LEE'S SUMMIT
MISSOURI

CITY MANAGER'S MESSAGE

May 4, 2020

Members of the Lee's Summit Public Works Committee, Planning Commission and City Council:

Pursuant to the City of Lee's Summit Charter, Article XI, Section 11.4. Capital Program, I am pleased to submit the proposed fiscal years (FY) 2021-2025 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.

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Proposed Plan

The 2021-2025 CIP totals $326,389,000 (including funding from prior years), up from $276,226,000 in the 2020-2024 plan. The increase in the total is due primarily to the passage of the 2019 Public Safety Bond Election and the addition of a major interchange project. Significant changes to the CIP include:

Completed Projects

- Commerce Drive - Tudor Road to Main Street
- Gateway Drive - Delta School Road to Georgian Drive
- Hook Road Shoulders - West City Limits to Ward Road
- Langsford Road Bridge rehabilitation
- Pryor Road & Hook Road Signal
- Pinetree Village Stormwater Improvements
- Traffic Signal Communication Master Plan
- Ward Road - Route 150 to Raintree Parkway
- Central Fuel Site
- Radio System Upgrade
- LSPR Greenway Master Plan Update
- Summit Park Renovation
- Wave Pool at Summit Waves
- Landfill Closure
- Cedar Creek Interceptor - Winterset Woods & Sterling Hills
- Water Main - Harris Rd - Herring to Haines
- Water Main Rehab FY19
- Level II Water Audit

New Projects

- Crackseal and Sealcoat Apron
- Remarking RW 18/36 and Rubber Removal
- Taxiway Alpha Pavement Markings
- Tree/Obstruction Removal North of RW 18/36 Part 77
- Tree/Obstruction Removal RW 18/36 Lots 1&2
- Existing Street Light Improvements
- M291 North Interchange with US50
- Ward Road - Chipman Road to NW O'Brien
- Ward Road & Persels Road Signal
- Fire Station 4 Replacement
- Fire Station 5 Replacement
- ITS Network Infrastructure
- Police Department Renovations
- Small Main Rehab and Creek Stabilization

- Tudor Force Main - Air Relief & Control Valve Update
- Private I&I Removal Program
- Water Utilities Service Center Improvements
- Solar Array Site Improvements
- Community Sewer Line Replacement
- East Prairie Lee Interceptor Upgrades
- Water Main Rehab FY25
- SE System Improvements Phase I
- Langsford & Milton Thompson Upsize

Projects moved to out years

- Rehabilitate Airfield Lighting Runway 11/29 and Taxiway Bravo
- Rehabilitate Hangar Access Taxiways Alpha and Bravo
- West Apron Reconstruction

Renamed Projects

- Update Airport Master and Business Plans (split into three projects)
  - Update Airport Business Plan
  - Update Airport Master Plan
  - Update Airport Master Plan - Phase 2
- Water Asset Management Plan (now part of WU Strategic Plan)

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	Stormwater	Sanitary Sewer	Water	Total
Prior Years	-	7,161	38,296	5,600	585	5,320	11,456	12,045	80,563
2021	8,368	5,485	11,338	13,475	350	3,703	4,880	8,783	56,382
2022	8,129	4,447	24,842	5,000	2,010	1,690	4,750	7,466	58,334
2023	8,298	3,654	19,450	-	8,510	-	2,950	7,465	50,327
2024	10,010	4,033	21,908	-	8,410	-	5,300	6,212	55,873
2025	8,466	988	6,525	-	-	-	1,100	7,891	24,970
Total	43,271	25,768	122,399	24,075	19,865	10,713	30,436	49,862	326,389

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

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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 22 projects around the community. Programs, airport, facilities, parks, water and sanitary sewer continue to comprise significant portions of the plan. Among the major revenue sources for the various capital projects included in the plan are:

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

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

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

Respectfully submitted,

Stephen A. Arbo
City Manager

CITY OF LEE'S SUMMIT, MISSOURI

CAPITAL IMPROVEMENT PLAN 2021-2025

Capital Improvement Plan Summary
Fiscal Year 2021-2025
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Public Works Programs	-	7,323	7,476	7,746	7,952	8,160	38,657
Water Utilities Programs	-	1,045	653	552	2,058	306	4,614
Airport	7,161	5,485	4,447	3,654	4,033	988	25,768
Bridges, Streets and Signals*	38,296	11,378	24,842	19,450	21,908	6,525	122,399
Facilities	5,600	13,475	5,000	-	-	-	24,075
Parks and Recreation	585	350	2,010	8,510	8,410	-	19,865
Storm Water	5,320	3,703	1,690	-	-	-	10,713
Sanitary Sewer	11,456	4,880	4,750	2,950	5,300	1,100	30,436
Water	12,045	8,783	7,466	7,465	6,212	7,891	49,862
Total	80,463	56,422	58,334	50,327	55,873	24,970	326,389

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

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

Programs	Prior Yrs	2021	2022	2023	2024	2025
Overlay & Slurry Seal	3800	4,300	4,400	4,500	4,600	4,700
Annual Curb and Gutter Replacement Program	2897	1,700	1,750	1,800	1,850	1,900
Neighborhood Traffic Safety Program	80	50	50	50	50	50
Bridge Rehab/ Maintenance	50	50	50	50	50	50
Capital Project Planning	40	45	45	50	50	50
Pavement Marking	550	525	500	587	613	640
Crack Sealing	240	300	310	320	330	340
Community Bus Service - ATA/OATS	336	353	371	389	409	430
TOTAL	7,993	7,323	7,476	7,746	7,952	8,160

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

Programs	Prior Yrs	2021	2022	2023	2024	2025
Equipment Replacement/Rehab	587	1,045	653	552	2,058	306
TOTAL	587	1,045	653	552	2,058	306

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 ¼-cent, this revenue source is dedicated to Parks and Recreation improvements including completion of Legacy Park facilities, new park development, the Senior Center, and greenway development.

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

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- A leasing structure that is backed by general revenues or fees and charges of a government. No voter approval is required. Limitations for financing 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 2021-2025 Capital Improvement Plan has been divided into seven 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 $326,389,000. A summary of the costs by category is summarized below.

2020-2024 CIP SUMMARY
(Costs in $1000s)

Category	Prior Yrs	% of Total	2021-25	% of Total
PW & WU Programs	0	0.0%	43,271	17.6%
Airport	7,161	8.9%	18,607	7.6%
Bridges, Streets, Signals	38,296	47.6%	84,103	34.2%
Facilities	5,600	7.0%	18,475	7.5%
Parks and Recreation	585	0.7%	19,280	7.8%
Stormwater	5,320	6.6%	5,393	2.2%
Sanitary Sewer	11,456	14.2%	18,980	7.7%
Water	12,045	15.0%	37,817	15.4%
TOTAL	80,463	100.0%	245,926	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

<u>Browning Street Extension – Browning Street to Hamblen Road:</u>
Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Local Roadway), Facilitates Access Management, Economic Development and Safety Improvements
Livable Streets Elements Omitted: None

<u>Chipman Road - Bent Tree Dr. to View High Dr.:</u>
Livable Streets Elements Included: Continuous Street Lighting*, Shared-Use Path, ADA Compliance, Street Gap Connectivity, Traffic Signal Control with Pedestrian Actuation and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety and Capacity Improvements (Reconstructed Two-Lane Arterial with Turn Lanes), Connectivity to Regional Trail.
Livable Streets Elements Omitted: Sidewalk. Sidewalk has been omitted from one side of the road (south side) along a portion of the project due to disproportionate cost compared to probable use. Adding sidewalk would require additional right-of-way and larger rock cut areas with larger retaining wall structures. Pedestrian use is severely limited from adjacent property due to constrained terrain. Future development opportunity is minimal due to constrained terrain, utility and environmental impact. If developed sidewalk may be required for connectivity and probable use. In lieu of a sidewalk, a shared-use path has been proposed along the north side of the road that provides network connectivity to meet projected pedestrian and bicycle needs. This path will connect to the Rock Island Trail and share connections along the corridor. The existing bridge across Cedar Creek and

the proposed RR crossing accommodate the proposed shared-use path along the north side of the road and the possibility of future sidewalk along the south side of the road.

Colbern Road – M350 Hwy to Douglas Street:
Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management, ADA Compliance, Traffic Signal Improvements.
Livable Streets Elements Omitted: None

Douglas Street – Chipman Road to Second Street:
Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance, Streetscape Elements
Livable Streets Elements Omitted: None

Downtown Public Parking:
Livable Streets Elements Included: ADA Compliance, Promotes a more walkable downtown with support for greater land use density.
Livable Streets Elements Omitted: None

Existing Streetlight Improvements:
Livable Streets Elements Included: Technology Improvements (e.g. LED Conversions)*
Livable Streets Elements Omitted: None

Hamblen Road & Bailey Road Traffic Signal:
Livable Streets Elements Included: Sidewalk, 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, ADA Compliance
Livable Streets Elements Omitted: None

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

Main Street - Chipman Road to Commerce Drive:
Livable Streets Elements Included: Sidewalk, ADA Compliance, Vehicular Safety Improvements, Vehicular Capacity Improvements.
Livable Streets Elements Omitted: None

M291 North Interchange with US50:
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 and Street Realignment, ADA Compliance.
Livable Streets Elements Omitted: None

Pryor Road – M150 Hwy to Longview Road (Project is split at Hook Road into two Phases):
Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management, ADA Compliance, Traffic Signal Improvements.
Livable Streets Elements Omitted: None

Streetlights – Lakewood Boulevard:
Livable Streets Elements Included: Continuous Street Lighting*
Livable Streets Elements Omitted: None

Streetlights – Shenandoah Drive:
Livable Streets Elements Included: Continuous Street Lighting*
Livable Streets Elements Omitted: None

Third Street Improvements – Jefferson Street to Blue Parkway:
Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Access Management (Driveway Consolidation and Access Restrictions), Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance, Streetscape Elements.
Livable Streets Elements Omitted: None

Third Street Improvements - Murray Road to Pryor Road:
Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Traffic Signal Control with Pedestrian Actuation* and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance.
Livable Streets Elements Omitted: None

Ward Road & Persels Road Traffic Signal:
Livable Streets Elements Included: Sidewalk, Shared-Use Path/Regional Trail Crossings, ADA Compliance, Access Management and Street Realignment, 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

Ward Road – Chipman Road to O'Brien Road:
Livable Streets Elements Included: Sidewalk, Safe Routes to School, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance
Livable Streets Elements Omitted: None

Ward Road – O'Brien Road to Blue Parkway:
Livable Streets Elements Included: Sidewalk, Safe Routes to School, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance
Livable Streets Elements Omitted: None

Facilities:

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

- Downtown Performing Arts Space and Farmers Market Pavilion

Parks:

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

- Arts in Parks
- Bailey Park Development
- Eagle Creek / Park West Development
- Fieldhouse
- Hartman Park Splashpad
- Lowenstein Park Improvements
- Pleasant Lea Park Improvements

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				
Programs (City-Wide)																																				
Community Bus Service – ATA/OATS								+													★															
Neighborhood Traffic Safety Program			+			−	+	−															★													
Annual Curb and Gutter Replacement Program			+							●	●																									
Residential Curb Replacements Program/Project			+								+																									
Sidewalk Improvements Program/Project		+	+							+	+																									
Other Programs (e.g. Marking, Planning, Overlay, Etc.)							+																													
Bridges, Streets and Signals																																				
Browning Street Extension, Browning to Hamblen Road		+	+			+	+			●	●							★	●					★												
Chipman Road, Bent Tree Drive to View High Drive		+	+	+	+	+	+	+		○	●	●						★						★						★	★					
Colbern Road, M350 to Douglas Street		+	+	+	+	+	+	+		●	●	●							●					★			★									
Douglas Street, Chipman Road to Second Street		+	+	+	+	+	+			●	●			★										★												
Downtown Public Parking						+																														
Existing Streetlight Improvements			+		+		+																													
Hamblen Road & Bailey Road Traffic Signal		+	+		+	+	+			●	●														●					★	★					
Independence Ave & Town Centre Blvd Improvements			+		+		+			●	●								●						●		★									
Jefferson Street, Persels Road to Oldham Parkway		+	+	+	+	+	+			●	●	●							●					★												
Main Street, Chipman to Commerce Drive		+	+	+	+	+	+	+		●	●																									
M291 North Interchange with US50		+	+	+	+	+	+	+		●	●	●							●					★						★	★					
Pryor Road, M150 to Longview Road		+	+	+	+	+	+	+		●	●	●							●					★						★	★					
Streetlighting – Lakewood Boulevard			+		+		+																	★												

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				
Streetlighting – Shenandoah Drive			+		+		+																	★											
Third Street Improvements, Jefferson Street to Blue Pkwy		+	+			+	+	+	★	●	●								●					★		★									
Third Street Improvements, Murray Road to Pryor Road		+	+			+	+	+		●	●								●					★						★	★				
Ward Road and Persels Road Traffic Signal		+	+	+	+	+	+	+		●	●								●						●					★	★				
Ward Road, Chipman Road to O'Brien Road		+	+	+	+	+	+			●	●			★	★																				
Ward Road, O'Brien Road to Blue Parkway		+	+	+	+	+	+			●	●			★	★																				
Facilities																																			
Downtown Cultural Arts Facilities and Farmers Market		+	+	+	+	+			★	●	●											★				★									
Parks																																			
Miscellaneous Projects		+	+	+	+				●	●	●	●														●									
Water, Sewer, Storm Water, Solid Waste, Airport																																			
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.*

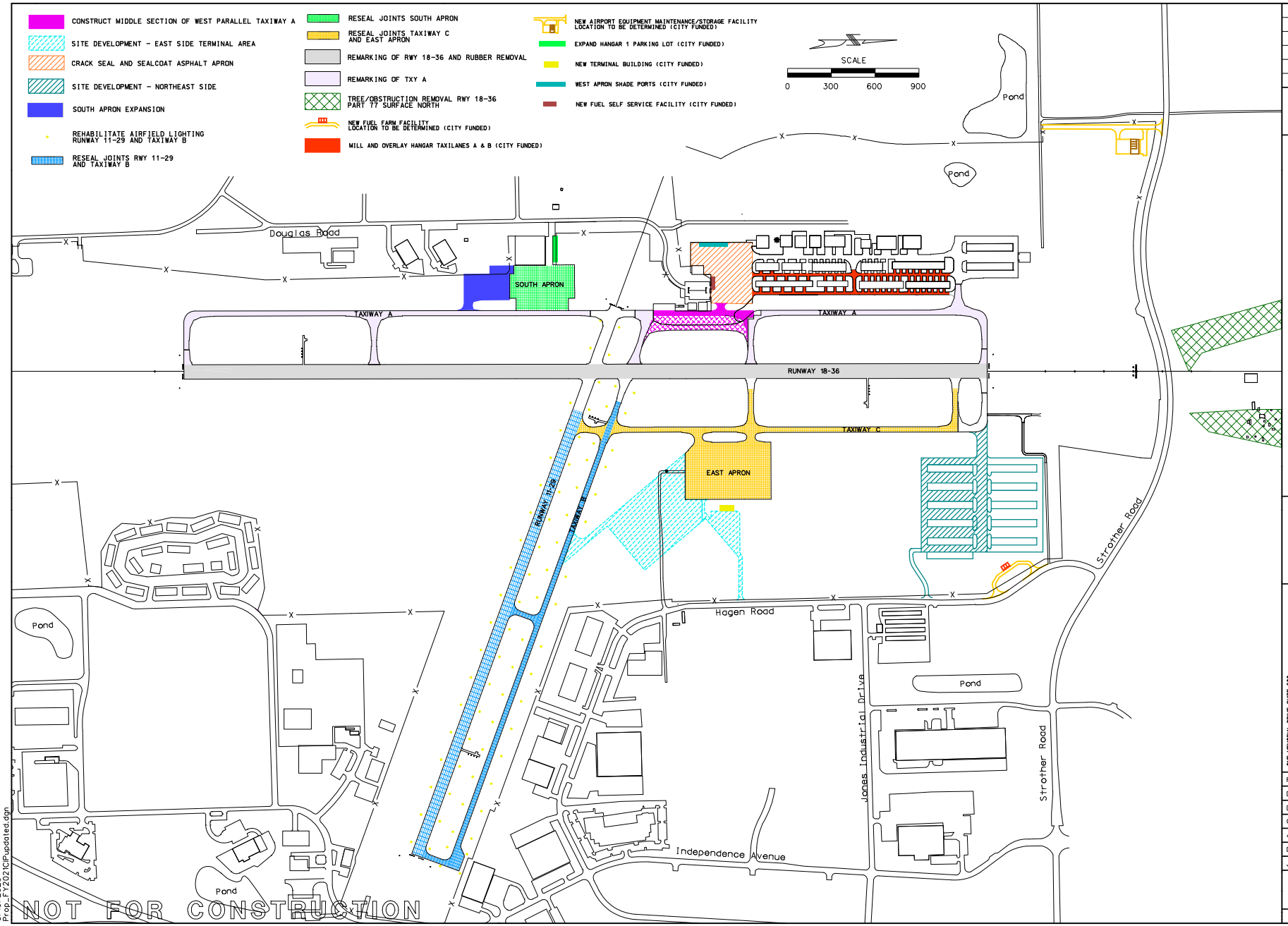
★ - *Livable Streets Element is included in project scope although it is not required by Ordinance or Adopted Plan.*

● - *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 2021-2025

Airport



3/10/2020
Prop_FY2021CIPupdated.dgn

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). PLOT 1

LEE'S SUMMIT MUNICIPAL AIRPORT
LEE'S SUMMIT, MISSOURI

PRELIMINARY

CMT
Corporation of Professionals, Engineering - 000831
DIE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-2500

FILE: Prop_FY2021CIPupdated.dgn
DESIGN BY:
DRAWN BY:
CHECKED BY: TCS
APPROVED BY: TCS
DATE: APRIL 24, 2017
JOB No: 16443-01

PROPOSED
FY 2021 CIP

SHEET OF SHEETS

AIRPORT
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Construct Middle Section of West Parallel Taxiway	-	-	-	1,345	-	-	1,345
Crackseal and Sealcoat Apron	-	134	-	-	-	-	134
Expand Hangar 1 Parking Lot	100	70	-	-	-	-	170
Land Acquisition of ALP Properties Phase 2	6,350	-	-	-	-	-	6,350
Land Acquisition of ALP Properties Phase 3	-	2,045	-	-	-	-	2,045
Mill and Overlay Hangar Taxilanes Alpha and Bravo	-	288	-	-	-	-	288
New Airport Equipment Maintenance/Storage Facility	-	-	694	-	-	-	694
New Fuel Farm Facility	325	1,555	-	-	-	-	1,880
New Fuel Self Serve Facility	-	450	-	-	-	-	450
New Terminal Building	-	-	1,100	-	-	-	1,100
Remarking RW 18/36 and Rubber Removal	-	-	-	-	277	-	277
Reseal Joint and Marking Runway 11-29 and Taxiway Bravo	-	593	-	-	-	-	593
Reseal Joint and Marking South Apron	-	-	-	-	172	-	172
Reseal Joint and Marking Taxiway Charlie and East Apron	-	-	-	-	-	396	396
Site Development - East Side Terminal Area	-	-	2,653	-	-	-	2,653
Site Development - Northeast Side	-	-	-	-	3,476	-	3,476
South Apron Expansion	-	-	-	1,509	-	-	1,509
Taxiway Alpha Pavement Markings	-	-	-	-	108	-	108
Tree/Obstruction Removal North of RW 18/36 Part 77	-	-	-	-	-	143	143
Tree/Obstruction Removal RW 18/36 Lots 1&2	-	-	-	-	-	449	449
Tree Removal in South Avigation Easement	-	-	-	300	-	-	300
Update Airport Business Plan	277	-	-	-	-	-	277
Update Airport Master Plan	109	-	-	-	-	-	109
Update Airport Master Plan - Phase 2	-	350	-	-	-	-	350
West Apron Shade Ports	-	-	-	500	-	-	500
Total	$7,161	$5,485	$4,447	$3,654	$4,033	$988	$25,768

Project Title: Construct Middle Section of West Parallel Taxiway

Type: Airport	Activity #16832172

Project Description
This project consists of the construction of the middle section of the relocated west parallel Taxiway A, demolition of the existing terminal building and demolition of the existing fuel farm. The north and south ends of the relocated west parallel taxiway have been constructed earlier in the Airport CIP. This section is scheduled to 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
This section of the 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	2022
Construction	2023

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

Estimated Annual Operating and Maintenance
$1,100

Project Title: Crackseal & Sealcoat Apron

Type: Airport	Activity #77432185

Project Description
This project consists of the cracksealing and sealcoating the north asphalt apron area. This pavement receives a crackseal and sealcoat application about every 10-years to extend the life of the pavement and reduce Foreign Object Damage (FOD) to aircraft.

Project Purpose
Extend the life of the pavement and reduce FOD damage to aircraft from loose asphalt as required by Federal Aviation Administration safety standards. Meet FAA Assurances of pavement maintenance requirements.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
Transportation Sales Tax	13,400
State/Federal	120,600
Total Lifetime Budget	134,000

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

Project Title: Expand Hangar 1 Parking Lot

Type: Airport	Activity #56432185

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
Transportation Sales Tax	$170,000
Total Lifetime Budget	$170,000

Estimated Annual Operating and Maintenance
$1,500

Project Title: Land Acquisition ALP Properties Phase 2

Type: Airport	Activity #293211

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

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

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

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

Estimated Annual Operating and Maintenance
$3,000

Project Title: Land Acquisition ALP Properties Phase 3

Type: Airport	Activity #56532185

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	N/A

Funding Sources	
Transportation Sales Tax	$102,250
State/Federal	$1,942,750
Total Lifetime Budget	$2,045,000

Estimated Annual Operating and Maintenance
$3,000

Project Title: Mill & Overlay Hangar Taxilanes A & B

Type: Airport	Activity #56632185

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

Project Purpose
The existing asphalt taxiways are over 35 years old and are in need of rehabilitation. There are two taxiways are 1,407 feet long and 20 feet wide with one 90 foot by 25-foot cross taxiway and an apron lane that is 220 feet long and 40 feet wide. These taxiways support over 50% of the airport based aircraft. Further deterioration becomes a safety concern of Foreign Object Damage (FOD) to aircraft. These two hangar access taxiways have exceeded their projected 25-year life cycle and are in need of major rehabilitation. Federal and State funds to provide a total rebuild and improve the storm water drainage system aren't expected in immediate near future.

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2021

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

Estimated Annual Operating and Maintenance
No additional impact to operating costs

Project Title: New Airport Equipment Maintenance/Storage Facility

Type: Airport	Activity #17732172

Project Description
This project includes a new Airport Equipment Maintenance/Storage facility to be constructed as part of the new. The location of the facility will be determined as part of the Master Plan Update. This project includes the funding for infrastructure development for the Airport Equipment Facility.

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

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2022

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

Estimated Annual Operating and Maintenance
$16,000

Project Title: New Fuel Farm Facility

Type: Airport	Activity #17832172

Project Description
This project includes a new fuel farm 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 and construction of the middle section of Taxiway A results in the demolition of the existing fuel facility. This project replaces the fuel facility.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2021

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

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

Project Title: New Fuel Self Serve Facility

Type: Airport	Activity #56732185

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

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

Estimated Annual Operating and Maintenance
$3,500

Project Title: New Terminal Building

Type: Airport	Activity #17932172

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2022

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

Estimated Annual Operating and Maintenance
$12,500

Project Title: Remarking RW 18/36 & Rubber Removal	
Type: Airport	Activity #77532185

Project Description
This project consists of the removal of rubber build-up on the runway surface and pavement markings. Rubber build up on the pavement becomes a safety concern during times the pavement is wet causing a reduction in braking action to landing aircraft. This is a maintenace issue that must be addressed approximately every five-years depending on the volume of traffic and the amount of rubber buildup.

Project Purpose
Maintain the runway in a safe manor as required by Federal Aviation Administration safety standard inspections. Meet FAA Assurances for pavement maintenance requirements.

Estimated Schedule	
Design and Right of Way Acquisition	2024
Construction	2024

Funding Sources	
Transportation Sales Tax	27,700
State/Federal	249,300
Total Lifetime Budget	277,000

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

Project Title: Reseal Joint and Marking of Runway 11-29 and Taxiway Bravo

Type: Airport	Activity #70932172

Project Description
This project consists of the removal and replacement of joint material, spalling repairs and remarking for Runway 11-29 and Taxiway Bravo.

Project Purpose
The existing concrete for both of these pavements are over twenty-eight years old and as part of the airport's pavement maintenance program the joint seal material requires replacement periodically throughout the life of the pavement. Daily pavement inspections provide feedback on the condition of pavement conditions. Based on observations of both of these pavements they are nearing that period which will require the replacement of the joint seal material, spall repair of any concrete areas that are breaking up and remarking of the pavement. Similar work was performed on both of these pavements over the last 10 years.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
Transportation Sales Tax	$59,000
State/Federal	$534,000
Total Lifetime Budget	$593,000

Estimated Annual Operating and Maintenance
$1,500

Project Title: Reseal Joint and Marking of South Apron

Type: Airport	Activity #71032172

Project Description
This project consists of the removal and replacement of joint seal material, spall repairs and remarking of South Apron area.

Project Purpose
The existing concrete apron is over nineteen years old and as part of the airport's pavement maintenance program the joint seal material requires replacement periodically throughout the life of the pavement. Daily pavement inspections provide feedback on the condition of pavement conditions. Based on observations this apron area is nearing that period which will require the replacement of the joint seal material,and spall repair of any concrete areas that are breaking up as well as the remarking of the pavement. Activity on this apron was light to moderate until the purchase of Hangar 1 in late 2016. This apron area now handles the majority of all transient traffic including all corporate jet aircraft traffic. This work is necessary to prevent Foreign Object Damage (FOD) from becoming an issue which could result in damage to jet aircraft engines.

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2024

Funding Sources	
Transportation Sales Tax	$ 17,000
State/Federal	$155,000
Total Lifetime Budget	$172,000

Estimated Annual Operating and Maintenance
$1,500

Project Title: Reseal Joint and Marking of Taxiway Charlie and East Apron

Type: Airport	Activity #71132172

Project Description
This project consists of the removal and replacement of joint seal material, spall repair and remarking of Taxiway Charlie and East Apron.

Project Purpose
The existing concrete pavement for taxiway Charlie and East apron are over nine years old and as part of the airport's pavement maintenance program the joint seal material requires replacement periodically throughout the life of the pavement. Daily pavement inspections provide feedback on the condition of pavement conditions. Based on observations this taxiway is nearing that period which will require the replacement of the joint seal material, spall repair of any concrete areas that are breaking up and remarking of the pavement. This work also includes the marking of the pavement. Construction traffic activity over the last two years crossing sections of the pavement to access construction sites has advanced the need for the planned repairs stated.

Estimated Schedule	
Design and Right of Way Acquisition	2024
Construction	2025

Funding Sources	
Transportation Sales Tax	$40,000
State/Federal	$356,000
Total Lifetime Budget	396,000

Estimated Annual Operating and Maintenance
$800

Project Title: Site Development – East Side Terminal Area

Type: Airport	Activity #47732185

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2022

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

Estimated Annual Operating and Maintenance
$600

Project Title: Site Development – Northeast Side	
Type: Airport	Activity #17232172

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2024

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

Estimated Annual Operating and Maintenance
$600

Project Title: South Apron Expansion

Type: Airport	Activity #47832185

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2023

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

Estimated Annual Operating and Maintenance
$300

Project Title: Taxiway Alpha Pavement Markings

Type: Airport	Activity #77632185

Project Description
This project consists of the removal and remarking of taxiway Alpha. This project consists of the removal and remarking of taxiway Alpha. Markings must be removed and remarked on a periodical basis to maintain the integrity of the markings and reduce Foreign Object Damage (FOD) from paint flaking. The markings are repainted as needed throughout the five-year period. Paint buildup from repeated remarkings over a period of five years requires the entire removal of the markings and new markings be put down.

Project Purpose
Maintain the taxiway in a safe manor as required by Federal Aviation Administration safety standard inspections. Meet FAA Assurances for pavement maintenance requirements.

Estimated Schedule	
Design and Right of Way Acquisition	2024
Construction	2024

Funding Sources	
Transportation Sales Tax	10,800
State/Federal	97,200
Total Lifetime Budget	108,000

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

Project Title: Tree/Obstruction Removal North or RW 18/36, Part 77

Type: Airport	Activity #77732185

Project Description
This project consists of the removal trees that become an obstruction to air navigation off the North end of Runway 18/36. The trees are in an Avigation easement area acquired as part of the land acquisition for Runway 18/36. Growth of the trees over a period of years will result in them reaching a height that will be deemed by the Federal Aviation Administration as obstructions that must be removed.

Project Purpose
Maintain the airspace off the North end of Runway 18/36 in a safe manor as required by Federal Aviation Administration safety standard inspections. Meet FAA Assurances for protection of airspace in the approach ends of runways as the trees reach a height to be considered an encroachment into the airspace.

Estimated Schedule	
Design and Right of Way Acquisition	2025
Construction	2025

Funding Sources	
Transportation Sales Tax	14,300
State/Federal	128,700
Total Lifetime Budget	143,000

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

Project Title: Tree/Obstruction Removal RW 18/36 Lots 1 & 2

Type: Airport	Activity #77832185

Project Description
This project consists of the removal trees that become an obstruction to air navigation within the Runway Protection Zone (RPZ) off the South end of Runway 18/36. The trees are in an Avigation easement and RPZ areas acquired as part of the land acquisition for Runway 18/36. The trees impact the approaches to Runway 36 and are required to be removed by the Federal Aviation Administration as they are deemed to be an obstruction to the approach.

Project Purpose
Maintain the airspace off the South end of Runway 18/36 in a safe manor as required by Federal Aviation Administration safety standard inspections. Meet FAA Assurances for protection of the airspace in the approach ends of runways.

Estimated Schedule	
Design and Right of Way Acquisition	2025
Construction	2025

Funding Sources	
Transportation Sales Tax	44,900
State/Federal	404,100
Total Lifetime Budget	449,000

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

Project Title: Tree Removal in South Avigation Easement Area

Type: Airport	Activity #71232172

Project Description
This project consists of the removal of trees and any obstructions deemed as hazdards to aviation by the Federal Aviation Administration (FAA) from property involved with the of avigation easements on ALP Properties Phase 3 acquistion.

Project Purpose
This project is required to provide for future airport runway safety areas, and runway protection zones. The tree removal is the final phase of the ALP Properties Phase 3 land acquisition to remove obstructions in the avigation easement area. The properties associated with the tree removal are shown on the Airport Layout Plan approved in March 2000.

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2023

Funding Sources	
Transportation Sales Tax	$30,000
State/Federal	$270,000
Total Lifetime Budget	$300,000

Estimated Annual Operating and Maintenance
$0

Project Title: Update Airport Business Plan

Type: Airport	Activity #73432172

Project Description
This project consist of updating the adopted Airport Business Plan. Completion of many of the Airport improvement projects by 2020 and changes in the type of traffice and wide range of business use warrants the need to update the Airport Business Plan.

Project Purpose
The existing Business Plan is a document that provide guidance and vision for the business operations of the Airport, City and supporting agencies. This document will need to be reviewed and updated by 2021 to address the many changes that have taken place in the Airport's operational status since the inception and development of the previous plan in 2008 and will provide guidance for the future.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	N/A

Funding Sources	
Transportation Sales Tax	$27,700
State/Federal	$249,300
Total Lifetime Budget	$277,000

Estimated Annual Operating and Maintenance
$0

Project Title: Update Airport Master Plan

Type: Airport	Activity #44232172

Project Description
This project consist of updating the Airport's Master Plan. Completion of many of the projects listed in the current Master Plan by 2020 warrants the need to develop a new Airport's Master Plan.

Project Purpose
The existing Airport Master Plan is over 20 years old. Most of the projects listed in the Master Plan have been completed. A new plan will provide guidance and vision for the Airport, City and supporting agencies for the next 20 years. This new document needs to be reviewed and updated by 2021 to provide this guidance for the future. The Master Plan is split into two phases by the Federal Aviation Administration and State Aviation Department due to budget constraints. Phase 1 will provide basic planning elements of a Master Plan such as: inventory, forecast, facilities requirements and alternatives. Whereas Phase 2 will provide FAA deliverables such as Airports GIS Survey and Aerial Imagery, Airport Layout Plan (ALP), and the Exhibit A Property Map.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	N/A

Funding Sources	
Transportation Sales Tax	$10,900
State/Federal	$98,100
Total Lifetime Budget	$109,000

Estimated Annual Operating and Maintenance
$0

Project Title: Update Airport Master Phase 2

Type: Airport	Activity #77932185

Project Description
This project consist of the second phase of the development of a new Airport Master Plan. Completion of many of the Airport improvement projects by 2020 warrants the need to update and develop a new Airport Master Plan.

Project Purpose
The Master Plan is split into two phases by the Federal Aviation Administration and State Aviation Department due to budget constraints. Phase 2 will provide FAA deliverables such as Airports GIS Survey and Aerial Imagery, Airport Layout Plan (ALP), and the Exhibit A Property Map. The document 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	2021
Construction	N/A

Funding Sources	
Transportation Sales Tax	$35,000
State/Federal	$315,000
Total Lifetime Budget	$350,000

Estimated Annual Operating and Maintenance
$0

Project Title: West Apron Shade Ports

Type: Airport	Activity #44332172

Project Description
This project consists of the constructing approximately 12 shade port hangar units on the west side of the existing asphalt Airport Terminal Apron area. These units are desinated as replacement units for similar hangar units removed for the Taxiway 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 previously 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	2023
Construction	2023

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

Estimated Annual Operating and Maintenance
$1,500

Capital Improvement Plan 2021-2025

Bridges, Streets and Signals

CONSTRUCTION 2020

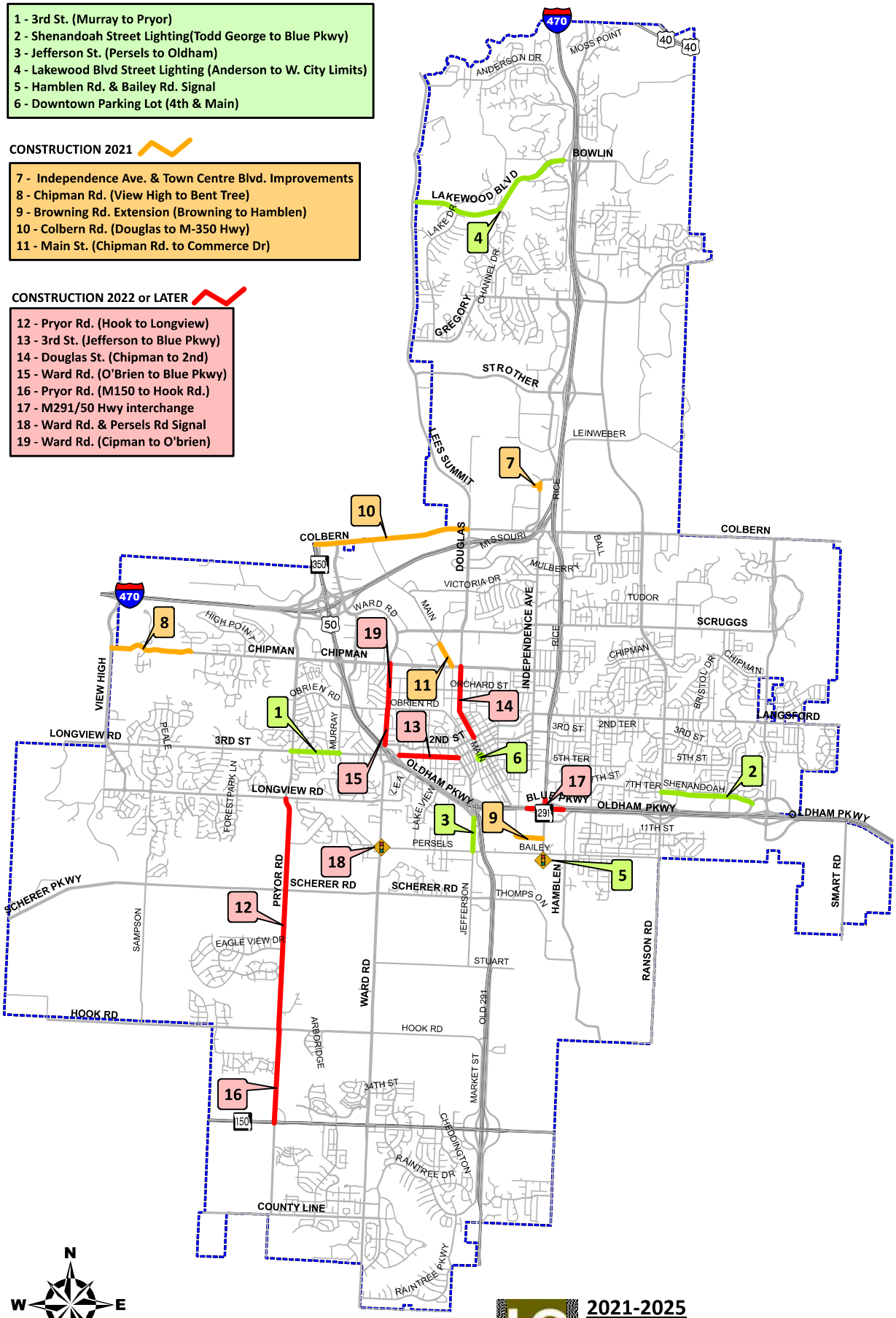
1 - 3rd St. (Murray to Pryor)
2 - Shenandoah Street Lighting(Todd George to Blue Pkwy)
3 - Jefferson St. (Persels to Oldham)
4 - Lakewood Blvd Street Lighting (Anderson to W. City Limits)
5 - Hamblen Rd. & Bailey Rd. Signal
6 - Downtown Parking Lot (4th & Main)

CONSTRUCTION 2021

7 - Independence Ave. & Town Centre Blvd. Improvements
8 - Chipman Rd. (View High to Bent Tree)
9 - Browning Rd. Extension (Browning to Hamblen)
10 - Colbern Rd. (Douglas to M-350 Hwy)
11 - Main St. (Chipman Rd. to Commerce Dr)

CONSTRUCTION 2022 or LATER

12 - Pryor Rd. (Hook to Longview)
13 - 3rd St. (Jefferson to Blue Pkwy)
14 - Douglas St. (Chipman to 2nd)
15 - Ward Rd. (O'Brien to Blue Pkwy)
16 - Pryor Rd. (M150 to Hook Rd.)
17 - M291/50 Hwy interchange
18 - Ward Rd. & Persels Rd Signal
19 - Ward Rd. (Cipman to O'brien)



April 2020

2021-2025
BRIDGE, STREET, AND SIGNAL
CAPITAL IMPROVEMENTS

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

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Browning Street Extension - Browning to Hamblen Rd	1,723	1,477	-	-	-	-	3,200
Chipman Road, Bent Tree Dr. to View High Dr.	15,773	-	-	-	-	-	15,773
Colbern Road - M350 to Douglas Street	3,100	7,047	9,730	-	-	-	19,877
Douglas Street - Chipman Road to 2nd Street	-	-	-	500	2,008	3,500	6,008
Downtown Public Parking	1,000	-	-	-	-	-	1,000
Existing Street Light Improvements	-	115	-	-	-	-	115
Hamblen Road & Bailey Road Signal	380	-	-	-	-	-	380
Independence Ave & Town Centre Blvd Intersect Imp	1,760	-	-	-	-	-	1,760
Jefferson Street - Persels Road to Oldham Parkway	4,092	-	-	-	-	-	4,092
Main Street - Chipman Road to Commerce Drive	1,200	-	-	-	-	-	1,200
M291 North Interchange with US50	-	-	2,000	10,000	9,000	-	21,000
Pryor Road Widening Phase 1 - Hook to Longview	2,000	550	9,000	6,500	-	-	18,050
Pryor Road Widening Phase 2 - M150 to Hook	-	-	-	-	9,150	-	9,150
Residential Curb Replacements	-	1,000	250	250	250	250	2,000
Sidewalk Improvements	-	-	-	-	-	500	500
Streetlights - Lakewood Boulevard	875	-	-	-	-	-	875
Streetlights - Shenandoah Drive	530	-	-	-	-	-	530
Third Street Improvements - Jefferson St to Blue Parkway/US50	-	531	2,987	-	-	-	3,518
Third Street Improvements - Murray Road to Pryor Road	5,863	658	-	-	-	-	6,521
Ward Road & Persels Road Signal	-	-	100	700	1,500	1,500	3,800
Ward Road - Chipman Road to NW O'Brien						775	775
Ward Road - NW O'Brien Road to Blue Parkway	-	-	775	1,500	-	-	2,275
Subtotal	38,296	11,378	24,842	19,450	21,908	6,525	122,399
Less water and sewer funds included in totals	2,642	931	790	480	150	275	5,268
Total	35,654	10,447	24,052	18,970	21,758	6,250	117,131

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

Type: Bridges, Streets & Signals	Activity #56832272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2021

Funding Sources	
License (Excise) Tax	$2,907,000
Sewer Construction	$67,000
Water Construction	$226,000
Total Lifetime Budget	$3,200,000

Estimated Annual Operating and Maintenance
$15,500

Project Title: Chipman Road – Bent Tree to View High

Type: Multi Funded Project	Activity #733221

Project Description
The project includes reconstruction of the existing roadway as a three-lane facility with curb & gutter, sidewalk, a multi-use trail, and streetlighting, as well as removal of the existing railroad tunnel. This project also involves relocating approximately 4,700 feet of water main and 1,400 feet of sanitary sewer.

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

Estimated Schedule	
Design and Right of Way Acquisition	Design is 90% complete. Finalizing design and ROW acquistion .
Construction	2021 - 2022

Funding Sources	
CIP Sales Tax Renewal (2007)	$15,000,000
Sewer Construction	$134,000
Water Construction	$639,000
Total Lifetime Budget	$15,773,000

Estimated Annual Operating and Maintenance
$12,480

Project Title: Colbern Road – M350 Hwy to Douglas St

Type: Bridges, Streets & Signals	Activity #56932272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2019-2021
Construction	2021-2022

Funding Sources	
CIP Sales Tax Renewal (2017)	$6,902,000
Water Tap Fee	$1,000,000
STP Funding	$3,975,000
MoDOT Cost Share	$8,000,000
Total Lifetime Budget	$19,877,000

Estimated Annual Operating and Maintenance
$35,000

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

Type: Bridges, Streets & Signals	Activity #57232272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2023-2024
Construction	2024-2025

Funding Sources	
CIP Sales Tax Renewal (2017)	$5,500,000
Water Construction	$508,000
Total Lifetime Budget	$6,008,000

Estimated Annual Operating and Maintenance
$30,000

Project Title: Downtown Public Parking

Type: Bridges, Streets & Signals	Activity #57032272

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

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

Estimated Schedule	
Right of Way Acquisition	2019
Design	2019 & Future Years CIP
Construction	2020 & Future Years CIP

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

Estimated Annual Operating and Maintenance
$3,850

Project Title: Existing Street Light System Improvements

Type: Bridges, Streets & Signals	Activity #76932272

Project Description
This project will provide improvements to the existing street lights system.

Project Purpose
The 2017 Capital Improvement Sales Tax included set aside allocation for street lighting improvements. The balance of that allocation after the completion of two committed street light projects (i.e. Shenandoah Street Lighting and Lakewood Boulevard Street Lighting), being insufficient for another new corridor of street lighting, was to be used for existing street light system improvements. Those existing street light system improvements include LED conversions, technology enhancements and efficiency upgrades that reduce maintenance cost, conserve energy, extend service life and/or improve function.

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2021

Funding Sources	
CIP Sales Tax Renewal (2017)	$75,000
Total Lifetime Budget	$75,000

Estimated Annual Operating and Maintenance
$0 (Potential Cost Reduction)

Project Title: Hamblen Road & Bailey Road Signal

Type: Bridges, Streets & Signals	Activity #71332272

Project Description
This project is the installation of a traffic signal at Hamblen Road and Bailey Road.

Project Purpose
The existing all-way stop intersection meets traffic signal warrant criteria. The traffic signal will address safety and operational needs and accommodate increased traffic associated with continued development activity and city growth.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2017)	$380,000
Total Lifetime Budget	$380,000

Estimated Annual Operating and Maintenance
$3,358

Project Title: Independence/Town Centre Intersection Improvements

Type: Bridges, Streets & Signals	Activity #263241

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

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

Estimated Schedule	
Design and Right of Way Acquisition	Complete
Construction	2021

Funding Sources	
CIP Sales Tax Renewal	$1,760,000
Total Lifetime Budget	$1,760,000

Estimated Annual Operating and Maintenance
$3,358

Project Title: Jefferson Street – Persels Road to Oldham Parkway

Type: Bridges, Streets & Signals	Activity #41932272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2017 - 2018
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2007)	$784,000
2014 Bond Funds	$2,000,000
Orchard Street Bond Funds	$595,000
Water Construction	$394,000
Sewer Construction	$319,000
Total Lifetime Budget	$4,092,000

Estimated Annual Operating and Maintenance
$10,000

Project Title: Main Street – Chipman Road to Commerce Drive

Type: Bridges, Streets & Signals	Activity #71432372

Project Description
This project will improve Main Street from Chipman Road to Commerce Drive. The project includes, but is not limited to, widening, paving, sidewalks, curb, and storm drainage work.

Project Purpose
This project will re-construct existing infrastructure that has deteriorated and improve the existing road conditions that are generally rural (or unimproved), narrow lanes, uncurbed with roadside ditches, and no shoulder. This section of unimproved road is located between Chipman Road, an improved major arterial, and Commerce Drive, an improved commercial collector. This unimproved section of Main Street is the only unimproved section of roadway in the immediate area and an impediment to adjacent development. This project will enhance access to several undeveloped or underdeveloped properties (including property owned by the City) and encourage economic activity. Any adjacent property development would otherwise require these improvements to Main Street. The project will also improve roadway safety and capacity. This project was identified in the Thoroughfare Master Plan and has been recommended by the License Tax Committee.

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources	
License (Excise) Tax	$1,200,000
Total Lifetime Budget	$1,200,000

Estimated Annual Operating and Maintenance
$15,500

Project Title: M291 North Interchange with US50

Type: Bridges, Streets & Signals	Activity #77032272

Project Description
This project is the reconstruction of the interchange at M291 North Junction and 50 Highway, including relocation of the north outer road (Blue Parkway), improvements to 7th Terrace and work along US 50 Highway. This project will be competed in a partnership with MoDOT among other entities.

Project Purpose
This is a project to improve traffic operations and safety of the local and state roadway network along the US 50 Corridor and M-291 Corridor in Lee's Summit. Current traffic congestion creates significant delays and safety issues that impede travel, detract from the local quality of life and depress property values. This project will also improve opportunities for (re)development, add multi-modal access and replace aging infrastructure. This project is funded, in part, by a City initiated TIF. Additional funds are sought from multiple state partnerships, cost share, excise tax, and sales tax.

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2023

Funding Sources	
CIP Sales Tax Renewal (2017)	$3,000,000
Excise Tax	$6,000,000
TIF	$3,000,000
MoDOT Cost Share	$9,000,000
Total Lifetime Budget	$21,000,000

Estimated Annual Operating and Maintenance
$3,358

Project Title: Pryor Road – Hook Rd to Longview Rd

Type: Bridges, Streets & Signals	Activity #57132272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2020-2021
Construction	2022

Funding Sources	
CIP Sales Tax Renewal (2017)	$18,050,000
Total Lifetime Budget	$18,050,000

Estimated Annual Operating and Maintenance
$65,000

Project Title: Pryor Road – M150 Hwy to Hook Rd

Type: Bridges, Streets & Signals	Activity #71632272

Project Description
This project is the second of two phases to complete committed improvements to Pryor Road from M-150 Highway to Longview Road. This second phase of the project will widen Pryor Road as a four-lane facility with turn lanes, sidewalk, shared-use path, curb, and street lighting from M-150 Highway to Hook Road.

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

Estimated Schedule	
Design and Right of Way Acquisition	2024
Construction	2025

Funding Sources	
CIP Sales Tax Renewal (2017)	$9,000,000
Water Construction	$150,000
Total Lifetime Budget	$9,150,000

Estimated Annual Operating and Maintenance
$45,000

Project Title: Residential Curb Replacements

Type: Bridges, Streets & Signals	Activity #71732272

Project Description
This project includes curb and gutter replacement within residential areas.

Project Purpose
Existing curb and gutter within residential areas have deteriorated beyond repair. Many of these areas are not in need of a mill & overlay and do not currently fall within the normal Pavement Maintenance Program. The condition of curb and gutter along these residential streets sections fails to properly function as intended for storm water management and consequently also contributes to pavement damages. The condition is becoming a public safety hazard if not mitigated. The curb and gutter needs replacement.

Estimated Schedule	
Design	2021
Construction	2021-2028

Funding Sources	
CIP Sales Tax Renewal	$5,000,000
Total Lifetime Budget	$5,000,000

Estimated Annual Operating and Maintenance
$0

Project Title: Sidewalk Improvements

Type: Bridges, Streets & Signals	Activity #71832272

Project Description
This project to complete sidewalk gaps throughout the City. The project schedule indicated below may be accelerated should funding be available.

Project Purpose
Over the years, as property developed throughout the City, a variety of different policies toward requirements for sidewalk construction resulted in disconnected or gaps in the sidewalk system. The intent of this program is to connect many of these gaps to the existing sidewalk system, resulting in a safer circulation path for those using the sidewalk system. The project supports the City's Livable Streets Policy and the City's Americans with Disabilities (ADA) Transition Plan For Public Rights-of-Way.

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2024-2029

Funding Sources	
CIP Sales Tax Renewal	$2,500,000
Total Lifetime Budget	$2,500,000

Estimated Annual Operating and Maintenance
$0

Project Title: Street Lighting – Lakewood Boulevard

Type: Bridges, Streets & Signals	Activity #57332272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2017)	$875,000
Total Lifetime Budget	$875,000

Estimated Annual Operating and Maintenance
$18,000

Project Title: Street Lighting – Shenandoah Drive

Type: Bridges, Streets & Signals	Activity #57432272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2017)	$530,000
Total Lifetime Budget	$530,000

Estimated Annual Operating and Maintenance
$6,000

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

Type: Bridges, Streets & Signals	Activity #57532272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2021
Construction	2022

Funding Sources	
CIP Sales Tax Renewal (2017)	$3,000,000
Water Construction	$518,000
Total Lifetime Budget	$3,518,000

Estimated Annual Operating and Maintenance
$20,000

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

Type: Bridges, Streets & Signals	Activity #42232272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2017 – 2019
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2007)	$5,758,000
Water Construction Fund	$713,000
Sewer Construction Fund	$50,000
Total Lifetime Budget	$6,521,000

Estimated Annual Operating and Maintenance
$18,900

Project Title: Ward Road & Percels Road Signal

Type: Bridges, Streets & Signals	Activity #77132272

Project Description
This project is the installation of a permanent traffic signal to replace the temporary span wire traffic signal at the intersection of Ward Road and Persels Road. The project will include relocation of Persels Road, north intersection at Ward Road, to align with Persels Road, south intersection at Ward Road; addressing the operational and safety issues related to the existing offset intersections. The project will also include left-turn lanes along Ward Road at Persels Road.

Project Purpose
The existing offset intersection with temporary span wire traffic signal control and shared use lanes for left-turn and through traffic has become a high crash location. This intersection often experiences significant delay and congestion; especially for left-turn traffic. The offset requires an extended green signal operation to clear vehicle queues between side street services or gridlock can occur. The Rock Island Corridor Trail passes through this intersection. Improvements have been requested by City Council, residents and school district officials. The project will improve safety and traffic operations for all roadway users.

Estimated Schedule	
Design and Right of Way Acquisition	2022-2023
Construction	2024-2025

Funding Sources	
CIP Sales Tax Renewal (2017)	$3,300,000
CMAQ	$500,000
Total Lifetime Budget	$3,800,000

Estimated Annual Operating and Maintenance
$3,358

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

Type: Bridges, Streets & Signals	Activity #77232272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2025
Construction	2026

Funding Sources	
CIP Sales Tax Renewal (2017)	$2,000,000
Water Construction	$275,000
Total Lifetime Budget	$2,275,000

Estimated Annual Operating and Maintenance
$10,000

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

Type: Bridges, Streets & Signals	Activity #59932272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources	
CIP Sales Tax Renewal (2017)	$2,000,000
Water Construction	$275,000
Total Lifetime Budget	$2,275,000

Estimated Annual Operating and Maintenance
$10,000

Capital Improvement Plan 2021-2025

Facilities

FACILITIES
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Downtown Performing Arts Space and Farmers Market Pavilion	600	-	-	-	-	-	600
Fire Station 3 Replacement	5,000	-	-	-	-	-	5,000
Fire Station 4 Replacement	-	7,000	-	-	-	-	7,000
Fire Station 5 Replacement	-	-	5,000	-	-	-	5,000
ITS Network Infrastucture	-	975	-	-	-	-	975
Police Department Renovations	-	5,500	-	-	-	-	5,500
Total	5,600	13,475	5,000	-	-	-	24,075

Project Title: Downtown Performing Arts Space and Farmers Market Pavilion

Type: Facilities	Activity #54734671

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

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

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 puropse of this is to replace station 3 with a modern facility in a new location to better serve the citizens and to be better able to handle future growth of the City and resultant demands placed on the fire department.

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: Fire Station 4 Replacement

Type: Facilities	Activity #75735874

Project Description
This project is the second part of the redeployment of first response units in the northern portion of the City. Station #4 has long since reached its maximum capacity and also due to its age and location is in need of replacement. With an addition of an additional station in the northern portion of the City, it is intended that the location of new Station 4 would be moved further south, effectively creating 2 fire response areas out of the area that was previously served by current Fire Station #4.

Project Purpose
This project will replace an existing station that is in need of replacement. This will also serve to redistribute Fire Department response apparatus to better serve the current population and development and provide a much more efficient location to serve the northern area of the City in anticipation of a large amount of future development. This approach addresses two concerns in the replacement of an aging and outdated fire station, as well as prepare for future growth and expansion of services in the northern portion of the City.

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

Funding Sources	
2019 Public Safety Bond	$7,000,000
Total Lifetime Budget	$7,000,000

Estimated Annual Operating and Maintenance
$10,000

Project Title: Fire Station 5 Replacement

Type: Facilities	828TBD74

Project Description
Current Fire Station #5 has reached its capacity and can no longer accommodate additional units for further development or population expansion. This Station also does not conform to current standards for accommodations for personnel, technology advances, or health and wellness changes that have occurred for cancer prevention. Additionally the location of the current fire station is not ideal to a long-term deployment plan.

Project Purpose
This project will replace an existing station that is in need of replacement. This will also serve to redistribute Fire Department response apparatus to better serve the current population and development and provide a much more efficient location to serve the southern area of the City in anticipation of a large amount of future development. This approach addresses two concerns in the replacement of an aging and outdated fire station, as well as prepare for future growth and expansion of services in the southern portion of the City.

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

Funding Sources	
2019 Public Safety Bond	$5,000,000
Total Lifetime Budget	$5,000,000

Estimated Annual Operating and Maintenance
$10,000

Project Title: ITS Network Infrastructure

Type: Facilities	Activity #74635688

Project Description
This project will provide communication interconnectivity among numerous City facilities (City Hall, Water Service Center, Public Works Operations, Fire, Police, Longview and Harris Park Community Centers) to provide a reliable communications network for public safety. The first component of this initiative would be to replace the aging infrastructure with buried fiber optic in the following locations: • Along Douglas from Fire Headquarters to Police Headquarters • From the intersection of Hamblen and Bailey roads to Public Works Operations The second component is the development of new infrastructure by installing a City-owned fiber network that will improve bandwidth and resiliency.

Project Purpose
Reliable communication is essential both in terms of every day public safety operations and in crisis situations resulting from serious weather events, natural disasters, fires, terrorism, public violence, shooting incidents and other life-threatening situations that require an immediate response and reliable communications.

Estimated Schedule	
Design	2020
Construction	2020-2021

Funding Sources	
2019 Public Safety Bond	$975,000
Total Lifetime Budget	$975,000

Estimated Annual Operating and Maintenance

Project Title: Police and Courts Building Renovation and Security Enhancement

Type: Facilities	Activity #74836573

Project Description
This project will provide security enhancements throughout the Police and Courts facility. Special attention to the main entrance, lobby, court screening, Police Service Officer area, and Prosecutor/Court Clerk areas. Improvements in the building will provide better efficiencies and safety features that better align with modern Police and Court facilities. Better customer experience with regard to walk-in services will be accomplished with the renovation. Reallocation of existing space will afford for growth in the female locker room area among other areas. The current female locker room space is at capacity. The project will accommodate planned growth in the 911 center as well as investigations.

Project Purpose
Safety and security are the main driving factors for the need for renovation. Accommodating staff growth will be accomplished by repurposing existing space. This will afford better efficiency throughout the building while enhancing security for employees and citizens. The department continues to grow and adjust in order to deliver the highest level of service.

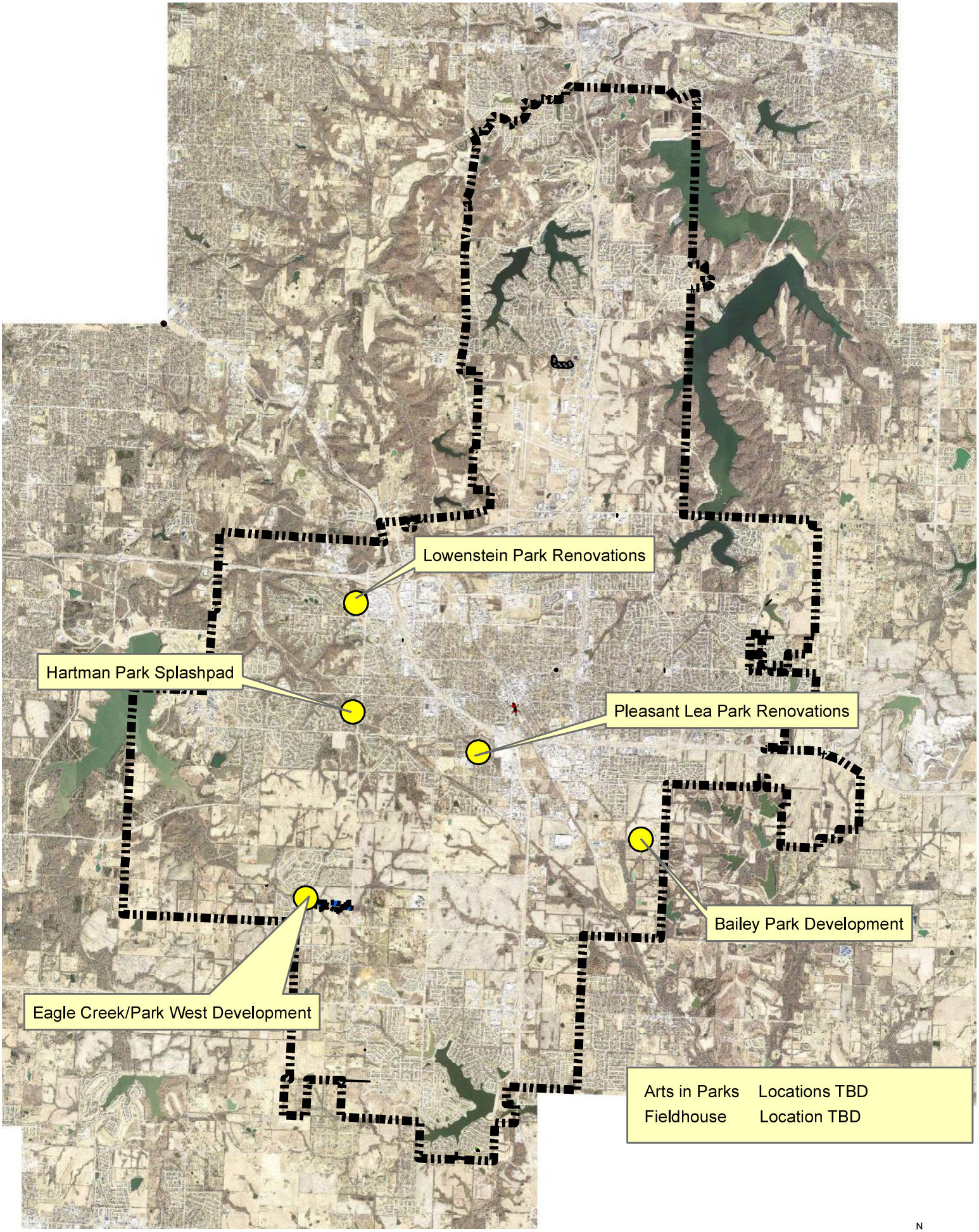
Estimated Schedule	
Design	2019-2020
Construction	2020-2021

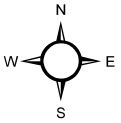
Funding Sources	
2019 Public Safety Bond	$5,500,000
Total Lifetime Budget	$5,500,000

Estimated Annual Operating and Maintenance
$10,000

CAPITAL IMPROVEMENT PLAN 2021-2025

PARKS AND RECREATION





FY 2021 CIP Parks and Recreation

PARKS
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Arts in Parks	20	-	10	10	10	-	50
Bailey Park Development	-	-	400	5,100	-	-	5,500
Eagle Creek/Park West Development	-	-	1,050	-	-	-	1,050
Field House	-	-	250	3,400	8,400	-	12,050
Hartman Park Splashpad	-	-	300	-	-	-	300
Lowenstein Park Improvements	515	-	-	-	-	-	515
Pleasant Lea Park Improvements	50	350	-	-	-	-	400
Total	585	350	2,010	8,510	8,410		19,865

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	TBD

Funding Sources	
Prior Years	$ 20,000
Park Sales Tax FY 22	$ 10,000
Park Sales Tax FY 23	$ 10,000
Park Sales Tax FY 24	$ 10,000
Total Lifetime Budget	$ 50,000

Estimated Annual Operating and Maintenance
$1,000

Project Title: Bailey Park Development

Type: Parks & Recreation	Activity #33032784

Project Description
Development of Park on 50 acre site

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

Estimated Schedule	
Design	January-June 2022
Phase I Construction	June 2022-July 2023

Funding Sources	
Park Sales Tax FY 2022	$ 400,000
Park Sales Tax FY 2023	$5,100,000
Total Lifetime Budget	$5,500,000

Estimated Annual Operating and Maintenance
$100,000

Project Title: Eagle Creek/Park West Development

Type: Parks & Recreation	Activity #33632784

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

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

Estimated Schedule	
Planning and Design	July 2021-October 2021
Construction	October 2021-June 2022

Funding Sources	
Park Sales Tax FY 2022	$1,050,000
Total Lifetime Budget	$1,050,000

Estimated Annual Operating and Maintenance
$10,000

Project Title: Field House

Type: Parks & Recreation	Activity #47232784

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

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

Estimated Schedule	
Design	July 2021-September 2022
Construction	March 2023-June 2024

Funding Sources	
Park Sales Tax FY 22	$ 250,000
Park Sales Tax FY 23	$ 3,400,000
Park Sales Tax FY 24	$ 8,400,000
Total Lifetime Budget	$12,050,000

Estimated Annual Operating and Maintenance
$250,000

Project Title: Hartman Park Splashpad	
Type: Parks & Recreation	Activity #55232784

Project Description
Construct splashpad in Hartman Park

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

Estimated Schedule	
Planning and Design	July-November 2021
Construction	January-May 2022

Funding Sources	
Park Sales Tax FY 2022	$ 300,000
Total Lifetime Budget	$ 300,000

Estimated Annual Operating and Maintenance
$20,000

Project Title: Lowenstein Park Improvements	
Type: Parks & Recreation	Activity #33332784

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

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

Estimated Schedule	
Planning and Design (In-House)	January-April 2019
Construction	September 2019-August 2020

Funding Sources	
Park Sales Tax FY 20	$ 400,000
Developer Contribution	$ 115,000
Total Lifetime Budget	$ 515,000

Estimated Annual Operating and Maintenance
$2,000

Project Title: Pleasant Lea Park Improvements

Type: Parks & Recreation	Activity #47032784

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

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

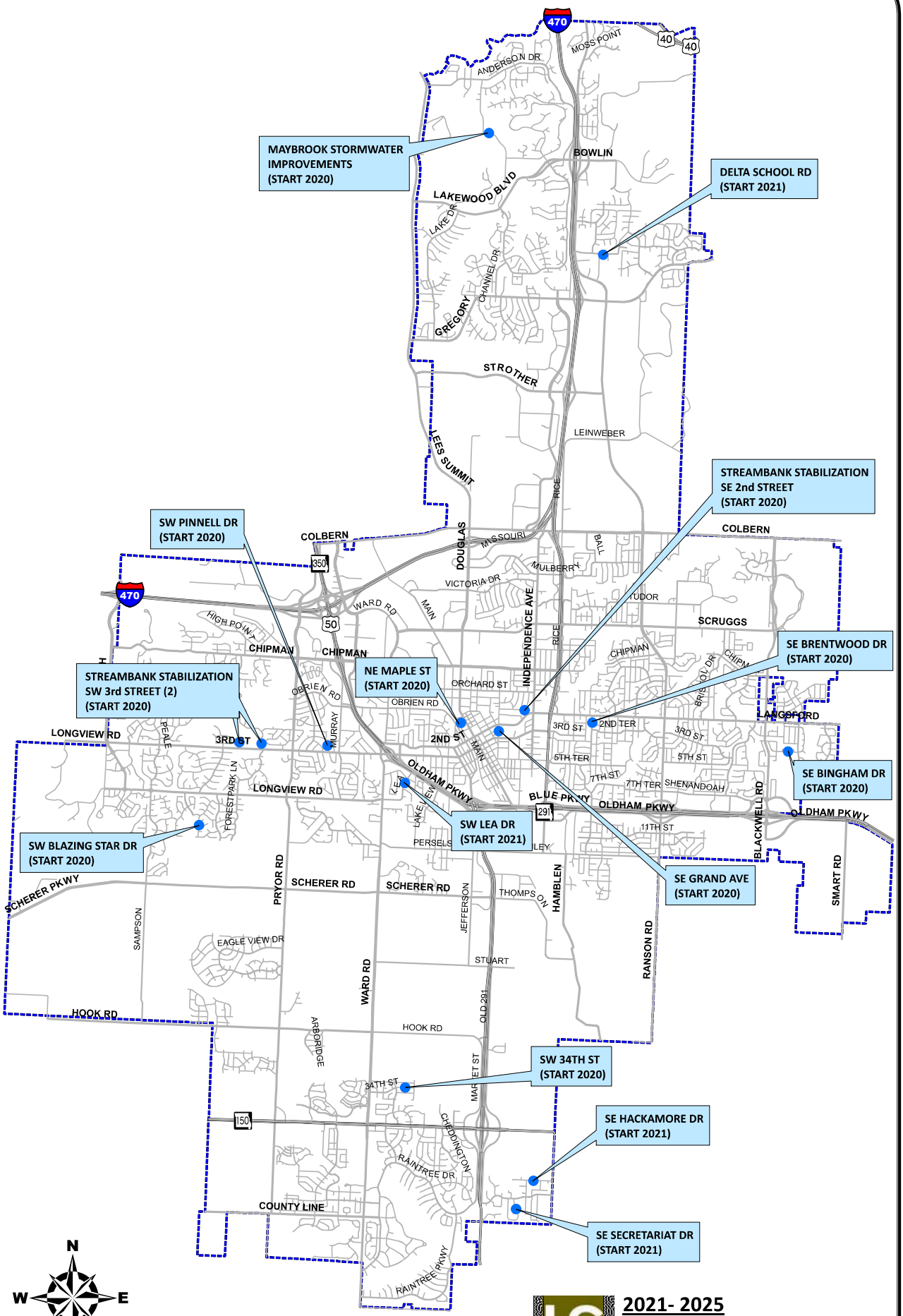
Estimated Schedule	
Planning and Design	July 2019-June 2020
Construction	September 2020-May 2021

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

Estimated Annual Operating and Maintenance
$ 10,000

Capital Improvement Plan 2021-2025

Stormwater Improvements



March 2020

2021- 2025
STORMWATER BOND
CAPITAL IMPROVEMENTS

STORM WATER
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
NE Maybrook Rd Drainage Improvements	102	73	-	-	-		175
Stormwater Infrastructure Improvements (2007)	1,718	-	-	-	-	-	1,718
Stormwater Infrastructure Improvements (2017)	2,000	3,630	1,690	-	-	-	7,320
Streambank Stabilization	1,500	-	-	-	-		1,500
Total	5,320	3,703	1,690	-	-	-	10,713

Project Title: NE Maybrook Road Drainage Improvements

Type: Stormwater	Activity #73232272

Project Description
Install inlets and pipe to collect and convey water to nearby stream.

Project Purpose
A portion of Maybrook Road is regularly inundated, and impassible, during relatively small storm events. Due to the lack of drainage, standing water ponds on the roadway for several days which creates a safety issue for traffic along the road.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources	
CIP Sales Tax Renewal (2017)	$175,000
Total Lifetime Budget	$175,000

Estimated Annual Operating and Maintenance
$3,500

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	$1,718,000
Total Lifetime Budget	$15,800,000

Estimated Annual Operating and Maintenance
No impact on maintenance costs.

Project Title: Stormwater Infrastructure Improvements	
Type: Stormwater, Public Works	Activity #57632272

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

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

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

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

Estimated Annual Operating and Maintenance
No impact on maintenance costs.

Project Title: Streambank Stabilization

Type: Stormwater, Public Works	Activity #54832272

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2019-2020

Funding Sources	
2017 CIP Sales Tax	$1,322,000
MDNR Stormwater Grant	$ 178,000
Total Lifetime Budget	$1,500,000

Estimated Annual Operating and Maintenance
No impact on maintenance costs.

CAPITAL IMPROVEMENT PLAN 2021-2025

WATER UTILITIES
SEWER CONSTRUCTION

SANITARY SEWER
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Big Creek EFHB (East & West Forks)	650	-	-	-	3,000	-	3,650
Bogg's Hollow Meter Structure	400	-	-	-	-	-	400
Cedar Creek Improvements - MH29-220 to MH37-001	3,400	-	-	-	-	-	3,400
Cedar Creek Interceptor - Phase III &IV	1,715	225	-	-	-	-	1,940
Community Sewer Line Replacement	-	500	500	500	500	-	2,000
East Prairie Lee Interceptor Upgrades	-	1,371	-	-	-	-	1,371
Large Diameter Sewer and Force Main Condition Assessments	1,260	200	200	200	-	-	1,860
Large Diameter Sewer and Force Main Repair Program	-	-	-	700	-	-	700
Maybrook Watershed Capacity Improvements	-	-	-	300	-	-	300
Maybrook Watershed Knife Valve Replacement	-	-	-	-	150	-	150
Private I&I Removal Program	-	100	-	500	500	500	1,600
Sanitary Sewer Rehab - Relining, Manhole Rehab, Tap Repairs	-	900	900	750	750	500	3,800
Sewer Main Cathodic Protection	-	-	-	-	300	-	300
Small Main Rehab and Creek Stabilization	-	300	-	-	100	100	500
Small Main Replacement Program	2,000	-	-	-	-	-	2,000
Solar Array Site Improvements	-	254	-	-	-	-	254
Tudor Force Main - Odor Control	1,200	-	-	-	-	-	1,200
Tudor Force Main - Air Relief & Control Valve Update	-	230	-	-	-	-	230
Tudor Pump Station EFHB Rehabilitation	131	-	-	-	-	-	131
Wastewater Master Plan	500	-	-	-	-	-	500
Water Utilities Service Center Improvements	-	100	150	-	-	-	250
Water Utilities Stratigic Plan	200	-	-	-	-	-	200
West Prairie Lee Sewer Capacity Study	-	700	3,000	-	-	-	3,700
TOTAL	11,456	4,880	4,750	2,950	5,300	1,100	30,436

Project Title: Big Creek Interceptor Capacity Improvements

Type: Sanitary Sewer	Activity #42431583

Project Description
This project will provide capacity improvements to convey flows through the Big Creek Interceptor to the newly proposed Middle Big Creek Sewer District Interceptor at the site of the Greenwood Pump Station.

Project Purpose
Sewer Upsizing in lieu of EFHB installation with the replacement of the Greenwood Pump Station with a gravity solution.

Estimated Schedule	
Land Acquisition	2019
Design & Construction	2020-2025

Funding Sources	
Sewer Tap Fund	$3,650,000
Total Lifetime Budget	$3,650,000

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	2017-2021

Funding Sources	
Sewer Tap Fund	$400,000
Total Lifetime Budget	$400,000

Estimated Annual Operating and Maintenance
$1,500

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

Type: Sanitary Sewer	Activity #42531783

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2020-2022

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

Estimated Annual Operating and Maintenance
$1,000

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

Type: Sanitary Sewer	Activity #42631783

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

Project Purpose
The existing sanitary sewer lines do not have capacity to convey the predicted wet-weather flows nor meet the future needs of development in the watershed.

Estimated Schedule	
Design and Right of Way Acquisition	2016-2017
Construction	2018-2020

Funding Sources	
Sewer Construction Fund	$1,510,000
Sewer Tap Fund	$430,000
Total Lifetime Budget	$1,940,000

Estimated Annual Operating and Maintenance
$1,000

Project Title: Community Sewer Line Replacement

Type: Sanitary Sewer	Activity #75831783

Project Description
Replacement of privately owner sewer lines serving multiple properties with a public line.

Project Purpose
Throughout the city there are residential properties where the homes sanitary sewer service is connected to a line that is not owned and maintained by the city. These lines generally do not meet the City's standard for sewer mains and are in poor condition. This program will identify these lines, attempt to acquire easements and work to replace these with public infrastructure.

Estimated Schedule	
Design and Construction	2021-2024

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: East Prairie Lee Interceptor Sewer Upgrades

Type: Sanitary Sewer	Activity #75931783

Project Description
Upgrade of specific section of the East Prairie Lee interceptor sewer in support of development of the land at the top of the drainage basin.

Project Purpose
The city enter into a development agreement with a development at the top of the East Prairie Lee Drainage Basin. This developer was required to provide a sanitary sewer capacity study which identified improvements needed to convey their flow. The cost of these improvements was identified and the money escrowed so that it could be used to make these and other improvements in the basin by the City.

Estimated Schedule	
Design and Construction	2021-2022

Funding Sources	
Sewer Construction Fund	$1,371,000
Total Lifetime Budget	$1,371,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Large Diameter Sewer and Force Main Condition Assessments

Type: Sanitary Sewer	Activity #48331783

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

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

Estimated Schedule	
Inspection and assessment	2018-2023

Funding Sources	
Sewer Construction Fund	$1,860,000
Total Lifetime Budget	$1,890,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Large Diameter Sewer and Force Main Repair Program

Type: Sanitary Sewer	Activity #71931783

Project Description
Based on condition assessments findings fund repair projects 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 performed a condition assessment on these lines and this project funds the repairs identified in those assessments.

Estimated Schedule	
Repair and Maintenance	2023-2024

Funding Sources	
Sewer Construction Fund	$700,000
Total Lifetime Budget	$700,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Maybrook Knife Valve Replacement

Type: Sanitary Sewer	Activity #76131783

Project Description
Replacement of the knife valve on the sewers under Lakewood Lake.

Project Purpose
The existing knife valve at the dam at Lakewood Lake is in need of replacement. This project will complete that task.

Estimated Schedule	
Design and Construction	2024-2025

Funding Sources	
Sewer Construction Fund	$150,000
Total Lifetime Budget	$150,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Maybrook Watershed Capacity Improvements

Type: Sanitary Sewer	Activity #76031783

Project Description
Upgrade of specific sections of the Maybrook interceptor sewer in support of development of the land within the drainage basin.

Project Purpose
The City has been collecting tap fees to provide additional capacity in the Maybrook Drainage basin. These improvements will use those funds on specific pipe sections for capacity improvements.

Estimated Schedule	
Design and Construction	2023-2024

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

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Private I&I Removal Program

Type: Sanitary Sewer	Activity #76231783

Project Description
Removal of Inflow and Infiltration to the City's Sanitary Sewer System from private sources.

Project Purpose
The sanitary sewer system is adversely affected by inflow and infiltration from illicit and illegal connection created through the years on private property. This program is designed to provide property owners a way to fix these issues with their homes to remove these flows from the City's sanitary sewer system.

Estimated Schedule	
Plan Creation	2021-2025

Funding Sources	
Sewer Construction Fund	$1,600,000
Total Lifetime Budget	$1,600,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

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

Type: Sanitary Sewer	Activity #19131783

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

Project Purpose
Lining of sanitary sewer pipes will reduce the I&I and the potential for blockages. Rehabilitation of 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	2021-2025

Funding Sources	
Sewer Construction Fund	$3,800,000
Total Lifetime Budget	$3,800,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Sewer Main Cathodic Protection

Type: Water Utilities	Activity #82931783

Project Description
Project Consists of installing cathodic protection in the form of sacrificial anodes on existing metalic pipes in the sewer system.

Project Purpose
The condition assessment program has identified that the corrosive soils found in and around Lee's Summit is having a detrimental corrosive effect on the sewer systems metalic pipes. These pipes require protection from this corrosion and the simplest form of this protection on existing facilities is Cathodic Protection.

Estimated Schedule	
Design	2024
Construction	2025-2025

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

Estimated Annual Operating and Maintenance
$0

Project Title: Sewer Main Rehab and Creek Stabilization

Type: Sanitary Sewer	Activity #48531783

Project Description
Protection of sewer infrastructure impacted at stream bed crossings.

Project Purpose
Across the city sanitary sewers cross streams in order to reach outfall locations. Occasionally these streams erode and threaten to impact the sanitary sewers. This project will adjust the sewer location or stream location depending on a number of factors to protect these existing city assets.

Estimated Schedule	
Plan Creation	2021-2025

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

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 – 2022
Construction	2016 - 2022

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: Solar Array Site Improvements

Type: Sanitary Sewer	Activity #76331783

Project Description
Installation of fencing, bored road crossings and removal of trees.

Project Purpose
This work is in support of the installation of the the solar arrays to be located a various remote water facilities across the city.

Estimated Schedule	
Design and Construction	2021

Funding Sources	
Sewer Construction Fund	$254,000
Total Lifetime Budget	$254,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Tudor Force Main – Odor Control

Type: Sanitary Sewer	Activity #42831583

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2019-2020

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

Estimated Annual Operating and Maintenance
$5,000

Project Title: Tudor Road Pump Station Force Main Air Relief and Control Valve Update	
Type: Sanitary Sewer	Activity #76431783

Project Description
Replacement and retrofitting of force main air relief and control valves.

Project Purpose
The Tudor Road Pump Station has a large diameter force main that conveys its flows to gravity sewers for disposition to the treatment facility. This main utilizes air relief valves at high points to help maintain system efficiency. These have been modified over time and need to be reviewed and replaced.

Estimated Schedule	
Plan Creation	2021

Funding Sources	
Sewer Construction Fund	$230,000
Total Lifetime Budget	$230,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

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	2018-2021

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	2020-2021

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

Estimated Annual Operating and Maintenance

Project Title: Water Utilities Service Center Parking Expansion and Improvements

Type: Sanitary Sewer	Activity #76531783

Project Description
Expansion of the facilities parking lots as planned in the original design.

Project Purpose
The Water Utilities Service Center was planned for expansion for growth with the Utility and to accomodate a variety of uses. Current Staffing and equipment levels require further expansion of the site parking for employee vehicles as well as city equipment.

Estimated Schedule	
Plan Creation	2021-2022

Funding Sources	
Sewer Construction Fund	$250,000
Total Lifetime Budget	$250,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Utilities Strategic Plan	
Type: Sanitary Sewer	Activity #48431783

Project Description
Update Existing Strategic Plan

Project Purpose
The Utility adopted a Strategic Plan in 2011. This plan is to be updated periodically to provide ongoing guidance for the Utilities near term and long term objectives.

Estimated Schedule	
Plan Creation	2021-2022

Funding Sources	
Sewer Construction Fund	$100,000
Water Construction Fund	$100,000
Total Lifetime Budget	$200,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: West Prairie Lee Sewer Capacity Study, Upgrade Design and Construction

Type: Sanitary Sewer	Activity #72031783

Project Description
This sanitary sewer project consists of modeling of the upper reaches of areas to the west of Highway 291 to identify capacity issues in the existing system that may affect redevelopment in the downtown core.

Project Purpose
Identify improvements that will increase the conveyance of sewer to meet current and future needs within the West Prairie Lee watershed as redevelopment occurs.

Estimated Schedule	
Study	2021
Design & Construction	2022-2024

Funding Sources	
Sewer Construction Fund	$3,700,000
Total Lifetime Budget	$3,700,000

Estimated Annual Operating and Maintenance
NA

CAPITAL IMPROVEMENT PLAN 2021-2025

WATER UTILITIES
WATER IMPROVEMENTS

WATER
(Costs in $1,000s)

Project	Prior Yrs.	2021	2022	2023	2024	2025	Total
Harris Park Standpipe - Recoating	-	287	-	250	-	-	537
Hook Tower - Recoating	409	425	-	-	-	-	834
Interconnection Projects – Tri County Water Authority	200	-	-	-	-	-	200
Ranson Tower - Recoating	841	-	-	-	-	-	841
Scherer Tower - Recoating	417	-	382	-	-	-	799
SE System Improvements Phase I	-	-	-	-	247	1,781	2,028
South Terminal Discharge Main	1,812	-	-	-	-	-	1,812
Transmission Main Condition Assessment	675	-	850	2,000	-	-	3,525
Water Main – Lakewood Way – Ridgewood to Bowlin Rd	-	-	400	-	-	-	400
Langsford & Milton Thompson Upsize	-	-	-	450	-	-	450
Water Main – Samson Road Existing 12” to Hook	682	-	-	-	-	-	682
Water Main – View High Longview Golf to Chipman Upsize	340	-	-	-	-	-	340
Water Main Rehab FY20	3,386	-	-	-	-	-	3,386
Water Main Rehab FY21	50	4,481	-	-	-	-	4,531
Water Main Rehab FY22	-	-	4,952	-	-	-	4,952
Water Main Rehab FY23	-	-	-	4,265	-	-	4,265
Water Main Rehab FY24	-	-	-	-	5,465	-	5,465
Water Main Rehab FY25	-	-	-	-	-	5,610	5,610
Water Master Plan Update	-	250	-	-	-	-	250
Water Meter Replacement	2,000	2,840	-	-	-	-	4,840
Water Operations Site Remediation and Genset Reconditioning	400	-	-	-	-	-	400
Woods Chapel Tower - Recoating	333	-	382	-	-	-	715
Cathodic Protection Pilot Program	500	500	500	500	500	500	3,000
TOTAL	12,045	8,783	7,466	7,465	6,212	7,891	49,862

Project Title: Cathodic Protection Program

Type: Water Utilities	Activity #57831683

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

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

Estimated Schedule	
Design	2021
Construction	2021-2025

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

Estimated Annual Operating and Maintenance
$0

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	2023
Construction	2023-2024

Funding Sources	
Water ERP	$537,000
Total Lifetime Budget	$537,000

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 separating from the undercoat. The tower was put into service in 2004 and is an integral part of the distribution system. The tower provides water storage for peak demands and emergencies.

Estimated Schedule	
Design	2017
Construction	2017-2021

Funding Sources	
Water ERP	$834,000
Total Lifetime Budget	$834,000

Estimated Annual Operating and Maintenance
$0

Project Title: Interconnection Projects – Tri County Water Authority

Type: Water Utilities	Activity #48731483

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020-2021

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

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Langsford and Milton Thompson Water Main Upsize

Type: Water Utilities	Activity #76731483

Project Description
Project consist of connecting to an existing 12" main on Langsford Road and extending the 12" main down Milton Thompson Road where it will create a loop to help support our customers along and south of 50 Highway.

Project Purpose
This work is in support of development in the eastern portion of Lee's Summit and will provide water for the development of that area.

Estimated Schedule	
Design	2023
Construction	2024-2025

Funding Sources	
Water Tap	$425,000
Total Lifetime Budget	$425,000

Estimated Annual Operating and Maintenance
$0

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 integral part of the distribution system and provides water storage for peak summer demands and emergencies.

Estimated Schedule	
Design	2017
Construction	2019-2021

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

Estimated Annual Operating and Maintenance
$0

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 integral part of the distribution system. The tower provides water storage for peak summer demands and emergencies.

Estimated Schedule	
Design	2018
Construction	2019-2022

Funding Sources	
Water ERP	$799,000
Total Lifetime Budget	$799,000

Estimated Annual Operating and Maintenance
$0

Project Title: SE System Improvements Phase I Hamblen Road to Hook Extended

Type: Water Utilities	Activity #76631683

Project Description
Project consists of installing transmission main along the existing Hamblen Road to where Hook Road will eventually intersect it.

Project Purpose
This work is in support of development in the Southeast portion of Lee's Summit and will provide water for the development of that area.

Estimated Schedule	
Design	2024
Construction	2025-2026

Funding Sources	
Water Tap	$2,028,000
Total Lifetime Budget	$2,500,000

Estimated Annual Operating and Maintenance
$0

Project Title: South Terminal Discharge Main

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.

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020-2022

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

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Transmission Main Condition Assessment

Type: Water Utilities	Activity #48831683

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

Project Purpose
The water system 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

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	2022-2023

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

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018-2020

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

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

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

Type: Water Utilities	Activity #49231483

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	2018-2020

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 FY20

Type: Water Utilities	Activity #34331683

Project Description
Rehablilitation of water mains on: - Quik Trip and Squeaky Clean Carwash - 5th Ter Melody to Bayberry - 7th Pl - Brentwood South of Langsford - 7th Terrace – Vista west to the 8inch line - Briarcroft -Bayberry and Woodway Pines

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

Estimated Schedule	
Design and Right of Way Acquisition	2020
Construction	2020-2021

Funding Sources	
Water Construction	$3,386,000
Total Lifetime Budget	$3,386,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY21

Type: Water Utilities	Activity #43831683

Project Description
Rehablilitation of water mains on: - Lake Lee's Summit lots 293-630 Phase1 - Basswood - Bramble Trail - Timberlake Estates - Lake Lee's Summit Phase 3

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

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

Funding Sources	
Water Construction	$4,531,000
Total Lifetime Budget	$4,531,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY22

Type: Water Utilities	Activity #49631683

Project Description
Rehablilitation of water mains on: - Highway Ln, Peggy, 1st and McClendon - SW 1st Noel and Alderson - Yost - Obrien Donovan to Monroe and Main Monroe to Maple - Vista Del Verde – Phase 1 - Banner, Ridgeview, Rice Chipman and M291 - SE 5th Terrace - Windsboro Dr, Nottingham to Williamsburg - Pheasant Run Appartments - Backyards between 4th Ter and Blue Parkway off Walnut

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

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

Funding Sources	
Water Construction	$4,952,000
Total Lifetime Budget	$4,952,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY23	
Type: Water Utilities	Activity #72131683

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2023
Construction	2023-2024

Funding Sources	
Water Construction	$4,265,000
Total Lifetime Budget	$4,265,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY24

Type: Water Utilities	Activity #72231683

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2024
Construction	2024-2025

Funding Sources	
Water Construction	$5,465,000
Total Lifetime Budget	$5,465,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY25

Type: Water Utilities	Activity #76831683

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2024
Construction	2024-2025

Funding Sources	
Water Construction	$5,610,000
Total Lifetime Budget	$5,610,000

Estimated Annual Operating and Maintenance
No additional operating/maintenance costs

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	2021-2022

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	$4,840,000
Total Lifetime Budget	$4,840,000

Estimated Annual Operating and Maintenance
$70,000

Project Title: Water Operations Site Remediation and Genset Reconditioning

Type: Water Utilities	Activity #49431883

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

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

Estimated Schedule	
Design and Right of Way Acquisition	2018
Construction	2018-2020

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 integral part of the distribution system. The tower provides water storage for peak summer demands and emergencies.

Estimated Schedule	
Design	2018
Construction	2018-2022

Funding Sources	
Water ERP	$715,000
Total Lifetime Budget	$715,000

Estimated Annual Operating and Maintenance
$0