



KENTON

Downtown Revitalization Plan
Preparing the foundation for the next 100 years

ACKNOWLEDGEMENTS

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01

INTRODUCTION

- Project Overview
- Project Approach
- Project Location
- Project Study Area

OHIO
HISTORICAL
MARKER

**THE HARDIN COUNTY
COURTHOUSE**

One of Ohio's larger courthouses, this structure, completed in 1918 at a cost of \$250,000, is the third courthouse to be built in this vicinity. The building, designed by the architectural firm, Richards, McCarty, and Bulford, is an excellent example of Neoclassical Revival architecture. The courthouse interior is notable for its outstanding leaded stained glass skylight, brass chandeliers, and murals. The twelve large exterior light standards are made of solid brass. The exterior walls and terrace railings are made of Indiana Gray Limestone, while the steps and surrounding curbs consist of granite.

COURTNEY CONNECTION CLUB
AND
HISTORICAL SOCIETY 15-353

PURPOSE OF THE PLAN

1 ASSESS...

the existing conditions of critical underground infrastructure, traffic flow, and streetscape conditions in Downtown Kenton.

2 DEVELOP...

A vision to coordinate infrastructure repairs with a unique opportunity to reimagine the streets and public space of Downtown Kenton.

3 IMPLEMENT...

the recommended funding strategy and design concepts to move Downtown Kenton forward.

PROJECT OVERVIEW

Downtown Kenton, like many downtowns across the country, is built upon infrastructure that is nearing the end of its life-cycle. Aging storm, water, and sewer lines – some of which are as old as the city itself – are in need of significant repair and replacement. This infrastructure is critical for serving Downtown, but is also part of a larger network that serves the rest of the Kenton community. Repairing Kenton’s water and sewer lines are crucial to ensuring the economic success of Downtown, and the City of Kenton at large, moving forward.

WHY DOWNTOWN?

The Project Study Area is the area within a 1-block radius around the Hardin County Courthouse. Naturally, this is a small part of the City as a whole, along with a small part of the water, storm, and sanitary sewer system. Kenton’s challenges will not be completely solved with the replacement of the underground infrastructure in Kenton. However, Downtown is a logical starting point for a few reasons. First, as the oldest part of the City, Downtown likely has some of Kenton’s oldest infrastructure. Repairing and replacing the oldest infrastructure in the City will help Kenton realize the largest efficiency gains in its water, sewer, and storm systems.

Secondly, Downtown is a focal point for employment, shopping, and culture within the Kenton community. The replacement of infrastructure within Downtown will require the roads and sidewalks to be replaced. This project provides a unique opportunity for the City to transform its Downtown streets into a vibrant, prosperous center for the community.

WHY NOW?

Currently, Kenton’s water infrastructure challenges continue to effect local businesses and residents. Local news outlets in Kenton have reported on water main breaks throughout the City that have forced local businesses to shut down. Pipes constructed out of brick and clay means a high amount of unnecessary groundwater is entering the system and flowing to the Wastewater Treatment Plant, depreciating capital equipment faster, and costing residents more money. Now is the time to make an investment in Kenton’s infrastructure to lay the foundation for Kenton’s businesses and residents for the next 100 years.

PROJECT APPROACH

The project approach was a coordinated effort between the planning and engineering teams at OHM. The project team broke the project into 5 phases, described below.

I. Investigate

During the investigative phase, the project team worked with the City and project stakeholders to create the foundation of the Plan. Key elements of this phase included creating a project steering committee and beginning an existing conditions analysis of underground infrastructure and above ground design of Downtown Kenton. The investigation of the underground infrastructure was an exhaustive undertaking that lasted throughout much of the planning process.

II. Inform

The project team conducted 3 stakeholder interviews with property owners, business owners, and local officials. Additionally, the project team hosted an open house with the public, to offer information on the purpose of the project, listen to public concerns about the process, and gain a detailed perspective from the public on issues and priorities facing the Downtown.

III. Invent

During the invent phase, the project team synthesized feedback from the public meeting and stakeholder interviews, and began to develop concepts that advanced the desires of the community. Streetscape designs were particularly geared toward mitigating the impact of semi-truck traffic, a principal concern of the project steering committee, stakeholders, and the public.

IV. Implement

The implementation phase was conducted concurrently to the invent phase. As the project team began to develop a clearer understanding of Kenton's

existing infrastructure challenges, an implementation strategy was formed. The strategy charts a sustainable path forward for Kenton to invest in its infrastructure, taking advantage of state and federal grants and low-interest loans.

V. Finalize

The last stage of the project involved developing the Final Plan, and fine-tuning the Plan with the steering committee and the public. Key meetings during this phase included a joint presentation of the Plan to City of Kenton and Hardin County staff, along with an Open House at the Eats on the Streets festival in Kenton.

PROJECT SCHEDULE

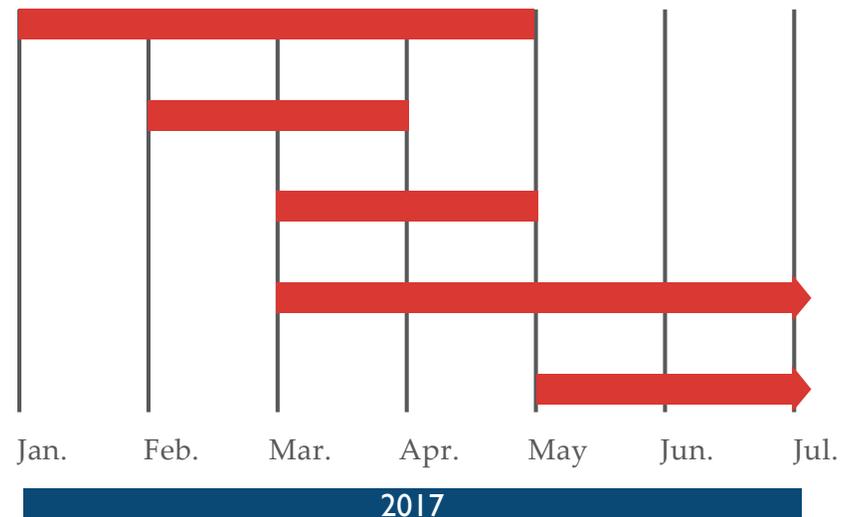
Phase I: Investigate

Phase II: Inform

Phase III: Invent

Phase IV: Implement

Phase V: Finalize



PROJECT LOCATION

NORTHWEST OHIO

At the intersection of 5 state routes, Kenton is at the crossroads of an important truck transportation network connecting markets in Ohio, Michigan, and beyond. These state routes are crucial to the Kenton economy, but pose challenges to the quality of life in Downtown Kenton and the project study area.



PROJECT STUDY AREA

DOWNTOWN KENTON

DOWNTOWN KENTON

The project study area for the project are the Downtown streets immediately surrounding the Hardin County Courthouse. Aging storm, water, and sewer infrastructure, some of which is as old as the City itself, are in significant need of repair and replacement. This infrastructure is critical for serving Downtown, but is also part of a larger network that serves the rest of the Kenton community.

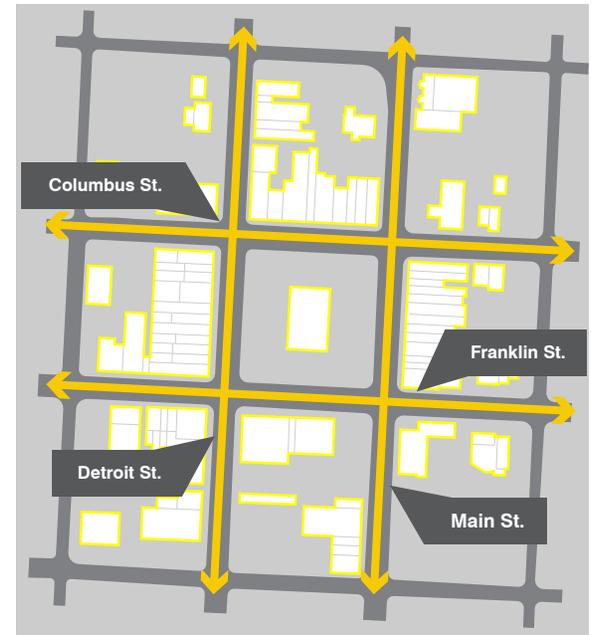


Figure 1-1 Project Study Area



▲▲
Kenton's aging water infrastructure is causing economic and environmental challenges to the City of Kenton.



▲▲
The need to fix Kenton's water infrastructure presents an opportunity to develop solutions to other challenges facing Downtown Kenton, such as mitigating the impact of truck traffic.



“By far the greatest and most admirable form of wisdom is that need to plan and neautify cities and human communities.”

-Socrates



100F



02

CONTEXT

- Project Overview: Below Ground**
- Project Overview: Above Ground**
- Outreach Overview**
- Public Input**
- Stakeholder Input**

BELOW GROUND

WATERFLOW IN KENTON

Currently, about 1 million gallons of water is distributed to Kenton’s residents, businesses, and institutions. Water is distributed from the Kenton Water Treatment Plant just south of the Scioto River.

In a properly functioning water system, the quantity of water distributed from the Water Treatment Plant should be slightly higher than the quantity of water treated at the Wastewater

Treatment Plant. This difference accounts for the water consumed by area businesses and residents throughout the day.

However, currently in Kenton’s water system, the quantity of water treated at the Kenton Wastewater Treatment Plant far exceeds the quantity of water being distributed into the city. This suggests that Kenton’s aging infrastructure is allowing a significant quantity of groundwater to flow into the system.

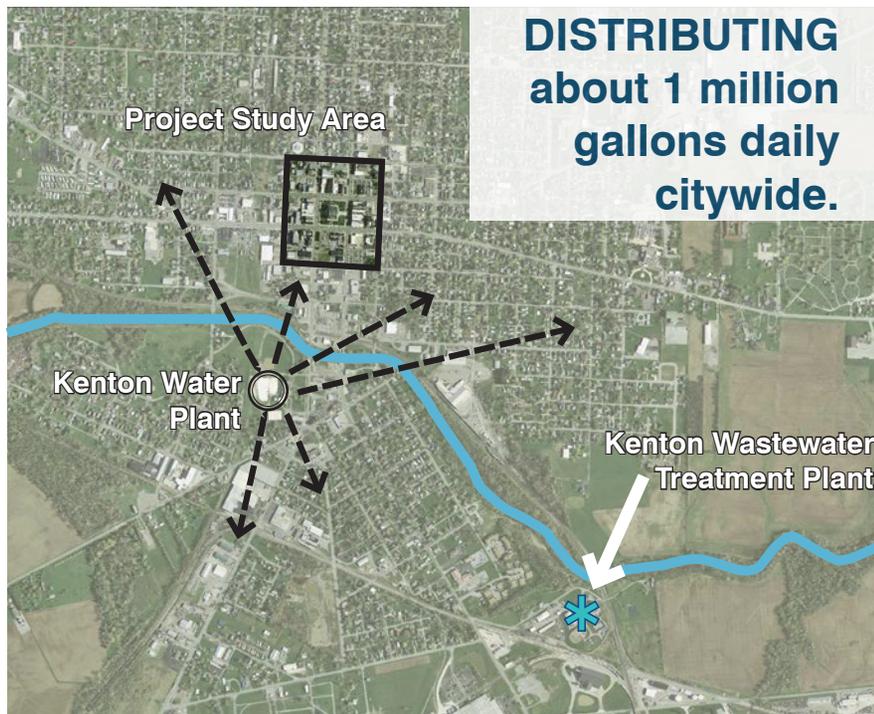


Figure 2-1 Kenton Water Distribution Overview

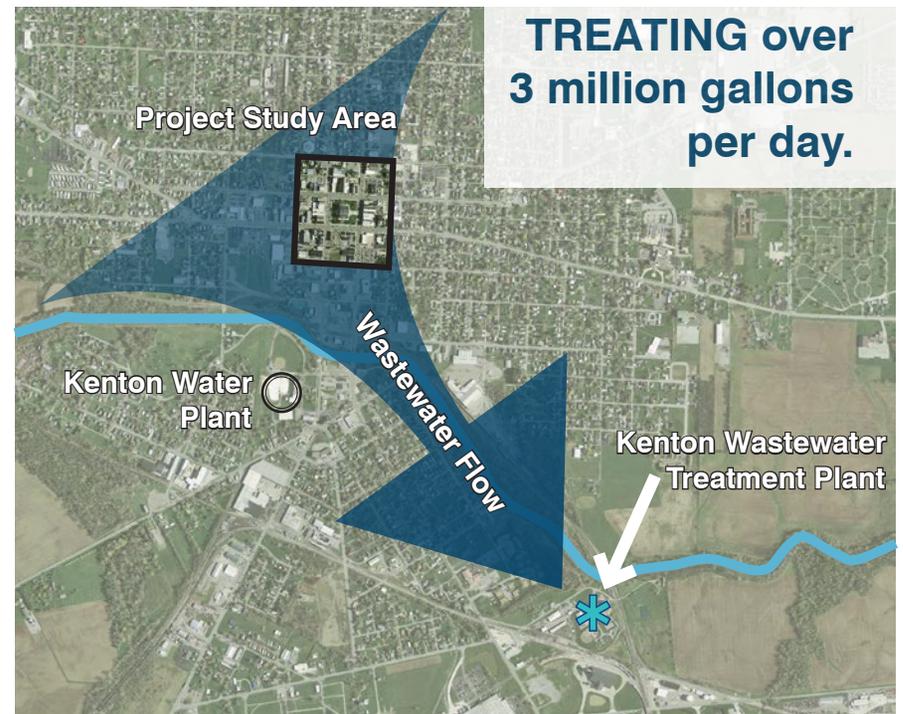


Figure 2-2 Kenton Wastewater Treatment Overview

BELOW GROUND

INFLOW AND INFILTRATION

Kenton’s aging water infrastructure, which is original to the construction of Downtown, is likely made from brick and clay. Aging water systems constructed of brick and clay are prone to leaks and cracks, both along the pipes and at faulty joints in the system. This causes unnecessary groundwater to enter the system, a process known as inflow and infiltration. Below, a diagram highlights potential avenues for groundwater to enter a water system.

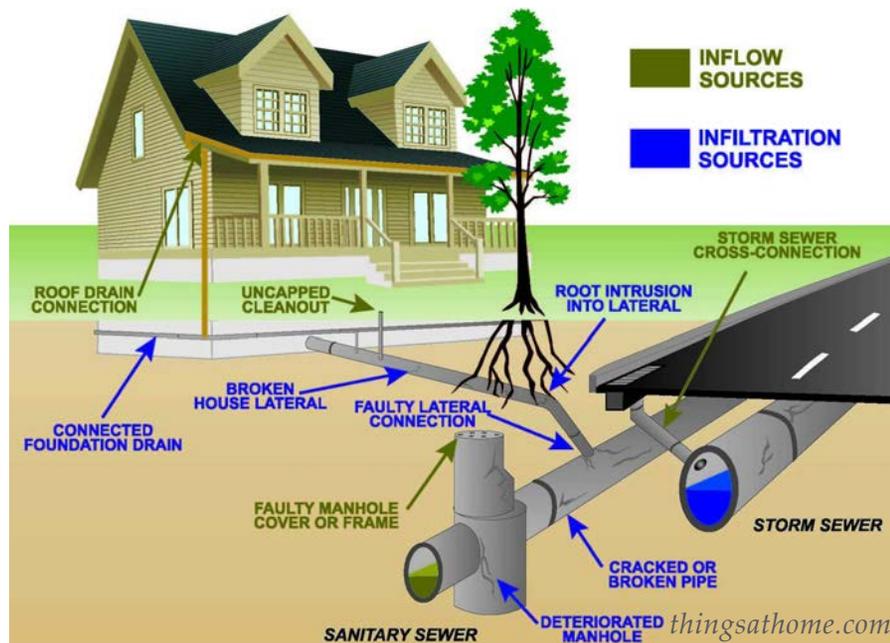


Figure 2-3 Inflow and Infiltration Model

WATER TREATMENT COSTS

The inflow and infiltration of groundwater into Kenton’s water system is the primary cause of the excess water flowing into the Kenton Wastewater Treatment Plant. Approximately 70% of water treated annually at the Kenton Wastewater Treatment Plant is through inflow and infiltration. This costs Kenton residents directly, through higher sewer rates to cover the treatment of unnecessary groundwater. This also depreciates capital equipment at the Wastewater Treatment Plant faster than normal.

1.2 Billion Gallons
of water treated annually at the
Wastewater Treatment Plant.
+/- 835 Million Gallons
of water treated annually is inflow and
infiltration entering the system, about
70% of the total amount treated.
\$1.3 Million
in annual operating costs at the
Wastewater Treatment Plant.

Figure 2-4 Kenton Water Treatment Costs

BELOW GROUND

PUBLIC UTILITIES

Water, sanitary, and storm infrastructure has outlived its useful lifespan in the project study area. Although there is incomplete information on the age and condition of the underground infrastructure, much of it is original to the City, which was developed in the late 1800's.

Additionally, many of the storm lines run through back alleyways, and some of the sanitary storm lines don't run along the public right-of-way. This poses challenges for engineers and construction crews who don't have access to repair and replace parts of the system as necessary.

-  Existing Water Lines
-  Existing Storm Sewer Lines
-  Existing Sanitary Sewer Lines

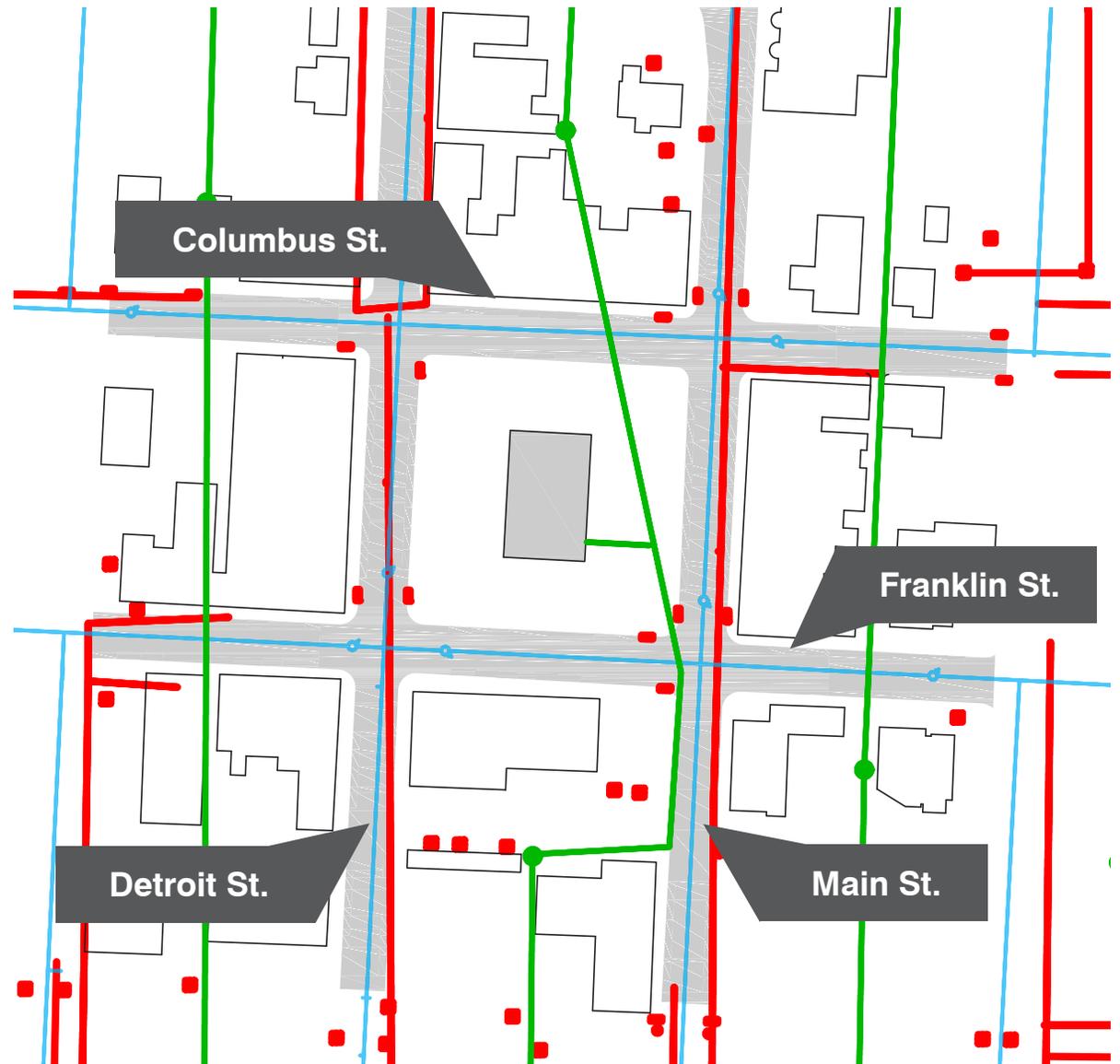


Figure 2-5 Existing Public Utilities

BELOW GROUND

PRIVATE UTILITIES

In addition to being aware of public utilities in the project study area, the City of Kenton and the project team will have to work closely with the owners of private utilities in the area as well. Challenges will include working with existing cable, electric, gas, and phone lines to either work around them, or relocate them if necessary.

-  *Underground Gas Lines*
-  *Aboveground Cable Line*
-  *Underground Cable Lines*
-  *Aboveground Electric Lines*
-  *Underground Electric Lines*



Figure 2-6 Existing Private Utilities

ABOVE GROUND

PAVEMENT CONDITION RATING

The Ohio Department of Transportation uses a Pavement Condition Rating system to quantify the conditions of Ohio's roadways. The scale has a range from 0-100, where 0 represents a roadway in the most dire need of repair and 100 represents a perfect roadway with no need for repairs.

The four roadways within the project study area have PCR's ranging from 72 to 82. Generally, roads see their PCR drop an average of four points per year. When a road's PCR drops into the range of 55-65, the road generally needs to be repaired. Based on the PCR score for the four roads in the project study area, they would likely have to be repaired in the near future.

Road	PCR
 Franklin St.	72
 Columbus St.	82
 Detroit St.	74
 Main St.	76

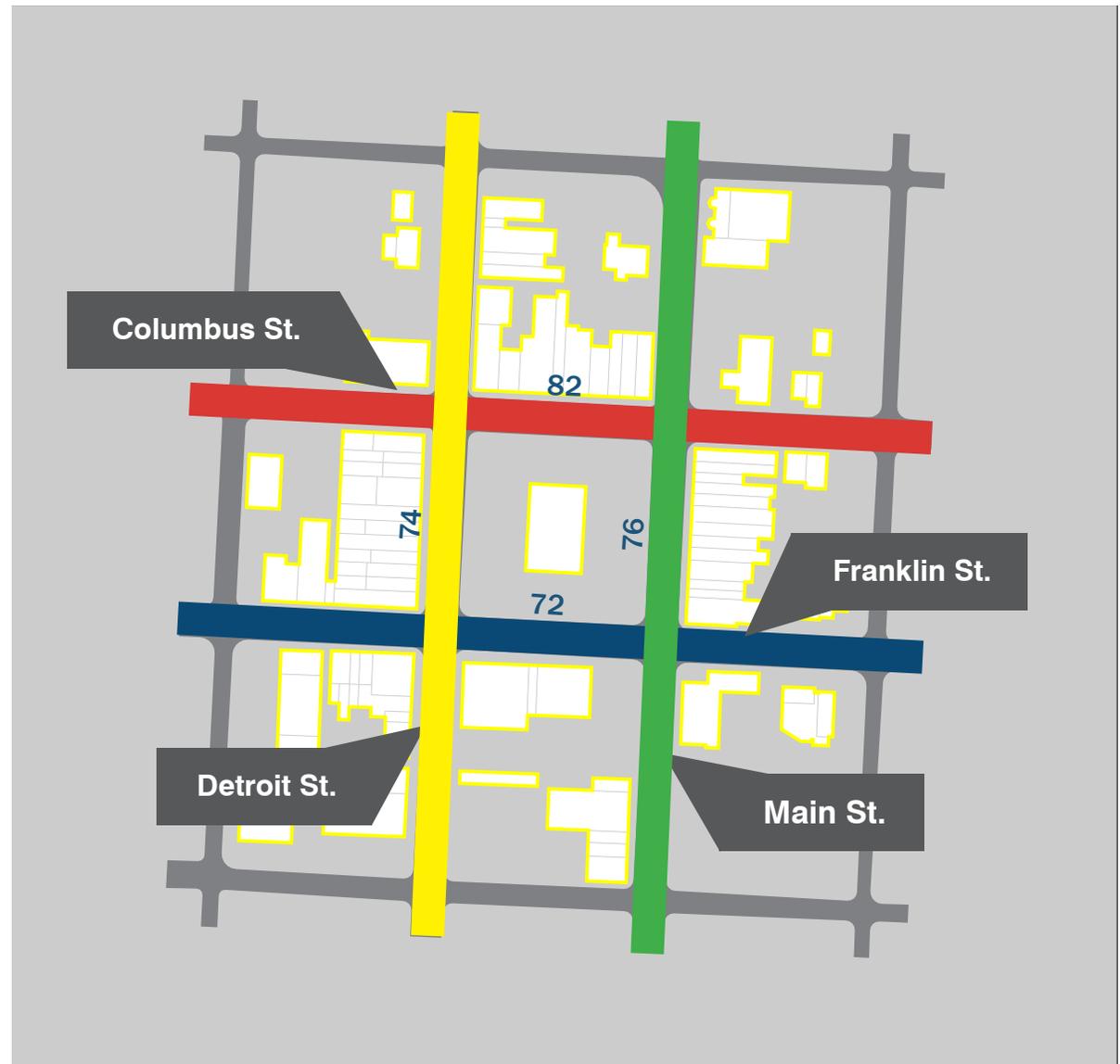


Figure 2-7 Pavement Condition Rating Overview

ABOVE GROUND

SIDEWALK CONDITIONS

Downtown Kenton lacks sufficient pedestrian facilities to make the area a safe and comfortable place to walk around. Crosswalks at primary intersections along the square are uninviting to cross and not well-defined or visible. Sidewalks throughout the district are in disrepair. The Downtown district lacks a consistent pattern and design of streetscape materials.

A *Sidewalks throughout Kenton are in strong need of investment. Areas that are crumbling pose accessibility challenges to the young and elderly.*

B *Street trees in the District aren't planted in appropriate planter boxes. The roots cause cracks in the surrounding bricks and pavement, while forcing the soil out of its box and onto the street, giving the sidewalks a messy appearance.*

C *The pedestrian environment throughout the District is uninviting and unsafe for pedestrians, particularly the elderly and children. At the four primary intersections around the square, a lack of pedestrian signage, landscaping, or pedestrian bumpouts indicates that the priority at these intersections remains with automobile and truck traffic. The lack of comfort experienced by pedestrians when crossing the street is a significant barrier to transforming Downtown Kenton into a walkable community.*



A



A



B



C

ABOVE GROUND

COEXISTING WITH HEAVY TRUCK TRAFFIC

At the intersection of five state routes, the traffic surrounding the Hardin County Courthouse is dominated by truck traffic. Truck traffic poses safety concerns for pedestrians and automobiles, and deters residents and employees from enjoying the square. Trucks stopping and starting at traffic lights significantly increases the noise level around the square. Finally, wide-truck turns on the square significantly reduces the comfort level of pedestrians and automobiles waiting at intersections.

 *Designated Truck Routes*

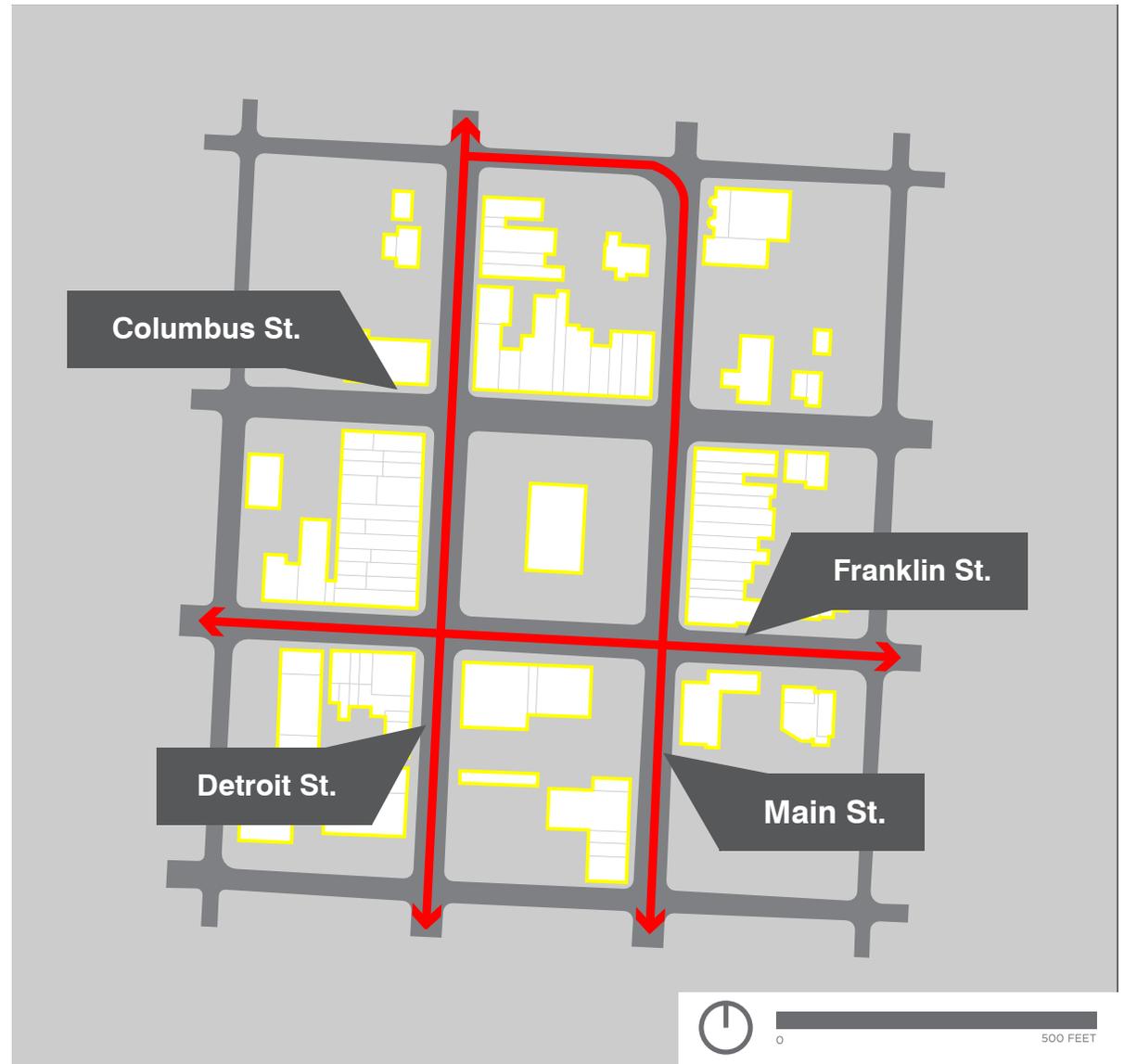


Figure 2-8 Designated Truck Routes

Truck traffic poses safety concerns

Semi-trucks through Downtown pose obvious conflicts with pedestrians. It is difficult for truck drivers seated high off the ground to see pedestrians in crosswalks and in the middle of the street. Crosswalks are poorly marked throughout the district, reducing the visibility of pedestrians at intersections.



Truck noise reduces quality of life

The noise of truck traffic significantly reduces the quality of life throughout Downtown. Trucks make the most noise when stopping and starting at traffic lights. Additionally, because truck traffic doesn't follow designated truck routes and travels on all roads of the Downtown, it reduces the ability for businesses to set up sidewalk displays, or allow visitors to enjoy the Downtown in the summer months.



Truck turns reduce comfort for pedestrians and automobiles.

Often, trucks turn on the square, either to switch directions from north-south to east-west, or to avoid getting stuck behind other trucks in traffic. Truck turns with wide-radii add an additional conflict point between pedestrians and trucks, while also posing safety concerns for drivers stopped at a stoplight.



ABOVE GROUND

ROADWAY OVERVIEW

Although the City owns the right-of-way of all streets and has primary maintenance and repair responsibilities, 3 other government entities have various levels of jurisdiction (see map). However, Hardin County, the state, and the federal government, have jurisdiction over different parts of the project study area. As repairs and redesign are considered, the appropriate funding source and regulatory authority should be consulted.

-  County Route
-  State Route
-  U.S. Route

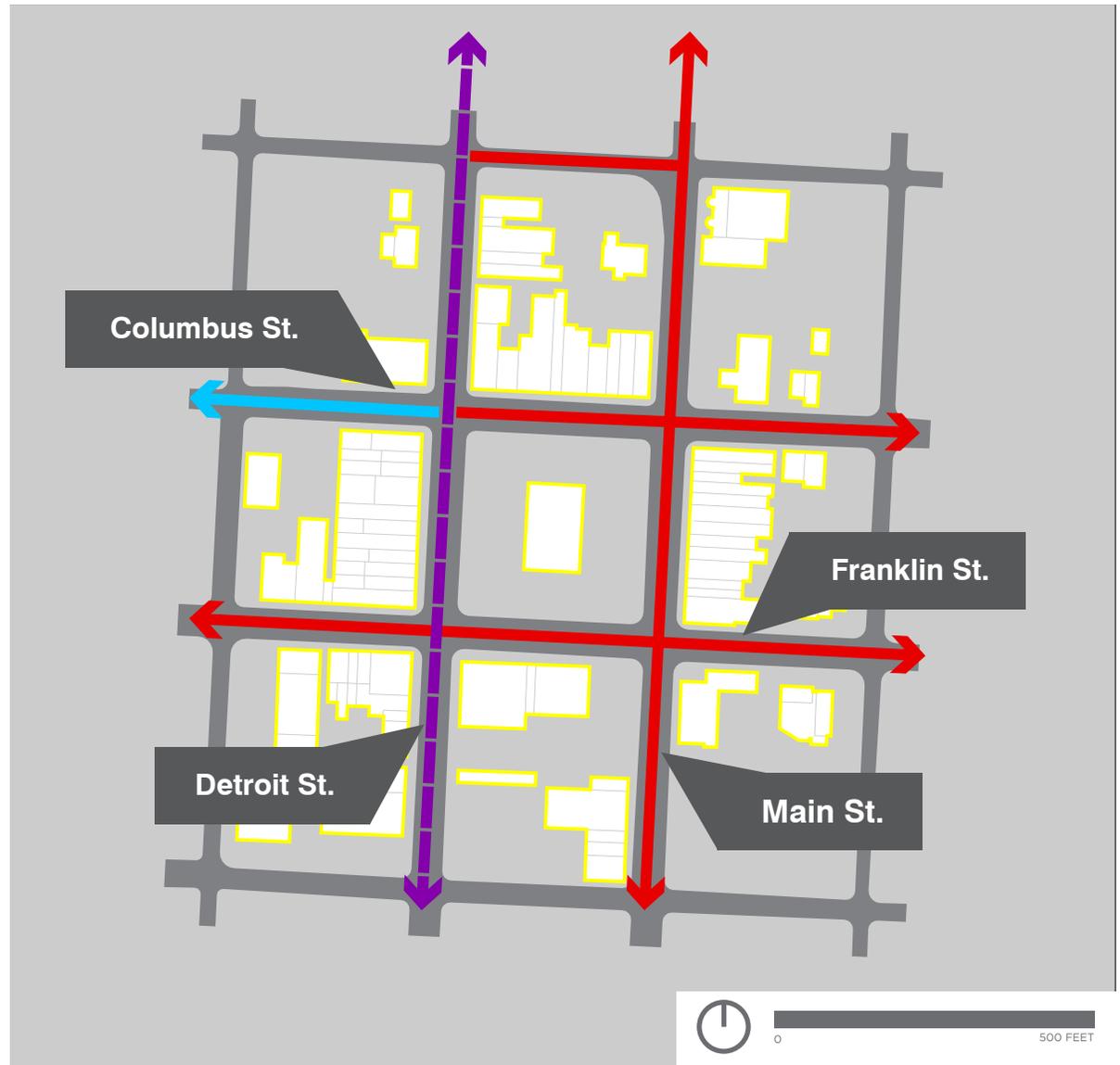


Figure 2-9 Roadway Overview

ABOVE GROUND

PARKING

One of the most common public concerns when conducting a planning project throughout a Downtown area is whether or not a proposed project will impact the quantity of parking in the area. There are 181 on-street parking spots spread evenly throughout Downtown Kenton, providing the community access to the District’s stores, offices, and government buildings.

Anecdotal evidence presented by the steering committee suggested that Downtown business owners and employees occupy on-street parking spots throughout the day. This prohibits the turnover of parking spots in Downtown Kenton, which is important for retail sales. This also increases the perception that Downtown Kenton has a parking shortage, even though many of the cars parked Downtown daily could be moved to other lots outside of the square.



Figure 2-10 Downtown Parking

OUTREACH OVERVIEW

The planning process incorporated meetings with the public and community stakeholders, to ensure a transparent process that was guided by the local knowledge of the community. The steering committee, comprised of local business and government leaders, played an instrumental role in guiding the final outcome of the Plan.

A full list of project partners are to the right. The pages that follow summarize the public engagement process and existing conditions analysis reflected in the project's final design.

PROJECT STAKEHOLDERS: WHO DID WE TALK TO?

Throughout the project, the planning team coordinated with a variety of stakeholders and the public to move the project forward. They include:



The steering committee: The committee was guided by a group of local officials, property owners, and business owners. The steering committee met 4 times with the planning team, providing guidance, feedback, and direction for the plan's final outcome.



The public: An open house on March 29th, 2017 at the Hardin County Courthouse drew approximately 30 attendees. The Open House at the Eats on the Streets festival drew approximately 100 visitors to the team's window display to learn about the project from the project team.



3 stakeholder interviews: March 29th, 2017 (~30 attendees). Stakeholders included Downtown business and property owners, along with City and County officials. The project team identified issues and opportunities facing Downtown with the group, which helped inform the final plan.

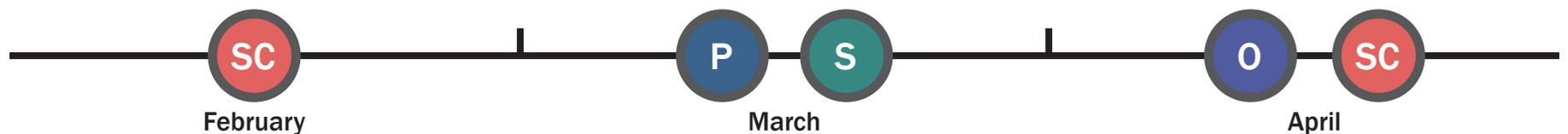


Kenton and Hardin County: The project team presented to a joint meeting of Kenton City Council and the Hardin County Commissioners to present the project and receive feedback.



ODOT District 1. The project team met with ODOT District 1 in Lima to coordinate the project with ODOT projects.

PROJECT SCHEDULE



PUBLIC ENGAGEMENT OVERVIEW

Activity 1

MAPPING EXERCISE



A location-based understanding of the public's priorities.

Public participants and steering committee members were asked to identify unsafe areas, areas that could be beautified, and their favorite place within Downtown.

Activity 2

PRIORITIZING THE STREET



The public's priorities for the future of their streets.

The public was asked to prioritize elements of attractive, walkable, safe streets that they would prefer to see in their Downtown.

Activity 3

BIG IDEAS



An opportunity for the public to think BIG about the future of the Downtown.

The public shared their BIG Ideas with the community, which helped reinforce some of the larger project themes.

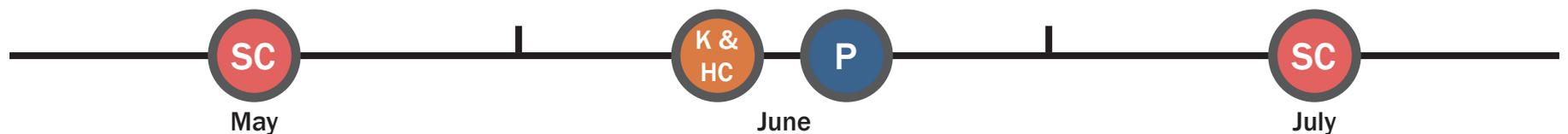
Activity 4

ISSUES AND OPPORTUNITIES



A nuanced conversation about the challenges Downtown Kenton faces, along with its potential for change.

Stakeholders identified specific issues and opportunities with the project team, ensuring the Plan was guided and informed by Downtown's most frequent users.



PUBLIC INPUT RESULTS

Activity 1

MAPPING EXERCISE

Meeting participants were asked to identify specific locations in Downtown Kenton that were unsafe, needed to be beautified, and were their favorite areas of Downtown. The results are shown to the right.

- Unsafe Pedestrian Areas**
 - Intersections on square
 - Surplus store
 - Intersection of North Main and East Carrol St.
- Areas to be Beautified**
 - Surplus store
 - Lot south of Will's Costume Shop
 - Streets around the square
- Favorite Areas Downtown**
 - Courthouse
 - Storefronts, Buildings Downtown
 - The Armory



Figure 2-11 Mapping Exercise

Activity 2 PRIORITIZING THE STREETScape

Open house participants were asked to prioritize streetscape amenities and elements that they would like to see in a future design. The top 4 vote-getters are to the right, and are reflected in the street designs as well.



22
Lighting



13
Signage



11
Crosswalks



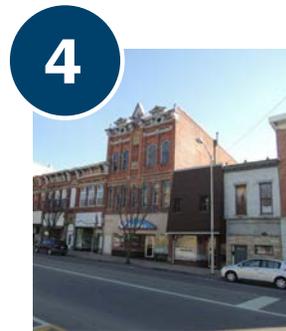
10
Art

Activity 3 THE BIG IDEA

Open house participants were also to think BIG about their big ideas for the future of Downtown. These big ideas include the following:



5
Improve truck circulation



4
Improve appearance



3
Add functional public space

Kenton residents and business owners had the opportunity to attend 2 open houses to learn about the project, provide input, and ask questions. The June 23rd open house took place at Kenton's annual Eats on the Streets festival.



STAKEHOLDER INPUT

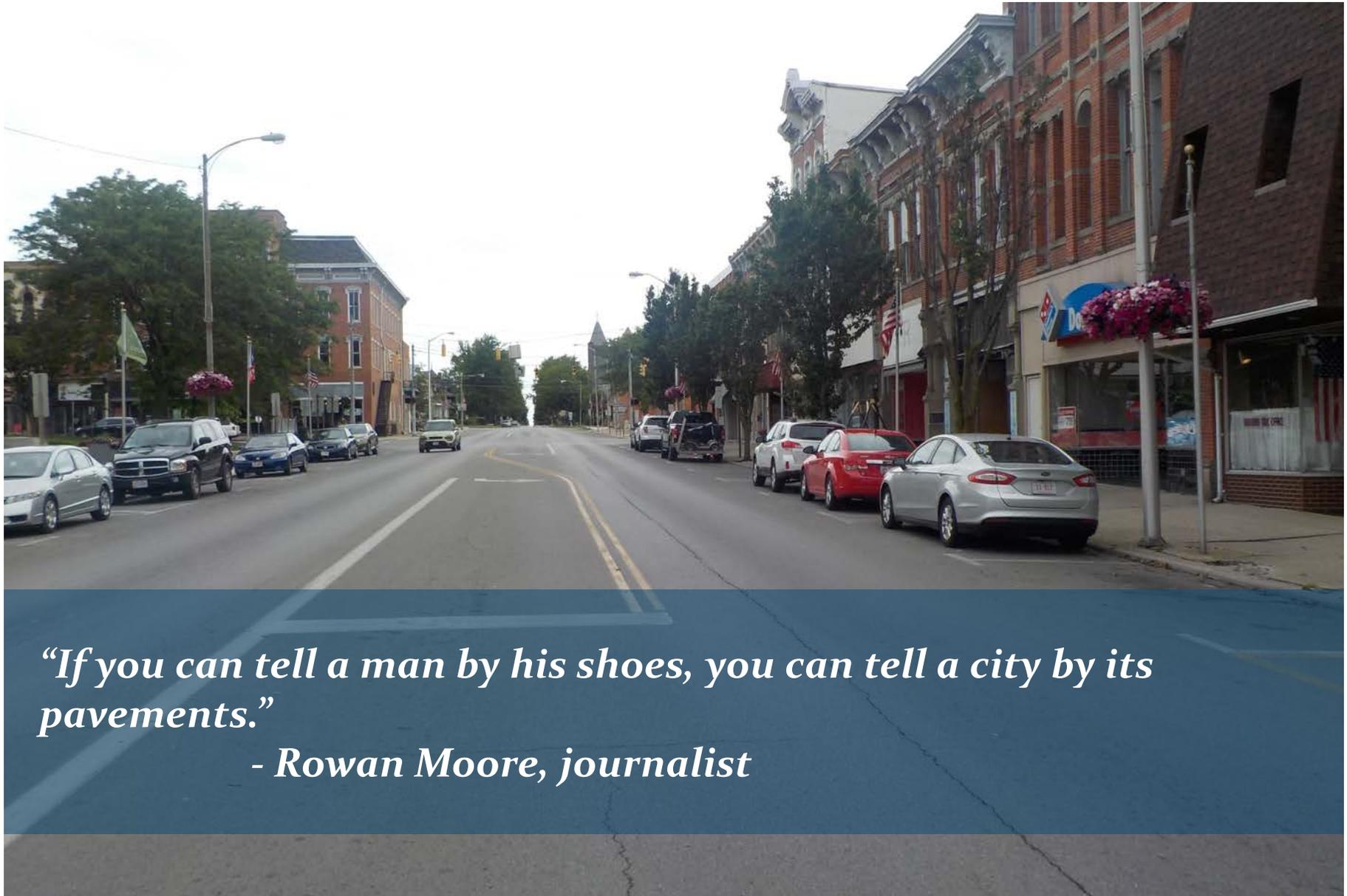
Activity 4

ISSUES AND OPPORTUNITIES

3 stakeholder meetings were held on March 29th, 2017. City and County staff, along with local business and property owners, were among the attendees. Stakeholders provided the project team an idea of the issues and opportunities facing Downtown Kenton. A complete list of issues and opportunities are to the right, with 3 of the most common themes below.

- 1 “Reduce the impact of truck traffic.”
- 2 “Take advantage of the opportunity to improve the safety and comfort levels of the Downtown streets.”
- 3 “Small, incremental projects can significantly improve the quality of life Downtown.”

Issues	Opportunities	
<i>Trees too big and in poor conditions</i>	<i>Ability to shut down Main Street and Columbus for festivals</i>	<i>Utilize alleyways</i>
<i>Lack of a hotel</i>	<i>Promote parades</i>	<i>Add greenspace</i>
<i>Neglected buildings</i>	<i>Signage similar to Bellefontaine</i>	<i>Better lighting</i>
<i>Poor lighting coverage</i>	<i>Add tables and benches</i>	<i>Outdoor music</i>
<i>Inconsistent design of lighting</i>	<i>Make Columbus Street pet and event friendly</i>	<i>Signage</i>
<i>No directional signage</i>	<i>Designate street crossings</i>	<i>Downtown historic tours</i>
<i>Signage in bad condition</i>	<i>Add mid-block crossing</i>	<i>Decorative sidewalks</i>
<i>Trucks need to stick to a designated route</i>	<i>Consider angled parking</i>	<i>Building art</i>
<i>Parking</i>	<i>Synched traffic lights</i>	<i>Bikes and alleyways</i>
<i>Lack of signage for parking</i>	<i>Columbus St. corridor to Kroger</i>	<i>Wifi</i>
<i>Lack of pedestrian safety</i>	<i>Add food trucks</i>	<i>Better signalization</i>
<i>Infrastructure in poor condition</i>	<i>Safe atmosphere</i>	<i>Strong partnerships</i>
<i>Trucks turning on the square</i>	<i>Guide trucks to a faster route</i>	<i>Leverage Table One</i>
<i>Too much truck traffic Downtown</i>	<i>Community based business incubator</i>	<i>Develop the ability to isolate water main breaks</i>



“If you can tell a man by his shoes, you can tell a city by its pavements.”

- Rowan Moore, journalist



FOOD IV
2 BLOCK



03

BEST PRACTICES AND PLAN FRAMEWORK

Walkability
Green Infrastructure
Planning Process Summary
Plan Framework

BEST PRACTICES

OVERVIEW

Kenton isn't the first community to face the challenges of infrastructure in disrepair, coupled with a Downtown that is unsafe and uncomfortable to walk around. As communities around the country have faced these challenges head-on, public and private planners have developed a series of best practices to address these problems. Best practices in walkability and green infrastructure are incorporated throughout this project, and should be adopted in Kenton's future planning efforts.

WALKABILITY

A critical ingredient to the success of Downtowns is walkability. Walkable downtowns encourage residents and employees to shop at area businesses, and mingle with neighbors, all while raising a community's quality of life.

Jeff Speck, a nationally renowned expert on walkability, has developed a set of four principles that communities should follow when thinking about promoting walkable places. The principles on the following pages are adapted from Jeff Speck's work to meet the current needs in Downtown Kenton. Current and future streetscape projects in Downtown Kenton should closely adhere to these principles.



ATTRACTIVE

Why: Well-maintained and attractive streets, sidewalks, and storefronts can encourage people to come Downtown more frequently, and stay longer while they are there.

How: Small investments, from planting appropriate street trees, to maintaining sidewalk infrastructure, to promoting public art, are important investments for Downtown Kenton to make.



SAFE AND COMFORTABLE

Why: Making pedestrians and drivers feel comfortable in the Downtown is critical to encouraging residents and visitors to visit Downtown.

How: Well-marked crosswalks and improved signage can promote the visibility of pedestrians. Added medians, and street trees are all important aspects for making residents feel comfortable walking around.

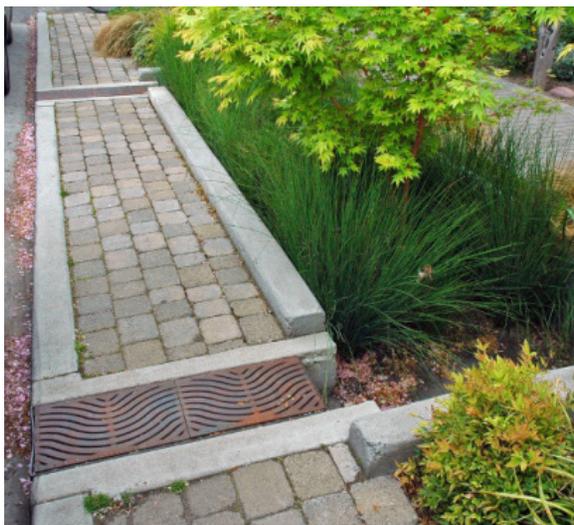




GREEN INFRASTRUCTURE

Why: Green infrastructure will reduce the amount of stormwater entering Kenton's storm water system, helping increase the lifespan of new infrastructure.

How: Green infrastructure can be incorporated into streets, sidewalks, and other paved areas throughout Downtown Kenton. This is an important element for Kenton, given its challenges with excess stormwater entering the system.



ECONOMICALLY VIABLE

Why: Kenton's public streets should help create economic vitality, and not just function as a way to move trucks, automobiles, and pedestrians.

How: promoting walkability while encouraging business and residential development will help leverage public investments with private economic growth.



Walkability Improvements in Newark, OH

Before



Newark, similar to Kenton, had aging water and sewer infrastructure that needed to be replaced.

During



The construction process, which has taken about 5 years, has maintained accessibility to local businesses.

After



An attractive streetscape has helped encourage a more active and comfortable Downtown environment.

The Investment



Public improvements have helped leverage nearly \$80 million in private investment.

BEST PRACTICES

GREEN INFRASTRUCTURE

Implementing green infrastructure projects throughout the Downtown streetscape will provide the City economic and environmental benefits. Green infrastructure can divert stormwater runoff from entering the storm system, an important benefit for the City of Kenton as it seeks to reduce the quantity of stormwater headed to its wastewater treatment plant. Furthermore, green infrastructure can help beautify the street and make Downtown more attractive.

The design concepts in Chapter 4 incorporate rain gardens into final street designs. However, as the City of Kenton continues to revitalize its Downtown and other neighborhoods, different green infrastructure techniques may be appropriate to incorporate into final street design concepts.

Bioswales and Rain Gardens

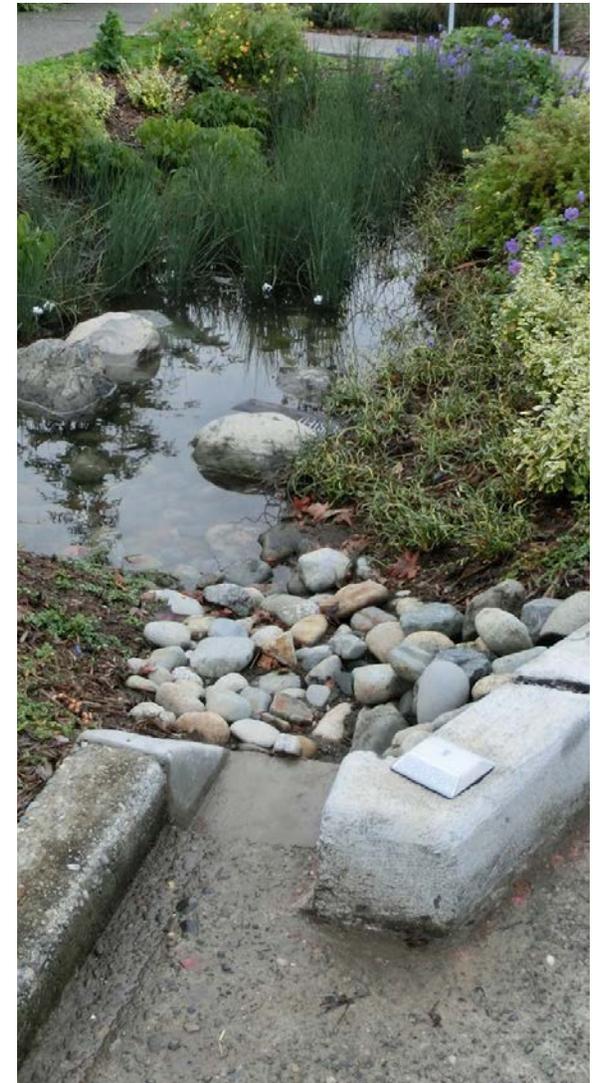
Rainwater that runs off from Kenton’s streets and sidewalks can be diverted into bioswales and rain gardens, which reduces the quantity of water entering the storm system, while providing a visually pleasing green element to the streets.

Applicable Sites within Downtown

- Curb bump-outs
- Medians
- Parking lots and on-street parking
- Plazas or parks adjacent to the street



 Bioswales can serve multiple purposes: collecting and cleaning rainwater while providing an aesthetically pleasing buffer between a parking lot and the sidewalk.



 Basins are typically designed for water to percolate into the soil over a 24-48 hour period, thereby limiting long periods of standing water and mosquito breeding.

Permeable Pavers

As pavement is replaced throughout the Downtown streetscape project; permeable pavers can be used to reduce the quantity of stormwater that runs off directly into the storm system. Permeable pavers allow stormwater to flow through pavers and infiltrate the ground, rather than running off into the stormwater system. With Kenton's heavy truck traffic, it is recommended that the permeable pavement not be installed on roads.

Street Medians

The primary benefit of street medians is to give pedestrians a stopping point when crossing from one side of the street to the other. However, street medians are an ideal location to integrate green infrastructure into a street, while adding an element of visual interest.

Street Trees

Finally, street trees are a critical element to the success of a downtown. A street tree with an appropriate base for the tree roots to grow is critical for the success of street trees.



Applicable Sites within Downtown

- Sidewalks
- Curb-bumpouts
- Medians
- Parking lots
- Plazas adjacent to Downtown



Applicable Sites within Downtown

- Locate on busy streets to narrow the feel of the street while reducing traffic speeds
- Locate in between crosswalks separated by long distances.



Applicable Sites within Downtown

- Locate consistently throughout Downtown to encourage sufficient shade cover and comfortable streets



▲▲
Permeable pavers can provide a nice element of visual interest to the built environment.



▲▲
Street medians can incorporate green infrastructure, but can also provide a city an opportunity to promote its brand.



▲▲
Street trees planted in larger planting beds have a stronger chance of succeeding in an urban environment.

PLANNING PROCESS SUMMARY

WHAT WE LEARNED

A summary of the planning process, incorporating existing conditions analysis, feedback from stakeholders and the public, along with knowledge of best practices, is highlighted below. These findings directly inform the plan principles and final design concepts for the Plan.

Existing Conditions



- **Below Ground:** Aging water utilities mean that the City of Kenton is treating significantly higher quantities of stormwater than necessary.
- **Below Ground:** Existing utilities often cross under buildings and streets, making it difficult to access the system for maintenance issues
- **Above Ground:** The downtown square is at the intersection of 5 state routes, which causes a high quantity of semi-trucks to circulate around the square
- **Above Ground:** Truck traffic makes it uncomfortable for pedestrians to walk around the square and increases the number of conflict points between pedestrians and automobiles.
- **Above Ground:** Downtown has an opportunity to add green infrastructure and amenities to enhance Downtown's appearance.

Stakeholder and Public Meetings



- Small, incremental projects can significantly improve the quality of life Downtown.
- Truck noise and traffic reduces the quality of life Downtown.
- Improving the appearance of Downtown will help strengthen the quality of life.

Best Practices



- Walkable communities are attractive, safe and comfortable, and can help leverage economic development.
- As the impetus for the project is to reduce the quantity of stormwater being treated by the Wastewater Treatment Plant, green infrastructure can be incorporated around the square that will reduce the quantity of stormwater entering the system while simultaneously beautifying the square.

PLAN FRAMEWORK

OVERVIEW

The plan framework outlines the method for incorporating the existing conditions analysis, best practices, and public input into an overall design. These plan inputs revealed a series of larger themes, referred to as the plan principles, below. The plan principles helped to guide the final design concept unveiled in Chapter 4, which will be achieved through the implementation strategy in Chapter 5.





THE KENTON HARDWARE CO.

HOME OF THE GENE AUTRY CAP GUN



04

DESIGN CONCEPTS

Streetscape Framework
Design Features
Final Concept
Gateways & Signage

STREETSCAPE FRAMEWORK

PRIMARY STREETS

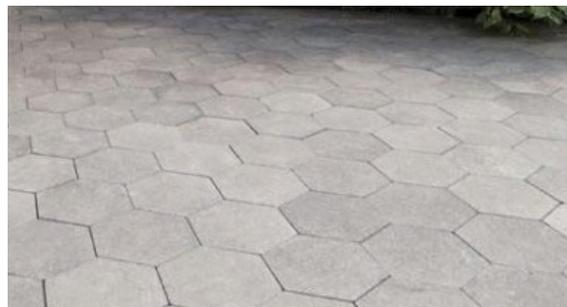
The redesign of Kenton's downtown streets will have 2 distinct treatments. The primary streetscape will be the 4 blocks immediately surrounding the Hardin County Courthouse. Streetscape improvements here will improve pedestrian safety and comfort while mitigating conflicts between truck traffic, automobile traffic and pedestrians. The end result is a safer, functional, and more aesthetically pleasing public realm, which will help catalyze development within Downtown Kenton.



MATERIAL OPTIONS



A OPTION 1: BASALT PAVERS



A OPTION 2: PERMEABLE PAVERS



B CLAY PAVERS

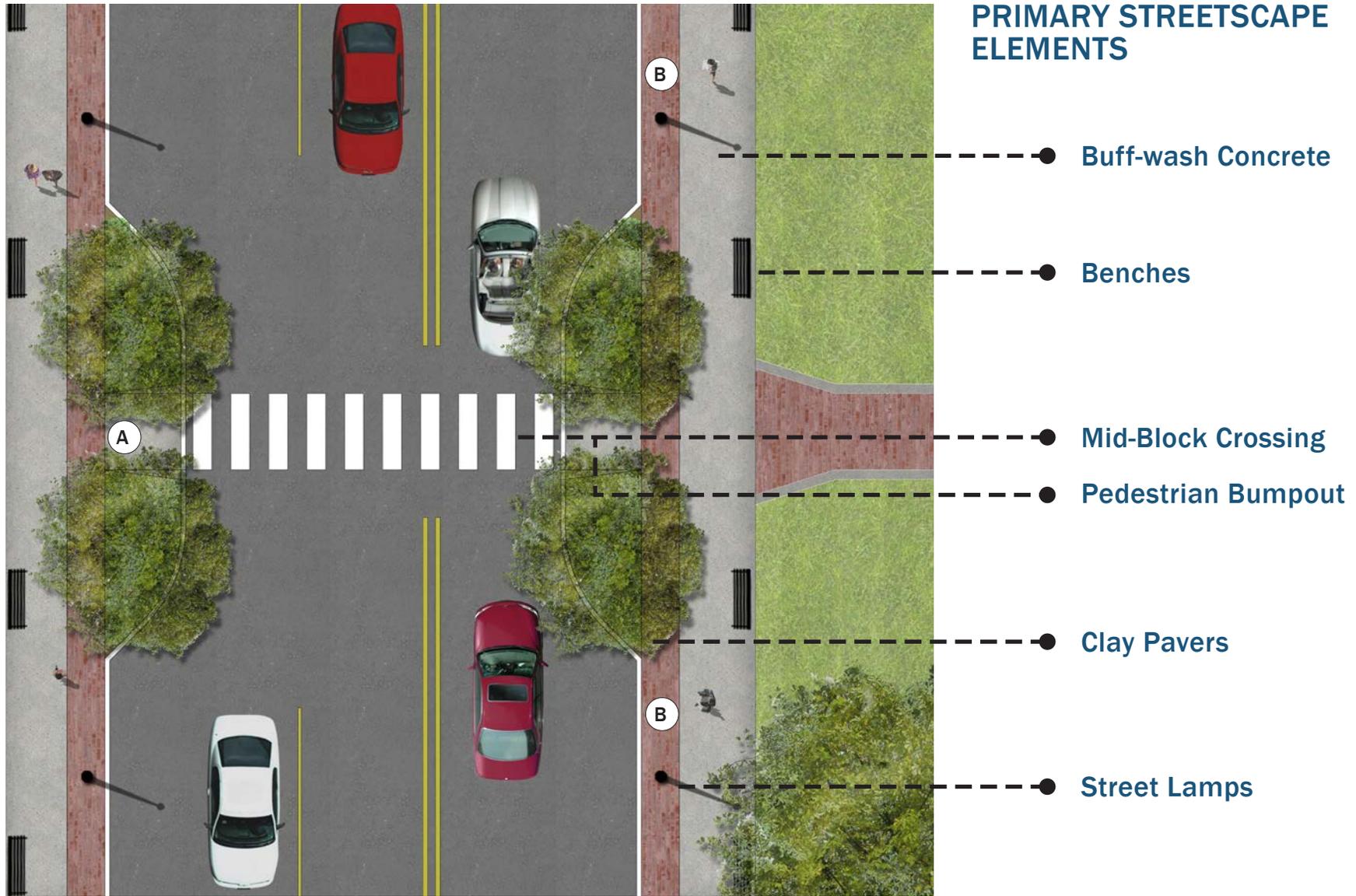


Figure 4-1 Primary Streetscape Section

STREETSCAPE FRAMEWORK

SECONDARY STREETS

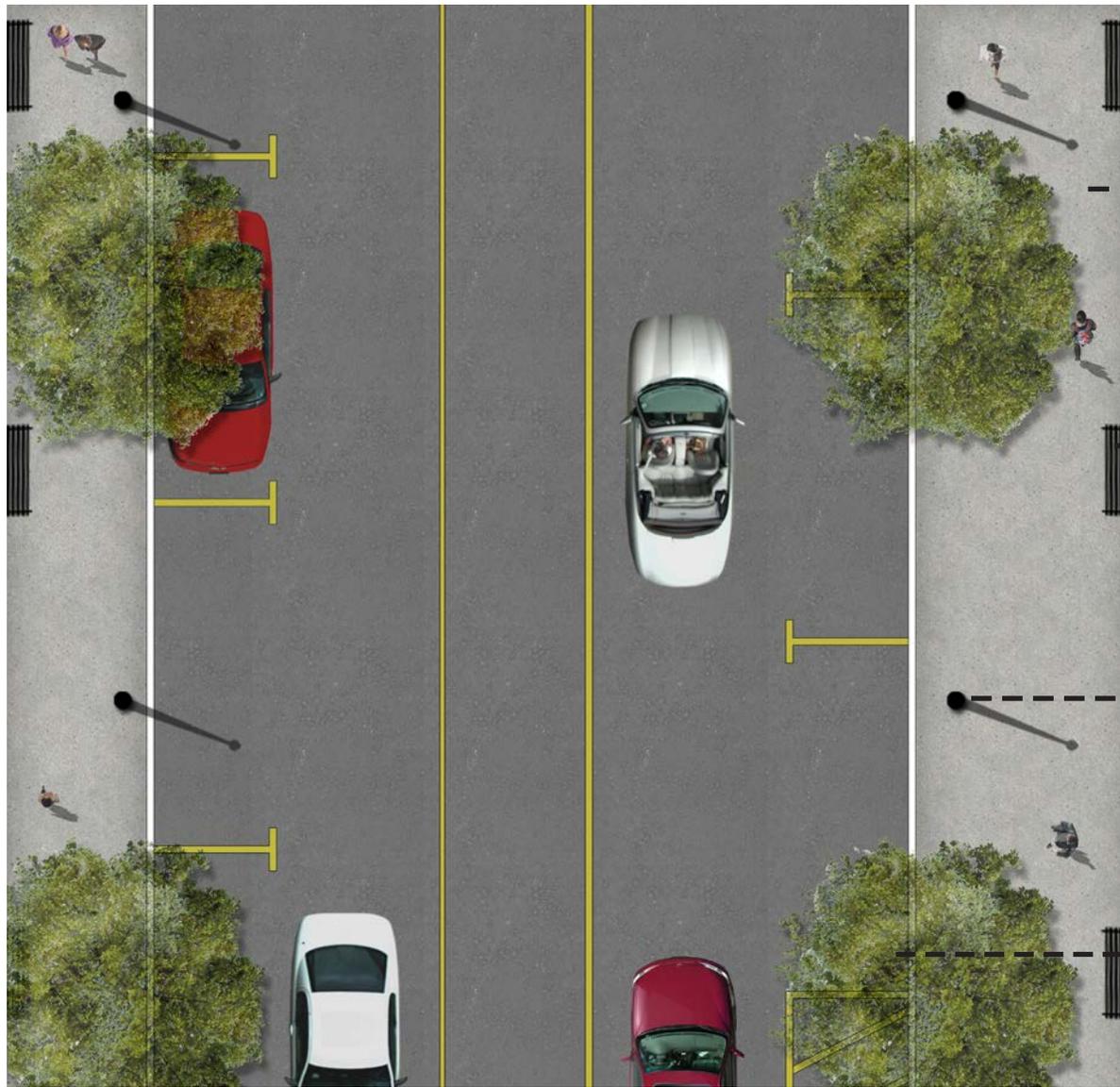
While the primary streets around the Courthouse will transform Downtown, the treatment of secondary streets just off the main square will help extend the revitalization of Downtown off of the main square. The improvement of the secondary streets will focus heavily on the pedestrian realm, with higher-quality street trees, added signage and lighting, and buff-wash concrete making the area a more comfortable place for pedestrians to walk. The secondary streets are an important transition between Downtown Kenton and its surrounding neighborhoods; improving the look and feel of these streets will better connect Downtown to the surrounding neighborhoods.



 Secondary Streetscape

STREETSCAPE AMENITIES





SECONDARY STREETSCAPE ELEMENTS

● Buff-wash Concrete

● Benches

● Street Lamps

● Street Trees

Figure 4-2 Secondary Streetscape Section

DESIGN FEATURES

The final conceptual design of the Kenton Downtown streetscape proposes a number of features designed to advance the plan principles developed in Chapter 3. These elements, described in further detail to the right, specifically advance the following principles below:



Enhance Downtown's Appearance



Mitigate the Impact of Truck Traffic



Improve Pedestrian and Automobile Safety

Mid-block Crossings

- Provide safe pedestrian access across the street
- Help narrow the feel of the street, reducing traffic speeds
- Encourages truck traffic to travel slower



Bump outs

- Increase the visibility of pedestrians to automobiles by allowing them to stand farther out into the street
- Shortens the distance required for pedestrians to cross the street



Rain Gardens

- Diverts stormwater from entering the storm system
- Provides an aesthetically pleasing element around the square



Street Trees

- Increase the comfort level for pedestrians walking down the street
- Appropriate tree species in well-maintained planters increase the likelihood that they will be well-maintained

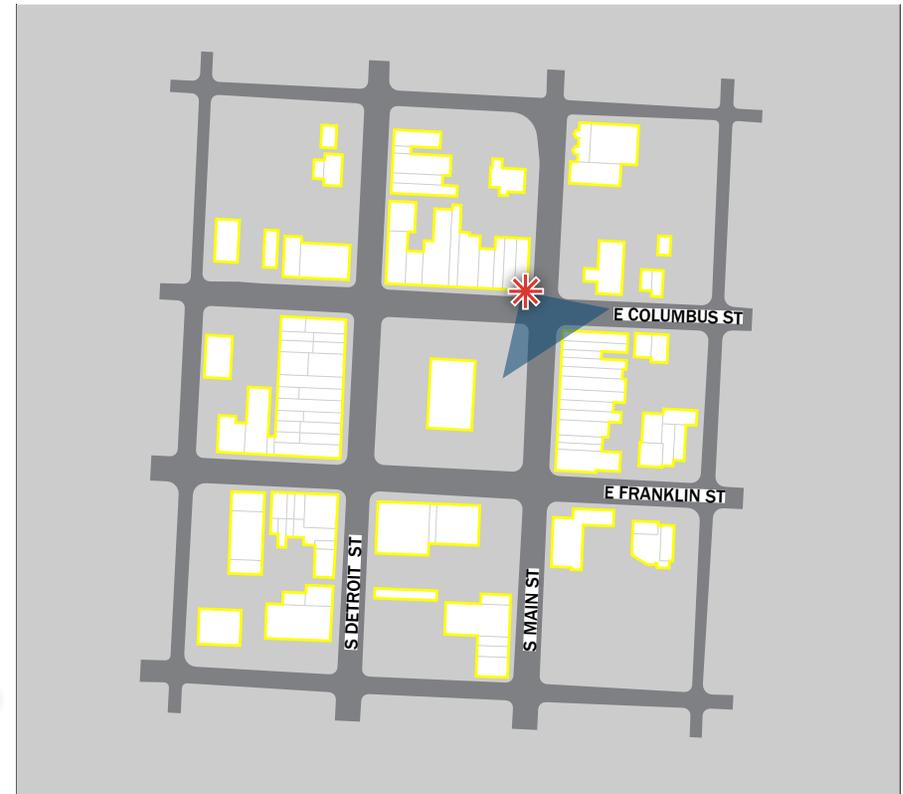




Figure 4-3 Concept Overview

FINAL CONCEPT

Downtown is the heart and soul of the Kenton community; its success is vital to the success of the Kenton community at large. The infrastructure challenges currently facing the City of Kenton gives the City a once-in-a-generation opportunity to transform how the City's downtown looks, functions, and feels. A revitalized public realm Downtown will make it safer, and more comfortable, for City residents and employees to enjoy their community. An improved street network will better connect Downtown Kenton to its immediate surrounding neighborhoods. Finally, improvements to the public realm will be a catalyst for economic development in the City, a signal to local business owners and property owners that Downtown Kenton is a place worth investing in.




Rendering Point
of View

PROPOSED CHARACTER





SIGNAGE AND MONUMENTS

Clear and thoughtful signage across Downtown will guide visitors within the Downtown while providing an opportunity to reinforce the Downtown image and brand. Strategically placed signage and wayfinding signs can help visitors and employees discover new businesses. Furthermore, it can allow more frequent visitors to Downtown the ability to discover new stores and locations they may not have previously encountered. The map to the right highlights recommended locations for signage within Downtown.

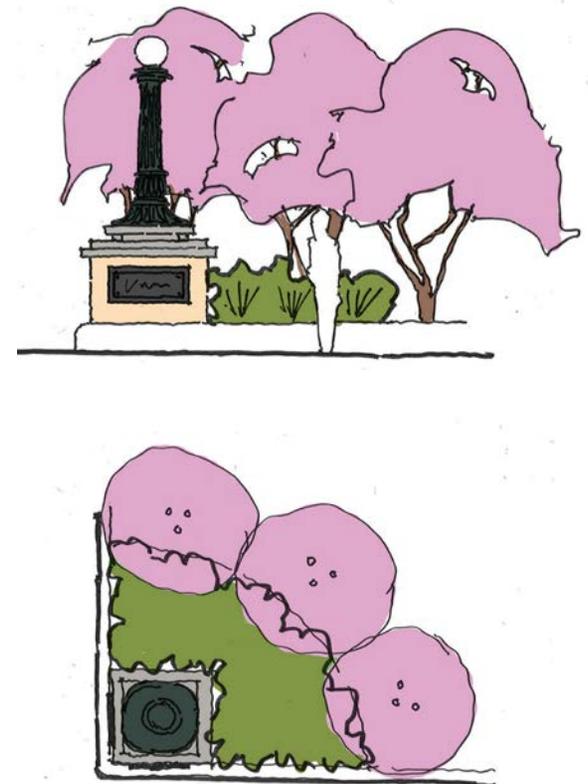
1 GUIDE WITHIN DOWNTOWN

Clear Downtown signage will help promote businesses and attractions to residents and visitors.



2 REINFORCE THE DOWNTOWN BRAND

New gateway monuments placed on the corners of the Courthouse Square gives the City an opportunity to tell a story about its history while communicating the City's image and brand.



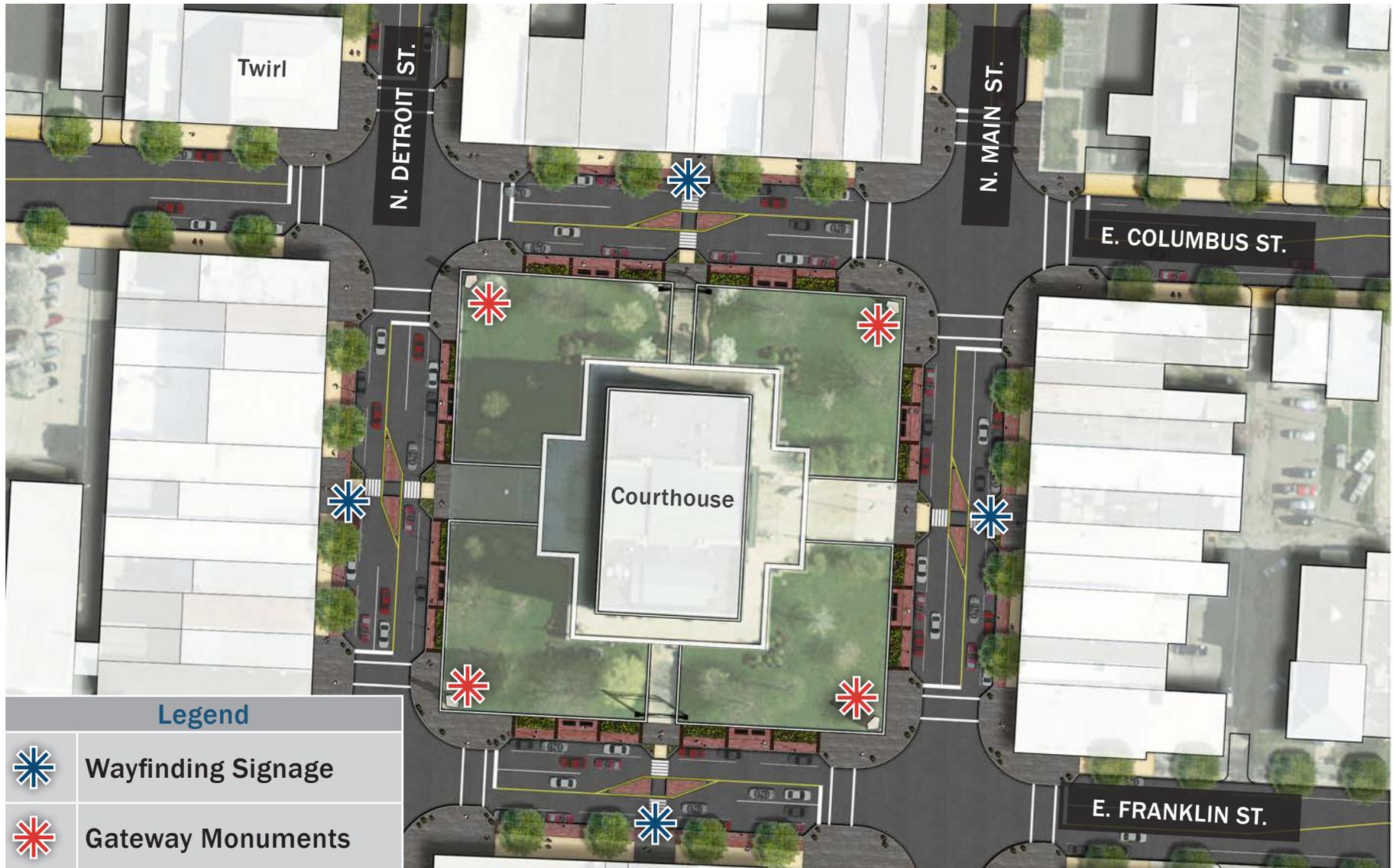


Figure 4-3 Gateways and Signage Map



05

IMPLEMENTATION

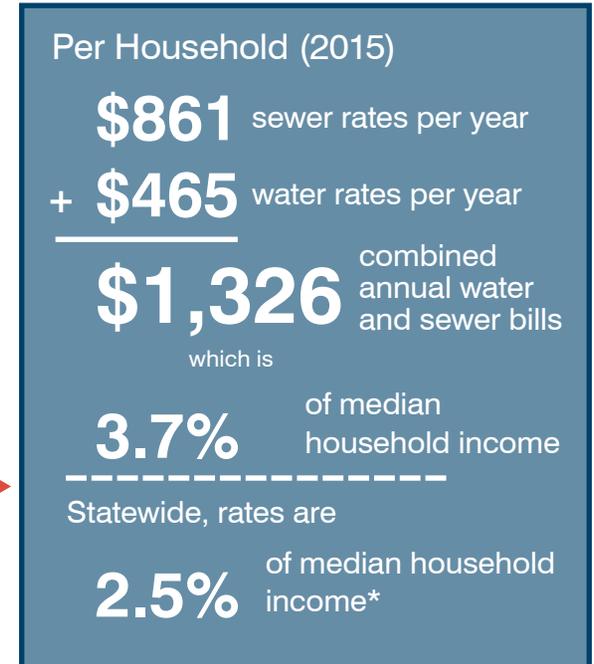
**Water and Sewer
Streets and Sidewalks
Schedule**

FUNDING STRATEGY AND OVERVIEW

The planning process is the first component to developing an implementation strategy to complete the project. The following pages outline a tentative project cost, possible funding sources, both for utility improvements and streets and sidewalks, and a project schedule to identify a potential start date for construction.

After the completion of the Plan, Kenton's next step will be to consult the Small Communities Environmental Infrastructure Group (SCEIG). This group meets quarterly and has a representative from every major funder of water infrastructure projects in Ohio. The funders will provide insight to Kenton as to whether or not their programs' funding streams are appropriate.

BY THE NUMBERS: Avg. Water & Sewer Rates



While Kenton will be able to fund approximately 60% of the project through water and sewer fees, City residents currently pay a high percentage of their median household income compared to the state rate. Loans and grants will be vital for the community to afford this project.

Source: Ohio EPA 2015 Water and Sewer Survey, 2015 ACS
 *2013 Data



PLANNING AND IMPLEMENTATION OVERVIEW



FUNDING OVERVIEW

Figure 5-1 provides a variety of cost estimates for the City of Kenton to complete the Downtown project, based on the quantity of grant funding the City can secure to help pay back the loan. Figure 5-2 provides a detailed cost estimate for each of the below ground and above ground components of the project. Approximately 60% of the cost of the project can be covered through existing water and sewer fees.

Grant Funding	Grant Award (million \$)	Local Share (million \$)	Yearly Payment (2.5% @ 30 yrs)
0	0	20.0	\$948,288
10%	2.0	18.0	\$853,464
20%	4.0	16.0	\$758,628
30%	6.0	14.0	\$663,804
40%	8.0	12.0	\$568,980
50%	10.0	10.0	\$474,144
60%	12.0	8.0	\$379,320
70%	14.0	6.0	\$284,484

Figure 5-1 Estimates of Local Share

Category	Sub-Category	Cost Estimate (million \$)
Utilities	Water	1.4
	Sewer	2.0
	Storm	2.6
Streets & sidewalk	Streets	4
	Sidewalks	2
	Lighting	1
	Signals	1.7
	Parking / Misc	2
Design	Planning	0.1
	Design	2.2
	CA / CM	1
Sub-Total		20.0
Amount payable through water & sewer fees		+/- 60%

Figure 5-2 Project Costs Overview

PROJECT PHASING

The infrastructure repair and replacement project will be constructed in 5 phases (as shown on the map to the right). The first phase will involve investigating the existing outlets south of Downtown to the river. Each of the remaining phases will involve one quadrant of the square at a time. As the project unfolds, it will be important to maintain and ensure access to the existing businesses on the square.

Cost estimates for each of the project phases are shown in Figure 5-4 on the following page.

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5

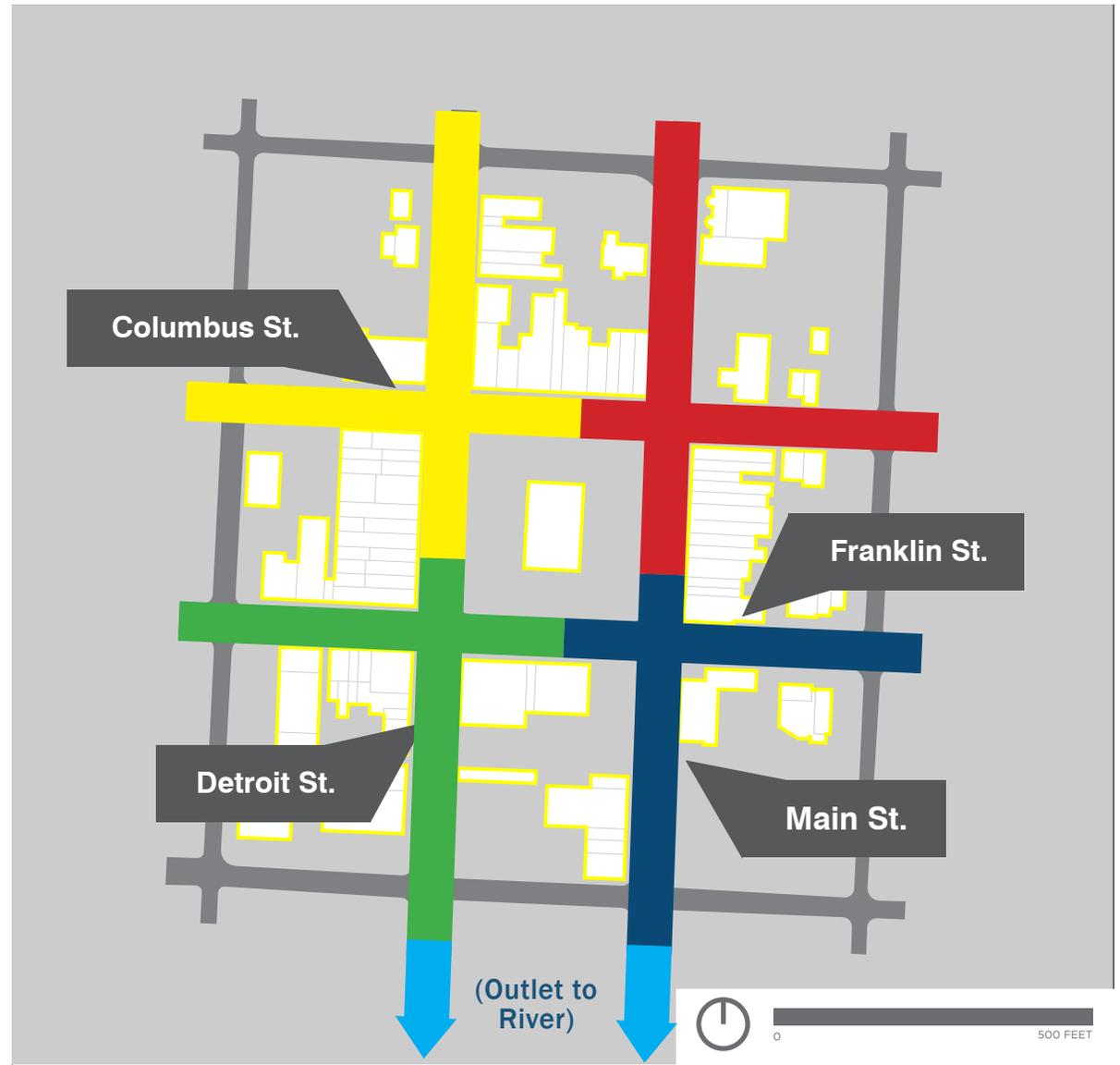


Figure 5-3 Project Phasing

Category	Sub-Category	Fund*	Cost Estimate	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Utilities	Water	601	1.4M	0	308K	398K	304K	390K
	Sewer	602	2.0M	631K	301K	390K	297K	381K
	Storm	201/602	2.6M	821K	392K	506K	386K	495K
Streets & sidewalk	Streets	201/602	4M	0	881K	1.138M	868K	1.113M
	Sidewalks	201	2M	0	441K	569K	434K	556K
	Lighting	201	1M	0	220K	285K	217K	278K
	Signals	201	1.7M	0	374K	484K	369K	473K
	Parking / Misc	201	2M	0	441K	569K	434K	556K
Design	Planning	201	100K	0	22K	28K	22K	28K
	Design	202	2.2M	190K	443K	572K	436K	559K
	CA / CM	601 602	1M	87K	201K	260K	198K	254K
Sub-Total			20.0M	1.729M	4.024M	5.199M	3.965M	5.083M

Figure 5-4 Detailed Project Cost Estimates

* Approximately 60% of costs would be covered through water and sewer fees. Fund refers to which city fund the city payment would come from. This is subject to change based on City of Kenton budgeting practices.

WATER AND SEWER FUNDING OPTIONS

1 SECURE THE LOAN

<i>Loan Options:</i>	Funding Source	Allowable Uses	Loan Term	APR
OWDA The Ohio Water Development Authority	Market Rate Program	Water & Sewer	5-20	3.53%
			21-30	3.64%
	Community Assistance	Water & Sewer	5-20	1.03%
			21-30	1.14%
OEPA The Ohio EPA	WPCLF Water Pollution Control Fund	Sewer	30	2.23%
	WSRLA Water Supply Revolving Loan Account	Water	30	2.23%
USDA United States Department of Agriculture	Water & Waste Water Disposal Loan & Grant Program	Water & Sewer	40	2.75%
OPWC Ohio Public Works Commission	SCIP State Capital Improvement Program	Water & Sewer	30	0%-3%

2 APPLY FOR GRANTS

<i>Options:</i>	Funding Source	Grant Type	Award
OEPA The Ohio EPA	WPCLF Water Pollution Control Fund	Principal Forgiveness	% TBD
	WSRLA Water Supply Revolving Loan Account	Principal Forgiveness	20%-40%
USDA United States Department of Agriculture	Water & Waste Water Disposal Loan & Grant Program	Grant	% TBD
OPWC Ohio Public Works Commission	SCIP State Capital Improvement Program	District 16 *\$6.2M Grant *\$689K Loan	\$0.5M-1.0M
ODSA / CDBG Ohio Development Services Agency	RPIG Residential Public Infrastructure Grant	Grant	\$0.5M
	Community Development Program	Grant	\$0.3M

Figure 5-5 Funding Strategy: Water and Sewer

**Amount awarded to entire district. Full award may be less.*

STREETS AND SIDEWALKS FUNDING OPTIONS

1 SECURE THE LOAN

<i>Loan Options:</i>	Funding Source	Allowable Uses	Loan Term	APR
ODOT Ohio Department of Transportation	SIB State Infrastructure Bank	All Infrastructure	30 yr.	0%-3%
OPWC Ohio Public Works Commission	LTIP Local Transportation Improvement Program	Streets	30yr.	0%-3%

2 APPLY FOR GRANTS

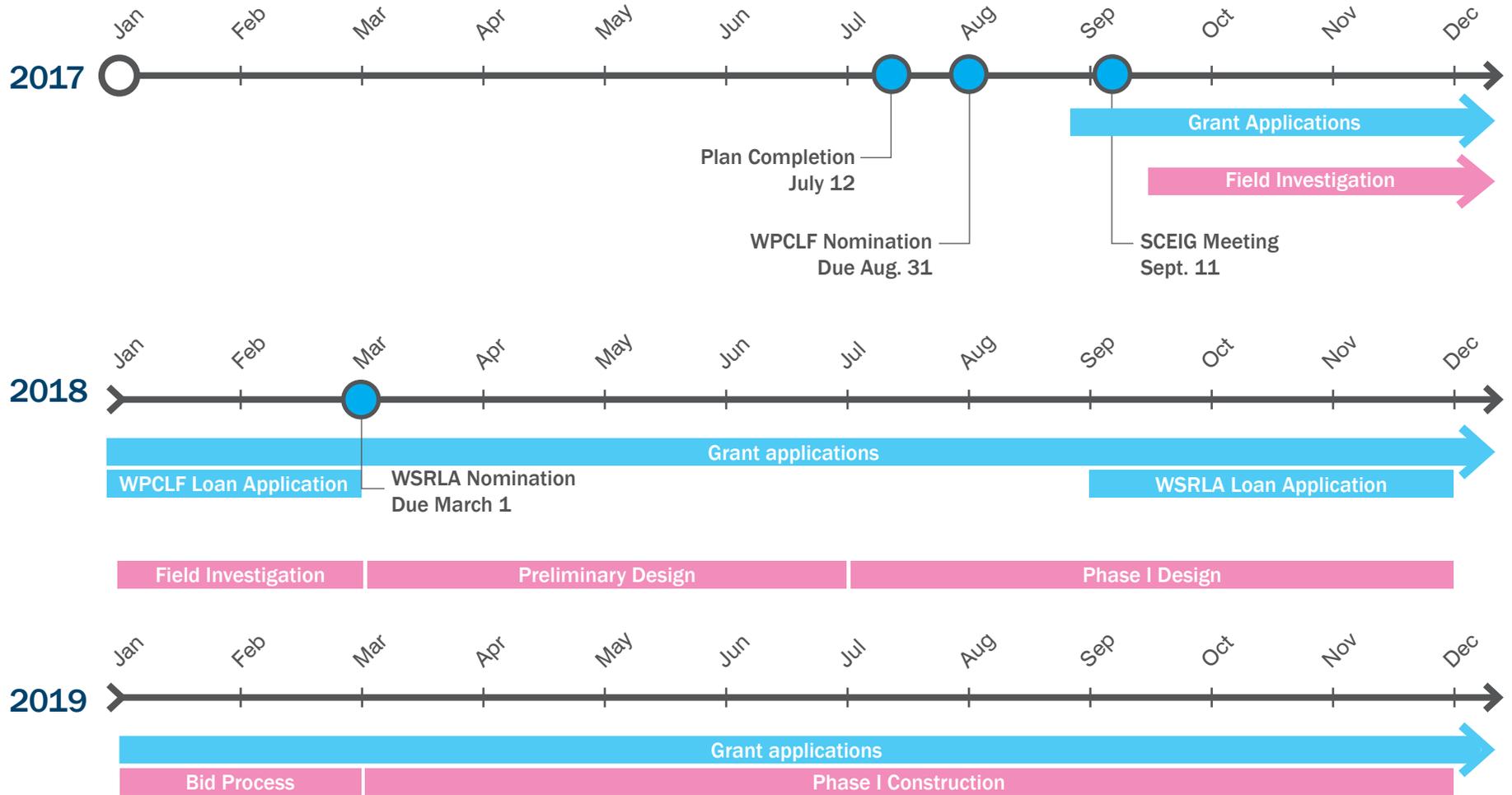
<i>Grant Options:</i>	Funding Source	Grant Type	Award
ODOT Ohio Department of Transportation	Small City	Grant - Construction	80%
	Urban Paving	Grant - Construction	80%
	Safety	Grant - Design & Const.	90%
	TAP Transportation Alternatives program	Grant - Construction	80%
	TID Transportation Improvement District	Grant	\$250k
	Jobs & Commerce	Grant	\$250k
ODOD Ohio Department of Development	Jobs Ohio	Grant	% TBD
OPWC Ohio Public Works Commission	SCIP State Capital Improvement Program	District 16 *\$6.2M Grant *\$689K Loan	\$0.5M-1.0M

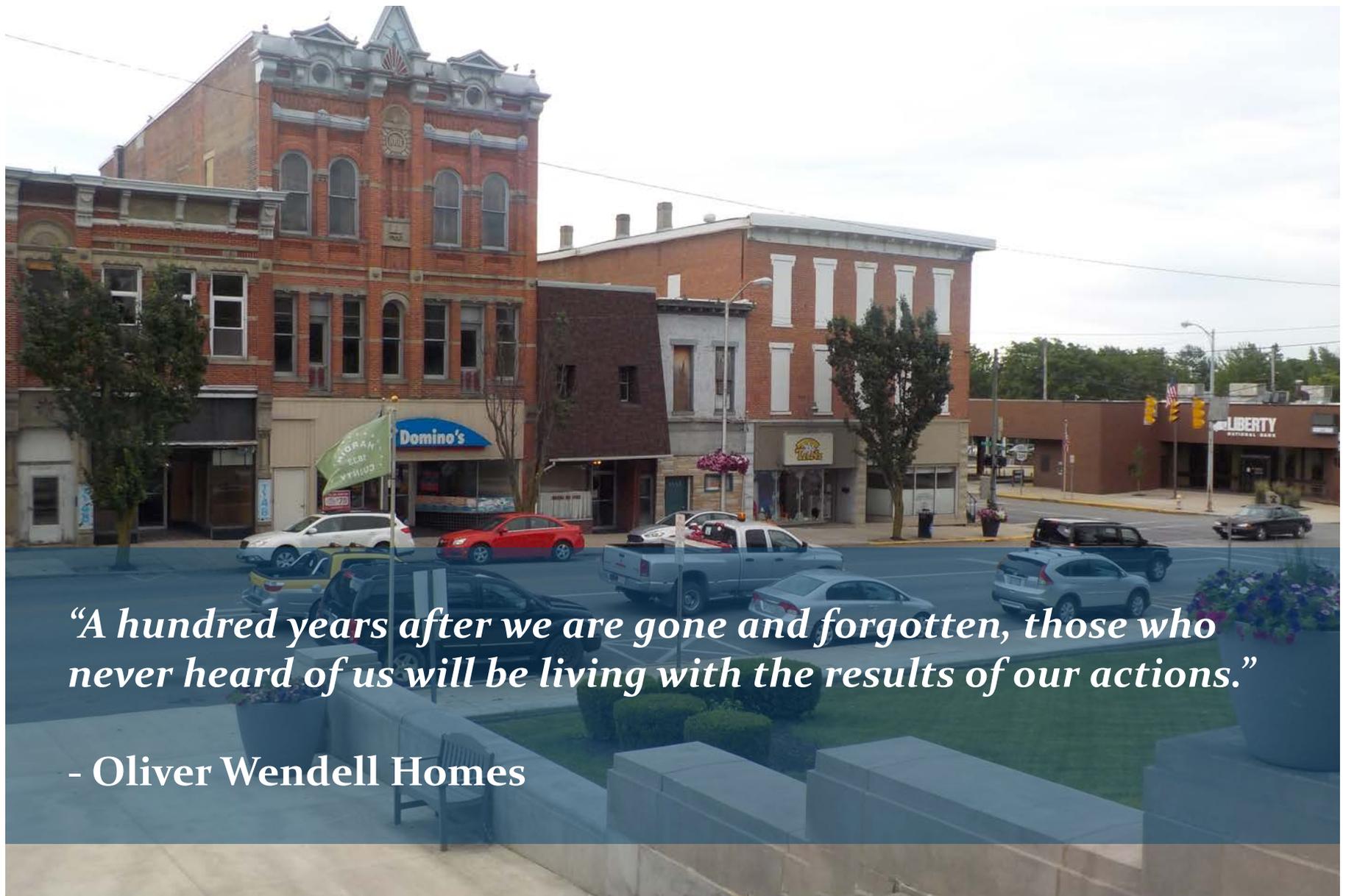
Figure 5-6 Funding Strategy: Streets and Sidewalks

**Amount awarded to entire district. Full award may be less.*

PROJECT TIMELINE

A generalized timeline and strategy for securing project funding, establishing the design process, and construction start is shown below.





“A hundred years after we are gone and forgotten, those who never heard of us will be living with the results of our actions.”

- Oliver Wendell Holmes