

CITY MANAGER'S MESSAGE

May 22, 2018

Members of the Lee's Summit Planning Commission and City Council:

Pursuant to the City of Lee's Summit Charter, Article XI, Section 11.4. Capital Program, I am pleased to submit the proposed fiscal years (FY) 2019-2023 Capital Improvement Plan (CIP). The CIP represents the multi-year scheduling of public infrastructure improvements and expansion, with much of it largely based on previously adopted master plans such as the Thoroughfare, Waste Water and Water Master Plans.

The benefits of adopting a Capital Improvements Plan are that it:

- Offers a vital link between the Comprehensive Plan and the actual construction of public improvements,
- Ensures that plans for community facilities are carried out,
- Improves coordination and scheduling of public improvements that require more than one year to complete,
- Provides an opportunity for long-range financial planning and management, and
- Offers an opportunity for residents and community interest groups to participate in decisions that impact their quality of life.

The CIP also acts as a public information document to advise residents and property owners of how the City plans to address significant capital needs over the next five years. With growing demands for project expenditures and a limited amount of revenues available, it has become increasingly difficult to predict the availability of future funding for capital projects. As the population in Lee's Summit continues to grow, so do the demands on City services. It is imperative that our organization plan the use of our limited dollars wisely to complete this plan and ultimately benefit all citizens of the City of Lee's Summit. As has been previously reported in various community surveys, infrastructure and growth management continue to be viewed as extremely important to residents.



Proposed Plan

The 2019-2023 CIP totals \$321,975,000 (including funding from prior years), up from \$311,943,000 in the 2018-2022 plan. The increase in the total is due primarily to voter approval of the 2017 Capital Improvement Sales Tax. Significant changes to the CIP include:

Completed Projects

- CC Watershed CC16, CC20 Private I/I Rehab
- Chipman Road Bridge Rehab over UPRR
- Facilities Asset Management Plan
- Hartman Park Improvements
- Hartman Park / South Trailhead Planning
- Jefferson Street Stewart to Persels
- Main Street Bridge Rehab over 2nd Street
- North Lea McKeighan Park Improvements
- Paving for Runway 18-36
- Practice Field Improvements
- Sewer Main Rehabilitation and Creek Stabilization
- Todd George Parkway Shoulders
- Tudor Road Ward to Douglas
- Water Main Rehab FY16
- Water Main US50 Blackwell to Smart
- Water Main US50 Smart to Harris
- Water Utilities Operations Facility

New Projects

- Browning Street Extension Browning to Hamblen Road
- Cathodic Protection Pilot Program
- Colbern Road M350 to Douglas Street
- Douglas Street Chipman to Second
- Downtown Public Parking
- Expand Hangar 1 Parking Lot
- Harris Park Restrooms
- Hartman Park Splashpad
- Hartman Park Trailhead
- Land Acquisition of ALP Properties Phase 3
- Level II Water Audit
- LSPR Greenway Master Plan Update
- Mill and Overlay Taxilanes Charlie and Delta
- New Fuel Self Serve Facility
- Pryor Road Widening Phase 1 Hook to Longview
- Streambank Stabilization Projects
- Streetlights Lakewood Boulevard



- Streetlights Shenandoah Drive
- Stormwater Infrastructure Improvements (2017)
- Third Street Improvements Jefferson Street to Blue Parkway
- Ward Road O'Brien to Blue Parkway
- Water Main Rehab FY23
- Water Main View High Longview Golf to Chipman Upsize

Deleted Projects

Neighborhood Park Renovations *

Renamed Projects

- Athletic Fieldhouse to Fieldhouse
- Bailey Farm Park / Nature Center Development to Bailey Park Development
- Greenway and Trail Development to Langsford / Ruiz Trail Extension
- Howard Park Splashpad to Howard Park Renovation
- Lowenstein Park Renovations to Lowenstein Park Improvements
- Park South and Community Center to Community Center #4
- Park West / Eagle Creek / Pryor Road Trail Connector to Eagle Creek
 / Park West Development
- Pleasant Lea Park Renovations to Pleasant Lea Park Improvements

The following table depicts the proposed annual appropriations for the five-year period in each of the major project areas plus the Public Works and Water Utility Programs, which are primarily major maintenance activities on roads and bridges.

Expenditures by Year (in \$1000's)

	PW and WU		Bridges Street &		Park &			Sanitary		
	Programs	Airport	Signals*	Facilities	Recreation	Solid Waste	Stormwater	Sewer	Water	Total
Prior		-	_							
Years	-	16,398	70,866	13,850	225	3,193	3,005	12,241	10,554	130,332
2019	7,443	6,003	11,463	-	2,835	1,377	3,000	3,125	4,348	39,594
2020	7,264	6,896	4,950	-	5,940	549	2,000	6,000	5,568	38,667
2021	6,754	2,993	12,400	-	11,235	-	3,000	1,350	3,400	38,632
2022	7,211	1,340	8,000	-	8,810	-	3,000	5,434	5,400	34,195
2023	7,080	2,865	6,500	-	5,110	=	3,000	1,350	6,650	34,055
Total	35,752	36,495	114,179	13,850	34,155	5,119	17,005	29,500	35,920	321,975

^{*}Costs include water and sewer funding associated with road construction.

^{*} Items included in this project have been included in other, more specific projects.



MISSOURI

As you can see, the majority of the capital funding continues to be allocated to the Bridges, Streets, and Signals section which includes 22 projects around the community. Programs, airport, parks, water, sanitary sewer and stormwater continue to comprise significant portions of the plan. Among the major revenue sources for the various capital projects included in the plan are:

- Capital Improvements Sales Tax (transportation / stormwater)
- Bond Proceeds (roads, facilities, stormwater)
- Park Sales Tax (parks)
- Road & Bridge Sales Tax (roads)
- State & Federal Grants (airport, roads, parks, sanitary sewer)
- TIF/TDD (roads)
- Sewer & Water Tap Fees (water & sewer system expansion)
- Sewer & Water User Fees (water & sewer system improvements)

It is important to emphasize that the CIP is a flexible plan that can be altered as conditions, funding, priorities, and regulations change. Although capital projects are scheduled throughout the five year plan, only those projects with activity scheduled during the first year are financed and adopted as part of the City's Annual Operating Budget. Projects slated for subsequent years may be adjusted to reflect changes in priority or funding.

Preparation of the CIP is a result of considerable effort from staff in all departments in the City. Each year, staff attempts to reassess overall goals for capital improvements, and the means for accomplishing them. Every project has been considered for its financial feasibility, environmental impact, conformance to previously adopted plans, priorities established from the citizen input process via committees and voter approval, and to meet the public need. Their commitment to providing accurate and understandable information is greatly appreciated.

Respectfully submitted,

Stephen A. Arbo City Manager

CITY OF LEE'S SUMMIT, MISSOURI

CAPITAL IMPROVEMENT PLAN 2019-2023



Capital Improvement Plan Summary Fiscal Year 2019-2023 (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Public Works Programs	6,262	6,435	6,563	6,586	6,745	6,953	33,282
Water Utilities Programs	2,228	1,008	701	168	466	127	2,470
Airport	16,398	6,003	6,896	2,993	1,340	2,865	36,495
Bridges, Streets and Signals*	70,866	11,463	4,950	12,400	8,000	6,500	114,179
Facilities	13,850	-	-	-	-	-	13,850
Parks and Recreation	225	2,835	5,940	11,235	8,810	5,110	34,155
Solid Waste	3,193	1,377	549	-	-	-	5,119
Storm Water	3,005	3,000	2,000	3,000	3,000	3,000	17,005
Sanitary Sewer	12,241	3,125	6,000	1,350	5,434	1,350	29,500
Water	10,554	4,348	5,568	3,400	5,400	6,650	35,920
Total	138,822	39,594	39,167	41,132	39,195	32,555	321,975

^{*}Costs include water and sewer funding associated with road construction.

PUBLIC WORKS PROGRAMS (Costs in \$1,000s)

Programs	2018	2019	2020	2021	2022	2023
Overlay & Slurry Seal	3,500	3,520	3,600	3,700	3,800	3,800
Annual Curb and Gutter Replacement Program	1,650	1,650	1,680	1,700	1,700	1,750
Neighborhood Traffic Safety Program	50	60	50	50	50	50
Bridge Rehab/ Maintenance	50	50	50	50	50	50
Guardrail Improvement Program	20	0	0	0	0	0
Capital Project Planning	25	35	35	40	40	45
Thoroughfares & Traffic	75	25	25	35	35	35
Pavement Marking	431	543	550	421	458	587
Crack Sealing	200	235	240	240	245	250
Community Bus Service - ATA/OATS	261	317	333	350	367	386
TOTAL	6,262	6,435	6,563	6,586	6,745	6,953

WATER UTIITIES PROGRAMS (Costs in \$1,000s)

Programs	2018	2019	2020	2021	2022	2023
Equipment Replacement/Rehab	2,228	1,008	701	168	466	127
TOTAL	2,228	1,008	701	168	466	127





CAPITAL IMPROVEMENTS PLAN IMPLEMENTATION

When a project on the CIP schedule is funded, it is assigned to a project manager who will assume oversight responsibilities. A number of steps are required before a project is complete.

DESIGN

The project manager will coordinate and participate in the selection process for an engineering or architectural design firm, as appropriate. Architectural and engineering services contracts, unlike commodities contracts, are awarded to firms strictly on the qualifications and expertise of the firm in the particular type of project. The project manager is responsible for negotiating a detailed scope and fee for the design services with the selected consultant. Design for some projects may be completed by City staff or awarded to consultants through annual on-call contracts.

The design process is typically divided into several phases: concept and/or preliminary design, right-of-way plans, right-of-way appraisal and acquisition, and final design. Plans and cost estimates are prepared, either by the consultant or City staff, for review at least at these project milestones. If state or federal funding is involved, plans and estimates are also provided to the appropriate agency for review. As more refined information on project scope and cost is developed, the CIP document is revised accordingly during the next annual update. Occasionally, projects may be deferred or deleted from the plan based on information gathered during the design process that indicates significant problems with pursuing the project.

Typically, one or more public meetings are held for major projects that have significant impacts on property owners and the public to obtain feedback and comments from the community. A meeting is often held at the completion of preliminary plans in order to let residents abutting the project know how the design will affect their properties. Comments made at the meetings are considered by City staff and the design firm for inclusion in revised plans, if appropriate, prior to appraisals and property acquisition. Other meetings may be held before any design is started and just before construction begins.

Right-of-way plans define the nature and extent of property required to complete a project. Property acquisition may be in the form of right-of-way, permanent easements or temporary construction easements. The City hires professional appraisers to determine fair market value of the acquisitions, which is the basis for initial offers to property owners. The City's right-of-way agent and/or contract agents complete the negotiation and acquisition process for the projects.

Once all property is acquired, final plans and specifications can be completed. During this time, any necessary relocation of private utilities (gas, phone, power) is also accomplished. Typically, all relocations are complete prior to bidding a capital project.

ADVERTISEMENT, BID AND AWARD

Capital projects are publicly advertised through the City's Purchasing Division. City and consultant staff members evaluate all bids for completeness and correctness, and references for the low bidder are checked. Based on the review and references, the consultant or the City's project manager makes a recommendation for award to the lowest and best bidder. The award of the construction contract is made by City Council.

DESIGN/BUILD

As an alternative to the typical design-bid-build process described above, the design/build process may be used. For these projects, a Design/Build Team is selected using a qualifications based selection process. This delivery method can minimize risk and reduce the overall delivery schedule for a project by overlapping the design and construction phases of the work.

SCHEDULE

The construction contract sets forth the required completion time for the project. Time is counted from the date of the "Notice to Proceed" to the point of substantial completion and final completion. The duration is determined by the design consultant and/or City staff based on the scope of work, seasonal constraints, coordination with property owners, and impacts on the traveling public. The order and duration of specific tasks within the allotted contract time is typically determined by the contractor. The assessment of liquidated damages is included in construction contracts for failure to meet required completion dates.

CONSTRUCTION ADMINISTRATION

The City's project manager for the design process or a project manager from the construction management group is typically responsible for performing or coordinating project administration during construction. Such tasks generally include monitoring project progress, schedule and costs; coordinating and facilitating communications between the design consultant, inspections staff, contractor and City staff; negotiating and coordinating approval of changes in the project scope or cost; reviewing and approving regular progress payments; and reporting on the construction progress to City Council and the public through the City's publications and website. Changes to the contract totaling up to five percent of the original bid price may be approved administratively by the appropriate Department Director. Changes that increase the cost in excess of that amount must be approved by the City Council.

SUBSTANTIAL COMPLETION

Substantial completion is defined as the time at which the project has progressed to the point where it is sufficiently complete that it can be utilized for the intended purpose. At this time, a comprehensive inspection is performed by City staff and the design consultant to create a list of all incorrect or outstanding items (a "punch list") remaining to be completed or corrected. The punch list items and all other deficiencies must be completed before final acceptance of the project by the City, and final payment to the contractor.

FINAL ACCEPTANCE

Final acceptance is realized when the contractor has completed all work on the project, including punch list items, has provided the City with a maintenance bond, and has submitted all other close-out documents in accordance with the construction contract. The project manager is responsible for preparing a final project report and submitting it to city and department management staff as well as to City Council. Any unspent funds authorized for a project will be returned to the appropriate funding source for reallocation to future projects.

CAPITAL IMPROVEMENT PLAN FUNDING

Revenue Sources

All funding sources that may be used for various capital improvements are reviewed each year. Much of the work to develop the CIP focuses on the balancing of available resources with the identified capital needs. Consideration must be given to factors such as annual revenue projections from various sources, restrictions on the uses of certain funds, legal limitations on debt capacity, and City policies relative to project funding. The following is a list of existing funding sources and definitions for each:

TAXES

<u>Property Tax-</u> Revenue from the ad valorem tax levied on all real and personal property, based upon the assessed valuation established by the County Assessor on January 1st of each year. Real property assessed valuation is determined by applying the "market value" times the appropriate assessment ratios. As follows:

Commercial/Industrial: 32%Residential: 19%Agricultural: 12%

 Personal Property assessed valuation is set at 33% of market value and is determined by the State Tax Commission. <u>Sales Tax-</u> The City imposes a total sales tax of 2.25% (Capital Improvement: 0.50%, General fund: 1.0%, Parks and Recreation: 0.25%, Transportation: 0.50%) on all goods and commodities sold within the City limits with the exception of drugs and farm machinery. The tax is also levied on all vehicles registered by residents of the City, regardless of where those vehicles were purchased. Transportation tax is not levied on utilities and is earmarked specifically for use in funding transportation projects only. The State of Missouri receives the tax from the respective business and distributes the funds monthly to the City.

Parks & Recreation 1/4-Cent Sales Tax- Initially approved in November 1997 for 3/8-cent and renewed in 2016 for ¼-cent, this revenue source is dedicated to Parks and Recreation improvements including completion of Legacy Park facilities, new park development, the Senior Center, and greenway development.

<u>Transportation ½-Cent Sales Tax-</u> Approved initially in the 1980s, this tax is available to pay for transportation and traffic infrastructure improvements and major maintenance, such as overlay and slurry seal, curb and gutter replacement, crack sealing and pavement marking. This sales tax also provides funding for several other Public Works Programs including bridge rehabilitation, thoroughfare and traffic master plan studies, community bus services and the Neighborhood Traffic Safety Program.

Capital Improvement ½-Cent Sales Tax- Originally approved in November 1997, this tax has been used in conjunction with the Road Excise tax to fund road improvements related to the "10-year road plan" adopted in 1997. The sales tax was renewed in April 2007 with collection beginning in 2008 and ending in 2018. This renewal of the sales tax will fund a second "10-year road plan" comprising 6 major projects. In April, 2017, voters approved a 15 year extension with collection beginning in April, 2018. In all, seven major road projects were identified as well as six transportation related projects. Additionally, this renewed tax will also be used to fund stormwater infrastructure projects throughout the City.

<u>Road Excise Tax-</u> Excise Tax is paid for development that generates new traffic in the City in the form of a license tax on building contractors. This revenue source is available for road improvements throughout the City that are required due to growth to at least some degree.

<u>Transportation Development Districts</u> A geographic area may be designated to levy an additional sales or property tax assessment to pay for transportation related infrastructure improvements.

<u>Tax Increment Financing</u> Provides for the capture of 50% of the Economic Activity Taxes (Sales and Franchise) generated within the boundaries of a designated area to be used to finance infrastructure improvements. All of the incremental increases in real estate taxes are also captured from all taxing jurisdictions until the infrastructure is paid off.

BOND PROCEEDS

<u>General Obligation (G.O.) Bonds</u>- Bonds which are backed by the full faith and credit of the City and require either a 2/3rds or 4/7ths voter approval. Limitations for bonding capacity are set by state statute.

Revenue Bonds- Bonds which are backed by the fees and charges of a business-like government function, payable only from a specific source of revenue. Simple majority voter approval required. Limitations for bonding capacity are not set by state statute but rather the entity's ability to repay the debt.

<u>Certificates of Participation</u>- Bonds which are backed by general revenues or fees and charges of a government. No voter approval is required. Limitations for bonding capacity are determined by the market and the entity's ability to repay the debt.

Special Obligation Bonds- Bonds which are backed by general revenues or fees and charges of a government. No voter approval is required. Limitations for bonding capacity are determined by the market and the entity's ability to repay.

GRANT FUNDING

Grants may be received from federal, state or county governments. Grants are typically available for transportation, airport improvements, parks, and public safety equipment. The City also receives community development block grants (CDBG) for use in low-to-moderate income areas within the community. Equipment purchases and CDBG projects are not included in the CIP.

FEES AND CHARGES

Fees for direct receipt of public service by the parties who benefit from the service

<u>Parks and Recreation Activity Fees-</u> Collected by Parks & Recreation Department for participation in various sports and recreation programs, aquatic instruction, and the Camp Summit and Club Summit daycare programs at the Recreation Center.

<u>Recreation Memberships-</u> Membership fees collected for the Lee's Summit Pool and the Legacy Park Community Center.

<u>Water Sales-</u> Charges for supplying water to residential, commercial, industrial and wholesale customers.

<u>Sewer Charges</u> Charges for providing wastewater collection and disposal services to residential, commercial and industrial customers.

<u>Sewer Tap-</u> The charge for a new sanitary sewer connection based on the number of drains in a structure and assessed at the time of building permit issuance.

<u>Water Tap-</u> The charge for a new water service connection based on the size of water meter required. Also included in the water tap fee is an amount which is intended to provide capital for the development of the City's water transmission capacity.

PRIVATE FUNDING

Amounts paid by developers, generally for specific infrastructure improvements, pursuant to development agreements between the City and those developers.

CAPITAL IMPROVEMENT PLAN FUNDING

The FY 2019-2023 Capital Improvement Plan has been divided into eight major categories, plus the Public Works and Water Utility Programs. The total estimated cost of all projects included in the five-year plan, including prior years, is \$321,975,000. A summary of the costs by category is summarized below.

2019-2023 CIP SUMMARY (Costs in \$1000s)

Category	Prior Yrs	% of Total	2019-23	% of Total
PW & WU Programs	0	0.0%	35,752	18.7%
Airport	16,398	12.6%	20,097	10.5%
Bridges, Streets, Signals	70,866	54.4%	43,313	22.6%
Facilities	13,850	10.6%	-	0.0%
Parks and Recreation	225	0.2%	33,930	17.7%
Solid Waste	3,193	2.4%	1,926	1.0%
Stormwater	3,005	2.3%	14,000	7.3%
Sanitary Sewer	12,241	9.4%	17,259	9.0%
Water	10,554	8.1%	25,366	13.2%
TOTAL	130,332	100.0%	191,643	100.0%

CIP IMPACT ON OPERATING BUDGET

As part of the Capital Improvement Plan, the impact of each project on the City's operating budget is identified. As capital improvement projects are completed, operation and maintenance of these facilities must be absorbed into the appropriate department operating budget, which provides ongoing services to citizens. These operating costs, which may include salaries, equipment, regular maintenance, and repairs, are adjusted annually to accommodate growth and inflation in maintaining or improving service levels. In some cases, elimination of high-maintenance facilities may also reduce these operating costs. It is the City of Lee's Summit's philosophy that new projects should not be constructed if

operating revenues are unavailable to cover the operating costs. These must be funded with recurring (ongoing) revenues. As a result, the availability of recurring revenues must be considered in the decision to include projects in the plan.

CIP IMPACT ON LIVABLE STREETS

In accordance with Resolution 10-17, A Resolution Establishing the Livable Streets Policy for the City of Lee's Summit, the Capital Improvement Plan shall include a summary or description of the Livable Streets Elements of all Public Improvement Projects. If a Livable Streets Element identified in and required by adopted public plans or ordinance is not incorporated in the project, such omission shall be documented in the Livable Streets Summary.

Livable Streets is not applicable to all capital improvement projects. Some capital improvement projects, including water, sewer, airport, storm water and solid waste, typically do not have relevant elements to Livable Streets nor do these projects inhibit or advance the Livable Streets initiative. Consequently, water, sewer, airport, storm water and solid waste projects have not been identified in the Livable Streets Summary unless a positive or negative Livable Streets impact exists.

The Livable Streets concept and Livable Streets Elements have been considered in all Capital Improvement Projects for all modes and abilities. The following Livable Streets Summary identifies each capital improvement project that has a potential impact to Livable Streets as well as a description of the included and omitted Livable Streets Elements (elements that have been identified with an asterisk are not required, but have been included in the project scope).

Bridges, Streets and Signals

Blackwell Road Interchange with US50:

Livable Streets Elements Included: Sidewalk, Continuous Street Lighting*, Access Management (Raised Medians), Shared-Use Path, Street Gap Connectivity (Multiple Streets), Roundabout Intersection Control*, ADA Compliance, Landscaping*, Vehicular Safety and Capacity Improvements (New Multi-Lane Arterial Roadway with Turn Lanes)

Livable Streets Elements Omitted: None

<u>Browning Street Extension – Browning Street to Hamblen Road:</u>

Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Local Roadway), Facilitates Access Management, Economic Development and Safety Improvements Livable Streets Elements Omitted: None

Chipman Road - Bent Tree Dr. to View High Dr.:

Livable Streets Elements Included: Continuous Street Lighting*, Shared-Use Path, ADA Compliance, Vehicular Safety and Capacity Improvements (Reconstructed Two-Lane Arterial with Turn Lanes)

Livable Streets Elements Omitted: Sidewalk. Sidewalk has been omitted from one side of the road (south side) along a portion of the project due to disproportionate cost compared to probable use. Adding sidewalk would require additional right-of-way and larger rock cut areas with larger retaining wall structures. Pedestrian use is severely limited from adjacent property due to constrained terrain. Future development opportunity is minimal due to constrained terrain, utility and environmental impact. If developed sidewalk may be required for connectivity and probable use. In lieu of a sidewalk, a shared-use path has been proposed along the north side of the road that provides network connectivity to meet projected pedestrian and bicycle needs. This path will connect to the Rock Island Trail and share connections along the corridor. The existing bridge across Cedar Creek and the proposed RR crossing accommodate the proposed shared-use path along the north side of the road and the possibility of future sidewalk along the south side of the road.

Commerce Drive - Tudor Road to Main Street:

Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Collector Roadway with Turn Lanes), Bike Route

Livable Streets Elements Omitted: None

Douglas Street - Chipman Road to Second Street:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance, Streetscape Elements

Livable Streets Elements Omitted: None

Downtown Public Parking:

Livable Streets Elements Included: ADA Compliance, Promotes a more walkable downtown with support for greater land use density.

Livable Streets Elements Omitted: None

Gateway Drive - Delta School Road to Georgian Drive:

Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Collector Roadway), Bike Route, Enhanced Neighborhood and School Accessibility.

Livable Streets Elements Omitted: None

Hook Road Shoulders - West City Limits to Ward Road:

Livable Streets Elements Included: Paved Shoulders*

Livable Streets Elements Omitted: This project only involves paved shoulders, a direct improvement in travel conditions for cyclists and pedestrians. Vehicular and maintenance benefits are ancillary. Hook Road, when constructed to urban

standards will include additional elements, such as Street Lighting, Curb and Gutter, Sidewalk, and Shared-Use Path.

<u>Independence Avenue and Town Centre Blvd Intersection Improvements:</u>

Livable Streets Elements Included: Roundabout, Vehicular Safety Improvements, Vehicular Capacity Improvements, Pedestrian and Bicycle Safety Improvements, ADA Compliance. Sidewalk

Livable Streets Elements Omitted: None

Jefferson Street - Persels Road to Oldham Parkway:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management (Driveway Consolidation and Access Restrictions), ADA Compliance.

Livable Streets Elements Omitted: None

Langsford Road Bridge Rehabilitation:

No Construction Activity related to Livable Streets

M291 South Junction Interchange with US50:

Livable Streets Elements Included: Street Lighting*, Access Management (Raised Medians), Shared-Use Path, Roundabout Intersection Control*, ADA Compliance, Landscaping*, Paved Shoulders, Traffic Signal Control with Pedestrian Actuation* and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety and Capacity Improvements

Livable Streets Elements Omitted: Sidewalk has been partially omitted through the interchange and in its place, shoulders and shared-use paths provided.

Pryor Road & Scherer Road Traffic Signal:

Livable Streets Elements Included: Intersection Lighting, Traffic Signal Control with Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, and Vehicular Capacity Improvement

Livable Streets Elements Omitted: Pedestrian Actuation has been deferred on this span wire traffic signal installation until the permanent traffic signal installation. In the interim, pedestrian service will be timed concurrent with nonconflicting vehicular service phases.

<u>Pryor Road Widening Phase 1 – Hook Road to Longview Road:</u>

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management, ADA Compliance, Traffic Signal Improvements.

Livable Streets Elements Omitted: None

<u>Streetlights – Lakewood Boulevard:</u>

Livable Streets Elements Included: Continuous Street Lighting*

Livable Streets Elements Omitted: None

<u>Streetlights – Shenandoah Drive:</u>

Livable Streets Elements Included: Continuous Street Lighting*

Livable Streets Elements Omitted: None

<u>Third Street Improvements – Jefferson Street to Blue Parkway:</u>

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Access Management (Driveway Consolidation and Access Restrictions), Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance, Streetscape Elements.

Livable Streets Elements Omitted: None

Third Street Improvements - Murray Road to Pryor Road:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Traffic Signal Control with Pedestrian Actuation* and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance.

Livable Streets Elements Omitted: None

<u>Traffic Signal Communication Master Plan:</u>

No Construction Activity related to Livable Streets

Ward Road - M150 to Raintree Parkway:

Livable Streets Elements Included: Sidewalk, Continuous Street Lighting*, Shared-Use Path* (Existing), Share-The-Road* (Existing), ADA Compliance, Vehicular Safety and Capacity Improvements

Livable Streets Elements Omitted: None

<u>Ward Road – O'Brien Road to Blue Parkway:</u>

Livable Streets Elements Included: Sidewalk, Safe Routes to School, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance

Livable Streets Elements Omitted: None

Ward Road – Tudor Road to Blue Parkway:

Livable Streets Elements Included: Sidewalk, Continuous Street Lighting*, Shared-Use Path* (Existing), Share-The-Road* (Existing), ADA Compliance, Vehicular Safety and Capacity Improvements

Livable Streets Elements Omitted: None

Woods Chapel Road & Channel Drive Traffic Signal:

Livable Streets Elements Included: Intersection Lighting, Traffic Signal Control with Pedestrian Actuation and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, Vehicular Capacity Improvement, and Pedestrian Safety Improvement

Livable Streets Elements Omitted: None

Facilities:

Although there are no particular Livable Streets elements planned within the City's streets rights-of-way as part of the facilities projects, the following projects foster active living and may include multimodal accommodations on-site and/or connectors to off-site multimodal facilities:

Downtown Cultural Arts Facilities

Parks:

Although there are no particular Livable Streets elements planned within the City's streets rights-of-way as part of the parks projects, the following projects foster active living and may include multimodal accommodations on-site and/or connectors to off-site multimodal facilities:

- Arts in Parks
- Bailey Park Development
- Community Center #4
- Eagle Creek / Park West Development
- Fieldhouse
- Harris Park Restrooms
- Hartman Park Splashpad
- Hartman Park Trailhead
- Howard Park Renovation
- Langsford / Ruiz Trail Extension
- Lowenstein Park Improvements
- LSPR Greenway Master Plan Update
- Pleasant Lea Park Improvements
- Summit Park Renovation
- Wave Pool at Summit Waves

Capital Improvement Project	No Construction/No Livable Street Impact	Pedestrian Capacity Impact	Pedestrian Safety Impact	Bicycle Capacity Impact	bicycle Safety Impact	Vehicular Safety Impact	Transit Impact	Pedestrian Furniture	Sidewalk	ADA Compliance	Shared-Use Path	Paved Shoulder	Share-The-Road /Signed Bike Route	Wide Curb Lane (14-16 ft)	Paved Shoulder Adjacent to Curb	Street Gap Connectivity	Access Management (e.g. Raised Median)	Transit Facility/Transit Stop	Transit Operation	Bicycle Parking	Residential Traffic Calming	Continuous Street Lighting	Intersection Street Lighting	Landscaping	Dodestrian Signal Improvements	Traffic Signal Improvements	Signal Improvements w/Pedestrian Detection	Signal Improvements w/Bike Friendly Detection	
Community Bus Service – ATA/OATS							+												*										
Neighborhood Traffic Safety Program			+		-	- +	- -														\star								П
Annual Curb and Gutter Replacement Program			+																										П
Other Programs (e.g. Marking, Planning, Overlay, Etc.)						+	-																						
Blackwell Road Interchange with US50		+		<u>+ -</u>	+ +																	\star		* 1	t				Ш
Browning Street Extension, Browning to Hamblen Road	_	+	+		+											*		Ш				*			\perp				 \sqcup
Chipman Road, Bent Tree Drive to View High Drive	_	+			+ +																	*			\perp				 \sqcup
Colbern Road, M350 to Douglas Street	_	+			+ +					•						Ι.						\star		1	۲				 \sqcup
Commerce Drive, Tudor Road to Main Street		+	+ -	+ -	+ +	- +	+									*		Ш							\perp	┷			 \sqcup
Downtown Public Parking				\perp			_									1.		Ш							\perp	┷			 \sqcup
Gateway Drive, Delta School Road to Georgian Drive	_	+		_	+ +											*		Ш											 Ш
Hook Road Shoulders, West City Limit to Ward Road		+		_	+	+								7	*			Ш											
Independence Ave & Town Centre Blvd Improvements			+		+	+												Ш						1	t				
Jefferson Street, Persels Road to Oldham Parkway		+	+ -	+ -	+ +	- +																\star							
Langsford Road Bridge Rehabilitation																		Ш											
M291 South Junction Interchange with US50		+		_	+ +													Ш						* 1	t		*		
Pryor Road & Scherer Road Traffic Signal					+ +													Ш										*	
Pryor Road Widening Phase 1, Hook to Longview Road		+			+ + + +																	\star					*	*	
Scherer Road Reconstruction, Ward to Jefferson Street																													 1 1

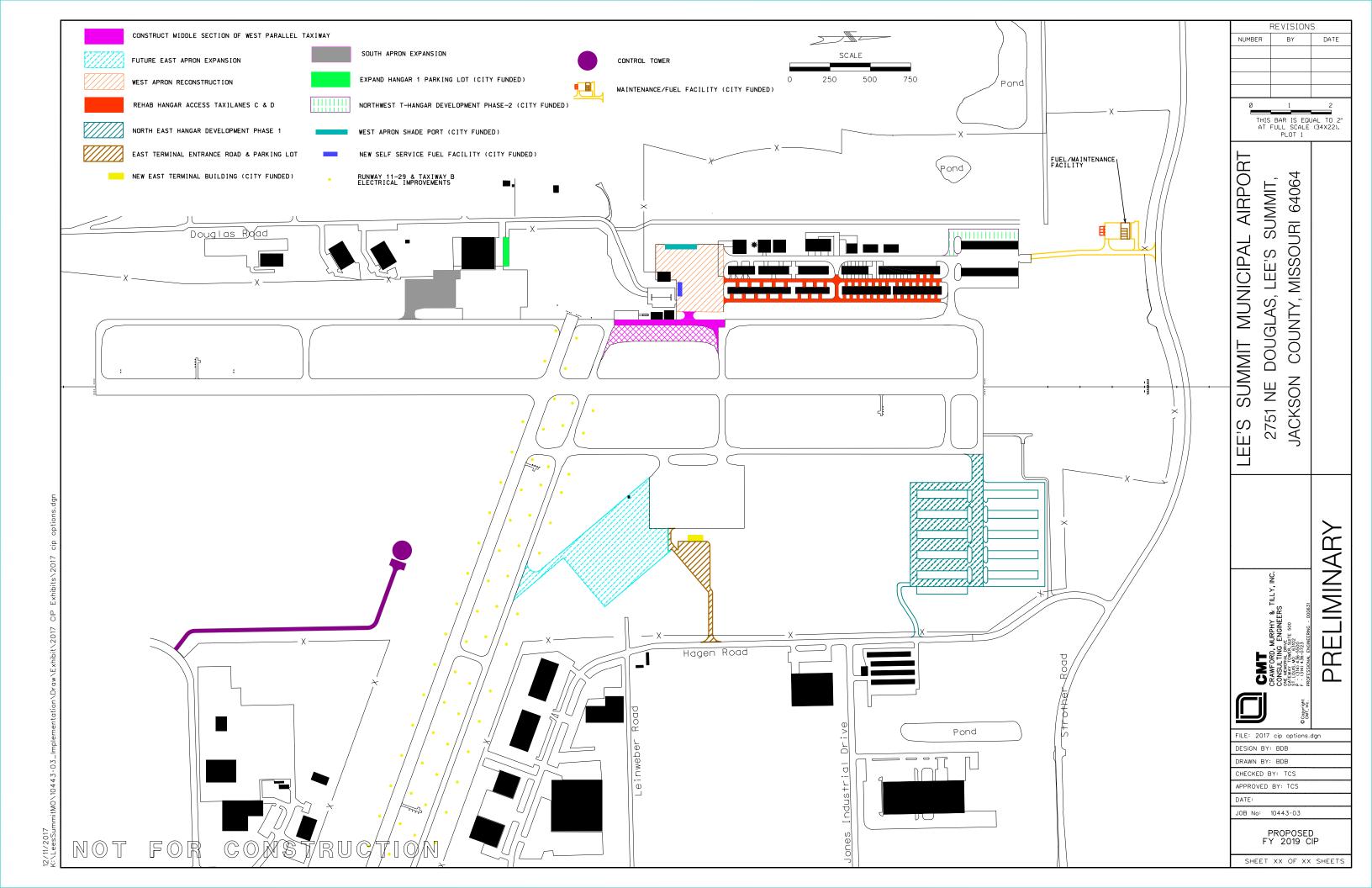
Capital Improvement Project	No Construction/No Livable Street Impact	Pedestrian Capacity Impact				Venicular Capacity Impact		Pedestrian Furniture	- 1	Sidewalk ADA Compliance	Shared-Use Path	Paved Shoulder	Share-The-Road /Signed Bike Route	Wide Curb Lane (14-16 ft)	Paved Shoulder Adjacent to Curb	Official Bicycle Lane	Street Gap Connectivity	Access Management (e.g. Raised Median)	ransit Facility/ ransit Stop	I ransit Operation	Bicycle Parking	Residential Traffic Calming		Intersection Street Lighting	Landscaping	Roundabout(s) Intersection Control	Pedestrian Signal Improvements	Traffic Signal Improvements	strian D	Signal Improvements w/Bike Friendly Detection			
Streetlighting – Lakewood Boulevard			+		+	H																	\star										
Streetlighting – Shenandoah Drive			+	1-	+	H	-																*					T		T		T	
Third Street Improvements, Jefferson Street to Blue Pkwy		+	+		-	+ +	- +	- 🖈	7														\star		\star							I	
Third Street Improvements, Murray Road to Pryor Road		+	+		-	+ +	- +	- [\star					7	★ 7	*		I	
Traffic Signal Communication Master Plan																																L	
Ward Road, M150 to Raintree Parkway		+	+ -	+ -		H		_)	*						_		_		*					\perp	\perp	\perp	\bot	\perp	$\perp \perp \mid$
Ward Road, Tudor Road to Blue Parkway		+	+			F H	- +	-															\bigstar						★ 7			\perp	
Woods Chapel Road & Channel Drive Traffic Signal			+		+ -	+ +																						7	★ 7	<u>k</u>	╧	ᆚ	
Downtown Cultural Arts Facilities																																	
Miscellaneous Projects		+	+ -	 	+																											\bot	
Miscellaneous Projects																																	

- Project may have a positive impact to the Livable Streets transportation mode choice.
 Project may have a negative impact to the Livable Streets transportation mode choice.
- Livable Streets Element is included in project scope although it is not required by Ordinance or
- Livable Streets Element is included in project scope in accordance with Ordinance requirement or Adopted Plan.
- Livable Streets Element is omitted from project scope otherwise required by Ordinance or Adopted Plan. See Project Information listed in the Livable Streets Summary for an explanation of the omitted Livable Streets Element.

CAPITAL IMPROVEMENT PLAN 2019-2023

AIRPORT





AIRPORT (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Airport Platting & Zoning	-	30	-	-	-	-	30
Construct Middle Section of West Parallel Taxiway	-	155	1,190	-	-	-	1,345
Construct Pavement for Taxiway Extension	6,676	-	-	-	-	-	6,676
Construct Replacement T-Hangars (northwest corner)	2,200	570	-	-	-	-	2,770
Expand Hangar 1 Parking Lot	-	100	-	-	-	-	100
Extend North Parallel Taxiways	701	-	-	-	-	-	701
Land Acquisition of ALP Properties Phase 2	5,500	850	-	-	-	-	6,350
Land Acquisition of ALP Properties Phase 3	-	320	1,425	-	-	-	1,745
Mill and Overlay Hangar Taxilanes Charlie and Delta	-	288	-	-	-	-	288
New Airport Equipment Maintenance/Storage Facility	-	150	-	544	-	-	694
New Fuel Facility	325	-	1,555	-	-	-	1,880
New Fuel Self Serve Facility	-	-	-	450	-	-	450
New Terminal Building	-	-	283	817	-	-	1,100
Rehabilitate Airfield Lighting Runway 11/29 and Taxiway Bravo	-	-	-	-	-	503	503
Rehabilitate Hangar Taxiways Charlie and Delta	-	-	150	1,182	-	-	1,332
Site Development - East Side Terminal Area	-	510	2,143	-	-	-	2,653
Site Development - Northeast Side	596	2,880	-	-	-	-	3,476
South Apron Expansion	-	-	-	-	240	1,269	1,509
Update Airport Master and Business Plans	400	150	150	-	-	-	700
West Apron Reconstruction	-	-	-	-	600	1,093	1,693
West Apron Shade Ports		-	-	-	500	-	500
Total	\$16,398	\$6,003	\$6,896	\$2,993	\$1,340	\$2,865	\$36,495

Project Title: Airport Platting and Zoning

Type: Airport Activity #56332185

Project Description

This project consists of Airport platting and zoning of approximatly 468 acres of the Airport Property Layout Plan which is the standard separation distance for a Class C runway.

Project Purpose

All fee simple property in the currently adopted Airport Layout Plan have been acquired. This project consists of platting approximatly 40 individual properties/parcels totaling approximatly 468 acres into three lots. The Airport will then make application to have the entir property zoned in the Al zoning classification.

Estin	nated Schedule
Surveying and Platting	2019

Fund	ing Sources
Transportation Sales Tax	\$30,000
Total Lifetime Budget	\$30,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Construct Middle Section of West Parallel Taxiway

Type: Airport Activity #16832172

Project Description

This project consists of the construction of the middle section of the relocated west parallel taxiway, demolition of the existing terminal building, demolition of the existing fuel farm and demolition of two rows of T-Hangars. The north and south ends of the relocated west parallel taxiway will be constructed earlier in the Airport CIP. This section will be constructed later because it requires that the new east side terminal and fuel facility be constructed first. The taxiway is to be relocated 400' from Runway 18-36 as shown on the Airport Layout Plan which is the standard separation distance for a Class C runway.

Project Purpose

The existing western parallel taxiway is located at 225' from Runway 18-36, which is less than the 400' FAA standard separation for a Class C runway.

Estima	ted Schedule
Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources	
Transportation Sales Tax	\$68,000
State/Federal	\$1,277,000
Total Lifetime Budget	\$1,345,000

Estimated Annual Operating and Maintenance	
\$1,100	

Project Title: Construct Pavement Taxiway Extension

Type: Airport Activity #17032172

Project Description

The taxiway is to be extended to match the extended runway and relocated to 400' from Runway 18-36 as shown on the Airport Layout Plan which is the standard separation distance for a Class C runway. Additionally, this project will complete the mass grading operations needed to develop the west hangar areas at the airport. Approximately 35,000 cubic yards of fill material must be placed to provide a relatively level area to construct hangar buildings and taxiways. Upon completion of this project, the rough graded building pads will be ready to receive buildings, parking lots, and other site improvements. The engineering design work for this project was performed as part of the West Hangar Area Site Plan Project.

Project Purpose

The existing western parallel taxiway is located at 225' from Runway 18-36, which is less than the 400' FAA standard separation for a Class C runway. In accordance with the City Council adopted Airport Business Plan, the extension of the runway will allow operations of a greater variety of business class aircraft under a greater range of weather conditions. This project will serve to improve the airport and allow more corporate jets to use the facility. These improvements should increase the economic value of the airport to the city.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources	
Transportation Sales Tax	\$334,000
State/Federal	\$6,342,000
Total Lifetime Budget	\$6,676,000

Estimated Annual Operating and Maintenance	
\$3,800	

Project Title: Construct Replacement T-Hangars (northwest corner)

Type: Airport Activity #47632185

Project Description

This project consists of the construction of additional enclosed aircraft T- hangar storage space for 36 aircraft. The relocation of Taxiway Alpha will result in the loss of 7 T-hangar buildings housing 42 aircraft.

Project Purpose

Construct replacement T-hangars in the Northwest quadrant of the airport. Loss of 40 percent of T-hangar space related to new taxiway Alpha relocation in 2018 requires the need to add additional replacement T-hangar units for existing customers. Current units generate \$100,000 annually. Newer units would generate a higher annual revenue.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Transportation Sales Tax	\$2,770,000
Total Lifetime Budget	\$2,770,000

Estimated Annual Operating and Maintenance		
#F 000		
	\$5,000	

Project Title: Expand Hangar 1 Parking Lot

Type: Airport Activity #56432185

Project Description

This project consist of the expansion of the existing automotive parking to include an additional 10 parking spaces to meet the daily parking demand for employees, customers and businesses located at Hangar 1.

Project Purpose

The existing automotive parking area is inadequate to meet the daily demand for customers and businesses that use this facility. Currently daily overflow is being provided by parking automobiles on the aircraft ramp areas. This is only a short term solution until this space is needed to park aircraft on a regular basis.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2019

Funding Sources	
Transportation Sales Tax	\$100,000
Total Lifetime Budget	\$100,000

Estimated Annual Operating and Maintenance	
\$1,500	

Project Title: Extend North Parallel Taxiway

Type: Airport Activity #17432172

Project Description

This project includes the final grading and the construction of pavement for the east and west parallel taxiways for the north end of Runway 18-36. This will match the north extension of the existing Runway 18-36. In addition, the existing west parallel taxiway is to be relocated to 400 ft. from Runway 18-36 as shown on the Airport Layout Plan, which is the standard separation distance for a Class C runway.

Project Purpose

In accordance with the City Council adopted Airport Business Plan, the extension of the runway will allow operations of a greater variety of business class aircraft under a greater range of weather conditions. This project will serve to improve the airport and allow more corporate jets to use the facility. These improvements should increase the economic value of the airport to the city

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources	
Transportation Sales Tax	\$35,000
State/Federal	\$666,000
Total Lifetime Budget	\$701,000

Estimated Annual Operating and Maintenance	
\$3,000	

Project Title: Land Acquisition ALP Properties Phase 2

Type: Airport Activity #293211

Project Description

This project involves the purchase of approximately 40 acres of land and 100 acres of avigation easement for future airport development, runway safety areas, and runway protection zones. Over \$13 million of the funding comes from federal grants, with local funds coming from the Brisben property reimbursement. Two avigation easements remain to be acquired. In addition, the entire airport will be platted and rezoned.

Project Purpose

This land is required to provide for future airport development, runway safety areas, and runway protection zones. The land is necessary to preserve the ability of the airport to develop in the future as the surrounding areas are developing. The properties to be acquired are shown on the Airport Layout Plan approved in March 2000.

Estimated Schedule	
Design and Right of Way Acquisition	2015
Construction	N/A

Funding Sources	
Airport Construction	\$275,000
Transportation Sales Tax	\$43,000
State/Federal	\$6,032,000
Total Lifetime Budget	\$6,350,000

Estimated Annual Operating and Maintenance	
\$3,000	

Project Title: Land Acquisition ALP Properties Phase 3

Type: Airport Activity #56532185

Project Description

This project involves the purchase of approximately 10 acres of land and 5 acres of avigation easement for future airport development, runway safety areas, and runway protection zones. Over \$1.6 million of the funding comes from federal grants, with local funds coming from the Airport Construction Fund. Two avigation easements remain to be acquired. In addition, the entire airport will be platted and rezoned.

Project Purpose

This land is required to provide for future airport development, runway safety areas, and runway protection zones. The land is necessary to preserve the ability of the airport to develop in the future as the surrounding areas are developing. The properties to be acquired are shown on the Airport Layout Plan approved in March 2000 and the Airport Business Plan approved in 2010.

Estimated Schedule	
Design and Right of Way Acquisition	
Construction	N/A

Funding Sources	
Transportation Sales Tax	\$87,000
State/Federal	\$1,658,000
Total Lifetime Budget	\$1,745,000

Estimated Annual Operating and Maintenance	
\$3,000	

Project Title: Mill & Overlay Hangar Taxilanes C & D

Type: Airport Activity #56632185

Project Description

This project consists of temporary rehabilitation of two aphalt hangar access taxiways Alpha and Bravo (1,407 feet by 20 feet), one cross taxiways one 90 feet by 25 feet and a taxi lane 220 feet by 40 feet,

Project Purpose

The existing asphalt taxiways are over 25 years old and are in need of rehabilitation. There are two taxiways are 1,407 feet long and 20 feet wide with one 90 foot by 25-foot cross taxiway and an apron lane that is 220 feet long and 40 feet wide. These taxiways support over 50% of the airport based aircraft. Further deterioration becomes a safety concern of Foreign Object Damage (FOD) to aircraft. These two hangar access taxiways have exceeded their projected 25-year life cycle and are in need of major rehabilitation. Federal and State funds to provide a total rebuild and improve the storm water drainage system aren't expected in immediate near future.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Transportation Sales Tax	\$288,000
Total Lifetime Budget	\$288,000

Estimated Annual Operating and Maintenance	
No additional impact to operating costs	

Project Title: New Airport Equipment Maintenance/Storage Facility

Type: Airport Activity #17732172

Project Description

This project includes a new Airport Equipment Maintenance/Storage facility to be constructed as part of the new development of the terminal area and hangars on the east side of Runway 18-36. This facility will be located near the new fuel facility. This project includes the funding for infrastructure development for both the fuel facility and the Airport Equipment Facility.

Project Purpose

The relocation of the west parallel taxiway results in the demolition of two rows of existing hangars, some of which are used for equipment storage and maintenance. This project provides the new facility to replace the existing spaces that will be lost.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2021

Funding Sources	
Transportation Sales Tax	\$694,000
Total Lifetime Budget	\$694,000

Estimated Annual Operating and Maintenance	
\$16,000	

Project Title: New Fuel Facility

Type: Airport Activity #17832172

Project Description

This project includes a new fuel facility to be constructed as part of the new development of the terminal area and hangars on the east side of Runway 18-36.

Project Purpose

The relocation of the west parallel taxiway results in the demolition of the existing fuel facility. This project replaces the fuel facility.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2020

Funding Sources	
Transportation Sales Tax	\$1,880,000
Total Lifetime Budget	\$1,880,000

Estimated Annual Operating and Maintenance	
No change to current maintenance costs.	

Project Title: New Fuel Self Serve Facility

Type: Airport Activity #56732185

Project Description

This project includes the replacement of the two existing underground fuel tanks and dispensing systems that are located North and East of the existing Terminal building. Both tanks would be replaced with above ground self contained automated dispensing fuel systems. The two existing tanks must be removed as part of the middle taxiway project as well as the removal of the existing Terminal building project. One of the existing underground tanks will be over 40-years old and the other 35-years by the time they are replaced. Both existing tanks are of the age that they are subject to denile of their annual operations renewal by the State Agriculture Department.

Project Purpose

The construction of the middle section of Taxi way Alpha and the relocation of the existing Terminal building to the east side of the Airport results in the requirement of the removal of the two underground fuel systems. This project provides the replacement of two new fuel dispensing systems that will be lost.

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2021

Funding Sources	
Transportation Sales Tax	\$450,000
Total Lifetime Budget	\$450,000

Estimated Annual Operating and Maintenance	
\$3,500	

Project Title: New Terminal Building

Type: Airport Activity #17932172

Project Description

This project is the construction of a new terminal building to be constructed as part of the new development of the terminal area and hangars on the east side of Runway 18-36. This project is eligible for some types of federal funding but the maximum permitted is \$600,000 for the eligible potion of the terminal. The remainder of the funding will be local.

Project Purpose

The relocation of the west parallel taxiway results in the demolition of the existing terminal. This project replaces the terminal.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources		
Transportation Sales Tax	\$1,100,000	
Total Lifetime Budget	\$1,100,000	

Estimated Annual Operating and Maintenance
\$3,500

Project Title: Rehabilitate Airfield Lighting for Runway 11/29 and Supporting Taxiway Bravo

Type: Airport Activity #44032172

Project Description

This project consist of replacing the airfield lighting on Runway 11/29 and supporting Taxi-way Bravo. The regulators and wiring for the airfield lighting will be over 30-years old by 2020.

Project Purpose

The existing airfield lighting for Runway 11/29 and supporting taxi-way will be reaching the end of its useful life by 2020. Planned replacement will provide a system that is modern, energy efficient and less cost to maintain.

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2024

Funding Sources		
Transportation Sales Tax	\$50,000	
State/Federal	\$453,000	
Total Lifetime Budget	\$503,000	

Estimated Annual Operating and Maintenance	
\$1,500	

Project Title: Rehabilitate Hangar Access Taxiways Charlie and Delta

Type: Airport Activity #44132172

Project Description

This project consists of the rehabilitation of two aphalt hangar access taxiways Charlie and Delta, 74 hangar access drives and 90 foot by 25 foot cross taxiway and improve storm drainage. These two hangar access taxiways have exceeded their projected 25-year life cycle and are in need of major rehabilitation. In addition to the pavement rehabilitation, improvements to the storm drainage is needed to control and direct proper draingage of water away from the pavement to prolong the life of the pavement.

Project Purpose

The existing asphalt taxiways are over 25 years old and are in need of rehabilitation and improvements to the storm water drainage system. These taxiways are 1,407 feet long and 25 feet wide with one 90 foot by 25-foot cross taxiway. These taxiways support over 50% of the airport based aircraft. Further deterioration becomes a safety concern of Foreign Object Damage (FOD) to aircraft. Rehabilitation of Hangar Access Taxiway Charlie will correct design flaws from an experimental FAA design that proved to be flawed.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
Transportation Sales Tax	\$133,000
State/Federal	\$1,199,000
Total Lifetime Budget	\$1,332,000

Estimated Annual Operating and Maintenance	
\$1,100	

Project Title: Site Development – East Side Terminal Area

Type: Airport Activity #47732185

Project Description

This project consists of the construction of infrastrucural to support development of the east side Terminal area.

Project Purpose

Provide infrastructural development of the East Terminal area to support development of the new Terminal building and aviation facilities in the south quadrant. Improvements consist of water, sewer, gas, road access and parking area.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources		
Transportation Sales Tax	\$265,000	
State/Federal	\$2,388,000	
Total Lifetime Budget	\$2,653,000	

Estimated Annual Operating and Maintenance	
\$600	

Project Title: Site Development – Northeast Side

Type: Airport Activity #17232172

Project Description

This project consists of the construction of infrastrucure to support development of aviation facilities and hangars on the northeast side of the Airport.

Project Purpose

This project will provide infrastructure for the development of the Airport's northeast side to support the building development of future aviation facilities and hangars. The improvements consist of grading, water, sanitary sewer, gas, access road, and parking area.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2019

Funding Sources	
Transportation Sales Tax	\$348,000
State/Federal	\$3,128,000
Total Lifetime Budget	\$3,476,000

Estimated Annual Operating and Maintenance	
\$600	

Project Title: South Apron Expansion

Type: Airport Activity #47832185

Project Description

This project consists of the construction of additional aircraft apron parking area on the south apron area of Hangar 1. The relocation of Taxiway Alpha resulted the loss of 40% of the airports outside aircraft parking area. Increase in airport usage due of runway improvements requires the need for additional parking area.

Project Purpose

The extend south apron to accommodate larger aircraft parking area at Hangar 1. Loss of 40 percent of apron tiedowns related to new taxiway Alpha relocation in 2018 requires need to add additional apron space.

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources	
Transportation Sales Tax	\$151,000
State/Federal	\$1,358,000
Total Lifetime Budget	\$1,509,000

Estimated Annual Operating and Maintenance	
\$300	

Project Title: Update Airport Master & Business Plan

Type: Airport Activity #44232172

Project Description

This project consist of updating the Airport's Master Plan and Business Plan. Completion of many of the Airport improvement projects by 2020 warrants the need to update the Airport's Master Plan and Business Plans.

Project Purpose

The existing Airport Master Plan and Business Plan are two documents that provide guidance and vision for the Airport, City and supporting agencies. Both documents will need to be reviewed and updated by 2021 to address the many changes that have taken place at the Airport since their inception and provide guidance for the future.

Estima	ted Schedule
Design and Right of Way Acquisition	N/A
Construction	N/A

Funding Sources		
Transportation Sales Tax	\$70,000	
State/Federal	\$630,000	
Total Lifetime Budget	\$700,000	

Estimated Annual Operating and Maintenance	
\$00	

Project Title: West Apron Reconstruction

Type: Airport Activity #32832172

Project Description

This project is the reconstruction of the existing apron to the north and east of the airport terminal building. The apron is old and has been rehabilitated

Project Purpose

In 2014, MoDOT funded a Pavement Management Report for the Lee's Summit Municipal Airport. This report indicated that the Pavement Condition Index for the existing terminal apron was 10 out of a possible 100, indicating that it was in need of reconstruction.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
Transportation Sales Tax	\$169,000
State/Federal	\$1,524,000
Total Lifetime Budget	1,693,000

Estimated Annual Operating and Maintenance	
\$1,100	

Project Title: West Apron Shade Ports

Type: Airport Activity #44332172

Project Description

This project consists of the constructing approximately 18 shade port hangar units on the west side of the existing asphalt Airport Terminal Apron area. These units are desinated as replacement units for similar hangar units being removed for the taxi-way Alpha improvements that requires it to be relocated 400' from Runway 18-36 as shown on the Airport Layout Plan which is the standard separation distance for a Class C runway.

Project Purpose

Provide replacement hangars for based customers currently in Open-T hangars and better utilize apron space that is not producing any revenues for the airport on a regular basis.

Estimated Schedule		
Design and Right of Way Acquisition	2022	
Construction	2022	

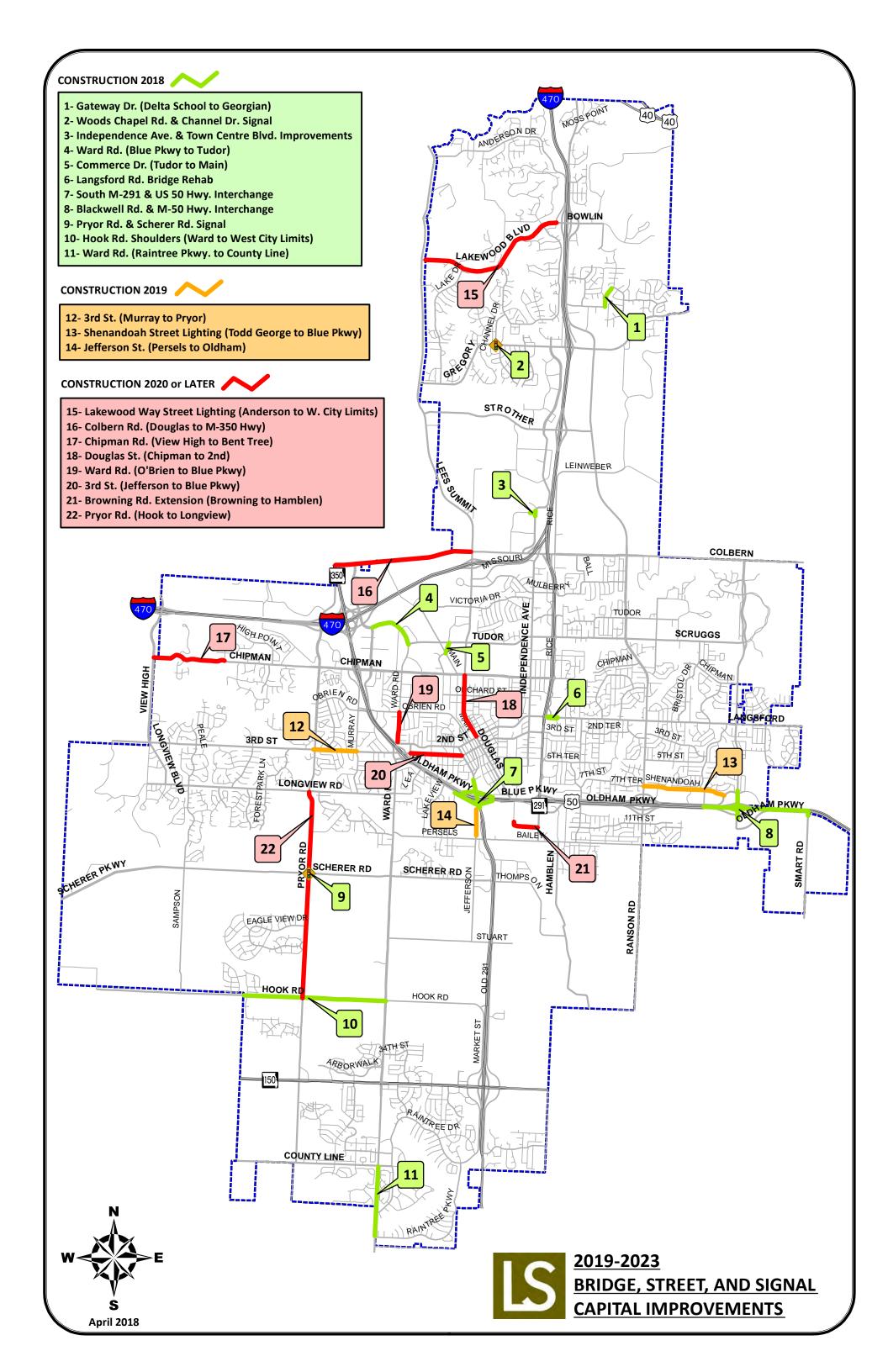
Funding Sources		
Transportation Sales Tax	\$500,000	
Total Lifetime Budget	\$500,000	

Estimated Annual Operating and Maintenance		
\$1,500		

CAPITAL IMPROVEMENT PLAN 2019-2023

BRIDGES, STREETS AND SIGNALS





BRIDGES, STREETS & SIGNALS

(Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Blackwell Road Interchange with US50	24,968	-	-	-	-	-	24,968
Browning Street Extension - Browning to Hamblen Rd	-	330	1,100	-	-	-	1,430
Chipman Road, Bent Tree Dr. to View High Dr.	7,491	2,923	-	-	-	-	10,414
Colbern Road - M350 to Douglas Street	-	1,500	1,600	7,900	-	-	11,000
Commerce Drive - Tudor Road to Main Street	1,316	-	-	-	-	-	1,316
Douglas Street - Chipman Road to 2nd Street	-	-	-	-	500	5,000	5,500
Downtown Public Parking	_	1,000	-	-	-	-	8,000
Gateway Drive - Delta School Road to Georgian Drive	910	-	-	-	-	-	910
Hook Road Shoulders - West City Limits to Ward Road	1,350	-	-	-	-	-	1,350
Independence Ave & Town Centre Blvd Intersect Imp	1,760	-	-	-	-	-	1,760
Jefferson Street - Persels Road to Oldham Parkway	2,478	1,240	-	-	-	-	3,718
Langsford Road Bridge rehabilitation	1,100	-	-	-	-	-	1,100
M291 South Interchange with US50	16,618	373	-	-	-	-	16,991
Pryor Road & Scherer Road Signal	180	-	-	-	-	-	180
Pryor Road Widening Phase 1 - Hook to Longview	-	-	-	2,000	7,000	-	9,000
Streetlights - Lakewood Boulevard	-	-	750	-	-	-	750
Streetlights - Shenandoah Drive	-	750	-	-	-	-	750
Third Street Improvements - Jefferson St to Blue Parkway/US50	-	-	500	2,500	-	-	3,000
Third Street Improvements - Murray Road to Pryor Road	1,700	2,647	1,000	-	-	-	5,347
Traffic Signal Communication Master Plan	295	-	-	-	-	-	295
Ward Road Phase 1 - O'Brien Road to Blue Parkway	-	-	-	-	500	1,500	2,000
Ward Road - Route 150 to Raintree Parkway	9,020	-	-	-	-	-	9,020
Ward Road - Tudor to Blue Parkway	1,300	700	-	-	-	-	2,000
Woods Chapel Rd & Channel Dr Signal	380	-	-	-	-	-	380
Subtotal	70,866	11,463	4,950	12,400	8,000	6,500	121,179
Less water and sewer funds included in totals	2,261	247	100	900	-	-	3,508
Total	68,605	11,216	4,850	11,500	8,000	6,500	117,671

^{*} Indicates future funding beyond the current CIP

Project Title: Blackwell Road Interchange with US50

Type: Bridges, Streets & Signals Activity #63121

Project Description

This project is the construction of a new interchange at Blackwell Road and 50 Highway, extension of Oldham Parkway east 1.0 miles to Smart Road, and the extension of Blue Parkway north to Shenandoah Drive, then east to the city limits. As part of this project approximately 3,200 feet of 8-inch water main will be upsized to a 16-inch water main beginning at Church Street and continuing east through the limits of the project.

Project Purpose

This is the first of three projects to improve traffic operations of the local and state roadway network along the US50 Corridor in Lee's Summit. Current traffic congestion at Todd George and US50 creates delays, which detract from the local quality of life, inhibit sustainable growth and depress property values.

Estimated Schedule		
Design and Right of Way Acquisition	Complete	
Construction	2015-2017	

Funding Sources			
Todd George/50 Hwy TIF	\$14,913,000		
State/Federal	\$10,055,000		
Total Lifetime Budget	\$24,968,000		

Estimated Annual Operating and Maintenance		
\$18,720		

Project Title: Browning Street Extension – Browning St to Hamblen Rd

Type: Bridges, Streets & Signals Activity #56832272

Project Description

This project will extend an existing commercial/industrial roadway, Browning Street, along a planned alignment to Hamblen Road. The project will include sidewalks, curb and gutter, turn lanes, etc. Total project length is approximately 2,100 feet.

Project Purpose

This project completes a roadway network gap that will improve access to the area between Hamblen Road and the UPRR, south of US 50 Highway and north of Bailey Road area, serving as an alternate route in lieu of Oldham Parkway. The new roadway will not only improve access to existing industrial and commercial development, but promote re-development and facilitate access management along Hamblen Road at Oldham Parkway in support of future improvements at the M-291 North Junction and US 50 Highway interchange. The project was identified in the Thoroughfare Master Plan. Right of Way for the project has been acquired in support of the project by adjacent development that has occurred in the last 5 years, including the Water Utilities Facility. The proposed Browning Street extension was recommended by the License Tax Committee.

Estimated Schedule		
Design and Right of Way Acquisition	2019	
Construction	2020	

Funding Sources		
License (Excise) Tax	\$1,430,000	
Total Lifetime Budget	\$1,430,000	

Estimated Annual Operating and Maintenance
\$15,500

Project Title: Chipman Road – Bent Tree to View High

Type: Multi Funded Project Activity #733221

Project Description

The project includes reconstruction of the existing roadway as a three-lane facility with curb & gutter, sidewalk, a multi-use trail, and streetlighting, as well as removal of the existing railroad tunnel. Scope and needs study by the Jackson County Rock Island Rail Corridor Authority (RIRCA) is underway to determine the type of bridge to be built over Chipman Road. After the type of structure has been determined, then roadway and bridge design can re-start to finish this project. This project also involves relocating approximately 4,700 feet of water main and 1,400 feet of sanitary sewer.

Project Purpose

This project was identified in the City's 2006 Thoroughfare Master Plan as a needed improvement. The project was included for funding from the 10-Year Sales Tax Renewal approved by voters in April 2007.

Estimated Schedule			
Design and Right of Way Acquisition	Design is 90% complete. Finalizing design and ROW acquistion are on hold until RIRCA determines the type of bridge needed over Chipman Road		
Construction	On hold		

Funding Sources		
CIP Sales Tax Renewal	\$9,641,000	
Sewer Construction	\$134,000	
Water Construction	\$639,000	
Total Lifetime Budget	\$10,414,000	

Estimated Annual Operating and Maintenance	
\$12,480	

Project Title: Colbern Road – M350 Hwy to Douglas St

Type: Bridges, Streets & Signals Activity #56932272

Project Description

This project will widen Colbern Road as a four lane facility with turn lanes, sidewalk, shared-use path, curb, and street lighting from M350 Highway to Douglas Street. Project improvements include bridge work for bicycle/pedestrian accommodations over the UPRR. The shared-use path will be extended to the existing path along Colbern Road east and west of the project limits.

Project Purpose

This project supports improved safety, operations, economic investment within the nearby area, and livability. The project is identified in the Thoroughfare Master Plan. The path is also included in the Greenway Master Plan and Bicycle Transportation Plan. Nearby roadways have been improved, including Lee's Summit Road and Blue Parkway, both of which intersect the project. Interchanges on the east and west end of the project have also been improved. Much of Colbern Road and the surrounding property was annexed by the City from Unity Village within the last decade and improvements to Colbern Road are necessary to accommodate existing traffic demand and any future property development.

Estimated Schedule	
Design and Right of Way Acquisition	2019-2021
Construction	2021-2023

Funding Sources	
CIP Sales Tax Renewal (2017)	\$10,000,000
Water Tap Fee	\$1,000
Total Lifetime Budget	\$11,000,000

Estimated Annual Operating and Maintenance	
\$35,000	

Project Title: Commerce Drive – Tudor Road to Main Street

Type: Bridges, Streets & Signals Activity #41532272

Project Description

This project will construct a planned commercial/industrial collector roadway, Commerce Drive, between Tudor Road and Main Street. The new roadway will begin at the existing intersection of Commerce Drive and Main Street to the south and end at the existing intersection of Tudor Road and Sloan Street to the north. The project will include sidewalks, curb and gutter, turn lanes, etc. A portion of existing Main Street south of Tudor Road will be removed with the project. Total project length is approximately 800 feet.

Project Purpose

This project completes a roadway network gap that will improve access to the area as an alternate route to Douglas Street between Tudor Road and Chipman Road. This road connection also provides new opportunities for economic activity. Recent projects in support of the proposed Commerce Drive connection include the extension of Sloan Street north of Tudor Road, Tudor Road extension between Ward Road and Douglas Street, and a traffic signal installation at the Commerce Drive and Chipman Road intersection. The new road will also improve access to and from Tudor Road for traffic from the south in place of the existing Main Street intersection that has an undesirable intersection alignment without lane capacity along Tudor Road for separate turning movements.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources	
CIP Sales Tax Renewal	\$1,231,000
Water Tap Fee	\$20,000
Sewer Tap Fee	\$65,000
Total Lifetime Budget	\$1,316,000

Estimated Annual Operating and Maintenance	
\$12,500	

Project Title: Douglas Street Improvements – Chipman Road to 2nd Street

Type: Bridges, Streets & Signals Activity #57232272

Project Description

This project will improve Douglas Street from 2nd Street to Chipman Road. The project includes, but is not limited to, paving, sidewalks, curb, storm drainage work, street lighting.

Project Purpose

This project will re-construct the existing infrastructure that has been deteriorated over the long life of the pavement. Records do not indicate when the street was built, but the recorded plats and home building permits date from 1887 through the 1920's. Over time, filling the underlying curb with asphalt, soil settlement, tree root damage, and age have created failed sidewalks and poor drainage in this area. The street was built long before the City adopted a livable streets policy and the recent downtown revitalization efforts identified gateways to downtown. Douglas Street is one of the downtown gateway projects approved by voters as part of the 2017 CIP Sales Tax renewal. The project supports the City's Livable Streets Policy.

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources	
CIP Sales Tax Renewal (2017)	\$5,500,000
Total Lifetime Budget	\$5,500,000

Estimated Annual Operating and Maintenance	
\$30,000	

Project Title: Downtown Public Parking

Type: Bridges, Streets & Signals Activity #57032272

Project Description

This project will result in additional public parking in the downtown central business district.

Project Purpose

Provide additional public parking within the downtown area to meet current and future parking demand. More public parking will also better accommodate downtown economic growth and re-developent activity. Additional public parking has consistently been recommended in various downtown parking studies and downtown master plans since 2001.

Estimated Schedule	
Right of Way Acquisition	2019
Design	2019 & Future Years CIP
Construction	Future Years CIP

Funding Sources	
CIP Sales Tax Renewal (2017)	\$8,000,000
Total Lifetime Budget	\$8,000,000

Estimated Annual Operating and Maintenance	
\$3,850	

Project Title: Gateway Drive – Delta School Road to Georgian Drive

Type: Bridges, Streets & Signals Activity #41732272

Project Description

This project will construct a portion of Gateway Drive, a residential collector, between Delta School Road and Georgian Drive. The project will include approximately 800 feet of roadway with sidewalk on each side.

Project Purpose

This project will significantly improve access throughout the area as an alternate route to and from Woods Chapel Road and Lakewood Way to the south and east, respectively, for many residents. Currently, limited options are available for the residents of several subdivisions to access nearby major thoroughfares. Furthermore, a middle school is located along Delta School Road without convenient access to subdivisions along and east of Gateway Drive. This livability project provides a more complete road network with new opportunities for active living, community, and better access for everyone, emergency services and school transportation included. This roadway gap would not otherwise be constructed as normal through development activity due to the mature surroundings of constructed subdivisions. This road connection has been planned in the Thoroughfare Master Plan as well as throughout the development of surrounding subdivisions.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources	
CIP Sales Tax Renewal	\$850,000
Water Tap Fee	\$60,000
Total Lifetime Budget	\$910,000

Estimated Annual Operating and Maintenance	
\$6,500	

Project Title: Hook Road Shoulders – West City Limits to Ward Road

Type: Bridges, Streets & Signals Activity #41832272

Project Description

This project will construct six-foot wide paved shoulders along each side of Hook Road from approximately Arthur Drive (West City Limit) to Ward Road. Total project distance is approximately 9,200 feet.

Project Purpose

This project will provide safer facilities for pedestrian and bicycle traffic using Hook Road. Paved shoulders also provide a paved surface for emergency situations and reduce ongoing maintenance of the turf shoulders that are regularly rutted by traffic.

Estimated Schedule	
Design and Right of Way Acquisition	2016 – 2017
Construction	2018

Funding Sources	
CIP Sales Tax Renewal	\$1,350,000
Total Lifetime Budget	\$1,350,000

Estimated Annual Operating and Maintenance	
\$3,200	

Project Title: Independence/Town Centre Intersection Improvements

Type: Bridges, Streets & Signals Activity #263241

Project Description

This project involves roundabout construction at Independence Avenue and Town Centre Blvd to better manage intersection operations and route thru-traffic along Town Centre Blvd rather than along Independence Ave, to and from Colbern Road. A traffic signal has been installed at Colbern and Town Centre intersection along with turn lanes and a raised median on Colbern with earlier phases of the project.

Project Purpose

Traffic at the intersection of Independence and Town Centre should be directed to the signalized intersection at Colbern and Town Centre for safer, full access in consideration of limited access along Colbern Road at Independence Ave.

Estimated Schedule	
Design and Right of Way Acquisition	Complete
Construction	2018

Funding Sources	
Transportation Sales Tax	\$1,535,000
TIF/TDD	\$225,000
Total Lifetime Budget	\$1,760,000

Estimated Annual Operating and Maintenance	
\$3,358	

Project Title: Jefferson Street – Persels Road to Oldham Parkway

Type: Bridges, Streets & Signals Activity #41932272

Project Description

This project will widen and reconstruct Jefferson Street as a two and three lane facility with sidewalk, shared-use path, and street lighting from Persels Road to Oldham Parkway.

Project Purpose

This project supports improved safety, operations, economic reinvestment within the nearby area, and livability. The City is improving Jefferson Street south of Persels, constructed Bailey Road east of M-291 Highway and partnered with MoDOT for the interchange reconstruction at M-291 Highway at US 50 with improvements to Oldham Parkway contiguous to the proposed improvements.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018 – 2019

Funding Sources	
CIP Sales Tax Renewal	\$3,379,000
Sewer Construction	\$191,000
Water Construction	\$148,000
Total Lifetime Budget	\$3,718,000

Estimated Annual Operating and Maintenance
\$10,000

Project Title: Langsford Road Bridge Rehabilitation

Type: Bridges, Streets & Signals Activity #42032272

Project Description

This project involves significant repair of the existing culvert bridge under Langsford Road near Ridgeview Drive.

Project Purpose

An evaluation of culvert bridge condition and recommended improvements have been completed with the determination significant repairs are needed. A failure of the culvert bridge across Langsford Road would have major impacts to storm water management, traffic and public safety.

Estimated Schedule	
Design and Right of Way Acquisition	2016 - 2017
Construction	2018

Funding Sources	
CIP Sales Tax Renewal	\$1,100,000
Total Lifetime Budget	\$1,100,000

Estimated Annual Operating and Maintenance	
No change to current maintenance costs.	

Project Title: M291 South Interchange with US50

Type: Bridges, Streets & Signals Activity #31534972

Project Description

This project is the reconstruction of the interchange at M291 South Junction and 50 Highway, including some work on the north outer road (Blue Parkway) and relocation of the south outer road (Oldham Parkway) with auxillary lanes along US 50 Highway to 3rd Street. This project will be completed in a partnership with MoDOT.

Project Purpose

This is a project to improve traffic operations and safety of the local and state roadway network along the US50 Corridor in Lee's Summit. Current traffic congestion creates significant delays, and safety issues that detract from the local quality of life, inhibit sustainable growth and depress property values. This project will improve economic development opportunities in the corridor, add multi-modal access and replace aged infrastructre. This project is funded by a citizen approved no tax increase bond issue, federal surface transportation funds and MoDOT funding.

Estimated Schedule	
Design and Right of Way Acquisition	2015 - 2016
Construction	2017 - 2018

Funding Sources	
2014 Bond	\$8,110,000
Federal Funds	\$6,800,000
State Funds	\$1,222,000
Water Construction	\$682,000
Sewer Construction	\$177,000
Total Lifetime Budget	\$16,991,000

Estimated Annual Operating and Maintenance

Project Title: Pryor Road & Scherer Road Signal

Type: Bridges, Streets & Signals Activity #48032472

Project Description

This project is the installation of a temporary signal at Pryor Road and Scherer Road.

Project Purpose

The existing intersection meets traffic signal warrant criteria. Pending development in the area will increase the traffic signal need. The existing roads are constructed to an interim road standard and are planned for expansion to full urban standards within 5 to 15 years. The temporary signal will address immediate safety and operational needs. Improvement to permanent signal will take take place when Pryor Road or Scherer Road is improved to urban standards.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources	
Transportation Sales Tax	\$180,000
Total Lifetime Budget	\$180,000

Estimated Annual Operating and Maintenance	
\$3,358	

Project Title: Pryor Road – Hook Rd to Longview Rd

Type: Bridges, Streets & Signals Activity #57132272

Project Description

This project is the first of two phases to complete committed improvements to Pryor Road from M-150 Highway to Longview Road. This first phase project will widen Pryor Road as a four lane facility with turn lanes, sidewalk, shared-use path, curb, and street lighting from Hook Road to Longview Road. The project will also include permanent traffic signal installations at the Hook Road and Scherer Road intersections along Pryor Road, with interconnect to the traffic signal at Longview. The permanent traffic signals may be preceded by temporary traffic signals.

Project Purpose

This project supports improved safety, operations, community growth in southwest Lee's Summit, and livability. The project is identified in the Thoroughfare Master Plan. The path is also included in the Greenway Master Plan and Bicycle Transportation Plan. Pryor Road has already been improved from Longview Road to Interstate 470 and provides a major arterial route between I-470 and M-150 Highway. Increased traffic demand and use by cyclists and pedestrians along this corridor is cause for its forthcoming capacity issues and impediment to further adjacent development.

Estimated Schedule	
Design and Right of Way Acquisition	2021-2022
Construction	2022-2023

Funding Sources	
CIP Sales Tax Renewal (2017)	\$9,000,000
Total Lifetime Budget	\$9,000,000

Estimated Annual Operating and Maintenance
\$65,000

Project Title: Street Lighting – Lakewood Boulevard

Type: Bridges, Streets & Signals Activity #57332272

Project Description

This project involves the installation of street lighting along Lakewood Boulevard from Anderson Drive to Lee's Summit Road. This project budget may also include improvements and energy efficiency upgrades to the existing street light inventory with remaining funds not used for the installation of corridor lighting identified in the CIP.

Project Purpose

Lakewood Boulevard is a minor arterial. Installation of a continuous street light system along arterials and commercial collectors moves the City towards a long-term street lighting goal described by the City's adopted street lighting policies and standards. Street lighting also supports the City's Livable Streets Policy. Street lights can improve roadway safety and quality of life. Other street light improvements and energy efficiency upgrades lower cost and further improve the quality of lighting.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2017)	\$750,000
Total Lifetime Budget	\$750,000

Estimated Annual Operating and Maintenance
\$18,000

Project Title: Street Lighting – Shenandoah Drive

Type: Bridges, Streets & Signals Activity #57432272

Project Description

This project involves the installation of street lighting along Shenandoah Drive from Todd George Parkway to Blue Parkway. This project budget may also include improvements and energy efficiency upgrades to the existing street light inventory with remaining funds not used for the installation of corridor lighting identified in the CIP.

Project Purpose

Shenandoah Drive is a commercial collector. Installation of a continuous street light system along arterials and commercial collectors moves the City towards a long-term street lighting goal described by the City's adopted street lighting policies and standards. Street lighting also supports the City's Livable Streets Policy. Street lights can improve roadway safety and quality of life. Other street light improvements and energy efficiency upgrades lower cost and further improve the quality of lighting.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2019

Funding Sources	
CIP Sales Tax Renewal (2017)	\$750,000
Total Lifetime Budget	\$750,000

Estimated Annual Operating and Maintenance
\$6,000

Project Title: 3rd Street Improvements – Jefferson Street to Blue Parkway/US50

Type: Bridges, Streets & Signals Activity #57532272

Project Description

This project will improve 3rd Street from Jefferson Street to Blue Parkway. The project includes, but is not limited to, paving, sidewalks, curb and storm sewer work, street lighting and access management. The project may include additional streetscape elements along 3rd Street similar to those within the downtown central business district; and could provide those same elements such as brick pavers, landscape/street trees, etc. along portions of Market Street and West Main Street between 2nd Street and 4th Street with available project funds.

Project Purpose

This project will enhance safety and operations by improving the 3rd Street corridor through access management, sidewalk, lighting, etc. This project will promote economic activity and reinvestment along the arterial corridor. The corridor is also a principal gateway into downtown Lee's Summit. The project supports the City's Livable Streets Policy.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
CIP Sales Tax Renewal (2017)	\$3,000,000
Total Lifetime Budget	\$3,000,000

Estimated Annual Operating and Maintenance	
\$20,000	

Project Title: 3rd Street Improvements – Murray Road to Pryor Road

Type: Bridges, Streets & Signals Activity #42232272

Project Description

This project will construct turn lanes and a traffic signal at the intersection of Murray Road and 3rd Street. The project also includes widening of 3rd Street east of Pryor Road to Murray Road to complete the 4/5 lane section with sidewalk on each side of the road.

Project Purpose

This project will enhance safety and operations by improving the 3rd Street corridor and the intersection of 3rd Street and Murray Road. Traffic signal warrants have been previously met at the intersection of 3rd Street and Murray which currently operates as an all-way stop. Left-turn lanes are necessary at this intersection for improved safety and operation in consideration of anticipated traffic growth within the next 10 years. Left-turn lanes at this intersection are needed for efficient traffic management under signal control. Widening of 3rd Street to a four or five lane section consistent with the design of 3rd Street west of Pryor Road and 3rd Street east of Murray Road is recommended in the Thoroughfare Master Plan to address current and projected traffic demand at an adequate level of service. Sidewalk connections should be provided for pedestrian access along the corridor. 3rd Street is a major arterial road.

Estima	ted Schedule
Design and Right of Way Acquisition	2017 – 2018
Construction	2018 – 2019

Funding Sources	
CIP Sales Tax Renewal	\$5,100,000
Water Construction Fund	\$197,000
Sewer Construction Fund	\$50,000
Total Lifetime Budget	\$5,347,000

Estimated Annual Operating and Maintenance	
\$18,900	

Project Title: Traffic Signals Communication Master Plan

Type: Bridges, Streets & Signals Activity #603241

Project Description

The first phase of this project developed a traffic signal communication master plan with recommendations for prioritized implementation of signal and signal communication infrastructure improvements. Remaining project funds will be used to implement improvements identified in the plan.

Project Purpose

A communication master plan improves the City's maintenance, response and level of service in regards to traffic signal operations. Remote communications will improve efficiency and customer service. This project benefits multiple stakeholders including public safety agencies, ITS and school districts.

Estimated Schedule	
Design and Right of Way Acquisition	Complete
Construction	Ongoing

Funding Sources	
Transportation Sales Tax	\$295,000
Total Lifetime Budget	\$295,000

Estimated Annual Operating and Maintenance	
N/A	

Project Title: Ward Road - M150 to Raintree Pkwy

Type: Bridges, Streets & Signals Activity #18532272

Project Description

This project will widen Ward Road from Route 150 to Raintree Parkway, approximately 9,900 feet. The original project in the 2005 Thoroughfare Master Plan called for building a 5-lane road with medians. Recently updated traffic information and planning studies show that only 2 lanes, plus turn lanes, are necessary for Ward Road south of M-150 Highway. The project has bene re-scoped appropriately, and subdivided into 2 distinct phases to allow and earlier construction strartup. Phase 1 will add sidewalks, curb, and storm drains to the east side of Ward Road between County Line Road and M-150. Phase 2 will reconstruct Ward Road between Raintree Parkway and County Line Road.

Project Purpose

This project was identified in the City's 2006 Thoroughfare Master Plan as a needed improvement. The project was included for funding from the 10-Year Sales Tax Renewal approved by voters in April 2007. City Council prioritized this project to later years of the funding program until traffic demands warrant additional improvements. Existing improvements address current traffic levels and safety.

Estimated Schedule	
Design and Right of Way Acquisition	2015-2016
Construction	2016-2018

Funding Sources	
CIP Sales Tax Renewal	\$8,875,000
Water Construction	\$145,000
Total Lifetime Budget	\$9,020,000

Estimated Annual Operating and Maintenance	
\$30,000	

Project Title: Ward Road – Tudor Road to Blue Parkway

Type: Bridges, Streets & Signals Activity #49832272

Project Description

This project will widen the existing 2-lane Ward Road by adding 2 lanes to complete the planned 4-lane, divided, major arterial. The addition will include curb, gutter, enclosed storm sewer, and sidewalks. Street lighting will be added if allowed by funding.

Project Purpose

This section of Ward Road is master planned as a 4-lane, divided roadway with turn lanes and lighting. Ward Road is classified as an arterial road connecting the Blue Parkway / 1-470 interchange with Tudor Road and Chipman Road. The area is zoned commercial as part of the Summit Fair, Summit Place, Summit Orchard, Summit Technology Campus, and Missouri Innovation Center developments. The primary purposes for this project are safety and traffic capacity. Significant development in the area, and the connection of Tudor Road, have taken place in the last 18 months that will increase traffic such that the existing 2-lane road will not be sufficient to accommodate the near-term traffic conditions and meet the City's traffic Level of Service goals adopted by Council.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources	
2007 CIP Sales Tax Renewal	\$2,000,000
Total Lifetime Budget	\$2,000,000

Estimated Annual Operating and Maintenance	
\$6,000	

Project Title: Ward Road Improvements – NW O'Brien Road to NW Blue Parkway

Type: Bridges, Streets & Signals Activity #59932272

Project Description

This project will improve Ward Road from NW O'Brien to Blue Parkway. The project includes, but is not limited to, paving, sidewalks, curb and enclosed storm drains, street lighting and other livable street components.

Project Purpose

This project will enhance safety and operations by improving the Ward Road corridor to include livable street components that will accommodate vehicles, cyclists and pedestrians. The project supports the City's Livable Streets Policy.

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources	
CIP Sales Tax Renewal (2017)	\$2,000,000
Total Lifetime Budget	\$2,000,000

Estimated Annual Operating and Maintenance	
\$10,000	

Project Title: Woods Chapel Road & Channel Drive Signal

Type: Bridges, Streets & Signals Activity #47932472

Project Description

This project is the installation of a permanent signal at Woods Chapel Road and Channel Drive.

Project Purpose

The existing intersection meets standard traffic signal warrant criteria. Planned lane configuration changes with routine pavement maintence will provide for left-turn lanes accomodating more efficient signal operations at the intersection. The warranted traffic signal will improve safety and intersection operations. The signal should be interconnected with adjacent traffic signals for corridor operations coordination.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Transportation Sales Tax	\$380,000
Total Lifetime Budget	\$380,000

Estimated Annual Operating and Maintenance	
\$3,358	

CAPITAL IMPROVEMENT PLAN 2019-2023

FACILITIES



FACILITIES (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Central Fuel Site	250	-	-	-	-	-	250
Downtown Performing Arts Space and Farmers Market Pavilion	600	-	-	-	-	-	600
Fire Station 3 Replacement	5,000	-	-	-	-	-	5,000
Radio System Upgrade	8,000	-	-	-	-	-	8,000
Total	13,850	-	-	-	-	-	13,850

Project Title: Central Fuel Site

Type: infrastructure Activity # 49561087

Project Description

Relocation of the current central fuel site to a more suitable location. Replacement of aging and failing fuel equipment and tanks.

Project Purpose

To provide a central fuel site for all city owned vehicles that will be up to date and compliant with current environmental regulations. Also due to the current underground tanks not constructed to handle the corrosiveness of the ethonal blend of fuel the state Insurance tank fund will no longer allow these tanks to remain in service. Replacement with above ground steel tanks will eliminate this issue.

Estimated Schedule		
Design	2017	
Construction	2017	

Funding Sources	
Fleet Fund Account	\$250,000
Total Lifetime Budget	\$250,000

Estimated Annual Operating and Maintenance	
\$3500	

Project Title: Downtown Performing Arts Space and Farmers Market Pavilion

	Type: Facilities	Activity #25934671
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Project Description

The downtown performing arts space and farmers market pavilion project includes two primary components. First, is the development of a performing arts space to provide for outdoor music and arts productions. Envisioned is development of a performance stage to include audio/visual equipment and both hardscaping and landscaping. Second, is the development of a farmers market pavilion. The pavilion is envisioned to accommodate 40-50 market booths under a covered vertical structure. The scope for this project includes funding for design. A future project will be establised once a construction budget and funding plan is finalized.

Project Purpose

The Citizen Cultural Arts Facility Task Force presented its recommendations to the City Council in January, 2013 for projects to be funded through a General Obligation (G.O.) bond issuance with the April, 2013 election. These projects included renovation of the downtown historic post office, which has been completed, and development of a downtown outdoor performance venue. The bond issue was approved by the voters.

Estima	ted Schedule
Design and Right of Way Acquisition	2014-2018
Construction	

Funding Sources	
Cultural Arts Bonds 2013	\$600,000
Total Lifetime Budget	\$600,000

Estimated Annual Operating and Maintenance
50,000

Project Title: Fire Station 3 Replacement

Project Description

In November of 2016, the citizens voted on and approved a \$14.5 million dollar bond initiative. Out of that \$14.5 million approximately \$5 million was appropriated to replace the existing fire station #3 at 3rd and Pryor. An MOU has been reached with JKV that lists out terms for the City do certain infrastructure improvements to a parcel of land west of Pryor around the area of Shamrock and in return JKV will convey a parcel of land for the construction of the new fire station. These improvements include improvements to Pryor Rd, Extension of Shamrock Dr to the west of Pryor, and utility extensions that would support the fire station and other future development in that immediate area.

Project Purpose

Station 3 has been in need of replacement for many years and was approved in the 2016 November "No Tax Increase" bond election. The puropse of this is to replace station 3 with a modern facility in a new location to better serve the citizens and to be better able to handle future growth of the City and resultant demands placed on the fire department.

Estim	ated Schedule
Design and Right of Way Acquisition	2017
Construction	2017-2018

Funding Sources	
2016 Public Safety Bond	\$5,000,000
Total Lifetime Budget	\$5,000,000

Estimated Annual Operating and Maintenance	
\$10,000	

Project Title: Radio System Upgrade (MARRS)

Type: Facilities Activity #46235273

Project Description

The project will provide the City of Lee's Summit with the design, procurement and implementation of equipment necessary to join the MARRS radio network.

Project Purpose

By joining the MARRS radio system, our first responders will be joining a robust, reliable public safety grade system. Joining this radio system will solve interoperable communications concerns between jurisdictions and improves communication during significant emergencies. The system upgrade will also assist our City with future Federal compliance of operating on a fully digital system. Planning and completing this project will ensure sustainability of our community.

Estima	ted Schedule
Design and Right of Way Acquisition	2017-2018
Construction	2018

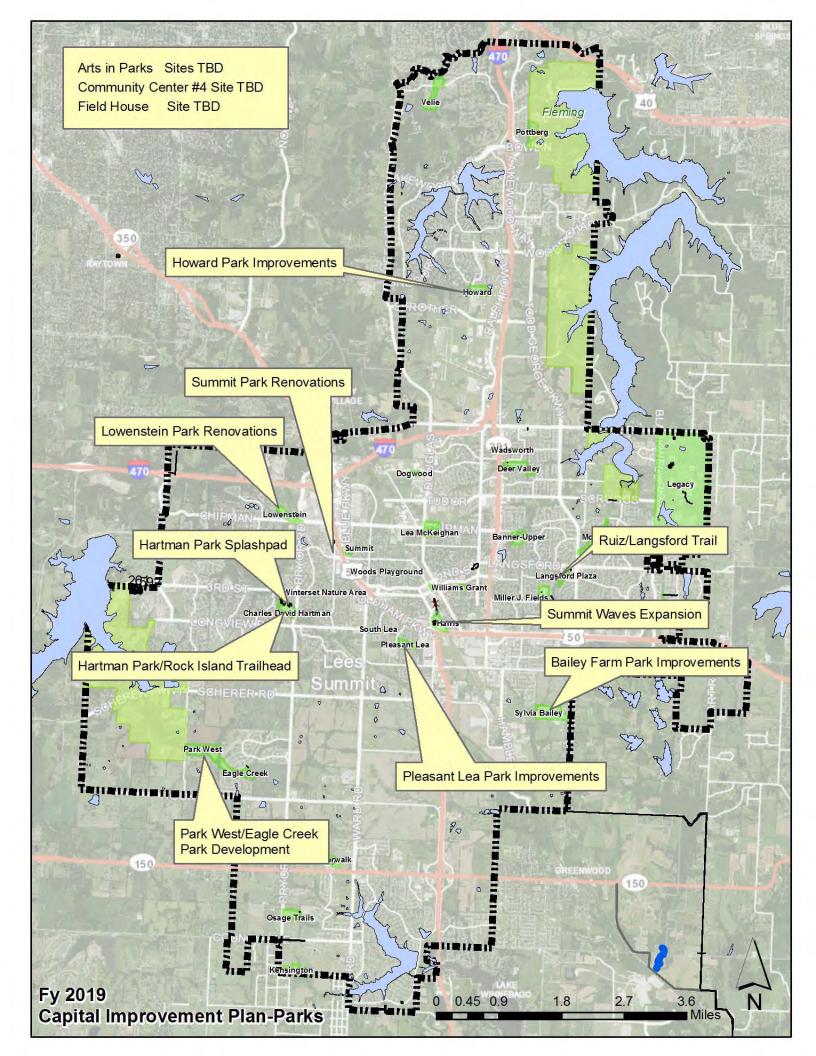
Funding Sources		
2016 Public Safety Bond	\$ 8,000,000	
Total Lifetime Budget	\$ 8,000,000	

Estimated Annual Operating and Maintenance
\$104,000

CAPITAL IMPROVEMENT PLAN 2019-2023

PARKS AND RECREATION





PARKS (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Arts in Parks	-	10	10	10	10	10	50
Bailey Park Development	25	-	-	-	400	5,100	5,525
Community Center #4	-	-	500	4,500	-	-	5,000
Eagle Creek/Park West Development	-	-	175	2,325	-	-	2,500
Field House	-	-	200	3,400	8,400	-	12,000
Harris Park Restrooms	-	110	-	-	-	-	110
Hartman Park Splashpad	-	-	-	300	-	-	300
Hartman Park Trailhead	-	250	-	-	-	-	250
Howard Park Renovation	200	700	-	-	-	-	900
Langsford/Ruiz Trail Extension	-	100	-	-	-	-	100
Lowenstein Park Improvements	-	-	50	350	-	-	400
LSPR Greenway Master Plan Update	-	20	-	-	-	-	20
Pleasant Lea Park Improvements	-	-	50	350	-	-	400
Summit Park Renovation	-	1,225	375	-	-	-	1,600
Wave Pool at Summit Waves		420	4,580	-	-	-	5,000
Total	225	2,835	5,940	11,235	8,810	5,110	34,155

Project Title: Arts in Parks

Type: Parks & Recreation Activity #47532784

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ¼ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign was Arts in Parks. This project serves as a placeholder for arts in parks as opportunities arise.

Project Purpose

Provide Arts in Parks as opportunities arise and as committed to the voters in August 2016.

Estima	ted Schedule
Design & Construction	TBD

Funding Sources		
Park Sales Tax FY 19	\$ 10,000	
Park Sales Tax FY 20	\$ 10,000	
Park Sales Tax FY 21	\$ 10,000	
Park Sales Tax FY 22	\$ 10,000	
Park Sales Tax FY 23	\$ 10,000	
Total Lifetime Budget	\$ 50,000	

Estimated Annual Operating and Maintenance
\$1,000

Project Title: Bailey Park Development

Type: Parks & Recreation Activity #33032784

Project Description

Development of Park on 50 acre site

Project Purpose

Follow through on commitment to Legacy for Tomorrow and Beyond Park Sales Tax initiative. Development will complement planned park activities and programming that began in 2016. A master plan of improvements was completed by consulting firm of BBN Architects in February of 2017. Construction to begin during FY2022. Project costs for development of the park were estimated at approximately \$5,500,000.

Estima	ted Schedule
Design	January-June 2022
Phase I Construction	June 2022-July 2023

Funding Sources		
Park Sales Tax FY 2017	\$25,000	
Park Sales Tax FY 2022	\$400,000	
Park Sales Tax FY 2023	\$5,100,000	
Total Lifetime Budget	\$5,525,000	

Estimated Annual Operating and Maintenance
\$100,000

Project Title: Community Center #4

Type: Parks & Recreation Activity #39932784

Project Description

LSPR is seeking locations in the south and west quadrant of the city for a new community center. Staff has been performing analysis and reviewing options on a number of site locations that meet the criteria established in the original LFTB plan.

Project Purpose

A community center at this location is on the fringe of the desirable service area but still very much an ideal location to provide a community type fitness facility branded along the same concept of the Gamber Community Center with more functional interior uses.

Estima	ted Schedule
Design	July 2019-June 2020
Construction	July 2020-June 2021

Funding Sources		
Park Sales Tax FY 20	\$ 500,000	
Park Sales Tax FY 21	\$ 4,500,000	
Total Lifetime Budget	\$5,000,000	

Estimated Annual Operating and Maintenance
\$250,000

Project Title: Eagle Creek/Park West Development

Type: Parks & Recreation Activity #33632784

Project Description

Construct approximately 8,000 If of trail east and west of Eagle Creek greenway. Develop neighborhood park space on east side of Park West property. Prepare preliminary plans and infrastructure improvements for the development of rest of 50 acre parcel

Project Purpose

To provide additional trail and park amenities along Mouse Creek stream corridor for southern portion of Lee's Summit. Trail would connect from Sampson Road through Park West and Eagle Creek Park and east to Pryor Road.

Estimated Schedule	
Planning and Design	June 2019-June 2020
Construction	July 2020-August 2021

Funding Sources	
Park Sales Tax FY 2020	\$175,000
Park Sales Tax FY 2021	\$2,325,000
Total Lifetime Budget	\$2,500,000

Estimated Annual Operating and Maintenance	
\$10,000	

Project Title: Field House

Type: Parks & Recreation Activity #47232784

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ¼ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign was construction of an indoor field house for competitive and recreational sports and year round training. Construction of a field house would be approximately 80,000-100,000 square feet. Final location to be determined.

Project Purpose

Project is necessary to serve demands of growing youth sports associations in Lee's Summit and for year round training and practice.

Estimated Schedule	
Design	April 2020-March 2021
Construction	April 2021-July 2022

Funding Sources	
Park Sales Tax FY 20	\$ 200,000
Park Sales Tax FY 21	\$ 3,400,000
Park Sales Tax FY 22	\$ 8,400,000
Total Lifetime Budget	\$12,000,000

Estimated Annual Operating and Maintenance	
\$250,000	

Project Title: Harris Park Restrooms

Type: Parks & Recreation Activity #55032784

Project Description

Construct permanent restroom facility on north end of park near playground and shelter to better serve park patrons.

Project Purpose

Improvements and upgrades to park restroom facilities was a high priority from patron comments during the sales tax campaign in 2016. Restrooms will serve Camp Summit programs along with daily park use

Estimated Schedule	
Planning and Design	Sept-Nov 2018
Construction	January-May 2019

Funding Sources		
Park Sales Tax FY 2019	\$110,000	
Total Lifetime Budget	\$110,000	

Estimated Annual Operating and Maintenance	
\$ 1,000	

Project Title: Hartman Park Splashpad

Type: Parks & Recreation Activity #55232784

Project Description

Construct splashpad in Hartman Park

Project Purpose

Neighborhood park improvements were a commitment in the Legacy for Tomorrow and Beyond Park Sales Tax program in 2008.

Estimated Schedule	
Planning and Design	July-Nov 2020
Construction	January-May 2021

Funding Sources		
Park Sales Tax FY 2021	\$ 300,000	
Total Lifetime Budget	\$ 300,000	

Estimated Annual Operating and Maintenance	
\$20,000	

Project Title: Hartman Park Trailhead

Type: Parks & Recreation Activity #54932784

Project Description

Jackson County Missouri has begun development of a 7-mile corridor of inactive rail line along the Rock Island railroad for recreational trail usage. Hartman Park serves an ideal location for trailhead development. Improvements include restroom upgrades, trail linkage, parking lot improvements, wayfinding, and bike maintenance

Project Purpose

To promote and create improved access to Rock Island Trail and Katy Trail

Estimated Schedule	
Design and Construction	September 2018-May 2019

Funding Sources	
2017 CIP Sales Tax	\$250,000
Total Lifetime Budget	\$250,000

Estimated Annual Operating and Maintenance
\$2,000

Project Title: Howard Park Renovation

Type: Parks & Recreation Activity #46632784

Project Description

Park renovations to include splashpad, park shelter, nine hole disc golf course, permanent restrooms, single track trails, and nature playground. A master plan of improvements was completed in January 2018.

Project Purpose

Renovation of neighborhood park in an underserved area. Park was constructed in 1998 and has aging infrastructure.

Estimated Schedule	
Planning and Design	July 2018-Nov 2018
Construction	January 2019-October 2019

Funding Sources	
Park Sales Tax FY 2017	\$ 200,000
Park Sales Tax FY 2019	\$ 700,000
Total Lifetime Budget	\$ 900,000

Estimated Annual Operating and Maintenance	
\$10,000	

Project Title: Langsford/Ruiz Trail Extension

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ¼ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign was Greenway and Trail Development. This project is identified on the greenway master plan and connects Miller J Fields Park to Langsford Park.

Project Purpose

Continued Greenway and Trail Development identified in the Master Plan and as committed to the voters in August 2016.

Estimated Schedule		
Design & Construction	2018-2019	

Funding Sources		
Park Sales Tax FY 19	\$100,000	
Total Lifetime Budget	\$100,000	

Estimated Annual Operating and Maintenance	
\$2,000	

Project Title: Lowenstein Park Improvements

Type: Parks & Recreation Activity #33332784

Project Description

Replace existing park shelters, provide shade structures adjacent to playground, and update playground equipment. Project is deferred until a FY2021 awaiting the outcomes of proposed development plans adjacent to the park.

Project Purpose

Existing wood shelters are in disrepair and require routine maintenance. Metal shelters are lower maintenance and durable. New shade structures and playground equipment will modernize the park and complement the trail renovation.

Estimated Schedule	
Planning and Design	July 2019-June 2020
Construction	September 2020-May 2021

Funding Sources	
Park Sales Tax FY 20	\$ 50,000
Park Sales Tax FY 21	\$ 350,000
Total Lifetime Budget	\$ 400,000

Estimated Annual Operating and Maintenance	
\$2,000	

Project Title: LSPR Greenway Master Plan Update

LIVDEL POIKS & RECTECTION LACTIVITY #551527/84	Type:	Parks & Recreation	Activity #55132784
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Project Description

Plan update to greenway and trails master plan. Previous plan was prepared in 2008

Project Purpose

Update current and planned route map for trails and greenways to update citywide comprehensive plan

Estimated Schedule	
Planning	October 2018-February 2019

Funding Sources	
Park Sales Tax FY 2019	\$ 20,000
Total Lifetime Budget	\$ 20,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Pleasant Lea Park Improvements

Type: Parks & Recreation Activity #47032784

Project Description

Construct new park shelter, provide shade structures adjacent to playground, and update playground equipment. Renovate and upgrade park amenities, tennis courts, site furnishings

Project Purpose

Existing park is aging and requires routine maintenance. Metal shelters are lower maintenance and durable. New shade structures and playground equipment will modernize the park and improve the appearance. Trail renovations may be required.

Estimated Schedule	
Planning and Design	July 2019-June 2020
Construction	Sept 2020-May 2021

Funding Sources	
Park Sales Tax FY 20	\$ 50,000
Park Sales Tax FY 21	\$ 350,000
Total Lifetime Budget	\$ 400,000

Estimated Annual Operating and Maintenance	
\$ 10,000	

Project Title: Summit Park Renovation

Type: Parks & Recreation Activity #33832784

Project Description

Replace aging infrastructure in park. Park shelter will be demolished in spring 2017 making way for future improvements. Improvements include new park shelter, restrooms, ball field and tennis court fencing, playground equipment and additional parking.

Project Purpose

Reduce on-going maintenance and care for aging park infrastructure.

Estimated Schedule	
Design	July 2018-Dec 2018
Construction	January 2019-October 2019

Funding Sources		
Park Sales Tax FY 2019	\$1,225,000	
Park Sales Tax FY 2020	\$375,000	
Total Lifetime Budget	\$1,600,000	

Ī	Estimated Annual Operating and Maintenance
Ī	\$20,000

Project Title: Wave Pool at Summit Waves

Type: Parks & Recreation Activity #47132784

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ½ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign were upgrades and improvements to Summit Waves Aquatics Center. Construction of a wave pool with open water was originally part of the scope of the project but because of budget concerns the project was put on hold. Improvements will be located adjacent to the current facility and will consist of approximately 6,000 SF of open water play with a shallow depth entry and artificially created waves.

Project Purpose

Project is necessary to make the facility competitive and current with other local and regional facilities.

Estimated Schedule	
Design	July 2018-June 2019
Construction	July 2019-May 2020

Funding Sources	
Park Sales Tax FY 19	\$ 420,000
Park Sales Tax FY 20	\$ 4,580,000
Total Lifetime Budget	\$ 5,000,000

Estimated Annual Operating and Maintenance	
\$100,000	

CAPITAL IMPROVEMENT PLAN 2019-2023

SOLID WASTE



SOLID WASTE (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Landfill Closure Phases I and II	2,041	1,377	549	-	-	-	3,967
Transfer Station	1,152	-	-	-	-	-	1,152
Total	3,193	1,377	549	-	-	-	5,119

Project Title: Landfill Closure

Type: Solid Waste Activity #40252086

Project Description

This project involves the phased closure of the landfill. Components include leveling settled areas of the landfill, applying final cover according to Missouri Department of Natural Resources specifications, and testing soil densities to make sure specifications are achieved. Other activities include leachate and methane system management.

Project Purpose

The City's landfill operating permit requires proper closure of the landfill after the landfill has reached capacity.

	Estimated Schedule
Landfill Closure-Phase I	2018-2019
Landfill Closure-Phase II	2019-2020

Fund	ing Sources
Landfill Closure Fund	\$3,967,000
Total Lifetime Budget	\$3,967,000

Estimated Annual Operating and Maintenance	
\$10,000	

Project Title: Trash Transfer Station

Type: Solid Waste Activity #40152086

Project Description

This project involves the design, permitting and construction of a trash transfer station. The facility will be constructed at the City's existing Resource Recovery Park. Components include, stormwater drainage, odor and blowing litter, fire safety, traffic management and aestetic considerations.

Project Purpose

The facility will allow continued solid waste services for citizens and businesses in Lee's Summit and the surrounding areas. The project continues implementation of the City's approved Solid Waste Master Plan.

Estima	ted Schedule
Design and Initial Permitting	2016-2017
Construction	2017-1018

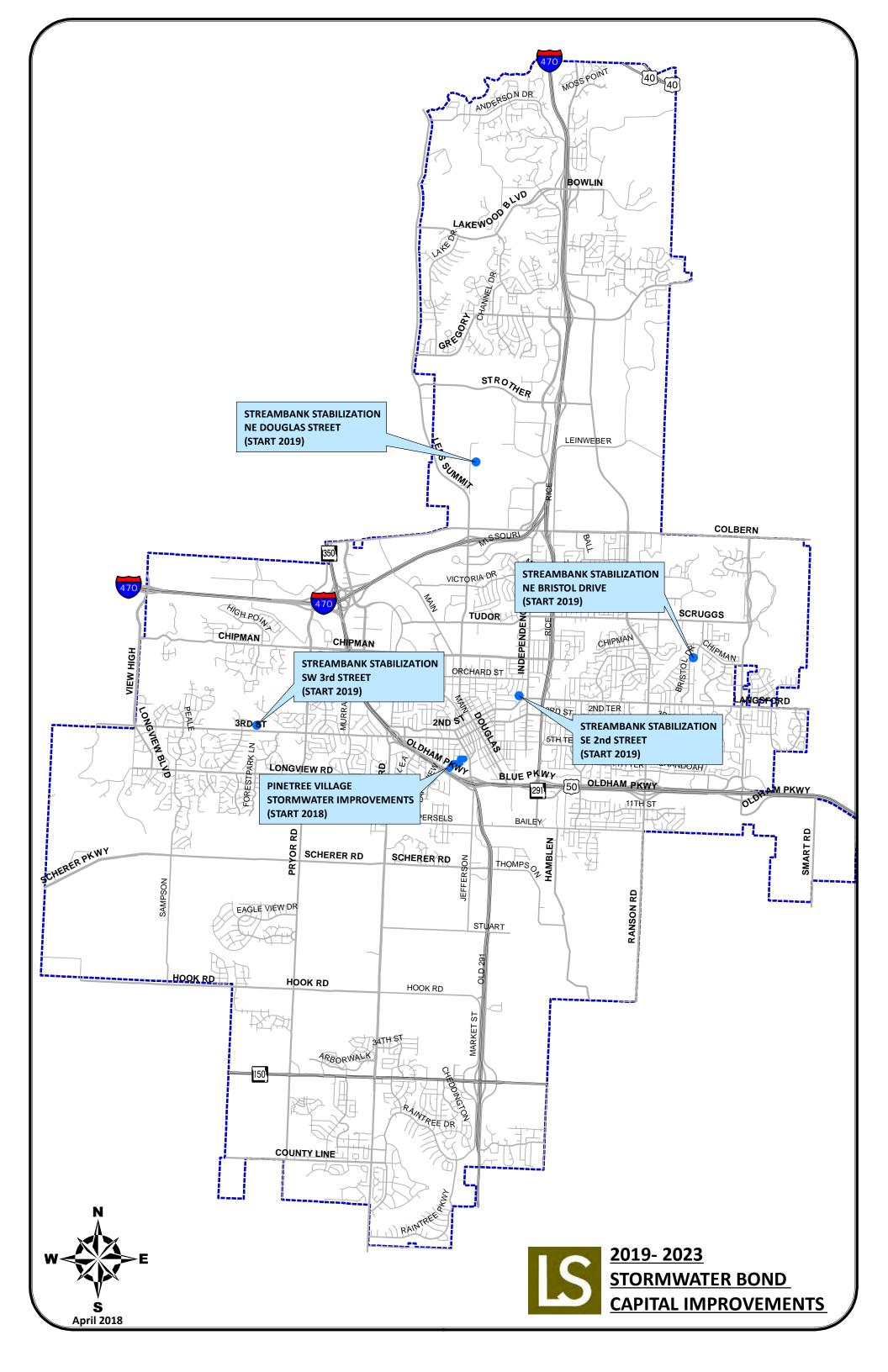
Fund	ling Sources
Landfill Construction	\$1,152,200
Total Lifetime Budget	\$1,152,200

Estimated Annual Operating and Maintenance
\$5,000

CAPITAL IMPROVEMENT PLAN 2019-2023

STORMWATER IMPROVEMENTS





STORM WATER (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Stormwater Infrastructure Improvements	3,005	-	-	-	-	-	3,005
Stormwater Infrastructure Improvements	-	1,500	2,000	3,000	3,000	3,000	12,500
Streambank Stabilization		1,500	-	-	-	-	1,500
Total	3,005	3,000	2,000	3,000	3,000	3,000	17,005

Project Title: Stormwater Infrastructure Improvements

Type: Stormwater, Public Works Activity #5433813

Project Description

This program will upgrade and/or improve the existing City stormwater system to relieve structural flooding throughout the City of Lee's Summit. Funding for this program was approved by the voters in the November 2007 "No Tax Increase" bond election. The final project currently scheduled in this program will be in the Pine Tree Village area. Additional work may be programmed if there are sufficient funds after completing this project.

Project Purpose

To reduce or eliminate structural flooding throughout the City. Locations of past flooding are outlined by the City;s Stormwater Master Plan and/or provided through citizen and Staff input.

Estimo	ated Schedule
Design and Right of Way Acquisition	2007-2015
Construction	2014-2018

Fund	ing Sources
Remaining Stormwater Bonds 2007	\$3,005,000
Total Lifetime Budget	\$15,800,000

Estimated Annual Operating and Maintenance
No impact on maintenance costs.

Project Title: Stormwater Infrastructure Improvements

Type: Stormwater, Public Works Activity #57632272

Project Description

This program will upgrade and/or improve the existing City stormwater system to relieve structural flooding throughout the City of Lee's Summit. Funding for this program is through the 2017 CIP Sales Tax Fund.

Project Purpose

To reduce or eliminate structural flooding throughout the City. Locations of past flooding are outlined by the City's Stormwater Master Plan and/or provided through citizen and Staff input.

Estimated Schedule		
Design and Right of Way Acquisition	2018-2023	
Construction	2018-2023	

Funding Sources		
2017 CIP Sales Tax	\$12,500,000	
Total Lifetime Budget	\$12,500,000	

Estimated Annual Operating and Maintenance
No impact on maintenance costs.

Project Title: Streambank Stabilization

Type: Stormwater, Public Works Activity #54832272

Project Description

This project will stabilize streambanks at four locations, NE Bristol Drive, NE Douglas Street, SE 2nd Street, and SW 3rd Street. The Bristol Drive stream will be redirected in such a manner to assure the longterm integrity of Bristol Drive. The stormwater flows originating on the Airport will be controlled so as not to threaten Douglas Street and utilities in the vicinity. The meandering of a stream toward 2nd Street and the adjacent sidewalk will be stabilized to protect the public infrastruture. A global slope failure on the south side of SW 3rd Street will to be stabilized over the box culvert underneath.

Project Purpose

To protect the existing roadway infrastructure at four locations throughout the City. Streambank erosion is threatening damage to the roadways and utilities.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018-2019

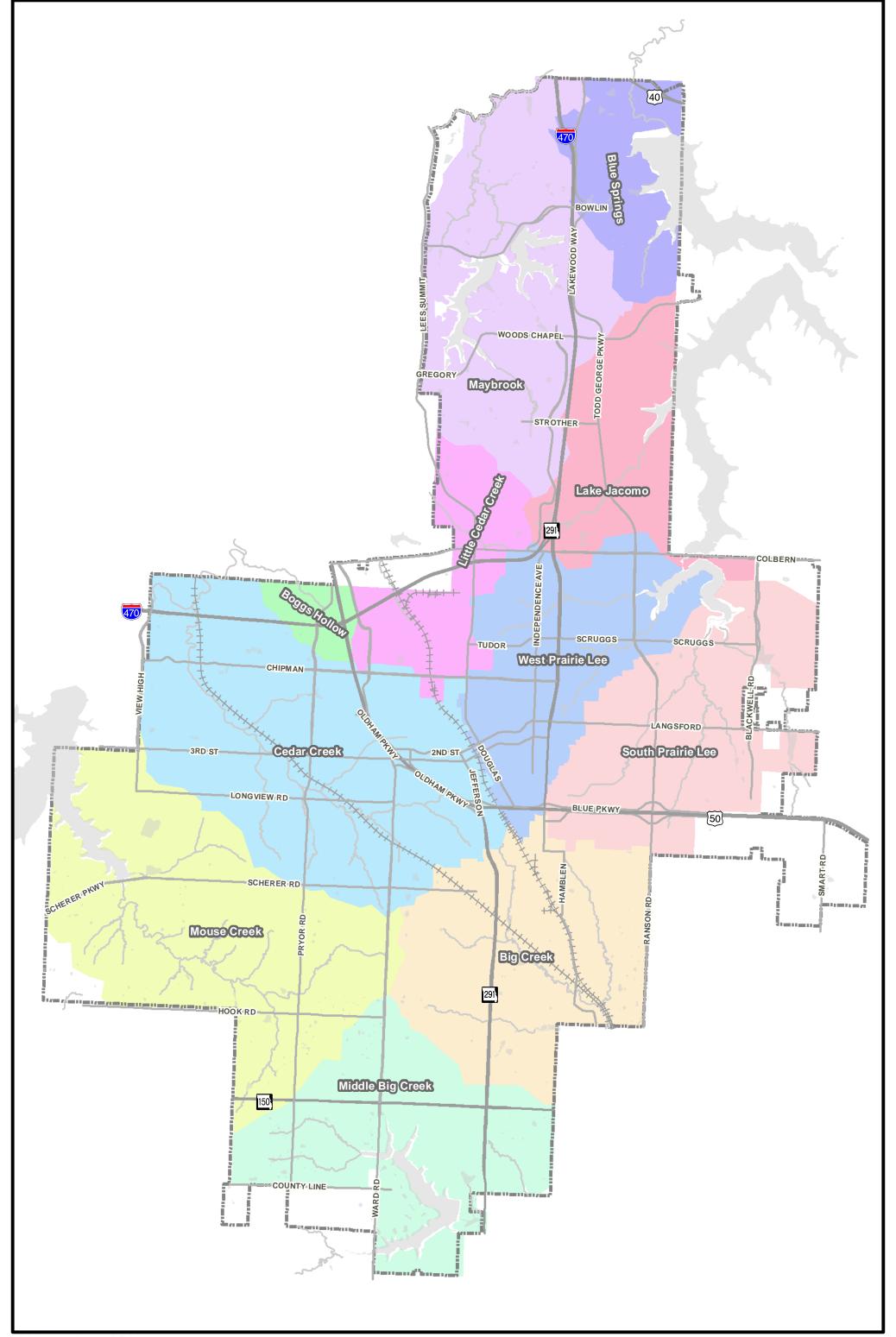
Funding Sources		
2017 CIP Sales Tax	\$1,500,000	
Total Lifetime Budget	\$1,500,000	

Estimated Annual Operating and Maintenance	
No impact on maintenance costs.	

CAPITAL IMPROVEMENT PLAN 2019-2023

WATER UTILITIES SEWER CONSTRUCTION





SANITARY SEWER

(Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Big Creek EFHB (East & West Forks)	-	50	600	-	-	-	650
Bogg's Hollow Meter Structure	300	-	-	-	-	-	300
Cedar Creek Improvements - MH29-220 to MH37-001	850	-	2,550	-	-	-	3,400
Cedar Creek Interceptor - Phase III &IV	1,000	715	-	-	-	-	1,715
Cedar Creek Interceptor - Winterset Woods & Sterling Hills	1,600	-	-	-	-	-	1,600
Flow Monitoring	450	150		-	-	-	600
Large Diameter Sewer and Force Main Condition Assessments	700	360	200	200	200	200	1,860
Little Cedar - Force Main	-	-	-	-	4,084	-	4,084
Sanitary Sewer Rehab - Relining, Manhole Rehab, Tap Repairs	5,610	1,150	1,150	1,150	1,150	1,150	11,360
Sewer Asset Management Plan	100	-	-	-	-	-	100
Small Main Replacement Program	1,000	-	1,000	-	-	-	2,000
Tudor Force Main - Odor Control	500	700	-	-	-	-	1,200
Tudor Pump Station EFHB Rehabilitation	131	-	-	-	-	-	131
Wastewater Master Plan	-	-	500	-	-	-	500
TOTAL	12,241	3,125	6,000	1,350	5,434	1,350	29,500

Project Title: Big Creek EFHB (East & West Forks)

Type: Sanitary Sewer	Activity #42431583
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Project Description

This project will provide storage for peak wet weather flows in the Big Creek watershed. Phase I of this project will determine the location to meet the storage requirements of the basin. Phase II will be the construction of the basin.

Project Purpose

This basin will serve existing and future customers by reducing peak wet weather flows to downstream sewers and reduce potential overflows.

Estimated Schedule		
Land Acquisition	2019	
Design & Construction	2020	

Funding Sources		
Sewer Tap Fund	\$650,000	
Total Lifetime Budget	\$650,000	

Estimated Annual Operating and Maintenance
\$2,000

Project Title: Boggs Hollow Meter Structure

Type: Sanitary Sewer Activity #28531583

Project Description

Secure the property for the construction of the Boggs Hollow Meter Structure, and construct meter structure on Boggs Hollow Interceptor.

Project Purpose

This project is in conjunction with KCMO for access to Boggs Hollow Interceptor.

Estimated Schedule		
Design and Right of Way Acquisition	2017	
Construction	2017	

Funding Sources		
Sewer Construction Fund	\$300,000	
Total Lifetime Budget	\$300,000	

Estimated Annual Operating and Maintenance	
\$1,500	

Project Title: Cedar Creek Improvements – MH 29-220 to MH 37-001

Type: Sanitary Sewer Activity #42531783

Project Description

This sanitary sewer improvement project consists of upgrades to the Interceptor within the Cedar Creek watershed that serves the internal core of the city. The project will improve approximately 5,000 LF of sewer main and will require a bore of US 50 Highway.

Project Purpose

The improvements will increase the conveyance of sewer to meet current and future needs within the Cedar Creek watershed as redevelopment occurs.

Estimated Schedule		
Design and Right of Way Acquisition	2017	
Construction	2020	

Funding Sources		
Sewer Construction Fund	\$2,550,000	
Sewer Tap Fund	\$850,000	
Total Lifetime Budget	\$3,400,000	

Estimated Annual Operating and Maintenance	
\$1,000	

Project Title: Cedar Creek Interceptor Improvements – Phase III & IV

Type: Sanitary Sewer Activity #42631783

Project Description

This sanitary sewer improvement project consists of the construction of approximately 1,500 LF of sanitary sewer lines along the upper segments of the Cedar Creek interceptor.

Project Purpose

The existing sanitary sewer lines do not have capacity to convey the predicted wetweather flows nor meet the future needs of development in the watershed.

Estimated Schedule		
Design and Right of Way Acquisition	2016-2017	
Construction	2018	

Funding Sources		
Sewer Construction Fund	\$1,285,000	
Sewer Tap Fund	\$430,000	
Total Lifetime Budget	\$1,715,000	

Estimated Annual Operating and Maintenance	
\$1,000	

Project Title: Cedar Creek Interceptor - Winterset Woods & Sterling Hills

Type: Sanitary Sewer Activity #19631783

Project Description

This sanitary sewer improvement project consists of the construction of 2,600 LF of sanitary sewer relief lines ranging in pipe size from 12-inches to 15-inches in diameter on the lower segments of the Cedar Creek Interceptor Subbasins CC-03 and CC-04.

Project Purpose

The existing lines do not have capacity to convey the predicted peak wet weather sanitary sewer flows nor meet the future needs of development. The condition of the existing pipe system is also a concern. There has been at least one documented overflow in these subbasins.

Estimated Schedule	
Design and Right of Way Acquisition	2017-2018
Construction	2018

Funding Sources	
Sewer Tap Fund	\$565,000
Sewer Construction Fund	\$1,035,000
Total Lifetime Budget	\$1,600,000

Estimated Annual Operating and Maintenance	
\$2,000	

Project Title: FY16, FY17, FY 18 & FY19 Flow Monitoring

Type: Sanitary Sewer Activity #33931783

Project Description

Provide Flow Monitoring in the portions of the South Prairie Lee, and West Prairie Lee Water Sheds.

Project Purpose

Extensive flow monitoring was conducted in 1996 and used to define the Sanitary Sewer Masterplanning project and I&I reduction projects. The proposed flow monitoring will measure the success of the work done as outlined in these programs along with the sewer rehab programs and set a new baseline for these areas.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2019

Funding Sources	
Sewer Construction Fund \$600,000	
Total Lifetime Budget	\$600,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Large Diameter Sewer and Force Main Condition Assessments

Type: Sanitary Sewer Activity #48331783

Project Description

Perform Condition assessments on our large diameter interceptor sewer and force mains.

Project Purpose

The sewer system that serves the City of Lee's Summit is made up of a network of small lines which drain to larger interceptors and pumpstations. The City has the equipment to inspect the small diameter mains effectively but does not have the equipment to inspect these larger interceptor mains or force mains as that requires specialized equipment. This program will inspect these mains.

Estimated Schedule	
Inspection and assessment	2018-2023

Funding Sources	
Sewer Construction Fund	\$1,890,000
Total Lifetime Budget	\$1,890,000

Estimated Annual Operating and Maintenance	
	No additional operating/maintenance costs

Project Title: Little Cedar – Force Main

Type: Sanitary Sewer Activity #42731583

Project Description

This sanitary sewer improvement project consists of a new 24" force main along Tudor Road from M-291 Highway to near Douglas Road.

Project Purpose

The improvements will allow 24 MGD to be conveyed to the Little Cedar Creek watershed from the West and South Prairie Lee watersheds.

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2023

Funding Sources	
Sewer Tap Fund	\$4,084,000
Total Lifetime Budget	\$4,084,000

Estimated Annual Operating and Maintenance	
\$5,000	

Project Title: Sanitary Sewer Rehabilitation - CIPP Lining, Manhole Rehab, Tap Repairs

Type: Sanitary Sewer Activity #19131783

Project Description

Project is a multi-year rehabilitation of clay tile pipe, maholes and substandard sewer taps in service throughout the City that allow inflow and infiltration (I&I) to enter into the system.

Project Purpose

Lining of sanitary sewer pipes will reduce the I&I and the potential for blockages. Rehabilitation of maholes to reduce I&I and H2S corrosion.

Repair of substandard sewer taps to reduce I&I and the potential for blockages.

Estimated Schedule	
Design and Right of Way Acquisition	N/A
Construction	Ongoing

Funding Sources	
Sewer Construction Fund	\$11,360,000
Total Lifetime Budget	\$11,360,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Sewer Asset Management Plan

Type: Sanitary Sewer Activity #48431783

Project Description

Create a new asset management plan for the sewer lines managed Water Utilities.

Project Purpose

The sewer systems contrains a system of pipes on which the Water Utilities Department collects data daily. The Sewer Asset Management plan will review our current practices and standard operating proceedures and make recommendations to move us to the best practices in this area.

Estimated Schedule	
Inspection and assessment	2018

Funding Sources	
Sewer Construction Fund	\$100,000
Total Lifetime Budget	\$100,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Small Main Replacement Program

Type: Sanitary Sewer Activity #34031783

Project Description

Replacement of undersized and dilapidated sewer mains around the City.

Project Purpose

Segments of line have been identified that are under the current standard for minumum size and in poor condition. These lines will be replaced to bring them up to standard and reduce 1&1 and potential for blockage.

Estimated Schedule	
Design and Right of Way Acquisition	2016 – 2020
Construction	2016 - 2020

Funding Sources	
Sewer Construction Fund	\$2,000,000
Total Lifetime Budget	\$2,000,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Tudor Force Main – Odor Control

Type: Sanitary Sewer Activity #42831583

Project Description

This project involves the design and installation of an Oxygen Injection System for odor control at the pump station.

Project Purpose

This project will reduce maintenance costs and improve odor control effectiveness. Costs associated with chemical delivery, storage and operation will be reduced.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2019

Funding Sources			
Sewer Construction Fund \$1,200,000			
Total Lifetime Budget	\$1,200,000		

Estimated Annual Operating and Maintenance				
\$5,000				

Tudor Pump Station EFHB Rehabilitation

Type: Sanitary Sewer Activity #48631783

Project Description

The floor in the Excess Flow Holding Basin at Tudor Road Pump Station is showing signs of distress and cracking and is in need of repair.

Project Purpose

The EFHB at Tudor Road Pumpstation was constructed in 1991 and is utilitized to equalize flows into the pumpstation during rain events. The floor in the EFHB is beginning to deteriorate and show signs of cracking. This project will be to remediate this issue and keep this vital piece of our system in service.

Estimated Schedule				
Design and Right of Way Acquisition	2018			
Construction	2018			

Funding Sources			
Sewer Construction Fund \$131,000			
Total Lifetime Budget	\$131,000		

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Wastewater Master Plan

Type: Sanitary Sewer Activity #42931583

Project Description

This project consists of analysis, modeling, and evaluation of the Sanitary Sewer System.

Project Purpose

This project will ensure that the City's wastewater system is adequately prepared to meet future growth needs through an analysis the current infrastructure considering the number of improvements that have been made to the system.

Estimated Schedule			
Design and Right of Way Acquisition	2020		
Construction	2020		

Funding Sources				
Sewer Construction Fund \$500,000				
Total Lifetime Budget	\$500,000			

Estimated Annual Operating and Maintenance	

CAPITAL IMPROVEMENT PLAN 2019-2023

WATER UTILITIES WATER IMPROVEMENTS



WATER (Costs in \$1,000s)

Project	Prior Yrs.	2019	2020	2021	2022	2023	Total
Harris Park Standpipe - Recoating	-	-	287	-	-	-	287
Hook Tower - Recoating	409	-	-	-	-	-	409
Interconnection Projects – Tri County Water Authority	-	-	200	-	-	-	200
Ranson Tower - Recoating	324	517	-	-	-	-	841
SCADA Radio Communications*	870	-	-	-	-	-	870
Scherer Tower - Recoating	417	-	-	-	-	-	417
South Terminal Discharge Main	-	231	1,581	-	-	-	1,812
Transmission Main Condition Assessment	275	400	-	-	850	2,000	3,525
Water Asset Management Plan	-	-	100	-	-	-	100
Water Main - Harris Rd - Herring to Haines	504	-	-	-		-	504
Water Main – Lakewood Way – Ridgewood to Bowlin Rd	-	-	-	-	400	-	400
Water Main – Samson Road Existing 12" to Hook	682	-	-	-	-	-	682
Water Main – View High Longview Golf to Chipman Upsize	340	-	-	-	-	-	340
Water Main Rehab FY17	2,000	-	-	-	-	-	2,000
Water Main Rehab FY18	2,400	-	-	-	-	-	2,400
Water Main Rehab FY19	-	2,500	-	-	-	-	2,500
Water Main Rehab FY20	-	-	3,000	-	-	-	3,000
Water Main Rehab FY21	-	-	-	2,750	-	-	2,750
Water Main Rehab FY22	-	-	-	-	3,750	-	3,750
Water Main Rehab FY23	-	-	-	-	-	4,250	4,250
Water Master Plan Update	-	-	-	250	-	-	250
Water Meter Replacement	1,600	400	400	400	400	400	3,600
Water Operations Site Remediation and Genset Reconditioning	400	-	-	-	-	-	400
Woods Chapel Tower - Recoating	333	-	-	-	-	-	333
Level II Water Audit	-	50	-	-	-	-	50
Cathodic Protection Pilot Program		250	-	-	-	-	250
TOTAL	10,554	4,348	5,568	3,400	5,400	6,650	35,920

^{*}Includes funding from Sewer Construction Fund since system serves both water and sewer facilities.

Project Title: Harris Park Standpipe - Recoating

Project Description

Project consists of recoating interior and exterior of standpipe located in Harris Park.

Project Purpose

The Harris Park Standpipe provides storage to meet peak demands during the summer.

Estimated Schedule			
Design	2020		
Construction	2020		

Funding Sources				
Water ERP \$287,000				
Total Lifetime Budget	\$287,000			

Estimated Annual Operating and Maintenance			
\$0			

Project Title: Hook Tower - Recoating

Project Description

Project consists of recoating interior and exterior of water tower located at Hook Road & Ward Road.

Project Purpose

Recent inspections have indicated that the exterior coating is seperating from the undercoat. The tower was put into service in 2004 and is an intergral part of the distribution system. The tower provides water storage for peak demands and emergencies.

Estimated Schedule	
Design	2017
Construction	2017

Funding Sources	
Water ERP	\$409,000
Total Lifetime Budget	\$409,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Interconnection Projects – Tri County Water Authority

Type: Water Utilities	Activity #48731483

Project Description

Provide Redundancy with interconnection points to Tri County Water Authority Connect to the transmission main at Ranson and Scherer Road Towers

Project Purpose	
Continued efforts to maintain and strengthen our water distribution system.	

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources	
Water Tap	\$200,000
Total Lifetime Budget	\$200,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Ranson Tower - Recoating

Project Description

Project consists of recoating interior and exterior of water tower located on Ranson Road south of US 50 Hwy.

Project Purpose

The tower was recoated in 2004 and had an expected life of 12 years. The Ranson tower is an intergral part of the distribution system and provides water storage for peak summer demands and emergencies.

Estimated Schedule	
Design	2017
Construction	2019

Funding Sources	
Water ERP	\$841,000
Total Lifetime Budget	\$841,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: SCADA Radio Communications

Project Description

Replace the SCADA control system's existing leased phone lines with a radio based communication system by expanding upon the public safety radio project. Approximately 35 radio segments will be added to the public safety hub and will utilize a fiber connection linking the SCADA host computer to the radio hub. The SCADA component of the radio system will be owned and maintained by the Utility. The SCADA system serves both water and sewer facilities so the project is funded from both water construction and sewer construction accounts.

Project Purpose

The existing leased line communication system is an outdated technology and has become time consuming to maintain and increasingly expensive to utilize. The conversion to a privately owned system utilizing current radio technologies will increase the reliability of control system communications, will extend the useful life of the communication system, and will reduce its overall annual cost.

Estimated Schedule	
Design	2017
Construction	2017-2018

Funding Sources	
Water Construction	\$870,000
Total Lifetime Budget	\$870,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Scherer Tower - Recoating

Project Description

Project consists of recoating interior and exterior of water tower on Scherer Road, west of Pryor Road.

Project Purpose

Recent inspections have indicated that the exterior coating fading and should be recoated in 2018. The tower was placed into service in 2002 and is an intergral part of the distribution system. The tower provides water storage for peak summer demands and emergencies.

Estimated Schedule	
Design	2018
Construction	2019

Funding Sources	
Water ERP	\$417,000
Total Lifetime Budget	\$417,000

Estimated Annual Operating and Maintenance
\$0

Project Title: South Terminal Discharge Main

Project Description

Create a redundant water discharge connection to the Kansas City transmission main at South Terminal.

Project Purpose

Reduce pressure and velocity on the water supply system at South Terminal.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources	
Water Tap	\$1,812,000
Total Lifetime Budget	\$1,812,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Transmission Main Condition Assessment

Type:	Water Utilities	Activity	/ #48831683

Project Description

Condition Assessment of select Large Diameter (greater than 16") transmission mains.

Project Purpose

The water system contrains a system of pipes on which the Water Utilities Department collects data daily. The large transmission main system in Lee's Summit is the backbone of our water supply

Estimated Schedule		
On Going Condition Assessment	2018-2023	

Funding Sources	
Water Construction	\$3,525,000
Total Lifetime Budget	\$3,525,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Water Asset Management Plan

Project Description

Create a new asset management plan for the water lines managed Water Utilities.

Project Purpose

The water system contrains a system of pipes on which the Water Utilities Department collects data daily. The Water Asset Management plan will review our current practices and standard operating proceedures and make recommendations to move us to the best practices in this area.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources	
Water Construction	\$100,000
Total Lifetime Budget	\$100,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Water Main – Harris Road (Herring to Haines)

Type at Mater Hillities	A ativity, #42421702
Type: Water Utilities	Activity #43431683

Project Description

Rehabilitation and upsizing of water mains at:

-- Harris Rd – Herring to Haines

Project Purpose
Continued offertate to receipt size and strong other accounts which distributions are

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Water Construction	\$280,000
Water Tap	\$69,000
District 14	\$155,000
Total Lifetime Budget	\$504,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main – Lakewood Way – Ridgewood to Bowlin Rd

Type: Water Utilities Activity #49031483
--

Project Description

Connect existing Waterlines and Ridgewood and Bowlin Road to create a looped system.

Project Purpose
Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2022

Funding Sources	
Water Tap	\$400,000
Total Lifetime Budget	\$400,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main – Samson Road Existing 12" to Hook

h		
	Type: Water Utilities	Activity #49131483

Project Description

Rehabilitation and upsizing of water mains at:
Along Sampson Road in support of development

Project Purpose	
Continued efforts to maintain and strengthen our water distribution system.	

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Water Tap	\$613,800
Water Construction	\$68,200
Total Lifetime Budget	\$682,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main – View High Longview Golf to Chipman Upsize

Project Description

Rehabilitation and upsizing of water mains at:

Along Viewhigh Drive to Chipman in support of development

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Water Tap	\$227,800
Water Construction	\$112,200
Total Lifetime Budget	\$340,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Description

Rehablilitation of water mains on:

- Braeside Park Donovan and Robin Rd
- NE Main St, Forest to 1st
- Village Fair Phase II

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2017

Funding Sources	
Water Construction	\$2,000,000
Total Lifetime Budget	\$2,000,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Description

Rehablilitation of water mains on:

- Lakeview and 1st
- Lynn and Applewood St
- Applewood and Magnolia
- Wicklow
- Hilltop School

Project Purpose	
Continued efforts to maintain and strengthen our water distribution system.	

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Water Construction	\$2,400,000
Total Lifetime Budget	\$2,400,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Description

Rehablilitation of water mains on:

- Raintree Drive Clubhouse Option
- Woods Chapel West of Lakeview
- Bordner and 11th
- NW Prior Road and Under 470
- Raintree cul-de-sacs Lido, Pendant, Starboard, Ensign, Breezy Point
- -Agate Dr and Circle

Project Purpose Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2019

Funding Sources	
Water Construction \$2,500,000	
Total Lifetime Budget	\$2,500,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Description

Rehablilitation of water mains on:

- Quik Trip and Squeaky Clean Carwash
- 5th Ter Melody to Bayberry
- 7th Pl
- Windsboro Dr, Nottingham to Williamsburg
- Pheasant Run Apartments
- Westwind Ln
- -Basswood
- Lake Lee's Summit Phase 1
- NW Murray Road
- NW Executive Way and Obrien

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources		
Water Construction \$3,000,000		
Total Lifetime Budget	\$3,000,000	

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

١	Type: Water Utilities	Activity #43831683
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Project Description

Rehablilitation of water mains on:

- 7th Terrace, Vista west to 8 inch
- Sampson Road and Longview Farms Phase 1
- Summit Point Condos
- Highway Ln, Peggy 1st and McCLendon
- Brentwood South of Langsford
- SW Winter Park Blvd

Project Purpose	
Continued efforts to maintain and strengthen our water distribution system.	

Estima	ted Schedule
Design and Right of Way Acquisition	2021
Construction	2021

Fund	ing Sources
Water Construction	\$2,750,000
Total Lifetime Budget	\$2,750,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Description

Rehablilitation of water mains on:

- Briarcroft
- Pergola View
- Bramble Trail
- Timber Lake Estates

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estima	ted Schedule
Design and Right of Way Acquisition	2022
Construction	2022

Fund	ling Sources
Water Construction	\$3,750,000
Total Lifetime Budget	\$3,750,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Type: Water Utilities	Activity #43831683
1700, 770101 01111103	7 (011711) // 10001000

Project Description

- Rehablilitation of water mains of various sizes throughout the City.

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estima	ted Schedule
Design and Right of Way Acquisition	2023
Construction	2023

Fund	ing Sources
Water Construction	\$4,250,000
Total Lifetime Budget	\$4,250,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Master Plan Update

Project Description

Our most recent Water Master Plan was completed in 2006 and is becoming out of date with the growth of our City and the changing technologies and water use levels. Water Utilities proposes to update the current plan to reflect the system as it is now and provide direction for the future.

Project Purpose
Provide future planning and direction for the utilty.

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2021

Funding Sources		
Water Tap	\$250,000	
Total Lifetime Budget	\$250,000	

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Water Meter Replacement

Type: Water Utilities Activity #20531683

Project Description

Replacement of water meters throughout the City.

Project Purpose

Water meters degrade over the life of the meter and readings begin to slow. To ensure accurate readings and sustain revenues, water meters need to be replaced.

Estimated Schedule	
Design and Right of Way Acquisition	N/A
Construction	Ongoing

Funding Sources	
Water Construction	\$3,600,000
Total Lifetime Budget	\$3,600,000

Estimated Annual Operating and Maintenance	
ľ	\$70,000

Project Title: Water Operations Site Remediation and Genset Reconditioning

	T
Type: Water Utilities	Activity #49431883

Project Description

Demo of some of the existing buildings at the Douglas and Chipman Operations Facility after the new facility is complete.

Project Purpose	
Continued efforts to maintain and strengthen our water distribution system.	

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources	
Water ERP Fund 318	\$400,000
Total Lifetime Budget	\$400,000

Estimated Annual Operating and Maintenance	
N/A	

Project Title: Woods Chapel Tower - Recoating

Project Description

Project consists of recoating interior and exterior of water tower north of Woods Chapel on Lakewood Way.

Project Purpose

Recent inspections have indicated that the exterior coating fading and should be recoated in 2018. The tower was placed into service in 2000 and is an intergral part of the distribution system. The tower provides water storage for peak summer demands and emergencies.

Estimated Schedule	
Design	2018
Construction	2018

Funding Sources	
Water ERP	\$333,000
Total Lifetime Budget	\$333,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Level II Water System Audit

Project Description

Project Consists doing a Level II Water Audit to produce a clearer more reliabel review of the systems water, purchases sales, non revenue water and water losses.

Project Purpose

The utility does water balance and audit program internally to measure the intergrity of our system and its appurtenances. A Level II Audit will further enhance this tool to ensure the long term integrity of the system.

Estimated Schedule	
Design	2019
Construction	2019-2020

Funding Sources	
Water Construction	\$50,000
Total Lifetime Budget	\$50,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Cathodic Protection Pilot Program

Project Description

Project Consists of installing cathodic protection in the form of sacrificial anodes on a portion of the system which is showing signs of corrosion to slow the loss of the wall on the metalic water lines.

Project Purpose

Watermain break data indicates that we are seeing wall degredation on lines installed as recently as 20 years ago. This is due to the type of materials and construction methods used at that time. This corrosive degredation is creating a potential for an increased main break rate in the near future and the need for a rapid expansion in main replacement. The use of cathodic protection is hoed to slow this corrosion and allow us to replace these mains at a more reasonable rate.

Estimated Schedule	
Design	2019
Construction	2019-2020

Funding Sources	
Water Construction	\$250,000
Total Lifetime Budget	\$250,000

Estimated Annual Operating and Maintenance	
\$0	