



WICHITA: PLACES FOR
PEOPLE
OCTOBER 2018

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WICHITA PUBLIC INVESTMENT STRATEGY

PLACES FOR PEOPLE

Wichita is a city in the midst of significant growth and change. In some instances, this growth has been concentrated in the region's inner core, the Established Central Area (or ECA), while in other instances, it has occurred at the edge of the city and has produced neighborhoods accessible only by automobile travel. Recent planning efforts have found strong resident support for creating more places within Wichita where residents can walk, bicycle, or use mass transit on a daily basis. While walking and bicycling conditions are heavily impacted by private development considerations, the City has the power to improve the walking and bicycling environment by changing existing street design to better accommodate all users. Multimodal street improvements should be focused in neighborhoods that either have existing or future attributes that support walking and bicycling.

To determine where such investments should occur, individuals from the community worked in tandem with City staff and the consultant project team on the Wichita Walkable Development Plan. This plan analyzed the population characteristics, housing diversity, market position, and development conditions in Wichita's neighborhoods and subdivided the ECA into two areas: Areas of Opportunity and Areas of Stability. Street-oriented public investment should be clustered in these general areas with a greater intensity of investment surrounding development nodes (and tapering off with distance). The Walkable Development Plan identified three levels of nodes. From largest to smallest, these are: regional centers; community cores; and neighborhood hubs.

This document first lists the existing and proposed street typologies throughout Wichita, and describes their role and location within the street network (along with the appropriate street design elements by street type). Second, it lists sidewalk zone elements and summarizes where these elements are appropriate, again by street type. The third section presents possible sources of funding and cost estimates to assist policy-makers and the public.

I. STREET TYPES IN WICHITA

WHAT ARE STREET TYPES?

Streets are a pivotal component of every city. They provide access to our residences, businesses, institutions and centers of entertainment and recreation. Wichita's streets help to define our community, how we interact with various land uses, and how we interact with one another. Their design and function is critical to ensuring the creation and success of walkable places for people.

The following set of street types provide a framework for ensuring that the city's streets serve all users. Rather than assigning streets a functional class based solely on vehicular needs, we recommend simplifying, consolidating, and enhancing the street types discussed in the City's street design guidelines. This allows the City to move away from functional class as a determining factor in street design and to maintain the focus on land use and desired character in determining target speeds, the number of lanes, lane widths, curb radii, and other design elements and amenities.

These street types are intended to support Wichita's multimodal policies and development in the neighborhood hubs, community cores, and regional centers recommended for the ECA in this plan.

FUNCTIONAL CLASSIFICATION VS. STREET TYPES

The Street Types described in the following pages supplement the traditional functional classification system of streets and provide the necessary flexibility to support diverse user needs and a range of land use conditions. Traditional functional street classification systems, such as those promoted by the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO), establish a street hierarchy emphasizing automotive mobility. This traditional functional classification system is built almost exclusively around vehicular needs rather than a multimodal perspective of person throughput. Expected and accommodated traffic volumes and travel speeds are often based on assigned classifications of streets into the following categories: arterial; collector; and local street. In contrast, the street types recommended here provide a more nuanced approach to balancing context, character, mobility, and access. These typologies are intended to provide additional guidance during the selection of street design elements, as well as to help inform choices made during the visioning process of a corridor redesign project.

Because land use contexts can change throughout the length of a corridor, street types may change along the corridor as well. For example, a corridor may be categorized primarily as a Residential Connector; however a commercial node along it may result in a segment being classified as a Mixed Use Main Street. Street design elements will change accordingly, reflecting the designated street type and its economic and mobility objectives.

STREET TYPOLOGIES

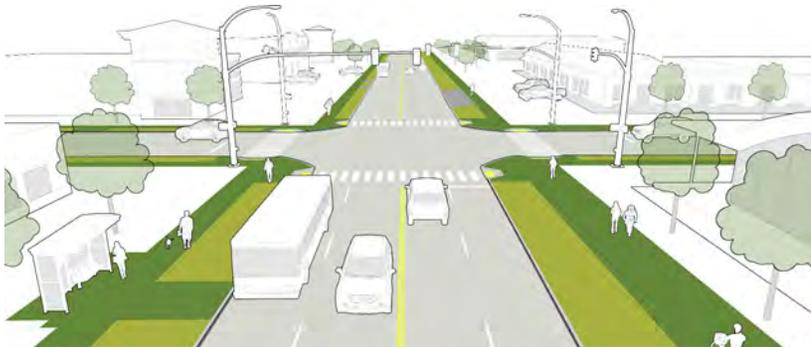


Features

- Wide sidewalks and high pedestrian volumes
- On-street parking
- Street trees and street furniture
- Mix of land uses
- Medium to high land use densities
- Reduced vehicular speeds

MIXED USE MAIN STREETS

Mixed Use Main Streets are often located in the core of the city, with moderate to high densities and access to a mix of businesses. They have the highest volumes of vehicles and transit service, as well as moderate to high volumes of pedestrian activity. These streets often have on-street parking, street trees, and may include street furniture such as benches or bicycle parking racks. These streets may host a variety of uses such as farmers' markets, street fairs, and community gatherings. Pedestrian infrastructure such as wide sidewalks, curb ramps, and curb extensions are common. Where bicyclists cannot be accommodated, facilities are provided on adjacent streets to create a "complete corridor."

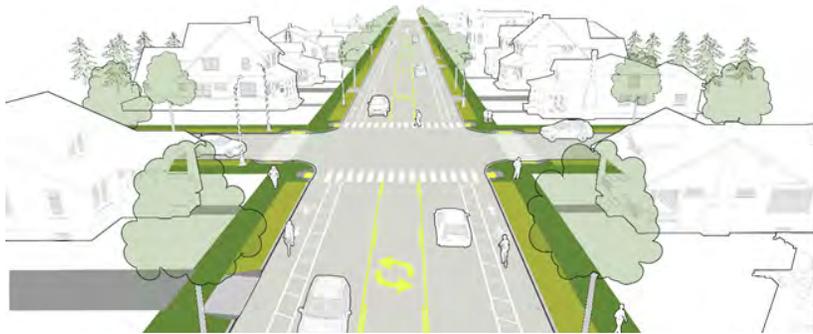


Features

- Some buildings set back from street
- Serves larger big box retail, institutional, and office uses
- Low or moderate pedestrian and bicycle activity (lacks accommodation)
- Access management with the use of landscaped median or two-way left turn lane
- Higher volumes of motor vehicle traffic
- Heavy transit

MIXED USE CONNECTORS

These streets serve mostly commercial or institutional areas with a mix of densities. Buildings may be set back farther from the street and have a combination of surface lots and on-street parking. These streets are often multi-lane and are important for regional connections. Pedestrian and bicycling activity is typically lighter than on Mixed Use Main Streets. Nonetheless, pedestrians and bicyclists require access to adjacent land uses and transit. Adjacent land uses function as service and job destinations, with buildings located on separate parcels. Land uses include offices, restaurants, and a range of retail and commercial uses. Adjacent land uses may also include multifamily housing in low- to mid-rise apartment buildings.



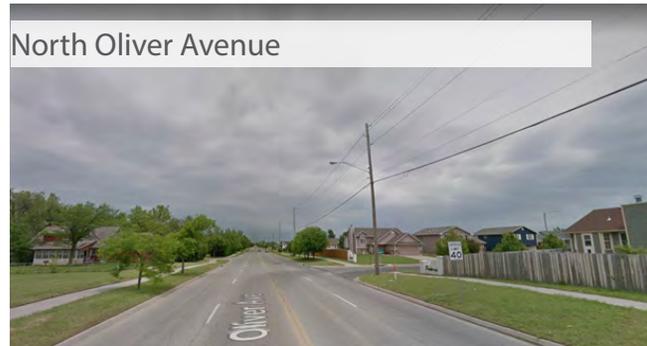
RESIDENTIAL CONNECTOR STREETS

Residential Connector Streets connect multiple neighborhoods and primarily serve residential land uses, though some businesses may be integrated into the street fabric. These streets have longer blocks and often serve faster-moving traffic. Residential Connectors are currently dominated by motor vehicles, but also have a strong need to accommodate and encourage pedestrian and bicycle activity. These streets often have bus stops and are key routes in the transit network. Street design for Residential Connectors should focus on reducing speeds, installing or improving crossings and tree coverage, and providing sidewalks and potentially bikeways.



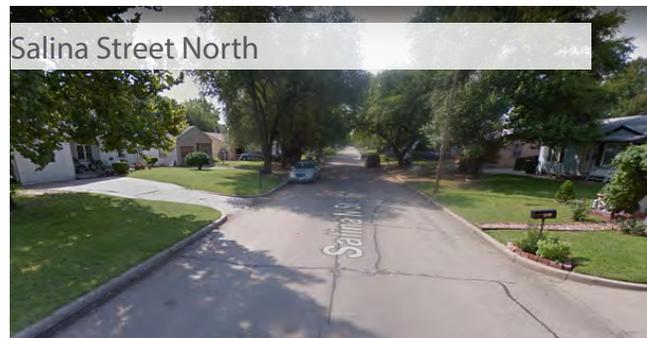
RESIDENTIAL NEIGHBORHOOD STREETS

Residential Neighborhood Streets provide immediate access to residential town houses, duplexes, and single-family homes. They are used primarily for local trips and are characterized by lower volumes of vehicular traffic. These streets are not more than a single lane in each direction and not intended for through-traffic. Design for Residential Neighborhood Streets should focus on encouraging slow speeds, pedestrian safety, healthy tree coverage, and well-defined routes to nearby parks, transit, and schools.



Features

- Primarily residential land uses, with occasional businesses
- Longer block lengths
- Serves heavier vehicular traffic, particularly during peak hours
- Often serves transit therefore pedestrian safety is a priority
- Continuous sidewalks and bicycle facilities
- Some bus routes



Features

- Provide immediate access to single-family and multi-family residences
- Slow motor vehicle speeds
- Focus on pedestrian and bicycle safety
- On-street parking

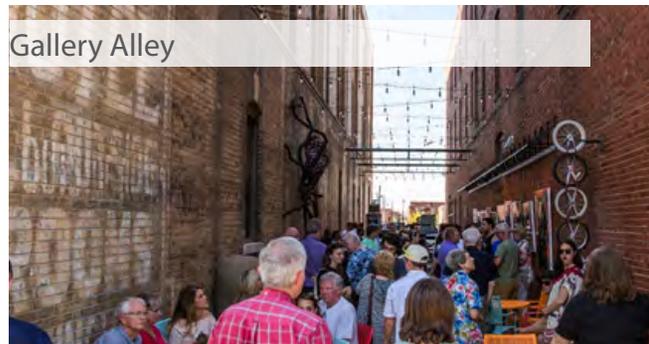
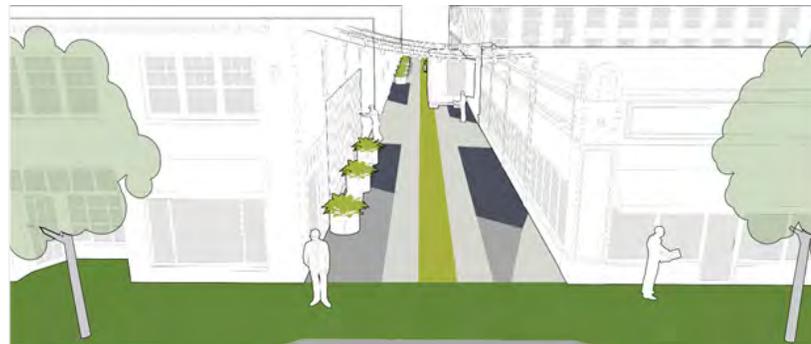


Features

- May be curb-less on one or both sides of the street
- Medium to high land use density
- Paving material is typically brick
- Some streets have center drain

PLAZA STREETS

Plaza Streets build on the distinctive Old Town street type. Plaza Streets host a diverse mix of medium- to high-density uses, which includes retail, restaurants, arts and entertainment, and some residential uses. The density of activity relative to the narrowness of Old Town streets provides an attractive environment for pedestrians, bicyclists and transit users while also accommodating motorists and freight delivery trucks. These streets are characterized by their extensive pedestrian zones that accommodate significant volumes of foot traffic and foster social interaction. Elements including street furniture, public art, vegetation, and sidewalk cafés help define the boulevard zone. Continuous building facades sited at or near the edge of the property line provide visual interest through architectural elements such as doorway details, awnings, and window displays.



Features

- May be public or private
- Primary purpose is for access and service
- May occur in residential or commercial areas
- Space shared amongst pedestrians, motor vehicles, bicyclists
- Dedicated space for utilities and receptacles

ACTIVE ALLEYS

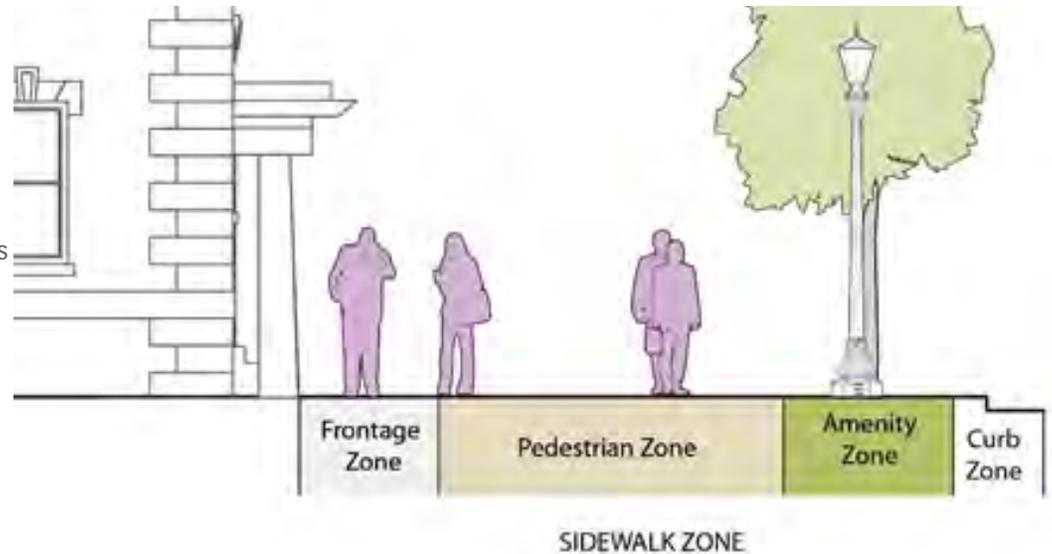
Active Alleys have features that are not commonly found in traditional alleys. Active Alleys are typically located between commercial and mixed use parcels, and may feature public seating and street furniture, permanent or temporary art installations, patio and dining space, music and performance areas, and overhead lighting. Space may be shared amongst pedestrians, motor vehicles, and bicyclists, or it may be delineated between uses. Active Alleys provide unique public space opportunities that complement and enhance the streets they serve and connect. Building facades can be enhanced through the installation of artistic murals, lighting, and other aesthetic treatments such as planters near walls and entryways.

II. SIDEWALK ZONE ELEMENTS

WHAT ARE SIDEWALK ZONE ELEMENTS?

Sidewalk zone elements enhance the public space and make streets more inviting places for walking and socialization. Elements include street trees and landscaping, street furnishings (benches, tables and chairs), bus stop features, lighting, bicycle parking, wayfinding, and public art. While these features are described separately below, they are commonly integrated with one another (for example, bicycle parking is often installed at bus stops).

Sidewalk zone elements are typically located in the amenity zone (situated between the curb zone and the pedestrian zone), but may also be located in the frontage zone (situated between the sidewalk zone and building frontages). The type of amenities appropriate for each street varies based on their street typology.



STREET TREES

Street trees enhance the ease of walking by shading pedestrians from hot sun, breaking strong winds, adding an intermediate sense of scale between a person and large buildings or broad open spaces, and making streets aesthetically appealing through their color, shape, and texture. Trees also provide environmental benefits by mitigating the urban heat island effect, capturing rainwater runoff, and sequestering carbon dioxide. Trees also contribute to natural diversity and provide habitat for a range of species.

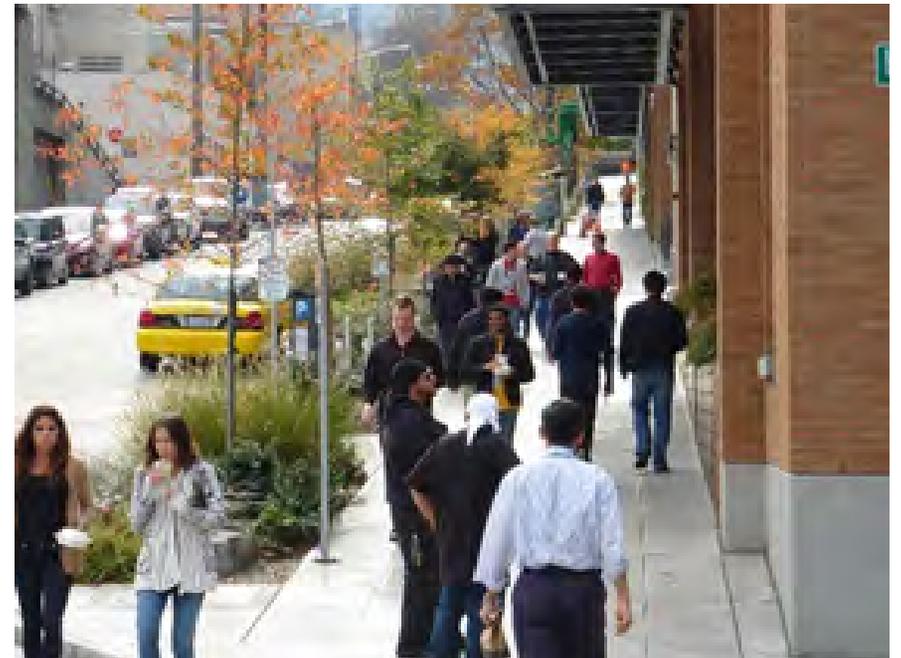


LANDSCAPING

Landscaping creates visual interest along the street, softens the urban landscape, and helps manage stormwater drainage and runoff. Landscaping also creates a buffer between the pedestrian zone and the travel zone, providing a more inviting and comfortable environment for pedestrians.

STREET FURNISHINGS

Street furnishing includes benches, seat walls, seating platforms, tables, and chairs. Furnishings contribute to the comfort and inviting aesthetic of streetscapes. Seating helps define space and provides places for rest, gathering, and conversation. Street furnishing also includes café seating, which can define a block and activate the sidewalk with vibrant activity. More guidance on the manufacturers and models of recommended street furnishing can be found in the *Downtown Wichita Streetscape Guidelines*.



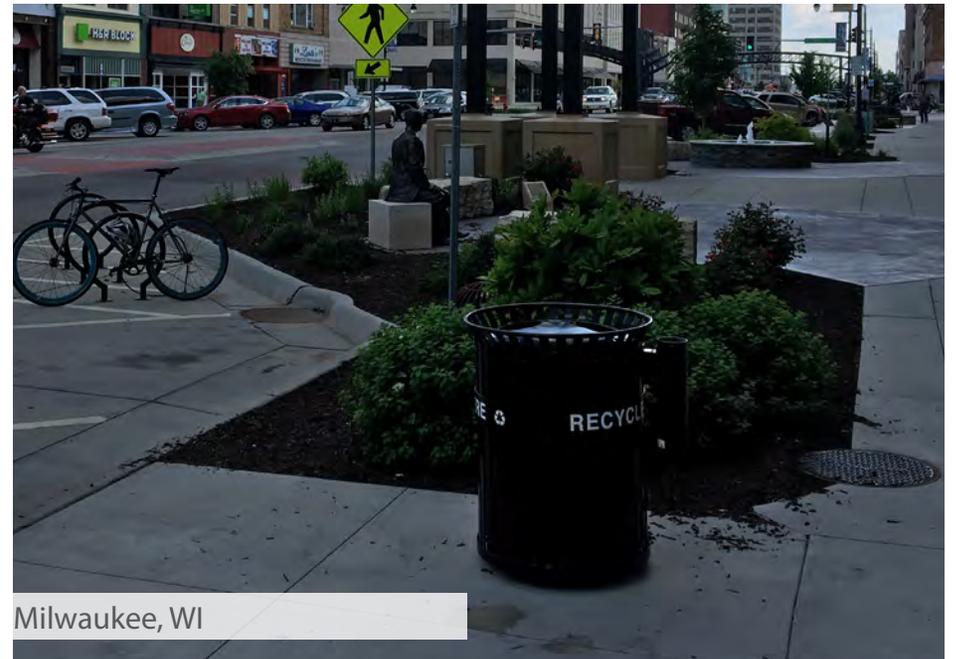


BUS STOP FEATURES

Bus stop features include benches and shelters; benches provide resting areas while shelters increase both the comfort and visibility of bus stops by providing shelter from sun, rain and other elements. Shelters typically provide additional seating and lighting at a bus stop, adding comfort and convenience for riders. To improve comfort, safety, and aesthetic appeal, elements such as trash receptacles, furnishings, trees and plantings, bicycle parking, and lighting are often included in bus stops. Bus shelters can even be used as small parks which provide gathering spaces for bus passengers and non-passengers alike.

TRASH RECEPTACLES

Trash and recycling receptacles should be placed in accessible locations and at key destinations and gathering areas. The function of the receptacles must be simple from the user's standpoint, and should be easily serviced, lockable, and fire resistant (metal liners are preferred when available). The materials for the receptacles should match and align with the other public realm elements. In some locations, providing ash receptacles for cigarette butts will greatly enhance the streetscape by reducing the amount of cigarette waste that ends up in planting beds. More guidance on the manufacturers and models recommended can be found in the *Downtown Wichita Streetscape Guidelines*.



Milwaukee, WI



LIGHTING

Lighting is essential to enhancing a vibrant street life and the perception of security. Design of light levels should be based upon land use activity level (i.e. higher light levels in retail increases shopping, lower light levels in residential areas). Lighting can have many variations, including color, lumens, luminaries, globe style, and the ability to incorporate artwork, banners, and hanging baskets. The location and number of lights varies based on street typology. More guidance on the recommended manufacturers and models can be found in the *Downtown Wichita Streetscape Guidelines*.

BICYCLE PARKING

Bike parking provides safe locations to secure bicycles as people explore, shop, or dine in the ECA. Bike racks may be standalone items bolted into the surface of the sidewalk or roadway or they may be integrated with other items in the street such as parking meter poles, street light poles, planters, or other items. The alignment of bike racks should minimize the parked bicycles impact on the use of the sidewalk or curbside. Bike racks are frequently grouped in small clusters to better meet the needs of multiple users. More guidance on the manufacturers and models recommended can be found in the *Downtown Wichita Streetscape Guidelines*.



WAYFINDING

Trash and recycling receptacles should be placed in accessible locations and at key destinations and gathering areas. The function of the receptacles must be simple from the user's standpoint, and should be easily serviced, lockable, and fire resistant (metal liners are preferred when available). The materials for the receptacles should match and align with the other public realm elements. In some locations, providing ash receptacles for cigarette butts will greatly enhance the streetscape by reducing the amount of cigarette waste that ends up in planting beds, etc. More guidance on the manufacturers and models recommended can be found in the *Downtown Wichita Streetscape Guidelines*.



PUBLIC ART

Public art enhances the streetscape by providing visually stimulating elements that create a more interesting and attractive environment. Public art can be categorized into four types of site-based art: gateways; interactive art; landmarks/focal points; and wayfinding. Consideration of design, placement, and number of installations will be based on street typology. A growing number of communities dedicate a percentage of expenditures for public projects to art; however, this is not currently the case in Wichita. The Wichita Design Council, a city-sponsored group composed of architects, landscape architects, engineers, artists, designers, and the public, regularly meet to recommend partnerships and strategies for incorporating art into public projects. This group also recommends desired locations for art and coordinates with local artists to ensure high-quality design.

III. EXPENDITURES

COST INPUTS AND ASSUMPTIONS

While reconfiguring existing streets in the ECA is crucial in giving residents more transportation options and creating walkable places, in a time of limited public funding, it is important to analyze costs so that policymakers, engineers, planners, and the public can determine the order and magnitude of investment. First, different infrastructure components are listed for each street type. Then, assumptions and inputs from the Federal Highway Administration (FHWA)-produced document, *Costs for Pedestrian and Bicyclist Infrastructure Improvements (2013)* were used to estimate the costs of building each street type included in the *Walkable Development Book*. Costs were inflated to 2018 dollars using a 4% annual inflation rate. When estimating costs, it should be noted that estimates are just that: estimates. Costs for individual projects will vary substantially based on project scope, existing conditions, and the unique needs and desires of the community.

Most of the infrastructure improvements involve removing or narrowing motor vehicle lanes, moving curb lines, striping, or sign installation, and so are less expensive. Street reconstruction is the most costly of the proposed infrastructure investments, as it involves a complete rebuilding of an existing street; this generally includes removal and then reconstruction of the road surface. Full street reconstruction only applies to creating new Plaza Streets, similar to the reconstructed streets in Old Town. Therefore, estimated construction costs for these street types are the highest. Routine Bicycle Accommodation, which only involves painting bicycle lanes and installing signage, has the lowest cost and applies to many street types. Refer to the *Wichita Bicycle Master Plan* for planned bikeway locations. All of these estimates do not include maintenance expenditures. While many of the following elements do not require extra maintenance, others do (such as trees, certain types of bicycle facilities, and bus shelters). Such costs are drawn from cities' general funds.

The charts in this section show the assumptions for preparing different infrastructure investment estimates based upon street types.

PEDESTRIAN AND BICYCLE ACCOMMODATIONS

STREET TYPES	PEDESTRIAN AND BICYCLE ACCOMMODATIONS				
	ADD 6' SIDEWALKS	ADJUST CURB LINES, ADD 10' SIDEWALKS, AND ADD 5' PAVERS IN AMENITY ZONE	ADJUST CURB LINES, ADD 8' SIDEWALKS, AND ADD 8' AMENITY ZONES	STREET RECONSTRUCTION	ROUTINE ACCOMMODATION
MIXED USE MAIN STREET		X			X
MIXED USE CONNECTOR STREET			X		X
RESIDENTIAL CONNECTOR STREET			X		X
RESIDENTIAL NEIGHBORHOOD STREET	X				X
PLAZA STREET				X	
ACTIVE ALLEY					

TRAFFIC CALMING

STREET TYPES		CURB EXTENSIONS	DIVERTERS	MEDIANS AND REFUGE ISLANDS	TRAFFIC CIRCLE (SMALL)	NARROW SHARED STREET
	MIXED USE MAIN STREET	X				
	MIXED USE CONNECTOR	X		X		
	RESIDENTIAL CONNECTOR STREET	X		X		
	RESIDENTIAL NEIGHBORHOOD STREET	X	X		X	
	PLAZA STREET					X
	ACTIVE ALLEY					X

SIDEWALK ZONE ELEMENTS

STREET TYPES		TREES	BENCH/STREET FURNISHINGS	BUS SHELTER	TRASH BINS	LIGHTING	BICYCLE PARKING
	MIXED USE MAIN STREET	X	X	X	X	X	X
	MIXED USE CONNECTOR	X	X	X	X	X	X
	RESIDENTIAL CONNECTOR STREET	X	X		X	X	
	RESIDENTIAL NEIGHBORHOOD STREET	X				X	
	PLAZA STREET	X	X		X	X	X
	ACTIVE ALLEY		X		X	X	X

The following chart utilizes the costs of each infrastructure improvement, along with the assumptions used for arriving at estimated costs. Many of the figures were calculated by mile before being converted to cost per block (assuming a block length of 660 feet).

STREET DESIGN ELEMENTS INPUTS

INFRASTRUCTURAL IMPROVEMENTS

ITEM	UNIT	QUANTITY	ASSUMPTIONS
STREET RECONSTRUCTION	LF ¹	5,280	THE BASIS FOR THIS ESTIMATE IS A SIMILAR PROJECT THAT INVOLVED THE COMPLETE RECONSTRUCTION OF A 55' WIDE ROADWAY CORRIDOR.
CURB EXTENSIONS	EA ²	16	ASSUME 4 INTERSECTIONS/MILE, ALL QUADRANTS
DIVERTERS	EA	2	ASSUME 2 INTERSECTIONS/MILE
SPEED HUMPS	EA	18	ASSUME 300' SPACING
TRAFFIC CIRCLE	EA	2	ASSUME 2 INTERSECTIONS/MILE
MEDIANS AND REFUGE ISLANDS	SF ³	31,680	ASSUME 75% OF LENGTH IN MEDIAN, AVERAGE 8' WIDE
6' CONCRETE SIDEWALK	LF	10,560	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
ADJUST CURB LINES	LF	10,560	ASSUME OUTSIDE EDGES, ENTIRE LENGTH
10' CONCRETE SIDEWALK	LF	10,560	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
STAMPED BOULEVARD WALK	LF	10,560	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
8' CONCRETE SIDEWALK	LF	10,560	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
TREES	EA	352	ASSUME 30' SPACING, BOTH SIDES OF ROAD, ENTIRE LENGTH
BENCH	EA	70	ASSUME 150' SPACING, BOTH SIDES
BUS SHELTER	EA	18	ASSUME 600' SPACING, BOTH SIDES
TRASH BINS	EA	70	ASSUME 150' SPACING, BOTH SIDES
LIGHTING	EA	70	ASSUME 150' SPACING, BOTH SIDES
BICYCLE PARKING	EA	70	ASSUME 150' SPACING, BOTH SIDES
LANDSCAPING/TURF ESTABLISHMENT (5%) ⁵			
SIGNING, MARKINGS, AND WAYFINDING (5%) ⁶			
DRAINAGE (10%)			

1. LF=Linear Foot, 2. EA=Each, 3. SF=Square Feet, 4. MI=Mile (5,280 ft.), 5. Landscaping/turf establishment, signing/markings, and drainage are derived from taking a percentage of the total expenditure, 6. Public Art is not included in this category because cost estimates are highly variable.

The table below summarizes the estimated range of costs that would correspond to reconfiguring streets. Cost estimates only include construction costs and not planning, engineering, property acquisition, or maintenance costs. A list of infrastructure components and their costs by each street type is found in the Appendix.

ESTIMATED COST OF CREATING DIFFERENT STREET TYPES PER BLOCK (660 FT.)

	LOW ESTIMATE	HIGH ESTIMATE
MIXED USE MAIN STREET	\$ 347,500	\$ 578,750
MIXED USE CONNECTOR	\$ 295,000	\$ 491,500
RESIDENTIAL CONNECTOR STREET	\$ 261,250	\$ 435,000
RESIDENTIAL NEIGHBORHOOD STREET	\$ 173,750	\$ 288,750
PLAZA STREET	\$ 1,703,750	\$ 2,840,000
ACTIVE ALLEY	\$ 72,500	\$ 120,000
ROUTINE BICYCLE ACCOMMODATION	\$3,750	\$5,000

STREET TYPES

IV. FUNDING SOURCES

FUNDING SOURCES

The following chart shows possible sources of funding that can be utilized for different infrastructure improvements. There are a large number of Federal sources, but many of these sources also have stringent requirements limiting what the money can be used for. Oftentimes, funds are earmarked for a specific transportation emphasis, such as highway construction, health and safety, or transit. For example, CMAQ (Congestion Mitigation and Air Quality Improvement) funds require applicants to show that a proposed project will reduce congestion and air pollution. As such, even otherwise strong recreational trail proposals would not usually qualify.

Generally, the most flexible funding sources are local funds in the CIP, STBG and STBG-SA programs, and HSIP (these acronyms are defined on the next page). These funding sources can be utilized for a broad variety of active transport projects.

It is important to note that the State of Kansas does not provide any dedicated funds for pedestrian and bicycling projects; however, it does apply for federal funds in concert with MPOs (metropolitan planning organizations) throughout the state such as WAMPO (Wichita Area Metropolitan Planning Agency). Cities must coordinate with their respective MPOs to ensure project funding. This is especially the case in the current atmosphere of dwindling federal and state funds (particularly for pedestrian and bicycling projects).

POSSIBLE FUNDING SOURCES FOR WICHITA

	LOCAL		FEDERAL								PRIVATE FOUNDATION		OTHER		
	OPS.	CIP	STPBG	STBG-SA (THIS INCLUDES THE RTP AND SRTRS)	RTP	SRTS	HSIP	NHPP	CMAQ	BUILD	FTA-5307	SUNFLOWER FOUNDATION	DOWNTOWN WICHITA	P/P	C/R
COMPLETE STREET RECONSTRUCTION		X	X	X	X	X	X	X	X	X	X				
CURB EXTENSIONS		X	X	X		X	X	X	X	X	X			X	X
DIVERTERS		X	X	X		X	X	X	X	X	X			X	X
SPEED HUMPS		X	X	X		X	X	X	X	X	X			X	X
MEDIANS AND REFUGE ISLANDS		X	X	X		X	X	X	X	X	X			X	X
TRAFFIC CIRCLE (SMALL)		X	X	X	X		X	X		X	X			X	X
ADD 10' SHARED USE PATH		X	X	X	X	X	X	X ¹	X ²	X ⁴	X ⁵	X		X	X
ADD 6' SIDEWALKS		X	X	X	X	X	X	X	X	X	X ⁶	X		X	X
ADJUST CURB LINES, ADD 10' WIDE SIDEWALK, AND ADD 5' PAVERS IN AMENITY ZONE		X	X	X			X	X	X	X	X			X	X
ADJUST CURB LINES TO CONSTRUCT 8' AMENITY ZONE AND 8' SIDEWALKS		X	X	X			X	X	X	X	X			X	X
ADD ON-STREET BICYCLE LANE AND SIGNAGE (ROUTINE ACCOMMODATION)		X	X	X	X	X	X	X	X	X	X		X	X	X
TREES	X	X	X	X	X		X	X		X	X		X	X	X
BENCH	X	X	X	X	X		X	X	X ³	X	X		X	X	X
BUS SHELTER	X	X	X	X	X		X	X	X	X	X		X	X	X
TRASH BINS	X	X	X	X	X		X	X		X	X		X	X	X
LIGHTING	X	X	X	X	X		X	X		X	X		X	X	X

Stand-alone projects in these categories are not competitive unless part of a larger road, transit, bicycle, or pedestrian project.

1. Generally only allowable alongside highways, 2. Only acceptable if the trail is commuter-oriented (cannot be recreation-oriented), 3. Must be shown to reduce trips,
4. Technically allowed, but new emphasis is certainly on projects that boost economic competitiveness in rural areas particularly, 5. & 6. Pedestrian improvements must be located within 500 ft. of a transit stop, while bicycle improvements must be located within three miles of a transit stop.

OPS=Operations

CIP=Capital Improvement Plan

STBG=State Transportation Block Grant

STBG-SA=State Transportation Block Grant-Set Aside

RTP=Regional Trails Program

SRTS=Safe Routes to School

HSIP=Highway Safety Improvement Program

NHPP=National Highway Performance Program

CMAQ=Congestion Mitigation and Air Quality Improvement

BUILD=Better Utilizing Investments to Leverage Development

P/P=Public Private Partnership

C/R=Private Construction

PROGRAMMING FOR WALKABLE STREETS PROJECTS

Many of the non-city funding sources described above are very competitive and federal money typically requires a local match. There are several ways to implement “walkability” projects through efficient use of resources. Working within the existing right-of-way, breaking projects into phases, and/or incorporating them into larger projects are all ways to stretch limited funding resources.

Using Capital Improvement Funds for New Construction, Reconstruction, or Rehabilitation

Local Capital Improvement Program (CIP) Funds can be used to fund walkability projects as stand-alone projects or as through the routine accommodation of pedestrians and bicyclists as part of another project. These funds are typically used for new construction, reconstruction, or rehabilitation (such as mill and overlay) projects. CIP projects are prioritized using a scoring system and the Wichita Bicycle and Pedestrian Advisory Board makes recommendations for inclusion in the list of projects. Using the City’s Multimodal Policy and checklist to take advantage of opportunities to include walking and bicycling projects through routine accommodation in rehabilitation projects is a low-cost way to improve walkability

Working within the Existing Right-of-Way

Finding opportunities to create additional space for pedestrians and bicyclists within the existing right-of-way will reduce the funds needed for additional right-of-way and programming these projects along-side other improvements will help use funds efficiently. Many of the recommendations for improving walkability and achieving the street types recommended in this plan can be accomplished by allocating the right-of-way space differently than in the current built environment. There are several opportunities for “finding” additional space. These include:

- removing or narrowing motor vehicle travel lanes,
- removing or narrowing parking lanes
- moving curb lines
- reconstructing the street



On 1st Street in Downtown Wichita, a motor vehicle travel lane was removed to accommodate a buffered bike lane, which can reduce traffic speeds and provides additional separation between the sidewalk and motor vehicle travel lanes.

For example, in the lower-right image of a Residential Connector Street, the dotted line shows where the original curb line of a typical five-lane street (two travel lanes in each direction and a center turn lane) would have been. The sidewalk was located immediately adjacent to the curb. Removing a travel lane in each direction creates enough space for a buffered bike-lane and landscaped buffer along the sidewalk. Similarly, removal of low-occupancy parking lanes can also free up space for bicycle accommodations. Not only does this provide space for bicyclists, but it also creates an additional buffer between motor vehicles and pedestrians, shortens pedestrian crossing distances, and creates a more inviting overall street environment.

Phasing Recommendations

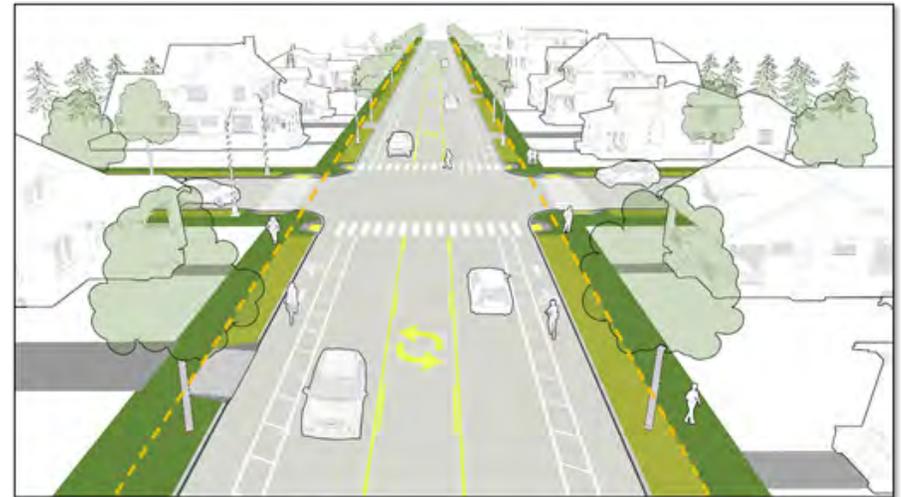
Many of the street design elements recommended in this Plan can be phased in to the street environment allowing low-cost, “quick-fix” solutions to be tested and modified before implementing them as more permanent cost-intensive solutions. The City recently used this approach when installing curb extensions on Douglas Avenue. Rather than rebuild the entire street, the City first installed flex-posts to test the curb-extensions. In a second phase, concrete curb-extensions were built as a more permanent solution to shortening crossing distances, enhancing the visibility of pedestrians, slowing turning vehicles and delineating parking for bicycles and motor vehicles.



On Douglas Avenue in Downtown Wichita, curb extensions were installed after testing the improvement with flex posts.



In Wichita on 1st Street in Old Town, the street was partially reconstructed to provide curb extensions, rehabilitated sidewalks on one side of the street, and a new roadway surface for parking, bike lanes, and motor vehicle travel lanes.



--- previous curb line

This example illustrates how a Residential Connector Street could be transformed into a more walkable environment by removing motor vehicle lanes or parking to provide a vegetated sidewalk buffer and buffered bike lanes.

V. ECONOMIC DEVELOPMENT

INTRODUCTION

In addition to funding public improvements through public funding mechanisms, economic development tools can be used to support redevelopment that includes public improvements including streets, amenities and infrastructure. Additionally, some of these same tools can provide for the long-term funding and maintenance of improvements made. This section will examine those resources appropriate for supporting economic development and associated public improvements, specifically redevelopment projects within the ECA. The use of the tools should be guided by the recommendations of the Walkable Development Book and seek those projects that implement walkable development patterns.

The following provides a “toolkit” of resources that might be utilized in the implementation of the plan. Cities have available a variety of fiscal tools to induce private investment. These generally fall under the following categories:

- Bond financing (based on anticipated future revenue)
 - Key Program: Tax Increment Financing (TIF)
- Supplemental Taxes
 - Key Programs: Key Programs: Community Improvement District (CID); Business Improvement District (BID); Self-Supporting Municipal Improvement District (SSMID); Transportation Development District (TDD)
- Tax Reductions
 - Key Programs: Industrial Revenue Bonds (IRB); Constitutional Exemption (EDX)
- Tax Credits
 - Key Programs: Low Income Housing Tax Credits (LIHTC), New Markets Tax Credits (NMTC), Historic Tax Credits (HTC)
- Low Interest Loans
 - Key Programs: Façade Improvement, Special Assessments
- Equity Investment
 - Key Program: Opportunity Zones
- Grants

Anticipated Future Revenue

In certain instances, future taxes generated by real estate investments can be used to finance current costs of facilitating those improvements. This mechanism is referred to generically as Tax Increment Financing (TIF). The capture of taxes resulting from increased assessed value (the increment) is used

to pay debt service on bonds issued to fund selected costs of development.

This would involve the creation of new TIF districts in Areas of Opportunity. TIF revenue would be generated through the capture of net new property taxes, and could be used to finance public infrastructure and site acquisition and clearance.

To determine the efficacy of a TIF strategy, the level of taxable investment that is likely to be attracted to a proposed TIF District should be analyzed. It would be critical for school district representatives to agree on an appropriate level of tax capture because property taxes provide significant funding for the school district.

Although controversial, TIF is a tool that can be used to fund infrastructure, including improvements to walkable infrastructure.

Supplemental Taxes

This section focuses on improvement districts which are sometimes also referred to as special tax districts. In general, an improvement district generates a steady source of revenue to finance services and project costs that are considered “special” to landowners, residents, and businesses within a designated geographic area. Therefore, a separate tax is levied only on those properties within defined boundaries that will be benefited by these expenditures.

Community Improvement District (CID)

A CID, or similar program, typically involves a special sales tax or property tax that funds certain public and private improvements, as well as ongoing operating costs within the defined district. CID funds can be used to fund building construction costs, site improvements (sidewalks, streets, traffic signals, pedestrian amenities, etc.), streetscape features, lighting, parks, landscaping, cultural amenities, and other items. Ongoing operating costs often include marketing, maintenance, security, business promotion, employee training, public events, and market studies. It is important to note that the imposition of such supplemental taxes or fees do not have to be limited to businesses and commercial properties but can also come from residents and residential properties.

There are currently eight CID projects in the City of Wichita and five of those are located within the ECA. The special sales tax for the district can be up to 2 percent and the maximum term of the special sales tax or property tax is 22 years.

CIDs are another tool that can be used to fund walkable infrastructure where public funds are lacking, assuming sufficient future revenue from the district is likely.

Business Improvement District (BID)

A BID differs from a CID in that a special assessment is levied to individual businesses in the defined district and the core function of a BID is to provide services that will restore and/or promote the economic vitality of the district. Such services include: beautification and landscaping maintenance, the provision of additional public services like security and enhanced maintenance of public spaces, funding parking facilities, developing plans for the design of public spaces, developing plans for future development, organizing and promoting community events, and marketing the district.

There are no established BIDs in Wichita, although the Douglas Design District was recently authorized to form a Planning Committee to determine the viability of this tool in that district.

Self-Supporting Municipal Improvement District (SSMID)

A SSMID is currently in place in Downtown Wichita and it funds many of the activities of Downtown Wichita. The SSMID is funded through an additional assessment on all real estate in the district. It will be difficult to implement a SSMID in portions of the ECA outside of Downtown because neighborhood and similar districts are typically smaller and do not have as many high-value commercial properties that are necessary to generate sufficient funds to support an organization. SSMIDs are intended to support similar activities as BIDs.

Tax Reductions

Personal and real property tax reductions, or abatements, are common economic development incentives, particularly where significant new real estate investment occurs or new jobs are created. In most instances, the abatements act to reduce operating costs of investment real estate (office, industrial, retail, or rental apartment buildings) for a designated period of time. In Wichita, Kansas, the primary tax reduction program is Industrial Revenue Bonds (IRB), which allows for sales tax exemption on construction materials and property tax abatement, a payment-in-lieu of taxes (PILOT), or combination thereof. Abatement is available for a five-year term, with a second five-year term subject to approval by the governing body. IRBs are primarily available for business that maintain and create jobs and eligible businesses are defined by state statutes.

Economic Development Exemptions (EDX) primarily apply to warehouse/distribution and research/development companies that maintain or create significant new employment or export goods.

IRBs have been issued for several projects in the ECA and are only issued after a cost-benefit analysis demonstrates an overall net benefit to the city.

Tax Credits

Because the private market alone cannot deliver the products that are proposed as part of this development plan, public support is necessary to make development economically viable. Tax credits are one form of public participation that can be used to reduce the costs of development, thus making projects viable that otherwise could not be developed.

Three types of tax credits would be particularly useful: Low Income Housing Tax Credits (LIHTC) New Markets Tax Credits (NMTC), and Historic Tax Credits (HTC). LIHTC are used to provide affordable housing, defined broadly as rental units offered at below market rents to households that earn below 60 percent of area median income (AMI). New Markets Tax Credits are used for the development of commercial properties in distressed areas. Historic Tax Credits, as the name implies, can be applied toward the preservation, renovation, and rehabilitation of historic buildings.

There are many similarities in the broad ways in which the tax credits work. They provide tax credits for a percentage of eligible costs (which consist of most building hard and soft costs; infrastructure costs are rarely included). Once awarded, the future value of these tax credits can be bought and sold on the private market, usually at a discounted rate. This discounted rate becomes the "equity value" of the tax credits.

Impact of Tax Credits on Phasing

The state of Kansas places limits on the amount of tax credits that can be awarded to a project on an annual basis. This can have a significant impact on the phasing of a development. Further, tax credits are not necessarily awarded to the same project in consecutive years. In this way, an affordable project that could technically be absorbed into the market in two years might actually take five to seven years—or more—to develop, due to the constraint of limited tax credit allocations.

Impact of New Markets Tax Credits on Location

New Markets Tax Credits can only be allocated in qualifying census tracts; the chief criterion for this designation is median household income. Most of the ECA consists of qualifying census tracts, so this is a tool that can be leveraged for certain project types.

Tax credit projects are initiated by the private market—the developer—and typically require significant support from the local governing body.

Low Interest Loans

The City of Wichita offers low-interest loan programs for infrastructure, façade improvements, and asbestos/lead abatement in certain areas of the city. Loans are repaid through special assessments attached to the property and typically have a 15-year to 20-year term. Some of the programs are funded by the city through bond issuances.

Façade Improvement Program

The Façade Improvement Program funds enhancements to building exteriors in downtown Wichita and neighborhood revitalization areas—many areas of the ECA. It provides a low-interest loan to owners or tenants and, when available, matching funds to help renovate building facades.

Asbestos and Lead Based Paint Remediation Program

The Asbestos and Lead Based Paint Remediation Program funds the safe removal of hazardous material from commercial buildings through a low-interest loan. Remediation adds to the cost to renovate and reuse buildings, particularly those built before 1970, and is a common issue in the ECA.

20-Year Special Assessments

Special Assessment financing is available on a case-by-case basis and subject to approval by the City Council for residential developments with extraordinary development costs and existing residential neighborhoods without municipal services, such as sewer, water, storm sewers, and paving. Special Assessments are used in the ECA in areas without paved roads and adequate storm sewer.

Equity Investment: Opportunity Zones

The Opportunity Zone Program was initiated by the U.S. Congress as part of the 2017 Tax Cuts and Jobs Act. The intent of the program is to allow investors to invest funds that would otherwise be collected as capital gains taxes in real estate projects and businesses located in qualifying low-income census tracts. The investments will be made through Opportunity Zone Funds. As of September 2018, the Opportunity Zones for Wichita have been identified, and there are several neighborhoods within the ECA that will be eligible to receive investments through this program. The IRS has not yet issued guidance on the technical aspects of the program, so it is still in its early stages.

Investments made through this program will be initiated by the private market. Local governments can play an important role by identifying target developments—or catalyst projects—that align with specific neighborhood plans. In the case of the ECA, it is recommended the City partner with neighborhood organizations, developers, investors, non-profits, area foundations, the Greater Wichita Partnership, and other entities, to identify priority/catalyst projects in the portions of the ECA that are in Opportunity Zones. To make these projects more appealing to potential investors, it is advisable to hire an outside consultant to conduct market research, identify ideal uses, and conduct feasibility analysis to estimate capital needs and phasing for identified projects. Then, Opportunity Zone priority projects can be actively marketed to developers and investors and supported with relevant market information

Grants

There are opportunities to obtain grants and soft loans from a wide variety of both public and private sources to leverage limited public funds. Private corporate and charitable foundations do target their support to different aspects of urban investment and revitalization such as economic development, environment enhancement, historic preservation, and open space and parks. Most government grants are ones resulting from legislators' capacity to target appropriations to special community needs and high-profile projects of wide public benefit. Foundations might be compelled to participate (financially or otherwise) in the project—particularly if a component of the project is consistent with a particular mission. For example, community development programs are often supported by Wichita Community Foundation, Downing Family Foundation, and Kansas Health Foundation. These organizations, and others, also support workforce programs, education, and similar programs.

It is important for the city to collaborate with area foundations and understand their strategic priorities. Through this type of collaboration, it will be possible to identify partnership opportunities wherein foundations and other entities might provide matching funds for studies, public outreach, project implementation, and other programs.

Land Banks

Land banking is a tool used by more than 100 communities in the U.S. to help transition “vacant, abandoned, and tax delinquent properties into productive use.” Land banks are typically created and managed by local governments or non-profits, or a partnership thereof. They function by acquiring title (ownership) of the problem properties, eliminate encumbrances, liabilities, and any title problems, and sell or otherwise transfer the properties to new and responsible owners whose proposals for the properties are consistent with neighborhood/community plans.

Land banks are typically created by local ordinance based on state-enabling legislation. Kansas requirements include :

- The land bank must be governed by a board of trustees;
- Members of the board of trustees cannot receive compensation (but may be paid their necessary expenses for attending meetings and carrying out their duties);
- The city may dissolve the land bank by ordinance;
- The county may dissolve the land bank by resolution;
- The board of trustees must keep accurate accounts of all receipts and disbursements;
- All records and accounts must be available to public inspection;
- The land bank must make an annual report to the Governing Body, which includes an inventory of all property held by the land bank;
- The board of trustees can sue and be sued; enter into contracts; appoint and remove staff; and
- The board of trustees may accept or refuse to accept any property.

Land banks are granted certain powers and legal authority to:

- Obtain property at low or no cost through tax foreclosure
- Hold land tax-free
- Clear title issues and/or eliminate back taxes
- Lease properties for temporary uses
- Negotiate sales or land donations based on an outcome that aligns with community needs (as opposed to simply selling to the highest bidder)

Land banks are most effective in areas with large concentrations of vacant or abandoned property, properties with little or no market value, and properties with delinquent taxes that exceed market value, properties with title problems.

For these reasons, it is recommended that the City of Wichita implement a land bank program in neighborhoods of the ECA that have significant vacancy issues. Such a program would enable the city (or an entity contracted by the city) to reduce the number of problem properties and assemble such properties to support developments that would meet neighborhood goals. It would emphasize the importance of neighborhood planning efforts and could be used to support and encourage walkable developments.

See footnotes for links with resources that have more information.

Recommended Incentive Strategies

There is a need to leverage limited public resources by implementing incentive tools in strategic ways to catalyze the development of walkable places in the ECA. The following strategies aim to target those tools that can be used to install infrastructure.

- Create a Land Bank program that targets neighborhoods in Areas of Opportunity that have high vacancy rates and problems with abandoned property.
- Target use of infrastructure-focused incentives and tools (TIF, CID, and, if applicable, Special Assessments) in the identified walkable areas to help fund walkable infrastructure as new projects are proposed.
- Install walkable infrastructure concurrently with development projects and leverage other incentive programs to make new development feasible.
- Promote formation of BIDs and similar entities to assist with long-term maintenance of walkable infrastructure and landscaping.

¹ Center for Community Progress *Frequently Asked Questions on Land Banking*. <http://www.communityprogress.net/land-banking-faq-pages-449.php>

² *The Legal Basis for a Land Bank in Kansas: A discussion of the legal requirements and Sample Language*. Public Health Law Center, May 2015. Retrieved from: <https://www.livewelllawrence.org/DocumentCenter/View/145/LandBankKansas> on July 13, 2018.

³ See 1.

Economic Development Incentives and Programs - Application Recommendations

Program	Classification	Target Development Type	Used For?	Currently In Use in ECA?	Recommended for Areas of Opportunity?	Recommended for Areas of Stability?	Targeted Place Type*
Tax Increment Financing (TIF)	Anticipated Future Revenue	Commercial & Industrial	Infrastructure	Yes	Yes	No	CC, RC
Community Improvement District (CID)	Supplemental Taxes	Commercial	Site Infrastructure & Ongoing Services	Yes	Yes	No	CC, RC
Business Improvement District (BID)	Supplemental Taxes	Commercial	District Services & Operations	No	Yes	Yes	NH, CC
Self-Supporting Municipal Improvement District (SSMID)	Supplemental Taxes	Commercial	District Services & Operations	Yes	No	No	None
Industrial Revenue Bonds (IRBs)	Tax Reductions	Industrial & Commercial / Job Creation	Reduce Construction (material sales taxes) and Operating Costs (real estate taxes)	Yes	Yes	Yes	CC, RC
Economic Development Exemptions (EDX)	Tax Reductions	Industrial / Job Creation	Reduce Operating Costs (taxes)	Yes	Yes	Yes	RC
Low Income Housing Tax Credits (LIHTC)	Tax Credits	Multi-family Housing	Provide Equity to Support Affordable Housing Development	Yes	Yes	Yes	NH, CC
Historic Tax Credits (HTC)	Tax Credits	Historic Residential and Commercial Structures	Provide Equity to Support the Renovation and Preservation of Historic Buildings	Yes	Yes	Yes	NH, CC
New Market Tax Credits (NMTC)	Tax Credits	Commercial Properties	Support New Commercial Development in Distressed Areas	Yes	Yes	Not Applicable	NH, CC
Facade Improvement Program	Low-Interest Loan	Residential and Commercial	Restore Historic Facades	Yes	Yes	Not Applicable	NH, CC
Asbestos and Lead-Based Paint Remediation Program	Low-Interest Loan	Commercial Properties	Remediate Environmental Hazards	Yes	Yes	Yes	NH, CC
20-year Special Assessment	Low-Interest Loan	Residential	Infrastructure	Yes	Yes	No	NH, CC
Opportunity Zones	Equity Investment	Residential, Commercial, Industrial Real Estate; Direct Business Investment	Direct investment in real estate projects and businesses in Opportunity Zones	No	Yes	Not Applicable	NH, CC
Land Banks	Acquisition	Vacant Properties	Assemble vacant and abandoned property for new development that aligns with neighborhood plans	No	Yes	No	NH

*NH=Neighborhood Hub, CC=Community Core, RC=Regional Center

VI. APPENDIX

The following charts show cost breakdowns for the different inputs associated with the different street types. Street blocks are assumed to be 660 feet (8 blocks in 1 mile).

COST ESTIMATES FOR MIXED USE MAIN STREET

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
CURB EXTENSIONS	EA	16	\$15,816.49	\$253,064	ASSUME 4 INTERSECTIONS/MILE, ALL QUADRANTS
ADJUST CURB LINES	LF	10,560	\$25.55	\$269,805	ASSUME OUTSIDE EDGES, ENTIRE LENGTH
10' CONCRETE SIDEWALK	LF	10,560	\$77.87	\$822,263	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
STAMPED BOULEVARD WALK	LF	10,560	\$54.75	\$578,153	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
TREES	EA	352	\$523.16	\$184,153	ASSUME 30' SPACING, BOTH SIDES OF ROAD, ENTIRE LENGTH
BENCH	EA	70	\$1,885.81	\$132,761	ASSUME 150' SPACING, BOTH SIDES
BUS SHELTER	EA	18	\$13,979.34	\$246,036	ASSUME 600' SPACING, BOTH SIDES
TRASH BINS	EA	70	\$1,727.65	\$121,626	ASSUME 150' SPACING, BOTH SIDES
LIGHTING	EA	70	\$5,937.27	\$417,984	ASSUME 150' SPACING, BOTH SIDES
BICYCLE PARKING	EA	70	\$802.99	\$56,531	ASSUME 150' SPACING, BOTH SIDES
CONSTRUCTION COST SUBTOTAL				\$3,082,376	

LANDSCAPING/TURF ESTABLISHMENT (5%)	\$154,119
SIGNING, MARKINGS, AND WAYFINDING (5%)	\$154,119
DRAINAGE (10%)	\$308,238

AVERAGE CONSTRUCTION COST/BLOCK	\$462,356
LOW CONSTRUCTION COST/BLOCK	\$347,500
HIGH CONSTRUCTION COST/BLOCK	\$578,750

AVERAGE CONSTRUCTION COST/MILE	\$3,698,851
LOW CONSTRUCTION COST/MILE	\$2,780,000
HIGH CONSTRUCTION COST/MILE	\$4,630,000

COST ESTIMATES FOR MIXED USE CONNECTOR STREET

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
CURB EXTENSIONS	EA	16	\$15,816.49	\$253,064	ASSUME 4 INTERSECTIONS/MILE, ALL QUADRANTS
MEDIANS AND REFUGE ISLANDS	SF	31,680	\$8.83	\$279,826	ASSUME 75% OF LENGTH IN MEDIAN, AVERAGE 8' WIDE
8' CONCRETE SIDEWALK	LF	10,560	\$62.29	\$657,810	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
ADJUST CURB LINES	LF	10560	\$25.55	\$269,805	ASSUME OUTSIDE EDGES, ENTIRE LENGTH
TREES	EA	352	\$523.16	\$184,153	ASSUME 30' SPACING, BOTH SIDES OF ROAD, ENTIRE LENGTH
BENCH	EA	70	\$1,885.81	\$132,761	ASSUME 150' SPACING, BOTH SIDES
BUS SHELTER	EA	18	\$13,979.34	\$246,036	ASSUME 600' SPACING, BOTH SIDES
TRASH BINS	EA	70	\$1,727.65	\$121,626	ASSUME 150' SPACING, BOTH SIDES
LIGHTING	EA	70	\$5,937.27	\$417,984	ASSUME 150' SPACING, BOTH SIDES
BICYCLE PARKING	EA	70	\$802.99	\$56,531	ASSUME 150' SPACING, BOTH SIDES
CONSTRUCTION COST SUBTOTAL				\$2,619,596	

LANDSCAPING/TURF ESTABLISHMENT (5%)	\$130,979
SIGNING, MARKINGS, AND WAYFINDING (5%)	\$130,979
DRAINAGE (10%)	\$261,959

AVERAGE CONSTRUCTION COST/BLOCK	\$392,939
LOW CONSTRUCTION COST/BLOCK	\$295,000
HIGH CONSTRUCTION COST/BLOCK	\$491,250

AVERAGE CONSTRUCTION COST/MILE	\$3,143,514
LOW CONSTRUCTION COST/MILE	\$2,360,000
HIGH CONSTRUCTION COST/MILE	\$3,930,000

COST ESTIMATES FOR RESIDENTIAL CONNECTOR STREET

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
CURB EXTENSIONS	EA	16	\$15,816.49	\$253,064	ASSUME 4 INTERSECTIONS/MILE, ALL QUADRANTS
MEDIANS AND REFUGE ISLANDS	SF	31680	\$8.83	\$279,826	ASSUME 75% OF LENGTH IN MEDIAN, AVERAGE 8' WIDE
ADJUST CURB LINES	LF	10560	\$25.55	\$269,805	ASSUME OUTSIDE EDGES, ENTIRE LENGTH
8' CONCRETE SIDEWALK	LF	10560	\$62.29	\$657,810	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
TREES	EA	352	\$523.16	\$184,153	ASSUME 30' SPACING, BOTH SIDES OF ROAD, ENTIRE LENGTH
BENCH	EA	70	\$1,885.81	\$132,761	ASSUME 150' SPACING, BOTH SIDES
TRASH BINS	EA	70	\$1,727.65	\$121,626	ASSUME 150' SPACING, BOTH SIDES
LIGHTING	EA	70	\$5,937.27	\$417,984	ASSUME 150' SPACING, BOTH SIDES
CONSTRUCTION COST SUBTOTAL				\$2,317,029	

LANDSCAPING/TURF ESTABLISHMENT (5%)	\$115,851
SIGNING, MARKINGS, AND WAYFINDING (5%)	\$115,851
DRAINAGE (10%)	\$231,703

AVERAGE CONSTRUCTION COST/BLOCK	\$347,554
LOW CONSTRUCTION COST/BLOCK	\$261,250
HIGH CONSTRUCTION COST/BLOCK	\$435,000

AVERAGE CONSTRUCTION COST/MILE	\$2,780,435
LOW CONSTRUCTION COST/MILE	\$2,090,000
HIGH CONSTRUCTION COST/MILE	\$3,480,000

COST ESTIMATES FOR RESIDENTIAL NEIGHBORHOOD STREET

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
CURB EXTENSIONS	EA	16	\$15,816.49	\$253,064	ASSUME 4 INTERSECTIONS/MILE, ALL QUADRANTS
DIVERTERS	EA	2	\$31,681.64	\$63,363	ASSUME 2 INTERSECTIONS/MILE
SPEED HUMPS	EA	18	\$3,211.96	\$56,531	ASSUME 300' SPACING
TRAFFIC CIRCLE	EA	2	\$33,080.79	\$66,162	ASSUME 2 INTERSECTIONS/MILE
6' CONCRETE SIDEWALK	LF	10560	\$46.72	\$493,358	ASSUME BOTH SIDES OF ROAD, ENTIRE LENGTH
TREES	EA	352	\$523.16	\$184,153	ASSUME 30' SPACING, BOTH SIDES OF ROAD, ENTIRE LENGTH
LIGHTING	EA	70	\$5,937.27	\$417,984	ASSUME 150' SPACING, BOTH SIDES
CONSTRUCTION COST SUBTOTAL				\$1,534,613	

LANDSCAPING/TURF ESTABLISHMENT (5%)	\$76,731
SIGNING, MARKINGS, AND WAYFINDING (5%)	\$76,731
DRAINAGE (10%)	\$153,461

AVERAGE CONSTRUCTION COST/BLOCK	\$230,192
LOW CONSTRUCTION COST/BLOCK	\$173,750
HIGH CONSTRUCTION COST/BLOCK	\$288,750

AVERAGE CONSTRUCTION COST/MILE	\$1,841,536
LOW CONSTRUCTION COST/MILE	\$1,390,000
HIGH CONSTRUCTION COST/MILE	\$2,310,000

COST ESTIMATES FOR PLAZA STREET

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
STREET RECONSTRUCTION	LF	5,280	\$2,695	\$14,229,600	FROM A SIMILAR PROJECT ESTIMATE FOR 55' WIDE ROW
TREES	EA	352	\$523.16	\$184,153	ASSUME 30' SPACING, BOTH SIDES OF ROAD, ENTIRE LENGTH
BENCH	EA	70	\$1,885.81	\$132,761	ASSUME 150' SPACING, BOTH SIDES
TRASH BINS	EA	70	\$1,727.65	\$121,626	ASSUME 150' SPACING, BOTH SIDES
LIGHTING	EA	70	\$5,937.27	\$417,984	ASSUME 150' SPACING, BOTH SIDES
BICYCLE PARKING	EA	70	\$802.99	\$56,531	ASSUME 150' SPACING, BOTH SIDES
CONSTRUCTION COST SUBTOTAL				\$15,142,654	

LANDSCAPING/TURF ESTABLISHMENT (5%)	\$757,133
SIGNING, MARKINGS, AND WAYFINDING (5%)	\$757,133
DRAINAGE (10%)	\$1,514,265

AVERAGE CONSTRUCTION COST/BLOCK	\$2,271,398
LOW CONSTRUCTION COST/BLOCK	\$1,703,750
HIGH CONSTRUCTION COST/BLOCK	\$2,840,000

AVERAGE CONSTRUCTION COST/MILE	\$18,171,185
LOW CONSTRUCTION COST/MILE	\$13,630,000
HIGH CONSTRUCTION COST/MILE	\$22,720,000

COST ESTIMATES FOR ACTIVE ALLEY

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
BENCH	EA	70	\$1,885.81	\$132,761	ASSUME 150' SPACING, BOTH SIDES
TRASH BINS	EA	70	\$1,727.65	\$121,626	ASSUME 150' SPACING, BOTH SIDES
LIGHTING	EA	70	\$5,937.27	\$417,984	ASSUME 150' SPACING, BOTH SIDES
BICYCLE PARKING	EA	70	\$802.99	\$56,531	ASSUME 150' SPACING, BOTH SIDES
CONSTRUCTION COST SUBTOTAL				\$728,902	

SIGNING, MARKINGS, AND WAYFINDING (5%)	\$36,445
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AVERAGE CONSTRUCTION COST/MILE	\$95,668
LOW CONSTRUCTION COST/MILE	\$72,500
HIGH CONSTRUCTION COST/MILE	\$120,000

AVERAGE CONSTRUCTION COST/MILE	\$765,347
LOW CONSTRUCTION COST/MILE	\$580,000
HIGH CONSTRUCTION COST/MILE	\$960,000

COST ESTIMATES FOR ROUTINE BICYCLE ACCOMMODATION

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST	ASSUMPTIONS
BIKE LANE SIGNS AND MARKINGS	MI	1	\$32,000	\$32,000	
COST SUBTOTAL				\$32,000	

AVERAGE COST/BLOCK	\$4,000
LOW COST/BLOCK	\$3,750
HIGH COST/BLOCK	\$5,000

AVERAGE COST/MILE	\$32,000
LOW COST/MILE	\$30,000
HIGH COST/MILE	\$40,000