



Andover Wayfinding Project Program Document Policy and Conceptual Plan 29-MAY-2018



**jonathan mugmon design_
wayfinding & information design**



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Existing Conditions Review

- Document current attributes of pathway system in place
- Review existing and proposed plans

“I really don’t like the gym. I like experiences, so I take any chance I get to go on a bicycle or on a hike.”

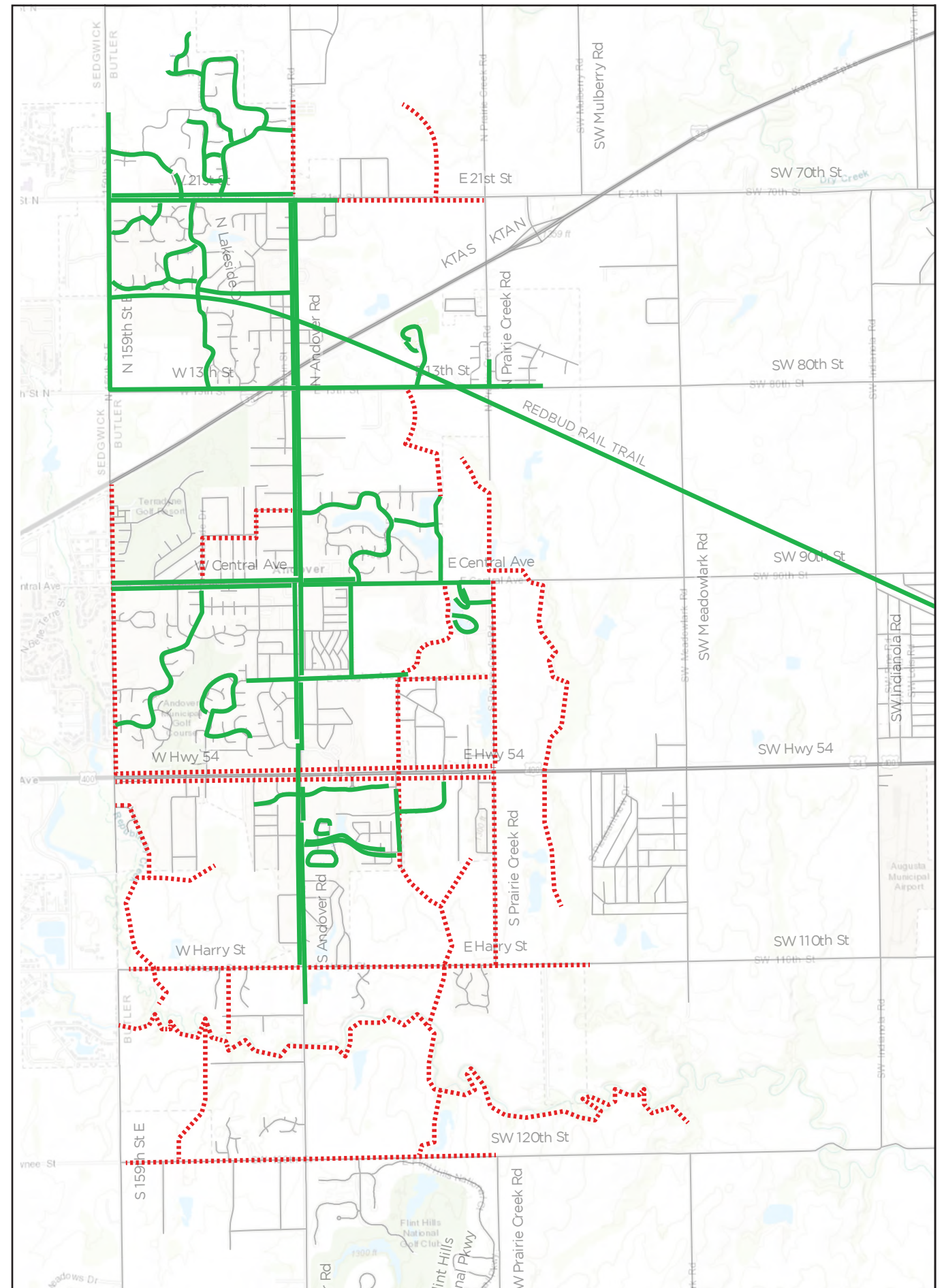
Blake L. - Andover trail user

Existing Conditions - Built and Proposed Pathways

The City of Andover has many pedestrian and bicycle paths and has plans for many more. The map on the right demonstrates the current and future trail system. The main north-south spine of the system is along Andover Road and east-west routes following US Highway 54, West Central Avenue, East 13th Street, and East 21st Street. Crossing through the northern part of the city is the Redbud Rail-Trail which connects to downtown Wichita.





The future paths are mainly concentrated on the south-side of Andover and extend east-west.

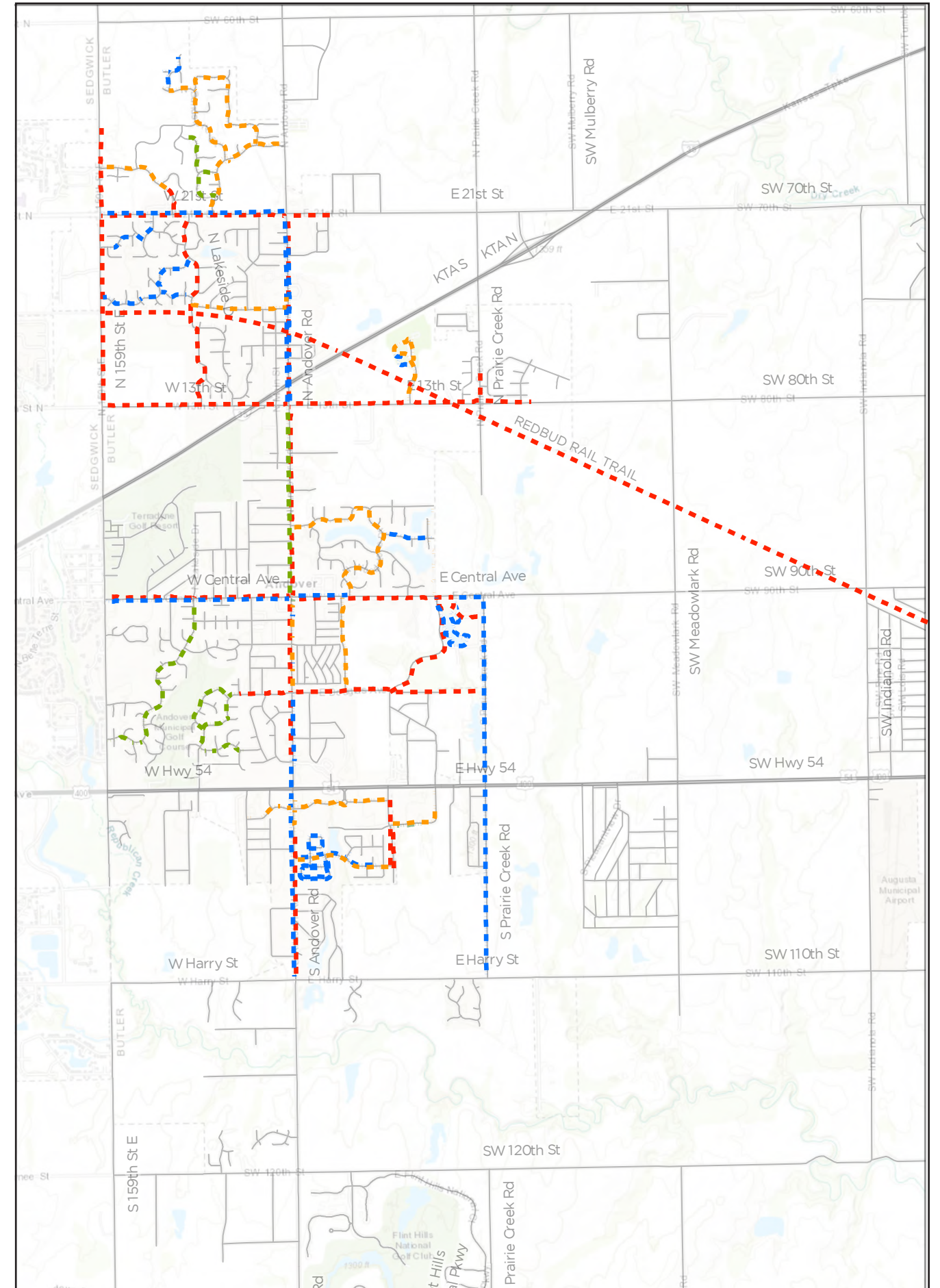
- Proposed (Future) Paths
- Existing Paths



Existing Conditions - Facility Inventory

Path conditions, including size, length, shade, and street crossings vary throughout the city. The wider the trail the easier it is for multiple users to share the facility. Wider trails also are easier to spot for cross traffic. As cyclists, runners, joggers, and walkers all share these wonderful amenities the size of the facility is important to note. The map on the right indicates the existing trail sizes and locations.

-  10 foot wide paths
-  8 foot wide paths
-  6 foot wide paths
-  5 foot wide paths

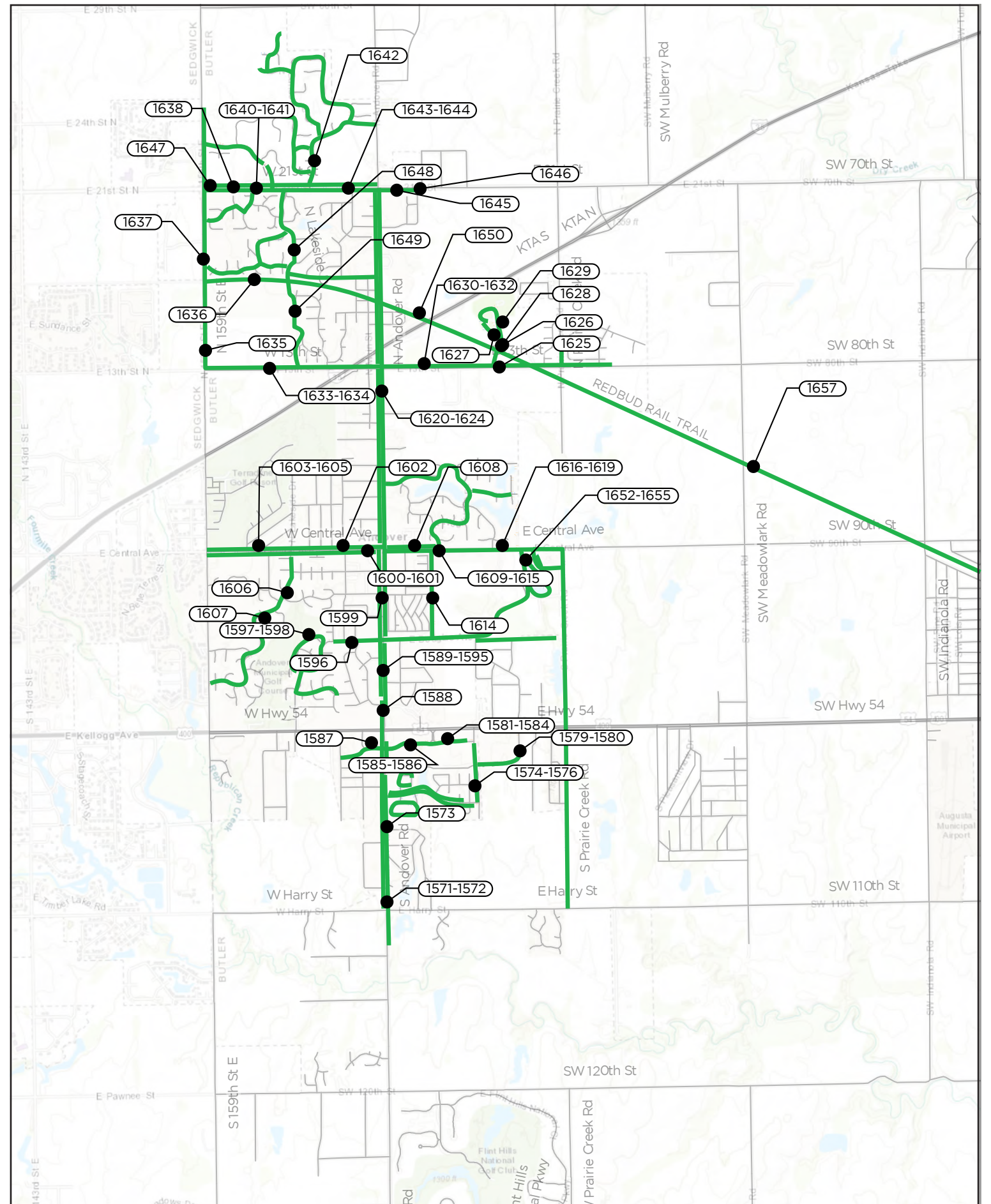


Existing Conditions - Photo Inventory

On May 10 through 12, in 2018, a photo documentation was undertaken to inform the analysis of existing conditions for the pathways and trails in the City of Andover. The map on the right provides locations and a key to the photographs shown on the following seven pages. Each photo number is displayed on the map that corresponds to the photo directory as shown.

“...encourage people to walk, bike, ride the bus rather than take their personal vehicles within the node. For such connectivity to be effective, the needs of pedestrians, bicyclists, and transit riders must be considered and planned for. This means including sidewalks, multi-use paths, and bike lanes and installing appropriately-designed lighting, landscaping, and signage.”

Andover US 54_400 Corridor Study by Parsons Brinkerhoff







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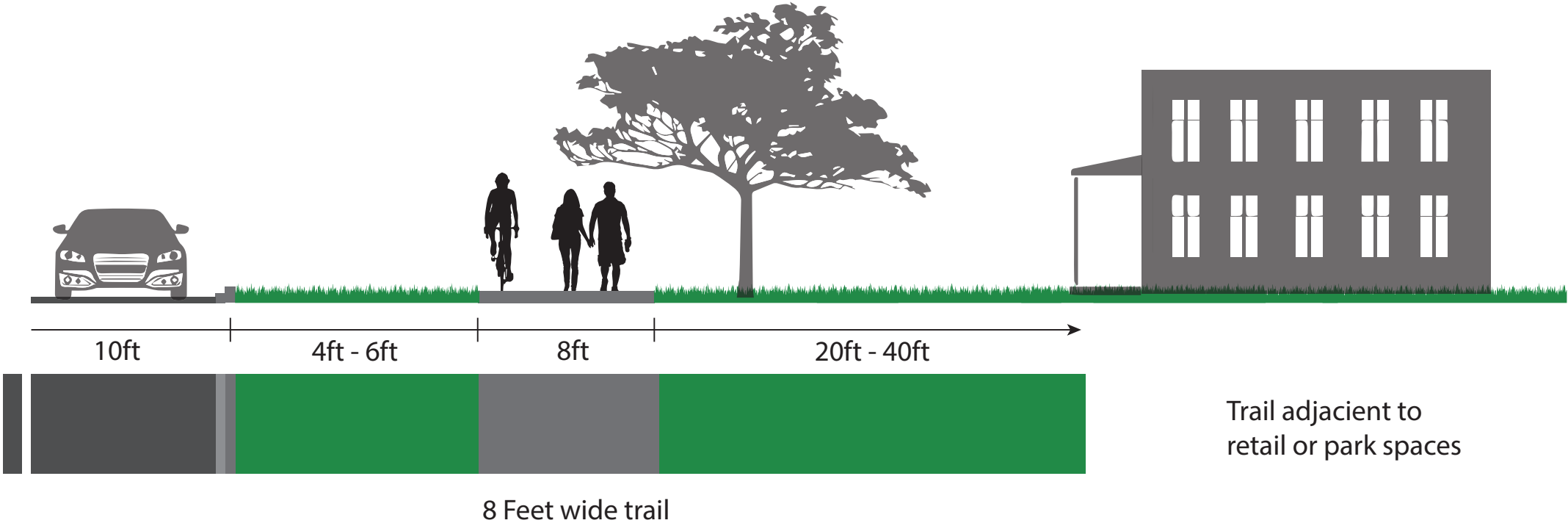
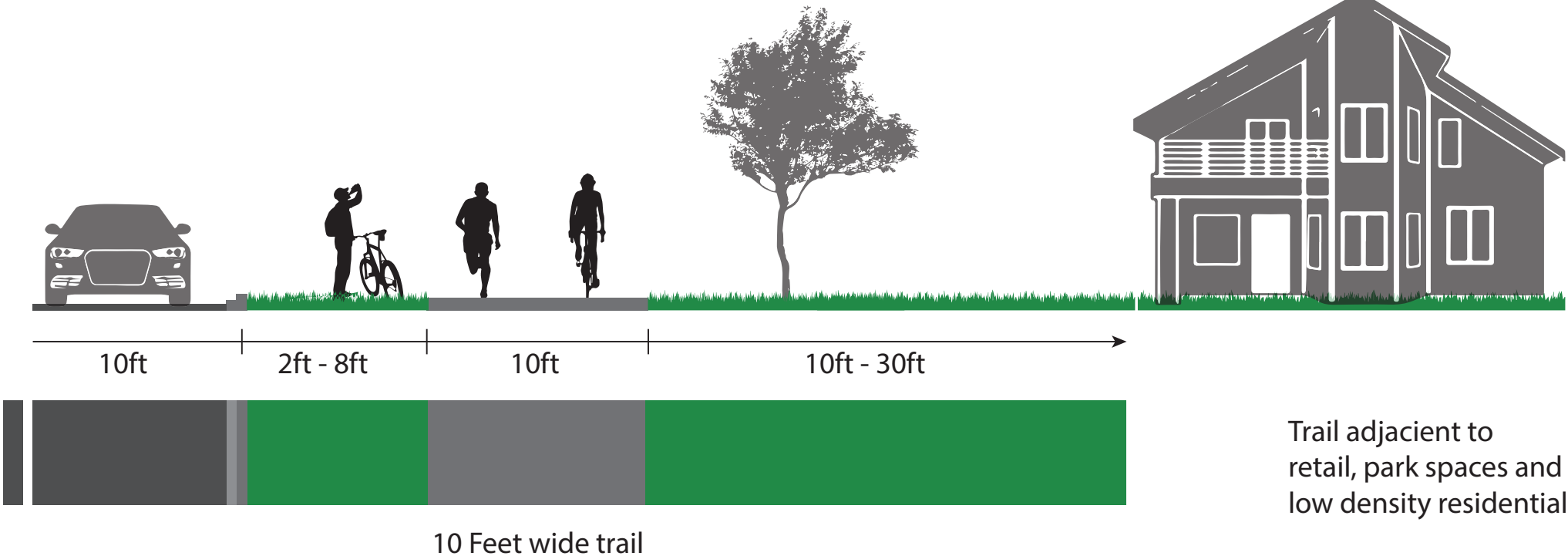
Existing Conditions - Pathway Typical Conditions

As demonstrated on the maps and photo inventory, Andover has a variety of pathway/trail conditions. From separated paths, with expansive green space between the road edge to on-street, and even residential sidewalk facilities each of these paths warrant a unique type of sign information content.

The 10-foot paths are well landscaped and predominately a long distance from retail, park or commercial properties and allow ample room to provide directional signage.

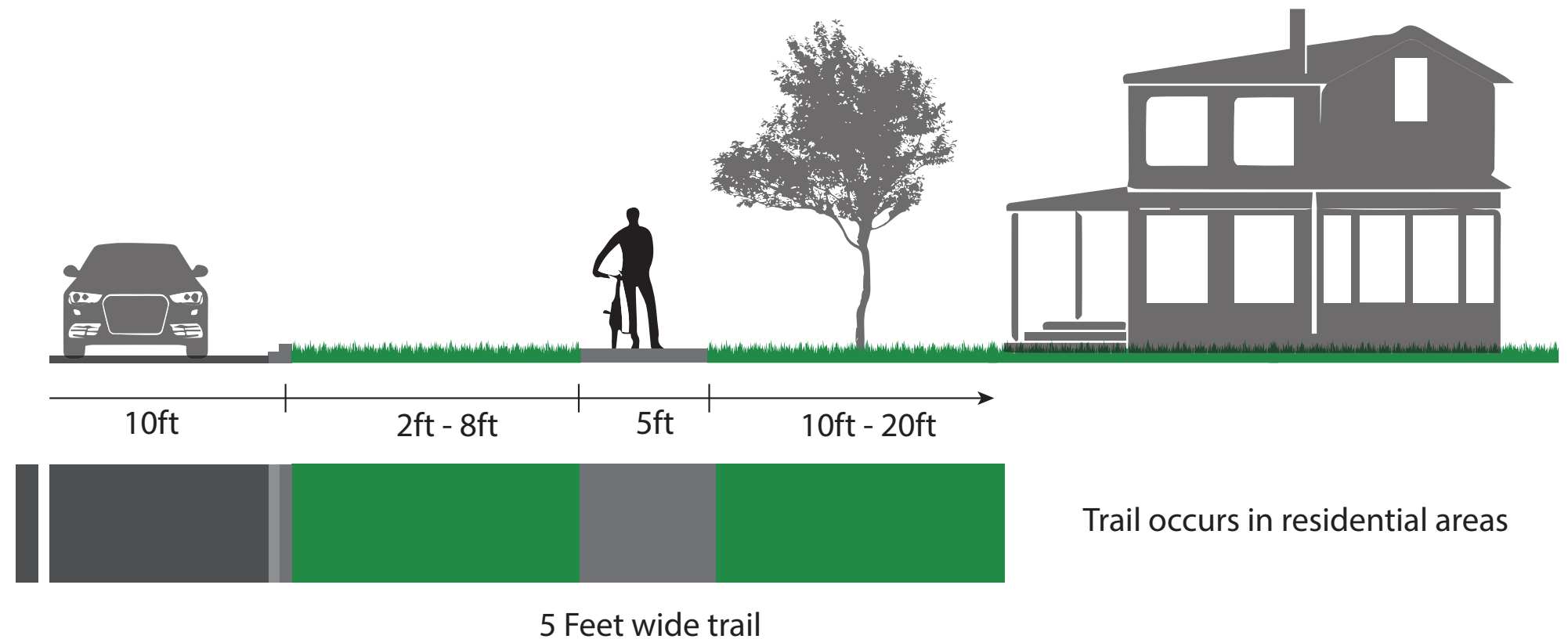
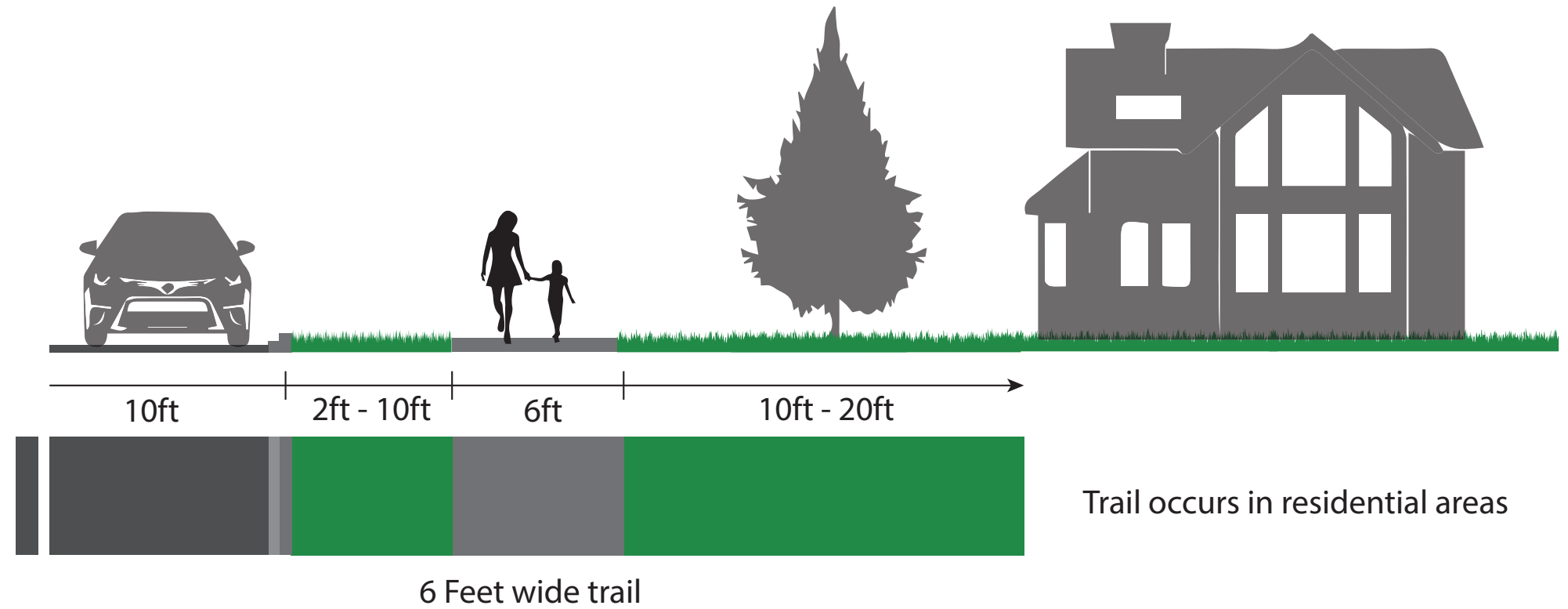
The 8-foot paths are well landscaped and are mostly adjacent to retail and park spaces. This pathways have the most room of all of the path types for signage locations without conflict.

Both of these conditions should permit signage along the paved path on the curb side from the right-of-way.



Existing Conditions - Pathway Typical Conditions

The 6-foot and 5-foot wide paths are predominantly located in residential areas. This limited space may pose a challenge with locating identification and directional signs as many will be in residential users yards. While ownership can be determined or permission granted it may be a challenge. Adjacent recreational areas with parking may provide an opportunity for information signs.



Existing Conditions - Vehicular Directional Signage

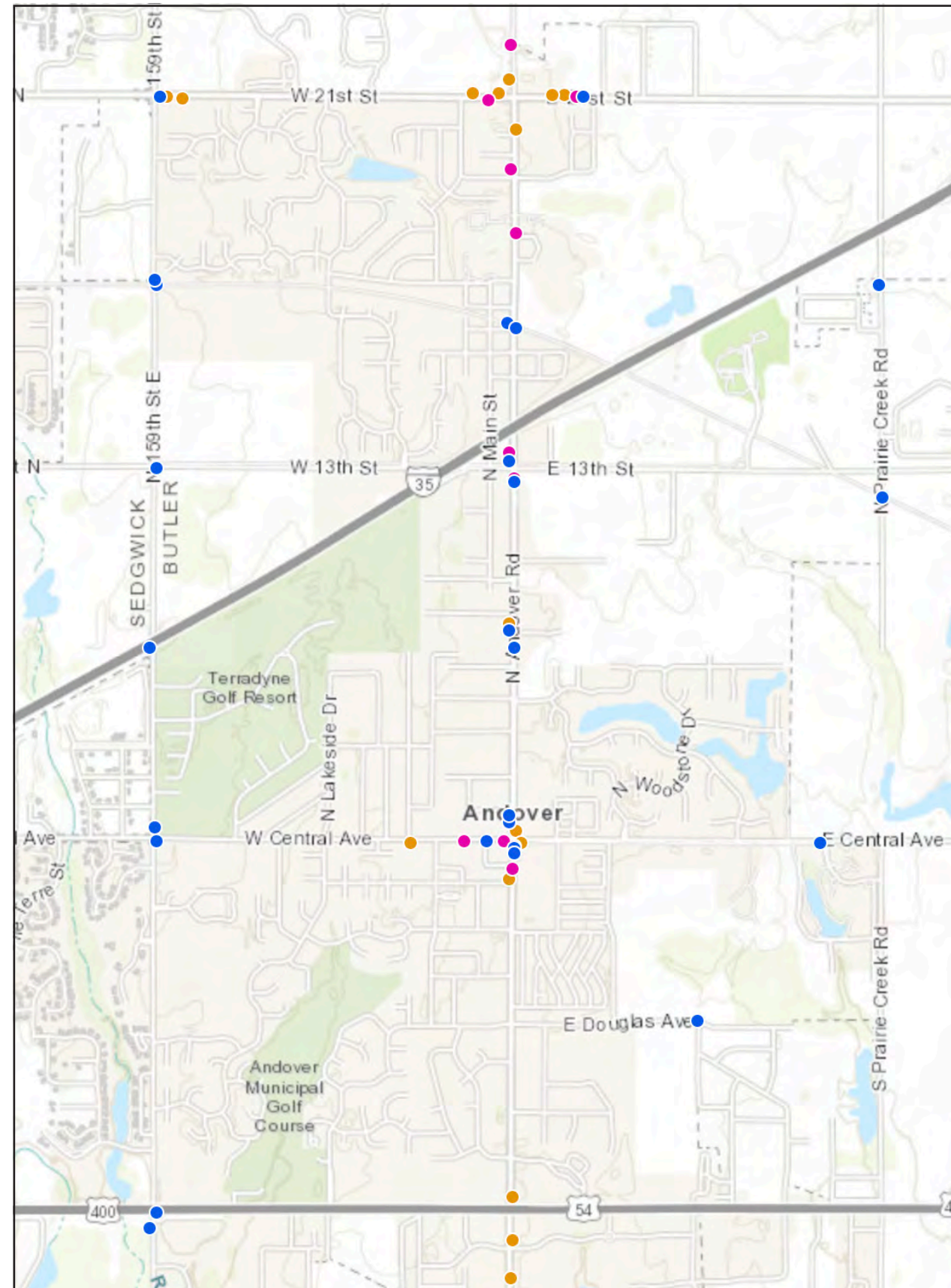
Vehicular signage throughout Andover is limited. Direction-giving is predominantly focused on the community college, regional parks, religious buildings and hospitals. While many other important civic destinations exist in the city, minimal direction-giving is provided with consistency. Some approaches have a directional sign at the turning movement intersection, while others do not.

Design of the existing directional signage does not follow KDOT, ADA or MUTCD standards for design, placement or legibility. The signs are predominantly scaled for viewing at a close distance with varying sizes of copy and logos.

The city should consider planning and design of a comprehensive vehicular oriented branded wayfinding plan to direct to the many wonderful destinations and amenities in and around Andover. This has been mentioned at previous meetings as a potential next project and should be prioritized.

Several gateway monument signs do exist on the approach to Andover. These gateway features provide a sense of awareness and pride in the community and should be reflected in a complementary wayfinding system throughout the community.

Existing Sign Inventory Map



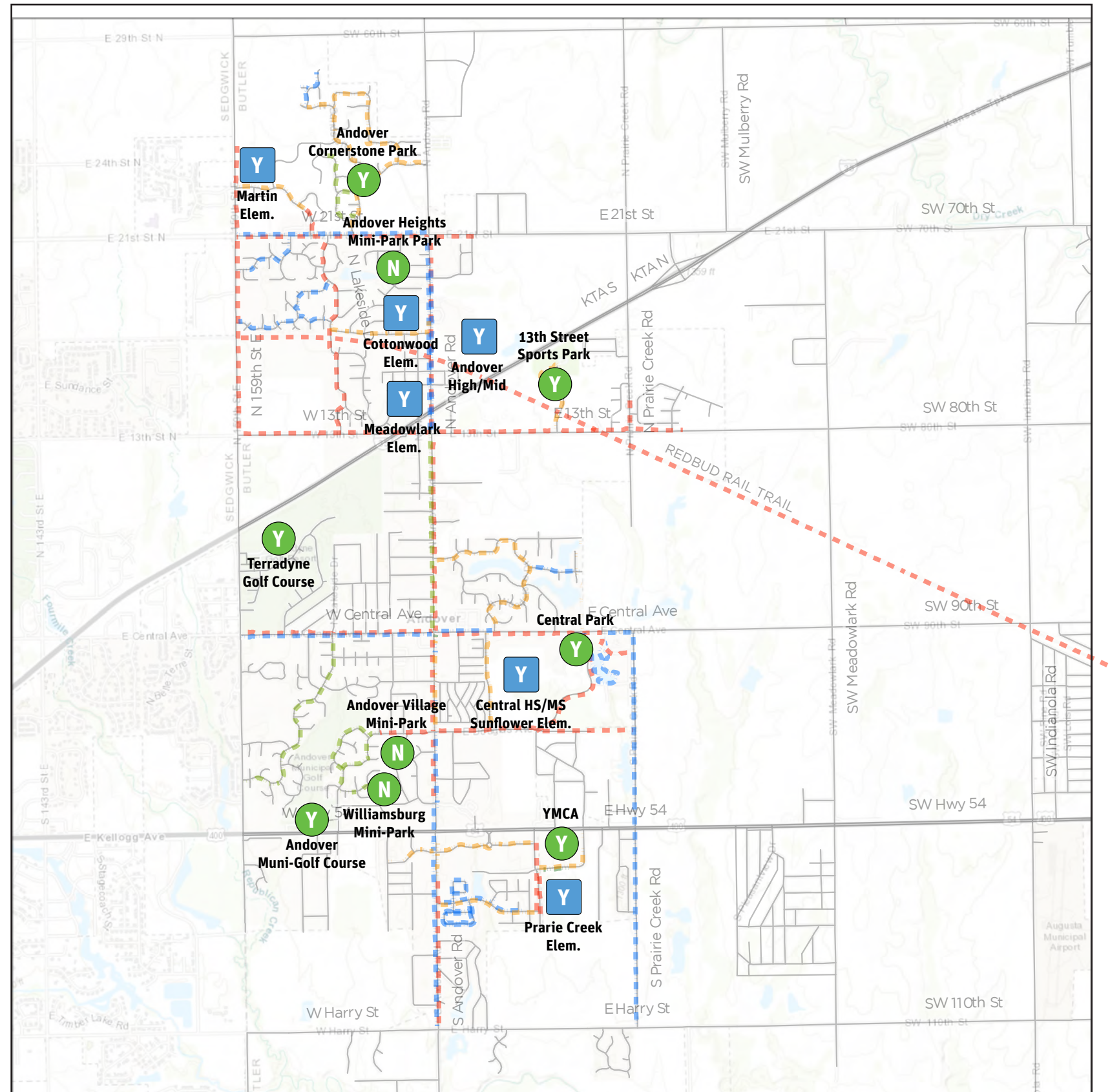
Existing Conditions - Pathway Access Points and Circulation

The pathways in Andover do not have dedicated trail-heads, so people access the paths via adjacent recreation facilities such as the YMCA, parks and schools. Some of the facilities have dedicated parking; some do not.

The map on the right displays the primary locations that visitors may be using to drive to park and access the Andover pathways.

All of the facilities shown here are directly adjacent to the pathway system except for the Terradyne and Andover Golf Courses.

- Y Recreational Facility with Parking
- N Recreational Facility without Parking
- Y Educational Facility with Parking



Strategy

→ Define strategic recommendations for a holistic wayfinding system

→ Outline the wayfinding components needed to support those recommendations

“An early-morning walk is a blessing for the whole day.”

Henry David Thoreau

Goals

- Promote Safety
- Leverage Park Connectivity
- Identify Road Crossings
- Announce Area Destinations
- Awareness of Route Options
- Progressive Disclosure

Strategy - The Right Information at the Right Time

What type of information is provided at the various types of access points is important to determine. This creates consistency in the system. People using the pathways grow comfortable that the information will be provided if they choose to explore. New opportunities to explore and go farther become comfortable with new-found confidence in information and access.

Welcome points

The entrances should provide a welcome to the pathway system which help to orient the user and provide an overview of what is available from that point. They should provide a sense of welcome, highlight the full extent of the pathway system and any connections that can be made to other modes.

Welcome points should be located in entrance points, in areas where there is parking or adjacent to residential.

Reorientation points

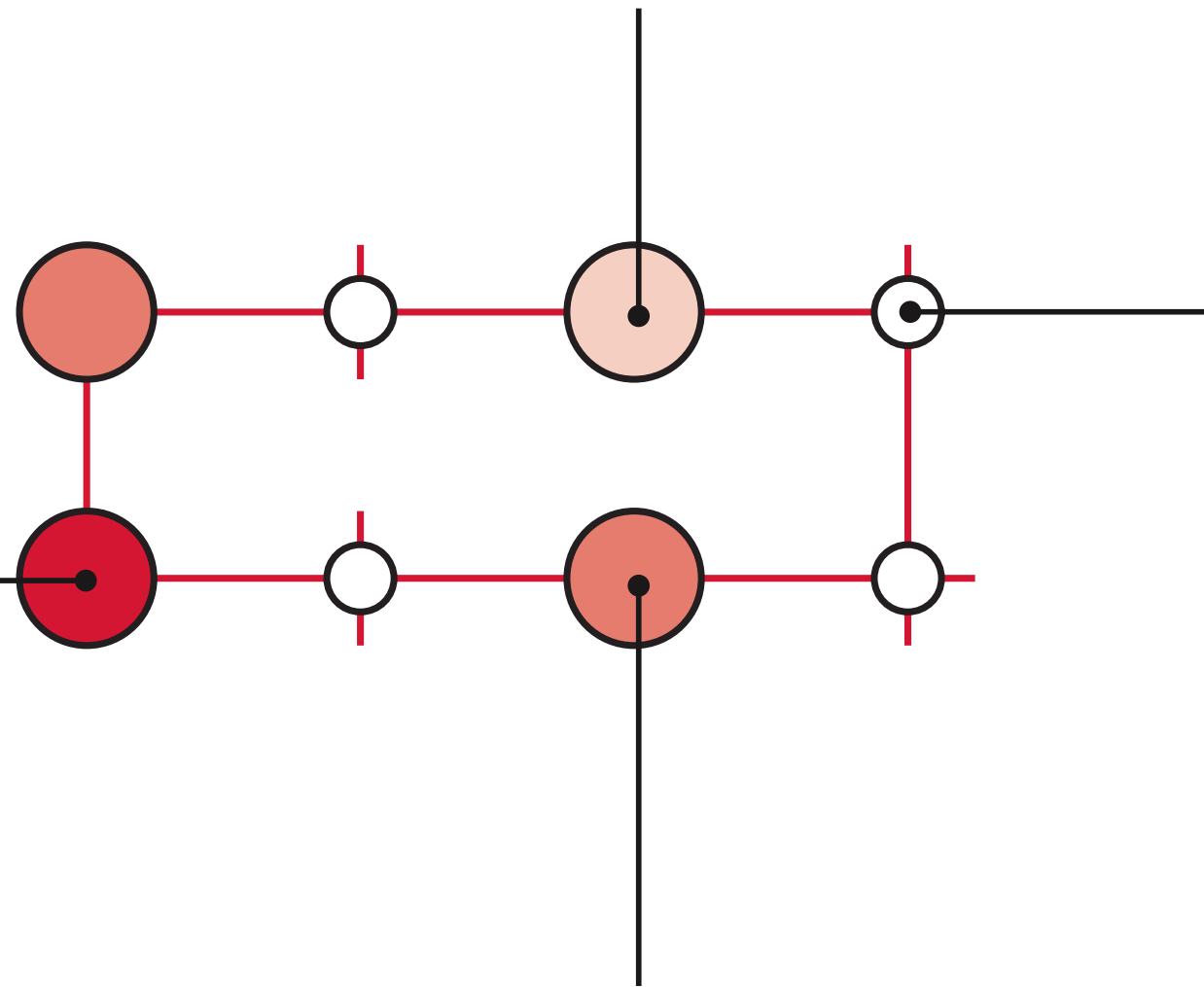
Reorientation points are areas where visitors can engage or re-engage with information. They help reinforce orientation and give an overview of where they are and adjacent to.

Decision points

Decision points are located at key nodes/junctions to 'nudge' visitors along to their destinations. Information content focuses on the destinations that people need most frequently and quickly.

Arrival points

Arrival points are at the threshold of intersections where detailed information is required to help visitors understand where they are and navigate.



Strategy - Code Requirements

When implementing a wayfinding system, it is important to understand and demonstrate the requirements prior to making an investment in fabricating signs.

The MUTCD 2009 Chapter 9B addresses wayfinding for bicycle facilities. The Manual for Traffic Control Devices provides recommended guidance for bicycle facilities adjacent to arterial roadways. These rules are recommendations for non-DOT facilities but variations are permitted and many examples exist of cities adopting a more 'branded' aesthetically pleasing system than the typical DOT standard.

The 2010 ADA address only pedestrian signage in regards to 'protruding objects' on pathways; text scale of overhead sign elements; and, light reflective value for color finish/contrast requirements to determine proper legibility.

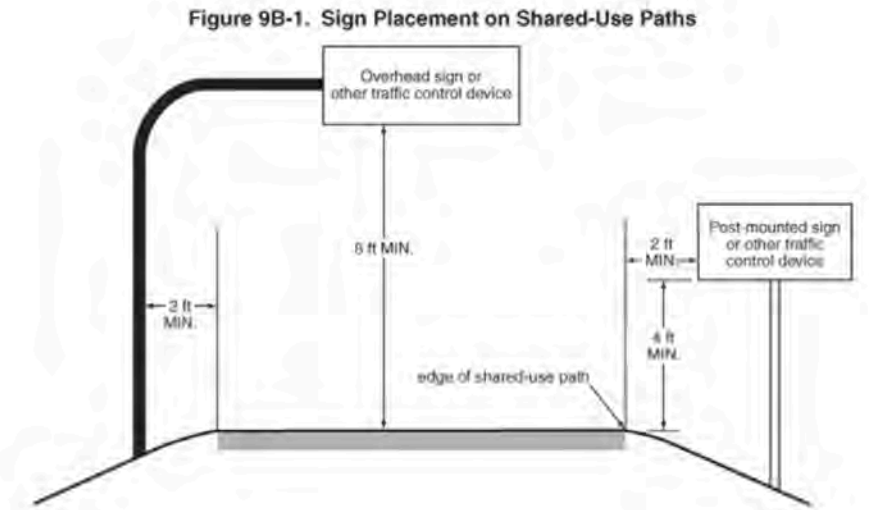
"KDOT does not have any unique requirements beyond the MUTCD and ADA standards." - Susan Turner, KDOT District Engineer Traffic Operations



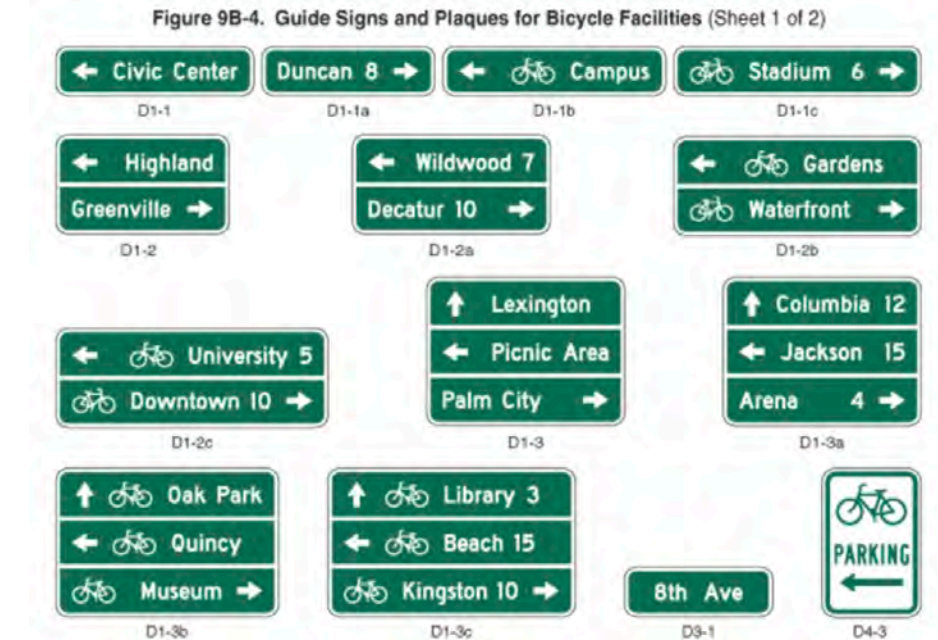
MUTCD 2009 - Section 9B

Contrast level meeting or exceeding 70%	
% Color combination	
95	White/Black
93	Black/Yellow
92	Black/Beige, Black/Steel, Black Silver
90	Black/Pink
89	White/Blue
88	White/Brown
87	Black/Gray
85	Black/Gold, Yellow/Blue
84	Yellow/Brown, Black/Copper, Black/Orange, White/Purple
83	Blue/Beige
82	White/Red, Brown/Beige, Blue/Steel, Blue/Silver
81	Brown/Steel, Brown/Silver, White/Teal
79	Black/Green, Blue/Pink
78	Yellow/Purple, Brown/Pink
76	White/Green, Red/Yellow
75	Purple/Beige
74	Black/Teal, Purple/Steel, Yellow/Teal
73	Purple/Silver
72	Red/Beige, Black/Red
71	Gray/Blue, Red/Steel
70	Red/Silver, Teal/Beige

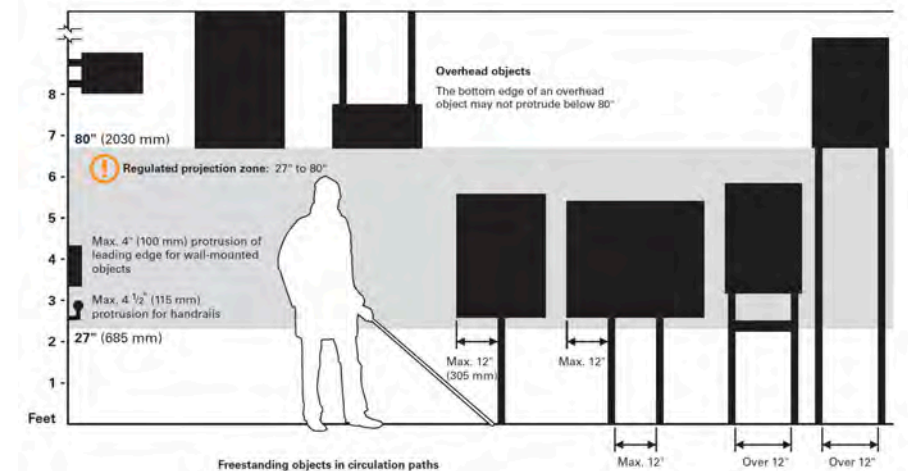
ADA -2010 Section 703.6.2



MUTCD 2009 - Section 9B



MUTCD 2009 - Section 9B



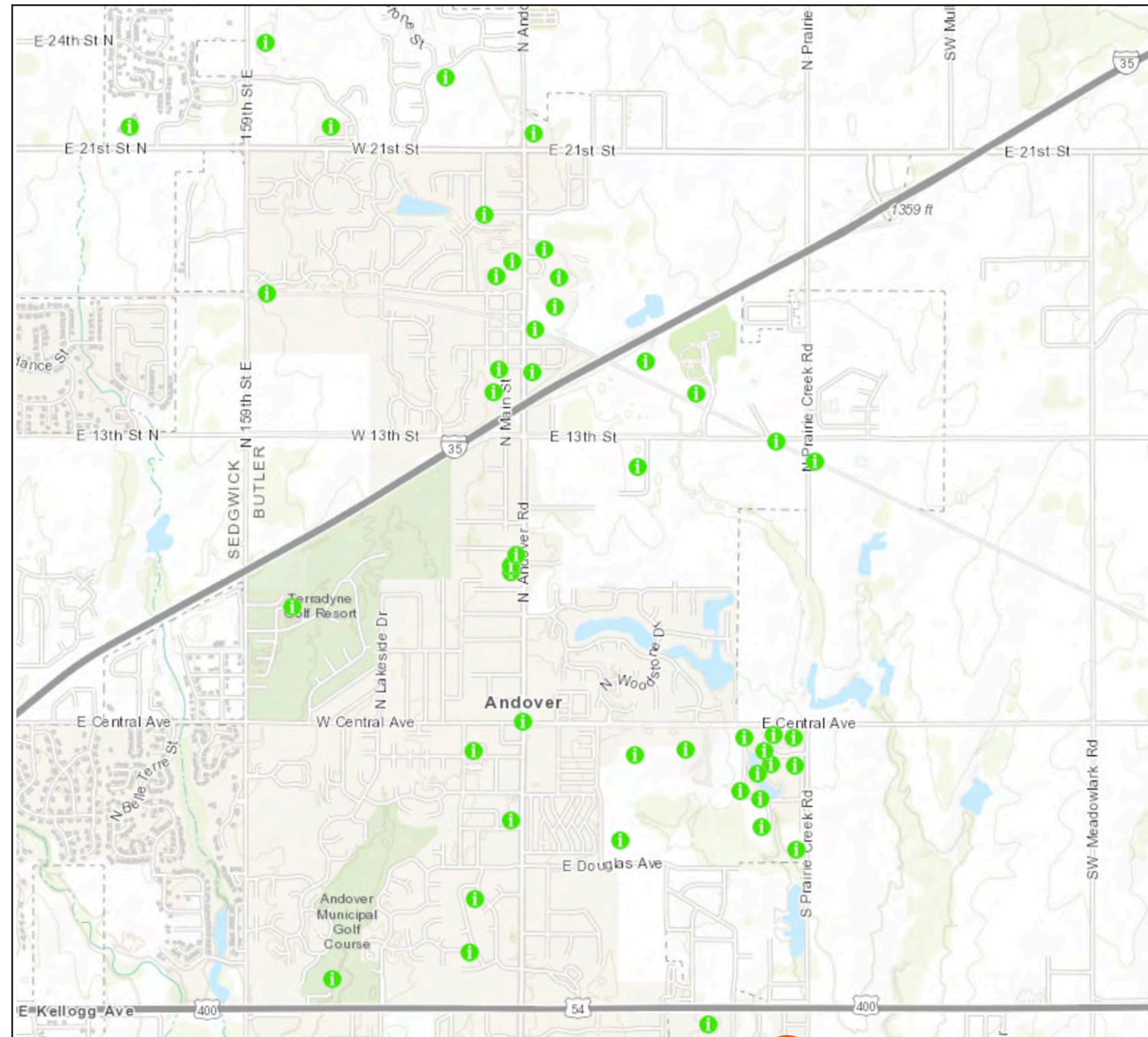
ADA -2010 Section 407.2.3

Strategy - Destinations

Destinations in the vibrant City of Andover are ample. Andover is a forward thinking city which prioritizes people. These priorities include ease of access, quality of life and healthy living. All of these are affected by a quality pedestrian and bicycle pathway system.

The destinations within the city are all not currently connected to the built pathways. It is also necessary to evaluate which destinations are reasonably needed for a recreational path user.

The list of destinations shown on this page represents the total of city destinations; but it needs to be defined which are worthy of being signed on the pedestrian and bicycle wayfinding.



- Martin Elementary
- Wheatland Elementary
- Kansas Medical Center
- Cornerstone Park
- Butler Community College
- Heights Mini Park
- Red Bud Trail
- Cottonwood Elementary
- Athletic Center
- Andover Middle School
- USD 385 District Office
- Meadowlark Elementary
- eCademy
- Andover Street Department
- 13th Street Sport Park
- Andover Historical Museum
- Fire - Rescue
- Police Department
- Municipal Court
- Terradyne Country Club
- Andover Cent. Middle School
- Andover Cent. High School
- Central Park
- City Hall
- Public Library
- Central Shopping District
- Senior Center
- US Post Office
- Village Mini Park
- Sunflower Elementary
- Williamsburg Mini Park
- Municipal Golf Course
- YMCA
- Prairie Creek Elementary
- Farha Sports Center

Strategy - Pathway Coding and Storytelling

Using Andover history to brand the pathways can inspire pride in the community and educate people about their shared history. The Andover Historical Society provided some insights into potential historically significant names that may serve to inspire path names.

Minneha Trail - When the Kansas territory was first mapped, this was its original name.

Cloud City Trail - Was later changed to Cloud City in the 1880's named after railroad engineer Mr. Cloud.

Pattison Trail - First homestead built on the land that is now Andover was built in 1872 by G.M. Pattison.

Waggoner Trail - In 1876 Mr Waggoner deeded 40 acres of land to plat the original townsite.

Boyer, Grier, Peacock and Hiskin Trails - These are the names of the first students who graduated from Andover High School in 1914.

Interpretive signs may be used to support the path name and tell the story.



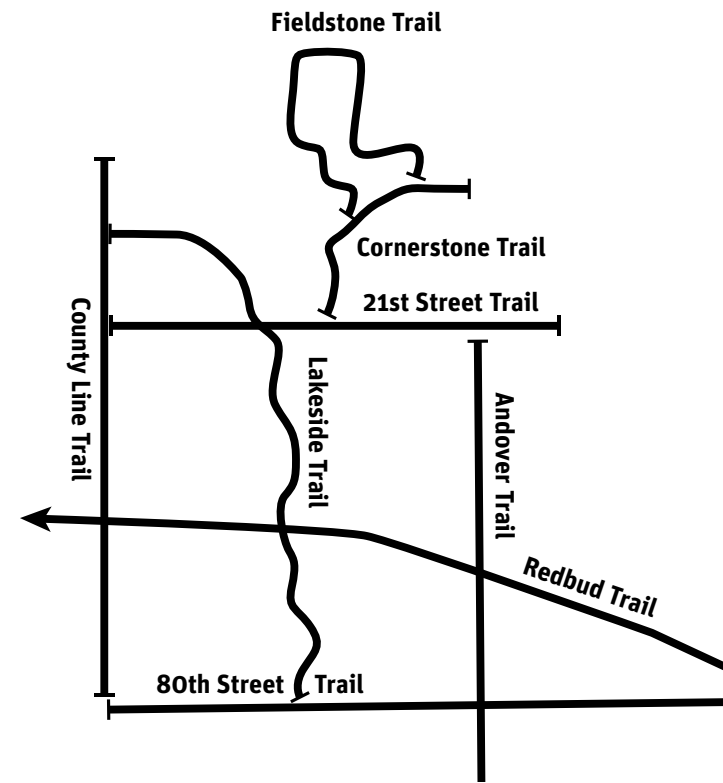
Strategy - Pathway Coding and Navigation

As an alternate to naming the pathways based upon historical attributes, it may be beneficial to name the pathways based upon other local attributes.

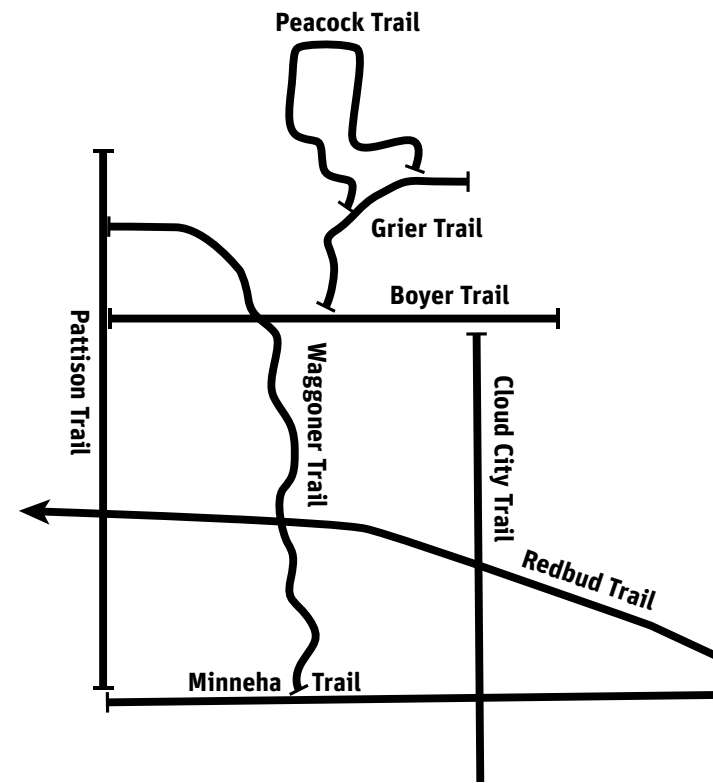
Adjacent road network - As many people who use the paths are Andover residents, naming these routes based upon the roads that they follow would make navigation and direction-giving easy.

Environmental - Following the lead from the Redbud Trail, the pathways could be named after local birds, wildlife or plants.

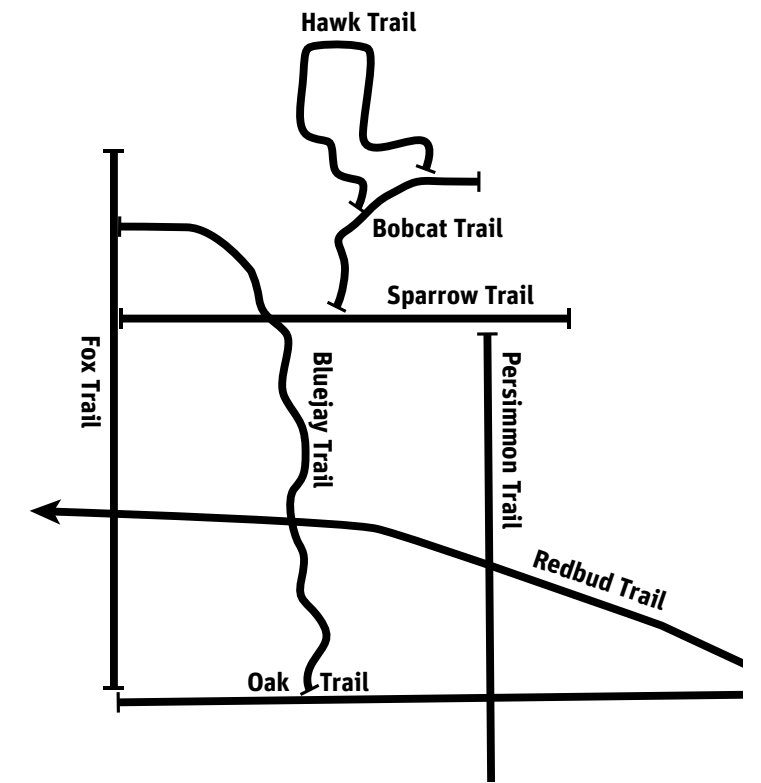
Option #1 - Geography/Road Names



Option #2 - Andover History



Option #3 - Nature



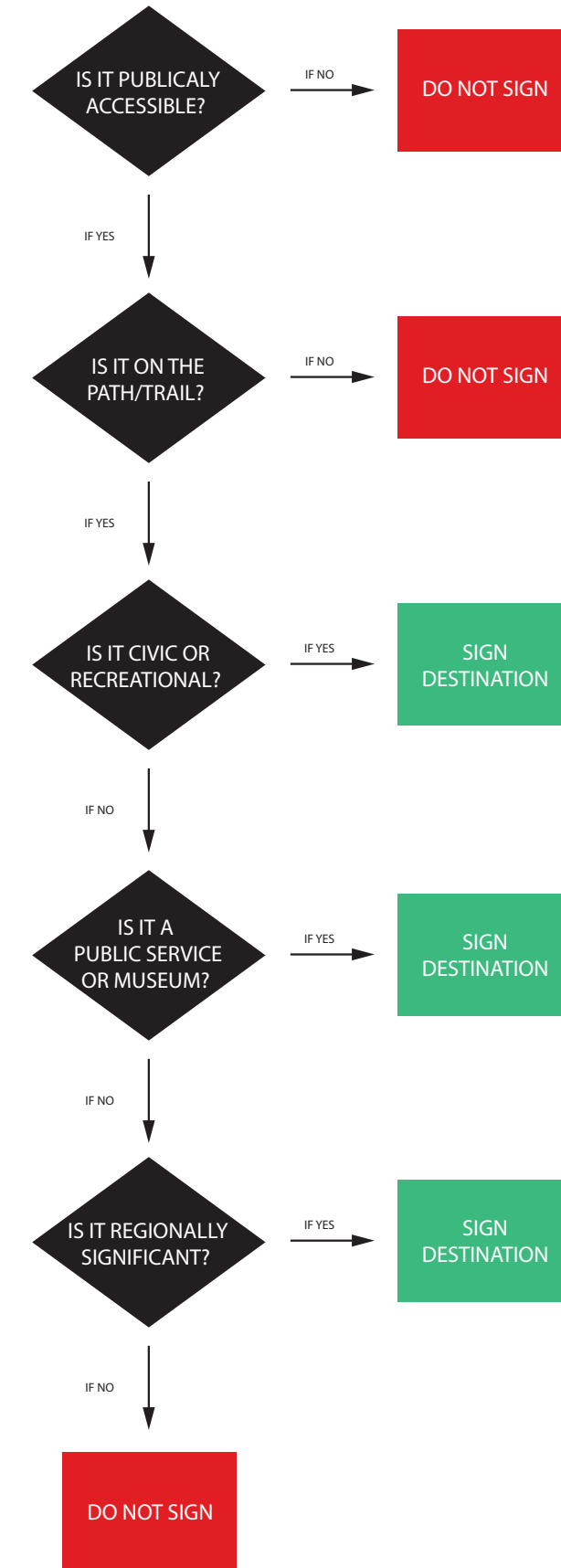
Strategy - Destination Criteria

As part of creating a complete management system, it is important that the City of Andover implement a cohesive wayfinding system that reinforces limits of the paths and trails, provides direction to the traveler, and reduces sign clutter by co-locating various directional system signs where possible.

Due to the wealth of resources and destinations of interest found within the city limits, signing to every destination would be challenging and would create an overabundance of signs that would negatively impact the visual character.

Therefore, it is necessary to develop a system for evaluating destinations for potential inclusion in the wayfinding system. To that end, the design team developed a flowchart methodology to quickly and objectively determine a destination's eligibility for inclusion in the wayfinding system.

1. Is it a publicly accessible facility? It was determined that only accessible facilities should be signed as part of the wayfinding system.
2. Is it on the path/trail? It was determined that all approved destinations located directly on the built path system should be signed. Destinations shall be within the city limits but those not on a path must meet additional eligibility criteria if the first two criteria are not met.
3. Is it a civic recreational use? It was determined that all city park spaces should be signed.
4. Does it provide a public safety service? It was determined that any police or fire department located on the path shall be signed.
5. Is it a not-for profit museum open at least 24 hours a week? It was determined that the Andover Center for History & Culture shall be signed.
6. Is it regionally significant and appeal to visitors outside the area? The resource must show regional significance and visitor appeal to be considered for signing.
7. Is it visitor ready? The resource must be able to accommodate visitors to be signed.
8. The Trail Steering Committee shall review the request and submit their recommendation to the City for approval.



Strategy - Naming and Coding

Abbreviations

A wayfinding system is meant to enhance a visitor experience and create a positive experience all while not detracting from the beauty of the Bike/Ped path or creating unsightly clutter.

In order to keep sign sizes to a minimum, destinations need to maintain a minimum number of characters in length. Listed along side the formal destination names are the proposed abbreviations.

FORMAL NAME	ABBREVIATION
Central Park	Central Park
13th Street Sports Park	13th St Sports Park
Andover Cornerstone Park	Cornerstone Park
Andover Heights Mini-Park	Andover Heights Mini-Park
Andover Village Mini-Park	Andover Village Mini-Park
Williamsburg Mini-Park	Williamsburg Mini-Park
Andover YMCA	Andover YMCA
Andover District Stadium	Stadium
Andover Center for History & Culture	Center for History & Culture
Andover City Police Department	Police Department
Andover Fire Department	Fire Department
Shopping District	Shopping

Strategy - Sign Location Planning

With the signed destinations established, a method of determining when and how to sign the destinations was determined.

First, the signed destinations shall be reviewed to determine if specific destinations could be grouped together into a larger regional category group. For example, Central Park has a number of destinations all in the same area. Because of their close relevancy and proximity, these destinations can be grouped together from outside the park. This larger grouping of destinations helps reduce sign clutter by reducing the number of destinations needed to be signed on each panel, allows the group of destinations to be signed from a farther distance since less destinations are required to be signed per panel, and the grouping provides added weight to the destinations by showing them as a collection of resources that tell a bigger story and may be more appealing to a traveler with limited time.

When resources are grouped, the individual resources are signed individually at critical turning points for each of the in-

dividual resources and on signs with available room at very close proximity to the resource. This regional context grouping method is similar to how vehicular systems work; although on a bike/ped system we also can also introduce an icon driven approach.

Once the various regional category groupings are determined, sign locations are established at the critical decision points along the path: key intersections, points of entrance into the path, and required turns to specific destinations.

For each sign, the available lines of copy shall be filled with destinations based on the following criteria:

First: Required turn for destination or regional category grouping

Second: Major regional destinations at critical entry points to the path

Third: Destinations or regional category groupings by proximity (closest receives priority)

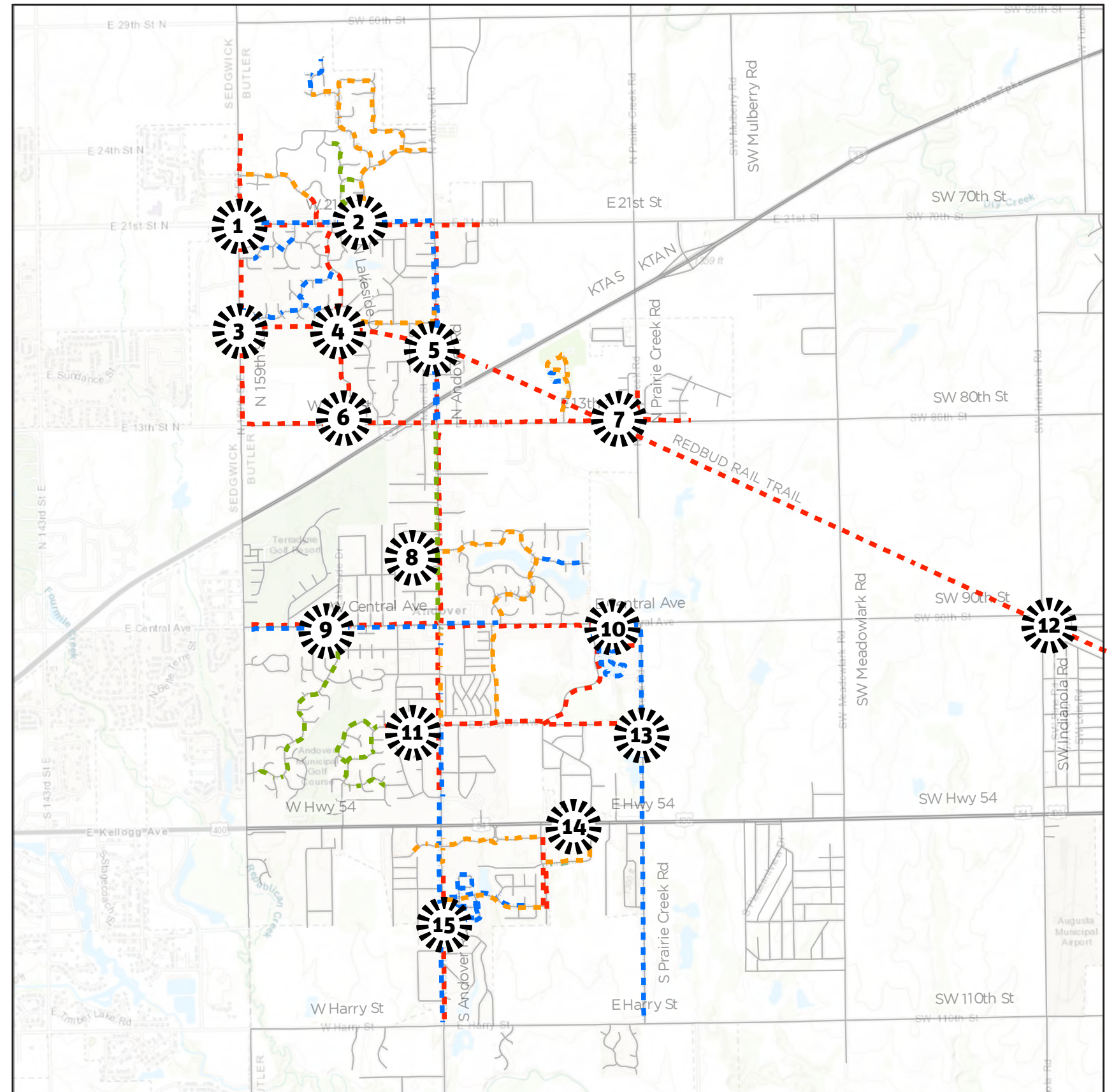
Destinations are ordered on each sign per MUTCD guidelines. Destinations straight-ahead are signed first followed by destinations to the left and then destinations to the right. For each direction, destinations are ordered closest to farthest. Also, it should be noted that the wayfinding system is provided along the path only. For destinations that are off the path, the wayfinding system will provide the turn direction at the appropriate location; however, the traveler will need to be directed by standard roadway directional signage after leaving the signed path.

Strategy - Key Entry Nodes

A major priority for the sign system is to be clear and legible in providing direction on each route. Signs are located along the major entrance nodes to best capture the attention of the audience.

Nodes are points of connection, convergence and intersection; they are important decision making points as a visitor makes their way from starting point to destination. This graphic is large scale and nodes are representative of a region. Specific locations will be clarified in a final sign location plan.

1. Cornerstone
2. Andover Heights
3. Redbud West
4. Lakeside Dr
5. Stadium/Redbud Central
6. Cedar Park
7. 13th Street Sports Park
8. Crescent Lakes
9. Green Valley
10. Central Park/Andover Schools
11. Andover Estates
12. Redbud East
13. YMCA North
14. YMCA South
15. Reflection Lake



Strategy - Visitor Tools

While there is notable interest in recreational paths in Andover as a travel destination, there are low levels of understanding of the existing facilities as a destination. The extensive numbers of activities and attractions available could cause confusion to participants. Visitors will likely expect and look to a source for guidance and suggestions in the form of travel planning tools and itineraries created along various interests or distances desired. Branding and particularly wayfinding signage will help the visitor to connect information they have gathered in preparation of a trip with what they experience during the trip.

This Visitor Tools chart represents the visitor process in planning and executing a trip. Each of these tools aide the visitor by providing information which enhances their experience.



Strategy - Materials and Environment

When designing a wayfinding system it is imperative that the material selection matches the environmental conditions in which they will exist. Specifications of durable materials for the sign program shall take into account the environment, temperatures and climate within Andover. In all cases the manufacturer guidelines will be the primary reference for material suitability. Materials may be exposed to the following conditions:

- »» UV radiation from sun exposure
- »» High temperature fluctuation
- »» High wind and rain
- »» Snow and ice
- »» Vandalism

Level of applicability for the City of Andover, Kansas
Area exterior environment uses:

Vehicular	Pedestrian	Material
●	●	Metal
◐	◑	Painted Surfaces
●	◑	Powder Coat Paint Surface
◑	◐	Vinyl Surfaces
◐	●	High Pressure Laminate
◐	●	Porcelain Enamel

● Excellent

◑ Good

◐ Medium

◒ Poor

Metals



Steel and aluminum should be coated to prevent weathering damage. Powder coating and anodizing will give an even hard wearing finish.

Vinyl Surfaces (3M)



Poor colors for sunny environments include black, dark reds, and green, will get the most gradation and will be noticeable faded in a 3 to 5 years. Protective surface treatment includes UV resistant clear coat.

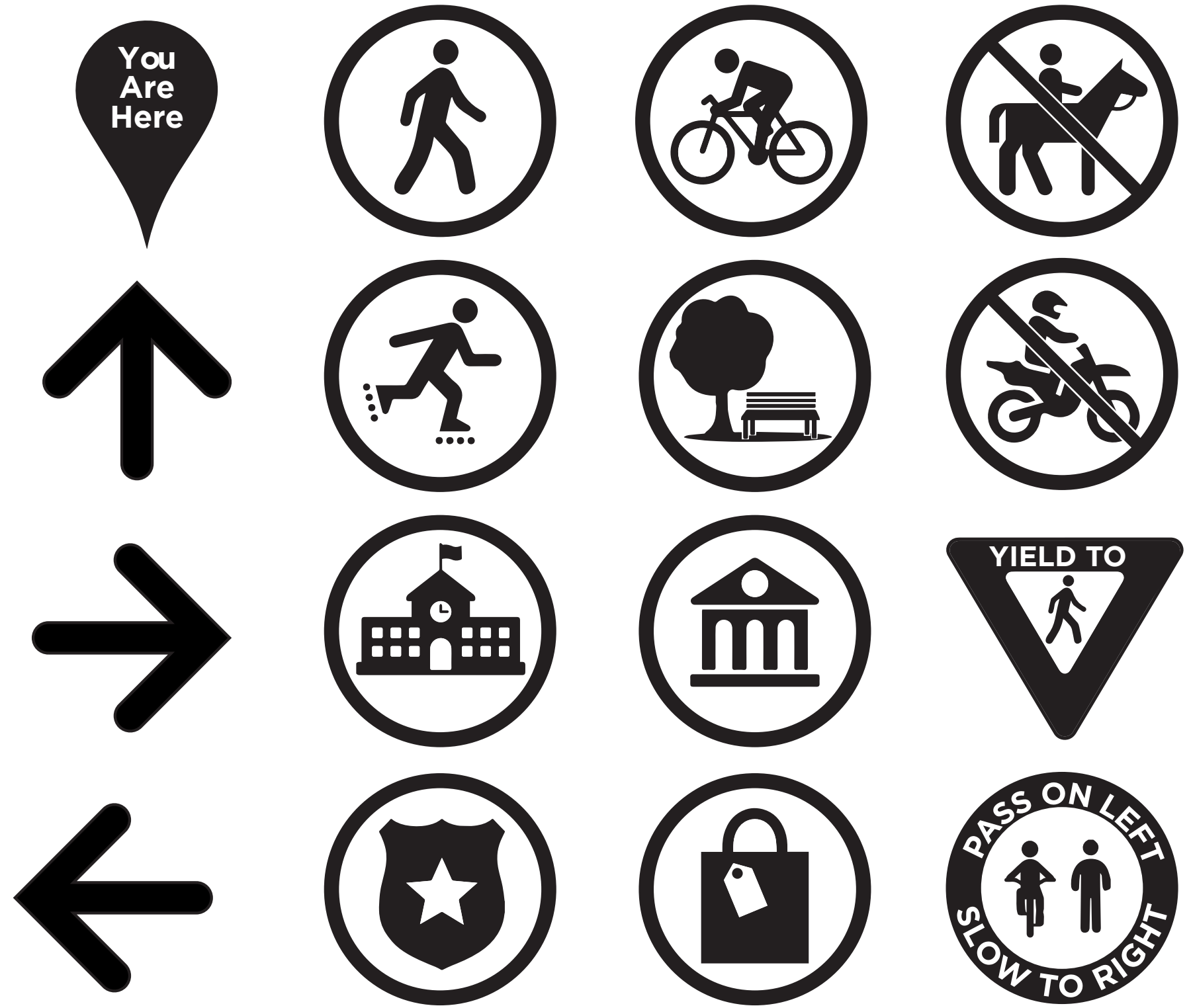
Strategy - Graphics

An icon set represents a visual vocabulary that anyone from any culture, any country, and any walk of life can understand—is of the utmost importance when it comes to wayfinding in physical spaces, especially in environments where people are moving. Icons provide a quick way for users to get information without spending an unnecessary amount of time to read text.

The following icons were prepared for the City of Andover paths and trails based upon the specific user needs. These icons include arrows and ‘you are here’ icons, and will be used on maps and directional signs. Additionally, provided icons include allowable activities, destinations and etiquette requirements.

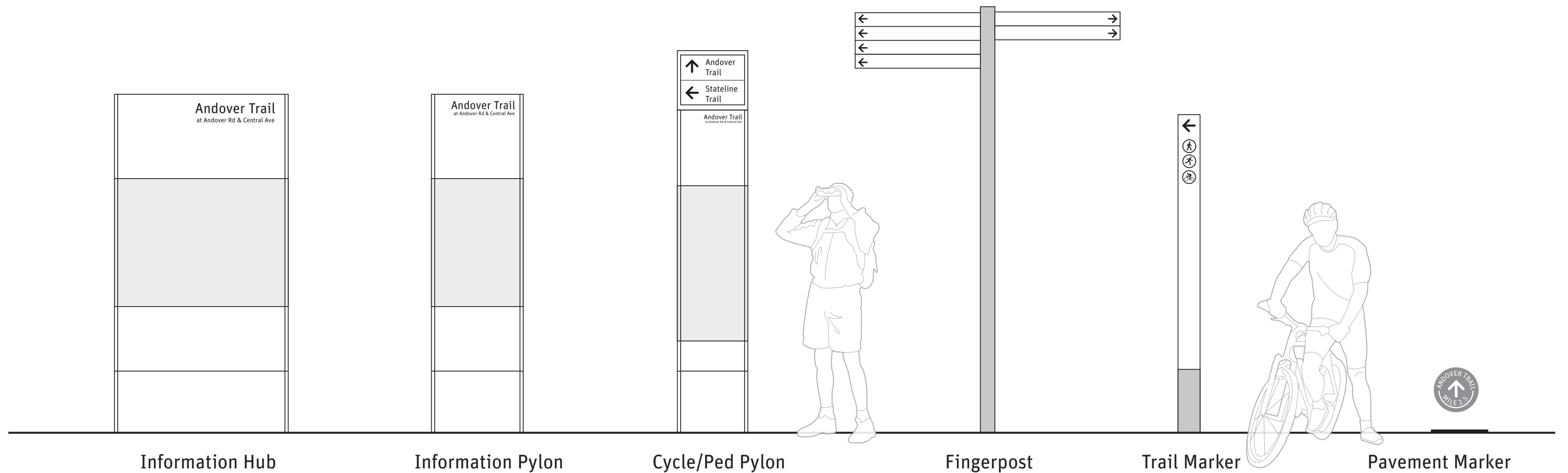
“Wayfinding should compliment and enrich the pedestrian experience and create interesting streets and spaces.”

Andover Design Guidelines



Sign Typology

The following page demonstrates the sign types that will be required to comfortably create a successful wayfinding system for the City of Andover paths and trails. These are not proposed designs but are a topology that represent the needed scale and information content for Andover. During the next phase of work actual designs shall be refined and detailed.



Large format pedestrian directional sign that occurs at trailheads, major nodes and access points. Displaying planner map, welcome message, directional information and trail descriptions.

Mid-format pedestrian directional sign occurs at intersecting nodes along the paths and trails. Displaying local area map, directional information within a limited geography.

Small pedestrian directional sign for on-ward and decision points along the paths and trails. Displaying local area and map information focused on path and trail intersecting points.

Fingerpost sign occurs at decision points at junctions where limited information is required. Blade sign points to destinations and lists distances.

Trail Marker provides limited information content such as distance travelled from start to end of path/trail and facility name.

Pavement marker identifies paths and trails, provides orientation, distances and confirmation.

Next Steps

Project Plan Overview

Task 1: Analysis – May 2018

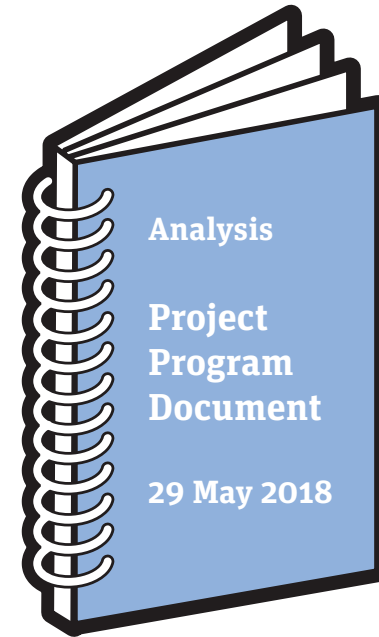
Consultant will conduct a wayfinding analysis of the community, its master plan, and the corridors adjacent to the site to gather all pertinent informational data.

Task 2: System Design – June – July 2018

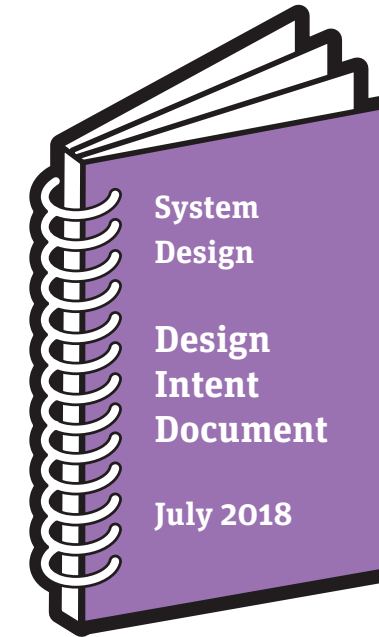
Design team develops and tests initial wayfinding and signage concepts, and further defines the hierarchy of wayfinding and signage elements.

Task 3: Documentation - August 2018

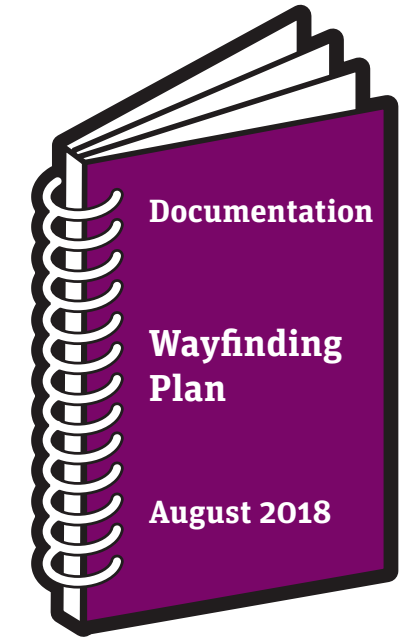
Wayfinding Placement Plan, will include maps of recommended sign locations and the documentation necessary for the purchase, fabrication and installation of the wayfinding/signage system.



Task 1 Deliverable



Task 2 Deliverable



Task 3 Deliverable

Conclusion

There are many factors that go into the design of a wayfinding system, and this document has covered many components that inform, direct, and inspire. Designing with all these components in mind will serve to make the built product available and cognizant to the broadest group of users and enable independence, security, and confidence to the greatest extent possible.

While a lot of information has been provided and digested and methodologies have been proposed and evolved there are still steps that need to be completed. The next steps to be performed for the completion of a Wayfinding System for the City of Andover are the following:

»» System design - Preparations of detailed design for the various sign types

»» Documentation - Creation of Design Documents, location plans and content

»» Presentation to Andover Governing Body for approvals

“Focus on the journey, not the destination. Joy is found not in finishing an activity but in doing it.”

Greg Anderson (American best-selling Author and founder of the American Wellness Project., b.1964)



Thank You.



jonathan mugmon design_
wayfinding & information design