

jmd_wayfinding



Connecting Our Region

Kansas City Regional Wayfinding Guidebook

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01. Introduction and Purpose

1.1 - What is Wayfinding?

Wayfinding encompasses all the tools and resources that help us find our way in our environment. It includes how we orient ourselves to our location and how we plan and follow a route to our destination. Wayfinding uses visual and sensory cues to help us navigate and it is influenced by many factors in the built environment: natural features, architecture and landmarks, street layout and urban form, landscaping, transportation, lighting conditions, signage, and the presence of people all influence wayfinding. The greater the complexity of the built environment, the more signage and other tools will be needed for a smooth journey.



1.2 - Purpose of this Guidebook

This Guidebook is the culmination of a yearlong effort among jurisdictions across the Kansas City metropolitan area to plan a regional wayfinding system. The Connecting Our Region project was spearheaded by the Kansas City Area Transportation Authority (KCATA) and the Mid-America Regional Council (MARC) and funded through MARC's Planning Sustainable Places (PSP) initiative. The purpose of this project was to develop a regional wayfinding system for residents and visitors that would make it easier to navigate the Kansas City Region by walking, bicycling and taking transit and encourage greater exploration of the region by multimodal transportation. Nearly 20 different jurisdictions participated in this project in some way including involvement in the project steering committee, providing matching funding for the study, responding to jurisdictional staff surveys, and attendance at open house events and informational presentations.



This document summarizes the background research, planning process and public engagement efforts that were used to develop the Kansas City Regional Wayfinding System and it also serves as a Guidebook with the necessary information for implementing that system by both big and small jurisdictions. It is organized as follows:

- Project Background and Process
- Sign Family Concept Designs
- Placement Guidance
- Implementation Considerations and Next Steps

- 1 - Adelaide, SA, Australia
- 2 - Prairie Village, Kansas
- 3 - Clayton, Missouri
- 4 - Colorado Springs, Colorado
- 5 - Kansas City, Missouri

1.3 - Wayfinding Guiding Principles for the Kansas City Region

Good wayfinding is about the whole journey. It encourages repeat visits, instills confidence, and builds reputation. When information is provided efficiently, it becomes seamlessly integrated within the broader context of a community. It allows the user to connect from point A to B without having to think or question any information. While numerous principles guided the development of the design and application of the Kansas City Regional Wayfinding System presented in the pages that follow, the most important guiding principles for the Connecting Our Region effort are:

- **Make Connections.** Ultimately, this project is about connecting people to places and the wayfinding system will play an important role in linking residents and visitors to destinations that are important at a regional level, such as key landmarks, cultural institutions, and transit centers as well as local destinations such as parks, libraries, schools and bus stops.
- **Make Information Simple and Predictable.** To be most effective, it is critical that the information provided and the placement of the signs in the wayfinding system be consistent, uniform, integrated, and predictable. This makes it easier for the user to understand travel information quickly and plan or implement their journey.
- **Promote Active Travel and Regional Exploration.** While many of the region's communities have signs in place for vehicular wayfinding, they often lack wayfinding for people who walk, bike or take transit. A goal of this project is not only to make it easier for people to find their way, but also to encourage people to try one of these modes for the first time.
- **Maintain Motion.** Pedestrians, bicyclists, and transit users move at different speeds. It is important that the wayfinding system allow users to navigate while maintaining motion.
- **Provide a Flexible and Manageable System.** In a fluid environment such as the Kansas City Region where things are constantly changing, it is important to have a modular system that allows for destination name changes and other updates with little expense.
- **Utilize Technology.** There is a great deal that can be done to enhance the experience of both residents and visitors by giving them targeted information using a variety of media including digital, on-street, and printed information. Mobile digital devices, interactive kiosks and online platforms provide the opportunity for real time information and reflect the pulse of the region with up to date information.

1.4 - Existing Wayfinding Guidance

Sign systems in the United States are guided by best practices, standards, and regulations. Typically, communities must follow regulatory guidance when implementing information systems on streets or in the public right-of-way. Customized signage solutions may be used off-street on sidewalks and trails, however a solid understanding of local, state and federal guidelines and requirements is important for the integration, legibility and safety of the traveling public. Chapter 3 of this Guidebook provides the sign family concepts for the Kansas City Region and includes both customized signs for off-street trail and sidewalk use as well as on-road signs directed at bicyclists. Chapters 4 and 5 include information regarding placement and installation of these signs. While these chapters highlight the most important national guidance and standards, they do not provide a comprehensive summary. The key national documents that refer to pedestrian and bicycling wayfinding are summarized below. These documents, along with state and local guidance and regulations should also be consulted when implementing the wayfinding system provided in these pages.

Manual on Uniform Traffic Control Devices (MUTCD)

The Federal Highway Administration's MUTCD (2009 edition) holds jurisdiction over all signs on any road or bikeway open to public travel. This includes all shared use paths and separated or conventional bike lanes. The MUTCD covers:

- Sign design for bicycle guide (wayfinding) signs, bicycle routes, and auxiliary plaques, based on a smaller size of the D-series guide signs for motorists.
- Pictographs and appropriate abbreviations for destination names
- Placement, mounting height requirements, sign size, and layout
- Priority MUTCD sections for bicycle wayfinding are Chapter 2D and Part 9. These sections should be consulted before undertaking any wayfinding development project.



D1-3c

MUTCD Section 2D.50 Community Wayfinding Signs allows for customized wayfinding signs that vary from standard MUTCD D-series signs. Community wayfinding guide signs may employ unique colors, logos, and fonts as part of a coordinated and continuous system of wayfinding signs for an area.

Currently, Community Wayfinding only applies to on-street bicycle routes, but in June 2014 the National Committee on Uniform Traffic Control Devices recommended that shared use paths be incorporated under Community Wayfinding in the next update of the MUTCD. For the purposes of this project, we have interpreted Community Wayfinding as applying to both on-street bicycle routes and shared use paths.

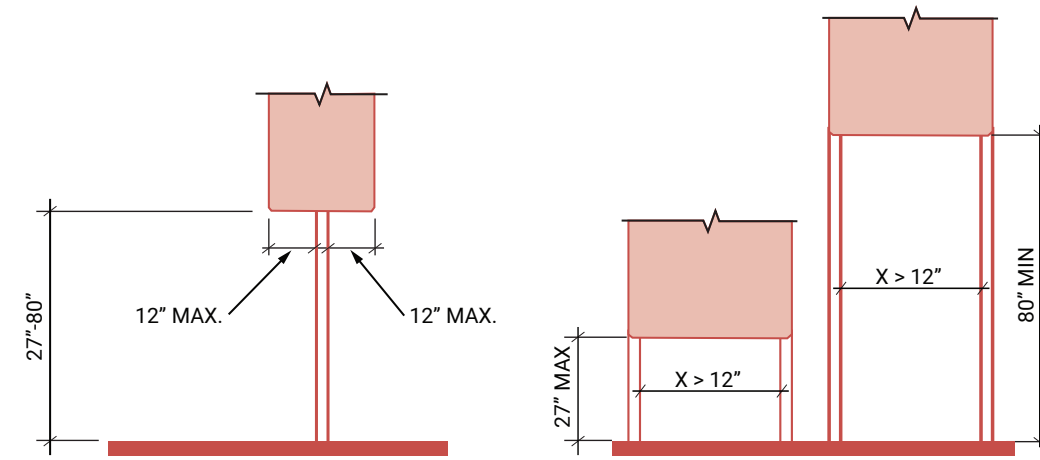


American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities

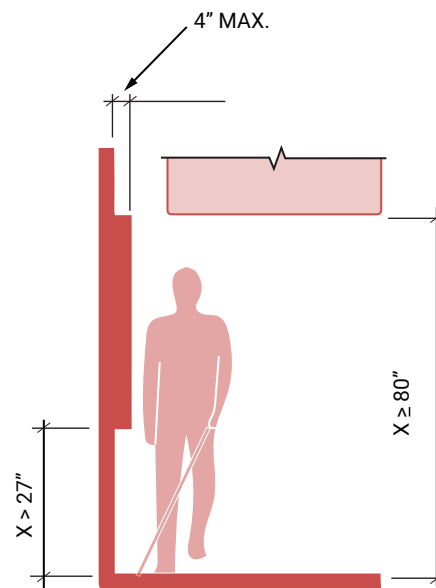
The AASHTO guide is consistent with and provides supplemental information to the MUTCD. A forthcoming update will contain a full chapter on wayfinding, expanding on the current 2012 guide. The current guide discusses the MUTCD D Series and MUTCD national and state route (M1) signage. The update will expand on the nuances of these signs while covering the MUTCD Community Wayfinding Series. The forthcoming guide will also discuss applications, sign types, and supplemental signs such as mile markers.

Americans with Disabilities Act (ADA) & United States Access Board

The ADA currently does not guide exterior wayfinding systems. It does provide guidance on protruding objects and clear width on accessible routes, with the guidance aimed toward pedestrians. Guidelines for shared use paths are under development and will address post mounted objects and sign legibility.



Minimum ADA clearances for post-mounted objects



Minimum ADA clearances for protruding objects



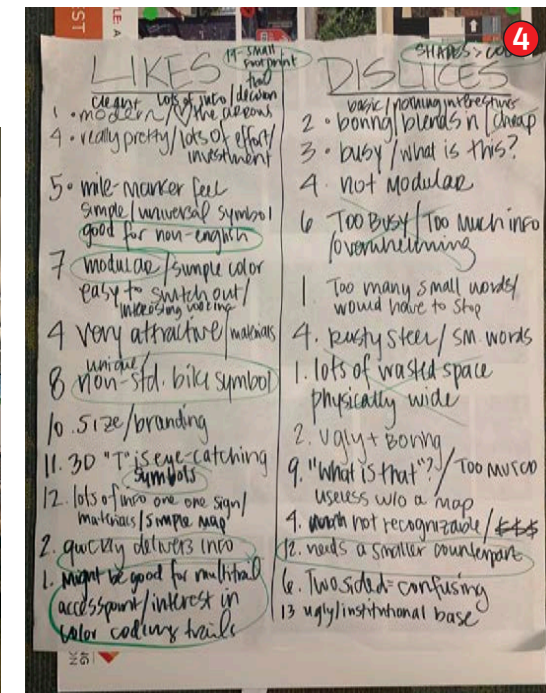
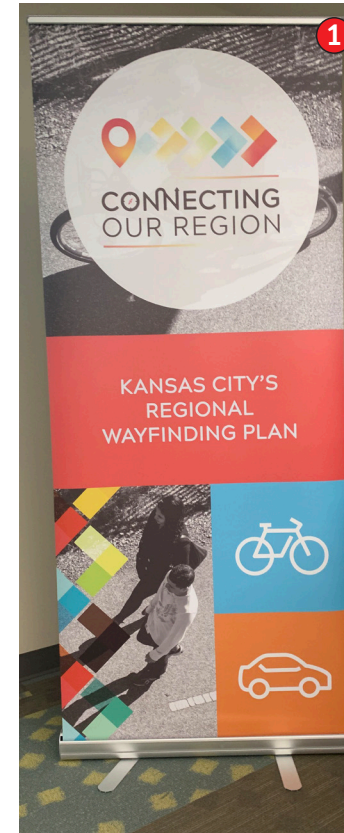
02. Project Background and Process

2.1 - Planning Process

Connecting Our Region followed an extensive planning process to ensure that the resulting Kansas City Regional Wayfinding System would meet the needs of visitors and residents; be implementable in jurisdictions across the metropolitan area; and achieve progress towards the project goals of making it easier and more attractive to use walking, bicycling, and transit as a means to explore all that the region has to offer. The process included the following components which are summarized in this Chapter.

- **Regional Stakeholder Committee.** A regional stakeholder committee comprised of representatives who are responsible for implementing wayfinding in their jurisdictions as well as staff from MARC and KCATA was established and met regularly throughout the course of the project.
- **Background and Best Practices Research.** The project team conducted a review of the most relevant regional plans that apply to wayfinding and regional travel by walking, bicycling and transit as well as a high-level survey of local guidance and standards as they relate to wayfinding. The team also researched and summarized best practices in the design and application of wayfinding systems.
- **Fieldwork.** The project team conducted limited fieldwork at a sampling of sites suggested by the stakeholder committee to gain an understanding of existing wayfinding types across the region.
- **Public Engagement.** Engagement opportunities included an informational website and online public survey, three pop-up engagement opportunities at locations across the region, a workshop for the stakeholder committee and staff from the local jurisdictions that make up the MARC region held in September, and a public open house and feedback opportunity held in February.
- **Presentations and Outreach to Additional Stakeholders.** In addition to the opportunities above, regular updates were provided to the MARC Bicycle and Pedestrian Advisory Committee and several presentations and other updates were provided to individual organizations and interested parties throughout the process.

- 1 - Stakeholder Workshop
- 2 - Santa-Cali-Gon Days Pop-Up, Independence, Missouri
- 3 - Stakeholder Workshop
- 4 - Stakeholder Workshop



2.2 - Regional Plans

Many of the Kansas City Region’s planning and policy documents have called for a better connected active transportation network with integrated wayfinding for years. Three plans in particular, Ride KC Smart Moves 3.0, the Metro Green Action Plan, and the Greater Kansas City Regional Bikeway Plan, specifically identify the need for transit, pedestrian, and bicycle wayfinding signage and have helped to guide the Connecting Our Region effort.

Ride KC Smart Moves 3.0 (2017) This document is a 20-year plan for transit and mobility choices in the Kansas City Region. The Plan includes recommendations for enhanced transit service, mobility hubs, and better connections to efficient transit. It discusses technological innovations so that people can be better informed of their transit options, including kiosks, online information, mobile apps and electric vehicle (EV) charging stations. The plan brings together five regional transit agencies under one brand called Ride KC, and has implemented consistent fares, a unified transit system map, and route identification numbers across the region.



Metro Green Action Plan (2001) This document builds built upon a 1991 ASLA plan to further define the critical relationship between environmental stewardship and urban growth management. The plan envisions a series of interlocking streams and river corridors, roadway corridors, and abandoned rail corridors to connect suburban areas with urban and green spaces across the region. It identifies five types of trails and prioritizes trail projects for future implementation. The appendix of the plan recognizes the need for a cohesive sign system, and outlines design guidelines, entry, wayfinding, trail map, regional map, and interpretive signs. These guidelines are quite flexible, which may have unintentionally contributed to the disjointed trail signage system across the region.



The Greater Kansas City Regional Bikeway Plan (2015) This document is an eight-county bikeway plan that includes 109 municipalities. It identifies the existing and proposed regional bikeway network and includes a toolkit to help jurisdictions implement bikeway projects and estimate costs. It identifies wayfinding signage as an important component of bikeway design and encouragement, but does not identify strategies for the location and design of wayfinding signage.

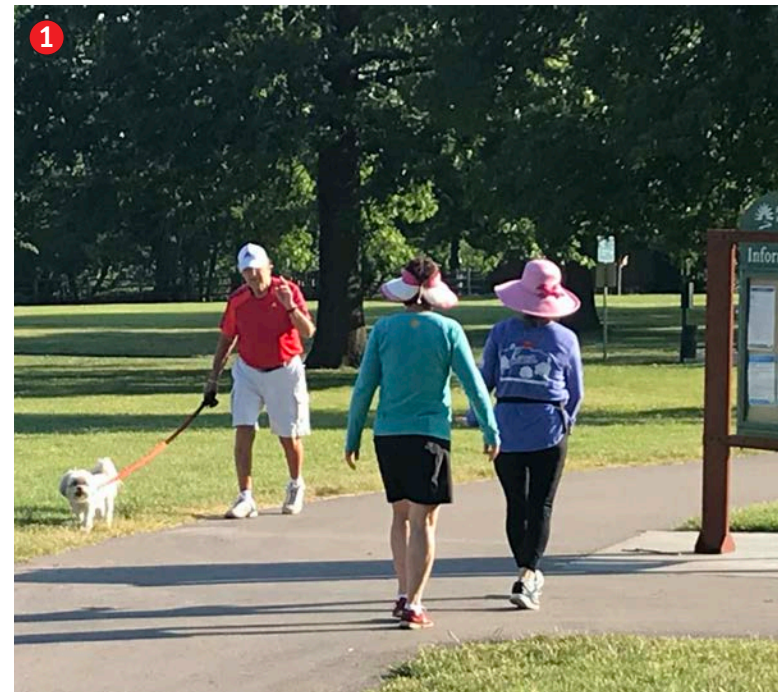


2.3 - Best Practices Review

To lay a strong foundation for the development of the Kansas City Regional Wayfinding System, national and international wayfinding systems aimed at increasing walking, bicycling and transit use were reviewed. This section of the report summarizes the key findings and best practices from this review and includes an overview of:

- the psychology of wayfinding design,
- the application and structure of wayfinding systems, and
- examples of successful wayfinding programs.

The design of the Kansas City Regional Wayfinding System draws from these best practices to meet the needs of pedestrians, bicyclists, and transit users across the region.



- 1 - Meadowbrook Park, Prairie Village, Kansas
- 2 - Kansas City, Missouri
- 3 - Kansas City, Missouri



The Psychology of Design

Responding to diverse users' needs

A strong wayfinding system must provide users with the ability to determine their route, learn it, and retrace or reverse it. Finding one's way in urban environments is essential for daily travel and requires a wide range of cognitive abilities. Predominant among these is the ability to make use of spatial cues to navigate one's surroundings. The better we understand how our audience perceives and interprets information about the city and region surrounding them, the more success we will have in designing a system that connects modes, provides legibility, and provides users with the confidence needed to explore the environment by various travel modes. With this in mind, it is useful to consider the following guiding principles of design psychology. These principles are illustrated by examples from the U.S. and abroad.

Psychology of Design Principles

1. Don't make me think
2. Make it frictionless
3. Strike a balance of information
4. Progressively disclose information
5. Make information predictable
6. Create a rhythm
7. Convey the right information at the right time
8. Design for mindsets
9. Create a mental map
10. Landmark-based navigation



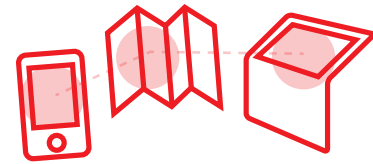
1. Don't make me think

The simpler the information is, the easier it will be to understand.

Designing for a diverse audience requires an understanding of the audience's information needs. Using icons, symbols, and typefaces that are legible at various traveling speeds and organizing information clearly are all part of the toolkit necessary to create a simple design that speaks to the diverse needs of the Kansas City Region's pedestrians, bicyclists, and transit users. Whether the users are non-English speaking or have physical, visual or mental disabilities, we must design with empathy and inclusion in mind in order to provide clear and legible communication for all users' ease of access and navigation. The examples here provide simple, basic information to a broad audience in different ways. They avoid graphic overload for users and maintain a system that is easily approachable and digestible.



1 - Barcelona, Spain
2 - Buenos Aires, Argentina
3 - New York City, NY
4 - Seattle, WA



2. Make it frictionless

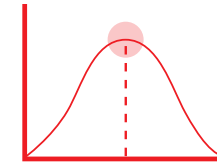
Integrate information across modes and media to reflect the real journeys people make.

Users must have easy access to the right information as they plan their trip and throughout their journey. Whether the information is on a computer or mobile device, or in the built environment, access to accurate, easy to locate information is paramount to creating a comfortable journey.

When information is integrated seamlessly across multiple modes, it facilitates travel for users who are unfamiliar with the environment and helps ensure they will return and share their positive experiences with others. These examples from the United Kingdom show several different ways to achieve such seamlessness.



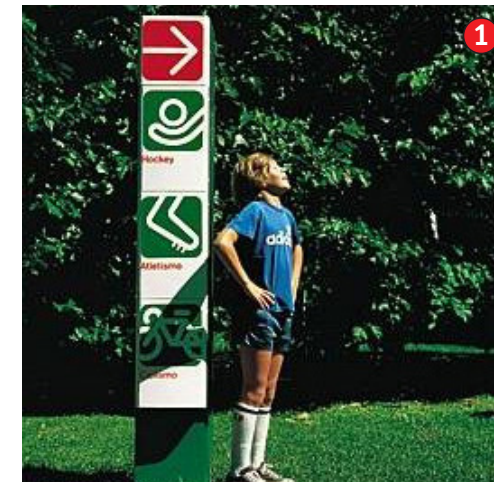
- 1 - West End - Westminster - London, UK
- 2 - Shepherds Bush - London, UK
- 3 - Parliament - Westminster - London, UK
- 4 - Clerkenwell - London, UK



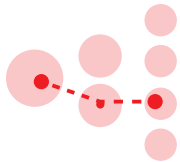
3. Strike a balance of information

Display the right amount of information at all stages of a journey.

Communication to bicyclists and pedestrians in the built environment requires providing the right amount of information at just the right time. Displaying too much information will cause the audience to ignore it; on the other hand, too little information will frustrate the audience. Careful study of locations, destinations, amenities, and user types in the greater Kansas City Region allows the development of a wayfinding system that meets the needs of the users without over-signing or placing information where it may not be effective.



- 1 - Buenos Aires, Argentina
- 2 - Springvale, Australia
- 3 - Indianapolis, IN
- 4 - New York City, NY



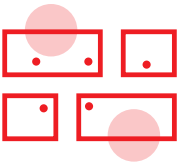
4. Progressively disclose information

Effective wayfinding systems offer different levels of information in successive stages.

In order to reduce sign clutter and support users ability to maintain motion as much as possible, effective wayfinding systems disclose the most relevant information progressively. For example, a local destination such as a library or school only appears on signs close to the destination, not miles away. Progressive disclosure of information reduces clutter, confusion, and cognitive workload by presenting the minimum information needed for the task at hand. In wayfinding systems, this often means dividing up large numbers of potential destinations into distinct zones by region, district, or neighborhood. When users arrive in a particular “zone,” they are introduced to the destinations within that zone. The images shown here demonstrate wayfinding signs that give information limited to the most immediate local zone. Local maps may be used together with directional content to inform users of local details.



1 - Bath, UK
2 - San Antonio Riverwalk, TX
3 - Bristol, UK



5. Make information predictable

Information consistency, integrity, and availability are crucial to achieving predictability.

People navigating an unfamiliar environment require a “bread-crum” trail to easily find their way. It’s important to provide information that is accurate, predictable, and consistent to establish trust with the users of the Kansas City Region’s pedestrian, bicycle, and transit networks. The use of modular sign systems, like those shown below, allows for updates to be easily made to accommodate changes and maintain accuracy of information. The signs shown here are all modular with removable panels to facilitate updating.



1 - Seattle, WA
2 - Washington D.C.
3 - Kuala Lumpur, Malaysia
4 - Chicago, IL