

GREEN TRAIL SYSTEMS AND TOURISM

Improving the Quality of Life in Kansas City through the addition of Green Systems,
Connected Districts and Tourism Opportunities

by

ERIC WILDHABER

A Report

submitted in partial fulfillment of the requirements for the degree

MASTER OF LANDSCAPE ARCHITECTURE

Department of Landscape Architecture, Regional and Community Planning, College of
Architecture, Planning and Design

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2012

Approved by:

Major Professor
Dr. Jason Brody

Copyright

Eric Wildhaber

2012

Abstract

The Mid America Regional Council, (MARC) is the official metropolitan planning organization for the Greater Kansas City region. MARC received a 4.25 million dollar grant from the US Department of Housing and Urban Development in 2010 to advance the region's vision of sustainability through vibrant, green, and connected centers and corridors. From which the CSP (Creating Sustainable Places) initiative was established.

Responding to this initiative, eight grant funded Kansas State University students worked in a Rock Island Corridor group. This group showed and described ways of achieving MARC's and the US Department of Housing and Urban Development's goals through the development of Master's Reports. Reports include design ideas and proposals which MARC and city planning departments might not have developed otherwise. Student collaboration between public and city planning departments informed the development of student ideas.

Green trail systems and tourism specifically addresses how the quality of life in the Kansas City Metro Area could be enhanced with the implementation of a cultural trail network. This network would provide access to the Rock Island Corridor, create greenspaces, and establish mixed-use housing districts for potential home and business owners.

The Greater Kansas City region population is increasing. Trails, parks, and mixed-use buildings for residents in KC could improve the quality of life for future residents. Adding greenspaces, pedestrian mobility, and entertainment districts in which to find region specific activities could help attract people to redeveloping areas. Green trail systems and tourism's project area is located between the Sprint Center and the Truman Sports Complex.

To resolve problems and dilemmas within this region of Kansas City, a routing plan of a cultural trail network is outlined. This cultural trail features new trail heads, cultural centers, and proposed zoning overlays for park developments and mixed-use housing districts. The trail network created connects the Sprint Center and Truman Sports Complex in Kansas City, Missouri as a tourism link. Tourism destinations and historic sites add to the economic success of KC. Sites are connected to in the routing plan for the cultural trail. This proposal shows one approach for creating sustainable centers in KC.

*Bettering lives for all current and future people of
Kansas City*



Figure A.01 Silver comet trail underpass



Green trail systems and tourism

**Improving the Quality of Life in Kansas City through the addition of
Green Systems, Connected Districts and Tourism Opportunities**



Figure A.02 Wilson Station

xi | List of figures
xxi | Acknowledgments
xxiii | Executive Summary

2 | Chapter 1: Introduction

4 | MARC CSP Introduction
8 | Thesis
10 | Master's Report Introduction
20 | Project Goals
22 | Design Process

34 | Chapter 2: History of Kansas City in respect to project interests

Vibrant

38 | Regional Context
40 | Entertainment and nightlife
42 | Historical destinations

Connected

44 | Transportation network
46 | Trail system

Green

48 | Natural resources
50 | Park system

52 | Chapter 3: Rock Island Corridor Inventory and Analysis

56 | Inventory process
60 | Site boundary
62 | Site selections
68 | Physical site inventory attributes
74 | Kansas City infrastructure inventory
80 | Kansas City demographics inventory
86 | Kansas City destinations inventory

92 | Chapter 4: Precedent studies

94 | Precedent study process
96 | Precedent study I - Indianapolis Cultural Trail
98 | Indianapolis cultural trail design
100 | Figure/Form
102 | Precedent study II - Midtown greenway trail
104 | Midtown greenway trail design
106 | Figure/Form

108 | Chapter 5: Design Proposal

- 110 | Design framework
- 112 | Brownfield redevelopment
- 114 | Kansas City park service areas
- 118 | Tourism opportunities
- 120 | Park opportunities
- 122 | Housing and population connections
- 124 | Pedestrian transit opportunities
- 126 | Routing plan
- 130 | Development district plan enlargements
- 132 | Mixed use districts placements
- 134 | Park developments
- 138 | Trail types (Low/mid-rise condition)
- 140 | Low-rise urban trail condition
- 142 | Single family urban trail condition
- 144 | Stream corridor urban trail condition
- 146 | Rock Island corridor urban trail condition
- 148 | Trail type plans
- 152 | Greenspace montages
- 156 | Housing developments montages

160 | Chapter 6: Project Results and Impacts

- 162 | Conclusions and future approaches
- 166 | Additional studies and suggestions

168 | Appendix I

- 170 | Glossary/project terminology

174 | Appendix II

- 176 | Literature reviewed

184 | Appendix III

- 186 | Site visits
- 190 | MARC meetings

192 | Appendix IV

- 194 | References

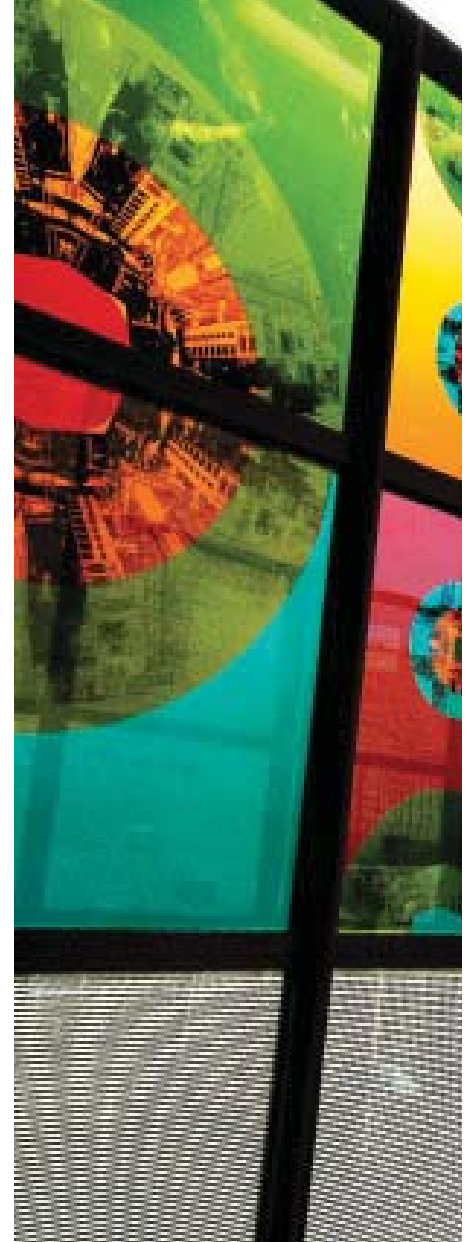


Figure A.03 CTA Glass art wall



Figure A.04 Sprint Center Street

Opening Pages

- A.01 - Silver comet trail underpass. "Powder Springs Trailhead-under Richard D Sailors Pkwy" Reproduced from "<http://www.silvercometga.com/silver-comet-photos/cobb-image-links2.shtml>" Digital photograph.
- A.02 - Wilson Station. "Wilson Station". Reproduced from <http://www.transitchicago.com>. Digital photograph.
- A.03 - CTA glass art wall. "CTA glass art wall". Reproduced from <http://www.transitchicago.com/art/>. Digital photograph.
- A.04 - Sprint Center Street. Wildhaber, Eric. 2012. "Sprint Center Street". Digital photograph.
- A.05 - Bonnieview Park. Wildhaber, Eric. 2012. "Bonnieview Park". Digital photograph.
- A.06 - Cultural Trail Flower Bed. "Cultural Trail Flower Bed." Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org>. Digital photograph.

Chapter 1: Introduction

- 0.01 - Stephen's Park Sprayground. Wildhaber, Eric. 2011. "Stephen's Park Sprayground". Digital photograph.
- 0.02 - MKT 3M Urban Ecological Restoration Ground breaking. Wildhaber, Eric. 2011. "Bill Moore, 3M Plant Manager Ground breaking Ceremony". Digital photograph.
- 0.03 - Cultural Trail Aerial. "DSCN0110." May 11,2008. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 0.04 - Cultural Trail Black and White. Carroll, Matt "Matt Carroll(14)." June 12,2008. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 0.05 - Crossroads Parking Fence. Wildhaber, Eric. 2011. "Crossroads Parking Fence". Digital photograph.
- 0.06 - Seaton Hall Entrance. Wildhaber, Eric. 2011. "Seaton Hall Building Entrance". Digital photograph.
- 0.07 - LARCP Research Umbrellas. Eric. 2011. "LARCP Research Umbrellas". Illustrator Diagram.
- 0.08 - City of Columbia. Wildhaber, Eric. 2011. "City of Columbia City Hall". Digital photograph.
- 0.09 - MKT Trail at Garth. Wildhaber, Eric. 2011. "MKT Trail at Garth". Digital photograph.
- 0.10 - Urban Design Mixed-use Nightlife. Wildhaber, Eric. 2009. "Urban Design Mixed-use Nightlife". Photomontage.

- 0.11 - City of Columbia, Wildhaber, Eric. 2011. "City of Columbia City Hall". Digital photograph.
- 0.12 - Elementary teaching. Wildhaber, Eric. 2011. "Elementary invasive species educational demonstration at Grant Elementary School". Digital photograph.
- 0.13 - MKT Trail Bridge. Wildhaber, Eric. 2011. "MKT Trail Bridge". Digital photograph.
- 0.14 - Blonde on Suncheon Bay Expo drawings. Wildhaber, Eric. 2011. "Blonde on Suncheon Bay Expo drawings at Columbia Parks and Recreation". Digital photograph.
- 0.15 - Urban Design Mixed-use Nightlife. Wildhaber, Eric. 2009. "Urban Design Mixed-use Nightlife". Photomontage.
- 0.16 - Show Me State Games Biking. Columbia parks and recreation. "Show Me State Games Biking" Reproduced from <http://www.gocolumbiamo.com/ParksandRec/>. Digital photograph.
- 0.17 - Northern Truman Sports Complex Stadiums. Wildhaber, Eric. 2011. "Northern Truman Sports Complex Stadiums". Digital photograph.
- 0.18 - Manchester Trafficway. Mid America Regional Council. "Manchester Trafficway" Reproduced from www.marc.org. Digital photograph.
- 0.19 - Kid Fishing. Columbia parks and recreation. "Kid Fishing" Reproduced from <http://www.gocolumbiamo.com/ParksandRec/>. Digital photograph.
- 0.20 - Stephens Park Old Course. Columbia parks and recreation. "Stephens Park Old Course" Reproduced from <http://www.gocolumbiamo.com/ParksandRec/>. Digital photograph.
- 0.21 - Cultural Trail Accessibility. Stewart, Stephanie "Stephanie Stewart (8).jpg." June 10,2010. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital Photography.
- 0.22 - Cultural Trail Housing. VanDeman, David "David VanDeman (2).jpg" June 10,2010. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital Photography.
- 0.23 - Prospect Residence. Wildhaber, Eric. 2011. "Prospect Residence". Digital photograph.
- 0.24 - River Bluff. Wildhaber, Eric. 2011 "Missouri River Bluff". Digital photograph.
- 0.25 - Literature map. Wildhaber, Eric. 2011. "Literature map". Illustrator Diagram.
- 0.26 - Independence Rail. Wildhaber, Eric. 2011 "Missouri River Bluff". Digital photograph.
- 0.27 - Personal design philosophy. Wildhaber, Eric. 2011. "Personal design philosophy". Excel Diagram.
- 0.28 - Corridor underpass. Wildhaber, Eric. 2011 "Corridor underpass". Digital photograph.
- 0.29 - Project Schedule. Wildhaber, Eric. 2011. "Project Schedule". Microsoft Word Chart.
- 0.30 - ICT crosswalk path. VanDeman, David "David VanDeman (6).jpg" June 10,2010. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital Photography.
- 0.31 - Design process path map. Wildhaber, Eric. 2011. "Design process path map". Illustrator Diagram.

Chapter 2: History of Kansas City

- 1.01 - Historic Map of Kansas City. "Historic Map of Kansas City, MO - 1869" March 15, 2012. Reproduced from "worldmapsonline.com" Digital photograph.
- 1.02 - Kansas City Skyline. Roever, John 22 July 2009. . "Kansas City Skyline & 1-70 after sunset" March 16 2012. Reproduced from http://www.flickr.com/photos/rock_chalk_jhawk_ku/3970333441/. Digital photograph.
- 1.03 - Green system. Wildhaber, Eric. 2010. "Independence green space". Digital photograph.
- 1.04 - Kansas City Cities. Wildhaber, Eric. 2011. "Kansas City Cities Surrounding Kansas City, MO". Illustrator Diagram.
- 1.05 - Plaza Lights. Bennett, Cate. "Kansas City Daily Photo". 18 March 2012. Reproduced from <http://www.kansascitydailyphoto.com/>. Digital photograph.
- 1.06 - Power and Light District. "Power and Light District. 18 March 2012. Reproduced from <http://kcfilm.com/power-light-district>. Digital photograph.
- 1.07 - Jazz Musicians. "David Basse". 15 March 2012. Reproduced from <http://www.davidbasse.com/citylight.html>. Digital photograph.
- 1.08 - Historic House. "1324886-Greek_Revival_Kansas_City.jpg" 20 March 2012. Reproduced from "www.virtualtourist.com" Digital photograph.
- 1.09 - Union Station in Kansas City. "unionstation.jpg." 15 March 2012. Digital photograph.
- 1.10 - KC Max Shelter. "max_bus.jpg". 18 March 2012. Reproduced from netdensity.net. Digital photograph.
- 1.11 - Kansas City Skyline. Roever, John 22 July 2009. . "Kansas City Skyline & 1-70 after sunset" March 16 2012. Reproduced from http://www.flickr.com/photos/rock_chalk_jhawk_ku/3970333441/. Digital photograph.
- 1.12 - Katy Trail Connector. "pleasant_hill_katy_trail.jpg" 15 March 2012.
- 1.13 - Rock Island Corridor Undeveloped Greenway. Mid America Regional Council. "Little Blue River". Reproduced from www.marc.org. Digital photograph.
- 1.14 - Tree stand. Wildhaber, Eric. 2010. "Tree stand in Independence, Missouri". Digital photograph.
- 1.15 - Missouri Woodland. Wildhaber, Eric. 2011. "Missouri Woodland". Digital photograph.
- 1.16 - KC Parks Logo. "013012.jpg". 20 March 2012. Reproduced from <http://www.kcmo.org/CKCMO/Depts/ParksandRecreation/index.htm>. Digital photograph.
- 1.17 - MKT trail park. Wildhaber, Eric. 2011. "MKT trail side park ". Digital photograph.

Chapter 3: Rock Island Corridor Inventory and Analysis

- 2.01 - Raytown Road View East. Wildhaber, Eric 2012. "Raytown Road View East". Digital photograph.
- 2.02 - South Truman Sports Complex Wide. Wildhaber, Eric 2012. "South Truman Sports Complex Wide". Digital photograph.
- 2.03 - Inventory process. Wildhaber, Eric 2012. "Inventory Process Diagram". Indesign diagram.
- 2.04 - Southern Truman Sports Complex Greenspace. Wildhaber, Eric. 2011. "Southern Truman Sports Complex Greenspace". Digital photograph.
- 2.05 - Northern Truman Sports Complex Stadiums. Wildhaber, Eric. 2011. "Northern Truman Sports Complex Stadiums". Digital photograph.

- 2.06 - Cultural trail bio-retention planters. Ailes, Casey Jo. "Cultural Trail Rain Garden" November 10, 2011. Reproduced from houstonstreetracing.com. Digital photograph.
- 2.07 - Inventory qualities. Wildhaber, Eric. 2011. "Inventory qualities". Microsoft Word Chart.
- 2.08 - Union Station in Kansas City. "unionstation.jpg." 15 March 2012. Digital photograph.
- 2.08a - Program percentages. Wildhaber, Eric. 2012. "Program percentages". InDesign diagram.
- 2.09 - Sprint center at night. Alongi, Isaac. "sprint center, kansas city power and light district aerial photo" 23 March 2012. Reproduced from <http://isaacalongi.com/kansascityaerialphotography>. Digital photograph.
- 2.10 - Sprint Center Street. Wildhaber, Eric. 2012. "Sprint Center Street". Digital photograph.
- 2.11 - Main Street Sidewalk. Wildhaber, Eric. 2012. "Sprint Center Street". Digital photograph.
- 2.12 - TSC Raytown Rd. Wildhaber, Eric. 2012. "Truman Sports Complex Raytown Road". Digital photograph.
- 2.13 - Royals Stadium. Wildhaber, Eric. 2012. " Royals Stadium northeast looking southwest". Digital photograph.
- 2.14 - Single family housing Benton blvd. Wildhaber, Eric. 2012. " Single family housing Benton blvd". Digital photograph.
- 2.15 - Wildhaber, Eric. 2012. Corridor site map. Source map: Google earth. Kansas City. Missouri.
- 2.16 - Raytown Rd. Hill. Wildhaber, Eric. 2012. " Raytown Rd. Hill Site one". Digital photograph.
- 2.17 - Aerial inventory map. Wildhaber, Eric. 2012. "Aerial development in relation to the MARC proposed Rock Island Corridor." Source data: Mid America Regional Council "NAIP2010_Jackson3"," rockisland_midline ", Accessed 2011.
- 2.18 - Slope inventory map. Wildhaber, Eric. 2012. "Jackson county slopes in relation to the MARC proposed Rock Island Corridor." Source data: Mid America Regional Council "Slope_Jackson"," rockisland_midline ", Accessed 2011.
- 2.19 - Waterway inventory map. Wildhaber, Eric. 2012. "Jackson county waterways in relation to the MARC proposed Rock Island Corridor." Source data: Mid America Regional Council "MARC_floodplain"," rockisland_midline ", Accessed 2011.
- 2.20 - Landuse inventory map. Wildhaber, Eric. 2012. "Jackson county landuse in relation to the MARC proposed Rock Island Corridor." Source data: Mid America Regional Council "MARC_TFC_forecast"," rockisland_midline", Accessed 2011.
- 2.21 - Park inventory map. Wildhaber, Eric. 2012. "Jackson county parks in relation to the MARC proposed Rock Island Corridor." Source data: Mid America Regional Council "MARC_parks"," rockisland_midline ", "cities_dtl_MARC_MO", Accessed 2011.
- 2.22 - Utility Box. Wildhaber, Eric. 2010. "Utility box in Independence, Missouri". Digital photograph.
- 2.23 - Mean centers map. Wildhaber, Eric. 2012. "Kansas City Metro Region Counties and their mean population centers." Source data: Mid America Regional Council "cities_dtl_MARC_MO ". Accessed 2011.
- 2.24 - Roadway inventory map. Wildhaber, Eric. 2012. " Jackson county roadways in relation to the MARC proposed Rock Island Corridor." Source data: Mid America Regional Council "MARC_streets ", "rockisland_midline". Accessed 2011.

- 2.25 - SUP Bikeways inventory map. Wildhaber, Eric. 2012. " Jackson county Shared Use Paths in relation to average household size in Jackson County, MO." Source data: Mid America Regional Council "MARC_streets ", "rockisland_midline". Accessed 2011.
- 2.26 - Katy trail inventory map. Wildhaber, Eric. 2012. " Jackson county trails and neighborhood park service areas in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "MARC_floodplain", "rockisland_midline", "Rockisland_trails_finalkc". Accessed 2011.
- 2.27 - Right-of-ways inventory map Wildhaber, Eric. 2012. " Jackson county Right-of-way areas in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "MARC_floodplain", "rockisland_midline", "MARC_TFC_forecast". Accessed 2011.
- 2.28 - Pedestrian on Prospect. Wildhaber, Eric. 2012. "Pedestrian sitting on bench on Prospect ave.". Digital photograph.
- 2.29 - Public housing inventory map. Wildhaber, Eric. 2012. " Jackson county existing public housing in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "cities_dtl_MARC_MO ", "rockisland_midline", "public_housing_marc_area ". Accessed 2011.
- 2.30 - diversity map. Wildhaber, Eric. 2012. " Jackson county diversity in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "NAIP2010_Jackson3", "rockisland_midline", "public_housing_marc_area ", " blkgrp_area". Accessed 2011.
- 2.31 - Median age inventory map. Wildhaber, Eric. 2012. " Jackson county median age in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "rockisland_midline", "blkgrp_area". Accessed 2011.
- 2.32 - Average housing value inventory map. Wildhaber, Eric. 2012. " Jackson county average household value in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "rockisland_midline", " medhomeval00". Accessed 2011.
- 2.33 - housing vacancies inventory map. Wildhaber, Eric. 2012. " Jackson county MetroGreen trail system and phases in relation to the existing number of Jackson county housing vacancies." Source data: Mid America Regional Council "blkgrp_area", " MARC_metrogreen". Accessed 2011.
- 2.34 - Silver Comet Station. "Historic_Silver_Comet_Depot_Cedartown_GA.jpg". 10 November 2011. Reproduced from "<http://www.silvercometga.com/silver-comet-photos/cobb-image-links2.shtml>" Digital photograph.
- 2.35 - Historic sites inventory map. Wildhaber, Eric. 2012. " Kansas City metro area historic sites in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "cities_dtl_MARC_MO ", " rockisland_midline", "MARC_historic_sites". Accessed 2011.
- 2.36 - Tourism destinations inventory map. Wildhaber, Eric. 2012. " Jackson county critical facilities in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council " MARC_activity_centers", "rockisland_midline". Accessed 2011.
- 2.37 - MARC regional corridors inventory map. Wildhaber, Eric. 2012. " Creating Sustainable Places corridors in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council "CSP_Corridor_Buffers_Merged", "rockisland_midline". Accessed 2011.
- 2.38 - Rock Island corridor nodes inventory map. Wildhaber, Eric. 2012. " Creating Sustainable Places corridor midlines and Rock Island Corridor MARC nodes in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council " CSP_Corridor_Midlines", "rockisland_midline", " rockisland_nodes". Accessed 2011.
- 2.39 - MARC critical facilities inventory map. Wildhaber, Eric. 2012. " Creating Sustainable Places corridor midlines and Rock Island Corridor MARC critical facilities in relation to the proposed MARC Rock Island Corridor alignment." Source data: Mid America Regional Council " CSP_Corridor_Midlines", "rockisland_midline", " MARC_critical_facilities". Accessed 2011.

Chapter 4: Precedent studies

- 3.01 - Cultural Trail Painted Crosswalk. "David Cultural Trail Painted Crosswalk". November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 3.02 - Precedent study methodology. Wildhaber, Eric. 2012. "Precedent study methodology ". InDesign Diagram.
- 3.03 - Cultural Trail Sign Logo. Stewart, Stephanie. June 10,2010. "Stephanie Stewart (4).jpg". November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 3.04 - Cultural Trail Black and White. Carroll, Matt "Matt Carroll(14)." June 12,2008. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 3.05 - Family on Cultural Trail. Carroll, Matt. June 12,2010. "Matt Carroll (18).jpg". November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 3.06 - Biking on the Cultural Trail. Scott, David. June 10,2010. "David Scott (3).jpg". November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 3.07 - Dancing Lady Plaza. Carroll, Matt. June 12,2010. "Matt Carroll (6).jpg". November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 3.08 - Cultural trail streetscape structure and form. Wildhaber, Eric. 2012. "Cultural trail streetscape structure and form ". Illustrator Diagram.
- 3.09 - Cultural Trail Flower Bed. "Cultural Trail Flower Bed." Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," http://www.indyculturaltrail.org. Digital photograph.
- 3.10 - Greenway Side Garden. "Greenway Side Garden ". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 3.11 - Greenway Side Park. "East of Hiawatha Avenue Greenspace ". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 3.12 - Greenway Park During Bike Event. "Cepro Site (10th Avenue) and Greenspace–Public Meetings fall 2009". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 3.13 - Gardening Along Greenway. "Gardening Along Greenway". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 3.14 - Community Garden along Midtown Greenway. "Soo Line Community Garden". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 3.15 - Greenway Public Art. "Greenway Public Art". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 3.16 - Greenway Wayfinding. "Greenway Wayfinding". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.

Chapter 5: Design Proposal

- 4.01 - Trail Routing Plan. Wildhaber, Eric. 2012. "Trail Routing Plan". Illustrator Drawing.
- 4.02 - Design framework. Wildhaber, Eric. 2012. " Design framework ". Illustrator Diagram.
- 4.03 - Design critical mapping framework. Wildhaber, Eric. 2012. "Design critical mapping framework". InDesign Diagram.
- 4.04 - Crossroads district site 1. Wildhaber, Eric. 2012. "Crossroads district site 1". Digital photograph.
- 4.05 - Brownfield sites in crossroads. Mallinckrodt, Stephanie. 2012. "Brownfield sites in crossroads". Digital photograph.
- 4.06 - Elementary teaching. Wildhaber, Eric. 2011. "Elementary invasive species educational demonstration at Grant Elementary School". Digital photograph.
- 4.07 - Neighborhood park service area adjacencies. Wildhaber, Eric. 2012. "Neighborhood park service area adjacencies". Illustrator Drawing.
- 4.08 - Cosmo park. Wildhaber, Eric. 2011. "Cosmo park playground". Digital photograph.
- 4.09 - Community park service area adjacencies. Wildhaber, Eric. 2012. "Community park service area adjacencies". Illustrator Drawing.
- 4.10 - Regional park service area adjacencies. Wildhaber, Eric. 2012. " Regional park service area adjacencies ". Illustrator Drawing.
- 4.11 - Dance Club. "Angels Dance Club". 15 March 2011. Reproduced from <http://www.visitkc.com/locals-and-residents/things-do/member-details/index.aspx?id=38648>. Digital photograph.
- 4.12 - Activity center cultural trail and historic site connections. Wildhaber, Eric. 2012. " Activity center cultural trail and historic site connections ". Illustrator Diagram.
- 4.13 - Bonnieview Park. Wildhaber, Eric. 2012. "Bonnieview Park". Digital photograph
- 4.14 - Significant neighborhood park zone voids. Wildhaber, Eric. 2012. " Activity center cultural trail and historic site connections ". Illustrator Diagram.
- 4.15 - Prospect Residence. Wildhaber, Eric. 2011. "Prospect Residence". Digital photograph.
- 4.16 - Housing concentration overlaps. Wildhaber, Eric. 2012. "Housing concentration overlaps". Illustrator Diagram.
- 4.17 - Prospect pedestrians crossing. Wildhaber, Eric. 2012. "Prospect pedestrians crossing ". Digital photograph.
- 4.18 - SUP bikeway connection potentials. Wildhaber, Eric. 2012. " SUP bikeway connection potentials ". Illustrator Diagram
- 4.19 - Cultural trail routing plan and overlay districts. Wildhaber, Eric. 2012. " Cultural trail routing plan and overlay districts". Illustrator Drawing.
- 4.20 - Main Street view. Source map: Google Earth Street View. Kansas City, Missouri. Accessed 15 March 2012.
- 4.21 - 12th Street view. Source map: Google Earth Street View. Kansas City, Missouri. Accessed 15 March 2012.
- 4.22 - Emanuel Blvd view. Source map: Google Earth Street View. Kansas City, Missouri. Accessed 15 March 2012.
- 4.23 - 35th Street view. Source map: Google Earth Street View. Kansas City, Missouri. Accessed 15 March 2012.
- 4.24 - Benton Blvd view. Source map: Google Earth Street View. Kansas City, Missouri. Accessed 15 March 2012.
- 4.25 - Hardesty Ave view. Source map: Google Earth Street View. Kansas City, Missouri. Accessed 15 March 2012.

- 4.26 - Sprint Center Street. Wildhaber, Eric. 2012. "Sprint Center Street". Digital photograph.
- 4.27 - Sprint Center development district layout. Wildhaber, Eric. 2012. " Sprint center development district layout". Illustrator Drawing.
- 4.28 - Truman Sports Complex development district layout. Wildhaber, Eric. 2012. " Truman Sports Complex development district layout". Illustrator Drawing.
- 4.29 - Main Street Sidewalk. Wildhaber, Eric. 2012. "Main Street Sidewalk". Digital photograph.
- 4.30 - Proposed mixed-use housing zoning overlay areas. Wildhaber, Eric. 2012. "Proposed mixed-use housing zoning overlay areas". Illustrator Drawing.
- 4.31 - Proposed cultural trail streetscape type segments. Wildhaber, Eric. 2012. "Proposed cultural trail streetscape type segments ". Illustrator Drawing.
- 4.32 - Scotts branch trail. Wildhaber, Eric. 2011. "Scotts branch trail". Digital photograph.
- 4.33 - Proposed cultural trail links & neighborhood parks areas. Wildhaber, Eric. 2012. "Proposed cultural trail links & neighborhood parks areas". Illustrator Drawing.
- 4.34 - Proposed neighborhood park zoning overlay areas. Wildhaber, Eric. 2012. " Proposed neighborhood park zoning overlay areas ". Illustrator Drawing.
- 4.35 - Cultural trail rendering. "Cultural trail rendering". November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 4.36 - Space visualization diagram. Wildhaber, Eric. 2011. " Space visualization diagram". Illustrator Diagram.
- 4.37 - Prospect streetscape. Wildhaber, Eric. 2012. "Prospect streetscape". Digital photograph.
- 4.38 - Cultural trail streetscape section type A. Wildhaber, Eric. 2012. " Cultural trail streetscape section type A". Illustrator Section Drawing.
- 4.39 - Cultural trail streetscape section type B. Wildhaber, Eric. 2012. "Cultural trail streetscape section type B ". Illustrator Section Drawing.
- 4.40 - Cultural trail streetscape section type C. Wildhaber, Eric. 2012. "Cultural trail streetscape section type C". Illustrator Section Drawing.
- 4.41 - Cultural trail streetscape section type D. Wildhaber, Eric. 2012. "Cultural trail streetscape section type D". Illustrator Section Drawing.
- 4.42 - Cultural trail streetscape section type E. Wildhaber, Eric. 2012. "Cultural trail streetscape section type E". Illustrator Section Drawing.
- 4.43 - Cultural trail streetscape section type F. Wildhaber, Eric. 2012. "Cultural trail streetscape section type F". Illustrator Section Drawing.
- 4.44 - Cultural trail streetscape plan type F. Wildhaber, Eric. 2012. "Cultural trail streetscape plan type F". Illustrator Plan Drawing.
- 4.45 - Cultural trail streetscape plan type A. Wildhaber, Eric. 2012. "Cultural trail streetscape plan type A". Illustrator Plan Drawing.
- 4.46 - Cultural trail streetscape plan type B. Wildhaber, Eric. 2012. "Cultural trail streetscape plan type B". Illustrator Plan Drawing.

- 4.47 - Cultural trail streetscape plan type D. Wildhaber, Eric. 2012. "Cultural trail streetscape plan type D". Illustrator Plan Drawing.
- 4.48 - Cultural trail streetscape plan type E. Wildhaber, Eric. 2012. "Cultural trail streetscape plan type E". Illustrator Plan Drawing.
- 4.49 - MKT trail park. Wildhaber, Eric. 2011. " MKT trail side park ". Digital photograph.
- 4.50 - Cultural trail park montage at prospect and victor. Wildhaber, Eric. 2012. " Cultural trail park montage at prospect and victor". Digital photo montage.
- 4.51 - Midtown Corridor Park. "Cepro Midtown Corridor Park ". 10 November 2011. Reproduced from <http://www.midtowngreenway.org>. Digital photograph.
- 4.52 - Cultural trail park montage in crossroads. Wildhaber, Eric. 2012. "Cultural trail park montage in crossroad ". Digital photo montage.
- 4.53 - Cultural Trail Housing. Cultural Trail Housing. VanDeman, David "David VanDeman (2).jpg" June 10,2010. November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 4.54 - Cultural trail mixed-use district at the Truman Sports Complex. Wildhaber, Eric. 2012. "Cultural trail mixed-use district at the Truman Sports Complex ". Digital photo montage.
- 4.55 - Intersection. "Intersection_After.jpg" November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 4.56 - Cultural trail mixed-use district in crossroads. Wildhaber, Eric. 2012. "Cultural trail mixed-use district in crossroads". Digital photo montage.

Chapter 6: Project Results and Impacts

- 5.01 - Crossroads District East. Wildhaber, Eric. 2012. "Crossroads District East ". Digital photograph.
- 5.02 - Crossroads Building. Wildhaber, Eric. 2012. "Crossroads Building ". Digital photograph.
- 5.03 - Crossroads Parking Fence. Wildhaber, Eric. 2012. "Crossroads Parking Fenc". Digital photograph.
- 5.04 - Crossroads Building. Wildhaber, Eric. 2012. "Crossroads Building ". Digital photograph.
- 5.05 - Independence Open Space. Wildhaber, Eric. 2012. "Crossroads Building ". Digital photograph.
- 5.06 - Intersection. "Intersection_After.jpg" November 10, 2011. Reproduced from "Indianapolis Cultural Trail a legacy of Gene and Marilyn Glick," <http://www.indyculturaltrail.org/>. Digital photograph.
- 5.07 - Prospect Residence. Wildhaber, Eric. 2011. "Abandon Prospect Residence". Digital photograph.

Appendix I

- B.01 - Pedestrian Bridge Underpass. Wildhaber, Eric. 2010. " Pedestrian Bridge Underpass ". Digital photograph.
- B.02 - Tracks. Wildhaber, Eric. 2010. "Independence railroad tracks". Digital photograph.
- B.03 - Tracks. Wildhaber, Eric. 2010. "Independence railroad tracks". Digital photograph.
- B.04 - Tracks. Wildhaber, Eric. 2010. "Independence railroad tracks". Digital photograph.
- B.05 - Tracks. Wildhaber, Eric. 2010. "Independence railroad tracks". Digital photograph.

Appendix II

- C.01 - Green system. Wildhaber, Eric. 2010. "Independence green space". Digital photograph.

Appendix III

- D.01 - Pedestrian on Prospect. Wildhaber, Eric. 2012. " Pedestrian sitting on bench on Prospect ave." . Digital photograph.
- D.02 - River Market. Sanders, Chris. 2012. "River Market". Digital photograph.
- D.03 - CBD area. Sanders, Chris. 2012. "CBD area". Digital photograph.
- D.04 - River Market. Sanders, Chris. 2012. "River Market". Digital photograph.
- D.05 - Pleasant Hill Perspective Train Station. "Railroad Station; Pleasant Hill Missouri; July 1990". Reproduced from <http://grossersnostalgia.com>. Digital photograph.
- D.06 - TSC Raytown Rd. Wildhaber, Eric. 2012. "TSC Raytown Rd ". Digital photograph.
- D.07 - Crossroads skyline. Wildhaber, Eric. 2012. "Crossroads skyline ". Digital photograph.
- D.08 - Southern Truman Sports Complex Greenspace. Wildhaber, Eric. 2012. "Southern Truman Sports Complex Greenspace ". Digital photograph.
- D.09 - Poor Prospect Sidewalks. Wildhaber, Eric. 2012. "Poor Prospect Sidewalks". Digital photograph.
- D.10 - MARC Logo. Mid America Regional Council. "MARC Door". www.marc.org. "Digital photograph.
- D.11 - Raytown Road Bridge. Wildhaber, Eric. 2012. "Raytown Road Bridge ". Digital photograph.
- D.12 - Royals Stadium Parking North. Wildhaber, Eric. 2012. "Royals Stadium Parking North ". Digital photograph.

Appendix IV

- E.01 - Rail Tracks in Independence. Wildhaber, Eric. 2012. "Rail Tracks in Independence". Digital photograph.
- E.02 - Tracks. Wildhaber, Eric. 2010. "Independence railroad tracks". Digital photograph.



Acknowledgements

This project represents the result of six years of persistence and dedication of my family (Mom, Dad, Rachel) and friends (Jared Pumphrey, Emmanuel Tamayo) who have helped me continue to grow as a student and as a man. I want to specially thank members of the Kansas State Landscape Architecture faculty who inspired me as a designer to strive for designs which do more than simply produce attractive spaces but create ideas and allow people to live better lives. This project is a reflection of my progression in understanding how parts affect the composition of the whole. I would also like to thank my major professor Jason Brody for making me understand the larger vision of this project and for being a mentor for the previous three years. I would like to thank Mike Griggs, Steve Saitta, Toney Lowery, and Richard Perkins for helping me develop my park design interests throughout my internship with the City of Columbia Parks and Recreation Department. Lastly, the members of MARC and Rock Island Corridor Coalition for their time and resources which have been critical to the completion of this project.

Rock Island Corridor Coalition

Kansas City Government
Board of Directors

Kansas City Parks and Recreation

Parks and Recreation Department

K-State

Jason Brody, Blake Belanger, Stephanie Rolley, Eric Bernard
Timothy Keane, Katie Kingery-Page
Jared Pumphrey, Stephanie Mallinckrodt
Editor (Marcella Reekie)

Mid America Regional Council

Marlene Nagel
Jeff Hirt

Family

Mark and Vickie Wildhaber
Rachel Wildhaber
Joan Rudd
Velma Wildhaber

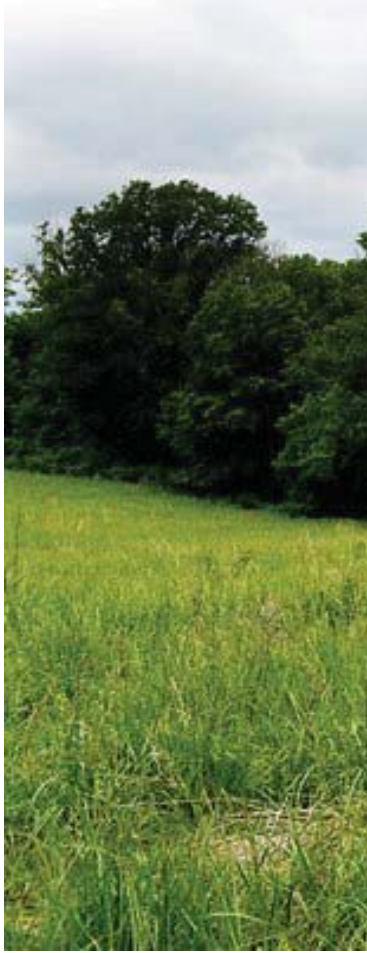


Figure A.05 Bonnieview Park

MARC, the Rock Island Corridor Coalition, and the City of Kansas have an opportunity to make the future development of Kansas City and the Rock Island Corridor a premier destination. Green trail systems and tourism addresses a solution for solving current dilemmas in Kansas city which could hinder the growth of a vibrant, connected, and green Kansas City. Showing how quality of life in Kansas City and along the Rock Island Corridor Trail could be improved by the introduction of zoning overlays for mixed-use urban districts and greenspace additions, and the implementation of an urban cultural trail network.

This document covers three solutions for creating a more vibrant, connected, and green Kansas City. The first is through a urban cultural trail network which will runs between the Sprint Center/ Crossroads District, the Truman Sports Complex, and the Plaza District. This urban trail uses five different street types which range from urban low/mid-rise buildings to rural rail corridor trail settings and set an example for the structure of each trail segment.

The second solution is the creation of new park and mixed-use housing overlay districts. These districts use trail, housing, and park voids to help determine their relationship within the project boundaries. These neighborhood park zoning overlays lessen the service area voids that currently exist within the park system in central Kansas City. Housing areas are placed in close proximity to trail and park areas in order to increase density to 20 DU/ acre and greater. This also allow people who wish to live near these green systems but not in a single family environment a place to live.

The final solution is creation of three trail nodes using the Sprint Center, Prospect, and the Truman Sports Complex districts as site locations. These centers will provide intense mixed-use development along with the opportunity for visitors to park and use the trail network for leisure and recreation.

These solutions solve the dilemmas of SUP disconnects, park voids, brownfield remediation sites, housing concentrations with limited

access, and tourism destination which are not linked.

In order to provide examples of prior projects and strategies for implementing these proposals two precedent studies were researched and analyzed. These two precedent studies were the Indianapolis cultural trail which was the implementation of an urban cultural trail, and the Minneapolis Midtown Greenway trail which was the implementation of a linear pedestrian transit corridor. These two studies showed the structure of modern pedestrian transit corridors, cost, construction, and impact on they the community they have.

Finally, these program elements which make up the body of green trail systems and tourism link to existing items in Kansas City whether it be the Kansas City Parks and Recreation Departments or the city's road system. Showing the evolution of these systems from historic to present day is discussed in the second chapter in order to give an over arching perspective to the connections which this design proposal will ultimately connect to in Kansas City.

The overall process of this document and the thought process I have as a designer which drove this document can be seen in the introduction. In the path mapping of this process the thought process for the next stage of this proposal is diagramed.

Potential plans of action for implementing these design proposals will be discussed in planning approaches and additional research suggestions. These suggestions are directed at issues which Kansas City might want to explore before moving a project such as this forward. These include cost, timeline, and logistics.

Introduction



Figure A.06 Cultural Trail Flower Bed

MARC's goals for the growth and development of the Rock Island Corridor involve three main elements. These elements are vibrant, connected and, green. These founding elements create the framework for the creating sustainable places initiative. To understand this project and its foundation I will describe what each of these terms mean to me as a designer and as a resident of Missouri.

Vibrant

Creating a vibrant city combines ideas such as lifestyle changes derived from how we as individuals and communities choose to live, work, and travel from destination to destination. Vibrancy is the act of creating cultural character by

seeking innovative ways to constantly change the way people encompass a city. The way people act, the attitudes and beliefs they share, and the events and spaces which they participate in. The expression of this to others both

residents and non-residents defines a city's culture.



Connected

Connections occur on more levels than street and road networks. Connection means connecting different individuals, communities, and areas to shared and common resource opportunities.

Figure 0.01 Stephen's Park Sprayground

Focusing investment in destinations such as shared commodities and reinvesting in key locations within the Rock Island Corridor can create sustainable development and

concentrated growth. Lastly, it means having a system that allows the community members to engage with one another on social, political, and economic level.



Green

Green views today have many definitions; however, green is a thought process rather than an objective. Green design is design that is aware of conditions previous and present and considers future predictions and

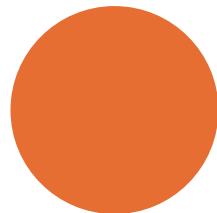
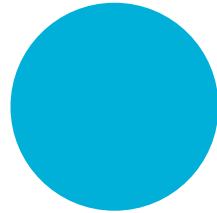
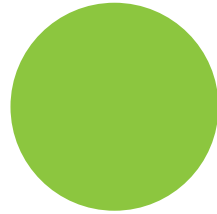
Figure 0.02 MKT 3M Urban Ecological Restoration Groundbreaking

extrapolations. Designing spaces to recognize environmental factors allows the preservation of resources both natural and built as well as allows outreach, education, and environmentally sensitive building

to occur. All of this allows for spaces to last longer, have lower costs, and create less environmental change.

CSP Initiative

The combination of these three elements creates the basic building blocks for improving quality of life in a city and community. Having the ability to move, live, and interact with others within a area which is sustainable allows people experience life to the fullest. These elements severed as deign goals.



Vibrant, Connected, Green



Figure 0.03 Cultural Trail Aerial



Figure 0.04 Cultural Trail Black and White



YIELD TO
TRAIL
USERS

Quality of life in Kansas City and along the Rock Island Corridor Trail will be improved by the introduction of pedestrian friendly mixed-use urban districts, greenspace additions, and trail networks. The creation of an urban cultural trail and park network within Kansas City will be enhanced by routing and placement of these spaces in relation to tourism destinations and historical places.

Kansas City, Missouri



Figure 0.05 Crossroads Parking Fence



Figure 0.06 Seaton Hall Entrance

The development of this master's report stems from a set of topic research umbrellas established for the 2011-12 LARCP program at Kansas State University. Though set in different settings and with different end products each had the goal of addressing sustainable initiatives. These initiatives ranged from social, educational, environmental, and economic based sustainable goals and objectives.

Masters Reports

Research umbrellas for sustainable initiatives

Group Research Umbrellas

Three research areas have been defined as potential initiatives to create sustainable communities. A group addressing environmental flooding and community development, another addressing learning landscapes in school systems, and finally a group addressing the effects of sustainable community design in the United States cities using Kansas City as a model. These umbrellas focus on addressing sustainability related to environmental, economic, and vibrant issues.

MARC Urban Design Group

Under the MARC urban design group eight students from the Kansas State College of Architecture Planning and Design were assigned the task of producing research documents which defined and resolved a research question related to the sustainability of the Rock Island Corridor in Kansas City, Missouri.

The 30.31 mile long corridor which spans from Pleasant Hill, MO to the Sprint Center in downtown Kansas City has been designated by MARC as a potential trail and commuter rail route.

Each student reviewed the Creating Sustainable Places Initiative (CSP) and identified a topic area which her or she felt needs to be further defined. The design opportunity sought to address the goals represented in the CSP.

Umbrellas

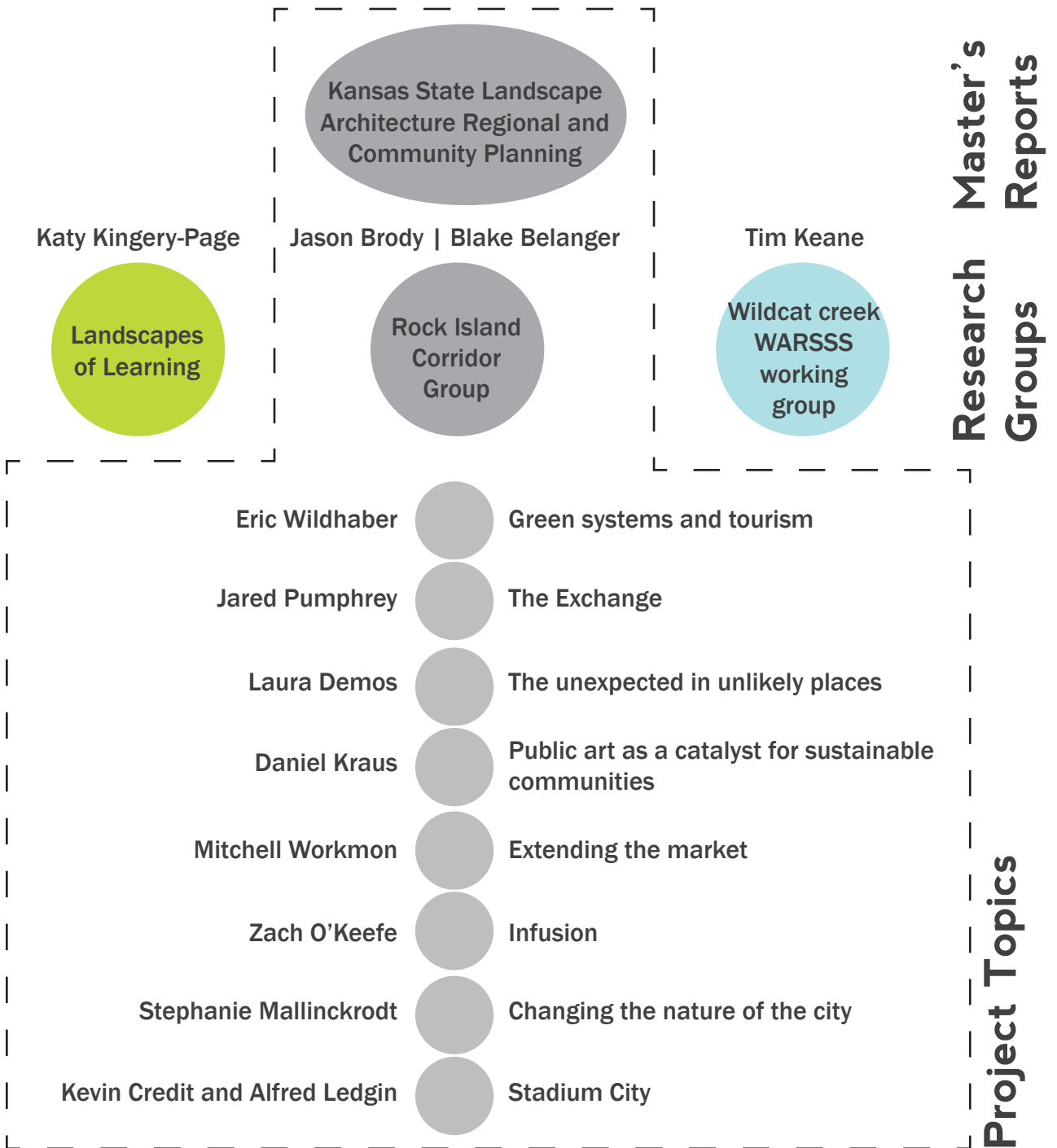


Figure 0.07 LARCP Research Umbrellas



Figure 0.08 City of Columbia

The Rock Island Corridor group umbrella was chosen for further development. Reasons stem from prior experience and knowledge both educationally and experientially. The last influence is my personal design interests for urban design and downtown/urban renewal.

Internship Development

- Mapping principals
- Neighborhood parks and service areas
- Trail development and trail sustainability
- Cultural traits
- Tourism development

Design Interests

- Urban design and civic art
- Complete streets and business development
- Downtown and urban renewal

Previous Kansas City Projects

- KC 2030 project and classes
- Summer 2010 first suburbs design studio

Local Knowledge

- Friends and family residents
- Events and sports

MARC Data

- Compiled information collected by MARC
- Census 2012 data

topic influences

Prior knowledge

Five aspects of my personal background have led me to this project description. An internship which focused on trail and park design and development, design interests in urban street design, interdisciplinary projects, a first suburb Kansas City design studio project, and local knowledge. Inventory data compiled by MARC for research and analysis also provided knowledge of the Kansas City region.



Figure 0.09 MKT Trail at Garth



Figure 0.10 Urban Design Mixed-use Nightlife



Figure 0.11 City of Columbia

Internship

Columbia Parks and Recreation is a public entity aimed at providing future planning and design for green spaces and recreation facilities for the citizens of Columbia, MO.

The city of Columbia's mission is to create community through People, Parks and Programming and it is through this mission statement that all divisions of work strive for.

As a division of the city, community and public interests are the most critical design consideration. The public sector is designed to help the health, safety and welfare of a society. Critical to this is the realization one cannot achieve the goals of everyone involved but it is the process of refining those goals that are the most sustainable and vital to the success of a design.

One critical message is that all project are public, with their uses and restrictions varying. In the design process, budget, and programming are designed so that EVERYONE has an equal opportunity to enjoy the spaces we create. This concept is applied to the design of green trail systems and tourism.

During the time at Columbia Parks and Recreation I had the opportunity to not only work on a trail routing project but park and green space designs. These projects also included wayfinding research and signage design.

These project helped to produce interest in these fields of study as well as provide me with how the public planning and design process is conducted. Having an understanding of what is feasible in a project proposal such which involves a trail design and routing plan helps drive the structure of green trail systems and tourism.

columbia parks & recreation



Figure 0.12 Elementary teaching



Figure 0.13 MKT Trail Bridge



Figure 0.14 Blonde on Suncheon Bay Expo drawings



Figure 0.15 Urban Design
Mixed-use Nightlife

The progression of this master's report is finally defined personally by my three interests in streetscapes, large scale planning, and urban design. As such each of these topics and there related subject matter helped to shape green trail systems and tourism using evidence based design. This document serve as a model for project development in a professional setting.

Field of Study

Urban Design
Streetscapes
Parks and Recreation

Regional GIS Analysis

Parks and residential connections
Pedestrian transit and amenities
Diversity and age groups

Urban Design and Development

Mixed use spaces and amenities
Tourism and entertainment districts
Business developments

professional enhancement

As a designer and future landscape architect this project serves as a basis to enhance and provide research into major topics which I will pursue throughout my career.

Urban design is one of the two main areas of study I hope to progress for the profession of landscape architecture. How urban environments function

and ways of improving the urban lifestyle for residents are two major relationships which this project seeks to provide me with additional knowledge.

Creating a better quality of life with urban trails and parks can be achieved with a better understanding of the benefits and logistics of implementing program elements such as these.



Figure 0.16 Show Me State Games Biking



Figure 0.17 Northern Truman Sports Complex Stadiums

With my design interests described the next phase was combining the objectives of the project scope. These included university master's degree objectives, CSP objectives, and the RIC coalition objectives. Each influenced the shape of this report and the structure of green systems and tourism as a whole.

University Objectives

This project is the capstone to the five year master's program for the landscape architecture program at Kansas State University.

As such this project acts as a thesis level graduate research document. The first semester focuses on research and distilling information which grounds and formulates a thesis and project proposal. This

proposal serves as a project definition in which landscape architecture students address all defined dilemmas and issues related to the project proposal.

The application of a design project at a graduate level is the goal of the master's project and is the feature to the completion of the MLA degree.

CSP (Creating Sustainable Places)

Creating Sustainable Places is an initiative to help the region develop a path to a more sustainable future. It includes many different partners from the private, not-for-profit, and public sectors and addresses different aspects of what makes a region

great and sustainable. The vision and history of this initiative, and the plans that this initiative is built on, are contained in the Regional Plan for Sustainable Development (MARC).

Kansas City and Rock Island Corridor Coalition

The coalition is a membership organization consisting of local government officials and private sector supporters. The coalition is led by representatives from the cities and counties along the old Rock Island Railroad corridor in the Kansas City area, including

the cities of Lee's Summit, Pleasant Hill, Greenwood, Raytown and Kansas City and Jackson and Cass counties. One representative from each unit of local government serves on an executive committee (MARC).

importance



Creating Sustainable Places

VIBRANT

CONNECTED

GREEN

MID-AMERICA REGIONAL COUNCIL — KANSAS CITY REGION

Figure 0.15 Creating Sustainable Places



Figure 0.18 Manchester Trafficway

project goals



Figure 0.19 Kid Fishing

In accordance with the Mid America Regional Council (MARC), the redevelopment goal of the Rock Island Corridor is to envision ways of planning that create spaces which are vibrant, connected, and green to provide more livable cities and suburban spaces.

This project addresses each goal with a direct design response.

Improving the quality of life for Kansas City Residents through lifestyles choices and opportunities within the urban settings of Kansas City.

Connection of people along the Rock Island Corridor in a sustainable growth pattern by creating attractive living environments adjacent to trail networks.

Use and access to **alternative forms of transportation** other than automotive travel within the Rock Island Corridor will promote urban districts and bike transportation along created trails.

Addition of greenspaces for residents and visitors of Kansas City. In which community gardens will help to grow food locally and the addition of parks will promote active lifestyles and allow more exercise opportunities for kids and adults.

project objectives



Figure 0.20 Stephens Park Old Course

In respect to the project objects to create more vibrant, connected, and green spaces three items are developed for implementation.

Creation of mixed-use districts:

Establishment of mixed-use zoning overlay areas for business, housing, and public infrastructure (banks, libraries etc.) development.

Routing plan of an urban cultural trail system:

Routing of a urban trail that connects other parks, tourism destinations, and historic sites to the Rock Island Corridor and trail.

Plan of new parks to be implemented:

Addition of park overlay zones which add greenspace will improve air and water quality.

design goals



Figure 0.21 Cultural Trail Accessibility

The form of the project will be aimed at designing both the route and project sites in relation to quality of life and branding. The image of these designed areas will be clearly distinct from that of typical development in the Kansas City area. The psychological impact of this program will be a system of spaces that encourages new forms of development and more pedestrian friendly living environments. Potential residents to these developed

areas will have an increased desire to choose the real estate along the Rock Island Corridor than other suburban areas of Kansas City. The design goals for are as followed.

To create attractive living spaces and environments for potential residents and business owners:

Establishment of housing districts with DU/acre of 20 or higher

Add green space and sustainable development ideas:

A core element to add value and visibility to the corridor will be green systems such as parks, greenways, and sustainable BMP systems for stormwater management. Trees along the streetscape of the urban trail while housing and mixed-use buildings are under construction will decrease the visual burden.

Increase tourism, historical education, foot traffic to local businesses in Kansas City:

Tourism-based markets can generate revenue for cities and business but also create a sense of place, identity, and connections in an area.

design objectives



Figure 0.22 Cultural Trail Housing

The design objectives for this project to work include economic development which is sustainable in nature and also profitable; to promote and ensure density growth in designated areas of growth; to protect water and air quality of residents and future home and business owners. The initial investment is lower than that of typical transportation systems, and re-purposing street lanes will allow utilities to be updated at the same time during the project time line.

The explanation of these design items are as followed.

Mixed-use districts which have opportunities for housing, business, civic infrastructure, and bmp streetscapes:

Vacant land and brownfield sites allow for urban in-fill opportunities and the reestablishment of urban neighborhoods.

Addition of parks where services areas are not reached and allotted for public activities and events.

Creation of an urban cultural trail which connects major objectives such as tourism destinations, historical spaces and business centers.

Public art, entertainment districts, and other forms of local cultural aspects will be connected to each other and allotted space.

“If we worked on the assumption that what is accepted as true really is true, then there would be little hope for advance”

-Orville Wright

Design Process



Figure 0.23 Prospect Residence



Figure 0.24 River Bluff

Several aspects of my design process and design philosophy were chosen as staples. These five elements include social equity, economics, user experience, social interaction, and environmental quality. These items were used as determining factors in the process while developing green trail systems and tourism.

Aspects in design choices

Social Equity

Improving social equity for people in a given area

Economics

Creating a more profitable business and career environments

User Experience

Creating memories from spaces which people visit

Social Interaction

Increasing leisure time and quality for people in urban environments

Environmental Quality

Improving air and water quality for people and wildlife

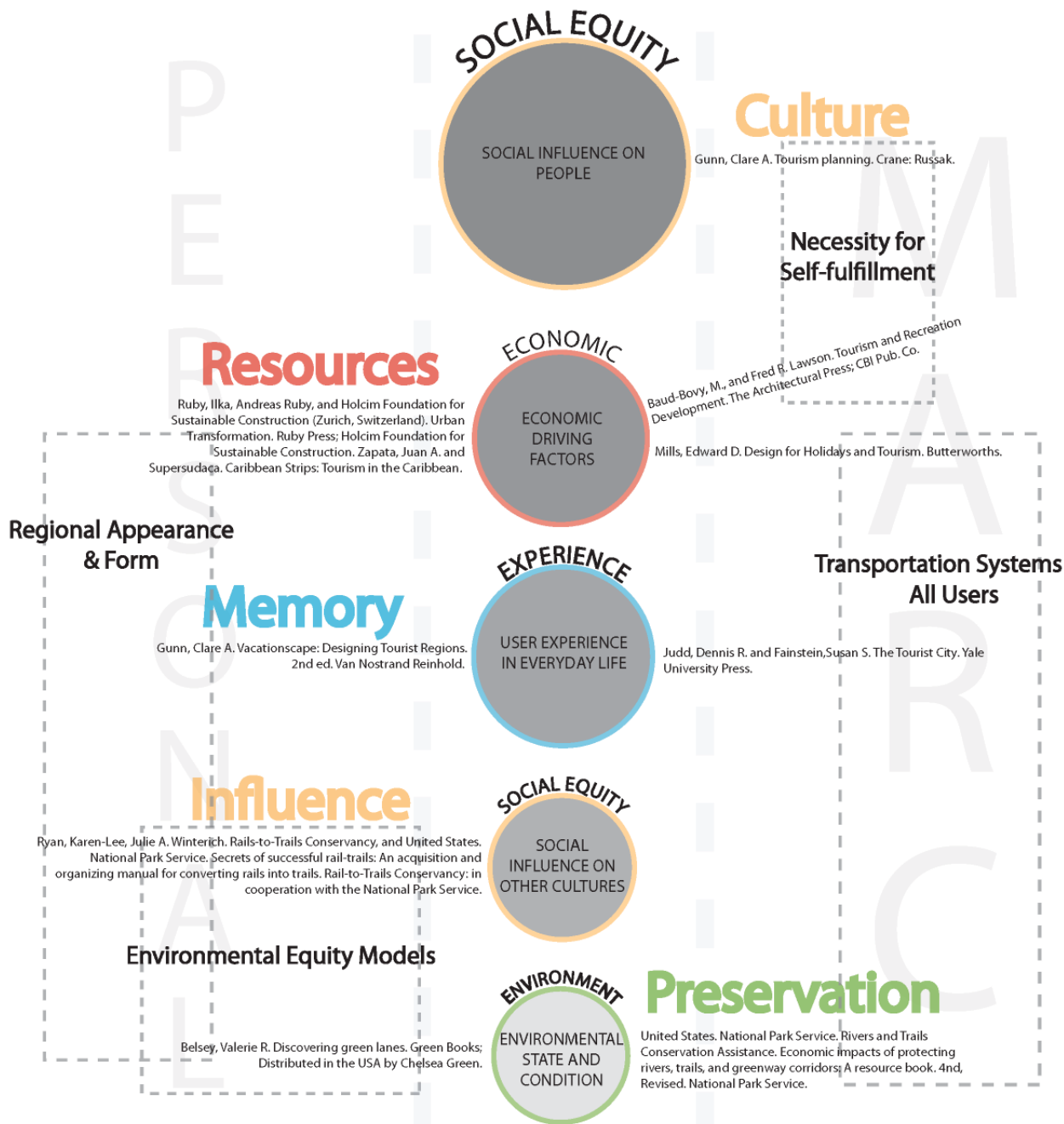


Figure 0.25 Literature map



Figure 0.26 Independence Rail

With personal project aspects in mind the next step was creating a system for the proposal and weighting my design interests with the mission and goals for the Rock Island Corridor and the CSP initiative. This methodology is as followed.

Methodology for conceptualizing project

Inventory and analysis > Dilemmas > Issues > Critical mapping > Objectives > Proposal

Six phases of analysis were studied before finalizing the project statement and outline. As seen in the flowchart above, inventory and analysis of the Rock Island Corridor was conducted. Dilemmas were

then established and critical mapping was developed from the interaction of issues within defined dilemmas. From these, critical map program elements were defined and a proposal for a design project was created.

Personal design process

Design interests vs. Project Objectives/goals and mission

This report was developed in respect to the project methodology as well as my design interests as a person, and the creating sustainable places project mission and objects.

It was through my interests in urban design and the CSP initiative which lead me to focusing on the regions of the Rock Island Corridor which were closer to the CBD of Kansas City.

Design philosophy

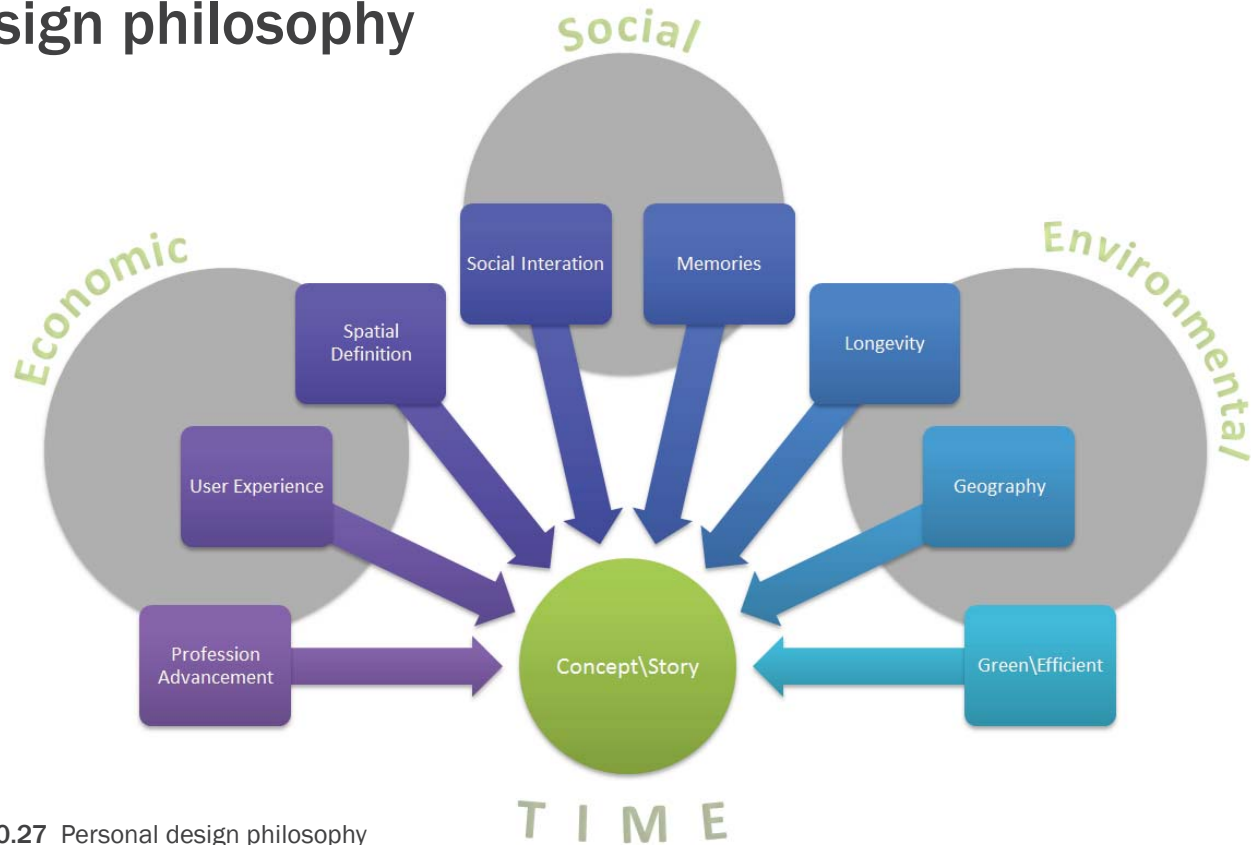


Figure 0.27 Personal design philosophy

Three areas of interests define all of the design decisions I make as a designer and which all have an influence on this project. These issues include economic, social, and environmental influences on a project. Within each of these areas of influence, I have defined major aspects which related to this report. Within the economic area are professional advancement, user experience, and spatial definition. Within the social area are social interaction,

and memories. Finally, within the environmental area are longevity, geography, and efficient/green systems.

The influence of these on the Rock Island Corridor have helped to shape the thesis as well as the design proposal as a whole. The concept and story for my design process is never developed before I start a project. I developed the story out of the second tier which is the outcome of these three categories and

the comprehension of there involvement in each project. In this project pedestrian traffic has always been the concept. A story of people being the majority traffic and instead of automobiles. As a final perspective how all of these pieces to the puzzle fit together time is the final aspect to which everything identified is related to.



Figure 0.28 corridor underpass ▼

Fall Scheduling and Goals

- Umbrellas and Project Definition
 - Research Questions
 - Research Documents
 - Literature Review
 - Thesis Proposal
 - Process Diagramming
 - Case Studies
 - Site Inventory and Analysis
 - Programming
 - Project Proposal
- Define role in group research
 - Address initial KC dilemmas
 - Identify area of study within dilemmas
 - Gain knowledge on tourism design
 - Define an argument
 - Conceptualize workflow
 - Comprehend successes and weakness
 - Understand site relationships
 - Define elements of design proposal
 - Define design project proposal

Spring Scheduling and Goals

- Programming revision
 - Conceptual Design
 - Text and documentation outlining
 - Design Development
 - Final Design Document layout
 - Final Master's Report
- Condense project expectations
 - Identify key design elements
 - Outline and compose argument
 - Produce informative documents
 - Organize mater's document
 - Describe an approach to improve CSP

A linear model for project scheduling and workflow was used. The fall 2011 semester of the two semester timeline was used for formulating research questions and analyzing literature in order to form a project proposal. The spring 2012 semester focused on programming and creating a design proposal which helps Kansas City in their future design of the Rock Island Corridor and other suburbs.

MASTERS'S PROJECT TIMELINE

2011-12

PROJECT PHASE	STARTING	ENDING
Group Rules of Engagement	8.22.2011	9.6.2011
Project Definition	9.6.2011	9.27.2011
Research Questions	9.27.2011	10.4.2011
Project Meeting	10.17.2011	10.17.2011
Literature Review	10.4.2011	11.1.2011
Process Diagrams	10.4.2011	11.1.2011
Case Studies	10.25.2011	11.15.2011
Program/Site Inventory and Analysis	11.15.2011	2.5.2012
Final Proposal Document	12.8.2011	1.27.2011
Conceptual Design	1.17.2011	2.19.2012
Annotated Outline	2.19.2011	3.2.2012
Design Development	2.20.2011	3.18.2011
Final Master's Report Document	3.18.2011	4.9.2011
Final Defense	4.18.2011	4.18.2011



Figure 0.29 Project Schedule



Figure 0.30 ICT crosswalk path

Project path mapping

Two main sides influence the project path as the project was developed. Personal design interests and approaches combined with MARC's project objectives and goals to synthesized the research and formulated a thesis.

After the thesis had been formed and the program developed, environmental response and

site longevity or lifespan were all weighted to formulate a design approach for the Rock Island Corridor.

After the design had been developed a methodology of both proactive and reactive ways implementing design decisions is be described as future research and studies for the MARC group and its members.

Linear project flow

Along with the path of the Rock Island Corridor the project workflow was very linear. Every step had been dependent on the previous piece of information.

the project have been completed in order to give and accurate wholistic assessment of the methodology for implementing the suggested strategy.

My personal design process is linear as the path map to the right indicates. Each step is completed and reviewed but the overall picture is not readdressed until all phases of

architectural style of housing, Available land, condemnation, and cost analysis research

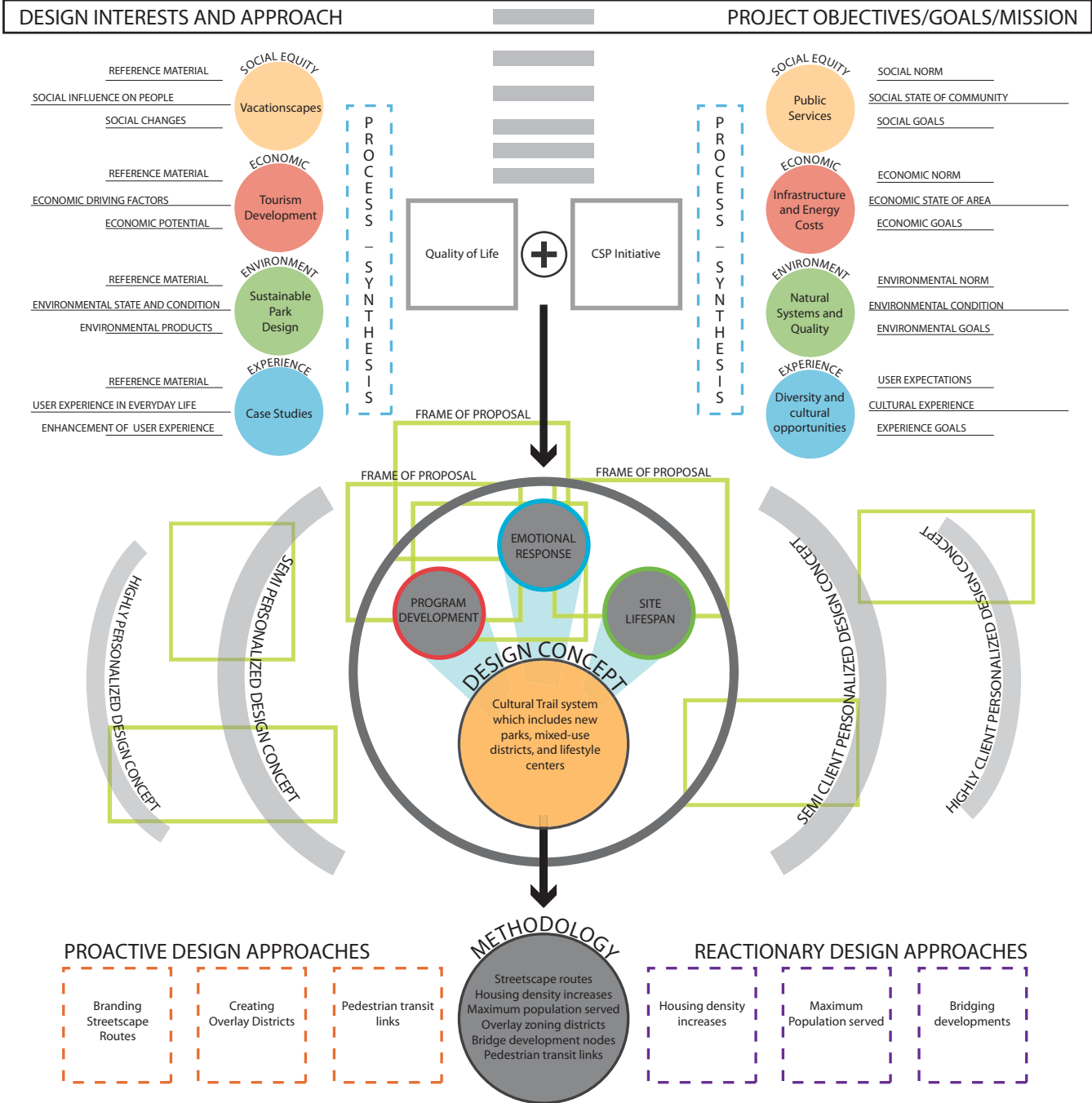


Figure 0.31 Design process path map

History of Kansas City in respect to project interests

Chapter II



Figure 1.01 Historic Map of Kansas City

Vibrant, Green, and Connected Historic Elements

Each element in the program established for green trail systems and tourism was looked at in regards to historical and current context. This series of pages establishes a base and general background knowledge of program elements which are used in the design proposal. The organization of the program elements are broken up into categories of Vibrant, Connected, and Green taken from the CSP.

Figure 1.02 Kansas City Skyline



“Kansas City, Missouri ... known for its barbecue and jazz, combines classic attractions—a top art museum among them—with a new emphasis on nightlife in a revitalized city center.”

-- National Geographic Traveler

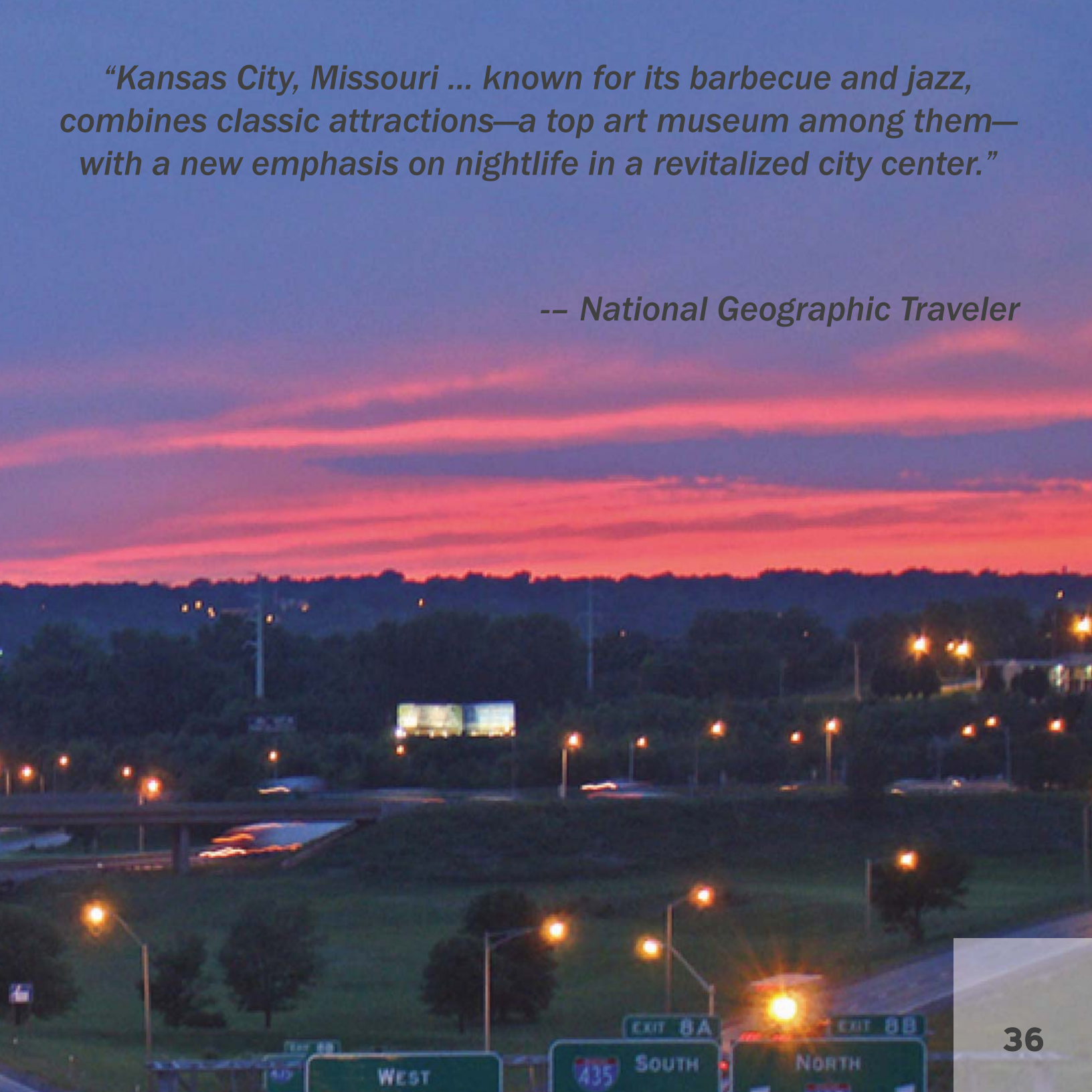




Figure 1.03 Green system

Kansas City Context

General historical background

Kansas City was established officially in 1853. Its relevancy to the civil war set the stage for the area to be used as a battlefield between the north and south. Post war Kansas City experienced a growth with the building of the Hannibal and St. Joseph railroad bridges (KC Group). Today Kansas cities metropolitan region has over 2 million people approximately and is made up of 9 counties (MARC).

Demographics

As a result of westward expansion Kansas City is a diverse city. It acts as a gateway and the diversity includes African, African American, Asian, Latino, Italian, Irish, German, Native American, Slavic, Mediterranean and Middle Eastern ethnic groups (KC Group).

Suburbs and cities

Kansas City is organized into a system of neighborhoods which comprise many suburb cities, some with historical significance.

Geography of Kansas City

Kansas City has a total area of 127.8 square miles. 124.3 square miles of it is land and 3.5 square miles of it is water (KC Group).

J.C. Nichols and Brush Creek/Country Club Plaza

Growth came to the city when J.C. Nichols developed the Country Club Plaza district in 1925. The Country Club Plaza was the first shopping center in the United States that was designed to accommodate the automobile. The district was developed to be on the outer edges of Kansas City to appeal to those who could afford to live outside of the city limits, which is how it was established and remains as an upscale housing district. At this time the Automobile was gaining in popularity as it was a new technology that allowed individuals to go further at faster speeds than horse and buggy (KC Group).

Kansas City, Missouri



Figure 1.04 Kansas City Cities

0mi 7.8mi 15.6mi 31.2mi



Figure 1.05 Plaza Lights

Entertainment and Music

Jazz history

“Kansas City is world renowned for its rich jazz and blues legacy. Jazz in Kansas City was born in the 1920s and continues today in clubs and events held throughout the city. More than 20 area nightclubs feature jazz on a regular basis. The jazz history is a key part of culture of Kansas City and its expression” (KC Travel).

Power and light district

Kansas City also is home to the Kansas City Power & Light District. This outdoor nightlife area is a premier dining, entertainment and shopping district in the heart of downtown Kansas City.

Cuisine

Kansas City’s reputation for its bar-be-que leads itself to also being used as a marketing strategy for historical and cultural tours of the city. Leaders such as Henry Perry who was the man responsible for creating the identity of Kansas City barbecue should be used as historic trademarks (KC Travel).

vibrant

The Kansas City Power and Light District is one of the main nightlife and entertainment area destinations for people who are both visitors and residents of Kansas City. It has a mixture of 50 unique restaurants, bars, shops, and entertainment venues (KC Travel). Its relative short walking distance to the Sprint Center also adds another dimension to the potential development of a development district near downtown Kansas City.



Figure 1.06 Power and Light District



Figure 1.07 Jazz musicians

Music is another aspect of Kansas City's history which could play a critical role in the further expansion of tourism and tourism related destinations. Jazz was began around the 1920's and flourished around

the 1930's. Jazz settings typically occurred in cabarets, and speakeasiers which further developed the musical style. Alcohol also played a vital role, as Kansas City's underground market during prohibition

allowed jazz entertainment venues to be the most desired places for late night and weekend entertainment (KC Travel).

As music constantly changes, Kansas City should strive to always be on the forefront of music as it once was with Jazz. Mixed-use districts offer a great opportunity for music and clubs to be built and used frequently by a mass audience. Not only could music be used a future branding mechanism it could also be a major source for jobs and economic revenue for the city.



Figure 1.08 Historic House

Historical events

Civil war

Situated between pro and anti-slavery forces, the Kansas City area was ground zero for the Civil War in the West. Many of those battles took place as early as the 1850's, and interest is peaking as we approach the 150th anniversary, or sesquicentennial, of the Civil War.

To satisfy public curiosity, a number of observances are planned, and there are several “don't miss” museums in the area (KC Travel).

Historical events such as civil war sites in Kansas City should be brought back to life and connected to as the CSP plan, and region continue to develop.

Katy Trail

The Katy Trail is a 237 mile (386 km) trail stretching across most of the state of Missouri....

America's longest “rails-to-trail” project, formerly the MKT rail line, is flat and scenic. It's ideal for hiking, running, or cycling on just about any kind of bike. Horseback riding is also allowed on a 35 mile section of the trail, from Sedalia to Clinton.

Many cross-country cyclists include the Katy Trail in their tours. It is part of Adventure Cycling's Lewis & Clark route, as well as the American Discovery Trail (Bike Katy Trail).

The proposed Katy trail extension is a critical part to bringing people who are using biking as a leisure activity to the new urban cultural trail route. The route which will bring them to the downtown region of Kansas City could be key in business growth.

Historic Destinations

KC Union Station and the Kansas City Museum landmarks

Kansas City has a rich history and many destinations which showcase historical artifacts. One such destination and landmark is Union Station located on the southern end of the Central Business District of Kansas City as shown in figure 1.09.

Many museums also exist around Kansas City such as Kansas City Museum at Corinthian Hall. Which happens to be the oldest and largest museum of local and regional history in Kansas City (KC Travel).

Historic destinations throughout Kansas City allow for visitors, residents, and school students to learn about the areas in which they live.

Using destinations within project boundaries as opportunities to connect spaces and people with local history can provide KC with a more vibrant community. The creation of connected

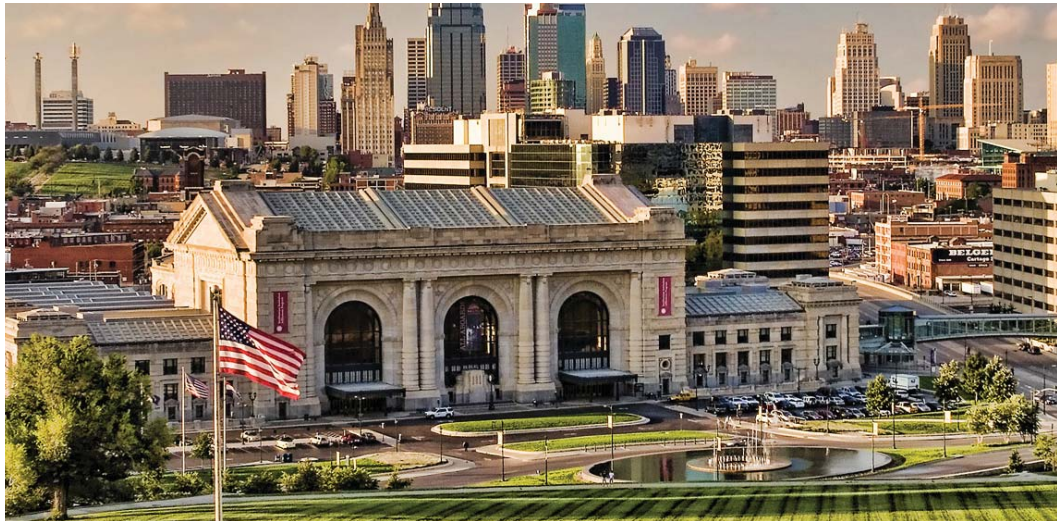


Figure 1.09 Union Station in Kansas City

historical destinations is one method of improving the quality of life in a area. Providing users with access and links to spaces which provide them with cultural knowledge of a region.



Figure 1.10 KC Max Shelter

Automobile Oriented development

Automobile roadway footprint

Auto oriented development has been the staple for most cities in the last 50+ years. Increasing the limits of travel for daily work commute and also increasing the distances at which people can access locations on a daily basis. However, with that comes demand increase on infrastructure, and the lower density of built locations. Food and other basic needs no longer have to be within walking distance and now automobile travel is no longer an desire but a necessity. A necessity which is both costly to purchase and maintain.

With this comes the decrease in pedestrian foot traffic along streets and the decrease in visibility to storefronts due to the higher rate of speed. The development footprint increases as now stores have to service a regional crowd rather than a local neighborhood. Access roads are now a necessity, and the footprint of the development as a whole starts to expand.

This increase in development and road structure puts a higher demand on road work and maintenance as well as worker safety. Utilities now have to be expanded and also maintained. This development structure is not efficient and not sustainable.

Daily commutes are an aspect of a daily routine which could be improved with highway design, but would be just as well served by having the option of living closer to work places. Changing the way we think about what improves someone's day to day quality of life is the next step in how we develop after the age of cars.

Traffic and Highways

Dependency on the Kansas City road and highway network

Traffics and highways have defined development and its pattern for the last 50 years. The highway system in Kansas City is defined by two major interstates and highway systems. These include interstate 70 and interstate 435.

One is a linear road which travels east-west for cross state travel while the other is an outer city wide ring (I-435). There are other major roads which influence and create barriers for people such as highway 35 and other major roads which will be discussed further on in the document.

The major issue with these road networks is that they create barriers and promote sprawl. This dependency on road development has to change for the city growth model to change.

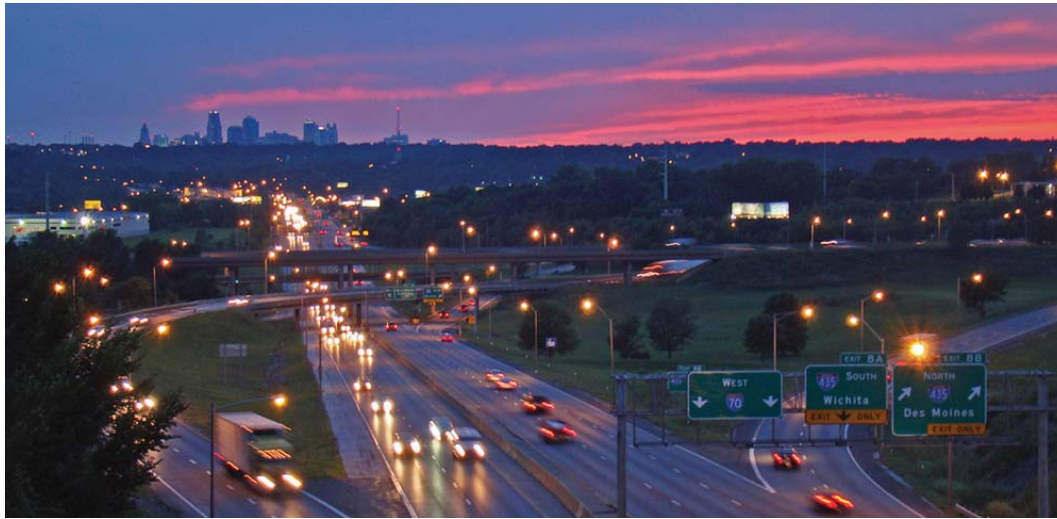


Figure 1.11 Kansas City Skyline



Figure 1.12 Katy Trail Connector

Pedestrian mobility

Urban mobility

Barriers exist in many forms for pedestrians within the city. Barriers are not just physical barriers such as walls, private property, and roadways. Barriers exist when there is a lack of items such as signals and crosswalks but also the quality or lack of sidewalks. Mobility is further decreased by the walking distance to an item. Natural features such as streams, rivers, and topography greatly effect how pedestrians move. Providing designs which help overcome these barriers change how easily people are able to get from one area to another without having to use a form of transportation.

Sidewalks

Sidewalks which are both available and in good condition are key to people and their ability to move within an urban environment. Several factors influence a persons desire to use sidewalks, these include condition, lighting, safety, wayfinding, and street adjacency distance. Low width sidewalks which exist closer to higher traffic areas are much less desirable to use and a hazard to children.

Trails

Pedestrian mobility is also influenced by the access and availability of trails. Again the use is dependant on the relative distance to connections, the condition, and the perceived safety. Increasing number of connections and routes within an area allows people to use these routes as alternative ways of biking to work and walking to destinations.

Trails and MetroGreen

Availability of greenway and trail systems in Kansas City

MetroGreen is an interconnected system of public and private natural areas, greenways and trails linking communities throughout the Kansas City metropolitan area.

The greenway plan covers more than 1,100 miles and spans seven counties in total. Three of these counties (Leavenworth, Johnson and Wyandotte) are in Kansas and four of the counties (Cass, Clay, Jackson and Platte) are in Missouri.

MetroGreen uses the parkways and boulevards concept established by George Kessler 1894 plan for Kansas City. The concept uses more than 75 corridors that are combined to form a regional network striving to connect natural assets.

Currently 200 miles of the system has been constructed and an additional 100 miles are planned to be constructed over the next ten years.



Figure 1.13 Rock Island Corridor Undeveloped Greenway

Finally the MetroGreen plan establishes five types of trails which are used in their system. These include No facility development, Limited development, multi-use unpaved trails, multi-use paved trails, and bike and pedestrian facilities within right-of-ways (MARC).

Expanding these trail systems and adapting how urban trails are viewed by connecting some planned and existing MetroGreen trails could serve as an efficient

way of expanding the trail system in the Kansas City region.



Figure 1.14 Tree stand

Air and Water Quality

Stormwater

Stormwater is a critical component of developed urban land. Due to the development and sprawl which Kansas City has seen over the last 100 years the amount of Impervious surface has increased. This has many effects on stream bank erosion and water quality.

The watersheds in Kansas City feeds directly into the Missouri River and connects to other cities along both the Missouri and Mississippi Rivers. This connection means improving water quality not only effects Kansas City but its neighbors.

Runoff

As population increases and the amount of developed land continues to increase the more of an ecological and infrastructure issue managing stormwater becomes.

The maintenance of controlling runoff by adding and replacing stormwater systems, to removing sediment buildup within these pipe system adds taxes to current and future residents of Kansas City.

BMP's

Creative ways of approaching stormwater as population increases be in BMP's such as bioswales, green roofs, or countless other options. Simply reducing the building foot print of the expanding population by increasing density and creating more multi-family living environments could help control stormwater.

Finally, there are brownfield sites which exist throughout Kansas City, and occur in a higher rate in the crossroads district. Finding ways of restoring these areas to ecological friendly places helps to fix prior mistakes and public hazards.

Protection of natural resources

MDC and the Kansas City Discovery Center public education

The natural spaces which encompass and interweave throughout the Kansas City area should be protected and cared for as the development of the Rock Island Corridor and the Kansas City Metro Region continue to grow and develop.

Items such as vegetation, waterways, and animals which makeup our landscapes should be thought about and cared for as we create new and evolving systems.

The Discovery Center is one such place which showcases these elements such as wetlands, gardens, wildlife, and other ecological systems. The building itself is another model of sustainability and environmentally consciousness (MDC).

MDC (Missouri Department of Conservation) and the Missouri Department of Natural Resources also have outreach services which are housed at the Discovery Center.



Figure 1.15 Missouri Woodland

Finally, the Discovery Center has many programs which provide educational services in regards to environmental awareness to urban children and adults in order to appreciate the beauty of nature. These include the outdoor skills, and recreation activities which one can do in the Kansas City area (MDC).

As the development of Kansas City increases these natural spaces become more and more

valuable to the community as a resource. Not only physiological, but economically as they provide many mitigation effects to the increase in development which is a detriment to air and water quality.

The creation of new parks and how they address educational values relating to environmental issues provides an opportunity for Kansas City to increase its role in civic education.



Figure 1.16 KC Parks Logo

History of Parks

Role of parks in urban environments

Parks provide two key elements to people who live where natural features and environments have been for the most part replaced with man-made structures. These two things are as follows. Leisure time, which is the time available when everyday items such as work, sleep and other basic needs such as food have been met (Baud-Bovy). This is time associated with rest and the enjoyment of experiencing your surroundings. The second item is recreation. Recreation involves taking time during leisure time and pursuing activities which normally would be filled with other committed activities such as childcare, homework and using that time to pursue other activities (Baud-Bovy).

Role of parks to civic programs

By having neighborhood parks you are able to have both of these experiences (leisure and recreation). Neighborhood parks facilitate and provide the ability for family gatherings to occur, festivals and art events, educational demonstrations, exercise, and play facilities. With limited natural environments in urban cities neighborhood parks are the backbone of providing spaces for these events and activities to occur.

The other aspect of park space is the civic function. City heritage festivals, sporting facilities, community events, entertainment venues, and shelter spaces for specialty events allow the community to bond and share in each other's lives. Without these spaces the ability to facilitate these types of activities goes away and with it the bond between residents of the city.

Kansas city parks and recreation

Mission and goals of parks and greenspaces in Kansas City

The Kansas City parks and recreation department is a core component of this design proposal. The mission statement of the parks and recreation department is as follows.

To improve the quality of life by providing recreational, leisure and aesthetic opportunities for all residents, and by conserving and enhancing the environment. We will accomplish this mission by providing quality programming, making the best use of existing resources, developing a supportive and influential constituency, developing effective collaborations and partnerships, and acquiring and preserving natural features.
(City of Kansas City)

As stated in the first line, their mission is similar to this project. Improving quality of life for their users through opportunities such as aesthetics, recreation, and leisure opportunities.



Figure 1.17 MKT trail park

The park system itself operates and maintains approximately 12,000 acres of parkland which includes 219 parks, 132 miles of boulevards and parkways, 10 community centers, and various other public amenities (City of Kansas City).

The park system is governed by a volunteer five-member board of parks and recreation commissioners appointed by the mayor.

Management of these park systems is key to the successful additions proposed in this proposal. Additional staff will be necessary for the management and maintenance of adding additional parks. However, if established with areas that have communities, the upkeep can be maintained within the new communities created by residents.

Rock Island Corridor Inventory & Analysis

Chapter III



Figure 2.01 Raytown Road View East

The inventory and analysis portion of the project area shows how the both the current conditions of the southeastern central region of Kansas City, MO and the dilemmas which exist for the current and future residents expected to move to KC. This section describes how issues such as diversity and population exist in relation to parks, trails, and mixed-use district aspects. Furthermore, this chapter is divided in to four parts. The first is a description of the inventory process used, second is the site selections and boundary information, and the third examines elements of inventory such as physical attributes, infrastructure, demographics, and destinations within the Kansas City Metro Regional and the site boundaries.



Figure 2.02 South Truman Sports Complex Wide



The process of inventory and mapping is shown in figure 2.02. MARC compiled a set of GIS data which along with Census 2012 data allowed for a substantial amount of data collection related to the site to be possible. From there extracting

the critical data and preparing it was the next phase. Mapping followed by analysis completed the process and is described in more detail in figure 2.02. Each program element as listed below was derived from research and used as inventory.

Gather Data
Extract Critical Information
Prepare Data

inventory



Figure 2.04 Southern Truman Sports Complex Greenspace

Green Systems and Spaces

A core element to add value and visibility to the corridor will be green systems such as parks, greenways, and sustainable BMP for stormwater management as well as trees along a lot of the streetscape of the urban trail construction. Because of this an inventory of physical features will be described showing parks, landuses, waterways, and topography.

Historical Sites

Public art, entertainment districts, and other forms of local cultural aspects will be connected to each other and allotted space within project sites to establish a greater sense of branding for Kansas City. An inventory of where program oriented historic site locations and cluster exist will be mapped.

Alternative Pedestrian Transportation Systems

Use and access to forms of transportation other than automotive travel within the Rock Island Corridor will promote urban districts and bike transportation along created trails. Bike trails, transit lines, and trail networks will be mapped.

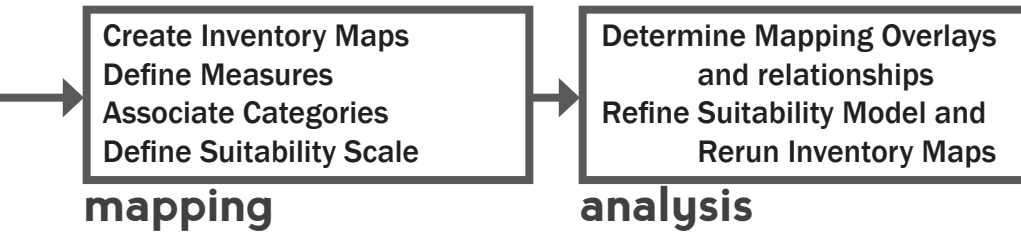


Figure 2.03 Inventory process



Figure 2.05 Northern Truman Sports Complex Stadiums

inventory process

The issues related to these program inventory features are listed and described in further detail to establish the measure which were used to analyze each map.

Urban Trail Network

Performance will be measured by the number of historic sites, potential businesses served, and greenspaces connected.

Pedestrian Mobility

Performance will be measured by the decrease distance to access items such as trails, parks and transit stops.

Parks and City Art

Performance will be measured by the number of parks served by trail proposals.

Housing Types and Clusters

Performance will be measured by the number of potential future residents served.

Brownfield renewal and urban in-fill

Performance will be measured



Figure 2.06 Cultural trail bio-retention planters by acreage of land redeveloped or re-purposed.

Safety Structures

Performance will be measured by area served by structure type.

Cultural and Historic Items

Performance will be measured by number of visitors and residents exposed in the service area of each location.

Wayfinding

Performance will be measured by number of routes potentially served as well as potential number of people served.

Education

Performance will be measured by distances to schools to developed program elements such as parks and trails.

Programmatic Elements

<i>Function</i>	1 <i>people</i> Population, Schools, Ethnicity, Family Programs, Public Spaces
	2 <i>activities</i> Memorials, Greenfields, Community Build, Trails, Parks, Bike Lanes
	3 <i>relationships</i> Art, Roads, Industries, Public/Private, Streetscape, Housing, Schools
<i>Form</i>	4 <i>site</i> Stadiums, Stores, Grocery, Crosswalks, Bridges, Paved Trails, Greenways
	5 <i>environment</i> Ag. Areas, Climate, Smog, Water, Parks,
	6 <i>quality</i> Neighborhood stigmas, safety, Natural/Urban Attractive Settings
<i>Economy</i>	7 <i>initial budget</i> Streetscape Cost, Concrete Trail Implementation
	8 <i>operating costs</i> Cost of electricity, Cost of programs, Snow removal
	9 <i>life cycle costs</i> Average worth of homes, Lighting replacements, Concrete
<i>Time</i>	10 <i>past</i> Utility age, Types of Zoning, Planning update cycle
	11 <i>present</i> Zonal restrictions. Pedestrian friendly zones, City building practices
	12 <i>future</i> Branding of city, sustainable features, business profits, home values

Figure 2.07 Inventory qualities

site boundary

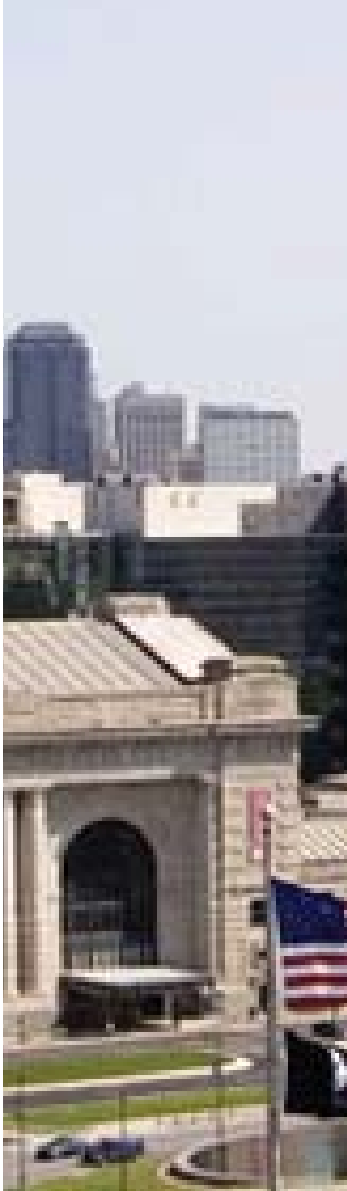


Figure 2.08 Union Station in Kansas City

The site boundary selected was determined by the following elements, program requirements, weighted influences, and objectives.

PROGRAM REQUIREMENTS

Brownfield sites

Rock island corridor trail connection

Existing park system connection

Cultural Trail (tourism areas)

Historic Sites (Tourist Destinations)

Housing (Mixed use districts)

Connections to Trails
Park Connections
Entertainment Zoning
Transit Stops

Wayfinding

Signage
Visibility/Topography
Destination

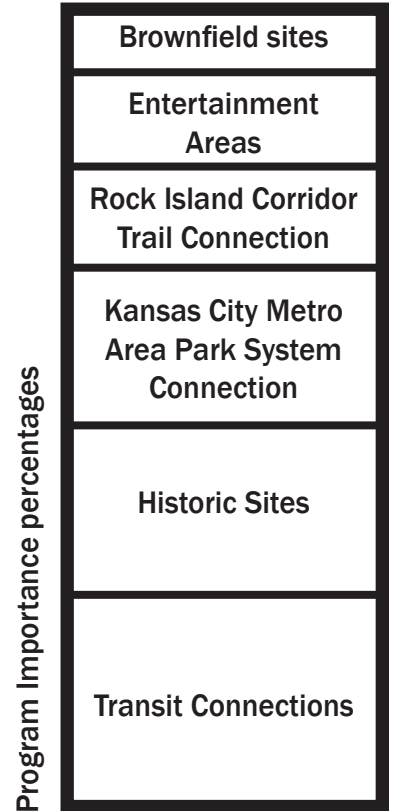


Figure 2.08a Program percentages

OBJECTIVES

The first objective is the implementation of a cultural trail in Kansas City which will connect historic sites and parks between the Truman Sport Complex and the Sprint Center.

The second objective is to develop a greenspaces and parks by using brownfield sites and land within areas of service area voids to current residents in the Rock Island Corridor segment.

The third objective is the creation of trail head node sites around the Sprint Center and Truman sports complexes as examples of modern development districts.

The forth is to create mixed-use housing districts which will serve as higher density real estate zones and examples of pedestrian oriented development schemes aimed at improving quality of life to its residents.



Figure 2.09 Sprint center at night



Figure 2.10 Sprint Center Street

These two end nodes for the main cultural trail link are described in further detail to their characteristics and aspects which relate to the program initiative.

Sprint Center Description NW Lifestyle Node

Sprint Center Site Program Elements Contained within site boundaries:

The site contains a park system running North-South as well as a connection to the Metro Green trail system. Based on these two elements a trail head node will be established to the East edge where the Rock Island Trail System adjoins.

Areas of Higher population are located to the Northwestern and Northeastern edges of the site boundaries. Trail accessibility to an urban cultural trail which accesses the Rock Island Corridor will allow residents and visitors to access the Truman Sports Complex via the trail network to be implemented.

Brownfield sites and urban in-fill opportunities exist on the southern portion of the site located in the Crossroads neighborhood. These areas will serve as development opportunities for mixed-use

development which will include housing, business, and public infrastructure.

The western portion of the site and 70 highway are rich with historical sites which are all bounded by park. These historic sites will be connected by the implementation of an urban cultural trail which will also improve streetscapes which it touches.

Site definition:

The site is approximately 0.968 square miles. It is located in the Central Business District of Kansas City with its center at -94.5782, 39.0985. The neighborhoods of Crossroads, Hospital Hill, and Paseo are adjacent spatially to the site boundaries.

Impact of Program Elements to Site:

The Sprint Center site is over 90% developed land with the rest consisting of urban forest. Adding greenspace from the implementation of parks and BMPs, this site will improve both water and air quality for the

downtown visitors and residents of Kansas City. Parks will improve the greenspace and recreation image of Kansas City attracting visitors and potential.

The addition of an urban cultural trail will improve quality of life by increasing pedestrian mobility as well as connecting users to destinations of historic, cultural, and entertainment value throughout the region.

The addition of housing locations within mixed-use development along the southern portion will not only prevent further sprawl in suburban locations, but will also promote access to downtown tourism destinations and park systems spurring activity.

Dimensions Landscape Architects bring to the success of this site:

Spatial connections between developed objects will be critical to the future sustainable success of the Kansas City CBD and Crossroads neighborhoods. Pedestrian mobility and access to promote lifestyle changes will be established by land planning schemes such as the urban trail network and its connections

to business destinations. Trail routing and placement of buildings should be developed with the element of future in-fill and growth over time.

Research Questions which are vital to understanding this site:

What access point the Creating Sustainable Places initiative will be using as the trail alignment will determine where on the eastern edge of the Sprint Center site the trail head node will be placed and its ultimate design. Additionally, the feasibility and alternative successes which decking or capping the of the southern I-670 Interstate will have for the Sprint Center Site will need to be addressed during conceptual design phases.



Figure 2.11 Main Street Sidewalk



Figure 2.12 TSC Raytown Rd.

Truman Sports Complex

Description

SE Lifestyle Node

Program Elements Contained within site boundaries:

Currently the Truman Sports complex site contains six parks as designated by MARC. Two of these parks are closely related to the current proposed trail and transportation alignment for the Rock Island Corridor.

The Rock Island Corridor dissects the Truman Sports Complex site in half running northwest to southeast. This will serve as a connection between the residents and program elements.

The Truman Sports complex itself will serve as a site for mixed-use business redevelopment for partial areas of impervious paving in regards to the stadium's surface parking lots and available greenspace to the southwest of the complex.

Site definition:

The site contains over 50% of developed land. Unlike the Sprint Center site the Truman Sport Complex site has a pronounced watershed valley in the middle of the site running downhill from southeast to northwest. Areas adjacent to this drainage way are comprised of urban forests, deciduous forests, cultivated lands, lowland forests, and areas of mixed evergreen deciduous vegetation.

Large areas of agriculture, residential, and public land exist to the southern and eastern portions of the site.

The site is approximately 4.844 square miles. It is located southeast of the Central Business District of Kansas City with its center at -94.4765, 39.0389. The neighborhoods of Riss Lake, Ashland Ridge, Cunningham Ridge, Leeds, Eastwood Hills West, and Eastwood Hill are adjacent spatially to the site boundaries.

Impact of Program Elements to Site:

The Truman Sports complex site is suburban in nature but is suitable for implementation of a trail system which takes advantage of the site's vegetation types.

The areas of large agriculture, residential, and public land are places which mixed-used housing districts will be developed and integrated in the current neighborhood systems. This allows increased real estate locations which will consequently increase population. Future residents will live within biking and walking distance of sporting events at the Truman Sports Complex. This move creates a stronger sense of community within the athletic scene and provides future business with a large local customer base.

Lastly, parks will provide these nearby neighborhoods with places for community based programs and social interaction. Supplemental to improving air and water quality these parks will provide destinations for trail users who come from both the southeastern portion from

the Rock Island Corridor and the northwestern portion of the cultural trail.

Dimensions Landscape Architects bring to the success of this site:

A suburban site context which uses housing density increases a model for the potential benefits a sustainable development pattern is needed within the Kansas City metro region. Phasing these higher densities, mixed-use developments will take both time and creative approaches which Landscape Architects can help with. Again, the connection between program elements is critical in the ultimate success or failure of a proposed development such as the Truman Sports complex where parks, trails, and housing seek to provide a better quality of life living environment.

Research Questions which are vital to understanding this site:

Service areas of current parks within the Truman Sports Complex site needs to be analyzed to understand the density of additional parks required for the increase in

population density for this site. Also the understanding of housing value and the vacancies will help to phase to the site as it shifts from single family residential areas to multifamily development. Lastly, defining routes from redeveloped areas surrounding the Truman Sports Complex to the complex, itself for pedestrian access will be important in the justification for changing the zoning types to a higher residential type.



Figure 2.13 Royals Stadium



Figure 2.14 Single family housing Benton blvd.

Urban Trail Corridor

The connection of these two nodes and the program elements which influence them are described here.

Trail routing

The urban trail route will retain its boundary within a diameter of these two sites, the plaza district and the southern side of the Missouri River.

Mixed-use housing districts

The placement of housing districts will be adjacent to trail routes and available land development in the central Kansas City area.

Park additions

Park additions and developments will relate to undeserved populations in the central Kansas City, MO area. These additions will also have links or adjacencies to the route of the proposed trail and greenway systems.

Sprint Center/Downtown KC

Trail head and cultural trail node

Truman Sports Complex

Trail head and cultural trail end node. Connection point for Rock Island Corridor Katy Trail expansion.



Figure 2.15 Corridor site map

inventory



Figure 2.16 Raytown Rd. Hill

The first phase of the inventory mapping was viewing how physical items existed in the region. This section shows how natural elements such as topography, waterways, landuse, and parks influence the area. Each item is described and explained through the findings and value.

Inventory physical concerns

Aerial Imagery

Imagery of Jackson County, MO and Clay County, Mo.

Slope

Map of regional slope analysis from Pleasant Hill, MO to Downtown Kansas City, MO.

Waterways

Map depicting waterways and their floodplains relative to Jackson County, MO.

Landuse

Map showing current landuses within Jackson County, MO between Truman Sports Complex and Sprint Center study areas.

Parks

Map showing all types of Regional Parks currently existing in relation to Jackson County, MO.

physical attributes

aerial imagery



Imagery of Jackson County provides relative orientation and size of the Truman Sports complex and Sprint Center study areas.

Figure ground of streets, hardscape, and natural areas are visible in at a county scale.

Patterns of development and urban density are also apparent on the map with areas of higher amount of buildings and hardscape showing as gray and brown areas.

Figure 2.17 Aerial inventory map



Legend



Aerial

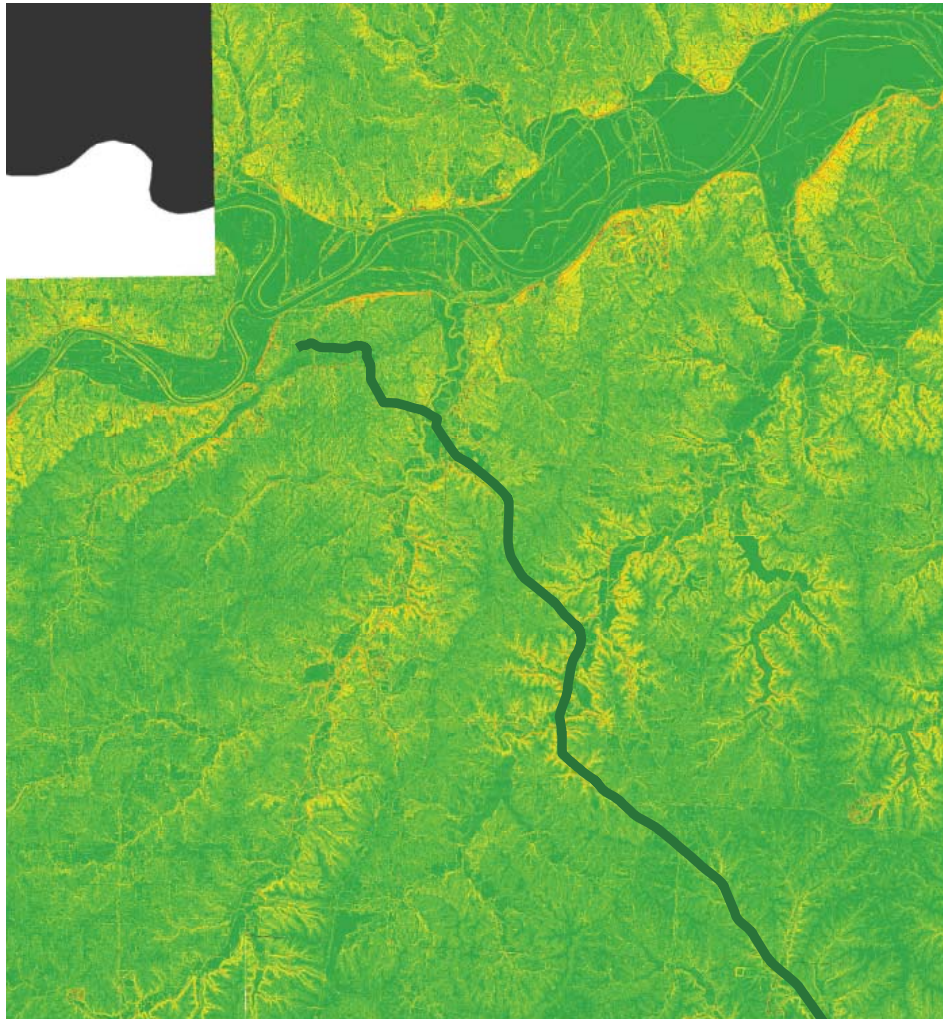


Proposed MARC Rock Island Corridor Alignment



Development district Site Areas

slope



Slope analysis of Kansas City metro region showing areas which have higher amounts of grade change in yellow and red.


Three major stream corridors exist along the corridor.

Most of Jackson county maintains slopes which are under 20%.

Figure 2.18 Slope inventory map

Legend

 Slope gradient (4-95%, yellow to red)

 Proposed MARC Rock Island Corridor Alignment



waterways



The Missouri river is a major influence in the region. It is due north from the Rock Island Corridor MARC proposed alignment.




Another hydraulic system adjacent to the west of the Truman Sports Complex site the Big Blue River.

It is a major flood way in respect to the region and an important link to the water quality of the Missouri river.

Figure 2.19 Waterway inventory map



Legend

-  Floodplain areas
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas

landuse



This map shows the current land use zoned for the Jackson County, MO region.

It shows major areas between project sites as yellow residential swatches.

Large areas of agriculture and open space due to flood plains also exist.

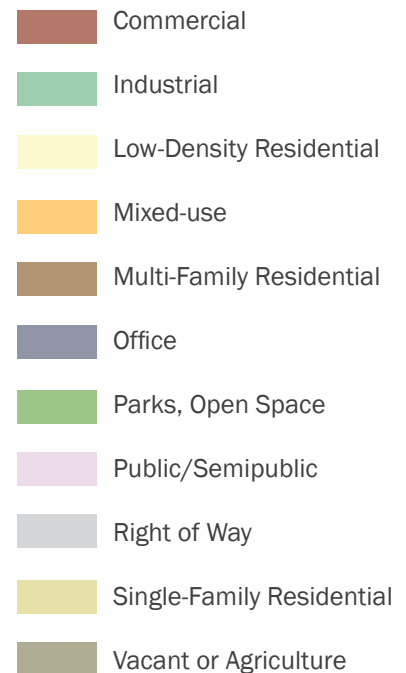



Figure 2.20 Landuse inventory map

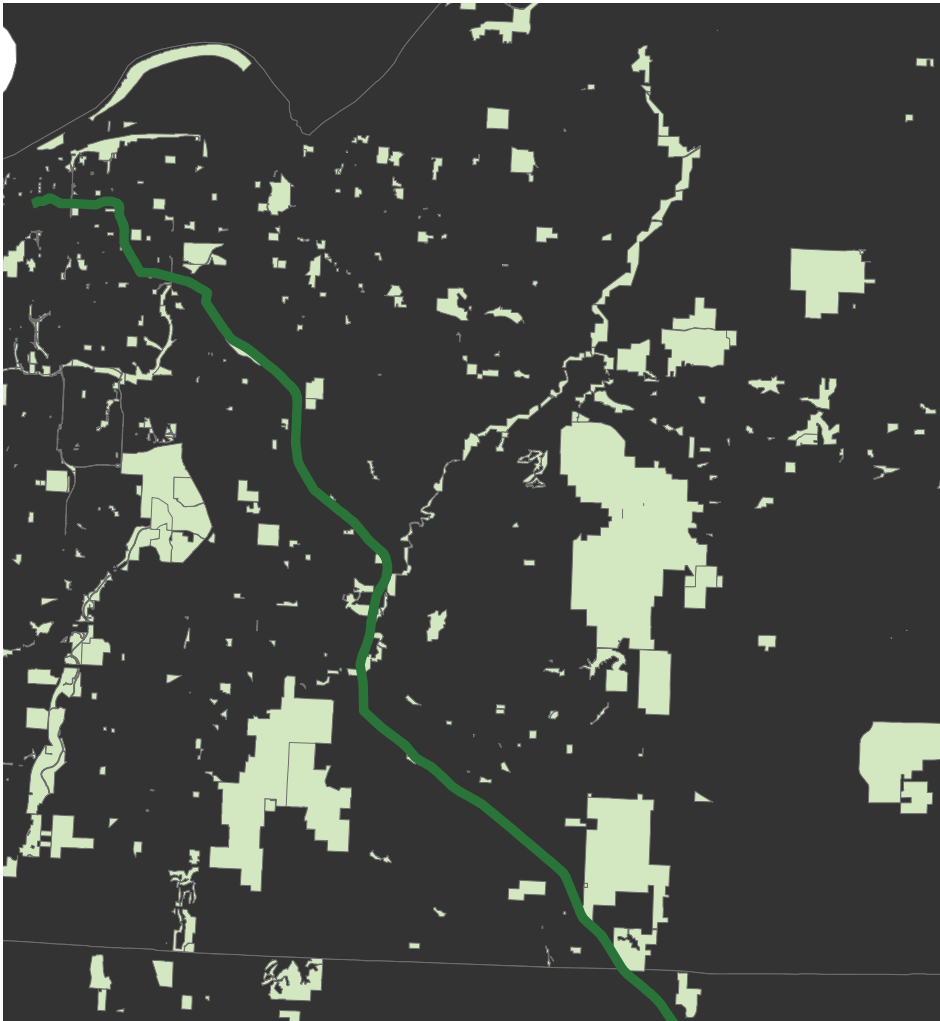
Legend

 Proposed MARC Rock Island Corridor Alignment

 Development district Site Areas



parks



Parks relative to the proposed MARC Rock Island Corridor show major bands and areas of public and protected park land.

These areas start to get more segmented as the corridor moves towards the downtown region of the Kansas City metro area.

Figure 2.21 Park inventory map

Legend




-  Missouri counties
-  Proposed MARC Rock Island Corridor Alignment
-  Kansas City Metro Area Parks





Figure 2.22 Utility Box

The second phase of the inventory mapping was describing how the Kansas City infrastructure existed in the region. This section shows how structural elements such as city centers, roadways, bike paths, trails, and Right-of-way areas influence the project boundary. Each item is described and explained through the findings and value.

Infrastructure layout inventory concerns

Mean city centers

Map depicting the mean centers of each county within the defined MARC counties and an overall mean center for the combined counties.

Roadways

Map with all Kansas City, MO road networks and street types.

Bike paths

Map showing existing separated bike pathways and routes in Jackson County, MO in relation to average household size using 2012 census data.

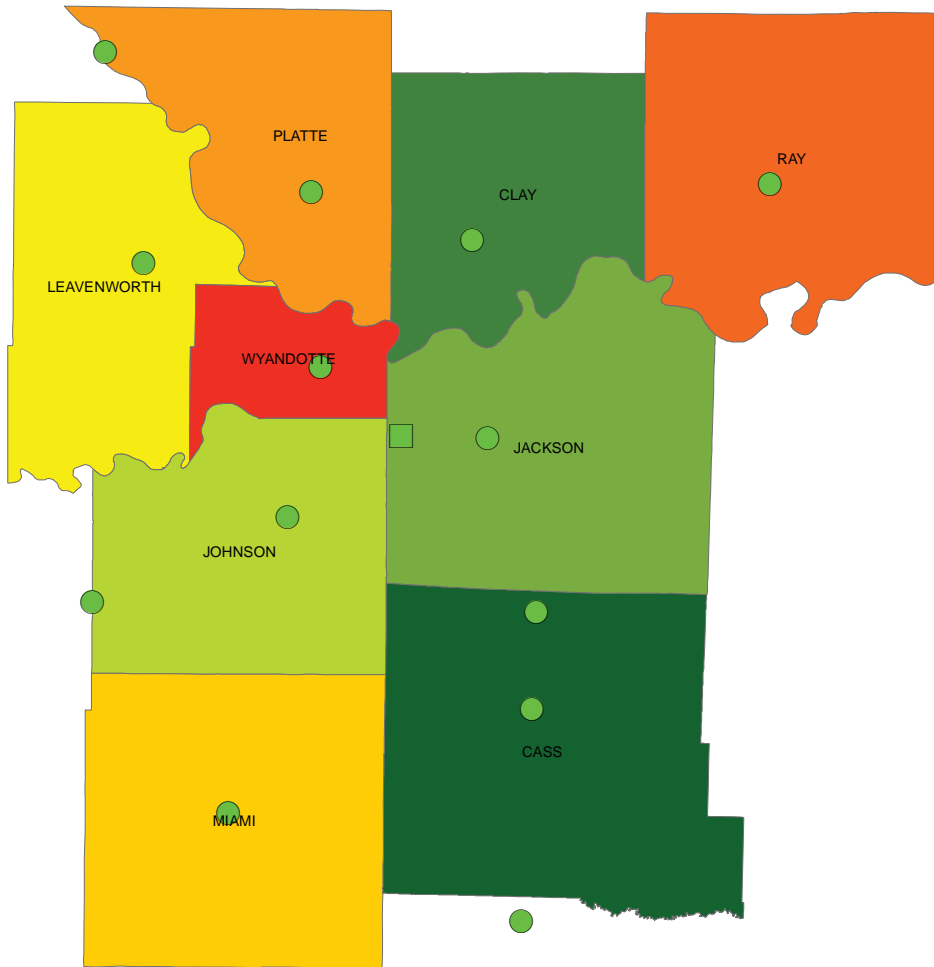
Trails

Map of existing Kansas City trail systems.

ROW (Right of Way)

Map showing ROW and potential open space that include Parks/Open space, Public/semipublic, Right-of-way, and Vacant or Agriculture land.

mean city centers



Mean city centers is calculated by taking the average x- and y-coordinate of all the features in the study area.




In this instance population was the attribute which was used to calculate the center of population for both individual MARC counties and the overall compilation of MARC counties.

What is observed here is that Jackson Counties mean population center and the center for the MARC counties are in close proximity to the northwestern edge of Jackson County, MO.

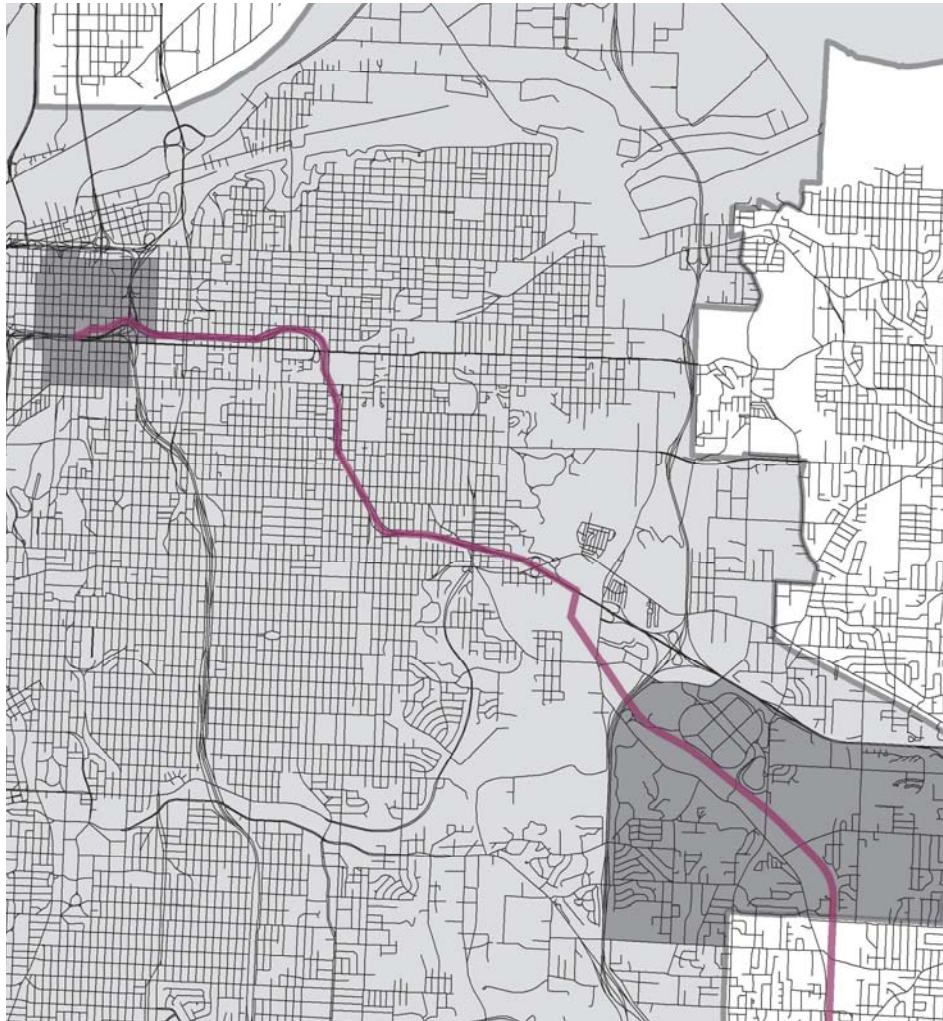
Figure 2.23 Mean centers map



Legend

-  MARC counties
-  Kansas City Metro Area population center
-  County specific population center

roadways






Roadways within the Jackson County, MO region vary in type and size from boulevards to interstates.

This map illustrates the road network pattern and the observed density of roads within Jackson County, MO.

Figure 2.24 Roadway inventory map

Legend

-  Roadways
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas



bike paths

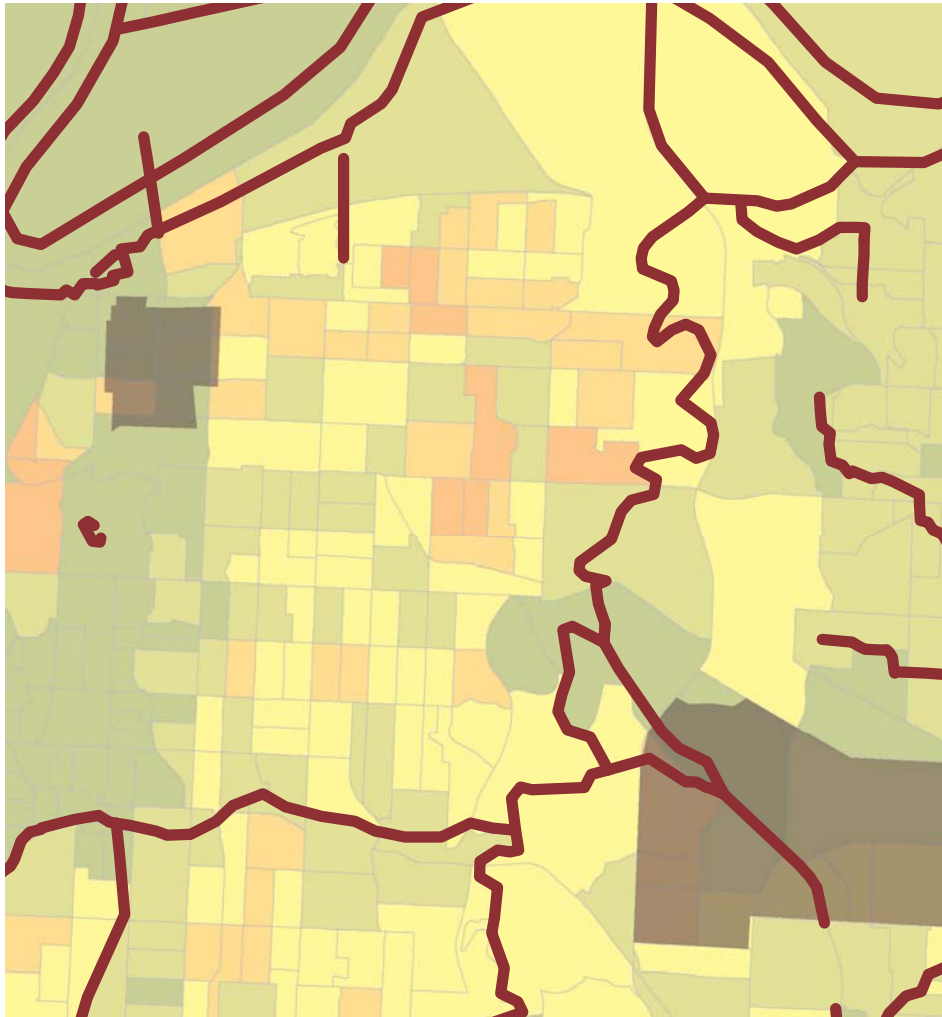





Figure 2.25 SUP Bikeways inventory map

Legend

-  Separated Bikeway Paths (SUP)
-  Development district Site Areas
-  Average Household Size
(Deeper shade of red indicate higher sizes)



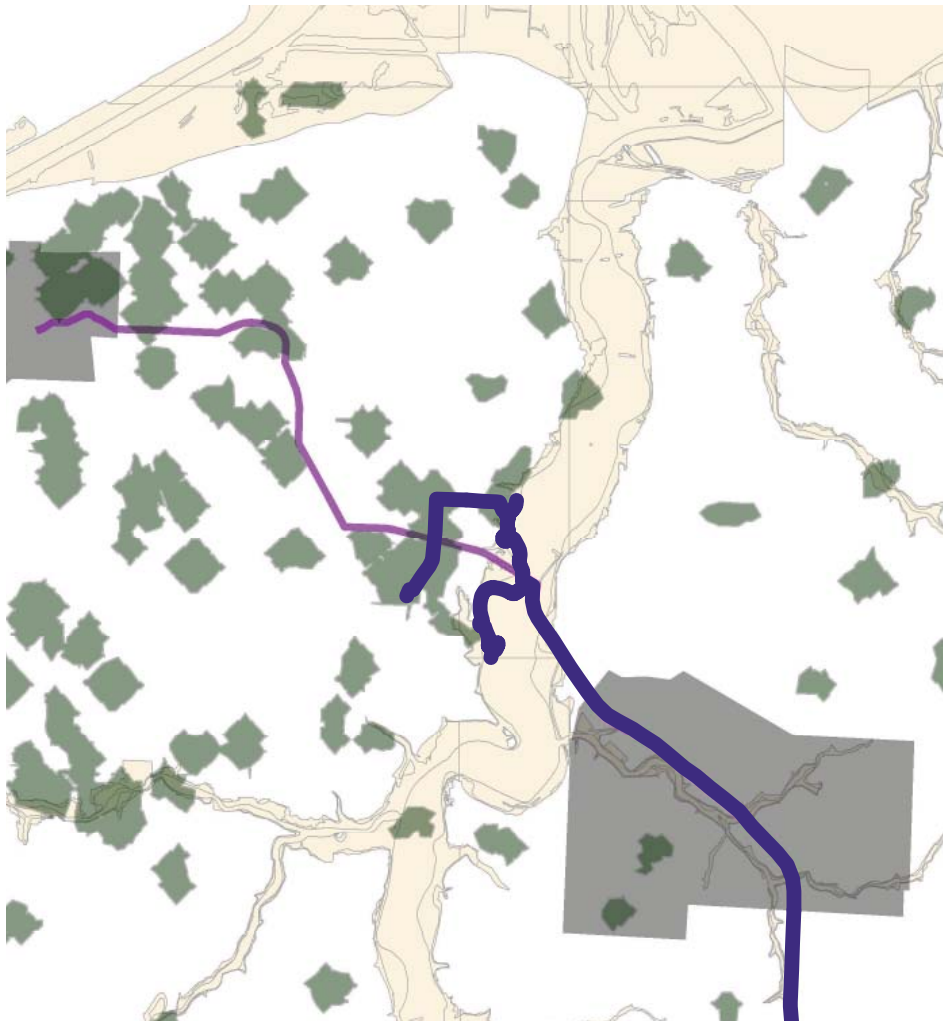
The bike paths in the Jackson County, MO area are in a state of disconnect from the interior first suburb ring of Kansas City, MO.

Bike paths shown are bike paths which are classified as 'BL' OR 'PHT' OR 'SUP'

These paths do not share a road segment or pathway with pedestrians, more than 90% SUP.

SUP = Shared Use Path - a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths are also used for transportation and/or recreation by pedestrians, skaters, wheelchair users (both non-motorized and motorized), joggers and other non-motorized users. AASHTO recommends a minimum of 10 feet width (in rare cases, 8 feet) (MARC).

trails



The Katy trail is the only proposed trail segment currently slotted as a major regional trail connector.

However it ends just northwest of the Big Blue River flood plain.

In relation to trails neighborhood park service areas are shown in a 1/4 mile distance.

The lack of trail connectors to the regional purposed Katy Trail connector poses a problem to downtown residents which seek to use the regional trail system without driving or using transit.

Figure 2.26 Katy trail inventory map


Legend

 Proposed Katy Trail Segment

 Proposed MARC Rock Island Corridor Alignment

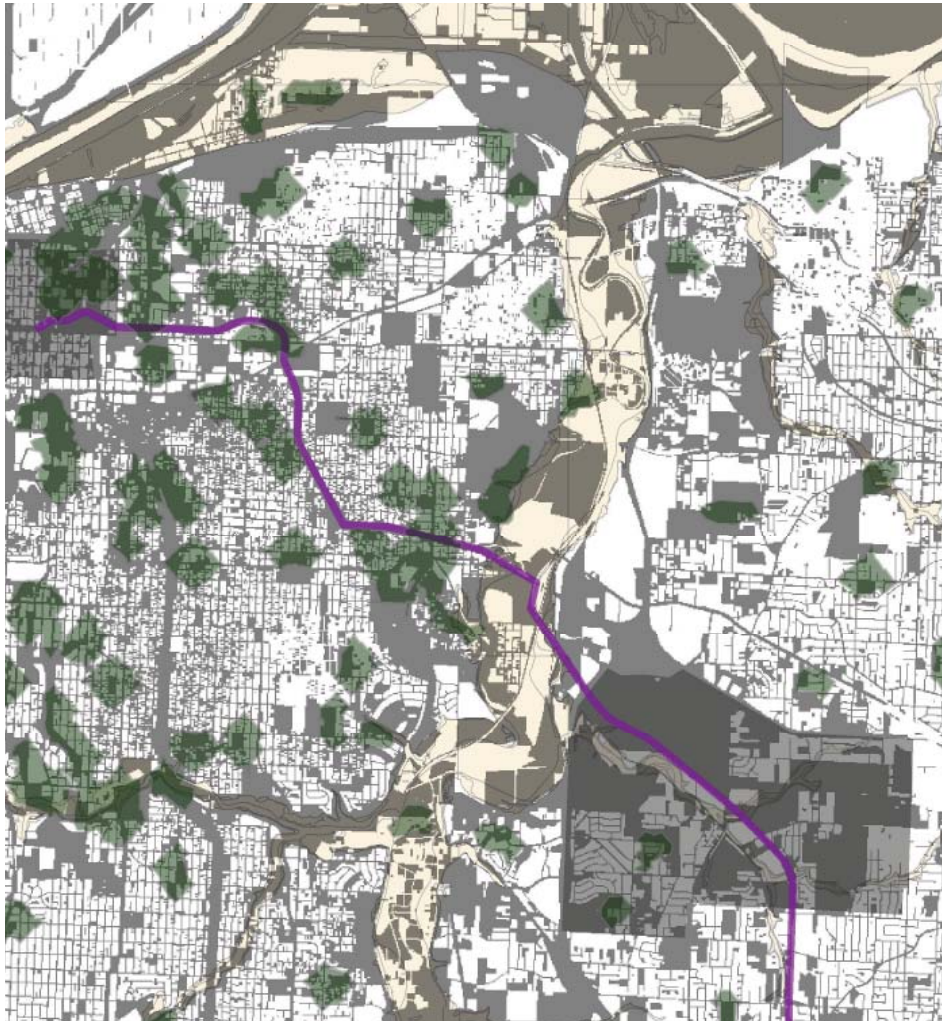
 Development district Site Areas

 1/4 mile neighborhood park service areas

 Floodplain areas



ROW's



This map shows the inventory of neighborhood parks service areas and Right of Ways (ROW's) defined as a compilation of multiple land uses.

Most major ROW areas exist along highway corridors and stream systems.

This poses a problem when trying to use develop large new mixed use housing districts making condemnation more relative.

Figure 2.27 Right-of-ways inventory map

Legend








-  Right of Way potential
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas
-  1/4 mile neighborhood park service areas
-  Floodplain areas



Figure 2.28 Man on bench

The third phase of the inventory mapping was describing how the demographics existed in the region. This section shows how social elements such as city public housing, diversity, age, housing values, and housing vacancies influence the project boundary. Each item is described and explained through the findings and value.

Social dynamics inventory concerns

Public housing projects

Regional map of the Rock Island Corridor in respect to public housing projects built by the city of Kansas City, MO.

Diversity

Map showing the relationship between census 2012 block groups which have a diversity of any race 90% or higher to public housing projects, the Rock Island Corridor and site nodes.

Median age

Map showing the median age in Jackson County and the relationship to the Rock Island Corridor MARC proposed alignment.

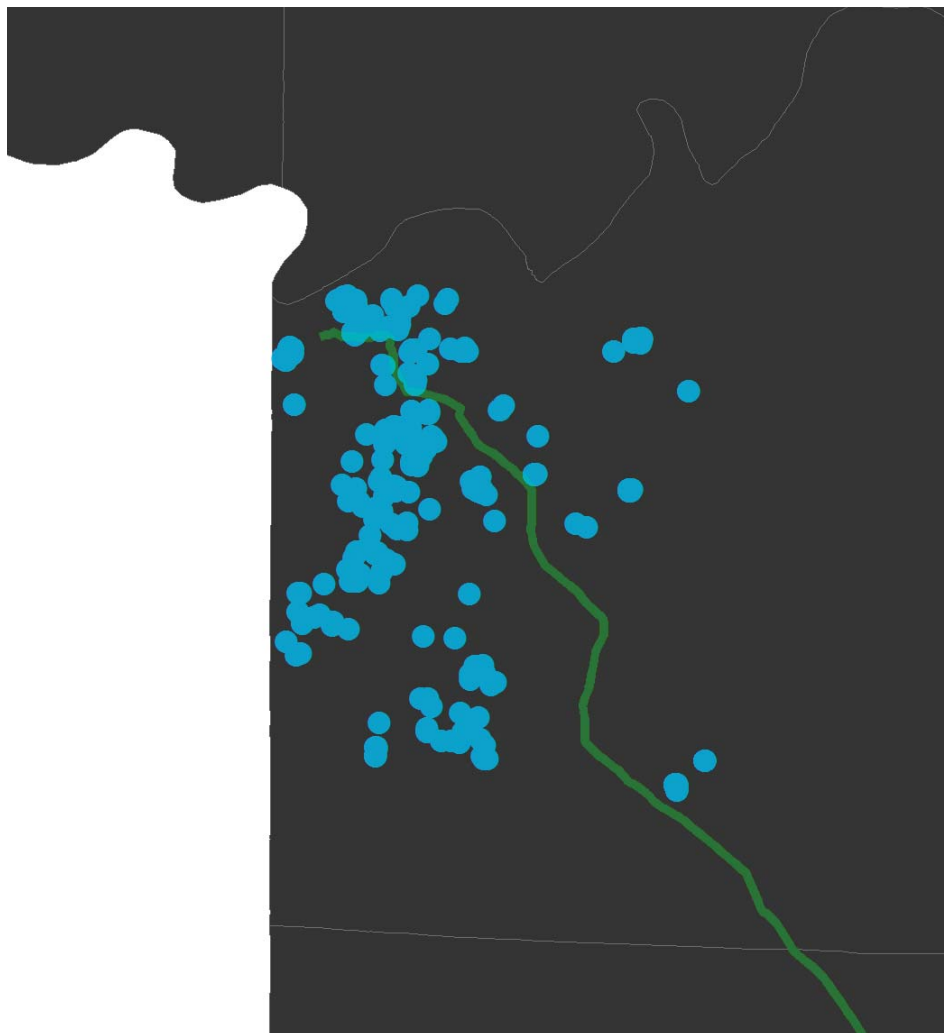
Housing values

Map showing regional housing values of Jackson County, MO in relation to the Rock Island Corridor MARC proposed alignment.

Housing vacancies

Map showing the current number of residential vacancies in Jackson County, MO per square mile in relation to the currently planned, phased and built segments of the MetroGreen trail system.

public housing projects



Shown is public housing sites within the Missouri region of the Kansas City Metro area.

The clustering shows an arc around the downtown region of Kansas city with a secondary ring starting to take form farther southeast.

The dot density also coincides with the Big Blue river flood plain edge not shown on this density map.


Figure 2.29 Public housing inventory map



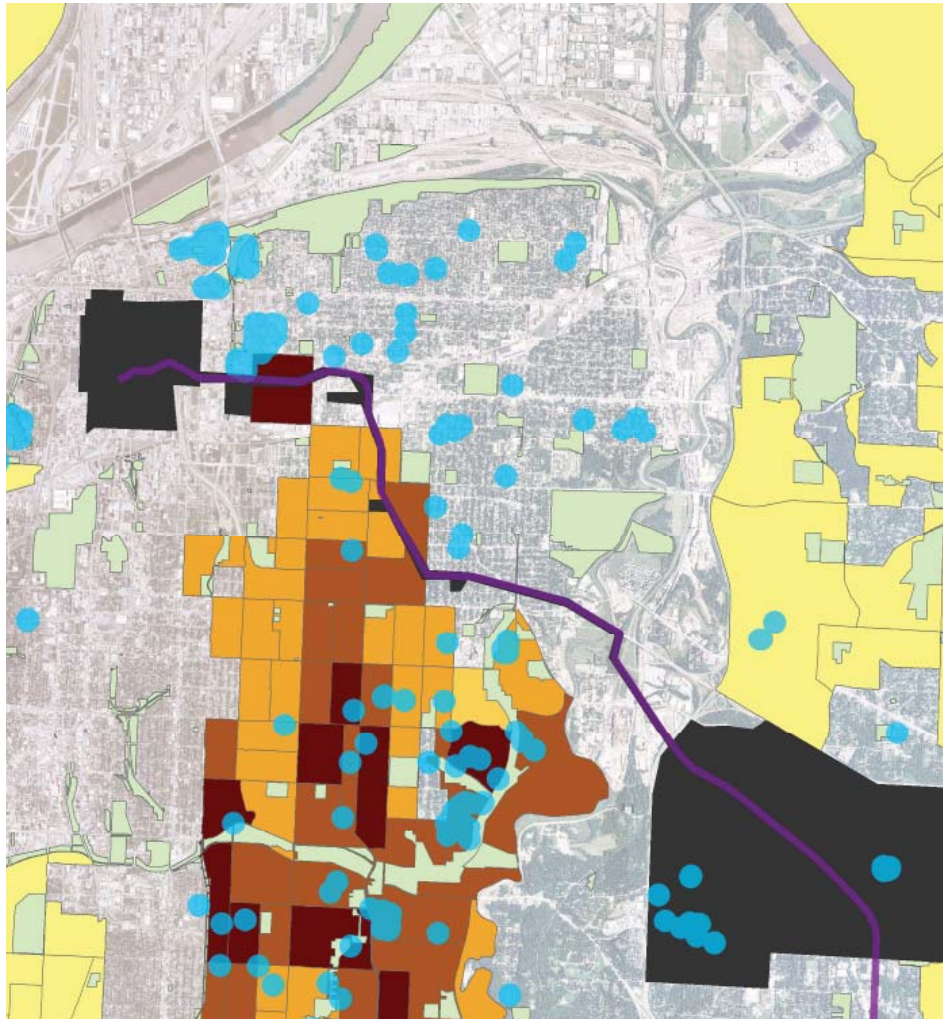
Legend

 Missouri counties

 Proposed MARC Rock Island Corridor alignment

 Public housing projects

diversity



Block groups which are present indicate areas which have limited diversity (90% or higher of one race).







The gradient color shows the density of black population.

A large relationship to lack of diversity and the current system of public housing project is shown in this map.

Also a strong outer ring of white people is also present. These areas have a limited diversity as well with very few public housing projects.

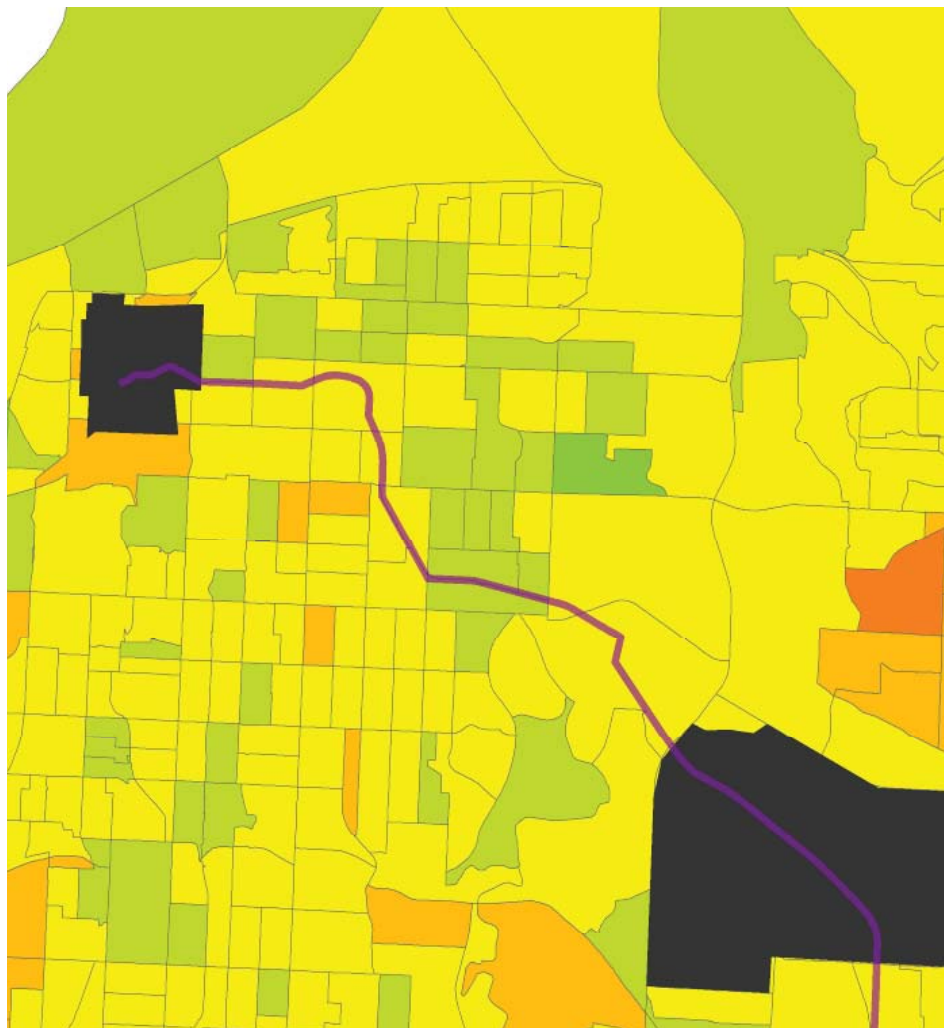
Figure 2.30 diversity map

Legend

-  Public housing projects
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas
-  Counties with 90% racial populations
-  Aerial
-  Higher shades have higher single race percentage (African American)



median age



Median age in the Jackson County, MO region of this map.







Most areas of higher ages fall to the southern side of the proposed MARC Rock Island Corridor alignment.

Multiple orange block groups form a shape similar to the proposed alignment but further south for a higher potential gain at addressing an age cohort which could have more users which are pedestrian transit dependant.

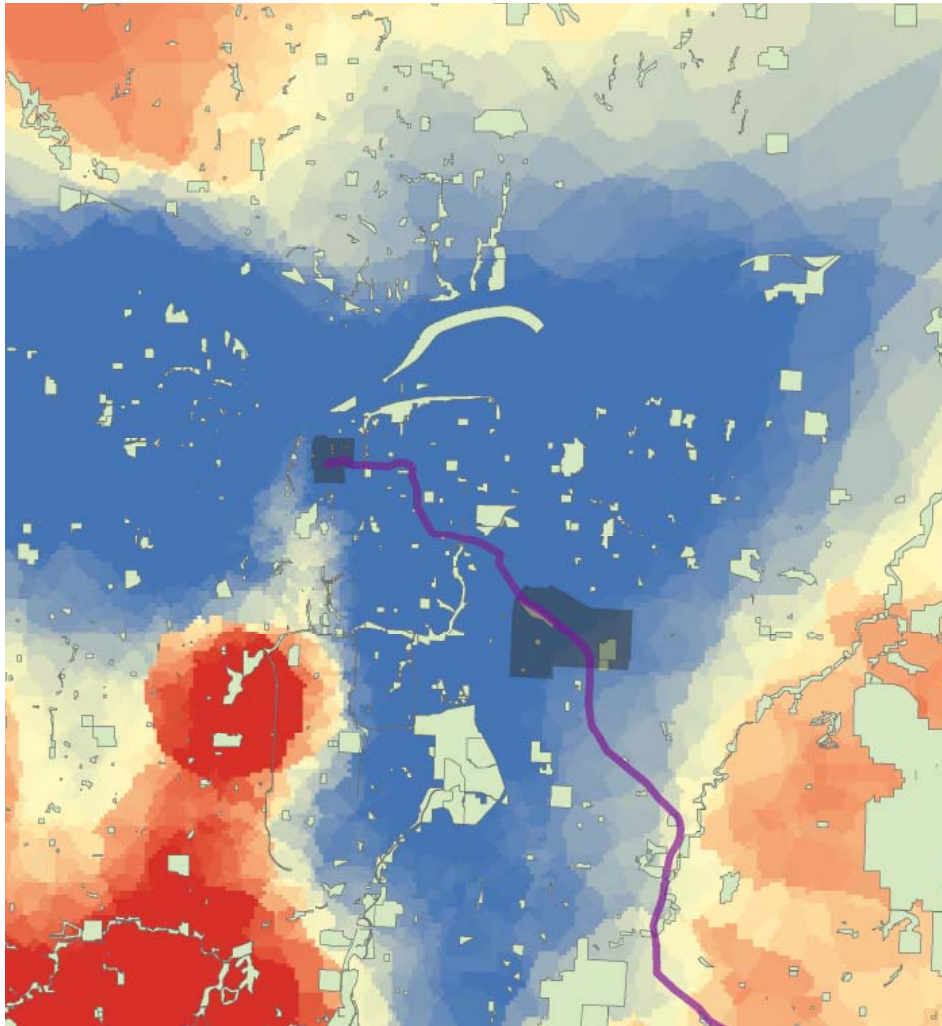
Figure 2.31 Median age inventory map



Legend

- | | | | |
|--|--|---|------------------|
|  | Census 2012 Block Groups |  | Median Age of 20 |
|  | Proposed MARC Rock Island Corridor Alignment |  | Median Age of 30 |
|  | Development district Site Areas |  | Median Age of 40 |

housing values



Housing values are shown in this map as a range of red (indicating higher home values) to blue (indicating lower home values).

These housing values show a decline as you move toward downtown Kansas City.

The section between the two proposed site study areas falls within these segment of lower home values.

Figure 2.32 Average housing value inventory map

Legend



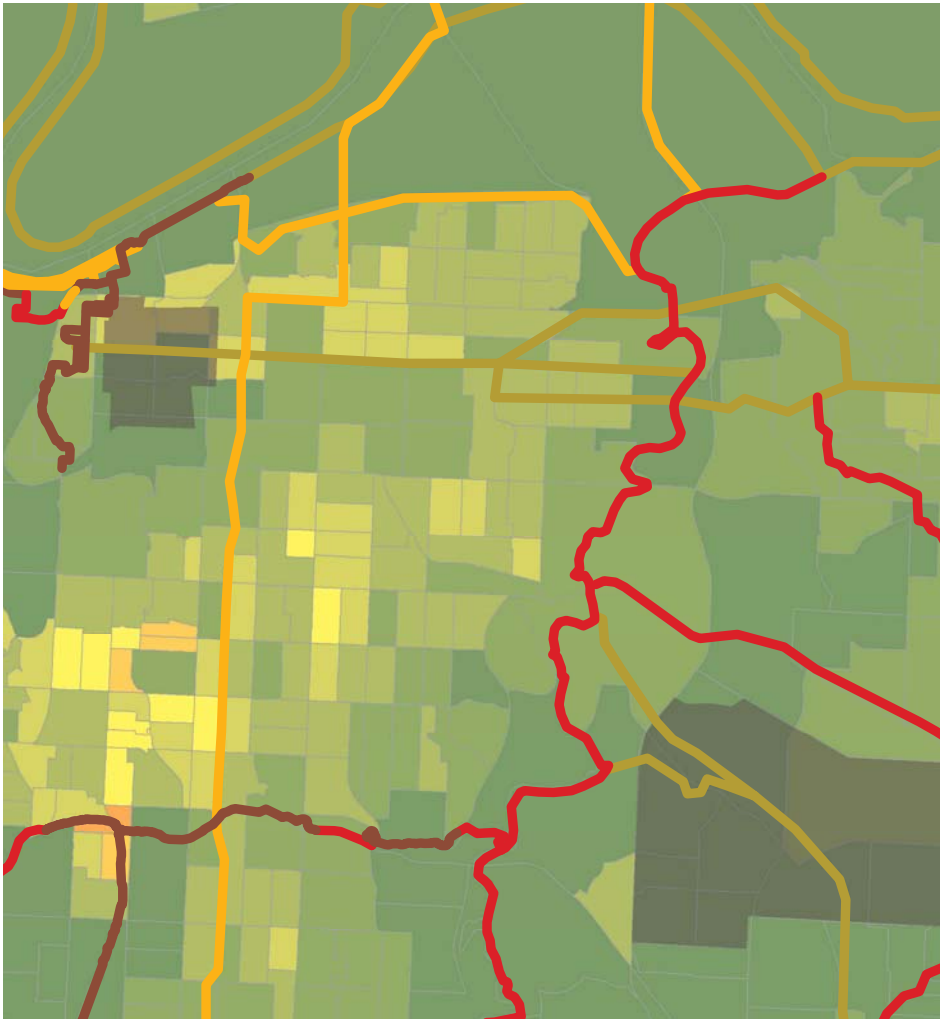
— Proposed MARC Rock Island Corridor Alignment

■ Development district Site Areas

■ Kansas City Metro Area Parks

■ Average Housing Price Range
(Blue min: \$30,000 - Red max: \$260,000)

housing vacancies



Currently areas of high home vacancies (deeper shades of yellow) are between the Truman Sports Complex and the Sprint Center.

The currently planned MetroGreen trail fails to link these two sites with a direct route.

The system as fails to address many zones which have potential for redevelopment with a pedestrian amenity.

Figure 2.33 housing vacancies inventory map

Legend









- | | | | |
|--|---|---|--------------------|
|  | Housing Vacancies (Higher # towards orange) |  | MetroGreen Phase 1 |
|  | Existing MetroGreen Trail routes |  | MetroGreen Phase 2 |
|  | Development district Site Areas |  | MetroGreen Phase 3 |



Figure 2.34 Silver Comet Station

The fourth phase of the inventory mapping was describing how destinations existed in the region. This section shows how attraction elements such as historic sites, tourism destinations, MARC corridors, RIC nodes, and critical facilities influence the project boundary. Each item is described and explained through the findings and value.

Area cluster inventory concerns

Historic sites

Map showing the point density of historic sites in surrounding counties of Kansas City.

Tourism destinations

Map showing current activity centers defined by MARC in the Kansas City metro region.

MARC regional corridors

Map showing creating sustainable places initiative buffers and midlines in Jackson County, MO.

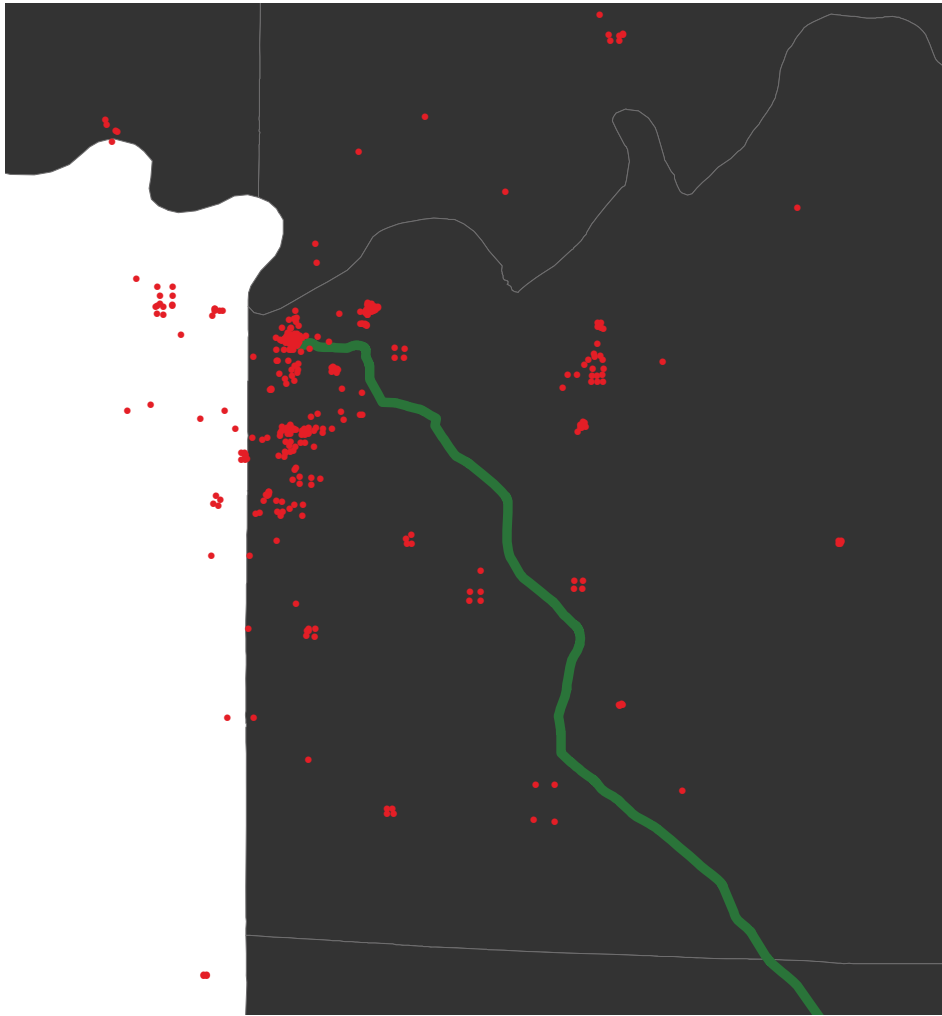
Rock Island corridor nodes

Map showing the defined Rock Island Corridor Nodes relative to Jackson County, MO and Truman Sports Complex and Sprint Center site areas.

MARC critical facilities

Map showing Kansas City critical facilities in the Jackson County, MO.

historic sites



Historic sites exist throughout the Rock Island Corridor in different densities.

There are however a strong concentration of historical sites in which links and tourism opportunities can be made towards the northwest end of the corridor.

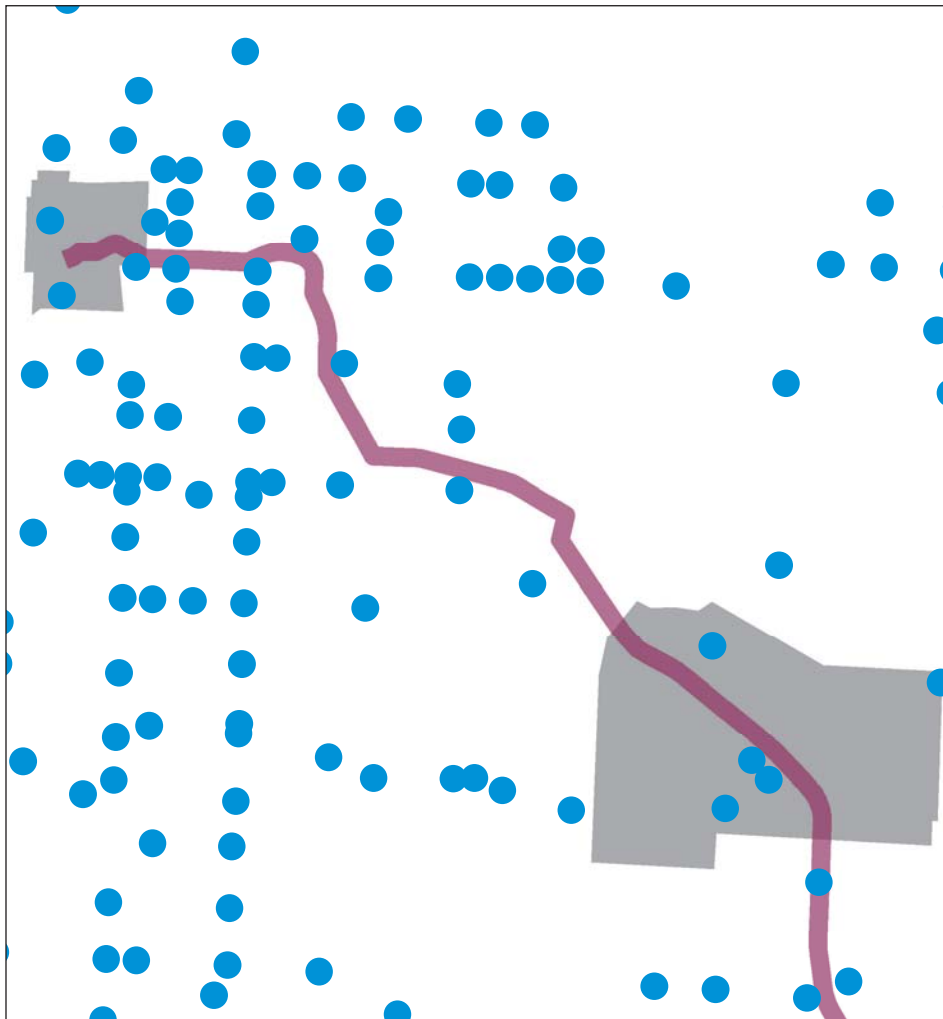
Figure 2.35 Historic sites inventory map



Legend

- Missouri counties
- Proposed MARC Rock Island Corridor alignment
- MARC defined Historic Site Locations

tourism destinations






Tourism destinations on this map take form in the location and dot density of MARC defined activity centers.

These centers exist mostly along street corridors and along the western and northern edges this area.

Creating new activity centers and entertainment districts in the central area of this map will help to attract future residents to this area.

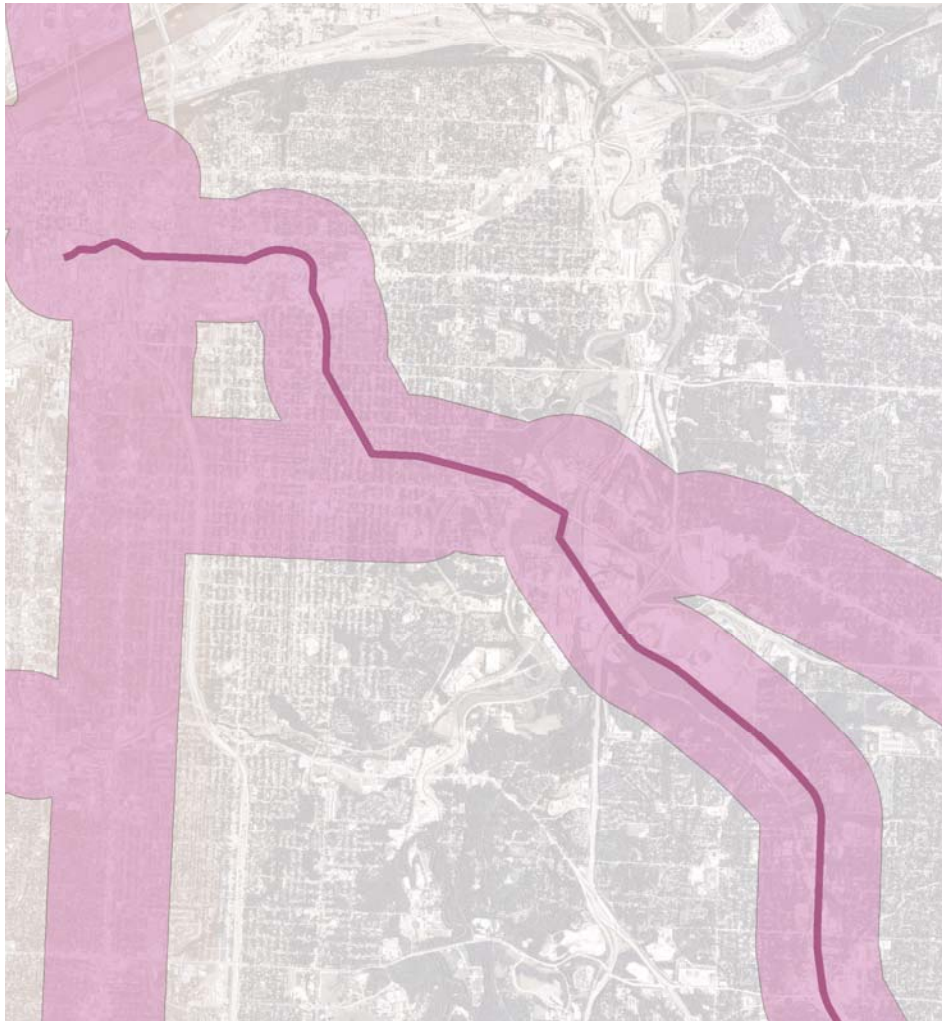
Figure 2.36 Tourism destinations inventory map

Legend

-  Activity Centers
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas



MARC regional corridors



Regional CSP (Creating Sustainable Places) MARC defined corridors are shown on this map in the form of 1/2 mile buffer areas.


Two other major corridors play critical roles in the shaping of this project, one along Troost running north-south and the other along 31st street running west-east.

The corridor with the midline shown is the Rock Island Corridor.

Figure 2.37 MARC regional corridors inventory map

Legend

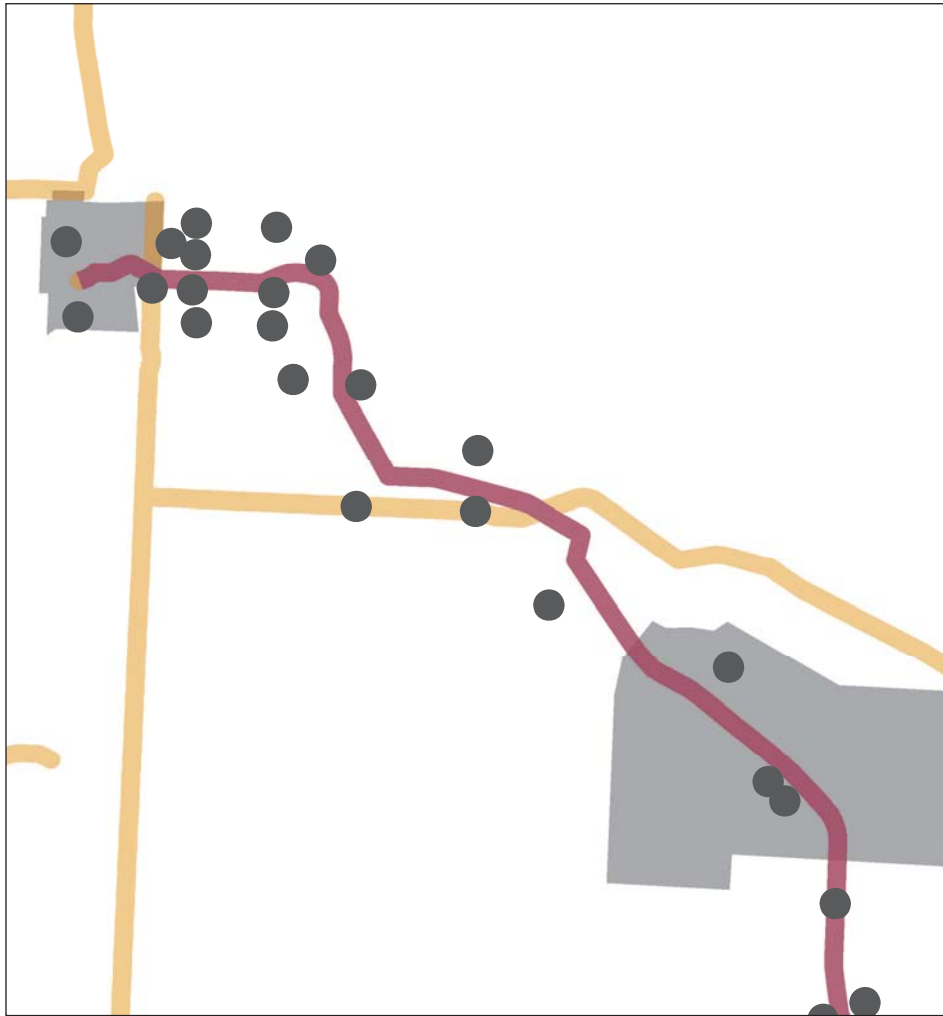


 Proposed MARC Rock Island Corridor Alignment

 Creating Sustainable Places (CSP) Corridors

 Aerial

rock island corridor nodes







Rock Island Nodes are shown in respect to all CSP midlines.

The Concentration of nodes decreases between the two site area nodes.

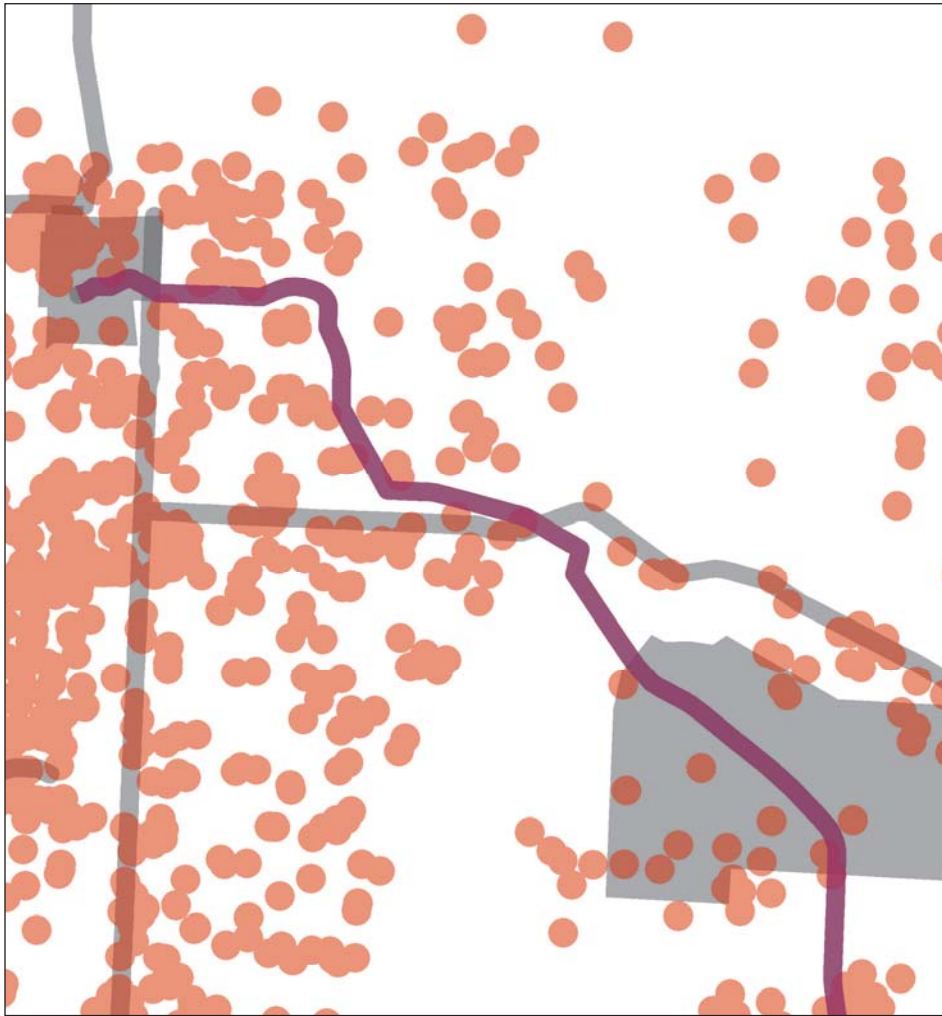
Figure 2.38 Rock Island corridor nodes inventory map

Legend



-  MARC defined Rock Island Corridor Nodes
-  CSP Corridor Midlines
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas

MARC critical facilities







This map shows the dot density of the critical facilities in the Kansas City metro region as defined by MARC.

The highest density occurs on the western edge of the map fanning out as you progress to the east.

Figure 2.39 MARC critical facilities inventory map

Legend

-  MARC defined Rock Critical Facilities
-  Proposed MARC Rock Island Corridor Alignment
-  Development district Site Areas
-  CSP Corridor Midlines



Precedent studies

Chapter IV



Figure 3.01 Cultural Trail Painted Crosswalk

The following is a description and analysis of the Indianapolis Cultural Trail and the Minneapolis Midtown Greenway Trail. These two projects were chosen due to similar missions, scales, and project goals. Precedent studies are used to help ground and determine design outcomes of the proposal for green trail systems and tourism as a measure of the logistics and cost.

project types



analysis criteria



evaluation

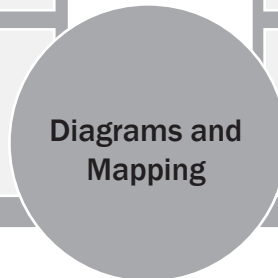
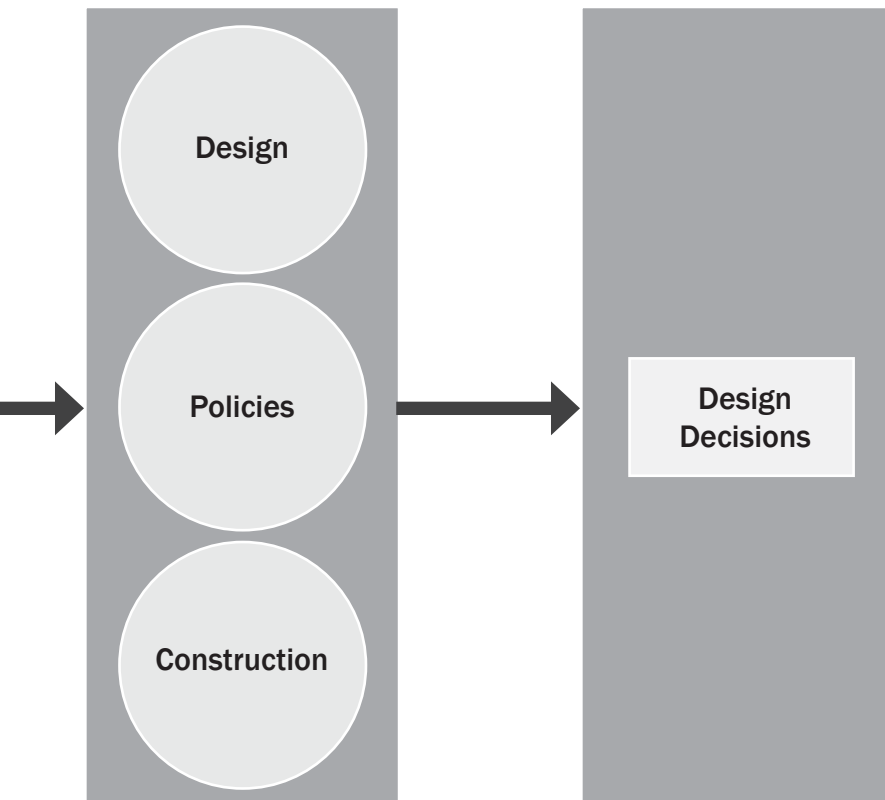


Figure 3.02 Precedent study methodology

precedent study methodology

influences

compilation



Deciphering the information in each of the two case studies is shown in figure 3.01. This process used a five step process of creating analysis criteria and using the information gathered to evaluate each project. Each evaluation description from these case studies were used to inform how green trail systems and tourism was designed from a design, policy, and construction aspect.

Indianapolis Cultural Trail

The first precedent study is the Indianapolis cultural trail. This project example shows how a trail can be transformed into an urban trail. This project shows the dynamics of branding a trail system as well as using a

city's heritage and tourism to incorporate culture into a project.



Figure 3.03 Cultural Trail Sign Logo



Figure 3.04 Cultural Trail
Black and White

Indianapolis Cultural Trail

Indianapolis, Indiana

Background on Project

Location

The Indianapolis Cultural Trail is located in Indianapolis, Indiana linking many urban cultural and entertainment districts.

Public vs. Private

The trail is a public amenity meant to serve as a greenway system to central Indiana.

Goals

Indianapolis Cultural Trail, Inc.'s mission is to market, manage, and maintain the Indianapolis Cultural Trail: A Legacy of Gene and Marilyn Glick as a world class amenity for the residents and visitors of Indianapolis (ICT).

Organization

The Cultural Trail is made possible by a large public and private collaboration led by

Central Indiana Community Foundation, the City of Indianapolis and several not-for-profit organizations devoted to building a better city (ICT).

Lifespan Expectancy of Project

Started in 2007, the construction phase of all seven corridors is projected to be done by the end of 2012 (ICT).

Starting Conditions

Establishment of six cultural districts and attempt to application transpose ideas from the Indianapolis Monon Trail to an urban application (ICT).

Cost of Project

Most of the funding, approximately \$35 million of the \$50 million budget, will come from charitable contributions. We are also using \$15 million in federal transportation funds, but no local funding (ICT).



Figure 3.05 Family on Cultural Trail

Design

Materiel

The trail consists of a variety of brick pavers as well as concrete structures and designs to create a pathway that is inviting for bikers and pedestrians.

Goal of Design Decisions

The goal was to create a trail of world-class caliber and provide city beautification for Indianapolis unlike any other found in the world (ICT).

Focus of designed items

Linkage from destination to destinations. Unlike many trails

that link or take you out of the city to waterfronts or out of town, the cultural trail brings you into the city within one block of every cultural amenity in the downtown area as defined by the city of Indianapolis (ICT).

Vegetation

Planters, flowering flora and trees make up most of the vegetation palette the trail system. In one half mile there is 16,000 sq. ft. of new landscaping and 50 new trees (ICT).

Pedestrian Impact

Pedestrian sidewalks are located closest to buildings and furthest

away from traffic. They are designed in a slightly textured way to look like blue slate. Adjacent to a buffer zone for site furnishings this layout offers pedestrians the best way to walk and otherwise use the trail. Also combined trails occur where the ROW was too narrow to separate the sidewalk and bike path.

Trail Head and Civic Centers Criteria

The look, feel, and connections of the trail should reflect the image and future imaging goals, values, and aspirations of the city of Indianapolis (ICT).



Figure 3.06 Biking on the Cultural Trail

Social + Vibrancy

Economic Impact

The trail has inspired new businesses along the route, and existing business has expanded due to increased bike and foot traffic; also, property values have increased (ICT).

Sustainable Practices

Encouragement for people to use alternative forms of transportation such as biking, roller blading, walking or seaways will be aimed at trips 2 miles or less which makes up 40% of US urban travel (ICT).



Figure 3.07 Dancing Lady Plaza

Infrastructure Impacts

This addresses these goals: Provide a dedicated path that connects many objects such as greenways, trails and new bike lanes; Replace asphalts and concrete with 500 new trees; and finally, control stormwater runoff with bio-retention areas or stormwater planters (ICT).

Public Art

Donors are recognized by the naming of many project sites. Amy dancing (Figure 1-0) is on of the most recognized public art pieces currently in place and uses elements such as LED's. Two percent of the development budget was allotted to public art.

Quality of Life

Traffic calming is a result as is the benefit of alternate forms of pedestrian movement. This in turn creates better air quality.

Tourism

Public/Private relationships are a consequence that strengthens the bond between the community and allow for replacement of older infrastructure, allowing businesses to generate more revenue 'Do the Cultural Trail' (Arts, cultural, heritage, sport and values) (ICT).

Figure/Form

Scale

Permits re-purposing of many driving lanes into bike and pedestrian ways which many cities of a size close to a million or more have not yet attempted (ICT).

Location

Enables linking of six cultural districts in the downtown region of Indianapolis.

Housing Market

National media and marketing attention has drawn many new residents as well as allowed marketing firms to attract many new conventions to Indianapolis using the cultural trail as the main selling point.

Duration

Future imaging and marketing will come from the look and concepts of the cultural trail

system.

Streetscape Structure

The 18 mile streetscape trail system incorporates three main areas; The sidewalk zone, the buffer zone and the pedestrian transportation zone. At points these can combine; meanwhile, most areas have had a lane of vehicular traffic taken out to accommodate a bike lane (ICT).

Livability/Amenities

Obesity has been a major problem for Indiana and Indianapolis ranks as one of the most obese areas in the united states. Trails that are easy to access promote exercise more frequently and safely, which promotes community fitness and makes exercise more easy to accomplish. Predictably lower health care and insurance costs are attracting businesses to Indianapolis (ICT).

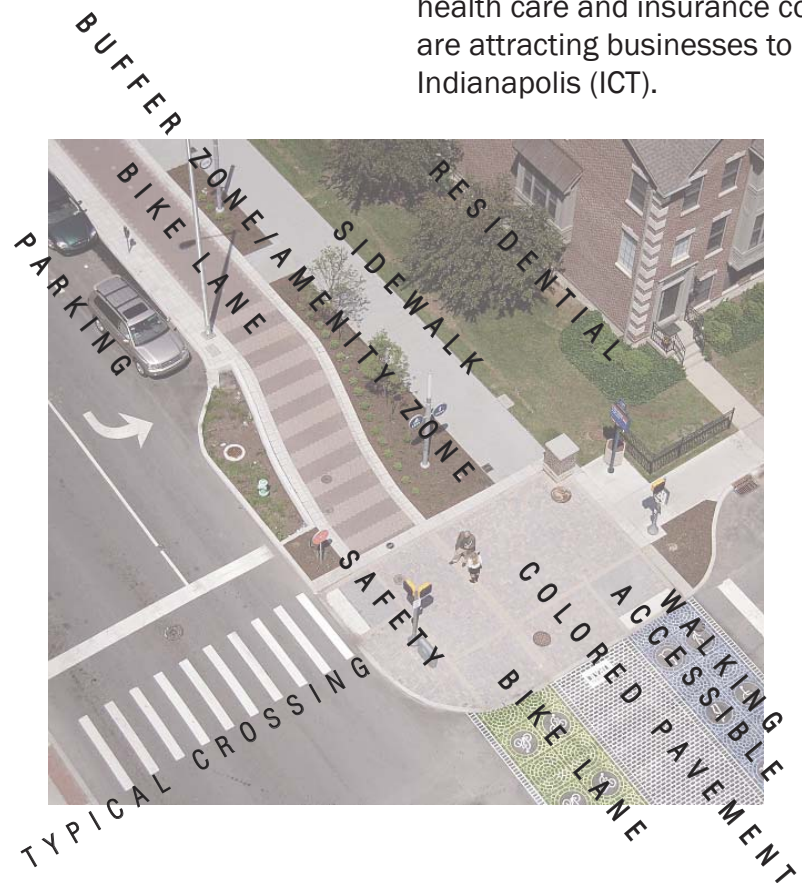


Figure 3.08 Cultural trail streetscape structure and form



Figure 3.09 Cultural Trail
Flower Bed

Conclusion

Successes

As a cultural re-imagining proposition, the urban trail has been well-accepted both by residents and business owners. It was funded mostly through a donation process, which to me is one of the most valuable aspects of trail design.

Evaluation of Goals

As a way to market the city as a tourism destination that both defines and creates culture, planners have done an excellent job. Using signage, material, and most importantly, aspects of the city that have historic and entertainment potential, planners have developed a system that pulls people into the core rather than looks upon the core as a place from which to escape. Lastly, budgeting a reoccurring five million dollars to the project is a great first step in maintaining their asset. Ultimately, using systems that are sustainable, increases the lifespan of the trail as well. The goals laid out seem to be covered thoroughly and implemented well.

Shortcomings vs. Successes

A shortcoming might be the combining of foot traffic with people who are using bikes and roller blades. Having parking and sidewalks being interrupted by a lane of fast moving bikes might be difficult for people to navigate. Also, many people seem to use the wider lane of bike path for a walking route rather than the sidewalk. This issue is addressed by using larger pedestrian walking zones than bike zones in green systems and tourism. However, the successes mentioned in the goals of creating an amenity for the community and a stimulus for new business and development far outweigh any shortcomings the Indianapolis cultural trail project might have.

Midtown Greenway Trail

The second precedent study is the Minneapolis Midtown Greenway Trail. This project example shows how a linear pedestrian transportation oriented system works within an urban environment. The project

also incorporates many park side trail adjacencies, public art, and community oriented spaces. Linking items is a subject within this project that is analyzed throughout the precedent study.



Figure 3.10 Greenway Side Garden



Figure 3.11 Greenway Side Park

Midtown Greenway Trail

Minneapolis, Minnesota

Background on Project Location

Downtown Minneapolis, Minnesota starting at Lake Calhoun and ending at the Mississippi river's edge.

Public vs. Private

Midtown Greenway Trail is owned by the Hennepin County Regional Railroad Authority, and the trails are maintained by the City of Minneapolis. The Midtown Greenway Coalition is the grass roots organization that successfully advocated for installation of the Midtown Greenway by public agencies (Midtown).

Goals

Three main objectives of the Midtown Greenway Coalition (the body that overlooks many of the processes which the trail undergoes) are sustainable gardens, outreach to the community and safety on the trail (Midtown).

Trail Organization

For most of its distance across the city, the corridor is grade-separated from the street grid, either in a gorge passing under bridges carrying streets overhead, or on a overpass. This offers barrier-free bicycling that can make cross-town trips faster than going by car (Midtown).

Lifespan Expectancy of Project

The County's long term plan for the corridor includes an express rail transit service operating alongside the trails and serving as an important part of a regional rail transit system (Midtown).

Cost of Project

A specific cost of the project is not known. However, with engineering costs, the total is around \$35 million (Midtown).



Figure 3.12 Greenway Park During Bike Event

Design

Materiel

Most of the trail is combined concrete construction, the other sections being asphalt.

Process of Design Decisions

The Midtown Greenway Coalition is one of the main governing bodies deciding current and future use of the trail along with county government.

Client

The Midtown Greenway Coalition is a grass roots nonprofit organization that advocated for the Midtown Greenway trails to

be put in by public agencies. Resulting in an amenity for the city of Minneapolis (Midtown).

Maintenance

Adopting four-block sections of the Greenway is a way in which citizens and organizations are involved in the trails ongoing maintenance. This is one of the biggest components of the Midtown Greenway Coalition's volunteer program with over 50 groups adopting. Groups are asked to schedule two cleanup events a year and sign a contract for two years. Additional tasks may also be done such as caring for past planting beds, adopting a garden, or sponsoring a larger area with various needs, such

as a major entrance location (Midtown).

Pedestrian Impact

The trail has provided many spaces for both public exercise, and commute and green space amenities for users of the trail network.

Trail Head and Development Criteria

With the completion of the trails across Minneapolis, the Greenway has become much more visible and has caught the eye of many developers who want to build along it.



Figure 3.13 Gardening Along Greenway

Social + Vibrancy

Economic Impact

The Midtown development has decreased air pollution and as a result lower health care costs. Moreover, new developments have been put into place along the corridor consisting of many types and scales of apartment complexes.

Sustainable Practices

Many plantings are dynamic and sustainable particularly native plants, which are well-adapted to the climate and should require relatively low maintenance once established. Such planting protects or improves water, soil,



Figure 3.14 Community Garden along Midtown Greenway

air, and biodiversity quality and in turn provide food and shelter for wildlife, especially birds and butterflies. Lastly, green spaces provide a regional connection for wildlife (Midtown).

Infrastructure Impacts

There are three general categories of Midtown Greenway bridges: 1. Historic and new bridges spanning the Greenway's trench segment; 2. The new Martin Olav Sabo Bridge that takes trail users over Hiawatha Avenue; 3. A proposed Mississippi River crossing (Midtown).

Public Art

The Greenway is also a unique

forum to display art where travelers go more slowly than by car and travel without the distraction of traffic. Art in the Greenway brings various cultures together, enhancing the positive aspect of inner city life. Temporary Art, Performance Art, and Permanent Art make up the three types of art in the corridor.

Quality of Life

With programs associated with the trail, many opportunities like walks arise, bringing about 200 hundred regular group walkers to the Greenway. In this way, the sense of community is greatly enhanced (Midtown).



Figure 3.15 Greenway Public Art

Figure/Form

Location

The Greenway lies in a former Milwaukee Road railroad corridor along 29th Street. This corridor had been abandoned west of Hiawatha Avenue but is still active east of Hiawatha as part of the Minnesota Commercial Railway (Midtown).

Duration

Phase One of the Greenway opened in August 2000, Phase Two opened in November 2004, and Phase Three in September 2006. In fall of 2007, the new Martin Olav Sabo Bridge was opened by Hennepin County and the city as Phase Four,

eliminating a dangerous at-grade crossing at seven-lane Hiawatha Avenue (Midtown).

Livability/Amenities

The Greenway serves a very ethnically and economically diverse community. For example, all the way across Minneapolis, the Midtown Greenway runs parallel to nearby Lake Street, a commercial strip with hundreds of retailers, restaurants, and other businesses.

Housing Market

Many developments, consisting of multifamily structures, mainly apartment complexes, have appeared along the corridor.

Brownfield/Greenfield

Originally a greenfield project the rail line was built between 1879 and 1881; however, as traffic increased, the city of Minneapolis mandated a trench be built between Hiawatha and Irving avenues in 1910 as a brownfield project (Midtown).

Streetscape Structure

The Greenway consists of two one-way bike lanes and one two-way walking path, though they are combined in some places because of space constrictions. Because of the historic nature of the corridor, it cannot easily be widened or modified (Midtown).



Figure 3.16
Greenway Wayfinding

Conclusion

Scale

The project is around 5 miles long creating a greenway equal in length to the area I am looking at in my Kansas City urban business district analysis.

Starting Conditions

The Greenway is based on a former railroad corridor used by Milwaukee Railroad after being acquired by the city of Minneapolis (Midtown).

Tourism

Much of the tourism generated by the greenway is attributable to the art and public green spaces created by the corridor.

Successes

The most successful part of the greenway project is the public gardens and parks.

Evaluation of Goals

Creating sustainable gardens, ensuring outreach to the community, and improving safety on the trail were the main goals

of the project. The group walks, lighting features, and park projects they have more than fulfilled those goals.

Shortcomings

Using part of the Greenway right-of-way for mass transit is also under consideration and has the support of the Greenway Coalition, using either streetcar or light rail technology (Midtown). This was not an initial conception and might be missed if development does not go as planned, especially given the area and orientation of the trail.

Design proposal

Chapter V

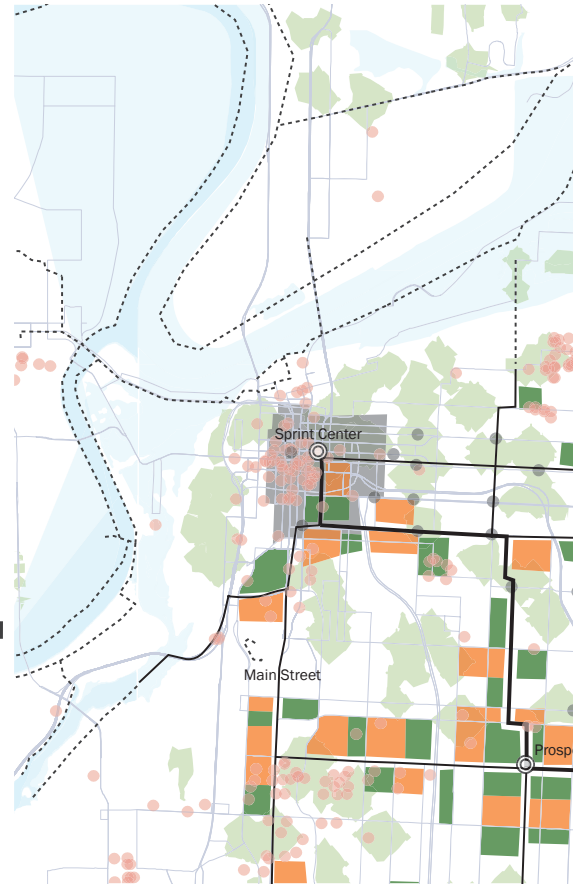
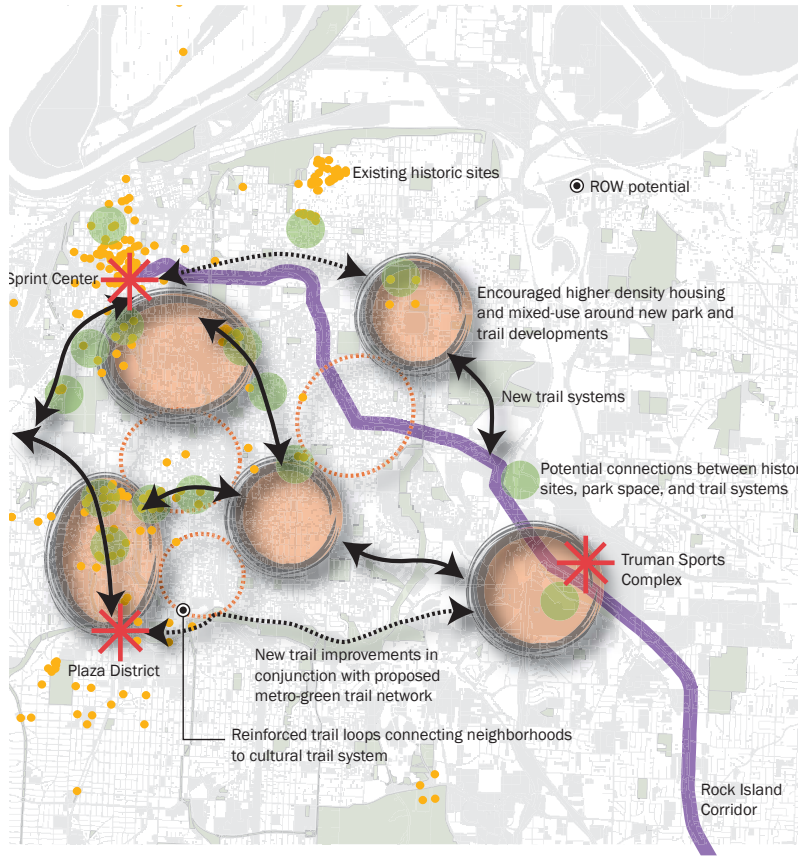


Figure 4.01 Trail Routing Plan

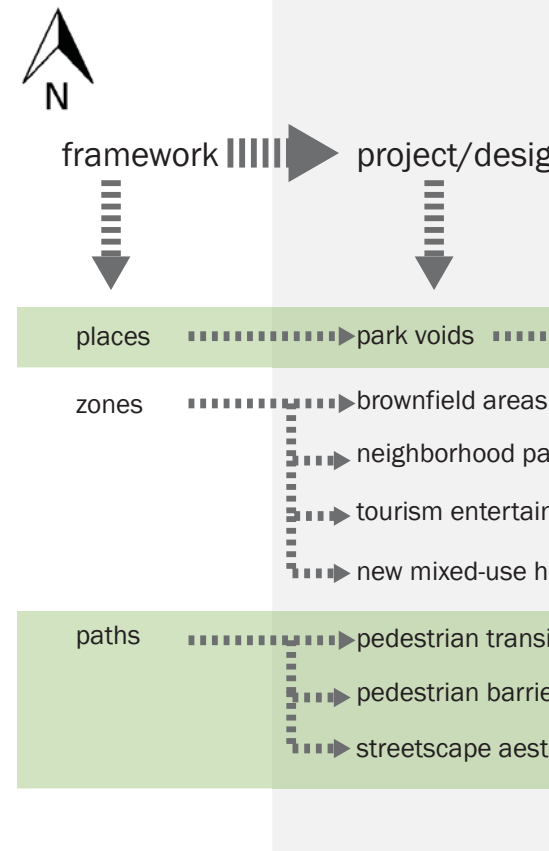
This section outlines the critical mapping process and design proposal of the cultural trail implementation between the Sprint Center and the Truman Sports Complex. Critical maps are followed by a routing plan for the cultural trail. Following, streetscape types are constructed and described, and a series of montages showing the character/material potential of these design elements are shown. These elements are all retrofitted on existing sites within the project boundary.

Framework



NTS

Figure 4.02 Design framework



Site Design

This framework flowchart diagram establishes a methodology for critical mapping in relation to project concerns and design considerations as shown in figure 4.03.

The chart breaks down trails, parks, and mixed-use districts into paths, places, and zones.

This establishes a methodology for diagramming and analyzing the relationships that occur between the different framework elements.

From the result of these diagrams, critical maps will be created using the visualization techniques described in the flowchart.

From these critical maps a basis for design moves which includes the urban cultural trail route, park overlay zones, and mixed-use district zoning overlay areas was established. This framework compilation is shown in figure 4.02. The diagram outlines major links, development zones, and destinations.

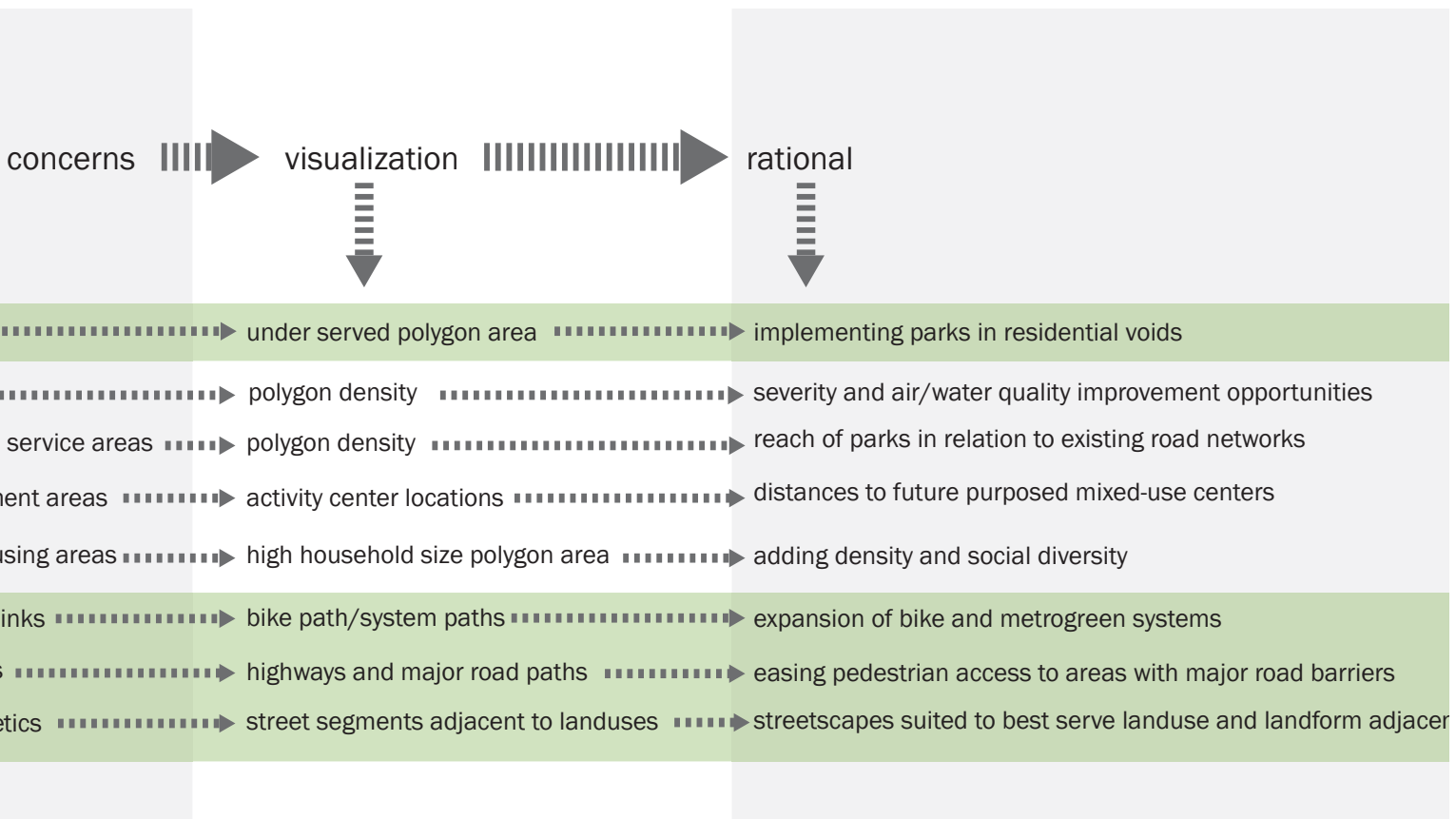


Figure 4.03 Design critical mapping framework

brownfield redevelopment areas



Figure 4.04
Crossroads district
site 1

First is the mapping of brownfield information. This information is taken from Stephanie Mallinckrodt which was also discussed in detail as to relationship to her project. Brownfields offer a unique opportunity for environmental consciousness in the remediation process for Kansas city. Two elements in particular, cluster and green trail system and tourism relationships.

Clusters

Size and Density

The amount of brownfield sites is concentrated along the southern portion of the crossroads districts. These sites which are darker also are larger in size than other areas. The density of the sites also seems to play a role in the severity of contamination likely hood. Clusters of industrial areas seem to produce a greater number of at risk areas.

Project area relationship

Crossroads District and downtown Kansas City CBD

The relative close proximity to the sprint center and development district trail node in downtown Kansas City offers a unique potential of redeveloping crossroad brownfield areas into mixed-use districts and park developments.



NTS

Figure 4.05 Brownfield sites in crossroads

Brownfields in Crossroads

Likely contamination of areas
(least likely being lightest) base
off of Noonan and Vidich
(1992)

Brownfields sites exist in areas of higher industrial development. Crossroads is an area of Kansas City that has a high likelihood of these types of sites. Remediation in the form of park redevelopments could serve as a way of addressing these areas for water quality and human hazards.



kansas city park service areas



Figure 4.06 Elementary teaching

Types of parks

Neighborhood, Community, and Regional parks

Parks exist throughout Kansas City, however it is the goal of green trail systems and tourism to increase the coverage of neighborhood parks within the area between the Truman Sports Complex and the Sprint Center cultural trail nodes. Increasing the urban density starts with providing use and access to neighborhood parks and it is with the increase in coverage which can act as a first step to this process.

Park service area distances (mi)

Neighborhood, Community, and Regional service distances

Parks have a defined service area for the distances they cover to residents or people. These areas are as such for each park; Neighborhood parks have a 1/4 mile service area; Community parks have a 3 mile service area; Regional parks have a 5 mile service area. These service areas are derived from various sources including the National Recreation and Park Association and Missouri Department of Natural Resources.

Service area limiting factors

Roadways, Barriers, and Sidewalks

Barriers exist in multiple forms for users to access parks. Most of these forms are derived from the layout of lots and parcels as well as the roadways and sidewalks which are directly related in form. Landscape features also can act as barriers to pedestrian mobility. It is these such items which create the polygon shapes which are seen in (figure 4.07) as an element of consideration when proposing new park developments.

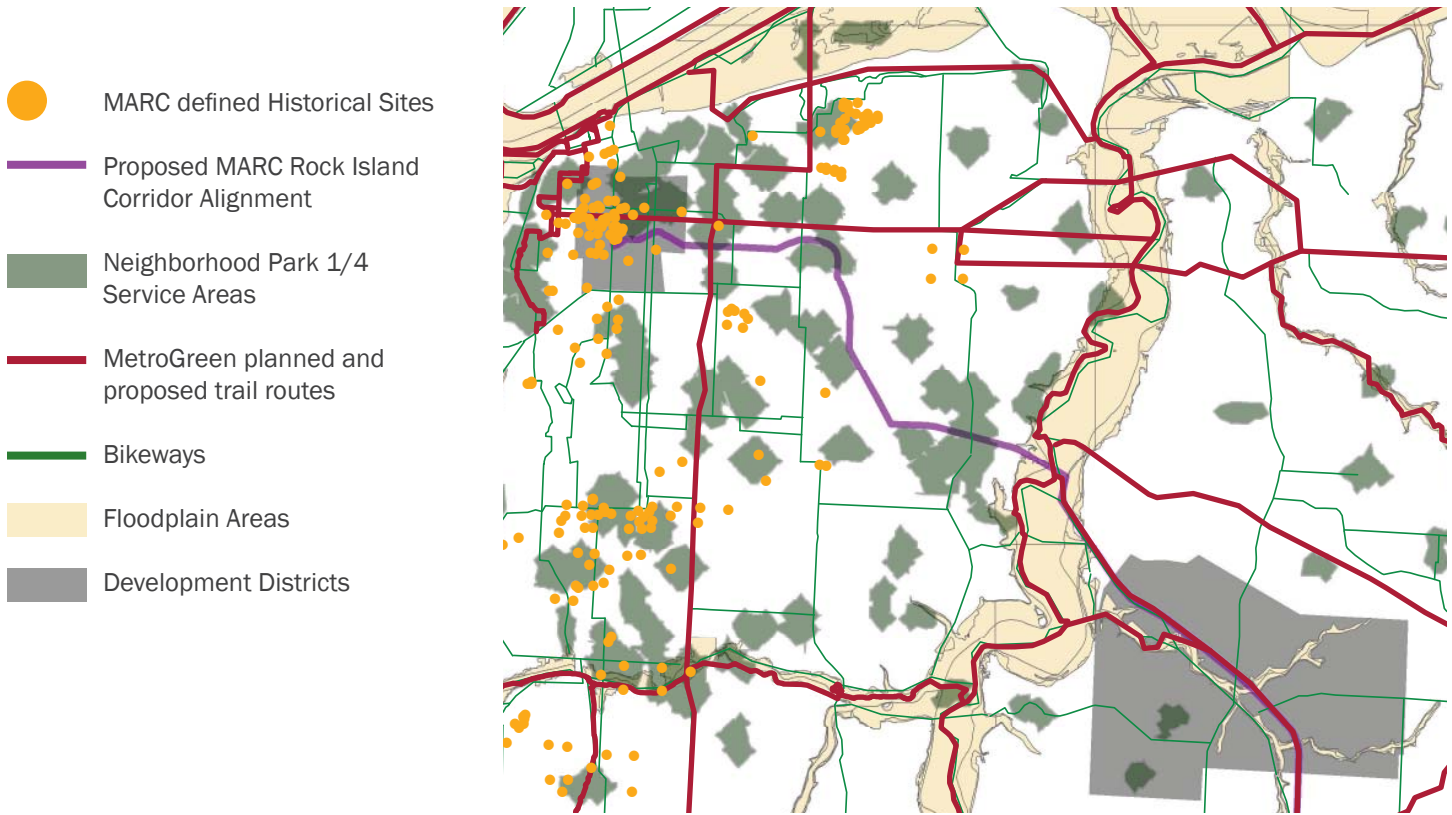


Figure 4.07 Neighborhood park service area adjacencies

Neighborhood park coverage



Neighborhood parks are a key element to the design decisions and design program. Neighborhood parks have a service area of 1/4 mile. Current MetroGreen trails are also shown in red. Connecting historic sites to areas of park service area voids will help establish a better served community.



kansas city park service areas



Figure 4.08 Cosmo park

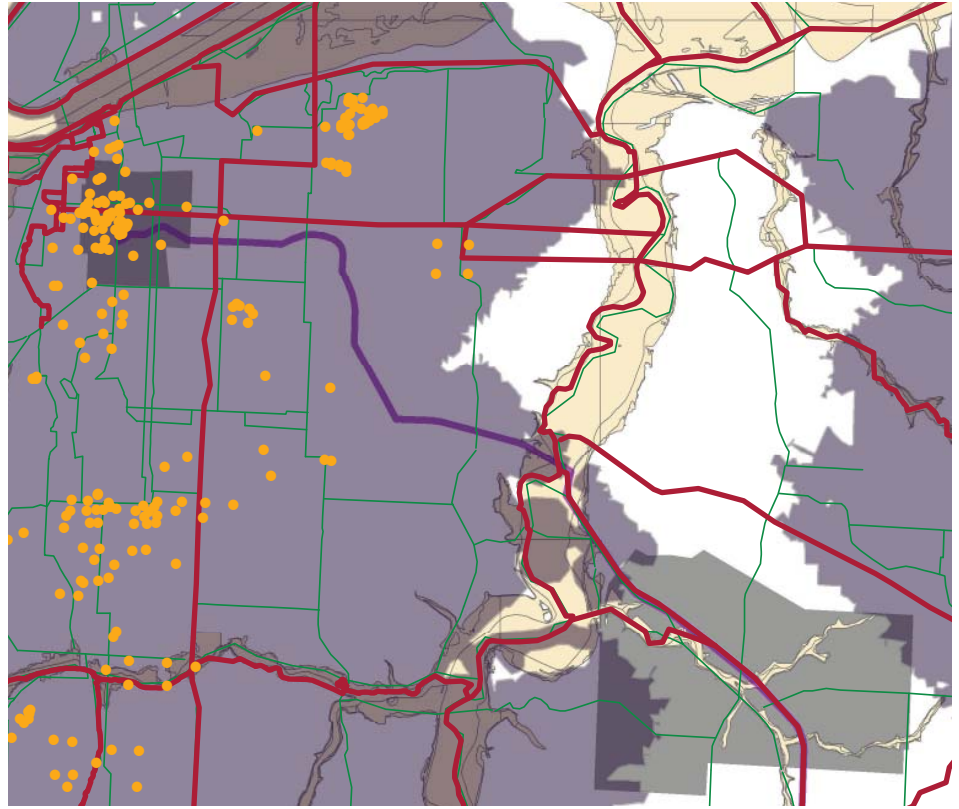


Figure 4.09 Community park service area adjacencies

Community park coverage

Community parks have a 3 mile service area. This service area covers most of the region in Jackson County, MO. However, the Truman sports complex is in on of the few voids making it a good candidate for establishing a development district with a mixed-use development and a community park for the new residents it will serve.

- MARC defined Historical Sites
- Rock Island Corridor Alignment
- Community Park 3 mile
- MetroGreen planned and proposed trail routes
- Bikeways
- Floodplain Areas
- Development Centers



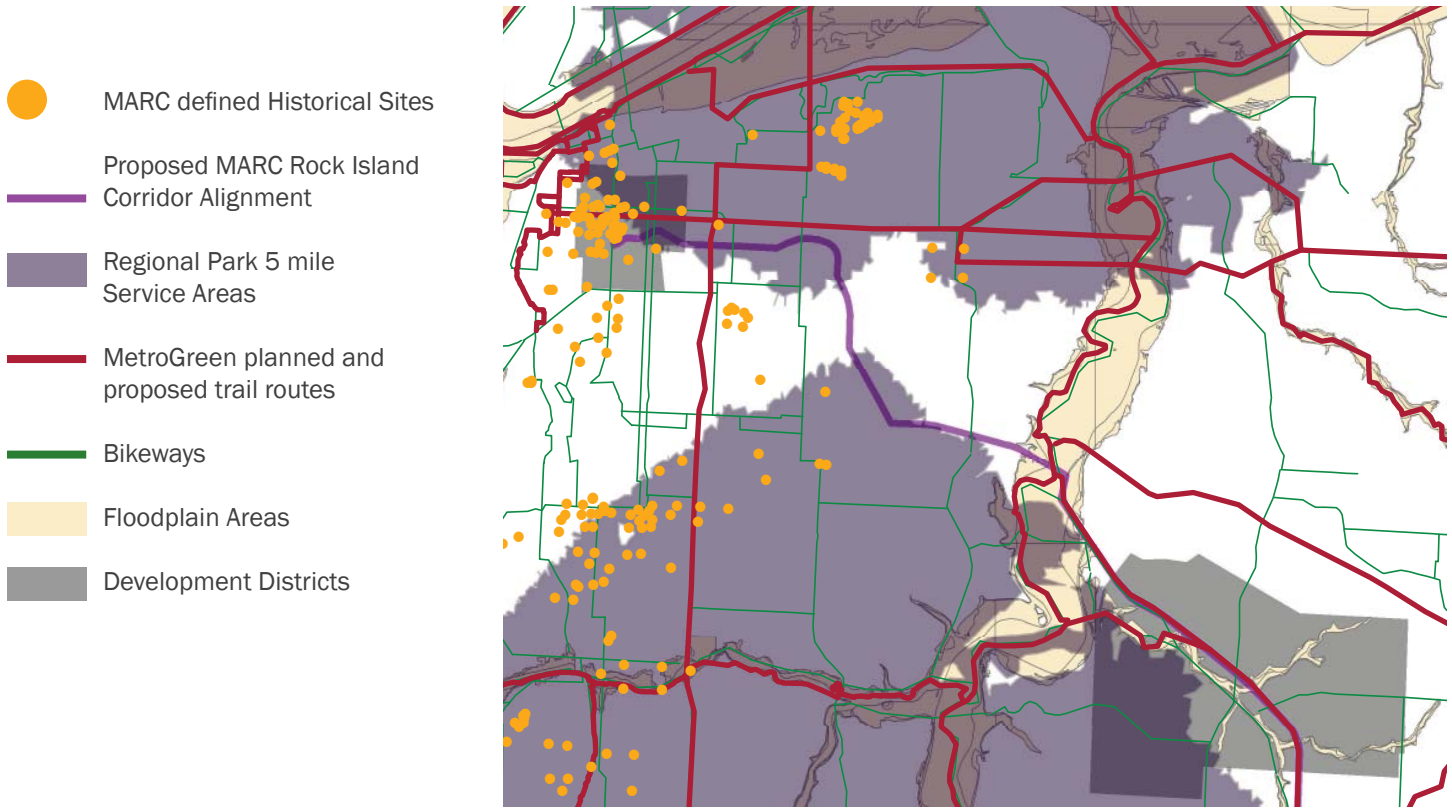


Figure 4.10 Regional park service area adjacencies

Regional park coverage

Regional parks have a 5 mile service area and serve large populations. Within the Jackson County, MO area there is a void in parks between downtown and the plaza as well as on the northeast side of the Truman Sports Complex. Placing parks and routes which serve these areas could help connect counties outside of Jackson and bring interest to the area as a destination for parks.





Figure 4.11 Dance Club

Entertainment districts

Nightlife areas

Kansas City has nightlife areas such as the Kansas City Power and Light District and the KC live stage. Also the Sprint Center hosts many concerts and events through out the year. Main street hosts many local venues and clubs which attract visitors and residents (KC Travel).

Music

Many music venues exist which could be tapped into and expanded. KC style Jazz is the focus of many night clubs and venues in the downtown region such as the 18th and Vine Historic Jazz District (KC Travel).

Theatre

To appeal to the arts, theatre's such as the Gem Theater put on shows that showcase local and national talent. Additionally, Crown Center put on Broadway style performances (KC Travel).

Shows

Finally, a multitude of shows such as the Kansas City Ballet performs at annual concerts in the local parks. A great way to showcase new parks and a cultural trail system would be to have live performances outside. Also the Kauffman Center for Performing Arts will be the new home to the KC ballet, opera, and symphony companies located in the crossroads district (KC Travel). These places can be linked to as well in the creation of a cultural trail network.

- MARC defined Activity Centers
- Proposed Cultural Trail Routes
- Areas which contain higher amounts of historical sites and activity center locations
- Historical Sites
- Floodplain Areas
- Development Districts

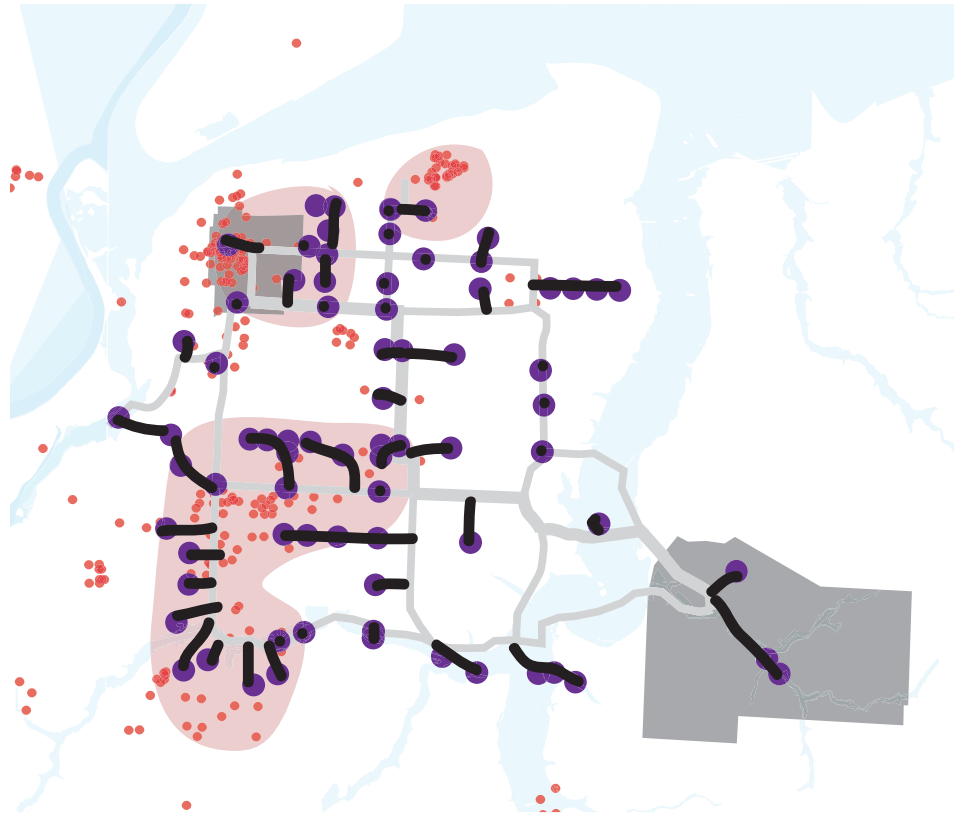


Figure 4.12 Activity center cultural trail and historic site connections

Activity Center Connections



Activity centers as defined by MARC are linked to areas which also contain a higher density of historic sites (MARC GIS 2011). These zones are outlined in red. These zones could be used for branding but also should be connected to interior segments along the proposed cultural trail routes. These tourism destinations should serve as new routes for which businesses and districts can develop.





Figure 4.13 Bonnieview Park

Park development opportunities

Park Voids

Park voids exist in many places in Kansas City in respect to neighborhood parks. With this though is the opportunity to develop more greenspace and leisure environments. These voids can generate new jobs and interests in Kansas City, MO as well as produce air and water quality improvement for local residents. Adding parks also can help brand KC as a greener city and encourage potential residents to move to new park areas.

Greenbelts and systems

As stated before the MetroGreen project is a good move in the right direction for the green networks throughout KC. New parks and their alignment in respect to the proposed plans can further improve and refine the planned network of green systems.

Neighborhoods

Neighborhoods are an important part of Kansas City's identity and heritage. Developing parks in respect to the heritage of each neighborhood's unique identity can help bring to light some of the historic culture within each of these project areas.

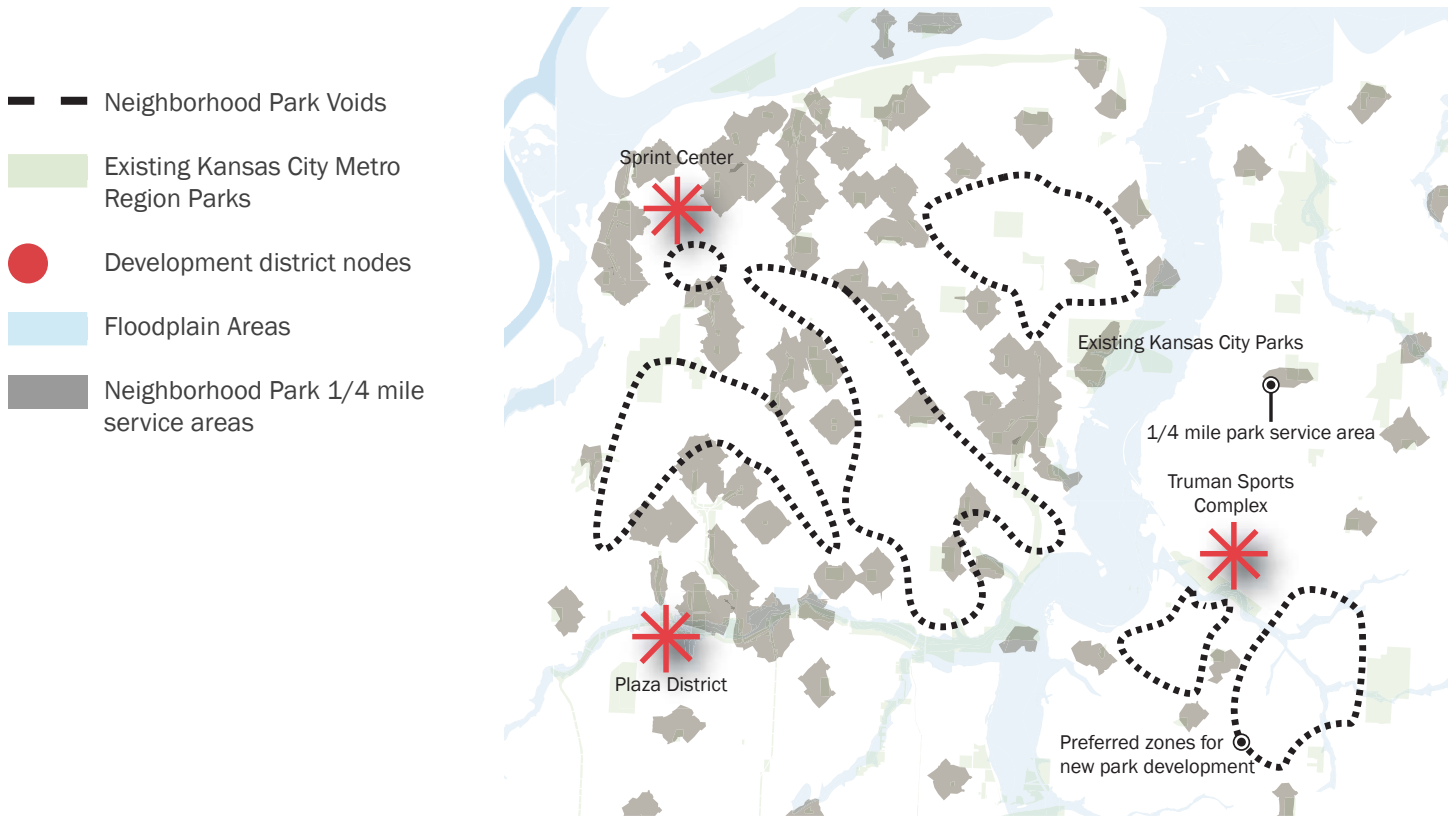


Figure 4.14 Significant neighborhood park zone voids

Park voids

Park void areas are shown in relation to both major project nodes and neighborhood park service areas. Areas which have been outlined as park service area voids use neighborhood parks as a measure. The design development for these areas are aimed at residential use in a mixed-use setting. As shown on the map most lie in the interior between nodes and will be connected in the proposed trail network.



housing and population connections



Figure 4.15
Prospect Residence

Size of households

High household sizes

Areas which have larger household sizes have been identified. Areas which have a larger family structure correlate strongly to areas which have park service voids. The reasoning for this could be attributed to many aspects of demographics and culture. However, it does represent one idea which is the change in family structure to lower U.S. household sizes is not occurring within these areas of park voids. The introduction of parks and higher density low household oriented housing projects could help encourage a younger professional demographic growth in these areas.

Census 2012 data

This information was described using the census 2012 data so that it reflects an accurate portrayal of the current conditions of housing representative to Kansas City, MO.

Population density

Higher population density

Areas in which the population density per square mile is larger than surrounding block groups are outlined in grey and also stacked in respect to household size. Many areas which are higher density in relation to the respective areas are without service to basic quality of life items such as parks. There is no reason that residents of these areas which have kids should have no access to parks. The route of the cultural trail will help these areas fill that void.

Census 2012 data

This information was described also using the census 2012 data so that it reflects an accurate portrayal of the current conditions of population representative to Kansas City, MO.

- Overlap areas
- Existing Kansas City Metro Region Parks
- Development district nodes
- Transit Routes
- Areas of high population density and household sizes



Figure 4.16 Housing concentration overlaps

Population concentrations

Shown in this diagram are areas of both higher household sizes per residence and areas in which there are higher averages of population density occur. Focusing design efforts which lack parks and trails will help define which central areas need designed districts. Routing the cultural trail in respect to these areas future helps define pathways and the placement of programmatic elements.



pedestrian transit opportunities

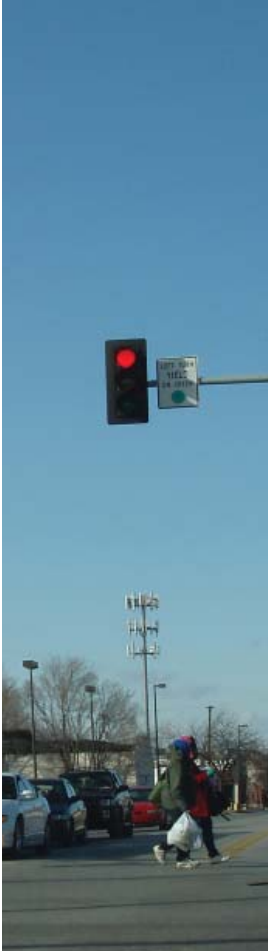


Figure 4.17 Prospect pedestrians crossing

Destinations

Downtown and Rock Island Corridor Nodes

The many nodes along the Rock Island corridor such as historical sites, activity centers, housing, and jobs should be served with better pedestrian mobility options.

Mass transit opportunities

Commuter rail line

A potential for commuter rail has the possibility of using the Rock Island Corridor. Two railroad companies Union Pacific and Missouri Central own sections of the corridor (MARC). With this in mind the creation of a active trail system is more vital in the analysis of the project.

Light rail

A light rail system connecting the three districts (Truman Sports Complex, Sprint Center, and the Plaza) could be a nice addition to the implementation of an expanding train system as Kansas City progresses its transit system.

Streetcars

Finally, street cars should be used at each node to help with wayfinding and congestion for high activity times.

Trails

Biking

Biking paths exist in limited number for residents to experience biking in a safe separated bike path environment. Most bike trails with separated conditions exist outside of the interior urban housing areas of the Rock Island corridor.

Walking

Being able to access everyday necessities such as food, banking, mail, and even job locations is a goal of this project. Being able to access development districts and mixed-use districts by simply walking will help promote a more user friendly and healthy lifestyle for residents of the Rock Island Corridor.

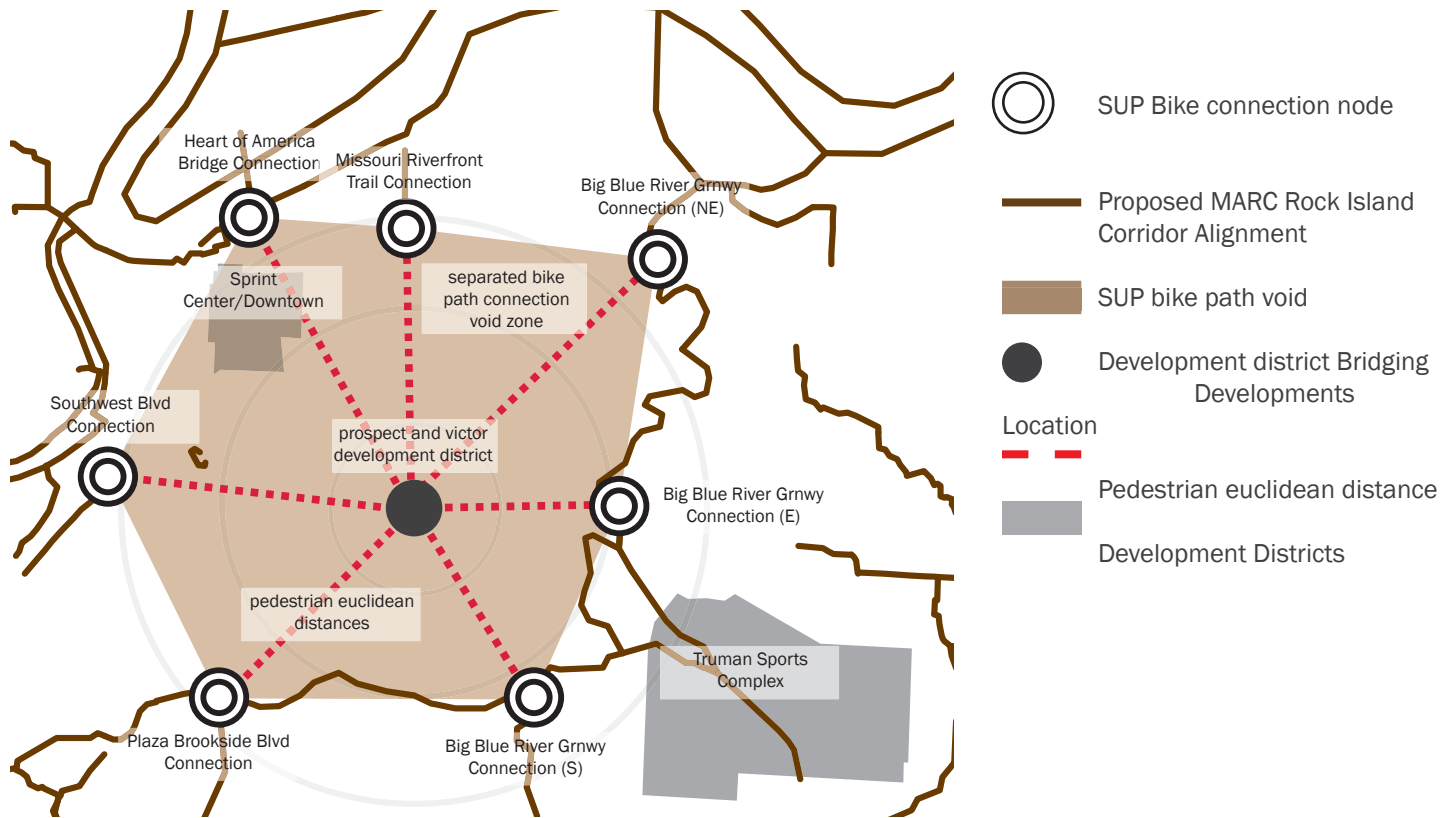


Figure 4.18 SUP bikeway connection potentials

S.U.P. connection nodes

With the project site there are several major bike paths which link to greenways or entertainment districts. However there are hardly any interior bike paths which are SUP (shared use pathway). This makes it very hard for some of the highest residential areas to safely access areas of interests along with creating a pedestrian barrier for downtown residents and workers to go to game days or weekend activities without using a car.



Creating a central hub that is a development district consisting of mixed-use housing and business along with parks will serve as a regional connector for people to use proposed cultural trail routes.

-  Development district trail node
-  Proposed Main Cultural Trail Link
-  Proposed Cultural Trail Secondary Routes
-  Proposed Mixed-Use District Zoning Overlay
-  Proposed Park Area Zoning Overlay
-  Development Districts
-  Existing Transit Lines
-  Existing Parks
-  SUP Bike Paths
-  Historic Sites
-  Floodplain Area
-  Rock Island Corridor Node

Routing Plan

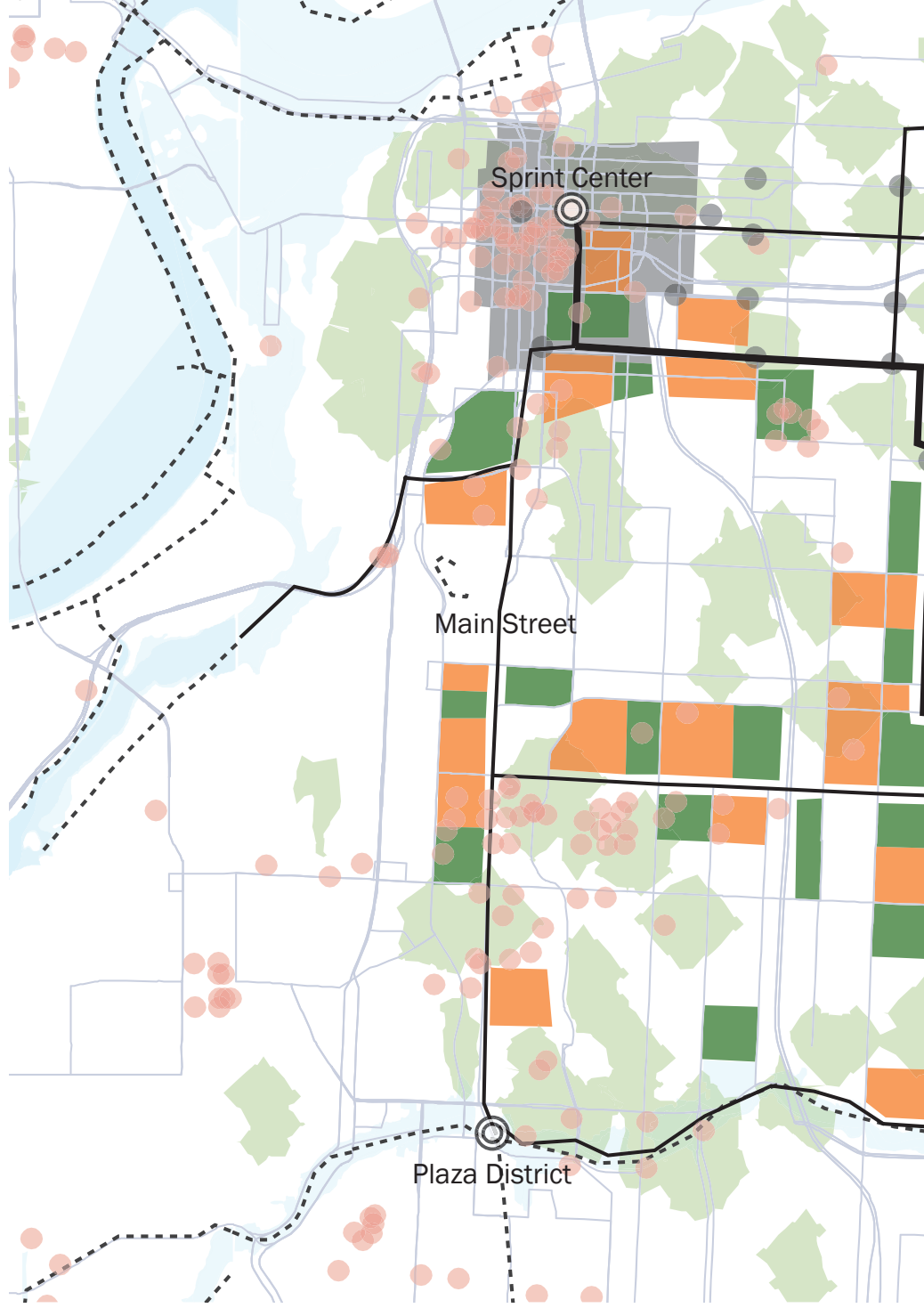
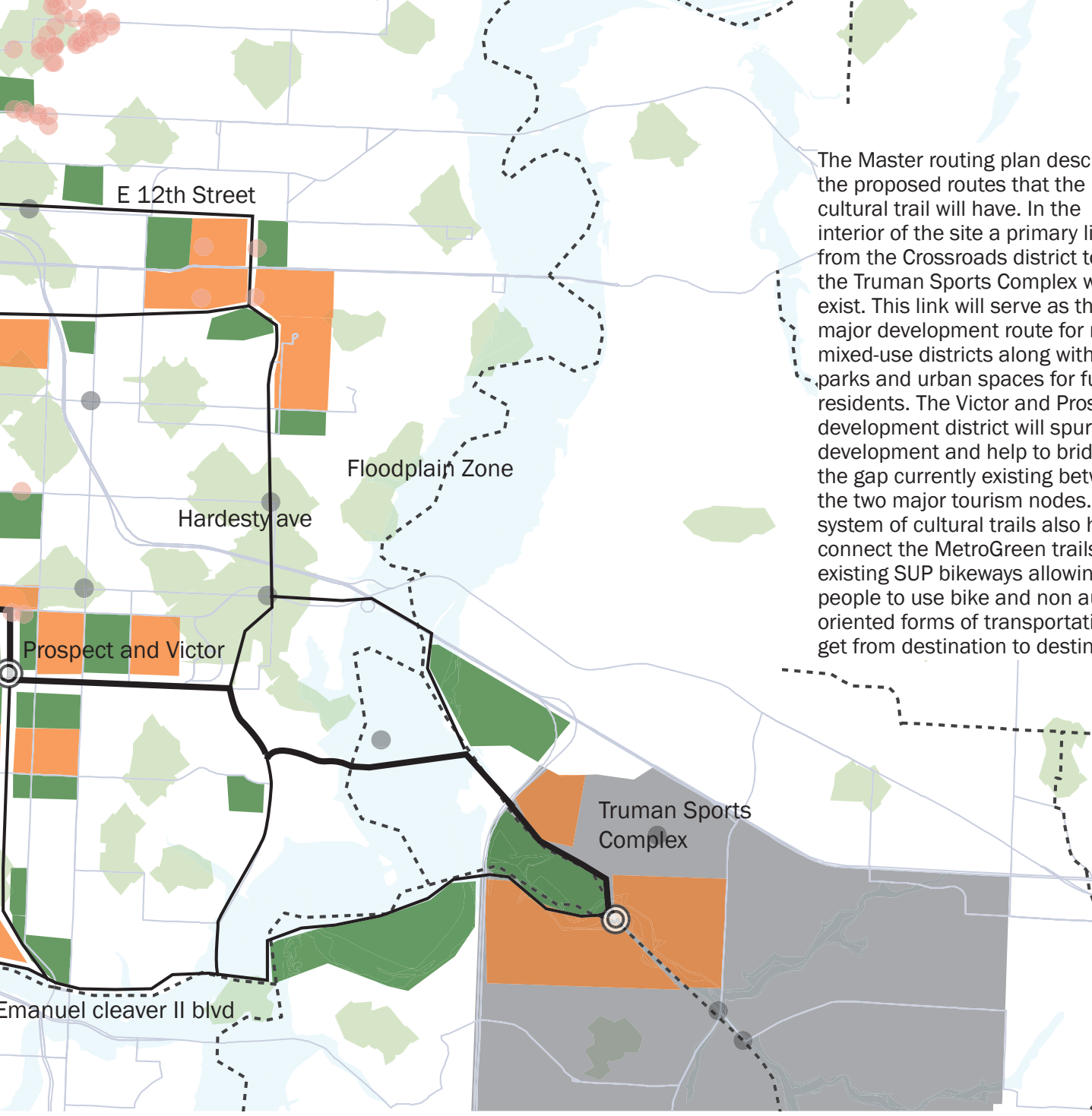


Figure 4.19 Cultural trail routing plan and overlay districts



The Master routing plan describes the proposed routes that the cultural trail will have. In the interior of the site a primary linkage from the Crossroads district to the Truman Sports Complex will exist. This link will serve as the major development route for new mixed-use districts along with new parks and urban spaces for future residents. The Victor and Prospect development district will spur development and help to bridge the gap currently existing between the two major tourism nodes. This system of cultural trails also helps connect the MetroGreen trails and existing SUP bikeways allowing people to use bike and non auto oriented forms of transportation to get from destination to destination.



Every path of the trail proposal uses an existing roadway corridor. These corridors have unique characters and attributes. This series of images shows the current character of each of these routes.

exterior cultural trail streets

When addressing the implementation of a urban cultural trail items such as how many driving lanes need to be kept and what side/s of the

roadway would be serve a trail placement should be developed by Kansas City.

Main street



Figure 4.20 main street view

Main street runs north south within the cultural trail routing plan. It is an urban environment that has many activity centers and historical sites within its ROW adjacencies.

E 12th street



Figure 4.21 12th street view

12th street runs west to east and houses two cultural trail street typologies, low rise, and single family housing. It connects the northern I-70 side of the project area to downtown and Truman Sports Complex.

Emanuel cleaver II blvd



Figure 4.22 emanuel blvd view

Emanuel cleaver II blvd runs west to east on the southern side of the cultural trail system. It is directly adjacent to brush creek and proposed MetroGreen trail system. It is an excellent opportunity for leisure trail and pedestrian travel use.

interior cultural trail streets

E 35th street



Figure 4.23 35th street view

East 35th street runs west-east midway in the central region between the Sprint Center and the Truman Sports Complex. It runs through mainly single family residential neighborhoods and will be redeveloped to low rise.

Benton blvd



Figure 4.24 Benton blvd view

Benton blvd. is a north south connector which is also in mainly single family residential neighborhoods. The central portion will be redeveloped to low rise with the rest using the single family streetscape type.

Hardesty ave



Figure 4.25 Hardesty ave view

Hardesty avenue is a north-south exterior cultural trail route which links areas north of I-70 directly to the Truman Sports Complex. It will use single family and train corridor street typologies.

cultural trail routing



Figure 4.26 Sprint Center Street

Development districts are comprised of Greenspace zoning overlays and Housing Overlays. The two enlargements of the Sprint Center and Truman Sports Complex site show a relative composition of which areas would be more park and open space oriented vs. mixed-use buildings.

Urban District

Sprint Center and Crossroads Development district layout

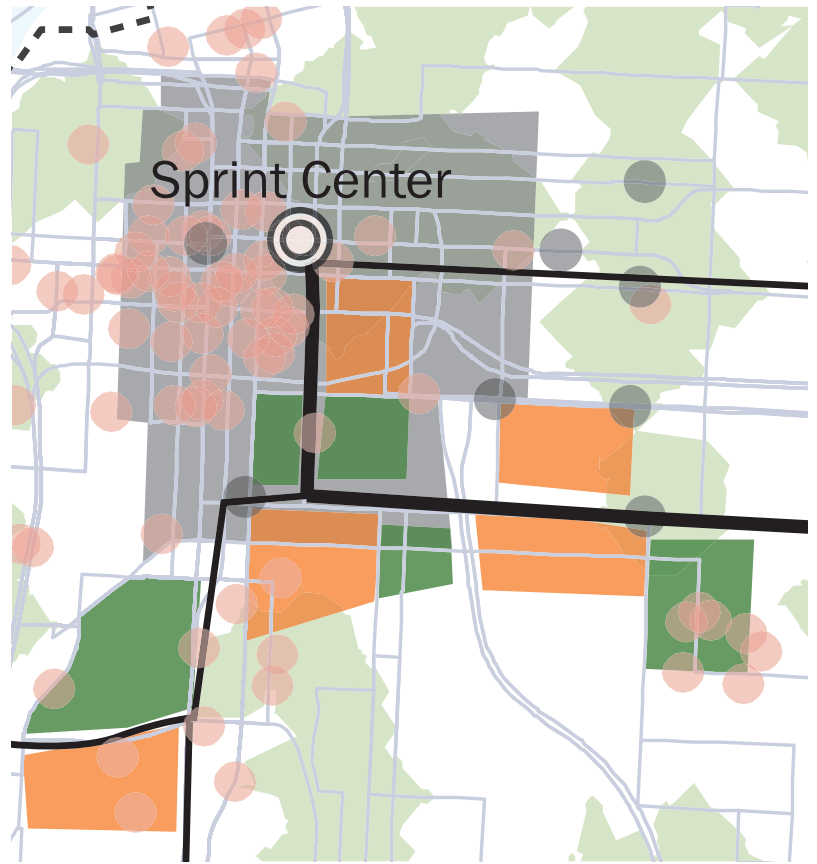


Figure 4.27 Sprint center development district layout

Two major aspects of the downtown and crossroads areas of Kansas city are important when planning the development of potential mixed-use, park, and an urban trail. First is the

potential capping of I-70, and the second is the conversion of crossroads sites into parks for brownfield remediation.

routing plan enlargements

Truman Sports Complex Development district layout

-  Development district trail node
-  Proposed Main Cultural Trail Link
-  Proposed Cultural Trail Secondary Routes
-  Proposed Mixed-Use District Zoning Overlay
-  Proposed Park Area Zoning Overlay
-  Development Districts
-  Existing Transit Lines
-  SUP Bike Paths
-  Floodplain Area

Sports District

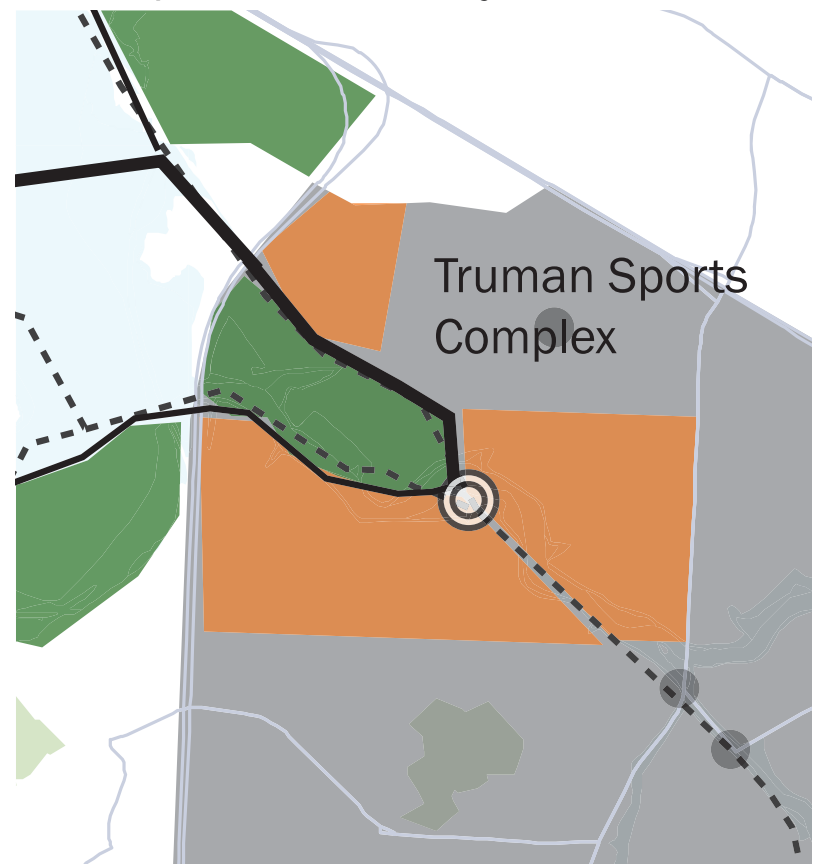


Figure 4.28 Truman Sports Complex development district layout

In regards to the Truman Sports Complex, future planning could provide a green space just south of Raytown road integrated with housing. Other surrounding mixed-use buildings could also

exist adjacent to stadiums as well as further south and east of Raytown road. This zoning layout could provide users and residents with a central green space.

mixed-use districts

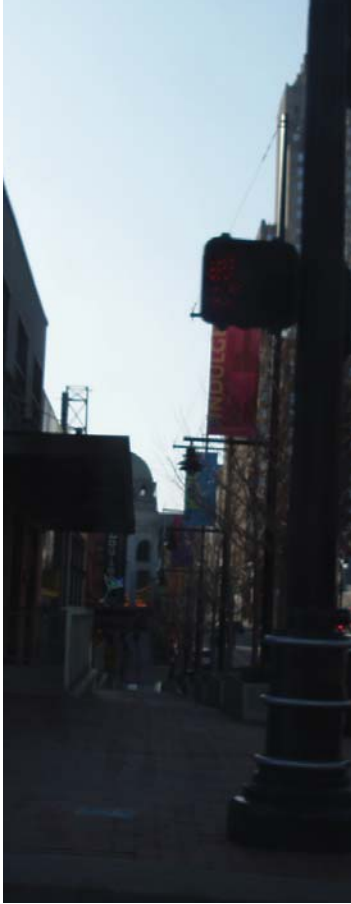


Figure 4.29 Main Street Sidewalk

Mixed-use housing districts are a critical aspect of the CSP initiative. The region is expected to grow but by previous designs sprawl has created a layout which is not as productive to a city as it could be. The placement of people in closer proximity to the Central business district in Kansas City can seek to strengthen the urban ring around the CBD. Housing sites are clustered around proposed cultural trail routes and park proposals. The highest density being at each node including the victor and prospect development district.

Housing

Mixed-use Housing Overlay Zoning areas

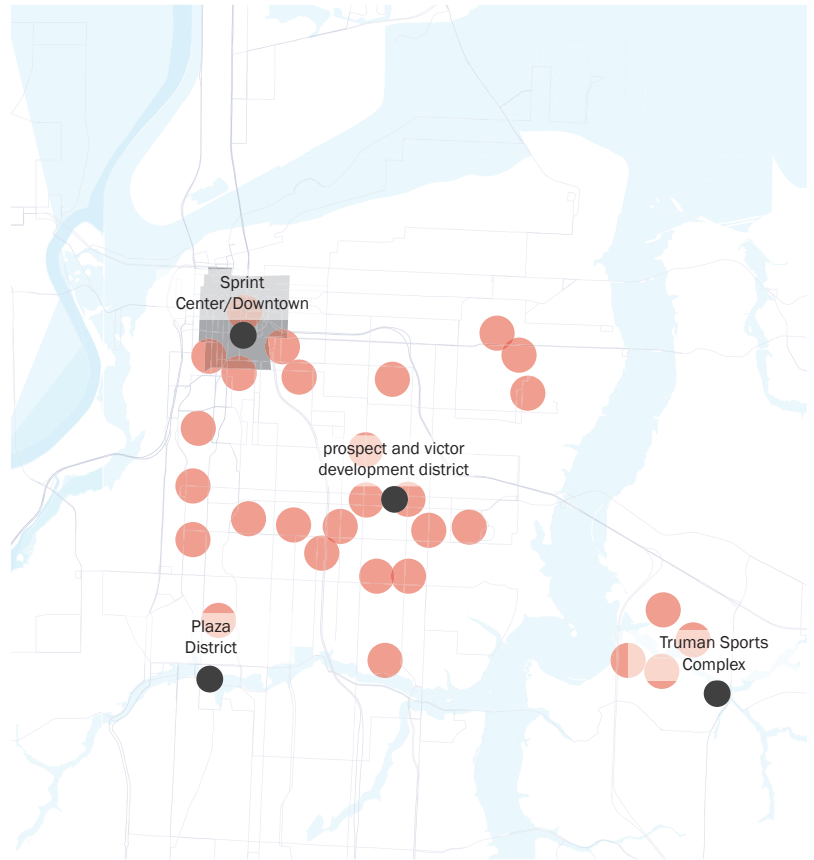









Figure 4.30 Proposed mixed-use housing zoning overlay areas



critical housing maps

Trail Type Segments

-  Potential Bike Path Connection Nodes
-  Existing transit routes
-  Proposed Mixed-Use Housing Zoning Overlay
-  Trail node
-  Floodplain Area
-  Existing SUP Bike Lanes
-  Development Districts
-  Trail Type E
-  Trail Type B/C
-  Trail Type D
-  Trail Type F
-  Trail Type A

Trails

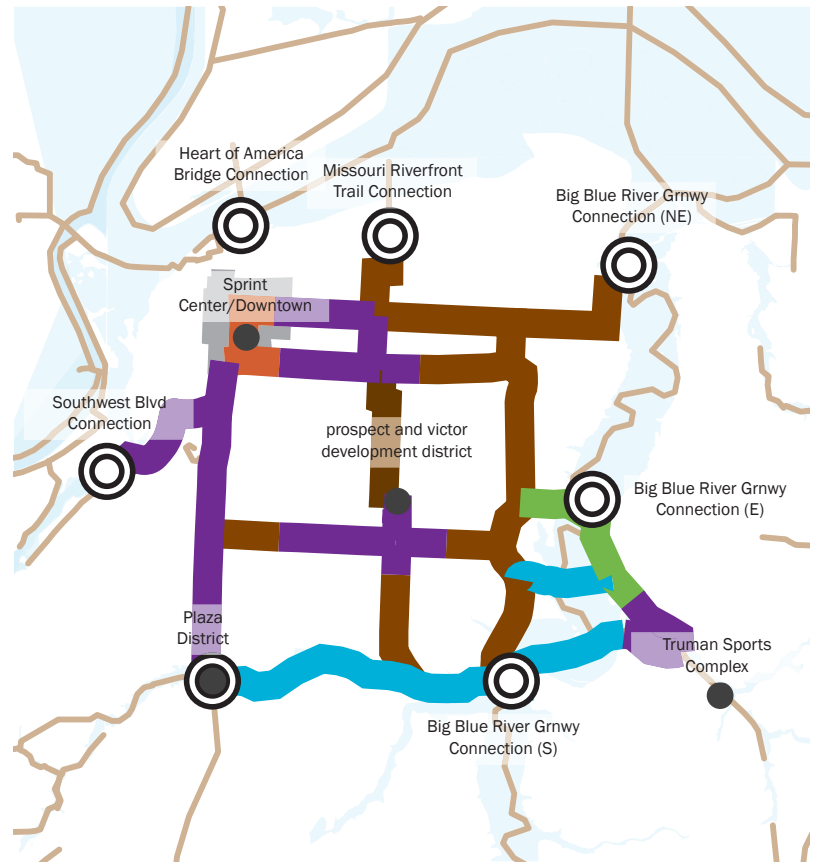
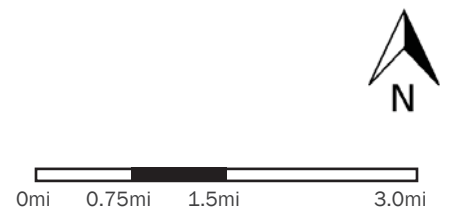


Figure 4.31 Proposed cultural trail streetscape type segments



park developments



Figure 4.32 Scotts branch trail

Parks will help to create public amenities and cultural spaces for the additional residents which are to come to the development areas along the cultural trail segments. These zones and links which were established based off of previous maps cluster in the interior sections of the map but also a line corridors. An additional thirty five parks are suggested for implementation along the cultural trail system.

Green Zones

Greenspace potential trail side adjacent areas

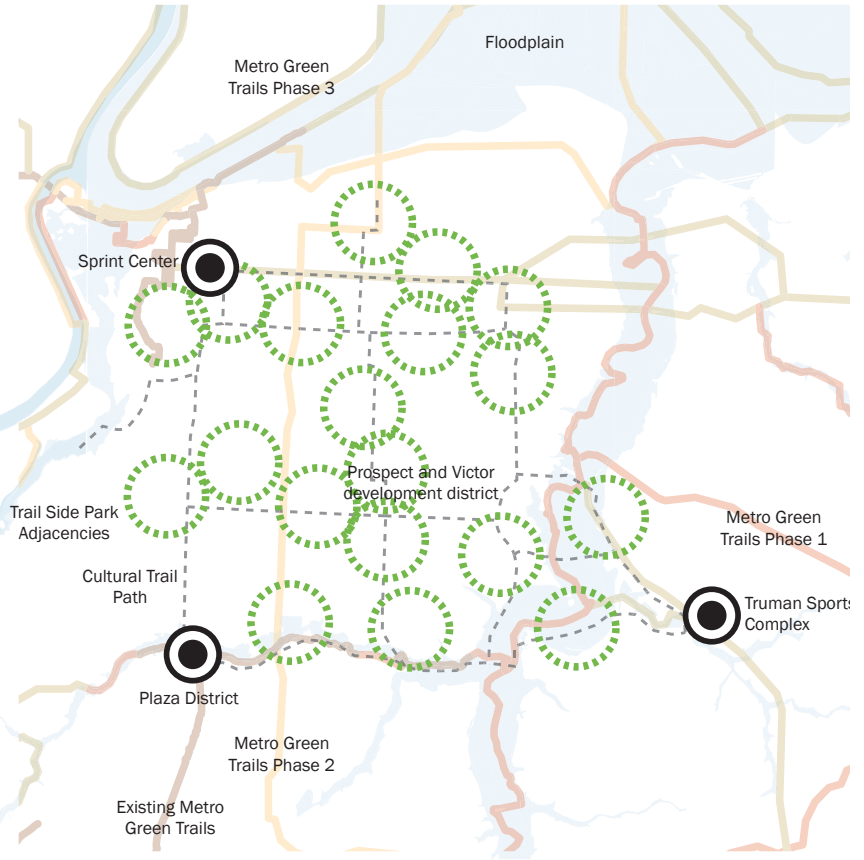
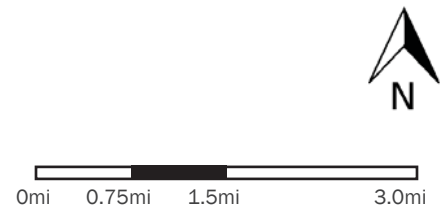










Figure 4.33 Proposed cultural trail links & neighborhood parks areas



critical park maps

Park Development Overlay Zoning areas

-  Potential Park Development Zones
-  Proposed Trail Links
-  Existing transit routes
-  Trail node
-  Floodplain Area
-  Proposed Park Zoning Overlay Areas
-  Development Districts
-  MetroGreen Existing Trail
-  MetroGreen Phase 1
-  MetroGreen Phase 2
-  MetroGreen Phase 3

Park Sites

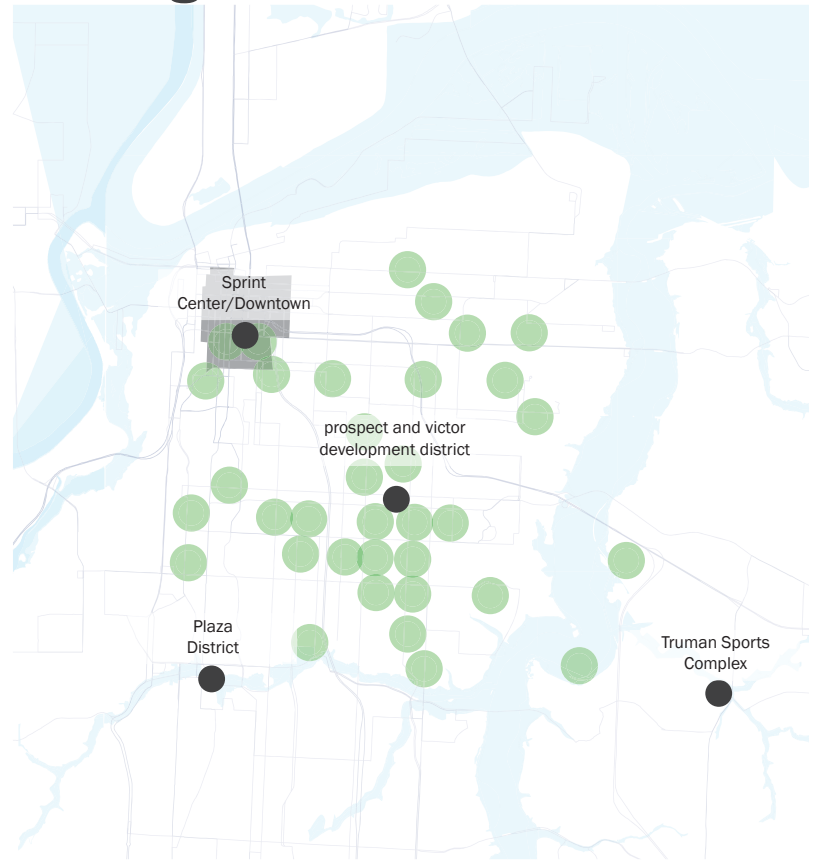


Figure 4.34 Proposed neighborhood park zoning overlay areas



conceptualizing spaces

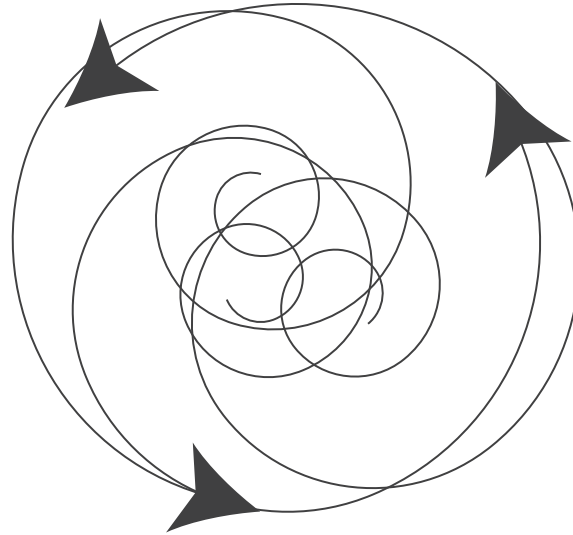
Each of the proposed routes has a unique feel and character. The next set of images show how these characters relate to each other and the surrounding area. A major component of providing trails, parks, and mixed-use districts is the appearance and structure. The sections, plans, and montages shown are rendered in a realistic style to show how the character and material of the locations change.



Figure 4.35 Cultural trail rendering

conceptualizing spaces

layout
scale
comparison



sections
plans
perspectives

character
atmosphere
moment

Figure 4.36 Space visualization diagram

The way these spaces were conceptualized is shown in figure 4.35. A circular thought process was used in forming how each of these different types and scales of drawing each related to the character, atmosphere, and moment represented in these images.

trail design



Figure 4.37 Prospect streetscape

Each streetscape type falls within the existing building structure. How the form varies is what is shown in this series of sections describing each type. They are listed in order from highest DU/acre to lowest DU/acre starting with a low/mid-rise urban condition.

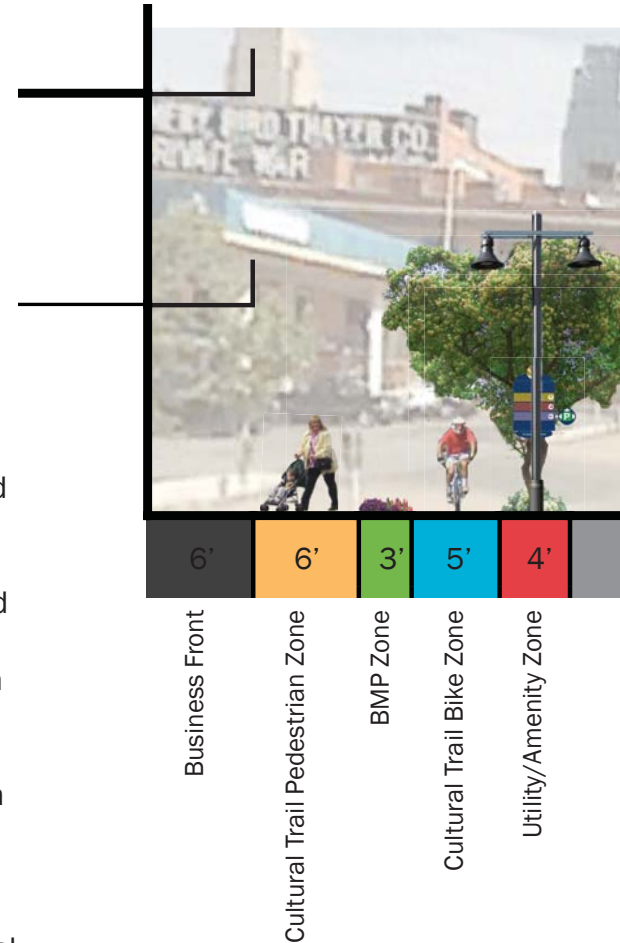
Low/Mid-rise urban condition

Converting sections of the urban trail in downtown Kansas City into urban cultural trail streetscapes

Streetscape type A

Design

The design of this streetscape is relative to the grand boulevard street in downtown Kansas City. The goal of this streetscape is to reduce lanes of traffic to produce traffic calming effect while widening the pedestrian membrane between the building edge and the roadway. Increasing the pedestrian zone gives people a greater sense of security and allows for the implementation of BMP stormwater items such as bioswales. It also allows for a separated bike path which increases rider and pedestrian safety. The low/mid-rise urban condition streetscape type shows cultural trails on both sides of the roadway in an ideal condition. The overall ROW width is 104 feet with 4 lanes of traffic with the option of the outer lanes becoming parking lanes if necessary.



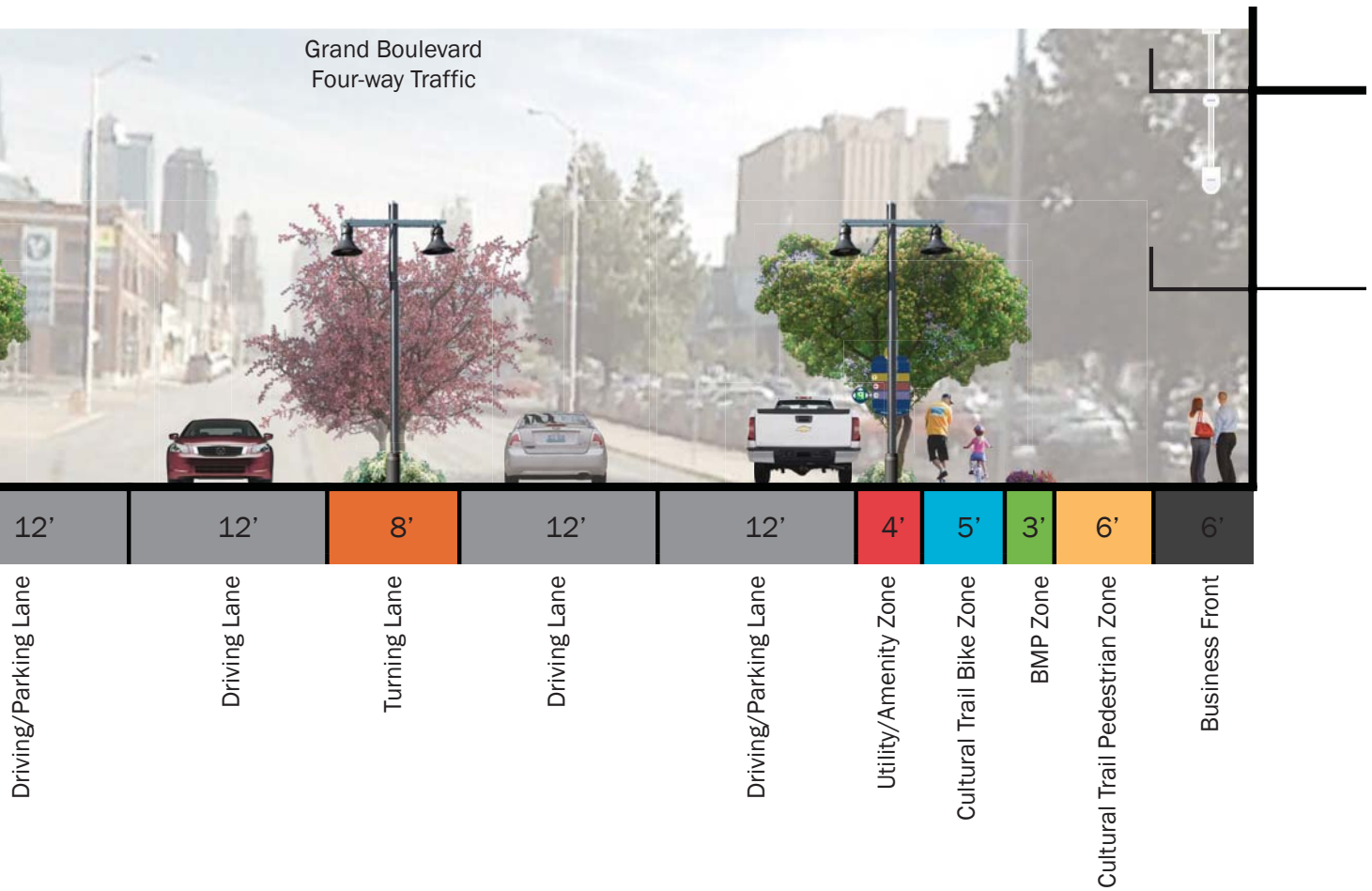


Figure 4.38 Cultural trail streetscape section type A

Low-rise urban condition two-way streets

Converting sections of the urban trail next to existing low-rise into urban cultural trail types with a parking lane and two-way street traffic within a 58' ROW

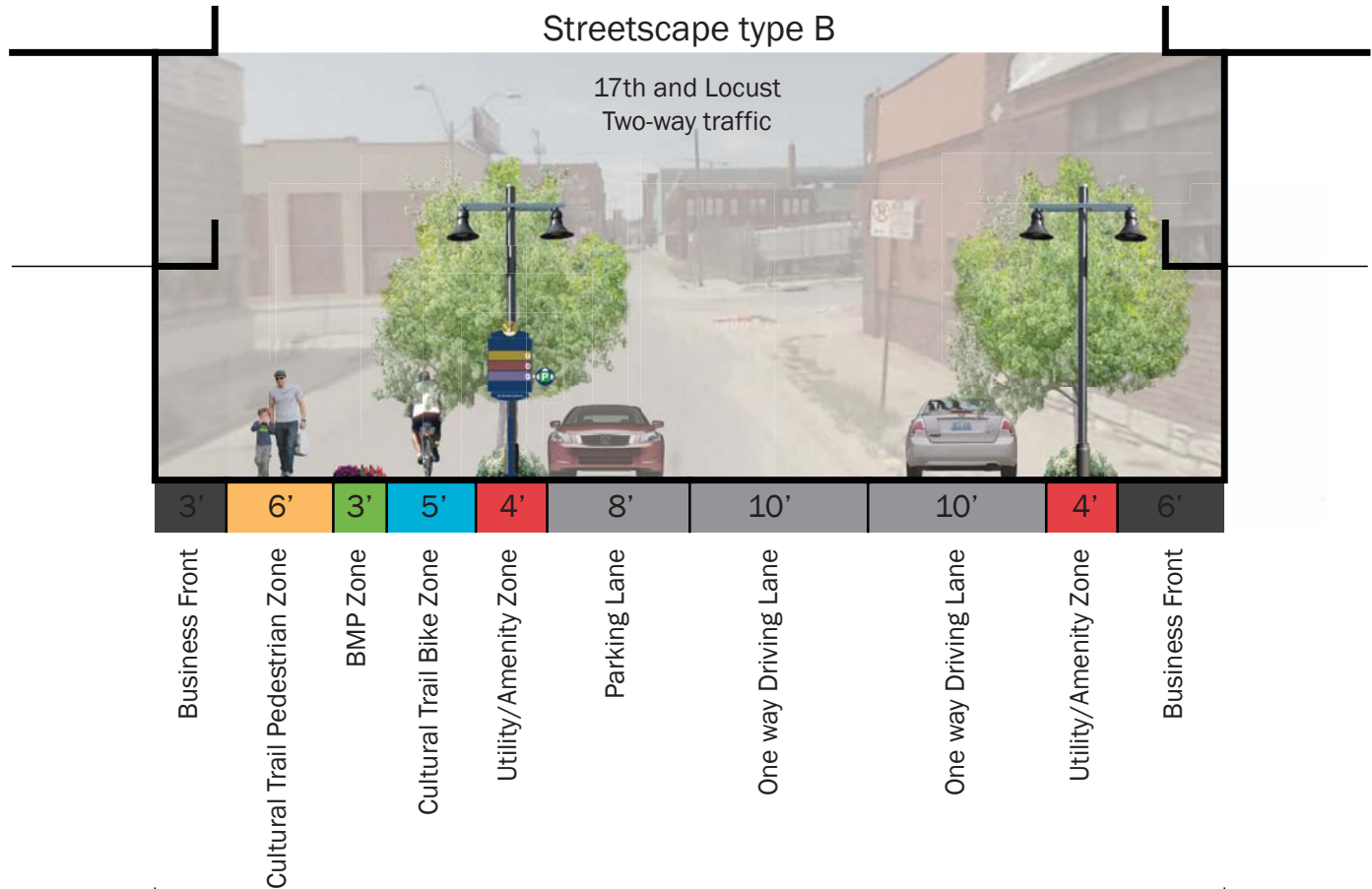


Figure 4.39 Cultural trail streetscape section type B

Design

The design of this streetscape is relative to 17th and Locust within the Crossroads district of Kansas City, MO. The number of stories is from 2-6 ideally in

a low-rise urban condition. This streetscape is composed within a Right of Way of 60 feet. In the first scenario there is the option of having a two-way street

condition with parking being on the side of the road adjacent to the cultural trail implementation.

Low-rise urban condition one-way streets

Converting sections of the urban trail next to existing low-rise into urban cultural trail types with a parking lane and one-way street traffic within a 58' ROW

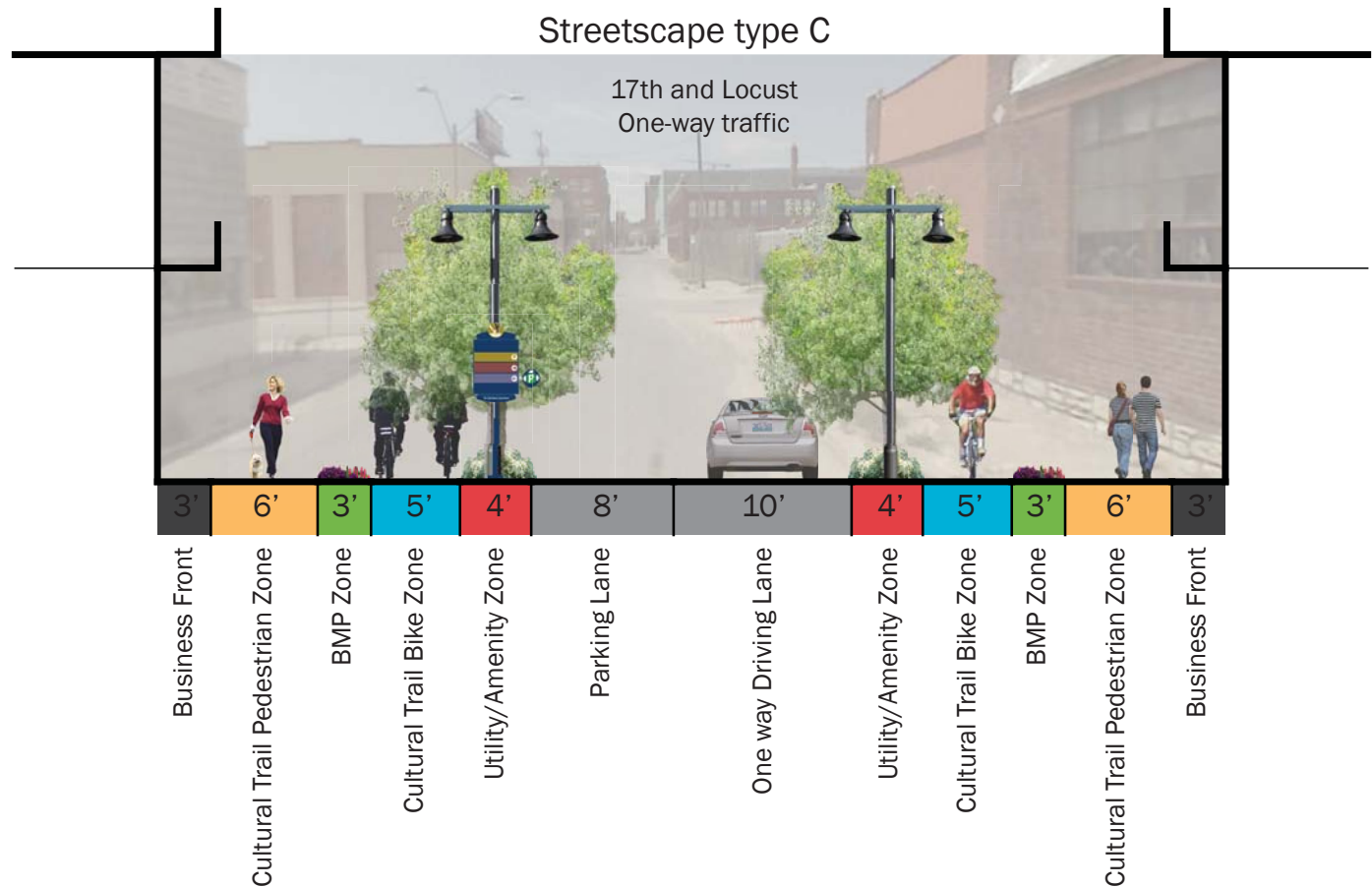


Figure 4.40 Cultural trail streetscape section type C

Design

This secondary option is the best case scenario using one-way street types to calm traffic and allow pedestrian movement to occur at a high

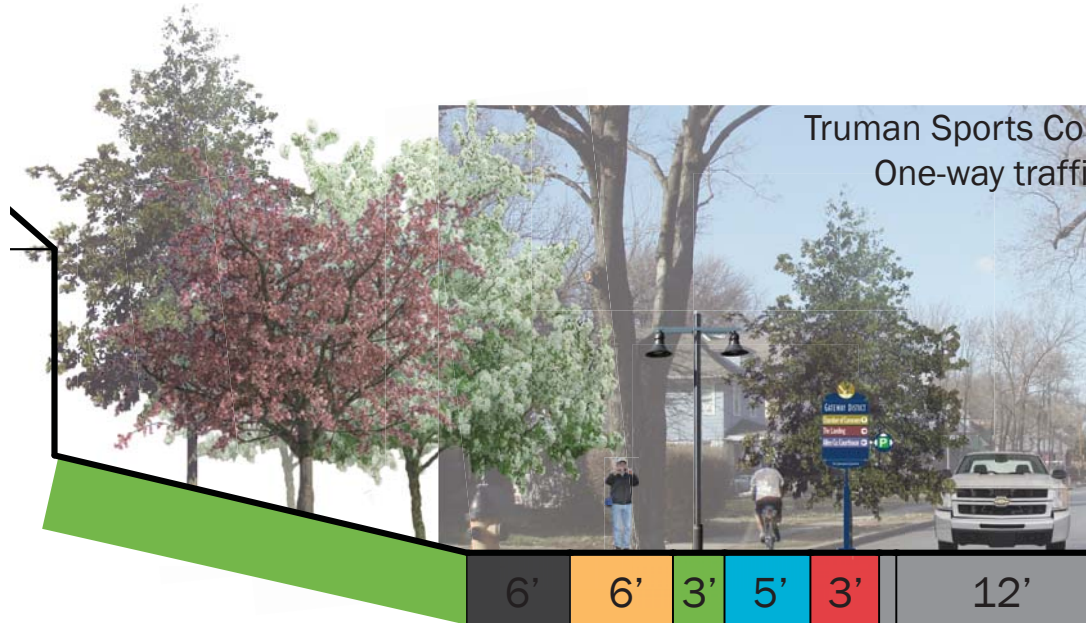
rate on both sides of the street. It allow for a environment where cars are secondary and pedestrians are able to move between street sides easily

only having to navigate across 18 feet of roadway. This allows for businesses to also create outdoor rooms for clients and customers.

Single family housing adjacencies

Converting sections of the urban trail next to existing single family housing into urban cultural trail types

Streetscape type D



Front Yard

6'

Sidewalk Improvements

6'

Cultural Trail Pedestrian Zone

3'

BMP Zone

5'

Cultural Trail Bike Zone

3'

Utility/Amenity Zone

12'

One way Driving Lane



Design

The design of this streetscape is relative to the single family segments of the cultural trail, specifically the Victor and Prospect development district node. This type uses a Right of Way width of 60' and retrofits a cultural trail segment without having to demolish anything outside of the public ROW. This shows how street signs can be used by both drivers and trail users and also how segments can be either one-way with parking or two-way without parking.

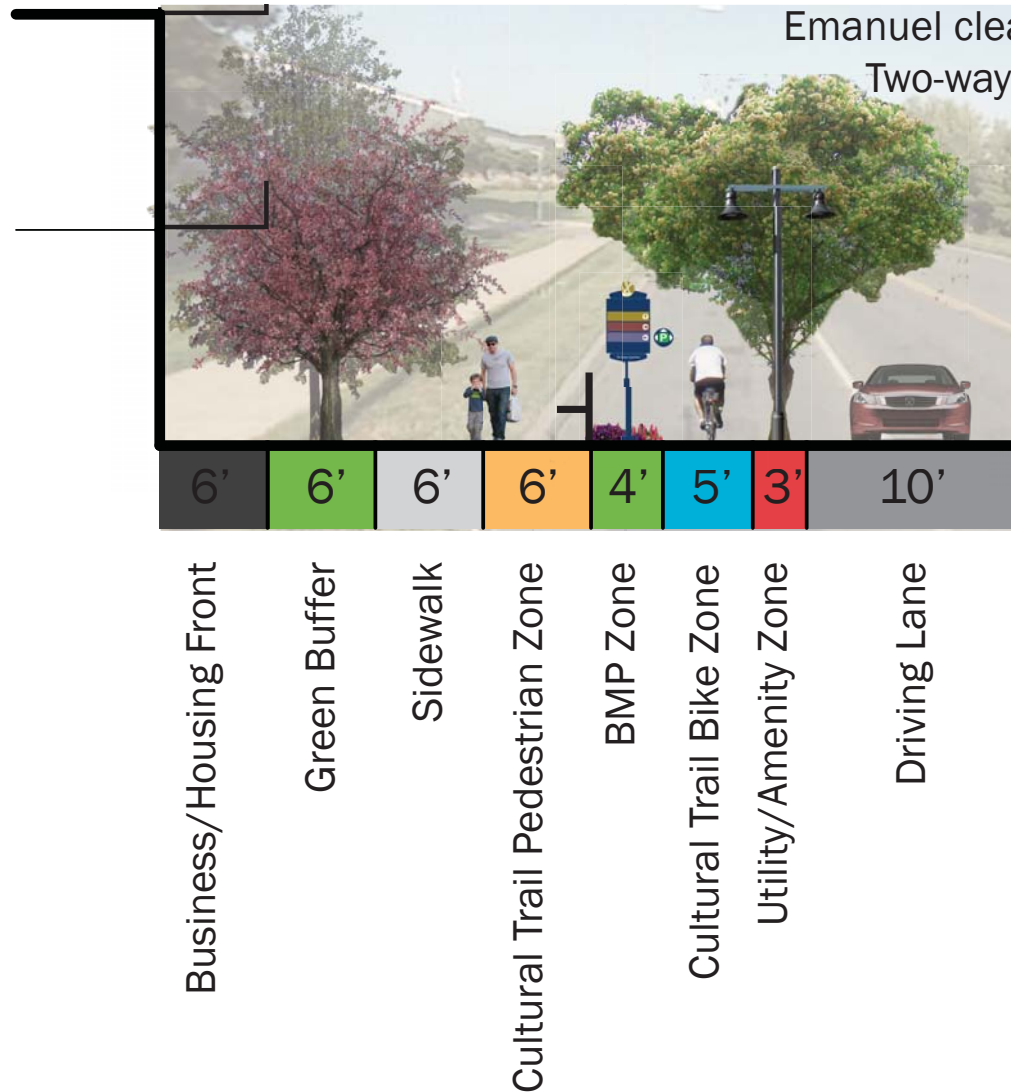
Figure 4.41 Cultural trail streetscape section type D

Stream corridor adjacencies

Converting sections of the urban trail next to water amenities into urban trail greenway types

Design

The design of this streetscape is relative to Brush Creek on the southern side of the cultural trail routing plan. It address both sides again with a cultural trail allowing home users to have access to a trail without having to cross a street and park/stream side users to enjoy a walking or bike trip next to the waters edge. On this example the bike path has been moved away from the street (on the water's side) assuming most bike travel along this route will be more leisure in nature than pedestrian transit work trip related.



Streetscape type E

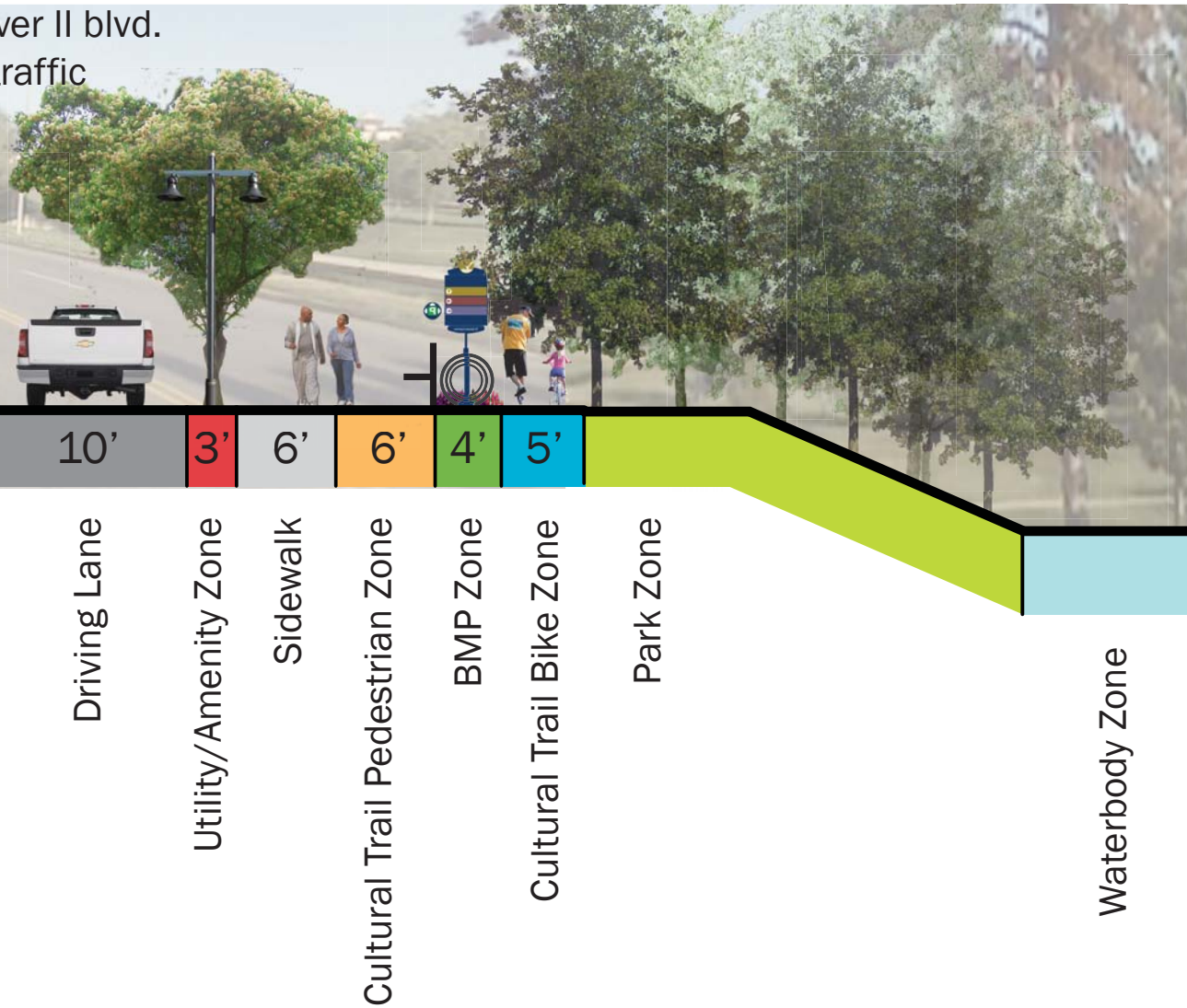


Figure 4.42 Cultural trail streetscape section type E

Rail Corridor Trail Re-purposing

Converting sections of rail corridor to combined walking and bike trail layout

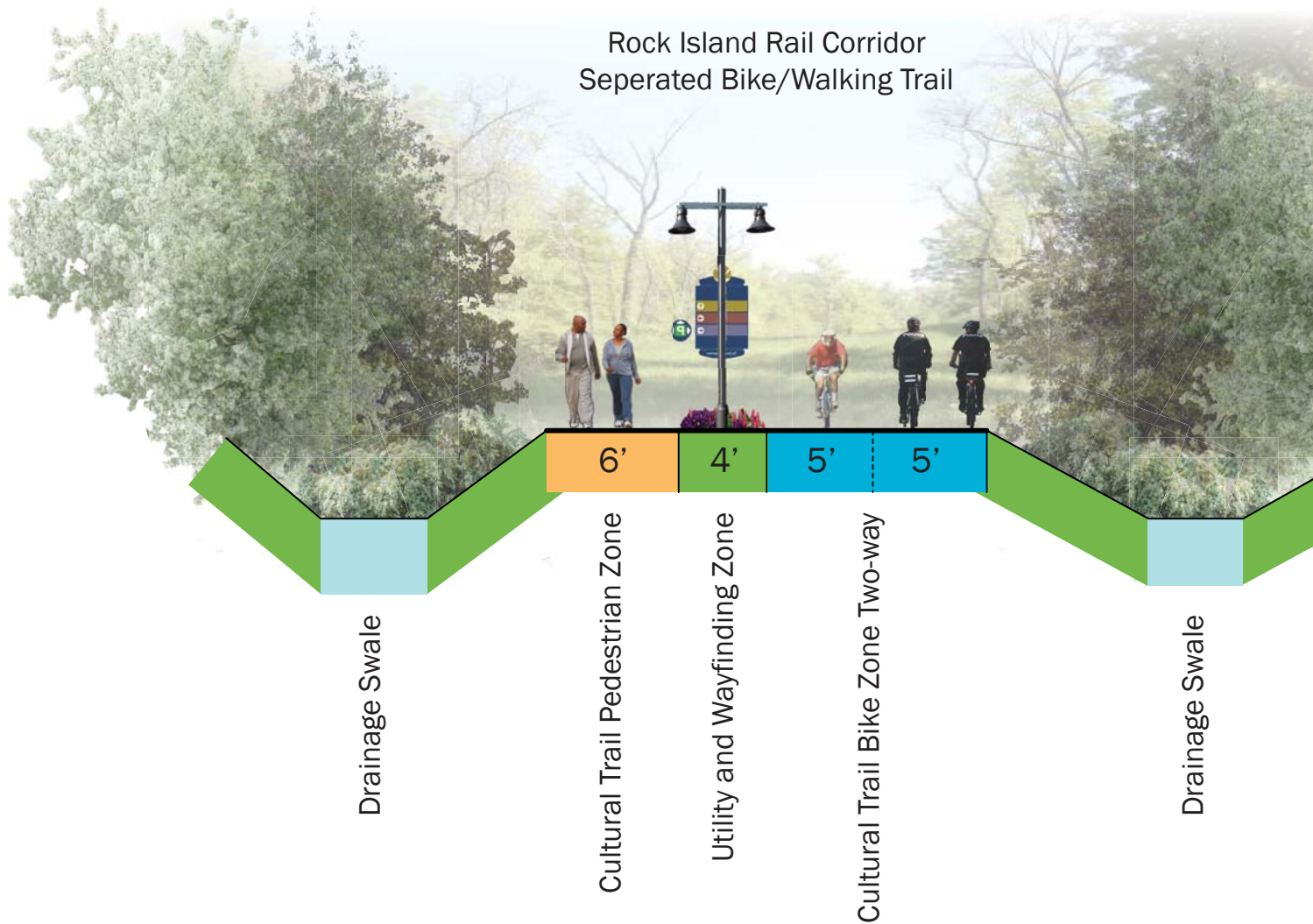


Figure 4.43 Cultural trail streetscape section type F

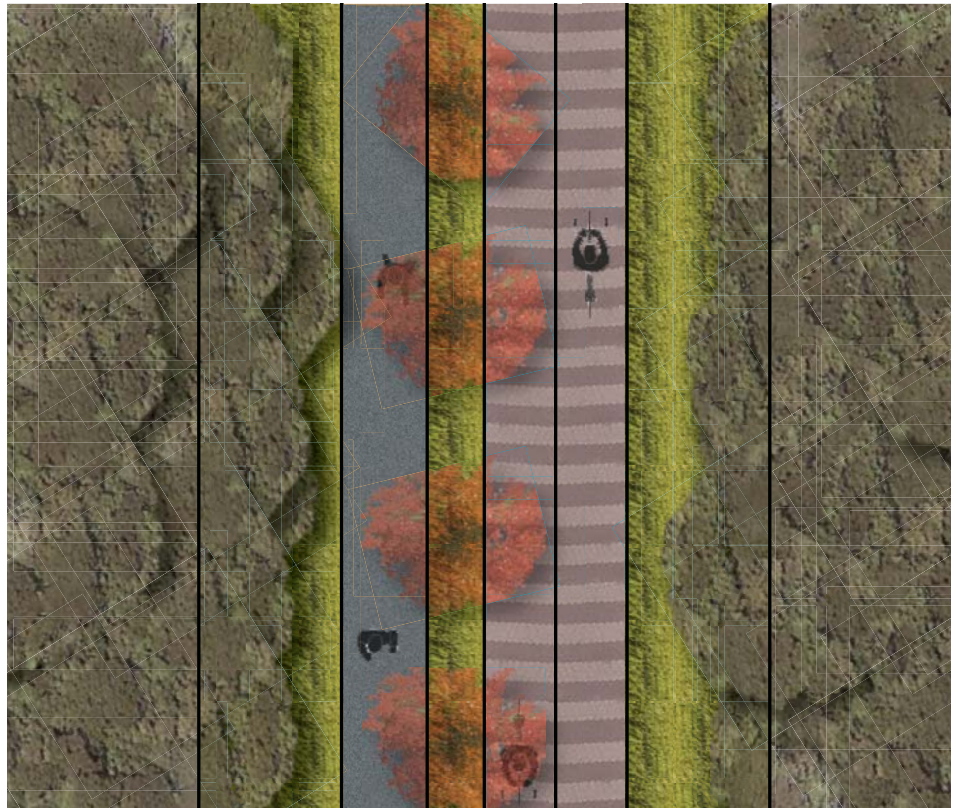
Next is the series of streetscapes described in sections in plan form. These are intended to provide a visual of the layout and linear aspect of many of these typologies. These plans also show the approximate area that

pedestrians, trees, vehicles, and structures need within the allowable right-of-way and existing streetscape structure. Most importantly they show the material choices which can set these trail projects apart from existing materials.

Streetscape type F

Design

The design of this streetscape is relative to the Trail being on the Rock Island Corridor train segment adjacent to the Truman sports complex. Most areas of the proposed cultural trail system do not use this type but serves a section of the system along with showing an example of how the trail route to the Pleasant Hill Katy trail connection could take form. The trail form is made up of a 20 foot ROW and allows for two-way bike travel and separates pedestrians from higher velocity bike travel with the use of an amenity and wayfinding zone which will house both lighting and way finding along with flowering vegetation.



NTS

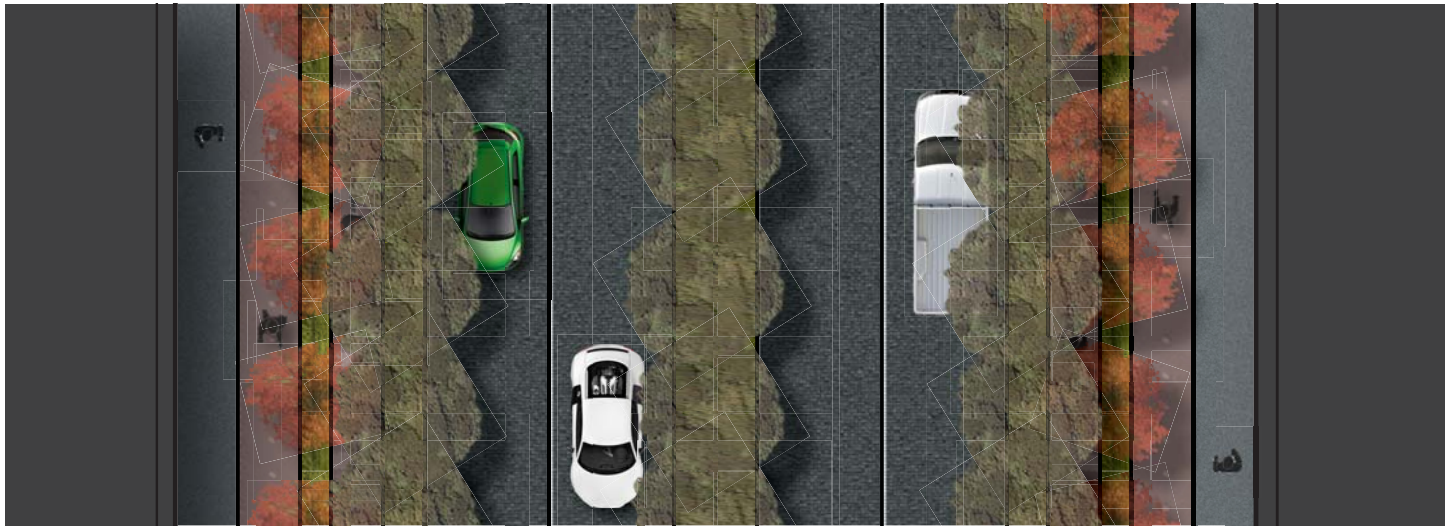
Figure 4.44 Cultural trail streetscape plan type F

plan I

Street type A

Downtown low/mid rise urban condition

plan II



NTS

Figure 4.45 Cultural trail streetscape plan type A

The design of this streetscape uses many buffers to calm not only the streetscape down by removing two lanes of traffic on the exterior sides, it narrows the distance required for a pedestrian to use a crosswalk at

intersections. This streetscape is developed for downtown sections of buildings 4 stories and higher and the additional pedestrian sidewalk zone width helps make buildings feel less daunting.

trail design cont.

Trail types

Street type B (C not shown)

Crossroads low rise urban condition

The design of this streetscape shows how in a limited ROW it is still possible to fit a trail expansion in an urban low rise condition. Parking buffers the trail addition and the width of the pedestrian zone is now around the same width as a car driving lane. Having the pedestrian expansion on one side allows for two-way traffic. This street layout could easily be modified to have both sides include a trail route in a one way street layout which is shown in section in street type C previously.



NTS

Figure 4.46 Cultural trail streetscape plan type B

plan III

Street type D

Single family

plan IV



NTS

Figure 4.47 Cultural trail streetscape plan type D

This plan shows the layout of the implementation of the cultural trail in the single family areas. Two way streetscapes have been converted into one way traffic. Traffic calming occurs and the safety for children in

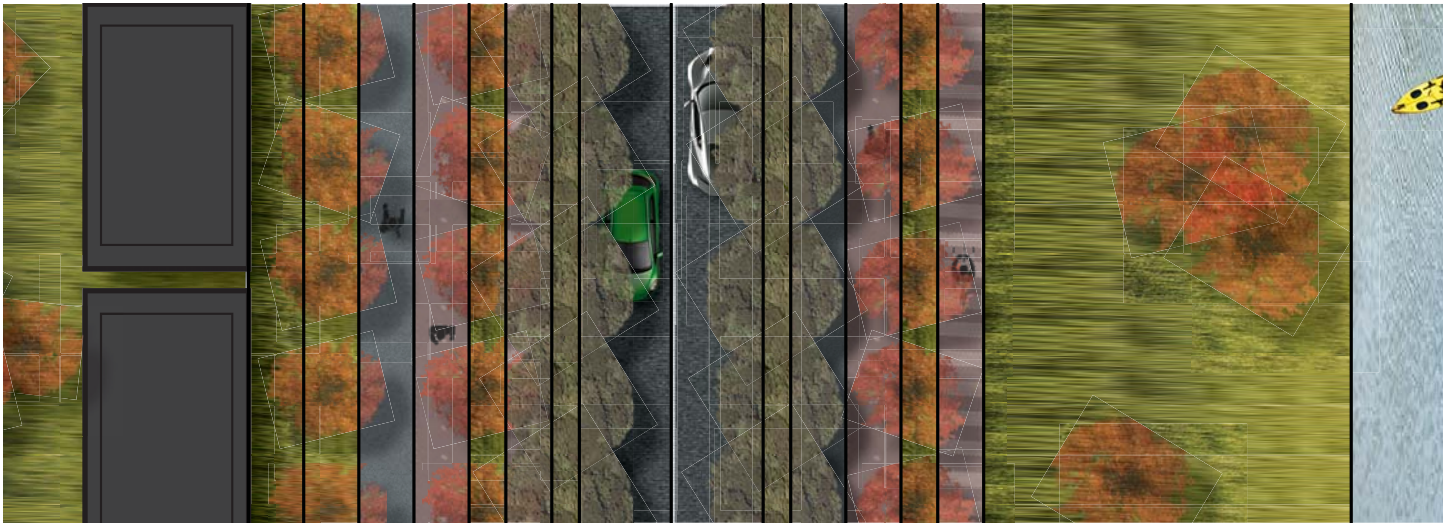
the area increases. This layout makes the street not feel like a street and the housing to act as a community designed development.

trail design cont.

Trail types

Street type E

Stream corridor adjacency



NTS

Figure 4.48 Cultural trail streetscape plan type E

Lastly, when looking at the streetscape design of the stream corridor adjacencies there is a strong connection between the people and the natural features. The increased separation of traffic and the pedestrian

zone allows users to be less concerned with traffic and have a more fulfilling leisure and recreation experience.

plan V

greenspace design



Figure 4.49 MKT trail park

This final series of montages provides imagery in respect to two housing and two park oriented examples of development from the implementation of a urban cultural trail network. Each uses an existing location on the routing plan and is composed with a paragraph describing the site and the changes seen within the image.

Victor and Prospect Single Family Housing

The proposed urban cultural trail connection between the Sprint Center and the Truman sports complex runs through single family residential neighborhoods.

Shown to the right is an example of how an adjacent urban park would look in this area. Buffered by greenspace and the urban cultural trail the existing housing should will most likely be around these developments for awhile is not dwarfed by higher rise buildings which are mixed-use. This also serves as a connection and public amenity for the current and future residents as a common neighborhood building block. Sound from the road should also decrease as traffic speeds will decrease.

Figure 4.50 Cultural trail park montage at prospect and victor



prospect park

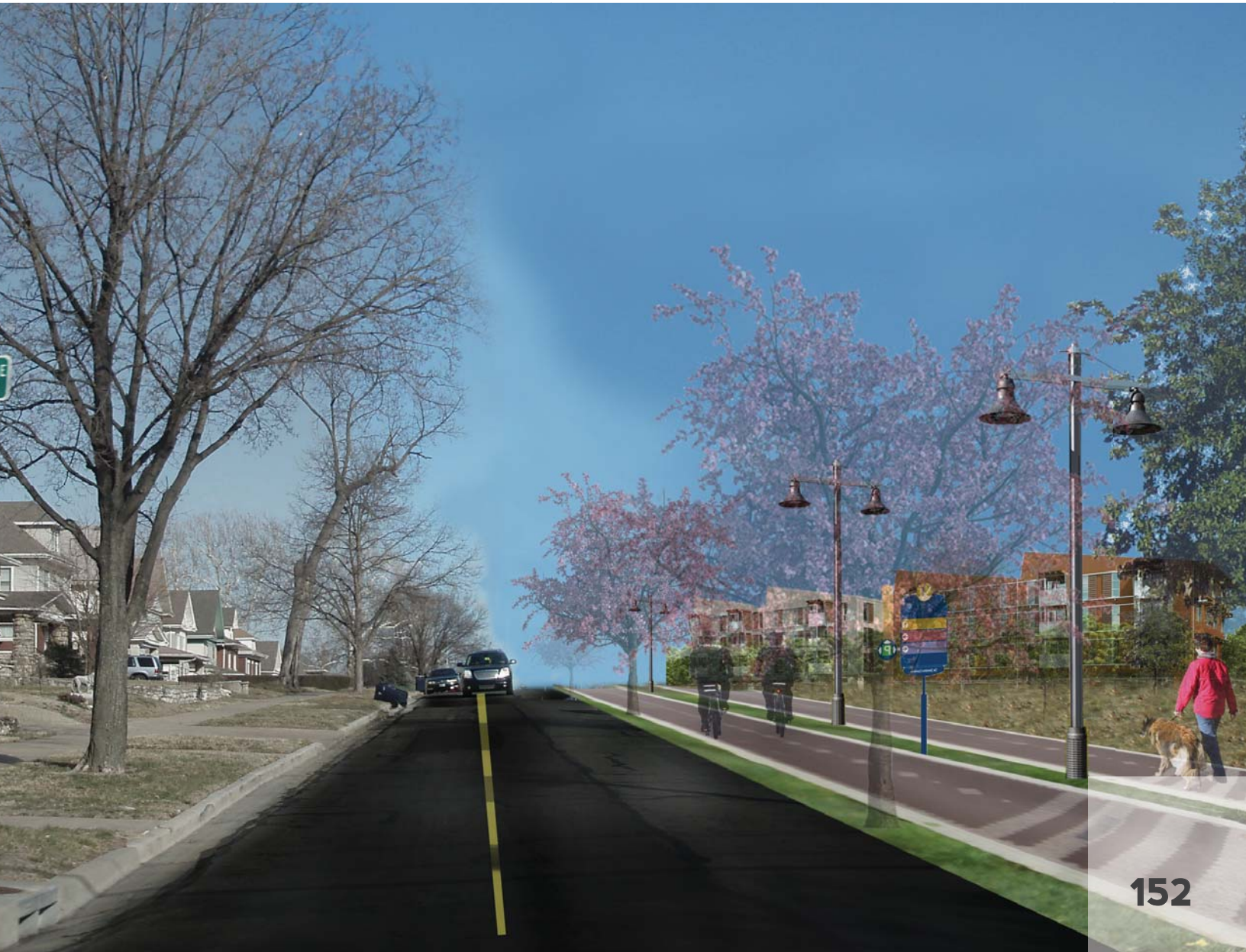




Figure 4.51
Midtown Corridor Park

Crossroads District

Greenspace in the crossroads district of Kansas City, MO is limited currently regardless of parks. However, the results of changing parking lots and light industrial areas to public parks is revealing. The character of the district changes to something which would be pleasant to walk by or play in when you are out running errands or taking a jog.

These spaces also become much more desirable when you have housing nearby. If these routes feature tours or simply destination points to the different nodes and historical sites the amount of potential home buyers and use of parks increases from simple word of mouth advertising.

Figure 4.52 Cultural trail park montage in crossroads



crossroads park



housing developments



Figure 4.53
Cultural Trail Housing

Truman Sports Complex District

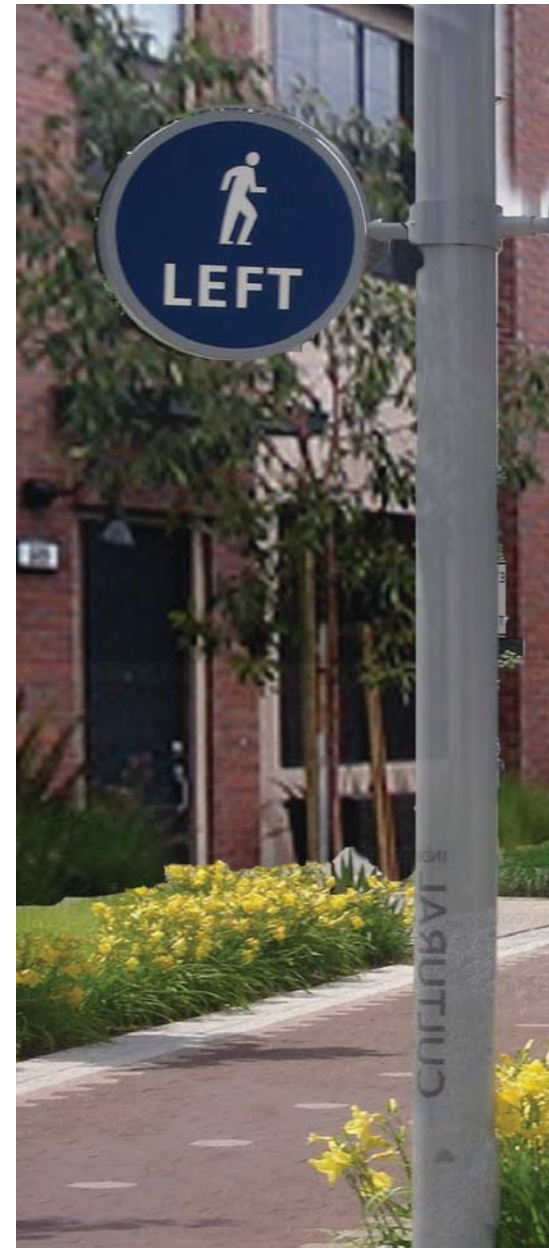
The development of the Truman Sports complex into a development district and end node to the cultural trail means it will be a good destination for new housing developments.

These developments should be higher density and should be branded to take advantage of the Kansas city Royals and Kansas City Chiefs sports stadiums.

As shown in the image to the right a separated bike and pedestrian path exist. This allows the many potential bike users to be still separated from the slower pedestrian traffic which should be active especially on game days.

Figure 4.54 Cultural trail mixed-use district at the Truman Sports Complex

truma



an sports complex housing



housing developments



Figure 4.55 Intersection

Crossroads District

The increase in housing density for the population increase to Kansas City is shown in reference to a crossroads site in the image to the right. The old brick facades of crossroads offer a great opportunity for mixed-use buildings to be integrated into the existing architecture.

The cultural trail route adjacent to these new additions and developments helps widen the pedestrian zone along the roadway and allows for more pedestrians to actively walk along these routes.



Figure 4.56 Cultural trail mixed-use district in crossroads

crossroads housing



Project results and impacts

Chapter VI



Figure 5.01 Crossroads District East

The effects of this project proposal show Kansas City's opportunity to connect major sections of tourism nodes to central areas which are currently residential, undeserved, and disconnected. The ways of potentially implementing this project and the impacts which this would have on the Rock Island Corridor and the central Kansas City, MO area are described in this chapter. Followed by this description is a few additional research topics that could play an important role in moving forward with a project such as this.



Figure 5.02
Crossroads Building

To help create positive change along the cultural trail and central residential areas it effects, planning approaches followed by the application of zoning overlay districts could be introduced. Each of these is described in more detail for the planning goal and the methodology for achieving these goals in the sections following.

Planning Approaches

Overlay zoning districts

Streetscape routes

The cultural trail route serves five different types of landscape conditions. These routes should serve as examples for other cities or future expansions to the proposed urban trail routing plan. The routes have a **unique feel** depending on the streetscape type used and the given area it passes through. These routes should be **branded and marketed** so that each can be used for tourism, but also so that wayfinding is easier and more readily identifiable.

Population density gain

The population density gains from this proposal are an example of where zoning overlays for mixed-use districts can help set desired number of built densities of **20 DU's/acre and greater**. Increasing the density along desired segments of the trail route offer the chance to locate future residents in closer proximity to the CBD.

Population served

The potential amount of current and future residents served could help provide a place for the future project growth of Kansas City to occur. The districts which have been proposed allow for the **greatest number of population to be effected** if this proposal were to be implemented. From a civic standpoint this makes the most of the resources available.

Planning Zoning Overlays

Methods and strategy

Overlay Districts

Overlay districts are the main form of implementing from a planning level the changes needed by this proposal. Many cities use overlay districts to establish certain development criteria without restricting development schemes to much. These districts should determine **minimum densities, minimum mixed-use building percentages, and housing types**. Park overlays should determine use as well as acreage. Both should also include **sustainable BMP systems** and their implementation strategies as guidelines.

Bridging developments

As a method of spurring development, creating a fourth development district between the Sprint Center, Truman Sports Complex, and The Prospect and Victor development district will help create change from the center outward. This will prevent development from stalling out as endpoints are being developed towards as well as their extension of development.

Pedestrian transit mobility links

Another method for implementing these overlay districts is the understanding of how people will circulate on foot throughout this region of Kansas City. These zones of development should be connected to routes and transportation systems which allow for car use to be optional to a residents personal desires.



Figure 5.03 Crossroads Parking Fence



Figure 5.04
Crossroads Building

If the planning approaches and zoning overlays are established there is an ideal schedule to the design, construction, and phasing of the trail, park, and mixed-use district elements. Each of these is described in more detail for the ideal scenario and the methodology for an implementation schedule in the sections following.

Ideal Scenario

Implementation of Cultural Trail Network

Cultural Trail Segment Phasing

As shown in the routing plan the major trail link proposed links the Sprint Center to the Truman Sports Complex. **This route should be the first route established** as it is the main catalyst for linking populations to destinations and providing housing, business, and tourism dollars to the city.

Route construction

After the construction of the first phase the next step would be the construction of the outer ring and the start of park and housing developments along the completed trail link.

The third phase would be the linking of the outer ring to the main link and the construction of parks and mixed-use districts throughout the remaining trail network.

This strategy allows for the trail construction to occur before housing and park. Approaching the construction as such allows for trail use and circulation to occur which should bring attention to the housing and development and hopefully gaining attention to these sites for more active use and move in interest once parks and housing project are complete.

Cultural Trail Implementation

Suggested approach

Time line

The system should be approached in a ten year development scheme. Indianapolis had a similar amount of trail length and used a five year model for which they expected to finish their trail implementation.

Their project was strictly a trail system and for the trail route I would expect that a similar time line would be advisable. As for the parks and housing, two year schematic design to completion should be the goal for each park and housing development. If the last trail line takes six years after the start of construction that leaves four years to finish park and mixed-use districts which have been programmed for initial development.

Funding

Two main sources should be pursued. The first being **bonds supplemented with taxes** and the second being **private donations and contributions**. Since this project is public it would be good to hold fund-raisers in existing parks and events which spread knowledge about the project and its goals. The Indianapolis cultural trail cost around 50 million dollars and a project such as this would meet and exceed that number.



Figure 5.05 Independence Open Space

additional studies and suggestions



Figure 5.06 Intersection

The research and design involved with green systems and tourism as a design project only cover the rational behind the design choices and the structure of the design drawings. There should be further studies and work done before this project could move forward and these sections outline what those elements are and the order in which they should occur.

Additional Studies

Suggestions in research prior to implementing a cultural trail route and zoning overlays

Housing and mixed-use architectural studies

Prior to the start of construction a study of the proposed zoning overlay districts and the architectural styles which are desired should be conducted. The character of Kansas City should be a strong branding strategy for the filling of housing and new business locations which are defined in this proposal.

Along with this study which will define the character of developments it is my suggestion that **each corridor trail segment have a unique building approach**. This allows for wayfinding to be stronger and allows branding strategies for each corridor to have a unique identity.

Amount of available land

Within each overlay district a study of the percent of available land should be done and the cost of buying the remaining portions. This will be a key indicator in the future planning of these areas. This will also help determine the cost of buying area in each overlay district and provide critical information which allotting public funding for these projects.



Figure 5.07 Prospect Residence

Cost analysis

Suggested methods

Condemnation

As a first form of cost analysis a study should be conducted after the amount of available land is finalized examining the cost of condemnation for lots or parcels which would be served as prime locations for park and mixed-use developments.

Condemnation is an approach for when vacant or for sale land is not available and a site exists which must be re-purposed. Although this is a strategy which should be used as a last resort a project of this scale will ultimately have situations which will require this as a planning method.

Cost

This proposal eventually has to be broken down into physical dollar amounts. As a final step in the planning process the selection of materials, land, and public funded housing park and housing projects will need to be finalized. A public bid process will likely be used for the project to be moved forward.

Glossary Project Terminology

Appendix I



Figure B.01 Pedestrian Bridge Underpass

This section defines the terminology which was used throughout the document. Terms are listed relative to their relationship category of vibrant, connected, or green. These terms are derived from the body of literature used in green trail systems and tourism. Terms used throughout the document represent the ideas and definitions presented in the terminology glossary presented. The over arching idea while compiling these terms was to address the ideas outlined in figure 0.31 which outlined the path mapping of research and design.



Figure B.02 Tracks

Glossary

Project Terminology

Project Glossary | Terminology

Project Definitions: Meaning of terms and ideas in relation to the MARC (Mid America Regional Council) Creating Sustainable Places initiative in relation to the redesign and redevelopment of the Rock Island Corridor in Kansas City, MO. The glossary consists of three categories derived from MARC, these categories are Connected, Green, and Vibrant.

THEME | Vibrant

Concept: Creating a Vibrant city combines ideas such as lifestyle changes derived from how we as individuals and communities choose to live, work, and travel from destination to destination. Vibrancy to me is the act of creating cultural character by seeking innovative ways to constantly change the way people encompass a city. The way people act, the attitudes and beliefs they share, and the events and spaces which they participate in. The expression of this to others both residents and non-residents defines a cities culture.

Leisure: Time available to an individual when the disciplines of work, sleep and other basic needs have been met (Baud-Bovy).

Social Leisure: Self-fulfillment in relation to experiences in tourism environments (Gunn, Tourism Planning).

Recreation: Pursuits taken up during leisure time other than those to which people are normally 'highly committed'; highly committed pursuits include activities such as homework, overtime, secondary work, childcare and various maintenance jobs about the house (Baud-Bovy).

Visitor: A visitor is defined as a person visiting a country other than where one has a place of residence for less than 24 hours (Baud-Bovy). In relation to the

definition of the United Nations Statistical Commission

Tourist: The tourist is a person who stays at least 24 hours or overnight in the country or place visited, whose journey is for the purpose of leisure or business (Baud-Bovy).

Business Tourist: Those travelling for business reasons including attending conferences, exhibitions (Baud-Bovy).

Specific Tourist: Pilgrims, students, and others whose travel motivation is specific to particular needs (Baud-Bovy).

Leisure Tourist: Those visiting places for pleasure or out of general interest, taking holidays (Baud-Bovy).

Tourist Image: The expression of all objective knowledge, impressions, prejudices, imagination, and emotional thoughts with which a person or group judges a particular object or place (Baud-Bovy).

Tourist Product: The concrete expression of the tourist image comprising components that are classified into three categories:

I Resources at destinations (inherent attractions)

II Facilities at destinations (accommodations, catering, sightseeing, recreation, local transport, handicrafts, information and assistance, etc...)

III Transport to destinations, including transfers (Baud-Bovy).

Non-Revenue-earning facilities: Infrastructures - airports, roads, distributing networks, sewage systems, etc, both on-site and off-site; involve very heavy capital requirements in non-developed areas opening to tourism (up to 70% of total investment); not only used for tourism but often shared with other economic activities.

Municipal Services – parks, schools, police stations, tourist offices, etc, and other ancillary services; some apply in any urban conglomeration, others, such as tourist offices, specific to tourist resorts (Baud-Bovy).



Figure B.03 Tracks



Figure B.04 Tracks

Revenue-earning facilities: Accommodation and catering – hotels, restaurants
Commerce, recreation and sports – shops, cinemas, theatres, golf courses, public beaches, ski lifts, etc.

Real estate development – buying, equipping, or re-selling land to build private houses or apartments (Baud-Bovy).

Multiplier effect: Tourist expenditure on goods and services generating new incomes and outputs, which, in turn, produce further expenditure and incomes in other economic sectors (Baud-Bovy).

THEME | Connected

Concept: Connections occur on more levels than street and road networks. Connection means connecting different individuals, communities and areas to shared and common resource opportunities. Focusing investment in destinations such as shared commodities and reinvesting in key locations within the Rock Island Corridor can create sustainable development and concentrated growth. Lastly, it means having a system that allows the community members to engage with one another on social, political, and economic levels.

Area Cluster: Growth of amenities and development adjacent to parks or trails that are linked (Gunn, Vacationscape).

Travel Propensity: Typical travel patterns that people naturally are inclined to do naturally (Gunn, Tourism Planning).

Reflexivity: The quality of modern culture that results from the ability of people to know what is happening elsewhere in the world and to change their behavior because of expectations of particular consequences (Judd, Fainstein).

Urban Mobility: The level of ease as defined by energy exerted by which people move both on foot and through transportation systems in the urban setting. (Wildhaber)

THEME | Green

Concept: Green views today have many definitions; however, green to me is a thought process rather than an objective. Green design is design that is aware of conditions previous and present and considers future predictions and extrapolations. Designing spaces to recognize environmental factors allows the preservation of resources both natural and built as well as allows outreach, education, and capacity building to occur. All of this allows for spaces to last longer with lower costs and less environmental impact.

Green Lane: An unmettled track that may or may not be a right of way for the public either on foot, by horse, bicycle or motor vehicle, including a motor bicycle, and which is usually bounded by hedges, walls, or ditches (Belsey).

Honey-Potting/Diversionsary Attractions: The creation of distracting or diversionary displays as part of an existing or new tourist attraction specifically designed to draw visitors away from the most sensitive areas (Mills).

Tourism Myopia: Lack of foresight or discernment for tourism planning (Gunn, Vacationscape).

Sustainability: The act of maintaining dynamic systems throughout time without losing the core values associated with the event as it changes (Wildhaber).



Figure B.05 Tracks

Literature Reviews

Appendix II

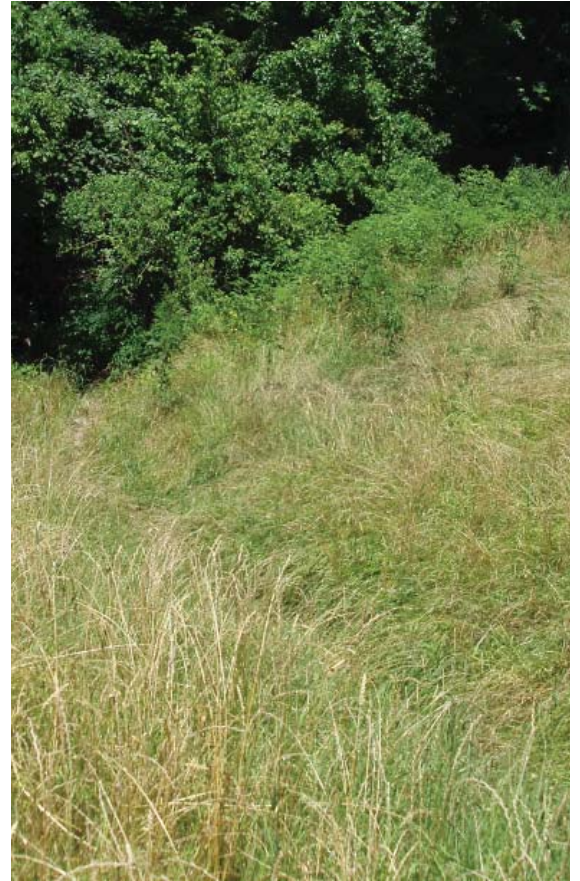


Figure C.01 Green system

This section provides the literature which was used for the background and explanation of design decisions within the document along with formulating the project proposal. This section also includes brief segments which outline the resource used, the theme and concept of the body of literature, a summary of main ideas, and the impact and meaning of the literature on the project proposal.

Tourism and Recreation Development

Baud-Bovy, M., and Fred R. Lawson. Tourism and Recreation Development. The Architectural Press; CBI Pub. Co

Theme + Concept

Defining the methods and procedures of physical planning of tourism, its facilities, and principles.

Summary

Tourism and Recreation Development by Manuel Baud-Bovy and Fred Lawson argues that tourism has ceased to be a luxury item reserved for those at the top of the income pyramid and that by definition; tourism is a service rather than a good. In direct relation to culture in the late 1970's, recreation and tourism has since changed to more of a state driven concept. This was due in part to the state introducing paid holidays as a social measure. Working populations began to have purchasing power and leisure time, and were free to choose to travel for holiday, family, or recreational purpose. Many argue that because of this shift, whose impacts are present in the 21st century, present-day

tourism is social rather than commercial. Thus, since it is derived from action by the State, logically the State still has a decisive role to play in tourism. Consequently, the State should regard tourism in terms of an obligation to advance social progress. Thus, planning procedures and requirements outlined for tourism destinations are important as a regulation tool so that tourism development does not result in blight or environmental degradation. Indeed, proactive planning can be a powerful instrument in environmental enhancement.

Impact + Meaning (Influence on Project)

Regardless of our economic situation, we have grown up believing that tourism and its related entities are a necessity rather than a luxury. Therefore, the spaces we create are not just site-specific but also potential destinations to individuals for non-residents.

Tourism Planning

Gunn, Clare A. Tourism planning. Crane: Russak.

Theme + Concept

Tourism Planning and its relationship to Landscape Architecture, Governmental bodies, and Business owners.

Summary

Clare A. Gunn was a professor of Parks and Recreation at Texas A & M University and was the first person in the United States to receive a Ph.D. degree in landscape architecture from an accredited graduate program (University of Michigan, 1965). The book *Tourism Planning* was created to fill a need for a text in relation to tourism planning for landscape architects. Gunn suggests that the phrase or term 'tourism planning' is actually unpopular given the stigma attached to case studies for which money was typically promotional and also because of perception that governmental bodies are unsympathetic and heavy-handed. The text is seemingly reactionary in nature as a text and given the rapid growth of tourism in the 1970's. Externalities and negative environmental spin-offs arose from poor or no planning efforts, which became evident. Lastly, governmental policies and mandates alienated many

governmental agencies dealing with recreation, conservation, parks and resource development from recognizing their extensive tourism functions. The text as a whole is meant to serve as the beginning concept for tourism planning, with which students and practitioners can further evaluate methods. One concept about the social impact of tourism Gunn makes is that leisure time is more than merely non-working time, but rather its being more clearly defined as self-fulfillment. Furthermore, some tourists become so attached to a travel locale that they settle there, enriching the area with new ideas and social interests.

Impact + Meaning (Influence on Project)

Tourism and the planning behind it have not been utilized as a metric or way of designing successful areas. Instead, often tourism planning has been disregarded, and many locations have even suffered harmful results. This text shows how tourism is a means of culture not merely a way of producing revenue or providing leisure opportunities. Also, it addresses the potential to enhance spaces rather than leave them of blighted.

Design for Holidays and Tourism

Mills, Edward D. Design for Holidays and Tourism. Butterworths

Theme + Concept

Lack of design of tourism locations could destroy beautiful areas, but specific design could generate social benefits such as mental and physical relaxation and be socially dynamic in breaking down barriers of color, class, and creed.

Summary

Transportation is the main factor to increase multi-class tourism use prompted by the human desire to travel to celebrate a 'holy day'. Since transportation drives tourism, some forms of tourism have become more and others less successful. For example, train use has declined due to air travel, and cars have subsumed all forms of horse and buggy travel. Preservation of resources through planning especially in developing countries is essential. Many examples in the literature detail case studies in different ways to

achieve sustainable tourism.

Impact + Meaning (Influence on Project)

Transportation systems are and will be major factors in how people experience tourism for both designed and undersigned spaces. Thinking about the history and evolution of previous transit networks and their results can be a useful way of determining new methods for designing transportation. In effect, urban mobility could be achieved through light rail or commuter rail if rail ever became a main travel mode again.

Urban Transformation

Ruby, Ilka, Andreas Ruby, and Holcim Foundation for Sustainable Construction (Zurich, Switzerland). Urban Transformation. Ruby Press; Holcim Foundation for Sustainable Construction. Zapata, Juan A. and Supersudaca. Caribbean Strips: Tourism in the Caribbean

Theme + Concept

Case studies of place transformation through design initiatives that increase social activity.

Summary

The global GDP is 11% of tourism based economy and approximately 8% are employed in tourism related industries. In fact, many third world countries have economies that depend on tourism as their main form of GDP. For example, the Caribbean is only 2% of the world's tourism, but tourism accounts for 52% of the local economy. Clearly, as an economic metric, tourism can sustain regional and local economic if planned well. This to me is a strong indicator of the power and potential for tourism based design to support new design initiatives. In the Caribbean example, current trends are shifting, and models need to be adjusted on regular bases to prevent loss in revenue. For example, Eco-tourism and more decentralized tourism locations

are becoming more requested options in island resorts. A more multi-prong system needs to be set up so that governmental bodies and private investors are able to produce profit in their business model. Resources and visitors are often limited on remote locations such as the Caribbean and the management of those systems (public and private) is what leads to a sustainable method.

Impact + Meaning (Influence on Project)

Transforming urban places such as parts of the Rock Island Corridor is difficult because they have many factors which are generating the problem. Green and sustainable plans, though helpful, have not been enough for evidence-based design to convince communities that changes are a necessity and not an option. However, tourism-based economies could help to bridge gaps when purposing new ways of thinking and approaching elements in urban sprawl and blighted areas.

Vacationscape (Second Edition)

Gunn, Clare A. *Vacationscape: Designing Tourist Regions*. 2nd ed. Van Nostrand Reinhold.

Theme + Concept

Mass travel is changing tourism myopia. Tourism destinations and attractions and using design principles and techniques for managing these locations are the basis for the argument Gunn presents for *Vacationscape*.

Summary

Humans often can travel where they wish without much hassle or hard work. However, this relationship has produced mass travel chaos, which has led to many nodes of development, some of which have been successful and some unsuccessful. The unsuccessful examples typically end up as vacant spaces along roads and around major tourism natural landmarks. Lack of comprehensive designs for tourism development has put many restraints on opportunity. Resources are typically eroded without proper management thus leading to no reinvestment. In such cases, both private and public sectors shy away from new approaches and investors miss opportunities for success. The first step is to realize that the definition of tourism has changed. Tourism has come to mean everything

associated with travel, experiences desired by travelers through policies, programs and physical development required to stimulate and accommodate such travel. This new definition is very seductive to nations and regions seeking to bolster sagging economies, but planning and development for tourism are actually complex. The last major idea from this text is the design principles, such as clustering. Gunn states that when a new

Impact + Meaning (Influence on Project)

The argument for designing spaces with tourism in mind is not typically or commonly accepted as a norm. This presents a planning problem planners perceive many new ideas with a high degree of speculation. Using a methodology with a solid foundation in resource and revenue studies associated with project proposals, planners can offer designs with greater validity. Even so, change is a hard sell. The arguments for proactive planning stem from the ideas that if the private sector finds a way of developing blighted areas in the Kansas City region it may go unplanned as a non-sustainable system. Another unplanned mass development could likely create more sprawl and blight.

Discovering Green Lanes

Belsey, Valerie R. Discovering green lanes. Green Books; Distributed in the USA by Chelsea Green.

Theme + Concept

Discerning and discovering opportunities to use and manage 'green lanes' as they occur in our world.

Summary

Recognizing pathways utilized and created by animals in cross corridor patterns is critical to managing naturalized areas. Preservation is established after first recognizing opportunities with which the human experience can be enhanced. English landscapes, used for centuries by people, are still yielding ways of use that derive from animals.

Impact + Meaning (Influence on Project)

Managing and using the Rock Island Corridor will be a complex task. Although the rail line has not been used for many years, it has undoubtedly been used by animals as a route/corridor for movement and as a habitat given the overgrown vegetation. This means altering the route has a potential for ecological opportunity or degradation depending on the planning process.

Secrets of successful rail-trails: An acquisition and organizing manual for converting rails into trails

Ryan, Karen-Lee, Julie A. Winterich. Rails-to-Trails Conservancy, and United States. National Park Service. Secrets of successful rail-trails: An acquisition and organizing manual for converting rails into trails. Rail-to-Trails Conservancy: in cooperation with the National Park Service.

Theme + Concept

Planners need to know preparation and guidelines for governmental bodies to implement successful transitions of preexisting rail lines into trail amenities for cities.

Summary

The conversion of many preexisting rail lines to trails is happening across America and elsewhere in parks and recreation departments. The ultimate goal of these transitions is an interconnected network of trails spanning regional areas and serving as the backbone for recreation, transportation, and open-space conservation in cities.

Impact + Meaning (Influence on Project)

Public and private opinions within the city of Kansas City have a significant influence on the ultimate design and implementation of the transition of the Rock Island Corridor into an amenity for the city. Understanding the relationships between city officials and typical practice and implementation of these trail networks will help generate a method of new urban trail concepts.

Economic impacts of protecting rivers, trails, and greenway corridors

United States. National Park Service. Rivers and Trails Conservation Assistance. Economic impacts of protecting rivers, trails, and greenway corridors: A resource book. 4nd, Revised. National Park Service.

Theme + Concept

Learn the importance of economic charting and mapping of revenue earned by preserving environmental amenities such as trails, rivers, and greenway corridors.

Summary

Many environmental segments have inherent intrinsic value, but monetary value can also be generated or saved by the proper identification and use of these objects. This text seeks to outline and chart in a more quantitative way the products of such resources as ways of generating revenue.

Impact + Meaning (Influence on Project)

Aesthetic value is a part of natural systems that landscape architects tend to recognize. However, citizens with other educational background tend to expect more than intrinsic value. A good metric of how to quantitatively qualify these benefits can help to spur conversation about the importance of preserving certain open spaces and areas within the corridor.

Site Visits & Meetings

Appendix III

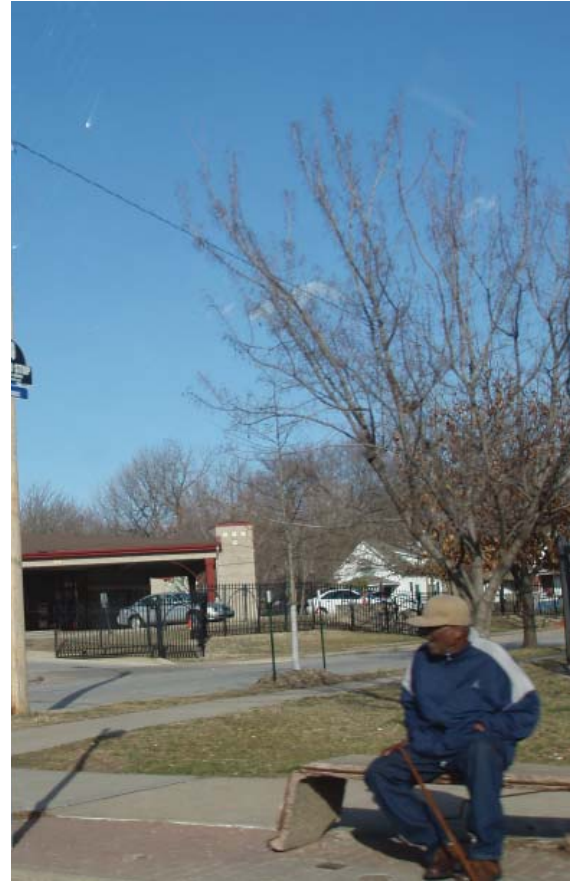


Figure D.01 Pedestrian on Prospect

Various site visits to and through Kansas City were made from the fall 2011 semester and the spring 2012 semester. This section provides a brief overview of the objective of each site visit and sites visited. Secondly, the section provides information regarding professional committee meetings and discussions with the MARC, and the RIC coalition.



Figure D.02 River Market

Site Visit (Fall 2011)

Driving tour from pleasant hill to river market

The first site visit to Kansas City once under the Rock Island Corridor group was a driving tour which ended in the river market as shown in figure D.02. The tour consisted of driving through the cities which the Rock Island Corridor passes through and seeing the landscapes adjacent to the corridor.



Figure D.03 CBD area

The end of the Rock Island Corridor ends downtown. The Central Business District along with the Sprint Center make for some great opportunities to use the edge of the Downtown region as a node.



Figure D.04 River Market

Pleasant Hill is a historic city which is at the starting point for the Rock Island Corridor and the end point of the Katy Trail as it could potentially connect into Kansas City. It is a rural city with the potential to be a tourism destination along the proposed trail system.



Figure D.05 Pleasant Hill Train Station

existing condition



Figure D.06 TSC Raytown Rd.

Site Visit (Spring 2012)

Site visit to three program areas
(Sprint Center/crossroads, Prospect Ave., Truman Sports Complex)

The site visit in the spring focused on getting existing condition photographs and character images for the three development districts while were in conceptual design. These included the Crossroads and Sprint Center area, Prospect avenue, and the Truman Sports Complex area.

In figure D.07 the crossroads district is shown. The focus of this visit was to see how the existing industrial areas and streets functioned. Many parking lots which were under used coupled with many buildings which had limited human activity indicates this area is under used for its close proximity to the heart of the CBD.



Figure D.07 Crossroads skyline

Figure D.08 shows the green space directly south of the Truman Sports Complex. This land is classified as open park space and would make for a great mixed-use district that could include housing and park space. At the moment it is slightly north of the proposed Rock Island Corridor trail corridor and could serve a major pedestrian transportation link.



Figure D.08 Southern Truman Sports Complex Greenspace

The last area visited during the spring visit is shown in figure D.09 along prospect avenue. This area showed signs of lack of maintenance with sidewalks in very poor shape, many areas which were overgrown with vegetation and houses which were deemed as unsafe and abandoned.



Figure D.09 Poor Prospect Sidewalks



Figure D.10 MARC Logo

MARC Meeting I (October 18, 2012)

During our first meeting with the Mid America Regional Council in October the Rock Island Corridor group presented initial project ideas and conceptions to members of MARC and the Rock Island Corridor member city representatives. Ten students presented initial dilemmas and research question which they planned on addressing. The relevance to the Creating Sustainable Places Initiative was also described to the members who attended along with a discussion of way of addressing these questions, contact information, and further considerations about the Rock Island Corridor and member cities.



Figure D.11 Raytown Road Bridge

MARC Meeting II (February 29, 2012)

The second meeting and presentation which occurred in February addressed initial design concepts based on project proposals. The meeting was held in the MARC offices in Kansas City, MO.

These presentations focused on showing design concepts which had been focused from the feedback given in the first meetings and studio reviews. A brief presentation was given to attending members of marc and member cities followed by a round table discussion about how to frame ideas relative to the CSP initiative. For green trail systems and tourism the suggestions focused mainly on how streetscape are built in urban environments due to the

relatively new nature of urban trails. Along with questions about how building facades are effected. Business are especially interested in the visibility of their building from any user which walks or drives by.



Figure D.12 Royals Stadium Parking North

References

Appendix IV



Figure E.01 Rail Tracks in Independence

This section provides a list of references used is documented. These references include books, peer reviewed articles, and online source information. References which address imagery and figures are found in the list of figures.



Figure E.02 Tracks

References

- American Society of Landscape Architects(ASLA). “ASLA Code of Professional Ethics.” asla.org. Accessed Wednesday Sept 28, 2011. <<http://www.asla.org/ContentDetail.aspx?id=4276>>.
- Baud-Bovy, M., and Fred R. Lawson. Tourism and Recreation Development. The Architectural Press; CBI Pub. Co.
- Belsey, Valerie R. Discovering green lanes. Green Books; Distributed in the USA by Chelsea Green.
- Bike Katy Trail. “Katy Trail Missouri Trail Maps, Businesses, Events, Mileage, and more.” Accessed March 15, 2012. <http://www.bikekatytrail.com/default.aspx>
- Chicago Transit Authority. <http://www.transitchicago.com/>. November 12, 2011
- City of Kansas City. Parks and Recreation. Accessed March 15, 2012. <http://www.kcmo.org/CKCMO/Depts/ParksandRecreation/index.htm>
- Gunn, Clare A. Tourism planning. Crane: Russak.
- Gunn, Clare A. Vacationscape: Designing Tourist Regions. 2nd ed. Van Nostrand Reinhold.
- Indianapolis Cultural Trail. <http://www.indyculturaltrail.org>. November 10, 2011
- Judd, Dennis R. and Fainstein,Susan S. The Tourist City. Yale University Press.
- Kansas City 2030 Studio. Kansas City Phoenix Design Group. “ReKonneCt 2030”.
- Kansas City: Official Travel Source. Entertainment. Accessed March 15, 2012. <http://www.visitkc.com/things-to-do/entertainment/jazz-history/index.aspx>
- Mid America Regional Council. Kansas City Area Rock Island Corridor Coalition. Accessed September 28, 2011. http://www.marc.org/metrogreen/Current_Projects/rockisland.aspx

Mid America Regional Council. 2011. Marc GIS Data Set. Provided by MARC

Midtown Greenway Trail Coalition. <http://midtowngreenway.org>. November 14, 2011

Mills, Edward D. Design for Holidays and Tourism. Butterworths.

Missouri Department of Conservation. Discovery Center. Accessed March 15, 2012. <http://mdc.mo.gov/regions/kansas-city/discovery-center>

Ruby, Ilka, Andreas Ruby, and Holcim Foundation for Sustainable Construction (Zurich, Switzerland). Urban Transformation. Ruby Press; Holcim Foundation for Sustainable Construction. Zapata, Juan A. and Supersudaca. Caribbean Strips: Tourism in the Caribbean

Ryan, Karen-Lee, Julie A. Winterich. Rails-to-Trails Conservancy, and United States. National Park Service. Secrets of successful rail-trails: An acquisition and organizing manual for converting rails into trails. Rail-to-Trails Conservancy: in cooperation with the National Park Service.

Silver Comet Trail. <http://www.silvercometga.com>. November 13, 2011

United States. National Park Service. Rivers and Trails Conservation Assistance. Economic impacts of protecting rivers, trails, and greenway corridors: A resource book. 4nd, Revised. National Park Service.

*Bettering lives for all current and future people of
Kansas City*



eric wildhaber | landscape architecture