

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2022 - 2026



APEX
NORTH CAROLINA

THE PEAK OF GOOD LIVING

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Section 1: Overview of the Capital Improvement Plan

The Capital Improvement Plan (CIP) is the planning mechanism by which the Town Council allocates limited financial resources to implement long-term goals as defined in the Town's Strategic Plan, Advance Apex: The 2045 Transportation Plan, the Downtown Master Plan, the Parks and Recreation Master Plan, and other similar planning documents. The purpose of the CIP is to forecast and match projected revenues and major capital needs over a five-year period. Capital planning is an important management tool that strengthens the linkage between community infrastructure needs and the financial capacity of the Town.

The CIP is a multi-year plan for major capital expenditures such as the acquisition of land, construction or significant renovation of public facilities (i.e. buildings/parks), construction of new transportation infrastructure (i.e. roads, sidewalks, multi-use paths), expansion or significant renovation of water, wastewater, electric, or stormwater infrastructure, capital equipment to support operations, or any combination of the above. Projects eligible for inclusion in the CIP are those with an asset value of greater than \$100,000 and a useful life of greater than three years.

When identifying new projects, staff looks to the long-term priorities and direction set by Town Council and submits formal requests through the CIP process. A formal request includes a description of the project, an explanation of how the project implements an established goal, the estimated cost of the project, and an estimate of the recurring costs associated with a completed project (i.e. additional staff, additional utilities, etc.). The formal request also includes an analysis of alternative solutions, if any, and a statement on the effect on services and/or programs if the project is not funded.

Once adopted by the Town Council, the CIP becomes a statement of town policy regarding the need, priority, timing, and funding of future capital projects. The Capital Improvement Plan is simply that – a *plan*. As such, projects and funding mechanisms are subject to change based on new or shifting service needs, special financing opportunities, emergency needs, or other directives or priorities established by the Town Council. Future needs and financial constraints may result in changes in priority over the five-year period; and because priorities can change, projects included in outward planning years are not guaranteed for funding. The CIP represents the best judgment of Town Administration and Town Council at the time the Plan is adopted. Priorities established in the CIP subsequently guide decisions made by Town Administration and the various boards and commissions appointed by Town Council.

The Town of Apex CIP achieves five major objectives as a component of the Town's budget and financial planning process:

1. Helps the Town rationally and intelligently plan for the repair, replacement, and acquisition of capital items that are necessary in providing high-quality services to the citizens of Apex.
2. Assists in fiscal planning by forecasting capital demands together with future revenues and expenditures.
3. Ensures better coordination, evaluation, and planning of projects to serve the community and its needs.
4. Serves, together with the annual budget and other financial plans, as a guide to decision-making for the Town Council, Town Manager, and staff.
5. Serves as a systematic and comprehensive analysis of capital needs, increasing the probability of making rational budgetary judgments since improvements are identified, prioritized, and matched to the projected fiscal resources of the Town.

Relationship to the Annual Operating Budget

Some CIP projects are funded through annual operating funds, such as the General Fund, Electric Fund, and the Water and Sewer Fund. In these cases, the CIP and the Annual Operating Budget are directly linked as CIP projects become authorized through the adoption of the Annual Operating Budget. Projects funded through debt financing also impact the operating budget through ongoing debt service expense. Finally, some completed CIP projects will directly impact the operating budget as they will require ongoing expenses for staff and other operating costs.

CIP Structure

The CIP is organized into seven functional categories, called “elements,” in order to group projects with similar items.

1. **Transportation Element:** funds the construction of new roadways, improvements to existing roadways, sidewalks, bicycle and pedestrian facilities, transit projects, and railroad crossing improvements. Implementation of Advance Apex: The 2045 Transportation Plan, Bike Apex, and the Downtown Master Plan and Parking Study are funded in this element.
2. **Parks, Recreation, and Cultural Resources Element:** funds the acquisition of land for new park and greenway facilities, the construction of park and recreation amenities, and major maintenance of current facilities. Implementation of the Parks and Recreation Master Plan is funded in this element.
3. **Public Safety Element:** funds the acquisition of capital equipment to support the operations of the three public safety departments in the Town (Fire, Police, and 911 Communications). Public safety facilities are considered in the public facilities element.
4. **Public Facilities Element:** funds construction and major maintenance of general government and public safety facilities and infrastructure. This element also funds improvements to communications and technology infrastructure.
5. **Public Works & Environmental Services Element:** funds projects designed to manage and mitigate the effects of stormwater runoff, manage the collection and disposal of solid waste, and maintain streets. These projects include structural improvements, Stormwater Control Measure (SCM) construction, and major maintenance of this infrastructure. They also include equipment needed to manage solid waste collection and maintain Town streets.
6. **Electric Utility Element:** funds the construction and improvement of electric distribution infrastructure. These projects include substation additions and upgrades, distribution line extensions, major maintenance of infrastructure, and the equipment necessary to maintain the system.
7. **Water and Sewer Utility Element:** funds the construction and improvement of water and sewer infrastructure. These projects include main additions and replacements, water/wastewater treatment plant renovations/expansions, filter rehabilitation, pump station additions, major maintenance of infrastructure, and the equipment necessary to maintain the system.

Capital Improvement Funding

The sources of funding used to execute the Plan are as important as the capital projects contained in the Plan. Capital Improvements for the Town of Apex are funded using a variety of sources that are broadly categorized as cash or debt financing.

Cash, or pay-as-you-go (paygo), funds come from sources such as tax revenue, development related fees (recreation, transportation, and capacity fees), program fees, State revenue, and interest earnings. Some of these sources, such as State revenue from the Powell Bill, Town recreation fees, and certain others, may only be spent to meet certain needs. Other revenue sources come with no restriction on the needs they may be used to address. Major funding sources for the CIP are described below:

General Fund: General Fund revenue, such as ad valorem taxes, sales taxes, utility taxes, and other similar revenues are used to fund Town operations and may be used to fund capital projects such as facility improvements, transportation system improvements, and other similar projects. Compared to other sources, General Fund resources are a flexible revenue source without restrictions on their use.

Enterprise Funds: Enterprise funds, such as the water/sewer fund and the electric fund, collect user fees as part of their operations, then invest a portion of that revenue into capital projects. The Town uses these funds only for corresponding

enterprise projects. For instance, the electric fund only pays for projects related to the electric system, and not for projects related to water/sewer or any General Fund related project.

Water/Sewer Capital Reimbursement Fees: These fees are charged, based upon a Town Council-approved Development Fee Schedule, to developers of land within the Town of Apex to pay for the capital facility burden created by new development. Revenue from these fees is restricted to be used for capital improvements to the water/sewer system or to fund payment of debt service for improvements to these systems.

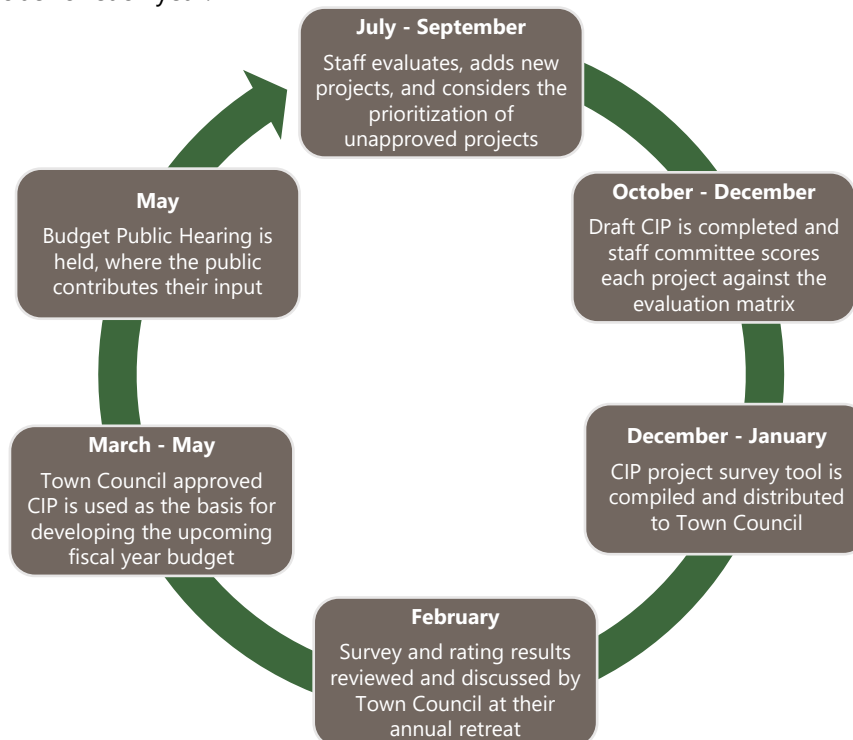
Debt Financing: For debt financing, the Town uses several types of debt mechanisms, including general obligation bonds, revenue bonds, and traditional lease-purchase or installment financing. The mechanism selected varies depending on the level of funding needed, the term of the need, and current debt market conditions. General obligation bonds are approved by voters and are backed by the Town’s taxing authority to repay the bonds. Revenue bonds pledge the revenue generated by specific enterprise (water, sewer, electric) charges.

Recreation Subdivision Fee-in-Lieu of Dedication: These fees are charged, based upon a Town Council-approved Development Fee Schedule, to developers of land within the Town of Apex and its Extraterritorial Jurisdiction (ETJ). Revenue from these fees is restricted to be used for park and recreation system expansion/improvements or to fund payment of related debt service.

Reserve from Prior Years: As capital projects are completed, any unspent budgeted amounts accumulate into capital reserves, which are available to fund future projects. Capital reserves can also build up when the Town collects revenue in excess of the amount budgeted for development fees described above.

The CIP Process

The process for developing the CIP, as illustrated below, begins shortly after the beginning of a new fiscal year (July 1) as staff considers unmet capital needs in the recently adopted budget and other emerging needs. For each project, staff in the requesting department complete a CIP project request form and compile supporting documentation. All CIP project requests are due by mid-October of each year.



Following an evaluation of current projects and needs, new projects are proposed to the 5-year plan. Using these proposals alongside pre-existing projects, a selection of senior staff representing the various departments are tasked with using an evaluation matrix to score the projects across eight categories, including public health and safety, legal mandates (as illustrated in the table to the right), economic development capacity, funding/budget impact, and other technical factors.

Legal Mandate	
* Select all that apply	Points Possible
Project mandated by State and/or	10 points
Project mandated by Town Council	7 points
Project mandated by legal settlement, contractual obligation or regulation	5 points
Project corrects a violation of Town or State code that would result in fines	2 points
Not Applicable	0 points

In preparation for the Town Council Annual Retreat in February, the Mayor and Town Council Members are provided with a survey tool to rank a selection of General Fund projects. The ranking excludes projects that are considered necessary for operations, such as replacement leaf trucks and radio replacements for public safety.

While the staff ratings focused on technical factors, the Mayor and Town Council rank the projects while keeping in mind how well they addressed each of the Town Council’s five strategic goals:

High Performing Government: We will deliver exceptional, responsive, and effective services by attracting and empowering a knowledgeable and diverse workforce that values transparency, financial stewardship, and collaboration with community, regional, and state partners.

Healthy & Engaged Community: We will promote the overall well-being of our residents and visitors with welcoming public spaces and high quality recreational facilities and cultural activities, and forge meaningful connections that fulfill a range of our community's needs.

Environmental Leadership & Responsible Development: We will plan our built environment in a way that respects and preserves natural resources and the small town character of our community.

Economic Vitality: We will leverage partnerships to create a supportive environment for current businesses, and form relationships that foster new and continued economic opportunities in Apex.

Safe Community & Reliable Infrastructure: We will ensure safe neighborhoods through proactive, professional, and engaged public safety services, and maintain reliable transportation and utility infrastructure.

The ranked responses from the Mayor and Town Council members for each proposal are averaged to create a project prioritization order. This order reveals which projects the Mayor and Town Council determine are most critical to achieving the Town’s strategic goals and, accordingly, have the most pressing need for immediate funding.

Using the prioritization list created with the averages of the Mayor and Town Council’s rankings for each project and a measure of dispersion (standard deviation), the results are then used to assign projects into quartiles based on average ranking and agreement. This helps illustrate projects where the Town Council is in agreement on ranking (high or low) and is used as the basis for further discussion on projects that have higher than average disagreement.

1. Above Average Score, Above Average Agreement	2: Above Average Score, Below Average Agreement
Apex Peakway North Widening Chatham Street Railroad Crossing Improvements & Sidewalk Downtown Alley Improvements GPS Emergency Vehicle Preemption Jessie Drive Phase I & Phase II Production Drive Extension Repurpose Depot Parking Lot Safe Routes to School Ten Ten Road at Jessie Drive Left Turn Lane Extension Cost Share	Apex Peakway Southeast Connector Burma Drive Phase 2/Pristine Water Drive to Lufkin Road Center Street Railroad Crossing Improvements and Sidewalk Communications Backup Center Kelly Point Court Drainage Improvements Public Safety Station 6 Ragan Road Sidepath Salem Street Downtown Streetscape and Resurfacing Saunders Street Parking Lot Expansion Tingen Road Pedestrian Bridge West Williams Street Sidewalk
3: Below Average Score, Below Average Agreement	4: Below Average Score, Above Average Agreement
Environmental Education Center Lynch Street Extension Station 1 Rebuild Tunstall House Restoration	Annual Miscellaneous Greenway Connections Apex Community Park Parking Lot Expansion Apex Nature Park/Seymour Athletic Fields Parking Lot Expansion Beaver Creek Greenway Improvement Davis Drive at Salem Church Road Realignment Fire Department Administration Building Fire Station 7 Jaycee Park Expansion Police Department Addition/Renovation Town Hall Remodel

The chart above reflects the project distribution. Quartile 1, the green block, contains projects with above average rankings and general agreement. These projects are considered the highest relative priority by the Town Council. Quartile 4, the red block, represents projects with below average rankings and general agreement. Quartile 2 and 3, the yellow and orange blocks, represent the middle ground where there is more disagreement. The Town Council focuses discussion on many of these projects in the 2nd and 3rd quartiles.

Following Town Council input and approval, the CIP is used as a basis for budgeting in the coming fiscal year and in formulating financial forecasts prepared as part of the budget process. Public input is solicited through two public hearings held during the budget process. In FY 20-21, the Town also introduced an online budgeting priorities survey, detailed in the following section.

Citizen Budget Priorities Survey

This year, the Town launched its first citizen budget priorities survey, inviting Apex residents to share their input on budgetary decisions. The online survey presented citizens with two different ranking tools. First, citizens were provided the opportunity to indicate the importance they placed on the following broad budgeting categories, which staff developed according to the priorities highlighted by the Town’s strategic goals and ongoing plans, such as the Downtown Plan, Affordable Housing Plan, and others. Staff presented the categories with the following brief descriptions prior to the ranking:

Recreation and Cultural Opportunities: Construction of new parks, greenways and facilities; maintenance and improvements to existing parks, greenways, and facilities; and athletic and cultural arts programming.

Transportation and Infrastructure: Construction and improvement of roadways, sidewalks, and bicycle lanes; public transit projects; and railroad crossing improvements.

Environmental Sustainability: Stormwater management; sanitation and recycling services; and initiatives to decrease the Town's carbon footprint, such as renewable energy improvements to Town facilities.

Economic Stability and Growth: Identifying and purchasing new development sites; recruiting new business and industry; and launching marketing initiatives for downtown businesses.

Housing Affordability: Programs to assist with home rehabilitation for low-income homeowners; emergency rental assistance; down-payment assistance for new homebuyers; construction of affordable housing units; and homeownership counseling.

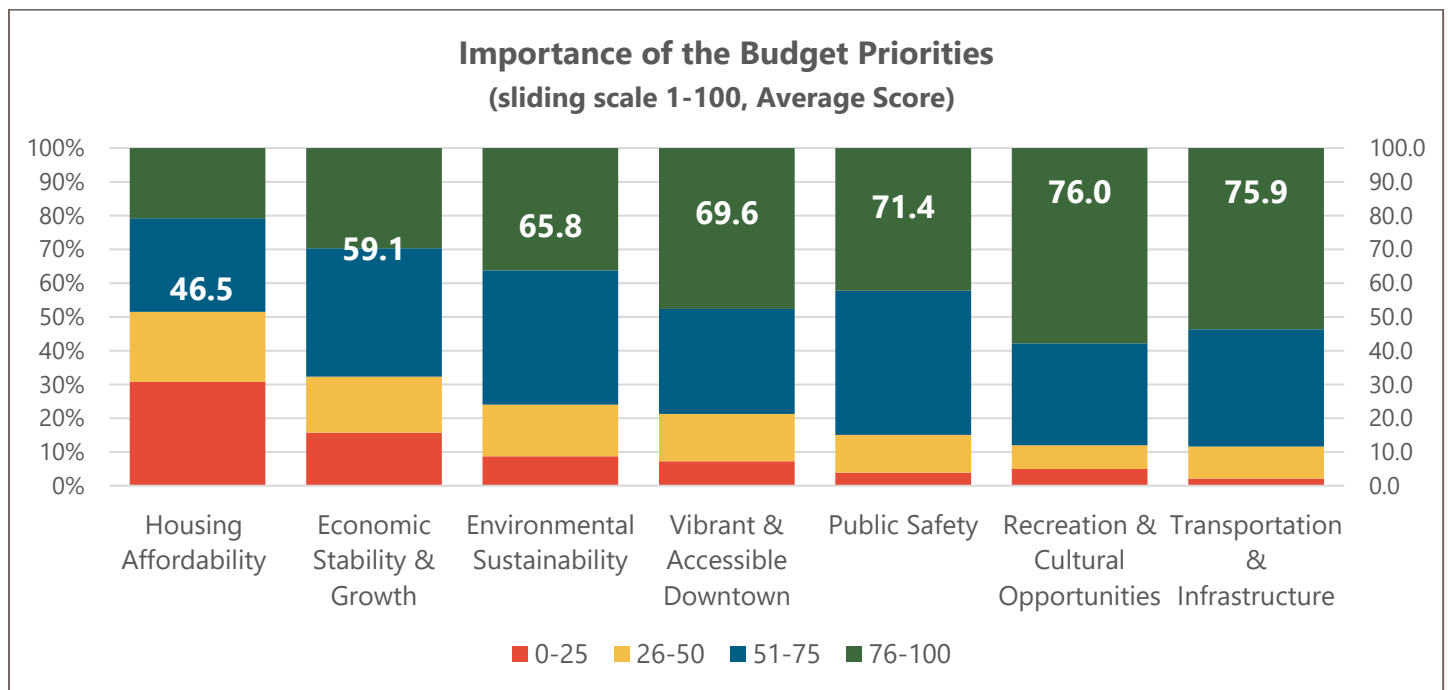
Public Safety: Resources to support the operations of the three public safety departments within the Town: Fire, Police, and Emergency Communications.

Vibrant and Accessible Downtown: Repurposing unused or underused spaces for public enjoyment; landscaping; and improving parking, sidewalks, and pedestrian crossings.

Next, residents were presented with a slider bar for each category, which represented a scale from “not at all important” to “very important.” By dragging and dropping a pin in the appropriate spot, citizens communicated how important they felt each given category was.

Then, citizens were invited to use a simple drag-and-drop tool to rank specific initiatives within each category. By moving these items into their preferred order, citizens indicated which items within the broader categories they felt were most and least important to fund. Citizens were also given the option to indicate that none of the items listed were important to them.

To analyze results, Town budget staff calculated the average score of each broad budgeting category. Citizens rated Recreation & Cultural Opportunities as being most important to them, while they indicated that Housing Affordability was least important to them.



Next, staff calculated the average rankings for the items within each budgeting category, which revealed the initiatives residents feel are most important for the Town to address in the FY 21-22 budget.

	1 (Most Votes)	2	3	4	5	6
Housing Affordability	None of these are important to me	Home rehabilitation programs for current low-income homeowners	Developer incentives for construction of affordable housing units	Construction of new affordable housing units	Emergency rental assistance & supportive services for low-income renters	Direct financial assistance for prospective low-income homebuyers
Transportation & Infrastructure	Construction of new sidewalks/side paths & improvement of pedestrian crossings	Improvements to existing roadways (e.g. road widening, traffic signal improvements)	Maintenance of existing roadways (e.g. road resurfacing, pothole repair)	Increased public transit options (e.g. GoApex bus route)	Construction of new roadways	None of these are important to me
Environmental Sustainability	Resources to support community forestry efforts	Increased renewable & alternative energy sources in Town	Stormwater runoff & collection improvements	Improved sanitation & recycling services for residents	None of these are important to me	
Economic Stability & Growth	Promotional initiatives for downtown businesses	Construction of road infrastructure to improve citizen access to new development	Marketing campaigns to attract new business & industry	None of these are important to me	Identification & purchase of new development sites	
Vibrant & Accessible Downtown	Repurposing of unused or underused downtown spaces for public enjoyment	Additional parking capacity	Aesthetic improvements (e.g. Salem St streetscape project; addition of murals, lighting, & landscaping to downtown alleyways)	None of these are important to me	Revitalization of the Tunstall House, grounds, & strollway	
Recreation & Cultural Opportunities	New park & greenway construction & completion of existing greenway connections	Maintenance & renovation of current parks, recreation facilities, & greenways	Additional/enhanced cultural arts programming	Additional/enhanced athletic programming	None of these are important to me	

The Town's goal in creating the citizen budget priorities survey was to gain input from a larger number of citizens than it typically reaches during its two annual budget hearings. With 251 usable survey responses, the Town was able to successfully gain a fuller picture of what is important to Apex citizens. This knowledge will help the Mayor and Town Council ensure Town actions are well aligned with citizen needs in the coming fiscal year.

CIP Practices

Long-Range Cost Estimates: Using the upcoming fiscal year as the base, staff will apply cost escalators to better estimate future construction costs. Staff applies the escalator to new construction and significant building rehabilitations. In some elements, such as public utilities and transportation, staff applies other escalators developed for those specific service areas.

Closing Projects: Projects are closed when the approved scope of work is complete. Staff reviews project statuses periodically to identify projects that are finished and can be closed. If the budget for a completed project is not fully expended, generally, the budget is closed and the remaining balance accumulates in the fund balance. The accumulated fund balance is available to pay for future projects.

Horizon Issues: The proposed CIP funds the Town's highly prioritized needs. Staff reviews and analyzes the business cases supporting these projects and considers them ready to move forward. In many situations, however, the Town has identified a future need, but has not yet completed a detailed analysis, considered options, or designed a specific facility. These projects include facilities, capital maintenance, and business systems that will be needed in the future, often beyond the CIP's five-year timeframe.

Planning By Fund

The following sections represent a description of the projects submitted, by element, for the five year planning timeframe under consideration. Each element begins with a brief description of what types of projects are funded and includes a tabular summary of all projects considered and the proposed revenue source to fund the projects in each year. At the end of each section, there is a summary table showing the total cost of the projects in each year and the total of each revenue source. More details regarding the cost of borrowing is provided in each summary section. The reference to "Local Revenue" in the revenue portion of the tables is indicative of the need for current year funding for some projects/purchases in each year. This could include appropriation of reserve funds from one or more of the major funds: General, Water and Sewer, and Electric.

Section 2: General Fund

A majority of projects included in the CIP are housed in the General Fund. This revenue is generated in large part by ad valorem taxes, along with sales taxes, utility taxes, and other similar revenues.

The types of capital projects that qualify for this fund include facility improvements, transportation system improvements, and other similar projects.

Compared to other sources, General Fund resources are a flexible revenue source without restrictions on their use.

The icons below signify each element within the General Fund. They are located on the top right corner of the pages that are associated with their projects.



Transportation



*Parks, Recreation, &
Cultural Resources*



Public Safety



Public Facilities



*Public Works &
Environmental
Services*



Transportation Element Projects

Projects Funded: Construction of new roadways, improvements to existing roadways, sidewalks, bicycle and pedestrian facilities, transit projects, and railroad crossing improvements.

Peak Plan 2030 Recommendation: Implementation of Advance Apex: The 2045 Transportation Plan, Bike Apex, and the Downtown Master Plan and Parking Study are funded in this element.

Transportation infrastructure, like the Peakway shown on the right, has a long lasting effect on the quality of life in Apex. It provides easier access to all areas of Town and helps ease commuter traffic congestion as residents travel to and from employment centers.



The table below shows each of the projects submitted for consideration in this year's CIP process and the estimated cost of the project in each fiscal year in the plan. Section 6 of this document contains detailed information regarding the proposed funding source for each individual project.

Transportation	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Annual Miscellaneous Drainage Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Annual Miscellaneous Road & Sidewalk Improvements	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
Annual Pavement Management	1,871,000	1,950,000	2,025,000	2,100,000	2,200,000	2,200,000	12,346,000
Apex Peakway Southwest Connector	22,625,000	-	-	-	-	-	22,625,000
Downtown Alley Improvements	500,000	-	-	-	-	-	500,000
Kelly Point Court Drainage Improvements	110,000	-	-	-	-	-	110,000
Pavement Management Backlog	1,000,000	-	-	-	4,000,000	-	5,000,000
Safe Routes to School	1,595,000	660,000	200,000	500,000	5,640,000	710,000	9,305,000
Saunders Street Parking Lot Expansion	1,200,000	-	-	-	-	-	1,200,000
Ten Ten Road at Jessie Drive Left Turn Lane Extension Cost Share	200,000	-	-	-	-	-	200,000
Wayfinding Signage Fabrication & Installation	155,000	190,000	340,000	330,000	155,000	-	1,170,000
GPS Emergency Vehicle Preemption	-	260,000	160,000	160,000	160,000	-	740,000
Salem Street Downtown Streetscape & Resurfacing	-	2,500,000	-	-	-	-	2,500,000
Burma Drive Phase 2	-	-	450,000	1,000,000	3,000,000	-	4,450,000
Ragan Road Sidepath	-	-	1,000,000	-	-	-	1,000,000
Stephenson Road High School Improvements Cost Share	-	-	750,000	-	-	-	750,000
Tingen Road Pedestrian Bridge	-	-	150,000	500,000	-	3,000,000	3,650,000
Apex Peakway North Widening	-	-	-	350,000	5,000,000	-	5,350,000
Center Street Railroad Crossing Improvements & Sidewalk	-	-	-	100,000	700,000	-	800,000
Chatham Street Railroad Crossing Improvements & Sidewalk	-	-	-	150,000	1,125,000	-	1,275,000
Davis Drive at Salem Church Road Realignment	-	-	-	200,000	500,000	7,000,000	7,700,000
GoApex Transit Program	-	-	-	100,000	690,000	-	790,000
Lynch Street Extension	-	-	-	550,000	-	-	550,000
West Williams Street Sidewalk	-	-	-	200,000	650,000	-	850,000
Apex Peakway Southeast Connector	-	-	-	-	1,710,000	17,100,000	18,810,000
Jessie Drive Phase I & Phase II	-	-	-	-	7,500,000	13,500,000	21,000,000
Production Drive Extension	-	-	-	-	400,000	4,000,000	4,400,000
NC 55 Sidewalk & Enhancement Cost Share (U-2901)	-	-	-	-	-	2,000,000	2,000,000
US 64 Sidewalk & Enhancement Cost Share (U-5301)	-	-	-	-	-	2,000,000	2,000,000
Ten Ten Road/Center Street Sidewalk & Enhancement Cost Share (U-5825)	-	-	-	-	-	2,000,000	2,000,000
Element Total	\$29,556,000	\$ 5,860,000	\$ 5,375,000	\$6,540,000	\$33,730,000	\$ 53,810,000	\$134,271,000



Continuous Projects

Annual Miscellaneous Drainage Improvements

\$100,000

Annually

This ongoing program addresses various deficiencies throughout Apex within the municipal drainage system concerning the safe and efficient management of stormwater. The program would address complaints generated by customers for various small drainage projects and avoid or minimize risk to private property. Without funding for this program, we would have to delay and bundle small projects while seeking a funding source, in some cases for a year or longer. Delaying response could adversely impact private property.

Annual Miscellaneous Road & Sidewalk Improvements

\$200,000

Annually

This ongoing program addresses various deficiencies throughout Apex on the municipal street system with accessible ramps and crosswalks, sidewalk maintenance and completion of short gaps in sidewalks, traffic control and warning device upgrades, and other related requests to provide a safe and accessible transportation system for all users. Without this program, we delay and bundle small projects while seeking a funding source, in some cases for a year or more.

Annual Pavement Management

\$1,871,000+

Annually

The Town is responsible for maintaining 150 miles of municipal streets, with the annual resurfacing contract providing for most of the pavement maintenance needs. Street mileage is growing annually with ongoing development. A recent survey of our streets reveals that we have deferred maintenance that needs to be addressed. This ongoing program focuses on deficiencies in pavement condition throughout Apex, addressing issues such as potholes, alligator cracking, and rutting in order to provide a safe and reliable transportation system. The Powell Bill program provides an annual funding allocation from the state, based on public centerline miles of road accepted and maintained by the Town. However, current and future resurfacing costs continue to exceed Powell Bill allocations, requiring additional General Fund revenues to be allocated.

FY 2021-22

Apex Peakway Southwest Connector

\$22,625,000

Four-year Total

This project completes a gap in the Apex Peakway, bridging over South Salem Street and the CSX S-Line with a four-lane bridge to connect the existing sections of Peakway north and south over the railroad tracks. The existing intersection at South Salem Street will be relocated to a new a four-lane loop road connector. Sidewalks will be connected along Apex Peakway on both sides of the bridge, both sides of the new loop road, and along the north side of South Salem Street. The interior of the loop provides an opportunity for a public park. Metal poles and mast arm traffic signals will be installed at both ends of the loop road and at the intersection with James Street. Decorative treatments including brick facing will be used to improve the appearance of the bridge and walls. This project was previously programmed for \$5 million in construction funds. Since 2015, substantial increases in estimated cost due to expanded scope and dramatic inflation in the construction market require reprioritization subject to new funding sources. Final design and property acquisition will be complete in 2020. Without it, the Peakway will still have a gap west of NC 55, forcing traffic to use other existing routes including NC 55, Olive Chapel Road, South Salem Street, Tingen Road, and James Street while leaving the sidewalk network incomplete.

Downtown Alley Improvements

\$500,000

The Downtown Plan envisions creating vibrant places for people to gather by transforming the "leftover" spaces along Commerce Street and Seaboard Street. Improving these spaces was identified as a "Top 10" priority in the plan and would also address complaints from the public regarding Seaboard and Commerce Streets. Implementation is likely to require a public investment and private partnership. This CIP request is for the implementation elements likely to be publicly funded - consolidated dumpster enclosures, improved pedestrian facilities, landscaping, and decorative pavement treatments for



public right-of-way. It is anticipated that private funding would leverage this public investment to install murals, back porch areas, lighting, and other soft improvements to create a place for people. Moving this project forward is critical for the implementation of the Downtown Plan.

Kelly Point Court Drainage Improvements

\$110,000

This project addresses an existing drainage issue at Kelly Point Court by rerouting storm drainage to avoid stormwater inundation of the properties and the street. Providing funds for this specific location, in addition to the annual program that addresses various deficiencies throughout Apex within the municipal drainage system, assists in the safe and efficient management of stormwater. Delaying this project may adversely impact private property and emergency services access to the properties.

Pavement Management Backlog

\$5,000,000

Two-year Total

This project is designed to catch up on our backlog of streets in need of rehabilitation over a two year period. This supplements the ongoing program that manages roadway infrastructure conditions throughout Apex on the municipal street system by optimizing strategies for maintaining pavements in serviceable condition at the lowest cost, providing a safe and reliable transportation system. Without it, we would continue to lag behind on street maintenance needs, the overall condition of streets would degrade, and maintenance costs over time would increase substantially.

Safe Routes to School

\$9,305,000

Six-year Total

The project will improve and add to existing Town infrastructure related to pedestrian and bicycle traffic to/from school. This five phase project includes adding sidewalks, pedestrian facilities, and safe crosswalks in the areas surrounding Apex Elementary School, Green Level High School, Apex High School, Baucom Elementary School, and Thales Academy Elementary School. These phases were identified through an analysis of safe routes to school needs. Without the project there will continue to be gaps in the sidewalk network and other deficiencies in the transportation system that make walking and biking to school difficult.

Saunders Street Parking Lot Expansion

\$1,200,000

This project includes resurfacing the existing paved Saunders Street public parking lot and paving the currently leased gravel lot. Parking count will be maximized in the combined lot. This project assumes acquisition of property in order to pave the gravel lot. If the project is not funded, it will be more difficult to offset parking loss from the Streetscape and increase parking downtown. Further, the vision shown in the Downtown Plan, to promote accessibility and downtown growth as a focal point for the community, will not be realized.

Ten Ten Road at Jessie Drive Left Turn Lane Extension Cost Share

\$200,000

This cost share would contribute funds for extending the 100 feet northbound left turn lane on Ten Ten Road at Jessie Drive, being constructed by Horton Park, to provide 300 feet storage as required by NCDOT for the Town's plans to later upgrade Jessie Drive. Delaying response would result in a shorter storage length being constructed prior to the Town's planned project, losing the opportunity to construct this lane to its ultimate required length at one time.

Wayfinding Signage Fabrication & Installation

\$1,170,000

Five-year Total

This project includes fabrication and installation of Wayfinding signage throughout Town. Sign types include parking directional, vehicular directional, pedestrian directional, destination identification, and gateway signage. This project was identified as part of the Downtown Plan & Parking Study and is an extension of the Community Branding Study. If it is not completed, the Town will not meet the objective of the Wayfinding Signage Program to provide consistent and attractive information to help residents and visitors discover and navigate to key destinations in Town.



FY 2022-23

GPS Emergency Vehicle Preemption

\$740,000
Four-year Total

In the first year, this project includes installing GPS preempt in 10 traffic signals and outfitting all fire vehicles with GPS preempt capability. Future years include adding GPS preempt at 10 signals/year, prioritizing major corridors (including NC 55, Salem Street, Center Street/Ten Ten Road, and Apex Peakway), and various signals adjacent to those major corridors. Without this system, time-saving benefits of having preemption for multiple directions of traffic flow along major routes would not be realized. Existing infrared preemption is only available for certain directions at four signals town wide and Apex Fire Department no longer has infrared emitters.

Salem Street Downtown Streetscape & Resurfacing

\$2,500,000

This project includes resurfacing Salem Street from Hunter Street to NC 55, the addition of marked on street parking north of Center Street by shifting the road center line, and the removal of on street parking between Saunders Street and Chatham Street in order to widen sidewalk and provide planting beds, landscaping, and pedestrian amenities. If the project is not funded, the pavement will continue to degrade and the vision of Salem Street shown in the Downtown Plan, of improving the walking and driving experience to promote accessibility and downtown growth as a focal point for the community, will not be realized.

FY 2023-24

Burma Drive Phase 2

(Pristine Water Drive to Lufkin Road)

\$4,450,000
Three-year Total

This project would extend Burma Drive 350 feet further south of the Phase 1 project, construct 700 feet of minor collector street west to Pristine Water Drive, upgrade 1,300 feet of Pristine Water Drive (west and northwest) to a public street, and upgrade 1,000 feet of an existing concrete private driveway to a public street connecting Pristine Water Drive to Lufkin Road to serve existing municipal and private industrial uses, as well as add a second point of access to the Cash Corporate Center for economic development. Without this connectivity, the Town would not be able to meet the needs of prospective major employers seeking access in accordance with the Transportation Plan, and thus, it would be difficult to attract such businesses to Apex at this time.

Ragan Road Sidepath

\$1,000,000

This project includes creating a connection from the Ragan Road sidepath to the American Tobacco Trail. Currently, residents surrounding Ragan Road have been using the sidepath along Ragan Road to the terminus and then walking along Ragan Road and cutting through a private property to access the southern end of the American Tobacco Trail.

Stephenson Road High School Improvements Cost Share

\$750,000

This project will contribute funds toward street infrastructure, sidewalks, and paths as part of the construction of Stephenson Road High School (2024 anticipated opening) that would not otherwise be constructed if they are beyond the required improvements for Wake County Public School System (WCPSS). Without this project, there would not be an opportunity to accomplish the Town's Transportation Plan goals around the school during construction, leaving gaps and other deficiencies in the transportation system that make walking and biking to school difficult.

Tingen Road Pedestrian Bridge

\$3,650,000
Three-year Total

This request is for construction of a pedestrian bridge over the railroad crossing of Tingen Road. This at-grade railroad crossing will be closed as part of the Apex Peakway Southwest Connector project per the agreement with CSX. Construction of the pedestrian bridge will provide a space for members of the community to safely cross the railroad tracks on Tingen Road to access downtown Apex, multi-family residential developments, multiple churches, and Apex Elementary School. If



it is not completed, the railroad crossing will become a barrier to the pedestrian network within the Town Center. A feasibility study will determine more accurate scope and cost with public involvement.

FY 2024-25

Apex Peakway North Widening **\$5,350,000**
 (Center Street to Old Raleigh Road) Two-year Total

This project widens existing Apex Peakway from a two-lane median-divided road to a four-lane median-divided road. Peak hour traffic exceeds capacity of the existing roadway so this widening will reduce queue lengths and delays. Without it, the road will continue to experience longer delays, making access difficult for commuters and emergency vehicles and causing more drivers to divert to other local routes, increasing congestion elsewhere. Until the state TIP widens Center Street/Ten Ten Road beginning in 2029 as currently programmed, this project may still not address backups at Center Street. However, this widening should be constructed prior to or during the Peakway Southeast Extension project, regardless of the state's schedule for widening Center Street.

Center Street Railroad Crossing Improvements & Sidewalk **\$800,000**
Two-year Total

This project includes improvement of the road-crossing surface with the addition of concrete panels and addition of sidewalk across CSX railroad tracks, as well as four quadrant gates and associated railroad equipment upgrades. Current review of statewide prioritization shows this may score well enough to allow for 70% state funding. Without it, the sidewalk will continue to stop short of the tracks on each side, forcing pedestrians onto the roadway, and the crossing surface will continue to compromise ride comfort. An additional benefit is the potential to create a quiet zone at this crossing.

Chatham Street Railroad Crossing Improvements & Sidewalk **\$1,275,000**
Two-year Total

The project includes addition of sidewalk across CSX railroad tracks, as well as 4-quad gates and associated RR equipment upgrades. Current review of statewide prioritization shows this may score well enough to allow for 70% state funding. Without it, sidewalk will continue to stop short of the tracks on each side, forcing pedestrians onto the roadway, and the quiet zone will not be able to move forward. This project also includes sidewalk along East Chatham Street from South Mason Street to the cul-de-sac. This sidewalk segment is a high-priority Safe Routes to School Project and is combined with the railroad crossing improvements for construction efficiencies and to complete pedestrian connectivity along the corridor.

Davis Drive at Salem Church Road Realignment **\$7,700,000**
Four-year Total

This project would realign Davis Drive to improve the horizontal curvature as well as add turn lanes and extend Salem Church Road. The intersection would be shifted west, away from the CSX RR freight line, allowing for vehicle stacking beyond the tracks and the installation of a traffic signal and gate arms. Without this project, it is possible that Salem Church Road will eventually be converted to right in-right out, and/or safety concerns will persist for the following issues: no left turn on Davis Drive backing up traffic southbound, no space for a traffic signal or gate arms to warn of an approaching train, and limited visibility around the curve on Davis Drive.

GoApex Transit Program **\$790,000**
Two-year Total

This request represents funds for improvements to GoApex Route 1 and expansion of the local public transportation services to offer a second route, GoApex Route 2. The first local transit route, GoApex Route 1, will begin operating in 2021. It is anticipated that, after several years of operating, ridership will be quantified and priority locations for shelters and other enhancements on GoApex Route 1 will be identified.



Lynch Street Extension

\$550,000

This project includes extending Lynch Street from its existing stub west of South Salem Street to intersect Apex Peakway and adds sidewalk on the north side of the street. The project would provide improved local connectivity for traffic flow south of NC 55 and pedestrian connectivity between Salem Street and Apex Peakway through the Justice Heights neighborhood. If the project is not funded, there will continue to be a gap in the transportation network between Salem Street and Apex Peakway for this local area.

West Williams Street Sidewalk

\$850,000

Two-year Total

This project would complete gaps in the sidewalk in front of Beaver Creek Commons shopping center, crossing the US 64 eastbound off ramp, connecting across the bridge over US 64, and extending to the intersection at Vision Drive. Current review of statewide prioritization shows this may score well enough to allow for 70% state funding. Signalized crosswalks would be installed at the existing traffic signals on both ends of this project. Without it, pedestrians will continue traveling along the shoulder of the road and both ends of this project will lack accessible ramps and crosswalks.

FY 2025-26

Apex Peakway Southeast Connector

(NC 55 to Center Street)

\$18,810,000

Three-year Total

The proposed project would complete the final gap in the Apex Peakway, completing a full loop around downtown Apex. The construction of Apex Peakway was identified as a high priority in Apex. It will become increasingly important given anticipated delays to NCDOT's widening of the NC 55 corridor between US 1 and Olive Chapel Road. The completed Apex Peakway loop will provide a needed alternative to the NC 55 corridor through Apex. Without completing this project, there will not be an intuitive relief valve for NC 55, nor will there be an alternative designed to handle the anticipated volume of traffic. This request is consistent with the Apex Peakway Southeast Connector Feasibility Study, completed in June 2018.

Jessie Drive Phase I & Phase II

\$21,000,000

Three-year Total

This project would connect Jessie Drive to NC 55, providing a major thoroughfare between Ten Ten Road and NC 55 south of US 1. The road would serve development of adjacent land, including industrial and commercial areas, and relieve some of the congestion along Ten Ten Road near the US 1 interchange. In the event of major closures or delays on NC 55 or Ten Ten Road, it would provide an east-west detour. Without it, adjacent development would be responsible for building sections of Jessie Drive, but it is unlikely that the entire route from NC 55 to Ten Ten Road would be completed. In the interim, development will burden existing connections, which are either already congested or offer less capacity. Phase I begins the project at an estimated cost of \$9 million. Phase II is programed for a yet-to-be determined future year, at an estimated \$12 million.

Production Drive Extension

\$4,400,000

Two-year Total

This project would extend Production Drive south for approximately 3,000 feet to the future extension of Jessie Drive. In conjunction with Jessie Drive, this would provide improved connectivity for economic development areas, including the Town's certified site, as well as an alternative route to avoid Ten Ten Road for residential development south of Jessie Drive. In the interim, development will continue to depend on existing Jessie Drive and Smith Road/Stephenson Road, as well as residential streets with no convenient alternatives to Ten Ten Road.

Horizon

NC 55 Sidewalk & Enhancement Cost Share (U-2901)

\$2,000,000

Transportation Improvement Program (TIP) project U-2901 will widen NC 55 from US 1 to Olive Chapel Road. This project will provide the enhancements the Town requests, which include pedestrian facilities (sidewalk and path), aesthetic



treatments at new CSX Bridge, and median enhancement and landscaping. As part of TIP U-2901, NCDOT will replace existing pedestrian facilities, but not complete gaps where there are no existing facilities without the Town sharing a portion of the costs. Similarly, NCDOT will not provide an enhanced streetscape unless the Town shares a portion of the costs.

US 64 Sidewalk & Enhancement Cost Share (U-5301) \$2,000,000

This project will convert the intersections of US 64 at Lake Pine Drive and US 64 at Laura Duncan Road to an interchange, and convert US 64 from Laura Duncan Road to US 1 to a superstreet. This project will provide funding for enhancements the Town requests as part of the widening project. Enhancements are likely to include protected pedestrian facilities, including sidewalk, multi-use path, and crossings. NCDOT will replace existing pedestrian facilities, but will not complete gaps where there are no existing facilities unless the Town shares a portion of the costs.

Ten Ten Road/Center Street Sidewalk & Enhancement Cost Share \$2,000,000

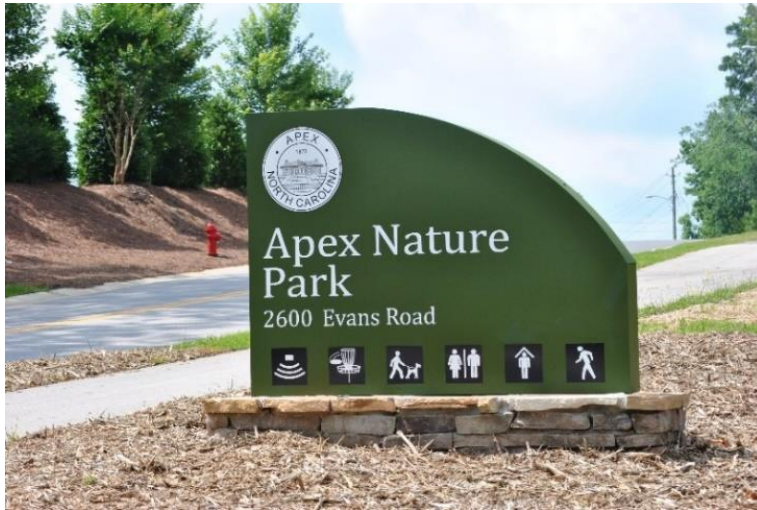
This project will provide enhancements the Town requests as part of the NCDOT widening project (Ten Ten Road from Apex Peakway to Kildaire Farm Road in the Town of Cary). Enhancements include pedestrian facilities (sidewalk and multi-use path), median treatments, and landscaping. As part of TIP U-5825, NCDOT will replace existing pedestrian facilities, but will not complete gaps where there are no existing facilities unless the Town shares a portion of the costs. Similarly, NCDOT will not provide an enhanced streetscape unless the Town shares a portion of the costs.



Parks, Recreation, & Cultural Resources Element Projects

Projects Funded: The construction of park and recreation amenities, expansion of existing parks, and major maintenance of current facilities.

Peak Plan 2030 Recommendation: That the Town “implement recommendations of the recently updated Parks, Recreation, Greenways, and Open Space Master Plan.” Projects shown in this element address needs reflected in this plan. Projects shown in this element include bicycle transportation improvements included in the Bike Apex plan.



The Apex Nature Park, which opened in early 2014, expanded our ability to serve the growing population of Apex with a variety of active and passive recreational opportunities. Our high quality park facilities, greenway network, and the programs we offer contribute greatly to the high quality of life people in Apex enjoy. This element suggests funding several other quality projects in response to our Parks Plan and the expressed needs of those we serve.

The table below shows each of the projects submitted for consideration in this year’s CIP process and the estimated cost of the project in each fiscal year of the plan. Section 6 of this document contains detailed information regarding the proposed funding source for each individual project.

Parks, Recreation, & Cultural Resources	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Annual Miscellaneous Greenway Connections	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Beaver Creek Greenway Improvement	-	337,800	-	-	-	-	337,800
Environmental Education Center	-	100,000	1,100,000	-	-	-	1,200,000
Apex Nature Park/Seymour Athletic Fields Parking Lot Expansion	-	-	-	975,000	-	-	975,000
Jaycee Park Expansion	-	-	-	100,000	1,000,000	-	1,100,000
Apex Community Park Parking Lot Expansion	-	-	-	-	665,000	-	665,000
Dredge Apex Community Park Lake	-	-	-	-	-	3,660,000	3,660,000
Northwest Wimberly Road Park Design	-	-	-	-	-	5,500,000	5,500,000
Olive Farm Park Design	-	-	-	-	-	5,500,000	5,500,000
Element Total	\$ 300,000	\$ 737,800	\$ 1,400,000	\$ 1,375,000	\$ 1,965,000	\$ 14,960,000	\$ 20,737,800



Continuous Projects

Annual Miscellaneous Greenway Connections

\$300,000

Annually

This ongoing program would allow for the study and prioritization of proposed connections of existing greenways. As requests for connections continue to increase each year, without funding for this program, we would lack the resources to properly identify the viability of the proposed connections.

FY 2022-23

Beaver Creek Greenway Improvement

\$337,800

Relocate, replace, and rebuild a section of greenway that is flooding/holding standing water on Beaver Creek Greenway.

Environmental Education Center

\$1,200,000

Two-year Total

The Nature and Environmental Education facility was part of the initial Master Plan for the Nature Park site that was part of a 2004 bond package. The intent is to utilize this facility as a headquarters for the operation of the park and to provide someone on-site to program and oversee the park. Additionally, it would be a place where environmental and nature exhibits can be seen as part of the Town's effort to educate and support environmental initiatives such as conservation and good stewardship. It is envisioned that a large portion of the potential programming for this facility would be achieved through Town initiatives and by developing collaborative relationships with area schools and universities.

FY 2023-24

Apex Nature Park/Seymour Athletic Fields Parking Lot Expansion

\$975,000

With the conversion of the Seymour Athletic Fields to synthetic turf and the current volume of use, there is a need for expanded parking to keep patrons from parking on Evans Road. This proposal would add approximately 50 parking spaces to Town-owned property on the other side of Evans Road and install an at-grade pedestrian crossing into the Nature Park.

Jaycee Park Expansion

\$1,100,000

Two-year Total

The expansion of Jaycee Park, adjacent to the Apex Peakway, adds new amenities that include an open play field, shelter, playground, and additional parking, which will serve multiple neighborhoods within walking distance of the park. This will also connect to the Beaver Creek Greenway and existing Jaycee Park amenities.

FY 2024-25

Apex Community Park Parking Lot Expansion

\$665,000

This project would reconfigure the existing parking area and add approximately 30 spaces to service greenway, shelters, fitness course, tennis courts, playgrounds, basketball courts, and special events.

Horizon

Dredge Apex Community Park Lake

\$3,660,000

This project would dredge Apex Community Park Lake, allowing boats using the lake for recreational purposes to have access to more of the lake with fewer obstructions and less restriction of movement. Dredging also improves water quality, which improves the lives of fish and fishing opportunities and assists in restoring habitats. The estimate involves removing 90,000 cubic yards of silt and disposing of it off-site.



Northwest Wimberly Road Park Design

\$5,500,000

In September of 2017, the Town purchased approximately 30 acres of land with the intention of developing a regional park in the northwest quadrant of Apex. The acquisition of property in this area was a priority outlined in the 2013 Parks, Recreation, Greenways, and Open Space Master Plan. This project would begin development of the site and amenities.

Olive Farm Park Design

\$5,500,000

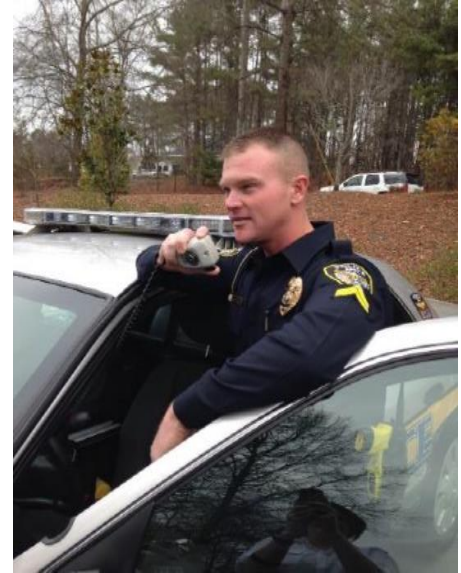
The Town acquired approximately 22 acres of land for a future park in Southwest Apex in August of 2017. The acquisition of property in this area was identified as one of two priority areas in 2013 Parks, Recreation, Greenways and Open Space Master Plan. This project would begin development of the site and provide significant public parkland in a rapidly growing area of Apex.



Public Safety Element Projects

Projects Funded: Acquisition of capital equipment to support the operations of the three public safety departments in the Town. (Note: Public safety *facilities* are considered in the *public facilities* element.)

Peak Plan 2030 Recommendation: That the Town “provide adequate fire and police in all areas.” This element considers the projects necessary to maintain adequate and responsive services to our citizens.



The table below shows each of the projects submitted for consideration in this year’s CIP process and the estimated cost of the project in each fiscal year in the plan. Section 6 of this document contains detailed information regarding the proposed funding source for each individual project.

Public Safety	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Fire Engine Replacement - Station 3	762,000	-	-	-	-	-	762,000
Aerial Apparatus to Replace Ladder 4	-	1,400,000	-	-	-	-	1,400,000
Engine 32 Replacement	-	-	740,000	-	-	-	740,000
Driving Simulator	-	-	-	243,000	-	-	243,000
Rescue Retrieval Van	-	-	-	-	165,000	-	165,000
Fire Pumper for Olive Farm Station	-	-	-	-	-	825,000	825,000
Element Total	\$ 762,000	\$ 1,400,000	\$ 740,000	\$ 243,000	\$ 165,000	\$ 825,000	\$ 4,135,000



FY 2021-22

Fire Engine Replacement – Station 3**\$762,000**

This is a request to replace the 2004 E-One Ladder apparatus at Station 3 with a new 75' aerial ladder apparatus. This type of fire apparatus provides the ability to operate as both an engine and an aerial ladder. The Ladder 3 apparatus will be 15 years old at the requested replacement date with over 100,000 miles and has begun to experience higher maintenance/repair costs due to age and mileage. This replacement will also support the 3 aerial apparatuses that are needed for the public protection classification. The current Ladder 3 would remain as the Town's only reserve aerial.

FY 2022-23

Aerial Apparatus to Replace Ladder 4**\$1,400,000**

This request is for an aerial platform apparatus to replace Ladder 4, which is a 2006 model. At this point, Ladder 4 will have reached its expected 15-year service life. The intent is to use this apparatus in reserve, replacing the quint reserve from Station 3, which will aid our Public Protection Classification. Not funding this request will require the department to continue to run an aerial apparatus that will have approximately 90,000 miles when this replacement is requested. Aerial apparatuses are expensive to operate and the maintenance cost associated with this truck will increase over time.

FY 2023-24

Engine 32 Replacement**\$740,000**

This will replace Engine 32, a 2011 model rescue pumper that currently has 94,000 miles. While the Town typically attempts to get 15 years out of front-line service from a pumper, this truck's dual purpose has caused it to build up mileage at a faster rate. Therefore, a replacement pumper is being requested in order to ensure that our front-line response fleet remains at a level necessary to provide the highest level of service to our community. Not funding this request will require the department to continue to operate this truck until such time as it is replaced.

FY 2024-25

Driving Simulator**\$243,000**

The Town currently has extremely limited access to a quality driving simulator. Funding this project would be beneficial to staff members in every department and directly enhance our ability to improve employee safety. A modern driving simulator is extremely realistic and can simulate nearly every piece of equipment present within a Town vehicle. Trainers can program real life scenarios for staff to encounter during the simulation and integrate a number of challenges into the course.

FY 2025-26

Rescue Retrieval Van**\$165,000**

This vehicle has a "normal" van exterior appearance and will not attract undue attention while still providing protection to occupants in critical incidents. This vehicle provides the department with the capability to rescue persons in the event of active gunfire and provide officers ballistic protection in critical incidents involving gunfire and/or explosives. The armored transit van would primarily serve in the role of hostage recovery & rescue transport. This addition will increase officer and citizen safety.

Horizon

Fire Pumper for Olive Farm Station**\$825,000**

This fire pumper will be needed for the fire station slated to be built in the area of Olive Farm Road and Humie Olive Road. This new station was proven to be needed through a third-party station distribution assessment by Envirosafe. If not funded and the station is constructed, the station will be forced to open with a reserve apparatus with well over 100,000 miles. The cost of this project includes equipment needed in order to fully outfit the truck.



Public Facilities Element Projects

Projects Funded: Construction and major maintenance of general government and public safety facilities and infrastructure, including upgrades to existing Town facilities, new public safety facilities, and additional public works facilities.

Peak Plan 2030 Recommendations: The Peak Plan recommends: 1) Provide adequate fire and police services in all areas. 2) Continue to assess public facility needs to meet demand generated by existing, as well as future, growth and development.



The Public Works Administration building, which was part of a project that included a new Purchasing and Inventory Building, storage yard, and upgrades to other facilities in the public works complex, currently houses Water Resources staff. This element suggests funding several other quality projects such as this to address current and future facility needs.

The table below shows each of the projects submitted for consideration in this year's CIP process and the estimated cost of the project in each fiscal year of the plan. Section 6 of this document contains detailed information regarding the proposed funding source for each individual project.

Public Facilities	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Mechanical (HVAC/Chiller) Upgrades to Town Facilities	140,000	120,000	-	125,000	165,000	-	550,000
Eva Perry Library Improvements	443,400	110,000	-	-	-	-	553,400
Police Department Security Fencing	125,000	-	-	-	-	-	125,000
Public Safety Station 6	6,500,000	-	-	-	-	-	6,500,000
Public Works Operations Building Renovations	830,000	-	870,000	-	-	-	1,700,000
Town Fiber Optic Expansion	125,000	-	-	-	-	-	125,000
Town Hall Remodel	75,000	500,000	-	500,000	-	-	1,075,000
Tunstall House Restoration	400,000	450,000	-	-	-	-	850,000
Communications Backup Center	-	325,000	-	-	-	-	325,000
Mechanical (Boiler) Upgrades to Community Center	-	130,000	-	-	-	-	130,000
Repurpose Depot Parking Lot	-	250,000	2,000,000	-	-	-	2,250,000
Station 1 Rebuild	-	500,000	4,500,000	-	-	-	5,000,000
Vehicle Storage Shed & Brine Building	-	-	23,500	235,500	-	-	259,000
Fleet Fluid Pumps/Reclamation	-	-	-	100,000	-	-	100,000
Town Campus Parking Lot Resurfacing	-	-	-	470,000	500,000	-	970,000
Fire Department Administration Building	-	-	-	-	-	2,000,000	2,000,000
Fire Station 7	-	-	-	-	-	6,500,000	6,500,000
Land Purchase for Affordable Housing	-	-	-	-	-	500,000	500,000
Police Department Addition/Renovation	-	-	-	-	-	6,400,000	6,400,000
Element Total	\$ 8,638,400	\$ 2,385,000	\$ 7,393,500	\$ 1,430,500	\$ 665,000	\$ 15,400,000	\$ 35,912,400



FY 2021-22

Mechanical (HVAC/Chiller) Upgrades to Town Facilities

\$550,000
Four-year Total

This project includes the replacement of old inefficient R22A HVAC/chiller units to R410 in Town Facilities due to R22 refrigerant being phased out with limited to no replacements available. Where replacements can be found, it is extremely expensive and timely to replace/repair.

Eva Perry Library Improvements

\$553,400
Two-year Total

The Eva Perry Regional Library first opened in 1996 and is one of Wake County's most active libraries. It serves the Apex and southern Cary areas. A renovation is scheduled to update the building's interiors and address long-term maintenance issues with aging building systems. This project includes funding to replace the roof and HVAC mechanical components at the facility. Wake County and the Town, through the current interlocal agreement, have agreed to the replacement of capital items by the Town for the duration of the agreement.

Police Department Security Fencing

\$125,000

This project will provide increased security along the Apex Police Department compound by fully enclosing it in decorative gating with one vehicle entry point, one vehicle exit point, and one pedestrian walk-through gate. Vehicle entry/exit points will have sensor and magnetic reading capabilities for slide gate operators. Failure to obtain the needed safety gate may result in vandalism and trespassing.

Public Safety Station 6

\$6,500,000

Public Safety Station 6 (PSS6) involves the relocation of Public Safety Station 3 and will provide fire and emergency services to the White Oak Basin and Green Level areas of Apex. It is forecasted that this area will see upwards of 2,100 new homes, along with related services, within the next few years. This rapid development, coupled with the existing I-540 corridor, will continue to generate pressure on existing fire services and require an additional station in order to provide adequate service. Response from the existing Station 3 will result in long response times due to the distance that would need to be covered. This station will feature a new design to more effectively meet the needs of both fire and police departments. Station 6 will house a new engine and 12 personnel.

Public Works Operations Building Renovations

\$1,700,000
Two-year Total

Phase I of this project includes renovating the existing locker area and expand it into the adjacent space being vacated by Electrical Operations upon their move to a new facility off-campus. New, larger men's and women's locker rooms would be created, with more toilet fixtures, showers, and lockers in each space. Additionally, a single occupancy toilet and shower room would be added, as well as a larger janitorial space. In the wider and longer hallway serving these new spaces, more laundry dropoff and pick-up lockers would be made available.

Town Fiber Optic Expansion

\$125,000

The proposed fiber project will provide funding for expansion of the existing Town fiber network to greater support operational efficiencies, create redundancy, and expand the fiber optic backbone and fiber optic connections to key locations and facilities throughout the Town. The Town's current fiber network supports a variety of operational areas. This project will help fund additional fiber strands, equipment, and installation as incremental costs to other planned projects. This request includes the final two phases of this project.



Town Hall Remodel

\$1,075,000

Three-year Total

This project includes a placeholder to fund the design changes to the Town Hall facility once the Building Inspections & Permitting Department relocates to the Mason Street property. Following the recommendations of a space needs study conducted in FY19-20, the Town has identified areas it can renovate or change to improve and increase the physical capacity of the building. An important component of this project will be anticipating growth and changes for each department and considering interactions between departments.

Tunstall House Restoration

\$850,000

Two-year Total

Restoration of the existing Tunstall House would not only be a prescriptive plan to save the current structure, but also provide long term use as well as mediate deterioration to the existing structure. This project contemplates the historic restoration of the house and contributing outbuildings. The house is suffering from deferred maintenance and currently serves no purpose. In the past, the house has been looked at for public purpose, but the restoration/renovation costs have been prohibitive. The first phase would include testing for lead and asbestos and determining preventive steps to stop further deterioration until the renovation occurs in the following year.

FY 2022-23

Communications Backup Center

\$325,000

The Continuity of Operations review completed in April 2020 identified four critical issues that need to be addressed. These include: limitations of the backup Communications Center physical footprint, backup equipment and functional capabilities, aging Apex Police Department radio tower, and the limitation of technology currently in place in the event the primary center needed to evacuate. Funding the CIP project will resolve three of these four issues. This project is designed to align with the opportunity to build the equipment and footprint into the construction of PSS6. Delaying would result in and increased cost to retrofit PSS6 and limit some design flexibility currently available during the pre-construction planning stages for PSS6.

Mechanical (Boiler) Upgrades to Community Center

\$130,000

Replace the four 20 year-old boilers at the Community Center and create a hot water loop system. Currently, there are issues with keeping temperatures up during colder months throughout the year, and there is significant deterioration of heat bricks, burners, and sensors. Burners and sensors have been replaced several times, but due to the age and inefficiency of units replaced, the items burn out.

Repurpose Depot Parking Lot

\$2,250,000

Two-year Total

The conversion of the Depot parking lot to the premier space to gather downtown was identified as a "Top 10" priority project in the Downtown Plan. The details of the final design will include a durable curbsless environment with a balance of sun and shaded areas, along with lighting and movable, interactive furnishings. Conceptual plans include space for the Farmer's Market, a splash pad area, an ice skating rink, and plenty of seating and space to host a variety of activities.

Station 1 Rebuild

\$5,000,000

Two-year Total

This project will raze and rebuild a three-bay fire station on half of the land on which the current Station 1 sits. The current building is not suitable for major renovation. This station will be designed to fit with the character of downtown while providing modern capabilities and operational effectiveness. It is anticipated that this station will continue to be a single company house with the addition of battalion chief quarters, since the current Station 3 will house Fire Administration. Incorporation of some type of public "museum space" featuring the Hunter fire apparatus is also planned for this location.



FY 2023-24

Vehicle Storage Shed & Brine Building

\$259,000
Two-year Total

This project is for the construction of a vehicle storage shed & brine building at the Public Works Operation Yard. The storage shed and brine building will provide shelter for vehicles and equipment not currently protected from inclement weather.

FY 2024-25

Fleet Fluid Pumps/Reclamation

\$100,000

This project includes the relocating of motor oil, hydraulic, coolant, and reclamation reservoir. Currently, the vehicle and equipment fluids are located in a small room with limited size drums, which increases the number of times vendors have to come out to refill or remove used fluids. Dumping old/used fluids is hazardous, based upon current practices, in which the mechanic hand pours/pumps old fluids into an open drum. This project will relocate to a larger area to allow larger tanks of new fluids and several reclamation tanks hooked up to pneumatic pumps that would safely and efficiently remove used fluids. On several occasions, the "oil room" where fluids are kept has experienced spills and overflow due to an increase in services provided by our fleet mechanics.

Town Campus Parking Lot Resurfacing

\$970,000
Two-year Total

This project is for the reconstruction of the Town Campus and Public Works Operations parking lots to include asphalt pavement and remarking.

Horizon

Fire Department Administration Building

\$2,000,000

As the Fire Department grows, the need for additional administrative office and conference room space is increasing exponentially. This project will renovate Station 3 to a fire administrative building that is capable of housing fire administration, logistics, training, and the fire marshal's office. This building will also contain conference space, planning rooms, and secure storage for departmental supplies.

Fire Station 7

(Olive Farm Area)

\$6,500,000
Two-year Total

Fire Station 7 (possibly #6) has been identified by a third party as being needed in order to meet the informally adopted fire department coverage standard of at least 90% of our coverage area being within a five minute travel time from all stations. This station's concept will mirror the Wimberly Road Station without the police elements.

Land Purchase for Affordable Housing

\$500,000

This project will provide funding for the purchase of land for future development of affordable housing.

Police Department Addition/Renovation

\$6,400,000
Two-year Total

With the growth of the community and police department, the Town is experiencing space limitations at the main police facility. This project includes plans to add space for operations, administrative functions, and the Communications Center. The conceptual plan adds two stories of office space above the current administrative parking lot (east side) over a secured police parking lot. The first level above that would align with the existing second story of the building and would be finished into office space for administrative functions. The second level would be unfinished shell space to allow for future growth. The existing administrative office space would be renovated to allow for a doubling in size of the existing Communications Center and the addition of related office and work space.



Public Works & Environmental Services Element Projects

Projects Funded: Projects designed to manage and mitigate the effects of stormwater runoff, manage the collection and disposal of solid waste, and maintain streets. These projects include structural improvements, SCM construction, and major maintenance of this infrastructure. They also include equipment needed to manage solid waste collection and maintain Town streets.

Peak Plan 2030 Recommendation: There are no direct recommendations in the plan regarding Public Works and Environmental Services.



Focusing on maintaining and improving the conveyance of stormwater protects property, infrastructure, and the environment. A well-managed yard waste collection program assists in this effort by keeping roadside gutters and drains clear.



The table below shows each of the projects submitted for consideration in this year's CIP process and the estimated cost of the project in each fiscal year in the plan. Section 6 of this document contains detailed information regarding the proposed funding source for each individual project.

Public Works & Environmental Services	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Chipper Truck - Replacement	165,000	-	-	-	165,000	-	330,000
Leaf Truck - Replacement	212,000	-	212,000	-	212,000	212,000	848,000
Pothole Patcher/Asphalt Truck - Replacement	200,000	-	-	-	-	-	200,000
Dump Truck - Addition	-	100,000	-	-	-	-	100,000
Leaf Truck - Addition	-	212,000	-	212,000	-	-	424,000
Motor Grader - Replacement	-	250,000	-	-	-	-	250,000
Grapple Truck - Replacement	-	-	195,000	-	-	-	195,000
Street Sweeper - Replacement	-	-	275,000	-	-	-	275,000
Chipper Truck - Addition	-	-	-	165,000	-	-	165,000
Small Asphalt Paver - Addition	-	-	-	-	115,000	-	115,000
Dump Truck - Replacement	-	-	-	-	-	185,000	185,000
Element Total	\$ 577,000	\$ 562,000	\$ 682,000	\$ 377,000	\$ 492,000	\$ 397,000	\$ 3,087,000



FY 2021-22

Chipper Truck – Replacement \$165,000

This truck replacement is necessary to maintain our current level of service to the Town. Not adequately maintaining the fleet of the Town would mean the current level of service would have to be decreased in order to accommodate the higher population. The replacement is needed due to the aging of an existing chipper truck/chipper combo (Unit #76), which will be 13 years old at the time of replacement and have well over 109,000 miles.

Leaf Truck – Replacement \$212,000

This project will replace a leaf truck (Unit #53) in the Town’s current fleet that will be 12 years old with over 121,000 miles at the time of replacement.

Pothole Patcher/Asphalt Truck – Replacement \$200,000

The purpose of the haul vehicle is to transport the asphalt mixture from the asphalt plant while maintaining proper heat of the virgin asphalt so there is no loss of material during the delivery process and the asphalt remains workable. This truck will be used on 95% of the asphalt patches throughout town. If not funded, the older, more unreliable truck (Unit #20) will continue to be used resulting in less efficiencies and loss of materials. The vehicle will be 14 years old at time of replacement.

FY 2022-23

Dump Truck – Addition \$100,000

There are currently four dump trucks available to public works. The oldest is a 1996 single axle dump truck and the newest is a 2006 two-ton dump truck. This project will add an additional dump truck to the fleet to account for the future growth and additional responsibilities of the department.

Leaf Truck – Addition \$212,000

The addition of another leaf truck will be necessary to meet the expanding service area resulting from residential growth. An additional employee will be necessary to operate the equipment to continue to provide weekly service.

Motor Grader – Replacement \$250,000

This project will replace a grader (Unit #5506) that is over 53 years old with over 120,000 miles. A motor grader is necessary to spread materials, maintain ditches, and maintain gravel roads and parking lots. This vehicle will also be utilized for snow and ice control operations.

FY 2023-24

Grapple Truck – Replacement \$195,000

There are currently two grapple trucks in the fleet to support the Town's yard waste program by providing large limb and tree stump removal service. Only one of the grapple trucks is used on a daily basis with a second truck serving as a backup. This second truck is also used to support the bulk item pickup program; collecting oversized items that cannot be lifted by hand. This project will replace a truck (Unit #210) that will be over 9 years old with over 94,000 miles.

Leaf Truck – Replacement \$212,000

This project will replace a leaf truck (Unit #212) in the Town’s current fleet that will be 8 years old with over 75,000 miles at the time of replacement.



Street Sweeper – Replacement

\$275,000

This project will replace a street sweeper (Unit #96) that will be over 22 years old at the time of replacement. There is currently one street sweeper in the street department fleet used to clean streets for special events. This truck will be used to clean Town streets after spills, provide routine maintenance, and clean up after parades and festivals.

FY 2024-25

Chipper Truck – Addition

\$165,000

This project will be an addition of a Chipper Truck, which will be a required addition to the future growth of the department and additional responsibilities of the department. The department will not be able to maintain production due to lack of equipment within the Town.

Leaf Truck – Addition

\$212,000

The addition of another leaf truck will be necessary to meet the expanding service area resulting from residential growth. An additional employee will be necessary to operate the equipment to continue to provide weekly service.

FY 2025-26

Chipper Truck – Replacement

\$165,000

This truck replacement is necessary to maintain our current level of service to the Town. Not adequately maintaining the fleet of the Town would mean the current level of service would have to be decreased in order to accommodate the higher population. The replacement is needed due to the aging of an existing chipper truck/chipper combo (Unit #225), which will be 10 years old at the time of replacement.

Small Asphalt Paver

\$115,000

This paver is to expand our capabilities to pave when utility cuts might occur or for greenway trail repairs. Funding this Paver would prevent the Town from having to contract out these small projects at a higher cost.

Leaf Truck – Replacement

\$212,000

This project will replace a leaf truck (Unit #108) in the Town’s current fleet that will be 8 years old at the time of replacement.

Horizon

Dump Truck – Replacement

\$185,000

This project will replace a dump truck (Unit #62) in the Town’s fleet that will be 18 years old at time of replacement.

Leaf Truck – Replacement

\$212,000

This project will replace a leaf truck (Unit #121) in the Town’s current fleet that will be 8 years old at time of replacement.



General Fund Summary

The table below shows the total of the capital needs in each of the CIP elements supported by the General Fund and the revenue sources proposed to support these needs. The grant and fee revenues are explained in the applicable sections above. Local revenue is indicative of the need for current year revenue supported funding for some projects/purchases in each year. Section 6 of this document contains detailed information regarding the proposed funding source for each individual project.

The level of capital need reflected in this document necessitates the issuance of additional debt to meet these needs. In the table below, new debt service is shown as a total amount proposed in each fiscal year. Installment purchase is used primarily for debt issues that are shorter in term and/or for relatively small projects. Bond debt is issued for longer term, high cost projects. Some bond issues cover multiple projects. For the purpose of the estimates shown, we have used an interest rate of 4 percent for installment and bond debt issues. While bond debt will carry a lower interest rate, we opted to keep this illustration simpler by using a common interest rate.

For items such as fire apparatus purchases, replacement vehicles and minor renovations, we use “pay go” financing to avoid interest costs and use accumulated fund balance for these one-time purchases. For all other issues in the General Fund, we use a twenty-year term for the purpose of this illustration. Increasing the length of the term for these issues would result in a lower annual payment, but a higher over-all interest cost over the life of the borrowing.

General Fund Element Total	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Transportation	29,556,000	5,860,000	5,375,000	6,540,000	33,730,000	53,810,000	134,871,000
Parks, Recreation, & Cultural Resources	300,000	737,800	1,400,000	1,375,000	1,965,000	14,960,000	20,737,800
Public Safety	762,000	1,400,000	740,000	243,000	165,000	825,000	4,135,000
Public Facilities	8,638,400	2,385,000	7,393,500	1,430,500	665,000	15,400,000	35,912,400
Public Works & Environmental Services	577,000	562,000	682,000	377,000	492,000	397,000	3,087,000
	\$ 39,833,400	\$ 10,944,800	\$ 15,590,500	\$ 9,965,500	\$ 37,017,000	\$ 85,392,000	\$ 198,743,200
Revenues	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total
General Fund / Capital Outlay	6,099,800	7,894,200	8,489,300	6,513,100	9,422,800	3,722,000	42,141,200
Designated Capital Funds	1,620,000	1,520,000	1,040,000	1,060,000	1,080,000	-	6,320,000
General Obligation Bonds	24,000,000	-	-	800,000	24,200,000	-	49,000,000
Installment Purchase / Capital Lease	6,500,000	-	4,500,000	-	-	27,860,000	38,860,000
Intergovernmental Funds	1,613,600	1,530,600	1,561,200	1,592,400	1,624,200	-	7,922,000
Grants	-	-	-	-	690,000	-	690,000
To Be Determined	-	-	-	-	-	53,810,000	53,810,000
	\$ 39,833,400	\$ 10,944,800	\$ 15,590,500	\$ 9,965,500	\$ 37,017,000	\$ 85,392,000	\$ 198,743,200

After capital assets are acquired or constructed, most will entail ongoing expenses for routine operation, repair, and maintenance. These operations, repair, and maintenance costs are accounted for annually in each year’s operating budget.

Transportation Element: New road and parking lot construction will necessitate future maintenance work including pothole repair, crack sealing, road marking repair, and resurfacing. Downtown improvements, such as the downtown alley improvements and Salem Street Streetscape, will involve future costs such as landscaping, electrical work, and repainting. Sidewalk construction in the Safe Routes to School project will involve regular pavement repair, repainting crosswalk markings, and performing maintenance work on crosswalk signals. Lastly, the GoApex Transit Program will involve future costs including wages for operating personnel and routine vehicle maintenance and repair work.

Parks, Recreation, & Cultural Arts Element: New greenway connections will necessitate future maintenance work including brush clearing, sign and bench replacement, and trail reconstruction. Once constructed and operational, the Environmental Education Center will necessitate ongoing costs such as staff wages, educational materials, and regular cleaning and building maintenance. Parking lot



expansions will involve future costs including sweeping and asphalt treatment. New park construction will necessitate regular annual costs such as landscaping, irrigation system maintenance, restroom and public facility cleaning, and wages for park maintenance and programming staff.

Public Safety Element: The replacement aerial apparatus, replacement fire engines, and new rescue retrieval van will incur regular costs such as the purchase of fuel, wages for operating personnel, and repair and maintenance. Once acquired, the driving simulator will necessitate annual repair and maintenance costs

Public Facilities Element: New public safety and fire stations will incur future costs including staff wages, building cleaning and maintenance, and utility services. After renovations are complete, the Eva Perry Library will incur costs for routine maintenance and repairs of its new roof and HVAC unit. The repurposing of the downtown Depot parking lot will involve regular costs including street sweeping, landscaping, furniture and lighting replacement, and programming. HVAC, chiller, and boiler upgrades to Town administrative buildings will necessitate routine maintenance and repair costs as their useful lives progress.

Public Works & Environmental Element new and replacement vehicles and equipment such as chipper trucks, leaf trucks, dump trucks, and asphalt pavers will incur regular maintenance and repair costs over the course of their useful lives.

Section 3: CIP Financial Impact Analysis on General Fund

A key element of the CIP is the financial impact analysis that discusses the effects of capital spending on the town's operation costs, debt capacity, and other important debt ratios. It is important to understand how capital spending affects these indicators because the Local Government Commission (LGC) and bond rating agencies use them to evaluate the town's financial condition and to issue ratings. Apex currently has a bond rating of AAA with Standard & Poor's Corporation and Aaa with Moody's Investors Service. These ratings represent strong financial standing and are the highest possible ratings attainable.

Projections and Estimates

Proper financial planning requires projections and estimates for expenditures, revenues, and other financial indicators. Expenditure and revenue estimates require forecasts for changes in population, assessed property value, and other factors such as changes in the economy. The CIP projections represent a six percent growth factor for operations expenditures throughout the five-year scope. The town has been the beneficiary of sustained growth in property values with a three-year rolling average of 7.33 percent not including revaluation years. Wake County will perform a revaluation in 2024 that will affect the assessed value and revenue neutral tax rate for Apex. The CIP includes an adjustment in FY24-25 for a potential revenue neutral rate in response to the revaluation. Apart from gains in property tax revenues and sales tax revenues, estimates indicate growth in other revenues collectively is mostly flat or nominal. The CIP includes a revenue growth rate of five percent for FY22-23 and FY23-24 and a rate of 4.5 percent for the final two years of the plan. For projects subject to financing in FY21-22, interest rates between 3.5 and 4.0 percent are accurate based on other recent financing by the Town. For future years, a half percent has been added to the interest rate per year beginning in FY22-23. That rate may vary depending on the size of the project and length of term. Financing recommendations in this CIP include use of general obligation bonds and installment financing in the General Fund and revenue bonds in enterprise funds.

Debt Ratios

The large costs associated with capital projects may require financing, which results in debt obligation for the Town. The LGC and bond rating agencies assess the Town's ability to incur and repay debt through various debt capacity ratios and indicators. In the General Fund, the Town evaluates net debt as a percentage of total assessed value of taxable property, the aggregate ten-year principal payout ratio, and the ratio of debt service expenditures as a percent of total fund expenditures.

Net debt per assessed valuation is an important indicator because it takes into account the Town's largest revenue source and greatest means for repaying debt. This is a measure of debt capacity as well as debt burden. This ratio divides the Town's net debt by its total assessed value, where net debt is defined as all tax-supported debt. Town policy states that its net debt per assessed valuation should not exceed 2.5 percent. Apex's expected debt-to-assessed valuation ratio for FY21-22 is .90 percent. The ratio for FY21-22 represents the expected high point within the proposed CIP. Even with upcoming projects that will require additional debt financing, the growth in assessed value will outpace that modest increase in net debt, resulting in a lower ratio. The .90 percent is well below the Town's maximum and the legal limit set forth by N.C.G.S. 159-55, which limits net debt to eight percent or less of a local government's total property valuation. Apex's legal debt limit, based on the July 1, 2020 audited valuation is \$630,808,983. The CIP includes a maximum debt obligation of \$105,824,674 in FY25-26.

The 10-year payout ratio measures the amount of principal being retired in the next 10 years. As an indicator, it determines if debt is back-loaded, which can cause concern for long-term financial stability. Apex has a policy that establishes a minimum 10-year payout ratio of 55 percent. The CIP includes issuance of previously authorized bonds as well new bond debt and installment purchase financing. The new debt brings the payout ratio down to 68.27 percent in FY21-22. The lowest ratio of 66.52 in FY25-26 remains above the Town's minimum.



Debt service as a percentage of total expenditures measures annual debt service payments of non-self-supporting projects as a portion of the Town's General Fund expenditures. Debt service payments can become a large portion of a town's budget and should be monitored to ensure acceptable levels. Too much debt service may indicate excessive debt and fiscal strain. Bond rating agencies consider a net debt service percentage between 15 and 20 percent to be high. A ratio below five (5) percent indicates capacity for significant new debt. The Town's policy is to maintain a net debt service ratio of less than 12 percent. For FY21-22, the General Fund debt service ratio is 9.54 percent and reaches a high of 11.63 percent in FY22-23. Without significant changes to the CIP, the debt service ratio will remain below 12 percent for the length of the current CIP. Keeping this ratio below 12 percent provides the town with opportunities to finance more projects.

Pay-as-go financing can help keep key debt ratios in acceptable range by eliminating new debt obligations and annual debt service payments. The proposed CIP indicates differences from year to year in pay-as-go financing over the five-year period. This is due to the significant costs associated with some larger projects such as roads or a new fire station. If debt ratios begin to approach unacceptable ranges, delaying projects or using pay-as-go financing should be considered to keep the Town in good financial standing and reduce fiscal strain.

Other factors bond rating agencies consider when assessing a town's financial condition may include the community's wealth, tax base, sources of revenues, and the overall economy.

Summary of CIP Impact on General Fund Debt Ratios and Fiscal Indicators

Debt Obligations	FY20-21	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26
GO Bond Debt	\$61,660,000	\$82,455,000	\$79,250,000	\$75,535,000	\$71,420,000	\$90,695,000
Installment Purchase & Lease Debt	\$10,941,724	\$16,223,931	\$15,015,138	\$18,097,738	\$16,681,512	\$15,129,674
Total Net Debt Obligations	\$72,601,724	\$98,678,931	\$94,265,138	\$93,632,738	\$88,101,512	\$105,824,674
Debt Service						
GO Bond Principal	\$3,205,000	\$3,715,000	\$4,915,000	\$4,925,000	\$4,925,000	\$4,720,000
GO Bond Interest	\$2,202,403	\$2,243,257	\$3,126,007	\$2,919,357	\$2,712,057	\$2,504,456
<i>Total GO Bond Debt Service</i>	<i>\$5,407,403</i>	<i>\$5,958,257</i>	<i>\$8,041,007</i>	<i>\$7,844,357</i>	<i>\$7,637,057</i>	<i>\$7,224,456</i>
IP & Lease Principal	\$1,217,793	\$1,208,793	\$1,417,400	\$1,416,225	\$1,551,839	\$1,559,275
IP & Lease Interest	\$317,240	\$230,014	\$460,977	\$427,206	\$615,208	\$574,160
<i>Total IP Debt Service</i>	<i>\$1,535,033</i>	<i>\$1,438,807</i>	<i>\$1,878,377</i>	<i>\$1,843,431</i>	<i>\$2,167,047</i>	<i>\$2,133,435</i>
Total GF Debt Service	\$6,942,436	\$7,397,064	\$9,919,383	\$9,687,787	\$9,804,103	\$9,357,891

General Fund Debt Ratios & Fiscal Indicators	FY20-21	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26
Fund Balance	\$25,035,475	\$23,486,475	\$19,095,409	\$16,309,174	\$15,116,714	\$12,242,979
Fund Balance Percentage	30.91%	29.70%	21.91%	17.77%	15.63%	11.61%
Impact on Capital Designated Funds	\$0	\$1,820,000	\$1,520,000	\$1,040,000	\$1,060,000	\$1,080,000
Impact on Operating Budget	\$0	(\$12,000)	\$1,348,200	\$1,027,700	\$1,457,131	\$1,522,100
Revenue per Capita	\$1,233	\$1,119	\$1,112	\$1,087	\$1,092	\$1,082
% Property Tax Revenue	47.91%	53.98%	56.56%	58.81%	59.43%	60.97%
10-year Principal Payout (>55%)	0.00%	68.27%	73.70%	75.35%	80.24%	66.52%
Net Debt per Assessed Valuation (<2.5%)	0.711%	0.900%	0.787%	0.715%	0.585%	0.643%
Net Debt Service to Expenditures Less Transfers-in (<12%)	9.29%	9.54%	11.63%	10.56%	10.22%	8.88%
PAYGO Percent	0.00%	22.62%	100.00%	69.43%	91.97%	34.62%

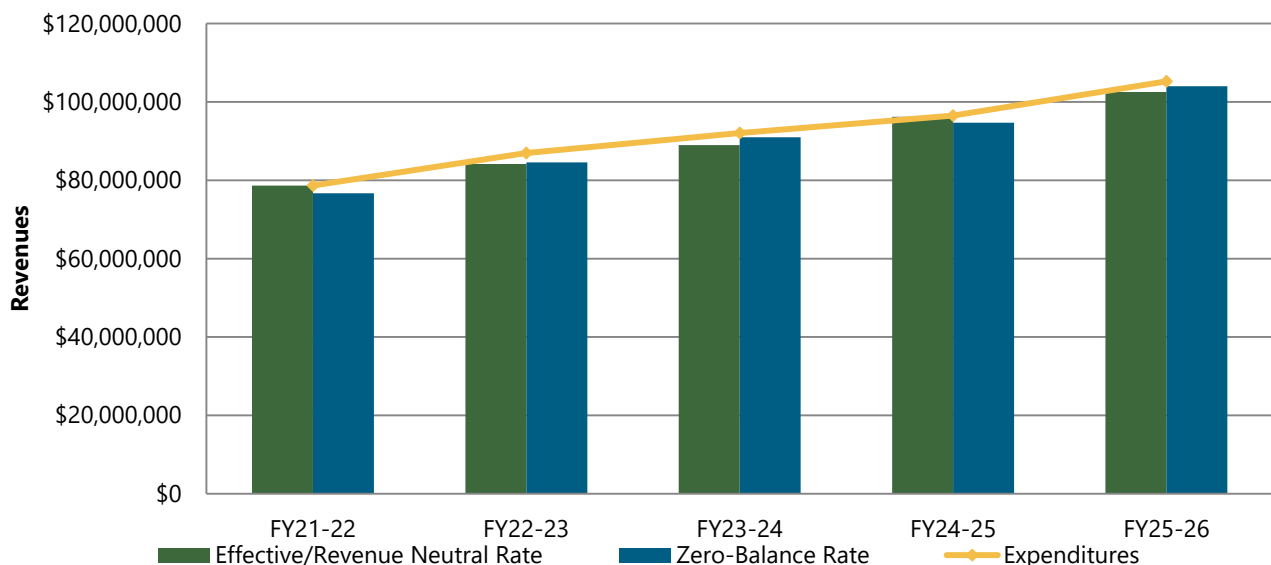
Tax Rate Analysis

One method of assessing the CIP impact on the operating budget is to illustrate the effects in terms of the tax rate. The table and graphs below depict the potential tax rate needed to generate enough revenue to account for General Fund CIP project costs beyond the Town's typical capital and operating expenditures. This calculation is dependent on the Town's assessed value and the revenue generated by a penny on the tax rate. The formula does not take into account substantial increases or decreases in revenues from other sources such as sales tax or service fees. In addition, it does not address changes in operational needs for the Town unless addressed in the CIP. The FY21-22 Recommended Budget includes a tax rate of \$.39, which includes the net of a \$.015 increase for voter approved bond debt in 2017 and \$.005 decrease as part of a shift in stormwater operations from the General Fund to an enterprise fund. Wake County will undergo another revaluation in 2024 and the projections for FY24-25 use a revenue-neutral tax rate of \$.38. For this analysis, the Town's capital expenditures do not include grant-funded projects except for the required local contributions.

If projections are accurate, CIP projects will create a funding gap each year beginning in FY22-23 with potential shortfalls ranging from \$290,505 in FY24-25 to \$3.08 million in FY23-24. These funding gaps represent potential policy decisions for Town Council regarding use of fund balance, setting the tax rate, delaying projects, and consideration of operational cuts. The funding gap is noticeable for all years due to large capital projects that will require financing, such as reconstruction of Fire Station 1 and new road construction as well as the substantial impact on the operating budget with the addition of a full engine company upon completion of Public Safety Station 6 in FY22-23. The CIP includes \$81.06 million in transportation projects over the next five years and identifies another \$53.8 million in projects on the horizon. Twelve projects in the next five years are \$1 million or more. How to finance these projects presents another policy decision for Town Council. The CIP includes general obligation bonds beginning in FY21-22 to cover \$42 million in transportation projects. This amount can easily be higher and only covers a portion of the large transportation projects. The impact model does include a tax rate increase to accompany the proposed general obligation debt. The proposed bond plan would include two separate tax rate increases of approximately \$.015 in FY22-23 and FY26-27 to cover the annual debt service.

The five-year tax rate assessment table indicates the change in tax rate needed to account for the potential funding gaps. Estimated expenditures and tax rate scenarios are depicted in the chart below. This does not account for any potential increases in other revenues sources or cuts in the operating budget that may offset the gap. The effective/revenue neutral rate line reflects revenues with no change in the current tax rate other than an adjustment for revenue neutral in the revaluation year and the required tax increase for the 2017 recreation bonds. The zero-balance rate line reflects revenues with the tax rate adjusted to offset the funding gap.

Projected GF Revenues vs. Expenditures Scenarios



5-Year Tax Rate Assessment

Forecasted Expenditures (Including CIP Projects)	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26
Operating Budget	\$63,001,436	\$65,629,722	\$70,595,205	\$76,288,049	\$82,387,432
Capital Outlay	\$8,918,400	\$10,944,800	\$10,220,500	\$9,165,500	\$12,127,000
Debt Service	\$7,397,064	\$9,919,383	\$9,687,787	\$9,804,103	\$9,357,891
Transfers Out	-\$1,820,000	-\$1,520,000	-\$1,040,000	-\$1,060,000	-\$1,080,000
<i>Total Expenditures</i>	<i>\$79,091,900</i>	<i>\$87,170,905</i>	<i>\$91,771,493</i>	<i>\$96,702,652</i>	<i>\$105,437,323</i>
Total Capital & Debt	\$14,495,464	\$19,344,183	\$18,868,287	\$17,909,603	\$20,404,891
Capital & Debt Expenditures %	18.33%	22.19%	20.56%	18.52%	19.35%
Forecasted Revenues					
Property Tax	\$42,695,130	\$47,869,681	\$52,329,591	\$57,205,021	\$62,534,683
Other Taxes, Fees, Charges	\$33,247,770	\$34,910,159	\$36,655,666	\$38,305,171	\$40,028,904
Transfers In	\$1,600,000	\$0	\$0	\$0	\$0
<i>Total Revenues</i>	<i>\$79,091,900</i>	<i>\$84,629,840</i>	<i>\$88,985,257</i>	<i>\$96,250,192</i>	<i>\$102,563,587</i>
Difference	\$0	(\$2,541,066)	(\$2,786,235)	(\$452,460)	(\$2,873,736)
Projected Fund Balance	\$23,486,475	\$19,095,409	\$16,309,174	\$15,116,714	\$12,242,979
Capital Impact on Fund Balance	\$0	(\$2,541,066)	(\$2,786,235)	(\$452,460)	(\$2,873,736)
Fund Balance Impact Percentage	29.70%	21.91%	17.77%	15.63%	11.61%
Assessed Property Value	\$10,958,427,579	\$11,979,399,513	\$13,095,493,095	\$15,059,817,060	\$16,462,906,184
\$.01 Property Tax Increase =	\$1,094,747	\$1,196,742	\$1,308,240	\$1,504,476	\$1,644,644
Tax Rate	\$0.390	\$0.400	\$0.400	\$0.380	\$0.380
Change in Tax Rate Needed for Difference	(\$0.000)	\$0.021	\$0.021	\$0.003	\$0.017
Zero-Balance Tax Rate	\$0.390	\$0.421	\$0.421	\$0.383	\$0.398
Projected Fund Balance with Tax Rate Adjustment	\$23,486,475	\$21,636,475	\$19,095,409	\$15,569,174	\$15,116,714
Projected Fund Balance % with Tax Rate Adjustment	29.70%	24.82%	20.81%	16.10%	14.34%

Section 4: Electric Utility

The projects funded through the Electric Utility element pull from the Electric Enterprise Fund. This fund pays only for projects related to the electric system and not for projects related to the Water/Sewer Fund or the General Fund.

The types of capital projects that qualify for this fund include construction, maintenance, and improvement of electric distribution infrastructure. These projects include substation additions and upgrades, distribution line extensions, and major maintenance of infrastructure. They also include equipment necessary to maintain the system.

The icon below signifies the electric utility element, and is located on the top right corner of the pages that are associated with these projects.





Electric Utility Element Projects

Projects Funded: Construction, maintenance, and improvement of electric distribution infrastructure. These projects include substation additions and upgrades, distribution line extensions, major maintenance of infrastructure and equipment necessary to maintain the system.

Peak Plan 2030 Recommendation: Continuing to assess, plan, and fund infrastructure needs through a capital improvement program and manage growth through utility investments.



From our newest substation, Mt. Zion (shown on the left), and throughout our system, we work to improve the reliability of our electric system.

Well-trained and well-equipped technicians are required to maintain a first rate utility.



The table below shows each of the projects submitted for consideration in this year's CIP process and the estimated cost of the project in each fiscal year in the plan.

Electric Utility Fund	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Bucket Truck - Replacement	235,450	-	-	-	-	-	235,450
Electric Line Truck - Replacement	285,400	285,400	-	-	-	-	570,800
Smart Grid Meters & Load Control	1,000,000	1,000,000	-	-	-	-	2,000,000
System Fault Indicators	130,000	-	-	-	-	-	130,000
Green Level Substation	-	-	-	1,700,000	-	-	1,700,000
East Williams Street Substation	-	-	-	-	-	5,075,000	5,075,000
Total	\$ 1,650,850	\$ 1,285,400	\$ -	\$ 1,700,000	\$ -	\$ 5,075,000	\$ 9,711,250



FY 2021-22

Bucket Truck – Replacement \$235,450

This request is to replace one bucket truck (Unit #65). The bucket truck is a specialized vehicle required for the installation of overhead electrical equipment and performance of maintenance activities. At time of replacement, the truck will be over 18 years old.

Electric Line Truck – Replacement \$285,400

This request is to replace one Electric Line truck (Unit #13) which will be over 10 years old at time of replacement. The Digger Derrick is a specialized vehicle required for the installation of both overhead and underground electrical equipment.

Smart Grid Meters & Load Control \$2,000,000

Two-year Total

This project provides an end-to-end solution for wireless smart grid and advanced metering. It will provide the ability to manage and monitor our electrical service customers by utilizing high speed, standards-based communications to access real-time data. In addition to advanced metering, this project will also provide updated load control devices, thermostats, and street light control hardware. The software provides meter data, network, load control, streetlight, and outage and customer portal management all in one easy to use platform.

System Fault Indicators \$130,000

This project utilizes technology to help improve the town’s response to outages by allowing first responders to quickly identify location of faults on our distribution system. Utilizing cellular technology coupled with electronic fault indicators, the town’s response is increased by correctly locating the point of the disturbance prior to the service technician being dispatched. Coupled with our SCADA system, we will be able to reduce the customer’s outage time significantly. This project address two of our major strategic areas of focus; Customer Satisfaction and Integration of Technology.

FY 2022-23

Electric Line Truck – Replacement \$285,400

This request is to replace one Electric Line truck (Unit #183). The Digger Derrick is a specialized vehicle required for the installation of both overhead and underground electrical equipment. At time of replacement, the truck will be over 10 years old.

FY 2024-25

Green Level Substation \$1,700,000

The Green Level area is expected to add more than 2,100 new homes and associated services in the next few years. To support this scale of development, we will initially need to build a new 80 MVA substation with one 40 MVA Power Transformer installed. Having the electrical capacity ready in the form of a new substation (and distribution lines) will help ensure that we can provide reliable electrical service to this area.

Horizon

East Williams Street Substation \$5,075,000

Two-year total

As Veridea begins to develop along East Williams Street, near the East Williams Substation, we will need to improve our ability to serve this area. This project consists of approved development of 2.2 million square feet of mixed-used commercial development, 500,000 square feet of office development, and 4,000 residential units located on approximately 1,000 acres. To support this scale of development, the Town would need to add two 40 MVA Power Transformers to the East Williams Substation to provide the additional capacity and reduce delivery point charges from Duke Energy. This project contains two phases. Phase I will install one 40 MVA transformer and Phase II, will add the second 40 MVA transformer.

Electric Fund Summary

The table below shows the total of the capital needs for the Electric Fund element and the revenue sources proposed to support these needs. Local revenue is indicative of the need for current year revenue supported funding for some projects/purchases in each year.

At this time, no issuance of additional debt is projected to be needed to meet the capital needs described above.



Electric Utility Fund	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Bucket Truck - Replacement	235,450	-	-	-	-	-	235,450
Electric Line Truck - Replacement	285,400	285,400	-	-	-	-	570,800
Smart Grid Meters & Load Control	1,000,000	1,000,000	-	-	-	-	2,000,000
System Fault Indicators	130,000	-	-	-	-	-	130,000
Green Level Substation	-	-	-	1,700,000	-	-	1,700,000
East Williams Street Substation	-	-	-	-	-	5,075,000	5,075,000
Total	\$ 1,650,850	\$ 1,285,400	\$ -	\$ 1,700,000	\$ -	\$ 5,075,000	\$ 9,711,250
Revenues	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total
Capital Outlay	1,650,850	1,285,400	-	1,700,000	-	-	4,636,250
Installment Purchase / Capital Lease	-	-	-	-	-	5,075,000	5,075,000
	\$ 1,650,850	\$ 1,285,400	\$ -	\$ 1,700,000	\$ -	\$ 5,075,000	\$ 9,711,250



Section 5: Water and Sewer Utility

Projects assigned to the Water and Sewer Utility element are funded through the Water and Sewer Enterprise Fund. This fund only pays for projects related to the water and sewer system, and not for projects related to the electric fund, or any General Fund related project.

The types of capital projects that qualify for this fund include main additions and replacements, water/wastewater treatment plant renovations/expansions, filter rehabilitation, pump station additions, and major maintenance of infrastructure. They also include equipment necessary to maintain the system.

The icon below signifies the Water and Sewer Utility element, and is located on the top right corner of the pages that are associated with these projects.





Water and Sewer Utility Projects

Projects Funded: Construction and improvement of water and sewer infrastructure. These projects include main additions and replacements, water/wastewater treatment plant renovations/ expansions, filter rehabilitation, pump station additions, and major maintenance of this infrastructure.

Peak Plan 2030 Recommendation: Continue to assess, plan, and fund infrastructure needs through a capital improvement program and manage growth through utility investments.

Our water and sewer utilities face increasing demands for maintenance and improvements in order to serve current and future needs. Our wastewater treatment plant treats a portion of the wastewater generated in Apex, with the remainder going to the new regional plant in New Hill.



The table below shows each of the projects submitted for consideration in this year's CIP process and the estimated cost of the project in each fiscal year of the plan.

Water and Sewer Utility Fund	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Advanced Metering Infrastructure (AMI)	900,000	-	-	-	-	-	900,000
Barscreen Replacement	265,000	-	-	-	-	-	265,000
Cash-Perkins Outfall	2,325,000	-	-	-	-	-	2,325,000
Combo Truck - Replacement	420,000	-	-	-	-	-	420,000
Elevated Water Storage Tank - 1.5 MG	3,443,000	-	-	-	-	-	3,443,000
Lawrence Crossing Sewer Rehabilitation	395,000	-	-	-	-	-	395,000
Water Main Replacement & Rehab Program	300,000	309,000	318,300	327,800	337,700	-	1,592,800
Wester Transmission Main - Phase III	350,000	1,700,000	-	-	-	-	2,050,000
Abbingtion Gravity Sewer Extension	-	250,000	-	-	-	-	250,000
Beaver Creek Commons Gravity Sewer Extension	-	1,115,000	-	-	-	-	1,115,000
Big Branch 2 Pump Station & Force Main	-	16,400,000	20,400,000	-	-	-	36,800,000
Friendship Elementary Gravity Sewer Extension	-	835,000	-	-	-	-	835,000
Humie Olive Water Loop	-	260,000	1,300,000	-	-	-	1,560,000
Old Raleigh Road Water Line Replacement	-	-	800,000	2,800,000	-	-	3,600,000
US 64 Utility Relocation	-	-	-	-	2,500,000	-	2,500,000
UV System Replacement	-	-	-	-	1,386,500	-	1,386,500
Elevated Water Storage Tank - 2.0 MG	-	-	-	-	-	6,461,600	6,461,600
NC 55 Utility Relocation	-	-	-	-	-	2,150,000	2,150,000
SR1010 Utility Relocation	-	-	-	-	-	2,500,000	2,500,000
Cary Projects Sub-Total	960,300	59,000	483,000	230,000	-	-	1,732,300
WWRWRF Sub-Total	49,000	93,500	195,500	274,800	-	-	612,800
Total	\$ 9,407,300	\$ 21,021,500	\$ 23,496,800	\$ 3,632,600	\$ 4,224,200	\$ 11,111,600	\$ 72,894,000



FY 2021-22

Advanced Metering Infrastructure (AMI)

\$900,000

This project continues to deploy AMI interfaces for all water meters. Upgrading to AMI technology will allow staff to take meter readings from a fixed location and have the readings enter directly into billing software. Phases 2 -5 include funds to transition to AMI and continue replacement of meters older than 10 years old. Tied with our proposed electric meter replacement, this project will allow us to deploy an advanced outage management system to greatly improve service to our customers. Originally, this project was envisioned as a phased approach to convert the town's existing AMR (Drive-by meter reading) system to an AMI (Advanced Metering Infrastructure) system. The first phase was to upgrade the existing meter interface units (MIUs) and some older meters. With this approach, the town would remain with its current AMR vendor through the transition to AMI. However, over the last year it has proven more prudent to take a more holistic approach to transitioning to AMI. In addition to considering other AMI vendors, the Water Resources and Electric Utilities departments have determined it is both feasible and in the towns best interest to pursue a combined AMI system (to read both electric and water meters). Thus, we have halted active upgrades to the AMR system and have begun working with the Electric Utilities Department to evaluate and select an AMI vendor. We expect to complete the selection process and begin system-wide implementation in the spring/summer of 2020. The operational, customer service, and financial benefits of AMI have proven well worth the cost for many utilities who have already implemented the technology. Not funding this request would simply prevent the town from realizing these benefits.

Barscreen Replacement

\$265,000

This project will replace one existing bar screen at the Wastewater Treatment facility's headworks. The existing bar screen is 30 years old and approaching the end of its life cycle. Better technology is available that will provide more efficient removal of debris from the wastewater, resulting in increased capacity and reducing maintenance costs.

Cash-Perkins Outfall

\$2,325,000

This project includes construction of a gravity sewer main extending through the Cash-Perkins property, connecting to the future Upper Middle Creek Gravity Interceptor and regional pump station to construct for Horton Park. This gravity sewer will allow both the Cash-Perkins and Pinnacle Park Pump Stations to be taken off line, resulting in a reduction of approximately \$50,000 in annual maintenance costs. This project is in compliance with the adopted Master Sewer Plan.

Combo Truck – Replacement

\$420,000

This project will replace a combination vacuum truck (Unit #97) in the Town's current fleet that will be over 12 years old at time of replacement.

Elevated Water Storage Tank – 1.5 MG

\$3,443,000

This project include construction of a 1.5 million gallon elevated storage tank to ensure we meet the State's minimum requirement for elevated storage.

Lawrence Crossing Sewer Rehabilitation

\$395,000

This project will replace an aging 24 inch gravity sewer outfall with a new 12 inch sewer line. The 24 inch line formerly conveyed over half of the Town's sewer flow. The completion of the Western Wake Regional Water Reclamation Facility (WRF) in 2014 diverted most of this flow. It is more cost effective to replace and downsize to a 12 inch line than to install a liner in the 24 inch pipe.



Water Main Replacement & Rehab Program

\$1,592,800

Five-year total

Gradual replacement of small diameter (<10"), extremely old cast iron and AC water lines. These water lines are 60+ years old and likely tuberculated such that their capacities are greatly reduced. Replacing these lines will improve reliability and available fire flow in the water system.

Western Transmission Main – Phase III

\$2,050,000

(Apex BBQ to Peakway)

Two-year Total

Phase III of the Western Transmission Main Project will be the final phase of this project. The project includes the following sections: 900 feet of 20-inch waterline on Salem Street from Apex BBQ Road to the Peakway, and 3,000 feet of 20-inch waterline on Old US 1 from West Village to Holland Road. The primary purpose of Phase III work is to provide adequate water flow at a manageable pressure to the entire water system as western portions of Apex, south of Olive Chapel Road, develop and demand grows. This work will also ensure that adequate flow and proper velocities are maintained in the other areas of Apex as growing demand to the west pulls water in that direction.

FY 2022-23

Abbington Gravity Sewer Extension

\$250,000

Due to constant overtime and emergency maintenance at this station, approximately 2,400 LF of gravity sewer is needed to connect the sewer flowing into the Abbington Pump Station to the outfall along Reedy Branch. Not funding this project will require continued maintenance of the pump station. Being able to abandon this pump station will reduce the amount of funding needed for maintenance and eventual upgrades as well as reduce the noise and odors that come from the site.

Beaver Creek Commons Gravity Sewer Extension

\$1,115,000

Recent development projects near Kelly Road have upgraded and extended gravity sewer from the Abbington Subdivision to I-540. Currently, there is a gap between I-540 and the Beaver Creek Crossings Pump Station. The land between is part of a large lot subdivision (Chapel Ridge) with little potential for redevelopment. This project would involve decommissioning the Beaver Creek Crossings Pump Station and constructing approximately 2,100 feet of 12-inch gravity sewer line and manholes to complete the system. Not funding this project will require continued maintenance of the pump station. Project also includes looping a dead-end 12-inch water main along Beaver Creek Commons Drive from Beaver Creek to Kelly Road. If not constructed, redundancy and improved transmission to Town's elevated tanks will not be realized. Increased flushing of water may be required in the dead-end 12-inch water line to maintain water quality.

Big Branch 2 Pump Station & Force Main

\$36,800,000

Two-year total

This project includes construction of Big Branch Pump Station (capacity of 3 million gallons per day) and approximately six miles of 30-inch force main that will discharge at the Western Wake Regional WRF. This infrastructure is needed to serve the Big Branch Basin, which is generally located in the triangle between I-540, US 1, and NC 55.

Friendship Elementary Gravity Sewer

\$835,000

Due to recent sewer extensions along Little Beaver Creek, the existing pump station located at the Friendship HS/ES site can be taken offline. In order to do so, approximately 2,400 linear feet of 12-inch gravity sewer is needed to extend from the Friendship Elementary School site to the Little Beaver Creek outfall. Not funding this project will require continued maintenance of the pump station. Being able to abandon this pump station will reduce the amount of funding needed for maintenance and eventual upgrades as well as reduce the noise and odors that come from the site.



Humie Olive Water Loop

\$1,560,000

Two-year total

This project will add approx. 7,000 linear feet of 12-inch water main along Humie Olive and New Hill Olive Chapel Road to complete a full 12-inch loop in this area. This loop will provide better water quality and fire protection capabilities to this section of the service area.

FY 2023-24

Old Raleigh Road Water Line Replacement

\$3,600,000

Two-year Total

The 10-inch water main in Old Raleigh Road was installed in the early 1960s and is now surpassing the designed 50-year life expectancy. Of additional concern are the improvements to Old Raleigh Road that have taken place over the years, subjecting this pipe to increasing vibration and stress from vehicle traffic. Research shows that expansive clay soil, which is found in Apex, contributes to pipe failure, particularly in the smaller diameters like the existing 10-inch line. While we do have redundancy, a pipe failure along this line would require an inordinate number of other valves and loops to be closed.

FY 2025-26

US 64 Utility Relocation

\$2,500,000

This project includes extending a 12-inch water line down Laura Duncan Road, under US 64, and tie-in to the existing 12-inch water line that runs parallel with US 64. In addition, utility relocations are needed to accommodate US 64 improvements. Existing Town utilities within the corridor include 8, 10, and 12-inch water lines, 14-inch force main and 8-10 inch gravity sewers. If the 12-inch water line is not extended across US 64, the Town will have flow issues in this area and continue to have to flush because of the dead-end lines. These lines are flushed routinely to keep up the proper disinfectant levels for water quality purposes.

UV System Replacement

\$1,386,500

The core components of a UV system consist of UV lamps, lamp drivers, and electronic circuit boards. As we all know, new electronic components generally replace older technology every few years. Like mobile phones, tablets, and computers, for example. We often see them become outdated in two or three years. Similarly, though perhaps not as quickly, a UV system's electronic lamp drivers and circuit boards (used for a UV intensity sensor) also have limited useful life expectancies. Not only that, but as components age, they may become more difficult to replace and keep in stock. Not to mention the cost increases associated with hard to get parts. There has been significant innovation in UV technology since our TrojanUV4000 was designed and installed (1998). Newer lamp and driver technologies combined with smart reactor design work together to reduce the amount of energy needed to achieve disinfection compared to older UV systems. So yes, power savings can alone justify a UV system replacement. But it's not the only one. There have also been advances in cleaning systems, monitoring and controls as well as reductions in maintenance, thanks to reduced lamp counts needed. Can do more for less. The TrojanUVSigna may be selected to replace the TrojanUV4000 in order to take advantage of the high-efficiency low-pressure high-output (LPHO) lamp technology, which reduces both electrical consumption and power costs. We will have the ability to operate the existing TrojanUV4000 system while installing the new UV system.

Horizon

Elevated Water Storage Tank – 2.0 MG

\$6,461,600

This project include construction of a 2.0 million gallon elevated storage tank to meet storage tank to meet storage requirements as demands grow.

NC 55 Utility Relocation

\$2,150,000

This project includes utility relocations to accommodate NC Department of Transportation's (NCDOT) widening of NC Highway 55. The Town has existing water and sewer utilities within the right-of-way, including 12-inch and 6-inch water



lines, fire hydrants, valves, water service lines, 8-inch gravity sewer lines, manholes, and water and sewer service laterals that will be in conflict with NCDOT's proposed road widening. Utilities in conflict have to be relocated to prevent disruption of utility service to customers within the construction corridor. This project also includes an extension of 12-inch line down NC 55 under the railroad trestle to create new loop in distribution system.

SR1010 Utility Relocation

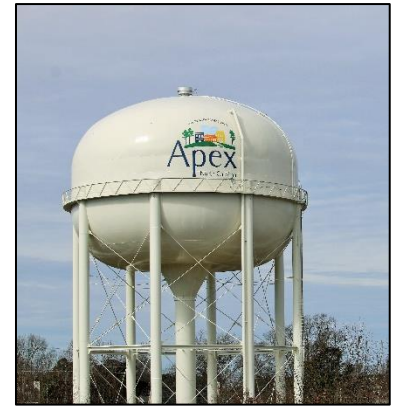
\$2,500,000

This project includes utility relocations to accommodate NC Department of Transportation's widening of Ten Ten Road/Center Street to Kildaire Farm Road. The Town has existing water and sewer utilities within the right-of-way, including 12-inch and 16-inch water lines, fire hydrants, valves, water service lines, and 6 and 8 inch force mains that will be in conflict with NCDOT's proposed road widening. Utilities in conflict have to be relocated to prevent disruption of utility service to customers within the construction corridor.

Water and Sewer Fund Summary

The table below shows the total of the capital needs for the Water and Sewer Fund element and the revenue sources proposed to support these needs. Local revenue is indicative of the need for current year revenue supported funding for some projects/purchases in each year.

At this time, no issuance of additional debt is projected to be needed to meet the capital needs described above.



Water and Sewer Utility Fund	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total Capital Cost
Advanced Metering Infrastructure (AMI)	900,000	-	-	-	-	-	900,000
Barscreen Replacement	265,000	-	-	-	-	-	265,000
Cash-Perkins Outfall	2,325,000	-	-	-	-	-	2,325,000
Combo Truck - Replacement	420,000	-	-	-	-	-	420,000
Elevated Water Storage Tank - 1.5 MG	3,443,000	-	-	-	-	-	3,443,000
Lawrence Crossing Sewer Rehabilitation	395,000	-	-	-	-	-	395,000
Water Main Replacement & Rehab Program	300,000	309,000	318,300	327,800	337,700	-	1,592,800
Wester Transmission Main - Phase III	350,000	1,700,000	-	-	-	-	2,050,000
Abbingtion Gravity Sewer Extension	-	250,000	-	-	-	-	250,000
Beaver Creek Commons Gravity Sewer Extension	-	1,115,000	-	-	-	-	1,115,000
Big Branch 2 Pump Station & Force Main	-	16,400,000	20,400,000	-	-	-	36,800,000
Friendship Elementary Gravity Sewer Extension	-	835,000	-	-	-	-	835,000
Humie Olive Water Loop	-	260,000	1,300,000	-	-	-	1,560,000
Old Raleigh Road Water Line Replacement	-	-	800,000	2,800,000	-	-	3,600,000
US 64 Utility Relocation	-	-	-	-	2,500,000	-	2,500,000
UV System Replacement	-	-	-	-	1,386,500	-	1,386,500
Elevated Water Storage Tank - 2.0 MG	-	-	-	-	-	6,461,600	6,461,600
NC 55 Utility Relocation	-	-	-	-	-	2,150,000	2,150,000
SR1010 Utility Relocation	-	-	-	-	-	2,500,000	2,500,000
Cary Projects Sub-Total	960,300	59,000	483,000	230,000	-	-	1,732,300
WWRWRF Sub-Total	49,000	93,500	195,500	274,800	-	-	612,800
Total	\$ 9,407,300	\$ 21,021,500	\$ 23,496,800	\$ 3,632,600	\$ 4,224,200	\$ 11,111,600	\$ 72,894,000
Revenues	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	Future Years	Total
Capital Outlay	2,280,000	2,769,000	2,418,300	3,127,800	4,224,200	4,650,000	19,469,300
Designated Capital Funds	7,127,300	1,852,500	678,500	504,800	-	6,461,600	16,624,700
Revenue Bonds	-	16,400,000	20,400,000	-	-	-	36,800,000
	\$ 9,407,300	\$ 21,021,500	\$ 23,496,800	\$ 3,632,600	\$ 4,224,200	\$ 11,111,600	\$ 72,894,000

Section 6: Project Funding Detail

The following pages contain project funding details.

Transportation

Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Annual Miscellaneous Drainage Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
- Designated Capital Funds	100,000	100,000	100,000	100,000	100,000	-	500,000
- To Be Determined	-	-	-	-	-	100,000	100,000
Annual Miscellaneous Road & Sidewalk Improvements	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
- Designated Capital Funds	200,000	200,000	200,000	200,000	200,000	-	1,000,000
- To Be Determined	-	-	-	-	-	200,000	200,000
Annual Pavement Management	1,871,000	1,950,000	2,025,000	2,100,000	2,200,000	2,200,000	12,346,000
- Intergovernmental Funds (Powell Bill Revenues)	1,500,600	1,530,600	1,561,200	1,592,400	1,624,200	-	7,809,000
- Designated Capital Funds	100,000	60,000	463,800	260,000	365,000	-	1,248,800
- General Fund / Capital Outlay	270,400	359,400	-	247,600	210,800	-	1,088,200
- To Be Determined	-	-	-	-	-	2,200,000	2,200,000
Apex Peakway Southwest Connector	22,625,000	-	-	-	-	-	22,625,000
- Designated Capital Funds	625,000	-	-	-	-	-	625,000
- General Obligation Bonds	22,000,000	-	-	-	-	-	22,000,000
Downtown Alley Improvements	500,000	-	-	-	-	-	500,000
- General Fund / Capital Outlay	500,000	-	-	-	-	-	500,000
Kelly Point Court Drainage Improvements	110,000	-	-	-	-	-	110,000
- General Fund / Capital Outlay	110,000	-	-	-	-	-	110,000
Pavement Management Backlog	1,000,000	-	-	-	4,000,000	-	5,000,000
- General Obligation Bonds	1,000,000	-	-	-	4,000,000	-	5,000,000
Safe Routes to School	1,595,000	660,000	200,000	500,000	5,640,000	710,000	9,305,000
- General Obligation Bonds	1,000,000	-	-	-	5,225,000	-	6,225,000
- Designated Capital Funds	595,000	660,000	200,000	500,000	415,000	-	2,370,000
- To Be Determined	-	-	-	-	-	710,000	710,000
Saunders Street Parking Lot Expansion	1,200,000	-	-	-	-	-	1,200,000
- General Fund / Capital Outlay	1,200,000	-	-	-	-	-	1,200,000
Ten Ten Road at Jessie Drive Left Turn Lane Extension Cost Share	200,000	-	-	-	-	-	200,000
- General Fund / Capital Outlay	200,000	-	-	-	-	-	200,000
Wayfinding Signage Fabrication & Installation	155,000	190,000	340,000	330,000	155,000	-	1,170,000
- General Fund / Capital Outlay	155,000	-	-	-	-	-	155,000
GPS Emergency Vehicle Preemption	-	260,000	160,000	160,000	160,000	-	740,000
- Designated Capital Funds	-	-	76,200	-	-	-	76,200
- General Fund / Capital Outlay	-	260,000	83,800	160,000	160,000	-	663,800
Salem Street Downtown Streetscape & Resurfacing	-	2,500,000	-	-	-	-	2,500,000
- General Fund / Capital Outlay	-	2,500,000	-	-	-	-	2,500,000

Transportation Cont.

Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Burma Drive Phase 2	-	-	450,000	1,000,000	3,000,000	-	4,450,000
- General Fund / Capital Outlay	-	-	450,000	1,000,000	3,000,000	-	4,450,000
Ragan Road Sidepath	-	-	1,000,000	-	-	-	1,000,000
- General Obligation Bonds	-	-	1,000,000	-	-	-	1,000,000
Stephenson Road High School Improvements Cost Share	-	-	750,000	-	-	-	750,000
- General Fund / Capital Outlay	-	-	750,000	-	-	-	750,000
Tingen Road Pedestrian Bridge	-	-	150,000	500,000	-	3,000,000	3,650,000
- General Fund / Capital Outlay	-	-	150,000	500,000	-	-	650,000
- To Be Determined	-	-	-	-	-	3,000,000	3,000,000
Apex Peakway North Widening	-	-	-	350,000	5,000,000	-	5,350,000
- General Obligation Bonds	-	-	-	350,000	5,000,000	-	5,350,000
Center Street Railroad Crossing Improvements & Sidewalk	-	-	-	100,000	700,000	-	800,000
- General Obligation Bonds	-	-	-	100,000	700,000	-	800,000
Chatham Street Railroad Crossing Improvements & Sidewalk	-	-	-	150,000	1,125,000	-	1,275,000
- General Obligation Bonds	-	-	-	150,000	1,125,000	-	1,275,000
Davis Drive at Salem Church Road Realignment	-	-	-	200,000	500,000	7,000,000	7,700,000
- General Fund / Capital Outlay	-	-	-	200,000	500,000	-	700,000
- To Be Determined	-	-	-	-	-	7,000,000	7,000,000
GoApex Transit Program	-	-	-	100,000	690,000	-	790,000
- General Fund / Capital Outlay	-	-	-	100,000	-	-	100,000
- Grants	-	-	-	-	690,000	-	690,000
Lynch Street Extension	-	-	-	550,000	-	-	550,000
- General Fund / Capital Outlay	-	-	-	550,000	-	-	550,000
West Williams Street Sidewalk	-	-	-	200,000	650,000	-	850,000
- General Obligation Bonds	-	-	-	200,000	650,000	-	850,000
Apex Peakway Southeast Connector	-	-	-	-	1,710,000	17,100,000	18,810,000
- General Fund / Capital Outlay	-	-	-	-	1,710,000	-	1,710,000
- To Be Determined	-	-	-	-	-	17,100,000	17,100,000
Jessie Drive Phase I & Phase II	-	-	-	-	7,500,000	13,500,000	21,000,000
- General Obligation Bonds	-	-	-	-	7,500,000	-	7,500,000
- To Be Determined	-	-	-	-	-	13,500,000	13,500,000
Production Drive Extension	-	-	-	-	400,000	4,000,000	4,400,000
- General Fund / Capital Outlay	-	-	-	-	400,000	-	400,000
- To Be Determined	-	-	-	-	-	4,000,000	4,000,000

Transportation Cont.

Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
NC 55 Sidewalk & Enhancement Cost Share (U-2901)	-	-	-	-	-	2,000,000	2,000,000
- To Be Determined	-	-	-	-	-	2,000,000	2,000,000
US 64 Sidewalk & Enhancement Cost Share (U-5301)	-	-	-	-	-	2,000,000	2,000,000
- To Be Determined	-	-	-	-	-	2,000,000	2,000,000
Ten Ten Road/Center Street Sidewalk & Enhancement Cost Share (U-	-	-	-	-	-	2,000,000	2,000,000
- To Be Determined	-	-	-	-	-	2,000,000	2,000,000

Parks, Recreation, & Cultural Resources

Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Annual Miscellaneous Greenway Connections	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
- General Fund / Capital Outlay	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Beaver Creek Greenway Improvement	-	337,800	-	-	-	-	337,800
- General Fund / Capital Outlay	-	337,800	-	-	-	-	337,800
Environmental Education Center	-	100,000	1,100,000	-	-	-	1,200,000
- General Fund / Capital Outlay	-	100,000	1,100,000	-	-	-	1,200,000
Apex Nature Park/Seymour Athletic Fields Parking Lot Expansion	-	-	-	975,000	-	-	975,000
- General Fund / Capital Outlay	-	-	-	975,000	-	-	975,000
Jaycee Park Expansion	-	-	-	100,000	1,000,000	-	1,100,000
- General Fund / Capital Outlay	-	-	-	100,000	1,000,000	-	1,100,000
Apex Community Park Parking Lot Expansion	-	-	-	-	665,000	-	665,000
- General Fund / Capital Outlay	-	-	-	-	665,500	-	665,500
Dredge Apex Community Park Lake	-	-	-	-	-	3,660,000	3,660,000
- Installment Purchase / Capital Lease	-	-	-	-	-	3,660,000	3,660,000
Northwest Wimberly Road Park Design	-	-	-	-	-	5,500,000	5,500,000
- Installment Purchase / Capital Lease	-	-	-	-	-	5,500,000	5,500,000
Olive Farm Park Design	-	-	-	-	-	5,500,000	5,500,000
- Installment Purchase / Capital Lease	-	-	-	-	-	5,500,000	5,500,000

Public Safety

Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Fire Engine Replacement - Station 3	762,000	-	-	-	-	-	762,000
- General Fund / Capital Outlay	649,000	-	-	-	-	-	649,000
- Intergovernmental Funds	113,000	-	-	-	-	-	113,000
Aerial Apparatus to Replace Ladder 4	-	1,400,000	-	-	-	-	1,400,000
- General Fund / Capital Outlay	-	1,400,000	-	-	-	-	1,400,000
Engine 32 Replacement	-	-	740,000	-	-	-	740,000
- General Fund / Capital Outlay	-	-	740,000	-	-	-	740,000
Driving Simulator	-	-	-	243,000	-	-	243,000
- General Fund / Capital Outlay	-	-	-	243,000	-	-	243,000
Rescue Retrieval Van	-	-	-	-	165,000	-	165,000
- General Fund / Capital Outlay	-	-	-	-	165,000	-	165,000
Fire Pumper for Olive Farm Station	-	-	-	-	-	825,000	825,000
- General Fund / Capital Outlay	-	-	-	-	-	825,000	825,000

Public Facilities							
Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Mechanical (HVAC/Chiller) Upgrades to Town Facilities	140,000	120,000	-	125,000	165,000	-	550,000
- General Fund / Capital Outlay	140,000	120,000	-	125,000	165,000	-	550,000
Eva Perry Library Improvements	443,400	110,000	-	-	-	-	553,400
- General Fund / Capital Outlay	443,400	110,000	-	-	-	-	553,400
Police Department Security Fencing	125,000	-	-	-	-	-	125,000
- General Fund / Capital Outlay	125,000	-	-	-	-	-	125,000
Public Safety Station 6	6,500,000	-	-	-	-	-	6,500,000
- Installment Purchase / Capital Lease	6,500,000	-	-	-	-	-	6,500,000
Public Works Operations Building Renovations	830,000	-	870,000	-	-	-	1,700,000
- General Fund / Capital Outlay	830,000	-	870,000	-	-	-	1,700,000
Town Fiber Optic Expansion	125,000	-	-	-	-	-	125,000
- General Fund / Capital Outlay	125,000	-	-	-	-	-	125,000
Town Hall Remodel	75,000	500,000	-	500,000	-	-	1,075,000
- General Fund / Capital Outlay	75,000	500,000	-	500,000	-	-	1,075,000
Tunstall House Restoration	400,000	450,000	-	-	-	-	850,000
- General Fund / Capital Outlay	400,000	450,000	-	-	-	-	850,000
Communications Backup Center	-	325,000	-	-	-	-	325,000
- General Fund / Capital Outlay	-	325,000	-	-	-	-	325,000
Mechanical (Boiler) Upgrades to Community Center	-	130,000	-	-	-	-	130,000
- General Fund / Capital Outlay	-	130,000	-	-	-	-	130,000
Repurpose Depot Parking Lot	-	250,000	2,000,000	-	-	-	2,250,000
- General Fund / Capital Outlay	-	250,000	2,000,000	-	-	-	2,250,000
Station 1 Rebuild	-	500,000	4,500,000	-	-	-	5,000,000
- Designated Capital Funds	-	500,000	-	-	-	-	500,000
- Installment Purchase / Capital Lease	-	-	4,500,000	-	-	-	4,500,000
Vehicle Storage Shed & Brine Building	-	-	23,500	235,500	-	-	259,000
- General Fund / Capital Outlay	-	-	23,500	235,500	-	-	259,000
Fleet Fluid Pumps/Reclamation	-	-	-	100,000	-	-	100,000
- General Fund / Capital Outlay	-	-	-	100,000	-	-	100,000
Town Campus Parking Lot Resurfacing	-	-	-	470,000	500,000	-	970,000
- General Fund / Capital Outlay	-	-	-	470,000	500,000	-	970,000
Fire Department Administration Building	-	-	-	-	-	2,000,000	2,000,000
- General Fund / Capital Outlay	-	-	-	-	-	2,000,000	2,000,000

Public Facilities Cont.							
Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Fire Station 7	-	-	-	-	-	6,500,000	6,500,000
- Installment Purchase / Capital Lease	-	-	-	-	-	6,500,000	6,500,000
Land Purchase for Affordable Housing	-	-	-	-	-	500,000	500,000
- General Fund / Capital Outlay	-	-	-	-	-	500,000	500,000
Police Department Addition/Renovation	-	-	-	-	-	6,400,000	6,400,000
- Installment Purchase / Capital Lease	-	-	-	-	-	6,400,000	6,400,000

Public Works & Environmental Services							
Project Cost	2021-22	2022-23	2023-24	2024-25	2025-26	Future	Total
Chipper Truck - Replacement	165,000	-	-	-	165,000	-	330,000
- General Fund / Capital Outlay	165,000	-	-	-	165,000	-	330,000
Leaf Truck - Replacement	212,000	-	212,000	-	212,000	212,000	848,000
- General Fund / Capital Outlay	212,000	-	212,000	-	212,000	212,000	848,000
Pothole Patcher/Asphalt Truck - Replacement	200,000	-	-	-	-	-	200,000
- General Fund / Capital Outlay	200,000	-	-	-	-	-	200,000
Dump Truck - Addition	-	100,000	-	-	-	-	100,000
- General Fund / Capital Outlay	-	100,000	-	-	-	-	100,000
Leaf Truck - Addition	-	212,000	-	212,000	-	-	424,000
- General Fund / Capital Outlay	-	212,000	-	-	212,000	-	424,000
Motor Grader - Replacement	-	250,000	-	-	-	-	250,000
- General Fund / Capital Outlay	-	250,000	-	-	-	-	250,000
Grapple Truck - Replacement	-	-	195,000	-	-	-	195,000
- General Fund / Capital Outlay	-	-	195,000	-	-	-	195,000
Street Sweeper - Replacement	-	-	275,000	-	-	-	275,000
- General Fund / Capital Outlay	-	-	275,000	-	-	-	275,000
Chipper Truck - Addition	-	-	-	165,000	-	-	165,000
- General Fund / Capital Outlay	-	-	-	-	165,000	-	165,000
Small Asphalt Paver - Addition	-	-	-	-	115,000	-	115,000
- General Fund / Capital Outlay	-	-	-	-	115,000	-	115,000
Dump Truck - Replacement	-	-	-	-	-	185,000	185,000
- General Fund / Capital Outlay	-	-	-	-	-	185,000	185,000