide the community of Middlesboro and tourists a place to hold public functions.
- Help create an active healthy community.
- Provide a continuous multi-use trail that connects to local and regional trails.
- Beginning a connection to Cumberland Gap National Historical Park.
- Connecting to the historic Boone Trace.
- Educate the public about best practices for water management.
- Creating a series of interactive and educational spaces.
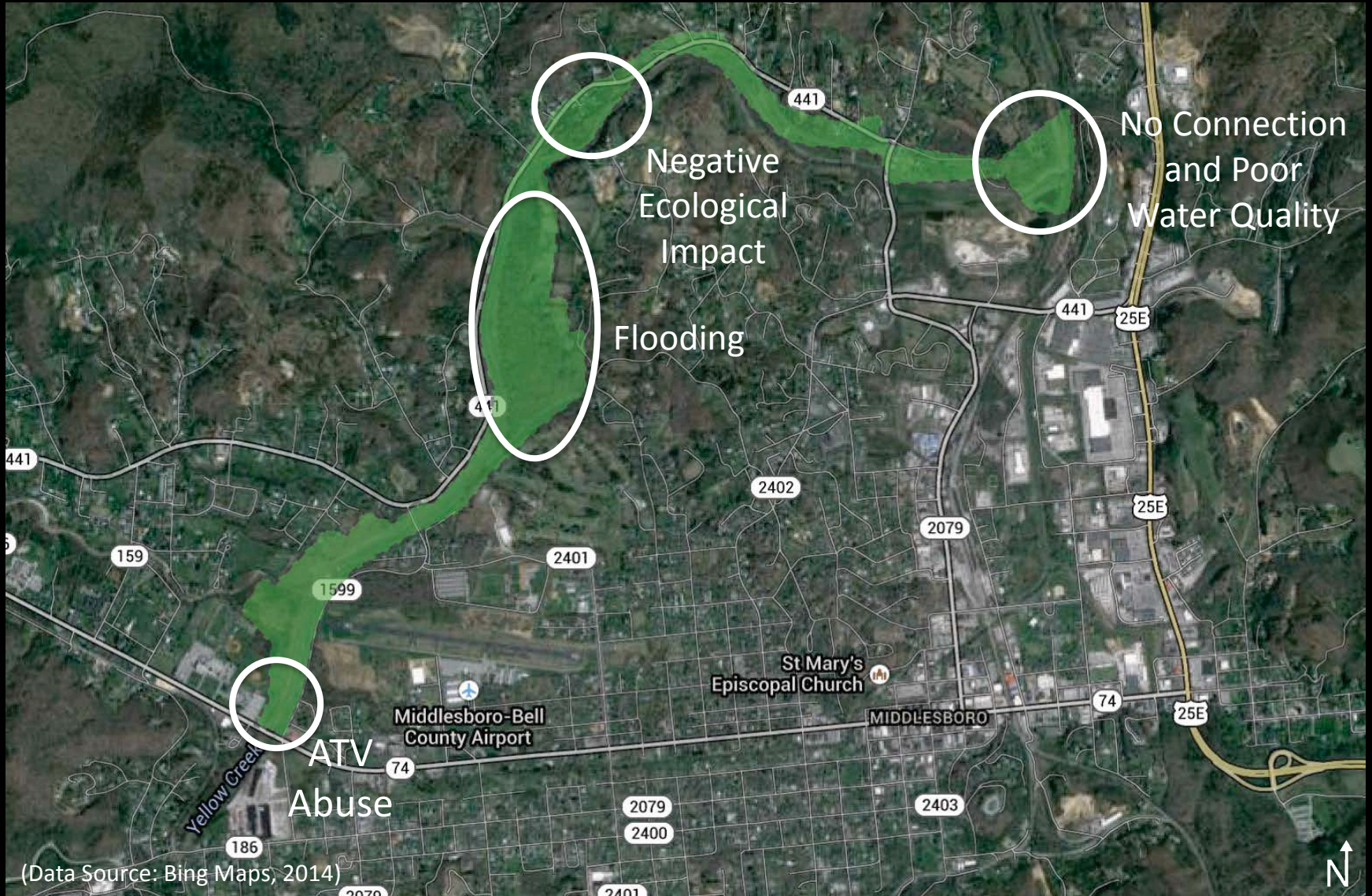
Presentation Outline

Q&A

Wayfinding

Greenway

Canal Walk

Downtown

Design Focus

Inventory, Analysis, & Research

Community Accomplishments

Project Objectives

Today's Process

Introductions
Who is UKLA?

(Data Source: Kentucky Geography Network, 2014)

Challenges

Negative Ecological Impact

No Connection and Poor Water Quality

Flooding

ATV Abuse

(Data Source: Bing Maps, 2014)

Project Name
Mill Creek Restoration Project (MCRP)

Location
Cincinnati, Ohio (USA)

Date Designed
[Varies]

Construction Completed
[Ongoing]

Construction Cost
$806.5 Million [To Date]

Landscape Architect
Amec, CDS Associates, Woolpert

Developer|Client
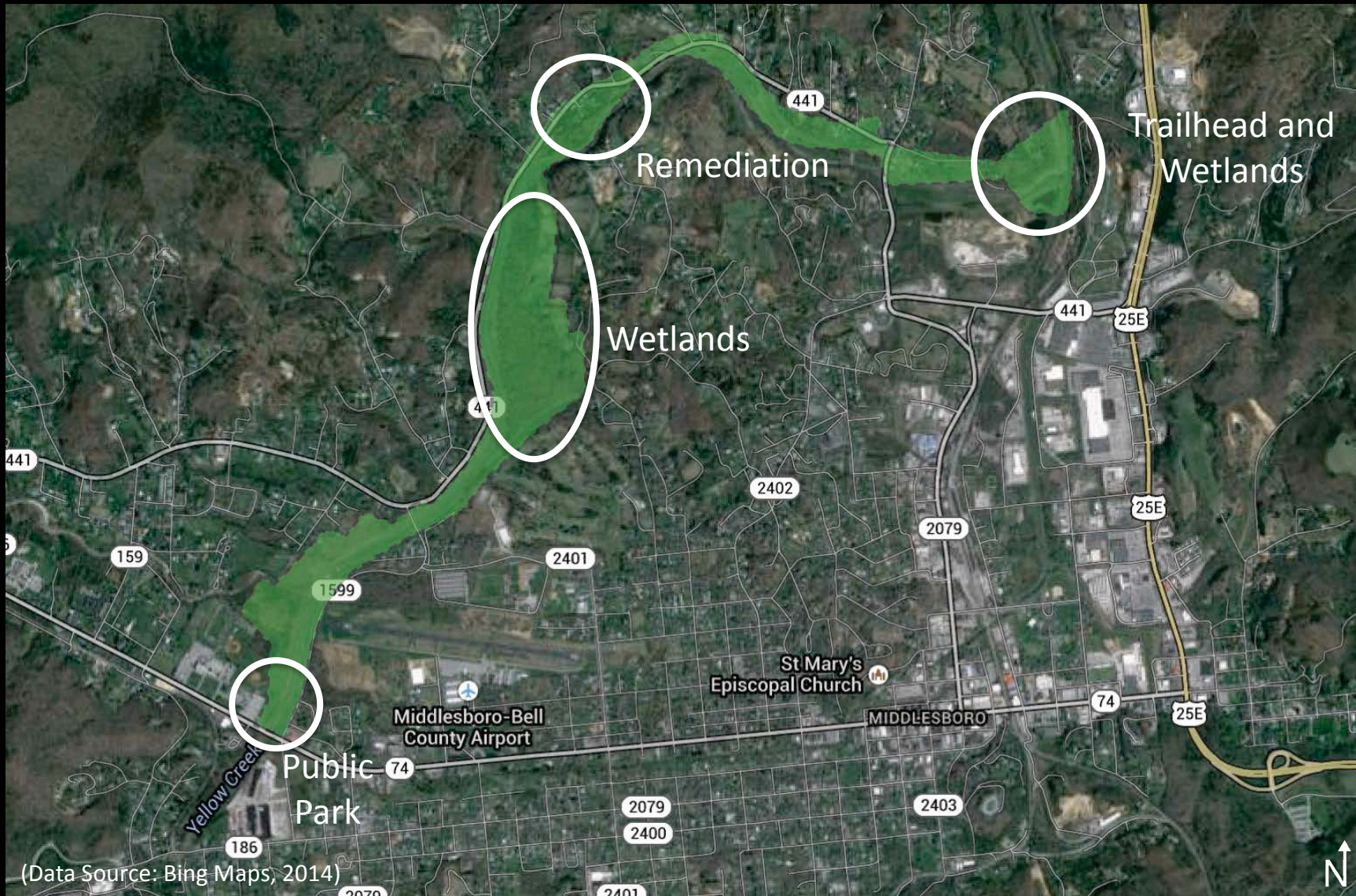Mill Creek Watershed Council, Groundwork Cincinnati

Manager
[Varies]

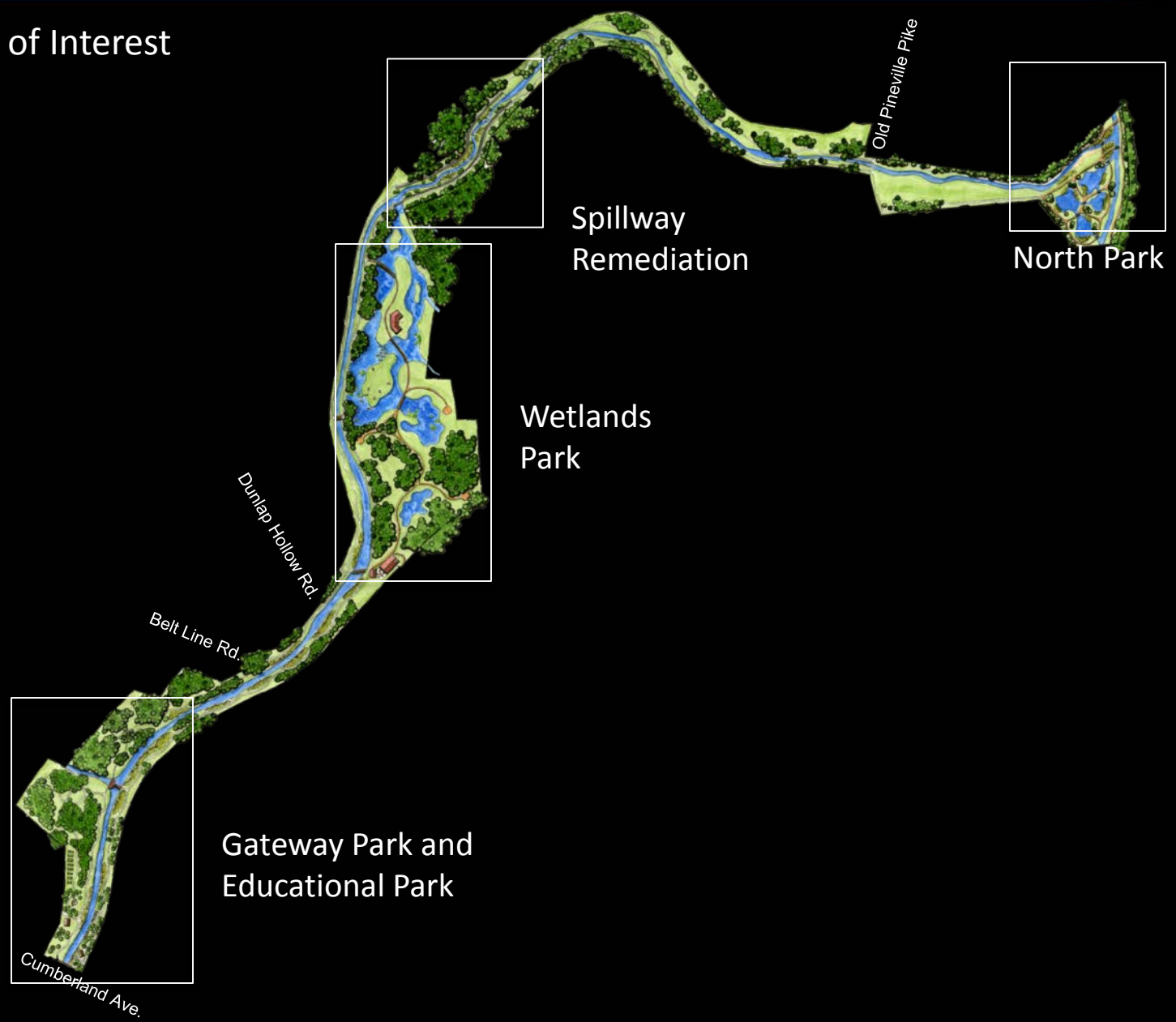(Source: Millcreekwatershed.org, n.d.)

Opportunities

Remediation

Trailhead and Wetlands

Wetlands

Public Park

(Data Source: Bing Maps, 2014)

N

Greenway

Areas of Interest

Spillway
Remediation

North Park

Old Pineville Pike

Wetlands
Park

Dunlap Hollow Rd.

Belt Line Rd.

Gateway Park and
Educational Park

Cumberland Ave.

N

North Park

Old Pineville Pike

Dunlap Hollow Rd.

Belt Line Rd.

Cumberland Ave.

N

North Park Conceptual Diagrams

Concept 1

Open Area

Lightly Forested Area

Wetlands

Trails

Pond

Concept 2

Riparian Zone

Open Areas

Trails

Wetlands Filtration System

N

North Park Refined Conceptual Diagram

Trail Head

Riparian Zone

Boardwalk

Wetlands Filtration System

Canal

Connection to Canal Walk

To Boone Trace

N

Greenway

Potential Trail Head

Spillway

Old Pineville Pike

Dunlap Hollow Rd.

Belt Line Rd.

Cumberland Ave.

N
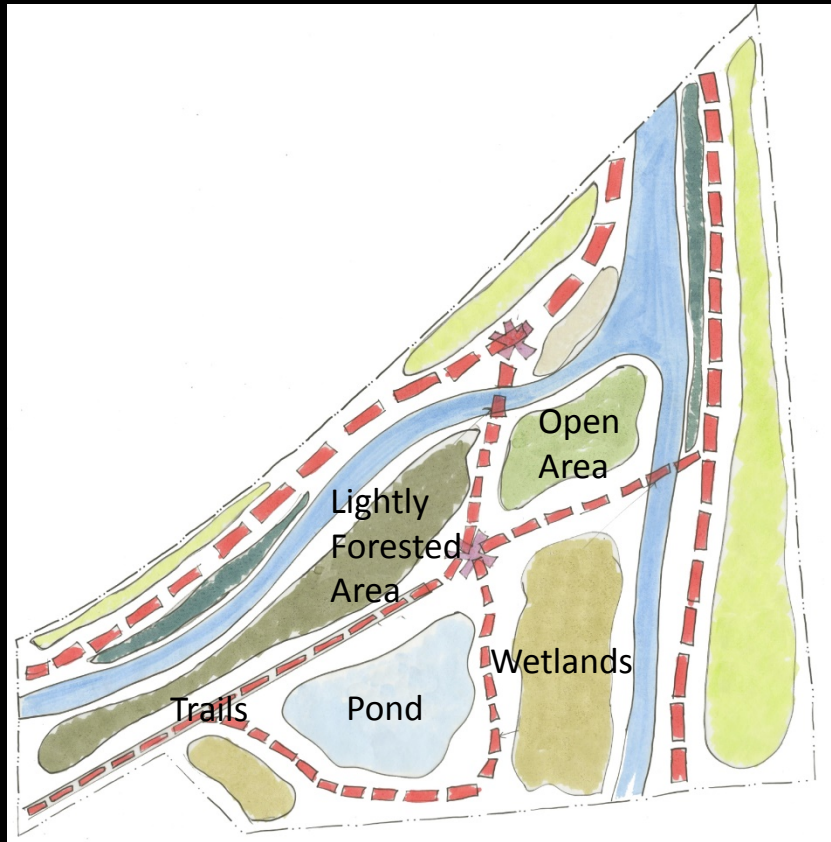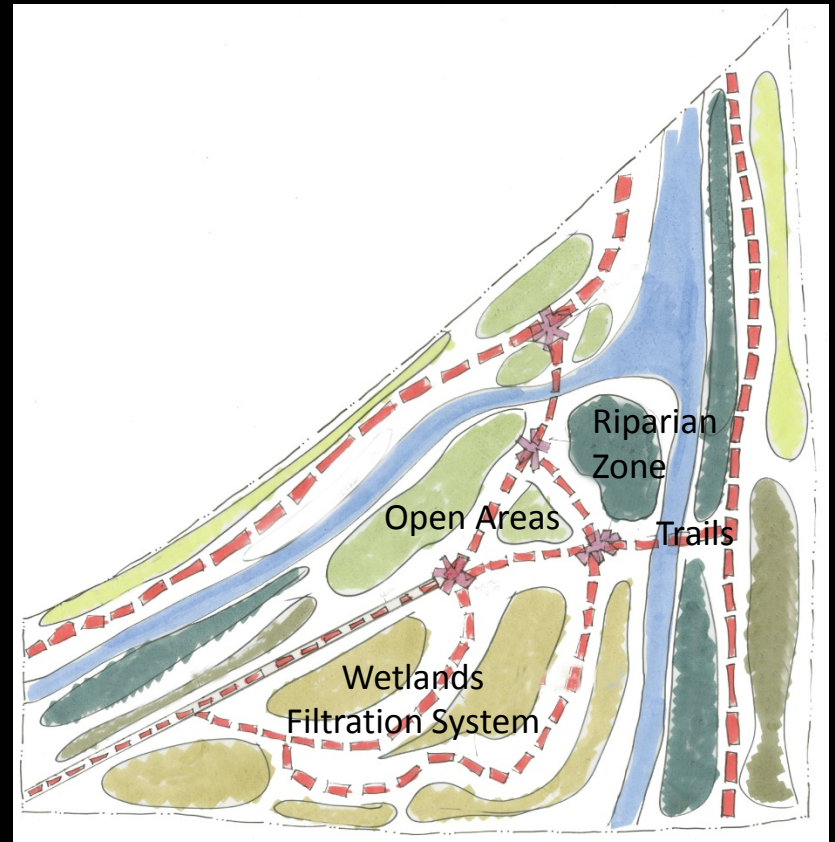
Spillway Conceptual Diagrams
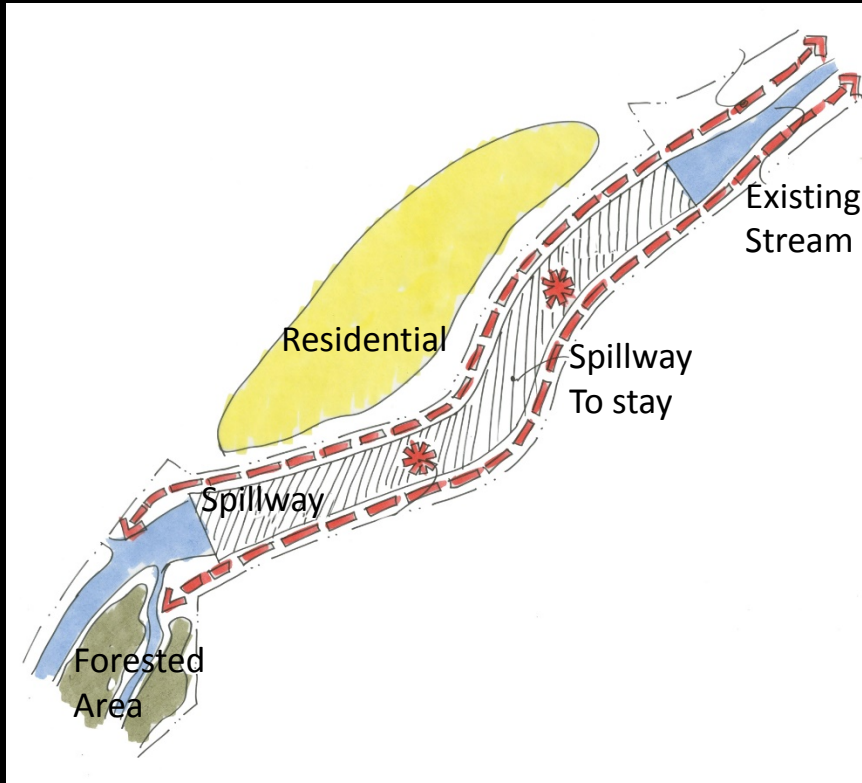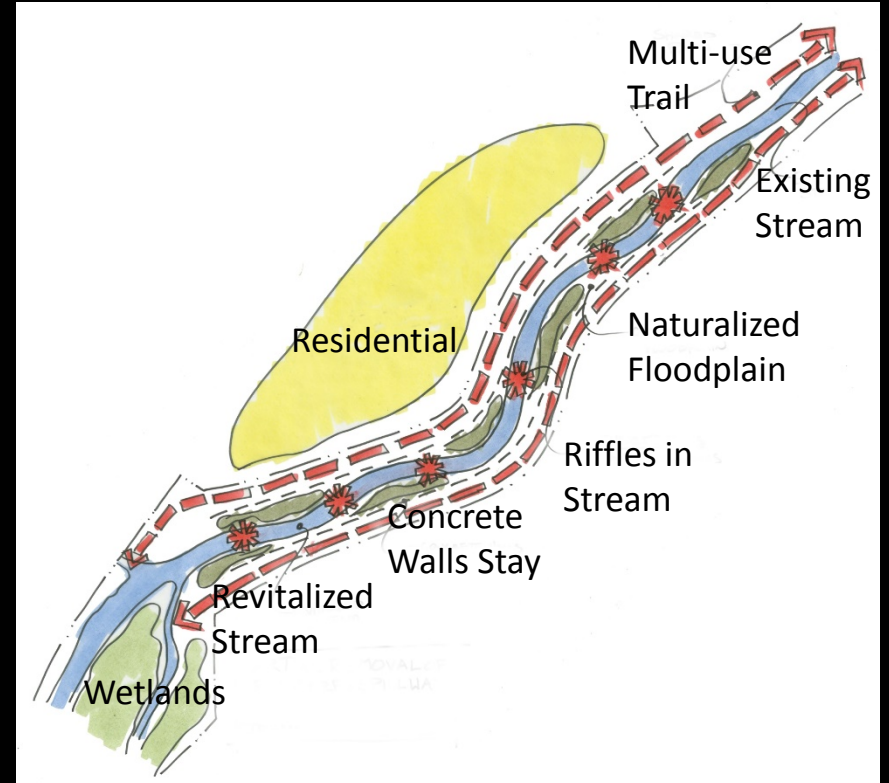
Concept 1

Concept 2

Spillway Refined Conceptual Diagram

Walls of Spillway

Riparian Zone

Naturalized Stream

Trail System

N

Potential Spillway

Wetlands

Old Pineville Pike

Dunlap Hollow Rd.

Belt Line Rd.

Cumberland Ave.

N

Greenway - Wetlands

Wetlands Conceptual Diagrams

Concept 1

Keep Heavily Forested

9-Hole Disc Golf

Residential

Concept 2

Wetlands and Fishing Area

Open Recreation Area

Residential

Concept 3

Natural Water Pooling Area

Wetlands and Fishing Area

Boardwalk

Conservation Area

Residential

N
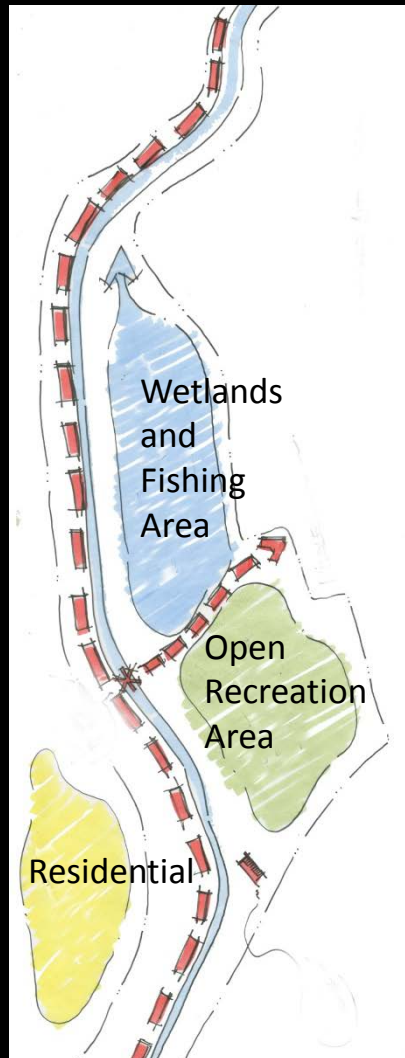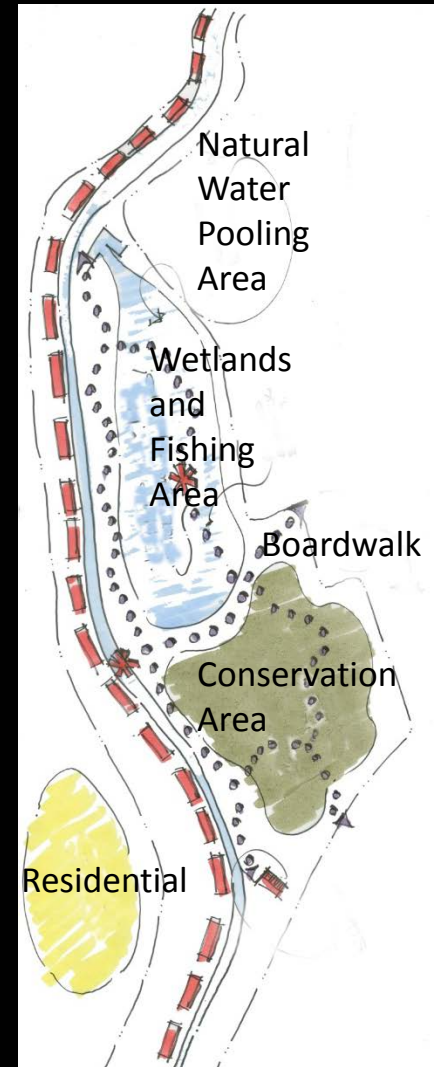
Greenway - Wetlands

Wetlands Refined Conceptual Diagram

Shelter

Islands

Trails & Boardwalks

Pedestrian Bridge

Wet Detention

Forest Conservation

"Snack Shack"

N

Potential Wetlands Trail

Greenway – Gateway and Educational Park

Gateway and Educational Park

Old Pineville Pike

Dunlap Hollow Rd.

Belt Line Rd.

Cumberland Ave.

N

Greenway – Gateway and Educational Park

Gateway and Educational Conceptual Diagrams

Concept 1

Concept 2

Concept 3

N
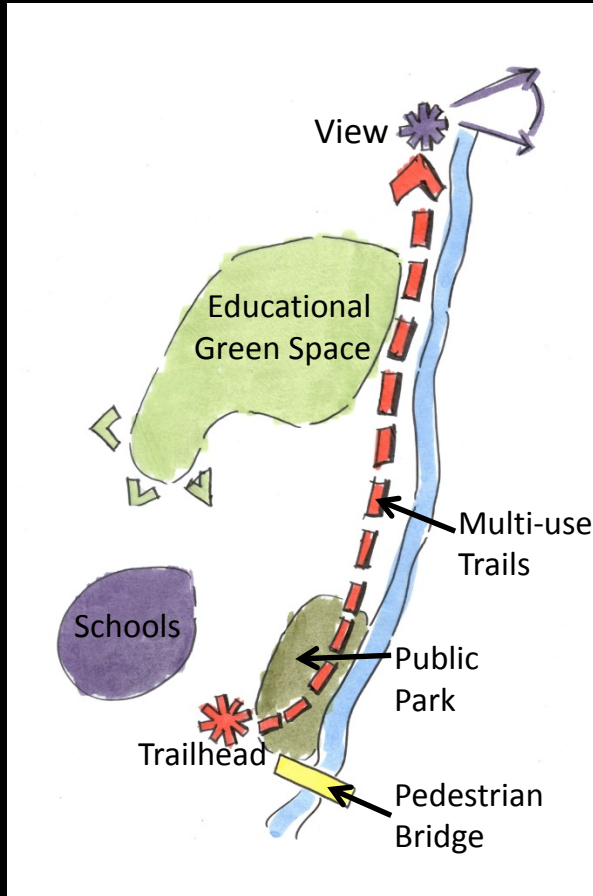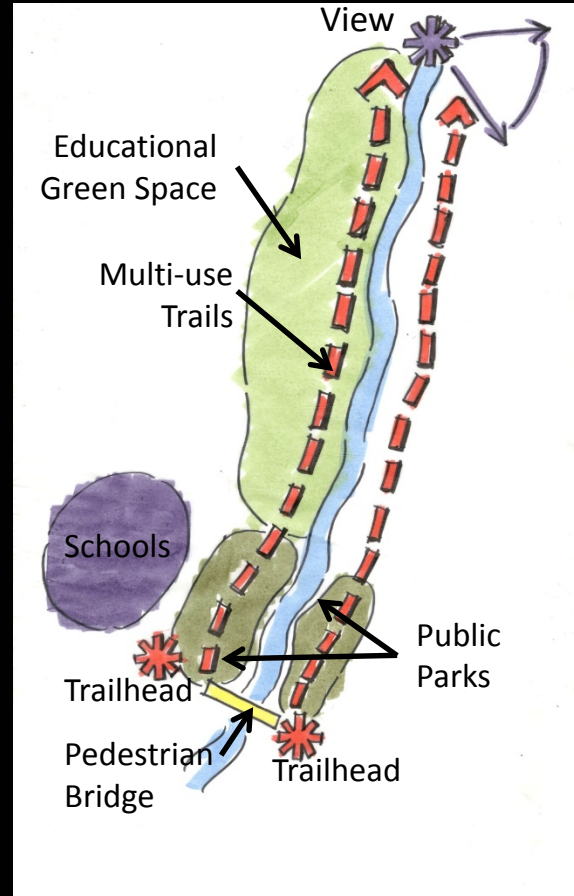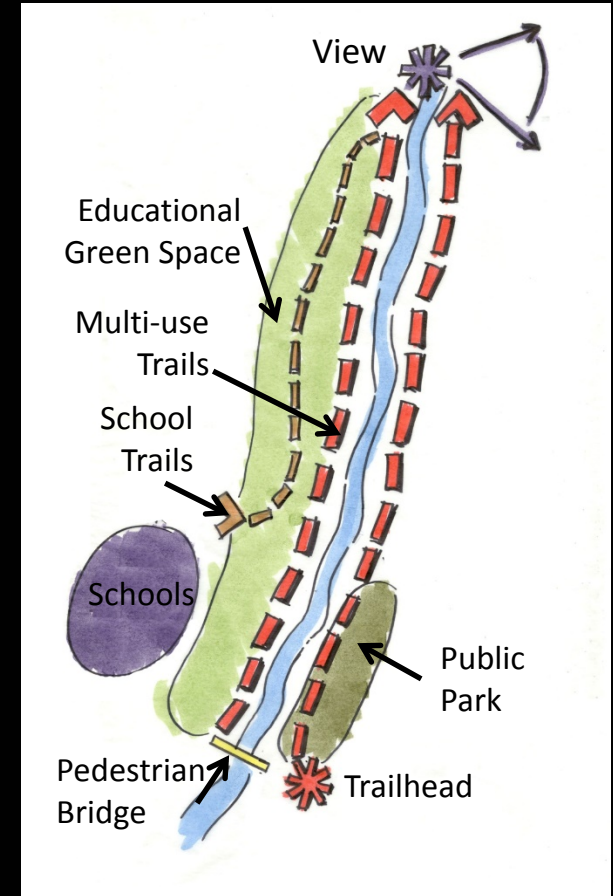
Gateway and Educational Park
Refined Conceptual Diagram

Overlook

Educational
Trail

Educational
Vegetable
Gardens

Riparian
Zone

Outdoor
Classroom

Shelter

Public
Park

Pedestrian
Bridge

Shelter

N

Potential Gateway Park

Destination Points

Legend:
- ★ (cyan) Religious Institution Destinations (residents)
- ★ (green) Potential connection points along Greenway
- ⬤ (yellow) Neighborhoods
- ● (red) Commercial destinations (residents + visitors)
- ★ (pink) Unique destinations (residents + visitors)
- ➤ (red) Connections
- ◉ (blue) Education destinations (residents)
- ⬢ (red) Libraries (residents)
- ● (yellow) Coffeeshops (residents + visitors)

Cumberland Ave

US

(Data Source: Kentucky Geography Network, 2014)

N

Possible Trail Connections

(Data Source: Kentucky Geography Network, 2014)
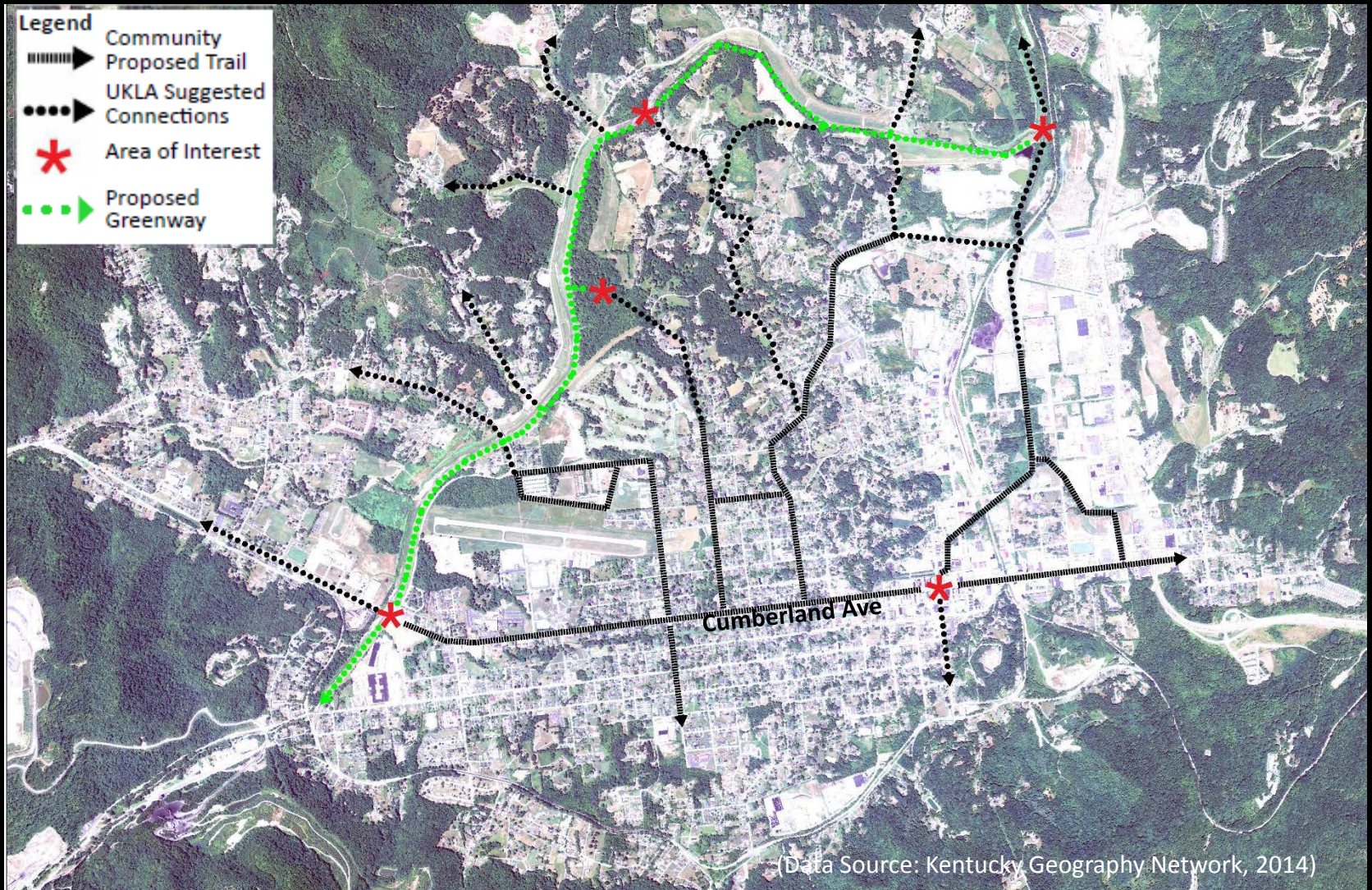
Greenway

Summary

Revitalize the Greenway through:
- Educational Opportunities
- Recreational Opportunities
- Connection to Downtown
- Connection to Canal
- Mitigating Flood Risk
- Mend Stream Stability
- Improve Overall Ecosystem

Presentation Outline

Q&A

Wayfinding

Greenway

Canal Walk

Downtown

Design Focus

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Community Accomplishments

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Today's Process

Introductions
Who is UKLA?

Wayfinding – Conceptual Ideas
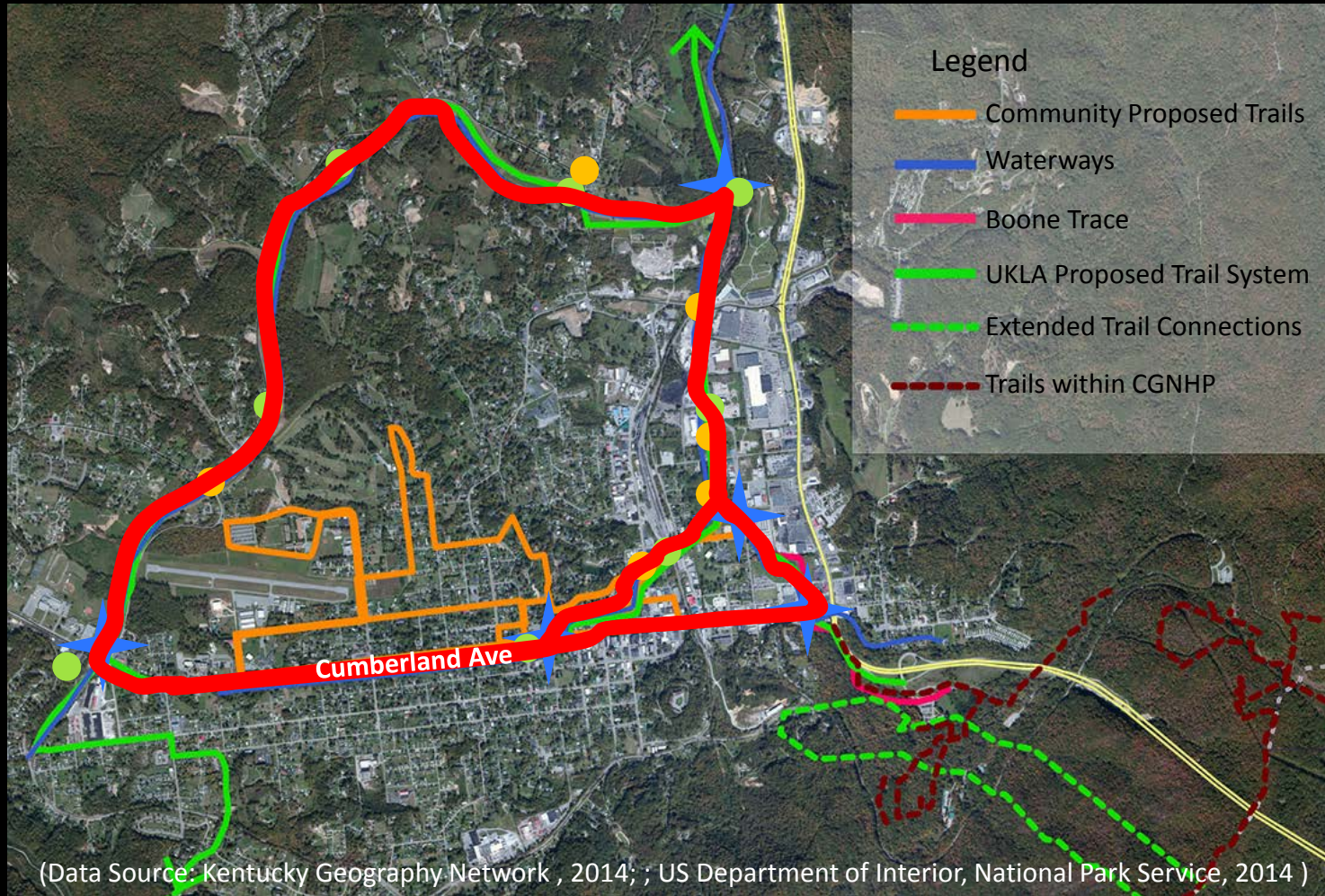
Existing Middlesboro Signage

Wayfinding – Conceptual Ideas

Proposed Signage Location Map

Trailhead

Secondary Trail Intersections

1 Mi. Marks

Inner loop 2mi

Small outer loop 7mi

Big outer loop 7.6mi

Legend
- Community Proposed Trails
- Waterways
- Boone Trace
- UKLA Proposed Trail System
- Extended Trail Connections
- Trails within CGNHP

Cumberland Ave

(Data Source: Kentucky Geography Network , 2014; ; US Department of Interior, National Park Service, 2014)
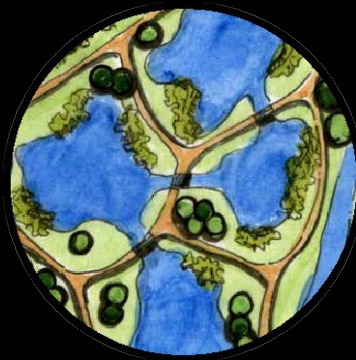
N

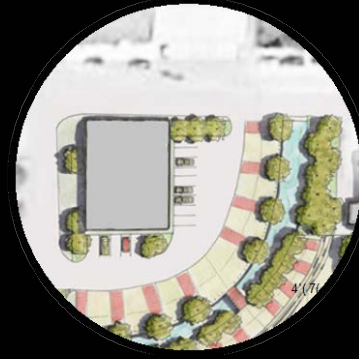Sign Elements from Proposed Design Solutions

Canal Walk

Greenway

Downtown

Summary

Summary

Revitalize the City of Middlesboro through:

- Instituting opportunities for tourism
- Increasing connectivity through trail use
- Beginning a connection to Cumberland Gap National Historical Park
- Enhancing public safety
- Providing a healthy environment
- Promoting socialization
- Creating a series of interactive and educational spaces
- Establishing a recreational corridor

Presentation Outline

Q&A

Wayfinding

Greenway

Canal Walk

Downtown

Conceptual Plans

Inventory, Analysis, & Research

Community Accomplishments

Project Objectives

Today's Process

Introductions
Who is UKLA?

Any Questions?