



6 TRANSPORTATION & MOBILITY

Gardner's transportation system consists of a layered network of highways, streets, trails, sidewalks, transit services, and airports. The Transportation and Mobility Plan highlights the importance of all of these elements, and identifies ways that the community can balance them in order to maximize mobility, and support other objectives related to economic development, community health, and sustainability.

There are many factors that will influence the evolution of Gardner's transportation systems over time. Over the past decade, several plans have been adopted that describe improvements intended to address specific issues or opportunities.

The 2009 Transportation Master Plan is the City's guiding policy document related to transportation, while the Access management Code, Gardner Municipal Airport Plan, US-56 Corridor Plan, and 2009 Park System Master Plan provide additional detail for improvements to specific areas of the network. In addition to these adopted policies, there are several entities that have jurisdiction over transportation elements.

The City of Gardner maintains the community's local roads, while the Kansas Department of Transportation (KDOT) maintains state and federal routes. The Johnson County Airport Commission maintains and operates the New Century AirCenter, and the Johnson County Transit Department operates the "JO," a bus transit system with services to specific destinations in Gardner.

In addition to the influences described previously, the following issues will have a significant impact on future investment in Gardner's transportation system:

- **Development within Gardner.** All development, including small-scale projects (i.e. a new bank or gas station) and large-scale developments (i.e. new schools, retail centers, and warehouse facilities), can help meet a local land use and development need, but also increases vehicular and pedestrian activity that needs to be accommodated.

- **Development outside Gardner.** Growth in adjoining communities, and in the greater Kansas City region, can contribute to the need for transportation investments to accommodate additional traffic traveling to and from Gardner, as well as through the City.
- **Ongoing Maintenance.** The need to maintain the existing transportation system is a significant issue and a major expense. Every addition to the system increases long-term maintenance costs. It is important to consider this need as part of the overall transportation system investment landscape.
- **Safety Improvements.** Improving the safety of the transportation system is an ongoing need. As issues are identified, they can be addressed through various modifications, enhancements, or reconstruction. Safety improvements can apply to all parts of the system (e.g. intersections, roadways, sidewalks, crosswalks, etc.) and to all users (e.g. auto drivers, pedestrians, bicyclists, truck drivers, etc.)
- **Improved Mobility and/or Efficiency.** Residents, business owners, and other users of Gardner's transportation system all desire to move quickly and efficiently from one point to another. Mobility and efficiency must be weighed against other factors such as safety, cost, and demand.
- **Truck Traffic.** With the development of the nearby intermodal facility and new warehouses, truck traffic in Gardner is an increasing concern. Policies and design improvements are needed to accommodate growing truck volumes.
- **Other Enhancements.** There are other factors that may warrant transportation improvements, including a desire for aesthetic enhancements, new recreational opportunities, or linkages between land uses.

ROADWAYS

Roadways, which include interstates, arterials, collectors, and local streets, are responsible for the vast majority of mobility in Gardner. The City's 2009 Transportation Master Plan serves as the primary guide for investment in the roadway system. It identifies a series of specific projects aimed at improving the efficiency and capacity of the roadway system.

Over the past several years, many critical improvements have been made to the local transportation system, including:

- Moonlight Road widening and improvements from Warren Street to Prairie Village Drive
- US-56/Old US-56 intersection upgrade and signalization project
- Restriping on Center Street at Madison Street (safety improvement)
- Traffic flow and circulation improvements at the Madison and Moonlight Elementary Schools
- Completion of Grand Street between Center Street and Moonlight Road

ROADWAY CLASSIFICATION

All roadways in the Gardner planning area are classified based on a hierarchy that relates to a series of factors including traffic volume, speed, level of access to adjacent land uses, and connectivity to other roadways. The 2009 Transportation Master Plan describes the role of each roadway classification and operational thresholds related to these factors. Generally, the current traffic volumes throughout the City fit within the thresholds established in the Master Plan. However, as development occurs and traffic volumes increase, some corridors should be upgraded. The Transportation Master Plan provides a map of functional classification for several corridors that would result in a robust system of arterials and collectors serving new growth areas in Gardner. The master plan's recommendations should be the guiding policy related to roadway classification, and reclassification should occur incrementally as new development is implemented in different portions of the community.

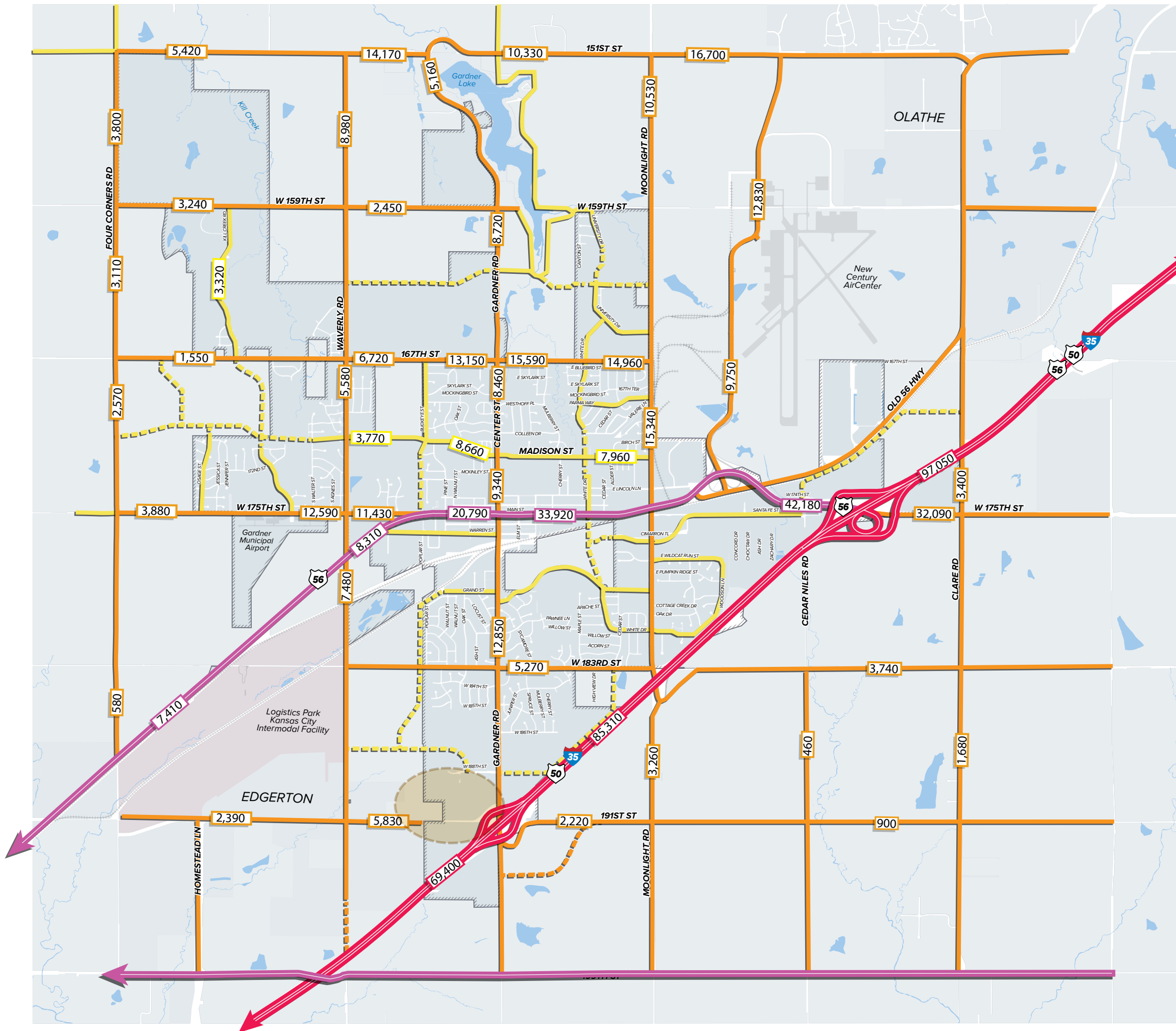
NEW STREETS

The Gardner Transportation Master Plan identifies a number of future roadway segments that would enhance connectivity throughout the community and support future land use as illustrated in this Comprehensive Plan. These future roadways should be developed in close coordination with new development to maximize access and ensure the efficient use of municipal resources. In several areas of the community designated for future development, there is a one-mile grid of rural roadways in place, but no finer grid of streets to serve the anticipated land uses. As development in these areas are planned, the new roadway network should reflect a logic system of arterials, collectors, and local streets similar to what is in place in already developed portions of Gardner. Specific roadway segments identified in the Transportation Master Plan and reflected in this Comprehensive Plan include:

- Western extension of 188th Street to Waverly Road
- New north-south road from new 188th extension to 183rd Street
- White Drive extension from Main Street to Moonlight
- Extension of Madison Street from Waverly Road to Four Corners Road
- Extension of 188th Street from Gardner Road to 183rd Street
- Additional subdivision and local roads as development occurs

CITY OF GARDNER TRANSPORTATION PLAN

- Interstate
- Principal Arterial
- Minor Arterial
- New Minor Arterial
- Major Collector
- New Major Collector
- Average Daily Traffic - 2030 Projections
- Kansas Department of Transportation Jurisdiction
- Roadway Alignment Evaluation Area (Planned)



Potential Main Street Streetscape Improvements:

- 1) Installing street trees along Main Street,
- 2) bump outs, 3) landscaped median,
- 4) convert existing parallel parking to angled parking configuration.
- 5) maintain continuous sidewalk network,
- 6) designated right-turn and left lanes for better traffic flow.

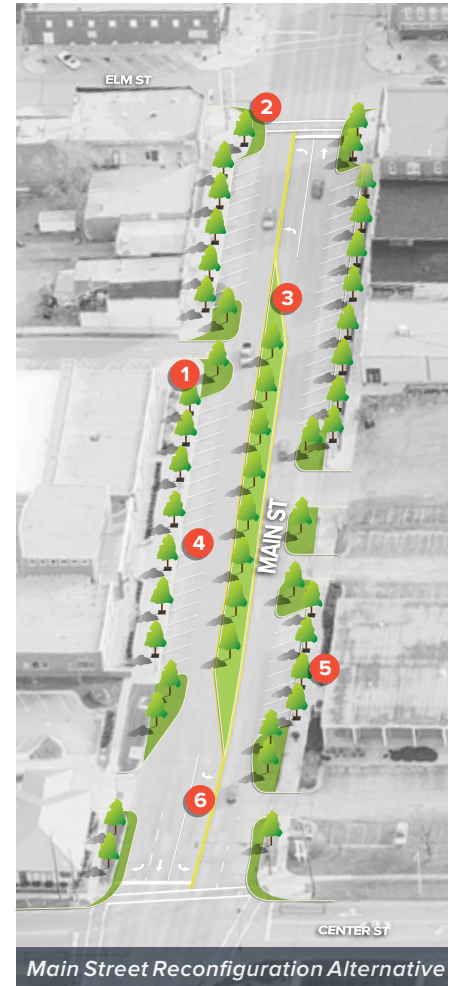
ROADWAY IMPROVEMENTS

This section includes a summary of recommended improvements to the transportation system. Many of these are included in the 2009 Transportation Master Plan. They are sorted into categories based on the anticipated phasing.

Funded Improvements

Funded improvements include projects that have received capital programming and will be undergoing construction or more detailed design in the near future. In either case, it can be assumed that they will be completed, and therefore their benefits will be realized. These project include:

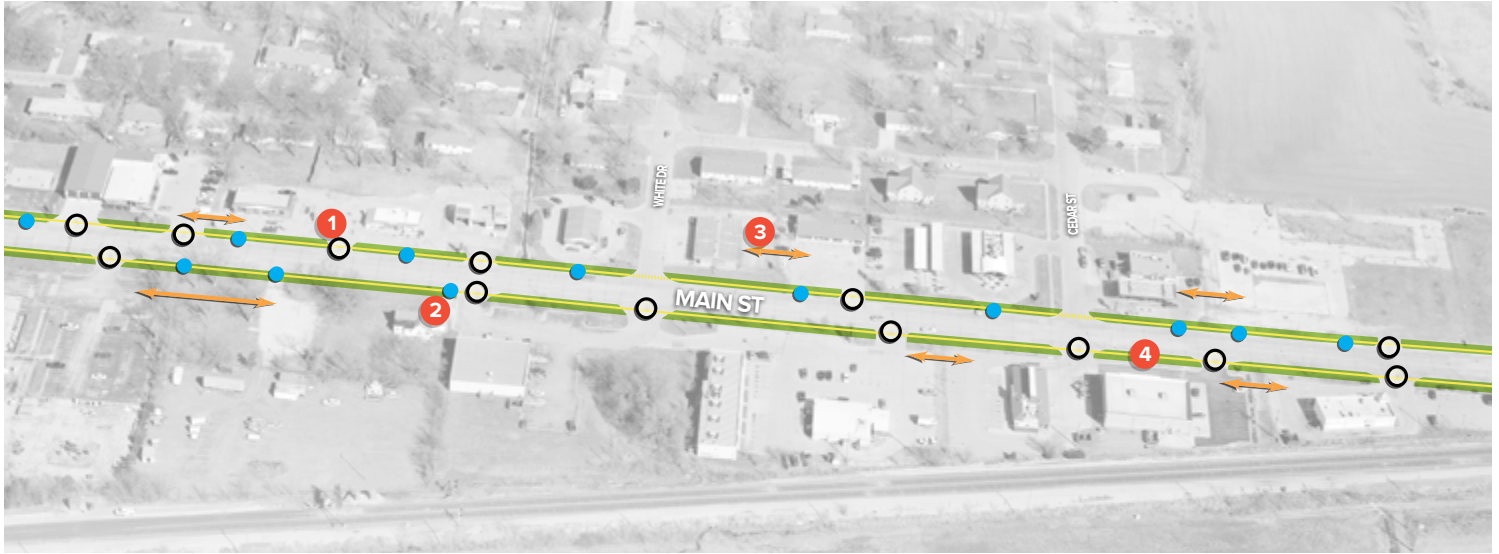
- **Main Street/Center Street Intersection Improvements.** Construction on this project is expected to begin in 2014. The project will enhance safety and capacity at this important intersection at the center of town.
- **Center Street/183rd Street Traffic Signal.** Over the past several years, traffic volumes and movements have been monitored at this intersection. Traffic operations have reached a threshold that warrants a signal, and funding has been secured for the project.



Source: Houseal Lavigne Associates

- **Main Street/Downtown Streetscape and Development Study.** KDOT and the City of Gardner are collaborating to study the urban design of Downtown Gardner with a focus on Main Street and some of the surroundings areas. Traffic calming concepts and pedestrian oriented design principles will be explored in the study. The accompanying diagrams illustrate how different types of potential improvements can accomplish different goals.

The Landscaping Alternative maintains the existing curb line, but allows for minimal landscape improvements. The Reconfiguration Alternative illustrates how the roadway could be reconfigured to accommodate additional parking, landscape areas, pedestrian amenities, and a central median. (This concept would likely require jurisdictional transfer of the roadway to the City). These and other alternatives should consider impacts to multi-modal safety, Downtown character, parking location and capacity, and traffic flow.



Source: US-56 Corridor Management Plan

Near-Term Improvements

Near-term improvements include projects that have not yet received funding, but are often linked to current development issues in the community, or are already under analysis as priority projects as funding becomes available. These include:

- **Traffic Signals.** The City should continue to regularly monitor intersections to determine the need for signal improvements. Intersections that are considered likely near-term candidates for improvement include Moonlight Road/Lincoln Street, Moonlight Road/Madison Street, and Waverly Road/175th. Four-way stops are sometimes implemented as interim measures if additional traffic control appears to be needed but signal warrants are not yet met.
- **188th Street/191st Street Area.** This area has been the focus of numerous site development and roadway planning efforts. It is important to continue to assess the long-term infrastructure needs, while developing roadway plans that can be implemented incrementally as private development occurs in the area. This will require ongoing coordination with developers and landowners as well as assessments of the impacts of projects outside the area that would use new roads to reach Gardner Road and the I-35/Gardner Road interchange.

Mid-Term Improvements

Mid-term improvements include projects that may not be under analysis, but should be considered as future development occurs. For some projects, the City may begin preliminary analysis and design in order to inform local development decisions and be prepared for when funding is available for detailed design and construction. These improvement include:

- **Turn Lanes and/or Widening on Arterials.** There are several arterials in the City that are either two- or four-lane undivided facilities, including portions of Gardner Road, Center Street, Main Street, Moonlight Road, 183rd Street, 167th Street, 175th Street, Santa Fe Street, and Waverly Road. As traffic grows on these roadways, the City should continue to assess the need for turn lanes and/or roadway widening (which would also include turn lanes). Capacity, safety, pedestrian needs, right-of-way, and many other factors should be considered. There are also several key intersections on these corridors that may need to be improved before the entire corridor is upgraded. Priority corridors that will likely need to be upgraded first include Waverly Road, Gardner Road/Center Street, and 167th Street.

Cross-Access and Curb Cut Consolidation

- 1) Curb cut to remain to provide vehicular access, 2) curb cut consolidation/removal, 3) cross access, 4) continuous parkway and sidewalk network



- **I-35/US-56 Interchange Improvements.** This interchange currently operates at acceptable capacity though past analyses have indicated that traffic related to future development could warrant improvements. Given that previous studies have shown that an interchange at Moonlight Road presents significant challenges, improving the I-35/US-56 interchange is critical to the viability of development south and east of I-35.
- **US-56/175th Street/Poplar Street.** Over the last several years, options have been put forward for improving this intersection. Some have been tied to new developments in the area, while others have been included as part of the Transportation Master Plan, US-56 Corridor Management Study or other plans. If funding becomes available, improvements should be made at this intersection before traffic volumes increase. Alternatively, improvements could be made as new development occurs. This project should be coordinated with improvements to 175th Street to the west and to Waverly Road.
- **Cedar Niles Road/Santa Fe Street.** This intersection was identified in the Transportation Master Plan as a location that is worthy of study to assess capacity and safety issues. As funds become available, this location should be considered for study.

Long-Term Improvements

Long-term improvements include projects that may not be considered an immediate need, but would influence development in currently undeveloped areas of the community. They may also include projects that would require significant capital resources to implement, and whose benefits do not warrant immediate investment. These improvement include:

- **Long-Term Arterial Widening.** There are several arterials that could require long-term improvements. The need for these improvements will continue into the long-term for many roadways. There are also sections of US-56 and 175th Street that could eventually require six through lanes if development continues at a moderate pace over the next 20 years. This possibility should be considered when near-term and mid-term planning decisions are being made.

One key roadway upgrade includes 199th Street at the south end of the Gardner planning area. This corridor is planned to be converted to an arterial that would serve as an alternative route for trucks and regional traffic. This could relieve some local streets of heavier traffic and could afford the opportunity for downgrades in classification.

- **Upgrades to the Existing Interchanges.** Moderate interchange improvements may be made in the near-term or mid-term depending on development and traffic demands. In the long-term, substantial improvements may be more likely. This could include new ramp designs, added lanes on ramps, wider bridges, or new interchange configurations. For example, a Directional Diamond Interchange (DDI) such as the one constructed at Homestead Lane, could be considered for the Gardner Road interchange.
- **Potential New Roadways.** The Transportation Master Plan identifies several new roadways as possible arterials and collectors in the new growth areas of the City. While the locations of these proposed roadways would require additional analysis, they should be considered and planned as new development occurs through right-of-way preservation, access management, and connectivity to other components of the network.



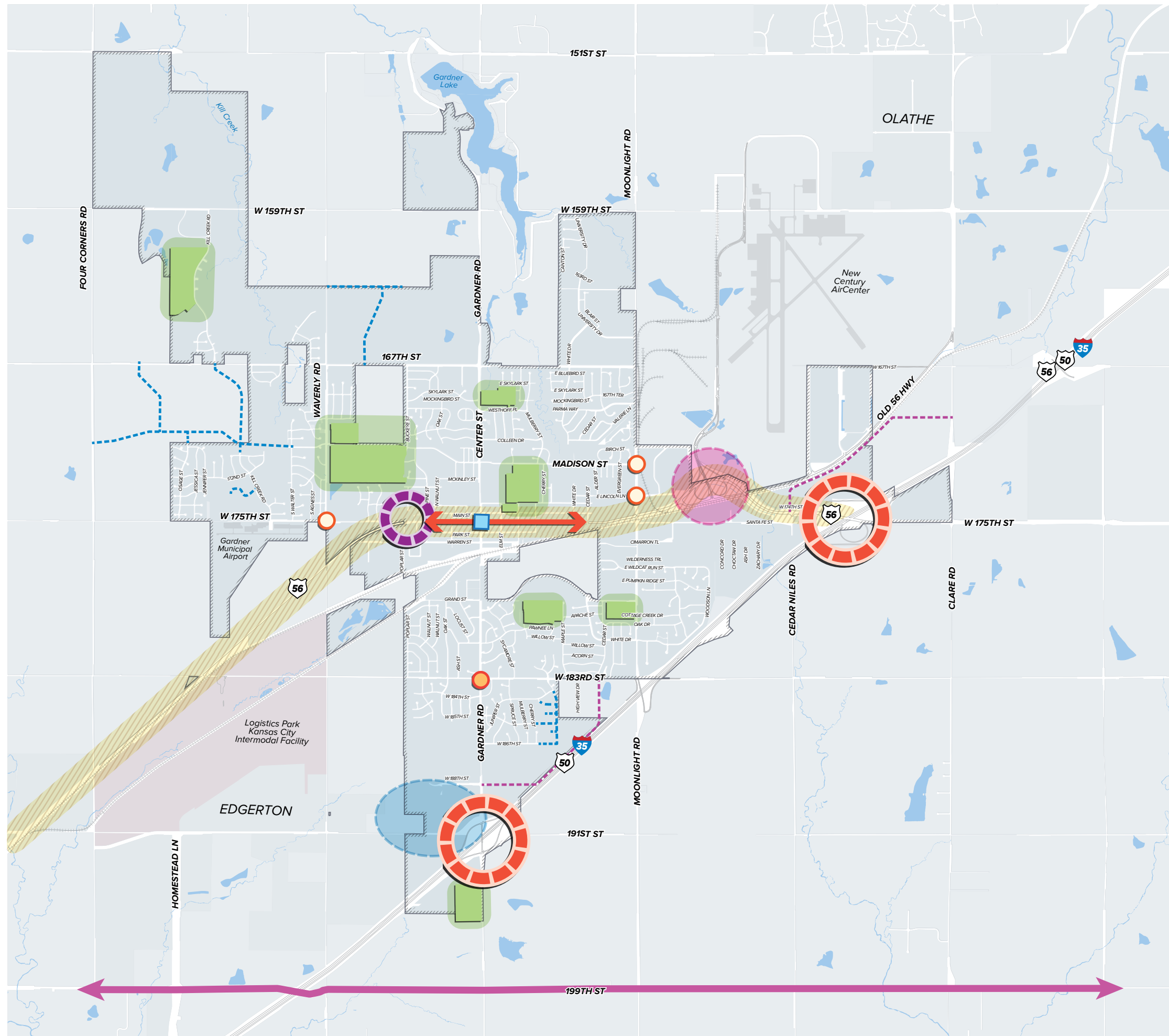
SUPPORTING POLICIES

In addition to the capital projects described above, there are several things the City can do, from a policy perspective, to influence the future transportation network. These action often require significantly less capital cost, yet can result in profound benefits as development occurs over time. Specific policy recommendations related to Gardner's roadways include:

- **Truck Route Evaluation & Signage.** The truck route system should provide reasonable access between the interstate system and the commercial and institutional properties in the City. It should help distribute these trips so they are not concentrated all in one corridor, but it should also limit intrusion into residential and non-commercial areas. The City should continue to monitor the amount of truck traffic as well as truck travel patterns within the City. Appropriate truck routes should be signed and enforced to minimize impacts on neighborhoods and commercial areas.
- **Ongoing School Area Improvements.** The City should continue to work closely with the Gardner-Edgerton School District to evaluate transportation issues on and around the public schools in Gardner. Once issues related to circulation, loading and unloading, signage, and safety are identified, the City, school district, and adjacent neighborhoods should work together to determine a solution.
- **Access Management.** The City should continue to implement the Access Management Code in order to ensure the efficient and safe operations of its roadways. By applying these requirements to new and upgraded arterials and collectors, Gardner can improve safety and mobility in the City.
- **New I-35 Interchange at 183rd Street.** In the past, a new I-35 interchange has been considered at 183rd Street. However, studies have shown it to be highly challenging due to high project costs, related improvements that would be necessary, other intended uses for the interchange area by KDOT, and the limited capacity to spur new development. Due to these realities, this Comprehensive Plan assumes the project will not happen within the horizon of this plan. However, the City should continue to monitor the status of these factors, and work with KDOT to determine the realistic likelihood of an interchange being feasible in the future. In the meantime, the City should not establish policies or capital commitments that assume an interchange will exist at this location, but rather secure jurisdictional control to preserve a potential interchange footprint.
- **Jurisdictional Transfer of Main Street from KDOT to the City of Gardner.** This project has been discussed by various parties for several years. It would involve KDOT re-designating portions of 199th Street, Homestead Road, and I-35 (or some other new route) as US-56. In turn, the City of Gardner would take ownership of what is now US-56 within the City Limits, and Johnson County and Edgerton would take ownership of what is now US-56 in their respective jurisdictions. The benefit of this to Gardner would be the ability to control the design and operation of Main Street. The drawback would be that the City would be responsible for maintaining this heavily traveled road as well as the bridge structures. The City should assess the potential impacts and benefits of a jurisdictional transfer, and coordinate with Edgerton and Johnson County to assess their interest in the policy.
- **Transportation Master Plan Update.** An Update of the City's 2009 Transportation Master Plan should be completed in the near future. Many of the projects listed as near-term projects in the 2009 Plan have already been completed and new transportation needs are beginning to emerge. At the same time, new practices in transportation practice and design should be integrated in order to maximize vehicular efficiency as well as bikability and walkability. The updated Transportation Master Plan should also address the equitable funding of transportation projects among the City, development community, and other agencies, as well as the development of mobility targets that measure the effectiveness of the multi-modal network through walkability ratings, bikability ratings, speed/delay metrics for different classes of roadways, and safety improvement targets.

CITY OF GARDNER ROADWAY IMPROVEMENT PLAN

- Interchange Improvements (planned, long-term)
- Interchange Evaluation (planned)
- Reconstruct "Y" Intersection (planned)
- Roadway Evaluation (planned)
- Turn Lane & Widening Evaluation (planned)
- Streetscape Improvement Study (funded)
- School Access Improvements Area
- Intersection Improvements (funded)
- Potential Jurisdictional Transfer
- Traffic Signal (funded)
- Traffic Signal (planned)
- Roadway Widening (planned)
- New Roads (planned)
- New Roads (development-dependent)





BICYCLE, PEDESTRIAN & TRANSIT MOBILITY

Bicycle, pedestrian and transit mobility are important components to Gardner's transportation network. They expand local and regional mobility for younger residents, and provide opportunities for active transportation and recreation. This section includes a series of recommendations and strategies aimed at creating as safe and efficient system of transportation alternatives.

COMPLETE STREETS

"Complete Streets" are roadways designed to provide access and mobility for all users, including pedestrians, bicyclists, motorists, and public transportation, regardless of age or ability. A complete streets policy formalizes a community's intent to plan, design, operate, and maintain roadways so they safely accommodate all users. Complete streets elements vary based on the surrounding context, but may include sidewalks, bicycle facilities, accessibility improvements, safe and convenient pedestrian crossings, transit enhancements, and more.

TRANSIT IMPROVEMENTS

The Johnson County Transit Department operates the "JO," a bus system with service that connects Gardner to other communities throughout the county. Route 670 serves Gardner, providing connections from New Century to the Olathe Great Mall, Oak Park Mall, Downtown Kansas City, and Crown Center/Union Station. The City of Gardner currently offers no local transit service.

Between 2013 and 2018, Gardner's median age is expected to increase by 5%, faster than the expected rate in Johnson County of 3%. In many communities throughout the United States, aging residents are seeking alternatives to large single family homes and reliance on private transportation. At the same time, Gardner is seeking greater visibility for events and employment. While public transit is not currently a significant part of the transportation landscape in Gardner, there are several actions the City can take to prepare for these emerging trends.

Specific recommendations include:

- Coordinate with local industry to assess the viability of, and implement a local employer-subsidized transit circulator that would provide an alternative for staff
- Coordinate with the Johnson County Transit department to implement special transit services for the Johnson County Fair and other events and festivals in Gardner that may attract visitors from other portions of the county or region
- As senior housing is developed, coordinate with facility managers to implement resident shuttle services that would provide access to local goods and services, community facilities, and special events
- Encourage major commercial and employment centers to provide designated shuttle drop-off and loading areas that could be used in the interim as landscape areas, plazas, or other on-site amenities



BICYCLE & PEDESTRIAN IMPROVEMENTS

Gardner has established the foundation of community-wide trail network through investment in multi-use facilities on several corridors, including Moonlight Road, Madison Street, Center Street, Grand Street, and 183rd Street. Off street paths, such as the Gardner Greenway, utilize floodplains as trail corridors and create links to surrounding neighborhoods, schools and parks. Generally, sidewalks are provided throughout the community, though traditional neighborhoods adjacent to Downtown do not have pedestrian infrastructure.

Newer subdivisions provide sidewalks that connect to sidewalks or trails along collectors and arterials. However, the most significant barrier to pedestrian mobility in Gardner is the lack of safe opportunities to cross collectors and arterials. In some instances, crosswalks are provided approximately every ½-mile, resulting in significant detours that often encourage jaywalking.

The 2009 Gardner Park System Master Plan recommends several new miles of multi-use trails. These trails include dedicated off-street facilities and were recommended based on their ability to enhance connectivity between parks, neighborhoods, schools, and commercial centers. The recommendations of the Master Plan are reflected in this Comprehensive Plan, and should continue to guide investment in future trails.






Safe Routes to School

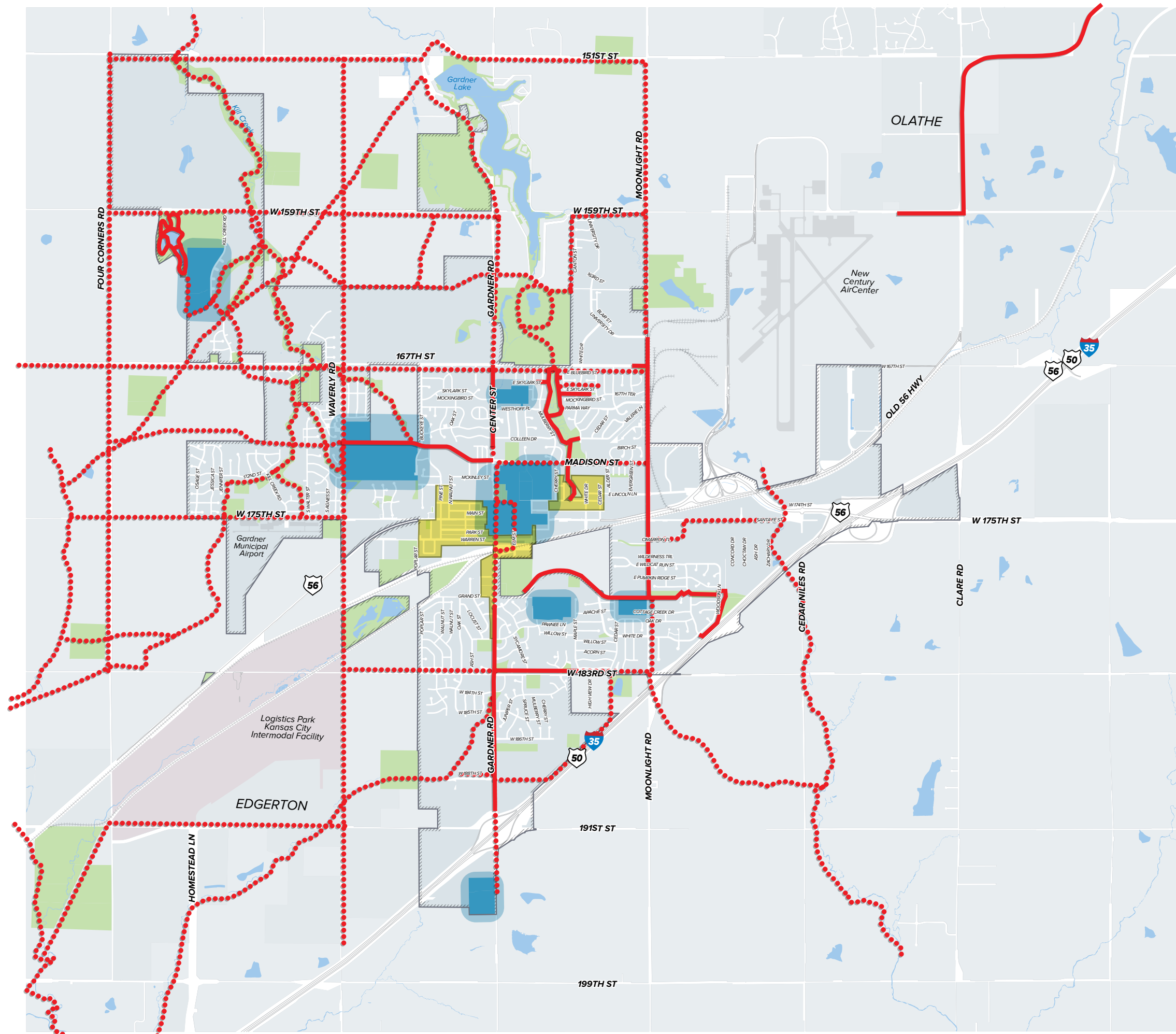
Safe Routes to School (SRTS) programs seek to promote the health and well-being of children by walking and bicycling to school. SRTS programs involve a combination of education, planning, and infrastructure improvements to provide safe walking and bicycling conditions around neighborhood schools.

The following recommendations should be implemented by the City in order to support the development of a comprehensive trail and pedestrian network as envisioned by the Park System Master Plan, and ensure that Gardner citizens enjoy a high level safety, comfort, and fully-accessible mobility:

- Adopt a local Complete Streets policy that highlights the importance of multi-modal transportation corridors and establishes standards for the integration of bicycle lanes, trails, sidewalks, crosswalks, pedestrian refuge islands, and other techniques into the design of roadways
- Perform a sidewalk inventory that determines areas where no sidewalks exist, where improvements are needed to maintain the integrity of the system, and where crossings are unsafe or not accessible
- Establish a bicycle and pedestrian capital improvement program that identifies a series of anticipated projects, prioritizes improvements based on their ability to enhance community-wide connectivity and access to important community destinations, strengthens regional trail connections, and identifies potential funding sources for recommended improvements
- Work with KDOT and City departments to increase the frequency of designated crosswalks on arterial and collector streets

CITY OF GARDNER BIKE & PEDESTRIAN PLAN

-  Future Trail
-  Existing Trail
-  Sidewalk Infill Area
-  Pedestrian Area Improvements
-  Open Space, Recreation & Open Space





- Upgrade pedestrian crossings and signalization to include highly-visible roadway markings and, where appropriate, pedestrian countdown signals, vehicular warning signs, and other safety systems
- Coordinate with the Gardner-Edgerton School District to establish a Safe Routes to School program in order to enhance youth pedestrian access from nearby neighborhoods
- Amend zoning regulations to require well-marked on-site pedestrian connections between the public sidewalk and building access for non-residential development
- Amend zoning regulations to require on-site bicycle parking as a percentage of the overall on-site parking requirement for non-residential development
- Continue to require trail connections through residential areas and floodplains as a component of new neighborhood development
- Utilize subdivision regulations and development agreements to require developers to install sidewalks on a block-by-block basis and within a reasonable period of time after the beginning of development, rather than on a lot-by-lot basis as incremental development occurs

AIR & RAIL MOBILITY

Gardner benefits from regional and interstate rail and air access provided by the Gardner Municipal Airport, New Century AirCenter, and Burlington Northern-Santa Fe (BNSF) rail corridor. The Gardner Municipal Airport is owned and operated by the City. The facility is used primarily for small private aircraft, and lacks any real potential as an anchor for significant economic development. The New Century AirCenter is operated by the Johnson County Airport Commission, and is the centerpiece of industrial development immediately west of the airport. The BNSF rail corridor bisects the community and provides access to the Logistics Park Kansas City Intermodal Facility.

Other sections in this Comprehensive Plan describe ways to capitalize on these facilities through economic development, infrastructure investment and land use policy. The following recommendations should be implemented by the City in order to maximize the benefits and minimize the negative impacts of these assets:

- Coordinate with KDOT and BNSF to ensure that all at-grade rail crossings are properly signed and gated
- As development occurs on the edge of the community, monitor the need for and viability of a new grade-separated rail crossing in order to provide timely emergency responsiveness and access to the I-35 corridor
- Work with the Johnson County Airport Commission to coordinate regarding planned airport runway or facility improvements, and assess the potential for spin-off development and its impact on municipal infrastructure and services