

Problem

Florida's population growth has led to a rise in planned communities and commercial development. Both residential and commercial planning rarely take into account the heat island effect, which is exacerbated by the loss of natural green spaces. Trees are removed and open grass-covered areas are replaced with inefficient, impermeable building materials such as concrete. Urban centers can measure up to a double digit increase in temperature when compared to nearby rural areas on the same day. Significant warming of Florida's communities can lead increased operating costs for local government and increased living costs for residents.

a. Solutions

- i. Pass a county/city ordinance increasing the number of tree shaded areas within commercial districts.
- ii. Establish a list of native shade trees.
- iii. Establish minimum tree coverage criteria for large open-air ground spaces covered by an impervious material.
- iv. Educate the public, developers and private property owners of greenhouse gas emission reductions provided by native tree canopies due to shade provided carbon sequestration.

b. Goals:

- i. Increase areas with concentrated shade tree coverage.
- ii. Reduce the heat island effect in dense urban communities.
- iii. Natural removal of pollutants from the air, soil and water.
- iv. Provide a natural habitat for native birds within city centers.
- v. Reduce heat related medical emergencies such as heat exhaustion.
- vi. Further Florida's attempts to be more sustainable.
- vii. Intercept rainfall and reduce storm water runoff.

c. Program elements:

- i. 50 % tree canopy coverage within 15 years for all new parking lots.
- ii. A minimum of 80% of the trees required for parking lots are to be large shade producing trees from the list of designated native shade trees.
- iii. Tree planted within 50-feet of a parking space.
- iv. Minimum of 50% of the trees in non-parking lot areas are to be shade-providing trees.

d. Financing:

- i. Comes from taxes allotted for federal, city, and or county respectively.

e. Counties and Cities that implement or Proposed such programs:

- i. City of Austin, Texas
 - a. [City of Austin, Texas](#)
- ii. City of Sacramento, California
 - a. [City of Sacramento, California](#)