

# LEED for Cities Roadmap for City of Atlantic Beach, Florida

**ENERGY** – Metric: Greenhouse Gas Emissions (CO2 equivalent); Unit: Tons/Year/Person

COAB plans to:

- Improve our Energy Performance above original certification score or at least be comparable to global average by:
  1. Measure the annual energy consumption and GHG emissions for COAB on an annual basis. The inventory should cover emissions for one whole calendar year or fiscal year. Several metrics to be measured:
    - a. Greenhouse gas emissions per capita (tons CO2 per capita).
    - b. Annual energy consumption from all sectors along with the source of energy.
    - c. Emissions co-efficient for electricity and all fuel types.
    - d. Total population of the city or community.
  2. Develop a sustainability action plan with public and private sector stakeholders with specific goals in:
    - a. GHG reductions
    - b. Energy efficiency
    - c. Water conservation
    - d. Waste reduction and recycling
    - e. Renewable energy
    - f. Land use and transportation (multimodal development, green fuels, and electric vehicles).
- Lead by example by reducing local government greenhouse gas emissions:
  1. Demonstrate local government building stock energy use is below the regional aggregated energy use intensity per building type.
  2. Demonstrate an annual decrease in local government public infrastructure energy use.
  3. Adopt alternative fuel guidelines and/or targets for locally owned facilities and vehicles.
  4. Explore a sustainable building ordinance. (Medium Term)
  5. Require employees responsible for the public buildings and infrastructure to participate in training programs on energy efficiency techniques.
  6. Track local government building and infrastructure energy use annually.
  7. Require that public infrastructure and facility managers consider energy consumption implications for new or upgraded infrastructure investments.
  8. Make retrofits and upgrades to local government buildings and/or infrastructure systems that will increase energy efficiency.
  9. Provide incentives for new building projects to achieve at least the LEED Gold standard certification or equivalent. (Medium Term)
  10. Incorporate best practice sustainability principles into neighborhood planning. (Short Term)
  11. Strive for one pilot net-zero or LEED Zero public building. (Medium Term)
  12. Replace all street and public lighting with high-efficiency fixtures that meet the efficiency related requirements of 'ANSI/IESNA RP-8-14 Roadway Lighting. In addition, lamps should have a minimum Luminous Efficacy of 100 lumens per watt. (Short Term)
  13. Meet the recommended energy efficiency requirements for a minimum of 50% of the pumps used in water supply, drainage and wastewater treatment.
  14. Retrofit government properties with renewable energy sources where feasible.

15. Install public-use alternative fueling stations.
  16. Conduct a local government Greenhouse Gas Inventory at least every 5 years
  17. Address heat island effect for 85% of population through tree canopy cover, green roofs or green walls or demonstrating the surface temperature of the community is no more than 5 degrees Fahrenheit measured on a summer and winter night
- Greening the Energy Supply: Increase the local energy supply for both transportation and non-mobile sources toward the use of renewable, less carbon-intensive, and less toxic alternatives with the following:
    1. Complete a feasibility study to identify opportunities for clean and green systems. (Short Term)
    2. Explore on-site nonpolluting renewable energy generation, owned, leased or subsidized by the city (or energy provider) such as solar PV, wind, geothermal, micro or small scale hydro15, or biomass, to meet a part of city's annual energy consumption.
    3. Explore local energy storage systems (e.g., mechanical, thermal, or chemical energy storage)
    4. Encourage development & adoption of grid-source, clean and green energy technologies to enhance reduction in air pollutants released.
    5. Obtain clean power mix from the local utility. Evaluate the environmental impact of the electricity, using the PEER Energy Efficiency and Environment (EE) Index and achieve a minimum EE Index score of 50.
    6. Purchase renewable energy certificates (RECs), and/or carbon offsets to mitigate the environmental impacts of city energy consumption.
    7. Create incentive programs to support the development of renewable infrastructure (e.g., streamlined or expedited permitting procedures; permit fee waivers or reductions; identification of approved installers; local government or utility financial rebates; local education efforts related to state or federal incentives; local tax incentives; and/or other local incentive program(s) (specify).
  - Educate the public on issues of global climate change and its related local impacts.
    1. Create an education and outreach campaign to engage residents and businesses in global climate change and related local impacts. Topics should include but are not limited to:
      - a. Energy, transportation and water efficiency programs
      - b. Sea level rise vulnerability, resiliency, and adaptation
      - c. Extreme weather events
      - d. Changes in the ecological distribution of flora and fauna

**WATER** – Metric: Water Consumption and Quality; Unit: Amount/Year/Person

COAB plans to:

- Improve its water performance score above original certification score
- By 2032, make 100% of COAB waterways fishable and swimmable by:
  1. Pursue innovative technologies to improve storm water runoff quality. (Medium Term)
  2. Restrict the use of cosmetic pesticides and chemical fertilizers (Medium Term)
  3. Study the feasibility of implementing nutrient and water quality trading programs. (Short Term)
  4. Implement a riparian buffer program for existing development and public property.
  5. Start a green roof program (Medium Term)
  6. Increase the use of green infrastructure along public rights of way. (Short Term)
  7. Establish pervious surface minimums for targeted zoning districts. (Short Term)
  8. Adopt a policy to comply with U.S. EPA's National Pollutant Discharge Elimination System (NPDES) permit program for stormwater pollution prevention from construction and industrial activities and municipal sources or local, state, or national equivalent, whichever is stringent.
- By 2032, decrease total per capita water use by 40%:
  1. Update water-efficiency standards in COAB building codes. (Short Term)
  2. Revise building codes to allow the use of alternative water systems. (Short Term)
  3. Expand use of neighborhood-scale water collection networks. (Long Term)
  4. Develop incentives for water efficiency measures in landscaping and building design. (Long Term)

- Ensure centralized or publicly owned and decentralized wastewater treatment systems and wastewater discharged to surface water comply with U.S. EPA's National Pollutant Discharge Elimination System (NPDES) permit program of Clean Water Act (CWA) or local, state, or national equivalent, whichever is stringent for 100% of wastewater generated. Meet the water quality parameter thresholds in NPDES permit program manual section 5.1.1 - Secondary and Equivalent to Secondary Treatment Standards by:
  1. Support compliance of independently operated decentralized plants within the city, such as at building or community level by adopting appropriate regulations, policies or ordinances.
  2. Undertake remedial actions in case of non-compliance with the adopted standard.
    - a. Violation of testing frequency
    - b. Violation in water quality parameter threshold
  3. Provide the following data for each wastewater treatment facility:
    - a. Frequency of water quality testing (quarterly, monthly, bi-monthly, etc.)
    - b. Water quality testing parameters

**WASTE – Metrics and Units: Municipal Solid Waste Generated as Amount/Year/Person & Municipal Solid Waste Diverted from Landfill as Percentage of Total Amount Collected**

COAB plans to:

- Improve our waste generated and waste diversion performance score above original certification score
- Reduce the volume of waste generated and disposed:
  1. Develop an education and outreach program on proper rethink, refuse, reduce, reuse, recycle and benefits.
  2. Develop waste reduction targets and recycling targets for all waste streams within 1 year (short term).
    - a. Common household
    - b. Recycling
    - c. Organic
    - d. Construction
  3. Develop a Waste Action Plan for all citywide waste streams. (Medium Term)
  4. Explore a Pay-As-You-Throw program for waste collection services. (Long Term)
  5. Ban Styrofoam and non-recyclable plastic containers from food and retail outlets. (Medium Term)
  6. Implement Sustainable Sites Initiative (SITES) guidelines for park maintenance. (Medium Term)
  7. Allow nearby businesses to share containers for landfill waste, recycling, and composting. (Short Term)
  8. Create communitywide incentives for waste reductions targets.
  9. Provide services to enable residents and businesses to recycle and reduce their waste footprint.
  10. Create at least 3 targeted recycling programs at key locations.
  11. Introduce construction waste management requirements. (Medium Term)
  12. Explore reuse of biosolids created in COAB (Short Term)
  13. Establish a new organics transfer station (Short Term)
  14. Increase the size of recycling bins, reduce size of trash cans and add a compost bin. (Medium Term)
  15. Increase recycling receptacles in the public realm. (Long Term)
  16. Provide incentives for residential composting and recycling. (Medium Term)
  17. Transport organic waste comprising of all food waste and yard waste to an organic waste treatment facility for converting it into compost via composting or biogas via anaerobic digestion.

**LAND USE & TRANSPORTATION – Metric: Distance Traveled in Individual Vehicles Daily; Unit: Distance Per Day (Vehicles Miles Traveled and Average Daily Trips)**

COAB plans to:

- Reduce the amount of VMTs and ADTs while increasing opportunities for multimodal transportation:
  1. Improve transit connections to activity centers from underserved areas. (Medium Term)
  2. Develop VMT and ADT reduction targets within 1 year (short term).
  3. Define and secure permanent funding for transit planning and improvements. (Long Term)

4. Develop land use regulations that allow the transit oriented development along transit routes (short term).
5. Develop a Bikeshare program with 10 stations. (Medium Term)
6. Partner with community organizations to deliver bike and pedestrian safety education. (Short Term)
7. Collect data to improve understanding of cyclist and pedestrian travel patterns. (Short Term)
8. Program crosswalks and traffic lights for improved safety of pedestrians and cyclists. (Medium Term)
9. Implement an expanded Performance-Based Parking program. (Short Term)
10. Expand car-sharing programs to low-income residents using financial tools. (Short Term)
11. Develop and adopt an official Complete Streets policy (short term).
12. Require walkability standards in land development regulations that encourage walking and safety.
13. Implement at least 2 types of focused enforcement programs to ensure pedestrian and bicycle safety.
14. Increase the mileage of sidewalks that connect people with activity centers.
15. Increase the mileage of dedicated bicycle infrastructure.
16. Construct or retrofit transportation infrastructure to meet the Americans with Disabilities Act.
17. Strictly limit idling engines at key locations such as schools.

#### VULNERABILITY, ADAPTATION & RESILIENCY PLANNING – Metric: Adoption and Implementation of Plan

COAB plans to:

- Develop a Vulnerability, Adaptation, and Resiliency Plan to address impacts related to climate change and extreme weather events. The plan should address the following topics:
  - a. Inventory of vulnerable land, buildings, and infrastructure predicted for impacts or in high risk areas.
  - b. Adaptation and mitigation recommendations.
  - c. Fundamental Emergency Planning and Preparedness: Access to basic needs - first aid, emergency supplies, water, food communication, temporary shelter.
  - d. Early Warning Systems: Strategies for early warning systems and operation of critical facilities during the extreme event and post-event rehabilitation. Demonstrate at least one early warning system in practice.
  - e. Education and outreach to the community.
- 2. Develop data driven policies, codes, and ordinances to address predicted climate change impacts and extreme weather events:
  - a. To be determined

#### HUMAN EXPERIENCE / QUALITY OF LIFE – Various metrics and units

COAB plans to measure and improve

- 1) **QUALITY OF LIFE** -- To support a higher quality of life in the city, measure all of the Quality of Life parameters below for one whole calendar year or fiscal year
  - a) **Education**
    - i) **Population with a High School Degree** – Percentage of population 25 years and over who have been awarded a High School Degree:
    - ii) **Graduation Rate** – Graduation Rate for high school.
  - b) **Prosperity**
    - i) **Median Household Income** – Median household income within the city in US dollars per year considering the Purchasing Power Parity (PPP) conversion factor.
    - ii) **Unemployment Rate:** Unemployment rate for the city.
  - c) **Equitability**
    - i) **Gini Co-efficient** – Gini co-efficient for the city.
    - ii) **Percentage of people earning minimum living wages** – Determine the minimum living wage for the city based on the living wage model.

- d) **Health and Safety**
    - i) **Median Air Quality Index (AQI)** – Median AQI for the year must be calculated as a median of the daily average AQI of 365 days.
    - ii) **Days with AQI Unhealthy for Sensitive Groups** – Number of days when AQI is above 100.
    - iii) **Violent Crime:** Incidences of violent crime per 100,000 people
- 2) **EQUITABLE DEVELOPMENT** -- To foster equitable economic prosperity, be responsive to all sociocultural groups and reduce disparities within the city.
- a) Explore Equitable Income Distribution by the disclosure of the income distribution across individuals or households based on the following categorization:
    - i) Age and gender – Report the median income for age groups (i) 16 to 30 years (ii) 30 to 65 years and (iii) 65+ years for males and females.
    - ii) Neighborhood – Report the Area median income for all the neighborhoods within the city.
    - iii) Sociocultural groups: Report the median income for various socio-cultural groups present within the city or community.
  - b) Explore Equitable Education by demonstrating the Graduation Rate for each of the following categories is proportional to the overall graduation rate for population above 25 years of age.
    - i) Males and females.
    - ii) Sociocultural groups present within the city or community.
  - c) Explore Equitable Employment by demonstrating that the unemployment rate for each of the following categories is proportional to the overall unemployment rate of the city.
    - i) Age groups (i) 15 to 24 years (ii) 25 to 54 (iii) 55 to 65 years for males and females.
    - ii) Sociocultural groups present within the city.
- 3) **PUBLIC HEALTH** -- To support positive health outcomes, minimize health risk factors associated with behaviors and reduce health inequities within the city. Demonstrate progress through trend line for the following indicators from five continuous years, with the most recent year no more than a year and a half prior to certification. Aggregated data for overall population and segregated data for each of the categories (i) A minimum of three age groups – under 19 years, 19 to 65 years and 65+ years for males and females separately (ii) Sociocultural groups segregated into males and females must be provided. In cases where ranges are calculated as a margin of error, the most beneficial value can be submitted.
- a) **Health Outcomes**
    - i) Persons affected with following types of diseases. Report the number as persons per 1000 people:
      - i) Communicable diseases.
      - ii) Non-communicable diseases.
    - ii) Mortality measures:
      - iii) Life Expectancy – The average number of year one is expected to live.
      - iv) Premature Death – Years of potential life lost before age 70 or greater per 100,000 population.
      - v) Infant Mortality – Number of all infant deaths, per 1,000 live births.
      - vi) Maternal Mortality – Maternal mortality per 100,000 live births.
      - vii) Low Birth Weight – Percent of live births with a weight of less than 5.5 pounds (2500 grams).
  - b) **Health Behaviors**
    - i. Percentage of population with tobacco use.
    - ii. Percentage of population who are obese (>30 Body Mass Index).
  - c) **Access to Healthcare**
    - i. Percentage of people covered under health insurance.
    - ii. Provide only aggregated data for overall population for ratio of population to (i) primary care physicians (ii) secondary care specialists (iii) number of beds in tertiary care hospitals.
- 4) **POVERTY ALLEVIATION** -- To ensure that the basic needs of food, clothing, shelter, and dignity are being elevated as fundamental to all quality of life. Demonstrate progress in reducing the percentage of residents living below the poverty line within the city in the last five years. Demonstrate that in the last five years the poverty reduction rate for the following categories is proportional (no lesser than 5%) to the overall poverty reduction rate:

- a) Women
  - b) Children (from 0 to 19 years)
  - c) Sociocultural groups present within the city or community
- 5) **ENVIRONMENTAL JUSTICE** -- Ensure no neighborhoods or populations are overburdened by environmental pollution. The scope of environmental justice includes not only the disparate impacts from degradation to the natural environment but impacts to the general environment that people live and work in as well. Demonstrate progress in reducing the risks and exposure to priority environmental justice conditions for priority sections of the society in the last 5 years.
- a) Identify the priority environmental justice conditions for the city or community. Priority environmental justice conditions are considered when a specific section of the community such as women and/or children, low-income groups, specific neighborhoods or sociocultural groups experience a disproportionate amount of human health or environmental effect, such as:
    - i. Bodily impairment, infirmity, illness or death
    - ii. Air, noise, and water pollution and soil contamination
    - iii. Destruction or disruption of man-made or natural resources
    - iv. Destruction or disruption of community cohesion or a community's economic vitality
    - v. Destruction or disruption of the availability of public and private facilities and services
    - vi. Displacement of persons, businesses, farms, or nonprofit organizations
    - vii. Isolation, exclusion, or separation from the broader community
  - b) Identify the priority sections of the society. Priority sections of the society must be identified based on evaluating the following:
    - i. Sections of society with the highest percentage of historically overburdened populations
    - ii. Areas of the city known to have the highest concentration of environmental pollutants or polluters
    - iii. Areas identified through substantial community engagement or complaints surrounding environmental justice conditions
    - iv. Areas currently in violation of state environmental regulations or where violations have been resolved within the last 3 years
- 6) **AFFORDABLE HOUSING** -- To construct, preserve, and maintain an adequate and diverse supply of location-efficient and affordable housing options for all residents.
- a) Adopt a comprehensive housing policy for the city. The policy should address the following elements:
  - b) Higher density of residential units closer to transit hubs. Aim for Compact, Mixed Use and Transit Oriented Development.
  - c) Land policies to ensure equitable balance for housing for all.
  - d) For housing catering to the lower income groups, define basic socially acceptable standard housing unit based on what is required for decent living. The floor space requirement for standard unit based on building by-laws, regulatory constraints and market conditions. The definition should also include minimum standards for basic amenities (running water, a toilet) as well as access to essential social services such as schools and health clinics. An acceptable housing unit should also place workers no more than an hour's commute from centers of employment. In addition, provide region specific guidance to developers on value engineering to improve capital productivity and industrial or modular construction techniques to improve labor productivity and shorten delivery time.
  - e) Evaluate the existing city conditions to identify whether a family of four with an income at 200% Federal Poverty Level afford to live at 30% housing cost or less. Incorporate strategies to ensure 100% of these families can meet the requirement within 5-10 years.
  - f) Housing policies and regulations to support the implementation of strategies.
- 7) **CIVIC & COMMUNITY ENGAGEMENT** -- To promote a cohesive, and socially connected community and facilitate their participation in local decision-making.
- a) Adopt inclusive public engagement guidelines for local administration.
  - b) Establish enterprise zones, arts or cultural districts, or overlay zoning that encourages businesses in the creative industries to cluster together and integrate with surrounding neighborhoods.
  - c) Demonstrate that residents have access to diverse community facilities within walking distance.

- 8) **EMERGENCY MANAGEMENT & RESPONSE** -- To Increase capacity and capability to respond to emergency incidents.
- a) Demonstrate that the local government has received accreditation by a national accreditation body, such as the Emergency Management Accreditation Program (EMAP).
  - b) Provide a third party audit showing compliance with ISO 22320 standard "Societal security – Emergency management – Requirements for incident response".
  - c) Demonstrate that 90% of Emergency Response Times are within 9 minutes of dispatch notification.
- 9) **CIVIL & HUMAN RIGHTS** -- To uphold a process that guarantees the civil and human rights of all people is fundamental.
- a) Have in place a local officer or commissioner on Human Rights who is responsible for
    - i) formulating and carrying out educational programs designed to minimize or eliminate discriminatory practices;
    - ii) receiving and investigating complaints alleging any discriminatory practices by police or non-police;
    - iii) (iii) providing mediation services to resolve incidences of alleged discriminatory practices; and (iv) advising city leadership on human rights issues.