



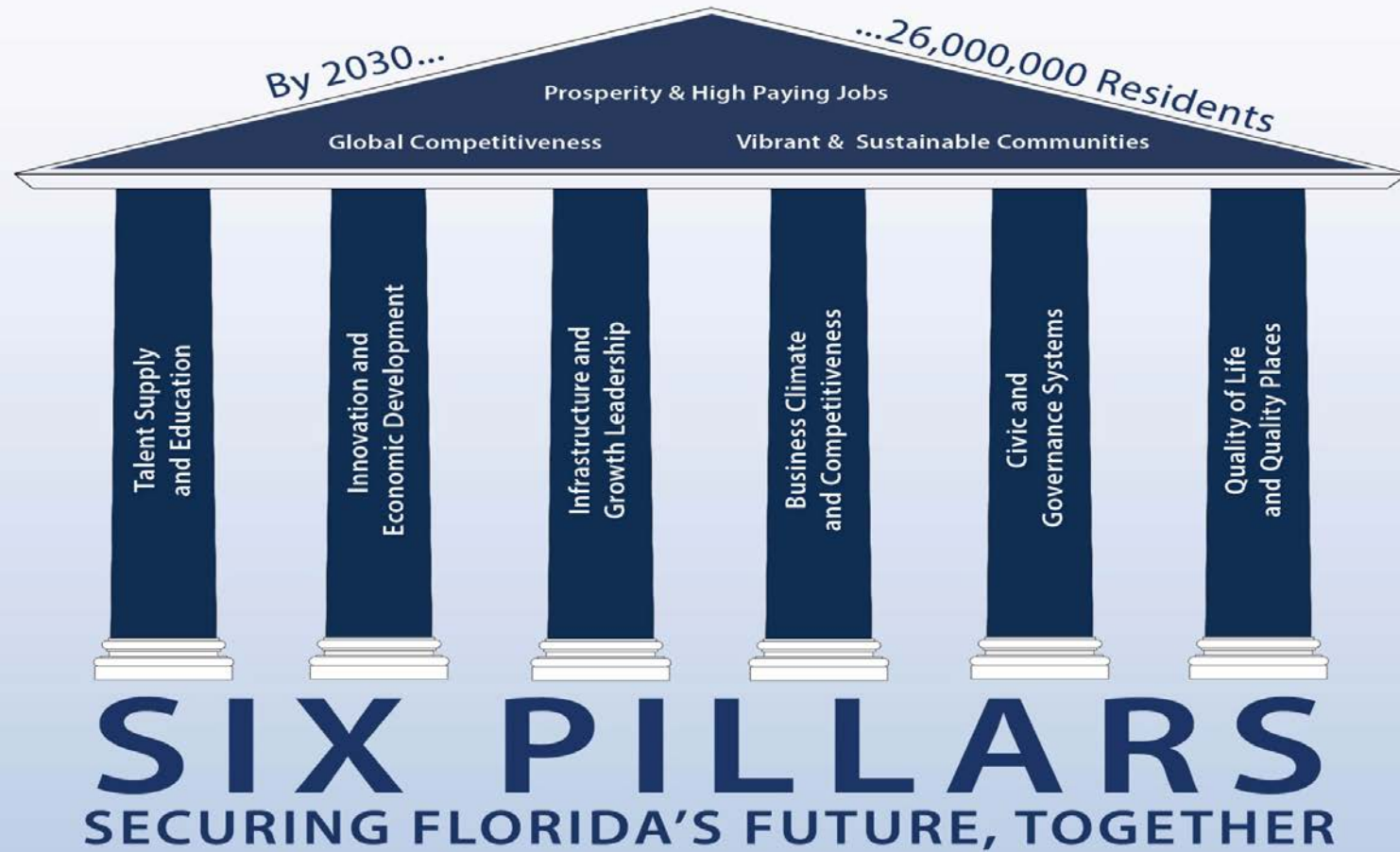
**INFRASTRUCTURE &
GROWTH LEADERSHIP
Advisory Committee**

Meeting #4

June 15, 2017 9:00 AM-12 Noon

Today's Agenda

- » **Introductions**
- » What have we learned so far?
- » Where do we want to go?
- » How do we get there?
- » Next steps



“We must plan better for the next 6 million Floridians than we did for the last 6 million”

Florida Chamber Foundation Trustees

Florida 2030
Executive Steering
Committee

Stakeholder,
Association, and
Agency Partners

Talent Supply &
Education
Advisory
Committee

Innovation &
Economic
Development
Advisory
Committee

Infrastructure &
Growth
Leadership
Advisory
Committee

Business Climate
&
Competitiveness
Advisory
Committee

Civic &
Governance
Systems
Advisory
Committee

Quality of Life &
Quality Places
Advisory
Committee

Caucus Members

Caucus Members

Caucus Members

Caucus Members

Caucus Members

Caucus Members

Committee Work Plan

Date	Activity
March 22-23	Kickoff meeting #1 in Tallahassee
April 18	Joint call of all committees
April 11	Meeting #2 via webconference
May 9	Meeting #3 via webconference
June 14-15	Meeting #4 in person in Orlando
July	Surveys or review of draft documents
August	Meeting #5 via webconference
September 27-29	Meeting #6 in person at Future of Florida Forum (Orlando) - review draft Pillar research report
March 2018	Rollout of Florida 2030 report

Today's Agenda

- » Introductions
- » **What have we learned so far?**
- » Where do we want to go?
- » How do we get there?
- » Next steps

Infrastructure & Growth Leadership Pillar - Outline

1. Land Use & Design



2. Transportation & Logistics



3. Water



4. Energy



5. Communications



6. Waste Management



7. Environmental Issues



8. Risk Preparedness & Mitigation



Team collaborations between all pillars

Land Use & Design & Transportation & Logistics Zones



Land Use & Design | *Providing land use choices through quality growth and intelligent design of varying scales from urban to rural*

- » Communities need to have a long-term plans for infrastructure and growth to be able to enhance the quality of life while adding additional residents and developments
 - » Protecting private property rights
 - » Protecting conservation lands
 - » *New development and re-development in Florida*
 - » *Ex. Babcock Ranch, West Bay, The District*



Transportation & Logistics | *Investments to meet future growth needs (multimodal)*

- » Florida's Transportation System
 - » 119,773 Centerline Miles (State and Local) | 11,874 Bridges (State and Local)
 - » 15 Seaports
 - » 780 Airports | 19 Commercial Airports | 12 International Airports | 2 Spaceports
 - » 30 Urban Transit Systems | 23 Rural Transit Systems

Water & Energy Zones



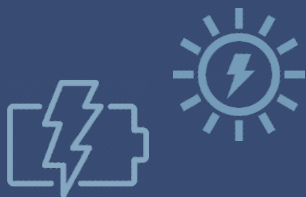
Water | *Connecting water infrastructure with supply/demand management to ensure sustainability*

- » Florida's Water System
 - » 5,275 public and private drinking water treatment systems
 - » 3,700 wastewater treatment facilities
 - » 165 local storm water systems
- » Florida's daily water demand could increase by 20%
 - » 7.7 billion gallons per day by 2030
 - » Estimate infrastructure improvement costs about \$16.5 billion

TOP FIVE STATES WITH SDWA VIOLATIONS BY POPULATION:	
1	TEXAS: 12,066,920 PEOPLE SERVED
2	FLORIDA: 7,540,465 PEOPLE SERVED
3	PENNSYLVANIA: 5,645,903 PEOPLE SERVED
4	NEW JERSEY: 4,487,703 PEOPLE SERVED
5	GEORGIA: 3,846,734 PEOPLE SERVED

Source: National Resource Defense Council Threats on Tap. May 2017.

Note SDWA = Safe Drinking Water Act



Energy | *Improve reliability of grid by providing alternative sources of energy to enhance diversity*

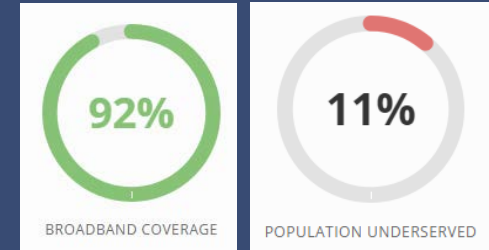
- » Total Energy Use
 - » Natural Gas – 33% | Motor Gasoline – 24% | Coal – 11% | Distillate Fuel Oil – 7%
 - » Nuclear Electric Power – 7% | Biomass – 6% |
 - » Florida is highly dependent on gasoline/diesel and natural gas imports
 - » *Florida has increased its dependence on natural gas in lieu of coal*

Communications & Waste Management Zone



Communications | *Modernizing infrastructure that addresses pace of technology advancements*

- » Florida's Telecommunications System
 - » 149 broadband providers
 - » 1.4 million without access to a wired connection (25mbps)
 - » 525,000 without access to any wired connection
- » Florida's Broadband Coverage
 - » 93% have access to wired broadband (25mbps)
 - » 90% have access to wired broadband (100mbps)
 - » 1.9% have access to 1 gigabit broadband



Source: BroadbandNow



Waste Management | *Utilization of resource recovery concepts to expand recycling*

- » Generated 32.5 million tons of solid waste (2015)
 - » Landfilled – 46% | Recycled – 42% | Combusted – 12%
 - » Overall diversion rate of 54%
- » Waste diversion vs. disposal in a landfill results in twice the economic output and generates slightly less than twice the amount of jobs (California Case Study)

Environmental Issues & Risk Preparedness & Mitigation Zones



Environmental Issues | *Balancing stewardship of natural systems, property rights, and growth*

- » Environmental quality is an economic driver
 - » 113 million visitors spent \$109 billion (2016)
- » Florida Natural Areas Inventory
 - » 27% of land area is Federal, State, or Local Conservation land
 - » Land area in conservation increased by 0.11% or 39,000 acres from 2013 to 2017
- » FDEP has observed declining and degrading water quality in Florida's springs
 - » Aquifer systems are being depleted
 - » Eutrophication and toxic algae bloom problems are increasing



Risk Preparedness & Mitigation | *Resilient infrastructure to withstand natural disasters, sea level rise, and other emergencies*

- » Hurricanes, wildfires, and other emergencies
- » “Within 30 years we will very likely experience sea level rise of a foot or more and by the end of the century a rise of five feet or more is predicted.” (Greater Miami Chamber of Commerce).

Infrastructure & Growth Leadership Pillar



Land Use & Design | *Providing land use choices of varying scales from urban to rural*

Transportation & Logistics | *Investments to meet future growth needs (multimodal)*

Water | *Connecting water infrastructure with supply/demand management to ensure sustainability*

Energy | *Improve reliability of grid by providing alternative sources of energy to enhance diversity*

Communications | *Modernizing infrastructure that addresses pace of technology advancements*

Waste Management | *Utilization of resource recovery concepts to expand recycling*

Environmental Issues | *Balancing stewardship of natural systems, property rights, and growth*

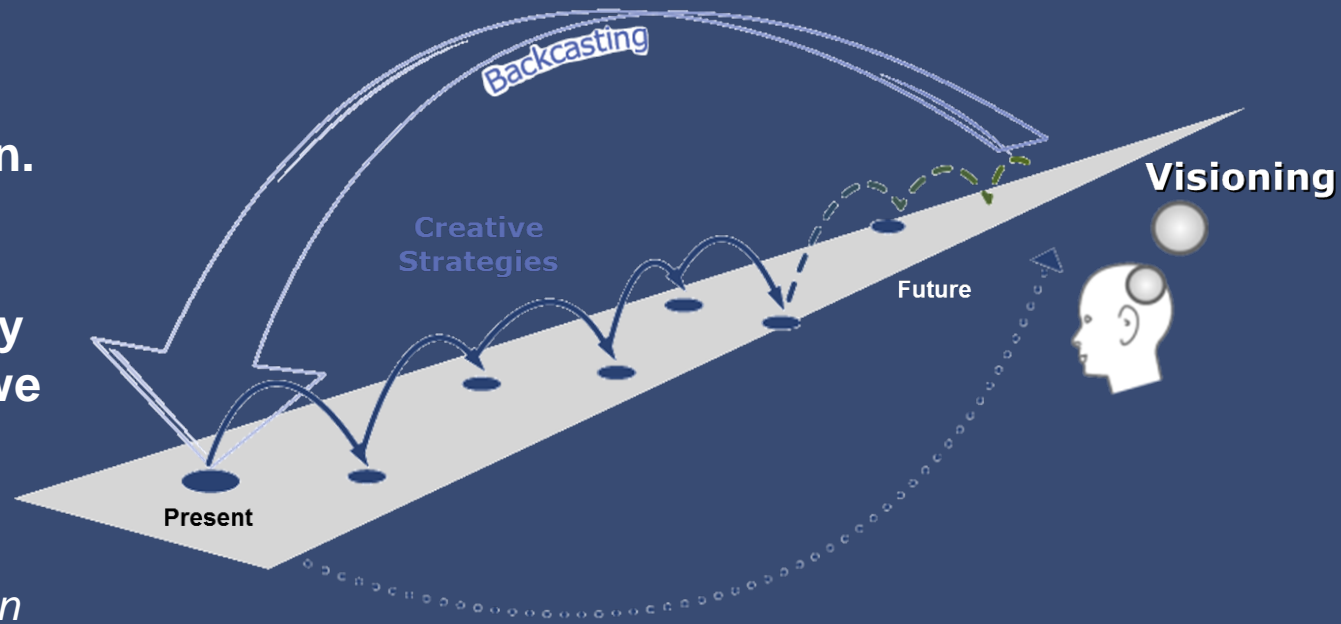
Risk Preparedness & Mitigation | *Resilient infrastructure to withstand natural disasters, sea level rise, and other emergencies*

Today's Agenda

- » Introductions
- » What have we learned so far?
- » **Where do we want to go?**
- » How do we get there?
- » Next steps

Backcasting and Forecasting

- » **Forecasting**, which attempts to extend trends in the present into the future to predict what might happen.
- » **Backcasting** turns this idea around by asking “What do we want the future to look like?”
 - » *Identify an aspirational vision for 2030*
 - » *Identify intermediate strategies/actions to achieve this vision*



Adapted from The Natural Step Framework

Where Do We Want to Go?

- » Florida is attractive to the millennial generation by improving transit, maintaining high-levels of internet connectivity, and growing our urbanized areas (i.e. Downtowns)
 - » *More choices for connectivity and innovative communication tools for urban and rural areas*
 - » *Environmental quality of land, water and air would be preserved for all Florida residents, and would continue to drive tourism and the economy*
 - » *Growth of smart city infrastructure, autonomous vehicle and connected infrastructure within urban areas*

- » Florida ports are strategically positioned for Florida AND Southeast demand for goods

- » A diversified portfolio of energy resources that is affordable, flexible and resilient to change
 - » *More energy choices for Florida business and residents*

- » Florida has adequately funded adaptation actions and developed emergency & recovery plans to meet the challenges posed by sea level rise and natural disasters

Today's Agenda

- » **Introductions**
- » **What have we learned so far?**
- » **Where do we want to go?**
- » **How do we get there?**
- » **Next steps**

How Will We Get There?

» What **key issues** need attention?

- » Pace of technological change and advancement in transportation, communications, energy, and water
- » Transportation infrastructure funding needs (highways, ports dredging, transit, rail, air, etc.)
- » Development of telecommunications infrastructure to keep Florida ahead of the curve
- » Providing clean potable water
- » Minimum level of connectivity needed for communities to compete and close prosperity gap

How Will We Get There?

- » What **major risks** do we face?
 - » Aging infrastructure and keeping pace with technology
 - » Overdependence on petroleum fuels and natural gas (future?)
 - » Impacts of sea level rise and natural disasters on infrastructure
 - » Technology advancements as disruptors; can be seen as an opportunity (Artificial Intelligence and Internet of Things)
 - » Cybersecurity concerns

How Will We Get There?

» What should we **keep doing**?

- » Land conservation and reducing threats to existing conservation lands
- » Investing in transportation infrastructure and providing multimodal options including transit, bicycle and pedestrian infrastructure
- » Investments in seaport and airports to ensure competitiveness
- » Maintaining good air and water quality standards

How Will We Get There?

» What should we be **doing differently**?

- » Statewide logistics network – ports, air cargo, ILCs, commerce corridors all linked together
- » High speed passenger connections between Florida's major cities
- » Incentivize business that conserve water, energy, resources or restore ecosystem services – best sustainability practices
- » Promote Smart Growth and intelligent design in which business/residential development is concentrated
- » Developing alternative energy sources and producing energy; diversifying energy portfolio

Today's Agenda

- » Introductions
- » What have we learned so far?
- » Where do we want to go?
- » How do we get there?
- » **Next steps**

Committee Work Plan

Date	Activity
March 22-23	Kickoff meeting #1 in Tallahassee
April 18	Joint call of all committees
April 11	Meeting #2 via webconference
May 9	Meeting #3 via webconference
June 14-15	Meeting #4 in person in Orlando
July	Surveys or review of draft documents
August	Meeting #5 via webconference
September 27-29	Meeting #6 in person at Future of Florida Forum (Orlando) - review draft Pillar research report
March 2018	Rollout of Florida 2030 report

Next Steps

- » **Committee member survey to further identify and refine strategies, key challenges, and opportunities**
 - » July 2017
- » **Additional research by consultant on key challenges and opportunities**

1,000s of Floridians

6 Pillars

2 Years

1 Plan

FL 2030 @FLChamber.com