



CHAPTER 9

TRANSPORTATION & MOBILITY

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Goal 3: Update the City's Street Design Guidelines

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Goal 5: Leverage transportation network as an asset

The *Forward SGF* Transportation and Mobility Chapter focuses on setting the high-level vision and goals for transportation in Springfield and directing regional transportation investments to support the local economy and quality of life. Key planning principles for transportation include balancing the needs of all users of the system, increasing use of modes that help reduce congestion such as transit; walking; and bicycling, improving roadway efficiency and capacity, and creating better access management throughout the City. The plan also seeks to maintain a competitive freight transportation system to provide effective linkages to state, national, and international markets. To facilitate the implementation of these goals and to ensure a well-functioning regional transportation system, coordination with regional and local governments as well as the public and other stakeholders will be essential.

Look for these icons identifying theme-related strategies!

COMMUNITY PHYSICAL IMAGE



ARTS, CULTURE & HISTORIC PRESERVATION



HEALTH & WELL-BEING



GOAL 1: Provide multimodal transportation options that are accessible and reliable for users of all ages, abilities, and backgrounds.

1.1 IDENTIFY AND ELIMINATE GAPS IN THE NETWORK

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HEALTH & WELL-BEING

Identify gaps in the transportation network for all modes and prioritize the implementation of new infrastructure in these locations.

15-MINUTE CITY AND SIDEWALK CONNECTIONS

No matter your preferred mode of travel, a connected network is essential to mobility and determines how easily you can access home, employment, school, recreational opportunities, and essential goods and services such as grocery stores and health care. The most livable cities provide the ability to reach most of these destinations within a 15-minute walk or bike ride and others within a 30-minute trip by car or transit. Multimodal connections between neighborhoods, including trails, sidewalks, and streets are essential.

Everyone is a pedestrian at some point in their trip, whether they walk to school, work, the bus stop, or simply from a parking spot to a store. Ensuring that Springfield is a walkable place is a critical component of developing and maintaining a well-functioning transportation system for the City while also supporting local economic growth and the health of the community. Nearly 50 percent of the roadways in Springfield currently lack sidewalks.

Springfield should develop a sidewalk master plan (or include this detailed element in a broader multimodal transportation plan) to identify gaps in the existing sidewalk network, identify funding sources for improvements, and determine a process to fill these gaps that aligns with the City's Complete Streets Policy. This process should include prioritizing sidewalks or shared-use path installations on both sides of arterials and collectors and on at least one side of all local streets.

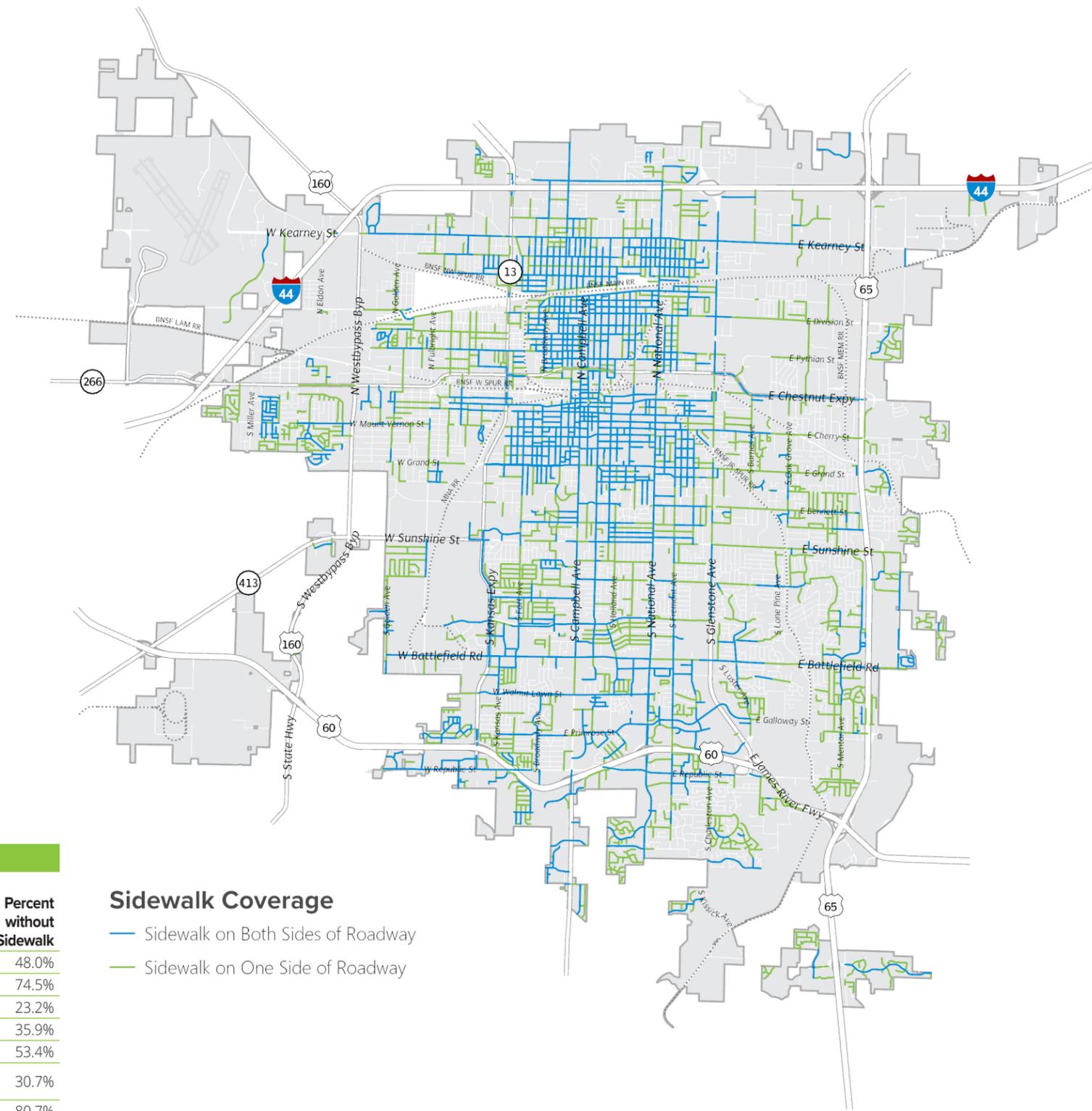


The width of these sidewalks is also important and any future design guidance should include a minimum of 6-foot sidewalks on arterials and collectors (wider in areas with high volumes of pedestrians including commercial areas) and 5-foot sidewalks on local streets. In locations where a shared-use path is preferred alongside a roadway, a minimum of 10-feet should be provided to minimize conflicts between pedestrians and bicyclists. The City should continue to implement its Public Rights of Way ADA Transition Plan to ensure accessibility for people of all abilities. All portions of the transportation network should be periodically reviewed to identify any potential service gaps that could be mitigated.

As important as it is to have accessible routes along streets, it is just as important to have accessible routes from the public sidewalks along our streets into adjacent properties. This is especially true for properties with commercial business uses. Easy pedestrian access into businesses promotes walking, biking, and transit use. It is important to have accessible pedestrian routes to business entry locations from the public sidewalks, parking areas within the property, or shared parking areas.

Current Sidewalk Coverage in Springfield

Road Type	Total Roadway Mileage	Percent Sidewalk One Side	Percent Sidewalk Both Sides	Percent without Sidewalk
Total	883.2	25.5%	26.5%	48.0%
Access	28.3	18.4%	7.1%	74.5%
Arterial	64.3	18.5%	58.3%	23.2%
Collector	157.5	28.8%	35.3%	35.9%
Local	508.5	27.7%	18.9%	53.4%
Minor Arterial	80.9	23.6%	45.7%	30.7%
State Route	43.6	6.3%	13.0%	80.7%



INTERSECTION DENSITY

Intersection density impacts walking rates as a greater number of intersections within an area allows pedestrians to access more destinations and take more direct routes. Where intersections are further apart, pedestrians tend to cross in the middle of the block at unmarked and often unsafe crossing locations to reach their destinations. As shown in the map, intersection density is highest in the central sections of the City, especially in Downtown and in neighborhoods to the southwest and north. Intersection densities are lowest in the far-eastern, western, and southern sections of Springfield, where streets are spaced farther apart and arranged less in a grid pattern.

MAJOR THOROUGHFARE PLAN

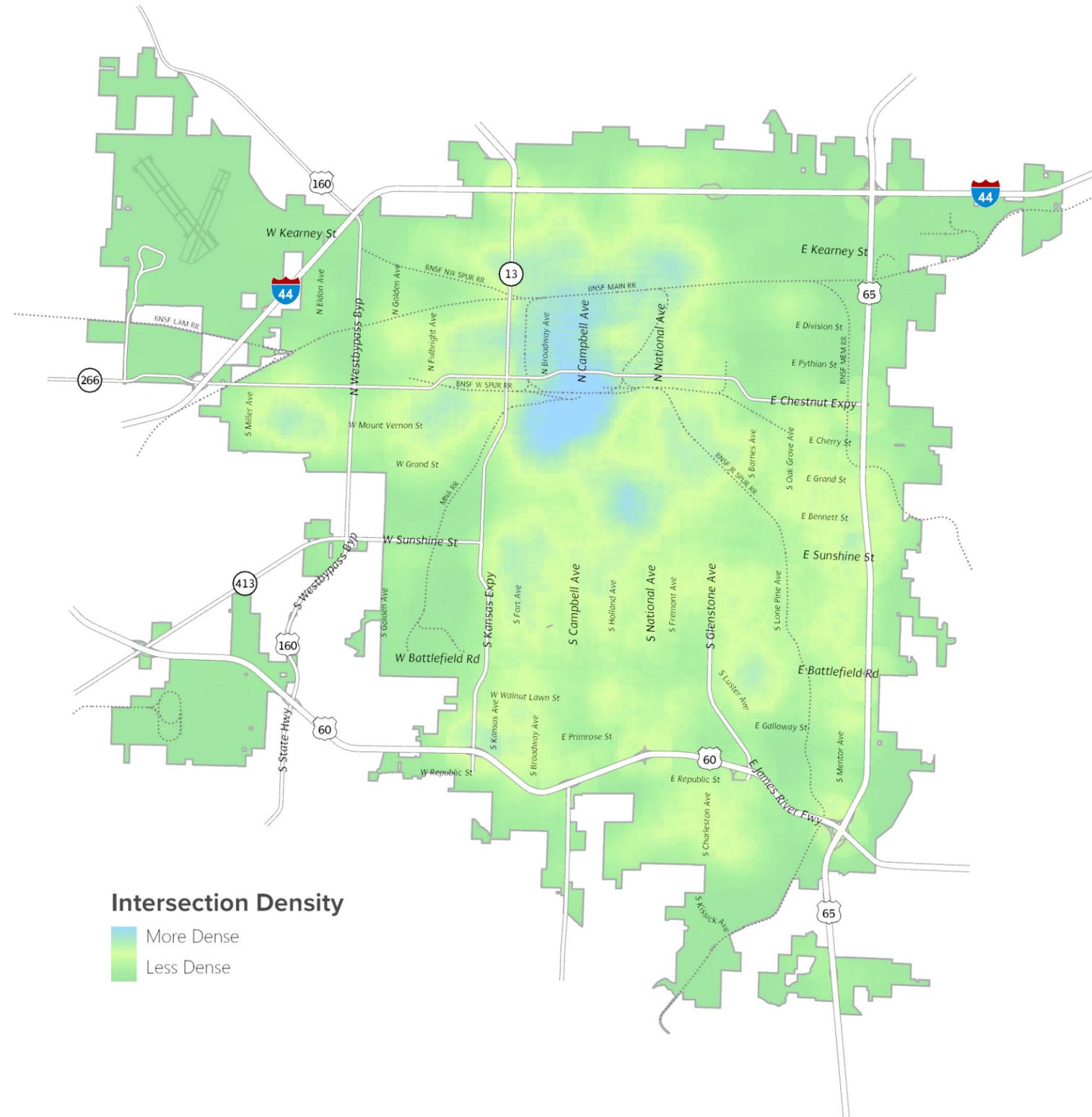
The Major Thoroughfare Plan provides an overall framework for making decisions on thoroughfare improvements and extensions, identifies approximate locations for future major transportation corridors, and serves as a general guide for securing street rights-of-way. The City coordinates amendments to the Major Thoroughfare Plan with the Ozarks Transportation Organization (OTO), which is the designated Metropolitan Planning Organization (MPO) for the Springfield urbanized area.

The Major Thoroughfare Plan should be reviewed at least every five years with amendments adopted by OTO and the City. Existing and Future Streets identified in the Major Thoroughfare Plan are assigned to the City's Functional Classification System based on the degree to which they are projected to provide mobility to through traffic and access to adjacent land. Specifications for the design and construction are defined by the Design Guide for Public Improvements adopted by the City of Springfield. Collectively, the Major Thoroughfare Plan, Functional Classification System, and the Design Guide for Public Improvements should be reviewed, updated, and codified as a key implementation component of the Comprehensive Plan; however, the Design Guide should be updated to reflect the Street Type overlay recommended by Forward SGF.

FACTORS INFLUENCING WALKABILITY

The following factors, among others, influence Springfield's level of walkability and the quality of the pedestrian experience:

- Land use and development patterns:** Factors such as connections to land use, the number of destinations accessible within a reasonable walking distance, and the attractiveness of the space along the path.
- Infrastructure:** The presence of sidewalks, lighting, wayfinding, and crossing infrastructure such as crosswalks or enhanced crossing treatments.
- Safety or personal security:** Real or perceived fear of crime and traffic safety (vehicular speeds and intersection design).
- Street and sidewalk/trail design:** Whether and to what degree streets are designed for all ages and abilities. To encourage walking, street and sidewalk/trail designs should be based on adjacent existing or desired land uses, and not exclusively on vehicular needs alone.



Design Guide for Public Improvements

The City of Springfield should actively work, in partnership with OTO, to ensure each component is consistent, to the greatest extent possible, with those adopted by surrounding transportation jurisdictions, including the Missouri Department of Transportation (MoDOT) and Greene County Highway Department. As classification system needs change, adoption of targeted multimodal plans, and implementation of other recommendations from this chapter are pursued, the City should consider the development of a stand-alone comprehensive Transportation Plan and updated Design Guide.

This approach would consolidate and coordinate all aspects of a balanced transportation network and increase flexibility around design to reflect adjacent land use context and the proposed street types in this plan. The Transportation Plan and Design Guide should work to balance the needs of all users of the transportation network including pedestrians, bicyclists, transit users, drivers, and freight. The Transportation Plan and Design Guide should reflect the collaboration of the Departments of Planning and Public Works and other partners as they develop a balanced transportation system that emphasizes safety and connectivity for all users and positively contributes to Springfield's quality of place.

Alignment Preservation

Under state law, cities may adopt an official map of a proposed street or thoroughfare and prohibit the issuance of building permits within the mapped right-of-way. The official map must be based on the adopted Major Thoroughfare Plan. To prevent encroachment of development upon corridors needed for future thoroughfares, future land planning recommendations included in the Comprehensive Plan and regulatory tools such as the Zoning and Subdivision Regulations should be reviewed and codified in concert with Major Thoroughfare Plan policies. Mapping is generally used to reserve the future right-of-way for major facilities such as freeways, expressways, and arterials, but in certain cases it can be used to reserve additional right-of-way for widening existing roads, expanding intersections, and installing traffic control improvements. These improvements will take into account the traffic generated by the proposed development and the normal traffic growth in the area.

Traffic Analysis

Future land planning strives to forecast reasonably anticipated land uses and intensities, based on existing patterns of development and existing and planned infrastructure, including transportation facilities. Impacts on the safety, connectivity, and accessibility of all modes of transportation, including but not limited to, pedestrian, bicycling, micromobility devices, transit, and accessibility concerns shall be considered. If a proposed development generates traffic volumes that exceed the design level of service of the existing/planned transportation system and public safety concerns or impacts to connectivity of all modes of transportation are anticipated, the development should be prohibited and/or modified unless the developer agrees to make changes that would enable the system to adequately handle the anticipated traffic. Such changes include dedicating additional right-of-way, widening and pavement improvements, providing sidewalks, side paths, crossing improvements or other multimodal accommodations, traffic signals, turning lanes, and internal circulation drives. A traffic analysis, identifying the number of vehicle trips generated by the proposed development and the impact of these trips on the street network, should be conducted for all rezoning requests and proposed developments.

The City should also consider incorporating analysis of impacts on non-vehicular modes into the standard traffic impact analysis. If analysis indicates that traffic level of service may decrease and/or safety issues may result as a result of the development, a more detailed study should be conducted to identify necessary changes to adjacent streets and circulation. In general, the developer of the adjacent property should make off-site traffic improvements when it can be shown that the development is primarily responsible for creating a situation that necessitates the improvement. In all cases, the developer should be required to dedicate the right-of-way needed to achieve the standard for the functional classification of an adjacent street and the necessary multimodal accommodations.

Public Improvements

Whenever a rezoning occurs along an existing substandard street that does not have the capacity to adequately handle the anticipated additional traffic, the developer of the tract in question should be required to upgrade the adjoining portion of the substandard street to meet current standards. If the street is a local or collector street, the developer should be required to upgrade it to the appropriate standard for its functional classification and any future guidance provided by future updates to the Street Design Guide and the Street Types in this Plan. If the street is an arterial, the developer should be required to upgrade it to appropriate street standards if needed and the appropriate Street Type Overlay, provided that it would then have sufficient capacity to handle traffic generated by the development.

When collector street standards would not be sufficient to accommodate the proposed development and improvement of the facility to arterial standards cannot be achieved at public expense in a reasonable and timely manner, the developer should be required to construct an arterial street or make other changes before the rezoning is granted. To encourage developers to proceed with construction of an arterial in order to expedite a development, the jurisdiction may elect to negotiate an agreement that explores a payback procedure that could reimburse the developer a portion of the investment from public funds for the portion of the cost in excess of collector street standards.

For new streets, the same conditions previously mentioned should apply. The developer should be required to construct new streets up to the necessary standards to accommodate anticipated trips related to the development. If an arterial is needed to accommodate the proposed development and it cannot be constructed at public expense, a jurisdiction could negotiate an agreement with the developer if they wish to construct the facility prior to the availability of public funds.

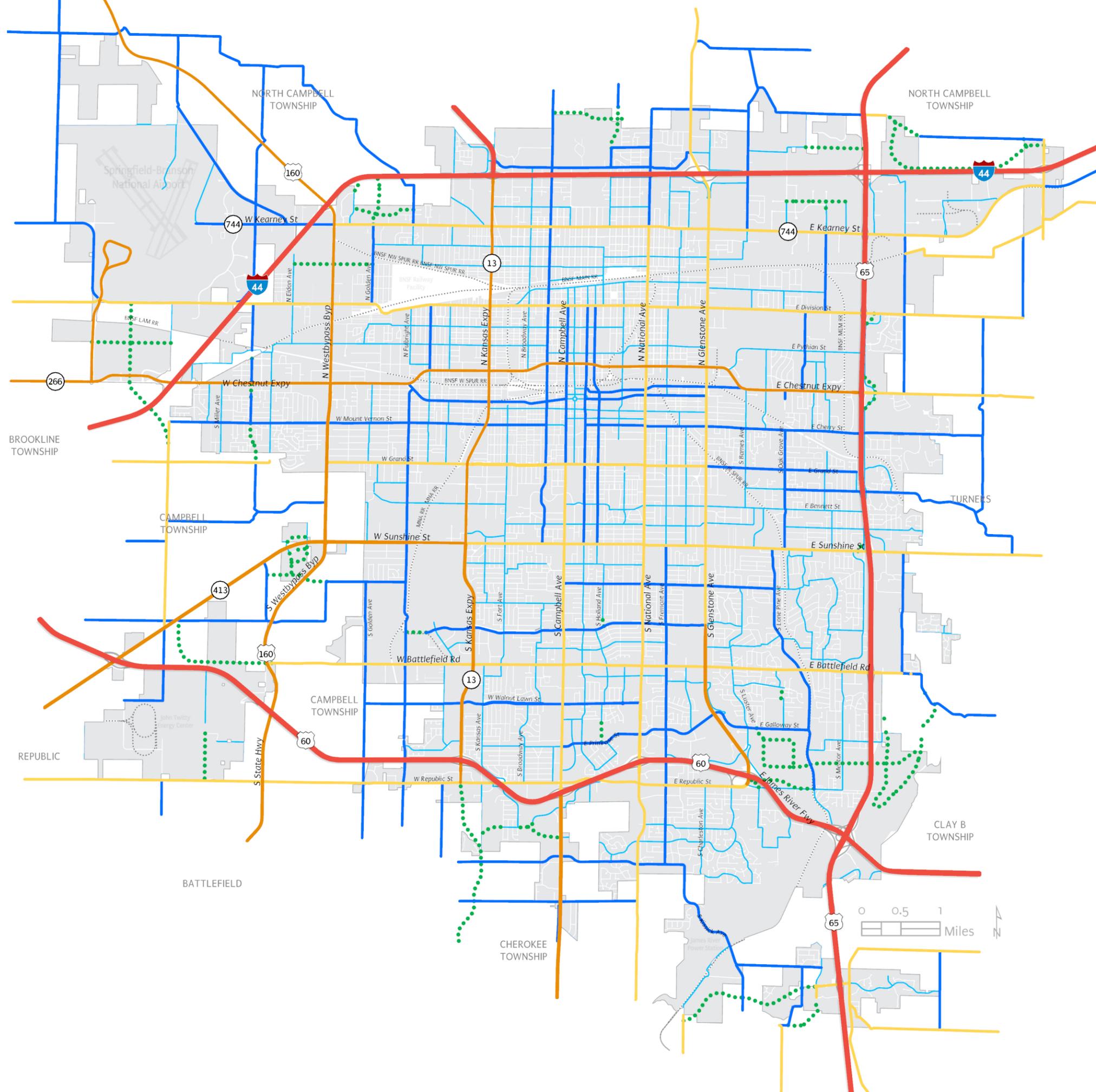


OZARKS TRANSPORTATION ORGANIZATION (OTO)

The Ozarks Transportation Organization (OTO) is the designated Metropolitan Planning Organization (MPO) for the Springfield urbanized area, which provides coordinated regional transportation planning to create a seamless transportation network. MPOs serve to conduct and lead a continuing, cooperative, and comprehensive transportation planning process. The OTO comprises four components: the Board of Directors, the Technical Planning Committee, the Bicycle and Pedestrian Advisory Committee, and the Local Coordinating Board for Transit. MoDOT, regional planning commissions (RPCs), MPOs, City officials, and county officials form regional partnerships to gather and evaluate local input on transportation needs. The City and OTO should continue to work together in developing and prioritizing transportation needs for the city as well as for the region.

Street Functional Classification

- Freeway
- Expressway
- Primary Arterial
- Secondary Arterial
- Proposed Roadway
- Collector



ON-STREET BICYCLING AND TRAILS

A connected network of bicycle facilities is also important to creating the 15-minute city and providing a range of transportation choices that are affordable and accessible. Bicycling infrastructure includes both on-road and trail facilities.

Springfield should identify a network of priority on-road bike facilities and use the FHWA's Bikeway Selection Guide to determine the most appropriate facility to provide adequate separation from motor vehicle traffic for bicyclists of all ages and abilities. On-road infrastructure may include a mix of shared lanes on lower volume, low-speed streets; traditional bike lanes; and separated bike lanes.

In addition to on-road facilities, side paths alongside a roadway and shared-use trails that follow their own rights-of-way are both examples of infrastructure that can be shared by bicyclists, pedestrians, micromobility devices, and more. Springfield currently has nearly 30 miles of trails and shared use path, most of which are paved, and approximately 75 miles of trails in the broader region. To ensure this system can be used for transportation purposes as well as recreation, Springfield should focus on filling in gaps that have the greatest potential for both uses. This will require additional funding for both construction of new facilities and long-term maintenance.

TRANSIT

During the public input process, the public identified various forms of transit as an important area of expansion for the transportation network. This would increase access to key community facilities, shopping areas, employment centers, and parks and recreational amenities. The bus service that currently serves the public has seen a decline in ridership from 1.60 million in 2012 to 1.25 million in 2018 and ridership consists mostly of transit-dependent riders.

PILOT CORRIDORS

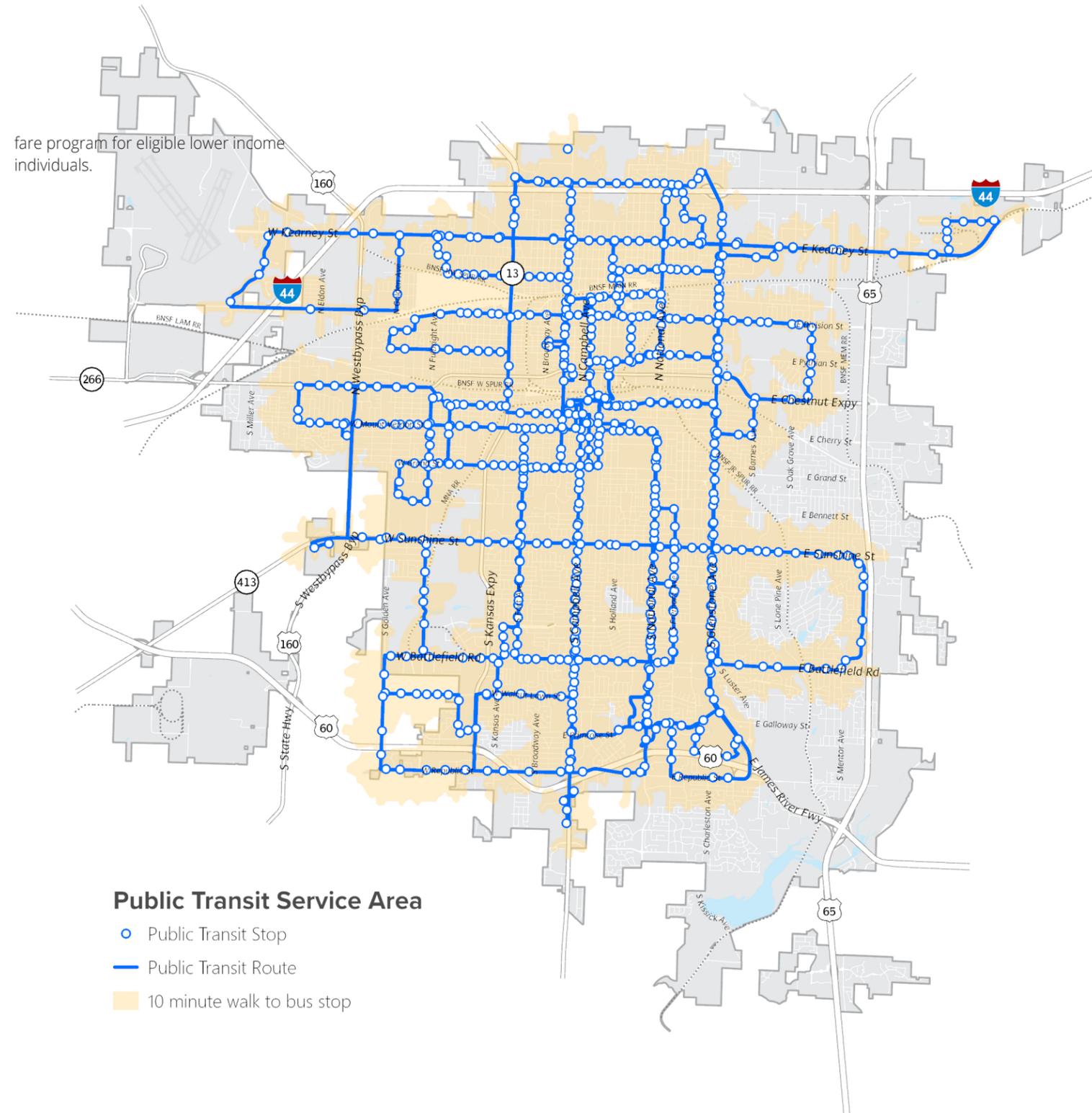
As the City explores additional transit and technology options, they should consider using pilot corridors to test these options. National Avenue for example could be used as a pilot corridor for BRT services and transit-supportive land uses due to its high population density and existing major employers and universities. This should be pursued in coordination with Ozarks Technical Community College, Missouri State University, and Mercy Hospital.

To improve service for current riders, attract new riders, and increase system efficiencies, a transit plan should be developed focusing on the following key areas:

- Improve frequency of service (e.g., 15-minute maximum wait times)
- Expand and optimize transit technology and user services, including Transit Signal Prioritization (TSP), mobile ticketing, live timetables, and automatic vehicle location (AVL) and tracking
- The City, City Utilities, and MoDOT should partner to ensure first mile/last mile access to routes (sidewalks, safe crossings, safe shelters and bus stops, and adequate and secure long term bicycle parking)
- Market, promote, and collaborate with major employers to increase ridership
- Develop a stronger planning and collaborative relationship between the City and City Utilities to make transportation improvements that support and complement the transit system
- Tie transit investments to targeted density investments

The City should work with City Utilities, OTO, MoDOT, and key stakeholders to study the current efficiency and coverage of the transit system as well as the feasibility of a high-frequency transit corridor. Current users and the general public should be surveyed to better understand current challenges and opportunities for increasing ridership and to determine if a focus on more frequent service on a smaller number of routes might be more efficient and sustainable. The City should also work with City Utilities to consider a reduced

fare program for eligible lower income individuals.



1.2 DEVELOP INDIVIDUAL MODAL PLANS

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HEALTH & WELL-BEING

Develop and regularly update transportation plans for specific modes of transportation.

Individual plans for specific transportation modes are an important way to develop and document detailed vision, goals, and recommendations for different user groups in the City beyond the scope of the Comprehensive Plan. Springfield should create new or update existing transportation plans that complement this Comprehensive Plan and provide further detail to ensure the needs of each mode are being met. Transportation planning should be coordinated to the greatest extent possible to ensure recommendations align and support the entire system. These modes should include the Railroad Reconfiguration Study; Airport Master Plan; Major Thoroughfare Plan; ADA Transition Plan; Transit Optimization Plan; Street Functional Classification Plan; Congestion Management Plan; Micromobility Plan; and Bike, Pedestrian, and Trail Plan. These could be incorporated as individual elements into a Transportation Plan and Design Guide that also incorporates the City's Complete Streets policy and updates design guidance based on the Street Types provided later in this chapter to balance the needs of multiple modes. The Departments of Planning and Public Works should work closely together and with the public in the development of all modal plans.

1.3 UTILIZE EMERGING MODES AND TECHNOLOGIES

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HEALTH & WELL-BEING

Utilize new travel modes and emerging transportation technologies to maximize the efficiency of Springfield's existing street network.

As Springfield's transportation infrastructure continues to evolve with the development of new mobility options and technologies, the City should continually evaluate emerging modes, technological advances, and data tools to determine how they fit within the City's current transportation offerings and infrastructure.

TRANSIT TECHNOLOGY

In addition to exploring new transit modes for Springfield such as light rail, streetcar, and bus rapid transit (BRT), the City should explore ways to use technology to enhance existing and future transit service. Technology can be used to make transit more accessible and appealing to users. New technologies to explore include mobile ticketing, the use of automatic vehicle location (AVL) to optimize routes, improved real-time information services for riders and operators, account based fare collection, and more.

MICROMOBILITY

Micromobility refers to a set of small, lightweight devices that are intended for individual transportation use to travel short distances. These devices include bikeshare, electric skateboards and scooters, electric assist bikes, and other micromobility technologies.

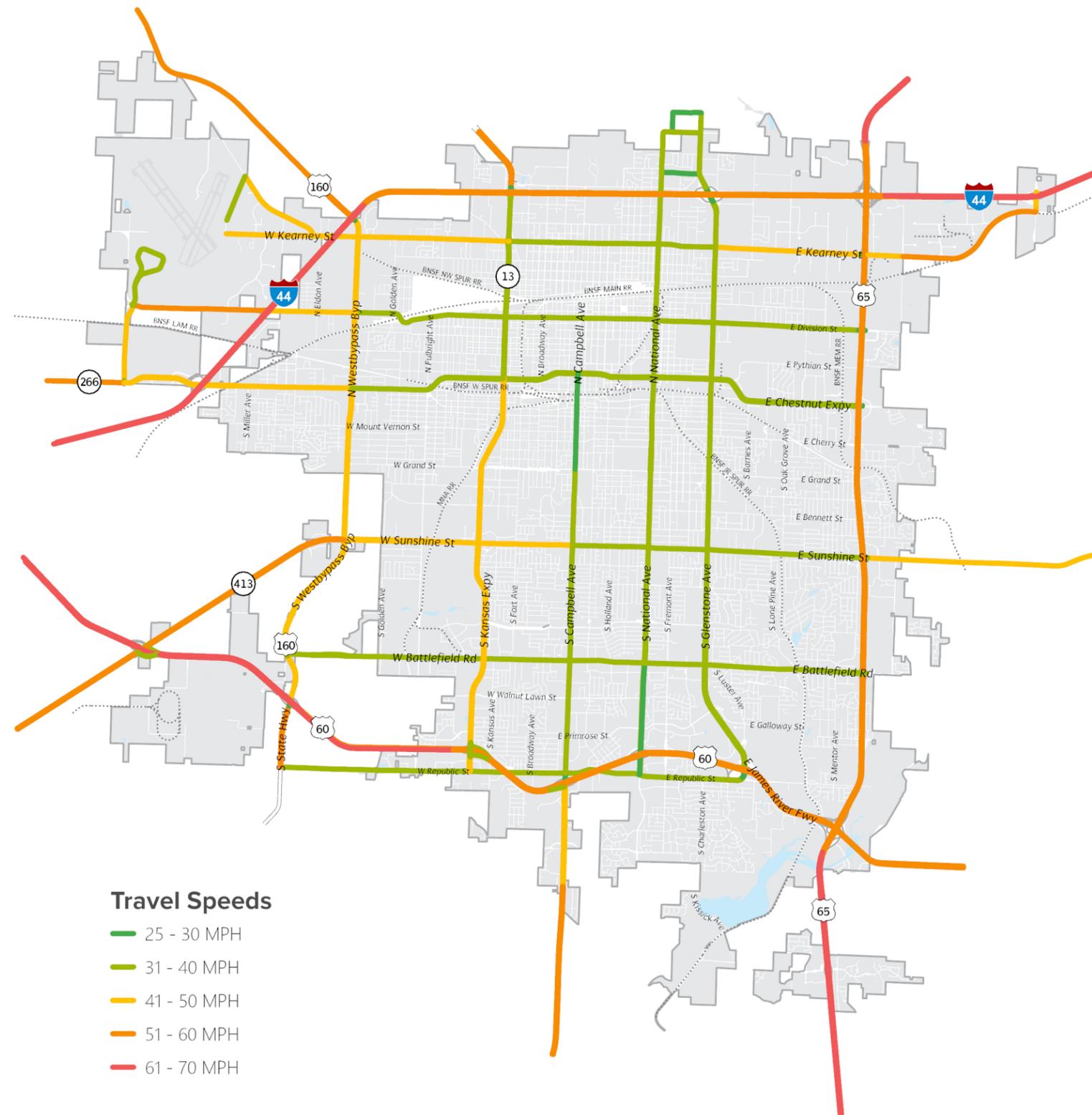
They have the potential to enhance transportation and mobility options in Springfield and will need solid, thoughtful policies to manage potential issues, such as user conflicts and device parking issues.

CONNECTED AND AUTONOMOUS VEHICLES INFRASTRUCTURE AND PLANNING

Springfield should proactively plan for future transportation and infrastructure improvements that allow emerging connected and autonomous vehicles (C/AV) to be supported within Springfield in the long term. The City should begin planning for necessary infrastructure and reserved space for C/AVs and address curbside management and technology needs. The design of future infrastructure should support connected vehicle technologies and information sharing across all modes. The City should continue to expand and improve the reliability of the transportation management system and associated communications network to support emerging vehicle technologies.

ADVANCED SIGNAL TECHNOLOGIES

The City should continue the development and implementation of responsive and/or adaptive signal operation, automated traffic signal performance measures (ATSPMs), advanced detection and data collection software, and advanced traffic management system (ATMS) software enhancements to improve arterial incident response and traveler information.



1.4 MAINTAIN EXISTING INFRASTRUCTURE

COMMUNITY PHYSICAL IMAGE

HEALTH & WELL-BEING

Prioritize routine maintenance and upkeep of existing infrastructure for all modes.

Maintenance and ongoing network and program evaluation are critical components of a well-functioning transportation system. Poor maintenance of transportation infrastructure impacts the safety and mobility of all users. It is critical that the City and its regional and state partners work together to maintain the highway system, local streets, sidewalks, and trails as well as the supporting infrastructure such as signals, lighting, and signs.

While specific maintenance related to accessibility is outlined in the City's ADA Transition Plan, maintenance should be inclusive of all modes and address:

- Pavement preservation (e.g. surface treatments, crack treatments, pothole repair, resurfacing)
- Sweeping
- Pavement markings (e.g. epoxy, latex, polypreform, thermoplastic)
- Vegetation management
- Sign and signal maintenance
- Traffic control (i.e., detours)
- Snow and ice clearing
- De-icing and Anti-icing

The city should consider a program, like Clean Green, that emphasizes the importance of developing an aggressive trash and maintenance program to keep major corridors looking their best, focusing on presenting Springfield in its best and cleanest. A campaign for key corridors like Chestnut, Glenstone, and Kansas Expressway should not exclusively rely on the Missouri Highway Department to implement, the city will need to take a leadership role in this effort.

PAVEMENT CONDITIONS

A 2018 pavement analysis report completed by Infrastructure Management System (IMS) identified Springfield's average Pavement Condition Index (PCI) to be 68 and identified a target PCI of 70. The report determined the City's PCI would decline within five years without an increase in funding levels. Thus, the City should develop a plan for obtaining and maintaining a good pavement condition for Springfield's roadway network. It should include funding strategies, roadway analysis, and an implementation plan. The pavement management plan should also address utility cut coordination and repairs to understand the impact on the pavement's condition and long-term smoothness that utility cuts can have. The IMS Study identified a need to establish an annual budget of \$6 to \$7 million to reach this target PCI of 70, which should be indexed over time to account for inflation.



MARKINGS AND SIGNING

Additional transportation infrastructure that must be maintained includes pavement markings, signing, signals, and connectivity infrastructure. These elements are key to providing transportation users with the necessary guidance to navigate the transportation network. Maintaining these elements in good condition also supports the implementation of the ever-changing arena of connected infrastructure and autonomous vehicles. Investment levels in maintenance of these infrastructure elements will need to be evaluated regularly as technology requirements demand a minimum level of conditions in order to operate reliably.

JOINT MAINTENANCE OF CONGESTION MANAGEMENT AND INCIDENT RESPONSE SYSTEMS

The City has jointly developed a robust congestion management and incident response system with MoDOT. This system recognizes the fact that while two separate agencies and systems manage the signal system in Springfield, it must be managed cooperatively in order to operate in an effective manner for the City. The system has the ability to collect important data points in the network that drive decision-making related to transportation network improvements and reliability. The system also works to inform the public with updated travel conditions and thus keep travel times low. Maintaining this system and investing in needed upgrades to it is a key aspect of maximizing traffic flow within the system.



GOAL 2: Increase safety for all users of the transportation system.

2.1 ADOPT A VISION ZERO APPROACH

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HEALTH & WELL-BEING

Adopt a Vision Zero approach to reduce fatalities and major injuries for all users of the transportation system.

Providing safe multimodal travel options is a critical function of Springfield's transportation system and essential to achieving the City's vision for a 21st century transportation system. Vision Zero is a strategy that works towards eliminating all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all.

VISION ZERO PRINCIPLES

Vision Zero takes a proactive and preventative approach to traffic safety (see Safe Systems Approach callout). It recognizes that all users of the roadway system have a role to play in improving safety and focuses on the following:

- Reframe traffic deaths as preventable
- Focus on system failure
- Reduce the impact of collision
- Adopt a Safe System approach
- Use data-driven decision making
- Road safety is a social equity issue

STAKEHOLDER COLLABORATION

Collaboration with a wide variety of stakeholders will be critical to effectively establishing this approach to traffic safety. Key stakeholders should be involved in ongoing safety efforts including staff from the City Manager's Office, Public Works, Planning, Health, Police and Emergency Services, Parks and Recreation, Public Information and Civic Engagement, schools, as well as members of OTO, MoDOT, City Utilities Transit, walking and bicycling groups, and public health and injury prevention professionals.

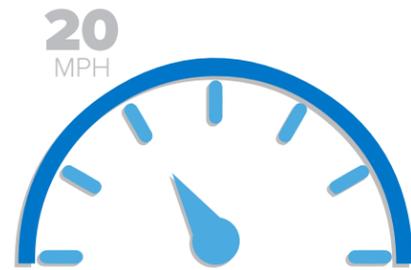
INCLUSIVE AND EQUITABLE

Vision Zero recognizes that everyone, regardless of background, age, ability, or chosen mode of travel has the right to move about their neighborhoods safely. Efforts should be made to address safety and connectivity in all neighborhoods with particular attention paid to neighborhoods with historic underinvestment.

SAFE SPEEDS AND TRAFFIC CALMING

Speed reduction is an essential Vision Zero strategy. Higher speeds not only increase the risk of a crash, but also increase the risk of serious injury or death, regardless of mode. The effects of speed are most pronounced for pedestrians, whose risk of dying if struck by a vehicle increases with vehicle speed as shown in the adjacent graphic. While higher speeds are expected on streets with higher speed limits, efforts should focus on ensuring target speeds, design speeds, and speed limits are set appropriately for the adjacent land uses. Speeds should be slower in residential neighborhoods, near schools, and in commercial areas.

In addition to ensuring target speeds are set appropriately for the adjacent land uses, the City should work to slow speeds in areas where drivers typically exceed the posted speed. One way to address speeds is through design techniques and the establishment of a formal traffic calming policy and program for the City. This policy and program should identify "slow zones" criteria and locations throughout the City as well as the specific design techniques for these zones. Additional design techniques for safe speeds can be addressed by updated design guidelines as discussed in Section 2.2.



13% Likelihood of fatality or severe injury



40% Likelihood of fatality or severe injury



73% Likelihood of fatality or severe injury

Source: Tefft, Brian C. Impact speed and a pedestrian risk of severe injury or death. *Accident Analysis & Prevention*, 50. 2013

SAFE SYSTEMS APPROACH

According to FHWA, "the Safe System approach represents a paradigm shift in how road safety is addressed. Foundational to the Safe System approach is that no person should be killed or seriously injured when using the road system, and that it is a shared responsibility by all parties involved to ensure this becomes reality. From a roadway infrastructure perspective, a Safe System approach involves managing the circumstances of crashes such that the kinetic energy imposed on the human body be kept at levels that are tolerable in terms of survivability and degree of harm. At an intersection, this challenge is characterized through managing speed and crash angles, as well as considering risk exposure and complexity."

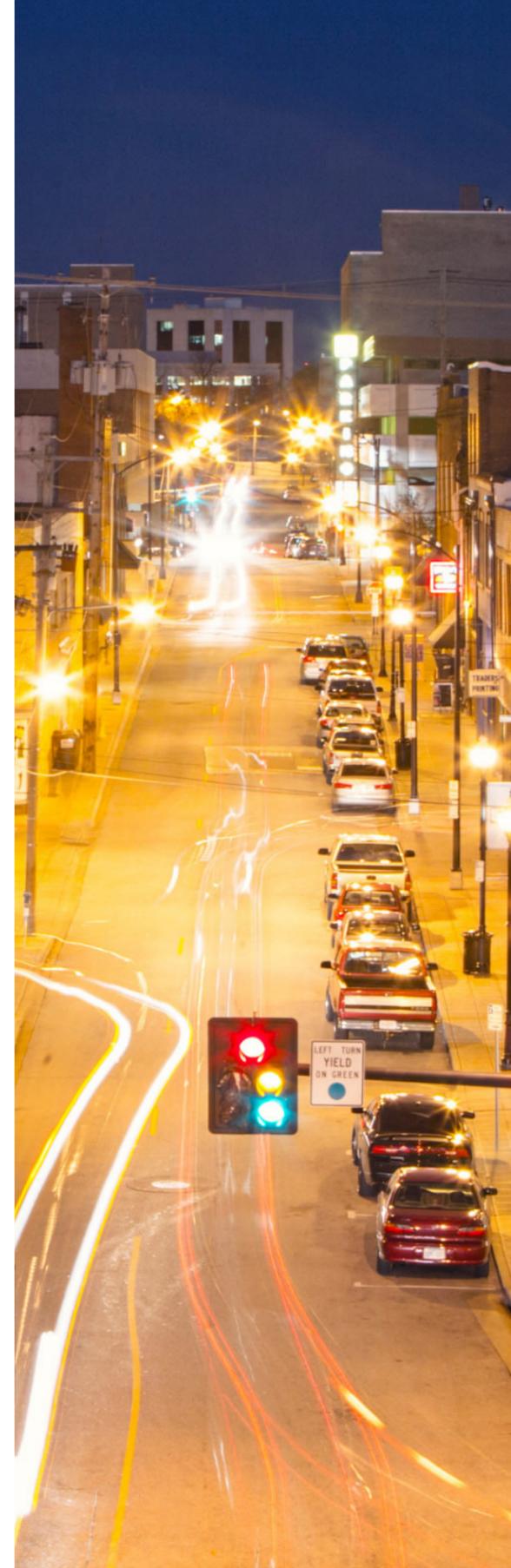


Photo Credit: Springfield, MO Convention & Visitors Bureau

CURRENT TRAFFIC CALMING IN SPRINGFIELD

One current example of traffic calming in Springfield is a recently completed project at the intersection of Cherry and Pickwick and extends roughly from Fremont Avenue to the west and the railroad crossing to the east. The goals of this project include slowing traffic along the Cherry Street corridor, creating a safer and more inviting environment for pedestrians, and promoting placemaking through aesthetic design features and landscaping.

Key Design Features

The Cherry Street and Pickwick Avenue intersection features “bulb-outs,” or extensions of the curbline into the roadway, to visually and physically narrow the street. This narrowing effect causes vehicles to slow down as they enter the intersection. In addition, the bulb-outs also create a safer crosswalk by reducing the crossing distance for pedestrians from around 37 feet to about 22 feet, while also improving the sight distance for vehicles.

A raised crosswalk is also incorporated into the bulb-outs at the intersection. This further slows traffic by creating a speed hump in the roadway. In addition, texturizing this crosswalk provides an audible, tactile experience for drivers, further providing a reminder to use caution.

Similar curbline bulb-outs were added to the western and eastern limits of the project. These again, create a visual and physical narrowing of the roadway and signify to drivers that they are entering a “pedestrian friendly” area. Crosswalks were also included in these eastern and western project limits.

2.2 IDENTIFY AND ADDRESS SYSTEM SAFETY DEFICIENCIES

COMMUNITY PHYSICAL IMAGE



HEALTH & WELL-BEING



Identify system safety deficiencies and work to remedy them.

DATA-DRIVEN APPROACH TO SAFETY

The City should continue to expand and enhance its data collection and analysis plan to identify and investigate the most common crash types on roadways, sidewalks, and trails and areas of high speed. The City should use the analysis to continue to pinpoint problem locations and proactively address issues through enforcement and engineering countermeasures. Analysis should include not only crash examination, but speed and yielding compliance as well.

CROSSING POLICY AND COUNTERMEASURES

Safe crossings are a key element of community walkability, pedestrian safety, and connectivity. The City should continue to evaluate and consider utilization of FHWA’s Safe Transportation for Every Pedestrian (STEP) process and use this process to select and implement countermeasures for improving pedestrian crossing safety. FHWA provides resources related to this program that can be found on the program web page.

STREET DESIGN PRACTICES AND GUIDELINES

Multimodal street design guidelines should be updated as part of a more comprehensive and detailed multimodal Transportation Plan and used to reflect and reinforce the City’s Complete Streets policy and should include the latest best practices to balance the mobility and safety needs of all modes (see Goal 3 for further discussion). The City should update street design guidelines and address the following key topics:

- The development of a street type overlay that aligns with adjacent land uses (or desired uses) and is used to determine key design factors such as speeds, number of lanes, lane widths, sidewalk width and the presence and design of bike and transit facilities
- An approach to determining and aligning target speeds, design speeds, and speed limits for area roadways to prioritize safety
- The appropriate use of traffic calming features for new and existing roadways. A successful example of this is the Cherry and Pickwick intersection in the Rountree Neighborhood
- The following are several key resources that are a good starting place for updating the City’s design guidance to reflect multimodal best practices:
 - Achieving Multi-Modal Networks: Applying Design Flexibility and Reducing Conflicts
 - National Association of City Transportation Officials’ Street Design Guidelines
 - FHWA Bikeway Selection Guide
 - AASHTO Guide to the Development of Bicycle Facilities (update forthcoming)

2.3 PROVIDE TRAFFIC SAFETY EDUCATION TO ALL USER GROUPS

COMMUNITY PHYSICAL IMAGE



HEALTH & WELL-BEING



Continue and enhance traffic safety education and promotion efforts that target users of all modes.

All users of the transportation system have a role to play in improving safety through roadway behavior. Education efforts should address all users and include messages regarding safe interactions with others on the roadway. These messages should be updated regularly to reflect key findings from ongoing safety data analysis and an up-to-date understanding of traffic fatalities, serious collisions, and the causes of these incidents.

SGF YIELDS PROGRAM

The City currently operates the “SGF Yields” campaign with the goal of instituting cultural change in Springfield toward being more pedestrian friendly. The campaign utilizes education and awareness to reach the community. The program also studies crosswalks throughout the City on a quarterly basis to determine what percent of drivers are yielding to pedestrians and provides relevant feedback to the public. In addition, City Council adopted a series of code changes in November of 2020 that require vehicles to yield to pedestrians approaching or waiting within three feet of an unsignalized crosswalk. This program utilizes several of the core elements of Vision Zero and aspires to have a long-lasting impact on transportation safety within Springfield.

The majority of the program is funded through grants from MoDOT (currently the Show-Me Zero grant). The City should establish a permanent funding mechanism for the program and build on its current pedestrian safety focus to include the role that all transportation users, including motorists, pedestrians, bicyclists, and drivers of freight and transit vehicles play in improving transportation safety within the community. Messages should be deployed through a variety of media and target a broad audience of all user types, ages, and backgrounds. Messages should avoid victim-blaming or targeting any one user group.

LARGE VEHICLES

During the engagement efforts for this project, the public and stakeholders expressed the need and desire to ensure that training for larger vehicles is incorporated in safety education efforts. Both freight transport and public transit are essential to Springfield’s transportation system. The City should work with the local trucking industry to implement safety measures of the American Trucking Associations (ATA), such as Compliance, Safety, Accountability (CSA); electronic logging devices; minimum medical requirements; drug and alcohol testing; performance-based commercial driver’s licensing testing standards; and training for sharing the road with pedestrians and bicyclists. The City should also incorporate elements of ATA’s Share the Road program, which teaches the public how to share the road with large trucks. In addition, City Utilities Transit, which operates the City transit and paratransit systems, should ensure that all operators receive training related to sharing the road with pedestrians, bicyclists, and motorists.



GOAL 3: Integrate transportation and land use to support mobility and placemaking.

3.1 ADOPT STREET DESIGN CHECKLISTS AND UPDATE GUIDELINES

COMMUNITY PHYSICAL IMAGE



HEALTH & WELL-BEING



Update the City's Street Design Guidelines to incorporate the adopted Complete Streets Policy and best practices in multimodal design that balance the needs of all users.

CONTEXT SENSITIVE APPROACH TO DESIGN

The City should implement a context sensitive approach to street design that responds to the desired land use and character of a corridor. To facilitate this, the City should adopt complete street checklists to use for roadway projects including new construction, reconstruction/retrofit, resurfacing, repaving, restriping, and rehabilitation.

In addition, the City should update street design guidelines with a strengthened multimodal approach that allows for greater flexibility and designs that support adjacent land uses. Adopting the Street Type overlay described in this section is a first step in developing street design guidelines that are more responsive to current land uses than the use of functional classification to determine design speed, number of lanes, and lane widths.

COMPLETE STREETS COMMITTEE

The City should establish a Complete Streets Committee made up of high-level staff from public works, Planning and Development, health, and safety departments and CU Transit to collaborate on new design guidelines and ensure multimodal concerns are addressed in street design.

3.2 ADOPT THE STREET TYPOLOGY OVERLAY

COMMUNITY PHYSICAL IMAGE



Adopt a new street typology overlay that reflects the Street Types in this chapter to guide and better align street designs with surrounding land uses.

DESIGN FLEXIBILITY

The traditional approach to street design of determining design, speed, and street width according to the functional classification of the roadway (arterial, collector, local street, etc.) is limiting. It also does not acknowledge that streets often change character and land uses over time along any given corridor. Springfield should apply a street typology overlay into the City's street design guidelines to allow for greater design flexibility that can match the scale and character of the neighborhood the street serves. The proposed street type overlay is detailed at the end of this chapter. This would serve as a first step in utilizing street types. Additional steps would include:

- Assign the new street types to specific streets (and create a map).
- Develop design standards or guidelines working closely with a complete streets advisory committee (described above).
- Ongoing coordination with OTO so these elements can be incorporated in their design guidance and capacity changes can be reflected in modeling.

3.3 ENHANCE COMMUNITY CHARACTER AND PLACEMAKING

COMMUNITY PHYSICAL IMAGE



ARTS, CULTURE & HISTORIC PRESERVATION



Enhance community character and placemaking through the transportation system.

The transportation network plays a major role in shaping both Springfield's community identity and aesthetic appeal. The character of individual streets, shaped by the street design, speed, travel options, safety, aesthetics, and adjacent land uses, should positively contribute to the community character of Springfield. Transportation infrastructure can be used to safely and conveniently take people where they need to go, but also serve as a basis for placemaking initiatives that incorporate public art, landscaping, and gateway features to enhance the City's sense of place.

Placemaking focuses on strengthening the connection between people and shared public space. As streets occupy large areas of the public realm, they can be used as a mechanism for enhancing community character and identity. Springfield has embraced placemaking to better establish an identity and provide the public with a way to celebrate the uniqueness that is Springfield.

GATEWAYS, ART, AND LANDSCAPING

Enhancing community character and aesthetic appeal was identified by the community as a high priority. Springfield should embrace and pursue opportunities to go above and beyond minimum design standards to enhance aesthetics with limited resources within the public right-of-way and transportation infrastructure. This includes exploring opportunities to establish gateways at key entrance points to the community, such as off I-44 and U.S. 60 and to and from the airport, and utilizing art and landscaping to define an identity for different neighborhoods and street corridors. Other areas for enhanced design aesthetic include highly visited destinations such as major commercial nodes, medical mile, and Missouri State University as well as high visibility corridors such as Sunshine, Campbell, National, Chestnut Expressway, Chase Street in the Moon City Creative District, Norton Road, Lone Pine, and others identified in subarea plans.

The City should develop placemaking and landscaping guidelines for these gateways and corridors. Other examples of enhancements include crosswalk art, underpass art or lighting installations, art on bus exteriors, and stormwater green infrastructure. The City should consider allocating a portion of funding for larger transportation improvements towards public art to promote integration of art into City streetscapes and trail corridors.

COORDINATION

The placemaking and landscaping guidelines should be coordinated with the Street Design Guidelines update and street typologies outlined above to establish the desired right-of-way aesthetic for the transportation network. The City should also coordinate landscaping and placemaking enhancements with larger capital improvement projects to maximize use of resources and time efficiency. In addition, the City should develop an analysis of cost and identify potential private partnerships when creating the guidelines. Creating private partnerships when enhancing and maintaining landscaping and branding in the right-of-way is always a welcome opportunity. However, current city code makes such arrangements cumbersome and difficult to initiate and maintain. Therefore, the City should explore ways to streamline "maintenance/encroachment agreements" for private landscaping and branding opportunities through adjustments to the city code.

Engaging the community for input will help foster a sense of community ownership and empowerment in the branding and landscaping efforts. This will help to provide a consistent theme on corridors and throughout the community depending on how the branding strategy is established. Providing a quality end product that can be maintained with existing resources and/or identifying resources that can be utilized to maintain the quality of the initial investment should also be considered.



STREET TYPOLOGY

Streets are shared public spaces. Not only do they help us get where we need to go by walking, bicycling, taking transit, or driving, they are also the places where we hold parades, street festivals, and neighborhood block parties. They are a critical component of our community fabric. They provide access to neighborhoods, businesses, institutions, and recreation. They are a critical component of the public realm that can help shape and be shaped by Springfield's community, culture, and creativity.

The Street Types described in the following pages can be used to supplement and enhance the traditional functional classification system of streets in Springfield. These Street Types should serve as a starting point for an updated Street Design Guide that strengthens the City's Complete Streets Policy with more detailed design guidance based on best practices in balancing the needs of all modes in the transportation system. The Street Types and Design Guide can be used to provide greater flexibility to support diverse user needs and a range of land use types.

PURPOSE OF STREET TYPOLOGY

Traditional functional street classification systems establish a street hierarchy emphasizing automotive mobility versus property access. While this traditional functional classification system can be useful in some respects and often necessary for funding purposes, it is built almost exclusively around vehicular needs rather than a multimodal perspective of person throughput and goods movement. Expected and accommodated traffic volumes and travel speeds are often based on assigned classification of arterial, collector, and local streets.

In contrast, a street typology system provides a more nuanced approach to balancing context, character, mobility, and access. Rather than a one-size-fits-all approach, a street typology provides a set of street types with distinct characters that are intended to be flexible and aspirational. The street types provide a framework for street design which is based on land use context, modal priorities, and desired roadway character. These street types are not a replacement for functional class, but rather should be used as an overlay to the existing functional class designations. They can be used when designing retrofits, reconstruction, and new roadways, and provide flexibility and a starting point for conversations about trade-offs when rights-of-way are limited.

PROPOSED SPRINGFIELD STREET TYPES

The street types on the following page are tailored to the needs of Springfield and are intended to support the land use place types in the **Forward SGF Comprehensive Plan**. The street types can be used to provide additional guidance during the selection of street design elements as well as to help inform choices made during the visioning process of a corridor redesign project. Because land use contexts can change throughout the length of a corridor, street types may change along the corridor as well. For example, a corridor may be categorized primarily as a Neighborhood Connector, however a commercial node along it may result in that particular segment being classified as a Mixed-Use Street. Street design elements will change accordingly, reflecting the designated street type and its economic and mobility objectives.

The following descriptions and graphics provide a high-level overview of the street typology for Springfield and examples of how they could be implemented. It is important to note that street types are intended to be flexible and not every implementation would include all the same design elements. To fully realize the benefits and flexibility of the recommended street typology overlay and how it can support Springfield's Complete Streets policy, the Departments of Public Works and Planning should work together through a series of work sessions to build detailed design guidance and an updated Design Guide based on the Street Types presented here.

TRANSPORTATION AND LAND USE

Transportation and land use are inextricably linked together. Land uses determine the number of trips generated; and transportation impacts the character of neighborhoods and activity centers through the travel options provided, character of the street design, speeds, and predominant modes used. Springfield's transportation should respond to the place types designated in this plan that are described in the **Land Use and Development chapter**.

MIXED USE STREET

Mixed-Use Streets are two-lane roadways designed for commercial and residential land use patterns that increase quality of place by incorporating green infrastructure, walkable and transit-friendly elements, and traffic calming that prioritizes pedestrian safety and experience.

Example Streets for Future Street Type Application:

- Commercial Street
- Cherry Street
- College Street
- Trafficway Street

Typical Characteristics of Street Type Application:

- Place Types/adjacent land use include Downtown, Mixed-Use, Institutional and Employment, and Residential Neighborhood Place Types to increase interest and walkability and accommodate more densely populated development patterns
- This typology is applicable to two-lane collector, secondary arterials, and some local streets within the functional classification system
- Mixed Use Streets should be prioritized for pedestrians, the pedestrian zone should be generous, safe, and visually interesting. Through the inclusion of artwork and landscaping, the creation of an active, engaged, and living street that is comfortable and enjoyable for the pedestrian is essential in the creation of place.

- Lane widths for vehicles should be as narrow as possible.
- Driveway placement and property access is consolidated and managed to improve traffic flow and minimize back-ups and conflicts with pedestrians and vehicle traffic
- Multi-use paths are installed on one side of the street and sidewalks on the opposite side and are separated to the greatest degree possible from traffic by a tree lawn or landscape barrier
- Decorative street and pedestrian lighting, marked crosswalks, and signals are installed to enhance and promote pedestrian circulation and increase safety
- Mixed use streets can be converted to pedestrian-only malls to support festivals and seasonal events
- Transit service is prioritized with frequent stops, that are connected to sidewalks and improved with well-lit bus shelters and live timetables
- Bike racks are installed, and on-street parking and delivery is incorporated to support commercial and residential land uses and calm traffic
- Quality designed elements are incorporated into streetscapes, along with necessary road diets and landscaped gateway elements, roundabouts, islands, medians, and bulb-outs to calm traffic and enhance quality of place
- Green infrastructure is incorporated, that includes elements such as street trees, landscaping, rain gardens, and bioswales to improve water quality and reduce runoff, while improving the aesthetics and enhancing quality of place

- Integrating native plants in the landscape shall be prioritized, as they are a critical component of connecting the built environment to the natural surroundings. Plants should be low water use/drought tolerant to enhance resiliency and ease maintenance
- The key concept of the green infrastructure is to retain, detain, infiltrate, and/or filter runoff from the street and sidewalk in landscaped areas behind existing or proposed curbs (either in the median or outside of the street). This approach treats stormwater as a resource, encouraging the capture and use of the water as near to the source as possible
- Infrastructure and management of electric vehicle charging stations and micro-mobility options are coordinated in larger markets and campus settings
- Public Transit Signal Prioritization (TSP), Traffic Signal Coordination (TSC), wayfinding signage, and Traveler Information Systems (TIS) and other emerging Intelligent Transportation System (ITS) improvements are incorporated
- Utilities are buried or are consolidated overhead to minimize conflicts with street trees, pedestrian infrastructure and viewsheds
- Mixed Use Streets are designed to target speeds of 25-35 mph
- Mixed Use streets should provide on-street parking, either parallel or diagonal, as a business amenity and pedestrian barrier



NOTE: Image is for illustrative purposes only.

COMMERCIAL CONNECTOR STREETS

Commercial Connector Streets serve commercial and light manufacturing land use patterns. While traditionally designed for an auto-oriented environment with high speeds and high traffic volumes, future designs can increase quality of place by incorporating green infrastructure, walkable and transit-friendly elements, and traffic calming.

Example Streets for Future Street Type Application:

- Jefferson Avenue
- Campbell Avenue
- Grand Street

Typical Characteristics of Street Type Application:

- Commercial Connectors are integrated within City Corridor, Industry and Logistics, Business Flex, and Institutional and Employment Place Types to increase interest and walkability and accommodate more densely populated development patterns
- This alternative design is applicable to collector, secondary, and primary arterial streets within the functional classification system

- Driveway placement and property access is consolidated and managed to improve traffic flow and minimize back-ups and conflicts with pedestrians and vehicle traffic
- Shared-use paths are installed on one side of the street and sidewalks on the opposite side and are separated to the greatest degree possible from traffic by a tree lawn or landscape barrier
- Decorative street and pedestrian lighting, marked crosswalks, and signals are installed to enhance and promote pedestrian circulation and increase safety
- Transit service is prioritized with frequent stops, that are connected to sidewalks and improved with well-lit bus shelters and live timetables
- Quality designed elements are incorporated into streetscapes, along with necessary road diets and landscaped gateway elements, roundabouts, islands, medians, and bulb-outs to calm traffic and enhance quality of place
- Green infrastructure is incorporated, that includes elements such as street trees, landscaping, rain gardens, and bioswales to improve water quality and reduce runoff, while improving the aesthetics and enhancing quality of place
- Integrating native plants in the landscape shall be prioritized, as they are a critical component of connecting the built environment to the natural surroundings. Plants should be low water use/drought tolerant to enhance resiliency and ease maintenance

- The key concept of the green infrastructure is to retain, detain, infiltrate, and/or filter runoff from the street and sidewalk in landscaped areas behind existing or proposed curbs (either in the median or outside of the street). This approach treats stormwater as a resource, encouraging the capture and use of the water as near to the source as possible
- Public Transit Signal Prioritization (TSP), Traffic Signal Coordination (TSC), wayfinding signage, and Traveler Information Systems (TIS) and other emerging Intelligent Transportation System (ITS) improvements are incorporated
- Utilities are buried or are consolidated overhead to minimize conflicts with street trees, pedestrian infrastructure and viewsheds
- Commercial Connectors are designed to target speeds of 30-40 mph



NOTE: Image is for illustrative purposes only.

NEIGHBORHOOD CONNECTOR

Neighborhood Connectors are typically two-lane streets with on-street parking, sidewalks, and are designed to provide access to a diverse range of housing types and local neighborhood supporting services. These streets provide character enhancing quality of place, promoting safety, a walkable environment and sense of community.

Example Streets for Future Street Type Application:

- Walnut Street
- Atlantic Street
- Mount Vernon Street

Typical Characteristics of Street Type Application:

- Place Types/adjacent land use include Downtown, Mixed-Use, Institutional and Employment, and Residential Neighborhood Place Types to increase interest and walkability and accommodate more densely populated development patterns
- This typology is applicable to two-lane collector, secondary arterials, and some local streets within the functional classification system
- Driveway placement and property access is consolidated and managed to improve traffic flow and minimize back-ups and conflicts with pedestrians and vehicle traffic
- Multi-use paths are installed on one side of the street and sidewalks on the opposite side separated from traffic by a tree lawn or landscape barrier
- Decorative street and pedestrian lighting, shared marked crosswalks, mid-block crossings, and pedestrian signals are installed to enhance and promote the pedestrian, and increase safety to prioritize active and vibrant placemaking near neighborhood nodes and denser residential areas
- Transit service is prioritized on some Neighborhood Connectors with semi-frequent stops, that are connected to sidewalks and improved with well-lit bus shelters and live timetables

- Neighborhood Connectors include design elements such as reduced lane widths, on-street parking, roundabouts, medians, and bulb-outs to calm traffic and enhance quality of place
- Green infrastructure is incorporated, that include elements such as street trees, landscaping, rain gardens, and bioswales to improve water quality and reduce runoff, while improving the aesthetics and enhancing quality of place
- Integrating native plants in the landscape shall be prioritized, as they are a critical component of connecting the built environment to the natural surroundings. Plants should be low water use/drought tolerant to enhance resiliency and ease maintenance.
- The key concept of the green infrastructure is to retain, detain, infiltrate, and/or filter runoff from the street and sidewalk in landscaped areas behind existing or proposed curbs (either in the median or outside of the street). This approach treats stormwater as a resource, encouraging the capture and use of the water as near to the source as possible
- Utilities are buried or are consolidated overhead to minimize conflicts with street trees, pedestrian infrastructure and viewsheds
- Neighborhood Connectors are designed to support moderate traffic volumes and lower speeds of 25-30 mph



NOTE: Image is for illustrative purposes only.

NEIGHBORHOOD LOCAL STREET

Local neighborhood streets are two-lane roads with on-street parking and sidewalks, designed to provide access to residential neighborhood homes and supporting services. Streets are enhanced to spark new investment, increase neighborhood pride and identity, and promote safety, walkability, and quality of place.

Example Streets for Future Street Type Application:

- Portland Street
- Broadway Avenue
- Fremont Avenue

Typical Characteristics of Street Type Application:

- Place Type/adjacent land use include the Residential Neighborhood and Mixed Residential Place Type. These Place Types largely support a diverse range of residential and multi-family housing, in addition to support services and uses customarily located in a residential neighborhood
- This typology is applicable to two-lane local streets within the functional classification system
- Driveway placement and property access is provided to all properties
- Decorative street and pedestrian lighting and sidewalks are installed on at least one side of the street and are separated from traffic by a tree lawn or landscape barrier
- Crosswalks are installed to enhance and promote pedestrian circulation and increase safety
- Sidewalks and pedestrian networks are well-connected to the greenway and trail network

- On-street parking is permitted on at least one side of the street
- Quality designed elements are incorporated into streetscapes, along with necessary road diets and landscaped gateway elements, roundabouts, islands, medians, and bulb-outs to calm traffic and enhance quality of place
- Green infrastructure is integrated, that include elements such as street trees, landscaping, rain gardens, and bioswales to improve water quality and reduce runoff, while improving the aesthetics and enhancing quality of place
- Utilities are buried or are consolidated overhead to minimize conflicts with street trees, pedestrian infrastructure and viewsheds
- Neighborhood Local Streets are designed to support low traffic volumes and low speeds of 20-25 mph



NOTE: Image is for illustrative purposes only.

URBAN PARKWAY

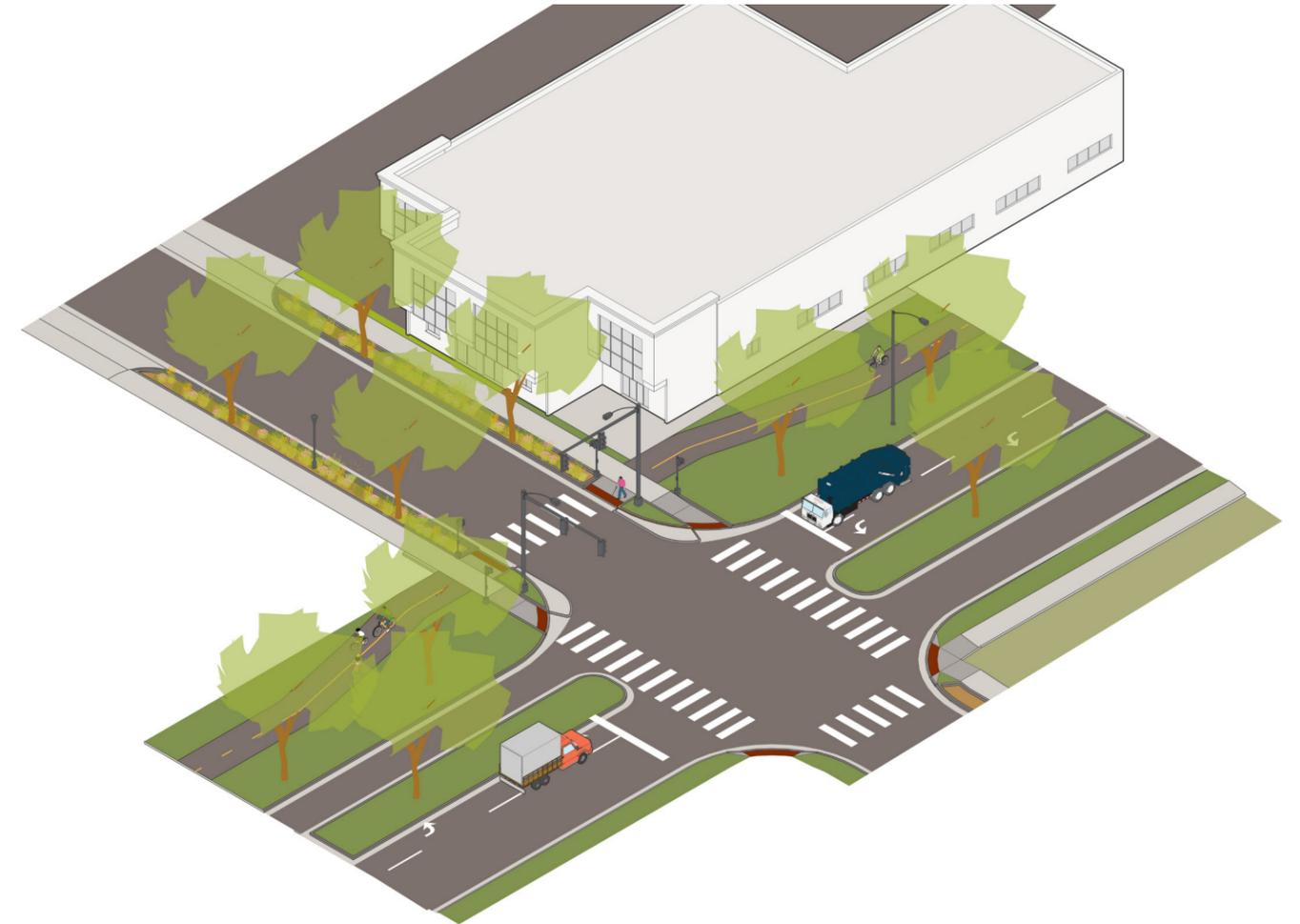
Urban Parkways are divided expressways and arterials that are largely auto-oriented but have been transformed into landscaped thoroughfares designed to improve and beautify the City while efficiently moving higher volumes of traffic at moderate to high speeds. Routes selected for parkway classification would be limited and would require support and cooperative agreements with the Missouri Department of Transportation

Example Streets for Future Street Type Application:

- Kansas Expressway
- Chestnut Expressway
- West Bypass
- Sunset Street

Typical Characteristics of Street Type Application:

- Urban Parkways are integrated alongside a variety of Place Types, connecting neighborhoods, commercial areas, employment centers, and other key destinations across the City
- Some Parkway conversions are under the jurisdiction of the Missouri Department of Transportation and will require interjurisdictional agreements to implement the Parkway typology
- Parkways do not provide direct access to individual properties and are significantly spaced apart from intersections to help ensure efficient movement of traffic
- Auto-orientated traffic is prioritized on Parkways to increase the efficient movement of vehicle traffic, but can also support multi-modal infrastructure
- Multi-use paths, sidewalks, and enhanced crosswalks are constructed alongside Parkways to increase connectivity between trails, greenways, neighborhoods, and other community destinations and are safely separated from traffic by a tree lawn or landscaped buffers
- Transit traffic is prioritized along parkways, with stops, shelters, and live timetables provided mainly from secondary street connections serving neighborhoods, commercial areas, employment centers, and other key destinations
- Quality infrastructure designs that incorporate art, culture, and connection to the nature are integrated into street lighting, overpasses, underpasses, signaled intersections, crosswalks, roundabouts, and medians to enhance the experience, improve traffic flow, increase safety, and control the movement of non-vehicular traffic
- Green infrastructure is incorporated into Parkway design with elements like street trees, landscaping, rain gardens, and bioswales to improve water quality and reduce run-off, while improving the aesthetics and enhancing quality of place
- Transit Signal Prioritization (TSP), Traffic Signal Coordination (TSC), wayfinding signage, and Traveler Information Systems (TIS) and other emerging Intelligent Transportation System (ITS) improvements are incorporated into Parkways
- Utilities are buried or are consolidated overhead to minimize conflicts with street trees, pedestrian infrastructure and viewsheds, enhancing the scenic experience of the City
- Parkways are designed to support moderate traffic volumes and lower speeds of 40+ mph



NOTE: Image is for illustrative purposes only.

SHARED STREET

Shared Streets are transformed to increase quality of place by prioritizing pedestrian use and experience over that of vehicles with extremely low traffic volumes and speeds.

Example Streets for Future Street Type Application:

- South Avenue
- Park Central Square / East and West
- Mill Street

Typical Characteristics of Street Type Application:

- Place Types/adjacent land use include Downtown, Mixed-Use, and Institutional and Employment Place Types to increase interest, experience, walkability, and accommodate more densely populated development patterns associated with highly urbanized areas
- This typology is applicable to two-lane collector, secondary arterials, and some local streets within the functional classification system
- Driveway placement and property access is consolidated and highly managed to restrict vehicle use and traffic flow at times, elevating the pedestrian and micro-mobility use

- Wide meandering sidewalks are installed alongside mountable or curbless traffic lanes, where shared café spaces, pedestrian plazas, and malls occupy the remaining public right of way
- Decorative street and pedestrian lighting, marked crosswalks, and signals are installed to enhance and promote pedestrian circulation and increase safety
- Shared Streets are routinely utilized by slow-moving vehicles but can be converted to pedestrian-only malls to support festivals and seasonal events
- Transit service is prioritized with frequent stops and live timetables
- Infrastructure and management of micromobility options are coordinated
- Bike racks are installed, and on-street delivery spaces are incorporated to support commercial uses
- Quality designed elements are incorporated into streetscapes, including artwork, multi-colored pavers, crosswalks, gateway elements, tree-wells, planters, roundabouts, landscaped islands, medians, and bulb-outs to calm traffic and enhance quality of place
- Green infrastructure is incorporated, that include elements such as street trees, landscaping, rain gardens, and bioswales to improve water quality and reduce runoff, while improving the aesthetics and enhancing quality of place

- Integrating native plants in the landscape shall be prioritized, as they are a critical component of connecting the built environment to the natural surroundings. Plants should be low water use/drought tolerant to enhance resiliency and ease maintenance
- The key concept of the green infrastructure is to retain, detain, infiltrate, and/or filter runoff from the street and sidewalk in landscaped areas behind existing or proposed curbs (either in the median or outside of the street). This approach treats stormwater as a resource, encouraging the capture and use of the water as near to the source as possible
- Public Transit Signal Prioritization (TSP), Traffic Signal Coordination (TSC), wayfinding signage, and Traveler Information Systems (TIS) and other emerging Intelligent Transportation System (ITS) improvements are incorporated
- Utilities are buried or are consolidated overhead to minimize conflicts with street trees, pedestrian infrastructure and viewsheds
- Shared Streets are designed to target speeds of 15 mph or less



NOTE: Image is for illustrative purposes only.

GOAL 4: Implement projects that are fiscally-responsible.

4.1 PURSUE DIVERSE FUNDING STRATEGIES

Actively pursue a diverse set of funding strategies, including state and local funding and public-private partnerships.

Securing funding and pursuing a diverse set of funding sources will be key to implementing the recommendations of this plan. At the time of this writing, it was not yet clear what new programs may be put in place as part of the new federal transportation funding bill, but it is expected that programs will expand and contain more multimodal funding opportunities. The City should partner with other agencies at the state and local level as well as private business entities and non-profit organizations to fund transportation projects and programs. The City should continue to collaborate with the State of Missouri to leverage state funds and local dollars into larger transportation projects. Recently, the State Legislature passed an expansion of the state fuel tax. Revenues from this tax will be shared with cities and counties, including Springfield. The community's support of the expansion and sourcing of a stable funding supply on a state level will be key to providing continued improvements to the transportation network.

Locally, the City has funded improvements to the transportation network through the passage of local sales taxes; the 1/8 Cent Transportation and 1/4 Cent Capital Improvements sales tax. These taxes provide funds that help to maintain and expand the transportation network in Springfield. Expansion of these funding resources would assist in building out the multimodal transportation network as well as improving safety, maintenance, and placemaking. Expanding these resources will also allow the City to leverage these funding sources with other government agency partners to provide a greater return on investment. In addition, the following should be considered:

- Research and identify alternative funding strategies for transportation and placemaking projects, such as a public-general fund, impact fees, and a dedicated tax.
- Seek public private partnerships to offset the cost of infrastructure not only for system expansion, but for system enhancements and future maintenance.
- Assign a member of staff, or hire a new staff member, with the role of identifying and securing funding beyond the normal revenue sources.
- Include trail and sidewalk maintenance in the maintenance budget for street maintenance.

4.2 ENSURE EQUITY IN TRANSPORTATION INVESTMENTS

Ensure equity in transportation investments through well-defined selection criteria, public input, and a transparent process.

Ensuring that everyone has access to safe, comfortable, affordable, and healthy transportation choices is an essential goal and responsibility of transportation in Springfield. Recognizing systemic inequities in the built environment is an important step in improving access to mobility options for all residents. The City should work to include screening tools in its project selection criteria that will help prioritize investment in areas that have historically been disadvantaged, enhance connectivity, and provide needed access to opportunity.

PUBLIC INPUT

The City should work closely with the community to solicit project feedback as part of project selection and clearly communicate project information, costs, and benefits to the community through multiple communication channels.

EQUITY LENS

Further guidance is expected from USDOT related to equity as part of the Infrastructure Investment and Jobs Act (IIJA), but a combination of variables that include, but are not limited to, the following should be considered when establishing project selection criteria and prioritization:

- Low income and high and/or persistent poverty
- High unemployment and underemployment
- Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
- Linguistic isolation
- High housing cost burden and substandard housing
- Distressed neighborhoods
- High transportation cost burden and/or low transportation access
- Disproportionate environmental stressor burden and high cumulative impacts
- Limited water and sanitation access and affordability
- Disproportionate impacts from climate change
- High energy cost burden and low energy access
- Jobs lost through the energy transition
- Access to healthcare and food

4.3 SEEK HIGH-RETURN PROJECTS

Seek projects that provide a high return on investment and benefit diverse user groups.

With limited resources for transportation dollars, engaging the community to help identify and prioritize projects is key to having a significant impact on the transportation network. In addition to utilizing the current metrics identified by transportation engineering staff, additional categories should be explored that would align with the community desires for the transportation network and to ensure equity. Additional categorical considerations could include quality of place, multimodal, equity, public health, anticipated land uses, proximity to community amenities/facilities, and economic development. The process should adapt to the community's desires and keep the public as a key stakeholder in the project selection process.

City-Wide Improvements

Rank	Project Name
1	Campbell & Walnut Lawn
2	National & Division
3	Kansas Expwy & Walnut Lawn
4	Kansas Expwy & Sunset St.
5	National Ave, Walnut Lawn to Battlefield
6	Central Street - Phase 2, Campbell to Clay

Source: City-Wide Improvement Programs Pamphlet



GOAL 5: Leverage our transportation network as an asset and impetus for economic development and tourism.

A safe, convenient, reliable, and attractive transportation system is critical to support healthy neighborhoods and a strong local economy. Improving the pedestrian, bike, transit, and roadway networks will be key to ensure residents and visitors can access shops, jobs, and other destinations by a variety of modes. Through regional collaboration, the City must also plan for the efficient movement of goods, recognizing the importance of freight movement along highways, airports, and railroads. Strengthening the City's transportation networks, and community access to them, will help the City capitalize on Springfield's central location in the region to attract more businesses, visitors, and residents to the City.

5.1 LEVERAGE TRANSPORTATION FOR ECONOMIC DEVELOPMENT

COMMUNITY PHYSICAL IMAGE

Leverage and promote the benefits of the transportation vision, goals, and strategies to attract new businesses, visitors, and workers to the region.

Springfield's location within the regional, state, and national transportation network provides an opportunity to promote this location for business attraction. The City should market the Springfield metropolitan area's transportation network as an asset from an economic development standpoint. The City should promote its location within the state and country to attract businesses and companies looking to locate within a vibrant community with a robust transportation network.

The City should also work with surrounding communities and regional transportation partners, such as OTO, to make strategic investments that benefit the region.

An attractive, inviting street network is a fundamental component of economic vitality. The City should harness previous and new investments in walkability, placemaking, landscaping, and programmed maintenance into marketing Springfield as a great place to do business.

5.2 ENSURE EFFICIENT MOVEMENT OF GOODS

COMMUNITY PHYSICAL IMAGE

Work with the freight industry to enhance the movement of goods.

The City should plan for the efficient movement of goods, recognizing the importance of freight and its movement to the local economy including highway, air, and rail access. This must be done while also ensuring that designated truck routes do not interfere with Springfield's residential and low intensity neighborhoods. The City should continue to locate industrial centers adjacent to major freeways and rail facilities, which helps reduce large/small vehicle conflicts and encourage efficient freight movement. The community should work with the freight industry to identify any potential gaps or system deficiencies that could be remedied and develop context-sensitive solutions.

RAIL FREIGHT

The Railroad Reconfiguration Study, completed in November 2006 in cooperation with the City of Springfield, MoDOT, BNSF, MN&A, UPRR and the Ozark Transportation Organization. The Rail Study provides concepts for grade separations citywide and reconfiguration of lines in center city to improve safety and efficiency and achieve the goals of community adopted plans, primarily the Jordan Valley Concept Plan.

Representatives from the organizations met annually through 2014 to review the Study, discuss current operations and develop an annual action plan. As a result many recommendations in the Study have been achieved to improve safety and efficiency for rail and vehicular transportation and lay the groundwork for realizing the vision for Jordan Valley and downtown revitalization, including the Renew Jordan Creek, expansion of Jordan Valley Park, Commercial Street Frisco Lane, and more. An example includes the construction West Wye and Grade Separations at Chestnut.

In recognition of the many changes and projects implemented over the years since the original Study was completed, an update is warranted. It is recommended that the 2006 Railroad Study be updated to reflect the current status of railroad operations and priorities and the community goals outlined in the Comprehensive Plan.

5.3 IMPROVE KEY TRANSPORTATION ROUTES

COMMUNITY PHYSICAL IMAGE

Encourage development and placemaking efforts along key transportation routes and gateways.

NODAL DEVELOPMENT

The City should promote development and redevelopment in and around key transportation nodes and corridors to take advantage of existing infrastructure with sufficient capacity. In addition, the City should direct investment towards visually enhancing the transportation system at key transportation nodes, highly trafficked routes, and gateways, which can stimulate economic development. The City should work with MoDOT to identify overpasses and major interchanges to develop signage, landscaping, gateways, and other placemaking features at key entry points to the City. In addition, quality of place improvements to bridge approaches and horizontal members crossing I-44, US 65 and US 60 (James River Freeway) should be considered.

CORRIDOR MASTER PLANS AND ACCESS MANAGEMENT

In concert with the subarea plans for Glenstone Avenue and Chestnut Expressway, the City should support the development of additional corridor plans for comparable major roadways including, but not limited to:

- Kearney Street
- Sunshine Street
- Battlefield Street
- Republic Road
- National Avenue
- Campbell Avenue

Of specific focus should be the implementation of an access management plan and strategic plans to activate and enhance use and design of key intersections, destinations, and activity nodes along these important routes.

5.4 SUPPORT REGIONAL CONNECTIONS

COMMUNITY PHYSICAL IMAGE

Strengthen regional transportation connections to increase commerce and tourism.

AIRPORT

Continued support and expansion of the airport is key to growth within the community. The City should revamp the administration of, and access to and from, the Springfield-Branson National Airport to ensure access to and from the airport is efficient, safe, and attractive, as this is the first and last impression of many visitors. The community should work with the airport to ensure sufficient facility and runway capacity for passenger, commercial, general aviation, and military use and support future expansions as needed. In addition to passenger travel, the community should strategically plan for logistics and freight connectivity to and from the airport, recognizing its significant role in the regional economy. The City should invest in infrastructure and development projects that leverage the influx of development further west to enhance expansion of public and private facilities at and around the perimeter of the airport. The value of high-quality design should be integrated into public and private development projects as the City conducts reviews of new projects at or near the airport.

PASSENGER RAIL

The City should work with the State of Missouri and regional communities to implement the 2012 Missouri Rail Plan, which recommends the expansion of passenger rail services to Springfield from both St. Louis and Kansas City.

HIGHWAY IMPROVEMENTS

Highway improvements are important to regional connectivity. Specifically, this plan supports federal designation of I-44 interstate loop; US 360 / 60 (James River Freeway) and US 65.

TRAILS OF REGIONAL SIGNIFICANCE

The City should continue to support the identification and development of trails of regional significance, which provide for key connections between the City and the communities of the greater Springfield area. This will further enhance Springfield's status as the premier outdoor destination in the Midwest while providing numerous opportunities for tourism, local commerce, and another option for commuters. Some examples include the Chadwick Flyer Trail and the northward expansion of the Frisco Highline Trail.