

Strategies & Action Items

Chapter 4

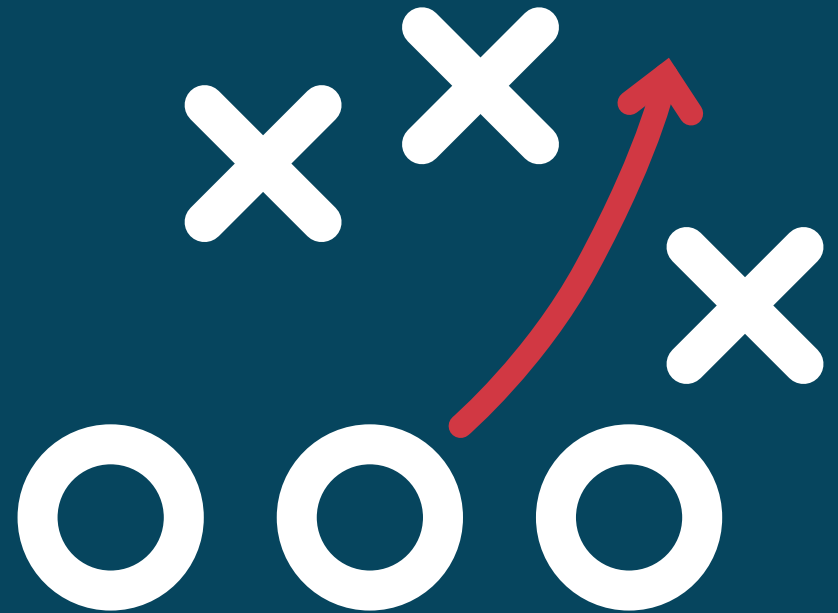


A Mobility Game Plan

The bedrock Core Values of this plan must be translated into tangible actions to invest in mobility. This chapter presents a set of 14 recommended Strategies and 101 subsequent Action Items that, together, bring the Core Values to life.

The Strategies and Action Items provide a menu of next steps for City departments and their staff to undertake. Their recommendations range from detailed updates to the City's regulatory language and forward-thinking roadway maintenance to continued leadership at the regional level.

The Strategies are intended to encompass the full gamut of mobility-related issues facing Sugar Land; Action Items provide specific projects, policies, programs, and future planning and coordination efforts to build a game plan for Plan implementation.



Strategies & Action Items

Getting Specific

Strategies and subsequent Action Items are the specific steps that the City and its partners can take to achieve Superior Mobility in Sugar Land. This includes capital projects and maintenance along the Transformative Mobility Network as well as policies and programs related to Superior Mobility.



Strategies and Action Items will help Sugar Land continue the City's focus on both improving existing infrastructure and investing in new mobility projects.

What is a Strategy?

Strategies describe recommended operational changes and policy direction for the City to better align its current policies, programs, and project delivery with the Five Core Values. Strategies provide affirmative direction for the City and encompass distinct but related Action Items.



Strategies will guide the staff of Sugar Land to make decisions and policies that will support Superior Mobility.

What is an Action Item?

Action Items offer detailed recommendations for starting or improving a project, program, policy, or planning effort. Action Items identify and name City documents and existing policies and programs, departments, partners, and stakeholders involved in implementation.



Action Items will identify recommendations to existing programs as well as new programs to achieve Superior Mobility.

Building on Core Values

The specific Strategies and Action Items build on the previous work of this plan and were selected because they support the Five Core Values and the City's overall vision of Superior Mobility in Sugar Land.

Each of the 14 Strategies and 101 subsequent Action Items pertain directly to one or more of the Core Values. For example, an Action Item to "Develop and implement a Safe Routes to Parks program in coordination with the Parks Department" supports the **Safe & Connected**, **Inclusive & Accessible**, and **Healthy & Active** Core Values. The relationship between each of the Strategies, Action Items, and Core Values is detailed in the Strategy Profiles starting on page 61.



Strategy & Action Item Inputs

Recommended Strategies and Action Items are intended to strengthen existing policies, programs, and initiatives by the City or create new initiatives that address mobility needs in Sugar Land. Several key inputs shaped the final list:

- » **Existing City Projects & Programs** reveal the current direction of mobility investments in Sugar Land and represent the starting point for any recommended set of projects, programs, and policies.
- » **Previous Plans & Studies** about mobility, such as the 2013 Pedestrian and Bicycle Master Plan, offer insight into recent thinking about the direction of mobility planning in Sugar Land. The 2018 Land Use Plan and the Activity Centers defined in that plan help tie mobility policy to the broader development trends in the City.
- » **The State of Mobility** (Appendix A) for this plan summarized the most up-to-date demographic and mobility data to illustrate the specific mobility characteristics and needs of Sugar Land. These data offer a necessary foundation for selecting Strategies and Action Items.
- » **Feedback from Residents, Workers, Visitors, & Business Owners** through three rounds of community engagement shed light on the most important needs of the people who use Sugar Land's streets every day. This feedback, paired with regular guidance from the **Mobility Task Force** (Appendix D) served as a major factor in determining the appropriate Strategies and Action Items to recommend.
- » Finally, input from **Local & Regional Partners** (Appendix E) helped contextualize Strategies and Action Items into a larger regional context that will ensure they can be implemented in partnership with other agencies.



14 Mobility Master Plan Strategies

- A** Centralize and streamline **transportation decision-making**.
- B** **Update standards and ordinances** to align with the Mobility Master Plan.
- C** Implement the **Transformative Mobility Network** (TMN).
- D** Develop a **safe streets initiative** with dedicated implementation funding to proactively and systematically address community safety concerns around mobility.
- E** Continue to invest in **innovation and technology** to leverage existing assets and position the City as an attractive place for research and development.
- F** Expand the **asset management program** to analyze the life cycle of transportation infrastructure.
- G** Formalize a comprehensive **active transportation infrastructure program** to address aging infrastructure, create new network connections, and improve experiences for people walking and biking.
- H** Initiate **small area mobility plan & corridor studies** program.
- I** Provide consistent, centralized, and **transparent mobility-related information and resources** about the City's mobility initiatives.
- J** **Integrate health** into transportation projects, programs, and policies.
- K** Invest in **transit to support economic development and regional connectivity** to, from, and within Sugar Land.
- L** Collaborate with surrounding cities, Fort Bend County, Texas Department of Transportation (TxDOT), school districts, and other regional entities to **create meaningful transportation partners and leverage resources**.
- M** **Incorporate resiliency** into the City's mobility-related decision-making.
- N** Refine funding processes to **leverage local dollars with grants, partnerships, and other innovative financing solutions** supporting Superior Mobility in Sugar Land.

14 Mobility Master Plan Strategies

STRATEGY PROFILE PAGES












The following pages describe each Strategy and Action Item in detail. The introduction pages outline today’s context and explain the impact each Strategy will have on helping Sugar Land achieve Superior Mobility.

ACTION ITEM MATRIX

After each Strategy profile page, an Action Item table shows the specific actions related to that Strategy, including a description of the Action Item, its category (e.g., Program, Project, Policy, or Planning & Coordination), and the Core Values pertaining to the Action Item.

The matrix also indicates which Action Items should be part of the City’s 100-Day Action Plan. These Action Items represent key early wins and initiatives that can lay the groundwork for future Action Items. The 100-Day Action Plan is further explained in the Implementation Framework Chapter starting on page 109.

Example Action Item Matrix

Action Item Number	Action Item Description	Pertinent Core Values	Pertinent Category
#.1	Description of each Action Item includes specific language about what City staff should achieve through the Action and who should be involved.	 	Planning & Coordination
#.2	Description for Action Item 2	 	Project
#.3*	Description for Action Item 3	    	Program
#.4	Description for Action Item 4	 	Policy

*Action Item is part of the 100-Day Action Plan.

Strategy

Centralize and streamline **transportation decision-making.**

A NEW PHASE WITH NEW DEMANDS

The City has grown rapidly over the last several decades thanks to quick construction of master planned developments and the annexation of communities within the City's extraterritorial jurisdiction (ETJ). This growth relied on developers to build new roadways as part of construction. Sugar Land is now transitioning from an era of speedy growth to the next stage in its lifecycle. Its population is aging, fewer new subdivisions are under construction, and investments in mobility will need to adapt to meet changing demands and a shifting funding landscape.











ADAPTING FOR THE FUTURE

This Strategy will help the City redefine its current structure so that infrastructure planning, construction, and maintenance leverages Sugar Land's multidisciplinary expertise across all departments. The Mobility Master Plan effort is an early example of this cross-departmental collaboration with guidance from Public Works, Engineering, and Planning and Development Services staff.

This Strategy will ensure that the City lives up to the Five Core Values of this plan. Clear and streamlined decision-making will help staff and elected officials face the next stage of Sugar Land's lifecycle with a clear vision and an operational structure that can implement great projects efficiently.

Key Action Items bolster the City's current project delivery pipeline, prioritize intelligent data collection, and ensure that departments are working in tandem to meet shared goals.

Strategy **A** Centralize and streamline transportation decision-making.

Action Item	Core Values	Category
A.1* Continue to engage the Mobility Task Force through the 100-Day Action Plan to help advance the critical first set of Action Items of this Mobility Master Plan.		Planning & Coordination
A.2 Expand the Transportation & Mobility Innovation Program to support the implementation of the Mobility Master Plan and to continue to expand coordination with other agencies and departments across the City.		Planning & Coordination
A.3 Develop and implement a citywide transportation model. Use the model to inform mobility decisions and project identification, and to refine City's traffic impact analysis (TIA) process to align City objectives with new development and redevelopment.		Planning & Coordination
A.4* Initiate regular cross-departmental mobility strategy meetings to formalize the use of the Implementation Framework as outlined in Chapter 6.		Planning & Coordination
A.5 Coordinate all mobility projects, programs, and policies with the Placemaking Program and 2018 Land Use Plan to ensure alignment. Build upon the 2018 Land Use Plan recommendations to support mixed-use developments that allow for many activities in one place and increase mode choices.		Planning & Coordination
A.6 Ensure that the Development Code aligns with the Mobility Master Plan Core Values, Transformative Mobility Network, and Implementation Framework using the 2018 Land Use Plan and associated regulations.		Planning & Coordination
A.7 Enhance mobility data collection and reporting across all departments to support future plans, funding applications, and community engagement.		Planning & Coordination
A.8* Continue to include mobility focused questions on the biannual Citizen Satisfaction Survey. If possible, include additional questions to better understand the long term impacts of the COVID pandemic on travel behaviors to pivot mobility decision making as needed, or develop a separate survey initiative to inform the Comprehensive Plan and future City efforts.		Planning & Coordination
A.9 Partner with Economic Development and Sugar Land employers to initiate a biennial commute survey to better understand where employees live and how they get to work. The survey can also assist with better understanding the long-term impact of the COVID pandemic on travel behaviors and the needs of employers within Sugar Land.		Planning & Coordination
A.10 Complete the necessary data collection and analysis to fully measure and report on all citywide Six Mobility Metrics as presented in Chapter 5.		Planning & Coordination

*Action Item is part of the 100-Day Action Plan.

Strategy **B**

Update standards and ordinances to align with the Mobility Master Plan.

A REGIONAL POLICY LEADER











Sugar Land maintains a well organized and implementable set of design standards and mobility related ordinances that guide City staff during the planning and design of transportation infrastructure. The Design Standards document provides parameters for the design of roadways, including lane widths, intersection and signal requirements, construction material types, and more. The guidance of the Design Standards works in tandem with the City's Development Code, which details the regulations that developers and property owners must follow when building or renovating in the City.

UPDATING TO ALIGN WITH GOALS

The City can fill remaining gaps in its current standards and ordinances to align with the Core Values of this Plan. Doing so would establish a more comprehensive framework for infrastructure design, construction, and maintenance.

Key Action Items include a cross-departmental review of the City's design standards, development of new policies where needed, and an update to standards that prioritize the construction of trails and Complete Streets with safe walkways, bikeways, and crossings.

Strategy **B** Update standards and ordinances to align with the Mobility Master Plan.

Action Item	Core Values	Category
B.1* Apply the Implementation Framework to all mobility decision making.		Policy
B.2 Perform a comprehensive review of the City's Design Standards and update in alignment with the Mobility Plan, Implementation Framework, and national best practices for roadway design such as National Association of City Transportation Officials (NACTO) and American Association of State Highway and Transportation Officials (AASHTO). Update sections that include, at a minimum, anything related to vehicular speeds and roadway, sidewalk, bikeway, and intersection design.		Policy
B.3* Incorporate the existing Major Thoroughfare Network (formally part of the Master Thoroughfare Plan) into the Implementation Framework. Formalize name of network and corresponding GIS data set as the <i>Major Thoroughfare Network</i> and update any reference in City codes or standards. Utilize network as a tool to define corridor functional classification, existing and proposed right-of-way, and locations for new roadways. Network should be reviewed yearly with regular network updates adopted by City Council.		Policy
B.4 Change City Development Code and Design Standards to require sidewalks all new development and redevelopment and remove existing sidewalk exemptions. If an existing sidewalk is below City standards, it should be upgraded to meet minimum standards.		Policy
B.5 Update design standards to require consideration of low-impact development (LID) strategies for all mobility projects.		Policy
B.6 Update the design standards to ensure that new bike facilities do not end abruptly and are designed to connect logically and safely to the broader street network.		Policy
B.7 Develop a City parking management strategy to align parking supply and management with parking demand, particularly during peak hours.		Planning & Coordination
B.8 Continue coordinating with CenterPoint to build trails through easements.		Policy
B.9 Develop a strategy in partnership with Cullinan Park Conservancy to create access for bicyclists in or around the park.		Planning & Coordination
B.10 Create a set of curb management strategies to track, measure, and plan for curb uses like parking, deliveries, ride sharing, and school zone queuing.		Planning & Coordination

*Action Item is part of the 100-Day Action Plan.

Strategy



Implement the Transformative Mobility Network.

HISTORIC ROADWAY INVESTMENTS

During its decades of rapid growth, Sugar Land made major investments in a roadway network to serve booming residential, commercial, and industrial demand. These investments created a network of streets that prioritized the steady and rapid movement of vehicles through the City. In recent years, forward-looking investments in Intelligent Transportation Systems (ITS) have used technology to maximize the efficiency of Sugar Land's roadways.




The historic car-first investments established a safe and convenient roadway network for people driving in Sugar Land, but did not include a similar magnitude of projects for people walking, biking, and riding transit.

DEFINING A NEW NETWORK

Implementation of the Transformative Mobility Network (TMN), presented in Chapter Three will largely maintain vehicle capacity on Sugar Land roadways while targeting new investments to prioritize safety and connectivity for non-auto users of all ages and physical abilities. This includes using small area mobility plans and corridor studies to identify segments of the TMN that can be redesigned to allocate more room for people walking, biking, and rolling. As part of implementation, segments may be Maintained, Repurposed, or Built New depending on the roadway and land use context.

Key Action Items under this Strategy include a feasibility analysis for a bridge across the Brazos River and selecting three projects along the TMN for rapid implementation.

Strategy **C** Implement the **Transformative Mobility Network**.

Action Item	Core Values	Category
<p>C.1* Initiate the Implementation Framework steps to identify the first series of projects from the Transformative Mobility Network; establish a timeline and phased approach for implementation. The first series could include 3 on-street and 3 off-street projects and should be inclusive of both repurposing and new construction.</p>		<p>Projects</p>
<p>C.2 Draft language for a mobility bond to implement the Transformative Mobility Network. Develop a process and timeline for the City to pursue a mobility bond that balances City needs with community expectations.</p>		<p>Planning & Coordination</p>
<p>C.3 Begin feasibility analysis for new crossing(s) of the Brazos River to close the mobility gap for all modes. A key focus of the analysis will be additional pedestrian connections.</p> <p>Note: This Action Item will be a specific standalone project and include a preliminary assessment of where to locate the crossing. Plans will include detailed feasibility analysis, cost assessments, alternatives assessment, and evaluation of tradeoffs.</p>		<p>Projects</p>

*Action Item is part of the 100-Day Action Plan.

Strategy



Develop a **safe streets initiative** with dedicated implementation funding to proactively and systematically address community safety concerns around mobility.

STATE OF SAFETY IN SUGAR LAND

Input from residents and the Mobility Task Force (MTF) highlighted safety as a top mobility priority. Recent crash data shows nearly 10,000 crashes on Sugar Land roadways in a five-year span. Nearly half of crashes are intersection-related and more than one-third are due to speed.

Maps of crash density highlight high-speed roadways like SH 6, IH-69, the Grand Parkway, and US 90A as corridors where safety concerns remain. These same roadways act as major barriers between destinations in Sugar Land and prevent people from crossing safely, particularly on foot or by bicycle.

THINKING SYSTEM-WIDE

This Strategy will position the City to better address safety needs across the network. A new safe streets initiative will provide a framework for City staff to identify safety concerns and use dedicated funding to thoughtfully address those concerns.

The initiative should use a safe system approach, meaning that the City considers the underlying systemic factors behind each crash — from roadway and vehicle design to education and emergency response. A safe system approach takes a holistic view of safety. This includes the ways safety is impacted by the City’s roadway network, operations, the people who are using the network, enforcement, and more. The approach is also proactive, meaning that the City should analyze trends in safety and apply best-practice design changes to corridors and intersections across the network, not just the ones where crashes occur today.

Key Action Items under this Strategy include identifying “high-crash” corridors throughout the City and establishing partnerships between City departments and outside agency partners to address safety concerns.

Strategy **D** Develop a **safe streets initiative** with dedicated implementation funding to proactively and systematically address community safety concerns around mobility.

Action Item	Core Values	Category
D.1* Expand the current Traffic Evaluation & Safety Improvements Program to establish a comprehensive citywide Safe Streets Initiative process. Introduce specialized local studies along with a citywide safety assessment. Enhance initiatives to ensure that recommendations and actions are prioritized and implemented in a timely fashion.		Policy
D.2 Work with Sugar Land Police Department to enhance existing crash data collection system and create analytic systems to quickly identify problems and possible root causes for further investigation.		Planning & Coordination
D.3 Analyze and establish a high-crash network across Sugar Land and identify streets to prioritize safety improvements. Identify strategies to reduce crashes on the high-crash network. Note: This network should be a tool for the City and partners to ensure that new mobility projects, programs, or policies align with objectives of the Safe Streets Initiative.		Planning & Coordination
D.4 Explore methods for collecting and analyzing data on the location and circumstances of “near-miss crashes” or “close-calls” to help inform other crash data. Potential methods include (1) using AI technology based software(s) with currently installed cameras at intersections throughout the City to collect data and track trends and/or (2) start collecting self-reported data on near-misses. See Appendix I for additional information on potential methods.		Planning & Coordination
D.5 Establish a yearly funding allocation to address safety enhancements on the high-crash network.		Program
D.6 Develop a Neighborhood Streets Program to make improvements that encourage safe speeds on streets outside of the Transformative Mobility Network.		Program
D.7 Coordinate with TxDOT to improve their on-system roadways and crossings in a way that prioritizes safety for all roadway users.		Planning & Coordination
D.8 Create a City-led Safe Streets Education Program with rotating topics/themes (e.g., safe biking, safe speeds, distracted driving, etc.) to disseminate information to residents and visitors about mobility safety. Coordinate this effort with travel demand management (TDM) programming.		Program

*Action Item is part of the 100-Day Action Plan.

Strategy



Continue to invest
in **innovation**
and **technology**
to leverage existing
assets and position the
City as an attractive
place for research
and development.

LEADERS IN INNOVATION










Sugar Land has established itself as a leader in implementing new technologies to address the City's transportation challenges. Investments such as the Traffic Management Center (TMC), real-time traffic volume data, emergency signal preemption, freight crossing alerts and more all indicate a commitment to problem-solving through technology. The City has maximized every opportunity to adopt and apply useful technologies, especially to reduce congestion on major roadways. For example, the City has taken an approach of maximizing existing capacity as much as possible to improve corridor operations using Intelligent Transportation Systems (ITS) and the installation of Adaptive Signal Timing along the right-of-way constrained SH 6 corridor.

THINKING SYSTEM-WIDE

This Strategy celebrates the City's embrace of technology and encourages Sugar Land to not only continue those investments, but to also leverage existing technologies to further enhance capacity across the entire mobility network. This could include partaking in pilot studies of new technologies or partnering with local schools and think tanks to better understand data trends.

Key Action Items of this Strategy include upgrading to current technologies and working to pair existing ITS systems with new technologies like automated and connected vehicles.

Strategy **E** Continue to invest in **innovation and technology** to leverage existing assets and position the City as an attractive place for research and development.

Action Item	Core Values	Category
E.1 Continue to invest in intelligent traffic control technologies (adaptive AI, predictive systems, other future technologies) to improve traffic flow while maximizing capacity of existing infrastructure and capitalizing on the City's state-of-the-art ITS system. Invest in systems that automate traffic insights and analytics to help with preemptive responses to traffic system failures and planning improvements within the roadway system.		Projects
E.2 Create a roadway count program to regularly gather data (vehicle volumes and speeds) on streets not already covered by the ITS network.		Program
E.3 Upgrade the City's existing ITS data collection systems to also detect people walking, biking, and rolling.		Projects
E.4 Implement and regularly update the City's ITS Master Plan to support the Core Values of the Mobility Master Plan.		Planning & Coordination
E.5 Partner with H-GAC to establish an active transportation counter program to gather data on sidewalk, trail, and bikeway network usage to support planning and funding applications.		Program
E.6 Ensure that the City's ITS infrastructure can reliably communicate with automated and connected vehicles.		Policy
E.7 Continue to invest in technologies that share real-time traffic conditions with motorists to help save time, fuel, and reduce frustration caused by congestion.		Projects
E.8 Investigate opportunities for the City to plan for urban air mobility, including policies for safe operations of automated aircraft, construction of landing and delivery infrastructure, and other pertinent policies, regulations, and projects.		Policy
E.9 Be an attractive place for research and testing of new technologies and mobility types through partnerships, pilots, and other programs.		Planning & Coordination

Strategy



Expand the asset management program to analyze the life cycle of transportation infrastructure.

A BUILT-OUT NETWORK






Nearly all large tracts of real estate and empty parcels in Sugar Land have been fully developed, meaning that the City's land and its transportation network are mostly built out. In other words, the City will not be constructing many new roads. Instead, as Sugar Land enters a new phase of its lifecycle, the City will maintain and enhance its existing network of roads, trails, and sidewalks. The City's right-of-way is one of its most valuable assets. The intent of this strategy is to make sure that the full value of the right-of-way is realized.

MAINTAINING PAST INVESTMENTS

City staff have already developed a meaningful asset management program to gather data about roadway quality and lifespan to better plan for maintenance. This Strategy encourages the City to broaden that program to include all types of mobility infrastructure, like sidewalks and trails, and strengthen the program to collect data that closely reflects the priorities represented in the Core Values of this plan. A responsible asset management strategy will also create a more resilient transportation system by allowing the City to save money through targeted maintenance. Funds saved can be directed toward other projects, stretching the overall impact of tax dollars spent on mobility.

Key Action Items associated with this Strategy include establishing a new model for sidewalk, trail, and bikeway maintenance and developing a system to clearly communicate pertinent infrastructure maintenance data to the public.

Strategy **F** Expand the **asset management program** to analyze the life cycle of transportation infrastructure.

Action Item	Core Values	Category
<p>F.1 Establish a Bridge and Roadway Maintenance Program that sets standards, designated funding, and a regular schedule for rehabilitating and improving the City’s network of existing roadways and bridges. Outputs of this model will be incorporated into the Mobility Master Plan metrics (i.e., Network Condition) to be used as part of the Implementation Framework outlined in Chapter 6.</p>		Policy
<p>F.2 Establish a Sidewalk, Trail, and Bikeway Maintenance Model similar to the City’s existing roadway condition model that sets standards, designated funding, and a regular schedule for rehabilitating and improving the City’s network of existing sidewalks, bikeways, and trails. Coordinate with Sidewalk construction/rebuild prioritization methodology. Outputs of these models will be incorporated into the Mobility Master Plan metrics (i.e., Network Condition) to be used as part of the Implementation Framework outlined in Chapter 6.</p>		Policy
<p>F.3 Establish an ITS Maintenance Model similar to the City’s existing roadway condition model that sets standards, designated funding, and a regular schedule for repairing and updating the City’s network of ITS technologies. Outputs of this model will be incorporated into the Mobility Master Plan metrics (i.e., Network Condition) to be used as part of the Implementation Framework outlined in Chapter 6.</p>		Policy
<p>F.4 Incorporate staff level-of-effort into the City’s existing maintenance model to capture the true cost of maintaining existing infrastructure and inform staff when it is more cost effective to invest in new infrastructure instead of continued maintenance.</p>		Policy
<p>F.5 Develop a system and schedule for communicating pertinent information from the asset management system to the public. This data should be coordinated with the recommended Mobility Dashboard.</p> <p>Note: Information can include when roaddashboardways are scheduled for construction, maintenance, or rehabilitation and can allow for input from residents.</p>		Program

Strategy



Formalize a comprehensive **active transportation infrastructure program** to address aging infrastructure, create new network connections, and improve experiences for people walking and biking.

TODAY'S ACTIVE NETWORK









Nearly all of Sugar Land's streets have sidewalks and the City has miles of trails. However, not all of these facilities are in great condition, nor do they include safe connections across major barriers. Similarly, the City's bikeways and trails are not linked in a high-comfort network that facilitates safe and convenient access for people walking or biking to all of the destinations that Sugar Land has to offer.

AN ACTIVE LIFESTYLE CITY

There is a clear desire for access to healthy mobility options like walking and biking according to community feedback from this plan. This Strategy would create the structure for City staff to build new and maintain existing active transportation infrastructure that helps Sugar Land be an active lifestyle city.

Key Action Items under this Strategy include strengthening the City's sidewalk prioritization methodology and developing a Safe Routes to School program.

Strategy **G** Formalize a comprehensive **active transportation infrastructure program** to address aging infrastructure, create new network connections, and improve experiences for people walking and biking.

Action Item	Core Values	Category
G.1 Continue to incorporate active transportation improvements in all roadway construction and maintenance projects throughout the City.		Policy
G.2 Expand on the sidewalk prioritization methodology to better target the City's existing sidewalk program. The methodology should place a high priority on sidewalks in poor repair, critical gaps in sidewalk network, areas near schools and parks, areas with higher number of people walking, and other key metrics. This should be coordinated with asset management program for sidewalk, trails, and bikeways.		Planning & Coordination
G.3 Create a Safe Routes to School Study and Program to identify recommendations for capital projects and to encourage safe access to schools for students walking and biking. Partner with school districts (FBISD, LCISD and private schools) on this effort.		Program
G.4 Conduct an ADA Transition Plan and develop an ADA compliance program with a dedicated compliance officer for persons with limited mobility and older adults.		Program
G.5 Develop an application-based funding program for residents to advocate for neighborhood/cul-de-sac trail connections within their neighborhood.		Program
G.6 Identify locations where bikeways end abruptly and design improvements for better transitions with the rest of the street network.		Projects
G.7 Construct short trail connections that increase access to off-street trails and fill gaps in the City's existing trail network.		Projects
G.8 Identify and construct short trail connections to connect the trail network with on-street bikeway network and area sidewalks within the roadway ROW.		Projects

Strategy



Initiate a small area mobility plan & corridor studies program.

CURRENT PLANNING EFFORTS






During Sugar Land's years of rapid growth, transportation planning largely occurred at the citywide scale with neighborhood networks driven by the designs of master planned developments. This approach proved valuable in establishing a coherent vision for Sugar Land's growth and coordinating across departments on key citywide issues. However, the focus on planning at a larger scale makes it difficult to plan, design, and construct individual projects that impact smaller neighborhoods.

THINKING AT THE CORRIDOR LEVEL

By establishing a program of small area mobility plans and corridor studies, the City can apply the Core Values of this Mobility Master Plan to smaller neighborhood networks. These plans will consider the specific mobility challenges and opportunities for people who live, work, and own businesses in each neighborhood of Sugar Land. These plans will help the City determine project priorities and appropriate roadway designs for the Transformative Mobility Network. They also offer a platform to think through connections across major barriers like TxDOT roadways and freight rail lines.

Key Action Items under this Strategy include outlining a community engagement approach for neighborhood plans and leveraging regional funds to complete the first small area mobility plan.

Strategy **H** Initiate a **small area mobility plan & corridor studies** program.

Action Item	Core Values	Category
H.1* Refine the purpose and goals for small area plans and corridor studies as outlined within this Plan to ensure alignment with the Comprehensive Plan process. Purpose and goals to include: safety, complete streets, neighborhood access points, needs of community, etc.		Planning & Coordination
H.2 Develop a community engagement approach for small area plans and corridor studies to ensure early and frequent community engagement that sets expectations and understands needs.		Planning & Coordination
H.3 Identify corridors from the Transformative Mobility Network to be studied further in a designated Corridor Study. Use the Implementation Framework to prioritize corridors and develop projects and identify funding.		Planning & Coordination
H.4* Implement the City's first small area plan through the 2023 H-GAC Livable Center Study.		Planning & Coordination
H.5 Use small area planning process and/or corridor studies planning process to identify and address feasibility of potential grade-separated rail crossings of the UPRR along 90A to reduce the number of at-grade crossings within the City. Assessment to include crossing for all modes.		Planning & Coordination

*Action Item is part of the 100-Day Action Plan.

Strategy



Provide consistent, centralized, and **transparent mobility-related information and resources** about the City's mobility initiatives.

AN ENGAGED PUBLIC




Sugar Land is fortunate to have residents, workers, and business owners who care about the City's future and want to engage in conversations that impact their lives and community. The City collects a wealth of mobility related data that can be shared with the public to build transparency and intelligent dialogue with community members. Staff currently gathers data such as real-time traffic volumes, roadway condition, Census data and much more to better understand the state of Sugar Land's roads and its users. The City also creates and maintains important information about mobility projects, including project timing, design details, cost estimates, and extents. Together, this mobility data illustrates the key characteristics of Sugar Land's transportation network.

PROACTIVE TRANSPARENCY

This Strategy encourages City staff to package data in a way that is accessible to the public and easy to understand. This strategy will give current and prospective residents, workers, and businesses the tools to understand how Sugar Land is working toward Superior Mobility. This information can enable residents to learn more about projects before providing feedback and can help all stakeholders understand how specific projects fit within the City's broader efforts. Building tools to share information can also help educate the public about using new modes of transportation, safe travel behaviors, healthy habits, and related topics.

Key Action Items associated with this Strategy include creating a mobility dashboard to track progress on Mobility Master Plan implementation and expanding the topics and reach of the City's existing social media presence.

Strategy I Provide consistent, centralized, and **transparent mobility-related information and resources** about the City’s mobility initiatives.

Action Item	Core Values	Category
1.1* Create a Mobility Dashboard to track and communicate the City's progress in Mobility Master Plan achieving Superior Mobility. The Dashboard should include (1) the status of key Plan Metrics, (2) an interactive map of the Transformative Mobility Network, and (3) links to additional data from the Traffic Management Center and other data sources that help residents understand mobility in Sugar Land.		Planning & Coordination
1.2 Build on the City's robust community engagement, including the MySugarLand App and social media presence, to share information about traffic congestion on local streets, construction impacts, and mobility topics to improve safety and knowledge of local traffic laws.		Program
1.3 Build on existing Capital Improvement Program (CIP) Story Map to develop a citywide project dashboard to communicate proposed design, funding, timing, and other details for City transportation projects.		Planning & Coordination
1.4 Work with Economic Development Department to define metrics that align mobility improvements with the City's economic attractiveness for business and employers to best meet the needs/aspiration of existing and future employers.		Planning & Coordination
1.5 Develop a transportation demand management (TDM) program and a mobility communications strategy to encourage more people to walk, bike, and take transit.		Program

*Action Item is part of the 100-Day Action Plan.

Strategy



Integrate health into transportation projects, programs, and policies.

CHANGING COMMUNITY NEEDS

In 2022, the U.S. News & World Report ranked Fort Bend County among the healthiest counties in the nation, scoring in the top ten percent based on a range of metrics. This ranking is due in part to the emphasis that Sugar Land and surrounding communities have placed on investments in greenspace and trails that allow for healthy activities like biking, jogging, and walking. These types of investments attract young families looking for a community where they can live and work within a short distance of outdoor activities.












Investments that prioritize public health will also become even more important as Sugar Land's population ages. Older residents will face new health challenges that limit their mobility.

A HOLISTIC VIEW OF MOBILITY

As Sugar Land's population changes, the City can view mobility investments as one of many tools to help build a healthier community for residents at every stage of life. City staff should integrate public health considerations into all facets of transportation decision-making. This includes expanding greenspace for healthy activities, improving air quality, and ensuring that everyone can access their day-to-day destinations without a car.

Key Action Items associated with this Strategy include partnerships with the Fort Bend County Health Department and defining the City's policy toward micromobility including scooters and bike share.

Strategy **J** Integrate health into transportation projects, programs, and policies.

Action Item	Core Values	Category
J.1 Partner with Fort Bend County Health & Human Services to support and apply recommendations from County health studies and programs. Ensure that the City is a partner in the current/ongoing county health assessment.	 	Planning & Coordination
J.2 Develop a new "Slow Streets" or "Sunday Streets" program to temporarily close streets for special events to encourage walking, biking, and rolling.	 	Program
J.3 Develop and implement a Safe Routes to Parks program in conjunction with the Parks Department.	  	Program
J.4 Develop and implement a micromobility policy to define and enforce the City's approach to bike share, scooter share, and any other micromobility modes.	 	Policy
J.5 Implement a pilot micromobility program with a partner that meets the City's objectives and expectations.	 	Program

Strategy

Invest in **transit to support economic development and regional connectivity** to, from, and within Sugar Land.

TODAY'S TRANSIT

Fort Bend County Transit and the University of Houston both provide transit services within Sugar Land. The University of Houston connects students, staff, and faculty traveling between the University of Houston at Sugar Land campus and the main University of Houston campus. Fort Bend County Transit provides park & ride commuter service between Sugar Land and major employment centers in Houston like the Texas Medical Center.

In addition to commuter service, Fort Bend County Transit operates a demand response service that allows Fort Bend County residents to request a transit ride between destinations in the County. This service is largely used by people with mobility challenges to access daily needs like grocery shopping and medical appointments.
























STRONGER REGIONAL CONNECTIONS

The existing transit services in Sugar Land provide important mobility options for residents who are unable or choose not to drive. However, new and innovative transit initiatives could strengthen Sugar Land's connectivity to the region and boost the City's role as an employment, health, and entertainment hub.

This Strategy supports further investment in the existing demand response and park & ride services within Fort Bend County while also exploring other options that support connectivity and access for Sugar Land residents, businesses, and commuters. This includes boosting economic development by providing more mobility options for the people who work and shop in Sugar Land but live elsewhere.

Key Action Items included in this Strategy are to build permanent park & ride facilities in Sugar Land and to work with regional leaders in developing transit policy.

Strategy **K** Invest in **transit to support economic development and regional connectivity** to, from, and within Sugar Land.

Action Item		Core Values	Category
K.1	Partner with Fort Bend County Transit to construct permanent Park & Ride locations in the City with real-time information, shade, seating, and other amenities that improve the experience for people riding transit.	  	Projects
K.2	Support Fort Bend County Transit as it returns to pre-COVID service levels. Collaborate with Fort Bend County Transit on data collection and ridership information to assist with strategies that best align with the Sugar Land community's needs.	  	Planning & Coordination
K.3	Coordinate with the University of Houston and Fort Bend County Transit Park & Ride services to reduce trip redundancies and increase overall transit service. Coordination can provide the opportunity to leverage grant and funding opportunities due to higher combined ridership between the two services.	 	Planning & Coordination
K.4	Continue to partner with Fort Bend County Transit to provide demand response service to residents. Ensure that demand response service meets the community's needs. Find opportunities to expand the service to better support those that can not drive. This should help meet the City's objectives of supporting aging in place.	    	Planning & Coordination
K.5	Participate in regional transit conversations, including at H-GAC's High-Capacity Transit Taskforce. Sugar Land's location can benefit from two regional corridors under consideration for potential future high-capacity, frequent transit - US 90A and IH69. Joining conversations and providing a clear vision of how the City can benefit from a potential future service can influence conversations and plans in a manner to best benefit residents and expand access to destinations within Sugar Land.	 	Planning & Coordination
K.6*	Use the Comprehensive Plan process to develop a vision for the future of transit in the City.	  	Planning & Coordination
K.7	Coordinate with senior living centers and/or medical providers that have existing services to identify areas of synergy between private services and existing public services. Identify partnerships if possible.	 	Planning & Coordination
K.8	Expand marketing efforts with Fort Bend County Transit to develop and distribute marketing materials to increase transit ridership for existing Park & Ride services. Coordinate this effort with TDM programming.	  	Program

*Action Item is part of the 100-Day Action Plan.

Strategy



Collaborate with surrounding cities, Fort Bend County, TxDOT, school districts, and other regional entities to create meaningful transportation partners and leverage resources.

CRITICAL PARTNERSHIPS


















The City depends on partnerships to plan, construct, and maintain mobility infrastructure. Fort Bend County and TxDOT own right-of-way for roadways through Sugar Land and pay for mobility projects that directly impact the City and its residents, businesses, and workers. Cities sharing a border with Sugar Land design and maintain roadways that connect directly into its transportation network. Agencies like local school districts, Fort Bend County Transit, and H-GAC also have unique mobility interests in and around Sugar Land. In this role as a regional employment and entertainment hub, the City has played an important role to guide transportation decisions that align with this plan's Core Values and maximize the impact of partnerships.

WIN-WIN OPPORTUNITIES

The City should embrace its role as a regional leader and continue to invest in these partnerships for developing win-win projects, plans, and policies at the local, state, and national levels. This means collaborating where possible to share the cost, and convening local partners to determine the best approach to difficult mobility challenges. It also means serving on boards and commissions to impact mobility policies.

Key Action items for this Strategy include close coordination with school districts about bus operations and school siting, and continued coordination with the Union Pacific Railroad and TxDOT.

Strategy **L Collaborate** with surrounding cities, Fort Bend County, TxDOT, school districts, and other **regional entities** to create meaningful transportation partners and leverage resources.

Action Item	Core Values	Category
L.1 Continue to coordinate with school districts on bus operations, parent pick-up and drop-off, and new school siting to improve mobility to and from school campuses.	 	Planning & Coordination
L.2 Coordinate with Fort Bend County to plan for new street connections to and within the ETJ to proactively design infrastructure that encourages walking and biking. Collaborate on ensuring new infrastructure in the City's ETJ aligns appropriately with both County and City standards.	  	Planning & Coordination
L.3 Establish regular coordination meetings with adjacent jurisdictions and regional partners as mobility-related and economic extensions into/out of city limits. Sugar Land should lead these endeavors. Regular coordination meetings can lead to the creation of a Fort Bend County Mobility Consortium.	 	Planning & Coordination
L.4 Partner with other agencies to proactively invest in mobility infrastructure that anticipates and complements population growth in nearby communities.	 	Planning & Coordination
L.5 Expand the data sources available to the Traffic Management Center by collaborating with new agencies (e.g., rail, TxDOT, etc.) to support more integrated planning and emergency response.	  	Planning & Coordination
L.6* Continue frequent coordination with UPRR to share information and concerns about existing freight movement through the City and highlight opportunities for improvement and collaboration.	  	Planning & Coordination
L.7 Continue participating regional planning committees and expand participation in state-level groups such as TxDOT's advisory committees to coordinate closely with statewide mobility-related initiatives.	 	Planning & Coordination

*Action Item is part of the 100-Day Action Plan.

Strategy



Incorporate
resiliency into the
City's mobility-related
decision-making.

FACING EXTERNAL CHALLENGES

Sugar Land has been impacted by a variety of natural disasters in its recent past such as Hurricane Harvey in 2017, and the week-long extreme winter freeze in 2021. Like much of southeast Texas, hurricanes, drought, excessive heat waves, flooding, and even cold snaps regularly effect the local area. These intense weather events can weaken mobility infrastructure, causing disruptions in access to daily needs and resulting in costly repairs for Sugar Land and its residents.










The City's mobility network also plays an important role for emergency and disaster response; the Police Department and Fire Department rely on roadways to respond to emergencies. During storm events, roadways also help residents get out of harm's way along designated evacuation routes. Beyond disaster response, Sugar Land's mobility network plays a necessary role in transporting hazardous materials, particularly along the freight rail lines and streets in and around the business park in the City's northeast.

BOUNCING BACK BY DESIGN

Sugar Land can implement policies that help the City quickly respond to emergencies and bounce back from natural disasters. This resiliency is possible with collaboration among departments, thoughtful data collection about the state of infrastructure, and proactive investments to better prepare Sugar Land's streets, bridges, and signals for extreme weather.

Key Action items under this Strategy include developing a citywide vulnerability assessment for the City's transportation network and ensuring that roadway design standards support stormwater drainage needs in case of large flooding events.

Strategy **M** Incorporate **resiliency** into the City's mobility-related decision-making.

Action Item	Core Values	Category
M.1 Institutionalize the exploration and use (through pilot programs as warranted) of innovative construction materials and methods to ensure lasting and resilient infrastructure.		Policy
M.2 Create an electric vehicle plan (either internally or with external consultation) to guide the City's policy and actions for siting and constructing electric vehicle charging stations.		Policy
M.3 Ensure that Design Standards for roadways are aligned with storm water drainage needs and incorporate low impact/green infrastructure design and materials.		Policy
M.4 Conduct a citywide infrastructure vulnerability assessment to define a baseline for existing infrastructure condition and prioritize resilient investments.		Planning & Coordination
M.5 Incorporate air quality improvement solutions into mobility decision-making and explore grant funding for these programs. Improvements could include: decreasing vehicular delay, reducing daily trips by vehicle, increasing mode choices for active transportation, and supporting the incorporation of electric vehicles into City infrastructure.		Program
M.6 Coordinate with the Emergency Management Department on the Hazard Mitigation Plan and identify mobility projects to include within the Hazard Mitigation Plan.		Planning & Coordination
M.7 Coordinate with the Emergency Management Department on Hazard Mitigation Grant Opportunities to fund/implement mobility projects included in the Hazard Mitigation Plan.		Projects
M.8 Formalize and enforce hazardous material routes through the City to keep hazardous materials on regional roadways and off of local roads.		Policy
M.9 Participate in quarterly hazard risk assessment drills.		Planning & Coordination

Strategy



Refine funding processes to **leverage local dollars with grants, partnerships, and other innovative financing solutions** supporting Superior Mobility in Sugar Land.

CONSTRAINED MOBILITY FUNDING










Mobility projects can be expensive. Important features like bridges, signal technology, landscaping, and stormwater drainage are all important for successful projects but can increase costs. Sugar Land has been innovative in funding past mobility projects but it is constrained — like many municipalities — by a limited local budget for a long wish list of new projects and maintenance obligations.

LEVERAGING THE WHOLE TOOLKIT

As the City looks forward to implementing the Mobility Master Plan, staff can be inventive in leveraging funds in new and strategic ways. Partnerships with other local governments like Fort Bend County will be crucial to addressing many mobility needs. Likewise, staff will need to utilize the Core Values of this plan to navigate a bevy of new and expanded regional, state, and federal grant dollars available for mobility infrastructure projects.

Key Action Items emphasize close coordination with other departments and partner agencies in identifying and securing new funding options.

Strategy **N** Refine funding processes to **leverage local dollars with grants, partnerships, and other innovative financing solutions** supporting Superior Mobility in Sugar Land.

Action Item	Core Values	Category
N.1* Hire a grants coordinator staff member to proactively lead and pursue grant and funding opportunities leveraging local dollars supporting mobility and quality of life projects. Potential grants coordinator would keep a pulse on local, regional, statewide, and national public or private grant opportunities that align with the Mobility Master Plan's Vision for Superior Mobility and Five Core Values. The coordinator would also work closely with other City departments (ex: planning, parks & rec, etc.) to identify and develop larger-scale improvement projects to seek grants that enhance mobility as well as quality of life, health, economic development, etc.		Planning & Coordination
N.2* Create a grants database based off of the Funding Matrix to match types of projects (and/or specific projects) to grant opportunities and sources, and tracks estimated timing and requirements.		Planning & Coordination
N.3* Utilize the Implementation Framework to develop and maintain a comprehensive list of mobility-related projects for implementation that can be packaged quickly and easily (including cost, level of effort, timing, etc.) for a grant application or local non-routine funding opportunity.		Planning & Coordination
N.4* Identify projects and programs through the use of the Implementation Framework to be included in an upcoming bond to secure designated funds to implement thoughtful projects. Projects and programs could include specific mobility projects and/or maintenance needs supporting Superior Mobility.		Projects
N.5 Develop a routine maintenance program framework that proactively sets aside projects, time, and money to provide preventative maintenance on the City's infrastructure – saving money and time in the long run.		Policy
N.6 Explore assessment fee opportunities in special areas around the City where money can be generated and directly reinvested into the public infrastructure supporting safe places to walk, bike, drive, or take transit.		Policy
N.7 Continue close coordination with other City departments, specifically the Economic Development department to identify potential partnership opportunities on projects or efforts that support mobility, commerce, and enhanced quality of life in the City.		Planning & Coordination
N.8 Set up an annual coordination meeting (at minimum) to meet with statewide grant coordinators at TxDOT to understand potential grant opportunities hosted by the state in line with Mobility Master Plan.		Planning & Coordination
N.9 Explore opportunities for strategic investments through the Infrastructure Investment and Jobs Act (IIJA) and future federal grant opportunities, state grant opportunities, and H-GAC.		Planning & Coordination

*Action Item is part of the 100-Day Action Plan.

The 100-Day Action Plan

SETTING THE STAGE FOR SUCCESS

The 100-Day Action Plan highlights the tasks that will give staff the tools and resources to be more efficient as they undertake the remainder of the Action Items. By highlighting the key “must-come-first” items, it eliminates the need to set Action Item priorities in the first months after the completion of the Plan.

The City can leverage these select Action Items to garner early successes and build momentum for the Plan. The tables on the next two pages call out the Action Items that comprise the 100-Day Action Plan for quick reference. Action Items are listed based on which should come first. Staff can use this sequence of Action Items or choose to prioritize others as they begin Plan implementation.

CONTINUING GOOD WORK

The 100-Day Action Items should be implemented in conjunction with the many existing efforts already underway at the City. These “continued” efforts are acknowledged throughout the Action Items in this chapter and include ongoing collaboration with regional partners such as Fort Bend County and continued coordination among City departments.

These Action Items work together with the 100-Day Action Plan to create a meaningful set of next steps for the City.

100-Day Action Items	
A.1	Continue to engage the Mobility Task Force through the 100-Day Action Plan to help advance the critical first set of Action Items of this Mobility Master Plan.
A.4	Initiate regular cross-departmental mobility strategy meetings to formalize the use of the Implementation Framework as outlined in Chapter 6.
B.1	Apply the Implementation Framework to all mobility decision making.
B.3	Incorporate the existing Major Thoroughfare Network (formally part of the Master Thoroughfare Plan) into the Implementation Framework. Formalize name of network and corresponding GIS data set as the <i>Major Thoroughfare Network</i> and update any reference in City codes or standards. Utilize network as a tool to define corridor functional classification, existing and proposed right-of-way, and locations for new roadways. Network should be reviewed yearly with regular network updates adopted by City Council.
C.1	Initiate the Implementation Framework steps to identify the first series of projects from the Transformative Mobility Network; establish a timeline and phased approach for implementation. The first series could include 3 on-street and 3 off-street projects and should be inclusive of both repurposing and new construction.

The 100-Day Action Plan

100-Day Action Items

H.1	Refine the purpose and goals for small area plans and corridor studies as outlined within this Plan to ensure alignment with the Comprehensive Plan process. Purpose and goals to include: safety, complete streets, neighborhood access points, needs of community, etc.
N.1	Hire a grants coordinator staff member to proactively lead and pursue grant and funding opportunities leveraging local dollars supporting mobility and quality of life projects. Potential grants coordinator would keep a pulse on local, regional, statewide, and national public or private grant opportunities that align with the Mobility Master Plan's Vision for Superior Mobility and Five Core Values. The coordinator would also work closely with other City departments (ex: planning, parks & rec, etc.) to identify and develop larger-scale improvement projects to seek grants that enhance mobility as well as quality of life, health, economic development, etc.
N.2	Create a grants database based off of the Funding Matrix to match types of projects (and/or specific projects) to grant opportunities and sources, and tracks estimated timing and requirements.
H.4	Implement the City's first small area plan through the 2023 H-GAC Livable Center Study.
N.4	Identify projects and programs through the use of the Implementation Framework to be included in an upcoming bond to secure designated funds to implement thoughtful projects. Projects and programs could include specific mobility projects and/or maintenance needs supporting Superior Mobility.
K.6	Use the Comprehensive Plan process to develop a vision for the future of transit in the City.
N.3	Utilize the Implementation Framework to develop and maintain a comprehensive list of mobility-related projects for implementation that can be packaged quickly and easily (including cost, level of effort, timing, etc.) for a grant application or local non-routine funding opportunity.
I.1	Create a Mobility Dashboard to track and communicate the City's progress in Mobility Master Plan achieving Superior Mobility. The Dashboard should include (1) the status of key Plan Metrics, (2) an interactive map of the Transformative Mobility Network, and (3) links to additional data from the Traffic Management Center and other data sources that help residents understand mobility in Sugar Land.
D.1	Expand the current Traffic Evaluation & Safety Improvements Program to establish a comprehensive citywide Safe Streets Initiative process. Introduce specialized local studies along with a citywide safety assessment. Enhance initiatives to ensure that recommendations and actions are prioritized and implemented in a timely fashion.