



Fiscal Year 2021 Business and Capital Plans

Lower Colorado River Authority

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The Board of Directors is composed of 15 members appointed to six-year terms by the governor with advice and consent of the Texas Senate. Directors represent counties in LCRA’s electric and water service areas. The directors meet regularly to set strategic corporate direction for the general manager and staff, to approve projects and large expenditures, and to review progress on major activities and industry issues.

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These business and capital plans present a long-term vision and summary of operational plans for LCRA and its nonprofit corporations. The business and capital plans should not be used as a basis for making a financial decision with regard to LCRA or any of its securities or other obligations. These business and capital plans are intended to satisfy the official intent requirements set forth in IRS Treasury Regulations Section 1.150-2. For more complete information on LCRA and its obligations, refer to LCRA's annual financial report, the official statements relating to LCRA's bonds, and the annual and material event disclosures filed by LCRA with nationally recognized municipal securities information repositories and the State Information Depository pursuant to Rule 15c2-12 of the U.S. Securities and Exchange Commission. The information in this report and within each of the documents referenced applies only as of the report's date. The business and capital plans include forecasts based on current assumptions used for planning purposes only and are subject to change. Copies of the documents referenced in this report may be obtained from Stephen Kellicker, senior vice president of Finance, LCRA, 3700 Lake Austin Blvd., Austin, TX 78703.



OUR *Mission*

To enhance the quality of life of the Texans we serve through water stewardship, energy and community service.



OUR *Vision*

We will be the public utility
that sets the standard for excellence.

Setting the Standard for Excellence

The people of Texas deserve the very best, and LCRA has been committed to delivering just that for more than 85 years.

We were created in 1934 to tame the Colorado River and, in so doing, protect Austin and communities downstream. Today, more than a million people rely on the water we manage, and the wholesale power and transmission services we provide are key to continued growth as people flock to our state. These are responsibilities we don't take lightly.

In everything we do, we set an extremely high bar. That's reflected in our vision:

We will be the public utility that sets the standard for excellence.

Our business and capital plans – detailed in the following pages – provide a road map for how we will continue fulfilling our mission and achieve our vision and strategic goals in the coming years, all the while adhering to the core values that define who we are.

Our mission

To enhance the quality of life of the Texans we serve through water stewardship, energy and community service.

Our strategic goals:

- **Run an effective, cost-aware business.**
- **Manage and develop water.**
- **Implement digital tools and use data effectively.**
- **Build today's workforce for the future.**

Our values:

- **Focus on safety.**
- **Operate with integrity.**
- **Show respect.**
- **Take initiative.**
- **Focus on service.**



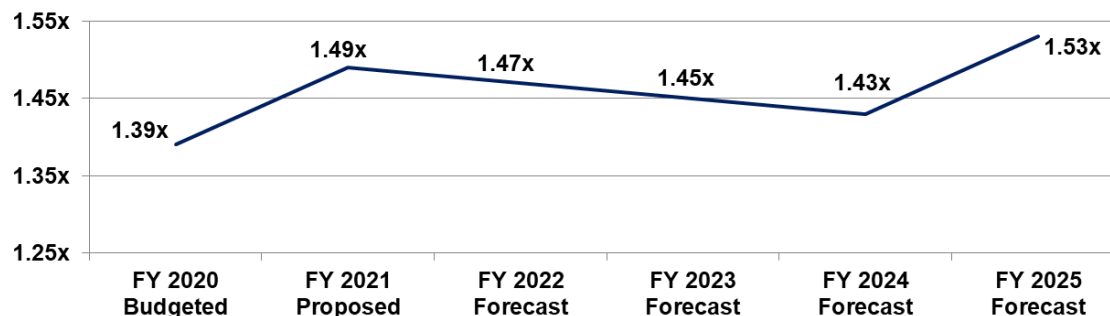


TOGETHER.

LCRA Financial Summary

- Approval of this business plan authorizes LCRA to spend \$390.4 million for operations in fiscal year 2021.
- Debt service coverage, a widely used measure of financial performance, is forecast to be 1.49x in FY 2021.
- Debt service coverage is projected to remain between 1.43x and 1.53x over the five-year planning horizon.
- Stable debt service coverage reflects LCRA's commitment to manage costs and grow our business to support growth in Texas.

LCRA Debt Service Coverage



(Dollars in millions)

		Budgeted	Proposed	Forecast			
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues ¹	\$	1,025.0	982.3	1,049.3	1,086.6	1,124.2	1,236.3
Expenses ¹		573.6	528.4	565.2	586.9	590.9	614.2
Net Operating Margin		451.4	453.8	484.1	499.7	533.2	622.1
Less: GenTex Funds ²		(7.2)	(0.5)	(0.3)	(1.8)	(0.3)	(2.0)
Net Margin for Debt Service, Adjusted		444.3	453.3	483.8	498.0	532.9	620.2
Debt Service	\$	319.2	304.6	329.7	343.5	373.2	404.1
Debt Service Coverage		1.39x	1.49x	1.47x	1.45x	1.43x	1.53x

¹ Revenues and expenses are net of intracompany transfers. Revenues include interest income. Expenses exclude the LCRA TSC capital charge, which is a capital expense for LCRA consolidated.

² Includes adjustments related to GenTex capital funding and reserve funding.

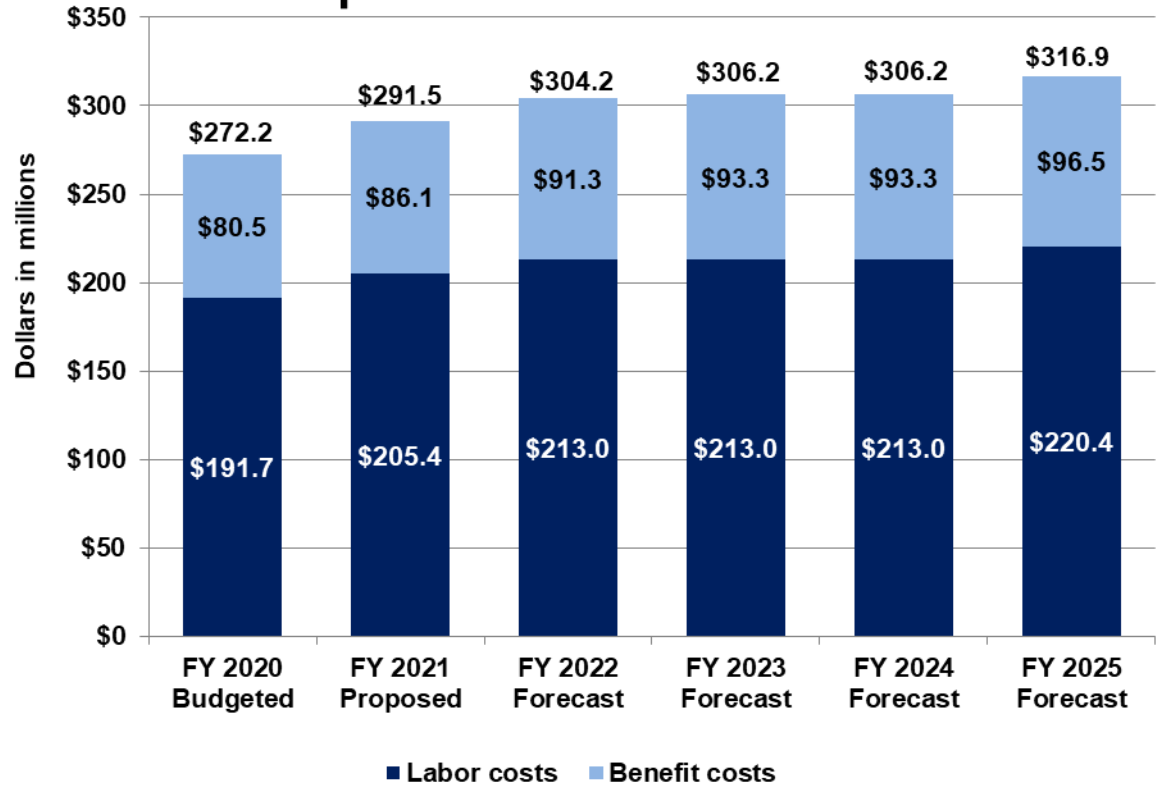
Compensation and Benefits

Compensation and benefits are key drivers of LCRA's budget.

- Budgeted positions for FY 2021 are 2,154¹, which is an increase of 101 positions (5%) from the FY 2020 budget.
 - About half of the new positions are to support and sustain growth of the transmission system.
 - The remaining positions are to support the other areas of LCRA as they meet sustained growth in Texas.
- FY 2021 compensation and benefit costs will increase by \$19.3 million, reflecting:
 - Position increases discussed above.
 - Maintaining competitive salaries in key areas.

¹ Excludes seasonal workers.

Compensation and Benefit Costs



- 3.5% labor cost increases are planned in FY 2022 and FY 2025.
- LCRA continues to manage benefit costs, which range from 42% to 44% of labor costs for the next five years.

Wholesale Power – Financial Summary

Wholesale Power shows continued financial strength for a sustainable business.

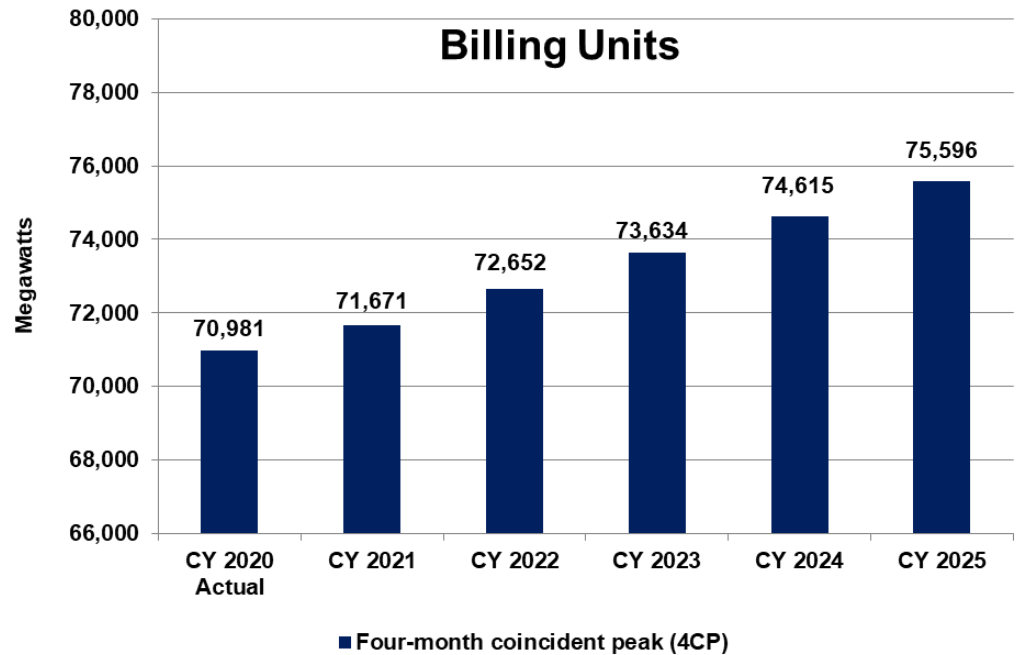
- Debt service coverage is projected to range between 1.33x and 1.57x over the five-year planning horizon.
- Financials remain strong and support our strategic goal to run an effective, cost-aware business.
- LCRA expects to continue to fund capital projects through FY 2025 from coverage dollars or existing funds, rather than issuing additional debt.

Confidential competitive electric information has been removed from this version of the document.

LCRA Transmission Services Corporation – Billing Units

LCRA TSC’s billing unit is the four-month coincident peak in the Electric Reliability Council of Texas market.

- 4CP is the average of the peak ERCOT electrical demands (measured in kilowatts) during the months of June, July, August and September of the previous calendar year.
- The Public Utility Commission of Texas approves the average of these four ERCOT system peaks each year to establish a 4CP for the following calendar year.
- 4CP is forecast to grow about 1.3% per year across ERCOT.



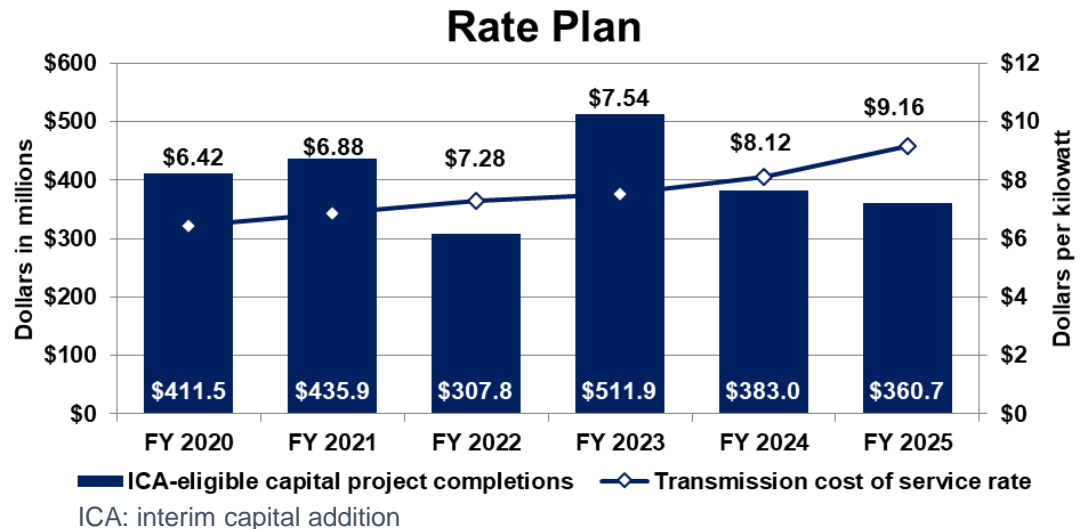
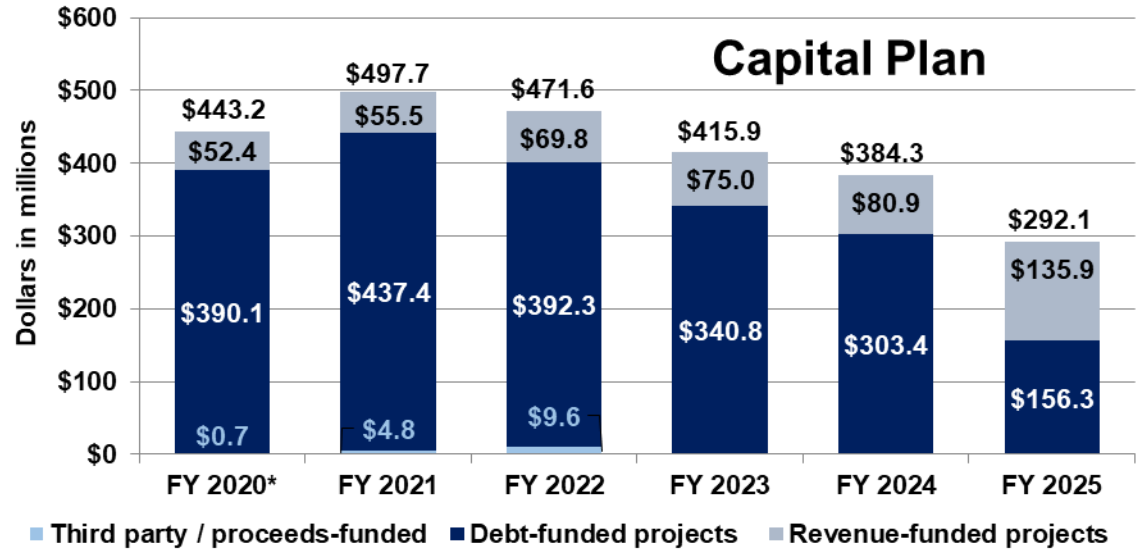
Note: One megawatt equals 1,000 kilowatts.

LCRA TSC – Capital and Rates

We're growing the transmission system to meet customer needs:

- LCRA TSC plans to spend about \$2.1 billion on capital projects over the five-year planning period to support the needs of the ERCOT and LCRA TSC systems.
- LCRA TSC plans to recover its investment in capital costs for projects that are completed and energized through interim filings in FY 2021 through FY 2025. Additionally, LCRA TSC plans to file a transmission cost of service rate case using an FY 2023 test year with new rates going into effect in FY 2025.
- LCRA TSC will continue to recover costs associated with additional projects beyond FY 2025 after they are completed and energized.

*Note: The LCRA Board of Directors in January 2020 approved the amended capital spending limit for LCRA TSC for FY 2020.



LCRA TSC – Financial Summary

- LCRA continues to expand the Transmission organization, adding staff and equipment needed to increase its current capacity to operate and construct facilities for LCRA TSC and provide customer services.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues	\$ 457.5	494.0	534.3	562.8	607.5	709.3
Operations and Maintenance	117.9	131.2	138.0	141.3	148.5	149.5
Net Operating Margin	339.5	362.8	396.3	421.4	459.0	559.8
Plus: Interest Income	5.6	4.1	4.2	5.0	5.4	4.4
Less: Assigned Enterprise Expense	51.1	53.9	56.2	60.8	64.9	74.2
Public Service Fund	13.7	14.8	16.0	16.9	18.2	21.3
Resource Development Fund	9.1	9.9	10.7	11.3	12.2	14.2
Net Margin Available for Debt Service	271.2	288.3	317.5	337.5	369.2	454.6
Debt Service	\$ 199.1	210.6	235.7	249.0	276.9	307.7
Debt Service Coverage	1.36x	1.37x	1.35x	1.36x	1.33x	1.48x

- Transmission plans to manage costs to maintain its debt service coverage ratios between 1.33x and 1.48x.

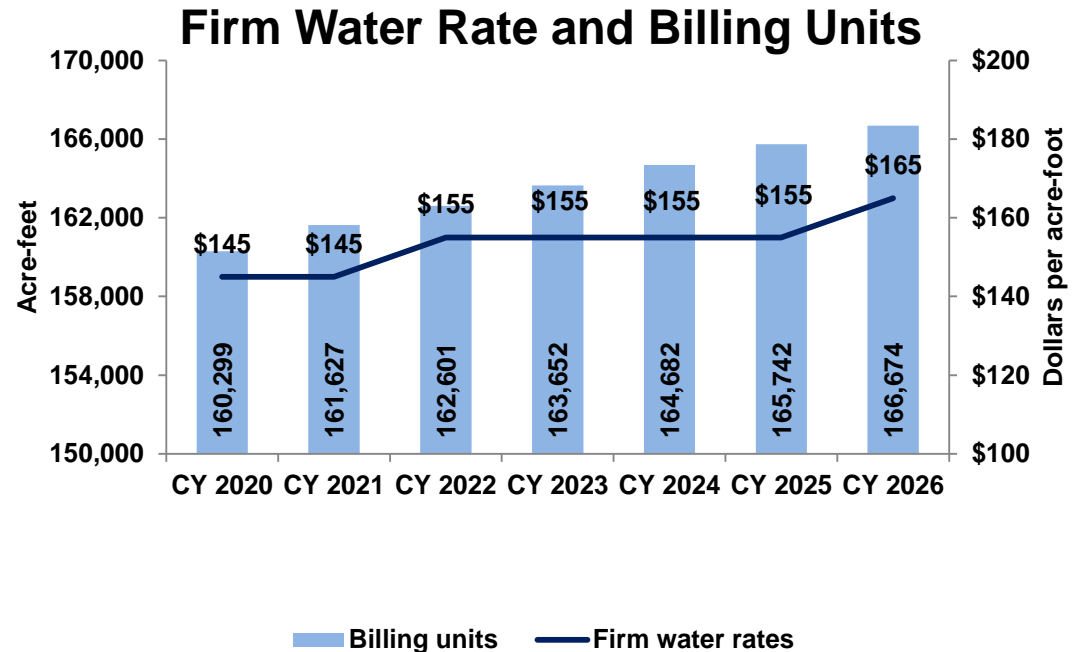
Water – Firm Billing Units and Rates

The firm water rate will remain flat through FY 2021. For the third year in a row, LCRA has delayed the next increase previously projected for calendar year 2019 to calendar year 2022.

We are managing costs with a delay in a planned firm water rate increase.

- Billing units are forecast to rise by less than 1% in each calendar year of the five-year planning period.
- The firm water rate is projected to increase to \$155 per acre-foot beginning with the January 2022 billing period.

Note: Water supplies managed by LCRA are divided into firm and interruptible water. Firm water is available even during a severe drought. During drought or times of shortage, interruptible water is cut back or cut off.



Water – Interruptible Rates

Full cost recovery assumes a gradual approach.

- The Board approved rates for calendar year 2020 in January 2020. The rates for 2021 and beyond are subject to change based on actual and projected costs and billing units.
- Rates for Gulf Coast and Lakeside agricultural divisions are projected to increase to gradually recover the divisions' fully allocated shares of river management costs by calendar year 2023, assuming full water availability. The Garwood division is not subject to river management costs. Rates for Gulf Coast, Lakeside and Garwood agricultural divisions are based on full recovery of delivery costs associated with operation of the divisions.
- The rates for Gulf Coast and Lakeside for 2020 and beyond reflect an annual contribution from the Agriculture Reserve Fund in order to hold the annual rate increases to 5% per year. The rate impact of the contributions are reflected in the delivery component of the rate.

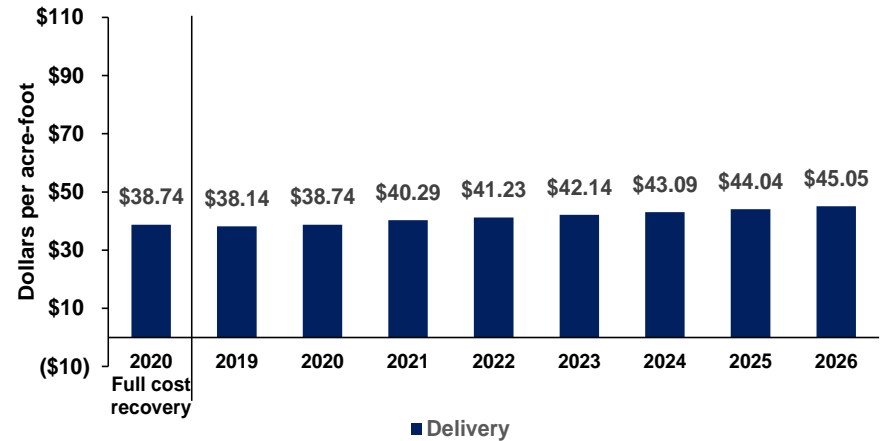
Gulf Coast Rate Outlook



Lakeside Rate Outlook



Garwood Rate Outlook



Water – Capital

Dam rehabilitation projects:

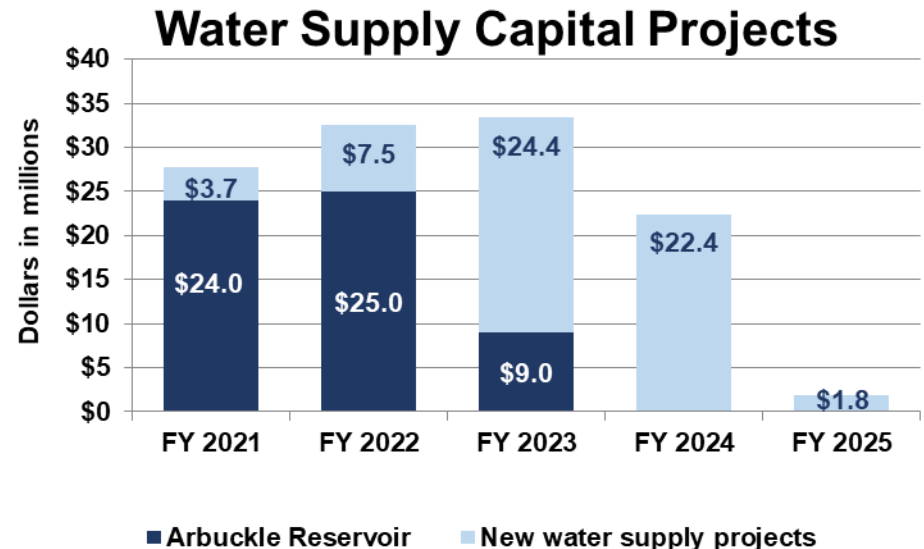
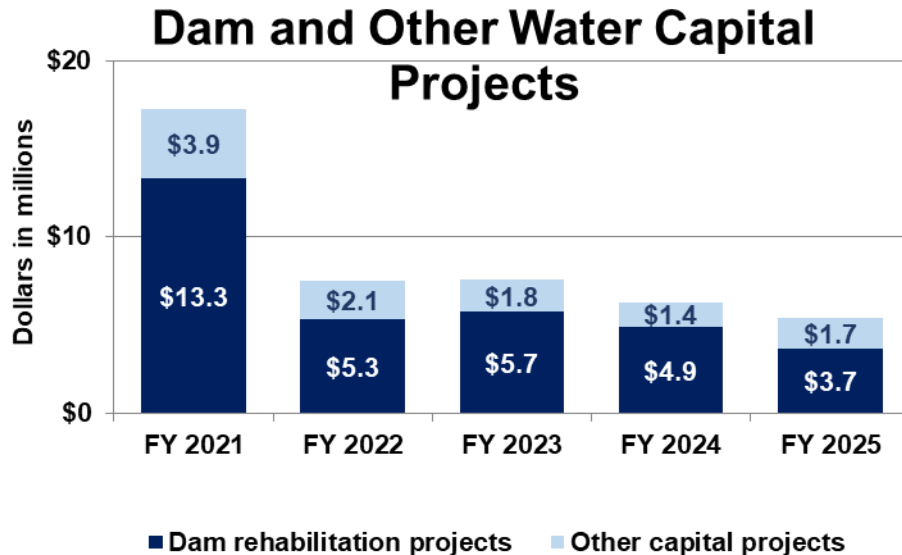
- LCRA plans to spend \$33 million on dam rehabilitation projects (excluding projects strictly for hydroelectric power generation) over the next five years for the continued safe and effective operation of the dams. As the projects continue, the costs to rehabilitate the dams could increase. LCRA primarily will issue debt to pay for these projects and recover the costs in the firm water rate. However, LCRA funds will pay for the Lane City Dam Rehabilitation project.

Other capital projects:

- Other capital projects include capital for irrigation and minor capital needs for Water.

New water supply capital projects:

- Capital spending for Arbuckle Reservoir will continue through FY 2023.
- LCRA plans to spend about \$59.8 million over the next five years for new water supply projects. LCRA expects to pay for these projects with existing funds or by issuing debt and recovering the costs in the firm water rate.
- LCRA continues to evaluate the timing and funding for the construction phases of future projects.



Water – Financial Summary

Providing long-term water supply at a low rate.

- FY 2021 revenues reflect the current firm rate of \$145 per acre-foot. The firm rate is assumed to increase to \$155 per a-f beginning in the January 2022 billing period.

- The financial summary assumes agricultural water deliveries in every year using rolling historical averages for acres.

- Annual debt service includes the Texas Water Development Board Arbuckle Reservoir debt paid from the Resource Development Fund.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues						
Firm Water	\$ 23.1	25.0	25.7	26.8	27.0	27.2
Agriculture	10.5	8.7	9.0	9.4	9.7	10.1
Other	2.1	2.1	2.1	2.1	2.1	2.1
Total Revenues	35.7	35.7	36.7	38.3	38.9	39.4
Operations and Maintenance	18.0	16.5	17.3	17.5	17.5	18.0
Net Operating Margin	17.6	19.2	19.4	20.8	21.3	21.5
Plus: Interest Income	1.4	0.8	0.8	0.9	1.0	1.0
Less: Assigned Enterprise Expense	5.5	5.6	5.8	6.0	6.5	7.5
Public Service Fund	1.1	1.0	1.0	1.1	1.1	1.1
Resource Development Fund	0.5	0.5	0.5	0.5	0.5	0.5
Net Margin Available for Debt Service	12.0	13.0	12.9	14.2	14.2	13.3
Debt Service	\$ 15.8	17.9	18.0	18.5	19.7	19.8
Debt Service Coverage	0.76x	0.72x	0.72x	0.77x	0.72x	0.67x
Plus: Resource Development Funding	\$ 10.6	13.3	13.8	14.2	14.3	14.4
Debt Service Coverage, Adjusted	1.43x	1.47x	1.48x	1.54x	1.45x	1.40x

Public Service Fund

LCRA uses the Public Service Fund on statutory programs that do not fully recover their costs.

- FY 2021 Public Service Fund operating fund requirements include:

- \$7 million for parks.
- \$4.1 million for water quality programs.
- \$3.2 million for natural resource protection.

- These services provide some revenue but require annual support to cover the costs of operations, Enterprise Support and capital.

- The PSF grants include \$2.1 million annually for the Community Development Partnership Program. Beginning in FY 2020, it also includes \$500,000 annually for the Colorado River Land Trust.

- Fund sources include contributions from budgeted nonfuel Wholesale Power costs, budgeted LCRA WSC Energy net margin, and budgeted revenue from GenTex, LCRA TSC, Water and Strategic Services.

(Dollars in millions)

Revenue
Total Operating Expense
Operating Fund Requirement

Capital Spending
Assigned Enterprise Capital
Reserves
Grants
Total Funding Requirement

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$	4.4	5.0	5.3	5.8	5.8	5.8
	18.0	19.6	20.2	20.6	20.8	21.3
	13.6	14.6	14.9	14.8	15.1	15.5
	2.3	2.5	2.6	2.4	2.3	2.2
	0.2	0.4	0.4	0.4	0.4	0.4
	0.0	0.4	0.1	0.1	0.1	0.1
	1.6	2.6	2.6	2.6	2.6	2.6
\$	17.7	20.5	20.6	20.4	20.4	20.9

(Dollars in millions)

Sources

Public Service Fund

Wholesale Power
Gentex Power Corporation
Water
LCRA TSC
LCRA WSC Energy
Strategic Services
Subtotal

Uses

Public Service Activities
Resource Development Fund
Infrastructure Reserve
Strategic Reserve Fund
Subtotal

Remaining PSF Funds

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$	7.6	6.9	7.0	7.3	7.1	7.0
	1.4	1.1	1.0	0.8	0.8	0.9
	1.1	1.0	1.0	1.1	1.1	1.1
	13.7	14.8	16.0	16.9	18.2	21.3
	0.0	0.0	0.0	0.0	0.0	0.0
	0.5	0.5	0.6	0.6	0.6	0.6
	24.3	24.3	25.6	26.7	27.8	30.8
	17.7	20.5	20.6	20.4	20.4	20.9
	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	2.8	3.0	3.0	3.0	3.0
	5.6	0.0	1.0	2.3	3.4	6.0
	24.3	24.3	25.6	26.7	27.8	30.8
\$	0.0	0.0	0.0	0.0	0.0	0.0

Strategic Services

Strategic Services includes external services that people pay LCRA to provide.

- Strategic Services primarily includes:
 - Transmission Customer Service.
 - LCRA Environmental Laboratory Services.
 - Telecommunications radio sales.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues	\$ 19.6	18.2	20.2	20.9	21.3	21.4
Expenses	13.7	11.8	12.5	12.9	13.1	13.5
Net Operating Margin	5.9	6.5	7.7	8.0	8.2	8.0
Less: Assigned Enterprise Expense	3.2	3.0	3.1	3.1	3.2	3.2
Public Service Fund	0.5	0.5	0.6	0.6	0.6	0.6
Resource Development Fund	0.3	0.2	0.3	0.3	0.3	0.3
Net Margin Available	\$ 1.9	2.7	3.8	4.0	4.1	3.9

Enterprise Support

Enterprise costs consist of essential functions that support business operations across LCRA.

- Enterprise Support includes:

- Cybersecurity.
- Digital Services.
- Facilities.
- Legal.
- Finance.
- Public Safety.
- Regulatory.
- Telecommunications.
- Others.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Net Enterprise Costs	\$ 118.3	129.4	131.1	132.6	134.0	138.9
Cost Assignment						
Wholesale Power and Nonprofit Corporations	29.1	31.4	31.1	31.2	30.9	30.4
LCRA TSC	51.1	53.9	56.2	60.8	64.9	74.2
Water	5.5	5.6	5.8	6.0	6.5	7.5
Public Service Fund Activities	2.8	3.2	3.3	3.3	3.4	3.5
Strategic Services	3.2	3.0	3.1	3.1	3.2	3.2
Capital/Other	26.7	32.4	31.5	28.1	25.1	20.0
Total	118.3	129.4	131.1	132.6	134.0	138.9
Capital Expenditures						
Revenue-Funded	18.5	30.2	24.3	26.4	25.2	26.0
Third Party or Proceeds-Funded	1.8	1.2	0.8	0.0	0.0	0.0
Total Capital	\$ 20.3	31.4	25.0	26.4	25.2	26.0

- Some costs are direct-charged when specific services are performed for a product line.

- Most other costs are assigned based on a three-factor formula of assets, labor hours and revenue.

LCRA Capital Plan – by Status

- Approval of this capital plan authorizes the initiation of all recommended projects at their individually stated lifetime budgets as shown in the plan.
- Staff may bring future projects individually to the Board for approval after scope and cost estimates have been further refined, and staff includes future projects in this document for financial planning purposes.
- Board approval of this plan also authorizes the proposed \$96.9 million budget for FY 2021 capital spending, which includes \$41.1 million for recommended projects and \$55.8 million for projects the Board approved previously.

FY 2021-FY 2025 Capital Spending for Recommended, Approved and Future Projects

LCRA Total (Excluding LCRA TSC and Including Austin Energy's Share and the City of San Marcos' Share)

(Dollars in millions)

	Budgeted	Proposed	Forecast					Five-Year	
			FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Recommended Projects	\$	41.1	8.8	1.1	0.0	0.0	50.9	50.9	
Approved Projects		55.8	37.9	16.1	8.9	3.7	122.4	497.0	
Subtotal Recommended and Approved		96.9	46.7	17.2	8.9	3.7	173.3	547.9	
Future Projects		2.5	42.8	68.1	65.5	51.3	230.2	250.7	
Total FY 2021 Capital Plan		99.4	89.4	85.3	74.4	55.0	403.5	798.6	
Less: Co-owners' Shares		1.1	3.9	2.1	2.0	4.3	13.5	14.6	
LCRA's Share		98.2	85.5	83.2	72.4	50.6	390.0	784.0	

Comparison With Previous Plan

Total FY 2020 Capital Plan (With Co-owners)		93.4	67.7	78.3	64.7	53.3	0.0	357.4	719.7
Difference*	\$	n/a	31.6	11.1	20.6	21.1	55.0	46.1	78.9

*Difference for five-year total is based on a rolling five-year comparison, i.e., FY 2021-FY 2025 spending from the current plan compared with FY 2020-FY 2024 from the plan the Board approved in May 2019 (not compared with the amended FY 2020 spending limit the Board approved in January 2020).

LCRA TSC Capital Plan – by Status

- Board approval of this plan authorizes the proposed \$497.7 million budget for FY 2021 capital spending, which includes \$367.5 million for projects the Board approved previously and \$130.2 million of potential future projects.
- Staff will bring future projects individually to the Board for approval after scope and cost estimates have been further refined, and staff includes future projects in this document for financial planning purposes.

FY 2021 Capital Spending for Approved and Future Projects LCRA Transmission Services Corporation

(Dollars in millions)

	Budgeted	Proposed	Forecast				Five-Year Total
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	
Approved Projects	\$	367.5	109.4	14.4	0.1	0.0	491.5
Future Projects		130.2	362.2	401.5	384.2	292.1	1,570.1
Total FY 2021 Capital Plan		497.7	471.6	415.9	384.3	292.1	2,061.6

Comparison With Previous Plan

Total FY 2020 Capital Plan	\$	341.9	369.1	320.5	196.7	153.3	1,381.5	
Difference*		n/a	128.6	151.1	219.1	231.0	n/a	680.1

*Difference for five-year total is based on a rolling five-year comparison, i.e., FY 2021-FY 2025 spending from the current plan compared with FY 2020-FY 2024 from the plan the Board approved in May 2019 (not compared with the amended FY 2020 spending limit the Board approved in January 2020 for LCRA TSC).

LCRA Capital Plan – by Business

- LCRA’s share of the total FY 2021 capital budget for recommended, approved and future projects is \$595.9 million. Of that amount, about 22% will be revenue-funded or third party or proceeds-funded.
- LCRA’s share of the five-year total capital budget, including recommended, approved and future projects, is about \$2.5 billion. Of that amount, about 29% will be revenue-funded or third party or proceeds-funded.
- LCRA is using previously reserved funds to fund and accelerate certain critical infrastructure capital projects throughout the organization.

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020*	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
LCRA Capital Expenditures						
<u>Revenue-Funded</u>						
Wholesale Power and Nonprofit Corporations	\$ 24.8	15.0	16.2	10.6	13.9	15.0
LCRA TSC	52.4	55.5	69.8	75.0	80.9	135.9
Water	3.2	7.2	8.2	9.6	8.3	6.6
Enterprise Support	18.5	30.2	24.3	26.4	25.2	26.0
Public Services	2.3	2.5	2.6	2.4	2.3	2.2
Strategic Services	0.5	0.2	0.8	0.4	0.2	0.2
	101.7	110.7	121.8	124.4	130.7	185.9
<u>Debt-Funded</u>						
LCRA TSC	390.1	437.4	392.3	340.8	303.4	156.3
Water	44.0	28.0	30.8	30.9	20.1	0.3
Strategic Services	1.4	1.0	0.5	0.5	-	-
	435.5	466.4	423.5	372.2	323.5	156.6
<u>Third Party/Proceeds-Funded</u>						
Wholesale Power and Nonprofit Corporations	1.9	0.7	-	-	0.7	-
LCRA TSC	0.7	4.8	9.6	-	-	-
Water	21.3	9.7	1.0	0.5	0.3	0.3
Enterprise Support	1.8	1.2	0.8	-	-	-
Public Services	1.7	2.4	0.4	2.0	1.5	-
	27.4	18.8	11.8	2.5	2.5	0.3
Total LCRA Capital	\$ 564.6	595.9	557.1	499.1	456.7	342.8

* The LCRA Board of Directors in January 2020 approved the amended capital spending limit for LCRA for FY 2020.

LCRA Capital Plan – Approach

Capital Planning Approach

LCRA includes projects in the capital plan with the goal of ensuring LCRA can continue to offer its customers energy, water and public services in a reliable, competitively priced, environmentally responsible and safe manner. Each project undergoes a thorough review by LCRA's Asset Management work group and other staff members who separate the projects into three categories: recommended (projects management has reviewed and recommended for Board approval); approved (projects the Board approved previously); and future (projects staff may recommend implementing within the next five years).

Staff does not submit future projects for Board approval until scope and cost estimates have been further refined, but includes them in this document for financial planning purposes. The cost and timing of future projects presented in this document could change. For this reason, LCRA continues planning activities throughout the year and updates the plan as necessary. LCRA will bring future projects back to the Board for approval.

Determining Need and Financial Analysis

Capital plan projects must support the goals of the business plan within financial parameters established by LCRA's Board and chief financial officer.

LCRA includes projects based on multiple factors, such as current and anticipated demand for LCRA's services and the need to maintain or build facilities or infrastructure to meet those demands. Other factors include compliance with applicable state and federal regulations, safety and security needs, the potential for increased revenues, and better management and protection of natural resources.

Staff has reviewed and analyzed the recommended projects and the projects for which LCRA plans to seek approval during the fiscal year. The project criteria may vary, but typically will involve either a payback period test, net present value analysis or other analyses to ensure the project is the most cost-effective approach. Executive management reviews each project to ensure the project warrants funding and inclusion in the capital plan. When appropriate, affected customers and stakeholders have the opportunity to review and comment on the proposed project scope and budget.

LCRA Capital Plan – Approach (Continued)

Developing Project Estimates

LCRA staff develops project cost estimates. An estimate's accuracy is based on identifying the work and resources necessary to complete the project objectives. Cost estimates are revised and become more accurate as more information regarding the scope and deliverables is available.

The capital planning cycle involves these steps:

- Developing and refining a list of business needs based on planning criteria and asset owner input.
- Defining the scope and approach necessary to address those needs.
- Obtaining cost estimates and performing business analyses to establish a proposed project budget and to evaluate affordability, economic viability, portfolio prioritization and risk.
- Seeking approval of the capital plan to validate strategic direction, establish lifetime and fiscal year budgets, and allow business planning for the future.

LCRA may recommend or seek approval of some projects using less refined cost estimates because of the timing in determining the specific technology that would be implemented. Projects recommended that have less refined cost estimates are noted in the project description.

Regardless of the estimating level or the method used to generate the cost estimate, LCRA Board Policy 301 – Finance and LCRA TSC Board Policy T301 – Finance require LCRA and LCRA TSC to bring previously authorized projects to the Board for additional review and approval if staff expects the projects to exceed the Board-approved lifetime budget by 10% and \$300,000. The LCRA TSC Board has delegated this authority for LCRA TSC capital projects to the LCRA TSC president and chief executive officer through Dec. 31, 2020.

Project Prioritization

LCRA reviews and prioritizes its projects based on criteria that include safety, cost, reliability, competitiveness, environmental considerations and other factors. The appropriate executive reviews staff recommendations.

LCRA Capital Plan – Approach (Continued)

Project Prioritization (Continued)

Projects that are essential to ensure the continued reliable and cost-effective delivery of LCRA services, concern public safety or limit interruption of services receive the highest priority. LCRA also assigns higher priority to projects with regulatory issues that may result in substantial financial impacts for noncompliance, projects already in progress that have a substantial cost to stop, and projects with contractual requirements that could have substantial financial impacts to LCRA.

Medium priority projects include those in progress that have a moderate financial impact associated with stopping them or have contractual, regulatory or reliability issues that would have a moderate to minimal financial or health and safety impact to LCRA, customers and stakeholders.

A lower priority project is not unimportant to LCRA or to stakeholders. Staff may assign lower priority rankings to projects that have a more moderate monetary or stakeholder impact and would have minimal impacts to safety, the environment, contractual obligations or revenue if they were stopped or delayed.

Project Approval and Monitoring

LCRA brings each recommended capital project for the next fiscal year to the LCRA Board for approval with this plan. Board approval authorizes the release of funds to execute the identified projects. However, executives may authorize funding in stages or all at once for the entire project. Staff may bring future projects individually to the Board for approval throughout the fiscal year.

From time to time, conditions change rapidly and may create a need for immediate action. The LCRA general manager and CEO and the LCRA TSC president and CEO, under LCRA Board Policy 301 – Finance and LCRA TSC Board Policy T301 – Finance, have the authorization to approve any capital project with a lifetime budget not to exceed \$1.5 million, provided the new projects remain within fiscal year spending limits. Additionally, per LCRA TSC Board Policy T301 – Finance the president and CEO is delegated authority to approve all capital projects associated with generation interconnection projects not previously authorized by the Board. Asset Management staff provides quarterly capital project reports to the Board that include any new projects approved by the LCRA general manager and CEO and the LCRA TSC president and CEO. Staff will present projects exceeding the LCRA general manager and CEO and LCRA TSC president and CEO authorization limits to the Board for approval.

LCRA Capital Plan – Approach (Continued)

Project Approval and Monitoring (Continued)

Project Management staff provides to LCRA's executives quarterly capital project status reports on approved projects. Reports include cost variances, estimated completion dates, comparisons of work completed to budget spent, fiscal year spending forecasts and project estimates at completion compared to the current capital plan. The reports also highlight any significant changes to the capital program, including project cancellations, delays and budget-to-actual expenditures.

Contingency

Contingency refers to a dollar amount added to a project's spending estimate to address items that are unknown when the estimate is prepared. This dollar amount often is based on a percentage of total construction or project costs, and the percentage often is based on the amount of planning and scope definition available at the time of the estimate. LCRA staff estimates and manages many different types of projects, including those for major wholesale power facilities, new electric transmission lines, dam and hydroelectric upgrades, water delivery and utilities, telecommunication facilities, software system installations, park developments, and facility improvements. Despite this diversity of project types, LCRA has arrived at certain standards for estimating, reporting and managing contingency for all of LCRA's capital projects.

Individual project managers manage contingency amounts included in the lifetime budgets in accordance with LCRA standards as part of the overall budgets for the projects. LCRA staff monitors the status of contingencies on all projects and provides reports at least quarterly to executive management.

LCRA Capital Plan – Approach (Continued)

Capital Plan Approval and Reporting

LCRA Board approval of this capital plan authorizes the initiation of all recommended projects at their individually stated lifetime budgets. These recommended projects include annual budgets for general additions and minor capital. General additions are small capital additions or replacement projects that do not exceed \$300,000. Minor capital budgets are used to fund purchases of equipment that, essentially, is ready to place in service upon delivery, such as fleet assets or technology hardware.

Board approval of this plan also authorizes the proposed \$597.1 million budget for FY 2021 capital spending for recommended, approved and potential future projects. At this time, LCRA is not seeking Board approval for future projects. LCRA will bring any future project determined to require initiation in FY 2021 to the Board for approval individually.

LCRA incorporates spending projections in the capital plan into the financial performance and rate impacts shown in the business plan. Upon approval and throughout FY 2021, LCRA will provide to the Board regular reports on project progress and compliance with the project budgets and fiscal year spending constraints established in the plan.

The following pages include specific project details and proposed lifetime budgets for recommended projects, as well as annual spending projections for approved and future projects.

Note: The dollar amounts in parentheses after the project titles reflect lifetime budgets.

Wholesale Power Projects

Information about Wholesale Power capital projects included in the capital plan is considered confidential and has been removed from this version of the document.

Transmission Projects

Approved and potential future Transmission projects total \$497.7 million in FY 2021 and \$2.1 billion over the next five years. Staff will bring potential future projects individually to the Board for approval throughout the fiscal year. LCRA TSC projects are required to meet anticipated electric load growth and electric load additions, operating constraints and long-term reliability criteria addressing transmission and transformation needs as well as reliability of service and equipment reliability limitations, and safety and environmental issues.

To assist in aligning the various goals and associated requirements listed above, the projects are organized in the following categories:

- **Facility acquisition projects** are associated with the acquisition of existing facilities.
- **General addition projects** are funded by the general additions budget and justified individually as smaller line-item projects.
- **Generation interconnection projects** are necessary to facilitate generator interconnections requested by ERCOT market participants.
- **Service reliability projects** are driven by equipment obsolescence, operational improvements or transmission service reliability needs.
- **System capacity projects** are needed to provide new or increased transmission system capacity.
- **Third-party funded projects** are not driven by utility criteria; instead, external parties that will contribute a substantial portion of the project cost request the projects.

Transmission Projects (Continued)

LCRA TSC FY 2021 Requested Project Budget Increases

Burnet to Lampasas Transmission Line Overhaul (\$24.6 million) – LCRA TSC requests an \$11.7 million increase to the Burnet to Lampasas Transmission Line Overhaul project’s lifetime budget from \$12.9 million to \$24.6 million. The LCRA TSC Board initially approved the project in the LCRA TSC FY 2020 capital plan. The budget increase is based on an updated engineering estimate for external construction that is higher than the original estimate. The project is needed to increase the reliability of transmission facilities on the 23.4-mile T219 Burnet to Lampasas 138-kilovolt transmission line. The project is scheduled for completion on May 15, 2021.

Camp Wood to Leakey Transmission Line Overhaul (\$48 million) – LCRA TSC requests an \$18.4 million increase to the Camp Wood to Leakey Transmission Line Overhaul project’s lifetime budget from \$29.6 million to \$48 million. The LCRA TSC Board initially approved the project in the LCRA TSC FY 2017 capital plan. The budget increase is largely due to the preliminary external construction estimate and potential costs related to weather and other potential project risks being higher than originally estimated. The project is needed to increase the reliability of transmission facilities on the 17.3-mile T269 Camp Wood to Leakey 69-kilovolt transmission line and upgrade the line to 795 aluminum conductor steel-reinforced cable that is 138-kV capable with an optical ground wire shield. The project is scheduled for completion on June 30, 2021.

Transmission Projects (Continued)

There are 89 approved projects with expected spending of \$367.5 million in FY 2021. See the appendix for details on LCRA TSC approved projects. This expected spending is categorized below:

LCRA Transmission Services Corporation FY 2021 Capital Plan Approved Projects

(Dollars in millions)

Planning Category	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total
Facility Acquisition Projects	\$ 4.9	6.3	-	-	-	11.2
Generation Interconnection Projects	20.4	22.5	3.5	0.1	-	46.5
Service Reliability Projects	160.2	44.8	0.3	0.03	-	205.3
System Capacity Projects	182.1	35.8	10.6	-	-	228.5
Approved Subtotal	\$ 367.5	109.4	14.4	0.1	-	491.5

Transmission Projects (Continued)

Staff continues to evaluate projects totaling almost \$1.6 billion of expected spending over the next five years. Staff will bring these projects individually to the Board for approval throughout the fiscal year. This spending is categorized below:

LCRA Transmission Services Corporation FY 2021 Capital Plan Future Projects

(Dollars in millions)

Planning Category	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total
Facility Acquisition Projects	\$ 20.0	-	-	-	-	20.0
General Addition Projects	4.0	4.0	4.0	4.0	4.0	20.0
Generation Interconnection Projects	18.0	18.0	25.0	30.0	30.0	121.0
Service Reliability Projects	45.8	156.8	207.7	276.5	128.4	815.3
System Capacity Projects	37.5	173.8	164.7	73.7	129.7	579.4
Third-Party Funded Projects	4.8	9.6	-	-	-	14.5
Future Subtotal	\$ 130.2	362.2	401.5	384.2	292.1	1,570.1

Transmission Projects (Continued)

Spending for approved and potential future projects totaling about \$2.1 billion over the next five years is categorized below:

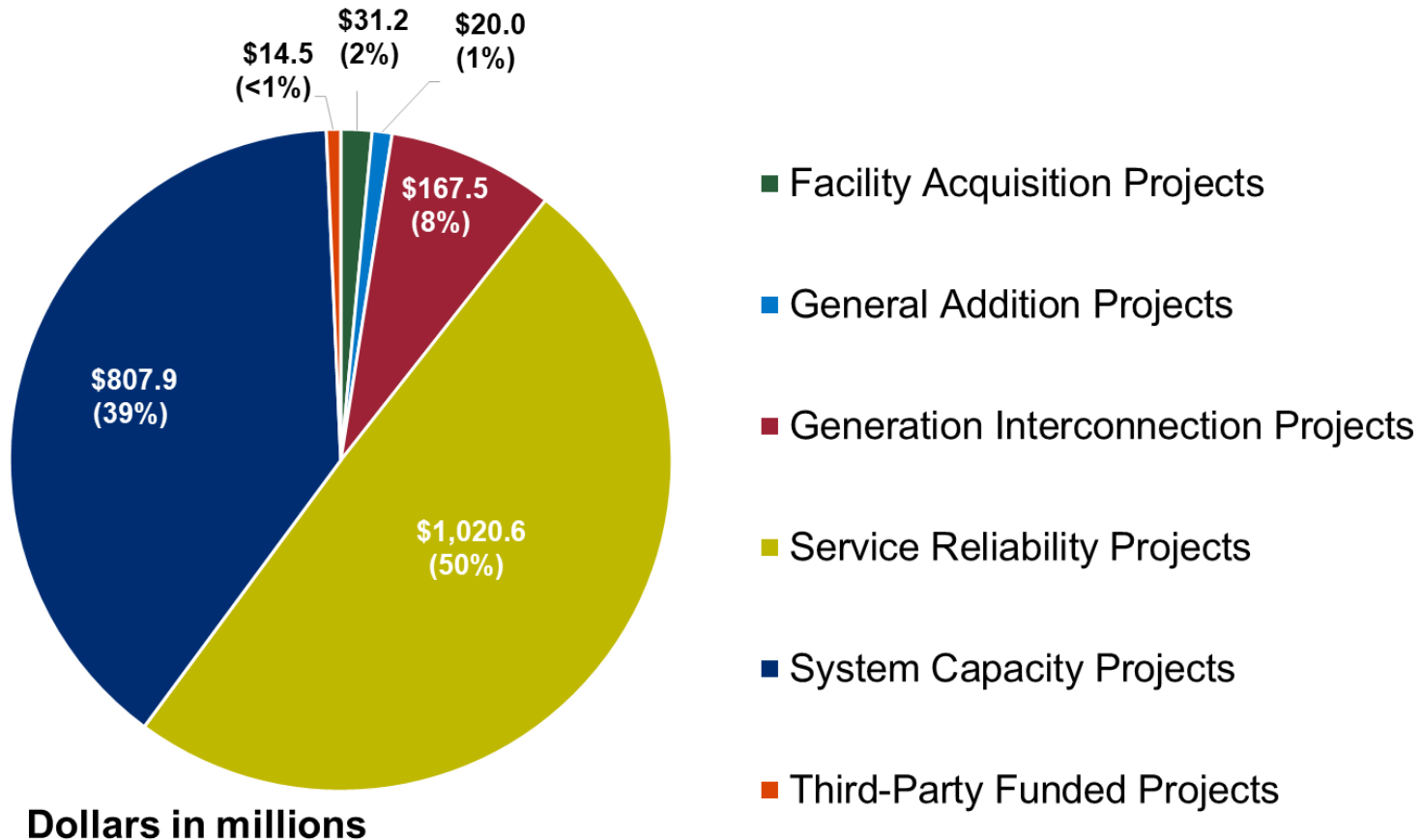
LCRA Transmission Services Corporation FY 2021 Capital Plan Approved and Future Projects

(Dollars in millions)

Planning Category	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total
Facility Acquisition Projects	\$ 24.9	6.3	-	-	-	31.2
General Addition Projects	4.0	4.0	4.0	4.0	4.0	20.0
Generation Interconnection Projects	38.4	40.5	28.5	30.1	30.0	167.5
Service Reliability Projects	206.0	201.6	208.0	276.5	128.4	1,020.6
System Capacity Projects	219.5	209.7	175.4	73.7	129.7	807.9
Third-Party Funded Projects	4.8	9.6	-	-	-	14.5
Total LCRA Transmission Services Corporation	\$ 497.7	471.6	415.9	384.3	292.1	2,061.6

Transmission Projects (Continued)

Total spending on Transmission approved and potential future capital projects is about \$2.1 billion over the next five years. This spending is categorized below:



Details of the approved projects are shown in the appendix.

Water Projects

Water projects in the capital plan include capital improvements for managing and delivering raw water. This plan focuses resources on managing the river, improving infrastructure – including LCRA’s Hydromet system – and planning to meet the basin’s future water needs.

Water recommended and approved projects total \$44.9 million in FY 2021 and \$99.8 million over the next five years through FY 2025. Future projects total \$61.9 million through FY 2025.

FY 2021 Recommended Projects

Buchanan Dam Seven-Gate Hoist Bridge Recoating (\$1.085 million) – The project will remove and capture the existing coating and apply a new multilayer coating to the seven-gate deck and hoist bridge.

Garwood Automated Gates (\$1.1 million) – The project will automate 46 existing gate structures in the Garwood agricultural division to allow remote operation and control of water levels within the irrigation canals. LCRA staff will perform most of the work and expects the project will take up to three years to complete. The project will be funded by the House Bill 1437 Agricultural Water Conservation Fund.

General Additions – General addition projects will maintain infrastructure and improve reliability and efficiency for the following:

- Hydromet (\$150,000).
- Irrigation systems (\$610,000).
- Raw water (\$100,000).

Minor Capital – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- Hydromet (\$137,000).
- Irrigation systems (\$483,000).

Water Projects (Continued)

Water

FY 2021 Capital Plan Recommended and Approved Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Recommended							
Buchanan Dam Seven-Gate Hoist Bridge Recoating	1,085	-	-	-	-	1,085	1,085
Garwood Automated Gates	300	500	300	-	-	1,100	1,100
General Additions – Hydromet	150	-	-	-	-	150	150
General Additions – Irrigation Systems	610	-	-	-	-	610	610
General Additions – Raw Water	100	-	-	-	-	100	100
Minor Capital – Hydromet	137	-	-	-	-	137	137
Minor Capital – Irrigation Systems	483	-	-	-	-	483	483
Recommended Subtotal	2,865	500	300	-	-	3,665	3,665
Approved							
Arbuckle Reservoir	24,000	25,000	9,000	-	-	58,000	315,000
Buchanan Dam Floodgate Rehabilitation – Phase 2	659	-	-	-	-	659	50,072
Buchanan Dam Spalling Concrete Rehabilitation – Phase 3	3,436	3,684	3,631	3,649	3,684	18,084	36,000
Griffith League Ranch Groundwater	2,792	1,658	-	-	-	4,450	8,500
Gulf Coast Plant No. 1 Bank Erosion	115	-	-	-	-	115	1,354
Lakeside River Plant Bank Erosion Hurricane Harvey Recovery	2,012	-	-	-	-	2,012	2,900
Lane City Dam Rehabilitation and Hurricane Harvey Recovery	6,939	278	-	-	-	7,217	13,760
Mansfield Dam Paradox Gate Rehabilitation – Phase 2	1,208	1,384	1,299	128	-	4,019	10,416
New Water Supply Projects – Phase 1	720	740	-	-	-	1,460	6,179
Prairie Conservation Reservoir	160	-	-	-	-	160	11,340
Approved Subtotal	42,041	32,744	13,930	3,777	3,684	96,176	455,521

Water Projects (Continued)

Water

FY 2021 Capital Plan Future Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Future							
Buchanan Dam Intake Structure – Phase 2	-	-	-	800	-	800	800
General Additions – Hydromet	-	100	100	100	100	400	400
General Additions – Irrigation Systems	-	960	860	410	410	2,640	2,640
General Additions – Raw Water	-	150	150	150	150	600	600
Griffith League Ranch Groundwater – Phase 2	-	-	6,500	6,500	-	13,000	13,000
Gulf Coast Plant No. 1 – Pumps 1 and 2	-	-	-	-	350	350	700
Lakeside Main Canal Structures	-	-	-	300	300	600	1,500
Mansfield Dam Floodgate Hydraulic Piping	-	-	800	-	-	800	800
Mansfield Dam Parapet Wall End Replacement	-	-	-	312	-	312	312
Matagorda Bay Brackish Groundwater Well	-	500	1,000	2,500	1,000	5,000	5,000
Minor Capital - Water Resource Management	-	50	50	50	50	200	200
Minor Capital – Hydromet	-	180	180	180	180	720	720
Minor Capital – Irrigation Systems	-	200	200	200	200	800	800
New Regional Water Supply Projects – Phase 2	-	4,613	16,864	13,379	844	35,700	35,700
Future Subtotal	-	6,753	26,704	24,881	3,584	61,922	63,172
Total Water	44,906	39,997	40,934	28,658	7,268	161,763	522,358

Public Services Projects

Legislative authority and LCRA's Board of Directors provide direction for LCRA staff to develop and manage parks, recreation facilities and natural science centers in LCRA's statutory district, providing public recreation and water access along the lower Colorado River and its tributaries and at LCRA's power plant reservoirs. LCRA's park system includes more than 40 parks on roughly 11,000 acres. The parks enhance the public's use and enjoyment of LCRA lands and provide diverse outdoor recreation and education opportunities.

LCRA's public service funding aims to keep pace with the growing Texas population and expected increase in park visitation, protect natural resources and water quality along the Colorado River; and develop facilities that help achieve LCRA's cost-recovery goals for parks. As part of this development, staff seeks approval of using the Public Recreation and Conservation Land Acquisition Fund to fund capital in the first three years of the plan.

Public Services recommended and approved projects total \$4.9 million in FY 2021 and \$6.4 million over the next five years through FY 2025. Future projects total \$12 million through FY 2025.

FY 2021 Recommended Projects

Minor Capital – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- Parks (\$242,000).
- Other Public Services (\$298,000).

Public Services Projects (Continued)

Public Services

FY 2021 Capital Plan Recommended, Approved and Future Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Recommended							
Parks							
Minor Capital	242	-	-	-	-	242	242
Other Public Services							
Minor Capital	298					298	298
Recommended Subtotal	540	-	-	-	-	540	540
Approved							
Parks							
Matagorda Bay Nature Park Improvements	4,396	1,433	-	-	-	5,829	6,915
Approved Subtotal	4,396	1,433	-	-	-	5,829	6,915
Future							
Parks							
Black Rock Park Improvements	-	-	1,300	1,500	1,000	3,800	3,800
General Additions	-	-	-	-	150	150	150
Minor Capital	-	384	173	163	133	853	853
Muleshoe Bend Recreation Area Improvements	-	1,000	2,700	2,000	-	5,700	5,700
Turkey Bend Recreation Area Improvements	-	-	-	-	800	800	1,800
Other Public Services							
Minor Capital	-	167	236	100	150	653	653
Future Subtotal	-	1,551	4,409	3,763	2,233	11,956	12,956
Total Public Service	4,936	2,984	4,409	3,763	2,233	18,325	20,411

Strategic Services Projects

Strategic Services recommended projects total \$1.3 million in FY 2021 and over the next five years through FY 2025. Future projects total \$2.5 million through FY 2025.

FY 2021 Recommended Projects

General Additions – General addition projects will maintain infrastructure and make strategic improvements to enhance customer service in the following area:

- Telecommunications (\$1.02 million).

Minor Capital – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- LCRA Environmental Laboratory Services (\$239,000).

Strategic Services Projects (Continued)

Strategic Services

FY 2021 Capital Plan Recommended and Future Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Recommended							
LCRA Environmental Laboratory Services							
Minor Capital	239	-	-	-	-	239	239
Telecommunications							
General Additions	1,020	-	-	-	-	1,020	1,020
Recommended Subtotal	1,259	-	-	-	-	1,259	1,259
Future							
LCRA Environmental Laboratory Services							
Minor Capital	-	770	360	230	200	1,560	1,560
Telecommunications							
General Additions	-	470	470	-	-	940	940
Future Subtotal	-	1,240	830	230	200	2,500	2,500
Total Strategic Services	1,259	1,240	830	230	200	3,759	3,759

Enterprise Support Projects

Enterprise Support capital projects provide the facility services, telecommunications and information technology infrastructure that support the business operations of the organization. LCRA's power, transmission and water rates fund the projects, which makes predicting costs to include in LCRA's rates especially important. Unless an emergency arises, LCRA adjusts Enterprise Support priorities throughout the year to stay within the approved capital plan budget for each fiscal year instead of seeking additional funding authority from the Board.

Enterprise Support recommended and approved projects total \$31.4 million in FY 2021 and \$39.5 million over the next five years through FY 2025. Future projects total \$94.5 million through FY 2025.

FY 2021 Recommended Projects

Security Information and Event Management (\$1.375 million) – The project will replace the existing end of life security information and event management hardware and software to facilitate cybersecurity threat detection and analysis throughout the LCRA network.

Dalchau Service Center Building E Rebuild (\$1.19 million) – The project will convert the 8,000-square-foot 1972 Building E at the Dalchau Service Center to modern networked office space to support the growing need of LCRA Transmission Service Corporation's business. This project will add offices and cubical spaces for more than 30 staff positions .

Dalchau Service Center Building T Foundation Remediation (\$800,000) – The project includes the construction of site drainage to stabilize the soil surrounding the 52,000-square-foot Building T at the Dalchau Service Center.

General Office Complex Elevator Modernization (\$970,000) – This project will modernize the elevators at the General Office Complex. The scope includes replacing the main components of the Miller, Long, Shapiro and Hancock building elevators.

Enterprise Support Projects (Continued)

FY 2021 Recommended Projects (Continued)

Communications Shelter Telecommunications Upgrade (\$2 million) – The project will increase the reliability, maintainability and flexibility of LCRA’s telecommunications system by installing telecommunications shelters, fiber patch panels, power supply equipment and generators at backbone facilities generally located east of Interstate 35.

Data Center Connectivity Telecommunications Upgrade (\$470,000) – The project will improve the reliability of the LCRA telecommunications network by providing access to a geographically diverse data center to support cloud-based data services.

East Backbone DWDM Telecommunications Upgrade (\$2.08 million) – The project will install dense wave division multiplexing equipment at locations generally central to and east of Interstate 35. This equipment will provide increased capacity for LCRA telecommunications uses such as the GenDesk, physical security related traffic, the Energy Management System and the corporate network.

Ferguson to Wirtz Fiber Upgrade (\$600,000) – The project will increase the capacity and reliability of the LCRA fiber network by replacing optical ground wire from the Ferguson Substation to Wirtz Substation with modern, higher capacity 72-count fiber.

Radio System Migration – FY 2021 Telecommunications Upgrade (\$2.24 million) – The project will upgrade firmware in approximately 4,100 OpenSky® radios to allow for conversion to the P25 network commonly used by emergency response organization dispatchers. The upgrade is based on vendor recommendations and notifications regarding termination of OpenSky support for the radio system.

Sim Gideon Network Telecommunications Upgrade (\$870,000) – The project will increase the reliability of the telecommunications network at the Sim Gideon Power Plant by installing a telecommunications shelter at the Sim Gideon Substation and replacing the existing fiber ring throughout the Sim Gideon campus to accommodate future growth and relieve fiber congestion.

Enterprise Support Projects (Continued)

FY 2021 Recommended Projects (Continued)

General Additions – General addition projects will maintain infrastructure and regulation compliance and improve reliability for the following:

- Digital Services (\$900,000).
- Facilities (\$800,000).
- Telecommunications (\$1.756 million).

Minor Capital – The scope of minor capital projects is to purchase equipment that, essentially, is ready to place in service upon delivery for the following:

- Digital Services (\$1.593 million).
- Facilities (\$766,000).
- Public Safety (\$546,000).
- Telecommunications (\$548,000).
- Unregulated transmission (\$7.444 million).

Enterprise Support Projects (Continued)

Enterprise Support FY 2021 Capital Plan Recommended Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year	
						Total	Lifetime
Recommended							
Digital Services							
General Additions	900	-	-	-	-	900	900
Minor Capital	1,593	-	-	-	-	1,593	1,593
Security Information and Event Management	1,375	-	-	-	-	1,375	1,375
Facilities							
Dalchau Service Center Building E Rebuild	1,190	-	-	-	-	1,190	1,190
Dalchau Service Center Building T Foundation Remediation	450	350	-	-	-	800	800
General Additions	800	-	-	-	-	800	800
General Office Complex Elevator Modernization	578	392	-	-	-	970	970
Minor Capital	766	-	-	-	-	766	766
Public Safety							
Minor Capital	546	-	-	-	-	546	546
Telecommunications							
Communications Shelter Telecommunications Upgrade	2,000	-	-	-	-	2,000	2,000
Data Center Connectivity Telecommunications Upgrade	470	-	-	-	-	470	470
East Backbone DWDM Telecommunications Upgrade	2,080	-	-	-	-	2,080	2,080
Ferguson-Wirtz Fiber Upgrade	180	420	-	-	-	600	600
General Additions	1,756	-	-	-	-	1,756	1,756
Minor Capital	548	-	-	-	-	548	548
Radio System Migration – FY 2021 Telecommunications Upgrade	737	737	766	-	-	2,240	2,240
Sim Gideon Power Plant Network Telecommunications Upgrade	435	435	-	-	-	870	870
Unregulated Transmission							
Minor Capital	7,444	-	-	-	-	7,444	7,444
Recommended Subtotal	23,848	2,334	766	-	-	26,948	26,948

Enterprise Support Projects (Continued)

Enterprise Support

FY 2021 Capital Plan Approved and Future Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Approved							
Digital Services							
Campus Distribution Switches	395	395	-	-	-	790	800
Edge Network Upgrade	303	692	692	692	-	2,379	3,500
Enterprise Compliance – Phase 1	695	-	-	-	-	695	1,485
Hybrid Infrastructure Management	670	820	-	-	-	1,490	1,500
Network Architecture Security	1,400	1,700	-	-	-	3,100	3,900
Scheduling Tool	130	-	-	-	-	130	300
Water Billing System	500	-	-	-	-	500	550
Telecommunications							
LCRA Fiber Backbone – FY 2020 Telecommunications Upgrade	3,000	-	-	-	-	3,000	4,027
Llano Fiber Addition	4	-	-	-	-	4	205
Operational Support System Telecommunications Upgrade	495	-	-	-	-	495	1,900
Approved Subtotal	7,592	3,607	692	692	-	12,583	18,167
Future							
Digital Services							
Asset and Work Management	-	-	-	1,000	-	1,000	1,000
Database High Availability	-	650	-	-	-	650	650
Digital Services Infrastructure	-	-	6,250	1,550	4,950	12,750	12,750
Energy Trade and Deal Capture	-	-	-	-	1,000	1,000	1,000
Enterprise Resource Planning System	-	-	-	2,000	-	2,000	2,000
General Additions	-	1,955	1,000	1,000	1,000	4,955	4,955
Generation Management System	-	-	-	1,200	-	1,200	1,200
Minor Capital	-	1,052	1,052	1,052	1,052	4,208	4,208
Mobile Work Management	-	500	-	-	-	500	500
PeopleSoft Commitment Accounting	-	500	-	-	-	500	500
Project Management Data Integration	-	525	-	-	-	525	525
Security Information and Event Management	-	-	-	-	2,000	2,000	2,000
Treasury Management	-	750	-	-	-	750	750
Virtual Private Network	-	-	-	500	-	500	500

Enterprise Support Projects (Continued)

Enterprise Support

FY 2021 Capital Plan Future Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year	
						Total	Lifetime
Future (continued)							
Wholesale Markets Data Lake	-	1,000	-	-	-	1,000	1,000
Wholesale Power Billing System	-	-	1,000	1,000	-	2,000	2,000
Facilities							
General Additions	-	750	990	1,750	2,135	5,625	5,625
General Office Complex Hancock Building Chiller Plant Magnetic Drive	-	-	1,000	-	-	1,000	1,000
General Office Complex Redbud Center Chiller	-	-	300	-	-	300	300
General Office Complex Site ADA Compliance Upgrade	-	300	-	-	-	300	300
Minor Capital	-	634	335	252	105	1,326	1,326
Public Safety							
Minor Capital	-	410	360	490	380	1,640	1,640
Physical Access Control System – Phase 5	-	-	-	500	-	500	500
Telecommunications							
DWDM Build-Out – FY 2022 Telecommunications Upgrade	-	700	-	-	-	700	700
Far West Radio Telecommunications Upgrades	-	800	800	800	-	2,400	2,400
Fayette Power Project Network Reliability Upgrade	-	300	500	-	-	800	800
General Additions	-	1,390	1,350	1,350	1,350	5,440	5,440
General Office Complex Campus Fiber Telecommunications Upgrade	-	500	-	-	-	500	500
Hilbig Gas Storage Facility Wireless Remote Terminal Unit System	-	300	-	-	-	300	300
LCRA Backbone Fiber Upgrades – FY 2022 Telecommunications Upgrade	-	1,000	3,000	-	-	4,000	4,000
LCRA Backbone Fiber Upgrades – FY 2023 Telecommunications Upgrade	-	-	1,000	3,000	-	4,000	4,000
LCRA Backbone Fiber Upgrades – FY 2024 Telecommunications Upgrade	-	-	-	1,000	3,000	4,000	4,000
LCRA Backbone Fiber Upgrades – FY 2025 Telecommunications Upgrade	-	-	-	-	1,000	1,000	4,000
Minor Capital	-	380	520	270	480	1,650	1,650
Radio Subscriber – FY 2025 Telecommunications Upgrade	-	-	-	-	3,000	3,000	3,000
Radio System Core Telecommunications Upgrade	-	-	-	500	500	1,000	1,000
Radio System Migration – FY 2023 Telecommunications Upgrade	-	-	1,250	1,250	-	2,500	2,500
Radio System Power – FY 2022 Telecommunications Upgrade	-	200	250	-	-	450	450
Telecommunications Technology Upgrade	-	500	-	-	-	500	500
Unregulated Transmission							
Minor Capital	-	4,000	4,000	4,000	4,000	16,000	16,000
Future Subtotal	-	19,096	24,957	24,464	25,952	94,469	97,469
Total Enterprise Support	31,440	25,037	26,415	25,156	25,952	134,000	142,584

Appendix

LCRA Consolidated

(Including Nonprofit Corporations)

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues						
Total Net Revenue¹	\$ 1,025.0	982.3	1,049.3	1,086.6	1,124.2	1,236.3
Expenses						
Total Net Expense¹	573.6	528.4	565.2	586.9	590.9	614.2
Net Operating Margin	451.4	453.8	484.1	499.7	533.2	622.1
Less: GenTex Funds ²	(7.2)	(0.5)	(0.3)	(1.8)	(0.3)	(2.0)
Net Margin for Debt Service, Adjusted	444.3	453.3	483.8	498.0	532.9	620.2
Debt Service	\$ 319.2	304.6	329.7	343.5	373.2	404.1
Debt Service Coverage, Adjusted	1.39x	1.49x	1.47x	1.45x	1.43x	1.53x
Net Margin After Debt Service³	\$ 132.2	149.3	154.4	156.2	160.1	218.0
Less:						
Operating Reserves	10.0	12.7	11.3	17.1	13.7	13.5
Revenue-Funded Capital	101.7	110.7	122.1	124.5	130.7	185.8
Noncash Revenue	2.6	2.6	2.6	2.6	2.6	2.6
Restricted for Reserves	12.6	15.0	15.1	5.9	7.6	11.6
Restricted for Capital/Debt Retirement	3.8	5.6	0.7	3.6	3.0	2.0
Grants	1.6	2.6	2.6	2.6	2.6	2.6
Net Cash Flow	\$ 0.0	0.0	0.0	0.0	0.0	0.0

¹ Total net revenues and total net expenses are net of intracompany transfers. Total revenues include interest income. Operations and maintenance expense excludes the LCRA TSC capital charge, which is a capital expense for LCRA consolidated.

² Includes adjustments related to GenTex capital funding and reserve funding.

³ Net margin after debt service includes funds dedicated to GenTex.

Wholesale Power (Including Nonprofit Corporations)

**Confidential competitive electric information has been
removed from this version of the document.**

LCRA TSC

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues	\$ 457.5	494.0	534.3	562.8	607.5	709.3
Operations and Maintenance	117.9	131.2	138.0	141.3	148.5	149.5
Net Operating Margin	339.5	362.8	396.3	421.4	459.0	559.8
Plus: Interest Income	5.6	4.1	4.2	5.0	5.4	4.4
Less: Assigned Enterprise Expense	51.1	53.9	56.2	60.8	64.9	74.2
Public Service Fund	13.7	14.8	16.0	16.9	18.2	21.3
Resource Development Fund	9.1	9.9	10.7	11.3	12.2	14.2
Net Margin Available for Debt Service	271.2	288.3	317.5	337.5	369.2	454.6
Debt Service	\$ 199.1	210.6	235.7	249.0	276.9	307.7
Debt Service Coverage	1.36x	1.37x	1.35x	1.36x	1.33x	1.48x
Net Margin After Debt Service	\$ 72.1	77.7	81.9	88.5	92.3	146.9
Less:						
Operating Reserves	5.7	7.9	6.0	7.6	8.8	8.6
Assigned Enterprise Capital	12.2	17.3	13.6	16.1	14.4	15.6
Assigned Transmission Minor Capital	0.0	7.3	3.9	3.9	3.9	3.9
Revenue-Funded Capital	52.4	55.6	70.1	75.2	80.9	135.9
Transfer to LCRA ¹	6.7	1.1	1.1	0.0	0.0	0.0
Plus:						
Amortization of Enterprise/Minor Capital ²	4.9	11.4	12.8	14.3	15.8	17.2
Net Cash Flow	\$ 0.0	0.0	0.0	0.0	0.0	0.0

¹ An initial transfer from LCRA TSC to LCRA was authorized by the LCRA and LCRA TSC boards of directors in April 2014. Under the initial contractual commitment, the LCRA and LCRA TSC boards must make an annual determination to authorize each year's transfer. Such annual transfers are payable only if all other financial commitments have been met as required by LCRA TSC's financial policies.

² In FY 2012, LCRA TSC began funding minor capital and its share of enterprise capital with current year revenues. It will include an amortization of the amount in each year to recover in rates.

Water

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues						
Firm Water	\$ 23.1	25.0	25.7	26.8	27.0	27.2
Agriculture	10.5	8.7	9.0	9.4	9.7	10.1
Other	2.1	2.1	2.1	2.1	2.1	2.1
Total Revenues	35.7	35.7	36.7	38.3	38.9	39.4
Operations and Maintenance	18.0	16.5	17.3	17.5	17.5	18.0
Net Operating Margin	17.6	19.2	19.4	20.8	21.3	21.5
Plus: Interest Income	1.4	0.8	0.8	0.9	1.0	1.0
Less: Assigned Enterprise Expense	5.5	5.6	5.8	6.0	6.5	7.5
Public Service Fund	1.1	1.0	1.0	1.1	1.1	1.1
Resource Development Fund	0.5	0.5	0.5	0.5	0.5	0.5
Net Margin Available for Debt Service	12.0	13.0	12.9	14.2	14.2	13.3
Debt Service	\$ 15.8	17.9	18.0	18.5	19.7	19.8
Debt Service Coverage	0.76x	0.72x	0.72x	0.77x	0.72x	0.67x
Plus: Resource Development Funding	\$ 10.6	13.3	13.8	14.2	14.3	14.4
Debt Service Coverage, Adjusted	1.43x	1.47x	1.48x	1.54x	1.45x	1.40x
Net Margin After Debt Service	6.9	8.4	8.6	9.9	8.8	7.9
Less:						
Operating Reserves	0.3	0.0	0.3	0.1	0.2	0.3
Assigned Enterprise Capital	1.4	1.5	1.0	1.0	0.9	1.0
Revenue-Funded Capital	3.2	7.2	8.2	9.6	8.3	6.6
Noncash Revenues	1.9	1.9	1.9	1.9	1.9	1.9
Plus:						
Agricultural Reserve	0.0	2.1	2.7	2.6	2.4	1.9
Net Cash Flow	\$ 0.0	0.0	0.0	0.0	0.0	0.0

Strategic Services

(Dollars in millions)

	Budgeted	Proposed	Forecast			
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenues	\$ 19.6	18.2	20.2	20.9	21.3	21.4
Expenses	13.7	11.8	12.5	12.9	13.1	13.5
Net Operating Margin	5.9	6.5	7.7	8.0	8.2	8.0
Less: Assigned Enterprise Expense	3.2	3.0	3.1	3.1	3.2	3.2
Public Service Fund	0.5	0.5	0.6	0.6	0.6	0.6
Resource Development Fund	0.3	0.2	0.3	0.3	0.3	0.3
Net Margin Available	\$ 1.9	2.7	3.8	4.0	4.1	3.9
Less:						
Operating Reserves	0.0	0.0	0.3	0.1	0.1	0.1
Revenue-Funded Capital	0.5	0.2	0.8	0.4	0.2	0.2
Assigned Enterprise Capital	0.6	0.5	0.5	0.5	0.4	0.5
Assigned Transmission Minor Capital	0.0	0.1	0.1	0.1	0.1	0.1
Noncash Revenues	0.7	0.7	0.7	0.7	0.7	0.7
Net Cash Flow	\$ 0.0	1.2	1.5	2.2	2.6	2.3

LCRA TSC Approved Projects

LCRA Transmission Services Corporation

FY 2021 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Facility Acquisition Projects							
Homestead Substation Addition Acquisition	4,942	-	-	-	-	4,942	5,041
RGEC Transmission Facilities Acquisition	-	6,285	-	-	-	6,285	6,285
Facility Acquisition Projects Subtotal	4,942	6,285	-	-	-	11,227	11,326
Generation Interconnection Projects							
Amos Creek Circuit Breaker Addition	4,187	-	-	-	-	4,187	8,025
Castle Mountain Circuit Breaker Addition	10	-	-	-	-	10	1,733
Divide Circuit Breaker Addition	14	-	-	-	-	14	2,114
Horse Crossing-Rio Pecos Transmission Line Addition	1,811	-	-	-	-	1,811	2,399
Kimbrow Substation Addition	1,198	-	-	-	-	1,198	4,510
Pinnacle Circuit Breaker Addition	340	-	-	-	-	340	2,689
Pinnacle Substation Addition	2,690	-	-	-	-	2,690	12,852
Schneeman Draw Circuit Breaker Addition	2,347	-	-	-	-	2,347	5,105
Soda Lake Circuit Breaker Addition	1,636	-	-	-	-	1,636	1,848
Soda Lake Substation Addition	3,050	-	-	-	-	3,050	3,548
Sonne Substation Addition	2,941	869	-	-	-	3,810	3,810
Tumbleweed Substation Addition	-	12,897	3,531	96	-	16,524	16,984
Twelvemile Substation Addition	130	8,727	-	-	-	8,857	8,857
Generation Interconnection Projects Subtotal	20,354	22,493	3,531	96	-	46,474	74,474
Service Reliability Projects							
Asphalt Mines Substation Addition	2,283	-	-	-	-	2,283	2,416
Autotransformer Monitoring – FY 2020 Substation Upgrade	12	-	-	-	-	12	399
Backbone Bandwidth Telecommunications Upgrade	5	-	-	-	-	5	1,466
Burnet-Lampasas Transmission Line Overhaul	19,235	272	-	-	-	19,507	24,600
Clear Fork-Lockhart Transmission Line Overhaul	430	3,463	17	3	-	3,913	3,913
Clear Fork-Robert Brown Jr. Transmission Line Overhaul	459	8,220	48	4	-	8,731	8,731
Clear Springs Autotransformer Replacement	4,084	-	-	-	-	4,084	6,743

LCRA TSC Approved Projects (Continued)

LCRA Transmission Services Corporation FY 2021 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Service Reliability Projects (continued)							
Coronado-Sherwood Shores Transmission Line Storm Hardening	11,129	6	-	-	-	11,135	12,001
Dimmit Circuit Breaker Addition	1,316	9	-	-	-	1,325	5,108
Divide Roadway Substation Upgrade	760	-	-	-	-	760	949
Fayette Area Transmission Line Upgrades	9,737	45	-	-	-	9,782	25,657
Fayette Power Project 138-kV-La Grange Transmission Line Overhaul	88	-	-	-	-	88	4,128
Fayetteville-Winchester Transmission Line Upgrade	131	-	-	-	-	131	17,230
Ferguson-Sherwood Shores Transmission Line Storm Hardening	2,835	-	-	-	-	2,835	3,368
Frelsburg Circuit Breaker Addition	5,145	-	-	-	-	5,145	7,736
Gabriel Substation Upgrade	19,776	1,623	-	-	-	21,399	23,696
Gabriel-Glasscock Transmission Line Storm Hardening	1,421	37	-	-	-	1,458	2,099
Gabriel-Rivery Transmission Line Storm Hardening	7,671	67	-	-	-	7,738	8,590
Georgetown-Rivery Transmission Line Upgrade	2	-	-	-	-	2	1,642
Goldthwaite-Lampasas Transmission Line Overhaul	4,699	176	-	-	-	4,875	6,071
Graphite Mine Circuit Breaker Addition	1,385	8,065	5	-	-	9,455	11,141
Harris Branch-McNeil Transmission Line Relocation	6	-	-	-	-	6	1,441
Harris Remote Terminal Unit Telecommunications Upgrade	4	-	-	-	-	4	456
Hi Cross-Turnersville Transmission Line Storm Hardening	2,472	3	-	-	-	2,475	2,852
Kempner Circuit Breaker Addition	1,379	6,274	30	-	-	7,683	9,152
Kleimann Circuit Breaker Addition	1	-	-	-	-	1	7,415
La Grange-Plum Transmission Line Overhaul	5	-	-	-	-	5	3,527
LCRA TSC Fiber Build-out – FY 2019 Telecommunications Upgrade	10,288	7,991	-	-	-	18,279	31,898
LCRA TSC Fiber Build-out – FY 2020 Telecommunications Upgrade	6,556	244	-	-	-	6,800	9,459
Luling-Zorn Transmission Line Overhaul	10,162	-	-	-	-	10,162	13,572
Magnolia Mercer Circuit Breaker Addition	2,578	-	-	-	-	2,578	5,131
Meadow Lake Substation Addition	2,706	-	-	-	-	2,706	5,901
Naruna Circuit Breaker Addition	2,248	-	-	-	-	2,248	3,991

LCRA TSC Approved Projects (Continued)

LCRA Transmission Services Corporation FY 2021 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
Service Reliability Projects (continued)							
New Bremen Circuit Breaker Addition	4,336	-	-	-	-	4,336	4,336
Obsolete Circuit Breaker Replacement – FY 2020 Substation Upgrade	468	-	-	-	-	468	5,939
Physical Security – FY 2019 Substation Upgrade	3,914	-	-	-	-	3,914	22,284
Physical Security – FY 2020 Substation Upgrade	2,406	4	-	-	-	2,410	3,530
Pooley Road Circuit Breaker Addition	3,619	50	-	-	-	3,669	4,265
Ranch Road 12 Circuit Breaker Addition	2,899	5	-	-	-	2,904	3,952
Remote Terminal Unit MPLS Migration – FY 2020 Telecommunications Upgrade	192	1	-	-	-	193	1,487
Rim Rock-Turtle Creek Transmission Line Storm Hardening	7,716	73	-	-	-	7,789	8,622
Riverside Circuit Breaker Addition	1,461	-	-	-	-	1,461	8,502
Robert Brown Jr.-San Marcos Transmission Line Overhaul	577	5,603	104	19	-	6,303	6,306
Switch Replacement – FY 2020 Substation Upgrade	497	-	-	-	-	497	1,477
Transmission Metering – FY 2020 Substation Upgrade	73	87	60	-	-	220	2,060
Turtle Creek Substation Upgrade	998	4	-	-	-	1,002	5,268
Weimar Circuit Breaker Addition	3	2,489	9	-	-	2,501	3,499
Welcome Circuit Breaker Addition	12	-	-	-	-	12	5,651
Service Reliability Projects Subtotal	160,179	44,811	273	26	-	205,289	359,657
System Capacity Projects							
Andice-Bertram-Burnet Transmission Line Upgrade	9,028	181	-	-	-	9,209	10,238
Bakersfield-Solstice Transmission Line Addition	31,557	-	-	-	-	31,557	78,100
Bellville South-Prairie View Transmission Line Upgrade	866	-	-	-	-	866	2,601
Boerne-Cico-Comfort-Kendall Transmission Line Upgrade	13	-	-	-	-	13	17,799
Camp Wood-Leakey Transmission Line Overhaul	34,316	212	-	-	-	34,528	48,000
Cooks Point Substation and Transmission Line Addition	25,252	-	-	-	-	25,252	39,457
Crane Circuit Breaker Addition	86	-	-	-	-	86	1,396
Escobares Substation Addition	4,142	-	-	-	-	4,142	5,158
Flatonia-Hallettsville Transmission Line Upgrade	134	-	-	-	-	134	13,722

LCRA TSC Approved Projects (Continued)

LCRA Transmission Services Corporation FY 2021 Capital Plan Approved Projects

(Dollars in thousands)

Project Name	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Five-Year Total	Lifetime
System Capacity Projects (continued)							
Fort Stockton Switch Substation Upgrade	5,159	-	-	-	-	5,159	5,456
Giddings-Warda Transmission Line Upgrade	8,746	-	-	-	-	8,746	16,326
Glidden Area Transmission Line Upgrade	13	-	-	-	-	13	19,995
Hayter Ranch Substation Upgrade	4,301	1	-	-	-	4,302	5,456
Kendall Most Limiting Series Element Substation Upgrade	1,180	-	-	-	-	1,180	2,080
Leakey Substation Upgrade	37	-	-	-	-	37	1,050
Leander-Round Rock Transmission Line Addition	71	-	-	-	-	71	118,167
Lincoln Substation Upgrade	2,584	-	-	-	-	2,584	3,982
Lockhart Substation Upgrade	586	-	-	-	-	586	2,547
McCamey Area Easement Enhancement System Upgrade	2,031	-	-	-	-	2,031	4,273
Motorman Substation Addition	5,649	-	-	-	-	5,649	7,613
Mountain Home Substation and Transmission Line Addition	30,059	33,851	10,593	-	-	74,503	79,089
Rattler Substation Addition	2,495	-	-	-	-	2,495	4,627
Study Butte Substation and Transmission Line Addition	6,939	1,535	30	-	-	8,504	87,127
Swiftex Substation Upgrade	2,557	1	-	-	-	2,558	2,848
Winchester Autotransformer Additions	1,284	-	-	-	-	1,284	50,592
Zorn Autotransformer Replacement	2,984	32	-	-	-	3,016	6,694
System Capacity Projects Subtotal	182,069	35,813	10,623	-	-	228,505	634,393
Approved Subtotal	367,544	109,402	14,427	122	-	491,495	1,079,850

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