

Long-Range Capital Improvement Program Strategic Plan (LRCSP) EDUCATIONAL PACKET

City of Austin - Planning and Zoning Department

THE LONG-RANGE CAPITAL IMPROVEMENT PROGRAM STRATEGIC PLAN (LRCSP)

The following educational packet aims to provide the Planning Commission with a deeper understanding of the Long-Range Capital Improvement Program Strategic Plan (LRCSP) and process. The purpose of the LRCSP, the Planning Commission's role, and an expansion of abbreviations or acronyms utilized throughout the LRCSP are provided below for context to the information that follows:

THE PURPOSE OF THE LRCSP

The LRCSP looks out into a 10-year or longer planning horizon and provides the basis for identifying both ongoing capital needs and strategic opportunities for capital investment in alignment with the City's comprehensive plan. Operating on an every other year planning cycle, the LRCSP takes a data-driven, collaborative approach to long-range planning for the Capital Improvement Program.

THE PLANNING COMMISSION'S ROLE IN THE LRCSP

Each year, the [Planning Commission](#) makes a recommendation to the City Manager about projects necessary or desirable to implement the City's comprehensive plan, [Imagine Austin](#). The LRCSP is a tool to help the Commission make its recommendation, which usually takes the form of a letter that is included in the final plan. In the off year of the planning cycle the Planning Commission has the option to reaffirm the memo and adopted plan from the previous year.

FREQUENTLY USED ABBREVIATIONS AND ACRONYMS:

- CIP - Capital Improvement Program
- CIA - Comprehensive Infrastructure Assessment
- RNA - Rolling Needs Assessment
- SIA - Strategic Investment Analysis

PACKET CONTENTS

CIP OVERVIEW (Pages 3-6) created by the Budget Office, the overview explains the City's CIP, the Capital Budget, and provides links to online CIP resources and tools.

A TWO PAGE LRCSP HANDOUT (Pages 7-8) provides a high-level overview of the LRCSP including the goals of the plan, plan components, and the planning process schedule.

AN INTRO TO THE LRCSP (Pages 9-14) describes the LRCSP's role and purpose. The components of the plan are also provided and defined. Lastly, the introduction illustrates and details the LRCSP planning cycle and its steps.

AMERICAN PLANNING ASSOCIATION (APA) PLANNING ADVISORY SERVICE (PAS) MEMO, "INTEGRATING CAPITAL IMPROVEMENTS PLANNING WITH THE COMPREHENSIVE PLAN" (Pages 15-26) offers background and context on the relationship between Imagine Austin Comprehensive Plan and Capital Improvements planning. It provides a detailed summary of the approaches and lessons learned in the City of Austin through its efforts in this area. Additionally, the memo includes a summary of action steps that can be used by planners seeking to fully integrate their comprehensive plan with capital improvements planning.

Capital Improvement Program

The City of Austin regularly undertakes projects to improve public facilities and infrastructure assets for the benefit of its citizens. Projects include the construction of city facilities such as recreation centers and libraries as well as the reconstruction of streets, replacement of water/wastewater lines and provision of power for City of Austin residents. Collectively, these projects are referred to as the City of Austin Capital Improvements Program (CIP). These improvements are an investment in the future of the organization and Austin. As such, emphasis is placed on anticipating capital needs well in advance and fully-integrating them with service and financial projections. Projects are department identified/prioritized to improve asset conditions and they support Imagine Austin and various Council-approved master plans, strategic plans, and initiatives. Each department's prioritization process is different based on its specific service responsibilities.

The Capital Budget, approved by the City Council, provides the financial authorization to make expenses for the CIP. The Capital Budget is multi-year, so the authorization remains in place until funding is exhausted. The CIP is supported by a number of different funding sources, including debt, cash and various other revenues. The type of funding utilized for a project can vary according to the type of project as well as whether the department is part of the General Government CIP or Enterprise CIP. Debt sources include public improvement bonds (voter approved bond programs), certificates of obligation, contractual obligations, and commercial paper. The use of debt is suitable in capital projects because it promotes intergenerational equity in bearing the costs of the projects in conjunction with enjoying the benefits. The public improvement bonds (PIBs), certificates of obligation (COs) and contractual obligations (KOs) are all secured by the full faith and credit of the City of Austin and secured by its ad valorem taxing power. The commercial paper (CP) program is utilized by Austin Energy and Austin Water Utility only. CP is a very short-term debt, usually due within 30 to 45 days, and utilized as an interim financing instruction for capital expenditures that provides for lower interest costs and flexibility. Cash and various other revenue sources for the CIP include transfers from department operating budgets, grants, donations, sale proceeds, interagency agreements, developer contributions, fees, etc.

With a Capital budget in place, departments are then able to move forward with project delivery. Delivery of the capital projects is complex. Delivery is typically multi-year and phases include planning, design, construction, and post construction. It takes a collaborative multi-department effort to contain costs and to ensure a quality project. Typical capital expenditures support land acquisition, architectural/engineering, construction labor/materials, furniture/fixtures/equipment, and project management services.

Capital Improvement Program Process



Capital Needs Identification and Planning: concepts identified through policy and planning documents and renewal/reinvestment needs. This is done on an ongoing basis.

Long-Range CIP Strategic Plan: documents capital needs across City departments. This is completed every 2 years.

5 year CIP Plan and Capital Budget: Starting for the FY2021 budget, the 5 year CIP plan and the capital budget are printed in the same document. These are annual documents.

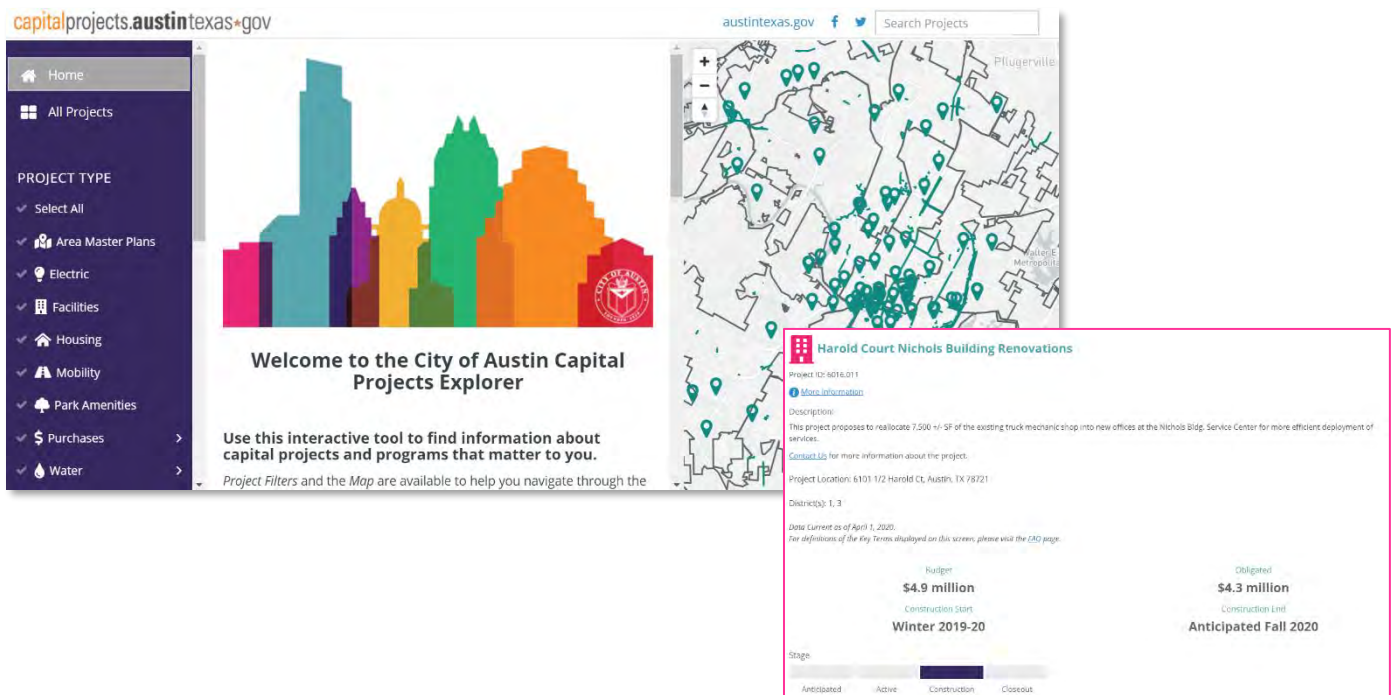
Program/Project Delivery: Once authorization to expend funds is in place, delivery moves forward utilizing the funds to get the asset into service. Programs and projects are delivered year round.

CIP Resources

Capital Projects Explorer (CPE) <https://capitalprojects.austintexas.gov/projects>

Capital Projects Explorer is an interactive tool that provides details about active projects and programs funded by the City of Austin's Capital Budget (excluding Austin Energy projects). This tool is a continuation of the City's efforts to make available capital project data to City Council and the public in a highly transparent, easily accessible manner.

The robust search capabilities in this tool allow for capital projects to be sorted by type, department, district, and status. Additionally, projects funded by either the 2016 or 2018 Bonds can be independently identified, allowing for a smooth transition between the previous CPE application and this expansion. This site also includes informative content, including a frequently-asked-questions section, definitions for key terms, and information about how to navigate the site.



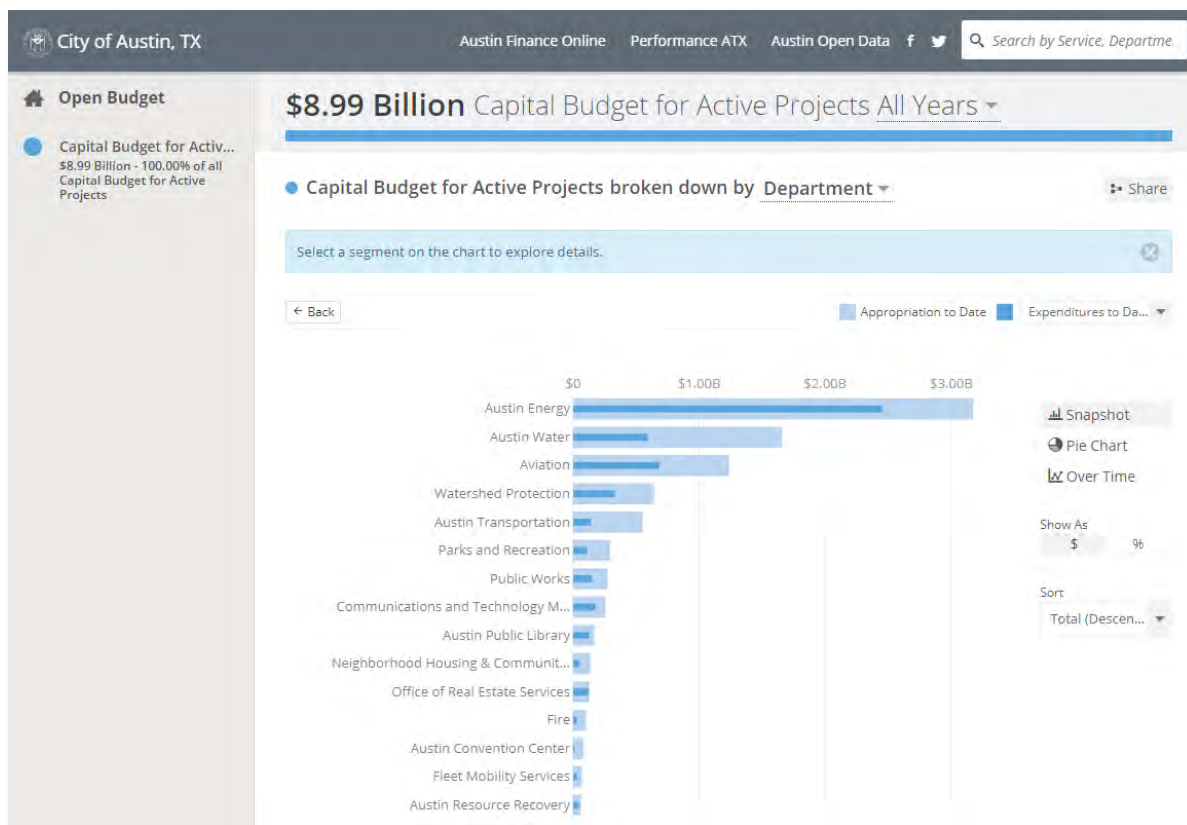
Open Budget (Capital)

http://budget.austintexas.gov/#!/year/All%20Years/capital/0/fdu_sponsor_department

The Open Budget tool allows citizens to explore the operating and revenue budgets for the City of Austin through interactive charts, tables, and graphs. This site features a section specifically for the Capital Budget, which includes appropriation-to-date and expenditure-to-date metrics for all active capital projects. Active projects are defined as projects that are progressing toward completion through either the planning, design, construction, or post-construction phases.

These budget metrics are initially aggregated by department, but there are drill options to see the data in terms of departments, projects, or subprojects. This user-friendly, interactive tool helps citizens understand how the capital budget is being distributed and utilized in the City of Austin. The datasets that power the Open Budget tool are also available through:

<http://budget.austintexas.gov/#!/view-data>.





Long-Range Capital Improvement Program Strategic Plan

The Long-Range CIP Strategic Plan takes a robust, data-driven approach to long-range capital program planning. The plan is used to inform decisions about current and future capital investments that collectively provide the infrastructure needed to support and shape the Austin around you. This best-managed approach advances the community’s vision through the Capital Improvement Program, and allows us to make more strategic and coordinated investments.

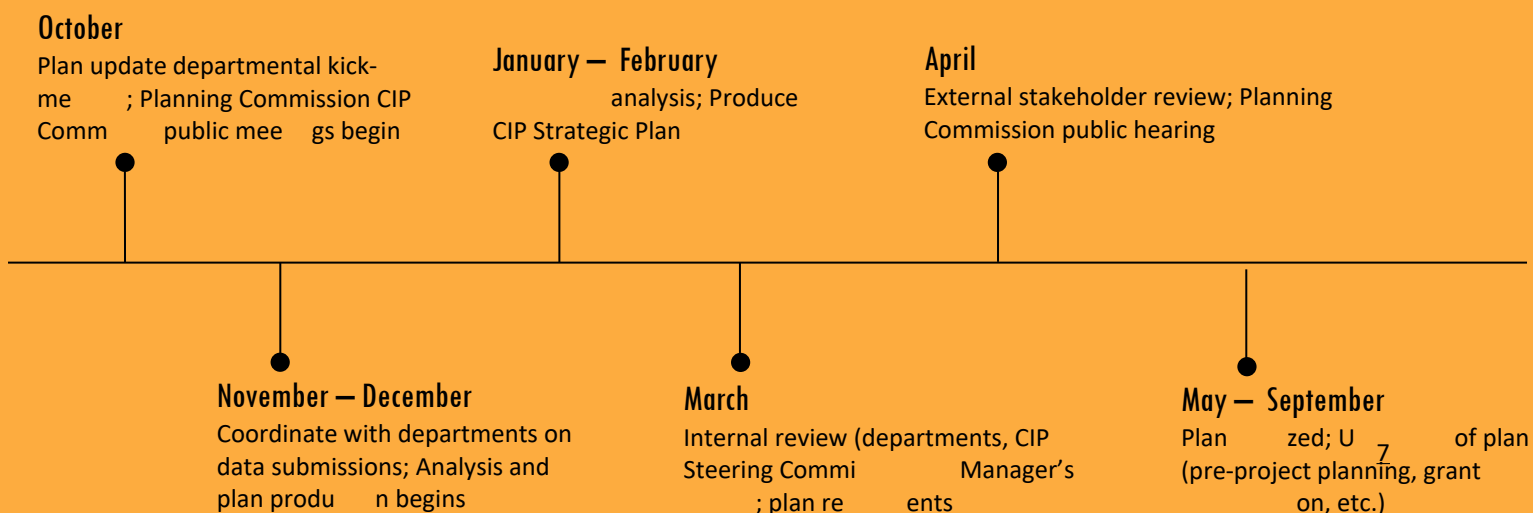
Goals:

- Create a stronger link between the Imagine Austin Comprehensive Plan and the City’s CIP
- Assist the Planning Commission in its City Charter requirement to annually recommend to the City Manager a list of capital improvement projects that implement the City’s comprehensive plan
- Improve transparency and understanding of citywide CIP needs
- Identify strategic capital investment areas, planned projects and opportunities for coordinated CIP investments
- Communicate unfunded needs to decision-makers to prepare for future funding and leveraging opportunities
- Inform development of long-term CIP funding strategies

Key Points:

- The Long-Range CIP Strategic Plan serves as a bridge between the community’s vision represented in Imagine Austin and the Five-Year CIP Plan, which appropriates funds for planned capital projects in the next five years.
- Planning Commission reviews the plan as a basis for its CIP-related recommendation to the City Manager in the Spring.
- The bi-annual production of the Long-Range CIP Plan kicks off in the Fall and provides an opportunity for staff across multiple departments to coordinate and collaborate for a best-managed approach to capital improvement program planning.
- The Long-Range CIP Strategic Plan is meant to play a large role during bond program development and grant funding opportunities; the plan represents the most current snapshot of citywide capital infrastructure needs.
- The plan is a mechanism for transparency about our citywide capital infrastructure needs and, through its Strategic Investment Analysis, provides information to decision-makers about how future capital infrastructure investment can meet Imagine Austin goals and objectives.

Bi-Annual Update Schedule



What You'll Find in the Plan

Recommendation Letter: Outlining capital improvement priorities to the Planning Commission to the City Manager as part of the Commission's annual requirements per City Charter.

Introduction to the Capital Improvement Program: Provides an easy-to-understand explanation of what the Capital Improvement Program is, how it's funded, and the key drivers for capital investment.

Comprehensive Infrastructure Assessment: Collects citywide infrastructure condition information to help inform future infrastructure needs and future funding opportunities.

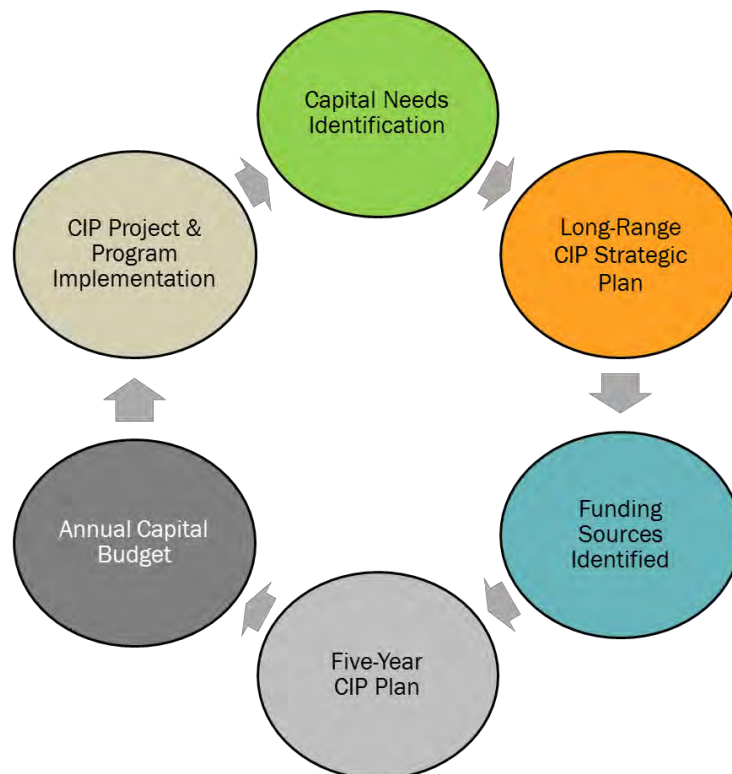
Strategic Investment Areas Overlay Analysis: Geographical mapping and analysis of the intersection of capital needs identified by the City and the City.

Rolling Needs Assessment: Bi-Annually updated list of long-term and unfunded citywide CIP needs, organized by infrastructure category.



The Capital Planning Process

The capital planning and decision-making process — or the process by which capital improvement projects go from concept to reality — is generally depicted in this diagram. While certain points in the process occur at particular times during the year, including development of the Long-Range CIP Strategic Plan, the Five-Year CIP Plan and the Capital Budget, other parts of the process, like identifying capital needs and funding sources as well as project implementation, occur year-round.





PART ONE: INTRODUCTION TO THE CIP



Chapter 1: Introduction to the Long Range-CIP Strategic Plan

The Capital Improvement Program (CIP) is all around you. You may not think about it every day, but it's the sidewalk you walk on, the park or library at which you meet your friends, even the pipes that carry water that comes out of your faucet. Assets such as these are operated and managed by the City of Austin, and they are part of a larger system of infrastructure that affects each and every person's quality of life.

The City is responsible for ensuring adequate infrastructure is available to citizens throughout the City. Through the Capital Improvement Program, the City makes sure that the infrastructure it owns operates safely, effectively, and at a level of service that the public expects. The Capital Improvement Program works in tandem with the Operations and Maintenance Program.

The Long-Range Capital Improvement Program Strategic Plan is a data-driven approach to planning for how the City's future capital improvements support the way Austin functions and grows in the coming years. The LRCSP helps ensure that capital improvements support the vision articulated in the *Imagine Austin Comprehensive Plan* as well as related plans and priorities that guide City capital investment, including the *Strategic Direction 2023* approved by City Council in 2017 to guide City decision-making in support of *Imagine Austin*. The Long-Range CIP Strategic Plan:

1. Articulates the City's capital improvement needs during the next 10 years to prepare for future funding and leveraging opportunities.
2. Links the Capital Improvement Program to City policies and planning priorities, including the *Imagine Austin Comprehensive Plan*, *Strategic Direction 2023*, and related City plans.
3. Facilitates infrastructure planning and coordination efforts between City departments and private development partners as well as with other governmental entities that manage infrastructure, including area counties, area school districts, Capital Metro, area colleges and universities, the Health District, and the State of Texas.
4. Improves the City's communication and transparency about citywide infrastructure improvement needs to Austin citizens and stakeholders.

IMAGINE AUSTIN

City Council adopted the *Imagine Austin Comprehensive Plan* in June 2012. *Imagine Austin* presents a long-term vision for the city that reflects the community's values and aspirations. Implementation of *Imagine Austin* is outlined by a five-point program, which includes "Capital Investment." The Long-Range CIP Strategic Plan was created soon after adoption of *Imagine Austin*, enhancing the City's ability to implement the community's vision with the help of the Capital Improvement Program.

Five-Point Implementation Program:

1. Community Engagement
2. Regulations
3. Capital Investment
4. Organizational Alignment
5. Partnerships



STRATEGIC DIRECTION 2023

City Council adopted *Strategic Direction 2023* in 2017. This 3-5 year strategic plan guides the City's work to implement *Imagine Austin* under 6 key outcomes.



ECONOMIC OPPORTUNITY & AFFORDABILITY

Having economic opportunities and resources that enable us to thrive in our community.



SAFETY

Being safe in our home, at work, and in our community.



CULTURE & LIFELONG LEARNING

Being enriched by Austin's unique civic, cultural, ethnic, and learning opportunities.



MOBILITY

Getting us where we want to go, when we want to get there, safely and cost-effectively.



HEALTH & ENVIRONMENT

Enjoying a sustainable environment and a healthy life, physically and mentally.



GOVERNMENT THAT WORKS FOR ALL

Believing that city government works effectively and collaboratively for all of us—that it is equitable, ethical and innovative.

5. Provides the basis for the City of Austin Planning Commission's formulation of recommendations on priority capital improvements that implement the City's comprehensive plan, in fulfillment of their responsibility under City Charter.

In the Long-Range CIP Strategic Plan

The Long-Range CIP Strategic Plan is divided into three parts:

PART I: Introduction to the CIP

The introduction provides an explanation of the Long-Range CIP Strategic Plan and CIP planning process (Chapter 1), the context for identifying future capital needs (Chapter 2), the key drivers for capital investment (Chapter 3), and funding and partnerships (Chapter 4).

PART II: Conclusions and Strategies

This section includes summary analysis and recommended priorities based upon the data compiled in the other sections of the Long-Range CIP Strategic Plan and the guiding goals and objectives related to implementation of *Imagine Austin* through capital investment.

PART III: Detailed Information and Analyses

The following chapters provide information on the City's future CIP needs and the detailed analyses that inform the overall conclusions and strategies for CIP investment in Part II.

Chapter 7: Comprehensive Infrastructure Assessment

To gain a better understanding of the collective state of Austin's infrastructure condition, the Public Works Department coordinated a comprehensive assessment of infrastructure assets in 2018. This assessment is part of a continuous, integrated process being developed by the Public Works Department in partnership with other departments involved in asset management and capital project planning and delivery.

The Comprehensive Infrastructure Assessment compiles data on the City's infrastructure inventory as well as infrastructure condition and other information. This information is used to inform departments' identification of capital renewal needs in the Rolling Needs Assessment and informs long-range planning for future capital investments in Austin's infrastructure.¹

¹ The 2018 Comprehensive Infrastructure Assessment builds on work initially coordinated by the City of Austin Capital Planning Office in 2014; however, due to significant changes in scoring methodology between 2014 and 2018, comparing

Chapter 8: Strategic Investment Analysis

The Strategic Investment Analysis is an analysis of the geographic alignment of future capital investment needs with City plans, policies, demographics, and anticipated growth patterns. The Strategic Investment Analysis is a starting point for identifying areas where planned capital investments identified in the Rolling Needs Assessment can be designed and coordinated to address multiple City priorities. The analysis connects the City's plans, particularly *Imagine Austin*, with capital improvements, and ensures that capital projects and programs play a critical role in realizing community goals and priorities.

Chapter 9: Rolling Needs Assessment

The Rolling Needs Assessment identifies the City of Austin's potential future capital projects and programs over a period of 10 years or longer and provides capital departments an opportunity to plan programs and projects for the long-term and coordinate efforts when feasible. The Rolling Needs Assessment includes the ongoing capital improvement programs that maintain the condition of existing infrastructure and ensure infrastructure meets increased service demands. It also includes potential strategic capital investments that have been identified through the City's planning efforts, including *Imagine Austin* and attached small area plans; City Council policy direction; and regional coordination. Some of these future needs have an identified funding source. In other cases, additional funding will be needed.²

Strategic Capital Investments

A strategic capital investment is an innovative approach to better provide services to the community, respond to specific City Council-identified capital investment priorities, or advance *Imagine Austin* goals through implementation of major capital projects that extend beyond the work of any one City department.

results across years is not recommended for all infrastructure types.

² In order to provide a comprehensive picture of capital needs, this year's Rolling Needs Assessment includes fully and partially funded project needs, as well as needs for which funding has not yet been identified.

Capital Improvement Planning Cycle

The Long-Range CIP Strategic Plan is part of a larger Capital Improvement Program planning cycle—a continuous process of planning, funding and implementation that generally includes six phases, described in this section. The cycle is a multi-year process; however, it is anchored by points in which a snapshot of the City’s Capital Improvement Program is made available to the public and decision-makers. These snapshots are the bi-annual publication of the Long-Range CIP Strategic Plan and annual publication of the Five-Year CIP Plan and the Capital Budget. The general cycle is illustrated in Figures 1.1 and 1.2.

Figure 1.1 Overview of CIP Planning Cycle

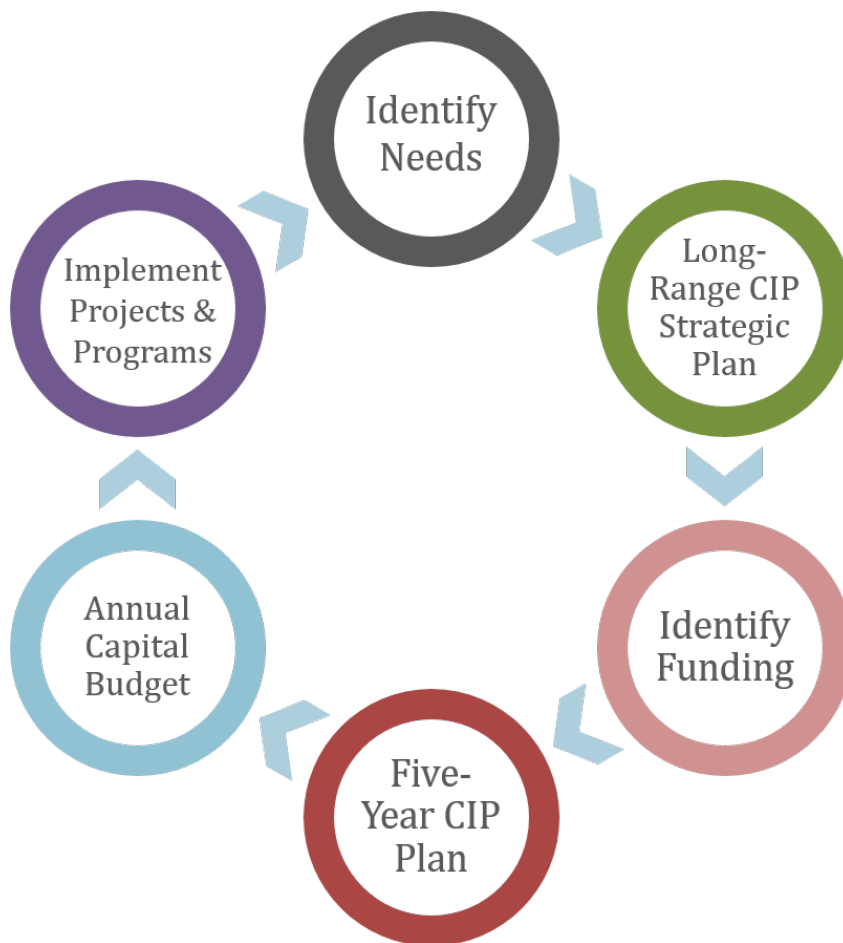
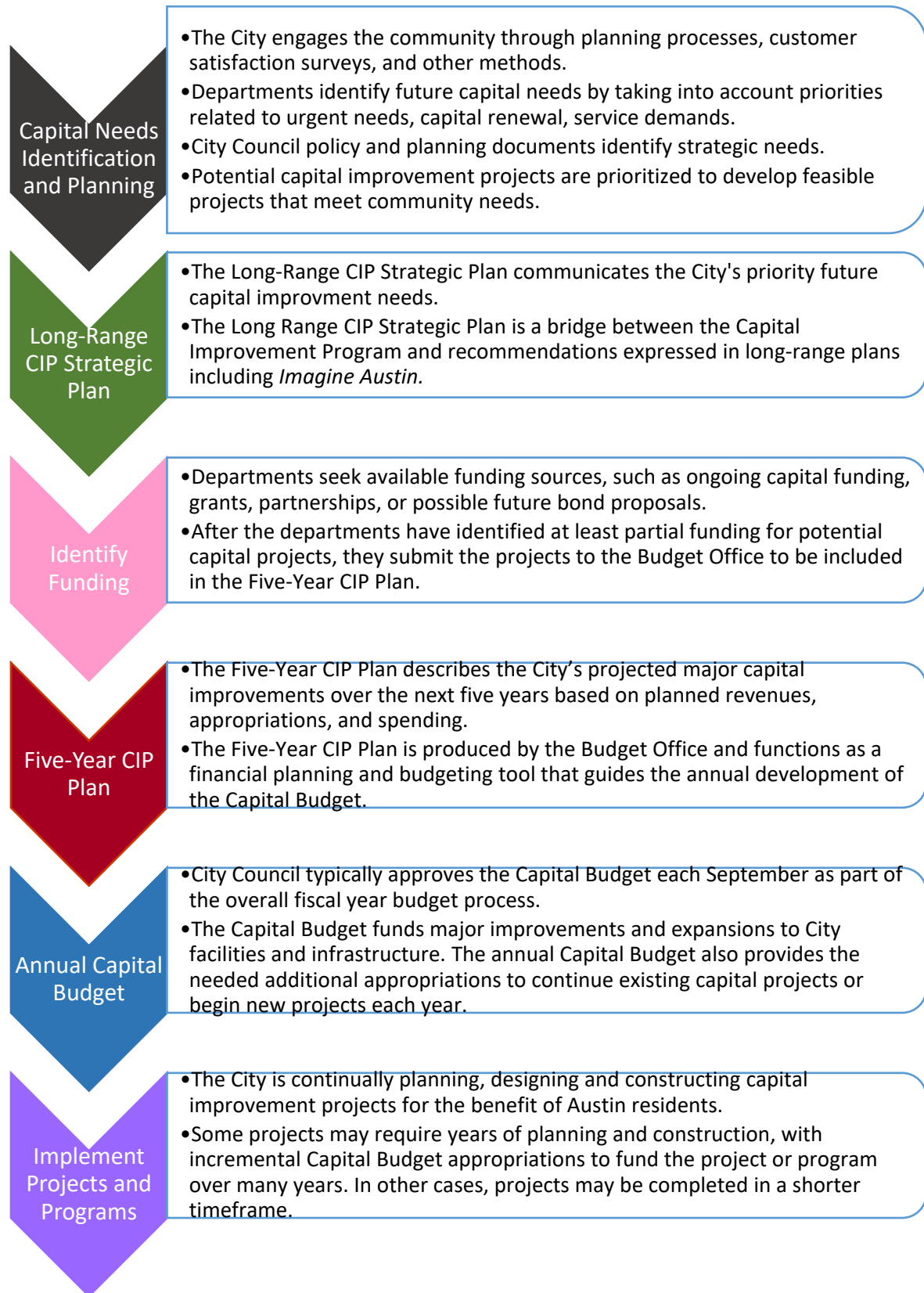


Figure 1.2 Steps in the CIP Planning Cycle





PAS MEMO

Integrating Capital Improvements Planning With the Comprehensive Plan

By Stevie Greathouse, Liane Miller, AICP, and Ming-ru Chu

Comprehensive plans are generally implemented through a combination of regulations, city expenditures, and partnerships with the private sector. Though many cities focus on implementing their comprehensive plans primarily through regulations, capital investments — in particular strategic infrastructure investments that support the development pattern envisioned by the plan — are just as important to achieve full implementation of the plan.

Unlike land development regulations, however, capital investments are generally planned, designed, funded, and constructed entirely outside of the planning department's zone of control. Given this reality, it can take a bit of creativity and persistence to ensure that the comprehensive plan influences and informs the capital improvement program (CIP).

With adoption of the *Imagine Austin Comprehensive Plan* (Austin 2012), the City of Austin, Texas, made a conscious choice to integrate comprehensive planning into the city's CIP. Over the last several years, the city has explored innovative approaches to this integration, including development of the *Long-Range CIP Strategic Plan* (Austin 2017b).

This *PAS Memo* will provide a detailed summary of the approaches and lessons learned in the City of Austin through its efforts in this area. The *Memo* will also provide a summary of action steps that can be used by planners seeking to integrate their comprehensive plan with capital improvements planning more fully.

CIP and the Comprehensive Plan

A *capital improvement program* (CIP) plan is a short-range plan, usually spanning four to ten years, that identifies capital projects, provides a planning schedule, and identifies options for financing the plan. The typical CIP planning process is a recurring cycle that begins with identification of needs and funding, then proceeds through development of a five-year CIP plan and annual capital budget before implementing projects (Figure 1).

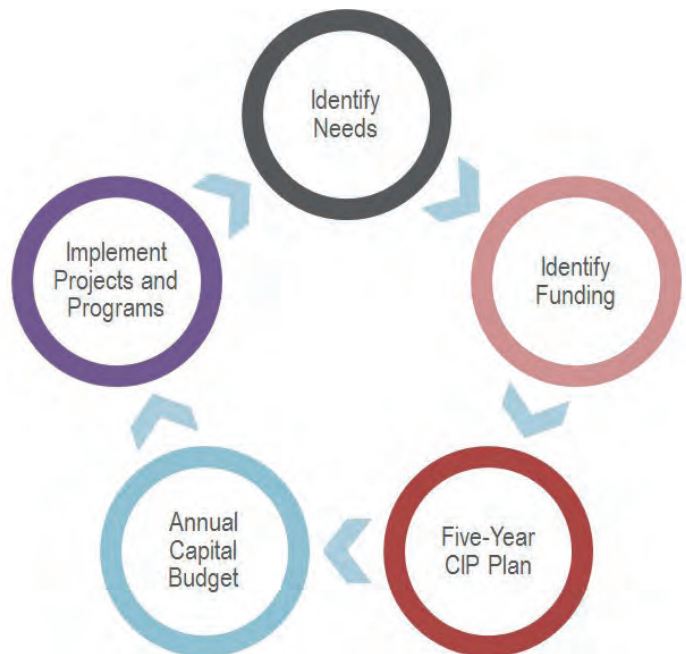


Figure 1. The CIP planning cycle. Courtesy City of Austin.

A *comprehensive plan* is a long-range plan, usually with a 20- to 50-year horizon, that provides an overarching vision and policies for a community and is intended to guide future actions in order to ensure orderly development and improve quality of life. Actual implementation of the comprehensive plan depends heavily on public and private investments in development and infrastructure. Major investments in public infrastructure are typically sequenced and prioritized within a jurisdiction's CIP.

The CIP may implement the comprehensive plan by funding one or more strategic infrastructure investments recommended by the comprehensive plan, by prioritizing investments based

on the policy framework of the comprehensive plan, or through some combination of these approaches. Integrating the CIP with the comprehensive plan can help to ensure that capital investments are working in tandem with development regulations and public-private partnerships toward realizing the vision of the comprehensive plan, and that development intensities and infrastructure capacity are in sync over time.

While capital investments are essential to implementation of the comprehensive plan, it can be very difficult to ensure that these investments are achieving that implementation for a number of reasons:

- The CIP plan is typically developed and updated in tandem with the annual municipal budget, which is generally geared toward financial accountability rather than comprehensive planning policies.
- The CIP plan generally has a far shorter funding horizon than the comprehensive plan.
- The CIP must respond to a host of infrastructure drivers including urgent needs, capital renewal needs, and service demands, which may be beyond the scope of the comprehensive plan.
- The CIP plan is often a ledger document, with decisions regarding funding being made by the implementing department or through general obligation bond package development before including funded projects in the plan.

However, with some careful coordination, cities can ensure that CIP planning provides for capital investments that implement the comprehensive plan and appropriately leverage land-use and development decisions.

Austin's Experience

Like many major U.S. cities, the City of Austin has always had good intentions about integrating its comprehensive plan and capital improvement program. The Austin City Charter (Austin 1994) requires that the CIP and the land development code be

consistent with the comprehensive plan, and even goes so far as to require that the planning commission provide to the city manager an annual list of recommended capital improvements that are necessary or desirable to implement the comprehensive plan (see sidebar).

However, while this charter requirement has been in place for more than 30 years, integration of the CIP and the comprehensive plan was fairly limited prior to 2010.

In 2010, newly hired City Manager Marc Ott began to take significant actions to change the city's processes. In addition to shepherding development of the first new comprehensive plan in more than 30 years, Ott partnered with the planning commission and city staff to make several significant changes to the city's budgeting and capital planning process to support better integration of the CIP and the comprehensive plan. Over time, the changes have led to better coordination across city departments, a more streamlined planning commission process, and construction of strategic capital investments that are helping to build out the vision of the comprehensive plan.

Establishing the Foundation:

The Imagine Austin Comprehensive Plan

The *Imagine Austin Comprehensive Plan* (Austin 2012) was adopted in 2012 after two years of community engagement and over 18,500 community inputs. *Imagine Austin's* vision statement — to be “a beacon of sustainability, social equity, and economic opportunity; where diversity and creativity are celebrated; where community needs and values are recognized; where leadership comes from its citizens and where necessities of life are affordable and accessible to all” (Austin 2012, 2) — expresses six core principles for action:

- grow as a compact, connected city
- integrate nature into the city
- provide paths to prosperity for all
- develop as an affordable and healthy community
- sustainably manage water, energy and other environmental resources
- think creatively and work together

These core principles for action point Austin toward becoming a city of complete communities where Austinites of all ages will be able to access employment, shopping, education, open space, recreation, and other services and opportunities that fulfill their needs and enable them to thrive. At the same time, Austin will protect its important environmental resources and preserve its identity, culture, and sense of place.

The framework for realizing complete communities throughout Austin is embodied in the Growth Concept Map (Austin 2012, 103). The Growth Concept Map (Figure 2, p. 3) represents areas where the city plans to accommodate more residents, jobs, mixed use areas, open space, and infrastructure over the next 30 years. It identifies activity centers and corridors in and along which the city will focus investments and an expanded transportation system. The corridors and centers designated on the Growth Concept Map provide a geographic

AUSTIN CITY CHARTER, ARTICLE X

§ 4. THE PLANNING COMMISSION — POWERS AND DUTIES

The planning commission shall:

- (1) Review and make recommendations to the council regarding the adoption and implementation of a comprehensive plan (as defined by Section 5 of this article) or element or portion thereof prepared under authorization of the city council and under the direction of the city manager and responsible city planning staff;
- (4) Submit annually to the city manager, not less than ninety (90) days prior to the beginning of the budget year, a list of recommended capital improvements, which in the opinion of the commission are necessary or desirable to implement the adopted comprehensive plan or element or portion thereof during the forthcoming five-year period; ... (Austin 1994)

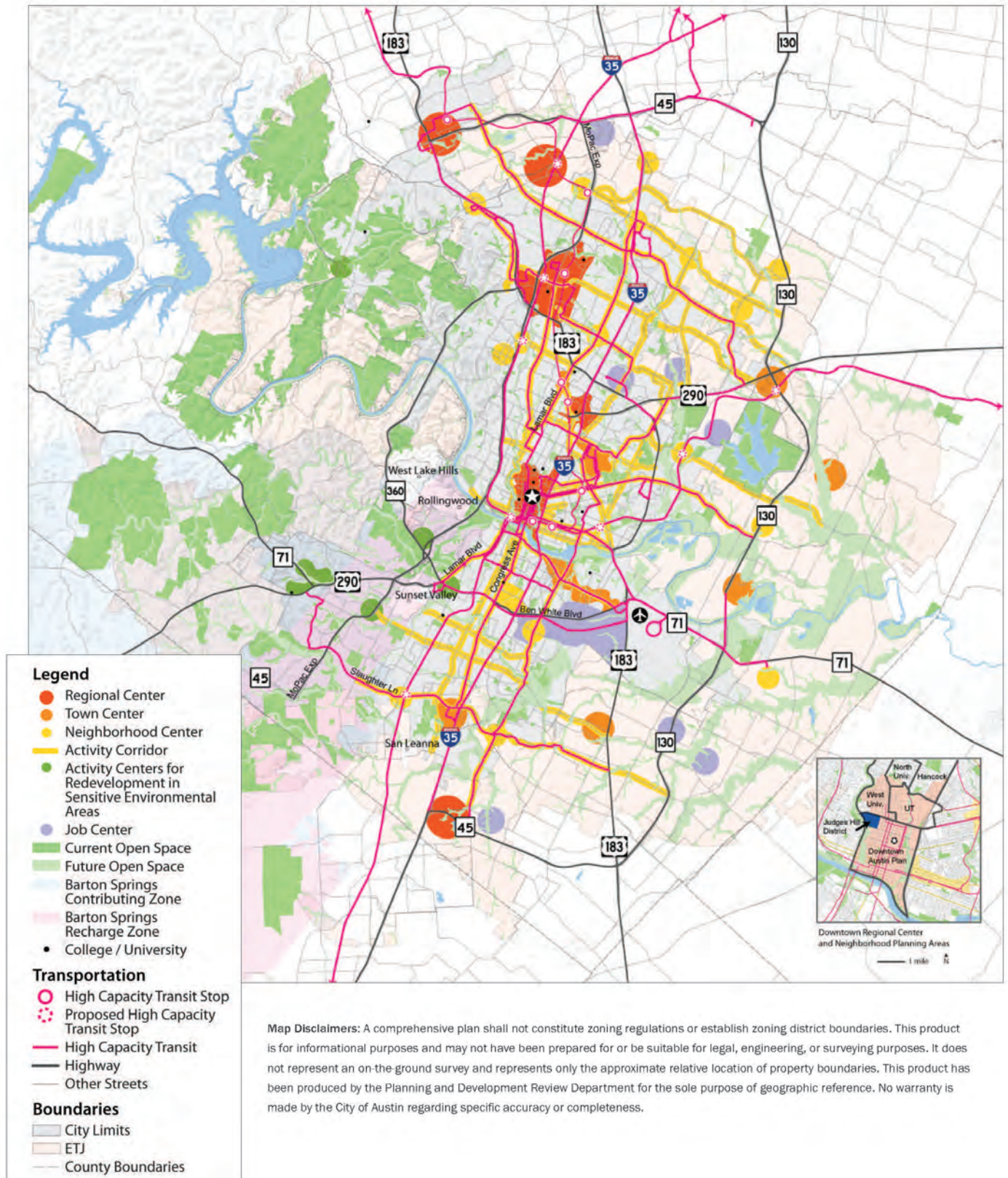


Figure 2. Imagine Austin Growth Concept Map. Courtesy City of Austin.

Imagine Austin's Priority Programs

Imagine Austin's eight Priority Programs are:

1. Invest in a compact and connected Austin.
2. Sustainably manage our water resources.
3. Continue to grow Austin's economy by investing in our workforce, education systems, entrepreneurs, and local businesses.
4. Use green infrastructure to protect environmentally sensitive areas and integrate nature into the city.
5. Grow and invest in Austin's creative economy.
6. Develop and maintain household affordability throughout Austin.
7. Create a Healthy Austin program.
8. Revise Austin's land development regulations and processes to promote a compact and connected city. (Austin 2012, 186)

Priority Programs



Figure 3. Imagine Austin Priority Programs. Courtesy City of Austin.

guide for where strategic capital investments should be made in tandem with private development and redevelopment in the future.

Imagine Austin's six core principles for action are reflected in eight priority programs that organize key policies and actions into related groups for coordinated implementation (see sidebar). The participants in the *Imagine Austin* process saw alignment of capital investments with the comprehensive plan as essential to plan implementation, and focused one of the eight priority programs on investment to ensure that this work would not be forgotten. The Invest in a Compact and Connected Austin priority program (Austin 2018c) calls for coordination of capital investments, incentives, and regulations to support the *Imagine Austin* vision.

Setting the Stage: Creating the Capital Planning Office

In addition to launching a process to develop a new comprehensive plan, Ott created the City of Austin's Capital Planning Office (CPO) in 2010. The Capital Planning Office was created to provide program-level preparation for an anticipated 2010 Mobility Bond election, and to help prepare for the CIP plan's role in the implementation of *Imagine Austin* (Austin 2012).

Austin's CPO was established to create a robust, comprehensive, and integrated CIP that supports the city's planning goals and priorities. In the memo establishing the office, Ott called for the creation of CPO to "ensure that the City's entire capital program ... is planned, developed and implemented in a strategic, integrated and effective manner, that is consistent with ... planning and economic development goals and policies" (Ott 2010).

CPO was similar to a capital program or portfolio management office, or PMO, which is a model seen in other cities. A PMO is a group within a larger organization which is responsible for managing the overall portfolio of capital

projects for that organization by prioritizing projects, allocating resources to projects, and identifying which projects to initiate, reprioritize, or terminate. Portfolio management is intended to provide a link between enterprise management and visioning occurring at the executive level, and project management occurring within staff-level capital project teams. Prior to the establishment of the Capital Planning Office, City of Austin portfolio management activities were split between the individual departments developing projects and the budget office.

Ott's intention in creating a separate Capital Planning Office was to provide additional resources to allow for greater transparency and consistency across departments, and to more strongly link portfolio management with planning. By creating a stand-alone office under city management dedicated to capital planning that was distinct from the budget office, portfolio-management decisions could be made on a corporate level (rather than by department). The office was initially staffed with an executive level capital planning officer and approximately five professional staff with expertise in planning, capital project development, public engagement, and information technology.

Ott established several objectives for CPO that framed its work, including:

- **Planning:** CPO assisted in the development of the CIP from an organizational perspective, primarily through the creation of the *Long-Range CIP Strategic Plan*.
- **Coordination:** CPO participated in and led interdepartmental coordination efforts aimed at more strategic and effective capital improvement outcomes.
- **Bond Development and Oversight:** CPO managed the development of several general obligation bond programs. The office provided management and oversight of the city's funded bond programs, including assistance

with project sequencing, development of spending milestones, and ongoing monitoring of progress.

- **Communication:** CPO supported the city's open government goals by providing information, reports, and updates about the CIP to city management, city council, and the public (Ott 2010).

The Capital Planning Office coordinated a successful 2010 Mobility Bond process supporting early implementation of the vision of the comprehensive plan still under development. Staff from the office also worked to develop a process that would help to connect the comprehensive plan with the annual CIP on an ongoing basis. During the first several years, this work included development of a planning model that was used to evaluate projects included in the five-year CIP plan. However, after several years of experimentation and extensive coordination with other city departments as well as the planning commission, it became apparent that a new level of planning and an additional tool was needed to help integrate the comprehensive plan and CIP beyond the framework provided by the five-year CIP plan. This realization led to development of the first *Long-Range CIP Strategic Plan* by the Capital Planning Office in 2013.

Connecting the Pieces: City of Austin Long-Range CIP Strategic Plan

The *Long-Range CIP Strategic Plan* (LRCSP) is intended to bridge the gap between the *Imagine Austin Plan* and the annual CIP plan. The LRCSP provides an opportunity for corporate-level discussion of planning needs and priorities before projects are funded and then set in stone during the annual CIP process.

Prior to 2013, the planning department worked with the planning commission to identify and develop a list of priority CIP projects concurrently with development of the five-year CIP plan. The list was developed based on the adopted comprehensive plan, neighborhood plans, and community engagement conducted by the planning commission. However, because the planning commission's CIP list was developed on a parallel track late in the CIP planning process, it was not very successful in informing the various funding decisions reflected in the financially constrained five-year CIP plan.

In contrast, the LRCSP provides a robust, data-informed approach to long-range capital planning. Decisions inform current and future capital investments that collectively provide the infrastructure needed to support and shape the city. The plan has three major components: a comprehensive infrastructure assessment, a rolling needs assessment, and a strategic investment analysis.

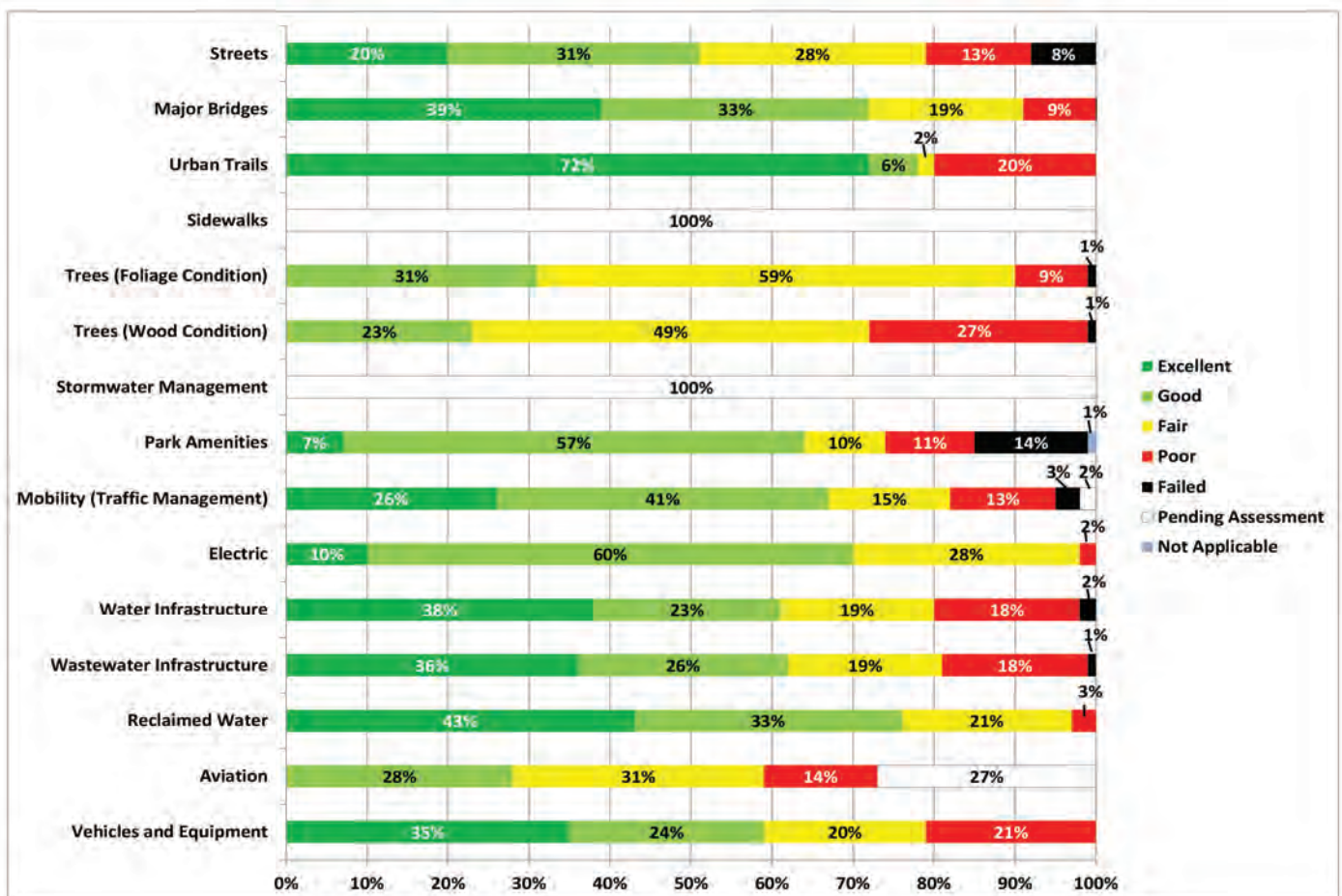


Figure 4. Summary of Infrastructure Condition, 2014 (Austin 2017b, 42–45).

Infrastructure Category	City Department
Area Plans	Planning and Zoning Department Neighborhood Housing and Community Development Department Economic Development Department
Aviation	Aviation Department
Electric	Austin Energy
Facilities	Building Services Office of Sustainability All City departments
Housing	Neighborhood Housing and Community Development Department
Land Acquisition	Office of Real Estate Services All City departments
Mobility Infrastructure	Austin Transportation Department Public Works Department Parks and Recreation Department Planning and Zoning Department Economic Development Department
Park Amenities	Parks and Recreation Department Public Works Department
Public Art	Economic Development All City departments
Stormwater	Watershed Protection Department Parks and Recreation Department Public Works Department Economic Development Department
Water Infrastructure	Austin Water Utility

Figure 5. Rolling Needs Assessment: Infrastructure Categories and Responsible Departments (Austin 2017b, 62).

Comprehensive Infrastructure Assessment

The first component of the LRCSP is the comprehensive infrastructure assessment, which collects citywide infrastructure condition information to help inform future infrastructure needs and funding opportunities (Austin 2017b, 39). The goal of the comprehensive infrastructure assessment is to quantify the state of infrastructure, acceptable levels of service for different types of assets, and where those service levels are achieved.

The comprehensive infrastructure assessment captures information across various infrastructure types on asset inventory, condition, age and expected useful life, and acceptable levels of service.

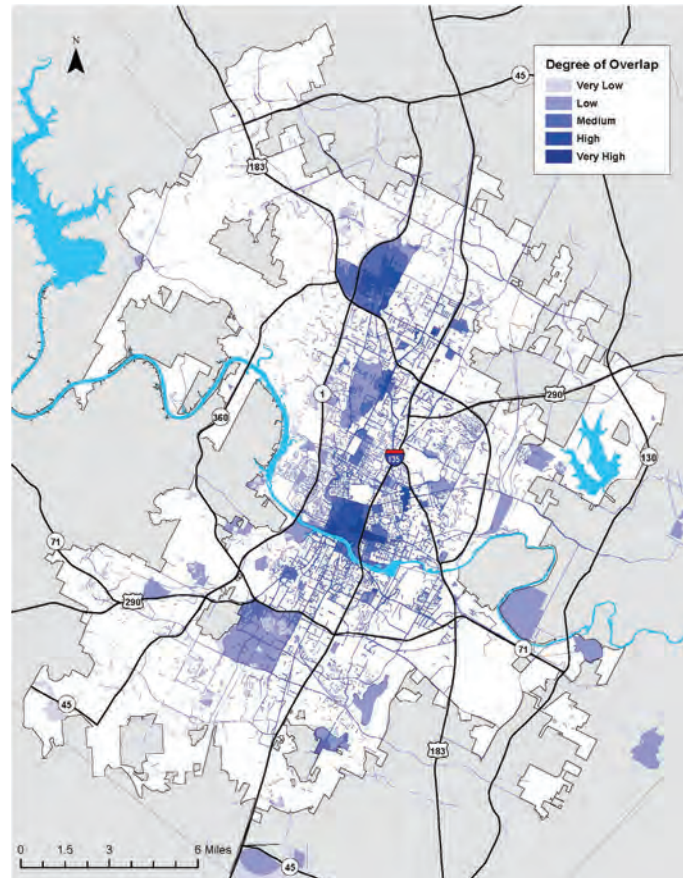
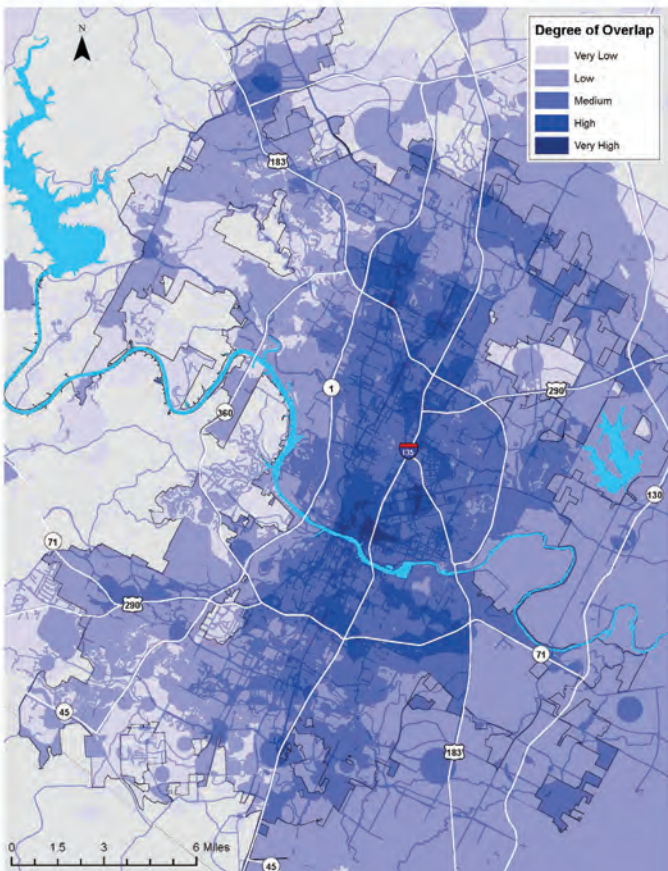
Figure 4 (p. 5) shows a summary of infrastructure condition, utilizing the same rating scale (failed, poor, fair, good, and excellent) across all infrastructure types. Using a consistent scale allows for a comprehensive, easy-to-understand look at the

state of the city's infrastructure. That data can be used for many purposes, such as informing long-range capital infrastructure need and funding strategies.

In developing the comprehensive infrastructure assessment, city departments collect data across many asset types, which helps them do the work of identifying, prioritizing, and communicating needs. Each department compiles information through a method that works for it. Flexibility in the process is needed because of the varying levels of information available for different asset types.

Rolling Needs Assessment

The second component of the LRCSP is the rolling needs assessment (Austin 2017b, 61; Figure 5). This is a catalog of all unfunded infrastructure needs across the city, organized by 13 infrastructure categories, such as water, mobility, facilities, and



Left to right: Figure 6. Strategic Areas Map (Austin 2017b, 51); Figure 7. Strategic Investment Areas Map (Austin 2017b, 53).

park amenities. Figure 5 shows the list of infrastructure categories and which departments are responsible for each.

Each year departments submit their needs for the rolling needs assessment. The assessment includes descriptions and justifications of ongoing programs needing additional funding, key highlighted projects, and strategic investments. As part of this component, departments also map their needs so they can be viewed spatially, creating a rolling needs assessment map that shows all department-identified infrastructure needs.

Departments have an opportunity to update their needs annually to reflect changes in priorities based on changes in CIP drivers, whether it's urgent needs caused by a recent natural disaster or new policy or planning priorities approved by the city council. One example of planning priorities are recommendations from the small area plans, which are adopted as attachments to the *Imagine Austin Comprehensive Plan*. The highest priority small area plan recommendations, as determined by the neighborhood organization for that area, are incorporated into the rolling needs assessment and provided to infrastructure departments as a reference layer as they plan their programs and consider various needs. For example, the public works department uses neighborhood plan recommendations in the prioritization process for sidewalk improvements.

Strategic Investment Analysis

The final component of the LRCSP is the strategic investment analysis (Austin 2017b, 47). This identifies areas where needed capital investments called out in the rolling needs assessment (Austin 2017b, 61) could address recommendations for capital improvements from the *Imagine Austin Comprehensive Plan* as well as other adopted city plans and initiatives.

The methodology for this analysis is straightforward. It requires two maps: the rolling needs assessment map plus a strategic areas heat map created using geospatial data for the *Imagine Austin Growth Concept Map* and other city plans and initiatives (Figure 6). Each of the layers included in the strategic areas map represent city council- or department-adopted documents that have recommended some type of capital improvement or investment and established community expectations that these recommendations will be considered in CIP decision making.

Many of these plans and initiatives are also tied directly to the *Imagine Austin Comprehensive Plan* as attachments. Each plan or initiative has a geographic target area which can represent a variety of features, from a specified neighborhood planning area boundary to the demographic composition of an area. The geographic areas with the most overlapping initiatives are identified by a dark shade and are designated "very high" strategic areas.

Those areas of overlap between the strategic areas map and rolling needs assessment map become the strategic investment areas map (SIA). This map identifies the intersection of areas of already identified unfunded needs and areas with already identified recommendations and goals (Figure 7, p. 7). These are the areas where the city has the most opportunity to support previously identified goals with new investment. Areas with “very high” and “high” overlap include Downtown, TODs, and *Imagine Austin* corridors. Moving forward, the SIA methodology will be adjusted to address limitations identified to date.

Implementation and Process Improvement

Since the creation of the *Long-Range CIP Strategic Plan*, the rolling needs assessment has been successfully used as the basis for bond development processes (Figure 8). Specifically, the needs identified in the rolling needs assessment served as the starting point for development of a 2016 Mobility Bond package (a historic \$720 million transportation bond program approved by Austin voters in November 2016) as well as for a citywide bond package currently in development that could be brought before voters in November 2018 (Austin 2018a). Prior to creation of the long-range plan, departments had been asked to identify needs in an ad hoc manner during development of bond packages. The plan has allowed for a needs assessment to be developed and maintained on an ongoing basis. It is more clearly informed by the comprehensive plan, and it can be used when seeking other funding resources including grants and private partnerships.

In support of the Invest in a Compact and Connected Austin priority program, the City of Austin has developed a “Compact and Connected” curriculum to train and support staff from all departments. Internal alignment and a shared understanding of what compact and connected growth looks like has been crucial for policy changes and projects that support *Imagine Austin*. The city also adopted a complete streets policy (Austin 2014) in support of the notion that all users on Austin’s streets should have connected networks that are safe, comfortable, and beautiful regardless of mode.

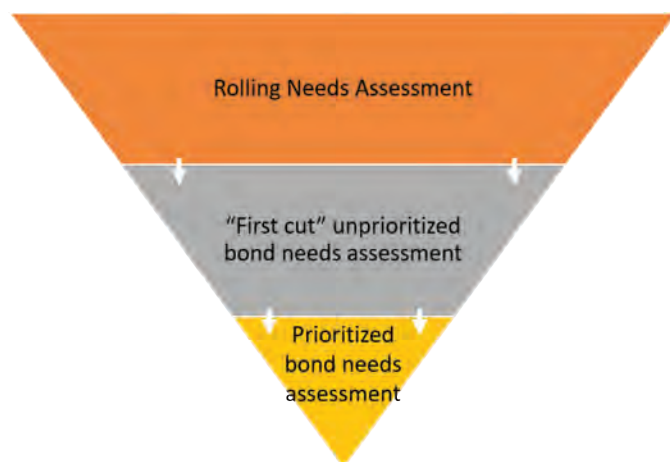


Figure 8. Bond Program Needs Assessment. Courtesy City of Austin.

In early 2017, the Capital Planning Office was reorganized to form a Corridor Program Office focused exclusively on implementing the 2016 Mobility Bond. With that reorganization, the Planning and Zoning Department assumed responsibility for the LRCSP. This organizational shift has provided an opportunity to evaluate and make process improvements.

Future plan updates will be developed on a two-year cycle. The city’s Budget Office will coordinate the rolling needs assessment, the Public Works Department will update the comprehensive infrastructure assessment, and the Planning and Zoning Department will continue to lead the strategic investment analysis and coordinate the overall plan update process. The planning commission reviews the LRCSP and transmits the plan to the city manager on an annual basis with a cover letter outlining planning commission recommendations to ensure alignment between the CIP and the comprehensive plan, as called for in the city charter. For future updates, the City of Austin will also be reassessing the methodology used to develop the strategic investment analysis to improve its efficacy and to bring it into closer alignment with the comprehensive plan.

What Planners Can Do: Action Steps

While every organization is different, there are steps that all planners can take to improve the integration of the comprehensive plan with the CIP.

Understand the Budget and Capital Funding Processes.

Project needs and funding decisions are often made by many different players well in advance of compiling the five-year CIP plan. In order to effectively integrate comprehensive planning into CIP planning, planners must understand budget and capital funding processes and get to know where the various levers exist to impact those funding processes. Some typical capital funding process levers include:

- department budgeting and prioritization
- general obligation bond development
- grant writing
- city council or city manager discretionary funding prioritization
- land development-related exactions
- public-private partnerships and innovative funding (e.g. TIFs, PIDs, etc.)

Understand the Capital Delivery Process and Drivers of Capital Investment.

Planners do a disservice to the community they are planning with and for by providing input into the capital improvement planning and delivery process at the wrong point in that process. Planners should work to understand the different infrastructure systems and the ways they are planned for by each specialty to maximize influence on the project scope.

For example, planning for park improvements is very different than planning for upsizing a water line, yet in both project development processes there are times when coordinating with another project or incorporating planning recommen-

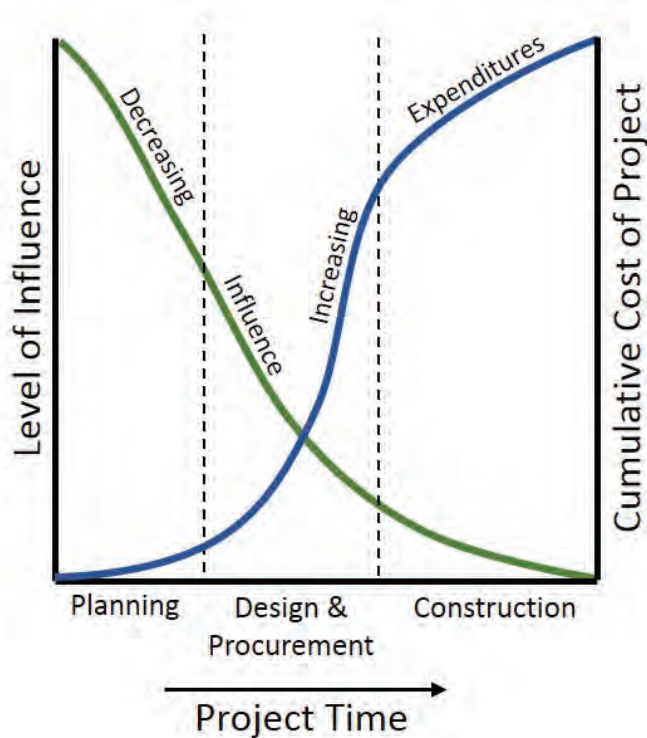


Figure 9. Construction projects cost-influence curve (based on Paulson 1976)

dations would be possible and most impactful. It can be very costly to a capital project, both financially and in potential delays, to add or change design elements later in the development process.

This concept is illustrated in the cost-influence curve (Figure 9), originally introduced by Boyd C. Paulson in 1976, which is routinely used when describing how the ability to influence a construction project with minimal cost implications decreases as the project moves from the planning phase to construction (Paulson 1976).

It is also helpful for planners to understand the different drivers of capital investments. With this knowledge, planners can determine what the process will be for policy and planning priorities to be included and considered among urgent needs and those based on capital renewal and service demands.

Build on Existing Data, Use It, and Share It. Planners should familiarize themselves with the CIP-related data sources already available to their cities, and build on this data as they work to coordinate CIP with comprehensive planning.

CIP Data. Many cities maintain a CIP database of record which may or may not feature geographic data. This data can form the core of the CIP coordination engine.

The City of Austin relies on a web-based project management system called eCAPRIS (City of Austin Project Reporting and Information System). The database provides tracking and reporting functions for planning, funding, appropriations, and spending on capital improvement projects. It stream-

lines interdepartmental communication and coordination by allowing staff to check eCAPRIS for project information once project managers have entered information and updates. eCAPRIS data can also be pulled together for sophisticated analysis and reporting in several ways. A GIS component furthers analysis capabilities by allowing projects to be defined spatially and viewed through CIVIC, an online, interactive visualization tool (Austin 2015). The City of Austin also uses eCAPRIS data in combination with the geographic data to power an internal GIS viewer, IMMPACT, which is used by CIP project managers to better coordinate future projects and identify “dig once” opportunities.

Plan Implementation Data. Planners can translate adopted plans into a comprehensive data set which allows for easier tracking of plan implementation and better coordination with CIP departments.

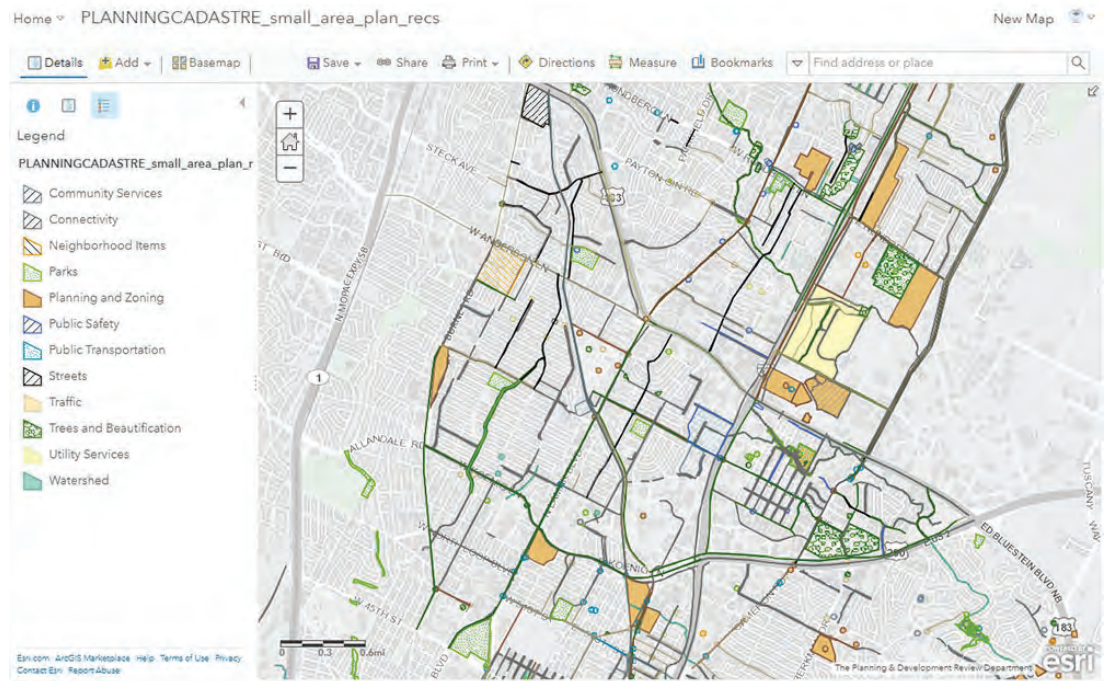
The City of Austin Planning and Zoning Department tracks all adopted small area plan action items in a relational database which is linked to spatial data. The spatial data is available to all City of Austin staff via an internal GIS server (Figure 10, p. 10). The spatial data is also available to CIP project managers as a reference layer within the IMMPACT viewer. Action item status updates come from a variety of sources including eCAPRIS and individual departments’ GIS data. Analyses and reports can be run on implementation status, type of action item, primary responsible department, or prioritized by neighborhood or other characteristic. The City of Austin Planning and Zoning Department also produces a *Small Area Plan Implementation Annual Report* (Austin 2018d) and other reporting based on this database, and makes the data available to the public through an online viewer and other means.

Take Stock of Infrastructure Conditions. Data-driven planning and decision making is becoming more prevalent and desired by our communities. The reality is that infrastructure needs almost always exceed available funding. With funding constraints, it is important to have data to help identify infrastructure needs, including the inventory and condition of the assets. Understanding infrastructure conditions also enables planners to compare needs across asset types and make the case for additional or more sustainable investment in a certain infrastructure category to improve the level of service. Developing the capability to report on infrastructure condition will also allow planners to establish performance measures by which we can measure progress toward community goals.

Be Flexible About Organizational Structure. Capital planning lies in an area of overlap between planning, financial services, and infrastructure services, and there is no one “right” way to organize your city around this work. Figure 11 (p. 10) offers one example. You may consider:

- establishing a single high-level “capital planning” or “portfolio management” office

Figure 10. Small area plan recommendations — ArcGIS online map (Austin 2018e).



- designating resources within an existing department (including planning, financial services, or infrastructure services)
- creating a capital planning strike team within the city manager's office or a council office
- establishing a collaborative approach where one department is responsible for overall coordination, while other departments provide specific support based on their expertise and function

Manage Public Expectations. There will never be enough funding to build every needed project, and even funded capital investments can take many years to fully develop and implement. It is easy for public stakeholders to become disappointed and feel like the plan they worked on “didn’t do anything” when they don’t see immediate results. This can have a negative impact on overall public trust in government. Planners may not be able to increase the funding available, but they can work to manage public expectations by:

- educating the public on the capital delivery process and how the plan’s recommendations will guide that process
- showcasing capital renewal needs as well as strategic investment priorities during the planning process
- providing a realistic picture of how one neighborhood’s desired project ranks against other priorities across the city (it might not be a high priority for the city overall)
- providing transparent, open data and reporting so that the public can see what is getting built
- providing funding visualizations

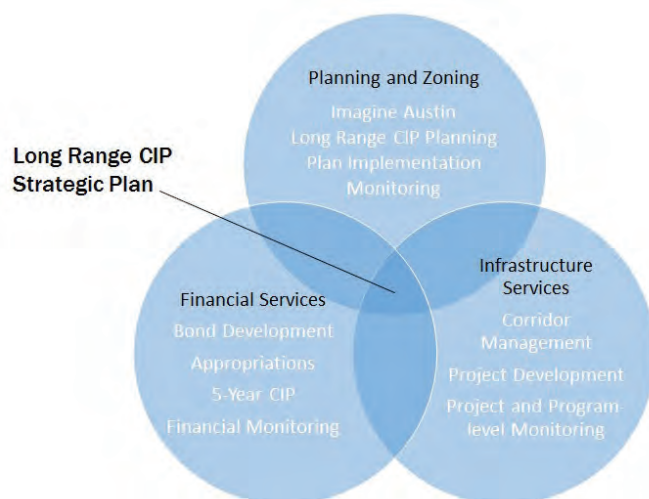


Figure 11. Sample organizational structure for long-range CIP planning. Courtesy City of Austin.

Focus on Key Strategies and Connect the Dots. Planners are well suited to the task of convening discussions across multiple disciplines and interest groups, and most planners, particularly those involved in comprehensive planning, are “dot connectors” by nature. Planners can use these skills in myriad ways to help their communities better align investments with the comprehensive plan, including:

- analyzing geographic data and developing maps that identify where particular investments could have the biggest impact on achieving the community’s vision

- convening departments to discuss opportunities for leveraging strategic investments through forums and roundtables
- bringing funding to the table, making tactical improvements, and coordinating pilot projects
- coordinating with city management to build future bond package recommendations or grant applications around strategic investments implementing the comprehensive plan
- looking for opportunities in every project that comes down the investment pipeline
- coordinating on an ongoing basis with capital project development and financial services staff to identify ways to integrate the comprehensive plan into CIP decision making
- using annual reporting to demonstrate how investments are implementing plans

Conclusion

While it can be challenging to integrate capital improvements planning with the comprehensive plan, the ability for cities to fully implement the vision laid out in their comprehensive plans depends on this integration. The City of Austin has experimented with how to approach this integration over the last several years, and looks forward to learning from others.

About the Authors

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