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ORGANIZATIONAL VISION, MISSION, & VALUES

OUR VISION:

Make Bel Aire a Hometown for Everyone – We continually hear how people love Bel Aire for the small town charm that runs deep within the community. We want to continue building on this with current residents, new citizens and all our businesses.

OUR MISSION:

Create a Friendly and Responsive Environment – Encourage friendliness from staff to citizens, citizens to citizens and citizens to staff. Staff will strive to be responsive to customer needs in quick fashion.

Attractive Growth and Safe Living – We have a clean city, people are proud of our community. Ranked in the top 10 annually of safest cities in Kansas. Encourage attractive neighborhoods and new developments through code enforcement and planning / zoning.

Build a Connected Community – Bel Aire has a large social media presence. Continue building on that as well as finding other innovative ways for public input. Also encourage mobility choices through sidewalks, paths and streets.

OUR VALUES:

Small Town Pride, Regardless of Size – Regardless of how big we get, keep that hometown feeling and attitude.

People First – People are our number one resource within the organization. Citizen Service is our number one priority for the City. Know that help is around the corner.

Working Together – Departments working together as one team. Staff working with residents, HOA’s and neighborhoods. Citizens working with each other.

Creativity and Innovation – Be open to new ideas, creativity and innovation within the organization and from the community.

Inclusion – Strive to involve everyone. Encourage collaboration.

BACKGROUND

The 2014 Comprehensive Development Plan established a vision for Bel Aire.....**“The City of Bel Aire is a safe, family-oriented, engaged community with focus on economics and growth to ensure an independent future for generations to come.”**

The Comprehensive Development Plan also includes recommendations to improve bicycling and walking in Bel Aire, which contribute to improved quality of life. It recommends concepts such as:

- Pedestrian friendly community
- Sidewalks on arterial and collector streets
- Walkways connecting neighborhoods
- Sidewalks in all new developments
- Accessibility to parks
- Connections to new center city
- Additional greenways

In 2017, the City developed a map showing the recommended future pedestrian and bicycle network. This was presented at the Planning for the Future Open House but was never formally adopted.

In 2018, Bel Aire secured funding from the Wichita Area Metropolitan Planning Organization (WAMPO) through the Planning Walkable Places program to develop the Bel Aire Bicycle and Pedestrian Plan.

PURPOSE OF THE BPP

The purpose of the Bel Aire Bicycle and Pedestrian Plan (BPP) is to describe the desired future of walking and bicycling in Bel Aire and how to make it a reality. This is done through a hierarchical process. It starts by defining the desired future with a vision statement. We then focus on specific aspects expressed in the vision; ultimately leading to action steps and projects.

The purpose of this process is to ensure that all actions are tied back to the vision and what the community ultimately desires. This provides clear direction of our course forward and gives justification for

each action because each is logically tied to the vision.

In order to do this , we engaged the community to assess needs, determine preferences, and identify priorities. Throughout the process, the community has expressed specific desires. To summarize these into a simple statement, **Bel Aire wants to connect the community.** We want to have connections within our neighborhoods. We want to have our neighborhoods connected to one another. We want our neighborhoods connected to destinations around the community and we want our community connected to adjacent communities.



DEVELOPMENT CHARACTER

Bel Aire is a city of about 8,000 residents located northeast of Wichita. Bel Aire shares its southern and western border with Wichita and a small portion of its northwestern border with Kechi.

Bel Aire encompasses just under 7 square miles of land. Much of the development is in the southwest portion of Bel Aire. However, it is developing to the northwest and north central. There is also industrial-type development occurring in the east.

A quality bicycle and pedestrian network connects the community; **connecting people to places**. The network allows people to walk and bike from their neighborhoods to schools, parks, businesses, jobs, community spaces, and other neighborhoods.

Walking and bicycling is heavily influenced by the number and variety of destinations within a comfortable walking and bicycling distance from homes and between destinations.

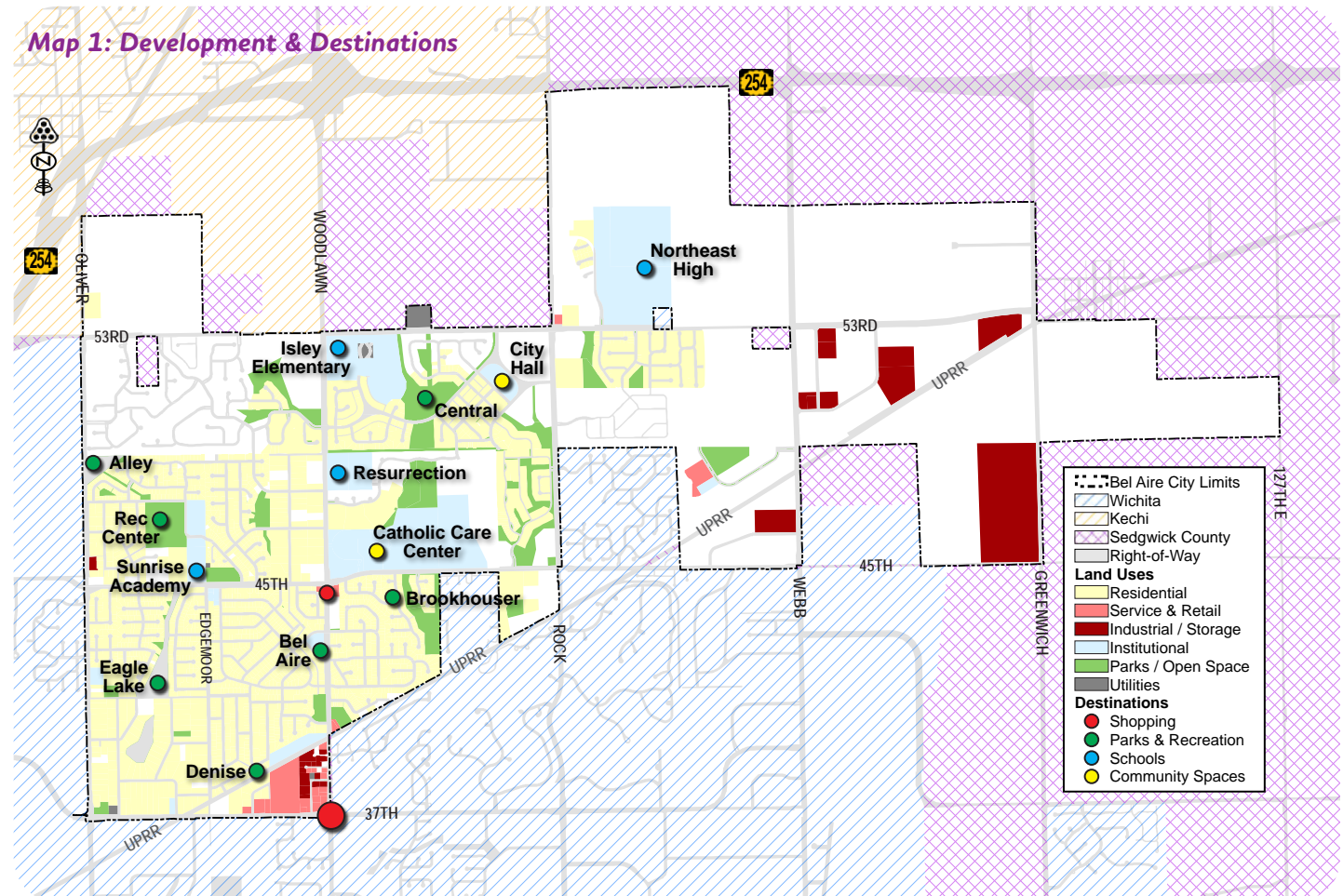
Primary walking and bicycling **destinations** in Bel Aire include the schools, parks, recreation center, and shopping. Destinations also include adjacent neighborhoods as well as places in Wichita such as Dillons and Chisholm Creek Park.

Shopping - The commercial service and retail businesses in Bel Aire are primarily located around two nodes. The largest node is at the Woodlawn and 37th St intersection, which includes businesses in Wichita. There is a smaller node at the Woodlawn and 45th St intersection.

Parks & Recreation - Bel Aire has six parks; Alley Park, Bel Aire Park, Brookhouser Park, Central Park, Denise Park, & Eagle Lake Park. There is also the Bel Aire Recreation Center. These destinations are fairly well distributed throughout the western portion of the City, which is primarily residential.

Schools - There are four schools in Bel Aire; Northeast High School, Resurrection School, Isley School, and Sunrise Christian Academy. Also, Stucky Middle School is located just west of Oliver St on the south side of 45th St.

Community Spaces - Other destinations in the community include City Hall and Catholic Care Center.



BIKE & PED INFRASTRUCTURE

There is more than 27 miles of off-street pathway in Bel Aire, most of which is sidewalk (6 ft wide or less). This does not include sidewalk on private property such as those on the Catholic Care Center property.

Pathways consist of all dedicated bicycle and pedestrian facilities including sidewalks, shared-use paths, bike lanes, and shared travel lanes.

There is 1 mile of on-street bicycle facilities that includes a combination of bicycle lane and shared-lane markings. These facilities are in both eastbound and westbound 37th St between Oliver St and Woodlawn Blvd.

Bel Aire has about 56 miles of street. Of this, 14% have sidewalk on both sides of the street, 19% have sidewalk on one side, and 67% have no sidewalk.

In addition to the sidewalks, bike lanes, and shared-lane markings, streets and street shoulders are used by bicyclists and pedestrians. Walking and bicycling on low volume and low speed streets or on the shoulder of the road is often deemed acceptable.

Bel Aire has a fair amount of pathways, but lacks a complete network. Many of the neighborhoods are not connected to the community. Some destinations lack connections. Many of the busy streets lack any sort of pedestrian or bicycle facilities. Some neighborhoods have sidewalks on both side of every street and some completely lack sidewalks.

Condition - The vast majority of these facilities are in good condition. There are a few point locations that are in fair to poor condition, such as cracked, broken, or heaved panels. These are generally in the older parts of Bel Aire.

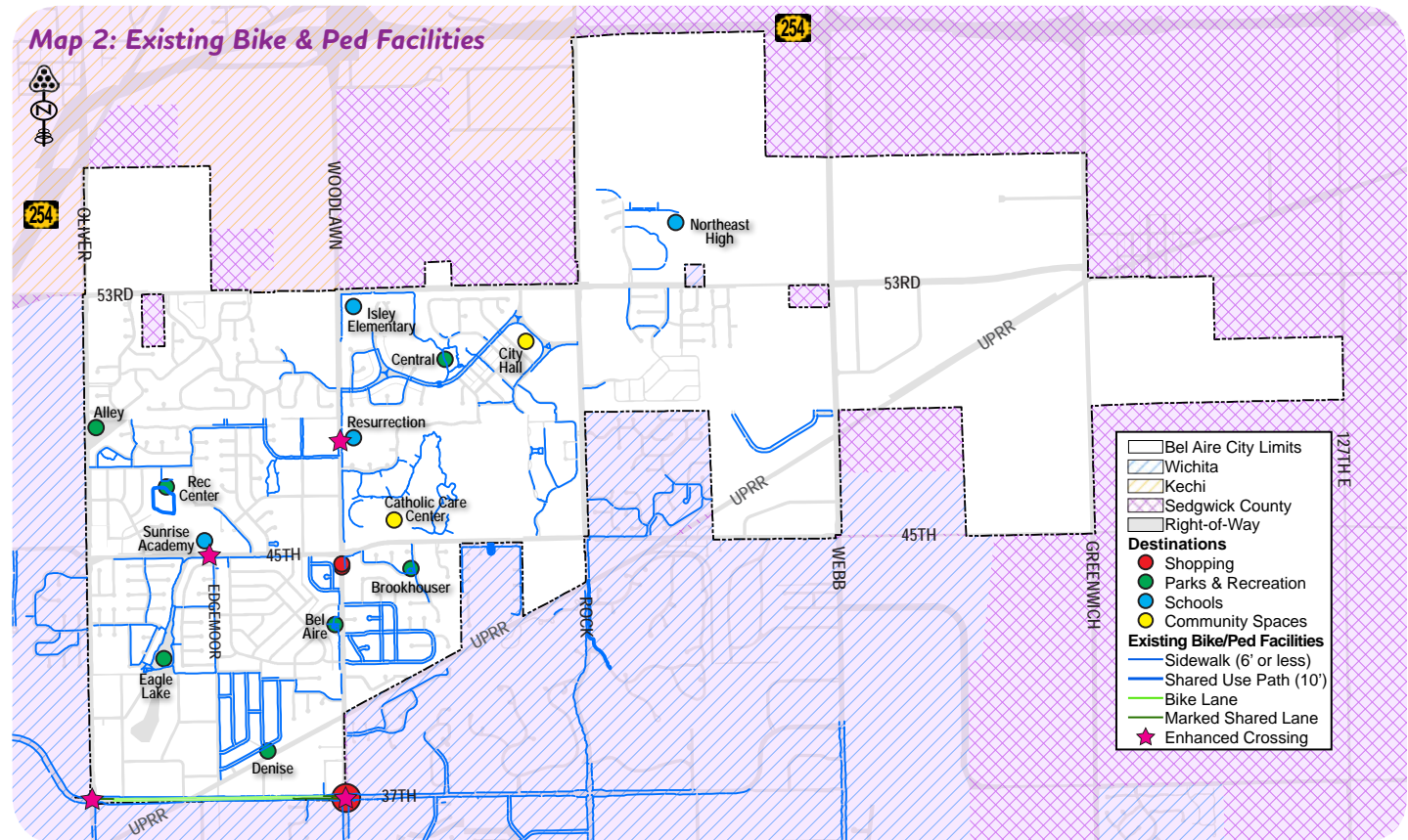
Curb Ramps - The majority of street crossings have curb ramps, many of which include truncated domes (small bumps) for Americans with Disabilities Act (ADA) compliance. Others have ramps but do not include the domes. ADA compliance was not determined due to very specific data being required, such as cross slope, running slope, landing area, and transition slopes.

Crosswalks - Most minor street crossings do not have crosswalk pavement markings. There are marked and signalized crosswalks at 37th St and Oliver St as well as 37th St and Woodlawn Blvd. There are two pedestrian-actuated mid-block signalized crosswalks; one across 45th St west of Edgemoor near Sunrise Christian Academy and one across Woodlawn Blvd north of 48th St near Resurrection Catholic School. Pedestrian-actuated means that a pedestrian has to activate the traffic light.

The high volume and high speed streets are a barrier to pedestrian and bicycle travel. Crossing these streets creates real and perceived safety concerns. The lim-

ited pedestrian crossings of arterials and major collectors require walking and bicycling further, making it less convenient to walk or bicycle.

Regional Connections - There are existing and planned bicycle facilities that connect Bel Aire to the region. There are existing connections into Wichita via Oliver St and Woodlawn Blvd. Based upon Wichita's Bicycle Master Plan, there are planned connections extending north to Bel Aire via Rock Rd, Webb Rd, and Greenwich Rd. Although not officially planned, there has been discussions about a connection north to Kechi via Oliver St.

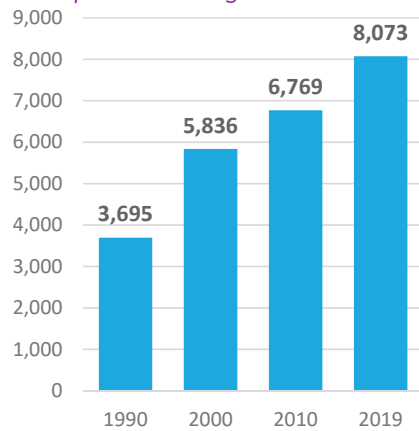


RESIDENTS

Population Change - Bel Aire has doubled in population since 1990. Bel Aire anticipates to continue to grow, primarily by new residential subdivisions in the northern portion of the current City Limits including Iron Gate, Central Park, Elk Creek, Deer Run, and Rock Spring.

More residents means more vehicle traffic and more demand for walking and bicycling. The location of these new residents will impact future bicycle and pedestrian connections and how the community will be fully connected.

Population Change since 1990



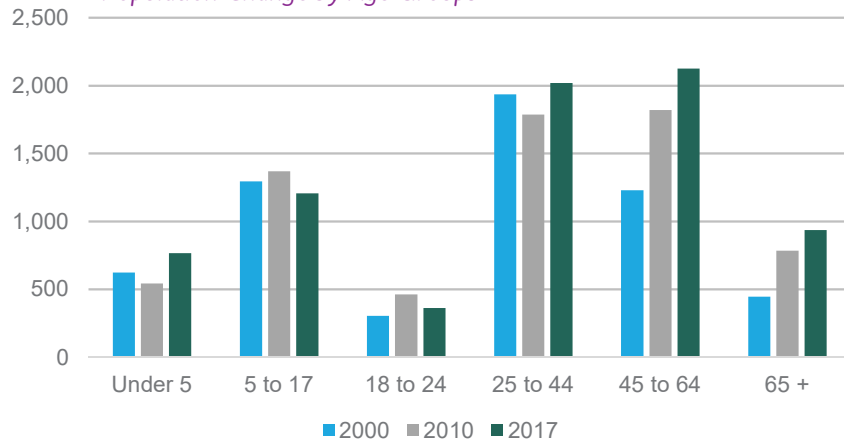
Age of Residents - Bel Aire is an aging community and aging faster than Sedgwick County as a whole. Since 2000, the median age in Bel Aire as increased from 33.2 years old to 37.4 years old. Over that same period, Sedgwick County's median age increased from 33.6 years old to 35.0 years old.

The number of Bel Aire residents aged 45 years and older has increased by about 1,400 since 2000. In 2000, that age group comprised 29% of the population. Today, they comprise 41%. Also, residents aged 65 years and older has more than doubled since 2000.

Although the number of children in Bel Aire has remained fairly flat since 2000, the percent of Bel Aire households with children has decreased substantially. In 2000, just under 50% of households had individuals under the age of 18. It has decreased to 34% today.

The age of residents and household composition can impact how likely people are to walk and bicycle, the purpose of the activity (exercise, enjoyment, travel, etc.), as well as the destinations to which they walk and bicycle.

Population Change by Age Groups



Transportation to Work - Over 91% of Bel Aire residents that are employed work outside of Bel Aire. This provides fewer opportunities for residents to walk and bicycle to work due to the longer trip length. In general, the acceptable trip length for walking trips is about 1/2 mile and about 2 miles for bicycle trips.

The vast majority (94%) of Bel Aire workers travel to work in a motor vehicle. There are no Bel Aire residents that walk to work and 1% of Bel Aire workers bicycle to work. Just under 4% work at home.

Vehicle Availability - The vast majority of occupied housing units have access to at least one motor vehicle with most having access to two or more. Most households do not have to rely on walking or bicycling as the only means of transportation. However, walking and bicycling can reduce the need for parents to drive their children to local destinations.



ENGAGEMENT SUMMARY

Public involvement was very important to the development of the Bel Aire Bicycle and Pedestrian Plan (BPP). There were several ways for citizens to get involved with the project.

- We shared information about the project on social media.
- We hosted a bicycle and pedestrian improvements survey.
- We held six pop-up meetings at community events and popular destinations.
- We hosted an interactive stakeholder discussion.

Engagement activities occurring during the fall of 2018. At the conclusion of our efforts, we talked with over 300 residents at events and meetings, and reached thousands through the City's social media pages.

Survey - Nearly 140 people participated in the online survey, which focused on bicycle and pedestrian needs and opportunities. Below is a summary of the results.

- 47% bicycle and 78% walk at least once per week
- 14% never bicycle and 3% never walk
- Residents want to be able to walk to parks and community buildings the most
- Residents want:
 - More off-street bicycle paths
 - Connections to schools, parks, and community buildings
 - Connections between neighborhoods
 - Improved crossings of busy streets
- Residents want improved safety and connectivity
- 88% support using local funds to improve walking and bicycling

Social Media - Project announcements were posted on Facebook and Twitter with the #BelAireBikePed hashtag to help spread the word about the bicycle and pedestrian survey and pop-up meetings.

Pop-Ups - We held pop-ups at the Fall Festival, Bob and Luigi's Pizza, Bel Aire Senior Club Potluck, Bel Aire Chamber of Commerce, Christmas in Bel Aire, and Ready Set...Bike! Those we engaged with identified perspectives, important bicycling and walking destinations and paths to them, projects, and priorities.

Stakeholder Workshop - City staff, City officials, and representatives of schools, home owners associations, community organizations, and citizens were invited to a stakeholder workshop. During the event, we discussed a vision for bicycling and walking in Bel Aire, strategies for the future, priorities, and improvement concepts and projects for high priority areas and corridors.

Key concepts for the vision statement included the following: active living and lifestyles, equity, a citywide view, creativity, connectivity, safe connections, recreation, transportation partnerships, and a small town feel. This group developed the vision statement for this Plan.

The group developed potential improvement concepts for priority corridors and areas.

- Top Priority Projects
 - Woodlawn Blvd from 37th St to 45th St - shared-use path on one side and sidewalk on the other side (under design with construction in 2020/2021)
 - Rock Rd from Central Park Ave to Old Mill St - sidewalks with crossing of Rock Rd.
- Second Priority Project
 - 45th St from Oliver St to Woodlawn Blvd - shared-use path on one side and sidewalk on the other side with a crossing at Westlake Dr and provisions for seating near the Rock Rd and Woodlawn Blvd intersection.

- Third Priority Project
 - 45th St from Woodlawn Blvd to Rock Rd - shared-use path on one side and sidewalk on the other side with crossings at the 45th St and Rock Rd intersection.
- Fourth Priority Project
 - Woodlawn Blvd from 45th St to 53rd St - shared-use path on one side and sidewalk on the other side with a crossings near Central Park Ave and Bethany/48th St..

Another key takeaway from the discussion was that Bel Aire should focus on providing more pathways first and, over time, provide amenities such as benches, lighting, and trees.



VISION, OUTCOMES, & STRATEGIES



VISION

Bel Aire will be a community for all ages that promotes equitable and active living opportunities for its residents by providing an enhanced, safe, and connected bicycle and pedestrian network.

SAFETY OUTCOME

Bel Aire will be a safe environment for all ages and abilities to walk and bicycle.

The primary safety concern for pedestrians and bicyclist is motor vehicles. Pedestrians and bicyclists are much more vulnerable than motorists, as they lack the protection provided by a vehicle. In a crash, the bicyclists and pedestrians lose. Streets with high traffic volumes and speeds divide the community, creating safety barriers to walking and bicycling.

The busy streets affect users in different ways based upon age, experience, and ability. Street, pathway, and crossing designs should consider all users including children, disabled, and elderly. Design also includes appropriate lighting of routes as well as crossings.

Safety Strategies

- Provide dedicated bicycle and pedestrian facilities along busy streets and where it is deemed unsafe to have pedestrians and bicyclists mixed in with motor vehicle traffic.
- Create safe crossings of busy streets and railroad tracks.
- Reduce vehicle speeds where motor vehicles cause safety concerns for pedestrians and bicyclists.
- Provide appropriate lighting of pathways and crossings.
- Educate citizens on safe bicycling, walking, and driving.
- Enforce walking, bicycling, and driving laws.

CONNECTIVITY OUTCOME

Bel Aire will have a seamless network of bicycle and pedestrian connections where residents can conveniently get around the community.

A quality bicycle and pedestrian network provides convenient connections to places people want to go. Each individual route is part of a larger network that links adjacent neighborhoods and connects to local and regional destinations.

There are currently many gaps in the network. Many neighborhoods lack pathways. Several neighborhoods are disconnected from the rest of the community. It is not uncommon for a neighborhood to have sidewalks that terminate at an arterial street with no pathways along the arterial street or safe crossings.

Pathways along arterial streets in Bel Aire could form a great backbone for the pathway network. The majority of local and regional destinations are in close proximity to the arterials.

Connectivity Strategies

- Provide pathways within neighborhoods, especially along busier streets.
- Develop pathways along arterial streets.
- Create safe crossings of arterials streets and ensure they are in convenient locations.
- Develop street design guidelines that provide for bicyclists and pedestrians.
- Ensure City regulations have provisions for bicyclists and pedestrians.
- Support development types that enhance bicycling and pedestrian opportunities.

USE OUTCOME

Bel Aire will be a place where residents walk and bicycle regularly.

Bel Aire wants to be a place where it is easy and comfortable to walk and bicycle. This can be accomplished by removing or reducing barriers. By achieving the previous two outcomes; by making walking and bicycling safe and connected, increased walking and bicycling is anticipated. However, we want to ensure the network gets used. There are a variety of programs that can be implemented to increase the use of the bicycle and pedestrian facilities.

There are a variety of ways to promote walking and bicycling. These include programs for regular walking and bicycling, special events, education and awareness of the multitude of benefits, and providing enhancements or amenities along a route.

Use Strategies

- Raise awareness of the health, environmental, congestion, and quality of life benefits of walking and bicycling.
- Host walking and bicycling events.
- Encourage walking and bicycling to City events.
- Maintain pathways in good condition.
- Coordinate with other agencies to provide facilities and promote walking and bicycling.
- Make walking and bicycling easier by enhancing safety and connectivity.
- Make walking and bicycling more appealing by providing amenities.

ACTIONS

The actions in this section outline how the City of Bel Aire should implement the Bike and Pedestrian Plan (BPP). High-priority actions should be implemented within the next five to ten years. Other actions are those with lower priority and can be implemented as deemed appropriate.

HIGH-PRIORITY ACTIONS

- Program local funds for, and construct, short-term capital projects identified in the BPP.
- Seek outside funding sources to supplement local funds for near-term capital projects identified in the BPP.
- Coordinate with USD 259, individual schools, local businesses, and other organizations to help fund the construction and maintenance of bicycle and pedestrian pathways.
- Require the provision of pedestrian and bicycle connections between adjacent neighborhoods and from neighborhoods to the bicycle and pedestrian network during the land development process.
- As development and redevelopment occurs, require the construction of bicycle and pedestrian projects, or portions

thereof, consistent with this Plan, or require fee-in-lieu of construction.

- When appropriate and feasible, incorporate pathway projects with other City projects, such as street and intersection improvement projects.
- Coordinate with the City of Wichita, City of Kechi, and Sedgwick County to develop regional connections.
- Create promotional campaigns and/or public events as projects are completed to celebrate the project completion to promote use of the facilities.
- Expand community walking and bicycling events and host them regularly.
- Promote walking and bicycling to City and community events. This could include encouraging walking and bicycling to the event in promotional materials, providing bicycle parking, and providing prizes or giveaways for those who walk or bicycle to the event.
- Continue to participate in the Wichita Area Metropolitan Planning Organization's bicycle and pedestrian count program.
- Assign City staff responsible for managing the implementation of this Plan.
- Seek out and engage community members to be champions of this Plan.

OTHER ACTIONS

- Program local funding for, and construct, long-term capital projects identified in this Plan.
- Seek outside funding sources to supplement local funds for long-term capital projects.
- Develop and codify transportation impact fees to be used for bicycle and pedestrian infrastructure.
- Update the subdivision regulations related to bicycle and pedestrian accommodations to be consistent with this Plan.
- Develop and implement an Americans with Disabilities Act (ADA) pedestrian accessibility program that includes installing accessible curb ramps in locations that do not meet current requirements.
- Develop an arterial street access management policy that focuses on minimizing negative impacts on bicyclists and pedestrians at business driveways.
- Develop a pathway maintenance program that identifies responsible parties for maintenance, issue reporting procedures, enforcement, and funding mechanisms.

- Include pedestrian and bicycle support facilities along major pathway routes such as seating, dog waste stations, trash receptacles, bicycle parking, bicycle fix-it stations, lighting, shade, exercise equipment/stations, educational components, and leisure areas.
- Provide safe and secure bicycle parking within public right-of-way in areas that have a high density of destinations for bicyclists. Consider requiring bicycle parking provisions for major destinations in the subdivision regulations.
- Reduce motor vehicle travel speeds and incorporate traffic calming measures on streets along bicycle and pedestrian routes, especially those near parks and schools.
- Develop and implement a bicycle and pedestrian wayfinding plan.
- Develop promotional materials that raise awareness of the health, environmental, congestion, and quality of life benefits of walking and bicycling.



FUTURE BIKE & PED NETWORK

The Bel Aire Bicycle and Pedestrian Plan (BPP) identifies routing for future pathways. **MAP 3** shows the long-term future bicycle and pedestrian network.

Design guidance for these sidewalks, shared use paths, and on-street bicycle facilities are provided in the Design Guidance section of the BPP. For reference in this section, on-street bicycle facilities are portions of the street (between the curbs or ditches) that are designated for bicycle travel. Sidewalks and shared use paths are separate, off-street facilities. Sidewalks are generally 6 feet wide or narrower and are designed for pedestrians. Shared use paths are generally 10 feet wide and are designed for bicyclists and pedestrians.

PEDESTRIAN ROUTES

The Ped Routes on **MAP 3** identify the corridors for pedestrian facilities. At a minimum, sidewalks should be provided on one side of the street. It is preferred that these routes include sidewalks on both sides of the street. If the route is not along a street, a single sidewalk is preferred. Shared use paths can be substituted for sidewalks.

BICYCLE & PEDESTRIAN ROUTES

The Bike & Ped Routes on **MAP 3** identify the corridors for bicycle and pedestrian facilities. The preferred accommodations are a shared use path on one side of the street with sidewalk on the adjacent side of the street. However, on-street bicycle facilities are an option. If on-street bicycle facilities are provided, sidewalks should be provided on both sides of the street. If the route is not along a street, a shared use path is preferred.

COMMITTED PROJECT

The City is currently designing a street project on Woodlawn Blvd from 37th St to 45th St. This project also includes the following pathway improvements:

- Shared-use path along the west side of Woodlawn Blvd from 37th St to 45th St.
- Sidewalk along the east side of Woodlawn Blvd from 37th St to the existing sidewalk north of 45th St.
- Sidewalk connection to existing sidewalk on 45th St.
- Pedestrian traffic signals and marked crosswalks on all four legs of the intersection of Woodlawn Blvd and 45th St.
- Enhanced pedestrian crossing of Woodlawn Blvd near Bel Aire Park.

NEAR-TERM PROJECTS

The projects identified in the table below and **MAP 4** are planned to be constructed in the near-term, or about the next 10 years. The projects listed are not in priority order. To construct this group of projects over the next ten years would require an annual funding amount of between \$78,700 to \$90,700.

Although the Plan shows specific sides of the street, the pathways could be placed on the opposite side due to circumstances unknown at this time.

LONG-TERM PROJECTS

The City should work towards completing the entire future bicycle and pedestrian network once the near-term projects are complete.

Additionally, as the City completes street reconstruction projects, similar to Woodlawn Blvd between 37th St and 45th St, pathway improvements can be part of the larger street project.

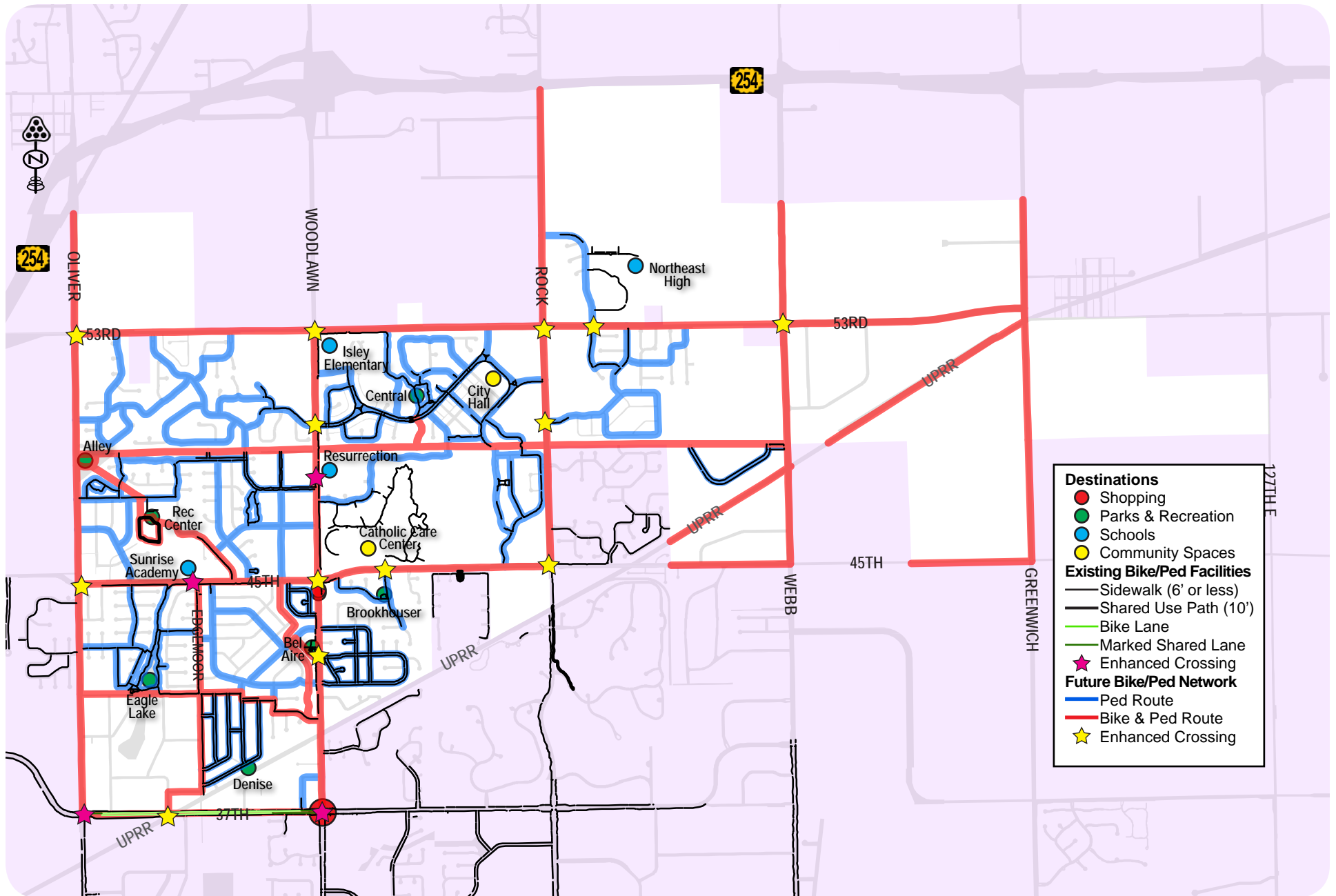
Many of the routes identified in the future bicycle and pedestrian network should be constructed as the residential subdivisions are developed. Another option is to require a fee-in-lieu of construction; collecting funds from the developer so the City can construct the pathways post-development.

Near-Term Projects

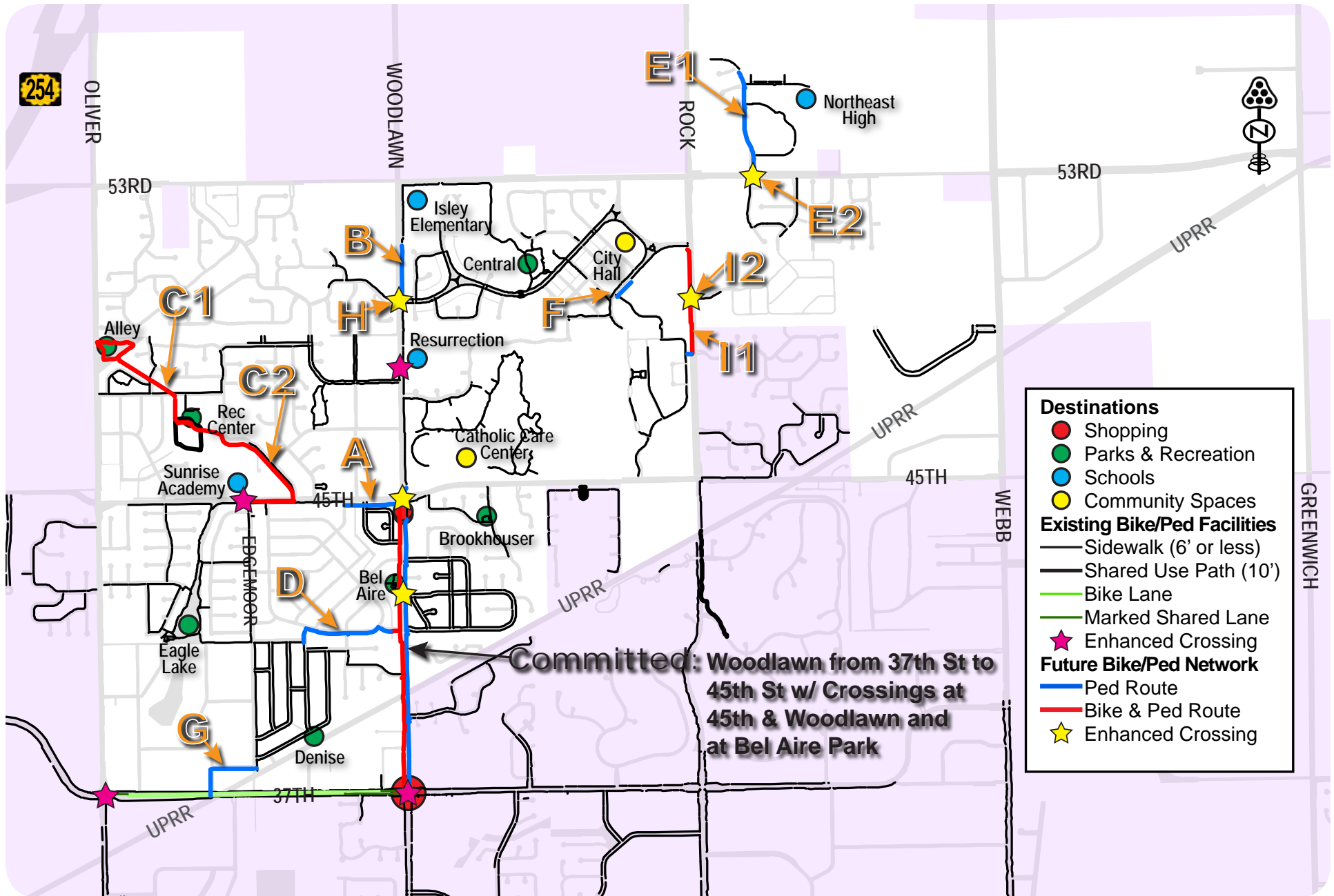
ID	Project Name	Project Description	Cost Estimate*
A	West 45th St Connection	Sidewalk along the south side of 45th St from Dundee St to Woodlawn Blvd.	\$25,000
B	Isley Connection	Sidewalk on east side of Woodlawn Blvd from Central Park Ave to existing sidewalk at Isley Elementary School.	\$34,000
C1	Alley Park to Rec Center	Shared use path loop around pond at Alley Park, along utility corridor to 48th St, through Rec Center area to Hedgerow Ct.	\$185,000
C2	Rec Center to Sunrise Academy	Shared use path from Rec Center along southwest side of Hedgerow Ct, and along north side of 45th St to Sunrise Academy.	\$111,000
D	Perryton St	Sidewalk along the west side of Danbury St from Perryton St to 41st St, along Perryton St from Danbury St to the drainage channel, and shared-use path from the drainage channel to Woodlawn Blvd.	\$59,000
E1	Lycee St	Sidewalk along the east side of Lycee St existing sidewalk south of 53rd to existing sidewalk near Lycee Ct with enhanced crossing of 53rd St at Lycee St.	\$55,000
E2	53rd St Xing at Lycee St	Enhanced pedestrian crossing of 53rd St at Lycee St	\$60,000 to \$100,000
F	Prestwick Ave	Sidewalk along the southeast side of Prestwick Ave from Remington Ave northeast to existing sidewalk.	\$8,000
G	Edgemoor St	Sidewalk on north side of 38th St from Edgemoor St to Parkwood Ln and on the west side of Parkwood Ln from 38th St to 37th St.	\$34,000
H	Woodlawn Blvd Xing at Central Park Ave	Enhanced pedestrian crossing of Woodlawn Blvd at Central Park Ave.	\$60,000 to \$100,000
I1	Rock Rd South of Central Park Ave	Shared use path along the west side of Rock Rd from Elk Creek entrance to Central Park Ave	\$96,000
I2	Rock Rd Xing at Rock Spring Rd	Enhanced crossing of Rock Rd at Rock Spring Rd.	\$60,000 to \$100,000
TOTAL			\$787,000 to \$907,000

*Cost estimates are for construction only and are general in nature and do not include design, major grading, drainage improvements, structures, right-of-way acquisition, utility relocation, or other elements that cannot be accounted for without careful examination of existing site conditions.

Map 3: Future Bike & Ped Network



Destinations	
●	Shopping
●	Parks & Recreation
●	Schools
●	Community Spaces
Existing Bike/Ped Facilities	
	Sidewalk (6' or less)
	Shared Use Path (10')
	Bike Lane
	Marked Shared Lane
★	Enhanced Crossing
Future Bike/Ped Network	
	Ped Route
	Bike & Ped Route
★	Enhanced Crossing



FUNDING STRATEGY

LOCAL FUNDING

Funding bicycle and pedestrian enhancements will require local financial support. Federal, state, and other grants typically require local funding for a portion of the project cost. Outside funding sources should be used to supplement local funding and stretch local dollars to get more bang for the buck.

The City can allocate funds for capital projects or programs through the City's budget. Bel Aire currently budgets about \$400,000 to \$500,000 for street improvements. Sidewalk and bicycle infrastructure improvements has typically come from this pot of money.

The City should consider creating a bicycle and pedestrian enhancements program and designating a specific amount to funding the installation of bicycle and pedestrian facilities and amenities.

If the City is to complete the near-term projects within ten years, Bel Aire would need to program approximately \$80,000 to \$90,000 per year.

WITH DEVELOPMENT

As mentioned in the previous section, many of the routes identified in the future bicycle and pedestrian network should be constructed as residential subdivisions are developed. This will take the financial burden off the entire community for the installation of sidewalks in new residential subdivisions. The City should enforce the subdivision regulations and require the provision of sidewalks and shared use paths as properties develop.

There are a few options for funding sidewalks during development. Each has their pros and cons.

Privately funded - In this approach, the developer pays for the design and construction of the pathway. The infrastructure is installed prior to home construction. The cost for infrastructure is rolled into the price of the land purchased by builders.

Special assessment - In this approach, the developer petitions the City to design and construct the pathways with other public infrastructure. The City then assesses the costs on individual properties. Owners of the properties pay for the improvements over time. Pathways are constructed prior to or during home construction.

In existing developments, individual property owners can petition for the City to design and construct pathways. The property owners then pay the City back over time.

Fee in lieu - In this approach, the developer pays a fee instead of building pathways. The money collected is set aside in a fund for future sidewalk or pathway construction in the area.

Impact fee - An impact fee is a one time fee assessed on new development to cover the expenses for essential capital improvements. The costs are to be proportionate to the demand created by the development. Improvements funded by impact fees must be used to provide substantial benefit to the new development.

WAMPO FUNDING

The Wichita Area Metropolitan Planning Organization (WAMPO) administers federal transportation funds for the Wichita area, which includes Bel Aire. There are multiple federal funding programs that could fund the construction of bicycle

and pedestrian improvements including Surface Transportation Block Grant (STBG) and Transportation Alternatives (TA). WAMPO is sub-allocated approximately \$12 million per year to fund projects. The Transportation Policy Body ultimately decides which projects receive funding.

The first step in securing funds is to get specific projects included in WAMPO's long-range transportation plan. WAMPO is currently developing their next long-range plan. Bel Aire should consider submitting projects for inclusion into WAMPO's long-range plan. This is a competitive process where all jurisdictions within the WAMPO region submit projects to receive funds. Getting a project into the long-range plan does not guarantee the project will receive federal funding assistance.

Once in the long-range plan, Bel Aire can then submit the project for inclusion in WAMPO's Transportation Improvement Program (TIP). The TIP is similar to a capital improvement program. It is a 4-year program that identifies specific projects to receive funds, the year for which the project is programmed, and the federal funding source and amount for the project. This is another competitive process to secure funding for a project. When WAMPO initiates a call for projects, Bel Aire should consider submitting projects that are in the long-range plan for inclusion in the TIP.

The federal funds administered through WAMPO typically require a minimum 20% local match. However, WAMPO typically prefers a larger local match.

Typical eligible project-related activities are limited to construction and con-

struction engineering. Design, right-of-way acquisition, and utility relocation are typically not eligible for WAMPO funding.

HIGHWAY SAFETY IMPROVEMENT PROGRAM

Administered through KDOT, the HSIP is intended for safety improvements on public roads that are consistent with the Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location or feature. The minimum local match requirement is 10%. This is a very competitive statewide program. Contact the KDOT Bureau of Transportation Safety and Technology to request funding.

TRANSPORTATION ENGINEERING ASSISTANCE PROGRAM

Administered through KDOT, the TEAP is available to cities for safety-related activities such as assessing traffic operational issues and traffic engineering problems. Applications can be found at <https://www.ksdot.org/bureaus/burlocalproj/default.asp>

OTHER FUNDING

The City should consider alternative means of funding capital projects, maintenance activities, and programs. The City should seek out partnerships with businesses and organizations to help fund, sponsor, or 'adopt' the construction or maintenance of a pathway.

There are other grants available for bicycle and pedestrian infrastructure projects and programs. A few of these include Community Development Block Grants (CDBG) and PeopleForBikes Community Grant Program.

DESIGN GUIDANCE

Not every street needs separate facilities for bicyclists and pedestrians. However, each street should safely and effectively accommodate bicyclists and pedestrians to the degree needed.

When determining how to accommodate drivers, bicyclists, and pedestrians, consider the safety of all users. Consider the likely users of the street. Certain segments of the population will desire different facilities. Children may not be comfortable walking and bicycling in the street (parents may not feel that it is safe either). Consider the experience of the drivers. Consider those with vision impairments or physical disabilities. Also consider the pavement condition to ensure that it will work for the users.

SHARED STREETS

A shared street is where motor vehicles, bicyclists, and pedestrians all share the same space; there are no sidewalks, shared use paths, or dedicated on-street bicycle facilities.

When to consider a shared street

- Very low pedestrian and bicycle volumes
- Vehicular speeds are typically 25mph or less
- Vehicular volumes are typically 300 cars per day or less
- Primarily residential uses along the street
- Residential cul-de-sacs or dead ends
- Pavement is smooth and in good condition

SIDEWALKS & SHARED USE PATHS

Sidewalks are a good way to accommodate pedestrians. Sidewalks are preferred to be 6 feet wide to comfortably accommodate two people walking side-by-side or passing one another. At a minimum, sidewalks should be 5 feet wide and meet all Americans with Disabilities Act (ADA) requirements.

Although not ideal, sidewalks also can accommodate bicyclists. Children often ride on sidewalks rather than in the street. The issue is that sidewalks are not wide enough for bicyclists to comfortably pass pedestrians or other bicyclists.

Shared use paths are wide enough to accommodate pedestrians and bicyclists. Shared use paths are preferred to be at least 10 feet wide. In constrained circumstances, 8 feet wide is acceptable. Shared use paths must also meet all ADA requirements.

Sidewalks and shared use paths should be buffered from an adjacent street. The buffer creates a more comfortable environments for walking and bicycling. The buffer should be at least 5 feet wide. When space is constrained and buffers cannot be provided, consider vertical dividers to separate the pathway from the street. Dividers should be more than a standard curb. They can include bollards, large stones, trees, railings, or anything else that will make the pedestrian or bicyclist feel safer and more comfortable.

When to consider a sidewalk on one side of the street

- Low to moderate pedestrian volumes
- Vehicle speeds are typically higher than 25mph
- Vehicular volumes are typically higher than 300 cars per day
- Block lengths are typically shorter than 600 feet long
- Pedestrians can safely cross the street to get to the sidewalk on the opposite side of the street
- There is development on only one side of the street
- Local streets
- Primarily residential uses along the street

When to consider a sidewalk on each side of the street

- Moderate to high pedestrian volumes
- Vehicle speeds are typically higher than 25mph
- Vehicular volumes are typically higher than 500 cars per day
- Block lengths are over 600 feet long
- There are long distances between safe street crossings
- Pedestrians cannot safely cross the street to get to the sidewalk on the opposite side of the street
- There is development on both sides of the street
- Collector and arterial streets
- Primarily commercial uses or mixed use developments along the street

When to consider a shared use path rather than a sidewalk

- Moderate to high pedestrian and/or bicycle volumes
- High volume of children bicycling
- Bicycling in the street is not preferred
- Collector and arterial streets



BUFFERED ON-STREET BICYCLE LANES

If the street is not a shared street, Bel Aire prefers shared use paths for bicyclists rather than on-street bicycle lanes. If on-street bicycle lanes are to be implemented, physical buffers should be provided between the bicycle lane and vehicular travel lanes. Bicycle lanes should be 4 to 5 feet in width. If adjacent to a curb, the bicycle lane should extend at least 3 feet from the longitudinal joint. If bicycle lanes are too wide, vehicles are more likely to encroach on the bicycle lane. The buffer between the bicycle and adjacent travel lane should be at least 2 feet wide and include vertical dividers.

When to consider an on-street bicycle lane

- Moderate to high bicycle volumes
- Excess space between the curbs (or edges of pavement) for vehicles and on-street parking
- Insufficient space between the curb or edge of pavement and right-of-way line to install a shared use path
- Open ditches and slopes do not allow off-street shared use path
- Moving the curb is not desirable to create space for a shared use path
- Driveways create unsafe conditions for a shared use path



Buffered Bike Lane

ENHANCED CROSSING

Enhanced crossings include features beyond the typical crosswalk pavement markings. Typical elements of enhanced crossings include traffic signals with pedestrian push buttons, pedestrian countdown timers, pedestrian hybrid beacons, and refuge islands. An engineer should assess the appropriate features to include at each enhanced crossing.

One of the major barriers to bicycling and walking in Bel Aire are the busy arterial and collector streets. Along the arterial streets, there are often long distances between intersections where pedestrians can safely cross the street. Each signalized intersection should include crosswalks and pedestrian signals. In general, there should be one to two pedestrian crossings between the mile-line street intersections. Prime locations for these crossings are typically signalized intersections.

Median refuge islands can greatly enhance pedestrian safety when crossing streets due to pedestrians only needing to cross one direction of travel at a time. Refuge islands should be considered for all pedestrian crossings, especially for mid-block crossings and arterial street crossings.



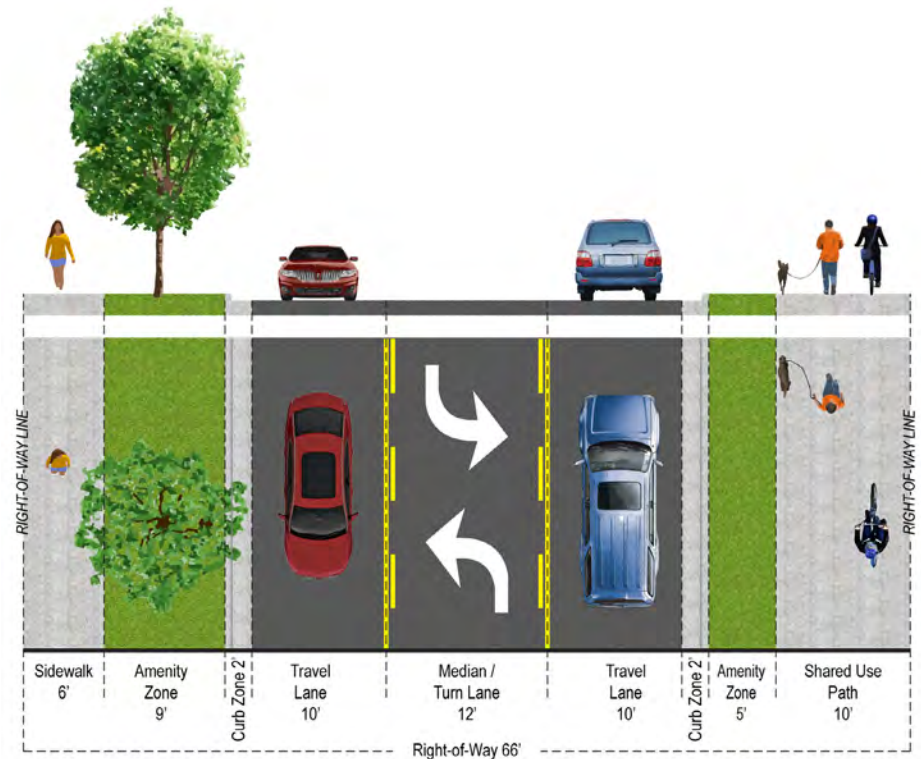
Enhanced Crossing



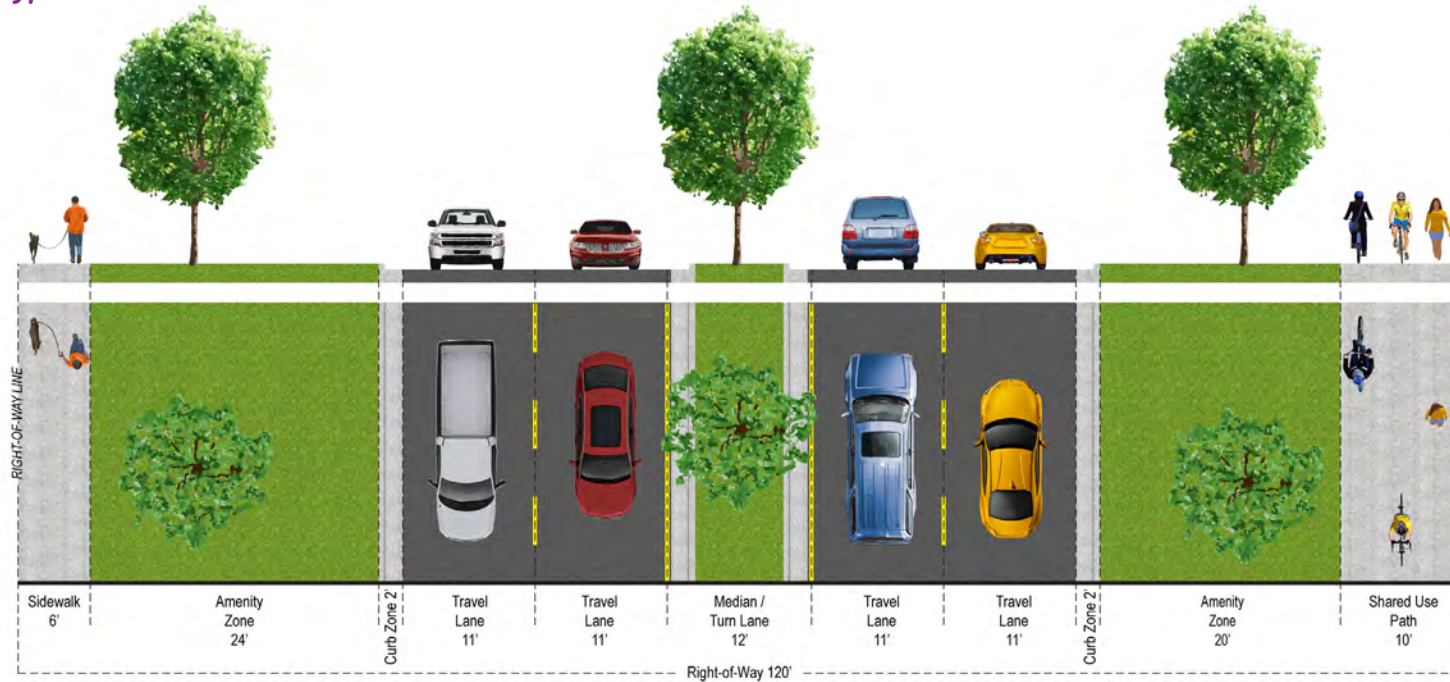
TYPICAL SECTIONS

Typical sections illustrate how space is allocated within the public street right-of-way. Below is an example of a collector street with a shared use path on one side of the street and sidewalk on the other. On the following page are two typical sections for arterial streets. The first includes all off-street bicycle and pedestrian facilities. The second includes off-street sidewalks on both sides of the street and on-street buffered bicycle lanes.

Typical Section: Collector with Shared Use Path



Typical Section: Arterial with Shared Use Path



Typical Section: Arterial with Buffered Bike Lanes

Vehicle impact speed and pedestrian risk of severe injury and death:

16 MPH - 10% severe injury

23 MPH - 25% severe injury

23 MPH - 10% death

31 MPH - 50% severe injury

32 MPH - 25% death

39 MPH - 75% severe injury

42 MPH - 50% death

46 MPH - 90% severe injury

50 MPH - 75% death

58 MPH - 90% death

Source: Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety.

