



LEE'S SUMMIT MISSOURI

CITY MANAGER'S MESSAGE

April 18, 2017

Members of the Lee's Summit Public Works Committee 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) 2018-2022 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.

Administration



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Proposed Plan

The 2018-2022 CIP totals \$312,923,000 (including funding from prior years), up from \$303,968,000 in the 2017-2021 plan. The increase in the total is due primarily to voter approval of the 2016 public safety bond initiative, as well as voter approval to renew the 1/4 cent sales tax for Parks and Recreation projects in August, 2016. Significant changes to the CIP include:

Completed Projects

- Arterial Curb Replacement
- Blackwell Road Livability Improvements
- Earthwork for Runway 18-36 and West Parallel Taxiway Extension
- FAA Review and Testing for Navaid Relocations
- Lee's Summit Road, Colbern Road to City Limits
- Legacy Park Trail Connector
- Murray Road Bridge Replacement
- Pryor Road / Longview Signal
- Scruggs Road Excess Flow Holding Basin
- South Prairie Lee Interceptor at Crystal View Estates
- Thoroughfare Master Plan
- Water Main Rehabilitation, FY15

New Projects

- Arts in Parks
- Athletic Field House
- Central Fuel Site
- Facilities Asset Management Plan (Sewer)
- Greenway & Trail Development
- Hartman Park / South Trailhead Planning
- Howard Park Splashpad
- Interconnection Projects – Tri County Water Authority
- Large Diameter Sewer and Force Main Condition Assessments
- Neighborhood Park Renovation
- Pleasant Lea Park Renovation
- Pryor Road / Scherer Road Signal
- Fire Station 3 Replacement
- Radio System Upgrade
- Sewer Asset Management Plan
- Sewer Main Rehabilitation and Creek Stabilization
- Site Development – East Side Terminal Area (Airport)
- South Apron Expansion
- Transmission Main Condition Assessment
- Tudor Road Pump Station EFHB Rehabilitation
- Water Asset Management Plan

Administration



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- Water Main – Lakewood Way – Ridgewood to Bowlin
- Water Main – Sampson Road Existing 12” to Hook
- Water Main Rehab FY22
- Water Master Plan Update
- Water Operations Site Remediation and Genset Reconditioning
- Wave pool at Summit Waves
- Woods Chapel & Channel Dr Traffic Signal

Deleted Projects

- Construct T-Hangars *
- Develop Site for T-Hangars *
- Extend Runway 18-36 North End **
- Grade North Safety Area **
- Perimeter Fencing – Phase II **
- Water Main – NW System Improvements
- Water Operation Facility Demo

* The activity for these projects are now included in the Site Development – Northeast Side.

** These projects and their associated budgets have been combined with the project to construct the pavement for Runway 18-36.

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 Programs	Airport	Bridges Street & Signals*	Facilities	Park & Recreation	Solid Waste	Stormwater	Sanitary Sewer	Water	Total
Prior Years	0	18,562	75,383	850	3,600	1,924	3,005	8,664	21,350	133,338
2018	8,490	8,921	20,812	13,000	2,100	1,269	0	4,611	6,516	65,719
2019	8,194	4,805	7,361	0	1,060	695	0	2,425	3,818	28,353
2020	7,088	3,966	1,000	0	9,675	549	0	6,000	4,881	33,159
2021	7,243	4,019	0	0	6,570	0	0	1,350	3,000	22,182
2022	7,815	2,668	0	0	9,250	0	0	5,434	5,000	30,167
Total	38,830	42,941	104,556	13,850	32,255	4,437	3,005	28,484	44,565	312,923

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

Administration



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As you can see, the majority of the capital funding continues to be allocated to the Bridges, Streets, and Signals section which includes 21 projects around the community. Programs, airport, water, sanitary sewer and stormwater continue to comprise significant portions of the plan. Because of recent elections, both Facilities and Parks & Recreation show significant increases in this year's plan. Among the major revenue sources for the various capital projects included in the plan are:

- Capital Improvements Sales Tax (roads)
- 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
2018-2022



Capital Improvement Plan Summary
Fiscal Year 2015-2019
(Costs in \$1,000s)

Project	Prior Yrs.	2017	2018	2019	2020	2121	Total
Public Works Programs	6,338	6,262	6,447	6,633	6,573	6,786	32,701
Water Utilities Programs	-	2,228	1,747	455	670	1,029	6,129
Airport	18,562	8,921	4,805	3,966	4,019	2,668	42,941
Bridges, Streets and Signals*	75,383	20,812	7,361	1,000	-	-	104,556
Facilities	850	13,000	-	-	-	-	13,850
Parks and Recreation	3,600	2,100	1,060	9,675	6,570	9,250	32,255
Solid Waste	1,924	1,269	695	549	-	-	4,437
Storm Water	3,005	-	-	-	-	-	3,005
Sanitary Sewer	8,664	4,611	2,425	6,000	1,350	5,434	28,484
Water	21,350	6,516	3,818	4,881	3,000	5,000	44,565
Total	139,676	65,719	28,358	33,159	22,182	30,167	312,923

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

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

Programs	2017	2018	2019	2020	2021	2022
Overlay & Slurry Seal	3,500	3,500	3,550	3,650	3,700	3,800
Annual Curb and Gutter Replacement Program	1,640	1,650	1,650	1,700	1,700	1,750
Neighborhood Traffic Safety Program	50	50	50	50	50	50
Bridge Rehab/ Maintenance	50	50	50	50	50	50
Guardrail Improvement Program	30	20	20	25	25	30
Capital Project Planning	20	25	25	30	30	30
Thoroughfares & Traffic	75	75	75	75	75	75
Pavement Marking	456	431	543	550	421	458
Crack Sealing	240	200	210	215	220	225
Community Bus Service - ATA/OATS	277	261	274	288	302	318
TOTAL	6,338	6,262	6,447	6,633	6,573	6,786

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

Programs	2017	2018	2019	2020	2021	2022
Equipment Replacement/Rehab	364	2228	1747	455	670	1029
TOTAL	364	2,228	1747	455	670	1029



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

Property Tax- 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.

Sales Tax- 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 1/4-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.

Transportation 1/2-Cent Sales Tax- 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 1/2-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.

Road Excise Tax- 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.

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

Tax Increment Financing 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

General Obligation (G.O.) Bonds- 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.

Certificates of Participation- 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

Parks and Recreation Activity Fees- 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.

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

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

Sewer Charges- Charges for providing wastewater collection and disposal services to residential, commercial and industrial customers.

Sewer Tap- 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.

Water Tap- 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 2018-2022 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 \$312,923,000. A summary of the costs by category is summarized below.

**2018-2022 CIP SUMMARY
(Costs in \$1000s)**

Category	Prior Yrs	% of Total	2018-22	% of Total
PW & WU Programs	0	0.0	38,830	21.6
Airport	18,562	13.9	24,379	13.6
Bridges, Streets, Signals	75,383	56.5	29,173	16.3
Facilities	850	0.6	13,000	7.2
Parks and Recreation	3,600	2.7	28,655	16.0
Solid Waste	1,924	1.5	2,513	1.4
Stormwater	3,005	2.3	0	0.0
Sanitary Sewer	8,664	6.5	19,820	11.0
Water	21,350	16.0	23,215	12.9
TOTAL	133,338	100.0	179,585	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

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) 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 limited – to no activity from adjacent property due to constrained terrain. Future

development opportunity is minimal due to constrained terrain, utility and environmental impact. If developed 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. 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

Fifth Terrace - Country Lane to Greenridge Drive:

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

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.

Independence Avenue and Town Centre Blvd Intersection Improvements:

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

Jefferson Street - Persels Road to Stuart Road:

Livable Streets Elements Included: Continuous Street Lighting, Sidewalk, Shared-Use Path, Traffic Signal Control with Pedestrian Actuation* and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management (Driveway Consolidation), ADA Compliance, Safe Routes to School Development

Livable Streets Elements Omitted: None

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.

Scherer Road and Heartwood Drive Intersection Improvements:

Livable Streets Elements Included: Vehicular Safety and Capacity Improvements (Sight Distance Corrections and Intersection Traffic Control Changes).

Livable Streets Elements Omitted: None

Scherer Road & Pryor 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.

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

Todd George Parkway Shoulders - Colbern Rd to Woods Chapel:

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. Todd George Parkway, when constructed to urban standards will include additional elements, such as Street Lighting, Curb and Gutter, Sidewalk, and Shared-Use Path.

Traffic Signal Communication Master Plan:

No Construction Activity

Tudor Road - Ward Road to Douglas Street:

Livable Streets Elements Included: Sidewalk, Continuous Street Lighting*, Traffic Signal Control with Pedestrian Actuation* and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Access Management (Raised Medians), Shared-Use Path*, Street Gap Connectivity (multiple streets), ADA Compliance, Vehicular Safety and Capacity Improvements (New Multi-Lane Arterial Roadway with Turn Lanes)

Livable Streets Elements Omitted: None

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

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

Misc. Bridge Maintenance and Replacements:

Maintenance work on Main Street Bridge over 2nd Street and on Chipman Bridge over the UPRR will also be done. These bridge replacement and rehabilitation projects will not result in any change or impact to Livable Streets elements.

Facilities:

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

- Arts in Parks
- Athletic Field house
- Bailey Farm Park Interpretive Center
- Greenway and Trail Development

- Hartman Park Improvements
- Hartman Park/South Trailhead Improvements
- Howard Park Splashpad
- Lowenstein Park Renovations
- Neighborhood Park Renovations
- North Lea McKeighan Park Improvements
- Park South and Community Center
- Park West/Eagle Creek/Pryor Road Trail Connector
- Pleasant Lea Park Renovation
- Practice Field Improvements
- Summit Park Shelter Replacement
- 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 Capacity 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	Official Bicycle Lane	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	Roundabout(s) Intersection Control	Pedestrian 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			+			-	+	-															★									
Annual Curb and Gutter Replacement Program			+							●	●																					
Other Programs (e.g. Marking, Planning, Overlay, Etc.)							+																									
Blackwell Road Interchange with US50		+	+	+	+	+	+	+		●	●	●						★	●				★		★	★						
Chipman Road, Bent Tree Drive to View High Drive		+	+	+	+	+	+			○	●	●											★									
Commerce Drive, Tudor Road to Main Street		+	+	+	+	+	+	+		●	●			●				★														
Fifth Street, Country Lane to Greenridge Drive		+	+	+	+	+	+	+		●	●			★				★														
Gateway Drive, Delta School Road to Georgian Drive		+	+	+	+	+	+	+		●	●							★														
Hook Road Shoulders, West City Limit to Ward Road		+	+	+	+		+									★																
Independence Ave & Town Centre Blvd Improvements			+		+		+			●	●							●							●		★					
Jefferson Street, Persels Road to Oldham Parkway		+	+	+	+	+	+			●	●	●						●					★									
Jefferson Street, Persels Road to Stuart Road		+	+	+	+	+	+			●	●	●						●					★						★	★		
M291 South Junction Interchange with US50		+	+	+	+	+	+	+		○	●	●	●					●							●	★	★	★	★	★		
Scherer Rd and Heartwood Dr Intersection Improvements						+	+																									
Scherer Road & Pryor Road Traffic Signal					+	+	+																	●							★	
Third Street Improvements, Murray Road to Pryor Road		+	+			+	+			●	●												★						★	★		
Todd George Pkwy Shoulders, Colbern to Woods Chapel		+	+	+	+		+									★																
Traffic Signal Communication Master Plan																																

Capital Improvement Project		Tudor Road, Ward Road to Douglas Street			No Construction/No Livable Street Impact
		Ward Road, M150 to Raintree Parkway	+	+	Pedestrian Capacity Impact
Woods Chapel Road & Channel Drive Traffic Signal			+	+	Pedestrian Safety Impact
			+	+	Bicycle Capacity Impact
Misc: Bridge Maintenance and Replacement (e.g. Main)			+	+	Bicycle Safety Impact
			+	+	Vehicular Capacity Impact
Downtown Cultural Arts Facilities			+	+	Vehicular Safety Impact
					Transit Impact
Miscellaneous Projects					Pedestrian Furniture
				●	Sidewalk
Miscellaneous Projects				●	ADA Compliance
				●	Shared-Use Path
Miscellaneous Projects					Paved Shoulder
				★	Share-The-Road /Signed Bike Route
Miscellaneous Projects					Wide Curb Lane (14-16 ft)
					Paved Shoulder Adjacent to Curb
Miscellaneous Projects					Official Bicycle Lane
				★	Street Gap Connectivity
Miscellaneous Projects				●	Access Management (e.g. Raised Median)
					Transit Facility/Transit Stop
Miscellaneous Projects					Transit Operation
					Bicycle Parking
Miscellaneous Projects					Residential Traffic Calming
				★	Continuous Street Lighting
Miscellaneous Projects			●		Intersection Street Lighting
					Landscaping
Miscellaneous Projects					Roundabout(s) Intersection Control
					Pedestrian Signal Improvements
Miscellaneous Projects					Traffic Signal Improvements
				★	Signal Improvements w/Pedestrian Detection
Miscellaneous Projects				★	Signal Improvements w/Bike Friendly Detection
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.*

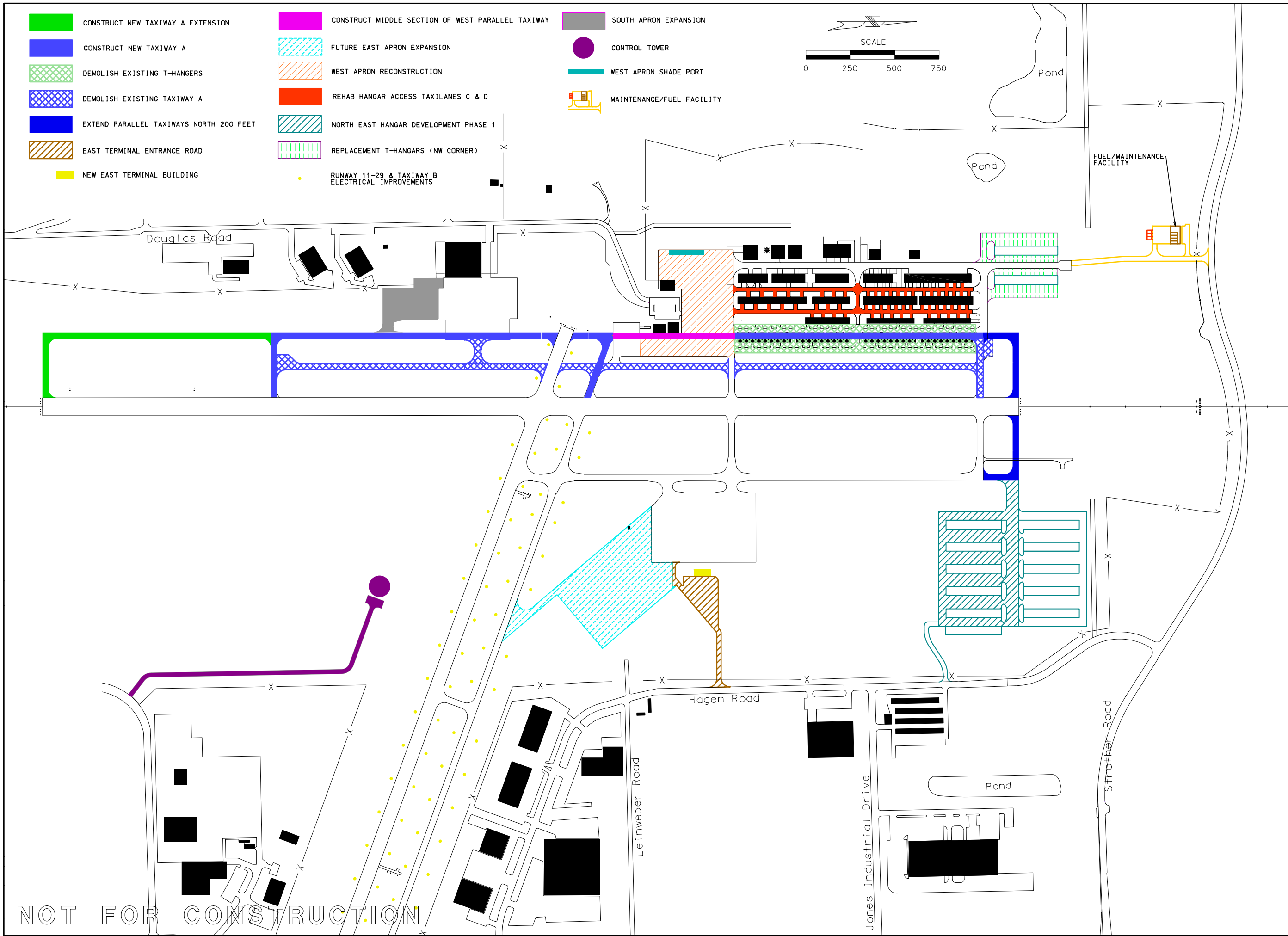
- ★** - *Livable Streets Element is included in project scope although it is not required by Ordinance or Adopted Plan.*
- - *Livable Streets Element is included in project scope in accordance with Ordinance requirement or Adopted Plan.*
- - *Livable Streets Element is omitted from project scope otherwise 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 2018-2022

AIRPORT

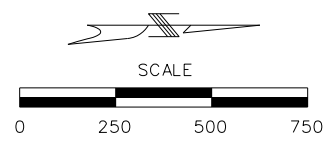


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NOT FOR CONSTRUCTION

- CONSTRUCT NEW TAXIWAY A EXTENSION
- CONSTRUCT NEW TAXIWAY A
- DEMOLISH EXISTING T-HANGERS
- DEMOLISH EXISTING TAXIWAY A
- EXTEND PARALLEL TAXIWAYS NORTH 200 FEET
- EAST TERMINAL ENTRANCE ROAD
- NEW EAST TERMINAL BUILDING
- CONSTRUCT MIDDLE SECTION OF WEST PARALLEL TAXIWAY
- FUTURE EAST APRON EXPANSION
- WEST APRON RECONSTRUCTION
- REHAB HANGAR ACCESS TAXILANES C & D
- NORTH EAST HANGAR DEVELOPMENT PHASE 1
- REPLACEMENT T-HANGARS (NW CORNER)
- RUNWAY 11-29 & TAXIWAY B ELECTRICAL IMPROVEMENTS
- SOUTH APRON EXPANSION
- CONTROL TOWER
- WEST APRON SHADE PORT
- MAINTENANCE/FUEL FACILITY



REVISIONS		
NUMBER	BY	DATE

THIS BAR IS EQUAL TO 2' AT FULL SCALE (34X22). PLOT 1

LEE'S SUMMIT MUNICIPAL AIRPORT
 2751 NE DOUGLAS, LEE'S SUMMIT,
 JACKSON COUNTY, MISSOURI 64064

PRELIMINARY

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 ONE MEMORIAL DRIVE
 GATEWAY TOWER, SUITE 500
 P.O. BOX 13141, JOPPOLIN, MO 64502
 P: (417) 438-5500
 F: (417) 438-0723
 PROFESSIONAL ENGINEERING - 000631

FILE: 2016 cip options.dgn
DESIGN BY: BDB
DRAWN BY: BDB
CHECKED BY: TCS
APPROVED BY: TCS
DATE:
JOB No: 10443-03
PROPOSED FY 2018 CIP
SHEET XX OF XX SHEETS

AIRPORT
(Costs in \$1,000s)

Project	Prior Yrs.	2018	2019	2020	2021	2022	Total
Construct Middle Section of West Parallel Taxiway	-	-	155	471	-	-	626
Construct Pavement for Runway 18-36	11,085	-	-	-	-	-	11,085
Construct Pavement for Taxiway Extension	1,425	5,251	-	-	-	-	6,676
Construct Replacement T-Hangars (northwest corner)	-	2,200	800	-	-	-	3,000
Extend North Parallel Taxiways	152	549	-	-	-	-	701
Land Acquisition of ALP Properties Phase 2	5,500	-	-	-	-	-	5,500
New Airport Equipment Maintenance/Storage Facility	-	-	150	452	-	-	602
New Fuel Facility	-	325	1,306	-	-	-	1,631
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	802	-	952
Site Development - East Side Terminal Area	-	-	510	1,610	-	-	2,120
Site Development - Northeast Side	-	596	1,884	-	-	-	2,480
South Apron Expansion	-	-	-	-	-	1,200	1,200
Update Airport Master and Business Plans	400	-	-	400	-	-	800
West Apron Reconstruction	-	-	-	600	2,400	-	3,000
West Apron Shade Ports	-	-	-	-	-	965	965
Total	18,562	8,921	4,805	3,966	4,019	2,668	42,941

Project Title: Construct Middle Section of West Parallel Taxiway

Type: Airport	Activity #16832172
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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.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources

Transportation Sales Tax	\$31,000
State/Federal	\$595,000
Total Lifetime Budget	\$626,000

Estimated Annual Operating and Maintenance

\$1,100

Project Title: Construct Pavement Runway 18-36

Type: Airport

Activity #16932172

Project Description

In accordance with the City Council adopted Airport Business Plan, this project includes construction of pavement for extension of the existing Runway 18-36 to 5,300 feet and for the extension of the west parallel taxiway to the end of the extended runway. This project also includes extending the north end of the runway 200 feet and grading for the north safety area. Completion of the perimeter fence will be completed with this project.

Project Purpose

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	2016
Construction	2017

Funding Sources

Transportation Sales Tax	\$554,000
State/Federal	\$10,531,000
Total Lifetime Budget	\$11,085,000

Estimated Annual Operating and Maintenance

\$8,500

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
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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	\$3,000,000
State/Federal	\$0
Total Lifetime Budget	\$3,000,000

Estimated Annual Operating and Maintenance

\$5,000

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 aviation 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 aviation 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
State/Federal	\$5,225,000
Total Lifetime Budget	\$5,500,000

Estimated Annual Operating and Maintenance

\$3,000

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	2020

Funding Sources

Transportation Sales Tax	\$602,000
Total Lifetime Budget	\$602,000

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	2019

Funding Sources

Transportation Sales Tax	\$1,631,000
Total Lifetime Budget	\$1,631,000

Estimated Annual Operating and Maintenance

No change to current maintenance costs.

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 portion 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
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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	2021
Construction	2022

Funding Sources

Transportation Sales Tax	\$50,261
State/Federal	\$452,352
Total Lifetime Budget	\$502,613

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 asphalt 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 drainage 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	\$95,200
State/Federal	\$856,800
Total Lifetime Budget	\$952,000

Estimated Annual Operating and Maintenance

	\$1,100
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Project Title: Site Development – East Side Terminal Area

Type: Airport	Activity #47732185
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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	\$212,000
State/Federal	\$1,908,000
Total Lifetime Budget	\$2,120,000

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 infrastructure 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	\$248,000
State/Federal	\$2,232,000
Total Lifetime Budget	\$2,480,000

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 ot 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	\$120,000
State/Federal	\$1,080,000
Total Lifetime Budget	\$1,200,000

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.

Estimated Schedule

Design and Right of Way Acquisition

N/A

Construction

N/A

Funding Sources

Transportation Sales Tax

\$80,000

State/Federal

\$720,000

Total Lifetime Budget

\$800,000

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	\$300,000
State/Federal	\$2,700,000
Total Lifetime Budget	3,000,000

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 designated 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	\$965,000
Total Lifetime Budget	\$965,000

Estimated Annual Operating and Maintenance

\$1,500

CAPITAL IMPROVEMENT PLAN 2018-2022

BRIDGES, STREETS AND SIGNALS



CONSTRUCTION 2017 

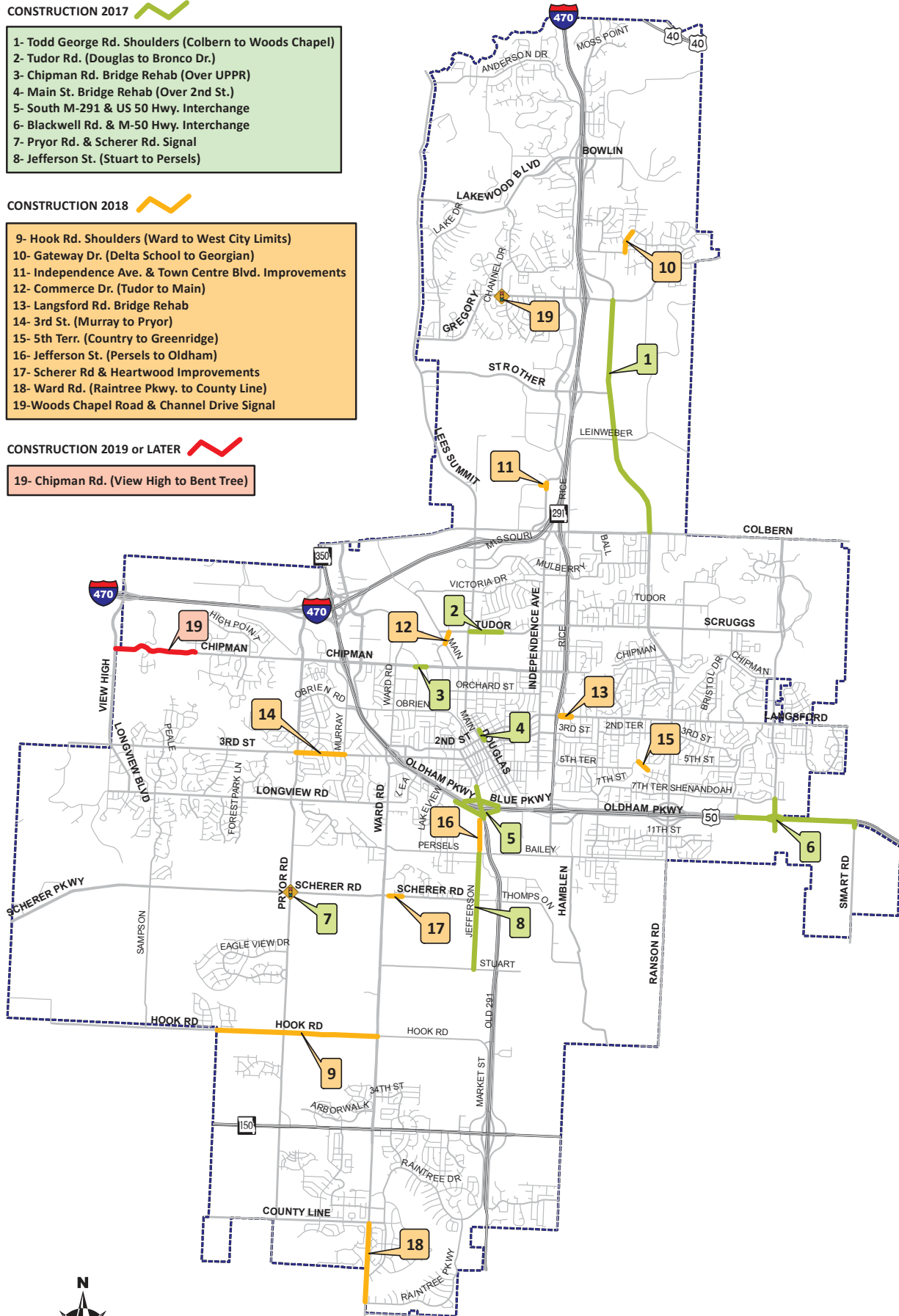
- 1- Todd George Rd. Shoulders (Colbern to Woods Chapel)
- 2- Tudor Rd. (Douglas to Bronco Dr.)
- 3- Chipman Rd. Bridge Rehab (Over UPRR)
- 4- Main St. Bridge Rehab (Over 2nd St.)
- 5- South M-291 & US 50 Hwy. Interchange
- 6- Blackwell Rd. & M-50 Hwy. Interchange
- 7- Pryor Rd. & Scherer Rd. Signal
- 8- Jefferson St. (Stuart to Persels)

CONSTRUCTION 2018 

- 9- Hook Rd. Shoulders (Ward to West City Limits)
- 10- Gateway Dr. (Delta School to Georgian)
- 11- Independence Ave. & Town Centre Blvd. Improvements
- 12- Commerce Dr. (Tudor to Main)
- 13- Langsford Rd. Bridge Rehab
- 14- 3rd St. (Murray to Pryor)
- 15- 5th Terr. (Country to Greenridge)
- 16- Jefferson St. (Persels to Oldham)
- 17- Scherer Rd & Heartwood Improvements
- 18- Ward Rd. (Raintree Pkwy. to County Line)
- 19- Woods Chapel Road & Channel Drive Signal

CONSTRUCTION 2019 or LATER 

- 19- Chipman Rd. (View High to Bent Tree)



BRIDGES, STREETS & SIGNALS
(Costs in \$1,000s)

Project	Prior Yrs.	2018	2019	2020	2021	2022	Total
Blackwell Road Interchange with US50	24,968	-	-	-	-	-	24,968
Chipman Road, Bent Tree Dr. to View High Dr.	2,678	4,813	2,923	-	-	-	10,414
Chipman Bridge rehab over UPRR	180	-	-	-	-	-	180
Commerce Drive - Tudor Road to Main Street	410	906	-	-	-	-	1,316
Fifth Terrace - Country Lane to Greenridge Drive	340	645	-	-	-	-	985
Gateway Drive - Delta School Road to Georgian Drive	350	560	-	-	-	-	910
Hook Road Shoulders - West City Limits to Ward Road	500	850	-	-	-	-	1,350
Independence Ave & Town Centre Blvd Intersect Imp	1,760	-	-	-	-	-	1,760
Jefferson Street - Persels Road to Oldham Parkway	500	1,639	1,240	-	-	-	3,379
Jefferson Street - Persels Road to Stuart Road	9,714	-	-	-	-	-	9,714
Langsford Road Bridge rehabilitation	500	600	-	-	-	-	1,100
M291 South Interchange with US50	8,984	7,634	373	-	-	-	16,991
Main Street Bridge over 2nd St.	120	185	-	-	-	-	305
Pryor Road & Scherer Road Signal	-	180	-	-	-	-	180
Scherer Road and Heartwood Drive Intersection Improvements	500	825	425	-	-	-	1,750
Third Street Improvements - Murray Road to Pryor Road	250	1,450	2,400	1,000	-	-	5,100
Todd George Parkway Shoulders - Colbern Rd to Woods Chapel	1,260	-	-	-	-	-	1,260
Traffic Signal Communication Master Plan	295	-	-	-	-	-	295
Tudor Road - Ward to Douglas	13,199	-	-	-	-	-	13,199
Ward Road - Route 150 to Raintree Parkway	8,875	145	-	-	-	-	9,020
Woods Chapel Rd & Channel Dr Signal	-	380	-	-	-	-	380
Subtotal	75,383	20,812	7,361	1,000	-	-	104,556
Less water and sewer funds included in totals	(1,062)	(1,344)	-	-	-	-	(2,406)
Total	74,321	19,468	7,361	1,000	-	-	102,150

Project Title: Blackwell Road Interchange with US50

Type: Bridges, Streets & Signals	Activity #63121
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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: 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 acquisition 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: Chipman Road Bridge Rehabs over UPRR

Type: Bridges, Streets & Signals	Activity #32932472
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Project Description

This project involves patching the existing bridge deck and providing a new concrete wearing surface. This project also includes replacing both expansion joints.

Project Purpose

The bridge deck is showing signs of excessive cracking, creating potholes and the potential for additional damage to the bridge structure if water is allowed to reach the reinforcing steel. The repairs will restore the driving surface, protect the underlying structural, and reduce maintenance by city crews.

Estimated Schedule

Design and Right of Way Acquisition	2016
Construction	2017

Funding Sources

Transportation Sales Tax	\$ 325,000
Total Lifetime Budget	\$ 325,000

Estimated Annual Operating and Maintenance

No change to current maintenance costs.

Project Title: Commerce Drive – Tudor Road to Main Street

Type: Bridges, Streets & Signals	Activity #41532272
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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: 5th Terrace – Country Lane to Greenridge Drive

Type: Bridges, Streets & Signals	Activity #41632272
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Project Description

This project will construct a portion of 5th Terrace, a residential collector, between Country Lane and Greenridge Drive. The project will include approximately 300 feet of roadway, sidewalks and a culvert/bridge for the road to cross a stream way. Sidewalk improvements should extend beyond the approximate 300 feet of roadway construction to connect with existing sidewalk and complete nearby gaps in the sidewalk network.

Project Purpose

This project will significantly improve access throughout the area as an alternate route to and from Todd George Parkway, Langsford Road and M-291 Highway. The existing intersection of 5th Terrace and Todd George Parkway is traffic signal controlled, but underutilized considering the gap in roadway connectivity. Prairie View Elementary is located at the intersection of 5th Terrace and Todd George Parkway too. Access to Miller J Fields Park Facility located west of the creek will be improved. 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. The roadway connection has been planned with adjacent subdivision plats for several decades and is included in the Thoroughfare Master Plan.

Estimated Schedule

Design and Right of Way Acquisition	2017
Construction	2018

Funding Sources

CIP Sales Tax Renewal	\$955,000
Water Tap Fee	\$30,000
Total Lifetime Budget	\$985,000

Estimated Annual Operating and Maintenance

\$9,500

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

Type: Bridges, Streets & Signals	Activity #41732272
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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
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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
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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
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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	\$3,040,000
Sewer Construction	\$191,000
Water Construction	\$148,000
Total Lifetime Budget	\$3,379,000

Estimated Annual Operating and Maintenance

\$10,000

Project Title: Jefferson Street - Stuart Road to Persels Road

Type: Bridges, Streets & Signals	Activity #273161
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Project Description

This project will widen and reconstruct Jefferson Street as a two and three lane facility with sidewalk, trail, and street lighting from Persels Road to Stuart Road. Between Market and Stuart Rd, approximately 3,600 feet of 2-inch PVC water main will be installed.

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	Complete
Construction	2015 - 2017

Funding Sources

CIP Sales Tax Renewal	\$9,599,000
Water Construction	\$115,000
Total Lifetime Budget	\$9,714,000

Estimated Annual Operating and Maintenance

\$25,475

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 infrastrctre. 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: Main Street Bridge Repair over 2nd St

Type: Bridges, Streets & Signals

Activity #13532472

Project Description

This project involves removing the existing wearing surface of the bridge and replacing it with a new surface. Also included are repairs to the limestone veneer to the bridge railing posts.

Project Purpose

The bridge deck is delaminating, creating potholes and the potential for additional damage to the bridge structure if water is allowed to reach the reinforcing steel. The repairs will restore the driving surface, protect the underlying structural, and reduce maintenance by city crews.

Estimated Schedule

Design and Right of Way Acquisition	2015
Construction	2017

Funding Sources

Transportation Sales Tax	\$325,000
Total Lifetime Budget	\$325,000

Estimated Annual Operating and Maintenance

No change to current maintenance costs.

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 place when Pryor Road or Scherer Road is improved to urban standards.

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2017

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

Estimated Annual Operating and Maintenance	
\$3,358	

Project Title: Scherer Road and Heartwood Drive Intersection Improvements

Type: Bridges, Streets & Signals	Activity #42132272
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Project Description

This project will reconstruct the intersection of Scherer Road and Heartwood Drive.

Project Purpose

This project will enhance safety and operations by improving the sight distance at the intersection of Scherer Road and Heartwood Drive. With improved sight distance the all-way stop can be removed and normal intersection control provide with a stop condition on Heartwood Drive and free-flow conditions on Scherer Road. Scherer Road is a major arterial with recently improved access at M-291 Highway towards the east.

Estimated Schedule

Design and Right of Way Acquisition	2017
Construction	2018 – 2019

Funding Sources

CIP Sales Tax Renewal	\$1,750,000
Total Lifetime Budget	\$1,750,000

Estimated Annual Operating and Maintenance

No change to current maintenance costs.

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

Type: Bridges, Streets & Signals	Activity #42232272
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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.

Estimated Schedule

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

Funding Sources

CIP Sales Tax Renewal	\$5,100,000
Water Construction Fund	
Total Lifetime Budget	\$5,100,000

Estimated Annual Operating and Maintenance

\$18,900

Project Title: Todd George Pkwy Shoulders – Colbern Rd to Woods Chapel Rd

Type: Bridges, Streets & Signals	Activity #42332272
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Project Description

This project will construct six-foot wide paved shoulders along each side of Todd George Parkway between Colbern Road and Woods Chapel Road. Total project distance is approximately 14,000 feet.

Project Purpose

This project will provide safer facilities for pedestrian and bicycle traffic using Todd George Parkway. 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
Construction	2017

Funding Sources

CIP Sales Tax Renewal	\$1,260,000
Total Lifetime Budget	\$1,260,000

Estimated Annual Operating and Maintenance

\$3,800

Project Title: Traffic Signals Communication Master Plan

Type: Bridges, Streets & Signals	Activity #603241
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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: Tudor Road – Ward to Douglas

Type: Bridges, Streets & Signals

Activity #6334313

Project Description

This project will construct Tudor Road between Ward Road and Douglas. The road will be constructed as a divided four-lane facility with a center median, turn lanes at appropriate intersections, streetlights, sidewalk and multi-use trail, a bridge across the Union Pacific Railroad main line, and improvements for turn lanes at the existing intersection of Tudor and Douglas.

Project Purpose

This project will provide traffic relief on both Douglas and Chipman Road by providing an alternate route as well as opening approximately 190 acres for potential economic development. The improvements at the existing Tudor-Douglas intersection will also improve safety at this heavily traveled location adjacent to LS North High School. Funding for this project was approved by voters in the 2010 "No Tax Increase" bond election.

Estimated Schedule

Design and Right of Way Acquisition	2014-2015
Construction	2014-2017

Funding Sources

Road Improvements 2010 Bond	\$11,143,000
CIP Sales Tax	\$2,056,000
Note: \$2,056,000 was added to the project budget from unallocated CIP Sales Tax revenue.	
Total Lifetime Budget	\$13,199,000

Estimated Annual Operating and Maintenance

\$15,000

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 been re-scoped appropriately, and subdivided into 2 distinct phases to allow an earlier construction startup. 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: Woods Chapel Road & Channel Drive Signal

Type: Bridges, Streets & Signals	Activity #47932472
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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 maintenance 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 2018-2022

FACILITIES



FACILITIES
(Costs in \$1,000s)

Project	Prior Yrs.	2018	2019	2020	2021	2022	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	850	13,000	-	-	-	-	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 established 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.

Estimated 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

Type: Facilities

Activity #46335274

Project Description

In November of 2016, the citizens voted on and approved a \$14.5million 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 purpose 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.

Estimated 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.

Estimated 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

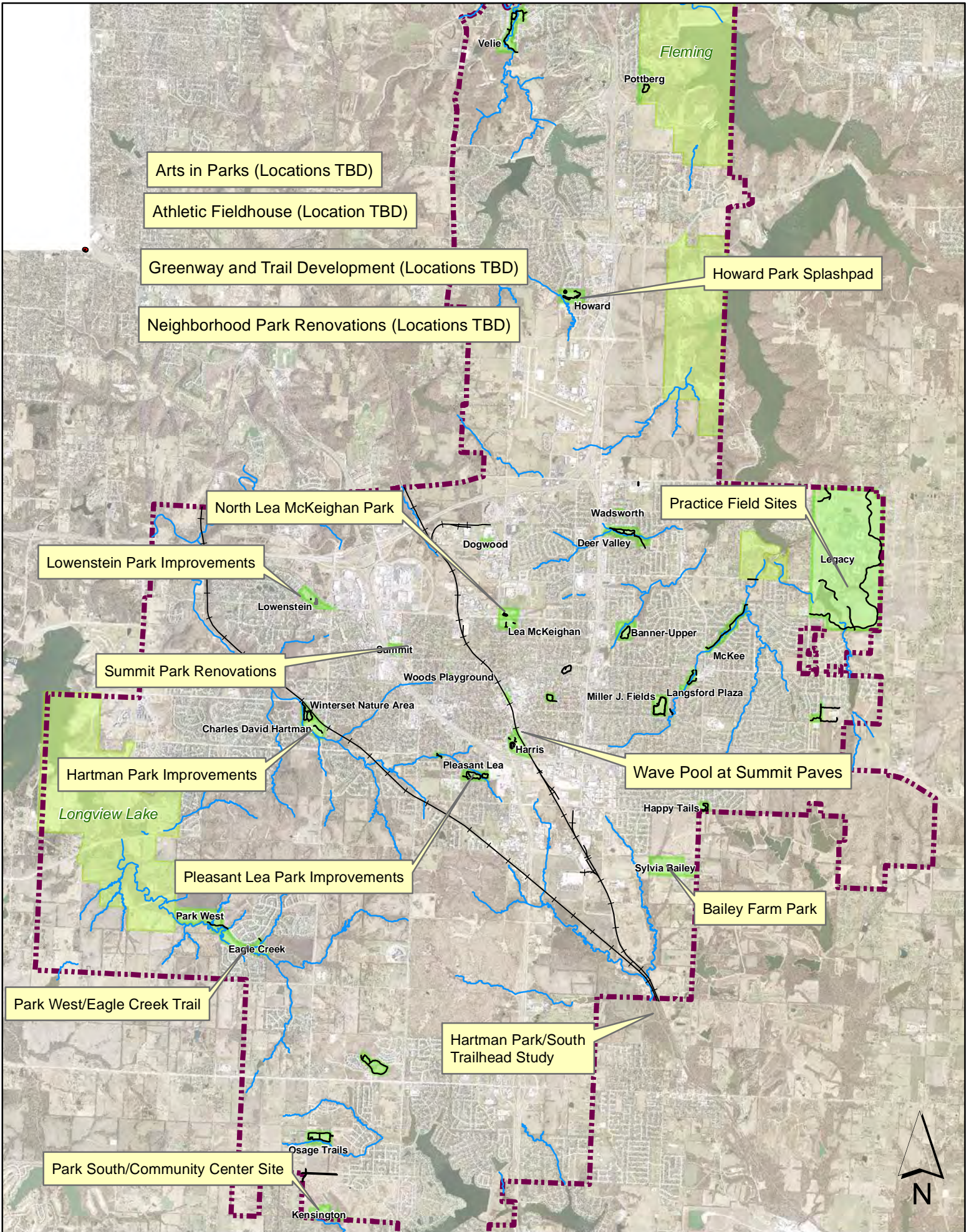
Estimated Annual Operating and Maintenance

\$104,000

CAPITAL IMPROVEMENT PLAN 2018-2022

PARKS AND RECREATION





Lee's Summit Parks and Recreation- C.I.P Project Map FY 2018-22

PARKS
(Costs in \$1,000s)

Project	Prior Yrs.	Reallocated	Prior Yrs.	2018	2019	2020	2021	2022	Total
Arts in Parks	-	-	-	-	10	-	20	-	30
Athletic Field House	-	-	-	-	-	-	25	6,000	6,025
Bailey Farm Park/Nature Center Development	750	(725)	25	-	-	-	1,500	2,500	4,025
Greenway and Trail Development	-	-	-	-	250	-	250	250	750
Hartman Park Improvements	185	-	185	-	-	-	-	-	185
Hartman Park/South Trailhead Planning	15	-	15	-	-	-	-	-	15
Howard Park Splashpad	200	-	200	-	-	-	-	-	200
Lowenstein Park Renovations	-	-	-	-	-	-	400	-	400
Neighborhood Park Renovation	-	-	-	-	-	-	-	400	400
North Lea McKeighan Park Improvements	1,600	1,300	2,900	2,100	-	-	-	-	5,000
Park South and Community Center	350	(350)	-	-	-	4,275	4,275	-	8,550
Park West/Eagle Creek/Pryor Road Trail Connector	200	(200)	-	-	200	-	-	-	200
Pleasant Lea Park Renovation	-	-	-	-	-	400	-	-	400
Practice Field Improvements	300	(25)	275	-	-	-	100	100	475
Summit Park Renovation	-	-	-	-	600	-	-	-	600
Wave Pool at Summit Waves	-	-	-	-	-	5,000	-	-	5,000
Total	3,600	-	3,600	2,100	1,060	9,675	6,570	9,250	32,255

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.

Estimated Schedule

Design & Construction	2019
Design & Construction	2021

Funding Sources

Park Sales Tax FY 19	\$ 10,000
Park Sales Tax FY 21	\$ 20,000
Total Lifetime Budget	\$ 30,000

Estimated Annual Operating and Maintenance

\$1,000

Project Title: Athletic 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	2021
Construction	2021-2023

Funding Sources

Park Sales Tax FY 21	\$ 25,000
Park Sales Tax FY 22	\$ 6,000,000
Park Sales Tax FY 23	\$ 5,975,000
Total Lifetime Budget	\$12,000,000

Estimated Annual Operating and Maintenance

\$250,000

Project Title: Bailey Farm Park/Nature Center Development

Type: Parks & Recreation

Activity #33032784

Project Description

Development of Farm Park and Nature Center on 50 acre site

Project Purpose

Follow through on commitment to Legacy for Tomorrow and Beyond Park Sales Tax initiative. New Nature Center 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 FY2021. Project costs for development of the park were estimated at approximately \$5,500,000.

Estimated Schedule

Planning and Design

July 2016-March 2017

Phase I Construction

July 2020

Funding Sources

Park Sales Tax FY 2017

\$ 25,000

Park Sales Tax FY 2021

\$1,500,000

Park Sales Tax FY 2022

\$2,500,000

Park Sales Tax FY 2023

\$1,500,000

Total Lifetime Budget

\$5,525,000

Estimated Annual Operating and Maintenance

\$50,000

Project Title: Greenway and Trail Development

Type: Parks & Recreation

Activity #47432784

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 serves as a placeholder for greenway and trail development as opportunities arise within the Master Plan.

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	2019
Design & Construction	2021
Design & Construction	2022

Funding Sources

Park Sales Tax FY 19	\$250,000
Park Sales Tax FY 21	\$250,000
Park Sales Tax FY 22	\$250,000
Total Lifetime Budget	\$750,000

Estimated Annual Operating and Maintenance

\$2,000

Project Title: Hartman Park Improvements

Type: Parks & Recreation

Activity #33732784

Project Description

To provide new playground improvements.

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

2016

Construction

January 2017-July 2017

Funding Sources

Park Sales Tax FY 2017

\$ 185,000

Total Lifetime Budget \$ 185,000

Estimated Annual Operating and Maintenance

\$5,000

Project Title: Hartman Park/South Trailhead Planning	
Type: Parks & Recreation	Activity #46532784

Project Description	
To provide funding to review alternatives to connect the Katy Trail at Pleasant Hill to the southern tip of Lee's Summit.	

Project Purpose	
To provide access to the Katy Trail from Lee's Summit.	

Estimated Schedule	
Planning	2016-2017

Funding Sources	
Park Sales Tax FY 2017	\$ 15,000
Total Lifetime Budget	\$ 15,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Howard Park Splashpad

Type: Parks & Recreation

Activity #46632784

Project Description

To provide a splashpad as a new amenity to the existing park.

Project Purpose

Renovation to enhance an existing neighborhood park.

Estimated Schedule

Planning and Design

2017

Construction

2017-2018

Funding Sources

Park Sales Tax FY 2017

\$ 200,000

Total Lifetime Budget \$ 200,000

Estimated Annual Operating and Maintenance

To be determined

Project Title: Lowenstein Park Renovations

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

2021

Construction

2022

Funding Sources

Park Sales Tax FY 21

\$ 400,000

Total Lifetime Budget \$ 400,000

Estimated Annual Operating and Maintenance

\$2,000

Project Title: Neighborhood Park Renovation

Type: Parks & Recreation

Activity #47332784

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 the renovation of Neighborhood Parks. An assessment is underway of the existing parks to determine their needs. Summit Park, Pleasant Lea Park and Lowenstein Park have been prioritized. This project serves as a placeholder for the next park identified for renovation. Renovations include replacement of shelters, playground equipment, etc. and could include additional amenities.

Project Purpose

Existing parks are aging and require maintenance. Park renovations as committed to the voters in August 2016.

Estimated Schedule

Design	2022
Construction	2022

Funding Sources

Park Sales Tax FY 22	\$400,000
Total Lifetime Budget	\$400,000

Estimated Annual Operating and Maintenance

\$2,000

Project Title: North Lea McKeighan Park Improvements

Type: Parks & Recreation

Activity #33532784

Project Description

Renovation of 11-acre North Lea McKeighan Park. Improvements to include activities consistent with existing activities (Sand Volleyball, Skate Park). Currently in final design of project. Proposed activities include outdoor ice skating, splashpad, adventure playground, skate park expansion, walking trails.

Project Purpose

To complement the programmed activities implemented on the South side of Lea McKeighan Park. Park has a highly visible location and good accessibility.

Estimated Schedule

Planning and Design

2017

Construction

2017-2018

Funding Sources

Previous Years Sales Tax

\$ 2,900,000

Park Sales Tax FY 18

\$ 2,100,000

Total Lifetime Budget \$ 5,000,000

Estimated Annual Operating and Maintenance

\$ 200,000

Project Title: Park South and Community Center

Type: Parks & Recreation

Activity #39932784

Project Description

Staff has been in negotiations to secure property at the corner of Pryor Rd and County Line Rd to develop a 20 acre parcel with a portion to be set aside for development of a 20,000 SF community center. No commitments have been made for the land or infrastructure at this location, only preliminary discussions and exchange of conceptual site plans for development of the property.

Staff is in continuing discussions with the current landowner for an option to swap land for a frontage site as shown on the plans with land currently dedicated for park site on the southwest corner of the property. Other sites are being considered.

Project Purpose

The Legacy for Tomorrow and Beyond plan included a community center that would be constructed in the south or west quadrant of Lee's Summit. Staff has been performing analysis and reviewing options on a number of site locations that meet the criteria established in the original LFTB plan.

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.

Estimated Schedule

Design	Fall 2020
Construction	2020-2021

Funding Sources

Park Sales Tax FY 20	\$ 4,275,000
Park Sales Tax FY 21	\$ 4,275,000
Total Lifetime Budget	\$8,550,000

Estimated Annual Operating and Maintenance

\$250,000

Project Title: Park West/Eagle Creek/Pryor Road Trail Connector

Type: Parks & Recreation

Activity #33632784

Project Description

Construct approximately 8,000 lf of trail east and west of Eagle Creek greenway. Improvements will include low water crossings and bike/ped bridge construction

Project Purpose

To provide additional trail 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

2019

Construction

2019

Funding Sources

Park Sales Tax FY 19

\$200,000

Total Lifetime Budget \$200,000

Estimated Annual Operating and Maintenance

\$5,000

Project Title: Pleasant Lea Park Renovations	
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	2020
Construction	2020

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

Estimated Annual Operating and Maintenance	
\$ 20,000	

Project Title: Practice Field Improvements

Type: Parks & Recreation

Activity #33132784

Project Description

Construct additional practice and game fields as necessary for youth sports programs. Practice infields and batting cages are being constructed north of the Legacy Park Football Venue inside Legacy Park. A second t-ball field will also be constructed at Girls Softball Venue at Legacy Park. Future additional practice space needs anticipated.

Project Purpose

Begin a multi phase program of expanding sports venues to accommodate increases in participation and reduce wear and tear on game fields. Accommodate additional practice field space for community use.

Estimated Schedule

Planning and Design

Fall 2016

Construction Phase I

March-June 2017

Funding Sources

Previous Years Sales Tax

\$275,000

Park Sales Tax FY 21

\$100,000

Park Sales Tax FY 22

\$100,000

Total Lifetime Budget

\$475,000

Estimated Annual Operating and Maintenance

\$ 20,000

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

Demolition/Planning and Design

2017-2018

Construction

2019

Funding Sources

Park Sales Tax FY 2019

\$600,000

Total Lifetime Budget \$600,000

Estimated Annual Operating and Maintenance

\$10,000

Project Title: Summit Waves-Wave Pool

Type: Parks & Recreation

Activity #47132784

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 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	2019
Construction	2020

Funding Sources

Park Sales Tax FY 20	\$ 5,000,000
Total Lifetime Budget	\$ 5,000,000

Estimated Annual Operating and Maintenance

\$100,000

CAPITAL IMPROVEMENT PLAN 2018-2022

SOLID WASTE



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

Project	Prior Yrs.	2018	2019	2020	2021	2022	Total
Landfill Closure Phases I, II and III	1,348	693	695	549	-	-	3,285
Transfer Station	576	576	-	-	-	-	1,152
Total	1,924	1,269	695	549	-	-	4,437

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	2017-2018
Landfill Closure-Phase II	2018-1019
Landfill Closure-Phase III	2019-1020

Funding Sources

Landfill Closure Fund	\$3,285,000
Total Lifetime Budget	\$3,285,000

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 aesthetic 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.

Estimated Schedule

Design and Initial Permitting

2016-2017

Construction

2017-1018

Funding Sources

Landfill Construction

\$1,152,200

Total Lifetime Budget

\$1,152,200

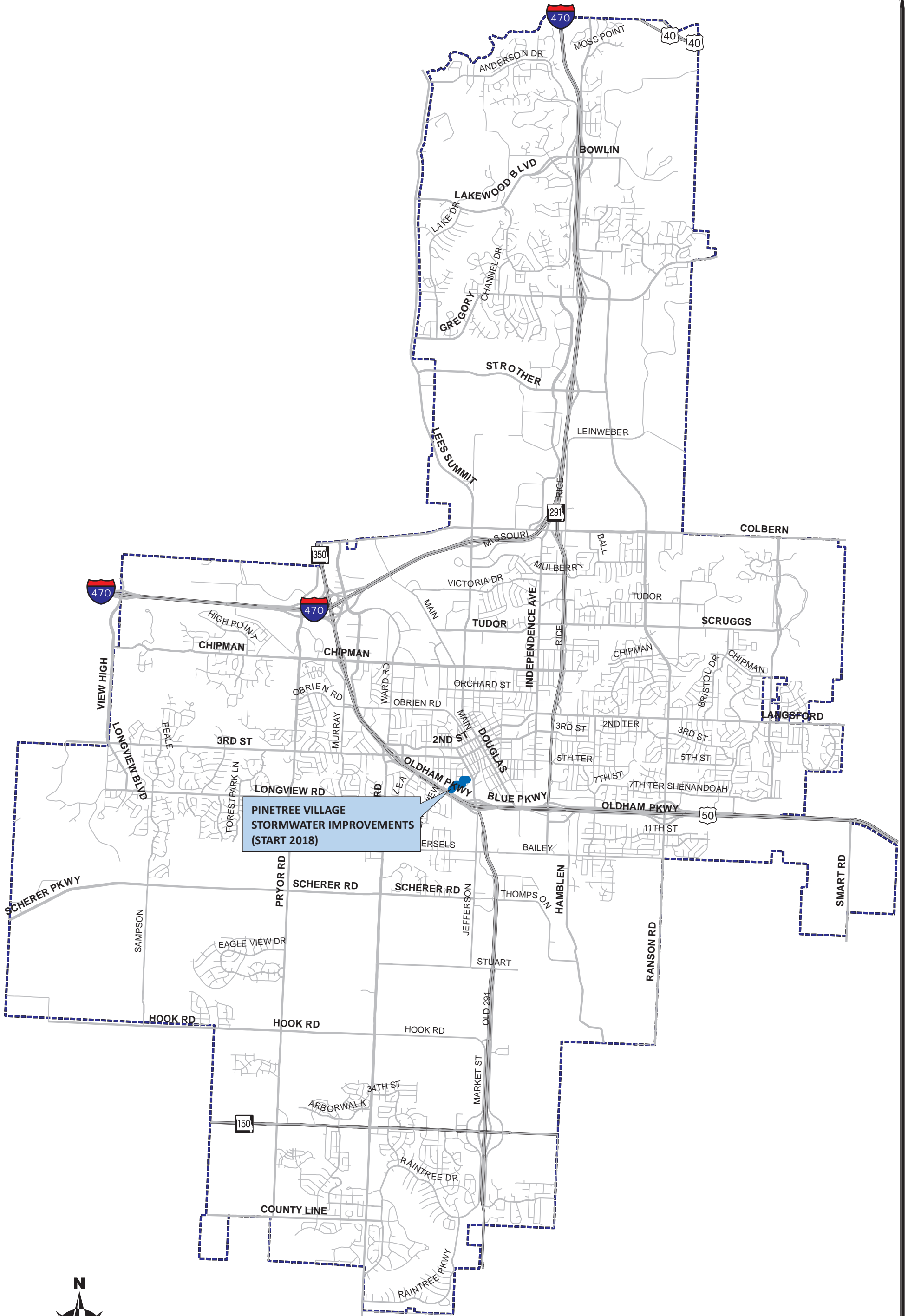
Estimated Annual Operating and Maintenance

\$5,000

CAPITAL IMPROVEMENT PLAN 2018-2022

STORMWATER IMPROVEMENTS





2018- 2022
STORMWATER BOND
CAPITAL IMPROVEMENTS

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

Project	Prior Yrs.	2018	2019	2020	2021	2022	Total
Stormwater Infrastructure Improvements	3,005	-	-	-	-	-	3,005
Total	3,005	-	-	-	-	-	3,005

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.

Estimated Schedule

Design and Right of Way Acquisition

2007-2015

Construction

2014-2018

Funding Sources

Remaining Stormwater Bonds 2007

\$3,005,000

Total Lifetime Budget

\$15,800,000

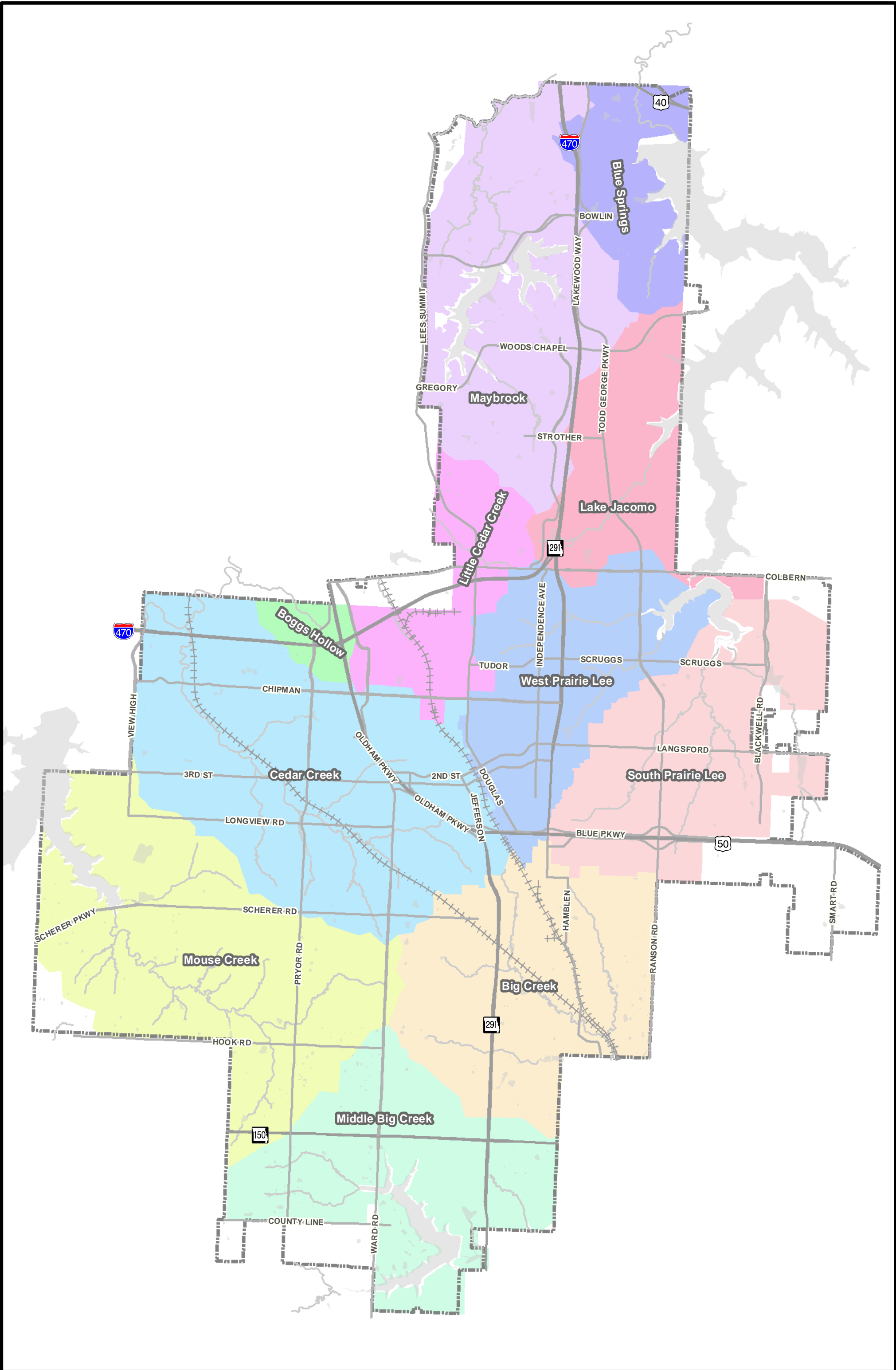
Estimated Annual Operating and Maintenance

No impact on maintenance costs.

CAPITAL IMPROVEMENT PLAN 2018-2022

WATER UTILITIES
SEWER CONSTRUCTION





SANITARY SEWER

(Costs in \$1,000s)

Project	Prior Yrs.	2018	2019	2020	2021	2022	Total
Big Creek EFHB (East & West Forks)	-	-	50	600	-	-	650
Bogg's Hollow Meter Structure	300	-	-	-	-	-	300
CC Watershed - CC16, CC20 Private I/I Rehab	584	-	-	-	-	-	584
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	565	1,035	-	-	-	-	1,600
Facilities Asset Management Plan	-	150	-	-	-	-	150
Flow Monitoring	300	150	150	-	-	-	600
Large Diameter Sewer and Force Main Condition Assessments	-	700	360	200	200	200	1,660
Little Cedar - Force Main	-	-	-	-	-	4,084	4,084
Sanitary Sewer Rehab - Relining, Manhole Rehab, Tap Repairs	4,565	1,045	1,150	1,150	1,150	1,150	10,210
Sewer Asset Management Plan	-	100	-	-	-	-	100
Sewer Main Rehabilitation and Creek Stabilization	-	300	-	-	-	-	300
Small Main Replacement Program	1,000	-	-	1,000	-	-	2,000
Tudor Force Main - Odor Control	500	-	-	-	-	-	500
Tudor Pump Station EFHB Rehabilitation	-	131	-	-	-	-	131
Wastewater Master Plan	-	-	-	500	-	-	500
TOTAL	8,664	4,611	2,425	6,000	1,350	5,434	28,484

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

Type: Sanitary Sewer

Activity #42431583

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 Watershed - CC16, CC20 Private I/I Rehabilitation

Type: Sanitary Sewer

Activity #16031783

Project Description

This sanitary sewer improvement project consists of completing the private I/I rehabilitation work identified in the Sewer System Evaluation Study (SSES) in the CC-16 and CC-20 sub-watersheds. These improvements have been completed and flow monitoring and reporting will finalize this work.

Project Purpose

This project will serve existing customers by reducing I/I from these sources which will alleviate sanitary sewer overflows and backups in homes.

Estimated Schedule

Design and Right of Way Acquisition	Complete
Construction	2014-2017

Funding Sources

Sewer Construction Fund	\$584,000
Total Lifetime Budget	\$584,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

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

Type: Sanitary Sewer	Activity #42531783
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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
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Project Title: Cedar Creek Interceptor Improvements – Phase III & IV

Type: Sanitary Sewer	Activity #42631783
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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 wet-weather 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

Facilities Asset Management Plan

Type: Sanitary Sewer

Activity #48231783

Project Description

Create a new asset management plan for the vertical infrastructure managed by Water Utilities.

Project Purpose

The water and sewer systems contain not only pipes but also pumpstations, water towers, metering and communications equipment. The Facilities Asset Management plan will review our current practices and standard operating procedures and make recommendations to move us to the best practices in this area.

Estimated Schedule

Inspection and assessment

2018

Funding Sources

Sewer Construction Fund

\$150,000

Total Lifetime Budget \$150,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

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
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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
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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	
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Type: Sanitary Sewer

Activity #42731583

Project Description	
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This sanitary sewer improvement project consists of a new 24" force main along Tudor Road from M-291 Highway to near Douglas Road.
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Project Purpose	
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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	
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Design and Right of Way Acquisition	2022
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Construction	2022
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Funding Sources	
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Sewer Tap Fund	\$4,084,000
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Total Lifetime Budget	\$4,084,000
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Estimated Annual Operating and Maintenance	
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\$5,000

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

Type: Sanitary Sewer	Activity #19131783
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Project Description

Project is a multi-year rehabilitation of clay tile pipe, manholes 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 manholes 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	\$10,210,000
Total Lifetime Budget	\$10,210,000

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 contains 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 procedures 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: Sewer Main Rehabilitation and Creek Stabiliation

Type: Sanitary Sewer	Activity #48531783
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Project Description

Two sewer main crossings have been identified with dilapidated pipe segments that require rehabilitation. Segment 1 is from MH 33-390 to MH 33-408 and segment 2 is from MH 37-030 to MH 37 031.

Project Purpose

Condition assessments have identified segments of line that are below standard. These lines will be replaced to bring them up to standard and reduce I&I and potential for blockage.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018

Funding Sources

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

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 minimum size and in poor condition. These lines will be replaced to bring them up to standard and reduce I&I 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	2017

Funding Sources

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

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 utilized 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 2018-2022

WATER UTILITIES WATER IMPROVEMENTS



WATER
(Costs in \$1,000s)

Project	Prior Yrs.	2018	2019	2020	2021	2022	Total
Harris Park Standpipe - Recoating	-	-	287	-	-	-	287
Hook Tower - Recoating	409	-	-	-	-	-	409
Interconnection Projects – Tri County Water Authority Operation Facility*	-	-	-	200	-	-	200
Ranson Tower - Recoating	14,000	650	-	-	-	-	14,650
SCADA Radio Communications*	324	-	-	-	-	-	324
Scherer Tower - Recoating	300	115	-	-	-	-	415
South Terminal Discharge Main	-	417	-	-	-	-	417
Transmission Main Condition Assessment	-	-	231	1,581	-	-	1,812
Water Asset Management Plan	-	275	400	-	-	850	1,525
Water Main - Harris Rd - Herring to Haines	-	-	-	100	-	-	100
Water Main – Lakewood Way – Ridgewood to Bowlin Rd	-	504	-	-	-	400	504
Water Main – Samson Road Existing 12” to Hook	-	-	-	-	-	-	400
Water Main - US 50 Hwy - Blackwell to Smart	-	682	-	-	-	-	682
Water Main - US 50 Hwy - Smart to Harris	568	-	-	-	-	-	568
Water Main – View High Longview Golf to Chipman Upsize	649	-	-	-	-	-	649
Water Main Rehab FY16	-	340	-	-	-	-	340
Water Main Rehab FY17	1,900	-	-	-	-	-	1,900
Water Main Rehab FY18	2,000	-	-	-	-	-	2,000
Water Main Rehab FY19	-	2,400	-	-	-	-	2,400
Water Main Rehab FY20	-	-	2,500	-	-	-	2,500
Water Main Rehab FY21	-	-	-	3,000	-	-	3,000
Water Main Rehab FY22	-	-	-	-	2,750	-	2,750
Water Master Plan Update	-	-	-	-	-	3,750	3,750
Water Meter Replacement	-	-	-	-	250	-	250
Water Operations Site Remediation and Genset Reconditioning	1,200	400	400	-	-	-	2,000
Woods Chapel Tower - Recoating	-	400	-	-	-	-	400
TOTAL	-	333	-	-	-	-	333
	21,350	6,516	3,818	4,881	3,000	5,000	44,565

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

Project Title: Harris Park Standpipe - Recoating	
Type: Water Utilities	Activity #43031883

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	2019
Construction	2019

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

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Hook Tower - Recoating

Type: Water Utilities

Activity #43131883

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
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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: Operation Facility

Type: Water Utilities

Activity #14431683

Project Description

Project consists of site acquisition, design and construction of a replacement to the current Operations Facility. The adopted Water Utilities Strategic Plan outlined a need for a functionally designed maintenance and operations facility that will improve operational efficiencies.

Project Purpose

A Space Needs Assessment completed in May 2007 identified several deficiencies with the current Operations Facility. The deficiencies include crowded and inefficient work spaces, lack of dedicated file space, lack of conference space, limited crew support space (lockers, restrooms, break rooms, training rooms), lack of dedicated vehicle storage space, inadequate welding/fabrication space, inefficient parts, inventory and pipe storage and lack of a dedicated System Control and Data Acquisition (SCADA) control room.

Estimated Schedule

Design and Right of Way Acquisition	2015
Construction	2016 - 2017

Funding Sources

Water Construction	\$7,325,000
Sewer Construction	\$7,325,000
Total Lifetime Budget	\$14,650,000

Estimated Annual Operating and Maintenance

\$49,000

Project Title: Ranson Tower - Recoating

Type: Water Utilities

Activity #43231883

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

2017

Funding Sources

Water ERP

\$324,000

Total Lifetime Budget \$324,000

Estimated Annual Operating and Maintenance

\$0

Project Title: SCADA Radio Communications

Type: Water Utilities

Activity #1553161

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	\$415,000
Total Lifetime Budget	\$415,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Scherer Tower - Recoating

Type: Water Utilities

Activity #43331883

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	2018

Funding Sources

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

Estimated Annual Operating and Maintenance

\$0

Project Title: South Terminal Discharge Main	
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Type: Water Utilities

Activity #34431483

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.
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Estimated Schedule

Design and Right of Way Acquisition	2019
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Construction	2020
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Funding Sources

Water Tap	\$1,812,000
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Total Lifetime Budget	\$1,812,000
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Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Transmission Main Condition Assessment
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Type: Water Utilities

Activity #48831683

Project Description

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

The water system contains 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
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Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Asset Management Plan

Type: Water Utilities

Activity #48931683

Project Description

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

Project Purpose

The water system contains 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 procedures 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: Water Utilities	Activity #43431683
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Project Description

Rehabilitation and upsizing of water mains at:
 - - Harris Rd – Herring to Haines

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	\$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

Type: Water Utilities	Activity #49131483
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Project Description

Rehabilitation and upsizing of water mains at: Along Sampson Road in support of development
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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 – US 50 Hwy (Blackwell to Smart)

Type: Water Utilities

Activity #43631483

Project Description

Rehabilitation and upsizing of water mains that will serve the SE quadrant of the City.

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	\$142,000
Water Tap	\$426,000
Total Lifetime Budget	\$568,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main – US 50 Hwy (Smart to Harris).	
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Type: Water Utilities

Activity #43731483

Project Description

Rehabilitation and upsizing of water main that serves eastern portion of service territory.

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2017
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Construction	2017
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Funding Sources

Water Construction	\$90,000
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Water Tap	\$559,000
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Total Lifetime Budget	\$649,000
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Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main – View High Longview Golf to Chipman Upsize
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Type: Water Utilities	Activity #49231483
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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 Title: Water Main Rehabilitation FY16

Type: Water Utilities

Activity #20231683

Project Description

Rehabilitation of water mains on:

- 5th Street Warrington to Jefferson
- 6th Street Green to Independence
- Beach Road off Woods Chapel
- Brockton and Hamstead
- Edewater
- Grant – Chapel to Stanton
- Green – 7th to 8th and 7th Terr to 8th St
- Noel and 1st Ter
- Noeleen Ln – Columbus to Oak Tree
- Pembroke Ln
- Warrinton Ct
- Woods Chapel Terminus

Project Purpose

The lines have exhibited increased break rates in recent years and are now due for replacement.

Estimated Schedule

Design and Right of Way Acquisition	2016
Construction	2016

Funding Sources

Water Construction	\$1,900,000
Total Lifetime Budget	\$1,900,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY17

Type: Water Utilities

Activity #20331683

Project Description

Rehabilitation 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 Title: Water Main Rehabilitation FY18

Type: Water Utilities

Activity #20431683

Project Description

Rehabilitation 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 Title: Water Main Rehabilitation FY19

Type: Water Utilities

Activity #28631683

Project Description

Rehabilitation of water mains on:

- Quik Trip and Squeaky Clean Carwash
- Tudor Shops off Rice Rd
- Pergola View
- 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 Title: Water Main Rehabilitation FY20

Type: Water Utilities

Activity #34331683

Project Description

Rehabilitation of water mains on:

- 5th Ter Melody to Bayberry
- 7th Pl
- Windsboro Dr, Nottingham to Williamsburg
- Princeton Heights, Parts of Windstar, 12th , and Rosehill
- Pheasant Run Apartments
- Westwind Ln
- Yost
- Basswood
- Lake Lee's Summit Phase 1

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

Project Title: Water Main Rehabilitation FY21

Type: Water Utilities

Activity #43831683

Project Description

Rehabilitation of water mains on:

- Backyards between 4th Terrace and Blue Parkway
- Bramble Trail
- Summit Point Condos
- BriairCroft
- Brentwood South of Langsford

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2021
Construction	2021

Funding Sources

Water Construction	\$2,750,000
Total Lifetime Budget	\$2,750,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY22	
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Type: Water Utilities

Activity #43831683

Project Description	
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Rehabilitation of water mains of various sizes throughout the City.

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

Estimated Schedule	
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Design and Right of Way Acquisition	2022
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Construction	2022
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Funding Sources	
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Water Construction	\$3,750,000
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Total Lifetime Budget	\$3,750,000
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Estimated Annual Operating and Maintenance	
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No additional operating/maintenance costs	
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Project Title: Water Master Plan Update

Type: Water Utilities

Activity #49331683

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 utility.

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

\$2,000,000

Total Lifetime Budget

\$2,000,000

Estimated Annual Operating and Maintenance

\$70,000

Project Title: Water Operations Site Remediation and Genset Reconditioning

Type: Water Utilities	Activity #49431883
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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	
Type: Water Utilities	Activity #43931883

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	