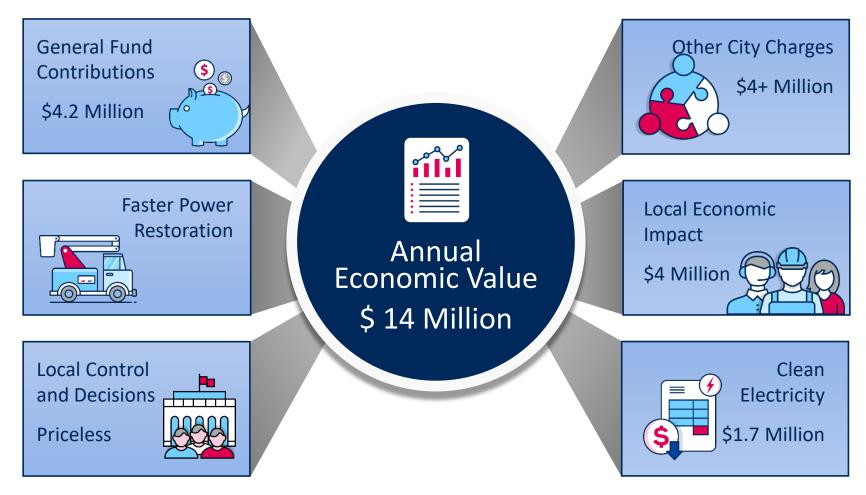


# Lake Worth Beach Electric Utility Provides Value for the City

Lake Worth Beach City Commission

December 15, 2020

# **LWB Electric Provides Value to City** *About \$14 Million in Annual Value & Growing*





# **Future is Bright for LWB Electric Utility** *Most Carbon-Free Supply in State and Low-Cost*

- Will have highest percentage of CO<sub>2</sub>-free supply in Florida
  - Greater than 50% of the supply CO<sub>2</sub> free by 2025
  - 51% improvement in CO<sub>2</sub> by 2025 vs. 2005, \$1.7M value @\$20/ton
- Rates are competitive and costs continue to decrease, ~\$9M annual reduction by 2027
  - Residential costs lower today than in 2006, while U.S. rates increased 26%
  - LWB's electric rates include items that competitors do not pay for
- Pays an additional \$4M+ to the city for various charges each year
- Provides ~\$4M/year in *economic activity to LWB through local jobs*
- Reliability improving and will improve further under SHRIP invested over \$14M in past two years for *reliability improvements, with an additional \$100M in coming years*
- General Fund Transfer ~15% of *revenues that city uses for general government services*
- Owned by the citizens; local priorities and local control over decisions



# LWB Electric 38+ MW of Solar by 2024 Carbon-Free Solar Resource ~40% of Peak Load



1.7 MW from 5-acre solar farm in Lake Worth Beach





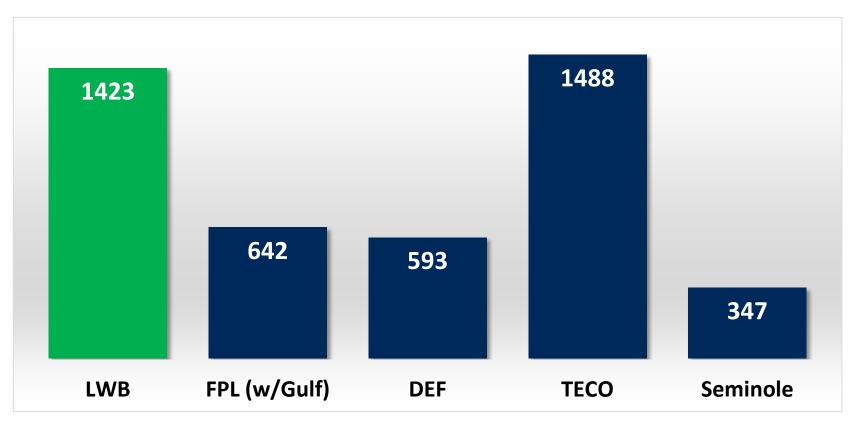


36.5 MW from one of the largest municipal-backed solar projects



# **LWB Leader in Solar Watts Per Customer** *Electric Utility Poised to Be A State Leader*

Projected Utility-Scale\* Solar Watts Per Customer (2024)

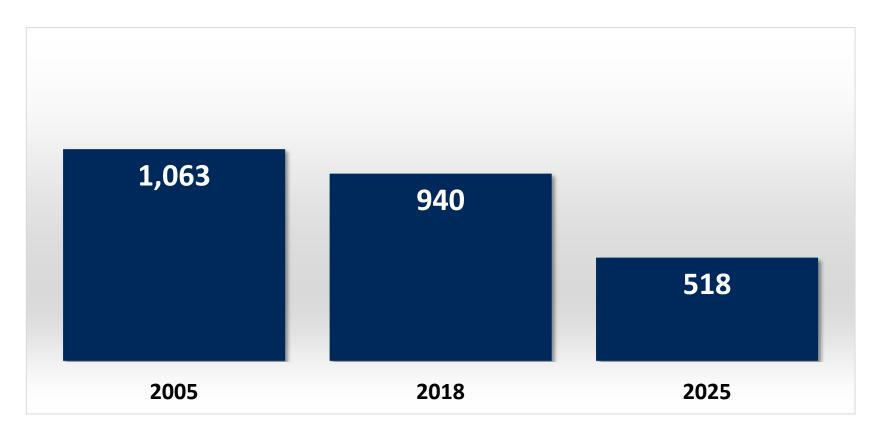




\*Based on Ten-Year Site Plans filed in April 2020 and other public data. Subject to change based on additional future solar additions not included in current plans. Reflects projected customer counts in 2024.

# **LWB CO<sub>2</sub> Emissions; Big Declines by 2025** 51% Reduction from 2005 levels\*

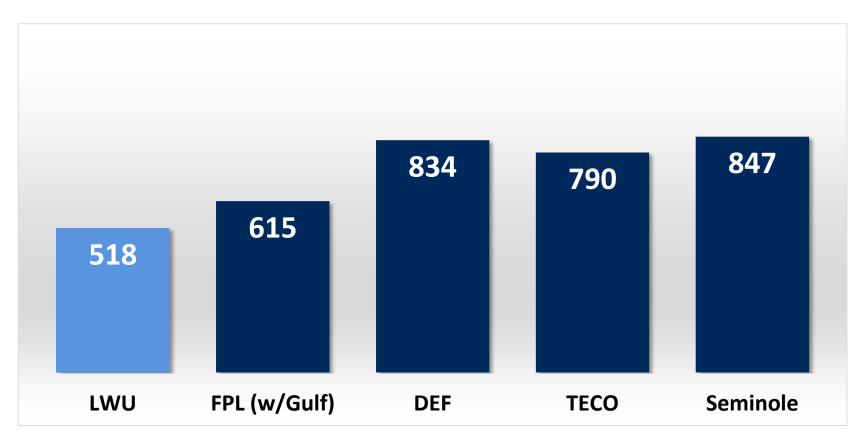
CO<sub>2</sub> Emissions (lbs./MWh)





# **LWB Electric Projected Lowest CO<sub>2</sub> Rate** *Poised to Be Florida Leader*

Projected 2025 CO2 Emissions Rate (lbs./MWh)

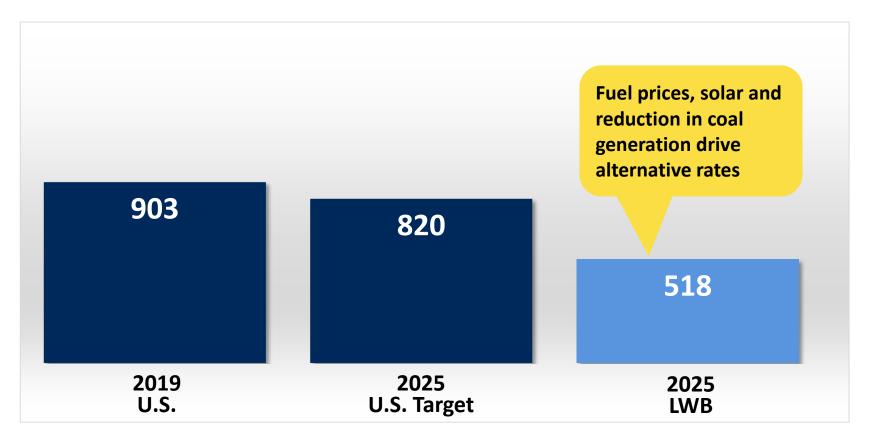




\*Based on Ten-Year Site Plans filed in April 2020 and other publicly available data. Reflects estimated typical emissions rates.

# **CO<sub>2</sub> Footprint Far Better Than U.S. Target** Avoided Emissions Worth ~\$1.7M at \$20/Ton

### Historical and Projected CO<sub>2</sub> Emissions (lbs./MWh)\*





\*SOURCE: <u>https://citizenownedenergy.com/earthday2020/</u>. U.S. actual based on data from Energy Information Administration. U.S. target derived from Clean Energy Standards.



## LWB Residential Retail Rates Competitive

### **Residential Bill Comparison**

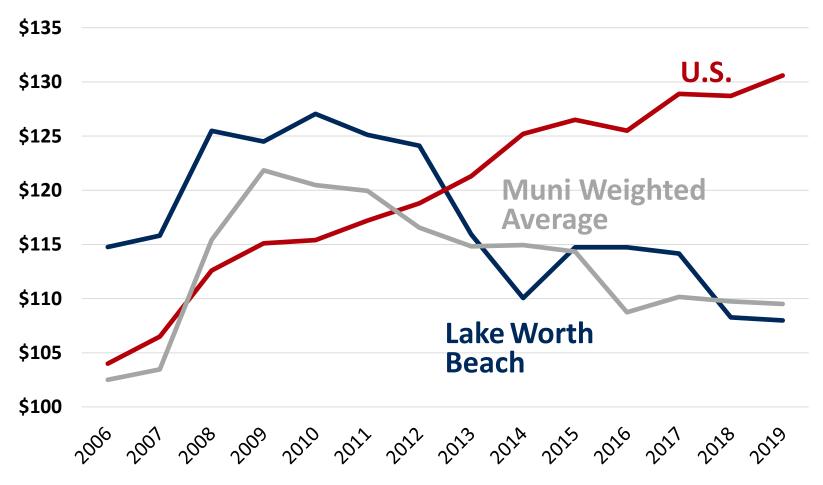
Cost per 1,000 kWh, Calendar Year 2019 Average





# LWB Residential Rates Lower Than 2006

Customer Rates Down 6%, U.S. Rates Up 26%\*



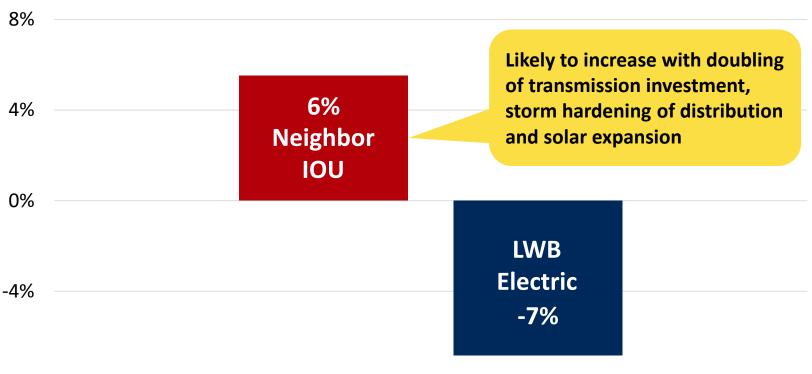


\*City rates from FMEA analysis of 1,000 kWh per month and U.S. from EIA Annual Electricity for residential



### **LWB Rates Declining Over Last 6 Years** *Neighboring IOU Rates Increasing*

### Percent Change in Residential Rates – 2013 to 2019



-8%



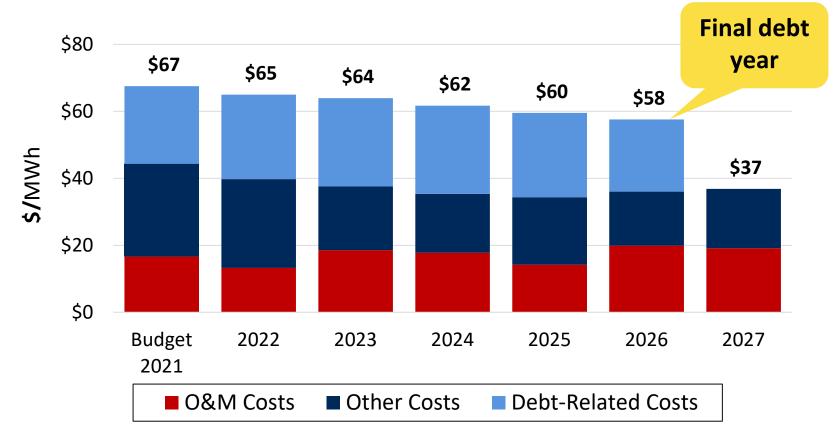
# LWB to Lower Power Costs \$9M Per Year ~33% Reduction by 2027

Area	Estimated Annual Savings	Fiscal Year
St. Lucie Debt Retirement	\$5M	2027
Reduce steam generation cost	\$2.5M	2023
Restructure coal costs	\$1M	2024



# **St. Lucie Costs Projected to Decline** ~\$5.1M Savings/Yr.\* After Debt Payoff in 2026

#### **Projected St. Lucie Project Costs**





\*Relative to 2021 budgeted Project rate and projected Lake Worth Beach St. Lucie energy

## **LWB Electric Creates Good, Local Jobs** Jobs Support Lake Worth Beach Economy

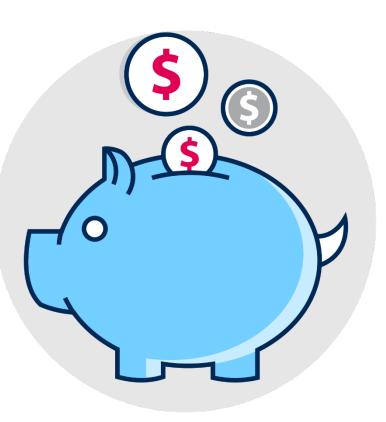
- Utility operations currently provides 86 local jobs
- Disposable income stays in the local economy
  - Local spending subject to a multiplier effect
- Net estimated impact on local economy:

# ~\$4 Million



# **LWB Electric Fund Transfers Support City** *Dollars Help Support City Services and Programs*

- Utility transfer ~\$4.2 to 4.5 million planned for city's general fund in fiscal 2021
- Transfer from electric is ~15% of total general fund revenue
- Highly competitive compared to an average 6% franchise fee
- No guarantee as to level of franchise fee available in market





# Leap in Storm Protection & Reliability \$100M Improvement Project Underway

- Pursuing a second transmission source to eliminate system-wide outages
- Upgrades to the distribution system to withstand Category 5 hurricanes
- Adding technology to reduce outage occurrences and duration
- Hardening in known trouble spots to reduce animal and vegetation contacts
- Converting to higher operating voltages to reduce thermal stress and increase power delivery needed for growth
- New system control and data acquisition systems







# **LWB Reliable at Keeping the Lights On** *Better Than Benchmark on 2 of 3 Key Metrics*

**2019 Distribution Reliability (Indices per City's FY 2019 Results & Scorecard)** For each index, the lower the number the better

Utility	Length <sup>1</sup>	Duration <sup>2</sup>	Repair Time <sup>3</sup>
Lake Worth Beach	125	80	41
FPL	178	41*	49*

<sup>1</sup> **L-Bar** = Average length of a service interruption.

<sup>2</sup> **SAIDI** = Average duration of interruptions for the average customer.

<sup>3</sup> **CAIDI** = Average repair time experienced by the average customer who experienced an outage.

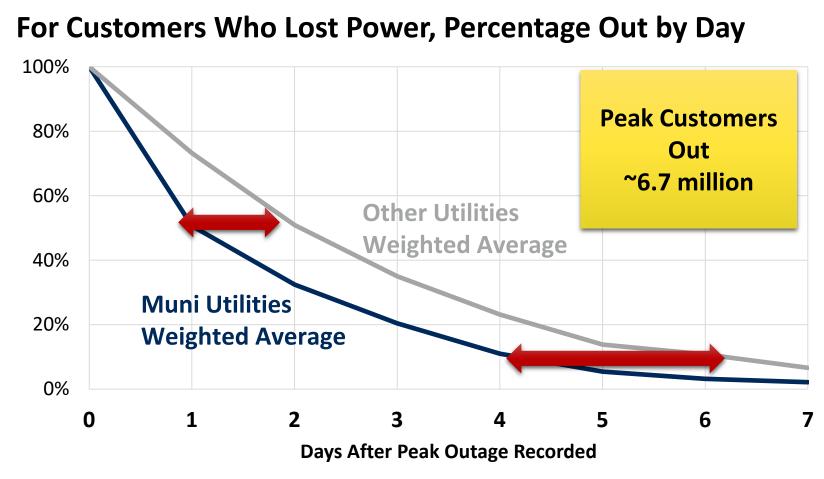
\* = FPL Palm Beach service area reliability metrics

- Local crews enable quicker responses to outages
- Capital investments focused on continued improvement



# **Municipals Fast Storm Restoration**

After Irma, Munis Restored Two Days Sooner





# **Utility Supports City in Addition to GF Transfer** *Lake Worth Beach Relies on the Utility*

- ~\$1.8 million in shared admin services
- ~\$220,000 for non-electric staff
- \$252, 000 in customer CC processing fees
- Cover 100% of office costs for electric and non-electric departments ~\$1.1M
- Vegetation management and clearing of alleyways ~\$265,000
- Auditing (shared with finance), IT services, and Fleet Division funding ~\$626,000
- Sponsor and provide electricity for community events (~\$10k)





# **Schools and County Wi-Fi Project Support** *Utility Can Offer Free Wired Pole Attachments*

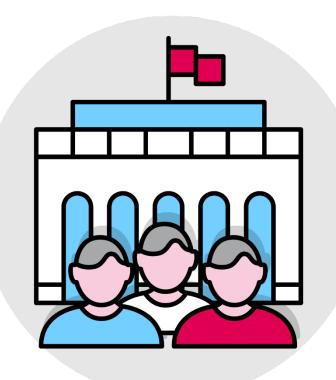
- City Commission has expressed support for County's plans to expand Wi-Fi coverage to increase access for school-aged children
- Required pole attachments at no cost to the utility
- Utility able to provide attachments without additional incremental revenues
- Utility will make annual in-kind contribution of ~\$300,000
- Local control leads to provision of valuable services



# Personal Service, Local Control

Customers, Officials Have a Voice in Decisions

- Local elected officials govern the utility and have access to utility's top leadership
- Local needs the top priority when decisions are made
- Service area is the top priority following a storm
- Efforts to improve customer experience ongoing – more work to be done







## **Questions & Discussion**