In October 2010, a consortium of more than 60 regional partners, led by the Mid-America Regional Council, received a $4.25 million planning grant from the U.S. Department of Housing and Urban Development to advance the implementation of the Regional Plan for Sustainable Development.

Creating Sustainable Places is not only a regional vision and plan to guide how we grow and develop, but a strategy for moving our communities from planning to action. This strategy includes the following steps:

**Organizing for Success** — Building on the region’s strong track record of collaboration to provide leadership, coordinate outreach and education activities, broaden public understanding of and involvement in sustainability issues, and strengthen stakeholder capacity to address them.

**Enhancing Decision Making** — Developing new tools, policies and practices necessary to make sound investments and accelerate sustainable development.

**Demonstrating New Models** — Applying these new tools to key corridors and activity centers through demonstration projects that can help transform the ways neighborhoods and communities grow and develop.
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Executive Summary

The Rock Island Corridor was one of six key transportation corridors selected as part of MARC’s Creating Sustainable Places (CSP) Initiative. In 2010, MARC received a grant from the U.S. Department of Housing and Urban Development (HUD) to implement the region’s plan for sustainable development. The six transportation corridors were identified in the region’s Long-Range Transportation Plan, Transportation Outlook 2040. The grant includes a number of components designed to support local governments’ efforts toward sustainable development, including:

- Technical tools and resources to support actions by local governments to achieve sustainable development,
- Preparation of corridor plans for six priority transportation corridors and
- Support of implementation plans and strategies in corridors and activity centers around the metro area.

The six selected corridors provide the framework for a system of vibrant, green places connected by multi-modal transportation corridors. Five of the corridors are part of the region’s TIGER 1 grant and are receiving considerable local and federal investment for bus and bus rapid transit (BRT). The sixth corridor, Rock Island, is a key trail and transit corridor along the unused Rock Island right-of-way, and is currently undergoing study for commuter service. The Rock Island Railroad right-of-way presents an exciting opportunity for the adjacent communities and larger region to acquire and develop a southeast connecting corridor that will provide commuter rail service, trail connections and development opportunities. To plan for this new investment, MARC initiated a study in partnership with the five jurisdictions along the corridor (Kansas City, Raytown, Lee’s Summit, Greenwood and Pleasant Hill). This report is intended to provide a roadmap for community decision-making concerning land use, transportation and trail connectivity along the corridor in the future.

The Jackson County Commuter Corridors Alternatives Analysis (JCCCAA) is evaluating enhanced commuter based transit options along the Rock Island corridor. The preferred transit mode is commuter rail extending to a terminus at I-470/View High Drive. In the long term (20 years+), rail could extend through Greenwood and Pleasant Hill; however the priority for
the unused rail alignment will be conversion to trail. Numerous transit station locations are being evaluated along the Rock Island route; however as part of this process each community selected one specific focus area. These station areas, referred to as activity centers in this plan, include:

- Highway 350/Noland Road (Kansas City)
- Downtown Raytown
- I-470/View High Drive (Lee’s Summit)
- Greenwood
- Pleasant Hill

Jackson County is in negotiations with the current owner of the Rock Island corridor, Union Pacific Railroad, on the acquisition of a 17-mile segment from the Truman Sports Complex to southern Lee’s Summit at Hamblen Road.

The purpose of this plan was to develop a corridorwide trail strategy along with conceptual land use and transportation plans for each activity center. The goal was to evaluate the individual strengths and needs for each activity center and their context within the larger corridor and region. The planning process considered the following transit-oriented development (TOD) principles for the activity centers:

- Defined center.
- Active, 18-hour place.
- Mix of uses, horizontally or vertically.
- Compact pedestrian-oriented design.
- Moderate to higher density development, especially near transit.
- Limited, managed parking.
- Sustained public leadership.

The principles were applied to the activity centers during a process that included an assessment of the existing conditions, creation of plan alternatives, a market assessment and selection of a preferred land use plan for each activity center. The process involved a wide range of public input, including a Steering Committee, stakeholder interviews, two sets of design charrettes, and use of MindMixer, a web-based engagement tool, to help identify the community needs and desires for the future. The community outreach process is described further in Section 2 of this report.
Activity Center Summaries:
This project considered the opportunities at each activity center, listened to public opinion about desires and needs for the community, and developed land use, transportation and trail concepts to reflect this input. The activity centers vary in land use and character, and their vision for the future varies accordingly:

- **Raytown:** A new transit station at 63rd and Raytown Trafficway would bolster economic development efforts in the heart of downtown and help create a destination for residents and visitors.

- **Highway 350/Noland Road:** A priority for the City of Kansas City, this area is defined by its rolling topography, plentiful parks and natural resources. The vision is to improve the image of the area through a revitalized commercial node at 350/Noland Road while transitioning undeveloped parcels into new residential neighborhoods.

- **View High:** The vision for a recreational multi-sports complex with supporting mixed-use will create a regional destination at this presently undeveloped site. This plan furthers that vision by identifying strategies to link future transit and trails to future development while embracing the Little Blue River as an asset.

- **Greenwood:** This small, primarily residential community along Main Street (M-150) will benefit from the Rock Island connection to the Katy Trail. A preferred alignment, location of trailheads, and off-street and on-street trail connections were the focus of this plan.

- **Pleasant Hill:** The City is moving forward with plans to construct a trail from downtown to the City Lake. The vision is to integrate this trail with the future extension of the Katy Trail and transit along the Rock Island corridor.

Parking Strategy
One example of an implementation strategy is parking, particularly in downtown environments such as Raytown.
Implementation Strategy

Market timing and phasing will be an important consideration since transit along the Rock Island Corridor may not be in operation for many years. Six strategies are recommended to move the activity center plans to the next phase of implementation:

- Support Jackson County’s efforts to purchase and rail bank the Rock Island Corridor,
- Develop detailed plans for an alternative trail alignment from Hamblen Road to the Pleasant Hill trail system,
- Develop a corridor strategy to identify linkages between the activity centers,
- Initiate more detailed plans for each activity center,
- Develop and adopt supportive zoning for mixed use and transit-oriented development,
- Explore available public financing mechanisms to support reinvestment and new development,
- Initiate infrastructure improvements to plan for the coming of both transit and the trail, and
- Forge public-private partnerships.

Specific implementation recommendations are included in Section 6 of this report.
Section 1

Rock Island Corridor Overview

The Rock Island corridor is being evaluated in coordination with the Jackson County Commuter Corridor Alternatives Analysis (JCCCAA). The JCCCAA is evaluating enhanced commuter-based transit service options in Jackson County, Missouri, that will integrate with a downtown streetcar in Kansas City, Missouri, providing essential transportation services while fostering opportunities for transit-related economic development near major activity centers and town centers. The two corridors under evaluation include the I-70 Corridor (running east of Kansas City, Missouri) and the Rock Island Corridor (See Figure 1).

The Rock Island corridor begins in the heart of Kansas City, sharing a common corridor segment with the I-70 corridor approximately to the eastern edge of Kansas City, and then follows the former Rock Island rail corridor through Raytown, Kansas City, Lee’s Summit, and Greenwood in Jackson County and further south to Pleasant Hill in Cass County. The suburban nature of the Rock Island Corridor, and likely direction of growth shown in the Market Assessment forecasts, emphasizes the need to focus growth and development policy on making suburban greenfield development more sustainable. Much of the housing demand in the region has been and is expected to be in suburban areas over the next 20 years. The Rock Island Corridor is located in primarily suburban portions of the region. Bringing more traditional neighborhood design (TND) to the Kansas City region presents an opportunity to diversify the land use pattern, reduce land consumption and vehicle miles travelled, and create communities with a more diverse housing stock and lasting value.

As identified in November 2012, the preferred transit mode for the Rock Island corridor is Diesel Multiple Unit (DMU) from 3rd and Grand (downtown Kansas City) to View High Drive (Lee’s Summit). In the long term, DMU could extend further to Greenwood and Pleasant Hill. Ridership projections do not currently justify extending the alignment to Pleasant Hill. With this understanding, the team focused on a transit and trail strategy from Kansas City to View High and a trail strategy for south Lee’s Summit, Greenwood and Pleasant Hill.
Figure 1: JCCCAA Locally Preferred Alternative

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The creation of preferred concepts for the five Rock Island activity centers was a highly interactive process with citizens playing an integral part of the concept creation. Beginning with project initiation in August 2012, stakeholder involvement was woven throughout the schedule at key points in the decision-making process. The goal of the involvement and engagement approach was to bring the public together in a structured, inclusive and transparent process consistent with the goals, strategies and techniques described in MARC’s Creating Sustainable Places Implementation Guidebook for Sustainable Development (2011).

The public involvement process employed a variety of methods for communicating with stakeholders and was coordinated appropriately with ongoing technical activities. The engagement methods employed included:

- Stakeholder interviews with key landowners and interest groups allowed for discussions of opportunities and constraints for each activity center.
- A Steering Committee composed of MARC, Jackson County and city staff provided guidance throughout the process.
- The public attended design charrettes and rolled up their sleeves to create and refine concept plans for each activity center.
- The broader public was encouraged to participate through MARC’s MindMixer website.

**Partnerships**

**Steering Committee**

A steering committee comprised of corridor representatives from each community, equity partners and other stakeholders guided the plan’s development. The steering committee met three times over the nine month process. The steering committee was responsible for:

- Advice on organizations, individuals, and interests to engage and assistance in contacting them;
- Review of the engagement process;
- Input into the design process as well as all other deliverables.
Equity Partners
The project team worked with local equity partners consisting of a variety of organizations and groups which have been meeting for the past several years. The group ensures that all populations — including people of color, people living in poverty, people with special needs and other often under-represented groups — can realize the benefits from implementation of MARC’s Regional Plan for Sustainable Development and its component plans.

The partners had two active participants on the project Steering Committee, made presentations at the charrettes and distributed meeting announcements and project notices.

Stakeholder Groups
In addition to the steering committee and the equity partners, the project team worked with the local communities to identify stakeholders and stakeholder groups to involve in the study process. A stakeholder email distribution list of nearly 250 was created and maintained. Primary correspondence took place through email and stakeholders were asked to share information and updates with their neighbors. The stakeholder groups included:

- Adjacent property owners
- Advocacy groups
- Chambers of Commerce and Economic Development Agencies
- Elected and appointed officials and local staff
- General public
- Neighborhood groups

Stakeholder Interviews
Stakeholder interviews took place early in the planning process so that issues, needs and opportunities could be identified and so that the consultant team could be better prepared to engage with the general public. The interviews were conducted with eleven groups or individuals that represented each of the five activity center locations. A standard set of questions was developed for the interview process; however the questions were tailored to the audience. The interviews not only were information-gathering opportunities for the consultant team, but also provided an opportunity to educate the stakeholders about the study.

Steering Committee
Steering Committee membership included MARC representatives, Jackson County representatives, staff from each of the five corridor jurisdictions and other agency partners.

- Marlene Nagel, MARC
- John Benson, City of Raytown
- Gerald Williams, City of Kansas City
- Deb Ridgway, City of Kansas City
- Bob McKay, City of Lee’s Summit
- Heping Zhan, City of Lee’s Summit
- Kirt Grahl, City of Greenwood
- Mark Randall, City of Pleasant Hill
- Shelby Teufel, City of Pleasant Hill
- Damon Daniel, CCO (Social Equity Partner)
- Lora McDonald, MORE2 (Social Equity Partner)
- Daniel Moyer, Jackson County
- Robbie Makinen, Jackson County
Public Workshops/Design Charrettes

Two sets of charrettes were held with the public over the course of the project. In October 2012, the first round of charrettes was held to actively share ideas to shape a vision for the future of the five Rock Island Corridor activity centers. The purpose was to gather feedback on the opportunities and constraints of each site and to generate preliminary alternatives for each activity center. A total of 86 people attended the charrettes. Key input heard at this first round of charrettes included:

- Facilitate change without changing the personality of each community,
- Support growth in retail, entertainment, employment and multi-family housing,
- Need trails, access points and bike paths accessible to all ages and abilities, and
- Continue this conversation.

Following the first round of charrettes, the project team developed concept plans for each activity center. These plans were referred to as “crash-test dummies,” meaning that none were designed to survive the next level of analysis, but instead represented a range of possibilities for density and land use at the activity centers. The concepts were reviewed by the steering committee and presented at a second charrette in January 2013.

The second round of charrettes was designed to receive feedback on the draft concept plans that had been developed for the five Rock Island Corridor activity centers. The charrettes provided the participants with an opportunity to discuss the strengths and weaknesses of each of the concepts and gain an understanding of the public’s desires for the future of each activity center. The 73 participants were asked to break into small groups to discuss their preferences for land use and transportation at each activity center.

Based on input from the public, the project team developed a recommended alternative for each activity center. The public had an opportunity to comment on the draft alternatives through MARC’s online engagement site.

Fact Sheets/E-newsletters

Three fact sheets were developed over the course of the study. The first fact sheet was distributed at the stakeholder interviews and at the first design charrette. The second fact sheet was distributed at the second design charrette and via email. The final fact sheet, which outlined the recommended improvements, was distributed via email to the stakeholder distribution list. Each fact sheet was posted on MARC’s Creating Sustainable Places website.
Web Outreach
Information about the Rock Island Corridor Study was posted on MARC’s Creating Sustainable Places website (http://www.marc.org/sustainableplaces/corridor-RockIsland.htm). In addition, a MindMixer website was developed for the Rock Island Corridor and each of the other Creating Sustainable Places corridors (http://www.creatingsustainableplaces.com/). MindMixer is an online interactive forum for outreach which was developed for each of the six corridors under evaluation. The project team worked with MARC to post questions that stimulated discussions about the Rock Island corridor and related topics. The MindMixer website was promoted and advertised at all outreach events and through handouts and materials.
Section 3
Transit-Oriented Development (TOD) Principles

Planning and implementation of a successful TOD involves many small decisions to assure development is consistent with TOD principles. Some of the key principles needed to create a successful TOD are:

- Defined center.
- Active, 18-hour place.
- Mix of uses, horizontally or vertically.
- Compact pedestrian-oriented design.
- Moderate to higher density development, especially near transit.
- Limited, managed parking.
- Sustained public leadership.

Defined Center
The concept of a TOD is more than providing easy access from home and work to transit. Although transit can be an important anchor for a center, the center must create a destination: a sense of place and community. While the character of the center is different at each activity center, they all contain some common, essential elements, including:

- A sense of vitality, with a compact urban form oriented toward walking and a mix of uses.
- A commitment to innovative development, a flexible approach, and the removal of barriers to development.
- Evidence of leadership and community vision.
- Accessibility to transit and major roads.
- Responsiveness to the fundamentals of market supply and demand.
- A mix of land uses (e.g., residential, retail, employment, civic, cultural, and/or recreational) and connections between those uses and the overall center.

Sense of Place
Each activity center can provide a sense of place by creating a unique character and identity that complements surrounding development and other activity centers along the corridor.
Mix of Uses
Creating a mix of land uses provides diversity and variety, helps to define the center, and creates a more active, vibrant place. The diversity in land uses enables people to take care of the majority of their needs within a short walking distance. The mix of uses can be either vertical, in the same building, or horizontal, located next to each other. The key is to locate the various uses close together, make them easily accessible and supportive of each other. At each activity center along Rock Island, the plan defines a mix of uses that matches the character, needs, opportunities, and constraints of the area.

Active, 18-hour Place
A mix of land uses promotes activity around the clock, either within the TOD or easily accessible from the TOD. This in turn promotes the most efficient use of the transit system: travel in both directions, throughout the day. A mix of employment, residential, and recreational uses that provides services during the day, evenings, and weekends expands transit ridership beyond the morning and evening commute to encourage transit use for shopping and entertainment purposes.

Pedestrian-Oriented Design
Within a TOD, non-auto trips increase when a mix of uses is easily accessible and arranged in a way that emphasizes travel on foot rather than car. According to national research, TOD households are twice as likely to not own a car and own roughly half as many cars as comparable households not living in TODs.

Creating a pedestrian environment requires considering the dimensions of the human body and the scale of the spaces that people use. Subtle factors, focused on a pleasant environment for the pedestrian, encourage people to walk. As noted in the Creating Transit Station Communities in the Central Puget Sound Region – A Transit-Oriented Development Workbook, “most people do not feel comfortable walking in a wide-open area with busy traffic passing closely by. Pedestrians are drawn to streets and paths with a feeling of intimacy and enclosure. This feeling can be created by locating buildings close to the sidewalk, by lining the street with trees, and by buffering the sidewalk with planting strips or parked cars. People on foot enjoy small details, such as displays in shop windows, street level lighting and signs, and public art and displays.”
Moderate to Higher Density Development

Residential or employment development near transit stations provides a ready market for transit trips. Consequently, higher densities strengthen the demand for transit. Development should be at higher densities in TODs in relation to the existing surrounding development pattern. Within TODs, densities should be the highest nearest transit. Historically, 6 to 7 dwelling units per acre will support a bus line and 9 to 25 dwelling units per acre will support a rail line. When the density increases to over 50 dwelling units per acre, the number of auto and non-auto trips are equal. The general rule of thumb is that a 10 percent increase in density equates to a five percent increase in transit trips. The densities envisioned at each Rock Island activity center vary according to the existing land use, surrounding context and preferences of the community.

Managed Parking

Managing parking to reflect the impact of transit is one of the most challenging aspects of any TOD. Typical suburban development, with 50 to 75 percent of the site devoted to surface parking, results in land use densities that are too low to support transit service. By creating a more limited parking supply and moving parking from surface parking lots to on-street parking and parking structures, residents, shoppers, and employees are encouraged to use transit to get to the TOD and walk.

We know from research that TODs behave differently from conventional development:

- People living and working in TODs walk more, use transit more and own fewer cars than in the rest of the region.
- At an individual transit station, TOD can increase ridership by 20 to 40 percent and up to five percent overall at the regional level.
- People who live in a TOD are five times more likely to commute by transit than other residents.

While the relationship between parking supply and travel behavior is well understood, there has been a disconnect between research and real world practice. Outside the largest urban markets, developers and financial institutions still tend to prefer conventional parking ratios in TODs despite local policies and codes that provide options for less parking.
Parking in a TOD should consider four fundamental components: size, location, design, and management:

- Parking needs to be sized sufficiently to meet auto needs that cannot be satisfied by transit. Shared parking between uses or a parking management district can reduce the need for parking by 25 percent over conventional ratios depending on the mix of uses. Strategies such as counting on-street parking as part of the requirements can help reduce the dominance of parking as a land use.
- Parking facilities should be located so the buildings, not the parked cars, are the dominant visual feature.
- Parking design should be integrated with the development to relate to the streetscape.
- Once parking has been “right sized” to transit, it needs to be managed.

**Sustained Public Leadership**

Historically, TOD revitalization supports the strategy that the public sector must take the primary leadership role and the initiative before the private sector is willing to commit time and money. In addition, public leadership is needed as a station area is being developed and throughout the life span of the station area. Each city along the corridor must set the stage for change by:

- Assuring that the political will is aligned with the TOD objectives.
- Preparing new and modified policies and code language to achieve the TOD goals, at the local levels.
- Committing necessary staff and capital resources to carry out implementation.
Section 4
Rock Island Extension of the Katy Trail

The Rock Island Corridor provides a unique opportunity to improve the quality of life for area residents and visitors by serving as the Kansas City metropolitan area’s “Gateway to the Katy Trail.” This portion of the study explores opportunities to extend the Katy Trail network along the existing Rock Island Corridor alignment, including conceptual ideas for integrating this new trail connection into the context of the communities it is planned to serve.

The following opportunities were identified and documented to serve as an initial strategy to provide an important connection along the Rock Island Corridor to the Missouri Katy Trail State Park:

- Trail Network Linkage
- Rail and Trail Interface
- Integrated Trail Amenities
- Trail-Oriented Economic Development Opportunities
**Trail Network Linkage**

The proposed joint use of the ~40-mile Rock Island Corridor as a multi-use trail and connection to the Missouri Katy Trail and for future commuter rail transit service represents a significant opportunity to improve connectivity throughout the region it serves.

To illustrate how this new trail corridor could be integrated into the existing community’s respective plans for trail network improvements, local and regional trail planning studies (highlighted in orange on the map below) were reviewed and the proposed Rock Island trail corridor (highlighted in yellow on the map below) was included.

The alignment of the Rock Island trail generally follows the existing rail corridor on the west side of the existing track in the northern portion of this corridor, then crosses to the east side of the track at Greenwood and extends south to Pleasant Hill.

There are two areas along the corridor where an adjacent planned trail extension could potentially be utilized as an optional alignment to following the existing track (shown in yellow dashed lines on the map on pages 18-19). Further analysis and coordination will be needed to better determine the feasibility of both options, which are generally located between the proposed Greenwood and 291 Highway activity centers, and between the proposed View High and 350 Highway/Noland Road Transit Stations.

Jackson County is in negotiations with the current owner of the Rock Island corridor, Union Pacific Railroad, on the acquisition of a 17-mile segment from the Truman Sports Complex to southern Lee’s Summit at Hamblen Road.
Potential Configuration of the Rock Island Trail Alignment
(Confluence)
The existing Rock Island Corridor right-of-way (ROW) south of the proposed 291 Highway station is not of sufficient width to eventually have trail and commuter rail adjacent to each other while sharing the same corridor. For this reason, the recommended strategy anticipates use of the existing ROW in this section initially for trail use – and eventually for use as part of the commuter rail track network. In the meantime, an adjacent parallel alignment along the east side of the tracks (outside the existing ROW) is anticipated to be explored to provide trail connectivity.

A conceptual analysis of the proposed network of local trails and the extension of the Rock Island trail was prepared. The plan incorporates a recommendation for providing an integrated series of trailheads along the corridor. These trailheads should be designed to provide appropriate trail amenities and facilities and are generally placed near major trail intersections and near local community corridors or destinations to provide opportunities for residents and visitors to access the proposed trail network.
Rail and Trail Interface

A majority of the Rock Island Corridor’s ROW north of the proposed 291 Highway station (Lee’s Summit) is proposed to include both the trail extension and commuter rail transit service. The proposed trail extension should be designed to appeal to a broad cross-section of trail users, and should integrate best practices and trail design requirements including, but not limited to:

- Design Criteria and Construction Specifications, American Public Works Association (APWA)
- Guide for the Development of Bicycle Facilities, American Association of State Highway and Transportation Officials (AASHTO)
- Manual on Uniform Traffic Control Devices, Federal Highway Administration (FHWA)

As further outlined in Rails-with-Trails: Lessons Learned by the U.S. Department of Transportation, there are a number of factors that need to be considered carefully when determining an appropriate setback distance between rails and trails that are co-located within the right-of-way and placed in relatively close proximity of one another:

- Type, speed, and frequency of trains,
- Separation technique between rail line and trail,
- Topography,
- Allowing proper sight distance for safe crossings,
- Ensuring ample space for maintenance requirements and restricting trail interaction within this space, and
- Access control.

Spacing between the rail and trail generally needs to be 25 feet or more, but there may be instances where site conditions, topography, or other factors do not allow this much setback distance. In these cases, use of an appropriate separation technique must be applied to ensure proper safety for trail users. Common trail separation techniques can include fencing, vegetation, vertical grade differences, and drainage ditches and/or berms of appropriate width.

If the final trail alignment is anticipated to cross the rail tracks at any point, they should ideally be perpendicular to the railway—but not less than 45 degrees due to many factors including sight distance and safety. Railroad crossings shall also be smooth and even to cyclists as well as slip resistant. The use of active warning devices, such as flashing light signals and swing gates, is also recommended to increase safety at these crossings.

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Integrated Trail Amenities

The provision of amenities along the trail will benefit its users while encouraging frequent visits. The location and development of major station points and trailheads, along with the creation of unified signage, are key components in building a successful trail.

While there are no readily accepted national standards for trailheads and the types of trail amenities that should be provided, the use of a programmed hierarchy of trail amenities and facilities has been utilized on a variety of larger national and regional trail systems.

Three levels of trailheads are recommended for future design consideration as the trail is implemented. Level 1 trailheads are proposed to be located at high traffic areas with proximity and visibility from major roadway corridors. Recommended features include: structure with restroom accommodations; accessible parking; drinking fountains; emergency telephone; seating; lighting; primary trail and information signage; bicycle racks; waste receptacles; landscaping; and shaded and picnic areas.

Level 2 trailheads are proposed to be located at secondary trail connections and intersections with minor roadway proximity and visibility. Recommended features include: permanent or portable restroom accommodations; accessible parking; drinking fountains; emergency telephone; seating; lighting; secondary trail and information signage; bicycle racks; shade; waste receptacles; landscaping; and an informal picnic area.

Level 3 trailheads are proposed to be located every two to three miles along the trail to serve as rest areas. Recommended features vary widely, but may include: permanent or portable restroom accommodations (if practical); accessible parking; drinking fountain; seating; lighting; trail signage or kiosk; waste receptacle; and minimal landscaping.
Trail-Oriented Economic Development Opportunities

Avid trail enthusiasts travel across the globe to experience the Missouri Katy Trail State Park, and as such, these tourists also experience the communities the trail connects. There are unique opportunities to capitalize on this form of eco-tourism while simultaneously strengthening each community’s connection and experience with the trail system.

An excellent guide for promoting this type of tourism is Trail Towns—Capturing Trail Based Tourism by the Allegheny Trail Alliance. This guide stresses the importance of researching and understanding the various types of trail users—from local community members to those traveling to the area specifically looking for a unique experience. Understanding the needs of these users will help in preparing an appropriate strategy to capitalize on the anticipated economic development opportunities.

For instance, daily riders are likely more interested in basic amenities such as food services, bike repair, convenience stores, established trailheads, ATM’s, and drinking water sources. Regional or multi-day trail users can have different needs such as overnight lodging, laundry facilities, medical services, transportation services to nearby towns, and site seeing opportunities. These trail users represent opportunities for local businesses to cater to these needs. The intent is to create a friendly and welcoming environment for those using the trail, such that their needs are met and they are encouraged to experience the community’s unique sense of place while visiting. Additionally, adding equestrian use of the trail allows for opportunities for equine-oriented businesses, such as stables, stores and recreation.

Communities along the trail should research the offering currently available to trail users in other locations and identify opportunities to provide a unique experience—and highlight those things which set this community apart. A customized community strategy should include building partnerships with local businesses and garnering public/private support through educational brochures that explain the benefits of catering to trail users. An integrated marketing and promotional effort should be explored, and may include branding, advertising, and incorporation of community identification signage at nearby trailheads and throughout the local business district. A welcoming atmosphere, proper connectivity, and a well-designed wayfinding system that promotes local businesses and amenities will encourage trail users to come back again and again.
Section 5
Corridor Implementation Strategies

Regional Strategy
Rock Island is one of six key transportation corridors that form the heart of the region’s system of centers and corridors. MARC, in partnership with Jackson County, local jurisdictions and agency partners, seek to enable these multi-modal corridors to serve as a framework for vibrant, green places throughout the region. Coordination among regional and local agencies is needed to ensure that planning continues at the corridor level, that agency and public-private partnerships are solidified, and that a shared vision evolves for the Rock Island connection to the Katy Trail.

Corridor Planning
Activity centers along the Rock Island corridor could compete with each other for a future share of the market. As such, it is important that planning efforts continue at a corridor level so that stations complement, rather than compete with each other. Each activity center will have its own distinct character and personality based on existing land uses, transportation connectivity, natural resources and other assets. These individual characteristics should be embraced at the corridor level to ensure that a diversity of destinations are developed over time. In addition, the pace of change and redevelopment in this corridor will occur over multiple decades. A corridor planning strategy is needed to track long-term corridor investments and provide a forum for shared dialogue amongst corridor jurisdictions.

Agency Partnerships
MARC, Jackson County, the cities and other agency partners all share an interest in transforming the Rock Island Corridor into a vibrant, sustainable multi-modal corridor. This vision will not happen overnight, and needs active participation from each agency. Partnerships in the form of Intergovernmental Agreements (IGAs) or other forms could be executed in an effort to:

- Agree on station, facility design and location. Land use and transportation decisions need to happen in tandem so that stations and trailheads are placed in an optimal location to stimulate new growth and connect to surrounding neighborhoods.
- Ensure that natural resources (parks, floodplains, etc) within each activity center are
protected through coordination with state and local resource agencies and local natural resource protection ordinances.

**Rock Island Extension of the Katy Trail**

Plans are in process for transforming the former Rock Island railbed into a biking/walking trail linking Kansas City, Raytown, Lee’s Summit, Greenwood, and Pleasant Hill—and creating the final link of the Katy Trail-Kansas City connection. The Rock Island Corridor Coalition is a membership organization working through MARC and consisting of local government officials and private sector supporters. As the coalition grows, private sector participants are expected to include chambers of commerce, school districts, bicycle clubs, walking organizations, running clubs, health organizations, transit advocacy groups, environmental organizations, and businesses.

The trail will bring multiple benefits including enhanced transportation, economic return, tourism, recreation, health and environmental preservation. The Rock Island Corridor Coalition will play an important role in ensuring that the extension brings long term benefit to each community.

**Local Government Strategies**

Market timing and phasing will be an important consideration since transportation within the Rock Island corridor will transition over time. Strong partnerships between local jurisdictions will be important in planning for the introduction of new transportation modes over time. The Market Assessment (Appendix B) provides additional guidance on implementation strategies for each site.

**Activity Center Planning**

As trail and transit planning moves forward, local jurisdictions need to further plans for development and redevelopment within these activity centers. These concept plans will allow jurisdictions to work with their communities to develop more detailed plans for land use, transportation, urban design and implementation. The activity center plans should incorporate a detailed market analysis to plan for the phasing of new growth and ensure that the vision is grounded in market reality. It is important to note that a few of the activity centers along the corridor cross multiple jurisdictions. Shared plans for the station area would help facilitate greater collaboration and ownership.
The activity center plans provide the opportunity to plan at a greater level of detail. Since the planning for transit in the AA process is at a preliminary level, questions such as the amount and location of transit parking have not been clearly defined. The plans should provide input into a preferred location for parking and its relationship to surrounding development. For the plans to succeed, they need to have dedicated staff within each City with the time and authority to facilitate implementation. Part of the job will be to work with key property owners to ensure future development aligns with the larger vision for the area.

**Capital Improvements Planning**

Part of the purpose of these planning efforts is to prioritize capital improvements needed to encourage new investment from the public sector. Improvements such as new roadways, roadway connections, trail connections, sidewalks, utilities and other infrastructure investments need to be prioritized and funded by the public sector. Allocating funding to these improvements will send a clear signal to the private sector that the jurisdictions view these activity centers as priority sites.

**Land Use and Zoning Policies**

Each jurisdiction along the corridor needs to evaluate their existing zoning language to ensure consistency with transit-supportive land uses. Recommended language identifying zoning code, design review, and view corridor language to support implementation of the station area plans should be developed. Design guidelines should be developed to ensure that development is sized and scaled appropriate to local context.

**Public-Private Partnerships**

Public-private partnerships will be a key ingredient in the planning for new growth and development in each activity center. The jurisdictions could work together to:

- Enter into cooperative agreements to finance necessary infrastructure to support development in the corridor.
- Streamline development review consistent with the activity center plans and zoning.
- Participate in targeted land assembly.
- Create and distribute activity center marketing materials to showcase development opportunities.
Public Finance Mechanisms

A significant amount of public and private funding will be necessary for the activity center visions to become a reality. Each jurisdiction will possess different finance mechanisms to facilitate investment based on their unique processes. A few of these specific to the state of Missouri could include community improvement districts, local option economic development sales tax, neighborhood improvement districts, property tax abatement, tax increment finance, and transportation development districts. Specific options include:

- Community Improvement Districts: provide funding for certain public improvements or services in the designated benefit area. Funding may be through a special tax on sales, special assessment on certain real property or by fees, rents or charges generated in the district.

- Local Option Economic Development Sales Tax: allow citizens to authorize a supplemental sales tax dedicated exclusively for certain economic development initiatives in their home municipality.

- Neighborhood Improvement Districts: finance certain public facilities, improvements or redevelopment in the designated benefit area. Funding is accomplished by issue of general obligation bonds of the governing municipality.

- Property Tax Abatement: offered to private companies for certain urban redevelopment or industrial development projects by cities or counties.

- Tax Increment Financing: provides local tax financial assistance for the redevelopment of designated economically depressed areas. TIF allows the use of a portion of certain new local tax revenues generated for a limited number of years in the redevelopment area to help pay for the redevelopment.

- Transportation Improvement Districts: created for the purpose of developing, improving, maintaining or operating one or more projects relative to the transportation needs of the benefit area.

Source: www.missouridevelopment.org
Section 6  
Activity Center Summaries

The purpose of this section is to introduce each of the five activity centers Raytown, 350/Noland Road (Kansas City), View High (Lee’s Summit), Greenwood and Pleasant Hill. A summary of the existing land use and context, opportunities and constraints, and preferred concept details are included. The preferred concept discussion includes land use and transportation recommendations, along with natural resource protection (as appropriate). Each activity center discussion also includes a set of recommended implementation strategies unique to the area and the jurisdiction. Corridor-wide implementation strategies are included in Section 6. Appendix A provides an image board of various land use categories.

Rock Island Corridor Typologies

The type and scale of development will vary based on surrounding context and market projections. Typologies are an attempt to recognize the important differences among places and destinations within the corridor and then to identify appropriate characteristics for these places based on the community’s vision. Identification of typologies helps determine whether there are a diversity of land use types planned for the corridor that will complement, rather than compete with each other. If every activity center along the Rock Island corridor was planned for large-scale employment, there would naturally be competition for market share between the centers. Overall, the goal is to strive for a rich mix of housing and employment options that respond to the market over time.

Potential typologies along the corridor are shown in Figure 2. Four categories are shown (Downtown/Main Street, Suburban Center, Trail Focused Development and New Neighborhood Low to Medium Intensity). These typologies represent the existing and future character/focus moving forward and are not intended to represent the full spectrum of land use types.
Rock Island Corridor Typologies

- Downtown / Main Street
- Suburban Center
- Trail Focused Development
- New Neighborhood
- Stations included in transit study but not analyzed in this part of study

Legend

- Rock Island Corridor
- Future Rail Transit
- Rock Island Extension of the Katy Trail

Figure 2: Rock Island Corridor Typologies
Raytown

The Raytown Activity Center is located in the heart of downtown Raytown, Missouri, a community of approximately 30,000 people. Raytown is an inner-ring suburb that benefits from easy access to downtown Kansas City and the larger region. It is one of the few land-locked communities in the metropolitan area and is entirely surrounded by Kansas City, Missouri and Independence, Missouri. The center of downtown Raytown is focused on the area surrounding East 63rd Street, a major east-west corridor. Future transit along the Rock Island corridor would bring a new focal point and economic driver for the larger downtown. Figures 3 and 4 show existing Raytown land use and context.

The Rock Island corridor runs parallel to the Raytown Trafficway, a major north-south arterial through town. Existing land uses in the 1/4 radius of the transit station are primarily commercial. Commercial development is focused along existing streets including 63rd Street, Raytown Trafficway, and Blue Ridge Boulevard. North of East 61st Street along Blue Ridge Boulevard the uses transition to primarily office and residential, as well as Raytown High School. Multi-family residential (apartments) are located north of 63rd Street and Raytown Road and single-family neighborhoods are the predominant land use extending beyond the 1/4 mile boundary. A large undeveloped parcel is located north of 63rd Street between Raytown Road and Blue Ridge Boulevard. The city is in discussions to bring a large-format retailer to this site. City Hall is located north of the 1/2 mile boundary at the intersection of East 59th Street and Raytown Road.

The major corridors that extend through the area include 63rd Street, Blue Ridge Boulevard, Raytown Road and Raytown Trafficway. The City has plans to revitalize and enhance three of those corridors (63rd from the railroad bridge east to Blue Ridge Boulevard, Raytown Road from East 61st Street south to East 64th Street, and Blue Ridge Boulevard from East 63rd Street north to East 59th Street) with improved bicycle and pedestrian accommodation.
Figure 3: Raytown Existing Land Use
Opportunities and Constraints

Downtown Raytown has the potential to capitalize on future transit and trail development due to its unique historic downtown character, central location in the region, and base of local retail establishments on 63rd Street, Raytown Trafficway and Blue Ridge Boulevard. Specific opportunities include:

- Historic downtown building stock
- Station could be a gateway to downtown & organizing element
- Available land for redevelopment/infill
- City reinvestment to transform major streets including 63rd Street, Raytown Road and Blue Ridge Boulevard

The coming of transit and trail has the potential to enhance the attractiveness of the retail within downtown. Further, the infusion of new mixed-use residential product into Raytown could help solidify the viability of retail shops past the service-retail work-day period and into mornings, evenings, and weekends.

Constraints primarily pertain to local market conditions as well as the design and development pattern of downtown:

- Struggling retail market
- Downtown lacks civic space and open space
- Grade change of proposed station
- Lack of multi-modal accessibility, made difficult by high volume and high speed streets
- Excess surface parking (particularly off-street)

The vision for the Raytown activity center is to revitalize downtown through the coming of transit and new trailheads along the Rock Island extension of the Katy Trail. The transit station would serve as a new destination within downtown which would connect mixed-use destinations within 1/4 mile radius.

PREFERRED CONCEPT

Land Use Concept

Figure 5 shows the proposed Raytown land use concept. Specific strategies include:

- Focus the commercial core along 63rd Street. A key focal point north of 63rd will be the site at the northwest corner of 63rd and Blue Ridge Boulevard which is presently undeveloped but planned for a large-format retailer. This plan recommends that the contiguous row of buildings oriented to 63rd Street
Figure 4: Raytown Existing Context
remain in place and that the large format retailer is situated behind this row of buildings. The frontage of these buildings on 63rd Street provides a sense of enclosure, facilitates pedestrian walkability/street activity and contributes to a “main street” feel.

- Redevelop south side of 63rd into a mixed-use area with higher density housing surrounding it
- In the long term, this plan shows a relocation of City Hall to downtown near the library (see Figure 5 for a potential relocation site). This move would help create a cohesive civic space and anchor of activity near the station and trail.
- Create plaza space/central gathering area near the station.
- Consolidate off-street parking areas to help achieve the highest and best use for new development and minimize the amount of new parking in the future (see Implementation section)

**Transportation**

The preferred concept recommends a transit station extending under 63rd Street to provide transit and pedestrian access both north and south of the street. A challenge is to ensure that the station is visible as it will be below-grade. Gateway and signage features are recommended along 63rd Street to maximize visibility to the station. The Rock Island extension of the Katy Trail would run north-south parallel to the rail corridor with trailheads along the alignment to access various parts of downtown and the station. 63rd Street would be maintained as the primary east-west spine through downtown. The City has plans to reconstruct a portion of 63rd into a multi-modal street with on-street parking, a bicycle lane and wider sidewalks.

Traffic studies show that Blue Ridge Boulevard and Raytown Trafficway carry the largest average daily traffic (ADT) volume among the north-south streets in the City. Similarly, 63rd Street carries the highest amount of east-west traffic among arterials in Raytown. Heavy volumes benefit downtown businesses. However, high volume/speed streets limit pedestrian and bicycle mobility along and across downtown streets. A system and on and off-street paths are needed to enhance overall mobility. This system would include bicycle paths and sidewalks.
Figure 5: Raytown Proposed Concept
**Natural Resource Protection**
The Raytown activity center is located in an established downtown area. There are no waterways in the study area; thus floodplains are not a concern. The steep topography and need to preserve vegetation (mature trees) along the Rock Island corridor will be important considerations in the placement of the station as well as access points leading to the station. As redevelopment occurs, there will be a need to ensure stormwater management so as not to negatively affect the corridor.

**Implementation Strategies**
The following are a set of implementation strategies specific to the Raytown activity center. These strategies are recommended in addition to the corridor-wide strategies identified in Section 7. These strategies evolved from the process of developing the preferred concept. The entities responsible vary by strategy and may include MARC, Raytown, Jackson County, or a combination of these entities.

- **Parking Strategy:** An overabundance of surface parking in downtown Raytown has been expressed as a concern. Excessive parking limits the vitality of a downtown, deters walkability and increases impervious surface area. The amount of transit and trail parking that may be required in the future is currently unknown. However, a parking strategy could be developed in the short term to help plan for future growth, redevelopment, transit and trails. Parking should be evaluated and managed on a district basis rather than building by building. This approach encourages flexibility in meeting requirements by allowing for shared parking, on-street parking, parking maximums, paid parking and other tools to help reduce the amount of surface parking.
  - Entity responsible: Raytown
  - Timeframe: Short-Mid Term

- **Streets and Sidewalks:** Building off of the streetscaping investments along 63rd, Raytown Road and Blue Ridge Boulevard, the city should work toward an interconnected set of sidewalks and bike lanes that extend through downtown, particularly on streets that link to the future transit station and trailheads. In addition, the City should consider the addition of streetlights, landscaping, signage and street furniture (benches, bollards, etc) to add to the aesthetics and overall visual interest of downtown.
  - Entity responsible: Raytown
  - Timeframe: Mid-Long Term

**Market Assessment**
Downtown business conditions have been affected by the proliferation of highway-oriented retail on the Highway 350 corridor. However, a national retailer is planning to locate in downtown which will draw new shoppers to the area, and create greater interest in commercial property re-investment.

Young families are moving to Raytown for the Raytown School District. Many may be first time buyers or renters. Small single family homes and townhomes are appealing to this segment of the market. Higher quality apartments with a mix of two and three bedroom units will meet the needs of those who are not ready to buy.

Low real estate values are a constraint to redevelopment. The City and private sector partners can address this barrier over time by focusing on strategic placemaking investments to improve the quality of life and visitor in Downtown. As Downtown becomes more desirable, property values will rise, narrowing the feasibility gap. Targeted use of incentives and public financing tools should be considered.
• Market Incentives: The companion Market Assessment Report to this project (Appendix B) indicates that Raytown is somewhat underserved by retail. Some businesses are both stable and successful while others are owned by a population at retirement age who could sell. This situation, coupled with the new national retailer planned in the heart of downtown, provides the city with leverage to bring in high quality development long-term. Example development incentives include business improvement districts, city-led entitlement processes, empowerment zones, permit fee waiving, and facade programs (i.e. loans to businesses for improvements).
  • Entity responsible: Raytown and property owners
  • Timeframe: Mid-Long Term

• Brownfield Funds: Blue Ridge Boulevard is a major spine through Raytown and is envisioned for reinvestment, including a large-format retailer near the intersection of Blue Ridge Boulevard and 63rd Street. A few of the properties along Blue Ridge may have contamination on-site and may be categorized as brownfields. As part of future reinvestment/redevelopment efforts, the city could work with the property owner to seek federal or state brownfield funding.
  • Entity responsible: Raytown
  • Timeframe: Mid-Long Term
350 Highway/Noland Road

350 Highway/Noland Road is located within the Little Blue Valley in southeast Kansas City. The study area was included in the City’s recent *Little Blue Valley Area Plan (LBVP)*, which identified a vision for new growth in a 19.4 square mile area. The station area is largely undeveloped and is viewed by the City as one of their priorities for new growth. Lee’s Summit surrounds the north, east and south edges of the area, and Raytown is located to the west. See Figures 6 and 7 for existing land use and context. The area is primarily rural in character with a golf course, park/open space land, and the Little Blue River. Rural residential and some commercial at the interchange are the current development in the area.

The area surrounding the 350 Highway/Noland Road intersection is identified as a development priority zone and major activity node within the *Little Blue Valley Area Plan*. This area has traditionally been referred to as “Knobtown” and has struggled in reputation due to marginal land uses such as liquor stores and adult businesses. Existing land uses within 1/4 mile radius of the 350 Highway/Noland Road intersection are primarily commercial. The northeast corner of the intersection has an auto repair facility; further north along Noland Road are dilapidated buildings and a former motel. The southeast corner of the intersection has an 8,000 square foot retail strip center with a liquor store and other small retail stores.

An approximately 80-acre active gravel quarry is located northwest of the intersection (west of the Rock Island railroad tracks). The Rock Island tracks are elevated through this area and cross over 350 Highway approximately 250 feet west of Noland Road. Future redevelopment of this quarry may be a long-term possibility but is dependent on the length of gravel mining operations. The former Kansas City Speedway is located one half mile to the north, and was purchased by the City of Kansas City to be converted into a large regional park. The Raytown Soccer Complex (outdoor fields and park facilities) is located one third of a mile to the east.

350 Highway is a four lane expressway that extends east/west through the project area and links to both I-435 and I-470. Noland Road is a north/south two lane roadway extending from Little Blue Road to Bannister Road. The City is currently evaluating options to potentially upgrade the Rock Island Railroad bridge and relocate Noland Road to the east. This study assumes the current roadway configuration as these decisions have not yet been made.

The Jackson County Commuter Corridors AA has not defined an exact location for the Rock Island Corridor.
Island transit station; the station could be located either north or south of 350 Highway. The preferred concept recommends a station north of 350 Highway. Similarly, the Rock Island extension of the Katy Trail could either be located parallel to the rail corridor or parallel to the Little Blue River. The City and Jackson County have plans to construct a regional trail parallel to the Little Blue River connecting into the future park planned on the former Kansas City Speedway.

**Opportunities and Constraints**

Land use and transportation opportunities associated with the coming of transit and regional trail connectivity include:

- Redevelopment priority area for the City
- City commitment to invest in new parks and trails
- Plentiful natural amenities with the Little Blue River and associated open space
- Regional access from surrounding communities; viewed as a southeast gateway into Kansas City
- High quality schools, low crime and affordable housing stock

Constraints pertain to the existing land uses, topography and overall market potential:

- Lack of a cohesive identity and sense of place; historic reputation as “Knobtown”
- Elevated Rock Island alignment and overpass at 350 Highway
- Steep grades (particularly west of the tracks) limit developable land area
- Lack of sidewalks and bike lanes along existing streets such as Noland Road and 350 Highway
- Lack of infrastructure (water and sewer) on undeveloped sites
- 100-year floodplain and City stream setback ordinance limit redevelopment potential
- Timing of gravel quarry operations are unknown

**Preferred Concept**

The 350 Highway/Noland Road Activity Center will offer a mix of residential choices to residents and easy access to important natural amenities, including the Little Blue Trace Trail, city and county parks and recreational areas. Commercial reinvestment would be focused at 350 Highway and Noland Road to create a new gateway and identity for this area. Important transportation investments will create a multi-modal network for this activity center with a new system of local streets and trails and reuse of the Rock Island corridor for commuter rail. The vision plan is consistent with the principles identified in the Little Blue Valley Area Plan.
Figure 7: 350/Noland Road Existing Context
Land Use
Three subareas of development are envisioned in the activity center area. The first, and highest priority for development, is at the intersection of 350 Highway/Noland Road and surrounding the proposed transit station (north of 350). Figure 8 shows new neighborhood serving commercial envisioned near the Noland Road/350 intersection. The plan assumes redevelopment of the existing gravel quarry west of the railroad tracks into a new residential neighborhood with pocket parks. A development plan was proposed for the quarry site in 2007/2008; this plan was incorporated into the preferred concept.

A second area is west of the Rock Island corridor (south of 350) on an undeveloped parcel (currently utilized as a shooting range). Long term, this area could be developed into a mix of multi-family and single-family residential accessed from the south via Brickyard Road. A third development area is in the triangular parcel bounded by East 87th Street to the north and 350 Highway to the west. This area is currently a mix of light industrial and commercial (mini storage) uses. The public expressed a preference for transitioning to neighborhood serving retail and restaurant uses long term.

Transportation
This plan recommends a set of mobility improvements which would better integrate land use and transportation while maintaining the existing overall network (both within and outside of the study area). The station is proposed immediately north of 350. Further analysis would need to be done on a northern station to identify strategies for topography mitigation, circulation and access. However, an alternate location as shown in Figure 8 is possible farther north across from the City’s proposed park. Transit operations have not been evaluated in detail as part of the AA and thus both options need to be evaluated further in future studies.

The existing network of arterial, local and collector streets would remain in the proposed plan. A number of these streets are not pedestrian and bicycle friendly; particularly 350 Highway and Noland Road. New sidewalks and bike routes should extend through the area as shown in Figure 8, particularly where they could help link land uses, trails, and transportation facilities together. A network of local streets is proposed within the gravel quarry redevelopment and in the area west of the tracks (south of 350).

Kansas City has preliminary plans to construct an extension of the Little Blue Trace Trail along the Little Blue River to connect with the existing 15-mile trail farther north. The Little Blue Trace
Figure 8: 350/Noland Road Proposed Concept
Trail may be the preferable alignment for the Rock Island extension of the Katy Trail due to limitations at the Bannister Road Tunnel and existing grades along the tracks.

This alignment would connect through the proposed park on the former speedway property and provide the opportunity for a trailhead within the park. Proposed trail extensions and trailheads could connect directly to future development nodes near the station and south of 350. Trail extensions from the main trail would allow for direct connections to future residential as well as commercial at 350/Noland Road.

**Natural Resource Protection**

The 100 year floodplain follows the Little Blue River through the study area. The 500 year floodplain approximately parallels the 100 year floodplain boundary. The proposed concept avoids the 100 year floodplain entirely, and minimizes any encroachment into the 500 year floodplain.

In addition, the city of Kansas City has a stream setback ordinance to create a variable width buffer between development and sensitive water resources. According to the City’s stream setback ordinance fact sheet, the intent of limiting development near stream banks is to improve the City’s water quality, reduce erosion, and sedimentation, prevent infrastructure damage and protect riparian corridor habitat and greenways. Within the study area the stream setback ordinance extends at minimum 25-feet as a “no-build” riparian buffer zone around the Little Blue River. Riparian buffer zones also provide many other benefits to the urban landscape such as; trapping sediment, nutrients, and pollutants, improving habitat for wildlife, recharging groundwater, recreational opportunities and even increased property values.

Development on steep slopes presents a number of challenges. For one, additional expenses may be required to extend and maintain infrastructure (roads, sewer, water and power) through these areas. In addition, development on steep slopes can lead to increased erosion and sedimentation and can impact the natural scenic beauty of an area. Additional costs may be required for retaining walls, seedings and plantings of vegetation and other erosion control measures. Currently grasses, hardwood, and cedar trees are providing what appears to be excellent erosion control. Recognizing these concerns, an analysis of existing topography was conducted to ensure that development on steep slopes is avoided or minimized. This is of particular concern west of the Rock Island rail tracks where the quarry will be transitioned to residential development.

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**Pedestrian Priority Street**

*Streets that slow vehicles to allow for safer and more comfortable pedestrian crossings provide a more walkable and inviting pedestrian experience. The design elements of pedestrian priority streets are:*

- Improved crossings
- Alternative paving materials including permeable unit pavers
- Striping
- Signage
- Wide sidewalks
- Landscaping
- Barriers removed
- Tree grates/fences/boxes – replaced or repaired
- Street furniture including benches, trash receptacles, etc.
- Good maintenance

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**Rock Island Corridor**

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Implementation Strategies
The following are a set of implementation strategies specific to the 350/Noland Road activity center.

- **Land Use:** Ensure that plans for future land use are consistent with and build upon the recommendations of the Little Blue Valley Area Plan. Focus on opportunities to combine rural character with higher density/focused development. Plan for restoration and reuse of the quarry site into future residential and commercial development.
  - Entity responsible: Kansas City
  - Timeframe: Short-Mid Term
- **Capital Improvements:** Enhance mobility through the area through multi-modal facilities along existing and proposed streets and construction of the Little Blue Trace Trail. Continue detailed plans for improvements to Noland Road. Consider a context sensitive design solution to maintain sensitivity to the surrounding natural environment. Sewer structure will be important.
  - Entity responsible: Kansas City in coordination with Jackson County
- **Market the Site:** Three subareas have been identified as priority for new development; Kansas City needs to develop a marketing and branding effort and identify appropriate incentives for attracting high quality development to help attract new developer interest to this area.
  - Entity responsible: Kansas City
  - Timeframe: Mid-Long Term

Noland Road and Highway 350 Visualization
A simulation of potential development that follows the strategies identified in this plan is shown on the following pages.
Noland Road and Highway 350 Visualization

Original image

Initial public improvements: sidewalks & street trees

Corresponding private investment

Corresponding private investment
Corresponding private investment
View High

View High refers to the interchange at View High Drive and I-470 in west Lee’s Summit, Missouri. The Rock Island corridor runs north/south approximately 1/2 mile east of the View High interchange. The area is primarily undeveloped and lacks a street network; major east-west streets include Bannister Road (1 mile north of and parallel to 470) and Chipman Road (1/2 mile south of and parallel to 470). See Figures 9 and 10 for existing land use and context.

View High/I-470 is identified as a top priority by Lee’s Summit City Council and the Lee’s Summit 360°: Charting Tomorrow Strategic Plan. City leadership has expressed a vision for mixed-use residential, retail and commercial development; job creation and potential recreational amenities for the area. In 2010, Lee’s Summit voters approved a No-Tax Increase Bond Issue for $1 million in traffic intersection enhancements to spur development in the area. In Spring 2012, the City issued an RFQ to select a developer for the site.

The selected private developer from the RFQ process owns land in the area (approximately 15 acres north of 470 and 40 acres south of 470). The remaining lands are owned by Kansas City, Lee’s Summit and Jackson County. Lee’s Summit owns approximately 70 acres north of 470; however much of this area is within the floodplain of the Little Blue River and development potential is limited. Consistent with the city’s vision, the private developer has plans to transform the area into a regional sports recreational facility while creating a mixed-use area with residential, restaurants and Class A office space.

The Rock Island rail station would be located north of 470; however the exact location has not been defined. A range of options extending from 470 north toward Bannister Road were evaluated in this study.
Figure 9: View High Existing Land Use
Opportunities and Constraints
Visibility and access from I-470 are one of View High’s most notable assets. Other opportunities include:

- Large developable land areas
- Strong demographics
- Market for corporate office, hotels, entertainment, residential
- Gateway to Lee’s Summit and Kansas City
- Regional access and visibility; MoDOT records indicate 74,900 average daily traffic counts along I-470
- Little Blue River winds through the site

Constraints refer to the overall market, challenging topography and fragmented land ownership:

- Proximity to Pryor Road limits the market for new large-scale commercial development
- Little Blue River floodplain extends through the site
- Difficult terrain for station location
- Lack of existing street network and access to potential station location
- Undermined area east of the tracks and north of I-470

Preferred Concept
The vision for View High Drive/I-470 is to create a new mixed-use, recreation focused destination station on the lands between View High Drive and the Rock Island corridor. This vision is consistent with the City’s vision for future land use as well as the large landowner/developer. Since the land use concept for this area is not yet finalized, the project team focused on a transportation concept to reflect a potential rail station location as well as streets and trails.

Land Use
Figure 11 shows the area that would be developed into a mixed-use development assuming a regional sports complex, entertainment (restaurant emphasis), hotels, office development and residential. Characteristics of the proposed land uses:

Commercial: The two regional retail destinations at Pryor Road (one interchange to the east) including Summit Fair and Summit Woods Crossing limit the market for large-scale retail development in this area. Thus, the commercial development focus would be on destination-oriented restaurants and entertainment to serve visitors to the sports complex.
Figure 10: View High Existing Context
Office: The market study confirmed that the site’s regional access and attractive natural amenities make it a strong candidate for corporate office development. A large site southeast of the View High/I-470 interchange is ideal for office development. This site does not depend on the coming of transit but rather on the proximity to the larger region via I-470. The market report states that transit service to downtown may not be a major driver for employment at this site since a majority of the work force lives in the southeast and southwest suburbs.

Residential: This site benefits from strong access to the south metro area’s employment centers and is a desirable location within the Lee’s Summit School District. With the unique branding of an entertainment destination, plentiful natural amenities and proximity to a rail station, the area could become a natural draw for a wide range of for sale and for rent residential development.

Transportation
View High Drive currently extends north-south through the site. Additional east-west connections are recommended to enhance access to the future transit station. The Little Blue Trace Trail would reconnect with the Rock Island corridor north of Bannister Road to become the Rock Island extension of the Katy Trail. This extension would continue south and extend under I-470 to Chipman Road. A large section of floodplain along Cedar Creek extends west of the railroad tracks (south of 470). The public discussed opportunities for a trail network and possible mountain bike park in this area.

Natural Resource Protection
The Little Blue River flows through the study area beginning in the northeast quadrant (east of the Rock Island tracks). The 100 year floodplain surrounds the Little Blue River and ranges in width from 100 to 300 feet. A large section of the 500 year floodplain covers the undeveloped parcels west of the tracks and north of 470.

Protection of the riparian buffer zone is important to maintain water quality, reduce erosion, and sedimentation, prevent infrastructure damage and protect riparian corridor habitat and greenways. Riparian buffer zones also provide many other benefits to the urban landscape such as trapping sediment, nutrients, and pollutants; improving habitat for wildlife; recharging groundwater; offering recreational opportunities, all resulting in increased property values.
Figure 11: View High Proposed Concept
Implementation Strategies
The following are a set of implementation strategies for the View High Drive/I-470 area:

• Finalize the land use plan and associated studies: The City of Lee’s Summit is working with the site developer to develop a detailed land use plan and market analysis. These plans should be integrated with future trails and the transit station along the Rock Island Corridor.
  • Entity responsible: Site developer and City of Lee’s Summit
  • Timeframe: Short-Mid Term

• Cross-jurisdictional working group: As this site crosses multiple jurisdictions, a cross-jurisdictional working group composed of Lee’s Summit, Jackson County, Kansas City and private developers/landowners would provide a forum for long term coordination. Topics for discussion include the future alignment of View High Drive from I-470 to Bannister Road, land assemblage, development incentives, shared infrastructure, natural resource protection, and market phasing.
  • Entity responsible: All
  • Timeframe: Short-Mid Term

• Market Phasing: The investment in rail transit is anticipated to be long term (possibly up to 20 years or more). Thus, short-term investments may focus on highway-serving development at the interchange. As transit planning progresses and the station location is solidified, new transit-supportive mixed use will likely become viable.
  • Entity responsible: Site developer and City of Lee’s Summit
  • Timeframe: Throughout

Market Assessment
A multi-sports complex with a national draw is being planned for the View High area. Supporting development will include a large destination entertainment, restaurant, and hotel component. If executed, the sports complex will become a major draw and economic generator for Lee’s Summit.

Housing demand is diversifying in Lee’s Summit. In addition to the typical three to four or more bedroom single family detached home, smaller lower maintenance homes, apartments, and single story homes will be in demand. Lee’s Summit is a proven location for up-market residential development and Traditional Neighborhood Design has been successful here.

View High has excellent regional access and attractive surroundings, which make it a good site for a build-to-suit corporate office or R&D campus. Retail development opportunities are limited at View High due to the nearby competition at Summit Woods Crossing and Summit Fair.
Greenwood

Greenwood, Missouri is a quaint yet vibrant community with a population of around 5,200. It is located within six miles of Downtown Lee’s Summit and 25 miles from Downtown Kansas City, Missouri. The primary thoroughfare through town is along M-150, also known as East Main Street. M-150 connects to Highway 7 to the east and 291 Highway to the west, allowing for convenient access to the larger region (See Figure 12).

The population of Greenwood grew substantially over the past few decades, most notably a 163 percent increase between 1990 and 2000 (from 1,500 to 3,952 persons). In response to this growth, the City published a Comprehensive Plan in 2008 to develop a long-term vision with the community.

The heart of Greenwood along East Main Street is characterized by a mix of uses, including antique and gift shops, Greenwood Elementary School, and City Hall, interspersed with single-family residential. East of the Main Street extension of the railroad tracks, the James A Reed Wildlife Refuge is located to the north and a restaurant and other small businesses are located to the south. Greenwood’s largest employer, Mr. LongArm, was formed in 1958 and is located one block south of East Main Street. During the planning process, City staff mentioned plans for a new recreation center on an undeveloped parcel south of City Hall.

Rail is a definitive part of Greenwood’s history. Both the active Union Pacific line and the Rock Island Corridor parallel each other extending north/south through the community. In its peak at the turn of the century, Greenwood had two train depots that averaged 100 trains every 24 hours.

Greenwood benefits from a number of natural amenities including parks and open space. The James A Reed Wildlife Refuge is located northeast of the intersection of East Main Street and the railroad tracks. This wildlife area was established in 1952 and presently includes 3,084 acres. The natural areas encompass woodlands, fields, grassland, and wetlands. Facilities include boat rental, picnic areas and pavilions, fishing docks, an archery range, and 11 fishable lakes and ponds (252 acres total) (Source: Missouri Department of Conservation).
Figure 12: Greenwood Existing Land Use
OPPORTUNITIES AND CONSTRAINTS
Greenwood’s small town character and antique shopping business cluster provide a destination for the larger region. Specific opportunities include:

- Amenities of parks, open space, and wildlife preserve
- Proximity to Lee’s Summit; within school district
- Future Katy Trail extension (trail and associated economic development)
- Large land holdings east of the Rock Island rail tracks
- High traffic counts along M-150 benefit businesses

Creating a sustainable place with a mix of housing and businesses is one of the key challenges moving forward for Greenwood. Land use and transportation constraints include:

- Rail tracks and the M-150 bridge are a barrier to east/west movement
- Limited services to meet daily needs
- Limited employment opportunities
- Recovering real estate market
- High traffic counts on M-150 limit walkability

PREFERRED CONCEPT
The vision for Greenwood is consistent with and builds upon the vision identified in the City of Greenwood Comprehensive Plan (2008). The word “trails” is recommended as an addition to the Comprehensive Plan vision to exemplify the importance of the Rock Island connection to the Katy Trail as a draw for residents and visitors.

Greenwood is a growing and thriving bedroom community of the Kansas City metropolitan urban area. Households of all ages are attracted to the Greenwood community because of its peaceful, safe, small town atmosphere. Young families and retirees are moving into the City because of good schools, shopping, parks, trails and recreation, housing availability, and jobs.

Trail Strategy
Negotiations and plans between area communities and Union Pacific have been moving forward since 2008 to convert the former Rock Island rail corridor to trail. Since two sets of tracks (Rock Island and Union Pacific) extend through the Greenwood segment, the trail alignment would need to be located outside the rail right-of-way. Figure 13 shows the preferred alignment for the trail, which would extend east of the railroad tracks parallel to Big Creek.
Greenwood

Areas of Change
- Retail / Commercial
- Single Family Residential
- City Owned Flexible Open Space
- Civic
- Mixed-Use
- Transit Plaza

Floodplains
- 100 Year Floodplain
- 500 Year Floodplain

Transportation
- Trail
- Trailhead
- On-street Bike Lanes
- Existing Streets
- Transit Parking
- Bike Share Station
- Town Gateways
- Streetscaping

Transit
- Station Location
- Rock Island Rail Corridor

Figure 13: Greenwood Proposed Concept

Final Report
Multiple trailheads are proposed as shown in Figure 13. Beginning at the north, a trailhead is recommended near the at-grade intersection of Ranson Road and the railroad tracks to provide direct pedestrian and bicycle access into town and to the wildlife preserve. A second trailhead is envisioned at M-150 to provide access onto the primary east-west thoroughfare through town. It is recommended that the equestrian portion of the Katy Trail from Windsor to Pleasant Hill be continued to Greenwood to connect with the James A. Reed Memorial Wildlife Area.

Along with proposed trailheads, a supporting network of pedestrian and bicycle friendly streets is needed to facilitate safe and efficient access to the trails and within the community. Two priority corridors which would link directly to the trail include Ranson Road and M-150. Both lack the pedestrian and bicycle infrastructure (sidewalks, bicycle lanes, etc) needed to promote safe access, coupled with substantial truck traffic which limits bicycle and pedestrian mobility.

Public feedback from the charrette process indicated preference for equestrian use of the trail with the potential for day use equestrian rentals, camping, and other associated activities. The proposed trail alignment would extend through the James A. Reed Wildlife Refuge, which could provide direct linkages into amenities within the park.

**Market Assessment**

The development and investment strategy in Greenwood should focus on creating connections between the Katy Trail and the Main Street business district on the west side of the trail and rail alignment. A stronger definition or separation of the spaces for automobiles, pedestrians, and cyclists is also needed along Main Street to encourage trail users to venture off the trail to local businesses and eateries. Most of the business and economic activity in Greenwood will continue to be west of the rail and trail alignment due to the hard physical separation from east to west created by the trenched rail alignment and Main Street Bridge.

Trail users will seek safe and convenient trailhead parking, restrooms, water, and easily accessible and bicycle-friendly businesses. Businesses that anticipate this demand will be the most successful.
Implementation Strategies

Implementation strategies for Greenwood focus on the future Rock Island extension of the Katy Trail and the associated infrastructure needed to support it.

- Complete a detailed market study and branding effort to foster new business to downtown, in light of the Rock Island extension of the Katy Trail. Preserve the small town character while building upon the antique store cluster in existence. Capitalize on the economic opportunity that the trail could bring through encouraging new trail-related businesses along M-150 such as bed and breakfasts, bicycle shops, stores, and cafes.
  - Entity responsible: City of Greenwood, partnering with local, state and federal organizations
  - Timeframe: Short-Mid Term

- Consistent with the goals identified in the Greenwood Comprehensive Plan, the City should undertake a parks and trails master plan which would solidify the preferred alignment for the Rock Island extension of the Katy Trail as well as trail connections (both on and off-street) into the community. This plan should identify linkages from the trail to existing parks and open spaces including the trail network within the James A. Reed Wildlife Refuge. The goal should be to form an interconnected system of trails and green spaces.
  - Entity responsible: City of Greenwood
  - Timeframe: Short-Mid Term

- Work with the Missouri Department of Conservation to identify a preferred trail pathway through the wildlife refuge. Include potential linkages to refuge amenities as well as opportunities for trail equestrian use and staging.
  - Entity responsible: City of Greenwood
  - Timeframe: Short-Mid Term

- Complete a business plan for equestrian-related businesses.
  - Entity responsible: City of Greenwood, City of Pleasant Hill
  - Timeframe: Short-Mid Term
Pleasant Hill

Although it competes with the economic activity along the M-7 Highway Corridor, Downtown Pleasant Hill is a tremendous asset for the larger community. Its history as a rail town dating to 1865 and its placement on National Register both demonstrate its importance to the community, the region and the nation. It is rare to find a small downtown that has maintained the components of a lasting place including a rich building stock, historic rail tracks and depot, civic uses and public spaces and landmarks such as the People’s Theater. The historic building stock and street grid pattern are assets that give Downtown its character and differentiate it from newer suburban development (See Figure 14). The purpose of this analysis was to identify land use and transportation strategies to strengthen downtown Pleasant Hill through a focus on greater visibility, connectivity and overall economic vitality.

The commercial district encompasses a two block area along First Street and along Wyoming Street. There are approximately 20 businesses located in Downtown including artist studios, bars and restaurants, and personal services. The City has worked with a consultant and the community to develop a strategic vision for downtown through their Downtown Strategic Plan. This plan details a marketing strategy, a redevelopment strategy for key parcels such as 1st and Wyoming Streets, streetscaping recommendations and a number of other components. These recommendations were incorporated into this study to build on previous planning efforts.

The State of Missouri is constructing the portion of trail from Windsor to Pleasant Hill to connect the Kansas City area to the Missouri Katy Trail by the end of 2014. An additional planning effort underway is a plan for an alignment of the Rock Island connection to the Katy Trail. The Katy Trail extension from Windsor to Pleasant Hill is currently under construction, and is planned to extend north through downtown. Through this process, we worked with city staff and the larger community to plan for this future trail alignment as well as possible trailhead and bike share locations.

OPPORTUNITIES AND CONSTRAINTS

The unique character and charm of historic downtown Pleasant Hill provide a strong foundation for planning efforts.

- City owned lots could serve as catalysts for future development
- Expand/leverage artists presence, downtown destinations
Figure 14: Pleasant Hill Existing Land Use
• Future trail connectivity through town
• Recreation and equestrian activity at the existing Fairgrounds site

Limited visibility from M-7 and other major corridors is a challenge for Pleasant Hill. Other challenges include:
• Competition for retail/restaurants/services with M-7
• Rail separates 1st Street from rest of downtown
• Wide streets and intersecting grids limit walkability and wayfinding
• Aging housing stock
• Existing floodplain areas limit future redevelopment

PREFERRED CONCEPT
The vision for Pleasant Hill is to improve transportation mobility within downtown, expand recreational opportunities such as trails, camping, and other amenities and improve economic vitality through redevelopment of key sites such as the proposed Farmer’s Market at 1st and Wyoming Streets.

Trail Strategy
The extension of the Katy Trail from Windsor to Pleasant Hill is currently under construction. This 42-mile trail will allow for equestrian use and will link to the Missouri Katy Trail State Park. A trailhead is planned next to the Cass County Fairgrounds, west of downtown Pleasant Hill. This trailhead could accommodate equestrian users and may also be a viable site for a future community building/recreation center.

The City of Pleasant Hill plans to extend the trail through downtown through a series of bicycle lanes, cycle tracks and off-street trails. Figure 15 shows a preferred concept for the placement of these routes. Future trailheads (in addition to the Fairgrounds) may include the future Farmer’s Market at 1st and Wyoming Streets, near the Train Depot and near City Lake to the north of downtown. A trailhead at City Lake could provide parking and other amenities at an optimal location between Greenwood and Pleasant Hill. Additionally, building on equestrian use at the Pleasant Hill fairgrounds, it is recommended that equestrian portions of the Katy Trail continue to Greenwood to connect to the James A. Reed Memorial Wildlife Area. The overall intent is to enhance economic vitality and improve mobility through the addition the trail and trail amenities.
Figure 15: Pleasant Hill Proposed Concept
A large portion of the study area is within the 100 year floodplain, particularly the area south of Highway 58 (Commercial Street). Single family residences are located along Front and Webster Streets. The floodplain limits new development in this area. Thus, this plan assumes that the existing single-family residential remains and that the area south and east of the residential could be utilized for camping, trail and open space/undeveloped.

Gateways and streetscaping are needed to direct visitors to downtown Pleasant Hill. Three gateways are shown in Figure 15: one at M-7, one at Highway 58 (near the Fairgrounds) and one at 1st Street southeast of downtown. Gateway signage recommendations are identified in detail in the Pleasant Hill Downtown Strategic Plan. Streetscaping (such as new trees, planter boxes, landscaping, wider sidewalks, street furniture, etc) is recommended on an interconnected network of streets to enhance downtown aesthetics and encourage walkability. Streets recommended for enhanced streetscaping include Cedar Street (major gateway into downtown), Veterans Parkway, 1st Street, Wyoming Street and Highway 58 (Commercial Street).

The timing of commuter rail along Rock Island is currently unknown and thus a station location has not been identified in Pleasant Hill. Two potential station locations are shown in Figure 15; one along the former Rock Island alignment and one along the existing UP & Amtrak routes.

**Market Assessment**

Downtown Pleasant Hill is an authentic and unique downtown in the region. While real estate market and business conditions are weak now, the Trail combined with broader investments to improve access, visibility, and appearance, and a continued effort to attract events will increase market demand over time.

The focus for Downtown Pleasant Hill is not necessarily on redevelopment, but on reinforcing what exists by curing deferred maintenance and continuing to market downtown. Implementing a catalyst project, such as a farmer’s market, on the City-owned property will help attract more visitors and provide an additional reason to visit, and more activity in Downtown. The solution for Downtown will not be one “silver bullet”, but a deliberate and sustained effort to market, beautify, and bring events to Downtown. The mix of restaurants and bars, and nearby trail parking is ideal for before and after trail activities.
Implementation Strategies

• This plan, along with previous planning efforts completed for downtown Pleasant Hill, identified the need for additional recreational amenities within and surrounding downtown Pleasant Hill. These include the Fairgrounds area, the area south of Highway 58, and overall connectivity to City Lake. A cohesive strategy is needed to program the activities/uses within each of these areas to ensure that they are each unique destinations as well as attractions to draw visitors to the larger downtown.
  • Entity responsible: City of Pleasant Hill
  • Timeframe: Short-Mid Term

• The existing economic climate limits substantial reinvestment. Improvements to existing streets (as well as redevelopment overall) will need to be phased over time. The City needs to prioritize transportation and streetscaping improvements on key streets (particularly connections from M-7 to downtown). Focus on those that link to the trail or contribute to overall trail connectivity.
  • Entity responsible: City of Pleasant Hill
  • Timeframe: Short-Mid Term

• Complete a business plan for equestrian-related businesses.
  • Entity responsible: City of Pleasant Hill, City of Greenwood
  • Timeframe: Short-Mid Term
Appendix A

Land Use Typologies

An image board (right) was developed to give stakeholders a sense of the size and scale of the land uses proposed at each activity center. Approximate heights and densities are shown (as appropriate) for each land use. The specific uses will vary according to individual jurisdiction standards.

This board was displayed at the public charrettes and utilized in the charrette break out group discussions.
**Single-Family Residential**
- Urban to suburban

**Small Lot Single-Family Residential**
- 5,000 - 6,000 sq. ft. lots

**Multi-Family Residential**
- Low Density (up to 40 du/acre)
  - 1-3 stories in height
  - Paired homes
  - Townhomes

**Multi-Family Residential**
- Medium Density (40+ du/acre)
  - 4-6 stories in height
  - Mixed-use retail/residential
  - Community retail

**Mixed-Use**
- 1-6 stories in height
- Active ground floor retail
- Office and/or residential above

**Commercial/Retail**
- 1+ stories in height

**Office/Employment**
- 1+ stories in height

**Parks, Trails, and Open Space**
- Active parks
- Passive open space

**Entertainment**
- Community destinations
- Theaters, museums, sports complexes, etc.

**Parking**
- Structured or surface parking

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**ROCK ISLAND CORRIDOR LAND USE TYPOLOGIES**

*Cities of the Future: Urban Design for Diverse Communities*