

TRANSPORTATION

Adopted March 27, 2023

This plan section focuses on current, near-term and long-range transportation needs and priorities in and around Katy. Some of these priorities are outward focused, involving regional and state-level entities and necessary coordination, recognizing the City’s role as one of multiple transportation partners in the Houston metropolitan area. Various other priorities are inward focused, involving essential thoroughfare system upgrades plus ongoing street rehabilitation, sidewalk repairs, and other mobility and safety enhancements in particular areas of the city.

Plan Sections

- Growth Capacity
- Land Use and Development
- **Transportation**
- Economic Development
- Recreation and Amenities
- Plan Implementation

As in many cities, top transportation-related issues facing Katy include improving traffic flow, safety and connectivity while adding more ways to move around the community on foot and by bike. Continued enhancement of the area roadway network will be necessary to accommodate the increased travel demand resulting from population growth and development, including the growing volume of pass-through traffic from new development around Katy. As the mobility system continues to evolve, it should not only address traffic and safety needs but also reflect the surrounding land use and character. Finally, public transportation options and services will become increasingly important in west Houston, with METRO aiming to enhance access to regional transit to and from Katy in the coming years.

Why this Comprehensive Plan Section is Important for Katy

- Reinforces the importance of minimizing traffic congestion while also ensuring safe roadway conditions as a key quality of life component for Katy residents.
- Highlights the role of street design in establishing and reinforcing the desired character of an area, whether in suburban residential neighborhoods or in Downtown Katy and vicinity, where walkability and safe biking are particularly desired along with accommodation of the automobile.
- Emphasizes the fundamental priority placed on neighborhood integrity in Katy, which is influenced by traffic conditions on residential streets and the safety of kids and adults when walking and biking in the community.

- Provides the public policy basis for the City’s regulations and standards related to streets, sidewalks, bike lanes, parking and other mobility-related infrastructure and physical improvements.
- Recognizes that multiple state and regional agencies plan for and guide transportation upgrades and services in the Houston metropolitan area, enabling the City to focus on local issues and needs along with regional coordination.
- Supports the City’s linking of roadway and corridor design to economic development and aesthetic objectives, as has been demonstrated successfully in recent years with the street, sidewalk and streetscape improvements made in Downtown Katy, the Boardwalk District and elsewhere in the community.

Accomplishments

Progress and achievements resulting from past planning and implementation efforts were identified through leadership and community input to this plan. Significant items cited that are most relevant to the Transportation topic include:

- Successful bond election for street improvements.
- \$33.5 million mobility package to upgrade nine area roadways and intersections, including within the Katy Boardwalk District, utilizing METRO General Mobility Program funds through the Katy Development Authority versus any new direct costs to Katy taxpayers.
- Renewed agreement with METRO for future funding and improvements.
- Sidewalk improvements.
- Established a designated truck route to divert this through traffic.



Vision, Guiding Principles and Plan Priorities

The Transportation section ties into the overarching Comprehensive Plan framework in the following aspects:

Link to Vision

Providing a safe, connected and resilient place to live, work, invest, learn and worship.





Relevant Guiding Principles

GP1: Katy will continue to be **PRO-ACTIVE** in providing a high quality of life for all residents, listening and responding to residents' concerns and aspirations, and seeking to involve more residents, businesses and other partners in making Katy a strong community.

GP2: Katy will be **ENGAGED** as it seeks to build and maintain partnerships in all arenas, including transportation, infrastructure, economic development, emergency response, and parks and recreation.

GP3: Katy will be **AUTHENTIC** as it seeks to preserve its small-town feel and unique identity, through continuing improvements to public areas and facilities, historic preservation efforts, and ongoing and new community events that bring people together.

GP4: Katy will be **FOCUSED** on maintaining the core elements that are valued by residents, including public safety and infrastructure to meet today's needs and beyond.

GP5: Katy will be **CONNECTED** both as neighbors and residents, and in working to achieve a citywide pathways network that better links areas of the city.

Relevant Strategic Priorities

1. Ongoing Attention to Katy's Infrastructure and Public Safety Services.
2. Pro-actively Preparing for Ongoing Growth.
3. Enhancing Mobility and Access.
5. Advancing Plan Priorities through New and Improved Implementation Tools.

Framework for Action

The Framework for Action in each plan section builds off of the plan priorities confirmed with Katy City Council during the transition from the Existing City to the Future City phase of Comprehensive Plan development. The actions in this Transportation section involve tangible steps that will lead to achievement of the Goals in line with the plan's Guiding Principles. The actions are categorized into the five types of plan implementation activities as highlighted in the Introduction section:

1. Capital Investments
2. Programs and Initiatives
3. Regulations and Standards
4. Partnerships and Coordination
5. More Targeted Planning/Study

Goals for Transportation

- GOAL T1:** A mobility system that provides connectivity and options for getting to destinations in and around the community and that enables swift emergency response.
- GOAL T2:** Increased opportunities for residents and visitors to walk and bike safely within the city, with a focus on linking key destinations.
- GOAL T3:** A street system that is maintained in good condition to be safe and inviting for all users.
- GOAL T4:** Enhanced partnerships and collaborative relationships with the Texas Department of Transportation (TxDOT), Houston-Galveston Area Council, METRO, Katy’s three area counties and others that oversee regional transportation planning, funding and improvements.

Strategic Action Priorities for Transportation

ACTION		Initiate	Action Type	Action Leaders and Key Partners
GOAL T 1:				
A mobility system that provides connectivity and options for getting to destinations in and around the community and that enables swift emergency response.				
SAP 1.	Given increasing traffic volumes on local roadways with area growth, plan for installation of additional traffic preemption devices at other key locations in the city, beyond one already in place at the Pin Oak Road/Kingsland Boulevard intersection. This will help reduce emergency response times and improve traffic safety for both first responders and the public at such times.	Years 1-10	Capital Investments	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Fire

ACTION		Initiate	Action Type	Action Leaders and Key Partners
SAP 2.	In follow-up to this Comprehensive Plan, conduct a more thorough and data-driven thoroughfare planning process based on the preliminary guidance in this plan and given the challenge of Katy being situated within three counties with differing terminology and methods for classifying roadways, along with the context of the City of Houston’s Major Thoroughfare and Freeway Plan that applies in various area around Katy (https://www.houstontx.gov/planning/transportation/MTFP.html). An updated “major street or thoroughfare plan” as defined in the City’s subdivision regulations will provide the necessary support and guidance for implementing existing provisions regarding the minimum width and other standards for “major streets,” “collector or secondary streets” and “residential streets” (Sections 10.04.003-Streets, 10.04.006-Sidewalks, 10.05.002-Street paving, and 10.05.003-Sidewalks).	Years 1-10	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Planning
SAP 3.	Continue to plan for the local implications of transportation technology advancements such as more widespread use of electric vehicles, autonomous vehicles, ride-sharing services and drones (e.g., for package deliveries).	Ongoing	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Planning
GOAL T 2:				
Increased opportunities for residents and visitors to walk and bike safely within the city, with a focus on linking key destinations.				
SAP 4.	Use the Connectivity Possibilities map within the City’s adopted Parks, Trails and Recreation Master Plan to prioritize and plan for on- and off-street improvements (e.g., on-street bike lanes, shared-use paths, trails, etc.) that will expand the range of options for traveling safely within Katy, including by walking and bicycling, with a focus on linking neighborhoods to downtown, schools, parks and public facilities via sidewalks or trails.	Years 1-5	Capital Investments	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Parks and Recreation
SAP 5.	Continue an ongoing sidewalk improvement program to repair, replace or install new sidewalks, crosswalks and curb cuts in high pedestrian use areas (e.g., around school campuses, near public buildings and spaces, in park vicinities, etc.) and in other areas with the potential for high sidewalk usage. Walkability within and to the downtown area should continue to be prioritized.	Ongoing	Capital Investments	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Katy ISD

ACTION		Initiate	Action Type	Action Leaders and Key Partners
SAP 6.	Take advantage of opportunities to implement bicycle/pedestrian improvements in conjunction with street maintenance and rehabilitation projects, utility installation and replacement projects, etc.	Ongoing	Capital Investments	<ul style="list-style-type: none"> Public Works City Engineer
SAP 7.	<p>Adopt a local Vision Zero policy, in line with similar policies adopted regionally and at higher levels of government, aimed at eliminating bicycle and pedestrian injuries and fatalities. Along with an ongoing commitment to capital projects that expand and enhance bicycle and pedestrian circulation and safety, other follow-up actions can include:</p> <ul style="list-style-type: none"> Evaluating whether speeds are a contributor to bicycle/pedestrian accidents and considering potential speed limit reductions in locations of concern, along with targeted traffic calming measures in both new development and existing developed areas of the city. Providing bicycling education and safety courses. Co-hosting with Katy ISD a National Walk and Bike to School Day event to promote safe biking/walking to and from school. Adopting a concurrent resolution endorsing consideration of “Complete Street” design principles in future roadway improvements, where appropriate. 	Years 1-5	Programs and Initiatives	<ul style="list-style-type: none"> City Council Public Works City Engineer Katy ISD
SAP 8.	When a comprehensive rights-of-way assessment is conducted (see below under Goal 3), take advantage of this opportunity to map simultaneously the current sidewalk/crosswalk network and assess the condition of all current sidewalks and crosswalks, where ADA ramps and other improvements are needed, etc.	Years 1-5	More Targeted Planning/Study	<ul style="list-style-type: none"> Public Works City Engineer Planning
SAP 9.	Identify potential routes that could be appropriate for on-street bike lanes (e.g., during the planning process for the Parks, Trails and Recreation Master Plan, East Avenue was discussed as an option as it connects the downtown area to the various public facilities and parks along Franz Road, and it currently has no sidewalks north of 10th Street).	Years 1-5	More Targeted Planning/Study	<ul style="list-style-type: none"> Public Works City Engineer Parks and Recreation

ACTION		Initiate	Action Type	Action Leaders and Key Partners
SAP 10.	Identify Katy ISD campuses that have significant trip generation along with a sizable share of students who walk and bike to/from school to pinpoint potential locations for adding sidewalk or shared-use path segments, filling gaps in the existing sidewalk network, adding on-street bike lanes, etc. In partnership with Katy ISD, also monitor periodic opportunities to apply for grant funding through the Houston-Galveston Area Council (https://www.h-gac.com/safe-routes-to-school) and/or the Texas Department of Transportation (https://www.txdot.gov/business/grants-and-funding/bicycle-pedestrian-local-federal-funding-programs.html) for locally-sponsored bicycle and pedestrian infrastructure projects.	Years 1-5	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Katy ISD ▪ H-GAC
GOAL T 3:				
A street system that is maintained in good condition to be safe and inviting for all users.				
SAP 11.	Complete street and drainage upgrades funded through the most recent successful streets/infrastructure bond proposition.	Ongoing	Capital Investments	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Finance
SAP 12.	Continue to implement short- to mid-term transportation projects identified in the City’s Capital Improvement Plan (CIP). In the interim, signal upgrades at intersections may also provide some congestion relief, for a relatively minimal cost, including simple signal timing adjustments. In some locations this will require coordination with the Texas Department of Transportation (TxDOT) depending on which entity has jurisdiction over the signals.	Ongoing	Capital Investments	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ TxDOT
SAP 13.	Follow a “dig once” policy that aims to synchronize utility work with road construction projects to reduce the cost burden of digging up streets multiple times. Where and when feasible, relocate overhead utilities underground for the aesthetic benefit, particularly at high-profile community gateways.	Ongoing	Programs and Initiatives	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Utility providers ▪ Keep Katy Beautiful

ACTION		Initiate	Action Type	Action Leaders and Key Partners
SAP 14.	As part of building an overall asset management approach to Katy’s public infrastructure, complete a comprehensive assessment of City-owned street rights-of-way to provide the framework for a more strategic and pro-active approach to ongoing street maintenance and rehabilitation. Typical steps include: (1) collecting data to inventory, spatially locate (using GPS) and map (using GIS) all existing improvements, (2) analyzing the collected data and assigning a condition rating to each asset, (3) using the condition ratings to determine the remaining usable life of each asset, and (4) identifying a repair and/or replacement approach for each asset to ensure that their maximum usable life is realized. Such efforts serve to reaffirm that it is in a municipality’s best interest to invest further in existing infrastructure before it reaches a poor condition. A more strategic, life-cycle approach to infrastructure maintenance will also enable the City to reap the benefits from lengthening the useful life of physical assets and reducing their total cost to the City over time.	Years 1-5	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer
SAP 15.	Along with periodic traffic counts, conduct traffic studies at targeted locations to better understand causes of congestion and evaluate potential improvements that could improve traffic flow and safety short of roadway widenings or other significant and costly projects (e.g., access management measures, lane width adjustments and/or additional turning lanes, signal adjustments, etc.).	Ongoing	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ TxDOT
SAP 16.	Investigate locations with the highest frequency of incidents involving pedestrians and cyclists to assess the physical and operational characteristics, along with input from bike/ped advocates and roadway users to confirm higher-risk roadways and intersections. Also assess whether high-frequency incident locations can be improved with low-cost enhancements such as curb bulb-outs, marked crosswalks and/or better lighting.	Years 1-10	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Police

ACTION		Initiate	Action Type	Action Leaders and Key Partners
SAP 17.	Identify corridors that could be candidates for “road diet” treatments (street retrofits that reallocate space within the available street right-of-way to balance the movement and speed of motorized vehicles relative to the safe circulation of pedestrians, cyclists and disabled individuals), which would incorporate “Complete Street” design principles and promote Americans with Disabilities Act (ADA) compliance. Monitor transportation funding opportunities intended to support such projects.	Years 1-10	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Planning ▪ Parks and Recreation
GOAL T 4: Enhanced partnerships and collaborative relationships with the Texas Department of Transportation (TxDOT), Houston-Galveston Area Council, METRO, Katy’s three area counties and others that oversee regional transportation planning, funding and improvements.				
SAP 18.	In coordination with TxDOT, prepare for robust community outreach and public information efforts during the upcoming construction phases for the I-10 and U.S. 90 improvement projects.	Years 1-5	Programs and Initiatives	<ul style="list-style-type: none"> ▪ City Administrator ▪ Public Works ▪ Police ▪ TxDOT
SAP 19.	Emphasize resiliency in future transportation network planning, including both redundancy in systems (e.g., multiple routes for reaching major community facilities and destinations, two or more points of subdivision ingress/egress per Section 10.04.002(d) in the City’s subdivision regulations, etc.) and protection from potential hazards and threats.	Years 1-10	Programs and Initiatives	<ul style="list-style-type: none"> ▪ Public Works ▪ City Engineer ▪ Fire ▪ Counties ▪ TxDOT
SAP 20.	In partnership with METRO, expand marketing to area residents and workers about transit options and services, taking even greater advantage of social media to disseminate information on how and where to ride local transit and thereby reduce peak-hour vehicular trips.	Ongoing	Programs and Initiatives	<ul style="list-style-type: none"> ▪ Public Works ▪ METRO

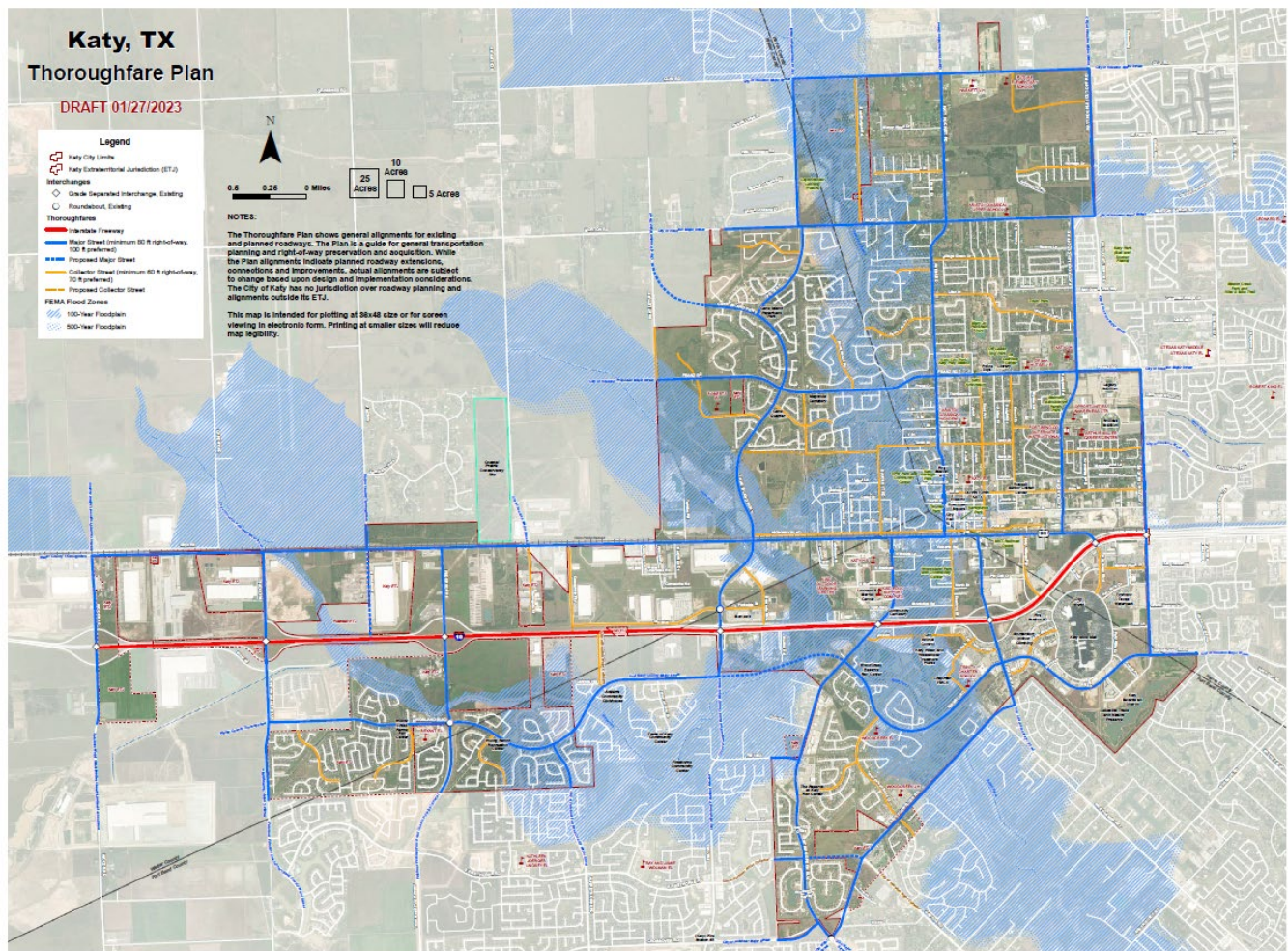
ACTION		Initiate	Action Type	Action Leaders and Key Partners
SAP 21.	Actively participate in regional transportation planning efforts and funding processes to advocate for Katy area needs, including through area representatives (e.g., at the time of this Comprehensive Plan, Waller County Precinct 4 Commissioner Justin Beckendorff was First Vice Chair of the regional Transportation Policy Council of the Houston-Galveston Area Council, the region’s designated Metropolitan Planning Organization, which periodically prioritizes candidate transportation projects across the region for funding allocation decisions).	Ongoing	Partnerships and Coordination	<ul style="list-style-type: none"> ▪ City Council and City Administrator ▪ Public Works ▪ Planning ▪ Counties ▪ H-GAC ▪ METRO ▪ TxDOT
SAP 22.	Provide input to and coordinate with TxDOT on its current Brookshire-Katy Mobility Study, along with ongoing dialogue to ensure that TxDOT-maintained roadways and area projects reflect Katy’s needs and design preferences.	Years 1-5	Partnerships and Coordination	<ul style="list-style-type: none"> ▪ City Administrator ▪ Public Works ▪ City Engineer ▪ Planning
SAP 23.	Gain insights from other area cities that have dealt with extended periods of freeway and major highway construction (e.g., Jersey Village on US 290, Webster and League City along I-45, etc.).	Years 1-5	Partnerships and Coordination	<ul style="list-style-type: none"> ▪ Public Works ▪ Police
SAP 24.	Continue to monitor evolving state statutes that, in recent years, allowed golf carts, all-terrain vehicles and other motorized vehicle types on local roadways as long as they are licensed. Monitor through the Texas Municipal League and other local government forums the strategies and best practices implemented in other Texas cities in response to this statutory change, along with standards and approaches in coastal and western states that have previously allowed a wider range of vehicles types on roadways.	Ongoing	More Targeted Planning/Study	<ul style="list-style-type: none"> ▪ City Attorney ▪ Police ▪ Public Works ▪ City Engineer ▪ Counties ▪ H-GAC ▪ TxDOT ▪ TML

Thoroughfare Plan

A thoroughfare plan is a city's long-term road network plan. It is designed to address current and anticipate future travel needs in and around Katy. Similar to the Future Land Use and Character map, which is intended to guide land use and development patterns over the next several decades, the thoroughfare plan map represents a long-term vision for the community’s surface transportation system.

An essential purpose of a thoroughfare plan is to preserve the rights-of-way needed for future transportation corridors so that, if and when land development occurs, adequate and continuous corridors for appropriately sized and designed transportation facilities will be available. On some such plans, various future proposed streets may not be needed or fully constructed for some years. With Katy being a nearly built-out city, most of the streets shown on its Thoroughfare Plan are already in place, although some are still to be upgraded to their ultimate intended width and number of travel lanes to accommodate area traffic growth.

Katy Thoroughfare Plan



NOTE: If viewing the map above online, click on the map to view a larger-scale PDF version.

Thoroughfare Planning Considerations

Along with Katy's projected growth and land development activity, the Thoroughfare Plan map reflects the related transportation planning of other entities (e.g., other area cities such as Houston and Fulshear; Fort Bend, Harris and Waller counties; the Houston-Galveston Area Council; and the Texas Department of Transportation - Houston District). Specific technical considerations for thoroughfare planning include:

Network and Alignment Factors

- Continuity (arterials) versus discontinuity (collectors) through an adequate array of north-south and east-west arterials that extend across and beyond the city.
- Connectivity of the network and origins/destinations, within the local street network and to the regional highway system.
- Spacing and density of the network.
- Intersection location and spacing of major roadways for effective signalization of key intersections.
- Alternative travel and emergency response routes.
- Multiple routes and travel options to avoid traffic overload on certain roadways.
- Crossings (water, railroads, freeways, etc.).
- Grade separation needs at key locations to maintain traffic flow and enhance safety.
- Multi-modal planning (pedestrian, bicycle, transit, freight, etc.).

Constraints

- Physical (floodplains, topography, water features, utility/pipeline corridors, etc.).
- Parcel pattern.
- Existing development.
- Environmental features / assets (e.g., forested areas, wetlands, etc.).
- Parkland and preserved open space.
- Jurisdictions (territorial, roadways, water features, etc.).
- Right-of-way potential (adequate width for eventual construction of a full roadway cross section to standard).
- Existing driveways and fronting development (access management needs).
- Fiscal (network cost implications, maintenance, cost of bridges and grade separations, etc.).



Land Use-Transportation Coordination

- Inducement of desired / undesired land use (future land use plan and zoning consistency).
- Designing roadways in context with their surroundings to maintain desired community character and to minimize effects on valued natural resources.
- Consistency with utility master planning and growth management strategy.
- Potential traffic volumes.
- Location of major traffic generators.
- Location of “sensitive” land uses (e.g., residential, schools, parks, etc.).
- Emergency access (network connectivity).

Functional Classifications

Functional street classifications are based on the characteristics of a road and its relationship with other roads in the area. Generally, the highest-level functional class (arterials) focuses on providing paths between origins and destinations. The lowest level functional classes (collectors and local streets) focus on providing property access. Along with an Interstate Freeway designation for the I-10 corridor through Katy, two other classifications on the Katy Thoroughfare Plan map are defined in the City's Code of Ordinances, at Section 10.01.001 of the subdivision regulations, including the minimum right-of-way width required for each type:

- A **major street, major thoroughfare, or arterial street** means a principal traffic artery or traffic way, usually of more or less continuous routing over long distances, whose function is to serve as a principal connecting street with state and federal highways, and shall include each street designated as a major thoroughfare or street on the major street or thoroughfare plan of the city or so designated by the planning commission and city council. **Minimum width of right-of-way shall be eighty feet (80'), preferably one hundred feet (100').**
- A **secondary street or collector street** means a street whose function is to collect and distribute traffic between major thoroughfares and minor streets, is not necessarily of continuous routing for long distances, has intersections at grades and provides direct access to abutting property, and shall include each street designated as a secondary street on the major street or thoroughfare plan or so designated by the planning commission and city council. **Minimum width of right-of-way shall be sixty feet (60'), preferably seventy feet (70').**

All other local streets in Katy are defined by the subdivision regulations as "minor streets":

- A **minor street** means a street whose function is to provide access to abutting residential property within neighborhoods, with all intersections at grade, and not continuous routing for any great distance so as to discourage heavy, through traffic. **Minimum width of right-of-way shall be sixty feet (60').**

Around the edges of the Katy city limits and extraterritorial jurisdiction, the map also notes the functional classifications assigned to the same current or future roadways by another county-level or municipal entity.