

Economic Infrastructure Subcommittee

Wednesday, February 5, 2025
9:00 AM - 11:00 AM
Reed Hall (102 HOB)

Daniel Perez
Speaker

Chip LaMarca
Chair

The Florida House of Representatives

Commerce Committee

Economic Infrastructure Subcommittee

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Meeting Agenda

Wednesday, February 5, 2025
9:00 am – 11:00 am
Reed Hall (102 HOB)

I. Call to Order

II. Roll Call

III. Welcome and Opening Remarks

IV. Florida's Infrastructure Future: Will We be Ready? A Discussion of the State's Role in Energy, Transportation, and Broadband Planning

V. Closing Remarks

VI. Adjournment

Presentation 1

Energy Resource Planning

Presentation to the

Florida House of Representatives Economic Infrastructure Subcommittee

Tom Ballinger
Director, Division of Engineering
Florida Public Service Commission
February 5, 2025

FPSC Regulatory Overview

- The Florida Public Service Commission is a Legislative agency with authority over the rates and service of the state's investor-owned utilities (IOUs).

- Electricity, Natural Gas, and Water & Wastewater:
  - The FPSC regulates the electric and gas IOUs, and the water and wastewater IOUs in those counties that have given jurisdiction to the PSC.
  - The FPSC has limited jurisdiction over publicly-owned municipal electric and gas utilities, and rural electric cooperative utilities.

- Telecommunications:
  - The FPSC has regulatory authority over the wholesale relationships of the state's various telecommunications companies, and over certain retail programs such as Lifeline and Relay.

FPSC Jurisdiction

Chapter 366, F.S.

- Authority over all electric utilities for the planning, development, and maintenance of a coordinated electric grid to assure an adequate and reliable supply of energy.

- Prescribe fair and reasonable rates and charges for investor-owned utilities in order to ensure the reliable provision of service.

- Goal is to achieve a balance between the cost of providing service and the reliability of the service provided.

- Section 186.801, Florida Statutes, requires that all major generating electric utilities in Florida submit a Ten-Year Site Plan (TYSP) to the Commission for review.

Ten-Year Site Plan

- Each TYSP contains projections of the utility's electric power needs for the next ten years and the general location of proposed power plant sites and major transmission facilities.
- The Commission performs a preliminary study of each TYSP and must determine whether it is “suitable” or “unsuitable”.
- TYSPs are not a binding plan of action on electric utilities.
- The Commission forwards the TYSP review to the Florida Department of Environmental Protection (DEP) for use in subsequent power plant siting proceedings.

Electricity Fundamentals

- Electric Demand: The rate at which electric energy is delivered at a given instant. Typically expressed in kilowatts (kW).

- Electric Energy: Usually measured in kilowatt-hours (kWh). Equal to one kilowatt of power supplied for one hour.

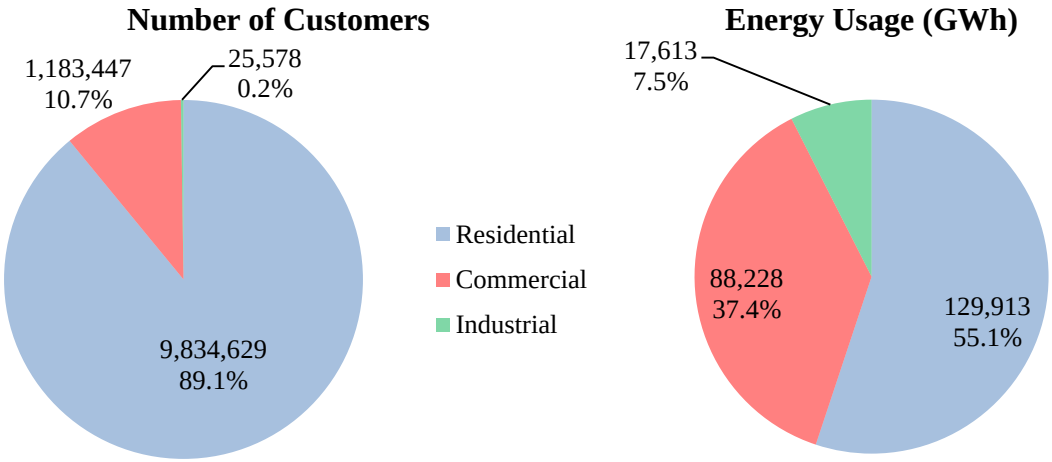
- Utilities must plan to serve both.

Electricity Fundamentals

- Peak Demand
  - Instantaneous measurement of load.
  - Determines TIMING and SIZE of new unit.

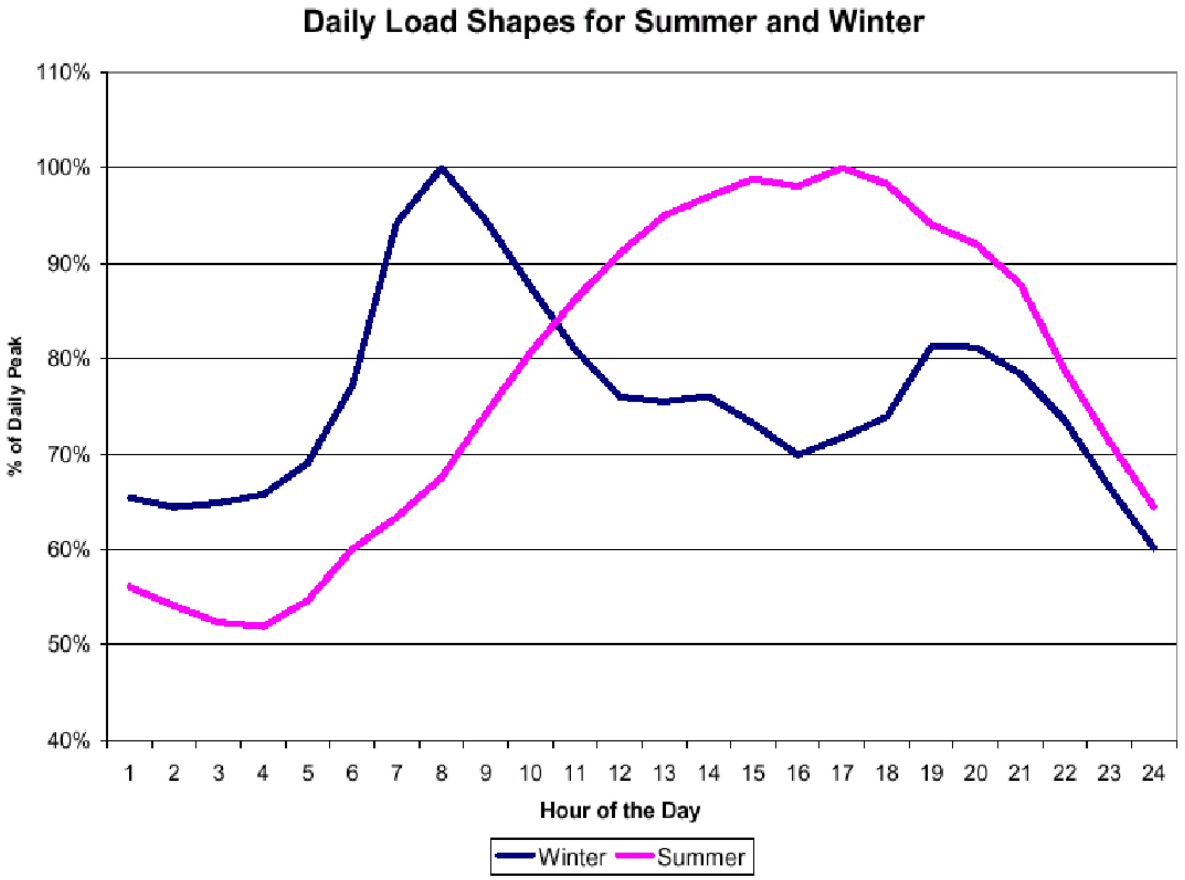
- Net Energy for Load
  - Accumulation of demand over period of time.
  - Determines TYPE of new unit.

Planning Process



Electric utilities must maintain an awareness of emerging trends such as customer adoption of EVs, roof top solar, the potential for growth of data centers, and energy storage.

Planning Process



Planning Process

- Once reliability need is identified, utility must add generation to keep the lights on.
- Analysis shifts from reliability need to economic choice.
- Cumulative Present Value Revenue Requirement (CPVRR) is typical metric.

Planning Process

- Power plants have three cost components:
  - Capital Costs + O & M Costs + Fuel Costs.
- Utility generally selects a mix of unit types that meet reliability criteria and minimize total costs over life of unit.

Planning Process

- Natural Gas-Fired Combustion Turbine
  - Very low capital costs, but high fuel costs.
  - Very low run time – used to meet peak demand.

- Natural Gas-Fired Combined Cycle
  - Medium capital cost, medium to high fuel cost.
  - Intermediate to baseload run time.

- Solar
  - Medium capital cost, no fuel cost.
  - Run time limited to daylight hours.

- Coal/Nuclear
  - Very high capital cost, very low fuel cost.
  - Fully committed baseload run time.

Planning Process

2024 Results

TYSP Utilities - Estimated Number of Electric Vehicles

Year	FPL	DEF	TECO	GRU	JEA	LAK	TAL	Total
2024	293,845	68,488	47,374	13,467	1,812	1,844	1,777	428,607
2025	428,132	104,185	67,251	16,526	2,226	2,379	2,220	622,919
2026	590,749	157,228	89,559	19,881	2,690	2,983	2,727	865,817
2027	787,129	234,412	114,145	23,577	3,211	3,650	3,331	1,169,455
2028	1,018,957	339,524	140,948	27,665	3,793	4,382	3,990	1,539,259
2029	1,287,414	474,718	169,854	32,169	4,440	5,183	4,731	1,978,509
2030	1,589,148	636,557	200,304	37,114	5,159	6,024	5,568	2,479,874
2031	1,929,264	822,895	231,346	42,493	5,951	6,873	6,442	3,045,264
2032	2,300,764	1,029,188	263,294	48,347	6,824	7,735	7,467	3,663,619
2033	2,695,021	1,242,094	295,772	54,689	7,781	8,595	8,601	4,312,553

Note: For 2024, about 2.3% of all registered vehicles.

Planning Process
2024 Results

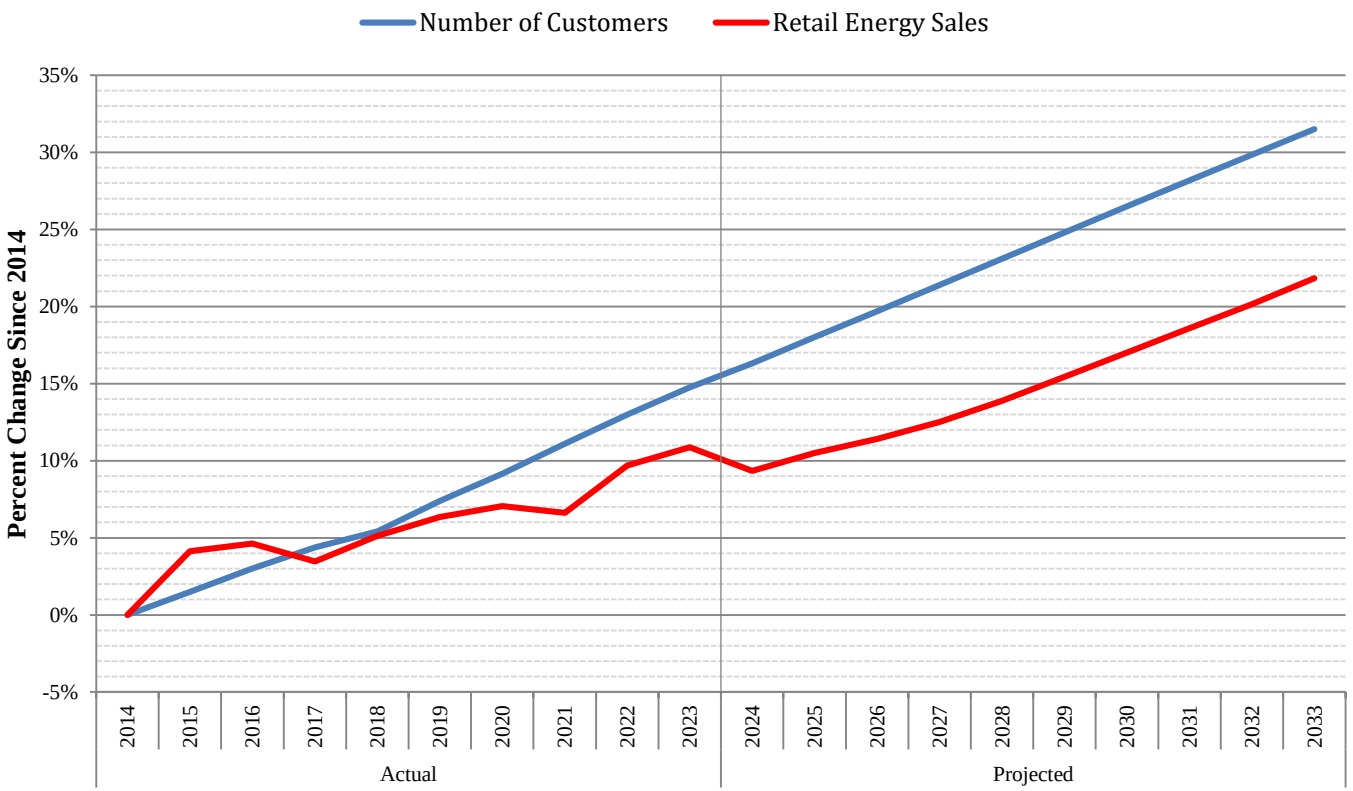
TYSP Utilities – Estimated Electric Vehicle Impact – Seasonal Peak Demand
Summer Peak Demand (MW)

Year	FPL	DEF	TECO	GRU	JEA	LAK	TAL	Total
2024	86.3	13.7	50.1	3.9	7.7	1.0	0.5	163.3
2025	200.5	33.6	66.3	5.0	9.2	1.0	0.7	316.3
2026	340.9	63.0	84.9	6.2	11.0	2.0	0.9	508.9
2027	514.0	105.6	105.0	7.5	13.1	3.0	1.2	749.5
2028	723.5	164.1	126.5	9.0	15.5	3.0	1.7	1,043.3
2029	972.1	293.4	149.6	10.6	18.1	3.0	2.3	1,449.1
2030	1258.5	331.4	173.8	12.4	21.1	5.0	3.1	1,805.2
2031	1602.4	531.1	198.5	14.3	24.3	5.0	3.9	2,379.6
2032	1994.0	668.6	224.1	16.4	27.9	6.0	4.8	2,941.8
2033	2381.8	809.1	250.1	18.7	31.8	6.0	5.9	3,503.4

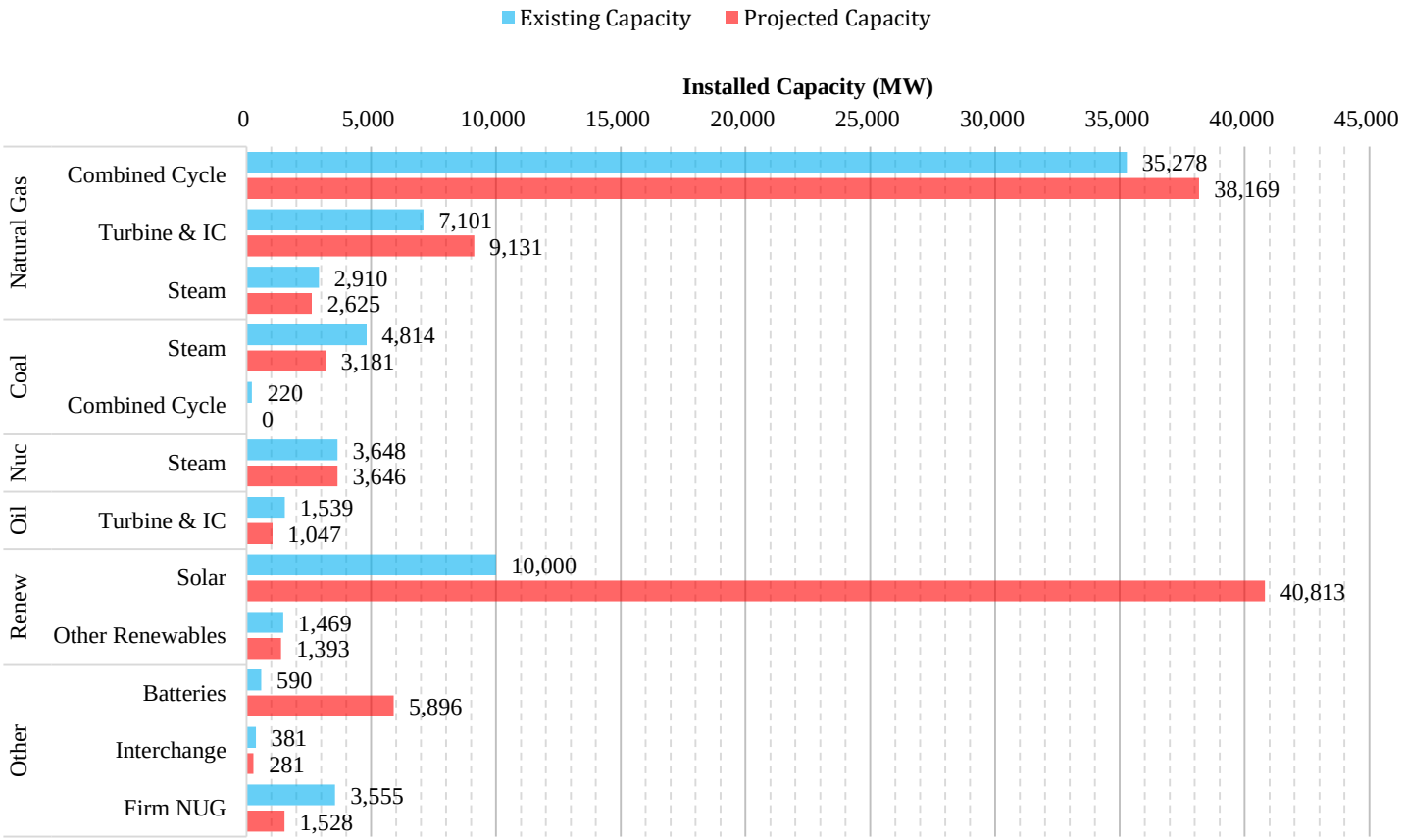
Note: For 2033, about 6.3% of summer peak demand.

Planning Process

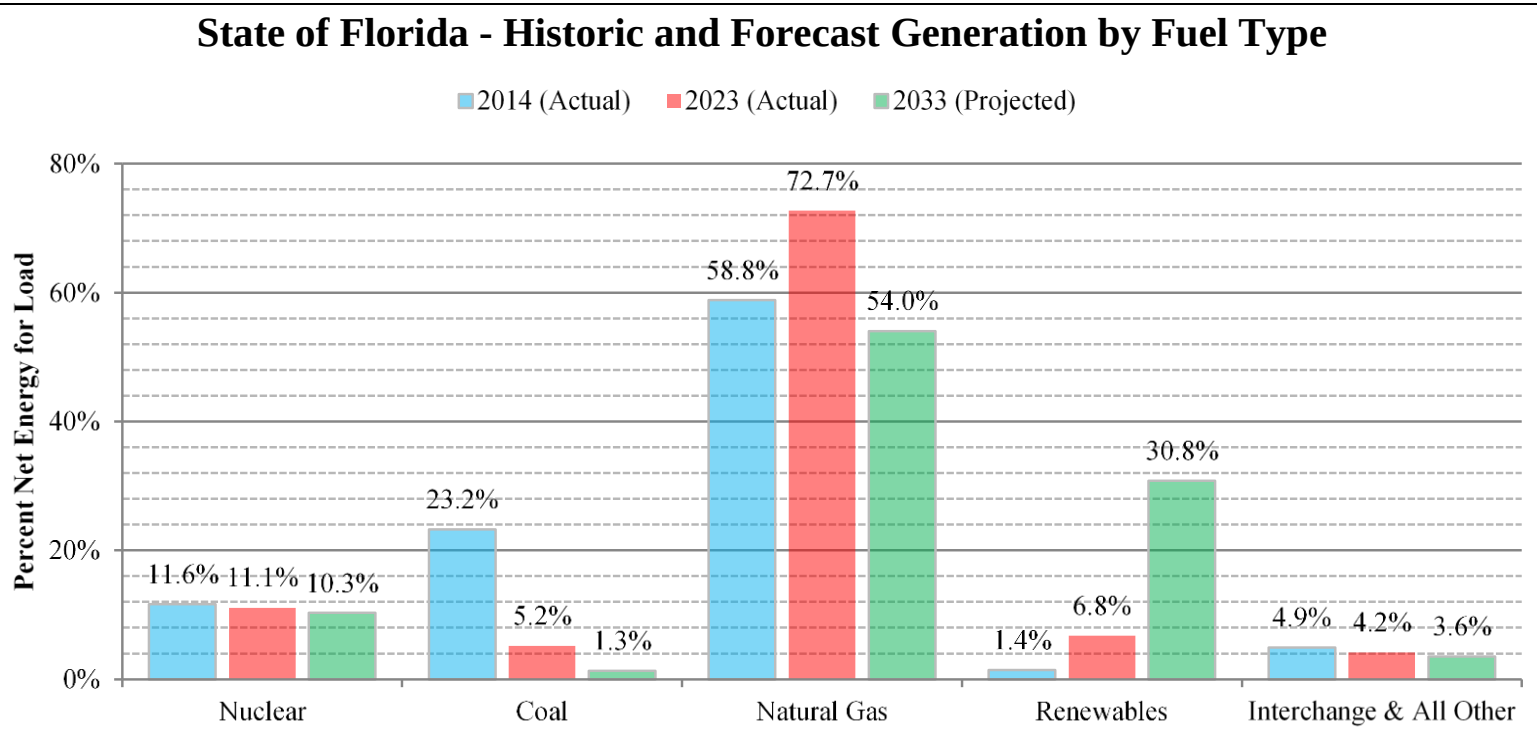
2024 Results



Planning Process - 2024 Results



Planning Process - 2024 Results



Source: FRCC 2015-2024 Regional Load and Resource Plan

- 2024 Review is on Commission's website:
  https://www.floridapsc.com/pscfiles/website-files/PDF/Utilities/Electricgas/TenYearSitePlans//2024/Review.pdf

Questions?

Tom Ballinger
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(850) 413-6680

Presentation 2

Florida Department of Transportation

SECRETARY JARED W. PERDUE, P.E.

Florida House of Representatives
Economic Infrastructure Subcommittee
February 5, 2025

FLORIDA LEADS THE NATION

BASED ON BUDGET, FDOT WOULD PLACE ON THE

Top half of

Fortune 500

BUSINESSES GLOBALLY

3 LARGEST CRUISE PORTS IN THE WORLD



673 ACTIVE CONSTRUCTION PROJECTS

2ND HIGHEST PASSENGER BOARDINGS IN THE U.S.

ONLY STATE WITH 4 LARGE-HUB COMMERCIAL AIRPORTS

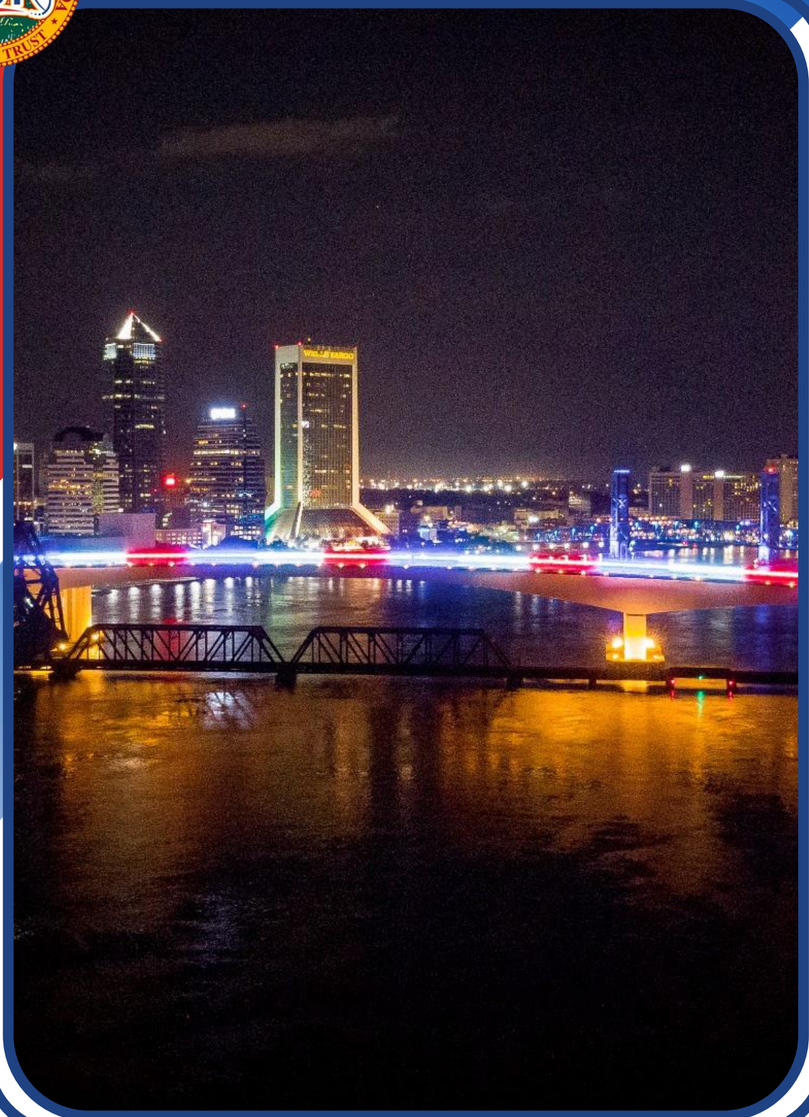


IF FLORIDA WAS A COUNTRY, IT WOULD LEAD THE WORLD IN TOTAL NUMBER OF SPACE LAUNCHES





MOST MEGA PROJECTS IN THE COUNTRY
(MEGA PROJECT = $500M+)



FDOT: WHO WE ARE

OUR MISSION:

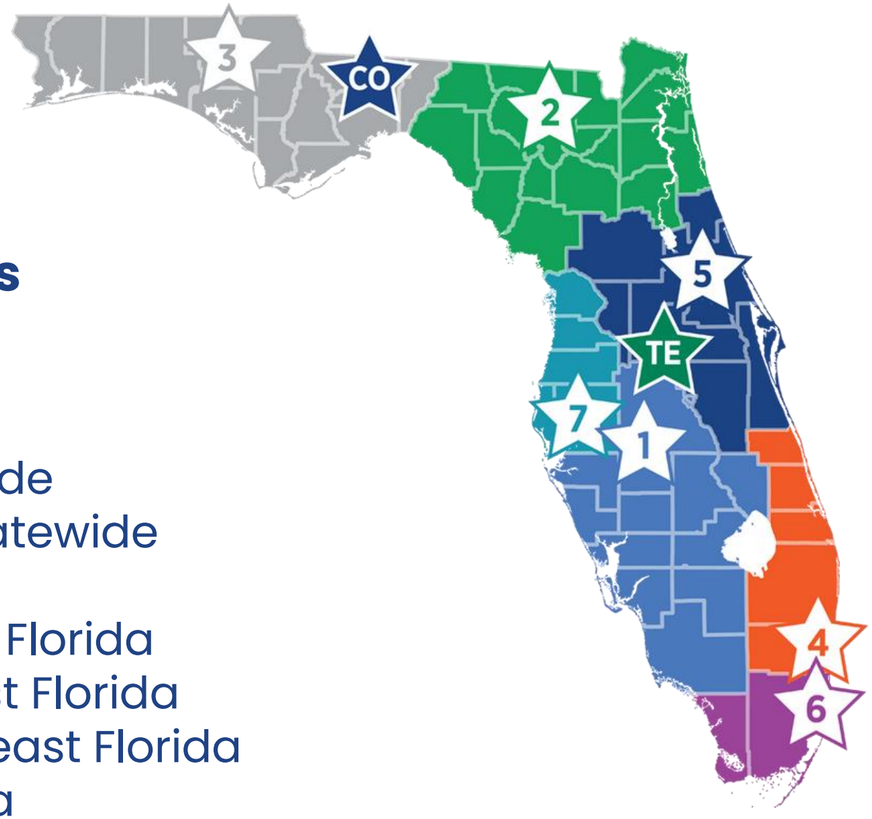
The Florida Department of Transportation is committed to providing a safe statewide transportation system that promotes the efficient movement of people and goods, supports the state's economic competitiveness, prioritizes Florida's environment and natural resources, and preserves the quality of life and connectedness of the state's communities.

- NEARLY 124,000 CENTERLANE MILES OF ROADWAY
- 7,079 FDOT MAINTAINED BRIDGES
- 16 DEEP SEAPORTS
- 21 COMMERCIAL AIRPORTS
- 8 ACTIVE LAUNCH SITES

SERVING FLORIDA'S COMMUNITIES

FDOT is a decentralized agency with headquarters located in Tallahassee.

Readily able to serve the local communities and closely coordinate directly with our regional partners to achieve a shared community vision.



- Central Office | Tallahassee, Leon County | Serving Statewide
- Turnpike Enterprise | Orlando, Orange County | Serving Statewide
- District 1 | Bartow, Polk County | Serving Southwest Florida
- District 2 | Lake City, Columbia County | Serving Northeast Florida
- District 3 | Chipley, Washington County | Serving Northwest Florida
- District 4 | Ft. Lauderdale, Broward County | Serving Southeast Florida
- District 5 | DeLand, Volusia County | Serving Central Florida
- District 6 | Miami, Miami-Dade County | Serving South Florida
- District 7 | Tampa, Hillsborough County | Serving West Central Florida

FLORIDA'S TURNPIKE ENTERPRISE

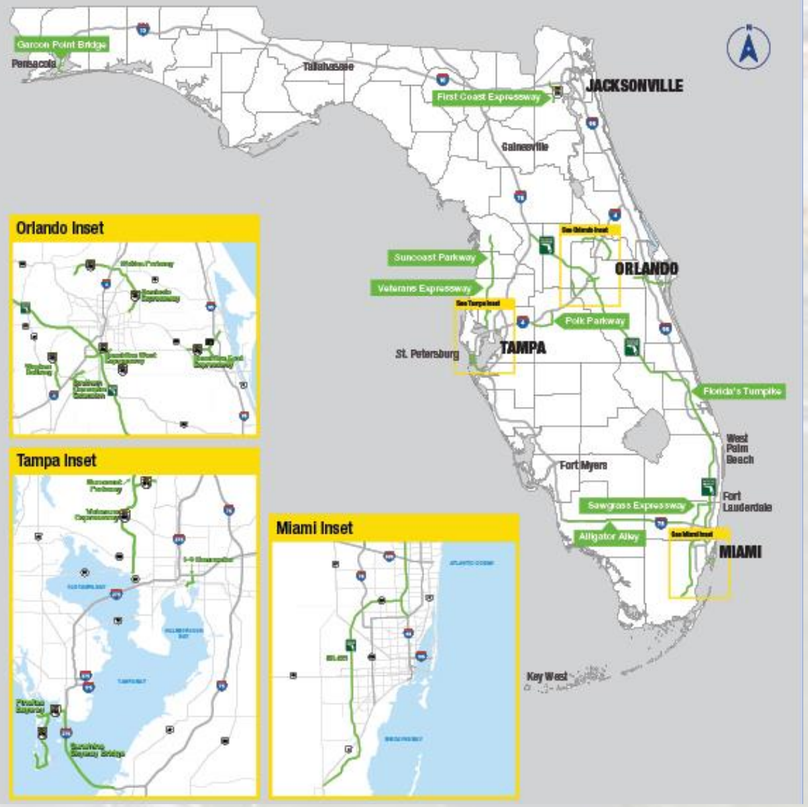
Florida's Turnpike Enterprise (FTE), as a unit of FDOT, operates all FDOT-owned toll roads and bridges for a combined total of **748 miles**. This includes **515 miles** of the Turnpike system, **126 miles** of toll roads and bridges, and **107 miles** of express lanes.

With **3.6 million customers** using **Florida's Turnpike System daily**, FTE reinvests revenues from tolls and managed lanes into:

- Operations and maintenance costs
- Preservation of the infrastructure
- Paying annual debt service on bonds
- Providing improvements in safety, technology, customer service, capacity, and access
- Providing financial support to FDOT road projects across Florida

SunPass Pro is the **largest, most interoperable** electronic tolling system in the U.S.

FDOT-OWNED TOLL FACILITIES



FDOT FUNDING SOURCES

Fiscal Years 2025-2029

$65.8 Billion

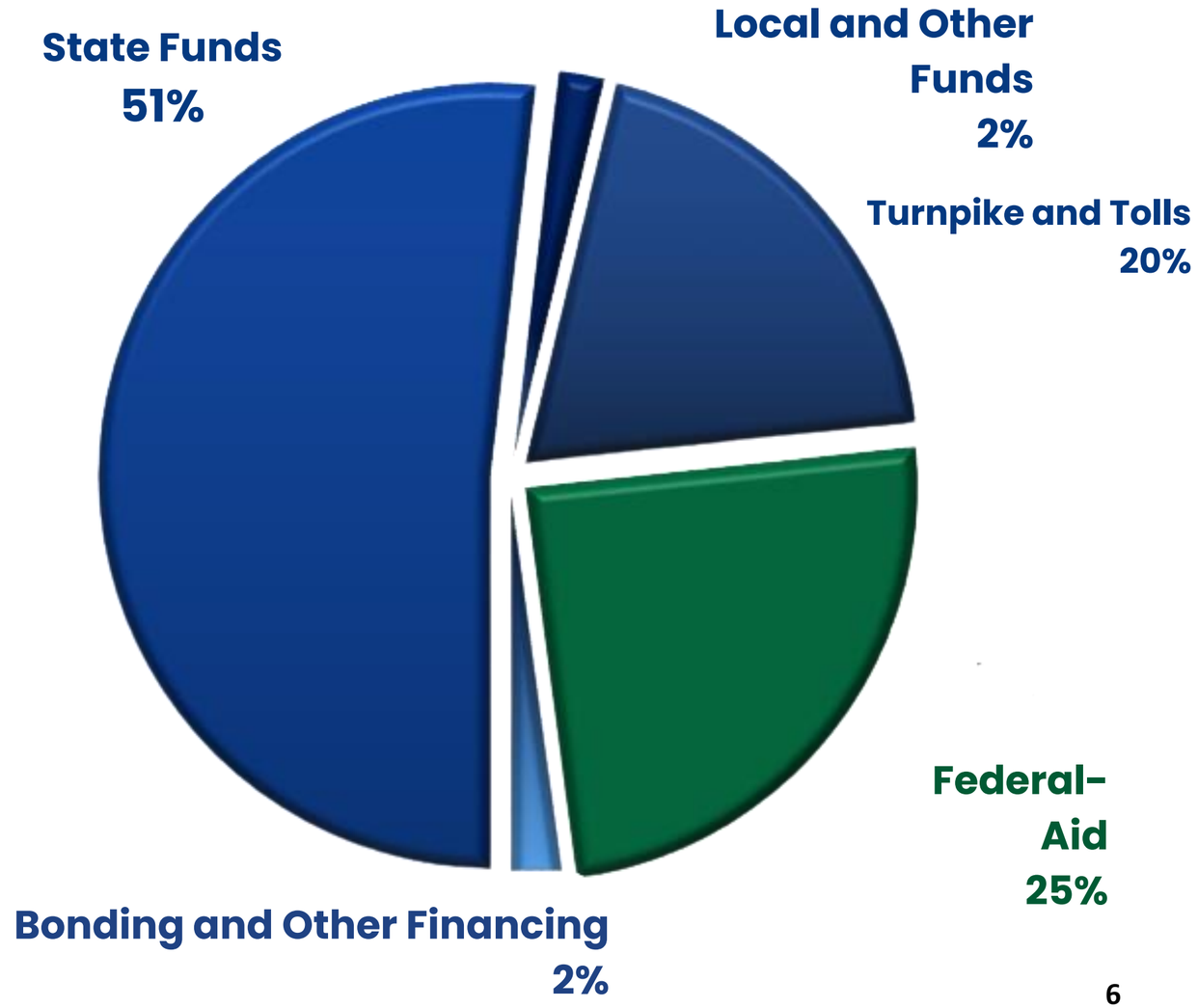
75% State Funding

25% Federal Funding

The current Work Program is comprised of annual legislative allocations and financing mechanisms, compounded over a rolling 5-year period.

Including:

- General State Revenue
- Toll Revenue
- Local and Other Funds
- Right of Way and State Infrastructure Bonds
- Other Financing



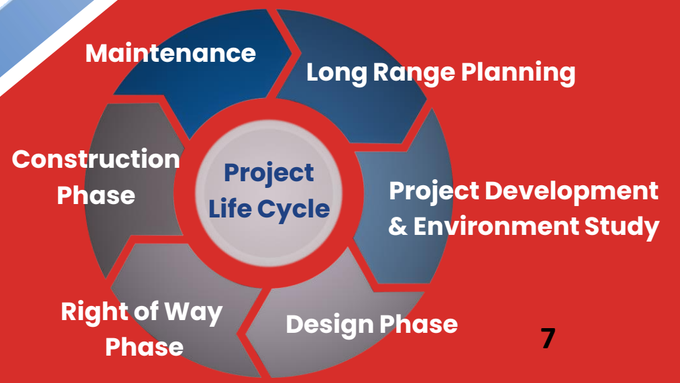
HOW FDOT OPERATES

FDOT Operates With a Distinct Financial Model

- Production-driven agency. Produces tangible products.
- Run like a business.

OPERATES ON A "CASH FLOW" COMMITMENT-BASED BUDGET

REVENUE → **5-YR CAPITAL PLAN BASED ON REVENUE FORECAST** → **PLANNING FOR NEEDS NOW + INTO THE FUTURE**

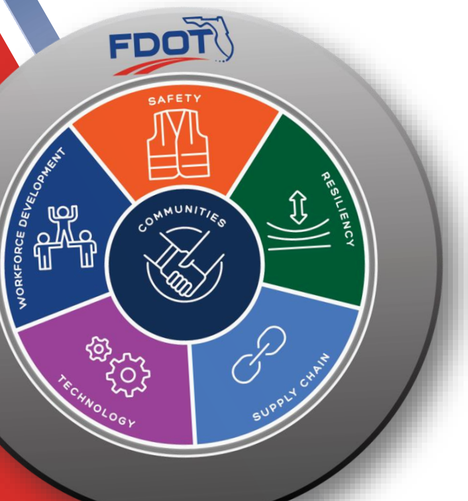


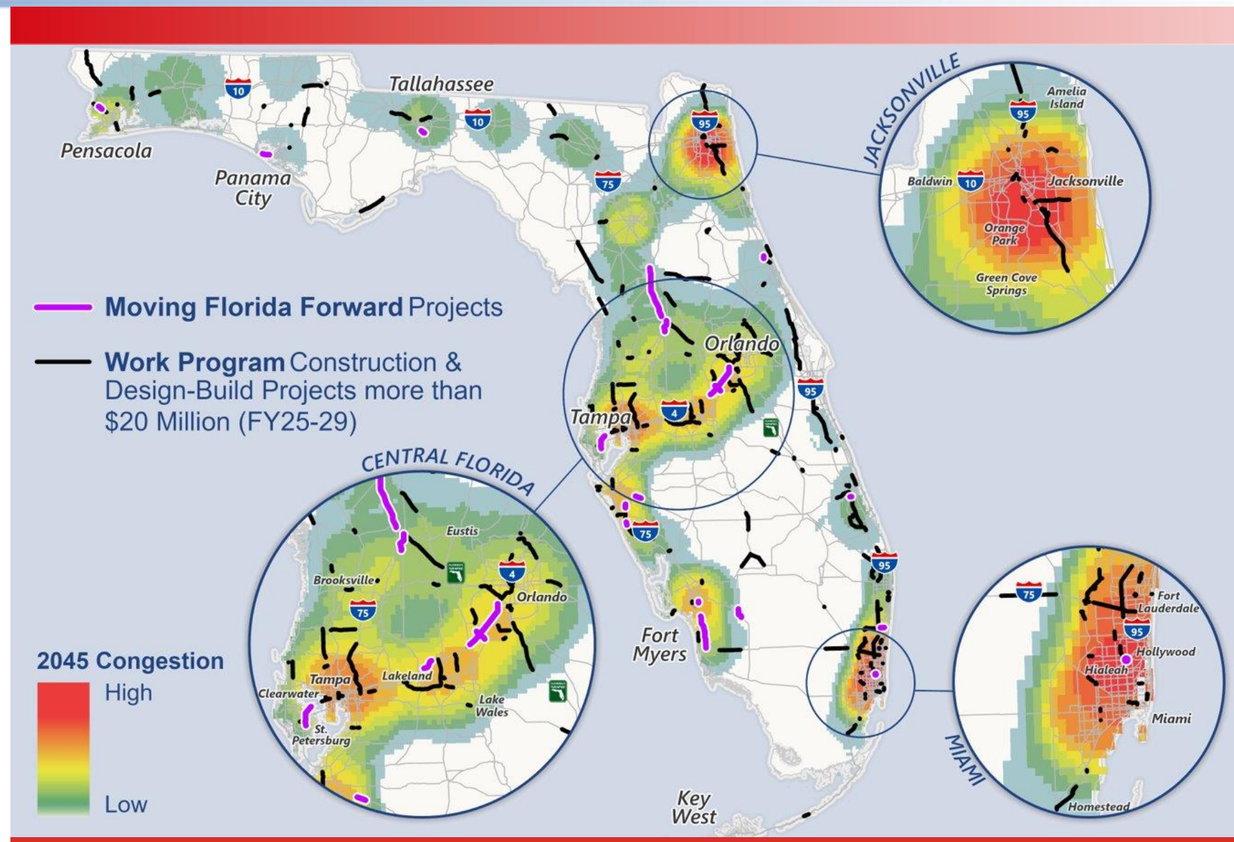
STRATEGIC INVESTMENTS

MOVING FLORIDA FORWARD
Infrastructure Initiative

- FY24-25 FDOT Budget: **$15.5 Billion**
- Current Year Budget Highlights:

  - Highway construction: $5.2 Billion
  - Bridge maintenance: $382.5 Million
  - Resurfacing: $1.8 Billion
  - Seaports: $109.6 Million
  - Florida Trails: $215.3 Million
  - Rail/Freight: $960.6 Million
  - Aviation: $334.2 Million
  - Spaceports: $43.5 Million
  - Rural Infrastructure: $182.2 Million
  - Safety Enhancements: $210.1 Million





RETURN ON INVESTMENT

Every dollar invested in transportation projects is expected to yield an average of **$4.26 in economic benefits.**



CRITICAL FOCUS

TALENT

WORKFORCE DEVELOPMENT, RECRUIT, RETAIN

- Continue to develop skilled personnel
- Retain FDOT professionals
- Recruit the next generation of skilled workforce

TOOLS

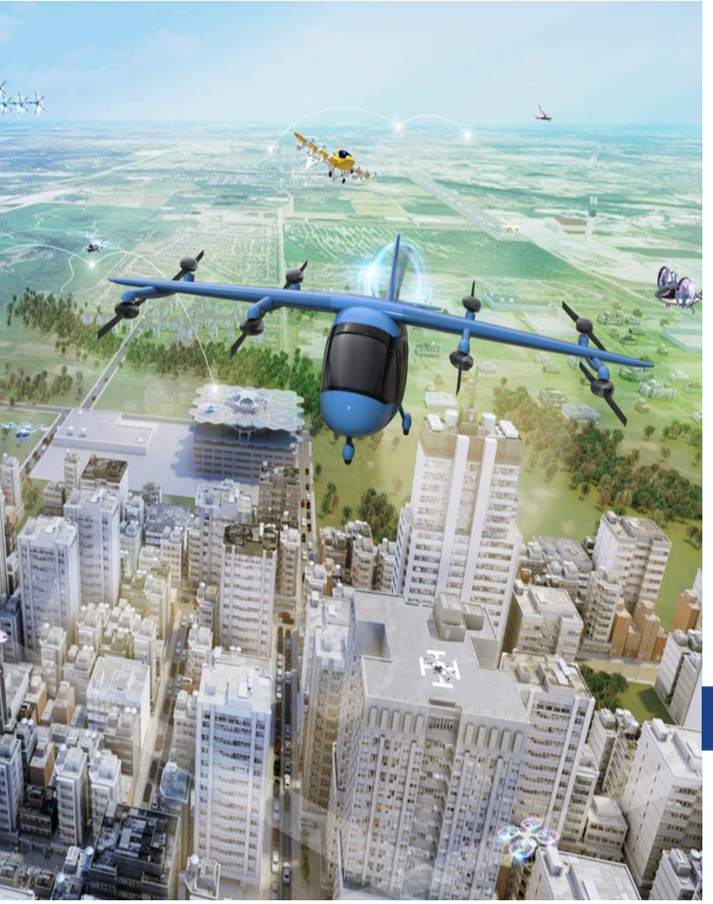
EQUIPMENT, FACILITIES, OPERATIONAL SUPPORT

- 2,254 pieces of heavy equipment
- 840 structures valued at over $560 million
- Operational costs to support record Work Program funding

TECH

SYSTEMS, MODERNIZATIONS, EMERGING TECHNOLOGIES

- Over 3,300 technology assets statewide
- Ongoing System Migrations and Modernizations
- Technological innovation, advancing internal & external technologies



ADVANCED AIR MOBILITY

Florida is the **1st in the nation** to create AAM Working Group

SunTrax is the **only** highway-speed autonomous vehicle testing facility in the Southeast

SUNTRAX





THANK YOU

Presentation 3

FLORIDA COMMERCE

Office of Broadband Overview

Division of Community Development

House Economic Infrastructure Subcommittee Meeting

Wednesday, February 5, 2025

Office of Broadband Overview

- The Legislature found that the sustainable adoption of broadband internet service is critical to the economic and business development of this state.
- In July 2020, the Legislature established the Office of Broadband within FloridaCommerce and tasked the Office with encouraging the use of broadband internet service.

Office of Broadband Program Overview

FloridaCommerce's Office of Broadband has engaged with 525 stakeholders to increase the availability and effectiveness of broadband internet throughout Florida including:

- ❑Local and state government agencies
- ❑Local Technology Planning Teams
- ❑Community organizations
- ❑Private businesses



Broadband Update

Italicized Text indicates:
Proactively targeted participation of state colleges, technical colleges and local workforce boards

State Grant Program – *Fully Awarded*

- Broadband Opportunity Grant Program - $363.9 million awarded for 137 grants in 59 counties

Federal Grant Programs – *Fully Awarded*

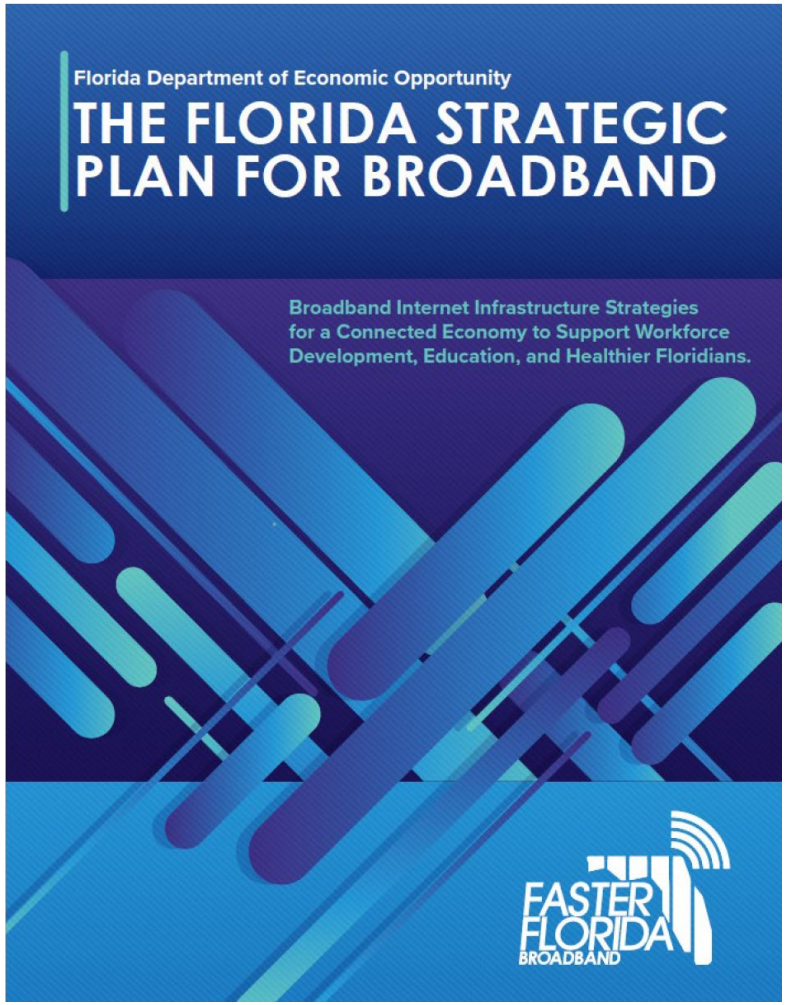
- Capital Projects Fund Program:
  - Broadband Infrastructure Program – Approximately $249 million awarded for 74 grants in 50 counties
  - *Multi-Purpose Community Facilities Program (workforce, health, digital literacy) – Approximately $87 million for 29 grants in 17 counties*
  - *Digital Connectivity Technology Program – More than $11 million for 15 grants in 25 counties*
- Many of the recipients mirrored the Multi-Purpose Community Facilities grants
- As of 2024, an estimated 1,167 miles of aerial and underground fiber were laid, enabling 4,300 residential and businesses to have access to broadband infrastructure.

Federal Grant Programs – *New; Grant Competitions in 2025*

- *Digital Capacity Grant Program – $70 million awarded to Florida ($41.7 million in-hand), with the intent to have competitive grant application window in Spring 2025*
- BEAD Program – $1.16 billion awarded to Florida, with the intent for competitive grant application windows in Spring 2025 and Summer 2025
  - Infrastructure – More than $970 million ($200 million prioritized for Seminole and Miccosukee Tribes)
  - *Workforce - $110 million*
  - Digital Literacy and Cybersecurity – $30 million

Strategic Plan for Broadband

- ❑Legislature tasked Office with creation of strategic plan, updated biennially.
- ❑First update was completed and submitted July 2024.
- ❑Assessed efficacy of Office programs and efforts thus far.
- ❑Updated strategies from initial plan based on lessons learned.
- ❑Created in collaboration with the University of Florida Public Utility Research Center.



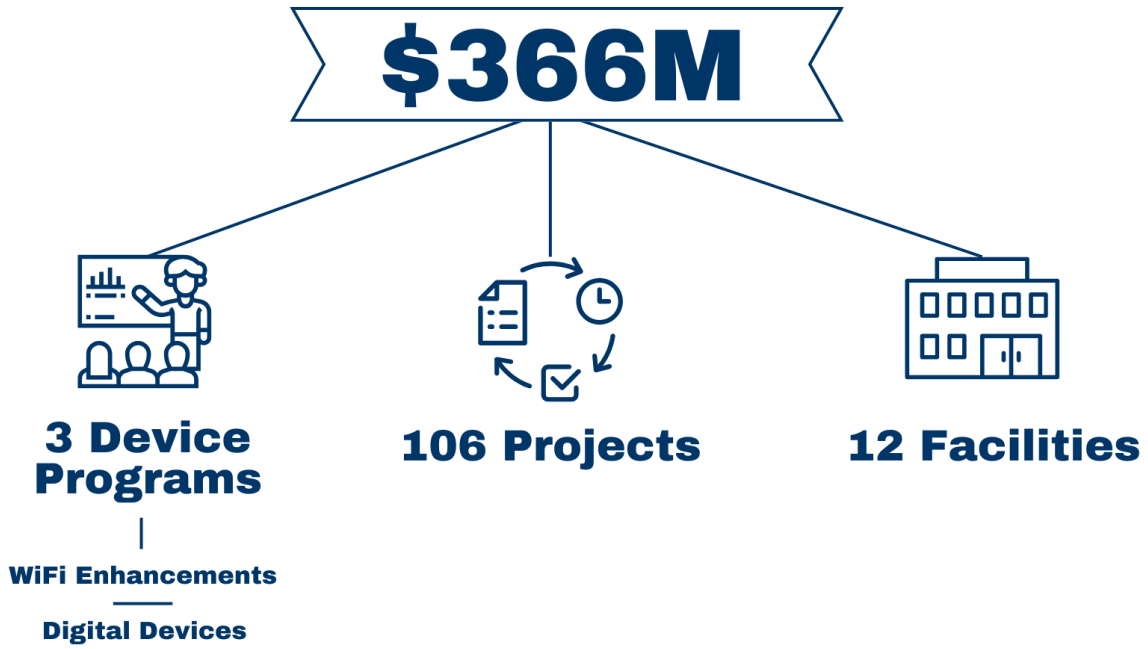
Office of Broadband: 255 Awards in 65 Counties

Since July 2020, FloridaCommerce's Office of Broadband has accomplished the following:

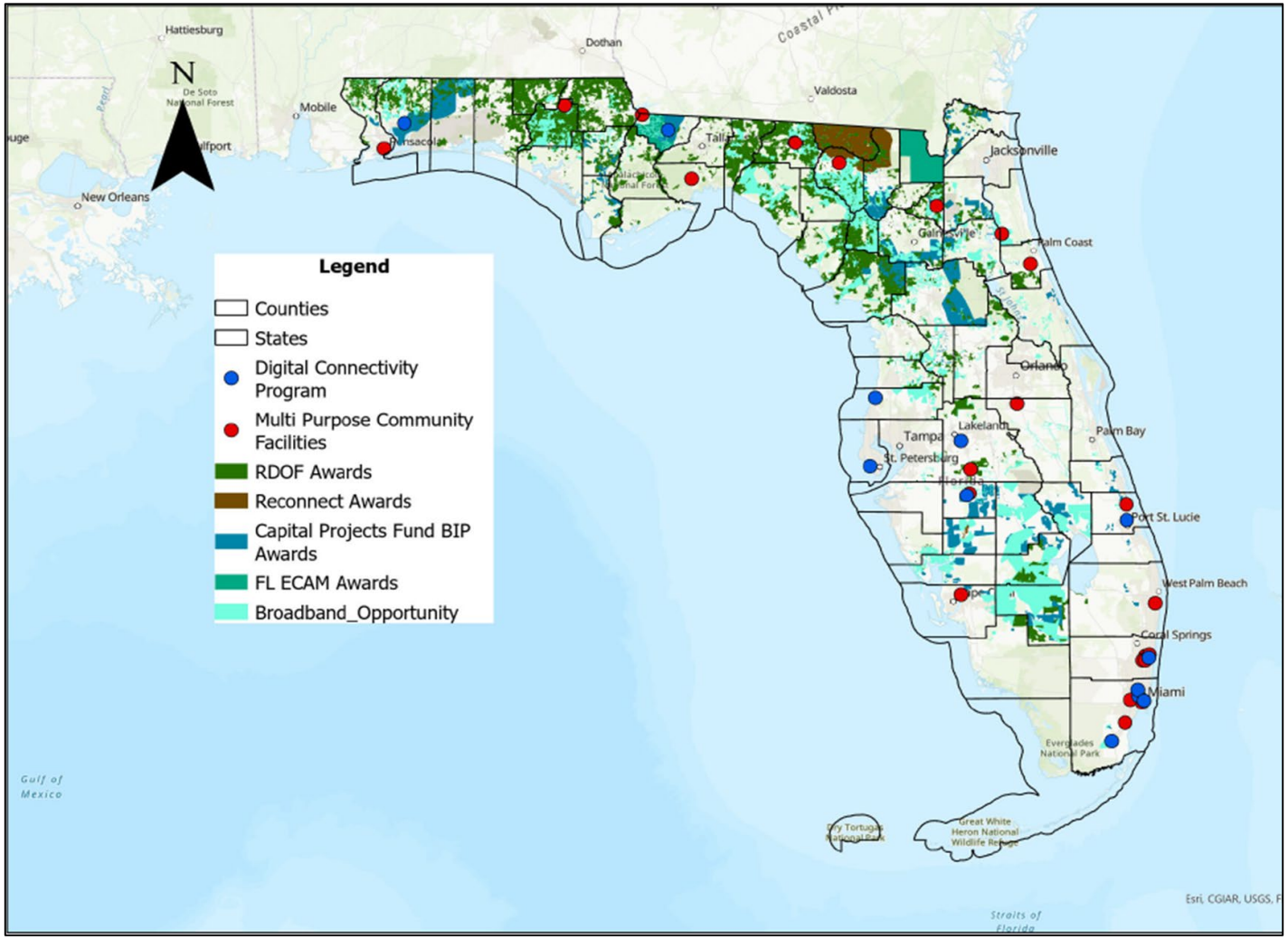
- ❑ Awarded more than $708 million in funding to four grant programs:
  - ❑ Broadband Opportunity Program
  - ❑ Capital Projects Fund
    - ❑ Broadband Infrastructure Program
    - ❑ Multi-Purpose Community Facility Program
    - ❑ Digital Connectivity Technology Program
- ❑ Generated $642 million in private leverage
- ❑ Upgrading 29 community facilities
- ❑ Funded 15 programs for digital devices, equipment and training

Broadband's Impact on Florida's Rural Communities

- ❑FloridaCommerce prioritizes rural investment
- ❑New opportunities for businesses and employees
- ❑New workforce needs for infrastructure
- ❑Expanded educational opportunities

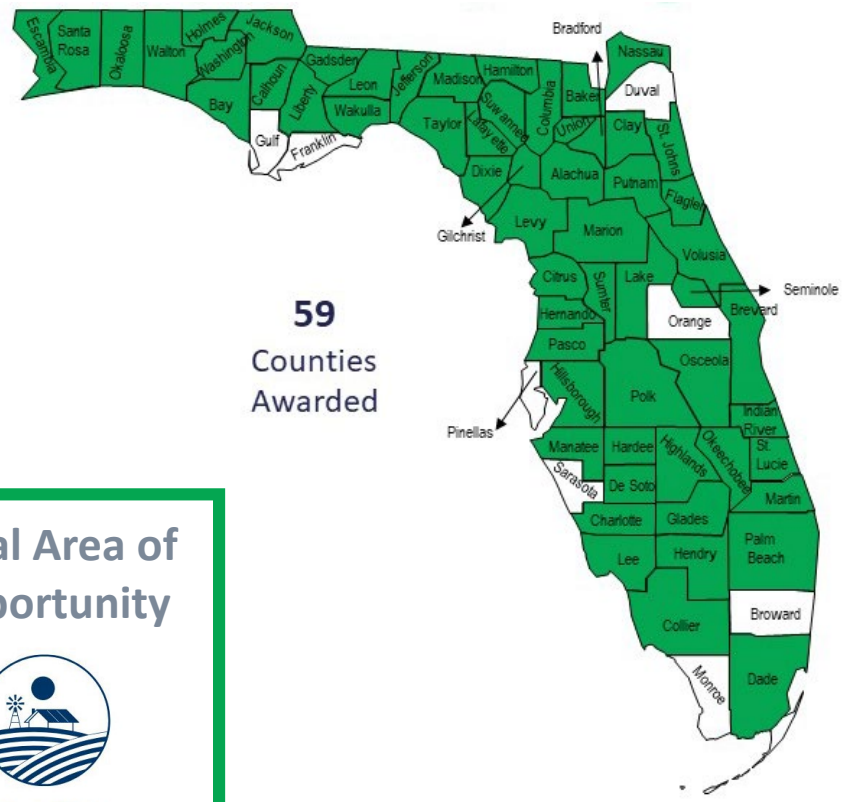


Office of Broadband Award Map



Broadband Opportunity Program

The Broadband Opportunity Program provides federal and state funding for installation and deployment of broadband internet infrastructure in unserved Florida communities.



59
Counties
Awarded

$363.9M
in Award Funding

66,804
Passings

18,227
Miles of Fiber

137
Awarded Projects

Rural Area of Opportunity

$168 Million

59

Projects

Broadband Infrastructure Program

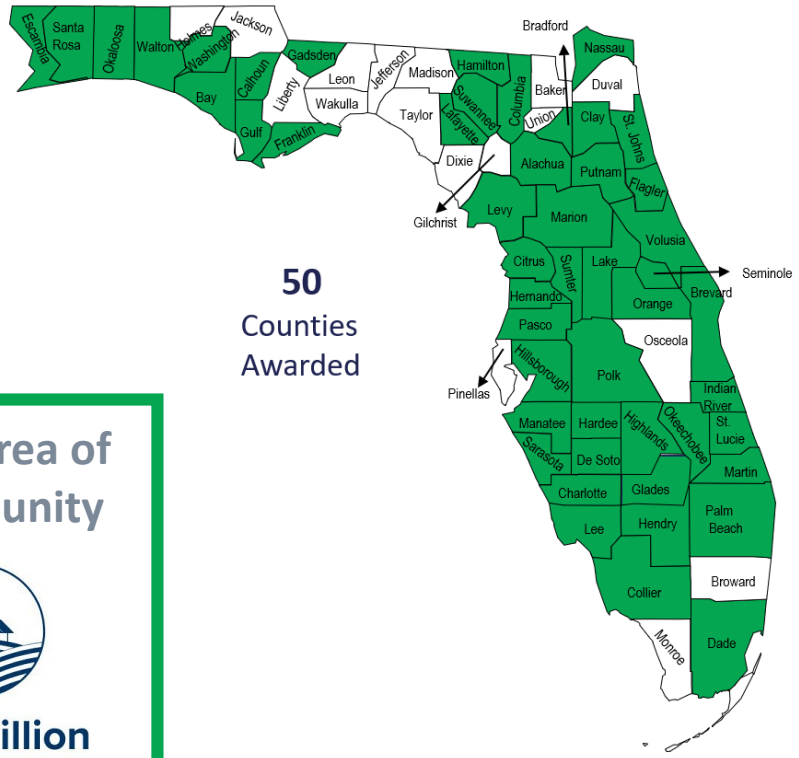
The Broadband Infrastructure Program provides funding to deploy broadband internet infrastructure in unserved and underserved areas throughout the state, prioritizing rural areas.

$248.5M
in Award Funding

37,313
Passings

8,796
Miles of Fiber

74
Awarded Projects



50
Counties
Awarded

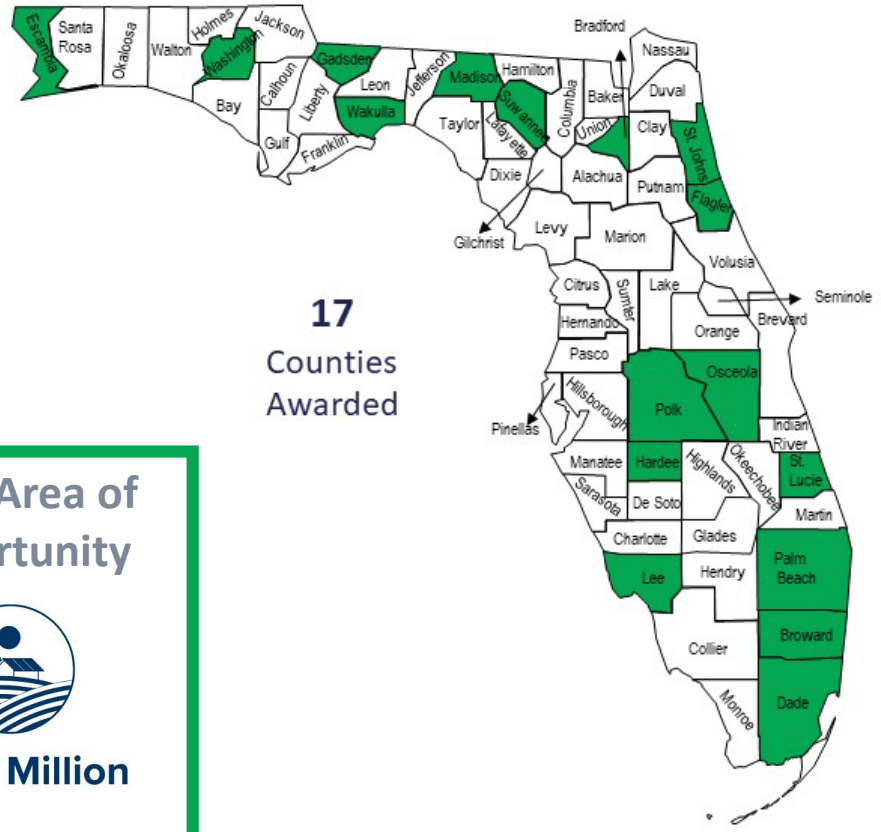
Rural Area of Opportunity

$82 Million

28
Projects

Multi-Purpose Community Facilities Program

The Multi-Purpose Community Facilities Program provides funds for construction of or improvements to buildings designed to give local communities access to broadband internet.



17
Counties
Awarded

$86.9M
in Award Funding

29
Awarded Projects

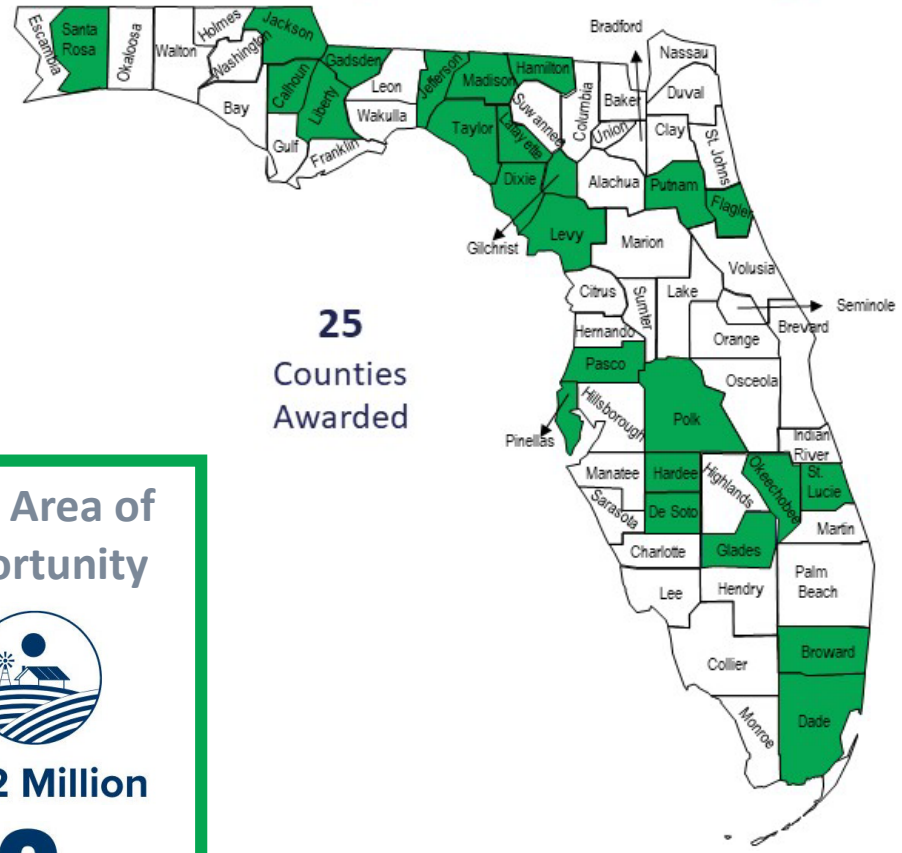
Rural Area of Opportunity

$37.7 Million

12
Projects

Digital Connectivity Technology Program

The Digital Connectivity Technology Program provides funds to subrecipients to enhance digital connectivity by providing essential devices, equipment and training.



25
Counties
Awarded

$11.5M
in Award Funding

15
Awarded Projects

Rural Area of Opportunity

$6.2 Million

3
Projects

Digital Capacity Grant Program

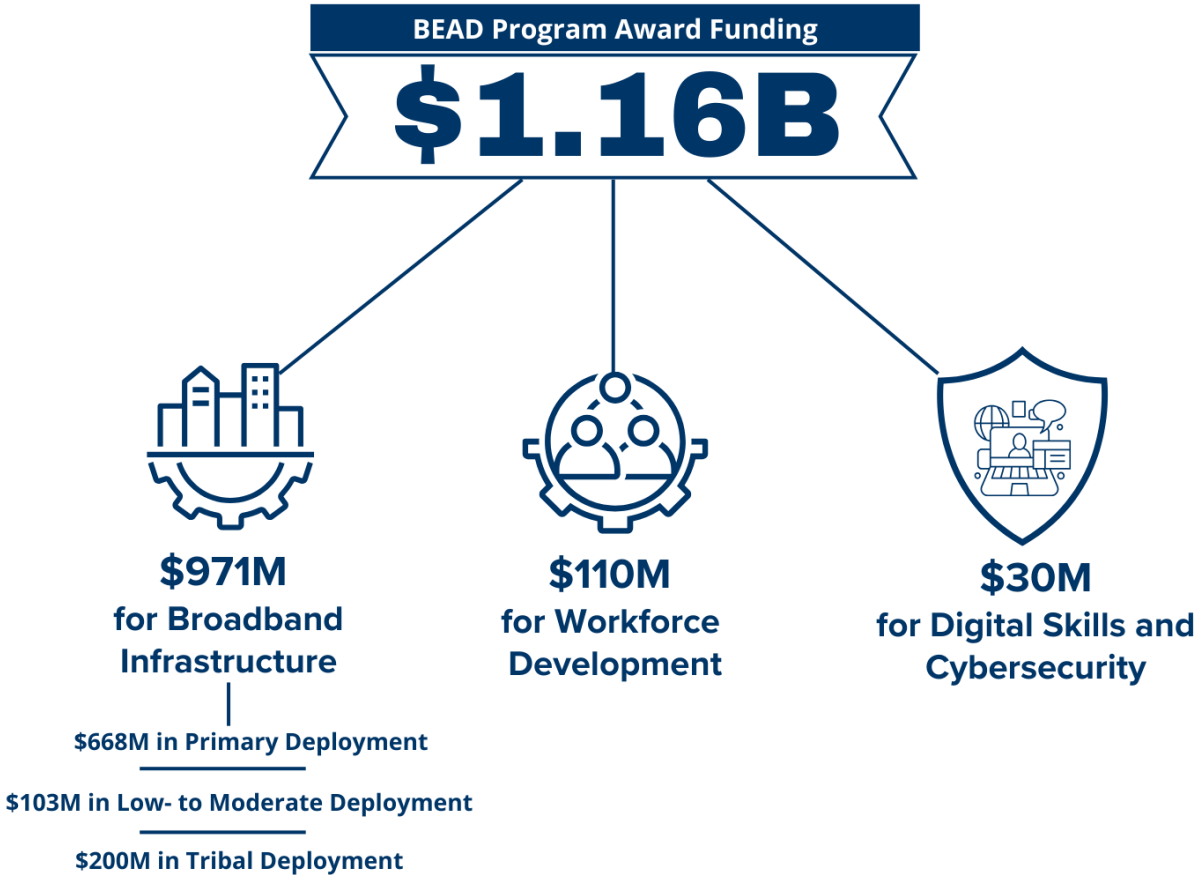
The Digital Capacity Grant Program will provide funding to close the digital divide, such as digital literacy, device programming, digital navigators, workforce and economic development.

Digital Capacity Total Award Allocation

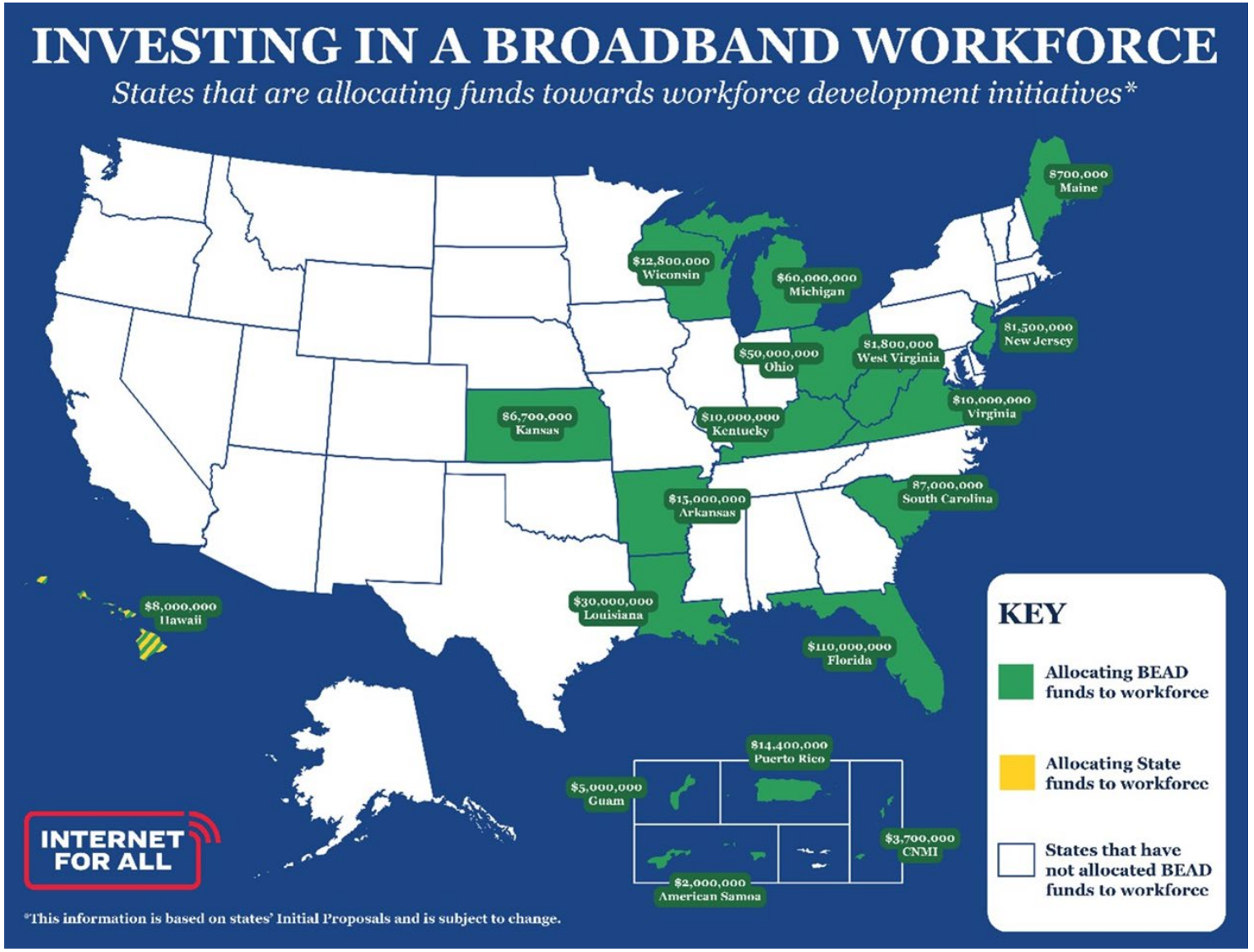
$70M

BEAD Program

The BEAD Program provides federal funding for grants to states for broadband planning, deployment, mapping, adoption and use activities. With this funding, Florida will serve every remaining unserved and underserved location in the state.



States with a BEAD Workforce Plan Map



BEAD Non-Deployment Overview

- Workforce development, digital literacy and cybersecurity training investments
  - $110 million in BEAD funding for workforce development
  - $30 million for digital literacy and cybersecurity
  - $70 million through separate Digital Capacity Grant Program for digital literacy, economic and workforce development and digital device programs
- Curriculum Frameworks
- Working with industry
- Application early 2025

How to utilize training funding?

- ❑Apprenticeship and pre-apprenticeship programs
- ❑On-the-job training programs
- ❑Credentialing and certificate programs
- ❑Training equipment purchasing
- ❑Tuition cost
- ❑Instructor recruitment and training



Fiber Technician Training Plan



INDUSTRY CERTIFICATIONS

CompTIA Network+
Fiber Optics Association's Fiber Optics Installer (FOI)
Fiber Optics Association's Fiber Optics Technician (FOT)



CAREER TECHNICAL CERTIFICATE

Telecommunication and Fiber Optic Technician



COLLEGE CREDIT CERTIFICATES

Cable installation
Network Communications (WAN/LAN)
Wireless Communications



ASSOCIATE IN SCIENCE DEGREE

Telecommunications Engineering Technology

Fiber Technician Curriculum Framework

TCN 1xxx - Telecommunications Fundamentals

3 Credits - 115 hours

TCN 1xxx - Network Cabling and Installation

3 Credits - 115 hours

Aligned Certification: CompTIA Network+

TCN 1xxx - Fiber Optics and Splicing Techniques

3 Credits - 115 hours

Aligned Certification: Fiber Optics Association's Fiber Optics Installer (FOI)

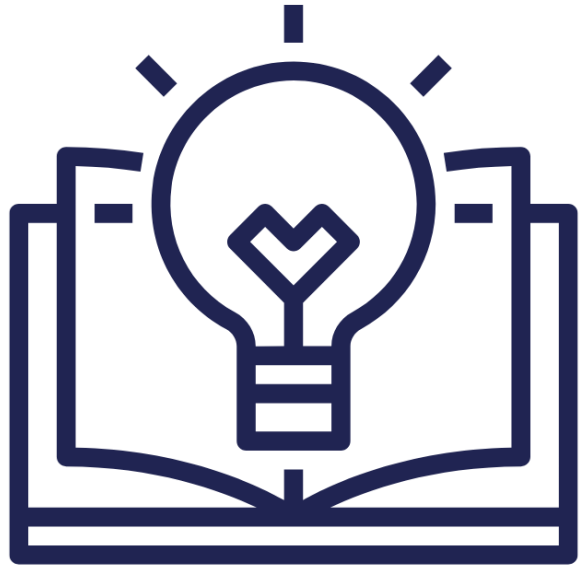
TCN 2xxx - Advanced Telecommunications Systems

3 Credits - 115 hours

Aligned Certification: Fiber Optics Association's Fiber Optics Technician (FOT)

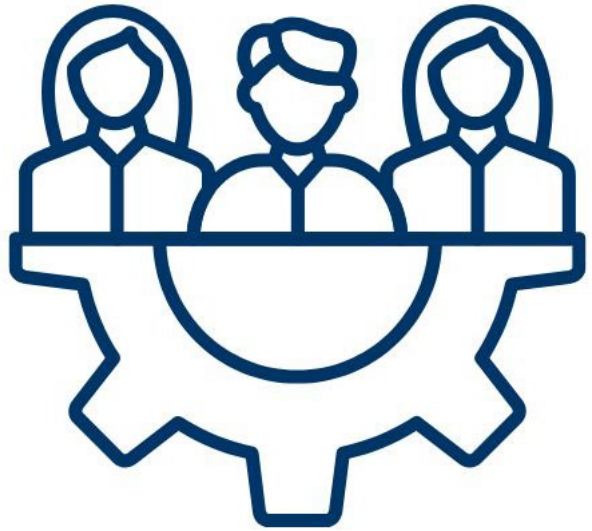
Role of Educational Institutions

- ❑ Deploy trusted curriculum frameworks
- ❑ Private Industry feedback
- ❑ Job-seeker confidence
- ❑ Increased capacity for new demand
- ❑ K-12 participation



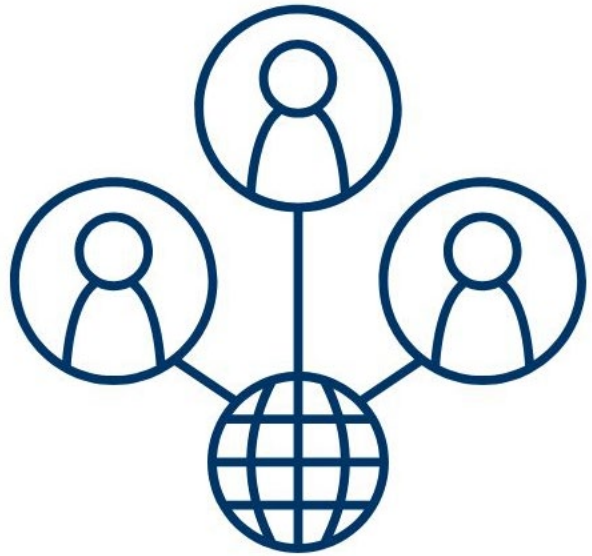
Role of Workforce Boards

- ❑Digital Literacy Training Efforts
- ❑Workforce Development and Standardization
- ❑Industry and Education Relationships
- ❑Job-seeker referrals

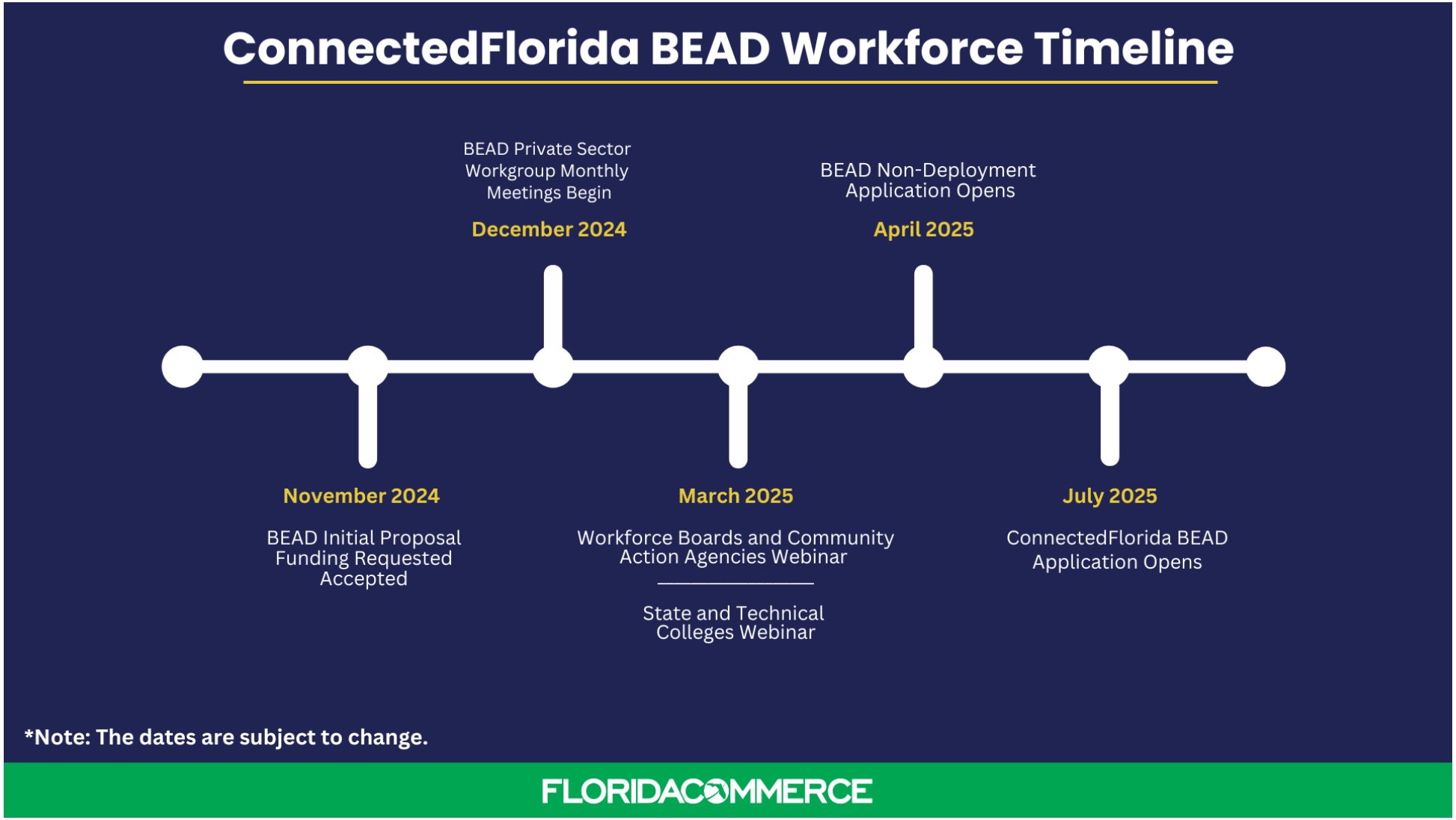


Role of Community Action Agencies

- Community Service Block Grant (CSBG) Program
  - Local Workforce Board Partnerships
- New opportunities for community
- Wraparound services
- Strong community presence
  - Referrals



Timeline and Next Steps



Contacts

If you have questions or comments about this presentation, please contact us or visit www.FloridaJobs.org/Broadband

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