

**APPENDIX** PHASE 1 GREEN INFRASTRUCTURE FRAMEWORK

# CONTENTS

A – DATA WISHLIST	4
B – PRECEDENTS	7
C – WORKSHOP MATERIALS	13
D – ANALYSIS PROCESS	124
E – ATLAS & PLAYBOOK DETAILS	156
F – POLICY ANALYSIS	165



## POLICY ANALYSIS

The policy recommendations in this document were developed in a three part process:

First, Biohabitats conducted a precedent review of policies from across the nation relevant to enabling or encouraging the implementation of green infrastructure. The applicability of each policy to various contexts within the region was discussed between Biohabitats and BNIM and evaluated based on the policy's impact and relevance in terms of the intersecting environmental, social, and political contexts.

Next a brief inventory of existing policies within the region was conducted to gain an understanding of the current policy context. This inventory was analyzed to identify regional trends and patterns as well as the potential for new policies or to adapt existing policies to new strategies. The precedent policies were subjected to an additional round of evaluation based on this analysis.

Finally, recommendations for each transect and priority area were formulated using the analysis from the first two steps as a guide.

#### Preliminary Policy Precedent Inventory

The following table was developed to inventory the preliminary research to identify national precedent policies and ordinances. Highlighted policies indicated policies which recieved significant debate. Highlights are not used to imply which policies are recommended by this team.

MARC Green Infrastructure Plan Policy Worksheet

11/29/2016

Zoning Zoning Zoning Zoning Subdivi Zoning Form B Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Comm	g Ordinance vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	Aggregates various planning lenses (transportation, parks, etc.) into a single plan at the municipality level. They need to incorporate the regional GI plan. Review and update zoning ordinance on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning designation per se.	Thematic and Comprehenisve Plans         Many communities use zoning to manage the intensity of land uses in clearly environmentally senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes         Reqirements that subdivisions be designed to minimize damage to the natural environment         At least one form based code existis for a particular district in Overland Park         Cluster development provisions are present in development codes
Zoning       Zoning         Zoning       Subdivi         Zoning       Form B         Zoning       Cluster         Zoning       Cluster         Zoning       Rezonin         Design and Density       Urban         Design and Density       Plan Rezonity         Design and Density       Density         Design and Density       Commin         Neighb       Commin	g Ordinance vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	into a single plan at the municipality level. They need to incorporate the regional GI plan. Review and update zoning ordinance on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	Many communities use zoning to manage the intensity of land uses in clearly environmentally senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivisions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning       Zoning         Zoning       Subdivi         Zoning       Form B         Zoning       Cluster         Zoning       Cluster         Zoning       Rezonin         Design and Density       Urban         Design and Density       Plan Rezonity         Design and Density       Density         Design and Density       Commin         Neighb       Commin	g Ordinance vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	into a single plan at the municipality level. They need to incorporate the regional GI plan. Review and update zoning ordinance on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	Many communities use zoning to manage the intensity of land uses in clearly environmentally senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivsions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning       Zoning         Zoning       Subdivi         Zoning       Form B         Zoning       Cluster         Zoning       Cluster         Zoning       Rezonin         Design and Density       Urban         Design and Density       Plan Rezonity         Design and Density       Density         Design and Density       Commin         Neighb       Commin	g Ordinance vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	Review and update zoning ordinance on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	Many communities use zoning to manage the intensity of land uses in clearly environmentally senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivsions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	intensity of land uses in clearly environmentally senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivsions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	intensity of land uses in clearly environmentally senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivsions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	senstive areas, such as including conservation districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivisions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	districts and mixed use districts. Some communities have incorporated urban agriculture and alternative energy into their zoning and development codes Reqirements that subdivisions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	agriculture and alternative energy into their zoning and development codes Reqirements that subdivsions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	implementation barriers. Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	zoning and development codes Reqirements that subdivisons be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning     Subdivi       Zoning     Form B       Zoning     Cluster       Zoning     Rezoni       Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Design and Density     Comminy	vision and Site Plan Regulation Based Codes er Subdivision ning Proffers	Review and update subdivision and site plan regulations on a periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	Reqirements that subdivsions be designed to minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning Form B Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi	Based Codes er Subdivision ning Proffers	periodic basis to conform with GI Plan, manage type and intensity of landuse in sensitive areas, encourage GI Plan implementation, and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning Form B Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi	Based Codes er Subdivision ning Proffers	and remove implementation barriers. Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	minimize damage to the natural environment At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning Form B Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi	Based Codes er Subdivision ning Proffers	Create form-based standards and regulating plans for street networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	At least one form based code existis for a particular district in Overland Park Cluster development provisions are present in
Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi Neighb	er Subdivision ning Proffers	networks, parks, community buildings, relationships of buildings and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	particular district in Overland Park Cluster development provisions are present in
Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi Neighb	er Subdivision ning Proffers	and parking to streets, and provisions for multi-modal transportation. Code to support GI Plan. Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	particular district in Overland Park Cluster development provisions are present in
Zoning Cluster Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi Neighb	er Subdivision ning Proffers	Cluster buildings on smaller lots leaving the remainder for recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	Cluster development provisions are present in
Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi Neighb	ning Proffers	recreation, ecosystem conservation, and restoration. Preserve rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commi Neighb	ning Proffers	rural and suburban land resources while maintaining or increasing development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Zoning Rezoni Design and Density Urban Design and Density Plan Re Design and Density Density Commu Neighb	ning Proffers	development value. Use proffers for Special Use Permits to conform with GI Plan while also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density Urban Design and Density Plan Re Design and Density Density Comm Neighb		also likely increasing property values through recreation amenities, ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Comminy     Neighb		ecosystem conservation, and restoration. Stronger tool in urban and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Comminy     Neighb		and suburban areas. Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density     Urban       Design and Density     Plan Re       Design and Density     Density       Comminy     Neighb		Designate areas planned for immediate and long-term utility service and coordinate development approval and utility extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density Plan Re Design and Density Density Comm Neighb	n Growth Boundaries	extensions. Intent is to concentrate development where supportive of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density Plan Re Design and Density Density Comm Neighb	n Growth Boundaries	of the GI plan and reduce utility and road infrastructure costs. A policy designation through a comprehensive plan and not a zoning	
Design and Density Plan Re Design and Density Density Comm Neighb	n Growth Boundaries	policy designation through a comprehensive plan and not a zoning	
Design and Density Plan Re Design and Density Density Comm Neighb	n Growth Boundaries		
Design and Density Density Comm Neighb			
Design and Density Density Comm Neighb			A Green Build Permit Program currently exists
Design and Density Density Comm Neighb	Review Incentives	Provide fast track plan reviews, reduced application fees, etc. for development plans that conform with the GI plan.	whereby permit fees are reduced for meeting green building standards.
Commi Neighb			Breen building standards.
Commi Neighb		Incentivize ecosystem conservation and restoration through	
Neighb	ty Incentives	allowance of increased density in less ecologically sensitive areas.	At least and TND and an district suists in Oletha
Neighb	nunity Design Concepts: Traditional		At least one TND zoning district exists in Olathe. Additionally, many communities have either
Design and Density Urbani	borhood Development (TND) and New	Create TND districts that allow or require walkable streets,	added or are considering mixed use districts
		bikelanes, SWM BMPs	where appropriate
			Kansas City, Mo has embraced TOD as a project
Comm	nunity Design Concepts: Transit Oriented		philosophy with the Downtwon Streetcar development and the use of Federal BRT funds
	lopment (TOD)		to spurr TOD on Prospect
		Public facilities and infrastructure must be sufficient to support	
Design and Density	uato Rublic Facilities Ordinar	new proposed development. What if this also included parks and	Many communities require parkland and open
Design and Density Adequa	uate Public Facilities Ordinance	equitable access to parks?	space dedication at the time of development
Land Management & Conservation		Some or all of parcel development rights from a sending district to	
Program Transfe	ferable Development Rights (TDR)	a receiving district. Purchase of Development Rights open markets.	
Land Management & Conservation Program Use Va	alue Assessment and Taxation	Discounts in property tax assessments to promote and preserve	
Land Management & Conservation	alue Assessment and Taxation	Legal agreement between landowner and land trust of government	
Program Conser	ervation Easements	agency.	
Land Management & Conservation			
Program Parklar	and Acquisition	With focus on ecological value, human health & equity. With nutrient water pollution limits, landowners can sell surplus	
		nutrient reductions to landowners that can't meet their targets.	
Land Management & Conservation		Low cost nutrient reduction sources can sell to high cost nutrient	
	ent Trading	reduction sources.	
Land Management & Conservation	ulture and Forest Districts		
<u> </u>	ulture and Forest Districts	protections.	
-			
	ric Districts	Can include cultural landscape preservation.	
Design and Construction Design		Can include cultural landscape preservation. Often based on historic preservation. Typically more effective in urban areas.	
Program Nutrier Land Management & Conservation Program Agricul Land Management & Conservation Program Histori	ent Trading ulture and Forest Districts	Low cost nutrient reduction sources can sell to high cost nutrient reduction sources. Voluntary preservation of agriculture or forest with incentives and protections.	

Design and Construction	Site Sensitive and Low Impact Development		At least one jurisdiction requiresStormwater
Design and Construction	Stormwater Management Permits		management Permits
Design and Construction	Erosion and Sediment Control Permits		
Design and Construction	Buildings Permits		
Design and construction			
			Some communities have incentives for green
			building construction and improvements,
	Green Building and Site Sustainability Rating	Require or incentivize the use of LEED and Sustainable Sites Rating	including cost of construction rebates and
Design and Construction	System Min. Requirements	Systems	property tax abatement
	GI Construction Training and Certification		
Design and Construction/ Program	Program	With disadvantaged business and community focus.	
	Procurement preference for GI Certification and		
Design and Construction	disadvantaged businesses		Certified Green Partners
			Flood Zone Overlay Districts estrict or prohibit
Design and Construction	Floodplain Regulations		development within flood zones
Design and Construction	Wetland Regulations		
		Require 100' stream buffers, with development restrictions and	
Design and Construction	Water Protection and Stream Buffer Ordinance	plant preservation/ restoration requirements.	
		Review state and local road design standards on a periodic basis to	
		conform with GI Plan, encourage GI Plan implementation, and	Complete Streets Streetscape Design; Parks and
Design and Construction	Road Design Standards	remove implementation barriers.	Boulevards Design Standards
		Require preservation and new planting to achieve tree canopy and	
Design and Construction	Tree Canopy Ordinance	heat island reduction goals.	
			Developers must submit a tree conservation
Design and Construction	Tree Preservation Ordinance & Standards		plan before removing existing vegetation
			Landscaping ordinances and standards including
Design and Construction	Landscaping Ordinance & Standards		tree minimums
Design and Construction	Invasive Species Ordinance		
	Remove Weed Ordinance barriers to native		
Design and Construction	plantings		
Design and Construction	Fees for stormwater coming off of a parcel.	Fee structured proportional to the amount of impervious area.	
	Barten	Landowner who treats SW in excess of regulatory requirements	
Design and Construction	Stormwater Retention Credit (SRC) market	can sell stormwater retention credits.	
		An aggregator finances installation of SWM GI on properties of	
		multiple landowners. Aggregator sells the SW retention credits as	
Design and Construction	Stormwater GI aggregator	profit. Can incentive through low interest loans.	
			City construction must comply with LEED
			minimums; All county construction projects
	Municipal Facility Best Practices Construction		greater than 5,000 sqare feet musty comply
Program	Program		with LEED minimums
10510111	i i oBioni	ļ	With LEED minimums

Regional GI Policy Tools as of 2016																								
	Plan		Zoning				Design and	Density			Land Mar	nagement & Conserv	ation Program		Design and Construction									
Local Government	Comprehensive Plans	Zoning Ordinance Many communities use zoning to manage the intensity of land uses in clearly environmentally sentities areas, such as	Subdivision and Site Plan Regulation	Form Based Codes	Cluster Subdivision	Urban Growth Plan Review Boundaries Incentives	Density Incentives	Community Design Concepts: Traditional Community Neighborhood Concepts: T Development (TND) Oriented and New Urbanism Developme		erable sprsent (TDR)	Conservation Easements I	Parkland Acquisition	Agriculture and Forest Districts	Historic Districts	Site Sensitive and Low Impact Development	Green Building and Site Sustainability Rating System Min. Requirements	Procurement preference for GI Certification and disadvantaged businesses	Floodplain Regulations	Wetland Regulations	Sedment an	d Erosion Contri	Stormwate ol Post C	r Management	t, Illicit Discharge
	Thematic and Comprehenisve Plans	Many communities use zoning to manage the intensity of land uses in clearly environmentally undusting conservation districts and movie use districts. Some communities have morpromised when agriculture and alternativ energy into their zoning and development codes	Regirements that subdivion be designed to minimize e damage to the natural environment	to At least one form based code existin for a particular district in Overland Park	Cluster development provisions are present in development codes	A Green Build Perm Program currently exists whereby permit frees are reduced for meeting green building standards.	1	Kansas City, emboards TC project philo with the Dow Screetcar des and the use - BRT hands to TOD on Pros	Wo has ID as a sophy intwon elopment of Federal spurr sect			Open space and Parkland requently conserved rhough adequate public lacities ordinanes and parkland dedication requirements				Some communities have incentives for green building construction and improvements, including cost of construction relates and property tax abatement	Certified Green Partners – t educational tool for environmentally conclous consumers	Flood Zone Overlay Districts restrict or prohibit development within flood zones		Sediment and Ension Control Ordinance?	Adopted APWA 51007	Adopted APV 5600 (rev. 11/03)?	Adopted MARC/APW/ Stormwater Best /A Managemen Practices Manual?	t Illicit Discharge Oridnance
BELTON												Explicitly provides for Met Green implementation in parkland dedication policy	D							¥E5	115	YES	YES	YES
BLUE SPRINGS	Comprehensive Plan goals reflect commitment to a Green Infrastructure philosophy Comprehensive Plan	YES									,	15		¥15						YES	ND	YES	ND	NO
GARDNER	Comprehensive Plan goals reflect commitment to a Green infrastructure philosophy				YES			mixed use downtown districts			,	115	VES VES	¥E5				Permit required for development within floodplain Permit required for development within floodplain		YES	WITH EXCEPTIONS	YES	ND	NO
IN DEPENDENCE		YES	YES								YES		Agriultural District + Conservation Overlays	YES		incentives for meeting minimum green building criteria				YES	YES	NO	ND	YES
KANSAS CITY, MD KEARNEY LEAKENWORTH LEAKEDOD LET'S SUMMIT	2008 Climate Protection Plan Briefly addresses environmental issues related to green infrastructure	YES inludes aquifer overla district	915 19		YES			YES			,	15	NE2	YES	YES	Adopted 2008 Edition of the National Green Building Standard; incentives for home energy efficiency		VES		415 415 415	115 115 115	YES YES	785 785 785	YES YES
(DITA)		ves										rrs.		755		incentives for meeting minimum green building criteria				YES	15	vec	virs	VES
LA PROPERTY.	Comprehensive Plan goals reflect commitment to a Green philosophy															COURSE -						163		164
LIBERTY MERSIAM MISSION MISSION MISSION CLATHE	Infrastructure philosophy	VES			YE5			mixed use districts VES VES			,	15	Raral Conervation District YES	YES YES				VES			YES YES YES NO NO	ND YES YES ND	NO YES YES NO	ND YES ND
OVERLAND PARK				115				Mixed Use Districts			,	ns		YES				Limited		YES	185	YES	115	YES
PECULIAR PRAIRIE VILLAGE RAYMORE		VES			YES						,	15	YES					PERMIT REQUIRED	YES	455 455	115 115	485 485	NO YES	VES VES
RAYTOWN	CED Streetscape Master Plan reflects commitment to using GI amentities such as trail systems to improve quality of life	wes						mised use districts			,	115	Conservation district	YES No formal overlay districts but trail and GI amenity planning linked to historic assets						ND VES	ND	NO	ND	ND
WEATHERBY LAKE		YES very low density residential and recreation uses only	ul									rES ndirectly with zoning for enry low density and ecreational uses only								YES	ND	YES NO	ND ND	NO
CLAY COUNTY		WES			YES								YES			Build Green Incentive Program				NO	NO	NO	125	YES
JACISON COUNTY					YES	YES		Mixed Use Provisions					YES				JOCO Certified Gree	YES		YES	115	YES	115	YES
JOHSON COUNTY																	- attnets	-43		4E5 4E5	ND	YES	пь 115	нь 45
WYANDOTTE COUNTY MIAME COUNTY RUBAN SUBURDAN					Village overlay districts			YES				rts	YES			incentives for meeting minimum green building criteria		YES		YES	115	NO BUT LOCA GUIDEUNES ARE SIMILAR 5600		YES
URBAN DIBURBAN	YES YES	455 465		115	YES YES	115		YES YES			1	15 15 15	YES YES	YES YES YES		YES YES		YES YES YES		YES YES YES	115 115 115	YES YES YES	185 185 185	YES YES YES

#### Regional Inventory of Existing Green Infrastructure Policies and Policies

This matrix is of existing policies and ordinances relevant to enabling and encouraging green infrastructure was used to identify which policies are already common or potentially missing, organize existing policies by transect zones, and generally inform possibilities for the introduction of new policies or the adaptation of existing policies to new strategies. This matrix is intended as a brief survey of the region and is not intended to be comprehensive. Expansions to the matrix are encouraged in future phases to gain a more comprehensive understanding of green infrastructure policy within the region.

This matrix was generated by applying the preliminary policy research to a a review of past MARC policy materials as well as the development codes and public facing websites for a small sample of jurisdictions within the MARC region.

Regional GI Policy Tools as

		Design and Const	ruction						Program/ Fu			Federal Funding		Coordination			Education			Community en	gagement
Stream Setback	Road Design Standards	Tree Preservation Ordinance & Standards	Landscaping Ordina & Standards	ance Invasive Specie Ordinance	Remove Weed Ordinance s barriers to native plantings	Municipal Facility Best Practices Construction Program	Muricipal Facility Best Fractices Maintenance Program	Vacant Lot Revitalization	Grant Programs	The Missouri Property Assessed Clean Energy (PACE) is a financing program for clean energy and energy efficiency improvements	Green Impact Zo	U.S. Department of Energy SunShot Initiativ Rooftop Solar ene Challenge I & II	t Federal Partnership	Watershed based Department regulation and reorganization and planning communication	Cooperative Exten Service	tsion Municipal C Programs	Datreach Education Homeow	n for Education fo Decis Businesses	r Stakeholder Meetings	Watershed Organizations	City Environmental Committees and Boards
Land Use Resolutions Arean Setback ordinance in buffer zone	Parks and Complete Streets Boulewards Model Ordinances Design Stands	Developers must submit a tree conservation plan before removing ands existing vegetation	Landscaping ordinan and standards includ tree minimums and species diversity requirements	Many weed onlinences also includes a sing prohibted noxio weeds its which includes some invasive species	Local weed ordinances primarily or exclusively rely us on vegetative height and th presence of nasious peeds to determise weed ordinance violations	e LEED rating to minimum for di or county construction	N														
100" minimum depending on streams VES	115	Encourages tree preservation by allowing preserved trees to count for minimum tree requirements	YES									YES									
No , but neconstruction allowed within 100 year flood zone	YES	115	YES					Land Bank Program				YES					Native pla planting g homeown Education nonbindin	nts list and uide for ers. al, 6			
Varies VES	Complete streets design guie		YES		8" height; exeption provide for large and/or undevelopable lots where the dominant species are native No 12' height exceptions for native grasses	d															
No discturbance of 85"- fat Order; 155" 2nd atteamable zone, no Order; 125"-3rd Order, permovent structure in 150"-8th Order Steam buffer	9 YES YES	YE5	YES									YES									Tree commission, city beautification commission, Park commission brownfields
land at 150 feet from the senter line of the creek.	¥15 ¥15		YES			115		YES			YES	YES	755			10,000 Raing Program	larders				brownfields Commission, Bicyle and Pedestrian Adalsory, Parks Board
varies dentifed in APWA 5620	YES YES	YES	YES		No 7" height exceptions for native grasses							YES									
An and a start of the start of		ves	YE5 YE5	prohibited speci list	<ul> <li>No.12" height exception for notive graves</li> <li>No.50" bright exception for notive graves</li> </ul>							YES YES				Community I Program	Forestry Continued	y forestry			Tree Board
4:2 2 bit 51 31 31 31 31 31 31 31 31 31 3	5. 14. 14. 14.	YES			No height exceptions for native graves							YES YES YES									Tree Board Tree Board, Becycling Committee
areas zoned conservation landuse	Participated in MARC demonstration project								YES			YE5									Tree Board
Currently enforce 30 food boulding saturack from the limits of the 25-Year Skornwater ranof event indirectly with setbad between structure an iot boundary	Looking to Implement complete streets policies soon de	115	115									YES									Bicycle advisory board
Buffer width 75 VES foot pather, UEX, noad crossing, driveray, Zone-2-evoid 22 vallow Rocreational user, 757 both sides of answer contestine system						LEED Silver for						YES									
150 Pt from the Center Line of the Creek YES	¥ES				Makes 15" vegetation heigh exception for native grasses	Sustainable priorities statement includes LEED				115		YES									
The goal is two the limits of the utilimate filosoptian Karias does 100 to 200 fast YES	VES			YES		implementation			YES Quality Education Gr Program to he fund educational projects and activities	int Np		YES									
ω	15		YES	455 455	some exception for large undeveloped tracts and crnamental gardens No exceptions for native grasses			YES	educational projects and activities			YES									
rts YES rtS YES rtS YES	YES YES YES YES	115	YES YES		115 115 115	1E5 1E5		YES			ves		115				YES YES				YES YES YES

### **REGIONAL PLANNING DOCUMENTS REFERENCED**

- Assessing Urban Forest Effects and Values: The Greater Kansas City Region, USDA Forest Service https://www.nrs.fs.fed.us/pubs/rb/rb\_nrs75.pdf
- Mid-America Regional Council MetroGreen Action Plan
   <a href="http://marc.org/Environment/MetroGreen-Parks/The-Plan/Action-Plan">http://marc.org/Environment/MetroGreen-Parks/The-Plan/Action-Plan</a>
- Mid-America Regional Council Solar Ready Kanas City and Solar Ready II <a href="http://www.marc.org/Environment/Energy/pdf/Solar\_Ready\_White\_Paper.aspx">http://www.marc.org/Environment/Energy/pdf/Solar\_Ready\_White\_Paper.aspx</a>
- Mid-America Regional Council Transportation Outlook 2040
   <a href="http://www.to2040.org/plandocs.aspx">http://www.to2040.org/plandocs.aspx</a>
- Mid-America Regional Council Clean Air Action Plan
   <u>http://marc.org/Environment/Air-Quality/pdf/clean\_air\_action\_plan</u>
- Missouri Guide to Green Infrastructure
   https://dnr.mo.gov/env/wpp/stormwater/docs/gi-cover.pdf

## MUNICIPAL AND PROJECT PLANS REFERENCED

- Blueprint for Liberty: Future Land Use Plan, 1999
   <u>http://libertymissouri.gov/DocumentCenter/View/2182</u>
- City of Blue Springs 2014 Comprehensive Plan
- http://www.bluespringsgov.com/455/Comprehensive-Plan
- Gardner, KS 2014 Comprehensive Plan
   <u>http://www.gardnerkansas.gov/development/economic-development/gardner-comprehensive-plan</u>
- Johnson County, KS Rural Comprehensive Plan Update
   <u>http://www.jocogov.org/dept/planning-and-codes/pln/rural-comprehensive-plan</u>
- Kearney, MO 2004 Comprehensive Plan
   <u>http://www.ci.kearney.mo.us/pdf/6-15-04\_Final\_Adopted\_Plan.pdf</u>
- Kansas City, MO 2008 Climate Protection Plan
   <u>https://data.kcmo.org/dataset/Climate-Protection-Plan-2008/ygpc-u9wi/data</u>
- Kansas City, MO 2010 Greater Downtown Area Plan
   <a href="https://data.kcmo.org/Area-Plans/Greater-Downtown-Area-Plan/e9ss-ttb9/data">https://data.kcmo.org/Area-Plans/Greater-Downtown-Area-Plan/e9ss-ttb9/data</a>
- Liberty, MO Downtown Master Plan, 2005 http://libertymissouri.gov/DocumentCenter/Home/View/1219
- Raytown Central Business District Streetscape Master Plan, 2013
   <u>https://raytownmo.govoffice3.com/vertical/Sites/%7B3A1DBD03-39C2-43FA-8CC9-95B16E6438CB%7D/uploads/Final\_Downtown\_Raytown\_Streetscape\_Master\_Plan\_2-27-13.pdf</u>
- Municipal Farm Sustainable Reuse Plan
   <u>https://data.kcmo.org/Government/Sustainable-Reuse-Plan-The-Municipal-Farm/szja-m9p8</u>
- Big Bull Creek Master Plan
   <u>http://jcprd.com/pages/pdfs/big-bull-creek/2016-04-11\_BBC-MP\_Final-Report\_web.pdf</u>
- Rosedale Master Plan
   <u>http://www.rosedalemasterplan.com/#draft-plan</u>

## DEVELOPMENT CODES REFERENCED

Municipal and development codes for the following jurisdictions were referenced

- Belton, MO
- Blue Springs, MO
- Harrisonville, MO
- Independence, MO
- Kansas City, MO
- Kearney, MO
- Lenexa, KS
- Liberty, MO
- Merriam, KS
- North Kansas City, MO
- Olathe, KS
- Overland Park, KS
- Peculiar, MO
- Prairie Village, KS
- Raymore, MO
- Shawnee, KS
- Weatherby Lake, MO
- Clay County, MO
- Jackson County, MO
- Johnson County, KS
- Miami County, KS
- Unified Government of Wyandotte County and Kansas City, KS