



Sustainable Communities & Transportation Planning

SP-1 Develop criteria in collaboration with municipal and county planning authorities to define Adaptation Action Areas and other areas requiring adaptation improvements related to coastal flooding and sea level rise, including, but not be limited to:

- Areas below, at or near mean higher high water
- Areas with a hydrological connection to coastal waters
- Areas designated as evacuation zones for storm surge
- Other areas impacted by climate related drainage/flood control issues

SP-2 Conduct new or utilize existing vulnerability analyses and other technical tools to identify Adaptation Action Areas and other areas requiring adaptation improvements related to coastal flooding and sea level rise as a way to provide guidance for adaptation planning efforts in areas especially at risk to sea level rise, tidal flooding and other related impacts of climate change.

SP-3 Develop sea level rise scenario maps and updated storm surge maps based on sea level rise projections published by the Southeast Florida Regional Climate Change Compact to be included in appropriate comprehensive plans and/or regional planning documents that will guide municipal and county government climate adaptation planning efforts related to the built environment, transportation infrastructure and services, historic and archaeological resources, water management systems and public infrastructure, including historic, archeological and natural resources. Continue to update regional and local planning efforts as more data becomes available and scientific projections are refined.

SP-4 Incorporate the definitions for "Adaptation Action Areas," "Restoration Areas" and "Growth Areas" (as provided in Florida law) into municipal and/or county comprehensive plans.

- Incorporate the definition of "Adaptation Action Areas" to provide a means to identify areas deemed most vulnerable to sea level rise and other climate change impacts (including, but not limited to, extreme high tides, heavy local rain events and storm surge) and prioritize funding and adaptation planning.
- Designate or otherwise recognize "Restoration Areas" in local comprehensive plans and post-disaster redevelopment plans to identify undeveloped areas that are vulnerable to climate change impacts for the purpose of environmental restoration, dune restoration, beach restoration, agriculture, conservation of natural resources or recreational open space or designation as stormwater retention areas. Local governments and appropriate regional planning authorities should prioritize land acquisition in these areas. These areas could also be established or acquired through mitigation or transfer-of-development rights initiatives.
- Designate or otherwise recognize "Growth Areas" in local comprehensive plans and post-disaster redevelopment plans as areas outside of vulnerable areas where growth is encouraged due to higher topographic elevation and the presence of existing infrastructure, such as transportation, water and

- Develop policies and capital plans, in collaboration with the appropriate municipal and county planning authorities, related to vulnerable areas (including those designated as Adaptation Action Areas) to improve resilience to coastal flooding, sea level rise and other climate-related vulnerabilities and to provide guidance for other adaptation planning efforts, including identifying locations within Adaptation Action Areas or similarly vulnerable areas where targeted infrastructure improvements, new infrastructure or modified land use and/or development practices could reduce vulnerability and/or improve community resilience.
- Coordinate regionally across municipalities and county planning authorities to develop projects and funding proposals seeking prioritized funding for identified infrastructure needs and specific adaptation improvements required in Adaptation Action Areas or other related adaptation planning areas.
- Identify populations and communities that are most vulnerable or of special concern within Adaptation Action Areas and similarly vulnerable areas in order to ensure the proper consideration of individual needs and resources as part of local and regional planning activities.
- Utilize the Resilient Redesign process to develop adaptation strategies.

SP-5 Incorporate strategies into local comprehensive plans and post-disaster redevelopment plans to discourage new development or post-disaster redevelopment in vulnerable areas in order to reduce future risk and economic losses associated with sea level rise and flooding. Work with appropriate local, regional and state authorities to revise building codes and land development regulations to require vulnerability reduction measures for increased resilience (e.g., additional hardening, higher floor elevations and the incorporation of natural infrastructure) for all new construction, redevelopment and infrastructure.

SP-6 Designate or otherwise recognize “Growth Areas” in local comprehensive plans and post-disaster redevelopment plans as areas outside of Adaptation Action Areas or other areas subject to adaptation planning efforts where growth is encouraged due to higher topographic elevation and the presence of existing infrastructure, such as transportation, water and sewer infrastructure. Growth Areas should be developed with Urban Design guidelines that address the character of the urban place and provide a high-quality pedestrian experience through landscaping and the creation of public spaces.

SP-7 Conduct an assessment of unused or underutilized properties and develop an approach for utilizing such properties that enhances overall resilience goals (e.g., increased flood storage and healthy food access).

SP-8 Preserve historic and archaeological resources and increase resource resilience by implementing best practices for the identification, evaluation and prioritization of threatened resources using adaptive preservation strategies, including in-situ and mitigation alternatives.

- Identify and map “at-risk” historic and archaeological resources (i.e., resources susceptible to sea level rise and the effects of natural disasters). Include the maps in comprehensive plans and/or regional planning documents to guide municipal and county government climate adaptation planning efforts and update plans as more data become available and scientific projections are refined.

SP-9 Continue to encourage, foster and support collaborative investigative work and scientific research, including the partnership with the Florida Climate Institute, to improve the understanding and communication of local and regional climate change impacts specific to Southeast Florida, including:

- Improved down-scaling of global climate models to represent precipitation at the regional and local scale and to develop standardized precipitation scenarios for the region.
- Identification and targeting of gaps in monitoring (such as Light Detection and Ranging, environmental data or data supporting regional climate indicators) to improve the quantification of the hydrologic system and its response to climate change (e.g., evapotranspiration, surface and groundwater levels, water quality, precipitation and local sea level) through local program efforts, agency collaborations and advocacy for additional state and/or

- Establish a ranking of “at-risk” regional historic and archaeological resources based on a matrix of vulnerability, historical significance, scientific and economic value and other criteria as determined by the appropriate historic preservation entities, and prioritize adaptive preservation and mitigation strategies to increase the resilience of resources against sea level rise and natural disasters.
- Develop adaptive sustainable preservation strategies, including existing best-practice models available from national and state preservation authorities, that are flexible and regularly evaluated and updated.
- Utilize available national and state emergency management funding to facilitate the implementation of the above recommendations, and establish local and regional incentives for the pre-disaster hardening of threatened resources.

SP-10 Encourage local governments and agencies to ensure environmental justice when considering the impacts of local and regional land use policy and public infrastructure and services decisions to vulnerable populations, including, but not limited to, the economically disadvantaged, racial and ethnic minorities, the uninsured, low-income children, the elderly, the homeless and those with chronic health conditions, including severe mental illness.

SP-11 Require new development and redevelopment in areas with existing and planned multimodal corridors connecting urban and other centers in the region to be planned and designed to support walking, biking and transit use.

SP-12 Support the effective planning and implementation of local- and regional-scale transit oriented developments (TODs), in coordination with the effective planning and delivery of transit services, particularly transit stations, to maximize ridership.

- Recognize that planning for TOD requires consideration of transit and land use issues at the system, corridor and station levels, as well as the evaluation of adequate infrastructure, such as water and sewer mains.
- Develop policies to streamline approval processes involving TODs.
- Incorporate affordable and workforce housing into TODs to ensure the equitable distribution of the benefits of TOD and premium type transit services.

SP-13 Consider the regional implementation of rapid transit zones to maintain land use control around a station with multiple jurisdictions. Modify local land use plans and ordinances to support compact development patterns, creating more walkable and affordable communities.

- Identify potential changes in future land use maps and other comprehensive plan changes at the local level, and address the subject in regional level plans.
- Adopt form-based codes that have physical form, the design of buildings and the public realm and an emphasis on mixed and evolving land uses as organizing principles.
- Consider the regional implementation of rapid transit zones or other such designations to maintain land use control around transit stations, including ones with multiple jurisdictions

SP-14 Consider the adoption of green building standards to guide decision-making and development and to provide an incentive for better location, design and construction of new residential, commercial and mixed-use developments. This will increase transportation choices while reducing household transportation costs and ensure new developments are planned and designed to support walking, biking and transit use. Incorporate sustainable building and neighborhood ratings or national model green building codes, including, but not limited to, those defined in Section 255.253(7), Florida Statutes, into municipal codes region-wide.

SP-15 Coordinate initiatives with the seven-county Southeast Florida Prosperity Plan (Seven50) to maximize the opportunities presented as Seven50 (e.g., sharing data and analyses; participating in alternative future scenario planning; engaging a variety of public, private and civic partners) and actively engage in Seven50 implementation efforts, designed to address the following livability principles:

- Provide more transportation choices
- Promote equitable, affordable housing
- Enhance economic competitiveness
- Support existing communities
- Coordinate policies and leverage investment
- Value communities and neighborhoods
- Enhance community resilience to the impacts of climate change

SP-16 Identify means to effectively engage the multiple public and private sector entities involved in the provision and maintenance of transportation infrastructure and the delivery of transportation services in the region in climate adaptation and mitigation initiatives. Document current and evolving coordination efforts among these entities.

SP-17 Focus transportation investments on projects that reduce greenhouse gas (GHG) emissions and have greater resilience to climate change.

- Ensure adequate and sustainable funding for transportation initiatives that seek to reduce GHG emissions and improve resilience through enhanced transit and transportation infrastructure. Shift away from revenue sources for transportation that rely upon fuel consumption. Consider mobility fees, value capture strategies, sales surtaxes and public-private partnerships.
- Continue to enhance and implement regionally coordinated transportation planning through the Regional Long Range Transportation Plan (RLRTP). Identify goals and objectives in the RLRTP that reinforce the desired GHG reductions and enhance resilience to climate change.
- Give higher investment priority to state and federal transportation infrastructure investments, programs and services that will reduce GHG emissions and enhance resilience and adaptability to climate change. Incorporate performance standards for climate and related metrics, such as reduced vehicle miles traveled (VMT) and increased mode split, in transportation plans and programs.
- Incorporate evaluation criteria and processes to prioritize projects that meet RLRTP goals and objectives into local and regional planning and programming processes, initially emphasizing evaluation criteria that reduce VMT and increase the use of transportation modes other than the personal vehicle. Projects that enhance economic vitality should also be given priority, such as projects and service expansions along transit-oriented corridors and those that improve connections to major airports and seaports.
- Identify and expand electric vehicle (EV) charging infrastructure, including expanding EV opportunities at multi-family buildings and at commercial/retail centers.
- Improve coordination among economic development, public health, land-use/housing, transportation and water resource planning activities. Review local and regional planning and decision-making processes to ensure a complementary approach toward developing and maintaining a transportation network that will reduce VMT and provide more transportation choices.

SP-18 Introduce a new activity-based regional travel demand forecast model to directly simulate individual trip-making and mode-choice behaviors, allowing for robust tests of the effectiveness of policy alternatives.

SP-19 Adopt or create a green rating system for roads to reduce emissions from construction, maintenance and agency operations through practices such as using recycled materials, purchasing materials found or manufactured sustainably in the region and requiring construction contractors to implement emissions reductions practices (e.g., using alternative fueled vehicles and clean diesel practices).

SP-20 Improve movement and safety for non-motorized modes of transportation through the adoption and implementation of best practice models, including complete streets.

- Develop policy, ordinances, guidelines, models and projects to accelerate this implementation.
- Identify partners and resources to support training and research into new techniques for transportation design.

SP-21 Complete, expand and connect networks of bicycle and pedestrian facilities, including those supporting access to transit.

- Prioritize the implementation of planned bicycle and pedestrian networks. Improve the overall coordination of local and regional agency planning and implementation efforts. Determine if these facilities are connected regionally and on a local scale to major employment, education and recreation centers.
- Implement a roadway design project checklist that includes measures of pedestrian, bicycle and transit (e.g., bus bay) accommodation.
- Work regionally to improve safety for pedestrians and bicyclists.
- Consider the regional adoption of transit, pedestrian and biking programs that improve access to transit.
- Develop policies to increase designated bike parking facilities at office and retail developments.

SP-22 Implement strategies to maximize the efficiency of the existing transportation network by all agencies across the region and develop a toolbox of successful strategies that can be duplicated across the region. Implementing agencies should ensure greenhouse gas emission reduction strategies can be evaluated for their effectiveness by collecting information including emissions reductions, fuel reductions, vehicle miles traveled impacts or other performance measures as appropriate, as well as information about implementation steps, costs and lessons learned. Strategies may include the use of roundabouts, real-time operation of the traffic signal system, traffic signal prioritization and queue jumps for transit, interstate ramp metering and employment of a virtual freight network (freight network managed in real time using intelligent transportation systems).

SP-23 Increase transit ridership by providing premium transit service on targeted regional corridors to provide a more convenient service for commuters traveling from residential areas to regional employment centers. Improve quality of service by continuing to monitor and address safety and performance. Agencies should review levels of service policies and service standards and modify as necessary to prioritize increasing services along corridors with dense land use, using as model examples of successful routes (e.g., the I-95 Express bus service and "The Flyer" route from Miami International Airport to Miami Beach).

SP-24 Increase the amenities and infrastructure available to transit riders, including shade, shelters, benches, lighting and bicycle racks utilizing solar power when feasible, and increase access to route and real-time boarding information.

SP-25 Provide seamless transitions to increase the use of low-carbon modes for the movement of people and freight in the region.

- Improve connections among Tri-Rail and county transit services, municipal trolleys and community shuttle bus services, which may require a realignment of routes.
- Implement seamless regional transit fare and transfer media (traditional or mobile) across transit services in the region.
- Develop planning strategies to address planning for the "First and Last Mile" of transit trips, which act as barriers for commuters who could potentially take transit but whose starting point or final destination cannot be conveniently accessed from the nearest transit stop/station due to distance, terrain (street patterns) or real or perceived safety issues (e.g., traffic or crime). Consider innovative partnerships with transportation network providers (e.g., Uber or Lyft), taxis or jitneys or through the use of autonomous vehicles.
- Encourage transit agencies to reduce greenhouse gas emissions by procuring alternative fuel and electric buses.
- Implement a virtual freight network as part of the region's comprehensive Intelligent Transportation System/Transportation System Management and Operations Programs. Establish a software application to provide "load matching" for shippers and truckers to alleviate "deadheading" of empty trucks traveling back to their destinations.
- Incorporate climate adaptation strategies and greenhouse gas emissions inventories into Seaport and Airport Master Plans and Regional Freight Plans. Plans should address the critical last mile to and from major seaports and airports in part by providing comprehensive plan land use designations, policies and standards that protect the function of roadway segments, such as interstates, connecting seaports and airports (hubs) to corridors.
- Establish performance measures including vehicle miles traveled reduction and emissions reductions monitoring for freight projects such as ship-to-rail projects, which remove drayage truck operations.
- Support the clustering of distribution facilities to promote intermodal centers and economic development.

SP-26 Use and expand transportation demand management strategies to reduce peak hour and single-occupant vehicle travel including, but not limited to:

- Work with mobile points of sale, South Florida Commuter Services and South Florida Vanpool, to identify and pursue opportunities to more fully utilize and expand vanpool and carpool programs.
- Work with companies providing car and bike sharing programs and strategic partners (e.g., universities, municipalities, large employers, etc.) to establish ZipCar, bike sharing and personal vehicle sharing programs.
- Encourage the sharing of information on and use of employee benefits that support walking, biking and other transit modes for work commutes (e.g., pre-tax benefits and Emergency Ride Home programs).
- Encourage local governments to promote participation in commute trip reduction programs such as the EPA Commuter Choice Program and explore the adoption of commute trip reduction ordinances.