



ROSE HILL PEDESTRIAN STUDY

MAY 2020



CITY COUNCIL

Steve Huckaby, Mayor
Gary Weaver, Council President
James Woydziak
Edward Musterer
Jeanine Schantz
Michelle Bollig

PLANNING COMMISSION

Greg Thomas, Chairman
Jeanine Schantz, Vice Chair
Eric Bolig
Mike Sullivan
Ed Templin

CORE TEAM

Steve Huckaby, Mayor
Debra Funke, Rose Hill Schools
Jason Steadman, Rose Hill Recreation Commission
Warren Potter, City of Rose Hill City Administrator
Kelly Mendoza, City of Rose Hill City Clerk
Rick Cooper, City of Rose Hill Parks & Street Supervisor
Cindy Stone, City of Rose Hill Treasurer / Planning & Zoning

CONSULTANT TEAM



The Rose Hill Pedestrian Study was funded in part by the Wichita Area Metropolitan Planning Organization (WAMPO) through the Planning Walkable Communities program.

RESOLUTION 625

WHEREAS, THE City of Rose Hill desired to develop a plan to enhance walkability in Rose Hill.

WHEREAS, THE City of Rose Hill received funding from Wichita Area Metropolitan Planning Organization (WAMPO) to contract with a consultant to develop a plan to enhance walkability in Rose Hill.

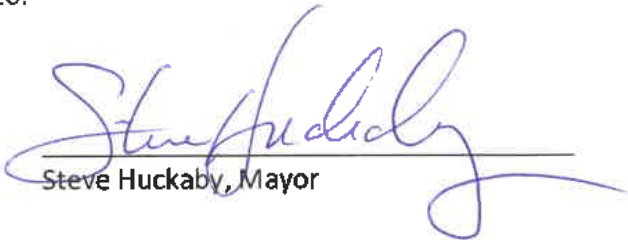
WHEREAS, THE City of Rose Hill was advised by citizens within the community on the development of a walkability plan.

WHEREAS, THE City of Rose Hill conducted public meetings and received input on public improvements from hundreds of citizens.

WHEREAS, THE Rose Hill Planning Commission has discussed the plan and publicly recommended approval of the plan on May 12, 2020.

NOW, THEREFORE, BE IT RESOLVED the City Council of Rose Hill, Kansas, has considered, discussed and adopts the Rose Hill Pedestrian Study.


Passed and adopted this 18th day of May, 2020.


Steve Huckaby, Mayor

ATTEST:




Kelly Mendoza, City Clerk



| | |
|--|-----------|
| Introduction..... | 1 |
| Existing Conditions..... | 2 |
| Challenges | 6 |
| Vision & Goals | 8 |
| Connectivity Concepts..... | 9 |
| Placemaking Concepts | 21 |
| Action Steps..... | 27 |
| Funding Strategy | 29 |
| Appendix A: Round #1 Survey Results | 31 |
| Appendix B: Round #1 Charette Summary | 38 |
| Appendix C: Survey #2 Results | 41 |
| Appendix D: Round #2 Pop-Up Summary | 44 |
| Appendix E: Social Characteristics | 45 |

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.
- Jane Jacobs

PURPOSE

The Rose Hill Pedestrian Study (RHPS) lays out a plan to enhance walkability in Rose Hill. The RHPS does so by:

- ▶ Setting forth an aspirational vision for walkability
- ▶ Identifying ambitious walkability goals
- ▶ Conceptualizing potential improvements
- ▶ Introducing a citywide pedestrian network
- ▶ Designating priority projects
- ▶ Establishing action items
- ▶ Describing a funding strategy for implementation

WHY WALKABILITY

Walkability entails creating or enhancing **places** we want to walk to as well as **routes** to safely and comfortably travel. Walkable communities are healthy communities. They are intentionally planned and designed to produce desired results such as:

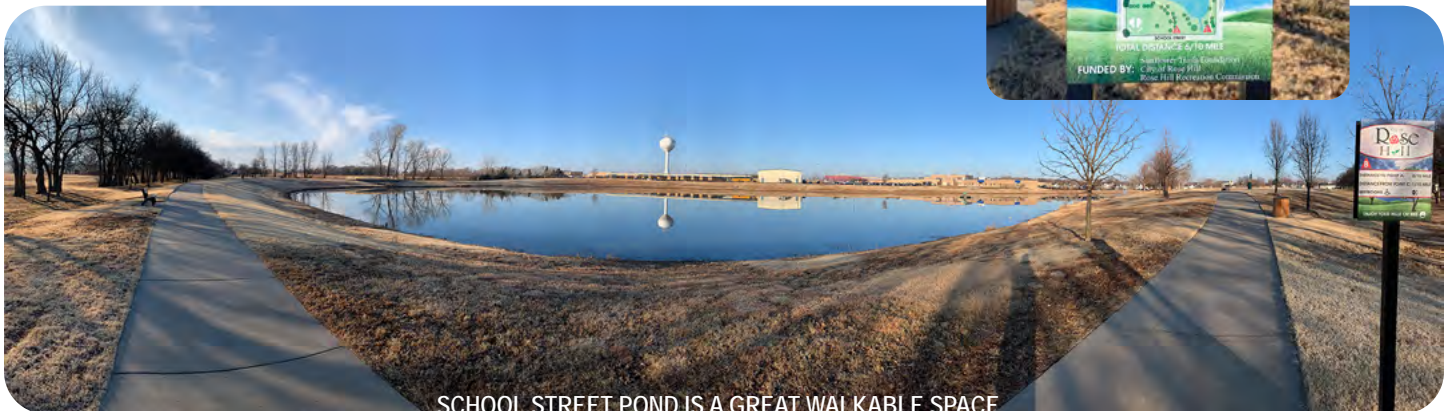
- ▶ Creating opportunities for social interactions; the cornerstone of a community
- ▶ Stimulating community pride
- ▶ Integrating exercise into our daily lives and improving individual health and wellbeing
- ▶ Improving the natural environment
- ▶ Increasing home and property values
- ▶ Boosting and stimulating business activity
- ▶ Attracting new residents and businesses
- ▶ Enhancing accessibility for all ages and abilities
- ▶ Creating equity among all economic classes and improving the affordability of transportation
- ▶ Enhancing quality of life and place

PLAN DEVELOPMENT PROCESS

A Core Team was comprised of community members, City staff, and consultant staff. This group guided the development of the RHPS, provided vital input along way, reviewed content and concepts, and provided vital feedback.

The RHPS is based upon community input and represents the will of the community. The development of the RHPS hinged around two rounds of community engagement. Round #1 in the fall of 2019 included an on-line survey and design charette. The vision, goals, and project concepts and ideas are direct results from Round #1. Round #2 in early 2020 included an on-line survey and pop-up open house at Rose Hill High School during multiple basketball games. The priorities are a direct result of Round #2. Almost 800 people participated in the surveys, about 50 people participated in the design charette, and about 125 people provided input at the pop-up. A summary of the input is provided in the appendix.

- ▶ Appendix A: Round #1 Survey Summary
- ▶ Appendix B: Round #1 Design Charette Summary
- ▶ Appendix C: Round #2 Survey Summary
- ▶ Appendix D: Round #2 Pop-Up Summary



SCHOOL STREET POND IS A GREAT WALKABLE SPACE

LOCATION

Rose Hill is a relatively small, primarily residential community located in Butler County, KS within the Wichita Metropolitan Statistical Area. It is located about 13 miles southeast of downtown Wichita, about 6 miles south of Andover, and about 6 miles east of Derby.

LAND USE PATTERN

Rose Hill has developed primarily north/south along Rose Hill Rd. Typical of the region, Rose Hill developed around the mile-line grid street network with most non-residential uses locating at intersections of this street grid or along these arterial streets.

Off of the mile-line street grid are the collector and local streets that serve primarily residential uses. The older developments have more of a grid network with newer developments having shifted to curvilinear streets and cul-de-sacs.

Much of the land within Rose Hill is dedicated to residential uses. Residences are primarily single-family homes with some medium density residential uses. Most neighborhoods are contiguous and are in close proximity to Rose Hill Rd and/or other major streets. Sienna Ranch and Rockwood Falls subdivisions are currently disconnected from the rest of Rose Hill.

ACTIVITY NODES

There are certain types of land uses and development that attract pedestrian activity. These are places where people want to walk to, walk through, and walk around. These uses include parks, schools, community spaces, and service & retail businesses such as grocery stores, convenience stores, restaurants, coffee shops, banks, pharmacies, medical services, and health clubs.

Often times, these types of land uses and developments cluster together; creating an activity node. When these uses cluster, it creates more concentrated activity. There are four pedestrian activity nodes in Rose Hill.

- ▶ City Hall Node (Rose Hill Rd and Rosewood St)
 - City Hall, Dollar General, Casey's, Sonic, Emprise Bank, etc.
- ▶ Fire Station Node (Rose Hill Rd between Wiatt St and Primrose Ln)
 - Butler County Fire Station, Coffee with Friends, Subway, Rose Hill Business Center, Rose Hill Plaza, Rose Hill Veterinary Health Center, etc.
- ▶ Library Node (Rose Hill Rd and Silkknitter St)
 - The old town area including the Public Library, Post Office, Senior Center, Grace Park, Kermit Cox Memorial Park, Louis Cafe, Rose Hill Pharmacy, Rose Hill Barber Shop, Rose Hill Family Dentistry, Happy House, Hair Matters, etc.
- ▶ School Node (southeast of Rose Hill Rd & School St)
 - Rose Hill Primary School, Rose Hill Intermediate School, Rose Hill Middle School, Rose Hill High School, Recreation Center, School St Pond, and Shorty Cox Park.

Other places within Rose Hill that attract pedestrian activity include Perkins Park and Deer Creek Park.

On-line survey results showed Rose Hill residents walk primarily for exercise and enjoyment. When walking to a destination, residents primarily walk to schools and parks. When asked where residents want to be able to walk, residents expressed the desire to walk to parks, schools, shopping, and restaurants.



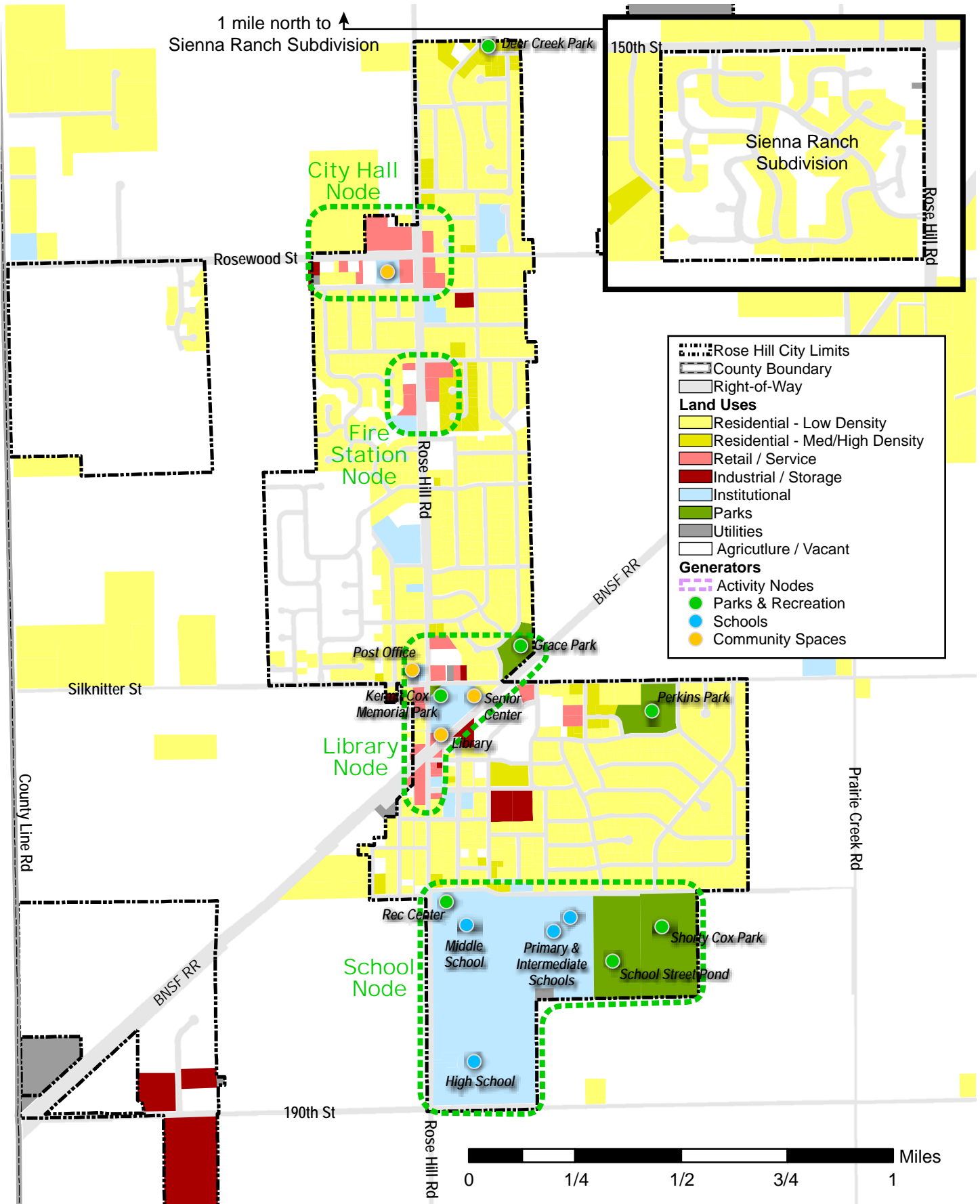
NEIGHBORHOODS

Homes within residential neighborhoods are where many pedestrian trips start. Pedestrians leave their homes to walk for enjoyment, get some exercise, to travel to a park or other destination including homes within their neighborhood or adjacent neighborhoods. Having safe and convenient pedestrian routes through neighborhoods is necessary to meet this demand.

EXISTING CONDITIONS



existing land use & Activity Nodes



PATHWAYS

The pedestrian network is comprised of two different types of pathways; sidewalks and shared-use paths. Sidewalks are 6 feet wide or narrower and are designed to accommodate pedestrians. They can accommodate bicyclists, especially children that don't want to ride in the street. Shared-use paths are 8 feet wide or more and are designed to accommodate pedestrians and bicyclists. They can accommodate higher volumes of pedestrians due to the greater width compared to sidewalks. Rose Hill has 8.7 miles of pathway comprised of 7.9 miles of sidewalk and 0.8 miles of shared-use path.

Pathways often include curb ramps that slope the pathway down to the street grade. Ramps improve the accessibility of the pathway, especially for disabled individuals.

Not included in this assessment is the street network. On some streets, pedestrians, bicyclists, and motor vehicles share the same space on the road. This may be the case where motor vehicle volumes and speeds are very low and there is a low volume of pedestrians and bicyclists.

CROSSWALKS

The ability to cross streets safely and efficiently is integral to a pathway network. They should be placed in convenient locations where pedestrians would want to cross and not have to walk a long distance out of their way. Rose Hill has a variety of street crossings throughout the community.

Pedestrian actuated traffic signals allow pedestrians to push a button to activate the designated pedestrian signal head that includes "walk" and "don't walk" or related symbols. These can be integrated into existing traffic signals at intersections, similar to those at Rose Hill Rd and Rosewood St. They can also be stand alone signals. These stand alone signals are often mid-block crossings. An example of this is the pedestrian crossing of Rose Hill Rd south of Waitt St.

Signed pedestrian crossings include a pedestrian warning sign at the crosswalk and often include an advance pedestrian crossing sign prior to the actual crossing. An example of this is the pedestrian crossing at School St and Bentwood Drive.

State law identifies each intersection as a crosswalk if pedestrian crossings are not prohibited with official traffic-control devices indicating the restrictions in place. Some of these types of crossings include pavement markings. An example of a marked crosswalk is at School St and Main St.

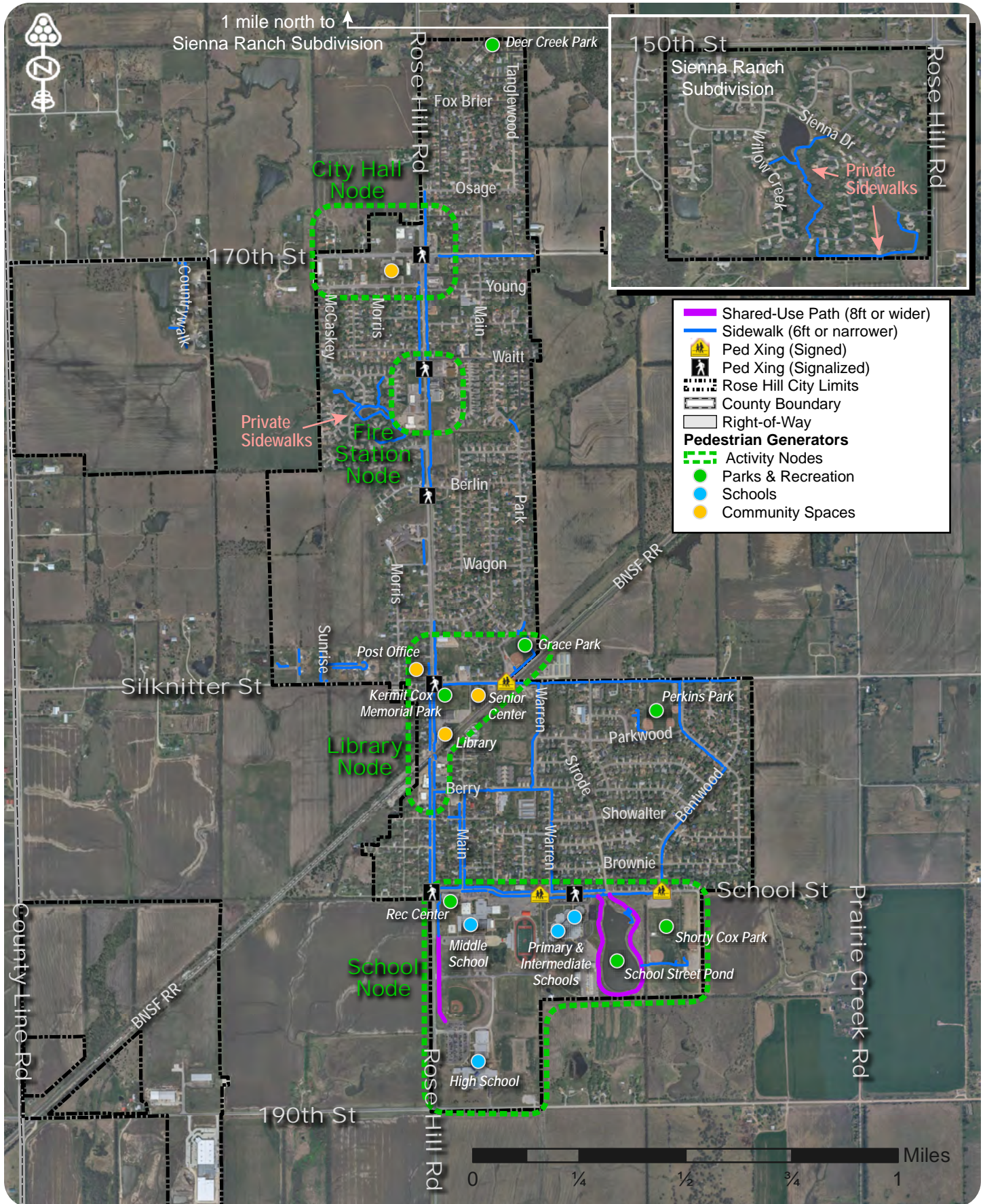
AMENITIES

Supporting infrastructure includes lighting, seating, landscaping, public art, bicycle parking, etc. Rose Hill has several benches that are distributed throughout the City along the pathways. There is a mix of lighted pathways and those that have insufficient lighting. There is a lack of designated bicycle parking. However, there is bicycle parking at some destinations.



EXISTING CONDITIONS

existing pathway network & Activity Nodes



GAPS

There is an uneven distribution of pathways in the City. The majority being in the southern portion of the City. The residential neighborhood north of the school complex has a fairly good pathway network with connections to the schools, nearby parks, and Rose Hill Rd.

Rose Hill Rd is the primary street through the community. It connects most of the community and most developments are within 1/2 mile of the road. However, it does not include pathway along the entire length to connect the community. Pathway along the entire length of Rose Hill Rd could provide much of the north/south connectivity since the community is very narrow.

Respondents to the on-line survey cited Rose Hill Rd as the worst place to walk. Primary reasons included lack of continuous sidewalks; sidewalks are too narrow; sidewalks are poorly maintained; street is too busy; too much vehicular traffic; too noisy. Over 100 responses specifically identified that the section of Rose Hill Rd between Silknitter St and School St is the worst due to the railroad crossing, narrow sidewalks, and poor sidewalk conditions.

There are a lack of connections to Rose Hill Rd from the neighborhoods east and west of Rose Hill Rd that are north of Silknitter St. When asked what would improve walking in Rose Hill, the top response in the on-line survey was “sidewalk connection between neighborhoods.”

Three residential subdivisions (Sienna Ranch, Rockwood Falls, and Sunrise) are completely disconnected from the community. There are no pathways to connect these subdivisions to the rest of the community.

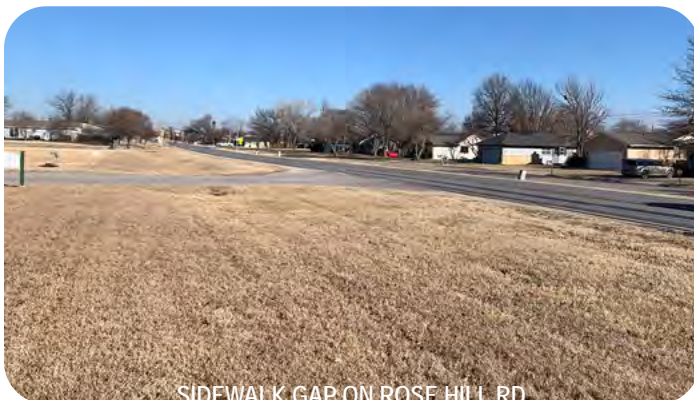
There are currently no connections to other communities in the area. The closest pathways outside of Rose Hill are to Andover to the north and Derby to the west. Andover currently has sidewalk on Rose Hill Rd about 6 miles north of Rosewood St at Harry St. Derby has a shared-use path on the south side of Rosewood St (63rd St S) terminating about 3.5 miles west of Rose Hill Rd.

EXISTING DEVELOPMENT

Many of the existing developments and neighborhoods do not include pathways. This is a major barrier due to concerns about who pays for installation and maintenance. There will also be issues about the amount of right-of-way required for the installation of pathways. On-line survey respondents cited neighborhood streets as one of the worst places to walk. Primary reasons included a lack of sidewalks, too much vehicular traffic and speeding, lack of sufficient street lighting, and potholes in the streets.

BUSY STREETS

Busy streets with high motor vehicle volumes and/or speeds present a serious barrier to walking in Rose Hill. First off, there is not a complete pathway network along these streets. Secondly, there are a lack of safe and accessible street crossings in certain locations. Often, drivers are not stopping for pedestrians at street crossings.



SIDEWALK GAP ON ROSE HILL RD



NO CONNECTION FROM SUNRISE SUBDIVISION

CHALLENGES



RAILROAD CROSSINGS

Similar to busy streets, the BNSF railroad tracks act as a barrier to pedestrian travel. The two street crossings of the railroad tracks, Rose Hill Rd and Silkmitter St, lack designated pedestrian crossing facilities. Crossings that are safe, smooth, accessible, and separated from vehicular traffic will improve walking opportunities.

DRAINAGEWAYS

Linear water features and drainageways can be significant obstacles to pedestrian connectivity. Drainageway crossings are limited due to the cost of installing bridges. Limited crossings tend to lengthen walking trips. Strategic crossing locations can reduce these barriers without making walking trip too long to be convenient.

MAINTENANCE

Maintenance responsibilities for sidewalks generally falls upon the property owner that abuts right-of-way. Maintenance is seldom enforced and routine maintenance is often neglected with no dedicated funding from the City. Areas in the older part of town have sidewalks in poor condition and pose hazards for pedestrians. Trees and shrubs can block pedestrian access along sidewalks. In neighborhoods with sidewalks, parked vehicles and trash containers can also block the sidewalk.

ACCESSIBILITY

When designing pedestrian facilities, considerations should be made for the wide variety of users and abilities including older adults, children, parents pushing strollers, and individuals with impairments (mobility, visual, hearing, etc.). Examples include sidewalks with curb ramps, wide enough for wheelchairs, and smooth enough as to not hinder travel.

LACK OF DESTINATIONS

The most common reason people walk in Rose Hill is for exercise and enjoyment. However, residents walk for transportation such as walking to schools, parks, work, and shopping. When asked what would improve walking in Rose Hill, the second most common response in the on-line survey was “create more walkable destinations.” Creating more walkable destinations and improving existing destinations can enhance opportunities for walking.



VISION

In the future, walking and biking in Rose Hill is **EASY** because the experience is safe, enjoyable, inviting, and supports healthy lifestyles and a healthy community.

GOALS

- ▶ Provide **safe** and **comfortable** routes for walking and biking, separating them from the roadway when possible
- ▶ **Connect** people to neighborhoods, schools, parks, and other community destinations
- ▶ Enhance **health** outcomes and opportunities for **social interactions**
- ▶ Make it possible for all residents to **safely** walk and bike
- ▶ **Draw** others to experience our safe and exciting community
- ▶ Develop a **stimulating** walking environment, offering **attractive** destinations and **interesting** places to stop along the way
- ▶ Strive to become the **most walkable community** in Kansas and draw residents from around the state to live and play in Rose Hill

VISION

The Dream

Describes the ideal situation in the future

GOALS

What We Want

Provides focus on specific ideas described in the vision

ACTIONS

How to Make it Happen

Policies, projects, other action steps to achieve a goal

Improve the connections & enhance the destinations

The Rose Hill Pedestrian Study focuses on two main concepts; connections and placemaking. Connections are about effectively linking people to places. Placemaking is about creating new places or enhancing existing places to increase walking opportunities.





The long-term vision is to create a city-wide pedestrian and bicycle network that connects neighborhoods, parks, businesses, and other destinations throughout Rose Hill. The network fills in the gaps of the existing sidewalk network, creates additional connections, and offers up enhancements that create a more walkable Rose Hill. The entire long-term network has been broken down into individual projects and grouped into phases to incrementally develop the city-wide network.

PHASE 1

The focus of phase 1 is to enhance north/south connectivity and enhance the BNSF railroad crossings. Rose Hill is developed in a north/south pattern, which makes north/south connections necessary. Phase 1 improves two north south routes; Rose Hill Rd and a route utilizing Main St, Waitt St, Park Rd, and Park Ln. It also creates crossings at the two railroad crossings.

PHASE 2

The focus of phase 2 is to continue enhancements along Rose Hill Rd to make it more bicycle-friendly; connect Sunrise and Rockwood subdivisions; and improve access to the school area. Although not identified in phase 2, the connection along Rose Hill Rd to Sienna Ranch is an important connection for the community. Butler County is planning for street and pathway improvements to Rose Hill Rd extending north from Rosewood St to Sienna Ranch. The City should support pedestrian and bicycle improvements along this corridor as part of the project.

LONG-TERM

The long-term routes complete the network. In undeveloped areas, such as Sunrise, the City should take the opportunity to require installation of sidewalks along with other infrastructure during development approval (with development). Sidewalks should be required in new subdivisions and connections to the existing and future network should be considered, planned, and constructed.

Phase 1 Projects

| Project ID # | Project Area | Project Description | Length (miles) | Cost Estimate |
|----------------------|---|---|----------------|------------------|
| 1 | Rose Hill Rd: Silkknitter St to School St | Install new 10' shared-use path on the east side of Rose Hill Rd utilizing the continuous curb extension concept & railroad crossing concept. | 0.48 | \$210,000 |
| 2 | Rose Hill Rd: Silkknitter St to School St | Install new 6' sidewalk on the west side of Rose Hill Rd utilizing the continuous curb extension concept & railroad crossing concept. | 0.48 | \$150,000 |
| 3 | Rose Hill Rd: Berlin Dr to Silkknitter St | Install new 6' sidewalk along west side of Rose Hill Rd. | 0.41 | \$70,000 |
| 4 | Rose Hill Rd: Rosewood St to Berlin Dr | Install new 6' sidewalks to fill in gaps on west side of Rose Hill Rd and north side of Rosewood St from Rose Hill Rd to driveway into Dollar General. | 0.22 | \$40,000 |
| 5 | Park Rd & Park Ln | Install new 5' sidewalk on east side of Park Rd & Park Ln and install 6' sidewalk railroad crossing on south side of Silkknitter St across BNSF railroad utilizing the railroad crossing concept. | 0.63 | \$100,000 |
| 6 | Main St, Waitt St, & Park Rd | Install new 5' sidewalk on east side of Main St, north side of Waitt St, and east side of Park Rd | 0.48 | \$80,000 |
| Phase 1 Total | | | | \$650,000 |

Phase 2 Projects

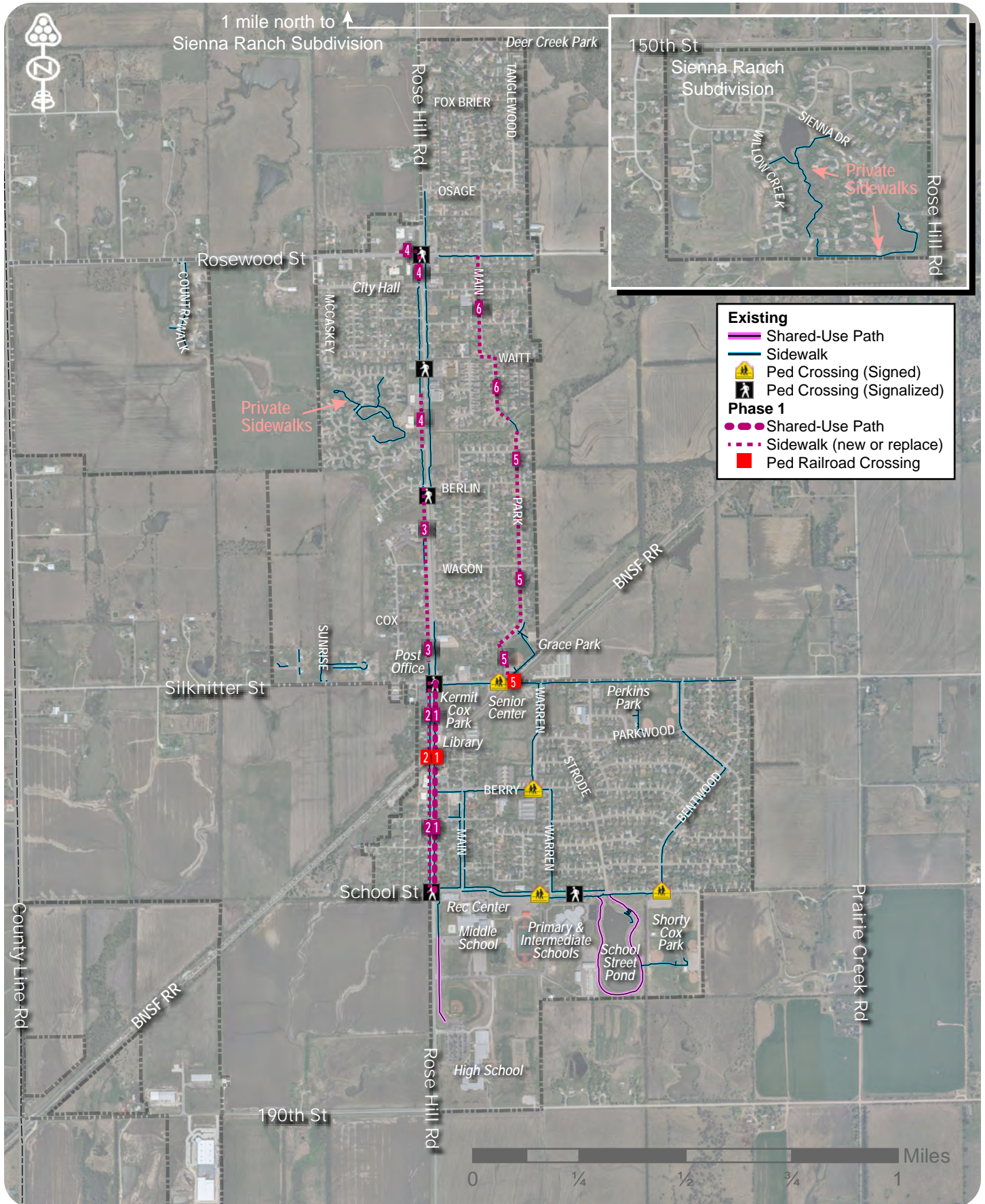
| Project ID # | Project Area | Project Description | Length (miles) | Cost Estimate |
|----------------------|---|--|----------------|------------------|
| 7 | School St & Rose Hill Rd | Install new 10' shared-use path on the south side of School St and the east side of Rose Hill Rd. | 0.60 | \$260,000* |
| 8 | Rose Hill Rd: Berlin Dr to Silkknitter St | Install share the road signs along Harris Dr from Berlin Dr to Ridgeway Rd. | 0.31 | \$2,000 |
| 9 | Silkknitter St: Sunrise to Rose Hill Rd | Install new 10' shared-use path on north side of Silkknitter St. | 0.31 | \$90,000 |
| 10 | Silkknitter St: Rose Hill Rd to Park Ln | Install new 10' shared-use path on north side of Silkknitter St. | 0.17 | \$50,000 |
| 11 | Strode Ave, Parkwood Dr, & Poston St | Install new 5' sidewalk on west side of Strode Ave, south side of Parkwood Dr, and east side of Poston Ave | 0.58 | \$100,000 |
| 12 | Rosewood St: Countrywalk St to Rose Hill Rd | Install new 10' shared-use path on south side of Rosewood St. | 0.55 | \$150,000 |
| Phase 2 Total | | | | \$502,000 |

* Cost can be reduced (up to about 40%) by saving existing sidewalk and adding additional width to create a 10' shared-use path. This can potentially be done on all or portions of the project extents. Cost estimates provided in this document are for construction and are very general in nature and do not account for specific elements that could impact the project such as major grading, substantial driveway replacements, or structures. They do not include design, right-of-way acquisition, utility relocations, or construction engineering.



CONNECTIVITY CONCEPTS

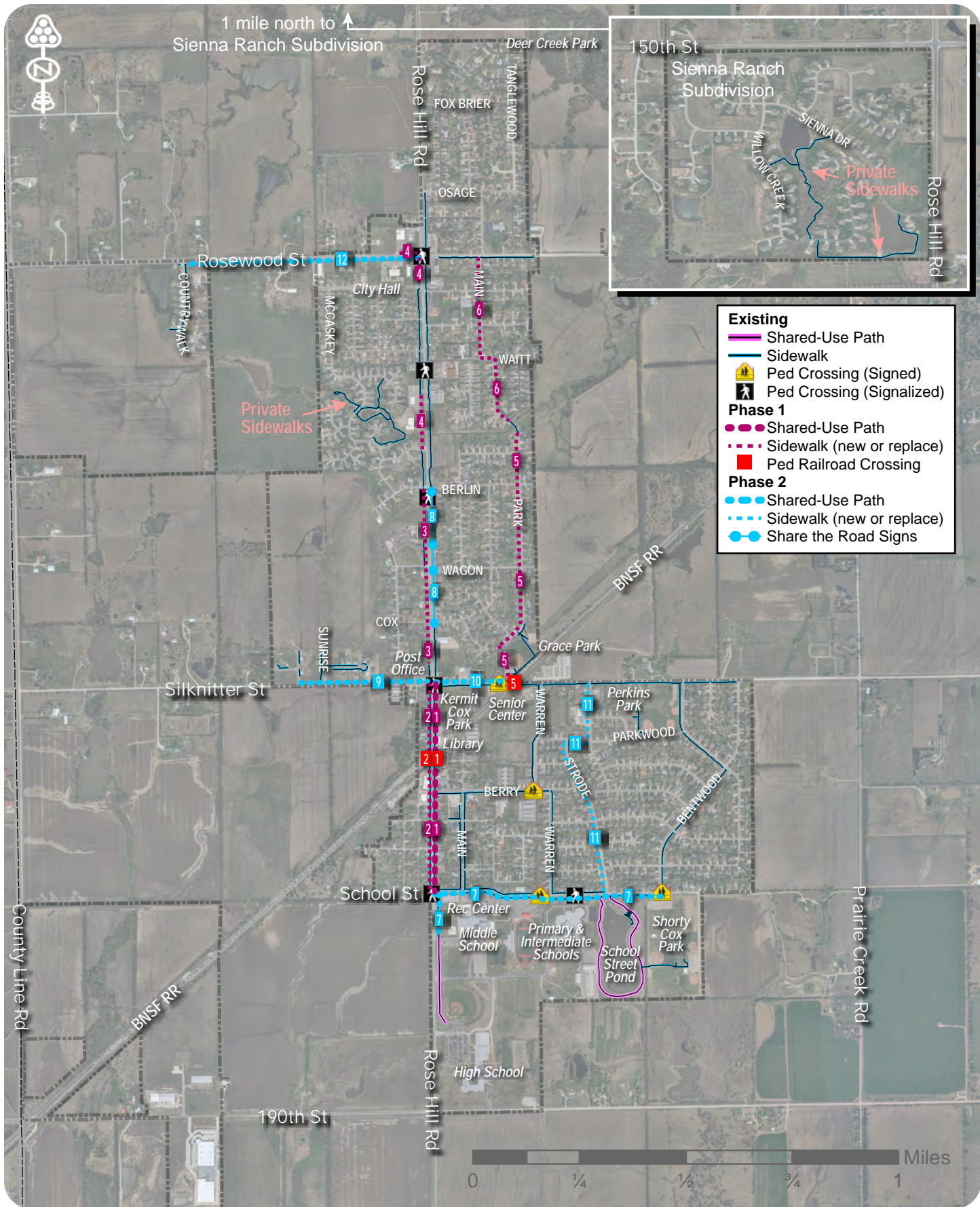
CITYWIDE NETWORK: PHASE 1





CONNECTIVITY CONCEPTS

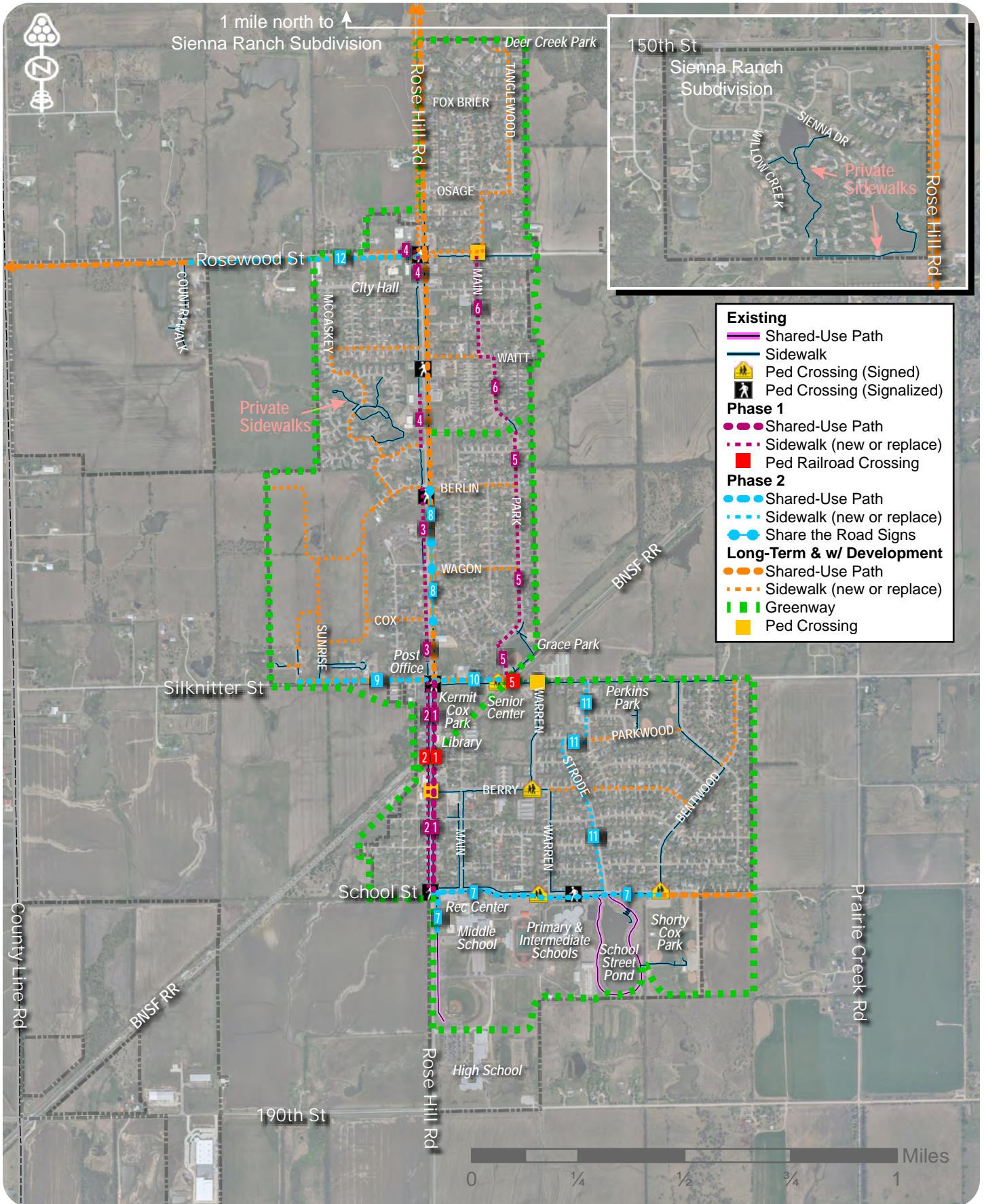
CITYWIDE NETWORK: PHASE 2



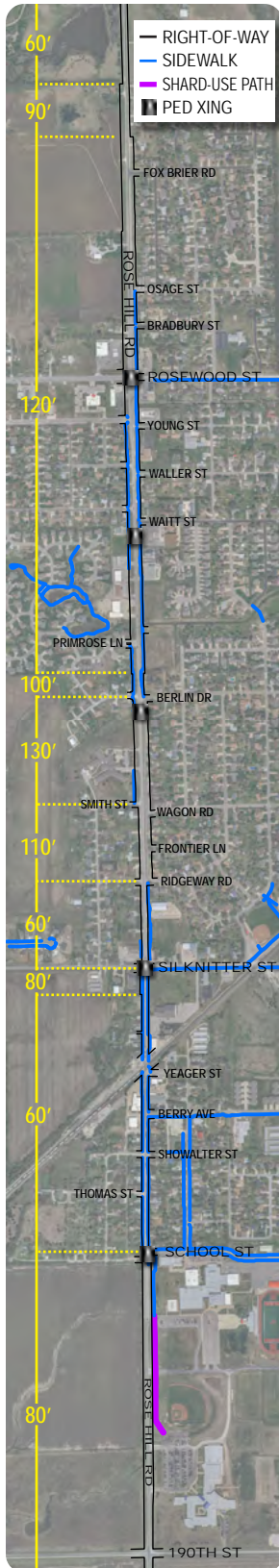


CONNECTIVITY CONCEPTS

CITYWIDE NETWORK: LONG-TERM



Current right-of-way widths on Rose Hill Rd



Rose Hill Rd is the primary north/south street through the community. It is the primary business corridor with the majority of Rose Hill businesses having frontage on Rose Hill Rd.

Rose Hill Rd has a disjointed sidewalk network with some segments having sidewalks on both sides of the street, some segments with sidewalks along only one side of the street, and some segments without sidewalks on either side of the street. The discontinuous network creates pedestrian connectivity problems.

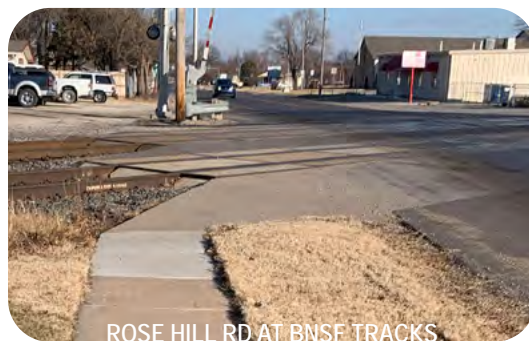
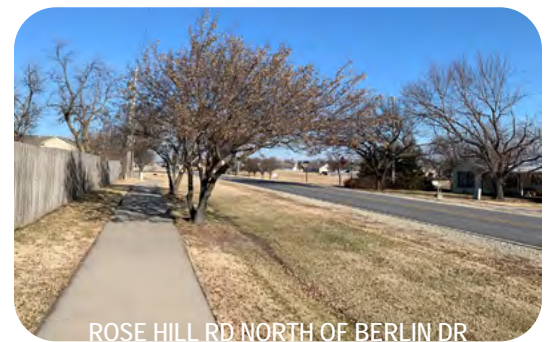
There are 5 signalized pedestrian crossings of Rose Hill Rd; 3 at the major street intersections and 2 mid-block crossings. These crossings are well distributed and don't require long travel distances to get to a designated crossing.

The Burlington Northern Santa Fe (BNSF) Railroad crosses Rose Hill Rd diagonally in downtown. Although there are sidewalks along both sides of the street leading up to the tracks, there is currently no pedestrian route across the tracks.

There is on-street parallel parking on the south portion of the corridor, which is needed for businesses and residences that front Rose Hill Road.

The corridor has a wide range of street right-of-way from 60 feet to 130 feet. The existing right-of-way limits the opportunities to add sidewalks, shared-use paths, or even widen existing sidewalks. Part of the issue with installing new sidewalks is that the existing curb line is directly along the right-of-way line, which offers no space to install new sidewalks.

The majority of the sidewalks along Rose Hill Road south of Silkknitter Street are less than three feet wide. The outside edge is directly along the property line and the inside edge is directly along the curb. This offers no opportunity to widen the sidewalks without purchasing right-of-way or moving the curb.





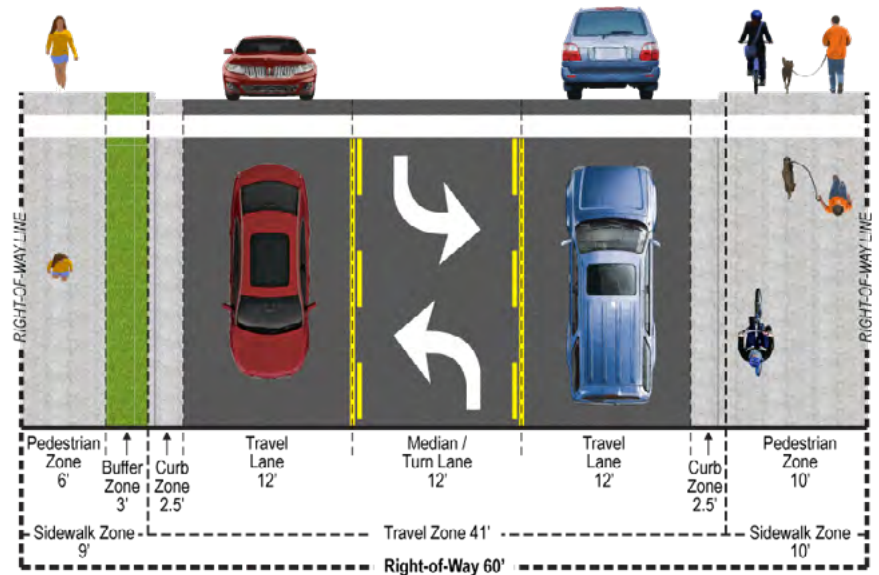
The long-term vision for the Rose Hill Rd corridor is a total reconfiguration of the space within the right-of-way. It is envisioned to be a variety of different types of cross sections based upon the needs for moving vehicles, turning vehicles, bicycles, pedestrians, parking, available right-of-way, and adjacent land uses.

- ▶ 3-lane street section from Rosewood St to south of Silkknitter St with 1 travel lane in each direction and continuous center turn lane / landscaped median.
- ▶ 2-lane street section from south of Silkknitter to north of School St with 1 travel lane in each direction and on-street parallel parking on both sides of the street. Bulbouts and enhanced crosswalks should be considered at each street intersection or possibly at mid-block locations.
- ▶ Curb and gutter with underground storm sewer.
- ▶ Continuous sidewalk along the west side of the street.
- ▶ Continuous shared-use path (SUP) along the east side.
- ▶ Additional design features and amenities including bulb-outs at intersections, pedestrian crossings, traffic calming, street lighting, landscaping, trees, seating, and public art.

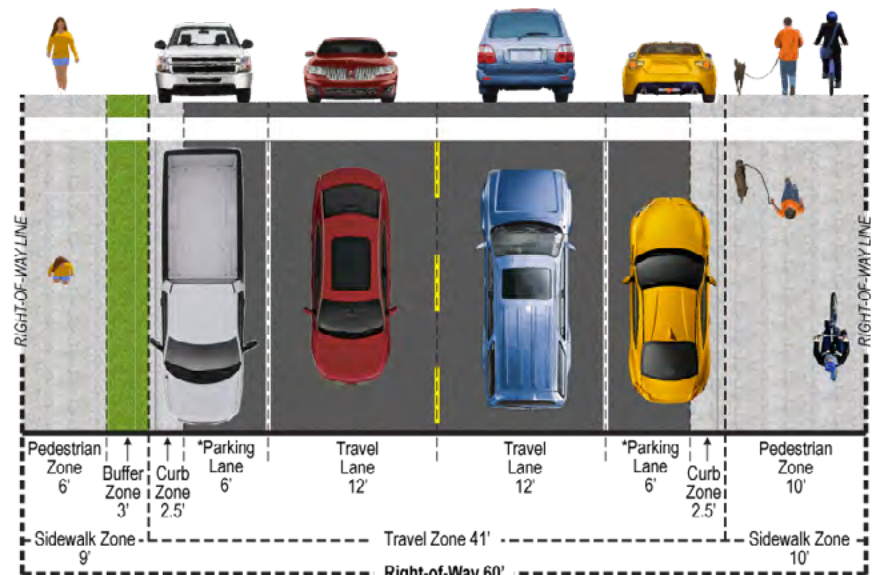
Each of the sections (2-lane and 3-lane) will fit within the most constrained right-of-way width of 60 feet. However, it may be desirable to acquire additional right-of-way to increase the buffer between the sidewalk/shared-use path and the curb for amenities and streetscaping and to increase the comfort of those using the pathways. The additional space also offers room for right turn lanes when needed or warranted.

Planning level cost estimate for the ultimate concept is about \$11.8 million.

ROSE HILL RD: 60 FT RIGHT-OF-WAY 3-LANE SECTION



ROSE HILL RD: 60 FT RIGHT-OF-WAY 2-LANE SECTION



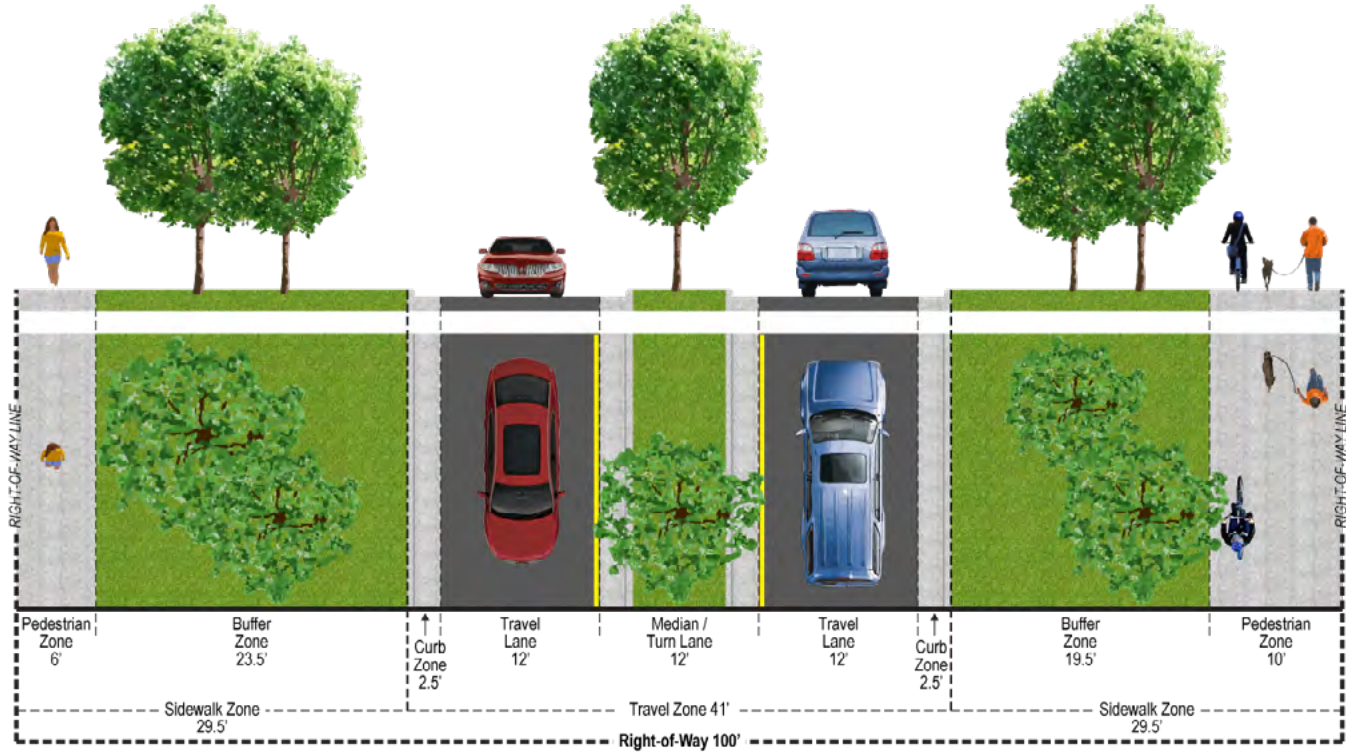
*Effective parking lane is 8' in width because 2' of curb zone (gutter) is used for parking

Butler County is planning improvements on Rose Hill Rd from 155th St to Rosewood St and includes an urban 4-lane section, curb and gutter, storm sewer, 10-ft path, and sidewalk.

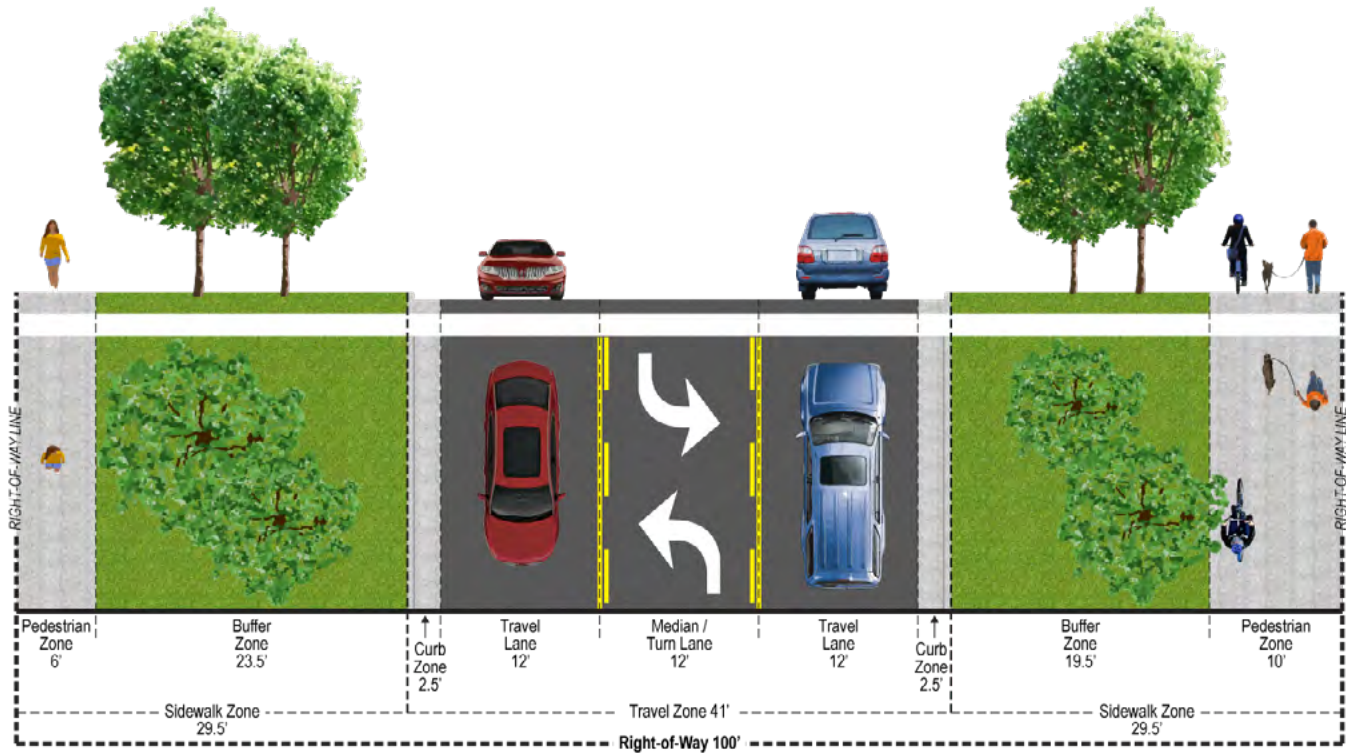
There will likely be interim improvements to improve pedestrian and bicycle connectivity along Rose Hill Rd, such as filling in sidewalk gaps. Any interim improvements should strive to be usable in the ultimate concept, which will maximize efficient use of funds and minimize throw away improvements.



Rose Hill Rd: 100 ft Right-of-way with median



Rose Hill Rd: 100 ft Right-of-way with center turn lane



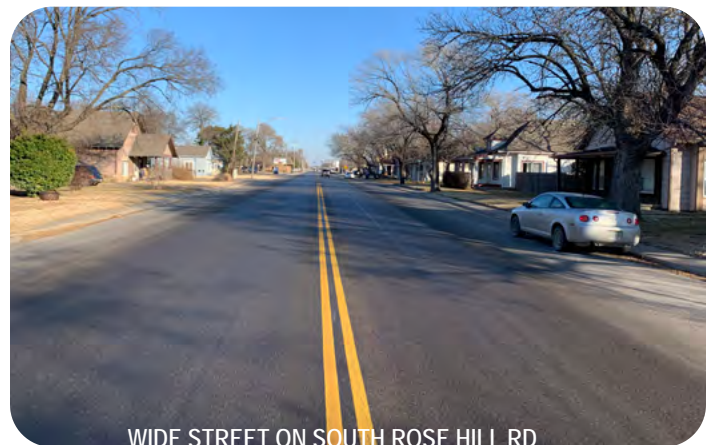


The continuous curb extension concept basically moves the curbs towards the centerline of the street and widens the sidewalk. It requires removal of the existing sidewalk, curb and gutter, and a portion of the outside of the street then installation of a new curb and gutter as well as sidewalk, modifications to the existing storm drainage inlets, and covers over the drainage inlet channel. It will likely require reconstruction of varying portions of driveways.

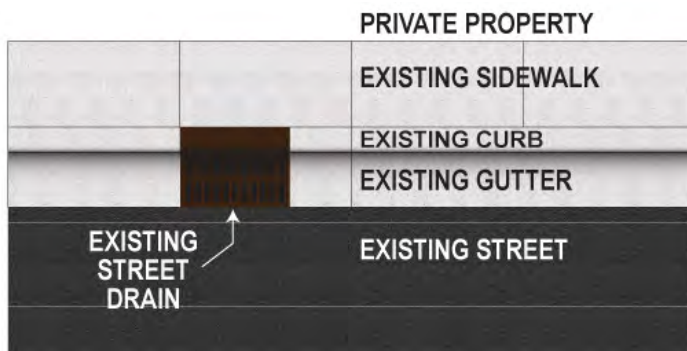
It is worth noting that this type of project will not fix any current drainage issues and has the potential to make any existing drainage issues worse due to less efficient use of existing drains. Specific project-level design modifications may be possible to mitigate drainage issues during the design process.

Projects #1 and #2 along Rose Hill Rd from Silkmitter St to School St are envisioned to utilize this concept. The Continuous Curb Extension concept creates a cross section that is almost identical to the Rose Hill Rd: Ultimate Concept. However, it is less expensive by not requiring reconstruction of much of the street or moving the existing storm sewers.

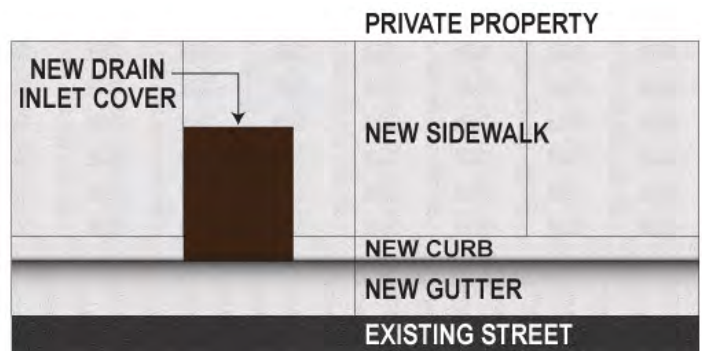
There may be other areas where this concept can be utilized. It can be used in areas with insufficient right-of-way to add sidewalks and shared-use paths and the street width can be reduced while still maintaining its desired functionality.



existing



continuous curb extension



Rose Hill Rd and Silkknitter St each cross the BNSF railroad. There are sidewalks leading up to the tracks on Rose Hill Rd, but do not continue through the tracks. There is sidewalk on the south side of Silkknitter St leading up to the tracks, but do not continue through the tracks. This creates opportunities to enhance safety and accessibility by creating designated pathway crossings of the tracks that are separated from the street.

Sidewalks and shared-use paths should cross railroad tracks at or near 90 degrees to reduce the potential of wheels (bicycle, wheelchair, stroller, etc.) getting caught in the tracks.





A greenway trail is a linear strip of land for recreation and potentially conservation purposes. They often follow natural features such as drainageways or topographic features. The trail itself can be paved or unpaved trails and can accommodate a variety of users such as walkers, runners, road and mountain bicyclists, and horse back riders. The land around the trail is often preserved in its natural setting.

The Rose Hill Greenway Loop is envisioned to encircle a majority of the existing City Limits with extensions along the BNSF Railroad corridor and the drainageway extending east from the fire station. It connects to all of Rose Hills parks and schools. It also offers a different type of experience in a more natural setting and allows for extended trips.

Additional amenities to the Rose Hill Greenway Loop could include mile markers, seating, lighting, parklets, exercise equipment, informational signs or kiosks, interpretive signs or story telling panels, and opportunities for sponsorships and/or advertising.

As shown in the image on the left, the greenway route is about 7.9 miles. This route is a rough routing concept. The City does not have right-of-way or easements to create this route. Right-of-way or easement acquisition or land donation would be required.

The cost for greenways can vary greatly based upon trail surface material, amenities along the trail, drainage patterns, topography, and acquiring right-of-way or easements. A simple 10 foot path with concrete surface would generally cost around \$300,000 to \$400,000 per mile. Although less accessible, a gravel or similar surface would reduce the cost. Lighting can enhance security and could be placed along the route or at rest points. A moderate degree of lighting along the trail would cost around \$100,000 per mile. Parklets (pull offs with amenities) along the trail can range from \$5,000 to well over \$100,000 depending upon the amenities included.

POTENTIAL GREENWAY ROUTING



AMENITY AREA CONCEPT ALONG GREENWAY

A quality pedestrian and bicycle network is safe, convenient, attractive, and enjoyable. These characteristics are achieved by providing the appropriate facilities in the appropriate situations. This section identifies a variety of facilities available to accommodate pedestrian and bicycle travel and provides general guidance on the design of the facilities.

SIDEWALKS & SHARED-USE PATHS

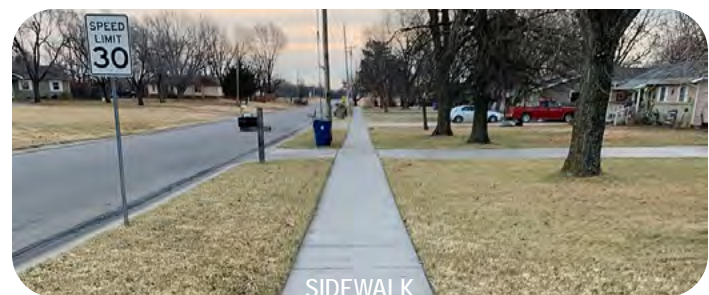
Rose Hill's preferred means of accommodating pedestrians and bicyclists is with off-street pathways such as sidewalks and shared-use paths. Sidewalks are spaces designed for pedestrian travel that are separated from motor vehicle traffic. Shared-use paths are spaces designed for pedestrians as well as bicyclists, runners, skaters, and other active transportation modes. These can be located along streets or in separate right-of-way or easements.

Sidewalks and shared-use paths exist within the pedestrian zone. The area between the pedestrian zone and the property line is the frontage zone. The area between the pedestrian zone and the curb or shoulder is the buffer zone.

WIDTH

- ▶ Sidewalk should be a minimum of 5 feet wide
 - 5 foot wide sidewalks allow two people to walk together and meets Americans with Disabilities Act (ADA) requirements
 - 5 foot wide sidewalks are acceptable in residential neighborhoods with relatively low pedestrian volumes
 - Sidewalks should be wider in areas that have higher pedestrian volumes
 - 6 foot wide sidewalks should be considered along arterial streets in developed areas
 - In shopping corridors where it is desirable to promote economic activity by pedestrians, a minimum of 8 foot wide sidewalks should be considered
 - In areas where social gatherings, festivals, or other major public gatherings are likely to take place, a minimum of 12 foot wide sidewalks should be considered
 - When temporary or permanent obstructions encroach on a sidewalk, a minimum clear path of 5 feet should be maintained. However, a 4 foot wide walkway may be acceptable at pinch points such as around utility poles or where other obstructions prevent a continuous 5 foot walkway.
- ▶ Shared-use paths should be a minimum of 10 feet wide
 - 8 foot wide shared-use paths are acceptable in constrained locations and for short distances
 - Wider paths should be considered in locations with high volumes of users

All facilities should meet or exceed ADA requirements



- ▶ Sidewalk and shared-use path surfaces should be hard, smooth, fairly level, and free of obstructions
- ▶ Sidewalks and shared-use paths should be level across driveways and not drop to a lower elevation

HORIZONTAL CLEARANCE

It is desirable to achieve a clear, continuous, and unobstructed travel path for pedestrians and bicyclists. Vertical obstructions adjacent to a sidewalk or shared-use path can effectively reduce the width of the travel path. People often “shy” away from vertical objects such as buildings, poles, fences, and parked cars. This “shy distance” on either side of the pathway is typically 2 feet and should be a minimum of 1 foot.

Pedestrians don't feel safe walking directly adjacent to moving vehicles. A minimum 5 foot wide buffer between the sidewalk and the curb or shoulder should be provided. On streets with high motor vehicle volumes and/or speeds, the buffer zone should be wider. In constrained areas, the buffer zone can be reduced or potentially eliminated to maintain the width of

the pedestrian zone. However, consideration should be given to the comfort and safety of pathway users. When on-street parking is adjacent to the sidewalk zone, the buffer zone should be wide enough to account for vehicle doors swinging open or vehicles overhanging the curb.

VERTICAL CLEARANCE

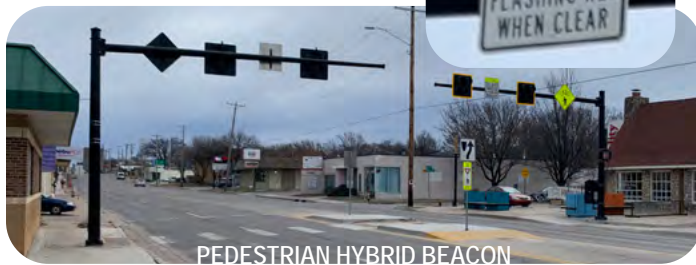
- ▶ Sidewalk clearance should be a minimum of 7 feet
- ▶ Shared-use path clearance should be a minimum of 8 feet

SLOPES & GRADES

- ▶ Slopes & grades must meet ADA requirements
- ▶ The sidewalk and shared-use path grade should be maintained across driveways (they should not be lowered to the grade of the driveway)

CROSSWALKS

Street crossings should be located in convenient locations and not cause pedestrians to travel too far out of their way. They should be designed for safety and convenience and take into account location and context. Medians and pedestrian refuge islands can enhance pedestrian safety. Pedestrian hybrid beacons can also enhance pedestrian safety. Curb extensions, or bulbouts, can also enhance safety by reducing crossing distances.



ON-STREET FACILITIES

It is not always feasible, desirable, or cost-effective to provide off-street pedestrian and bicycle facilities.

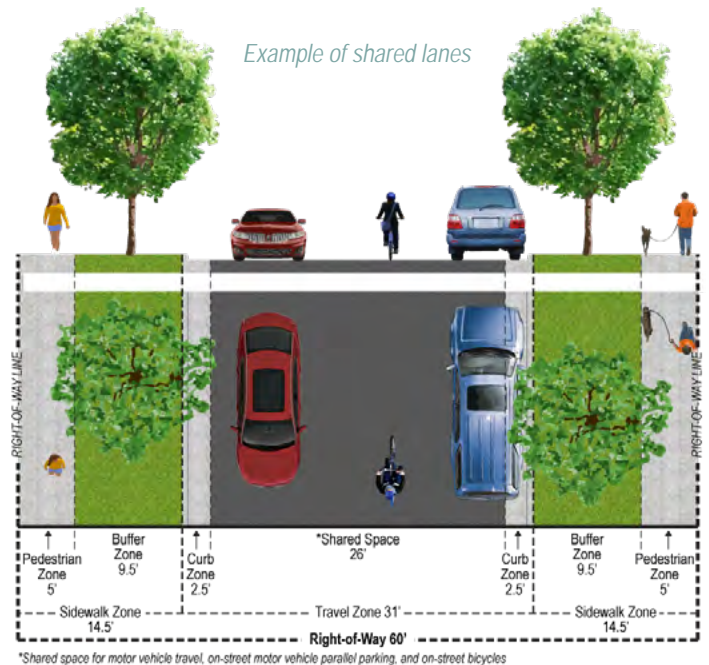
YIELD ROADWAY

Yield roadways are designed for pedestrians, bicyclists, and motor vehicles to use the same space. They serve bidirectional motor vehicle traffic without lane markings. They are appropriate on very low volume roads with low speeds such as local residential roadways. Consider using signs to warn road users of the special characteristics of the streets such as K2-0085.



Shared lanes may be considered under the following circumstances:

- ▶ 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
- ▶ Street lighting is sufficient to allow motorists to see pedestrians and bicyclists in the street



OTHER ON-STREET FACILITIES

Other on-street bicycle facilities or shared lanes should follow standard guidance such as that provided by the National Association of City Transportation Officials (NACTO) Urban Street Design Guide (<https://nacto.org/publication/urban-street-design-guide/>) and the Urban Bikeway Design Guide (<https://nacto.org/publication/urban-bikeway-design-guide/>).



The lack of destinations is one of the challenges of improving walking opportunities in Rose Hill. Creating new, or enhancing existing, walkable destinations can generate more opportunities for walking. The community desires two types of walkable destinations. The top priority is more parks/recreation spaces and the second priority is more business/shopping destinations.

The community envisions enhanced and additional park spaces near the School Node. The Shorty Cox Park Concepts address two options for enhanced and potentially new park spaces.



ONE OF THE PRIME WALKABLE DESTINATIONS

More park spaces are desired in the north part of the community. There are opportunities to provide additional parks on vacant lots north of Silknitter St. The Infill Park Concept shows one opportunity to create additional park space south of the old Dollar General. There are other opportunities to create parks and recreational spaces throughout the community.

Enhancing existing park spaces are also desired by Rose Hill residents. At Grace Park, there are opportunities to provide seating, enhanced landscaping, new park equipment, and a water fountain. In general, the community would like to see more water fountains within its existing parks. Kermit Cox Memorial Park's highly-visible location creates an opportunity to show community pride and quality design with enhanced landscaping.

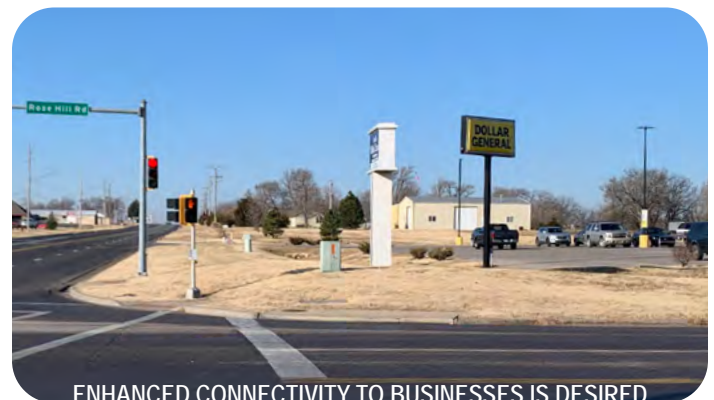
The City Hall Node, located at the primary intersection in Rose Hill (Rose Hill Rd and Rosewood St), offers a prime location for businesses. The community envisions this node as a commercial hub with new and expanded shops, restaurants, offices, and other businesses. The Business Expansion

Concept shows one option for expanding businesses in the area and enhancing walkability by creating better pedestrian connections from the network to existing and future businesses. The community also desires more businesses at the Fire Station Node.

At the Library Node, the community desires spaces and places that can be utilized for community events. They would like to see indoor and outdoor spaces that are designed for community festivals, markets, social gatherings, and other large gatherings of people. Designs should consider flexible open spaces with access to necessary amenities like bathrooms, electric power, and lighting. The community liked the idea of an indoor youth entertainment venue at the Library Node.

In order to create walkable destinations, they need to be well-connected to the community by a network of accessible, safe, and convenient walkable routes and pathways. The destinations themselves must be easily accessed from the pathway network by walkable paths into the development. This is often not the priority of developments, as they tend to focus on motor vehicle access and parking. This places priority on having numerous driveways and large setbacks with expansive parking areas between the street and the structure or destination. This creates undesirable, inaccessible, and uncomfortable conditions for walking and biking access.

Walkable destinations should place priority on design for pedestrian access. Safe, comfortable, and direct paths should be provided through parking areas and across driveways. Parking areas can be provided next to or behind the building, creating opportunities to move the building closer to street, therefore making it more accessible from the adjacent pedestrian network.



ENHANCED CONNECTIVITY TO BUSINESSES IS DESIRED

According to survey results, the area around and including Shorty Cox Park and the School Street Pond is the best place to walk in Rose Hill. The community would like to enhance this area to entice more walking and bicycling. Two concepts were developed to enhance this premiere destination in Rose Hill.

The community requested specific amenities be included such as an amphitheater, splash pad or pool, skate park, tennis/pickleball courts, a dog park, and a playground. There is also a need to keep the sports fields. However, the sports fields could be relocated to a different area if desired.

Concept 1 maintains existing Shorty Cox Park, expands the park to the east, and adds amenities. It adds an amphitheater, tennis/pickleball courts, skate park, off-leash dog park, storage & maintenance building, and parking. Based upon the survey results, the community prefers Concept 1.

Concept 2 reconfigures the existing Shorty Cox Park, expands the park to the east, and replaces the sport amenities in a new area such as the area west of Rose Hill Rd and south of School St.

shorty cox park concept 1





shorty cox park concept 2

shorty cox park reconfiguration



new sports complex west of Rose Hill Rd





There is a desire from the community for more recreation options with easier access by the entire community. Much of the park space is south of Silkmitter St. A new park space is desired north of Silkmitter St. A place along Rose Hill Rd would offer good access.

Two concepts were developed for a new park located on a vacant lot on the east side of Rose Hill Rd and south of the old Dollar General. The first option is a skate park, as illustrated in the top two images on the right. The second option is a combination tennis and pickleball court complex as illustrated in the bottom image on the right. Both amenities are desired by the community and would work well as an infill park.

skate park



tennis & pickleball courts





There is a desire for more shopping, restaurants, and other businesses in Rose Hill. More shopping and entertainment destinations would provide more opportunities for Rose Hill residents to walk.

There is the option to expand business opportunities at one of the busiest intersections in Rose Hill; Rose Hill Rd and Rosewood St. The concept not only adds more businesses, it enhances pedestrian connections to Dollar General, adds new pedestrian connections, and enhances the streetscape.



BUSINESS EXPANSION CONCEPT RENDERING

Communities are often planned and designed around cars. Transportation networks focus on funneling cars from neighborhoods to arterial streets. Streets are wide with many fast moving vehicles. Neighborhoods lack sidewalks and pathways. Street networks have many cul-de-sacs and lack connectivity; creating long travel distances for pedestrians. Houses are designed around the garage. Businesses focus on parking lots and driveways. All of these characteristics are auto-oriented and often hinder walkability.

Walkable communities create opportunities for increased health, activity, access, equity, and social interactions. Walking becomes more attractive because the community is intentionally designed for it. They are planned and designed with a priority on people. The following are some characteristics of walkable development.



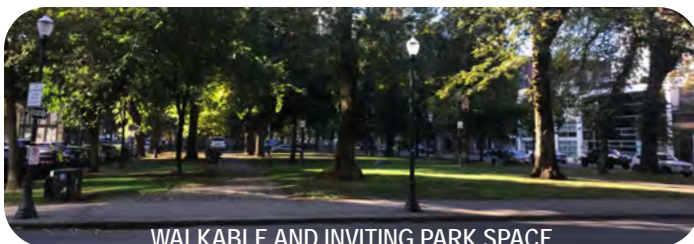
WALKABLE RESIDENTIAL NEIGHBORHOOD



WALKABLE BUSINESS DISTRICT



WALKABLE STREET



WALKABLE AND INVITING PARK SPACE

► INCREASED DENSITY

- The closer things are together, the more opportunities for walking. Increasing residential and business density helps to create more walking opportunities.

► MIXED LAND USES

- Separated land uses increases the distance between trip origin and destination points. Mixed land use developments place residents in close proximity to commercial uses. Mixed use can place multiple uses in the same building. It can also integrate compatible commercial uses into residential districts and vice versa.
- Focusing on neighborhood-level services can help to mix land uses; improving opportunities for walking. Neighborhood shops, schools, parks, and other compatible uses promote walkability. One option for this type of development is to create activity nodes or clusters of active uses such as shopping, entertainment, recreation, and leisure that serve adjacent neighborhoods.

► FOCUS ON INFILL DEVELOPMENT

- Prioritizing the development of vacant properties or redeveloping underutilized properties rather than greenfield development can increase density and walking opportunities. This type of development can also be more cost efficient because the properties are already served by City infrastructure and services.

► REDUCE PARKING MINIMUMS

- Reducing or potentially eliminating minimum parking requirements allows for more space for buildings or active uses on a site and less space for expansive and underutilized parking lots.

► PUBLIC SPACES

- Parks, open spaces, and public gathering spaces provide access for walking routes and can include amenities that draw people to a place and enhance the experience of being there.

► ENGAGE THE STREET

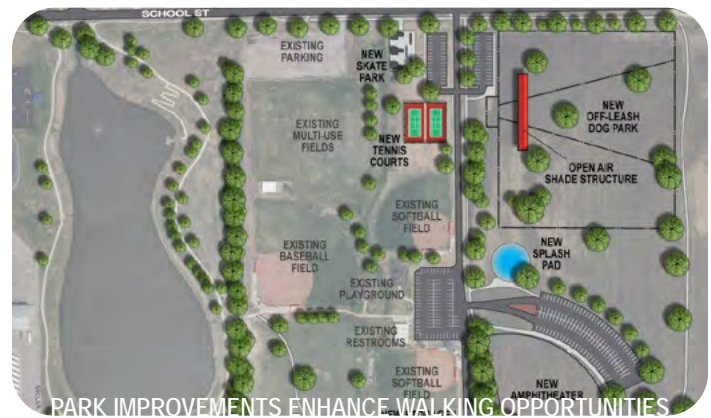
- For non-residential uses, reducing the distance from the sidewalk and the building (minimal front setback requirements) enhances walkability by easing pedestrian access. Buildings should be oriented to engage the street, have active and inviting entrances, and fronts with minimal blank walls. Pathways should be inviting from the sidewalk to the building entrances. Parking lots should not create a barrier for pedestrian access from the street. Streets should not create hazardous or uncomfortable conditions for pedestrians.
- For residential uses, front yards and streets are inviting, a place for socializing with neighbors, and safe for children to run and play.

PRIORITY ACTION STEPS

The priority actions for the City focus on constructing needed connections, making safety improvements, and creating great places identified in the Rose Hill Pedestrian Study (RHPS). The priority action steps are as follows:

- ▶ Construct the capital projects identified in the RHPS and other enhancements that promote walkability. Below are opportunities for capital projects.
 - Program local funds for, and construct, capital projects identified in the RHPS.
 - Seek outside funding sources to supplement local funds for capital projects such as grants and coordination with local organizations such as business groups, USD 394, and the Rose Hill Recreation Commission.
 - Coordinate with Butler County on improvements to Rose Hill Rd including pedestrian and bicycle facilities from Andover through Rose Hill.
 - Coordinate with the City of Derby, City of Andover, Butler County, and Sedgwick County to develop regional pathway connections with specific focus on Rose Hill Rd and Rosewood St (63rd St S).
 - Incorporate RHPS projects into other City projects, such as street and intersections improvement projects.
 - Include pedestrian support facilities along major pedestrian routes such as seating, dog waste stations, trash receptacles, lighting, shade, and integration of public art.
 - Provide safe and secure bicycle parking within public right-of-way in areas that have a high density of destinations and at public parks.
 - Develop and redevelop parks based upon the recommendations of a new Park System Master Plan (described later in this section).
 - Reduce motor vehicle travel speeds and incorporate traffic calming measures on streets along bicycle and pedestrian routes, especially those near parks and schools.
- ▶ Update the subdivision regulations to facilitate bicycle and pedestrian accommodations to be consistent with the RHPS. Below are specific elements to incorporate into the regulations.
 - Require sidewalks or other pathways on one or both sides of the street.
 - Require pathway connections from new developments or redevelopments to the existing pathway network.
 - Require pathway connections to exiting adjacent neighborhoods or developments.
 - Require dedication of public accessways to future adjacent neighborhoods or developments.
 - Require the dedication of land (public accessway) and potentially the construction of the pathway to develop the Greenway Loop concept.

- ▶ Develop a city-wide parks master plan to enhance recreational opportunities and community walkability. Below are items that parks plan should address.
 - Quantify and qualify the need for parks and park amenities.
 - Park amenities/features desired by the community include an amphitheater, tennis / pickleball courts, skate park, off-leash dog park, splash pad, pool, and drinking fountains.
 - Identify specific park improvements to existing parks.
 - Identify locations for future parks, with major consideration given to their proximity to population concentrations and ease of pedestrian access.
 - Define pedestrian circulation to and within existing and future parks.
 - Define safe and accessible vehicular circulation and parking.
 - Identify projects, costs, and phasing for improvements.
 - Identify funding strategy for capital projects, maintenance, and operations.
 - Coordinate with programming agencies, such as the Rose Hill Recreation Commission and USD 394.

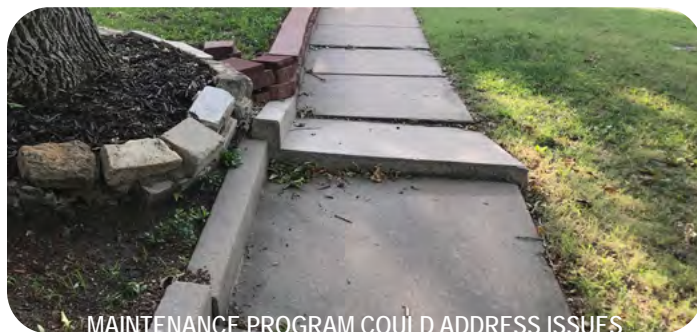


- ▶ Coordinate with USD 394 to identify strategies and projects to mitigate traffic safety issues caused by busing, drop-offs, and pick ups.
- ▶ Develop and implement an Americans with Disabilities Act (ADA) pedestrian accessibility program that includes installing accessible curb ramps in locations that do not meet current requirements.
- ▶ Assign City staff responsible for managing the implementation of the RHPS recommendations.
- ▶ Participate in the Wichita Area Metropolitan Planning Organization's bicycle and pedestrian count program.

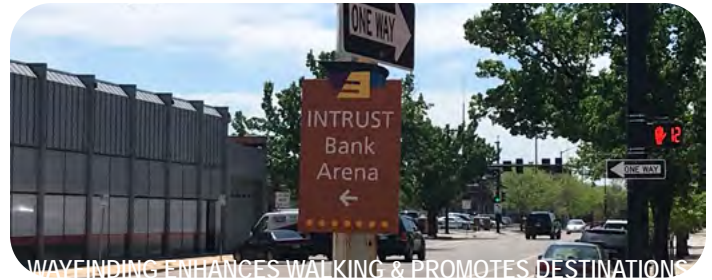
OTHER ACTION STEPS

The other action steps for the City identify options for the City to improve walkability in Rose Hill. The other action steps are as follows:

- ▶ Update the long-term comprehensive plan for the Rose Hill community. Ensure the plan is consistent with the RHPS and promotes walkability including a focus on infill development, opportunities for increased density, and mixed-use centers and activity nodes.
- ▶ Update the zoning code to enhance and promote walkability. Below are opportunities for modifying the zoning code.
 - Create a new zoning district to specifically allow the creation of mixed-use activity nodes. Rose Hill could also modify the existing B-1 Local Business District to allow for moderate to high density multi-family dwellings.
 - Allow compatible multi-family residential dwelling units within the R-1 Single-Family Residential District.
 - Allow for increased density, where appropriate, such as by reducing minimum lot size, increasing maximum lot coverage, and/or reducing minimum yard requirements.
 - Reduce or eliminate parking requirements.
 - Require bicycle parking provisions for major destinations such as large businesses and commercial clusters.
- ▶ Investigate locations where pedestrian and bicycle crashes have occurred. Design safety improvements and create an enforcement plan for high crash locations. Create high visibility pedestrian awareness and education campaigns
- ▶ Develop a pathway maintenance program that identifies responsible parties for maintenance, citizen reporting procedures, enforcement, and funding mechanisms.



- ▶ Develop promotional materials that raise awareness of the health, environmental, congestion, and quality of life benefits of walking and bicycling.
- ▶ Work with USD 394 to create, enhance, and promote walking school bus programs, walk/bike to school day, and other programs to instill safe habits and promote walking and bicycling to school.
- ▶ Develop materials that promote Rose Hill as a walking- and bicycling-friendly City. Distribute City promotional materials to tourism, real estate, and other organizations that attract businesses, residents, and visitors.
- ▶ Coordinate with local organizations to host regular community events intended to increase walking and bicycling, run/walk events, and walking clubs.
- ▶ Develop an arterial street access management policy that focuses on minimizing negative impacts on bicyclists and pedestrians at business driveways.
- ▶ Develop and implement a bicycle and pedestrian wayfinding plan.



- ▶ Develop and codify transportation impact fees to be used for bicycle and pedestrian infrastructure.

Funding bicycle and pedestrian enhancements will require local support. Even with outside funding sources, local municipalities are typically required to fund a portion of the project. Grants and funding programs allow the City to extend their dollars. However, grants should not be relied upon as the sole funding strategy because they are typically very competitive.

The City can allocate funds for capital projects or programs through the City's budget and capital improvement program. Rose Hill currently does not have a specific program for funding sidewalks or other pedestrian facilities. To get an order of magnitude for budgeting purposes, the City would need to allocate \$130,000 annually in order to get the Phase 1 projects completed within five years. All project costs estimates were provided in 2020 dollars. For programming purposes, it is important to consider the impact of inflation. The standard inflation rate used is 4% per year.

City officials have expressed that walkability improvements are important to Rose Hill. However, the City is currently addressing other priority infrastructure projects including streets, water, and wastewater.

This plan recommends the following funding strategies to improve walkability in Rose Hill:

- ▶ Include sidewalk and other walkability projects in the City's 5-10 year capital improvement plan.
- ▶ Include sidewalks and pathways as part of street projects in locations consistent with this plan.
- ▶ Actively pursue grants and other outside funding to stretch local funds.

FEDERAL FUNDING

The Wichita Area Metropolitan Planning Organization (WAMPO) administers federal transportation funds for the Wichita area. There are multiple federal funding programs that could fund the construction of bicycle and pedestrian improvements. WAMPO is sub-allocated approximately \$12 million per year to fund projects.

The first step in securing funds is to get specific projects included in WAMPO's long-range transportation 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, projects can be submitted 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.

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

STATE FUNDING

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.

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>

The new KDOT Cost Share program is a flexible program that can fund all forms of transportation infrastructure including pedestrian facilities. It requires a minimum 15% local match. Applications are being accepted twice a year.

The Kansas Department of Wildlife, Parks & Tourism (KDWPT) administers the Recreational Trails Grants, which provide 80% matching funds for eligible recreational trail and trail-related projects. Grant applications are due by August 1st of each year. (<https://ksoutdoors.com/KDWPT-Info/Grants>)

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.

The Community Change Grants from America Walks provide small funding amounts to support grassroots efforts to empower communities to create more safe, accessible, and enjoyable places to walk and be physically active. (<https://americawalks.org/community-change-grants/>)

AARP Community Challenge Grants provide funding for projects that can help communities become more livable for people of all ages. Grants can be used to support different types of projects including permanent physical improvements, temporary demonstrations that lead to long-term change, and new and innovative programming or services. (<https://www.aarp.org/livable-communities/community-challenge/>)

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

WITH DEVELOPMENT

Portions of the future bicycle and pedestrian network should be constructed as residential subdivisions and other areas are developed. This will take the financial burden off the entire community for the installation of sidewalks in new residential subdivisions and developments. The City should 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.

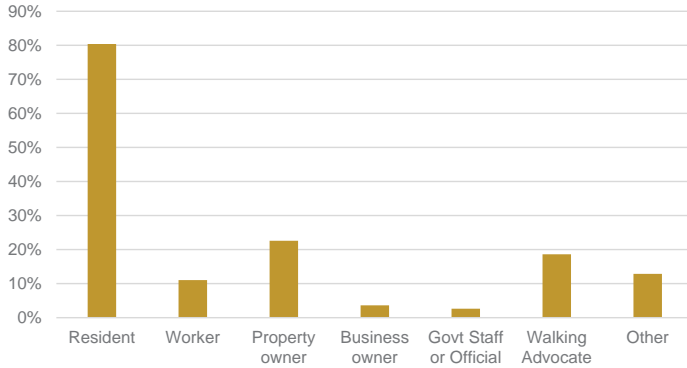
- ▶ Privately funded - In this approach, the developer pays for the design and construction of the pathway. The infrastructure is installed prior to home construction. The cost for infrastructure is rolled into the price of the land purchased by builders.
- ▶ Special assessment - In this approach, the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

APPENDIX A: ROUND #1 SURVEY RESULTS

A total of 616 people filled out the first on-line survey. Below is a summary of the results. Each question identifies how many people responded to the individual questions since some did not answer all of the questions.

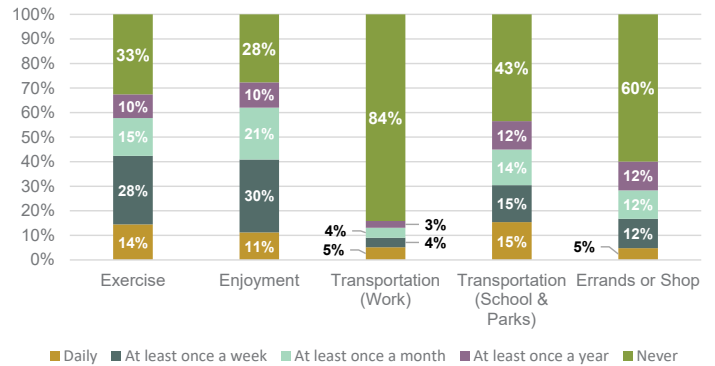
How would you describe yourself?

Answered: 607



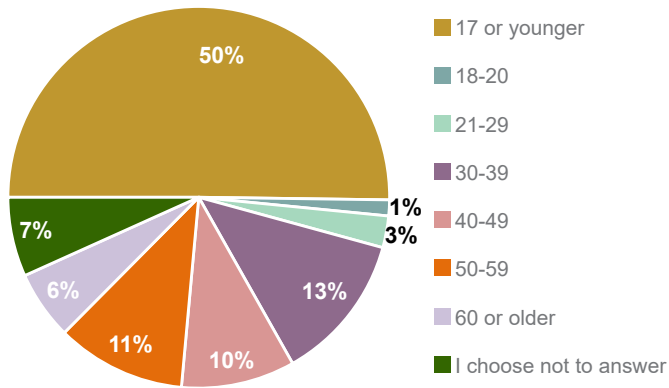
How often do you walk in Rose Hill for the following reasons?

Answered: 571



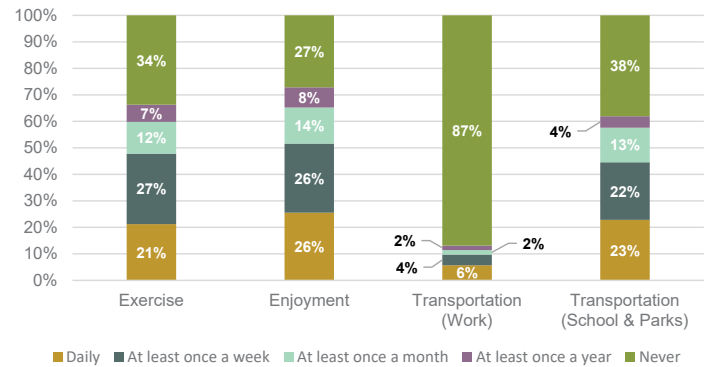
What is your age?

Answered: 446



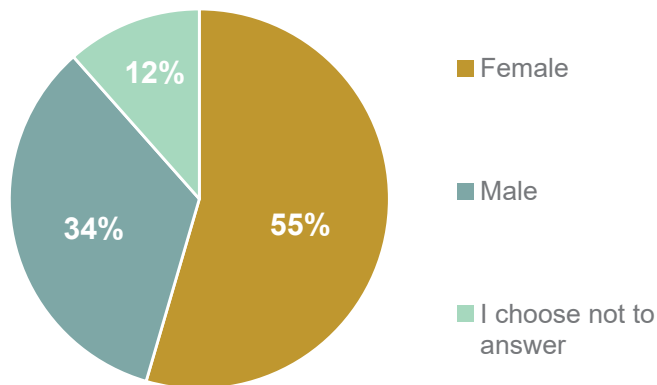
How often do your kids walk in Rose Hill for the following reasons?

Answered: 190



What is your gender?

Answered: 442



What single word or phrase describes walking in Rose Hill today?

Answered: 595



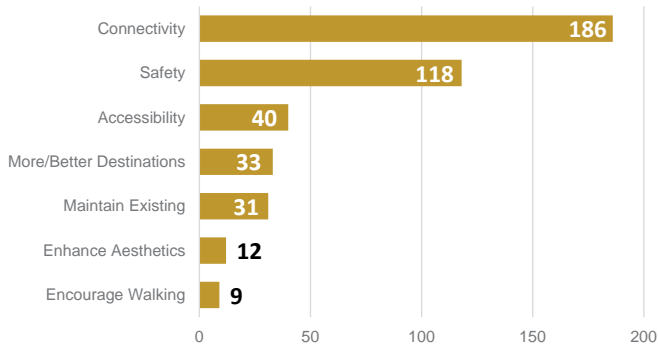
What single word or phrase describes walking in Rose Hill in the future?

Answered: 599



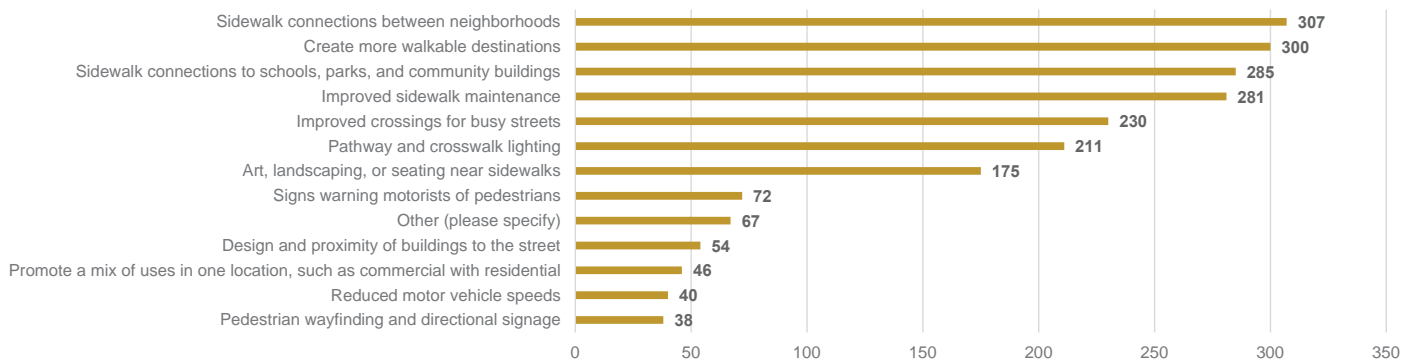
If the Rose Hill Pedestrian Study could accomplish one thing for walking, what should it be?

Answered: 404



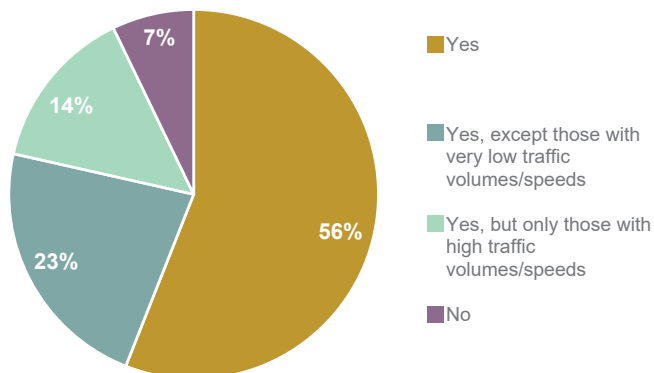
What would help improve walking in Rose Hill (select 4)?

Answered: 534



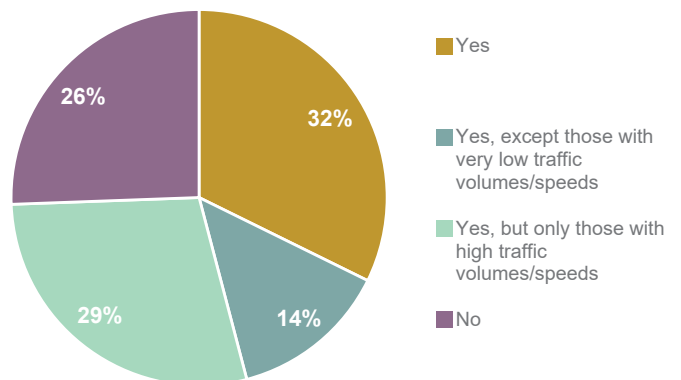
Should sidewalks be on at least one side of the street?

Answered: 475



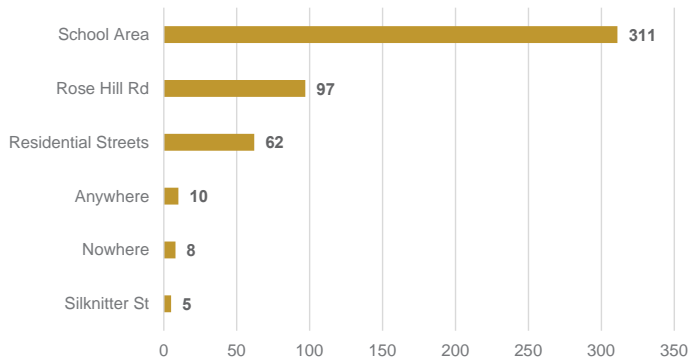
Should sidewalks be on both sides of the street?

Answered: 477



Where is the BEST place to walk in Rose Hill and why?

Answered: 527



Most of the responses identified places that currently have sidewalks and also have activities to participate in such as shopping, restaurants, walking for exercise/leisure, and parks/recreation.

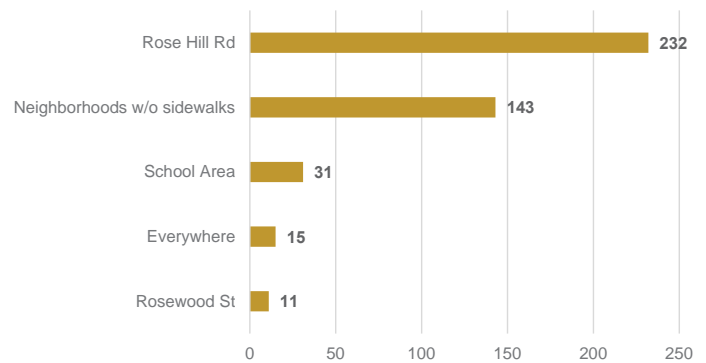
Comments about why the School Area (School St Pond, Shorty Cox Park, schools, and running track) is the best included: there are sidewalks; sidewalks are wide and well maintained; quiet; aesthetically pleasing; wildlife viewing; safe; lack of cars; and lots of social activity.

Comments about why Rose Hill Rd is the best included: there are sidewalks (in some areas); shopping destinations; restaurants; and other commercial destinations.

Comments about why residential streets (including neighborhoods) were the best included: there are existing sidewalks (in some areas); aesthetically pleasing; water features; less vehicular traffic; safe; street lighting; and quiet. Specific neighborhoods identified include Primrose, Sienna Ranch, and the neighborhood north of the school campus.

Where is the WORST place to walk in Rose Hill and why?

Answered: 521



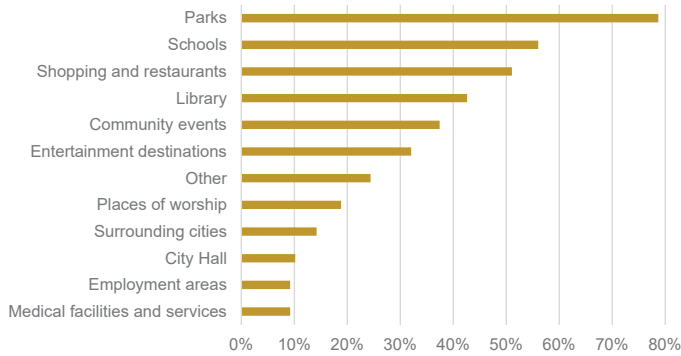
Comments about why Rose Hill Rd is the worst included: lack of continuous sidewalks; sidewalks are too narrow; sidewalks are poorly maintained; street is too busy; too much vehicular traffic; too noisy. Over 100 responses specifically identified that the section of Rose Hill Rd between Silkknitter St and School St is the worst due to the railroad crossing, narrow sidewalks, and poor sidewalk conditions.

Comments about why neighborhoods are the worst included: too much vehicular traffic; lack of lighting; lack of sidewalks; potholes in the street; cars blocking sidewalks; and speeding vehicles.

Comments about why the School Area is the worst included: too much vehicular traffic for the school; vehicular speeding; pedestrian exposure to vehicular traffic.

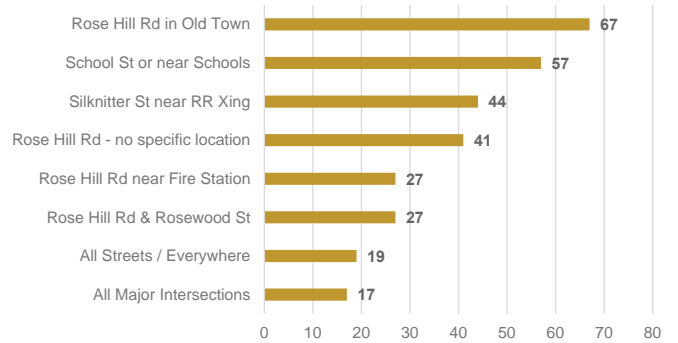
What places would you and/or your children like to be able to walk to the most?

Answered: 521



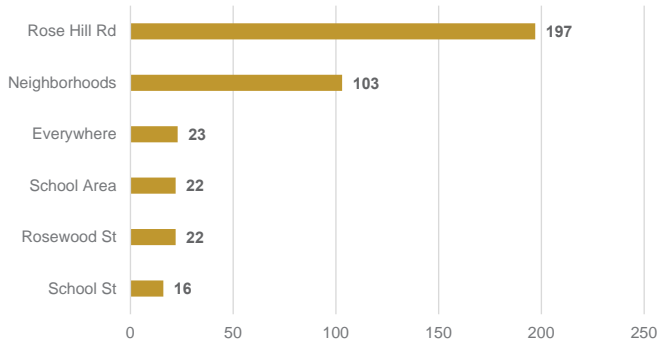
Where are pedestrian street crossings needed?

Answered: 337



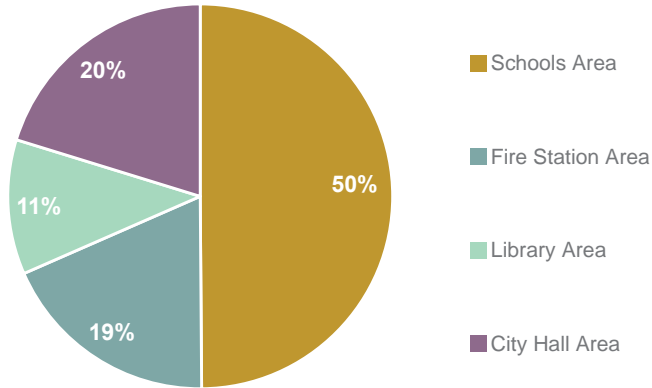
Where are walking improvements needed most?

Answered: 426



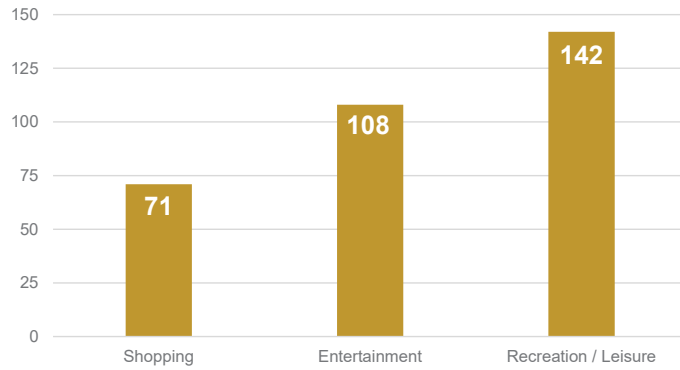
What location would you choose to invest in walkability?

Answered: 469

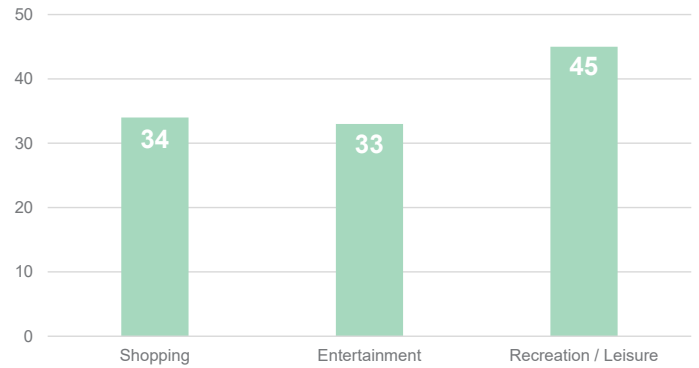


What activities would you like to see in the there?

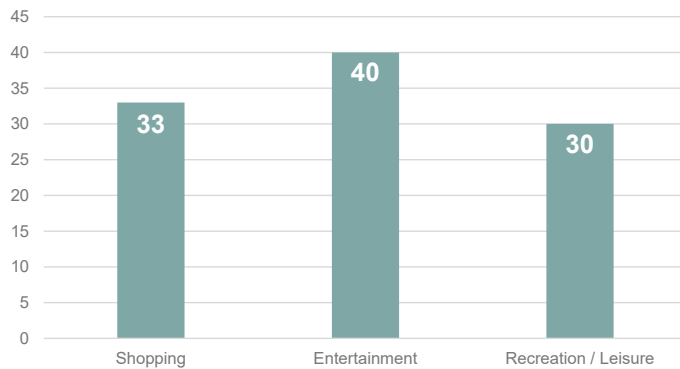
Schools Area



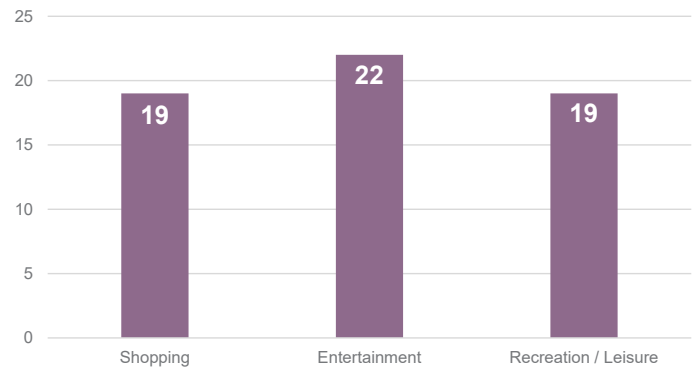
Library Area



Fire Station Area

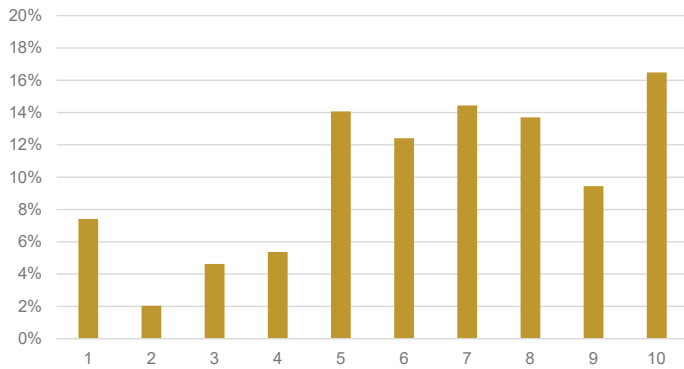


City Hall Area



How great is the need to improve walking in Rose Hill (1 being the lowest and 10 being the highest)?

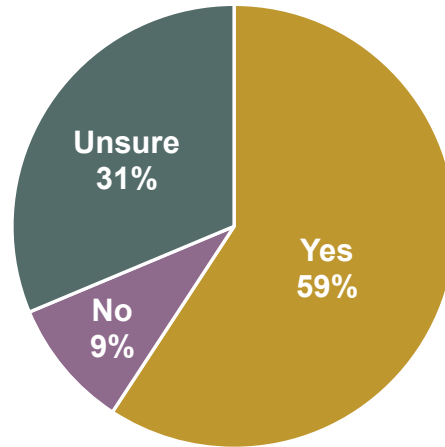
Answered: 540



The average ranking is a 6.5.

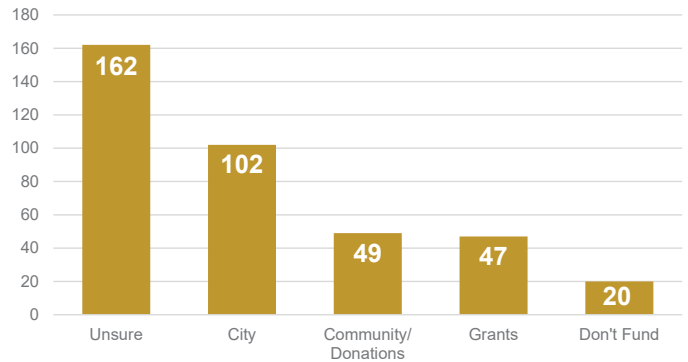
Do you support using local funds to improve walking?

Answered: 444



How do you think Rose Hill should fund pedestrian improvements?

Answered: 346



The City of Rose Hill and the consultant team held a two-day walkability charette on October 15th & 16th, 2019 at City Hall. The Round #1 survey was available prior to, during, and after the charette. Preliminary survey results were used during discussions at the charette.

About 50 people participated in the event, including residents, business owners, students, Senior Center group, and representatives for the Rose Hill School District, Rose Hill Recreation Commission, and City Council. All participants provided the study team with feedback on potential walkability and placemaking improvements for Rose Hill.

DAY 1

The purpose of the first day was to conduct a series of targeted stakeholder meetings during which invitees discuss needs and candidate improvement locations; help shape the vision, goals, and strategies for the Rose Hill Pedestrian Study; use a pedestrian improvements “toolbox” to develop concepts for key corridors and targeted improvement locations; explore recent improvement efforts that can be leveraged and paired with targeted locations; and identify a potential pilot project. An interactive public meeting was held at the end of day one to gather feedback from the general public on the results of the stakeholder meetings.

The purpose of the first day of the charette was to identify improvement locations and draft initial concepts. Discussion questions involved visioning, important places to walk and routes to them, and improvement ideas for making the places and/or routes great for walking. The study team recorded responses to visioning questions on large posters. They noted destinations and potential improvements by using markers and post-its and then placing them on a map of the community.

DISCUSSION

Responses including the following:

- ▶ Today, walking in Rose Hill is...
 - Same as 30 years ago
 - Parents are driving
 - School Street Pond has improved walking
 - North is not connected to south
 - Safe
 - Not much traffic- Safe
 - Limited (accessibility)

- Exercise
- Young people
- Outdated
- Not usable
- Scare/sparse
- Not accessible
- Boring
- No lighting – Dark
- Flat
- Easy – Not physically challenging
- Narrow – Can’t walk side-by-side
- Why would I? Lack of destinations
- ▶ In the future, walking in Rose Hill is...
 - Connected neighborhood
 - Accessibility
 - Safe
 - Good connectivity to school
 - Support long-term businesses – Sidewalk connections
 - Enjoyable
 - Inviting
 - Social (meet, greet)
 - Accessible (unrestricted)
 - It’s my mode of choice (first choice instead of driving)
 - Separated from the roadway
 - A must
 - Desirable
- ▶ The vision for Rose Hill walkability involves...
 - Safe
 - Enjoyable so it’s used
 - Inviting
 - Supports business development
 - Draft vision statement: “In the future walking in Rose Hill is a safe, enjoyable, and inviting experience that supports a



KIDS PARTICIPATING IN THE DESIGN CHARETTE

healthy lifestyle and community.”

- ▶ Goals for walkability include...
 - Dedicated space for walking and bicycling that's separate from the roadway
 - Connectivity to destinations – Schools, library, parks, and between neighborhoods
 - Greater accessibility that leads to better health outcomes, greater interaction among residents, and youngsters who can travel on their own safely
 - Safest city designation
 - Draws others to our community
 - Walking is attractive
 - There are destinations and along the route there are places to stop
 - Mentally stimulating
 - Something to see/do along the way
 - Exercise stations
 - “Officer of the Month” – Police highlight (re: safest city)
- ▶ Initial priority strategies include...
 - #1 – Connect neighborhoods to schools, parks, and the library
 - #1A – Develop Rose Hill Road as the main pedestrian and bicycle route in Rose Hill
 - #1B – Develop the north-south greenway
 - #1C – Develop pedestrian routes in existing neighborhoods
 - #2 – Create walkable places that also offer recreation and leisure activities
 - #3 – Develop programming for walkable nodes to activate the spaces
 - Note: New things are difficult to start and advertising is difficult
 - #4 – Create regional bicycle and pedestrian connections, including links to Andover and Derby
- ▶ Important destinations include...
 - Post office
 - Library
 - Snow cone stand
 - Schools
 - School Street Pond
 - City Hall
 - Dollar General
- ▶ Walkability needs and improvements should involve ...
 - Connecting north and south
 - Consideration of the roundabout proposed for Rose Hill Road at 150th Street
 - Providing walking (and bicycling) accommodations:

- Along Rose Hill Road from 150th Street to School Road
- East of Rose Hill Road through the residential neighborhoods from 170th Street to School Road
- Making safer crossings near the railroad tracks
- Improving Silknitter Street and School Road
- Recognizing that future retail growth could be limited but 170th Street at Rose Hill Road may be the greatest opportunity
- Considering areas of the community with lots of children or youth who walk and/or bicycle, especially those who cannot be bussed to school
- Exploring opportunities to provide more amenities, such as:
 - More accessible recreation space west of Rose Hill Road between Silknitter Street and 190th Street
 - Potential for amphitheater, splash pad, and/or skatepark near Shorty Cox Park
 - Potential for tennis courts near the schools
- Smoothing the sidewalk on the south half of Rose Hill Road, especially in midtown
- Adding lighting to the dark residential areas located east of Rose Hill Road



CREATING CONCEPTS AT THE CHARETTE

BRAINSTORMING

Participants also used a walkability “toolkit” (right) to brainstorm initial improvement concepts based on their vision and comments about destinations and needs. They used it to generate the two concepts attached to this report. The most frequently used tools included:

- ▶ Shared use, off-street path
- ▶ Pedestrian signage
- ▶ Art
- ▶ Seating
- ▶ Crosswalks
- ▶ Lighting
- ▶ Sidewalks
- ▶ Tree and landscaping

► Other

- Greenway/trail that follows the City's corporate limits – include mile markers, provide exercise and pest waste stations, allow sponsorships, incorporate bicycle rental, consider “strolling newsletter” concept, etc.
- Recreational amenities, such as a pool, dog park, water fountains, tennis courts, accommodations for non-street legal vehicles, jungle gym, skate park.

DAY 2

The second day built upon the results of day 1 by refining the vision, goals, strategies, and concepts for pedestrian walkability; drafting illustrations, recommendations, and an implementation strategy for the vision; and coordinating a public meeting to communicate and gather feedback on the draft vision, recommendations, implementation strategy, and priorities.

► Refined strategies include...

- Connecting neighborhoods to schools, parks, and the library
 - Develop Rose Hill Road as the main pedestrian and bicycle route in the city
 - Develop a greenway loop around the city
 - Develop pedestrian routes in existing neighborhoods
- Creating walkable places that offer recreation and leisure activities, shopping, and dining
- Thoughtfully planning events, games, and other programs to draw people to designated centers of activity
- Creating regional bicycle and pedestrian connections, including links to Andover and Derby

► Projects (details are attached) for connectivity include...

- Installing sidewalks along Rose Hill Road
 - Start by filling in sidewalk gaps on one side of the street between 63rd Street to the high school
 - Build a multi-use trail on the other side of the street in the same location
 - Extend sidewalks and the multi-use trail from 63rd Street to 150th Street
 - Incorporate art and benches into the streetscape between 63rd Street and Silkknitter Street
- Designating a bicycle/pedestrian route east of Rose Hill Road that connects north neighborhoods to the school campus via Main, Park, Warren, Strode, Brentwood, and/or Cedarwood
 - Incorporate bike and pedestrian signs
 - Add bicycle pavement markings
 - Add more street lighting
- Developing a connection to the Sunrise Subdivision on the north side of Silkknitter Street

- Construct a sidewalk from Rose Hill Road to Sunrise
 - Developing a connection to the Rockwood Subdivision on the south side of 63rd Street
 - Construct a multi-use trail from Rose Hill Road to Rockwood
 - Installing crosswalks at targeted locations along Rose Hill Road and Silkknitter Street
 - Rose Hill Road at Sienna Ranch
 - Rose Hill Road and 63rd Street (entire intersection)
 - Rose Hill Road at Primrose
 - Rose Hill Road at the school campus
 - Silkknitter Street at the post office
 - Silkknitter Street at the batting cages
 - Developing a pedestrian path across the railroad tracks
 - Near the library
 - Near the snow cone shop and batting cages
 - Developing a greenway loop trail
 - Develop the trail around the city, ensuring connections to nearby parks and schools
 - Add interpretive signs or storytelling panels
 - Provide opportunities for sponsorships and/or advertising
 - Add exercise stations and mile markers
 - Installing streetlights in targeted locations
 - School street, specifically at Rose Hill Road and Warren
 - Neighborhood east of Main and north of School Street
 - Rose Hill Road at Wagon
 - Adding benches along School Street near the schools
- Projects for destinations include...
- Adding indoor youth entertainment at the Library Node
 - Ensuring outdoor and indoor spaces focus on festivals and community events at the Library Node
 - Adding water fountains at Perkins Park
 - Adding benches, landscaping, a water fountain, and new park equipment at Grace Park
 - Adding landscaping to Kermit Cox Memorial Park



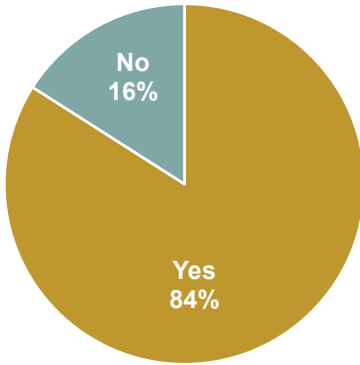
PRESENTATION OF CONCEPTS AT CHARETTE

APPENDIX C: SURVEY #2 RESULTS

A total of 162 people filled out the second on-line survey. Below is a summary of the results. Each question identifies how many people responded to the individual questions since some did not answer all of the questions.

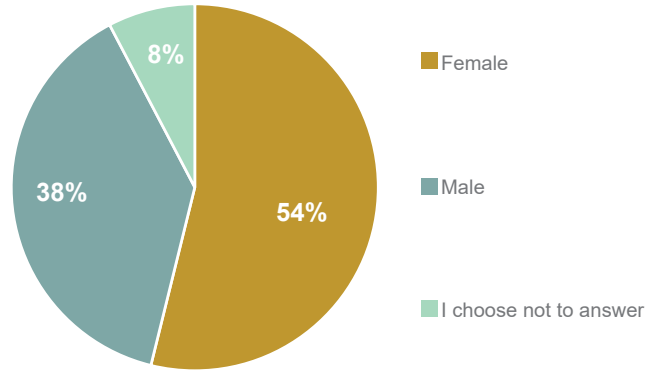
Do you live or work in Rose Hill, Kansas?

Answered: 144



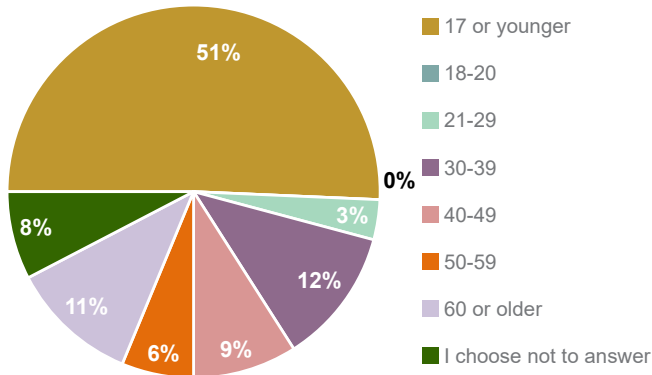
What is your gender?

Answered: 143



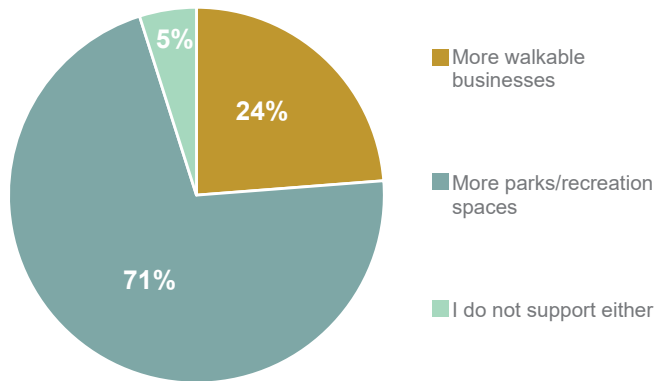
What category below includes your age?

Answered: 144



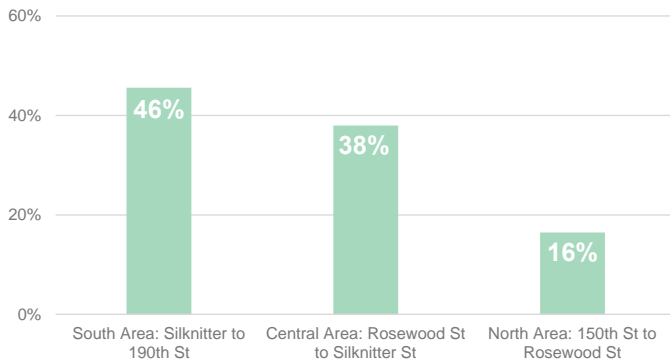
In the previous survey, community members stated they would like to see more walkable businesses and more parks/recreation spaces. Which is your higher priority?

Answered: 143



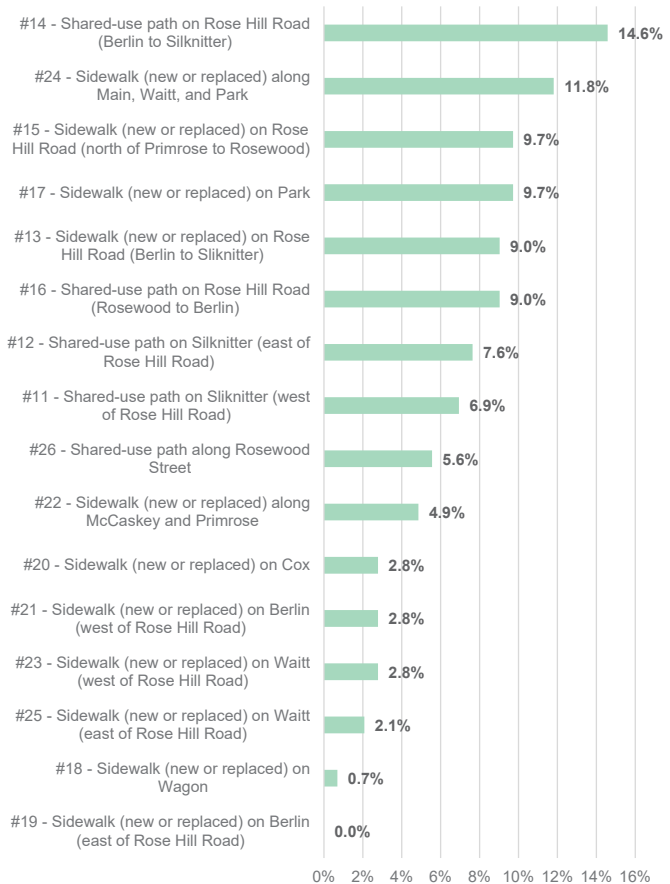
Which area of Rose Hill needs walkability improvements most?

Answered: 158



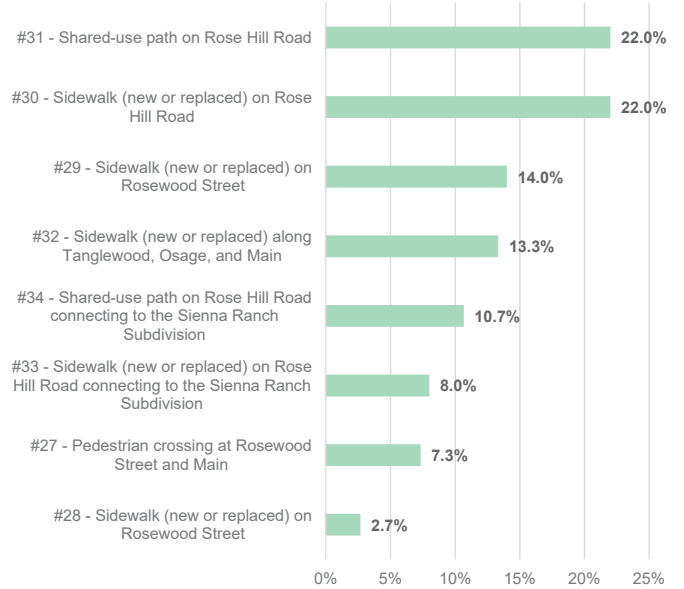
What is the most important walkability project for the Central Area of Rose Hill?

Answered: 144



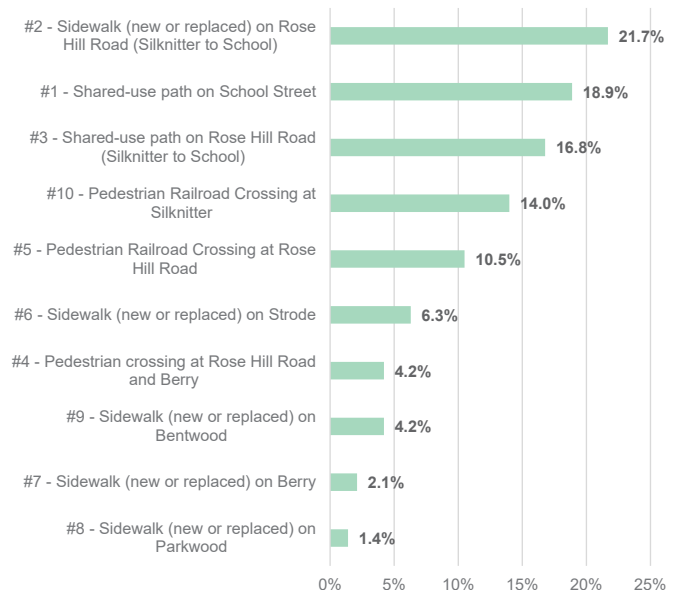
What is the most important walkability project for the North Area of Rose Hill?

Answered: 150



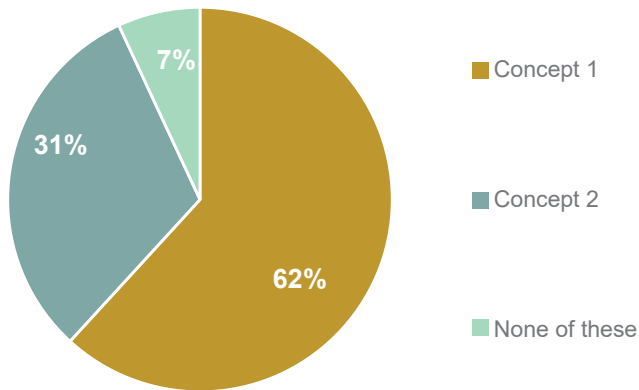
What is the most important walkability project for the South Area of Rose Hill?

Answered: 143



If more park space were developed at Shorty Cox Park, which concept would you prefer?

Answered: 144



CONCEPT 1

Keep existing Short Cox Park features (ball fields, multi-use fields, playground, etc.) and add improvements (splash pad, dog park, amphitheater, tennis courts, and parking) to the east.



CONCEPT 2

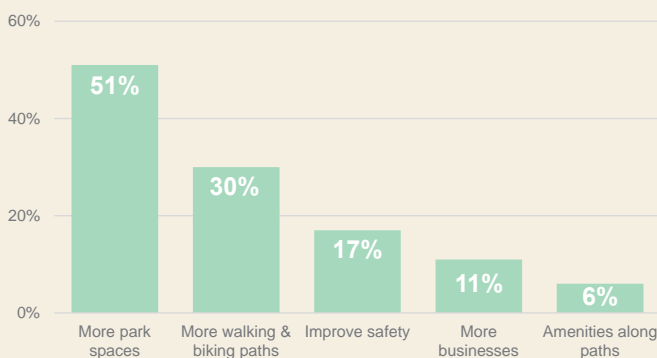
Redevelop Shorty Cox Park as a more neighborhood-based park with leisure activities and create a new sports complex at a different location, such as west of the School Campus.



In Concept 2, Shorty Cox Park is redeveloped as shown above. The sports fields would be relocated to a different area, such as the area west of Rose Hill Rd near the School Campus, as shown on the right.

What other comments do you have about the potential walkability improvements?

Answered: 100

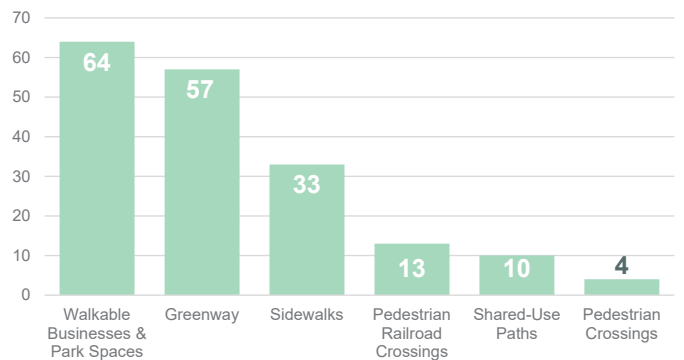
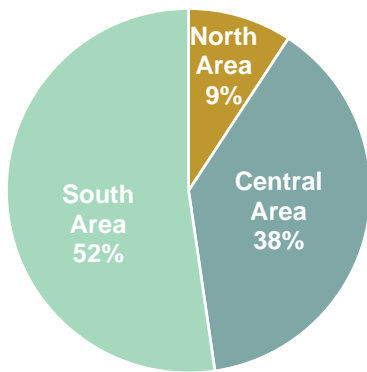


The vast majority of the responses were supportive of the walkability and placemaking concepts and projects. Many responses requested specific elements to add to Rose Hill. The most requested item was for a pool (22 respondents). Others included dog park (6), safety for children (5), and street / railroad crossings (5).

The project team hosted a pop-up event on February 4, 2020 at Rose Hill High School during five games; Freshman Boys, Junior Varsity Girls, Junior Varsity Boys, Varsity Girls, and Varsity Boys. A booth was set up in the entrance area with project promotional items and displays. Project team members briefly engaged with over 125 visitors as they walked past. They provided a project overview, presented draft projects and concepts, and asked for input on the most important project types and priority areas. Each person that wished to participate was provided four dots (stickers) to place on the boards. On the first board, they were to place one dot on the area they thought was the most important area to make walkability improvements. On the second board, they were to place three dots on the most important project types. The results are presented below. Project team members also distributed cards that included a weblink and QR code to participate in the on-line survey #2.



PARTICIPATING IN THE POP-UP



ROSE HILL PEDESTRIAN STUDY

MOST IMPORTANT AREA TO IMPROVE PICK 1

| Area | Response Count (Dots) |
|---|-----------------------|
| North Area 150th Street to Rosewood Street | 5 |
| Central Area Rosewood Street to Silkknitter Street | 18 |
| South Area Silkknitter Street to 190th Street | 29 |

CITY OF ROSE HILL

ROSE HILL PEDESTRIAN STUDY

MOST IMPORTANT PROJECT TYPES PICK 3

| Project Type | Response Count (Dots) |
|---|-----------------------|
| Shared-Use Paths | 7 |
| Sidewalks (new or replaced) | 23 |
| Greenway around the City | 24 |
| Pedestrian Crossings | 4 |
| Pedestrian Railroad Crossings | 13 |
| Walkable Businesses & Parks/Recreational Spaces | 64 |

CITY OF ROSE HILL

POPULATION CHANGE

Rose Hill is home to 3,863 residents. The historical growth trend from 1970 through 2010 does not appear to be continuing. However, home building and subdivision activity is picking up and Rose Hill's population is anticipated to grow.

AGE & GENERATIONS

Rose Hill is an aging community. It is aging faster than the surrounding communities and counties as a whole. Rose Hill residents aged 45 years and older have increased substantially and now comprise 41% of the population.

The number of children is also decreasing. Those aged 17 or under has decreased by about 300 since 2000. Households with children has decreased substantially since 2000. In 2000, the percent of households with individuals under 18 years old was 61.5%. That number has decreased to 42.7% of households today.

The generational distribution of residents has changed substantially since 2000. In 2000, Millennials were the most populous followed by Baby Boomers. Today, Generation Z is the most populous followed by Generation X.

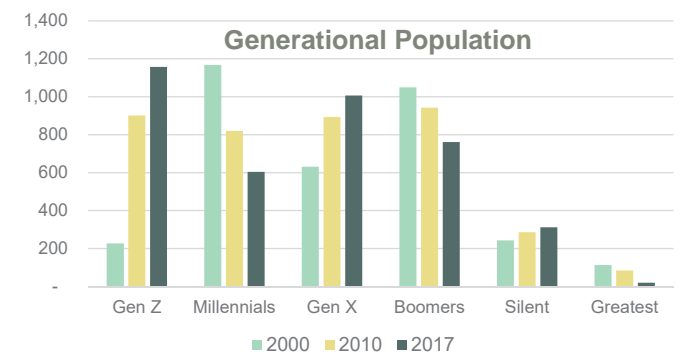
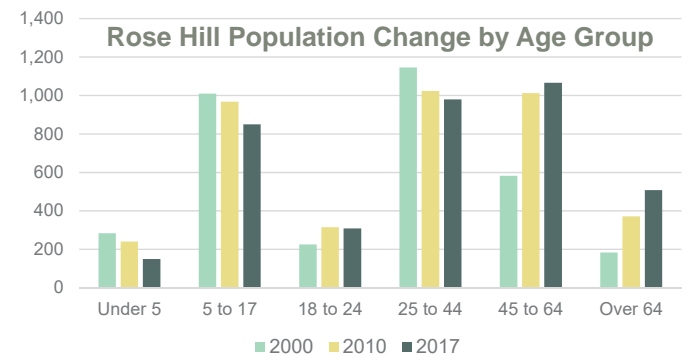
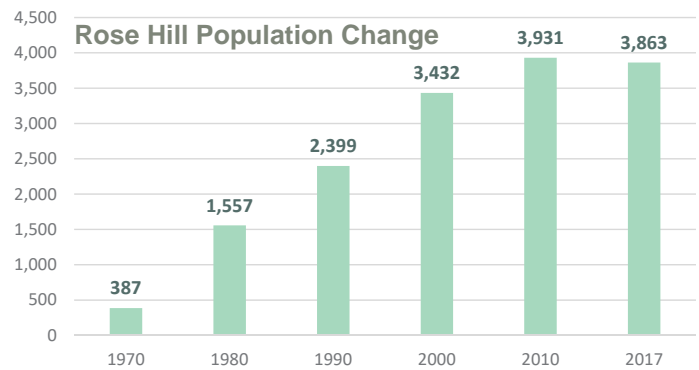
The age of residents and which generation they belong to plays a key role needs and choices such as community services, activities, and transportation options. Developments and community amenities should serve the existing community residents as well as foster growth of different age groups and generations.

TRANSPORTATION

The vast majority of Rose Hill workers drive to work with 95.9% traveling via car, truck, or van. No Rose Hill workers walk or bicycle to work. Over two-thirds of Rose Hill workers work outside of Butler County. However, 16.3% do work within Rose Hill. With some Rose Hill residents working in Rose Hill, there may be an opportunity to provide the option to walk or bicycle to work due to the relatively short travel distance.

Of the occupied housing units in Rose Hill, 99.3% have access to at least one vehicle with 80% having access to more than one vehicle. When assessing the need for walking and bicycling options, it is critical to look at those that do not have access to vehicles for transportation.

The vast majority of Rose Hill households do not have to rely on walking, bicycling, or other alternative modes of transportation. However, consideration should be giving to the need and/or desire to provide the option to walk or bicycle.



| Generation | Born between | Age in 2017 |
|--------------|--------------|-------------|
| Greatest Gen | 1901-1927 | 90-116 |
| Silent Gen | 1928-1945 | 72-89 |
| Baby Boomers | 1946-1964 | 53-71 |
| Gen X | 1965-1980 | 37-52 |
| Millennials | 1981-1996 | 21-36 |
| Gen Z | 1997-Present | 0-20 |

Vehicles Available per Household

