Project # CI-21-0001

Project Name Burroughs Creek Trail Extension downtown

Type Improvement

**Department** Citizen Input

**Useful Life** 

Contact

Category Unassigned

Score 36



#### Description

Construct a 10 foot wide by 6 inch concrete trail from the north terminus of the Burroughs Creek Trail at 11th St. to join an existing side trail at the 9 Del Lofts. Purchase 900 E. 11th St. as trail right-of-way, and to become part of Hobbs Park as being the #1 priority in the Burroughs Creek Corridor Plan. The trail will extend north from 11th St. through this proposed Hobbs Park Annex, continue north in an easement along the Allen Press property line, continue northwest along the north edge of the Allen Press parking lot to the existing 10 foot wide side trail along Delaware St. An easement agreement is needed from Allen Press. Another easement behind the quonset hut can take it from Delaware and 8th St. to the Santa Fe depot. See attached letter and map.

#### Justification

Since BNSF has rejected trail alignments along their tracks, MSO is looking at options. A so-called "eastern alignment" would go northeast to the Kansas River and double back to downtown. Eastside workforce residents, both bicyclists and electric wheelchair users, need a more direct commuter route downtown rather than a scenic river route at twice the length. The Burroughs Creek Corridor Plan designates 900 E. 11th St. as the #1 priority acquisition by the City, which also is a longstanding goal of East Lawrence Neighborhood. This proposal will invest more in ROW purchase and less in construction costs than other options.

#### Additional Comments:

900 East 11th St. is not listed for sale, so \$500,000 is an estimated price and subject to negotiation. Douglas County has appraised it at \$189,560. Allen Press may grant a use easement or a long term lease. Quonset Hut LLC at 620 East 8th St. may want an outright easement purchase along their north property line. It would be wise to negotiate all options.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		35,000					35,000
Land Acquisition		500,000					500,000
Construction/Maintenar	nce		204,000				204,000
	Total	535,000	204,000				739,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		535,000	204,000				739,000
	Total	535,000	204,000				739,000

### Budget Impact/Other

The 2019 Capital Improvement Plan budget item #PR2121CIP has \$600,000 allocated to this project, and KDOT has awarded a \$480,000 Transportation Alternatives grant to the City for this project (with a 20% local match).

<b>Budget Items</b>		2021	2022	2023	2024	2025	Total
Maintenance		1,000	1,000	1,000	1,000	1,000	5,000
	Total	1,000	1,000	1,000	1,000	1,000	5,000

Project # CI-21-0002

**Project Name** Green Pavement Intersection Crossings

Type Improvement

**Department** Citizen Input

Useful Life

Category Unassigned

Score 19

Contact

### Description

Addition of green pavement markings at all locations where 8, 9, or 10 foot wide bikeways cross streets and major commercial driveways. There are at least 151 conflict points where motor vehicles turn across 8, 9, or 10 foot wide bikeways. The green pavement markings shall be Methyl methacrylate (MMA) based material as previously used on Massachusetts St. The markings shall be 2 foot X 10 foot bars, typically 6 feet on center, priced at \$15/square foot. Projects could be phased in order of traffic volume and number of conflict points, such as 6th St, Kasold Dr, Peterson Rd, Clinton Pkwy, and on.

#### Justification

Safety of micro-mobility users is highly contingent on their visibility. Green pavement, which is present 24/7, is one of the industry best practices for visibility. The greatest incidence of collision results from turning motor vehicles. There are at least 151 conflict points where motor vehicles turn across 8, 9, or 10 foot wide bikeways.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		382,000					382,000
	Total	382,000					382,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		382,000					382,000
	Total	382,000					382,000

#### **Budget Impact/Other**

MMA is priced as materials and labor. There is a range of prices from \$9 to \$27 per square foot, so the actual price would result from a bid process.

Projects could be phased in order of greater traffic volume and number of conflict points, such as 6th St. (\$48,900), Kasold Dr. (\$44,700), Peterson Rd. (\$28,200), and Clinton Pkwy (N. \$46,800 and S. \$38,100).

City staff added anticipated budget impact figures below to account for future maintenance and replacement costs.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance				2,000	2,000	4,000
	Total			2,000	2,000	4,000

Project # CI-21-0003

Project Name Longleaf Division Street Repair & Replacement

Type Improvement

**Department** Citizen Input

**Useful Life** 

Contact

Category Unassigned

Score 19

#### Description

On behalf of the Longleaf Townhomes Association and the Longleaf Home Association, we are requesting the completion of new curbs, gutters, and street surface. Less than one-half of a block was begun late last fall. There was no indication the remainder of Longleaf would be done any time in the near future.

#### Justification

Whereas many in this development were a part of the original construction in 1999 - 2001, nothing has been done to maintain the street surface except for the fill of cracks with tar and the occasional fill of potholes (more often the breaking away of the gutters) with asphalt. Time, winter weather, and poor concrete in 1999 have created a poor street and curb situation. We have seen our property values increase but we are worried with a deteriorating street, curb, and gutter - our property values could suffer. Many of the neighborhoods on Harvard Street have been reconstructed. We hope the City of Lawrence would find value in this request.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		298,000					298,000
	Total	298,000					298,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		298,000					298,000
	Total	298,000					298,000

#### **Budget Impact/Other**

This project, if approved, would have a significant cost. It is our belief this investment by the City of Lawrence would enhance our properties both in value and in aesthetics. We realize the City of Lawrence provided for us approximately 5 years ago new intersections as the three original were broken by poor concrete and the freeze/thaw cycling. If this project was approved, it would affect Longleaf Drive, Longleaf Circle, Redleaf Place, and Goldleaf Place. One of our association members is an engineer. His assistance in providing costs estimates was/is invaluable.

City staff estimate there would be no impact to the operating budget for the durations of the CIP if the project were completed. Future maintenance would need to be completed once the repair has reached its useful life.

Project # CI-21-0004

**Project Name** 940 New Hampshire Street

Type Improvement

**Department** Citizen Input

Useful Life Contact

Category Unassigned

Score 28

### Description

Capital improvements to the Lawrence Arts Center Building at 940 New Hampshire Street. The building is city-owned, and leased to the non-profit. The lease includes maintenance of the building structure and HVAC systems.

Items within the project and their associated costs could be scheduled over 4 years if needed to lessen impact on city budget. Total project cost is less than 1% of the city's annual budget.

Fire treated Theatre Curtains: \$10,000

Kitchen HVAC: \$6,000

Set Shop Vent and Dust Collection System: \$3,000

LED lights: \$20,000 Lobby Lighting: \$2,000 Orchestra Pit Cover: \$33,292

SS300 AUTO SCRUBBER 20" PAD: \$6,250
3 Water Cooler & Bottle Filling Stations: \$4,000
Black Box & Lower Lobby floor & repairs \$30,000

Jewelry Studio updates & repair: \$40,000 Main Lobby Ceiling Repair: \$10,000

Total: \$164,542

maintnenance 80,000 supplies 84,542

#### Justification

The building at 940 New Hampshire Street is now 20+ years old, and has shown wear in the areas listed. In addition, many systems in the building have become outdated. Improvements include internal ceiling repairs needed due to a leaky roof, and updates that affect current safety, environmental, and energy standards such as fireproofing, floor repairs, lighting, HVAC and ventilation systems.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		165,000					165,000
	Total	165,000					165,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		165,000					165,000
	Total	165,000					165,000

#### **Budget Impact/Other**

Items within the project and their associated costs could be scheduled over 4 years if needed to lessen impact on city budget. Total project cost is less than 1% of the city's annual budget.

City staff estimate there would be no impact to the operating budget for the durations of the CIP if the project were completed.

# Proposed Capital Improvement Plan

2021 thru 2025

City of Lawrence, Kansas

Project # CI-22-0001

Project Name Naismith: 19th-23rd with Bicycle Track

Type Improvement

**Department** Citizen Input

**Useful Life** 

Contact

Category Unassigned

Score 36

#### Description

Reconstruct Naismith Dr., 19th to 23rd, with four motor vehicle lanes each 12 feet wide, by extending curb lines into median. Construct bus turnouts with shelters at 21st St. on east and west sides. Reconstruct sidewalk on west side to 5 feet. Construct a 10 foot wide bicycle track on east side. Purchase ROW at NE corner of 20th St. and others if needed. Relocate utilities as needed.

#### Justification

Motor vehicle pavement has failed. Lanes are dangerously narrow for use by buses and bicyclists. Increased capacity needed to accommodate increased traffic from K.U. Central District, which K.U. considers their "front door". K.U. traffic should be directed to 23rd St. and not 19th St. eastbound. The 2019 Lawrence Bikes Plan has designated this corridor as a Priority Network Bikeway. The 10 foot wide bicycle track will connect with the 10 foot wide Naismith Valley Trail south of 23rd St.

This proposal would coordinate and synchronize the reconstruction of Naismith motor vehicle lanes with construction of ped/bike/transit facilities.

This proposal would be a substitute for lane reduction under PW23E02CIP, and a substitute for a pre-emptive sidewalk on the east side under CIP# MS-20-8000 to MS-24-8000.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design			50,000				50,000
Land Acquisition			50,000				50,000
	Total		100,000				100,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund			100,000				100,000
	Total		100,000				100,000

#### **Budget Impact/Other**

Combined revenue streams will be \$330,000 street maintenance funds (PW23E02CIP) for widening the street, \$30,000 transit funds (T102) for the bus turn-outs, \$150,000 Sidewalk Mitigation funds (PW19E5CIP) for the west side sidewalk, and \$300,000 Bike/Ped Improvement funds (CI09CIP) for the bicycle track, for a total of \$810,000.

\$326,000 KDOT Access, Innovation & Collaboration grant will cover part of the costs for bus turnouts and shelters, sidewalk, and bicycle track. Local 10% match from Bike/Ped Improvement Project CIP# MS-20-8000 to MS-24-8000.

Project # CI-22-0002

Project Name Citizen Request Wireless gate at 19th-0'Connell

Type Improvement

**Department** Citizen Input

Useful Life

Contact

Category Unassigned

Score 2

#### Description

Install a motorized gate at 19th St. and O Connell Rd., including utility supplied power, solar supplied power, and battery backup. The gate shall open for programmable time lengths, initiated only by predetermined signals from all emergency and transit vehicles. Several technologies are available such as: infrared transponders, optical transponders. RFID transponders, or siren activated receivers. If the chosen system uses transponders, install units in each of City fire

engines, police cruisers, ambulances, and buses. Selection of a preferred technology shall be guided by research into the greatest reliability and the least cost, reliability being the more important.

#### Justification

The 19th Street Neighborhoods Coalition finds this method of emergency access into Venture Business Park via 19th St. to not only meet the requirements of emergency responders and buses to have a secondary and time-saving point of entry in addition to coming from 23rd St., but also to meet the neighborhoods need and City policy objectives for keeping traffic volume and speeds low along all of 19th St.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design		500				500
Construction/Maintenance		13,500				13,500
Other		1,000				1,000
Total		15,000				15.000

<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund		15,000				15,000
T	otal	15,000				15,000

#### **Budget Impact/Other**

Staff have added anticipated maintenance costs related to the request.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			1,000	1,000	1,000	3,000
•	Total		1,000	1,000	1,000	3,000

Project # CI-23-0001

Project Name Naismith: 19th-23rd with Bicycle Track

Type Improvement

**Department** Citizen Input

**Useful Life** 

Category Unassigned

Score 36

Contact

#### Description

Reconstruct Naismith Dr., 19th to 23rd, with four motor vehicle lanes each 12 feet wide, by extending curb lines into median. Construct bus turnouts with shelters at 21st St. on east and west sides. Reconstruct sidewalk on west side to 5 feet. Construct a 10 foot wide bicycle track on east side. Purchase ROW at NE corner of 20th St. and others if needed. Relocate utilities as needed.

#### Justification

Motor vehicle pavement has failed. Lanes are dangerously narrow for use by buses and bicyclists. Increased capacity needed to accommodate increased traffic from K.U. Central District, which K.U. considers their "front door". K.U. traffic should be directed to 23rd St. and not 19th St. eastbound. The 2019 Lawrence Bikes Plan has designated this corridor as a Priority Network Bikeway. The 10 foot wide bicycle track will connect with the 10 foot wide Naismith Valley Trail south of 23rd St.

This proposal would coordinate and synchronize the reconstruction of Naismith motor vehicle lanes with construction of ped/bike/transit facilities.

This proposal would be a substitute for lane reduction under PW23E02CIP, and a substitute for a pre-emptive sidewalk on the east side under CIP# MS-20-8000 to MS-24-8000.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance				710,000			710,000
	Total			710,000			710,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund				710,000			710,000
Total		710,000			710,000		

#### **Budget Impact/Other**

Combined revenue streams will be \$330,000 street maintenance funds (PW23E02CIP) for widening the street, \$30,000 transit funds (T102) for the bus turn-outs, \$150,000 Sidewalk Mitigation funds (PW19E5CIP) for the west side sidewalk, and \$300,000 Bike/Ped Improvement funds (CI09CIP) for the bicycle track, for a total of \$810,000.

\$326,000 KDOT Access, Innovation & Collaboration grant will cover part of the costs for bus turnouts and shelters, sidewalk, and bicycle track. Local 10% match from Bike/Ped Improvement Project CIP# MS-20-8000 to MS-24-8000.

<b>Budget Items</b>		2021	2022	2023	2024	2025	Total
Maintenance		1,000	1,000	1,000	1,000	1,000	5,000
	Total	1,000	1,000	1,000	1,000	1,000	5,000

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # CM-23-1905

**Project Name** City Hall Reconfiguration

Type Improvement

Department Facility Repair & Maintenance

Contact City Manager

Useful Life 20years
Category Buildings

Score 35

#### Description

The City Hall Reconfiguration Project is a 5 year phased project that addresses the needs for more space in City Hall. The project addresses the following: reconfiguration of the first floor to accommodate Utility Billing once Planning has moved to their new space in Riverfront; reconfiguration of every floor to maximize office, workstations, and storage spaces; address ADA compliance issues; address security issues for City Hall employees; and any potential projects needed during the course of the 5-year master plan.

#### Justification

Reconfiguration of the current spaces within City Hall will provide the following benefits: recapture unused space for various department needs (storage, growth, conference rooms, etc.); reorganization of space for similar type of job functions will capture efficiencies and provide better customer service to our citizens; accommodate citizen's needs for access to services (ADA compliant areas, service desk for payments and for job applications, etc.); and, provide better security for City Hall's employees.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenan	ice		2,043,000			2,043,000
	Total		2,043,000			2,043,000
Funding Sources	2021	2022	2023	2024	2025	Total
Capital Projects Fund			2,043,000			2,043,000
Total			2,043,000			

#### **Budget Impact/Other**

There is a minimal impact to the operating budget.

Project # CM-24-1905

**Project Name** City Hall Reconfiguration

Type Improvement

Department Facility Repair & Maintenance

Contact City Manager

Useful Life 20 years
Category Buildings
Score 35

#### Description

The City Hall Reconfiguration Project is a 5 year phased project that addresses the needs for more space in City Hall. The project addresses the following: reconfiguration of the first floor to accommodate Utility Billing once Planning has moved to their new space in Riverfront; reconfiguration of every floor to maximize office, workstations, and storage spaces; address ADA compliance issues; address security issues for City Hall employees; and any potential projects needed during the course of the 5-year master plan.

#### Justification

Reconfiguration of the current spaces within City Hall will provide the following benefits: recapture unused space for various department needs (storage, growth, conference rooms, etc.); reorganization of space for similar type of job functions will capture efficiencies and provide better customer service to our citizens; accommodate citizen's needs for access to services (ADA compliant areas, service desk for payments and for job applications, etc.); and, provide better security for City Hall's employees.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance					1,030,000		1,030,000
	Total				1,030,000		1,030,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					1,030,000		1,030,000
Total					1,030,000		1,030,000

#### **Budget Impact/Other**

There is a minimal impact to the budget.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Supplies/Materials				1,000		1,000
Т	otal			1,000		1,000

Project # CM-25-1905

**Project Name** City Hall Reconfiguration

Type Improvement

Department Facility Repair & Maintenance

Contact City Manager

Useful Life 20 years
Category Buildings

Score 35

### Description

The City Hall Reconfiguration Project is a 5 year phased project that addresses the needs for more space in City Hall. The project addresses the following: reconfiguration of the first floor to accommodate Utility Billing once Planning has moved to their new space in Riverfront; reconfiguration of every floor to maximize office, workstations, and storage spaces; address ADA compliance issues; address security issues for City Hall employees; and any potential projects needed during the course of the 5-year master plan.

#### Justification

Reconfiguration of the current spaces within City Hall will provide the following benefits: recapture unused space for various department needs (storage, growth, conference rooms, etc.); reorganization of space for similar type of job functions will capture efficiencies and provide better customer service to our citizens; accommodate citizen's needs for access to services (ADA compliant areas, service desk for payments and for job applications, etc.); and, provide better security for City Hall's employees.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance						1,581,000	1,581,000
	Total					1,581,000	1,581,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						1,581,000	1,581,000
	Total					1,581,000	1,581,000

#### **Budget Impact/Other**

There is a minimal impact to the operating budget.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Supplies/Materials					1,000	1,000
7	Total .				1,000	1,000

#### 2021 thru 2025

# City of Lawrence, Kansas

Project # PR-22-2426

**Project Name** Outdoor Aquatic Center - Pool Slide Replacements

Type Improvement Useful Life 15 years

**Department** Facility Repair & Maintenance

Contact PR Director

Category Park Improvements

Score 45



#### Description

The original design of the pool had two slides coming into the plunge pool. One slide was removed a number of years ago due to poor condition, and the remaining slide has been repaired many times over the past few years.

This proposal would replace both slides

Critical Success Factor:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods

#### Justification

The current slide was installed in 1998 and has outlived its expected use. The slide has been repaired many times in the past few years.

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan (plan completed in 2017).

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	Construction/Maintenance		130,000				130,000
	Total	otal130,000					
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			130,000				130,000
	Total		130,000				130,000

#### Budget Impact/Other

Project # PR-23-1930

Project Name Community Building - Security / ADA Improvements

Type Improvement
Useful Life 20years
Category Buildings

Score 66

**Department** Facility Repair & Maintenance

Contact PR Director



#### Description

The Community Building is a multi-use recreation facility in Downtown Lawrence. This Historic Structure was originally constructed in the 1940's as a National Guard Armory. It has seen a number of significant renovations bringing it to its current level of functionality. However the one item never addressed is security of the facility. At the present time, there is an elevator entrance at the back of the building, providing unrestricted access to the lower level of the building and the gym. Building staff are located at the north entrance of the building and have no control of who enters the building from the elevator at the back of the building. This layout also limits facility use tracking.

There are also ADA access concerns for the cardio area and the upper level dance studio.

Modern recreation centers provide one secured access point that can be monitored by building staff for control of who enters the building. This renovation project would provide this type of building control.

#### Justification

Areas of the building are not ADA compliant

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods Commitment to Core Services

Expenditures	2021	2022	2023	2024	2025	Total	
Construction/Maintenance	)	900,000					
	Total		900,000			900,000	
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total	
Capital Projects Fund			900,000			900,000	
•	Total		900,000			900,000	

#### **Budget Impact/Other**

#### 2021 thru 2025

# City of Lawrence, Kansas

Project # PR-23-2333

Project Name Cemetery Maintenance Shop - Replacement

Type Improvement
Useful Life 30 years
Category Buildings

Score 38

**Department** Facility Repair & Maintenance

Contact PR Director



#### Description

The maintenance buildings at Oak Hill Cemetery and Memorial Park Cemetery are in poor condition and need to be replaced. This project would remove all existing facilities and build a consolidated maintenance and equipment storage facility at Memorial Park Cemetery.

#### Justification

The current maintenance shop facilities are very old and not adequate for the department's needs.

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods Commitment to Core Services

Expenditures	2021	2022	2023	2024	2025	Total	
Construction/Maintenand	ce	350,000					
	Total		350,000			350,000	
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total	
Capital Projects Fund		350,000					
Total		350,000				350,000	

#### **Budget Impact/Other**

Project # PR-23-2400

Project Name Outdoor Aquatic Center - Play Feature Renovation

**Type** Improvement **Useful Life** 30 years

**Department** Facility Repair & Maintenance

Contact PR Director

Category Park Improvements

Score 41



#### Description

The Lawrence Outdoor Aquatic Center was last renovated in 1996. The pool continues to be a valued community asset during the hot summer months. In 2023 the pool will have been in service for 27 years. This project proposed an upgrade of some of the original features by removing diving boards and installing modern slides and spray features to update the appearance and use of the facility.

#### Note:

A more complete renovation of the Aquatic Center is proposed as a future CIP project. If the complete renovation is funded, this project would not be needed.

#### Justification

Maintaining existing infrastructure

Critical Success Factor:

Innovative Infrastructure and Asset Management

Safe, Healthy and Welcoming Neighborhoods

Expenditures	2021	2022	2023	2024	2025	Total	
Construction/Maintenanc	е		250,000			250,000	
	Total	Total 250,000					
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total	
Capital Projects Fund			250,000			250,000	
Total		250,000				250,000	

#### **Budget Impact/Other**

#### 2021 thru 2025

# City of Lawrence, Kansas

Project # PR-24-2230

Score 44

**Project Name** Sports Pavilion- Install Acoustical Panels in Gyms

Type Improvement
Useful Life 50 years
Category Buildings

**Department** Facility Repair & Maintenance **Contact** PR Director



#### Description

Install acoustical panels in the gymnasiums at Sports Pavilion Lawrence help reduce high decibel sound from the gym activities. This is a patron and staff comfort issue within the entire facility.

The sound decibels have been measured at more than 90 on the mezzanine at SPL. This makes it hard to hear throughout the entire building.

#### Justification

Critical Success Factors:

Innovative Infrastructure and Asset Management

Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenar	nce				100,000		100,000
	Total				100,000		100,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					100,000		100,000
Total				100,000		100,000	

#### **Budget Impact/Other**

Project # PR-25-8001

**Project Name** East Lawrence Center Gymnastics Expansion

Type Improvement
Useful Life 30 years
Category Buildings
Score 34

**Department** Facility Repair & Maintenance **Contact** PR Director



#### Description

The gymnastics room at the East Lawrence Recreation Center is a highly-used and programmed space. Since the expansion of the program in 2014, additional space (including a foam pit) is needed to further add and improve tumbling programs, birthday party opportunities and significantly improve revenues.

#### Justification

Expand and improve existing facilities

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	се				600,000	600,000
	Total				600,000	600,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund					600,000	600,000
	Total				600,000	600,000

#### **Budget Impact/Other**

This facility expansion will require additional maintenance to operate each year. Estimated staffing, utilities and materials cost would be \$6,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					6,000	6,000
	Total				6,000	6,000

Project # PR-25-8002

**Project Name** Holcom Park Recreation Center Expansion

Type Improvement
Useful Life 30 years

**Department** Facility Repair & Maintenance

Contact PR Director

Category Park Improvements

Score 35



#### Description

The Holcom Park Recreation was built in 1988. This center is a high-use facility and needs to be expanded to meet current usage. This project would add a multi-purpose room for community meetings and programmed classes, expand the weights / cardio space and renovate the existing lobby and restrooms.

#### Justification

Maintain and improve existing facility

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenan	nce					800,000	800,000
	Total _					800,000	800,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						800,000	800,000
	Total					800,000	800,000

#### **Budget Impact/Other**

This facility expansion will require additional maintenance to operate each year. Estimated staffing utilities and materials cost would be \$6,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					6,000	6,000
	Total				6,000	6,000

Project # PR-25-8003

**Project Name** Prairie Park Nature Center - Classroom Expansion

Type Improvement
Useful Life 30 years
Category Buildings
Score 43

**Department** Facility Repair & Maintenance

Contact PR Director



#### Description

The Prairie Park Nature Center was constructed in 1999 and has not had any interior or exterior renovations or improvements since opening. Currently programming and camps are running at capacity due to limited classroom space. This improvement would enclose the north end of the building under the existing roof structure to create added indoor program space.

#### Justification

This highly-used educational center houses multiple natural dioramas, displays, office space, a single classroom and dozens of live animals-including endangered and federally protected species. The facility also includes an outdoor live birds of prey collection including eagles, owls hawks and falcons. The facility needs to add a multi-purpose educational space for the growing number of school groups and camps. The outdoor bird displays are outdated and must be improved to ensure State and Federal guidelines are met for the care and display of live eagles. Additionally, improvements in the office space and animal dietary center would increase productivity and compliance with USDA mandates.

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods Commitment to Core Services

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	се				275,000	275,000
	Total				275,000	275,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund					275,000	275,000
	Total				275,000	275,000

#### **Budget Impact/Other**

This facility expansion will require additional maintenance to operate each year. Estimated staffing utilities and materials cost would be \$4,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					4,000	4,000
	Total				4,000	4,000

Project # PR-25-8004

Project Name Indoor Aquatic Center -- Add Swim Meet Event Space

Type Improvement
Useful Life 50 years
Category Buildings

Score 38

**Department** Facility Repair & Maintenance **Contact** PR Director



#### Description

During swim meets, teams, coaches and spectators need space to assemble between events. Initially, the gym at Free State High School was available. Now the gym is less available which limits the size and number of swim meets we can host. To remain a competitive swimming venue in the midwest, additional space is needed to accommodate the growing requirements.

#### Justification

Swim meets event bring people to the Lawrence, which creates a positive economic impact for the community

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan (plan completed in 2017)

Critical Success Factors:

Economic Growth and Security

Innovative Infrastructure and Asset Management

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce					750,000	750,000
	Total					750,000	750,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						750,000	750,000
	Total					750,000	750,000

#### **Budget Impact/Other**

This facility expansion will require additional maintenance to operate each year. Estimated staffing utilities and materials cost would be \$15,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					15,000	15,000
	Total				15,000	15,000

Project # PR-25-8005

Project Name Outdoor Aquatic Center - Major Renovation

Type Improvement
Useful Life 20years

Category Buildings
Score 46

**Department** Facility Repair & Maintenance **Contact** PR Director



#### Description

The current facility was renovated in 1998 to a state-of-the-art aquatic facility at that time. Since then technology and aquatic facilities have changed dramatically. Our current facility is not only outdated but is also in need of significant concrete replacement, filter replacements, heater replacement and bath house upgrades.

#### Justification

Maintaining current Parks and Recreation Infrastructure.

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce					4,000,000	4,000,000
	Total					4,000,000	4,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						4,000,000	4,000,000
	Total					4,000,000	4,000,000

#### **Budget Impact/Other**

This will be a new aquatics facility which will require additional maintenance to open, operate and close each year. Estimated staffing and materials cost would be \$10,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					10,000	10,000
	Total				10,000	10,000

Project # FM-21-1811

**Project Name** Fire Medical Station Number 6

Type Improvement Useful Life 40 years

**Department** Fire Medical **Contact** Fire Chief

Category Buildings
Score 66

#### Description

The expansion of a fire medical station to improve emergency services to the entire City of Lawrence.

The station expansion would provide more effective response coverage to areas not currently capable of receiving benchmark response times, and improve service quality to the entire City.

The land purchased should be of size to account for the building, adequate parking for employees and guests, and a drive-through bay for emergency vehicles. Backing into an apparatus bay from the street can be dangerous for the community and firefighters. The station design should include adequate space for both fire trucks and ambulances, training space, and other building features consistent with other City fire medical stations. The cost for design is projected at seven percent of the construction cost.

#### Justification

The fire medical department's response times have continued to elongate over several years as the community continues to change. Over the past two years, fire truck travel times to structure fires has exceeded six minutes, two minutes beyond the four minute benchmark and National Fire Protection Association 1710 Standard. As the community continues to evolve, the department needs to adapt to ensure it can provide reliable emergency services. Areas of the City are not capable of receiving benchmark response time performance with existing resources.

Recognizing an operational ready fire station takes several years, the department is requesting approval to purchase land suitable for a new fire medical station in 2021, planning and design costs in 2022, and station construction costs in 2023. The department is collaborating with City GIS and other City staff to publish a station optimization report by the end of 2020. This report will identify considerations to improve response time performance and reliability to the entire City.

In 2018, the department was reaccredited, but received strategic recommendations related to response time performance and resource capability to areas of the community.

Priority-Based Budgeting (PBB) program alignment from 2019 with this project include Fire Suppression (Q1), Emergency Medical Services (Q1), Employee Health, Safety, and Wellness (Q1), Domestic Preparedness (Q2), Technical Rescue (Q2), Hazardous Materials (Q2), and Tactical Medic (Q3).

Critical Success Factor Alignment: Commitment to Core Services; Safe, Healthy and Welcoming Neighborhoods, Innovative Infrastructure and Asset Management.

Reference the attached memoranda for additional information.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design			397,000				397,000
Land Acquisition		1,000,000					1,000,000
Construction/Maintena	nce			5,665,000			5,665,000
	Total	1,000,000	397,000	5,665,000			7,062,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		1,000,000	397,000	5,665,000			7,062,000
	Total	1,000,000	397,000	5,665,000			7,062,000

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

#### **Budget Impact/Other**

Douglas County will be asked to provide financial assistance with the project.

Beginning in 2024, staffing requirments of 21 FTE will be needed. The agreement with Douglas County indicates their cost is 25.64% of the departments operating budget.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance				150,000	155,000	305,000
Staff Cost				2,292,000	2,334,000	4,626,000
Supplies/Materials				100,000	105,000	205,000
	Total			2,542,000	2,594,000	5,136,000

#### Memoranda

Lawrence-Douglas County Fire Medical Department

TO: Craig Owens, City Manager

FROM: Shaun Coffey, Fire Chief

DATE: February 26<sup>th</sup>, 2020

SUBJECT: Fire Medical Station Planning and 2021-2025 CIP

#### **Background**

The fire medical department needs to adapt its deployment model and expand to address response time gaps. The community has envolved since the last station opened (fire medical station five) in 2006. Performance quality to different areas of the City, including the developing northwest, do not meet the department's response standard or industry best practice standard with existing resources. An increasing amount of activities compared to available resources has elongated response times and decreased the availability of units for reliable response time performance.

The department's four minute travel time goal is based on the industry best practice standard National Fire Protection Association (NFPA) 1710. Response times, specifically the travel time for fire trucks, has been two minutes slower than the NFPA standard two years in a row (18' and 19'). Response times have consistently elongated over the past eleven years on structure fire responses. 2018 was the slowest year for response time since the departments initial accreditation in 2008, but the department saw a fourteen second improvement in 2019. Contributing factors include an increase in call volume, increasing non-emergency tasks, population growth, and community development.

#### Ten Year Fire Truck Travel Response Comparison (90<sup>th</sup> Percentile)

2008 4 minutes and 37 seconds

2018 6 minutes and 16 seconds (1 minute 39 seconds slower than 2008)

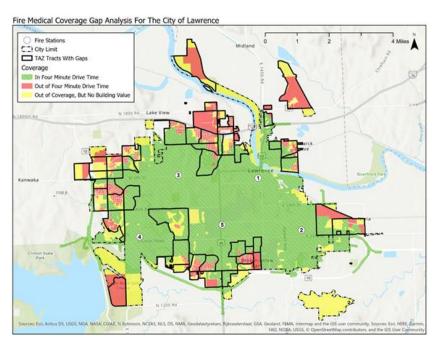
2019 6 minutes and 2 seconds (14 seconds faster than 2018)

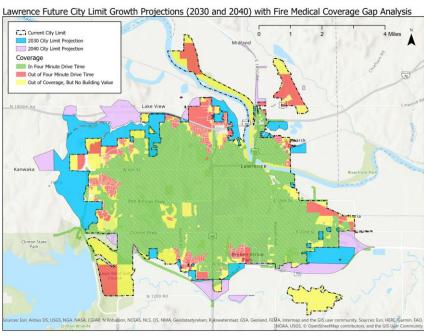
#### **ESRI GIS Response Coverage Polygon vs. Actual Performance**

Working with the City of Lawrence IT department's GIS analysts, the department has researched the travel coverage area potential from existing fire stations. This coverage blanket of the City or standard of cover is the response time "potential". The travel time polygon can assist in providing a visualization of the departments coverage with <u>all units being available</u>, in their stations, no traffic, and no adverse weather conditions impacting their response.

The travel time polygon does not account for activites which displace and commit emergency resources, creating dynamic gaps in the standard of cover. The more incidents that occur, the more holes are created in the blanket of coverage. Existing resources cannot provide four-minute response coverage to several areas in the City, including newer developed areas with single-family and multi-family housing, Rock Chalk Park, Lawrence Sports Pavillion, and the new Lawrence Memorial Hospital West campus. Based on information obtained through City Planning and Development, this area is projected to continue to expand through 2030 and 2040.

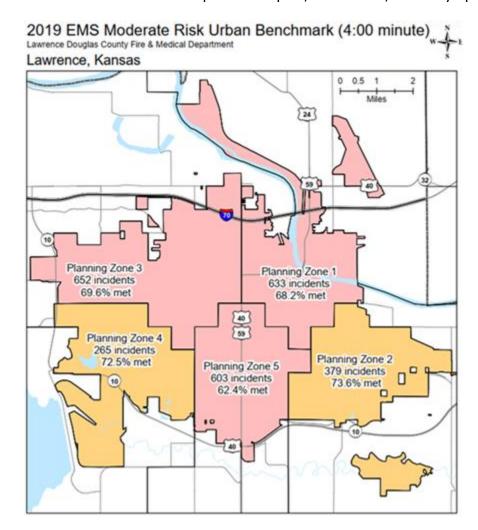
# **ESRI GIS Four Minute "Potential" (Current vs. Growth Projections)**





### Reliability of Travel Response Quality <u>Actuals</u> (NFPA Standard 90%)

Moderate Risk EMS incident examples: chest pain, unconcious, stroke symptoms



#### **Data Observations and Road Miles**

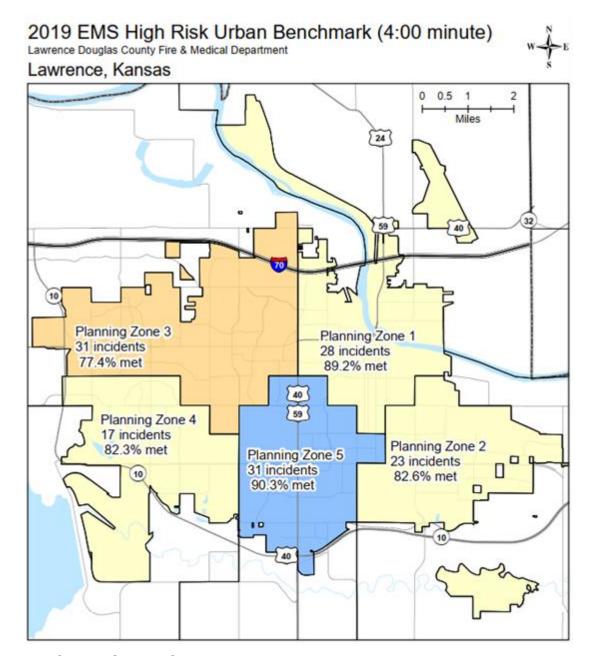
- Planning Zone 3 had the most moderate risk incident types, followed by Zone 1, and Zone 5.
- Planning Zone 5 showed the least reliable benchmark performance at 62.4%.
   This may have been attributed to construction around fire station 5 at 19<sup>th</sup> and Iowa Street and 21<sup>st</sup> Street. Zone 2 was the most reliable.

Lawrence Road Miles by Planning Zone

Planning Zone 1	106.7
Planning Zone 2	64.6
Planning Zone 3	131.6
Planning Zone 4	131.6
Planning Zone 5	94.2

### Reliability of Travel Response Quality <u>Actuals</u> (NFPA Standard 90%)

High Risk EMS incident examples: cardiac arrest, shooting, and drowning

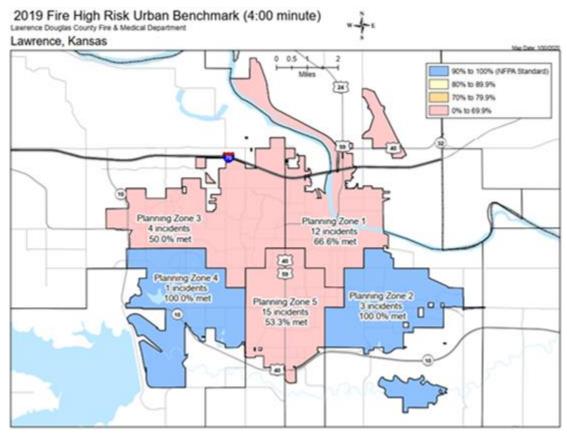


#### **Data Observations and Outcomes**

- Although being a small data set, these event types are critical, response
  performance is directly related to the outcome of the event. In 2019, the
  departments success rate for Return Of Spontaneous Circulation (ROSC) was
  47% in all of Douglas County when using Utstein Criteria (witnessed cardiac
  arrest and shockable rhythm upon arrival). \*\*Shockable rhythms decrease with
  extended response times; those outcomes wouldn't meet the Utstein Criteria.\*\*
- Planning Zone 3 and 5 had the most high risk incident types, followed by Zone 1.
- Planning Zone 3 had the least reliable benchmark performance at 77.4%.

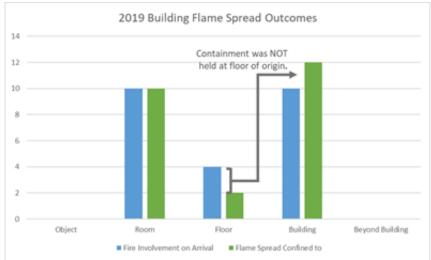
### Reliability of Travel Response Quality <u>Actuals</u> (NFPA Standard 90%)

High Risk Fire incident examples: building fire with flames showing, aircraft fire



#### **Data Observations and Outcomes**

 In 2019, there was approximately \$1.4 million in fire loss and no fire-related deaths.



• Studies conducted by the NFPA found that a resident is 14 times more likely to die in a structure fire when the fire extends beyond the floor of origin compared to the room of origin. (NFPA 1710, 2012-2016 National Data).

- Planning Zone 5 and 1 had the most high risk fire incident types, followed by Zone 1.
- Planning Zone 3 showed the least reliable benchmark performance at 50%.

#### **Isolated Deployment Model**

The City of Lawrence has unique community risk when compared to other cities its size in the Kansas City area. Reliable mutual aid support is twenty minutes away. Fire departments or districts adjacent to Lawrence do not have minimum staffing standards and cannot be relied upon as mutual aid to assist Lawrence when resources are depleted. Lawrence-Douglas County Fire Medical operates as an isolated deployment model.

The risk associated with an isolated deployment model is significant when the department resources are not available. Several recommendations are documented in the 2017 Community Risk Assessment Standards of Cover and 2018 Commission on Fire Accreditation International (CFAI) Report to help reduce risk to the community.

The department strives to maintain an adequate balance of resources to protect the community against the hazards and threats to lives and property.

#### Conclusion

The department will continue to educate and enforce its risk-reduction strategies to decrease the severity or even prevent events from occurring. The last station expansion occurred with the opening of fire medical station #5 in 2006. Fourteen years later, the community has changed, and the departments ability to effectively provide response coverage has been impacted. The department needs to adapt and expand to meet the new risk to the community now and in the future.

Recognizing an operational ready fire station takes several years to develop, the department is requesting approval to purchase land suitable for a new fire station in 2021, planning and design in 2022, and station construction in 2023. The department is collaborating with City GIS and other City staff to publish a station optimization report by the end of 2020. This report will identify several strategies and locations to improve response time performance and reliability to the entire City.

2021: \$1,000,000 CIP request for land purchase (unfunded)

2022: \$397,000 CIP request for station design (unfunded at 7% construction cost)

2023: \$5,665,000 CIP request for station six construction (unfunded)

Personnel services costs associated with the expansion will be included in the 2024 operating budget.

# Appendix

# Risk Call Type Table

Call Type ▼	Risk Class 🕶	Category -
ABDOMINAL PAIN	Moderate	EMS
ALARM-MEDICAL	Moderate	EMS
ALCOHOL POISON	Moderate	EMS
ALLERGIC REACT	Moderate	EMS
ANIMAL ATTACK	Moderate	EMS
ASSAULT	Moderate	EMS
BACK PAIN	Moderate	EMS
BREATHING PROB	Moderate	EMS
BURNS/EXPLOSION	Moderate	EMS
CARDIAC ARREST	High	EMS
CHEST PAIN	Moderate	EMS
CHOKING	Moderate	EMS
CONVULSIONS/SEI	Moderate	EMS
DIABETIC	Moderate	EMS
DROWNING	High	EMS
ELECTROCUTION	High	EMS
EYE PROBLEMS	Moderate	EMS
FALL LIFT ASSIS	Low	EMS
FALLS	Moderate	EMS
FIRE/CSI INV	Low	EMS
HEADACHE	Moderate	EMS
HEART PROBLEMS	Moderate	EMS
HEAT/COLD EXPOS	Moderate	EMS
HEMORRHAGE	Moderate	EMS
LONG FALL	Moderate	EMS
MED TRANSFER	Low	EMS
MED TRANSFER 3	Moderate	EMS
MEDICAL	Moderate	EMS
MEDICAL STANDBY	Moderate	EMS
MVA- LEVEL 1 (COUNTY ONLY)	Maximum	EMS
MVA LEVEL 2 (COUNTY ONLY)	High	EMS
MVA LEVEL 3	Moderate	EMS
OVERDOSE ACCIDE	Moderate	EMS
OVERDOSE INTENT	Moderate	EMS
PREGNANCY	Moderate	EMS
PSYCHIATRIC	Moderate	EMS
SHOOTING LVL 1	High	EMS
SHOOTING LVL 2	High	EMS
SHOOTING MEDICAL	High	EMS
SICK PERSON	Low	EMS
STABBING	High	EMS
STABBING LVL 2	High	EMS
STABBING MEDICAL	High	EMS
STROKE	Moderate	EMS
STRUCTURE FIRE - MEDICAL	Moderate	EMS
STANDBY 3812	Woderate	LIVIO
SUICIDE ATTEMPT	Moderate	EMS
TRAUMATIC INJUR	Moderate	EMS
UNCONSCIOUS	Moderate	EMS
UNKNOWN MEDICAL	Moderate	EMS

Call Type	▼ Risk Class ▼	Category , T
AIRCRAFT	High	Fire
ALARM-FIRE	Low	Fire
ALARM-FIRE LV 1	Moderate	Fire
ALARM-FIRE LV 2	Low	Fire
ARCING LINE	Low	Fire
CAR FIRE	Low	Fire
DUMPSTER FIRE	Low	Fire
FIRE OTHER	Low	Fire
FOTHER	Low	Fire
GRASS FIRE	Low	Fire
GRASS FIRE LV 1	Low	Fire
GRASS FIRE LV 2	Low	Fire
GRASS FIRE LV 3	Low	Fire
LIFT ASSIST	Low	Fire
POWERLINE DOWN	Low	Fire
SEMI FIRE	Moderate	Fire
STRUC FIRE LV 1	High	Fire
STRUC FIRE LV 2	Moderate	Fire
STRUC FIRE LV 3	Low	Fire

Call Type	Risk Class 🔻	Category ,T
CONFINED SPACE	Maximum	Tech. Rescue
ELEVATOR RESCUE	Low	Tech. Rescue
HIGH ANGLE	Maximum	Tech. Rescue
INDUSTRIAL ACCI	High	Tech. Rescue
MVA LEVEL 1	Maximum	Tech. Rescue
MVA LEVEL 2	Moderate	Tech. Rescue
WATER ICE RESCU	Maximum	Tech. Rescue

Call Type	Risk Class 💌	Category
CO ALARM	Low	HazMat
CO ALARMW/SICK	Low	HazMat
FUEL SPILL	Low	HazMat
GAS LEAK	Moderate	HazMat
GAS ODOR	Low	HazMat
HAZARDOUS MATER	Investigate	HazMat
HAZARDOUS MATERIALS LEVEL 1	High	HazMat
HAZARDOUS MATERIALS LEVEL 2	Moderate	HazMat
HAZARDOUS MATERIALS LEVEL 3	Low	HazMat
ODOR	Low	HazMat

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # IT-22-FIBSAF

**Project Name** IT Fiber Safety Improvement

Type Improvement

**Department** Information Technology

Contact IT Manager

Useful Life 40 + years
Category Unassigned

Score 43

#### Description

I.T. is rescinding this request, we have found a cheaper way to do these intersections and will include them one of them annually in our annual fiber maintenance costs.

#### Justification

This project was the bury current above ground fiber cabinets for additional safety from traffic accidents.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce		110,000				110,000
	Total		110,000				110,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			110,000			2025	110,000
	Total		110,000				110,000

#### **Budget Impact/Other**

There is no operating budget impact.

Project # MS-21-0051

Project Name Terminal Building Rehab and ADA Upgrades

Type Improvement
Useful Life 10 years
Category Buildings
Score 48

**Department** MSO - Airport **Contact** PW Director



#### Description

Parking lot and building improvements to bring the building up to current ADA standards. Additionally, the terminal building will receive new flooring, paint and furniture.

#### Justification

The Lawrence Municipal Airport averages approximately 50,000 flights annually. The airport is the first impression for dignitaries, business leaders, and others that utilize air travel to visit Lawrence. The airport has an estimated economic impact of \$14 million to the local economy. The terminal building was built in 1986 and has not received major updates since that time.

Several ADA improvements were identified as part of an ADA audit of the airport terminal building. These include: accessible parking and ramps, signage throughout the building, major restroom modifications, and other minor building improvements. Paint, flooring and furniture for the terminal building is also included.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	псе	120,000					120,000
	Total	120,000					120,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		120,000					120,000
	Total	120,000					120,000

#### **Budget Impact/Other**

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-21-0009

Project Name 17th and Alabama Drainage Improvement

Type Improvement Useful Life 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 67

#### Description

Identified as Project #11 in the 1996 Stormwater Master Plan this project calls for the replacement of storm sewer along the following streets: Alabama from 17th Street to 20th Street, Missouri from 18th to 19th Streets, Maine from 19th to 20th Street and 20th Street from Alabama to Naismith Drive.

#### Justification

Most of the storm sewer in this system provides less that a 2-year storm design frequency. The undersized system has led to street flooding along Alabama and at the intersection of 19th & Missouri.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		3,000,000					3,000,000
T	otal	3,000,000					3,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt		3,000,000					3,000,000
To	otal _	3,000,000					3,000,000

#### **Budget Impact/Other**

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-21-0030

Project Name 9th and Mississippi

Type Improvement

**Department** MSO - Stormwater

Contact

Category Storm Sewer/Drainage

Score 65

Useful Life 50 years

#### Description

Identified as Project #24 in the 1996 Stormwater Master Plan this project calls for the replacement of storm sewer north of 11th Street at the alley between Illinois and Mississippi north to 9th & Mississippi along city right of way.

#### Justification

The existing storm sewer provides less that a 2-year level of service. The system overflows could flood several residential and commerical areas around 9th & Mississippi. The alley on 10th Street between Illinios and Mississippi experiences localized flooding with heavy rainfall events.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		350,000					350,000
	Total	350,000					350,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt		350,000					350,000
	Total	350,000					350,000

#### **Budget Impact/Other**

Project # MS-21-9804

Project Name Stormwater System Id, Assessment & Model Creation

**Type** Improvement **Useful Life** 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 74

#### Description

A program to inspect and video all storm sewer structures (curb inlets, junction boxes, area inlets, manholes). This will be instrumental in prioritizing their maintenance and replacement.

#### Justification

This assessment will be instrumental in prioritizing their annual maintenance and eventual replacement.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenar	псе	2,400,000					2,400,000
	Total	2,400,000					2,400,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		2,400,000					2,400,000
	Total	2,400,000					2,400,000

#### **Budget Impact/Other**

To support the new program the following staff and equipment will be needed.

Field staff - 3 positions

2 vehicles repairs, maintenance and fuel

3 computers

3 phones

<b>Budget Items</b>		2021	2022	2023	2024	2025	Total
Staff Cost		220,000	227,000	234,000			681,000
Supplies/Materials		7,000	2,000	2,000			11,000
	Total	227,000	229,000	236,000			692,000

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-22-0030

Project Name 9th & Mississippi

Type Improvement

**Department** MSO - Stormwater

Contact

Category Storm Sewer/Drainage

Score 65

Useful Life 50 years

#### Description

Identified as Project #24 in the 1996 Stormwater Master Plan this project calls for the replacement of storm sewer north of 11th Street at the alley between Illinois and Mississippi north to 9th & Mississippi along city right of way.

#### Justification

The existing storm sewer provides less than a 2-year level of service. The system overflows could flood several residential and commerical areas around 9th & Mississippi. The alley on 10th Street between Illinios and Mississippi experiences localized flooding with heavy rainfall events.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ce	1,950,000				1,950,000
	Total	1,950,000				1,950,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt		1,950,000				1,950,000
	Total	1,950,000				1,950,000

#### **Budget Impact/Other**

Project # MS-22-9804

Project Name Stormwater System Id, Assessment & Model Creation

Type Improvement Useful Life 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 74

#### Description

A program to inspect and video all storm sewer structures (curb inlets, junction boxes, area inlets, manholes). This will be instrumental in prioritizing their maintenance and replacement.

#### Justification

This assessment will be instrumental in prioritizing their annual maintenance and eventual replacement.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			2,500,000				2,500,000
	Total		2,500,000				2,500,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund			2,500,000				2,500,000
Total			2,500,000				2,500,000

#### **Budget Impact/Other**

To support the new program the following staff and equipment will be needed.

Field staff - 3 positions

2 vehicles repairs, maintenance and fuel

3 computers

3 phones

<b>Budget Items</b>		2021	2022	2023	2024	2025	Total
Staff Cost			227,000	234,000			461,000
Supplies/Materials			2,000	2,000			4,000
	Total _		229,000	236,000			465,000

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-23-0027

Project Name Maple Lane - 19th - Brook St

Type Improvement
Useful Life 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 54

#### Description

Identified as Project #34 in the 1996 Stormwater Master Plan this project calls for the replacement of storm sewer along the west side of Maple Lane from 21st Street to Edgewood Park.

#### Justification

The existing storm sewer has a design frequency of 2 years or less. Improvement will relieve traffic and access issues associated with localized flooding.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenance			2,000,000			2,000,000
7	Γotal	2,000,000				2,000,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt			2,000,000			2,000,000
Total		2,000,000				2,000,000

#### **Budget Impact/Other**

Project # MS-23-9802

**Project Name** Stormwater Cap Improvement Construction Program

Type Improvement Useful Life 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 58

#### Description

This program will fund stormwater capital improvement projects. These projects are prioritized from the results of the ongoing inspection program with the master plan projects.

#### Justification

Funds are to be used for failing and undersized stormwater infrastructure and to prevent localized flooding and enhance safety.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenance			2,000,000			2,000,000
7	Γotal		2,000,000			2,000,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt			2,000,000			2,000,000
Total		2,000,000				2,000,000

#### **Budget Impact/Other**

Project # MS-23-9804

Project Name Stormwater System Id, Assessment & Model Creation

Type Improvement Useful Life 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 74

#### Description

A program to inspect and video all storm sewer structures (curb inlets, junction boxes, area inlets, manholes). This will be instrumental in prioritizing their maintenance and replacement.

#### Justification

This assessment will be instrumental in prioritizing their annual maintenance and eventual replacement.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ce		1,300,000			1,300,000
	Total		1,300,000			1,300,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund		1,300,000				
Total		1,300,000				1,300,000

#### **Budget Impact/Other**

To support the new program the following staff and equipment will be needed.

Field staff - 3 positions

2 vehicles repairs, maintenance and fuel

3 computers

3 phones

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Staff Cost			234,000			
Supplies/Materials			2,000			2,000
Т	Total		236,000			236,000

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-24-0030

Project Name 9th & Mississippi

Type Improvement

**Department** MSO - Stormwater

Contact

Category Storm Sewer/Drainage

Score 65

Useful Life 50 years

#### Description

Identified as Project #24 in the 1996 Stormwater Master Plan this project calls for the replacement of storm sewer north of 11th Street at the alley between Illinois and Mississippi north to 9th & Mississippi along city right of way.

#### Justification

The existing storm sewer provides less that a 2-year level of service. The system overflows could flood several residential and commercial areas around 9th & Mississippi. The alley on 10th Street between Illinios and Mississippi experiences localized flooding with heavy rainfall events.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenar				4,000,000		4,000,000	
	Total				4,000,000		4,000,000
Funding Sources		2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt					4,000,000		4,000,000
	Total _				4,000,000		4,000,000

#### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-25-0048

Project Name Property Acquisition

Type Improvement Useful Life 50 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 10

#### Description

Funding to be used to acquire real estate that has historically expierenced localized flooding with extreme rainfall events.

#### Justification

The area in question was originally identified in the 1996 Master Plan to enlarge downstream storm sewer diameters. An updated estimate to accomplish the proposed downstream improvements is approximately equal to the acquisition of the property. Acquistion of the property and its subsequent demoltion would alleviate if not completely eliminate the locatlized flooding in the area.

Expenditures		2021	2022	2023	2024	2025	Total
Land Acquisition						900,000	900,000
	Total					900,000	900,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		2021	2022	2023	2024	900,000	900,000
	Total					900,000	900,000

#### **Budget Impact/Other**

Project # MS-25-9802

**Project Name** Stormwater Cap Improvement Construction Program

Type Improvement Useful Life 30 years

**Department** MSO - Stormwater **Contact** PW Director

Category Storm Sewer/Drainage

Score 58

#### Description

This program will fund stormwater capital improvement projects. These projects are prioritized from the results of the ongoing inspection program with the master plan projects.

#### Justification

Funds are to be used for failing and undersized stormwater infrastructure and to prevent localized flooding and enhance safety.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ce				2,400,000	2,400,000
	Total				2,400,000	2,400,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Stormwater Fund- Debt					2,400,000	2,400,000
	Total				2,400,000	2,400,000

#### **Budget Impact/Other**

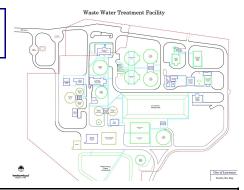
Project # MS-21-0013

Project Name Kansas River WWTP Improvements and NR

Type Improvement Useful Life 20 years Category Wastewater

**Department** MSO - Utilities Contact UT Director

Score 64



#### Description

The City currently operates 2 wastewater treatment facilities in Lawrence. The current National Pollutant Discharge Elimination System (NPDES) Permit for the KRWWTP took effect on August 1, 2019 and expires on July 31, 2024.

The primary goals of this project include:

•Perform a Nutrient Removal Pilot Study for evaluation and recommendation of process improvements to meet the current NPDES Schedule of Compliance regulations, required to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

a. Total Nitrogen (as N) – mg/l  $\leq$  10.0 as an annual average goal

b. Total Nitrogen (as N) –  $1b/d \le 1,044$  as an annual average goal

c. Total Phosphorus (as P) – mg/l  $\leq$  1.0 as an annual average goal

d. Total Phosphorus (as P) –  $lb/d \le 104.4$  as an annual average limit

Perform an in-depth overall condition assessment of the Kansas River Wastewater Treatment Plant including focus on process equipment, process piping, electrical service requirements, overall building assessment, roadways, basins, and the effluent outfall.

•Perform cost analysis on alternative treatment options to meet current permit compliance limits.

This project will also encompass the following projects that were previously shown in the proposed CIP budget:

MS-21-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-23-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-23-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-24-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-24-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

#### Justification

The current NPDES Schedule of Compliance regulations has this as a requirement to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		1,000,000					1,000,000
	Total	1,000,000					1,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt		1,000,000					1,000,000
	Total	1,000,000					1,000,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

At this time, the considered budget impacts are:

New or Equipment for treatment process, this could lead to additional or less engergy consumption

Chemical Usage, this could lead to additional or less chemical consumption

New Chemicals, this could lead to addditional chemical use and elimination of other chemicals

Additional resources required for maintenance and operation of new equipment.

2021 thru 2025

City of Lawrence, Kansas

Project # MS-21-0014

Project Name Clinton WTP Plant Piping

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

Useful Life
Category Water
Score 50



#### Description

The Clinton Water Treatment Plant Piping project will replace the filter gallery piping at the Clinton Water Treatment Plant.

#### Justification

The filter gallery piping is welded steel pipe that has been in a humid, wet environment for almost 40 years. Significant corrosion and coating failures require the replacement of the filter gallery piping.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		3,230,000					3,230,000
	Total	3,230,000					3,230,000
Funding Sources		2021	2022	2023	2024	2025	Total
Utility - Debt		3,230,000					3,230,000
Total		3,230,000	3,230,000				

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

Potential budget impacts could be: additional maintenance time, or additional needed resources.

Project # MS-21-0015

**Project Name** SW Lawrence Conveyance Corridor Improvements

Type Improvement

Department MSO - Utilities
Contact UT Director

Useful Life

Category Wastewater

Score 58

#### Description

This project will be designed to upgrade the existing conveyance system for dry and wet weather wastewater flows from the southwestern portion of Lawrence to the two existing Wastewater Treatment Plants on the east side of the City. Improvements will be required from the existing interceptor starting just south of Lake Alvamar to Pump Station 10 near 31st and Louisiana Streets. This will include significant improvement to pumping capacity and storage at existing Pump Station 9 (just west of 31st Street and Kasold Drive).

Additional modeling and study will be required to finalize scope and to determine proper improvement timing of related infrastructure improvements. This study phase will need to incorporate updated development information.

This project combines three previously identified projects related to southwest Lawrence wastewater conveyance corridor. 1) MS-22-0031 Lower Yankee Tank Capacity which was focused on the sanitary sewer interceptor upstream or west of existing Pump Station 9. 2) MS-YR-0015 Pump Station 9 Expansion to 15 MGD and 3) MS-YR-0016 PS9 Forcemain to PS10 which was focused on capacity improvements downstream or east of Pump Station 9.

#### Justification

This project was identified in the 2012 Wastewater Facilities Master Plan as a deficiency in the existing collection system. Sewer design flows upstream of Pump Station 9 have continued to increase due to development and are at the capacity of the pump station and existing storage. Operations staff was forced to bypass wastewater into the surface stream at Pump Station 9 several times in 2019. This capacity issue will only increase as development continues upstream.

The existing tributary area of Pump Station 9 includes areas west of Monterey Way and north of 6th Street. The ultimate tributary area of this facility would include the undeveloped areas west of K-10. The existing conveyance and storage facilities at Pump Station 9 are not sized to accommodate continued development in this area.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		1,000,000					1,000,000
Construction/Maintena	nce	1,780,000					1,780,000
	Total	2,780,000					2,780,000
	'						
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt		2,780,000					2,780,000
	Total	2,780,000					2,780,000

#### **Budget Impact/Other**

Project # MS-21-0022

Project Name Pump Station 16 Upstream Interceptor Rehab

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

Useful Life

Category Wastewater

Score 45

## Description

Significant portions of the interceptors upstream of Pump Station 16 are corrugated metal pipe (CMP) constructed in the late 1950s. This CMP was constructed with an inner coating to protect metal pipe from corrosion and potential failure. The inner protecting coating in particular sections of this interceptor was beginning to fail and expose the CMP to corrosion. Those sections of interceptor have been previously rehabilitated. The purpose of this project would be to reline the remaining sections of this interceptor.

#### Justification

The sanitary sewer interceptors upstream of Pump Station 16 is a critical part of the City's wastewater conveyance system. The tributary service area is west of Iowa St and north of 6th Street. The consequence of failure of this infrastructure would be severe due to no storage or diversion options upstream. Lining the existing CMP material of this interceptor would prevent further material corrosion and extend the useful design life without requiring complete replacement.

Expenditures	202	1 2022	2023	2024	2025	Total
Planning/Design	264	1,000				264,000
Construction/Maintenance	1,056	6,000				1,056,000
To	tal 1,320	),000				1,320,000
Funding Sources	2021	1 2022	2023	2024	2025	Total
Utility - Debt	1,320	,000				1,320,000
То	tal 1,320	,000				1,320,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

Potential budget impacts could be: energy consumption, additional maintenance time or additional needed resources.

Project # MS-21-0043

Project Name New York St 24" Transmission Water Main Rehab

Type Improvement
Useful Life 50 years
Category Water

Score 57

**Department** MSO - Utilities **Contact** UT Director

#### Description

The 24-inch Transmission Water Main had multiple leaks during June and August of 2019 along New York Street between 10th Street and 14th Street. The leaks required a shutdown of the transmission main that impacted the City's ability to fill water towers and provide water to wholesale customers. The City repaired the leaks at a cost of \$154,641.

The City contracted with Black & Veatch for \$31,502 to assess the condition of the transmission main. Black & Veatch recommended rehabilitation of the transmission main.

#### Justification

The 24-inch transmission water main is critical to operations of the City's water utility. The main is ductile iron pipe that has had multiple leaks. The Black & Veatch assessment recommended rehabilitation of the transmission main. A supplemental agreement with Black & Veatch will be required for design services. The project is expected to be bid in 2021.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce	10,000,000					10,000,000
	Total	10,000,000					10,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt		10,000,000					10,000,000
	Total	10,000,000					10,000,000

#### **Budget Impact/Other**

The operations and maintenance impact of not rehabbing the waterline was \$155,000 in 2019. Performing this rehab project on the waterline will save those costs in future years.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance		-174,000	-181,000	-188,000	-196,000	-739,000
	Total	-174,000	-181,000	-188,000	-196,000	-739,000

Project # MS-21-0057

Project Name Wakarusa WWTP Maintenance Building

Type Improvement
Useful Life 20 years

**Department** MSO - Utilities **Contact** UT Director

Category Wastewater

Score 21

## Description

Maintenance Building/Shop for the Wakarusa WWTP.

#### Justification

Area needed to work on equipment and make repairs.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		500,000					500,000
	Total	500,000					500,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Wastewater		500,000					500,000
	Total	500,000					500,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

Potential budget impacts could be: energy consumption, additional maintenance time or additional needed resources..

Project # MS-21-9909

Project Name Private Lateral & Sewer Extension Cost Sharing

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

Useful Life

Category Wastewater

Score 29

#### Description

In the City of Lawrence, property owners are responsible for the maintenance, repair and replacement of their private service line from the building to the point of connection on the public sanitary sewer main. The cost for replacement of a private sanitary sewer service line can be substantial depending on surface conditions, sewer depth, and public street/alley restoration.

The complexity and cost associated with a failing private service lateral is compounded in approximately 300 locations where the private service lateral crosses adjacent private property before connecting to the public sewer and/or is shared by multiple properties. Resolving a shared lateral situation requires a public sanitary sewer extension. Extending the public sanitary sewer system is extremely costly for individual property owners. In addition, the process of extending the public sewer requires City permits, KDHE permits, engineered drawings, easement acquisition and other issues that are beyond the capability of individual property owners to handle.

The cost to replace a standard single property service lateral can range between \$4,000 and \$15,000. The cost to install a public sewer extension to resolve a complex sewer legacy situation may cost between \$25,000 and \$150,000. Since the cost and associated issues of these two situations vary so significantly, the Private Lateral & Sewer Extension Cost Sharing Program will separate the two general situations into components programs. Each component program will have different cost sharing calculations, eligibility requirements, application processes, and other program details. These requirements and processes will be developed before the programs are started in 2021.

#### Justification

Deteriorating and failing service laterals contribute to City's increased wet weather flows following storm events and can cause a health issue to building occupants. Repairing a failed or deteriorating service lateral provides a shared benefit to the City as a whole by reducing the amount rain and groundwater entering the sanitary sewer system following rain events. Reducing the amount rain and groundwater entering the sanitary sewer system across the entire City can decrease future rate increases by reducing the need for large scale capacity improvements such as expanded treatment facilities, storage, or increased conveyance capacity.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		250,000					250,000
	Total	250,000					250,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt		250,000					250,000
	Total	250,000					250,000

#### **Budget Impact/Other**

Project # MS-22-0013

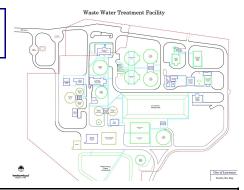
Project Name Kansas River WWTP Improvements and NR

Type Improvement
Useful Life 20 years

Category Wastewater

Score 64

**Department** MSO - Utilities **Contact** UT Director



#### Description

The City currently operates 2 wastewater treatment facilities in Lawrence. The current National Pollutant Discharge Elimination System (NPDES) Permit for the KRWWTP took effect on August 1, 2019 and expires on July 31, 2024.

The primary goals of this project include:

•Perform a Nutrient Removal Pilot Study for evaluation and recommendation of process improvements to meet the current NPDES Schedule of Compliance regulations, required to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

a. Total Nitrogen (as N) – mg/l  $\leq$  10.0 as an annual average goal

b. Total Nitrogen (as N) –  $lb/d \le 1,044$  as an annual average goal

c. Total Phosphorus (as P) – mg/l  $\leq$  1.0 as an annual average goal

d. Total Phosphorus (as P) –  $lb/d \le 104.4$  as an annual average limit

•Perform an in-depth overall condition assessment of the Kansas River Wastewater Treatment Plant including focus on process equipment, process piping, electrical service requirements, overall building assessment, roadways, basins, and the effluent outfall.

•Perform cost analysis on alternative treatment options to meet current permit compliance limits.

This project will also encompass the following projects that were previously shown in the proposed CIP budget:

MS-21-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-23-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-23-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-24-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-24-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

#### **Justification**

The current NPDES Schedule of Compliance regulations has this as a requirement to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design		3,950,000				3,950,000
Construction/Maintenance		3,950,000				3,950,000
7	Total	7,900,000				7,900,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Debt		7,900,000				7,900,000
Т	otal	7,900,000				7,900,000

#### Budget Impact/Other

This project will have no impact on the operational budget in the future.

At this time, the considered budget impacts are:

-New or Equipment for treatment process, this could lead to additional or less engergy consumption

-Chemical Usage, this could lead to additional or less chemical consumption

-New Chemicals, this could lead to addditional chemical use and elimination of other chemicals

2021 thru 2025

# City of Lawrence, Kansas

-Additional resources required for maintenance and operation of new equipment.

Project # MS-22-0015

**Project Name** SW Lawrence Conveyance Corridor Improvements

Type Improvement

Department MSO - Utilities
Contact UT Director

Useful Life

Category Wastewater

Score 58

#### Description

This project will be designed to upgrade the existing conveyance system for dry and wet weather wastewater flows from the southwestern portion of Lawrence to the two existing Wastewater Treatment Plants on the east side of the City. Improvements will be required from the existing interceptor starting just south of Lake Alvamar to Pump Station 10 near 31st and Louisiana Streets. This will include significant improvement to pumping capacity and storage at existing Pump Station 9 (just west of 31st Street and Kasold Drive).

Additional modeling and study will be required to finalize scope and to determine proper improvement timing of related infrastructure improvements. This study phase will need to incorporate updated development information.

This project combines three previously identified projects related to southwest Lawrence wastewater conveyance corridor. 1) MS-22-0031 Lower Yankee Tank Capacity which was focused on the sanitary sewer interceptor upstream or west of existing Pump Station 9. 2) MS-YR-0015 Pump Station 9 Expansion to 15 MGD and 3) MS-YR-0016 PS9 Forcemain to PS10 which was focused on capacity improvements downstream or east of Pump Station 9.

#### Justification

This project was identified in the 2012 Wastewater Facilities Master Plan as a deficiency in the existing collection system. Sewer design flows upstream of Pump Station 9 have continued to increase due to development and are at the capacity of the pump station and existing storage. Operations staff was forced to bypass wastewater into the surface stream at Pump Station 9 several times in 2019. This capacity issue will only increase as development continues upstream.

The existing tributary area of Pump Station 9 includes areas west of Monterey Way and north of 6th Street. The ultimate tributary area of this facility would include the undeveloped areas west of K-10. The existing conveyance and storage facilities at Pump Station 9 are not sized to accommodate continued development in this area.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design		1,000,000				1,000,000
Construction/Maintenance		5,080,000				5,080,000
To	otal	6,080,000				6,080,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Debt		6,080,000				6,080,000
To	otal	6,080,000				6,080,000

#### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-22-0032

Project Name 2022 Kaw WTP Infrastructure Rehab

**Type** Improvement **Useful Life** 50 years

**Department** MSO - Utilities **Contact** UT Director

Category Water
Score 50

#### Description

The Kaw Water Treatment Plant infrastructure assessment and rehabilitation project will design, construct and implement a new carbon contact basin at the Kaw River Water Treatment Plant.

#### Justification

The carbon basin was constructed in about 1917 and is in need of replacement.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design			1,054,000				1,054,000
Construction/Maintenance			4,216,000				4,216,000
	Total		5,270,000				5,270,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt			1,710,000				1,710,000
Utility - Water			3,560,000				3,560,000
	Total		5,270,000				5,270,000

### **Budget Impact/Other**

Project # MS-22-0049

Project Name Wakarusa WWTP Storage and Solids Handling

Type Improvement
Useful Life 15 years

**Department** MSO - Utilities **Contact** UT Director

Category Wastewater

Score 55

#### Description

Wakarusa Wastewater Treament Plant additional sludge storage basins.

#### Justification

Solids handling is challenging and additional storage will allow additional time for conditions to improve in the agricultural fields where biosolids land application takes place.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			1,000,000				1,000,000
	Total		1,000,000				1,000,000
Funding Sources		2021	2022	2023	2024	2025	Total
Utility - Debt			1,000,000				1,000,000
	Total		1,000,000				1,000,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

Potential budget impacts could be: energy consumption, additional maintenance time, or additional needed resources.

Project # MS-22-9909

Project Name Private Lateral & Sewer Extension Cost Sharing

Type Improvement

Department MSO - Utilities
Contact UT Director

Useful Life

Category Wastewater

Score 29

## Description

In the City of Lawrence, property owners are responsible for the maintenance, repair and replacement of their private service line from the building to the point of connection on the public sanitary sewer main. The cost for replacement of a private sanitary sewer service line can be substantial depending on surface conditions, sewer depth, and public street/alley restoration.

The complexity and cost associated with a failing private service lateral is compounded in approximately 300 locations where the private service lateral crosses adjacent private property before connecting to the public sewer and/or is shared by multiple properties. Resolving a shared lateral situation requires a public sanitary sewer extension. Extending the public sanitary sewer system is extremely costly for individual property owners. In addition, the process of extending the public sewer requires City permits, KDHE permits, engineered drawings, easement acquisition and other issues that are beyond the capability of individual property owners to handle.

The cost to replace a standard single property service lateral can range between \$4,000 and \$15,000. The cost to install a public sewer extension to resolve a complex sewer legacy situation may cost between \$25,000 and \$150,000. Since the cost and associated issues of these two situations vary so significantly, the Private Lateral & Sewer Extension Cost Sharing Program will separate the two general situations into components programs. Each component program will have different cost sharing calculations, eligibility requirements, application processes, and other program details. These requirements and processes will be developed before the programs are started in 2021.

#### Justification

Deteriorating and failing service laterals contribute to City's increased wet weather flows following storm events and can cause a health issue to building occupants. Repairing a failed or deteriorating service lateral provides a shared benefit to the City as a whole by reducing the amount rain and groundwater entering the sanitary sewer system following rain events. Reducing the amount rain and groundwater entering the sanitary sewer system across the entire City can decrease future rate increases by reducing the need for large scale capacity improvements such as expanded treatment facilities, storage, or increased conveyance capacity.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	ince		500,000				500,000
	Total		500,000				500,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt			500,000				500,000
	Total _		500,000				500,000

#### **Budget Impact/Other**

Project # MS-23-0013

Project Name Kansas River WWTP Improvements and NR

Type Improvement Useful Life 20 years

Department MSO - Utilities
Contact UT Director

Category Wastewater

Score 64

#### Description

The City currently operates 2 wastewater treatment facilities in Lawrence. The current National Pollutant Discharge Elimination System (NPDES) Permit for the KRWWTP took effect on August 1, 2019 and expires on July 31, 2024.

The primary goals of this project include:

•Perform a Nutrient Removal Pilot Study for evaluation and recommendation of process improvements to meet the current NPDES Schedule of Compliance regulations, required to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

a. Total Nitrogen (as N) – mg/l  $\leq$  10.0 as an annual average goal

b. Total Nitrogen (as N) –  $lb/d \le 1,044$  as an annual average goal

c. Total Phosphorus (as P) –  $mg/l \le 1.0$  as an annual average goal

d. Total Phosphorus (as P) –  $lb/d \le 104.4$  as an annual average limit

•Perform an in-depth overall condition assessment of the Kansas River Wastewater Treatment Plant including focus on process equipment, process piping, electrical service requirements, overall building assessment, roadways, basins, and the effluent outfall.

•Perform cost analysis on alternative treatment options to meet current permit compliance limits.

This project will also encompass the following projects that were previously shown in the proposed CIP budget:

MS-21-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-23-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-23-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-24-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-24-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

#### **Justification**

The current NPDES Schedule of Compliance regulations has this as a requirement to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

Expenditures	2021	2022	2023	2024	2025	Total	
Construction/Maintenand	ce		18,150,000			18,150,000	
	Total		18,150,000			18,150,000	
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total	
Utility - Debt			18,150,000			18,150,000	
Total		18,150,000			18,150,000		

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

At this time, the considered budget impacts are:

-New or Equipment for treatment process, this could lead to additional or less engergy consumption

-Chemical Usage, this could lead to additional or less chemical consumption

-New Chemicals, this could lead to addditional chemical use and elimination of other chemicals

-Additional resources required for maintenance and operation of new equipment.

2021 thru 2025

City of Lawrence, Kansas

Project # MS-23-0015

**Project Name** SW Lawrence Conveyance Corridor Improvements

Type Improvement

Department MSO - Utilities
Contact UT Director

Useful Life
Category Wastewater

Score 58

## Description

This project will be designed to upgrade the existing conveyance system for dry and wet weather wastewater flows from the southwestern portion of Lawrence to the two existing Wastewater Treatment Plants on the east side of the City. Improvements will be required from the existing interceptor starting just south of Lake Alvamar to Pump Station 10 near 31st and Louisiana Streets. This will include significant improvement to pumping capacity and storage at existing Pump Station 9 (just west of 31st Street and Kasold Drive).

Additional modeling and study will be required to finalize scope and to determine proper improvement timing of related infrastructure improvements. This study phase will need to incorporate updated development information.

This project combines three previously identified projects related to southwest Lawrence wastewater conveyance corridor. 1) MS-22-0031 Lower Yankee Tank Capacity which was focused on the sanitary sewer interceptor upstream or west of existing Pump Station 9. 2) MS-YR-0015 Pump Station 9 Expansion to 15 MGD and 3) MS-YR-0016 PS9 Forcemain to PS10 which was focused on capacity improvements downstream or east of Pump Station 9.

#### Justification

This project was identified in the 2012 Wastewater Facilities Master Plan as a deficiency in the existing collection system. Sewer design flows upstream of Pump Station 9 have continued to increase due to development and are at the capacity of the pump station and existing storage. Operations staff was forced to bypass wastewater into the surface stream at Pump Station 9 several times in 2019. This capacity issue will only increase as development continues upstream.

The existing tributary area of Pump Station 9 includes areas west of Monterey Way and north of 6th Street. The ultimate tributary area of this facility would include the undeveloped areas west of K-10. The existing conveyance and storage facilities at Pump Station 9 are not sized to accommodate continued development in this area.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design			1,000,000			1,000,000
Construction/Maintenance			3,500,000			3,500,000
To	otal		4,500,000			4,500,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Debt			4,500,000			4,500,000
To	otal		4,500,000			4,500,000

#### **Budget Impact/Other**

Project # MS-23-9909

Project Name Private Lateral & Sewer Extension Cost Sharing

Type Improvement

Department MSO - Utilities
Contact UT Director

Category Wastewater

**Useful Life** 

Score 29

## Description

In the City of Lawrence, property owners are responsible for the maintenance, repair and replacement of their private service line from the building to the point of connection on the public sanitary sewer main. The cost for replacement of a private sanitary sewer service line can be substantial depending on surface conditions, sewer depth, and public street/alley restoration.

The complexity and cost associated with a failing private service lateral is compounded in approximately 300 locations where the private service lateral crosses adjacent private property before connecting to the public sewer and/or is shared by multiple properties. Resolving a shared lateral situation requires a public sanitary sewer extension. Extending the public sanitary sewer system is extremely costly for individual property owners. In addition, the process of extending the public sewer requires City permits, KDHE permits, engineered drawings, easement acquisition and other issues that are beyond the capability of individual property owners to handle.

The cost to replace a standard single property service lateral can range between \$4,000 and \$15,000. The cost to install a public sewer extension to resolve a complex sewer legacy situation may cost between \$25,000 and \$150,000. Since the cost and associated issues of these two situations vary so significantly, the Private Lateral & Sewer Extension Cost Sharing Program will separate the two general situations into components programs. Each component program will have different cost sharing calculations, eligibility requirements, application processes, and other program details. These requirements and processes will be developed before the programs are started in 2021.

#### Justification

Deteriorating and failing service laterals contribute to City's increased wet weather flows following storm events and can cause a health issue to building occupants. Repairing a failed or deteriorating service lateral provides a shared benefit to the City as a whole by reducing the amount rain and groundwater entering the sanitary sewer system following rain events. Reducing the amount rain and groundwater entering the sanitary sewer system across the entire City can decrease future rate increases by reducing the need for large scale capacity improvements such as expanded treatment facilities, storage, or increased conveyance capacity.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ce		750,000			750,000
	Total		750,000			
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Wastewater			750,000			750,000
Total		750,000				750,000

#### **Budget Impact/Other**

Project # MS-24-0013

Project Name Kansas River WWTP Improvements and NR

Type Improvement Useful Life 20 years

Department MSO - Utilities
Contact UT Director

Category Wastewater

Score 64

#### Description

The City currently operates 2 wastewater treatment facilities in Lawrence. The current National Pollutant Discharge Elimination System (NPDES) Permit for the KRWWTP took effect on August 1, 2019 and expires on July 31, 2024.

The primary goals of this project include:

•Perform a Nutrient Removal Pilot Study for evaluation and recommendation of process improvements to meet the current NPDES Schedule of Compliance regulations, required to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

a. Total Nitrogen (as N) – mg/l  $\leq$  10.0 as an annual average goal

b. Total Nitrogen (as N) –  $lb/d \le 1,044$  as an annual average goal

c. Total Phosphorus (as P) – mg/l  $\leq$  1.0 as an annual average goal

d. Total Phosphorus (as P) –  $lb/d \le 104.4$  as an annual average limit

•Perform an in-depth overall condition assessment of the Kansas River Wastewater Treatment Plant including focus on process equipment, process piping, electrical service requirements, overall building assessment, roadways, basins, and the effluent outfall.

•Perform cost analysis on alternative treatment options to meet current permit compliance limits.

This project will also encompass the following projects that were previously shown in the proposed CIP budget:

MS-21-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-22-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-23-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-23-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

MS-24-0024 - Kansas River Nutrient Removal/Deammo & Sidestream

MS-24-0033 - Kansas River WWTP Side Stream - Belt Press Ammonia

#### **Justification**

The current NPDES Schedule of Compliance regulations has this as a requirement to be finalized and submitted to the Kansas Department of Health and Environment (KDHE) by June 30, 2021.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenar	nce			18,870,000		18,870,000
	Total			18,870,000		18,870,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Debt				18,870,000		18,870,000
	Total			18,870,000		18,870,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

At this time, the considered budget impacts are:

-New or Equipment for treatment process, this could lead to additional or less engergy consumption

-Chemical Usage, this could lead to additional or less chemical consumption

-New Chemicals, this could lead to addditional chemical use and elimination of other chemicals

-Additional resources required for maintenance and operation of new equipment.

2021 thru 2025

City of Lawrence, Kansas

Project # MS-24-0015

**Project Name** SW Lawrence Conveyance Corridor Improvements

Type Improvement

Department MSO - Utilities
Contact UT Director

Useful Life
Category Wastewater

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Score 58

## Description

This project will be designed to upgrade the existing conveyance system for dry and wet weather wastewater flows from the southwestern portion of Lawrence to the two existing Wastewater Treatment Plants on the east side of the City. Improvements will be required from the existing interceptor starting just south of Lake Alvamar to Pump Station 10 near 31st and Louisiana Streets. This will include significant improvement to pumping capacity and storage at existing Pump Station 9 (just west of 31st Street and Kasold Drive).

Additional modeling and study will be required to finalize scope and to determine proper improvement timing of related infrastructure improvements. This study phase will need to incorporate updated development information.

This project combines three previously identified projects related to southwest Lawrence wastewater conveyance corridor. 1) MS-22-0031 Lower Yankee Tank Capacity which was focused on the sanitary sewer interceptor upstream or west of existing Pump Station 9. 2) MS-YR-0015 Pump Station 9 Expansion to 15 MGD and 3) MS-YR-0016 PS9 Forcemain to PS10 which was focused on capacity improvements downstream or east of Pump Station 9.

#### Justification

This project was identified in the 2012 Wastewater Facilities Master Plan as a deficiency in the existing collection system. Sewer design flows upstream of Pump Station 9 have continued to increase due to development and are at the capacity of the pump station and existing storage. Operations staff was forced to bypass wastewater into the surface stream at Pump Station 9 several times in 2019. This capacity issue will only increase as development continues upstream.

The existing tributary area of Pump Station 9 includes areas west of Monterey Way and north of 6th Street. The ultimate tributary area of this facility would include the undeveloped areas west of K-10. The existing conveyance and storage facilities at Pump Station 9 are not sized to accommodate continued development in this area.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design				0		0
Construction/Maintenance				4,680,000		4,680,000
Tot	tal			4,680,000		4,680,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Debt				4,680,000		4,680,000
Tot	al			4,680,000		4,680,000

#### **Budget Impact/Other**

Project # MS-24-9909

**Project Name** Private Lateral & Sewer Extension Cost Sharing

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

Useful Life

Category Wastewater

Score 29

#### Description

In the City of Lawrence, property owners are responsible for the maintenance, repair and replacement of their private service line from the building to the point of connection on the public sanitary sewer main. The cost for replacement of a private sanitary sewer service line can be substantial depending on surface conditions, sewer depth, and public street/alley restoration.

The complexity and cost associated with a failing private service lateral is compounded in approximately 300 locations where the private service lateral crosses adjacent private property before connecting to the public sewer and/or is shared by multiple properties. Resolving a shared lateral situation requires a public sanitary sewer extension. Extending the public sanitary sewer system is extremely costly for individual property owners. In addition, the process of extending the public sewer requires City permits, KDHE permits, engineered drawings, easement acquisition and other issues that are beyond the capability of individual property owners to handle.

The cost to replace a standard single property service lateral can range between \$4,000 and \$15,000. The cost to install a public sewer extension to resolve a complex sewer legacy situation may cost between \$25,000 and \$150,000. Since the cost and associated issues of these two situations vary so significantly, the Private Lateral & Sewer Extension Cost Sharing Program will separate the two general situations into components programs. Each component program will have different cost sharing calculations, eligibility requirements, application processes, and other program details. These requirements and processes will be developed before the programs are started in 2021.

#### Justification

Deteriorating and failing service laterals contribute to City's increased wet weather flows following storm events and can cause a health issue to building occupants. Repairing a failed or deteriorating service lateral provides a shared benefit to the City as a whole by reducing the amount rain and groundwater entering the sanitary sewer system following rain events. Reducing the amount rain and groundwater entering the sanitary sewer system across the entire City can decrease future rate increases by reducing the need for large scale capacity improvements such as expanded treatment facilities, storage, or increased conveyance capacity.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	Construction/Maintenance					750,000	
Total			750,000			750,000	
Funding Sources		2021	2022	2023	2024	2025	Total
Utility - Debt					750,000		750,000
Total					750,000		750,000

#### **Budget Impact/Other**

Project # MS-25-0001

**Project Name** Clinton WTP Taste & Odor Phase 2

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

Category Water Score 28

**Useful Life** 



#### Description

Agal Toxin, Taste & Odor Phase 2, and Viral Reduction Treatment - Advanced Oxidation; Clinton Water Treatment Plant

#### Justification

The project was identified in the 2012 Integrated Water Utility Plan and Capital Improvements Plan, and 2013 Taste and Odor Study. The project addresses the Phase II of treatment processes that will enhance the removal of taste and odor compounds, microtoxins and viruses at the Clinton Water Treatment Plant.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design					2,037,500	2,037,500
Construction/Maintenance					6,112,500	6,112,500
To	otal				8,150,000	8,150,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Utility - Debt					8,150,000	8,150,000
To	otal				8,150,000	8,150,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

Potential budget impacts could be: energy consumption, chemical consumption, additional maintenance time, or additional needed resources.

Project # MS-25-0045

Project Name PS 49 To Wakarusa WWTP

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

**Useful Life** 

Category Wastewater

Score 12



#### Description

PS 49 currently pumps to PS 25. As growth in the East Lawrence Drainage Basin requires expansion of PS 25, PS 49 will be diverted to the Wakarusa WWTP instead of PS 25.

#### Justification

Dependent on PS 25 expansion. Included in the Integrated 2012 Wastewater Utilities Plan page 124: https://assets.lawrenceks.org/utilities/pdf/ReportFinal.pdf

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	ince					1,425,000	1,425,000
	Total					1,425,000	1,425,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt						1,425,000	1,425,000
	Total					1,425,000	1,425,000

#### **Budget Impact/Other**

Project # MS-25-0046
Project Name PS 25 Expansion

Type Improvement

Useful Life
Category Wastewater

Score 12

**Department** MSO - Utilities **Contact** UT Director



#### Description

PS 25 expansion will occur in phases based on growth in the East Lawrence Drainage Basin, including Lawrence VenturePark and the East Hills Business Center.

#### Justification

Dependent on growth within the East Lawrence Drainage Basin. Included in the Integrated 2012 Wastewater Utilities Plan page 124: https://assets.lawrenceks.org/utilities/pdf/ReportFinal.pdf

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	ince					260,000	260,000
	Total					260,000	260,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt						260,000	260,000
	Total					260,000	260,000

#### **Budget Impact/Other**

Project # MS-25-9909

Project Name Private Lateral & Sewer Extension Cost Sharing

Type Improvement

**Department** MSO - Utilities **Contact** UT Director

Useful Life

Category Wastewater

Score 29

## Description

In the City of Lawrence, property owners are responsible for the maintenance, repair and replacement of their private service line from the building to the point of connection on the public sanitary sewer main. The cost for replacement of a private sanitary sewer service line can be substantial depending on surface conditions, sewer depth, and public street/alley restoration.

The complexity and cost associated with a failing private service lateral is compounded in approximately 300 locations where the private service lateral crosses adjacent private property before connecting to the public sewer and/or is shared by multiple properties. Resolving a shared lateral situation requires a public sanitary sewer extension. Extending the public sanitary sewer system is extremely costly for individual property owners. In addition, the process of extending the public sewer requires City permits, KDHE permits, engineered drawings, easement acquisition and other issues that are beyond the capability of individual property owners to handle.

The cost to replace a standard single property service lateral can range between \$4,000 and \$15,000. The cost to install a public sewer extension to resolve a complex sewer legacy situation may cost between \$25,000 and \$150,000. Since the cost and associated issues of these two situations vary so significantly, the Private Lateral & Sewer Extension Cost Sharing Program will separate the two general situations into components programs. Each component program will have different cost sharing calculations, eligibility requirements, application processes, and other program details. These requirements and processes will be developed before the programs are started in 2021.

#### Justification

Deteriorating and failing service laterals contribute to City's increased wet weather flows following storm events and can cause a health issue to building occupants. Repairing a failed or deteriorating service lateral provides a shared benefit to the City as a whole by reducing the amount rain and groundwater entering the sanitary sewer system following rain events. Reducing the amount rain and groundwater entering the sanitary sewer system across the entire City can decrease future rate increases by reducing the need for large scale capacity improvements such as expanded treatment facilities, storage, or increased conveyance capacity.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce					750,000	750,000
	Total _					750,000	750,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Utility - Debt						750,000	750,000
	Total					750,000	750,000

#### **Budget Impact/Other**

Project # MS-21-0002

Project Name 19th Street Reconstruction - Harper to O'Connell

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 53

Useful Life 50 years



#### Description

19th Street Reconstruction from Harper to O'Connell. Includes reconstruction of 19th & Harper intersection, waterline, sidewalks, bike facilities, pavement reconstruction and storm sewer. Engineering survey and design is budgeted in 2019. Up to 5 different street designs will be considered and reviewed by the Transportation Commission and City Commission.

The project is adjacent to the DG Co. Fairgrounds and the city is requesting \$750,000 (25% of \$3M)to fund a portion of the project that will directly benefit the fairgrounds. The cost is based on the 2016 estimate (\$3M) and the fairgrounds frontage is 1500', which is a little more than half of the south side or 25% of the total.

#### Justification

Reconstruction is required to improve street to city standards. The existing waterline is failing and needs to be replaced (9 waterline breaks since 2011; 4 breaks in 2017). The current street rating PCI is 24.8. The project will provide additional access point to VenturePark and provide a bike/ped connection to facilities on O'Connell. The project is imperative to Venture Park to meet the emergency access needs of the community. The project will enhance transit service and provide a more direct access between major transfer location and employment and improve access for low-moderate neighborhood. The 19th Street connection to O'Connell is included in city's transportation plan T2040 plan.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		2,200,000					2,200,000
	Total	2,200,000					2,200,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		2,200,000					2,200,000
	Total	2,200,000					2,200,000

#### **Budget Impact/Other**

Project # MS-21-0004

**Project Name** Field Operations Facility

Type Improvement Useful Life 50 years

**Department** Municipal Services & Operation

Contact PW Director

Category Buildings
Score 49

#### Description

The Field Operations Facility project includes the design and construction of a new Field Operations Facility for Municipal Services & Operations and Parks & Recreation field staff, equipment, and inventory.

#### Justification

On October 15, 2019 the City Commission authorized the City Manager to execute an Engineering Services Agreement in the amount of \$577,480 with Dake Wells for preliminary design services for the Field Operations Facility.

Preliminary design is expected to be completed in August 2020. A supplemental agreement will be issued for design phase services of Phase 1 design of the Field Operations Facility.

The project includes preliminary design services for development of a Field Operations Facility Master Plan that meets current and future space requirements for City Field staff.

The selected consultant will: 1) Review existing operations, staffing, vehicles and equipment and compare with industry trends; 2) Assess existing facilities; 3) Conduct departmental interviews and develop operational programming summaries; 4) Conduct comprehensive space needs analysis for City Field staff in both current and estimated future capacities; 5)

Verify the Farmland Remediation site meets the space needs requirements; 6) Develop

concept plan for Phase 1 Facility and future expansion; 7) Determine infrastructure requirements for Phase 1 and future expansion; 8) Evaluate phasing of construction and field staff relocation; and 9) Establish opinion of probable cost for Phase 1 and potential future cost impacts.

The Municipal Services & Operations and Parks & Recreation Departments operate 18 maintenance-oriented facilities. Many of the facilities do not support the current demand for service and have limited potential for improvement or expansion. Other challenges with the current facilities include: 1) Employee safety; 2) Decentralized locations, requiring excessive drive time; 3) Duplication of facilities, function and staff roles; 4) Insufficient storage for equipment, materials, and inventory; 5) Insufficient information technology and systems; and 6) Lack of security.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenance	14,430,000					14,430,000
Total	14,430,000					14,430,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Solid Waste Fund- Debt	4,500,000					4,500,000
Stormwater Fund- Debt	3,900,000					3,900,000
Utility - Debt	6,030,000					6,030,000
Total	14,430,000					14,430,000

#### **Budget Impact/Other**

2021 thru 2025

City of Lawrence, Kansas

Project # MS-21-0005

Useful Life 50 years

Project Name 23rd Street - Haskell Bridge to East City Limits

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 53

#### Description

Reconstruction of 23rd Street from Haskell Bridge of East City Limits including concrete pavement reconstruction, geometric improvements at Haskell, storm sewer, access management improvements and sidewalks.

MPO corridor study in 2019; Design in 2020.

KDOT is contributing \$4M to construction (\$2M 2021;\$2M 2022)

Annual allocation of STP \$ through Federal Fund Exhchange (\$900k 2021;\$900k 2022)

This project will replace waterlines on 23rd Street from Haskell Avenue to the City's eastern limit. The existing waterlines of concern are located on the north side of the roadway, predominately 12-inch and 16-inch watermain, and were installed in the late 1970s and late 1980s respectively. These lines are to be replaced with new 12-inch and 16-inch PVC waterlines in coordination with proposed roadway improvements

#### Justification

K-10 designation is being removed from 23rd Street after completion of the South Lawrence Trafficway. This project includes a cost share with KDOT to improve street through the city/state turnback agreement.

23rd Street is to be fully reconstructed through this corridor (PW18E3CIP). Depending on the scope of the proposed reconstruction, relocation of the existing waterlines may be required to ensure that proper cover of the mains is maintained. Cost savings and efficiencies are gained and traffic impacts are minimized when improvements for various city functions are performed in coordination. The age, material, and diameter of the existing watermains make the existing waterlines candidates for replacement.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		5,960,000					5,960,000
T	Fotal .	5,960,000					5,960,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		4,250,000					4,250,000
Utility - Debt		1,710,000					1,710,000
Т	otal	5,960,000					5,960,000

### Budget Impact/Other

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-21-0017

Project Name Wakarusa - Research Pkwy to 23rd Street

**Type** Improvement **Useful Life** 50 years

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 52

## Description

Reconstruction of Wakarusa from Research Parkway to 23rd Street including concrete pavement, storm sewer, sidewalks, bike lanes and waterline.

#### Justification

Street is in poor condition with rating PCI 51.8 in 2015

Shared Utilities Project (unfunded)

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		400,000					400,000
	Total	400,000					400,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		400,000					400,000
	Total	400,000					400,000

### **Budget Impact/Other**

Project # MS-21-8000

Project Name Sidewalk/Bike/Ped Improvements

Type Improvement
Useful Life 50 years

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 45



#### Description

These funds are for projects across the city to build on the existing pedestrian and bicycle network. The Non-Motorized Projects Prioritization Process is used to score eligible projects and guides staff in making funding recommendations. Multimodal Transportation Commission reviews the staff recommendation and determines which projects will be included in a 5-Year Plan. The funds may be used as a match for grant opportunities that arise such as Safe Routes to School, Transportation Alternatives or other grants that support improvements to the pedestrian and bicycle networks.

Assumes award of 2 Transportation Alternatives grant from KDOT:

- 1) Safe Routes to School \$400,000 max
- 2) Other Bike/Ped 5-Year Plan Project \$600,000

#### Justification

The Bicycle Pedestrian Task Force recommended an annual allocation to improve the bikeability and walkability in Lawrence to increase safety, promote health and provide alternative modes of transportation. This program works towards the goals of the community outlined in the Lawrence Bikeway Plan and the Pedestrian Priority Network.

It is anticipated that there are approximately \$70,000,000 in needed sidewalk/bike/pedestrian improvements across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		1,675,000					1,675,000
	Total	1,675,000					1,675,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		1,675,000					1,675,000
	Total	1,675,000					1,675,000

#### **Budget Impact/Other**

Project # MS-21-8001

**Project Name ADA Ramp Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 70

Useful Life 50 years



#### Description

Initially included in Sidewalk/Bike/Ped Improvements (CI09) the ADA Ramp improvements have been seperated out into its own project. This project includes reconstruction of ADA ramps to meet current requirements for slope, cross slope and detectable warnings. Work will include removal and replacement of ramps, sidewalk and curbing to allow for improved accessibility. This program is being spent in conjunction as part of MS-21-8014 (Sidewalk Improvement Program - City) to save on economies of scale.

#### Justification

ADA standards have been evolving over many years. Many of the City's ADA ramps do not meet current ADA standards with respect to slope, cross slope or detectable warnings. There are also sidewalks that have no ADA ramp at an intersection. Funds for this program will improve accessibility for all.

It is anticipated that there are approximately \$8,600,000 in needed ADA Ramp repairs across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		32,500					32,500
Construction/Maintenar	nce	292,500					292,500
	Total	325,000					325,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		325,000					325,000
	Total	325,000					325,000

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-21-8004

**Project Name CDBG Infrastructure Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 50 years

Category Street New Construction

Score 53

#### Description

The Municipal Services and Operations Department applies annually for Community Development Block Grant (CDBG) funding. These funds can be used for a variety of project types that support expanding the pedestrian and bicycle network or increase safety for multi-modal users in low-moderate areas.

Projects will be priorized using the city's Non-Motorized Prioritization Plan.

#### **Justification**

Funds to be used to improve pedestrian connectivity and safety for low/moderate income areas.

This is a placeholder for funds that are received through the CDBG grant program. The budget will be adjusted annually with the actual grant amount once known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		300,000					300,000
	Total	300,000					300,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		300,000					300,000
	Total	300,000					300,000

### **Budget Impact/Other**

Project # MS-21-8019

Project Name Asset Management Program

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 10 years
Category Unassigned

Score 65

#### Description

In alignment with the City's Asset Management Program, staff have identified gaps in asset management practices across operating departments. This project will procure and implement an enterprise asset management system (EAMS) with features including a call center, inspections, work orders, service requests, and permitting; procure and implement a project and budget prioritization and optimization modeling software; inventory and/or extract assets; and assess asset condition. Additionally, professional services will be used to assist in the development of asset treatment schedules, software implementation, workflow mappings, and data migration/conversion as necessary.

#### Justification

The City owns, operates, and manages a diverse portfolio of infrastructure assets. The scale and criticality of stewardship drives the development of a systematic approach to manage this portfolio. Currently, several barriers contribute to the lack of a mature asset management program. The current asset management software has significant limitations in functionality and scope. Many asset classifications including transportation, facilities, and recreation have little documented inventory or condition rating. Lastly, there is limited ability to model level of service and budget priorities. This project will derive the maximum value of assets to achieve the lowest cost of ownership.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		550,000					550,000
	Total	550,000					550,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		440,000					440,000
Utility - Wastewater		55,000					55,000
Utility - Water		55,000					55,000
	Total	550,000	·				550,000

#### **Budget Impact/Other**

Software maintenance costs for modeling and enterprise asset management, estimated to be \$125,000 annually, would be absorbed into the operating budgets in CIP out-years. The Asset Management Program itself will have an impact on operating budgets. Implementation of an asset management program, by nature, develops lifecycle costs based on condition, level of service, and funding and treatment strategies. Once the City has made progress developing and implementing an Asset Management Program we will have a clearer picture for lowest cost of ownership for all of our assets.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			125,000	125,000	125,000	375,000
	Total		125,000	125,000	125,000	375,000

Project # MS-21-9700

**Project Name** Farmland Remedial Alternatives

Type Improvement
Useful Life 50 years

**Department** Municipal Services & Operation

Contact UT Director

Category Unassigned

Score 58

#### Description

Presently, the remeidial strategy that is implemented at the farmland property is not resilient. The purpose of this project is to asses alternative remedial alternative in order to determine future remedial action required at the site. The project includes a characterization study that will ultaimtely lead to design and construction of the reccomended remedial alternative.

#### Justification

The existing remedial strategy that was implemented at the site is inadequate in addressing the remedial goals for the property. Design and construction of resilient remedial alternatives is necessary in order to comply with KDHE requirements for the site.

It is anticipated that there are approximately \$40,000,000 in needed farmland remediation improvements. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		1,500,000					1,500,000
	Total	1,500,000					1,500,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		1,500,000					1,500,000
	Total	1,500,000					1,500,000

#### **Budget Impact/Other**

There is an anticipated capital investment of \$14 million over five years in order to design and construct the new remedial alternative followed by \$2 million operations budget annually in order to operate & maintain the new remedial alternative.

2021 Operations and Maintenance for Farmland Remediation Program is \$1.5 million and includes the following additional staff, contractual services, commodities and equipment needed to support the program:

\$291,000 for 4 additional positions (existing personnel \$56,000) and additional staff resources of 4 computers \$5,000, \$2,000 software, 4 phones \$3,000 plus \$2,000/year after initial purchase

\$400,000 for legal services and fees

\$265,000 for site maintenance including debris removal and wells

\$60,000 electricity for additional well heads

\$50,000 professional services, to be determined

\$25,000 water analysis and lab supplies \$50,000

3 vehicles: \$89,000 plus\$5000 repairs, maintenance and fuel

\$80,000 equipment, supplies and materials

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance	318,000	350,000	350,000	350,000	350,000	1,718,000
Other (Insurance, Utilities)	635,000	689,000	975,000	960,000	944,000	4,203,000
Staff Cost	347,000	361,000	375,000	390,000	406,000	1,879,000
Supplies/Materials	200,000	300,000	300,000	300,000	300,000	1,400,000
Total	1,500,000	1,700,000	2,000,000	2,000,000	2,000,000	9,200,000

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-22-0005

**Project Name** 23rd Street - Haskell Bridge to East City Limits

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 53

Useful Life 50 years

#### Description

Reconstruction of 23rd Street from Haskell Bridge of East City Limits including concrete pavement reconstruction, geometric improvements at Haskell, storm sewer, access management improvements and sidewalks.

MPO corridor study in 2019; Design in 2020.

KDOT is contributing \$4M to construction (\$2M 2021;\$2M 2022); 23rd St turnback agreement Annual Allocation of KDOT Federal Fund Exhchange (\$900k 2021;\$900k 2022)

#### Justification

K-10 designation is being removed from 23rd Street after completion of the South Lawrence Trafficway. This project includes a cost share with KDOT to improve street through the city/state turnback agreement.

Shared Utilities Project (unfunded)

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		5,000,000				5,000,000	
	Total		5,000,000				5,000,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund			5,000,000				5,000,000
	Total		5,000,000				5,000,000

### **Budget Impact/Other**

Project # MS-22-0017

Project Name Wakarusa - Research Pkwy to 23rd Street

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 50 years

Category Street Reconstruction

Score 52

#### Description

Reconstruction of Wakarusa from Research Parkway to 23rd Street including concrete pavement, storm sewer, sidewalks, bike lanes and waterline.

This project will relocate/replace existing waterlines on Wakarusa Drive from Research Parkway to Clinton Parkway. The existing waterlines are located on either side of the roadway and serve vital functions within the City's water distribution system. The existing 36" Prestressed Concrete Cylinder Pipe (PCCP) located on the west side of the road was installed in 1978 and serves as the single raw water feed for the Clinton Water Treatment Plant to the north. The 24" PCCP located on the east side of the road was installed in 1978 and serves as the primary transmission main from the Clinton Water Treatment Plant serving the low pressure system. These lines are to be evaluated, replaced, and/or relocated as appropriate in coordination with proposed roadway improvements.

#### Justification

Street is in poor condition with rating PCI 51.8 in 2015

Wakarusa Drive is to be fully reconstructed through this corridor. Depending on the scope of the proposed reconstruction, relocation of the existing waterlines may be required to ensure that proper cover of the mains is maintained. Cost savings and efficiencies are gained and traffic impacts are minimized when improvements for various city functions are performed in coordination.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			6,100,000				6,100,000
	Total _		6,100,000				6,100,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			5,100,000				5,100,000
Utility - Debt			1,000,000				1,000,000
	Total		6,100,000				6,100,000

#### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-22-0029

Project Name Wakarusa Extended - 27th St to CR458

Type Improvement

**Department** Municipal Services & Operation

Contact

Useful Life 30 years

Category Street New Construction

Score 47

### Description

Extend Wakarusa fron 27th Street to County Road 458 in corridation with KDOT K-10 4-lane west leg improvements. KDOT will construct a new grade seperated interchange at K-10 and Wakarusa. The city/county will partner with KDOT to extend Wakarusa to Co Rd 458.

#### Justification

Extend Wakarusa Drive to Co. Rd 458 to improve transportation in Lawrence and Douglas County. The extension is included in the City/Country transportation plan.

Shared Utilities Project (unfunded)

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design			500,000				500,000
Land Acquisition			500,000				500,000
	Total		1,000,000				1,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			1,000,000				1,000,000
	Total		1,000,000				1,000,000

### **Budget Impact/Other**

## 2021 thru 2025

## City of Lawrence, Kansas

Project # MS-22-8000

Project Name Sidewalk/Bike/Ped Improvements

Type Improvement Useful Life 50 years

Department Municipal Services & Operation
Contact PW Director

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Category Street Reconstruction

Score 45



#### Description

These funds are for projects across the city to build on the existing pedestrian and bicycle network. The Non-Motorized Projects Prioritization Process is used to score eligible projects and guides staff in making funding recommendations. Multimodal Transportation Commission reviews the staff recommendation and determines which projects will be included in a 5-Year Plan. The funds may be used as a match for grant opportunities that arise such as Safe Routes to School, Transportation Alternatives or other grants that support improvements to the pedestrian and bicycle networks.

Assumes award of 2 Transportation Alternatives grant from KDOT:

- 1) Safe Routes to School \$400,000 max
- 2) Other Bike/Ped 5-Year Plan Project \$600,000

#### Justification

The Bicycle Pedestrian Task Force recommended an annual allocation to improve the bikeability and walkability in Lawrence to increase safety, promote health and provide alternative modes of transportation. This program works towards the goals of the community outlined in the Lawrence Bikeway Plan and the Pedestrian Priority Network.

It is anticipated that there are approximately \$70,000,000 in needed sidewalk/bike/pedestrian improvements across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	20	021	2022	2023	2024	2025	Total
Construction/Maintenance			1,675,000				1,675,000
	Total		1,675,000				1,675,000
<b>Funding Sources</b>	20	)21	2022	2023	2024	2025	Total
Capital Projects Fund			1,675,000				1,675,000
	Total		1,675,000				1,675,000

#### **Budget Impact/Other**

Project # MS-22-8001

**Project Name ADA Ramp Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 70

Useful Life 50 years



#### Description

Initially included in Sidewalk/Bike/Ped Improvements (CI09) the ADA Ramp improvements have been seperated out into its own project. This project includes reconstruction of ADA ramps to meet current requirements for slope, cross slope and detectable warnings. Work will include removal and replacement of ramps, sidewalk and curbing to allow for improved accessibility. This program is being spent in conjunction as part of MS-22-8014 (Sidewalk Improvement Program - City) to save on economies of scale.

#### Justification

ADA standards have been evolving over many years. Many of the City's ADA ramps do not meet current ADA standards with respect to slope, cross slope or detectable warnings. There are also sidewalks that have no ADA ramp at an intersection. Funds for this program will improve accessibility for all.

It is anticipated that there are approximately \$8,600,000 in needed ADA Ramp repairs across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design		32,500				32,500
Construction/Maintenance		292,500				292,500
To	otal	325,000				325,000
Funding Sources	2021	2022	2023	2024	2025	Total
Capital Projects Fund		325,000				325,000
To	otal	325,000				325,000

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-22-8004

**Project Name CDBG Infrastructure Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street New Construction

Score 53

Useful Life 50 years

#### Description

The Municipal Services and Operations Department applies annually for Community Development Block Grant (CDBG) funding. These funds can be used for a variety of project types that support expanding the pedestrian and bicycle network or increase safety for multi-modal users in low-moderate areas.

Projects will be priorized using the city's Non-Motorized Prioritization Plan.

#### **Justification**

Funds to be used to improve pedestrian connectivity and safety for low/moderate income areas.

This is a placeholder for funds that are received through the CDBG grant program. The budget will be adjusted annually with the actual grant amount once known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			300,000				300,000
	Total		300,000				300,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			300,000				300,000
	Total		300,000				300,000

#### **Budget Impact/Other**

Project # MS-22-8019

Project Name Asset Management Program

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 10 years
Category Unassigned

Score 65

#### Description

In alignment with the City's Asset Management Program, staff have identified gaps in asset management practices across operating departments. This project will procure and implement an enterprise asset management system (EAMS) with features including a call center, inspections, work orders, service requests, and permitting; procure and implement a project and budget prioritization and optimization modeling software; inventory and/or extract assets; and assess asset condition. Additionally, professional services will be used to assist in the development of asset treatment schedules, software implementation, workflow mappings, and data migration/conversion as necessary.

#### Justification

The City owns, operates, and manages a diverse portfolio of infrastructure assets. The scale and criticality of stewardship drives the development of a systematic approach to manage this portfolio. Currently, several barriers contribute to the lack of a mature asset management program. The current asset management software has significant limitations in functionality and scope. Many asset classifications including transportation, facilities, and recreation have little documented inventory or condition rating. Lastly, there is limited ability to model level of service and budget priorities. This project will derive the maximum value of assets to achieve the lowest cost of ownership.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design			550,000				550,000
	Total		550,000				550,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			440,000				440,000
Utility - Wastewater			55,000				55,000
Utility - Water			55,000				55,000
	Total	·	550,000		·		550,000

#### **Budget Impact/Other**

Software maintenance costs for modeling and enterprise asset management, estimated to be \$125,000 annually, would be absorbed into the operating budgets in CIP out-years. The Asset Management Program itself will have an impact on operating budgets. Implementation of an asset management program, by nature, develops lifecycle costs based on condition, level of service, and funding and treatment strategies. Once the City has made progress developing and implementing an Asset Management Program we will have a clearer picture for lowest cost of ownership for all of our assets.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			125,000	125,000	125,000	375,000
	Total		125,000	125,000	125,000	375,000

Project # MS-22-9700

**Project Name** Farmland Remedial Alternatives

Type Improvement
Useful Life 50 years

**Department** Municipal Services & Operation

Contact UT Director

Category Unassigned

Score 58

#### Description

Presently, the remeidial strategy that is implemented at the farmland property is not resilient. The purpose of this project is to asses alternative remedial alternative in order to determine future remedial action required at the site. The project includes a characterization study that will ultaimtely lead to design and construction of the reccomended remedial alternative.

#### Justification

The existing remedial strategy that was implemented at the site is inadequate in addressing the remedial goals for the property. Design and construction of resilient remedial alternatives is necessary in order to comply with KDHE requirements for the site.

It is anticipated that there are approximately \$40,000,000 in needed farmland remediation improvements. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			4,000,000				4,000,000
	Total		4,000,000				4,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			4,000,000				4,000,000
	Total		4,000,000				4,000,000

#### **Budget Impact/Other**

There is an anticipated capital investment of \$14 million over five years in order to design and construct the new remedial alternative followed by \$2 million operations budget annually in order to operate & maintain the new remedial alternative.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance		350,000	350,000	350,000	350,000	1,400,000
Other (Insurance, Utilities)		689,000	975,000	960,000	944,000	3,568,000
Staff Cost		361,000	375,000	390,000	406,000	1,532,000
Supplies/Materials		300,000	300,000	300,000	300,000	1,200,000
Total	<u> </u>	1,700,000	2,000,000	2,000,000	2,000,000	7,700,000

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-23-0017

Project Name Wakarusa - Research Pkwy to 23rd Street

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 52

Useful Life 50 years

### Description

Reconstruction of Wakarusa from Research Parkway to 23rd Street including concrete pavement, storm sewer, sidewalks, bike lanes and waterline.

#### Justification

Street is in poor condition with rating PCI 51.8 in 2015

Shared Utilities Project (unfunded)

Expenditures		2021	2022	2023	2024	2025	Total	
Construction/Maintenance			900,000					
	Total			900,000			900,000	
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total	
Capital Projects Fund				900,000			900,000	
Total				900,000				

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-23-0029

Project Name Wakarusa Extended - 27th St to CR458

Type Improvement

**Department** Municipal Services & Operation

Contact

Useful Life 30 years
Category Street New Construction

Score 47

### Description

Extend Wakarusa fron 27th Street to County Road 458 in corridation with KDOT K-10 4-lane west leg improvements. KDOT will construct a new grade seperated interchange at K-10 and Wakarusa. The city/county will partner with KDOT to extend Wakarusa to Co Rd 458.

#### Justification

Extend Wakarusa Drive to Co. Rd 458 to improve transportation in Lawrence and Douglas County. The extension is included in the City/Country transportation plan.

Shared Utilities Project (unfunded)

Expenditures		2021	2022	2023	2024	2025	Total	
Construction/Maintenance			12,970,000					
	Total			12,970,000			12,970,000	
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total	
Capital Projects Fund				12,970,000			12,970,000	
Total		12,970,000			12,970,000			

### **Budget Impact/Other**

Project # MS-23-0034
Project Name 27th St Bridge

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 23

Useful Life 30 years

### Description

Replace concrete haunched slab bridge that carries 27th Street over Naismith Creek.

### Justification

Existing bridge deck nearing the end of design life due to delamination and efflorescence. Pier beam and bridge abutment piling nearing end of design life as well due to deterioration.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance				850,000			850,000
	Total			850,000			850,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund				850,000			850,000
Total		850,000				850,000	

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-23-0037

Project Name Wakarusa - Harvard to 6th Street

**Type** Improvement **Useful Life** 50 years

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 30

### Description

Reconstruct Wakarusa from north of Inverness to 6th Street including, concrete pavement, storm sewer, bike facility, and sidewalks.

### Justification

Wakarusa is in poor condition with PCI of 51.8. in 2015 and needs to be reconstructed. The street requires continual maintenance to maintain an adequate surface condition.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design				200,000			200,000
	Total			200,000			200,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund				200,000			200,000
	Total			200,000			200,000

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-23-0038

Project Name Naismith - 19th to 23rd

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 46

**Useful Life** 

### Description

Reconstruction of Naismith from 19th to 23rd st including new pavement, curb and gutter, storm sewer, sidewalks and bike facilities.

#### Justification

The street is in failing condition and needs to be reconstruction (PCI <50). Naismith is on the bike plan for future improvements.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design				300,000			300,000
	Total			300,000			300,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund				300,000			300,000
	Total			300,000			300,000

### **Budget Impact/Other**

#### 2021 thru 2025

## City of Lawrence, Kansas

Project # MS-23-8000

Project Name Sidewalk/Bike/Ped Improvements

Type Improvement Useful Life 50 years

Department Municipal Services & Operation
Contact PW Director

Category Street Reconstruction

Score 45



#### Description

These funds are for projects across the city to build on the existing pedestrian and bicycle network. The Non-Motorized Projects Prioritization Process is used to score eligible projects and guides staff in making funding recommendations. Multimodal Transportation Commission reviews the staff recommendation and determines which projects will be included in a 5-Year Plan. The funds may be used as a match for grant opportunities that arise such as Safe Routes to School, Transportation Alternatives or other grants that support improvements to the pedestrian and bicycle networks.

Assumes award of 2 Transportation Alternatives grant from KDOT:

- 1) Safe Routes to School \$400,000 max
- 2) Other Bike/Ped 5-Year Plan Project \$600,000

#### Justification

The Bicycle Pedestrian Task Force recommended an annual allocation to improve the bikeability and walkability in Lawrence to increase safety, promote health and provide alternative modes of transportation. This program works towards the goals of the community outlined in the Lawrence Bikeway Plan and the Pedestrian Priority Network.

It is anticipated that there are approximately \$70,000,000 in needed sidewalk/bike/pedestrian improvements across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total	
Construction/Maintenar	nce		1,675,000			1,675,000	
	Total		1,675,000				
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total	
Capital Projects Fund			1,675,000			1,675,000	
Total			1,675,000			1,675,000	

#### **Budget Impact/Other**

Project # MS-23-8001

**Project Name ADA Ramp Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 70

Useful Life 50 years



#### Description

Initially included in Sidewalk/Bike/Ped Improvements (CI09) the ADA Ramp improvements have been seperated out into its own project. This project includes reconstruction of ADA ramps to meet current requirements for slope, cross slope and detectable warnings. Work will include removal and replacement of ramps, sidewalk and curbing to allow for improved accessibility. This program is being spent in conjunction as part of MS-23-8014 (Sidewalk Improvement Program - City) to save on economies of scale.

#### Justification

ADA standards have been evolving over many years. Many of the City's ADA ramps do not meet current ADA standards with respect to slope, cross slope or detectable warnings. There are also sidewalks that have no ADA ramp at an intersection. Funds for this program will improve accessibility for all.

It is anticipated that there are approximately \$8,600,000 in needed ADA Ramp repairs across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total	
Planning/Design			32,500			32,500	
Construction/Maintenance	)	292,500					
	Total	325,000					
Funding Sources	2021	2022	2023	2024	2025	Total	
Capital Projects Fund			325,000			325,000	
Total		325,000				325,000	

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-23-8004

**Project Name CDBG Infrastructure Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street New Construction

Score 53

Useful Life 50 years

#### Description

The Municipal Services and Operations Department applies annually for Community Development Block Grant (CDBG) funding. These funds can be used for a variety of project types that support expanding the pedestrian and bicycle network or increase safety for multi-modal users in low-moderate areas.

Projects will be priorized using the city's Non-Motorized Prioritization Plan.

#### **Justification**

Funds to be used to improve pedestrian connectivity and safety for low/moderate income areas.

This is a placeholder for funds that are received through the CDBG grant program. The budget will be adjusted annually with the actual grant amount once known.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ce		300,000			300,000
	Total	300,000				
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund			300,000			300,000
Total		300,000				300,000

### **Budget Impact/Other**

Project # MS-23-8019

Project Name Asset Management Program

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 10 years
Category Unassigned

Score 65

#### Description

In alignment with the City's Asset Management Program, staff have identified gaps in asset management practices across operating departments. This project will procure and implement an enterprise asset management system (EAMS) with features including a call center, inspections, work orders, service requests, and permitting; procure and implement a project and budget prioritization and optimization modeling software; inventory and/or extract assets; and assess asset condition. Additionally, professional services will be used to assist in the development of asset treatment schedules, software implementation, workflow mappings, and data migration/conversion as necessary.

#### Justification

The City owns, operates, and manages a diverse portfolio of infrastructure assets. The scale and criticality of stewardship drives the development of a systematic approach to manage this portfolio. Currently, several barriers contribute to the lack of a mature asset management program. The current asset management software has significant limitations in functionality and scope. Many asset classifications including transportation, facilities, and recreation have little documented inventory or condition rating. Lastly, there is limited ability to model level of service and budget priorities. This project will derive the maximum value of assets to achieve the lowest cost of ownership.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design				375,000			375,000
	Total			375,000			375,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund				300,000			300,000
Utility - Wastewater				37,000			37,000
Utility - Water				38,000			38,000
	Total			375,000			375,000

#### **Budget Impact/Other**

Software maintenance costs for modeling and enterprise asset management, estimated to be \$125,000 annually, would be absorbed into the operating budgets in CIP out-years. The Asset Management Program itself will have an impact on operating budgets. Implementation of an asset management program, by nature, develops lifecycle costs based on condition, level of service, and funding and treatment strategies. Once the City has made progress developing and implementing an Asset Management Program we will have a clearer picture for lowest cost of ownership for all of our assets.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			125,000	125,000	125,000	375,000
	Total		125,000	125,000	125,000	375,000

Project # MS-23-9700

**Project Name** Farmland Remedial Alternatives

Type Improvement

**Department** Municipal Services & Operation

Contact UT Director

Useful Life 50 years
Category Unassigned

Score 58

#### Description

Presently, the remeidial strategy that is implemented at the farmland property is not resilient. The purpose of this project is to asses alternative remedial alternative in order to determine future remedial action required at the site. The project includes a characterization study that will ultaimtely lead to design and construction of the reccomended remedial alternative.

#### Justification

The existing remedial strategy that was implemented at the site is inadequate in addressing the remedial goals for the property. Design and construction of resilient remedial alternatives is necessary in order to comply with KDHE requirements for the site.

It is anticipated that there are approximately \$40,000,000 in needed farmland remediation improvements. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total	
Construction/Maintenance	е		4,000,000			4,000,000	
	Total	Total 4,000,000					
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total	
Capital Projects Fund			4,000,000			4,000,000	
Total		4,000,000				4,000,000	

#### **Budget Impact/Other**

There is an anticipated capital investment of \$14 million over five years in order to design and construct the new remedial alternative followed by \$2 million operations budget annually in order to operate & maintain the new remedial alternative.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			350,000	350,000	350,000	1,050,000
Other (Insurance, Utilities)			975,000	960,000	944,000	2,879,000
Staff Cost			375,000	390,000	406,000	1,171,000
Supplies/Materials			300,000	300,000	300,000	900,000
Tota	1		2,000,000	2,000,000	2,000,000	6,000,000

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-24-0003

Project Name Iowa - Irving Hill Road to 23rd Street

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 30

**Useful Life** 

#### Description

Reconstruction of Iowa from the Irving Hill Road bridge to north of 23rd Street with concrete pavement. Project will include full reconstruction of Iowa similar to the section from 15th to Irving hill Bridge. The project will also include sidewalk/ ADA and storm drainage improvements. intersection improvements @ 19th and 21st St will be evaluated.

### Justification

Pavement failures due to poor subgrade. Intersection improvements may be warranted including signalization and additional turning lanes.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design					400,000		400,000
	Total				400,000		400,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					400,000		400,000
	Total				400,000		400,000

### **Budget Impact/Other**

Project # MS-24-0004

**Project Name** Field Operations Facility

Type Improvement
Useful Life 50 years

**Department** Municipal Services & Operation

Contact PW Director

Category Buildings
Score 49

#### Description

The Field Operations Facility project includes the design and construction of a new Field Operations Facility for Municipal Services & Operations and Parks & Recreation field staff, equipment, and inventory.

#### Justification

On October 15, 2019 the City Commission authorized the City Manager to execute an Engineering Services Agreement in the amount of \$577,480 with Dake Wells for preliminary design services for the Field Operations Facility.

Preliminary design is expected to be completed in August 2020. A supplemental agreement will be issued for design phase services of Phase 1 design of the Field Operations Facility.

The project includes preliminary design services for development of a Field Operations Facility Master Plan that meets current and future space requirements for City Field staff.

The selected consultant will: 1) Review existing operations, staffing, vehicles and equipment and compare with industry trends; 2) Assess existing facilities; 3) Conduct departmental interviews and develop operational programming summaries; 4) Conduct comprehensive space needs analysis for City Field staff in both current and estimated future capacities; 5)

Verify the Farmland Remediation site meets the space needs requirements; 6) Develop

concept plan for Phase 1 Facility and future expansion; 7) Determine infrastructure requirements for Phase 1 and future expansion; 8) Evaluate phasing of construction and field staff relocation; and 9) Establish opinion of probable cost for Phase 1 and potential future cost impacts.

The Municipal Services & Operations and Parks & Recreation Departments operate 18 maintenance-oriented facilities. Many of the facilities do not support the current demand for service and have limited potential for improvement or expansion. Other challenges with the current facilities include: 1) Employee safety; 2) Decentralized locations, requiring excessive drive time; 3) Duplication of facilities, function and staff roles; 4) Insufficient storage for equipment, materials, and inventory; 5) Insufficient information technology and systems; and 6) Lack of security.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenar	nce				14,520,000		14,520,000
	Total				14,520,000		14,520,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					14,520,000		14,520,000
	Total				14,520,000		14,520,000

#### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-24-0037

Project Name Wakarusa - Harvard to 6th Street

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 30

Useful Life 50 years

### Description

Reconstruct Wakarusa from north of Inverness to 6th Street including, concrete pavement, storm sewer, bike facility, and sidewalks.

### Justification

Wakarusa is in poor condition with PCI of 51.8. in 2015 and needs to be reconstructed. The street requires continual maintenance to maintain an adequate surface condition.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenan				3,000,000		3,000,000	
	Total				3,000,000		3,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					3,000,000		3,000,000
	Total				3,000,000		3,000,000

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-24-0038

Project Name Naismith - 19th to 23rd

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Unassigned

Score 46

**Useful Life** 

### Description

Reconstruction of Naismith from 19th to 23rd st including new pavement, curb and gutter, storm sewer, sidewalks and bike facilities.

### Justification

The street is in failing condition and needs to be reconstruction (PCI <50). Naismith is on the bike plan for future improvements.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena				4,000,000		4,000,000	
	Total				4,000,000		4,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					4,000,000		4,000,000
	Total				4,000,000		4,000,000

### **Budget Impact/Other**

### 2021 thru 2025

## City of Lawrence, Kansas

Project # MS-24-8000

Project Name Sidewalk/Bike/Ped Improvements

Type Improvement Useful Life 50 years

Department Municipal Services & Operation
Contact PW Director

Category Street Reconstruction

Score 45



#### Description

These funds are for projects across the city to build on the existing pedestrian and bicycle network. The Non-Motorized Projects Prioritization Process is used to score eligible projects and guides staff in making funding recommendations. Multimodal Transportation Commission reviews the staff recommendation and determines which projects will be included in a 5-Year Plan. The funds may be used as a match for grant opportunities that arise such as Safe Routes to School, Transportation Alternatives or other grants that support improvements to the pedestrian and bicycle networks.

Assumes award of 2 Transportation Alternatives grant from KDOT:

- 1) Safe Routes to School \$400,000 max
- 2) Other Bike/Ped 5-Year Plan Project \$600,000

#### Justification

The Bicycle Pedestrian Task Force recommended an annual allocation to improve the bikeability and walkability in Lawrence to increase safety, promote health and provide alternative modes of transportation. This program works towards the goals of the community outlined in the Lawrence Bikeway Plan and the Pedestrian Priority Network.

It is anticipated that there are approximately \$70,000,000 in needed sidewalk/bike/pedestrian improvements across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce				1,675,000		1,675,000
	Total _				1,675,000		1,675,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					1,675,000		1,675,000
	Total _				1,675,000		1,675,000

#### **Budget Impact/Other**

Project # MS-24-8001

**Project Name ADA Ramp Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 70

Useful Life 50 years



#### Description

Initially included in Sidewalk/Bike/Ped Improvements (CI09) the ADA Ramp improvements have been seperated out into its own project. This project includes reconstruction of ADA ramps to meet current requirements for slope, cross slope and detectable warnings. Work will include removal and replacement of ramps, sidewalk and curbing to allow for improved accessibility. This program is being spent in conjunction as part of MS-24-8014 (Sidewalk Improvement Program - City) to save on economies of scale.

#### Justification

ADA standards have been evolving over many years. Many of the City's ADA ramps do not meet current ADA standards with respect to slope, cross slope or detectable warnings. There are also sidewalks that have no ADA ramp at an intersection. Funds for this program will improve accessibility for all.

It is anticipated that there are approximately \$8,600,000 in needed ADA Ramp repairs across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design				32,500		32,500
Construction/Maintenance	е			292,500		292,500
	Total			325,000		325,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund		2022	2020	325,000		325,000
	Total			325,000		325,000

### **Budget Impact/Other**

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-24-8004

**Project Name CDBG Infrastructure Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Category Street New Construction

Score 53

Useful Life 50 years

#### Description

The Municipal Services and Operations Department applies annually for Community Development Block Grant (CDBG) funding. These funds can be used for a variety of project types that support expanding the pedestrian and bicycle network or increase safety for multi-modal users in low-moderate areas.

Projects will be priorized using the city's Non-Motorized Prioritization Plan.

#### **Justification**

Funds to be used to improve pedestrian connectivity and safety for low/moderate income areas.

This is a placeholder for funds that are received through the CDBG grant program. The budget will be adjusted annually with the actual grant amount once known.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ion/Maintenance			300,000		300,000
	Total			300,000		300,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund				300,000		300,000
	Total			300,000		300,000

### **Budget Impact/Other**

Project # MS-24-8019

Project Name Asset Management Program

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 10 years
Category Unassigned

Score 65

### Description

In alignment with the City's Asset Management Program, staff have identified gaps in asset management practices across operating departments. This project will procure and implement an enterprise asset management system (EAMS) with features including a call center, inspections, work orders, service requests, and permitting; procure and implement a project and budget prioritization and optimization modeling software; inventory and/or extract assets; and assess asset condition. Additionally, professional services will be used to assist in the development of asset treatment schedules, software implementation, workflow mappings, and data migration/conversion as necessary.

#### Justification

The City owns, operates, and manages a diverse portfolio of infrastructure assets. The scale and criticality of stewardship drives the development of a systematic approach to manage this portfolio. Currently, several barriers contribute to the lack of a mature asset management program. The current asset management software has significant limitations in functionality and scope. Many asset classifications including transportation, facilities, and recreation have little documented inventory or condition rating. Lastly, there is limited ability to model level of service and budget priorities. This project will derive the maximum value of assets to achieve the lowest cost of ownership.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design					325,000		325,000
	Total				325,000		325,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					290,000		290,000
Utility - Wastewater					18,000		18,000
Utility - Water					17,000		17,000
	Total				325,000		325,000

#### **Budget Impact/Other**

Software maintenance costs for modeling and enterprise asset management, estimated to be \$125,000 annually, would be absorbed into the operating budgets in CIP out-years. The Asset Management Program itself will have an impact on operating budgets. Implementation of an asset management program, by nature, develops lifecycle costs based on condition, level of service, and funding and treatment strategies. Once the City has made progress developing and implementing an Asset Management Program we will have a clearer picture for lowest cost of ownership for all of our assets.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance				125,000	125,000	250,000
	Total			125,000	125,000	250,000

Project # MS-24-9700

**Project Name** Farmland Remedial Alternatives

Type Improvement Useful Life 50 years

**Department** Municipal Services & Operation

Contact UT Director

Category Unassigned

Score 58

#### Description

Presently, the remeidial strategy that is implemented at the farmland property is not resilient. The purpose of this project is to asses alternative remedial alternative in order to determine future remedial action required at the site. The project includes a characterization study that will ultaimtely lead to design and construction of the reccomended remedial alternative.

#### Justification

The existing remedial strategy that was implemented at the site is inadequate in addressing the remedial goals for the property. Design and construction of resilient remedial alternatives is necessary in order to comply with KDHE requirements for the site.

It is anticipated that there are approximately \$40,000,000 in needed farmland remediation improvements. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	20	21	2022	2023	2024	2025	Total
Construction/Maintenar	nce				2,000,000		2,000,000
	Total				2,000,000		2,000,000
Funding Sources	20:	21	2022	2023	2024	2025	Total
Capital Projects Fund					2,000,000		2,000,000
	Total				2,000,000		2,000,000

#### **Budget Impact/Other**

There is an anticipated capital investment of \$14 million over five years in order to design and construct the new remedial alternative followed by \$2 million operations budget annually in order to operate & maintain the new remedial alternative.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance				350,000	350,000	700,000
Other (Insurance, Utilities)				960,000	944,000	1,904,000
Staff Cost				390,000	406,000	796,000
Supplies/Materials				300,000	300,000	600,000
Tota	.l			2,000,000	2,000,000	4,000,000

Project # MS-25-0003

Project Name Iowa - Irving Hill Road to 23rd Street

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 30

**Useful Life** 

### Description

Reconstruction of Iowa from the Irving Hill Road bridge to north of 23rd Street with concrete pavement. Project will include full reconstruction of Iowa similar to the section from 15th to Irving hill Bridge. The project will also include sidewalk/ ADA and storm drainage improvements. intersection improvements @ 19th and 21st St will be evaluated.

### Justification

Pavement failures due to poor subgrade. Intersection improvements may be warranted including signalization and additional turning lanes.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce					5,000,000	5,000,000
	Total					5,000,000	5,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						5,000,000	5,000,000
	Total					5,000,000	5,000,000

### **Budget Impact/Other**

Project # MS-25-8000

Project Name Sidewalk/Bike/Ped Improvements

Type Improvement Useful Life 50 years

Department Municipal Services & Operation

Contact PW Director

Category Street Reconstruction

Score 45



#### Description

These funds are for projects across the city to build on the existing pedestrian and bicycle network. The Non-Motorized Projects Prioritization Process is used to score eligible projects and guides staff in making funding recommendations. Multimodal Transportation Commission reviews the staff recommendation and determines which projects will be included in a 5-Year Plan. The funds may be used as a match for grant opportunities that arise such as Safe Routes to School, Transportation Alternatives or other grants that support improvements to the pedestrian and bicycle networks.

Assumes award of 2 Transportation Alternatives grant from KDOT:

- 1) Safe Routes to School \$400,000 max
- 2) Other Bike/Ped 5-Year Plan Project \$600,000

#### Justification

The Bicycle Pedestrian Task Force recommended an annual allocation to improve the bikeability and walkability in Lawrence to increase safety, promote health and provide alternative modes of transportation. This program works towards the goals of the community outlined in the Lawrence Bikeway Plan and the Pedestrian Priority Network.

It is anticipated that there are approximately \$70,000,000 in needed sidewalk/bike/pedestrian improvements across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design					70,000	70,000
Construction/Maintenanc	e				1,632,000	1,632,000
	Total				1,702,000	1,702,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund					1,702,000	1,702,000
	Total				1,702,000	1,702,000

#### **Budget Impact/Other**

Project # MS-25-8001

**Project Name ADA Ramp Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Contact

Category Street Reconstruction

Score 70

Useful Life 50 years



#### Description

Initially included in Sidewalk/Bike/Ped Improvements (CI09) the ADA Ramp improvements have been seperated out into its own project. This project includes reconstruction of ADA ramps to meet current requirements for slope, cross slope and detectable warnings. Work will include removal and replacement of ramps, sidewalk and curbing to allow for improved accessibility. This program is being spent in conjunction as part of MS-25-8014 (Sidewalk Improvement Program - City) to save on economies of scale.

#### Justification

ADA standards have been evolving over many years. Many of the City's ADA ramps do not meet current ADA standards with respect to slope, cross slope or detectable warnings. There are also sidewalks that have no ADA ramp at an intersection. Funds for this program will improve accessibility for all.

It is anticipated that there are approximately \$8,600,000 in needed ADA Ramp repairs across the City. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures	2021	2022	2023	2024	2025	Total
Planning/Design					32,500	32,500
Construction/Maintenan	ice				292,500	292,500
	Total				325,000	325,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund					325,000	325,000
	Total				325,000	325,000

## **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # MS-25-8004

**Project Name CDBG Infrastructure Improvements** 

Type Improvement

**Department** Municipal Services & Operation

Useful Life Contact

Category Unassigned

Score 53

### Description

The Municipal Services and Operations Department applies annually for Community Development Block Grant (CDBG) funding. These funds can be used for a variety of project types that support expanding the pedestrian and bicycle network or increase safety for multi-modal users in low-moderate areas.

Projects will be priorized using the city's Non-Motorized Prioritization Plan.

### Justification

Funds to be used to improve pedestrian connectivity and safety for low/moderate income areas.

This is a placeholder for funds that are received through the CDBG grant program. The budget will be adjusted annually with the actual grant amount once known.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenan	се				300,000	300,000
	Total				300,000	300,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund					300,000	300,000
	Total				300,000	300,000

## **Budget Impact/Other**

This project will have no impact on the operational budget in the future.

Project # MS-25-8019

Project Name Asset Management Program

Type Improvement

**Department** Municipal Services & Operation

Contact PW Director

Useful Life 10 years
Category Unassigned

Score 65

### Description

In alignment with the City's Asset Management Program, staff have identified gaps in asset management practices across operating departments. This project will procure and implement an enterprise asset management system (EAMS) with features including a call center, inspections, work orders, service requests, and permitting; procure and implement a project and budget prioritization and optimization modeling software; inventory and/or extract assets; and assess asset condition. Additionally, professional services will be used to assist in the development of asset treatment schedules, software implementation, workflow mappings, and data migration/conversion as necessary.

#### Justification

The City owns, operates, and manages a diverse portfolio of infrastructure assets. The scale and criticality of stewardship drives the development of a systematic approach to manage this portfolio. Currently, several barriers contribute to the lack of a mature asset management program. The current asset management software has significant limitations in functionality and scope. Many asset classifications including transportation, facilities, and recreation have little documented inventory or condition rating. Lastly, there is limited ability to model level of service and budget priorities. This project will derive the maximum value of assets to achieve the lowest cost of ownership.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design						175,000	175,000
	Total					175,000	175,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						140,000	140,000
Utility - Wastewater						18,000	18,000
Utility - Water						17,000	17,000
	Total		•			175,000	175,000

## **Budget Impact/Other**

Software maintenance costs for modeling and enterprise asset management, estimated to be \$125,000 annually, would be absorbed into the operating budgets in CIP out-years. The Asset Management Program itself will have an impact on operating budgets. Implementation of an asset management program, by nature, develops lifecycle costs based on condition, level of service, and funding and treatment strategies. Once the City has made progress developing and implementing an Asset Management Program we will have a clearer picture for lowest cost of ownership for all of our assets.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					125,000	125,000
	Total				125,000	125,000

Project # MS-25-9700

**Project Name** Farmland Remedial Alternatives

Type Improvement Useful Life 50 years

**Department** Municipal Services & Operation

Contact UT Director

Category Unassigned

Score 58

### Description

Presently, the remeidial strategy that is implemented at the farmland property is not resilient. The purpose of this project is to asses alternative remedial alternative in order to determine future remedial action required at the site. The project includes a characterization study that will ultaimtely lead to design and construction of the reccomended remedial alternative.

#### Justification

The existing remedial strategy that was implemented at the site is inadequate in addressing the remedial goals for the property. Design and construction of resilient remedial alternatives is necessary in order to comply with KDHE requirements for the site.

It is anticipated that there are approximately \$40,000,000 in needed farmland remediation improvements. Further analysis is being completed and this figure will be updated when more information is known.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce					2,000,000	2,000,000
	Total					2,000,000	2,000,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						2,000,000	2,000,000
	Total	·				2,000,000	2,000,000

#### **Budget Impact/Other**

There is an anticipated capital investment of \$14 million over five years in order to design and construct the new remedial alternative followed by \$2 million operations budget annually in order to operate & maintain the new remedial alternative.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					350,000	350,000
Other (Insurance, Utilities)					944,000	944,000
Staff Cost					406,000	406,000
Supplies/Materials					300,000	300,000
Tota	al	<u> </u>	_	_	2,000,000	2,000,000

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # PR-21-2130

Project Name Lawrence Loop Trail - Routing and Design

Type Improvement
Useful Life 30 years

**Department** Parks and Recreation

Contact PR Director

Category Park Improvements

Score 34

## Description

Identify the buildable routes, delineate easements needs and preliminary design of the Lawrence Loop trail sections running from the Santa Fe Depot on 7th Street to Constant Park, and the section from Peterson Road to the trail near the Lawrence Memorial Hospital

### Justification

These projects would move us closer to completing a loop trail around Lawrence

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan (plan completed in 2017)

Critical Success Factors:

Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design		150,000					150,000
	Total	150,000					150,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		150,000					150,000
	Total	150,000					150,000

#### **Budget Impact/Other**

This project will have no impact on the operational budget in the future

# City of Lawrence, Kansas

Project # PR-21-2141

**Project Name** Sports Complex and Golf Irrigation Upgrades

Type Improvement
Useful Life 20 years

Category Park Improvements

Score 47

**Department** Parks and Recreation **Contact** PR Director



#### Description

The MSO Department has plans to install new raw waterlines to feed irrigation systems at the City's golf course and major atheltic complexes on the Corps of Engineers property at Clinton Lake. This new system will allow these facilities to be irrigated with water from Clinton Lake prior to it being treated at the City's water treatment plant.

This project will provide irrigation system upgrades at the sports complexes to transition the current system from a fresh water system to a raw water system and will also provide upgrades to the irrigation pump system at Eagle Bend Golf Course.

#### Justification

Lowers the cost of water treatment by utilizing untreated water for irrigation

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		350,000					350,000
	Total	350,000					350,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		350,000					350,000
	Total	350,000					350,000

## **Budget Impact/Other**

This new irrigation system will require added annual maintenance to keep the raw water system operational. There will also be added cost for electricity to run new pumps. Estimated annual cost \$10,000

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance		2,000	2,000	2,000	2,000	8,000
Other (Insurance, Utilities)		12,000	12,000	12,000	12,000	48,000
Total	1	14,000	14,000	14,000	14,000	56,000

# City of Lawrence, Kansas

Project # PR-21-2329

Project Name Water Spray Park - Burroughs Creek Park

Type Improvement
Useful Life 30 years

Category Park Improvements

Score 33

**Department** Parks and Recreation **Contact** PR Director



#### Description

The 2017 Parks and Recreation Master Plan called for the creation of 4-6 spray parks located in neighborhood areas. These park facilities provide water activities for patrons during the summer months. These locations would also provide an extended aquatic season in the early spring and fall when the pools may not be operational due to weather or staffing concerns.

Burroughs Creek Trail would provide a new aquatics facility on the City's East Side

#### Justification

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan (plan completed in 2017)

Critical Success Factors:

Innovative Infrastructure and Asset Management

Safe, Healthy and Welcoming Neighborhoods

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		200,000					200,000
	Total	200,000					200,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		200,000					200,000
	Total	200,000					200,000

#### **Budget Impact/Other**

This will be a new aquatics facility which will require additional maintenance to open, operate and close each year. Estimated staffing and materials cost would be \$5,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance		2,000	2,000	2,000	2,000	8,000
Other (Insurance, Utilities)		3,000	3,000	3,000	3,000	12,000
Tot	tal	5,000	5,000	5,000	5,000	20,000

# City of Lawrence, Kansas

Project # PR-21-2407

**Project Name** Youth Sports Complex Exit - 27th street extension

Type Improvement Useful Life 30 years

**Department** Parks and Recreation **Contact** PR Director

Category Park Improvements

Score 69



#### Description

The road network at Clinton Lake Regional Park needs to be further developed to improve safety and access to park facilities. By extending 27th from the Highway 10 stop light all the way to the lower dam road, we would provide a secondary entrance and exit to the Youth Sports Complex and the Mutt Run Dog Park. This would improve traffic flow and congestion issues and reduce the traffic at the busy stop-light on Highway 10 (KDOT is recommending this project).

This project may qualify for a KDOT local match grant

#### Justification

Citizen and visitor safety

Critical Success Factors

Innovative Infrastructure and Asset Management

Safe, Healthy and Welcoming Neighborhoods

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance		1,250,000					1,250,000
	Total	1,250,000					1,250,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		1,250,000					1,250,000
	Total	1,250,000					1,250,000

### **Budget Impact/Other**

Once constructed, this project will have no impact on the operational budget for 15-20 years in the future

# City of Lawrence, Kansas

Project # PR-22-2027

Project Name Broken Arrow Park - Restroom Replacement

Type Improvement
Useful Life 30 years

Category Park Improvements

Score 68

**Department** Parks and Recreation **Contact** PR Director



### Description

Upgrade the restroom in Broken Arrow Park (ADA Compliance)

The existing shelter, restroom and playground equipment have been in place many years and are one of the most popular rental facilities in the park system.

### Justification

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the 2017 Parks & Recreation Master Plan

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			130,000				130,000
	Total		130,000				130,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			130,000				130,000
	Total	•	130,000				130,000

### **Budget Impact/Other**

This project should increase revenue potentially from a new shelter / restroom . It would be an enclosed structure suitable for year round reservations and events.

# City of Lawrence, Kansas

Project # PR-22-2028

Project Name Broken Arrow Park - Shelter (ADA Compliance)

Type Improvement
Useful Life 30 years

Category Park Improvements

Score 72

**Department** Parks and Recreation **Contact** PR Director



## Description

Upgrade the park shelter in Broken Arrow Park (ADA Compliance)

The existing shelter has been in place many years and is one of the most popular rental facilities in the park system. The proposed plan would enclose the existing shelters and add accessible kitchen and restroom facilities attached to the shelter. This facility would be heated and air conditioned for year round use.

#### Justification

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the 2017 Parks & Recreation Master Plan

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			250,000				250,000
	Total		250,000				250,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			250,000				250,000
	Total		250,000				250,000

### **Budget Impact/Other**

There project should increase revenue potentially from a new shelter / restroom . It would be an enclosed structure suitable for year round reservations and events. There will be added utilities costs associated with heatring and cooling the facility.

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Other (Insurance, Utilities)			2,000	2,000	2,000	6,000
Total			2,000	2,000	2,000	6,000

Project # PR-22-2135

Project Name Youth Sports Complex - ADA sidewalks and parking

Type Improvement Useful Life 20 years

**Department** Parks and Recreation **Contact** PR Director

Category Park Improvements

Score 70



### Description

The Youth Sports Compex has 15 soccer fields, 5 football fields and 8 softball/ baseball fields. The complex needs improved parking and patron sidewalks to access many of the field viewing areas

### Justification

Many of these fields do not have proper ADA parking and viewing areas

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	Construction/Maintenance		200,000				200,000
	Total		200,000				200,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			200,000				200,000
	Total		200,000				200,000

### **Budget Impact/Other**

This project will have no impact on the operational budget in the future

Project # PR-22-2475

Project Name Eisenhower Dr. Park - Trail / Play Development

Type Improvement
Useful Life 20 years

**Department** Parks and Recreation **Contact** PR Director

Category Park Improvements

Score 44



#### Description

Eisenhower Drive Park is an undeveloped park property that has been master planned as a neighborhood park surrounding the new Police Department facility. This property is in the NW part of the City, which is an area that is under served by neighborhood parks.

This project phase would install new trails with fitness equipment in the park and establish new play areas for the neighborhood.

#### Justification

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the recently completed Parks & Recreation Master Plan (plan completed in 2017)

Critical Success Factors:

Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenance			100,000				100,000
	Total		100,000				100,000
	•						
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			100,000				100,000
	Total		100,000				100,000

### **Budget Impact/Other**

This new park will require added maintenance to open and operate each year. Estimated staffing and materials cost would be \$8,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			8,000	8,000	8,000	24,000
	Total		8,000	8,000	8,000	24,000

Project # PR-22-2520

Project Name Lawrence Loop Trail - Peterson Rd to Hospital

Type Improvement Useful Life 30 years

**Department** Parks and Recreation

Contact PR Director

Category Park Improvements

Score 44

### Description

Construct one of the missing segments of the Lawrence Loop trail.

This section would extend from the end of the Peterson Road trail at the intersection of Iowa & Peterson to the Sandra Shaw Trail near the Hospital.

#### Justification

This project would move us closer to completing a loop trail around Lawrence

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan (plan completed in 2017)

Critical Success Factor:

Innovative Infrastructure and Asset Management

Safe, Healthy and Welcoming Neighborhoods

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce		1,670,000				1,670,000
	Total		1,670,000				1,670,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			1,670,000				1,670,000
	Total	·	1,670,000				1,670,000

#### **Budget Impact/Other**

This new trail will require added maintenance to operate each year. Estimated staffing and materials cost would be \$8,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance			8,000	8,000	8,000	24,000
	Total		8,000	8,000	8,000	24,000

Project # PR-23-2001

**Project Name** South Park Wading Pool Renovation

Type Improvement
Useful Life 20 years

**Department** Parks and Recreation **Contact** PR Director

Category Park Improvements

Score 45



#### Description

The South Park Wading Pool is a small, traditional, zero-depth wading pool last updated in 2000. This aging facility would better serve the community by being converted into a splash pad. The current location including restroom facilities would be completely re-used. Only the pool basin and circulation/chemical system would be replaced and include interactive water play features, shade structures and enhanced seating.

This project would expand the usable season for this aquatic facility and will eliminate the need to staff the wading pool during the summer months of operation

### Justification

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the Parks & Recreation Master Plan

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenand	ce		175,000			
	Total		175,000			175,000
Funding Sources	2021	2022	2023	2024	2025	Total
Capital Projects Fund	2021	2022	175,000	2021	2023	175,000
Total		175,000				175,000

## **Budget Impact/Other**

This project will have no impact on the operational budget in the future

# City of Lawrence, Kansas

Project # PR-24-2006

Project Name Lyons Park Shelter Replacement

Type Improvement
Useful Life 30 years

rs Contact PR Director

Category Park Improvements

Score 46



### Description

Replace shelter in this North Lawrence Park. The shelter is among our oldest in the park system.

### Justification

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the recently completed Parks & Recreation Master Plan (plan completed in 2017)

**Department** Parks and Recreation

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce				120,000		
	Total				120,000		120,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					120,000		120,000
	Total				120,000		120,000

## **Budget Impact/Other**

This project will have no impact on the operational budget in the future

Project # PR-24-3032

Project Name YSC - Install Asphalt on Parking Lots (ADA access)

Type Improvement
Useful Life 20years

Contact PR Director

**Department** Parks and Recreation

Category Park Improvements

Score 71



#### Description

At the Youth Sports Complex there are gravel parking lots and driveways for approximately 75% of the complex parking. The gravel infrastructure is high maintenance during heavy traffic times of the year, especially during wet weather. With a limited number of paved parking stalls in the complex, ADA parking and access to many of the field is very difficult.

#### Justification

Installing asphalt over existing gravel lots at the Youth Sports Complex will provide a more stable parking surface and increased ADA access to fields

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce				300,000		300,000
	Total				300,000		300,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund					300,000		300,000
	Total				300,000		300,000

### **Budget Impact/Other**

This project will have minimal impact on the operational budget in the future.

Possible positive budgetary impact by reducing annual gravel purchases to maintain existing lots

# City of Lawrence, Kansas

Project # PR-25-2501

**Project Name** Water Spray Park

Type Improvement
Useful Life 30 years
Category Park Improvements

Score 35

**Department** Parks and Recreation **Contact** PR Director



### Description

The 2017 Parks and Recreation Master Plan called for the creation of 4 -6 spray parks located in neighborhood areas. These park facilities provide water activities for patrons during the summer months. These locations would also provide an extended aquatic season in the early spring and fall when the pools may not be operational due to weather or staffing concerns.

Possible options Watson Park Lyons Park

#### Justification

Critical Success Factors:

Innovative Infrastructure and Asset Management Safe, Healthy and Welcoming Neighborhoods

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenan	nce					250,000	250,000
	Total					250,000	250,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						250,000	250,000
	Total					250,000	250,000

## **Budget Impact/Other**

This will be a new aquatics facility which will require additional maintenance to open, operate and close each year. Estimated staffing and materials cost would be \$5,000 per year

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					2,000	2,000
Other (Insurance, Utilities)					3,000	3,000
Т	otal				5,000	5,000

# City of Lawrence, Kansas

Project # PR-25-3017

Project Name Youth Sports Complex Light Upgrade

Type Improvement
Useful Life 20 years

**Department** Parks and Recreation **Contact** PR Director

Category Park Improvements

Score 35

### Description

The Youth Sports Complex has 8 baseball / softball fields and 2 soccer fields that have lights that are 25 - 30 years old. This project would upgrade these lights to modern technology by replacing existing fixtures with LED fixtures

### Justification

This project will improve energy efficiency and reduce glare

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce					900,000	900,000
	Total					900,000	900,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						900,000	900,000
	Total					900,000	900,000

### **Budget Impact/Other**

This project will have a positive budgetary impact by using LED lighting to reduce electric demand on the facility

Project # PR-25-3049

**Project Name** Park Property Acquisition - Central

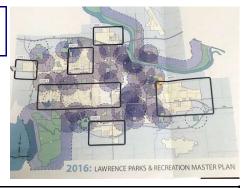
Type Improvement Useful Life 40 + years

Category Park Improvements

Contact PR Director

**Department** Parks and Recreation

Score 38



### Description

As the City grows, there is a need to acquire future park properties in the urban growth area prior to development reaching the area.

### Justification

Allow for future expansion of the park system and acquire property at a reasonable price before development reaches the area.

Parks & Recreation Master Plan

Through public input and administrative review, this project was identified as a priority project in the 2017 Parks & Recreation Master Plan

Critical Success Factors:

Safe, Healthy and Welcoming Neighborhoods

Commitment to Core Services

Expenditures		2021	2022	2023	2024	2025	Total
Land Acquisition						200,000	200,000
	Total					200,000	200,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund						200,000	200,000
	Total					200,000	200,000

## Budget Impact/Other

This new park will require added maintenance to operate each year. Estimated staffing and materials cost would be \$2,000 per year if left undeveloped

<b>Budget Items</b>	2021	2022	2023	2024	2025	Total
Maintenance					2,000	2,000
	Total				2,000	2,000

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # PD-21-0003

**Project Name** Police Outbuilding Completion

Type Improvement
Useful Life 30 years

**Department** Police

Contact Police Chief

Category Buildings
Score 33

### Description

Complete the construction of the outbuilding for police facility to include interior finishes and HVAC. The building houses critical response equipment and when completed, will house all Crisis Response Team equipment and operations.

The Commission approved Turner Construction's Guaranteed Maximum Price (GMP) of \$16,096,402 on August 20, 2019. To keep the project within budget, alternate bid items were not included in the GMP. In November 2019, the City Commission, through unused Police Department Salary, funded \$1 million completing the construction for the Investigations Division, Administration and a Crime Lab. While these areas will be completed, there was not a funding source available for completion of the outbuilding

#### Justification

The Commission, City and Department has expressed the intent to unite all police operations into one campus. Completion of the outbuilding will conclude all construction of the initial phase of the police facility and house critical components of the Department. For the described spaces will unite over 80% of the department into one facility.

Expenditures		2021	2022	2023	2024	2025	Total
Expenditures Construction/Maintenance Total		250,000					250,000
	Total	250,000					250,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		250,000					250,000
	Total	250,000					250,000

## **Budget Impact/Other**

There is no expected budget impact in the budget year or subsequent years.

Project # PD-21-0004

Project Name Vehicle Canopy & Weather Protection

Type Improvement
Useful Life 15 years
Category Unassigned

**Department** Police **Contact** Police Chief

Score 29

### Description

During the planning phase of the police facility, the architects designed areas in the parking lot that could be later be fitted for overhead vehicle protection (car ports) in order to protect the Department's fleet of vehicles. The average patrol vehicle, including equipment, has an estimated value of \$50,000. A large storm, especially hail, could cause catastrophic damage to the patrol fleet making it difficult, if not impossible to provide patrol services. This project would come in at least two phases, covering approximately 20 vehicles during each phase.

#### Justification

The Department has never had covered parking and has been lucky to not have significant damage to the patrol fleet. The Law Enforcement Center location provided access to three City parking garages, which provided significant protection from vehicles. Multiple officers often spend as much as an hour moving vehicles to and from these parking garages. With the new police facility, the nearest city parking garage is not within a distance in which it would be reasonable to move vehicles back and forth from the facility to the garage.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce	300,000					300,000
	Total	300,000					300,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund		300,000					300,000
	Total	300,000					300,000

## **Budget Impact/Other**

It is suggested to have this CIP item over two years, each approximately \$300,000 for a total of \$600,000 and protecting approximately 40 total vehicles. This project will have no impact on the operational budget in the future.

Project # PD-22-0002

Score 34

**Project Name** Training Center Design & Professional Services

Type Improvement
Useful Life 50 years
Category Buildings

**Department** Police

Contact Police Chief

## Description

The Training Center is expected to be a standalone building on the north end of the lot designated for the police facility. This building will house the recruit academy, space for department in-service and have designated rooms for specialty training such as training simulators and defensive tactics. Additionally, a space for a small special investigation's unit will be included.

The Commission approved \$18.5 million in the 2017 and 2019 CIP to design and construct the first phase of a new police facility with the primary goal of moving all services currently located in the Law Enforcement Center (LEC) into the new facility. The City anticipated the project budget would allow the first constructed phase of the facility to house Patrol, Information Services, Records, and Evidence. In 2019, the City Commission approved the construction of shelled spaces for Investigations, Administration and a Crime Lab.

#### Justification

The Commission, City and Department have expressed the intent to unite all police operations into one campus. Design of the Training Center will give the city appropriate cost estimates for construction. Completion of the Training Center will fully unite the police department into one campus.

Expenditures		2021	2022	2023	2024	2025	Total
Planning/Design			500,000				500,000
	Total		500,000				500,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			500,000				500,000
	Total		500,000				500,000

### **Budget Impact/Other**

There is an anticipated cost for future construction of the facility at approximately \$5 million.

Project # PD-22-0004

Project Name Vehicle Canopy & Weather Protection

Type Improvement
Useful Life 15 years
Category Unassigned

**Department** Police **Contact** Police Chief

Category Chassigh

Score 29

## Description

During the planning phase of the police facility, the architects designed areas in the parking lot that could be later be fitted for overhead vehicle protection (car ports) in order to protect the Department's fleet of vehicles. The average patrol vehicle, including equipment, has an estimated value of \$50,000. A large storm, especially hail, could cause catastrophic damage to the patrol fleet making it difficult, if not impossible to provide patrol services. This project would come in at least two phases, covering approximately 20 vehicles during each phase.

#### Justification

The Department has never had covered parking and has been lucky to not have significant damage to the patrol fleet. The Law Enforcement Center location provided access to three City parking garages, which provided significant protection from vehicles. Multiple officers often spend as much as an hour moving vehicles to and from these parking garages. With the new police facility, the nearest city parking garage is not within a distance in which it would be reasonable to move vehicles back and forth from the facility to the garage.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintena	nce		300,000	300,000			300,000
	Total		300,000				300,000
<b>Funding Sources</b>		2021	2022	2023	2024	2025	Total
Capital Projects Fund			300,000				300,000
	Total		300,000				300,000

## **Budget Impact/Other**

It is suggested to have this CIP item over two years, each approximately \$300,000 for a total of \$600,000 and protecting approximately 40 total vehicles. This project will have no impact on the operational budget in the future.

Project # PD-23-0002

**Project Name** Training Center Construction

Type Improvement Useful Life 50 years

**Department** Police

Contact Police Chief

Category Buildings
Score 26

### Description

The Training Center is expected to be a standalone building on the north end of the lot designated for the police facility. This building will house the recruit academy, space for department in-service and have designated rooms for specialty training such as training simulators and defensive tactics. Additionally, a space for a small special investigation's unit will be included.

The Commission approved \$18.5 million in the 2017 and 2019 CIP to design and construct the first phase of a new police facility with the primary goal of moving all services currently located in the Law Enforcement Center (LEC) into the new facility. The City anticipated the project budget would allow the first constructed phase of the facility to house Patrol, Information Services, Records, and Evidence. In 2019, the City Commission approved the construction of shelled spaces for Investigations, Administration and a Crime Lab.

#### Justification

The Commission, City and Department have expressed the intent to unite all police operations into one campus. Design of the Training Center will give the city appropriate cost estimates for construction. Completion of the Training Center will fully unite the police department into one campus.

Expenditures	2021	2022	2023	2024	2025	Total
Construction/Maintenance			5,000,000			5,000,000
-	Total		5,000,000			5,000,000
<b>Funding Sources</b>	2021	2022	2023	2024	2025	Total
Capital Projects Fund			5,000,000			5,000,000
7	Γotal		5,000,000			5,000,000

### **Budget Impact/Other**

There is an anticipated cost for future construction of the facility at approximately \$5 million. Once construction is complete, there will be increased operations costs for the facility. It is expected the increased operations costs would be offset by the ITC being vacated. This project will have no impact on the operational budget in the future.

# Proposed Capital Improvement Plan

2021 thru 2025

# City of Lawrence, Kansas

Project # TR-21-01

Project Name Multi Modal Facility

Type Improvement

**Department** Public Transit

Useful Life 40 + years

Contact Tranit & Parking Administrator

Category Buildings
Score 58

### Description

A bus transfer location that will act as the primary hub for the system. The facility will have amenities for transit users and drivers. The design will consider bicycle and pedestrian amenities.

#### Justification

Currently our major transfer activities occur in the downtown. With increases in service the operation has had difficulties operating in a safe and efficient manner. Development in the downtown has eliminated the availability of alternative location within the downtown. A more centrally located facility would allow for better use of our resources and would allow for a more efficient use of resources. A site location analysis has been performed and has found that a centrally located facility, on or around the KU campus, would benefit both students and the general public. These funds will be provided through funds previously reserved and will have no impact on the general budget.

Expenditures		2021	2022	2023	2024	2025	Total
Construction/Maintenar	nce	3,500,000					3,500,000
	Total	3,500,000					3,500,000
Funding Sources		2021	2022	2023	2024	2025	Total
Capital Projects Fund		3,500,000					3,500,000
	Total	3,500,000					3,500,000

#### **Budget Impact/Other**

These funds will be provided through the Transit Reserve Fund and will have no impact on the general budget. Facility Maintenance costs are unknown at this time.