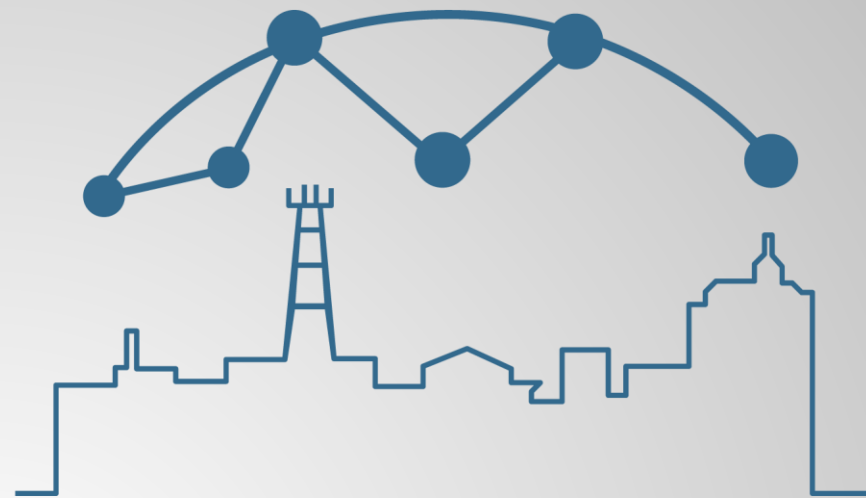




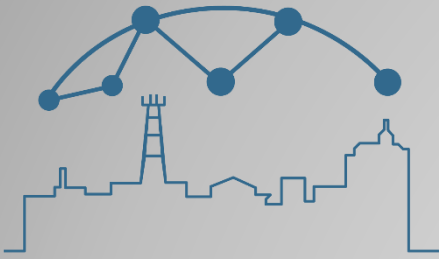
City of
Gainesville

SMART CITY PROGRAM



SMART CITY PROGRAM

The Smart City Program prepared this document proposing initiatives based on the City's Strategic Planning and 2020 Neighbors Survey.



Problem Statement

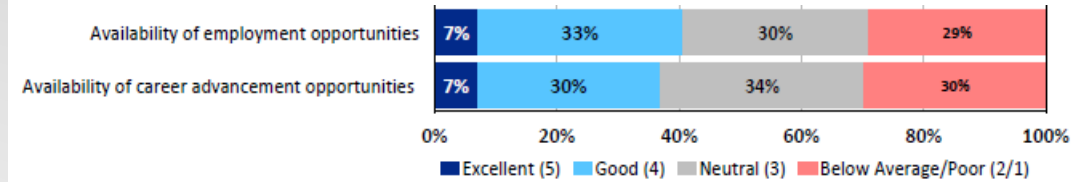
Technology is already a reality, and it is dictating some of the new job opportunities and how the workforce needs to be prepared to be able to be in the labor force in the next years. The City still has a percentage of residents that lack regular computer and Internet access. However, some individuals and disadvantaged demographics or groups sometimes lack the access or skills required to meet employment and educational requirements, access public services, or successfully use information and communication technologies.

Education and skill development are essential to engage underserved populations, especially youth, in initiatives to improve basic digital skills and advance their career opportunity. It has identified the need to build an effort to develop a skilled and educated workforce for the technology-driven economy of the 21st century.

In this regard, it is important to coordinate educational and professional programs to maximize residents' economic opportunities, ensuring all City residents have access to digital technology and economic opportunity.

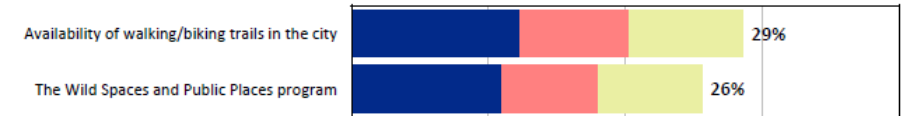
Q3. Perceptions of Quality of Life in Gainesville

by percentage of respondents (excluding "don't know")

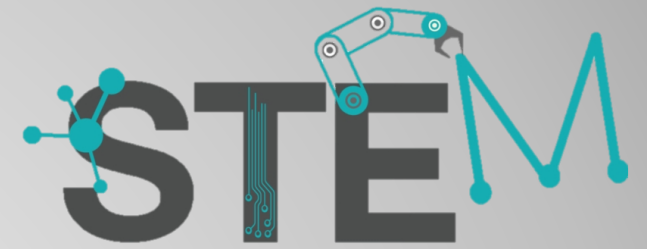


Q25. Parks, Recreation, and Cultural Affairs Services That Should Receive the Most Emphasis from City Leaders Over the Next Two Years

by percentage of respondents who selected the item as one of their top three choices



Proposed Solution: Hands-on tech center



These four cutting-edge disciplines can accelerate professional growth and design thinking. Having space with the technology available for youth in the underserved community is a way to provide a fun, hands-on experience in science and technology that will provide necessary skills and preparedness for the future workforce and entrepreneurs.



Aligned: A great place to live & strong and resilient community.

Neighbor Survey: The Wild Space & Public Place Program & City Youth Recreational Program & Availability of employment opportunities



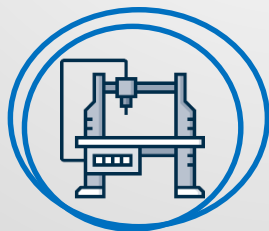
Computer access



Internet Access



STEM program



Access to other technologies



Opportunities for job and career training



Partnerships



Multifunctional space



Support the development of Startups

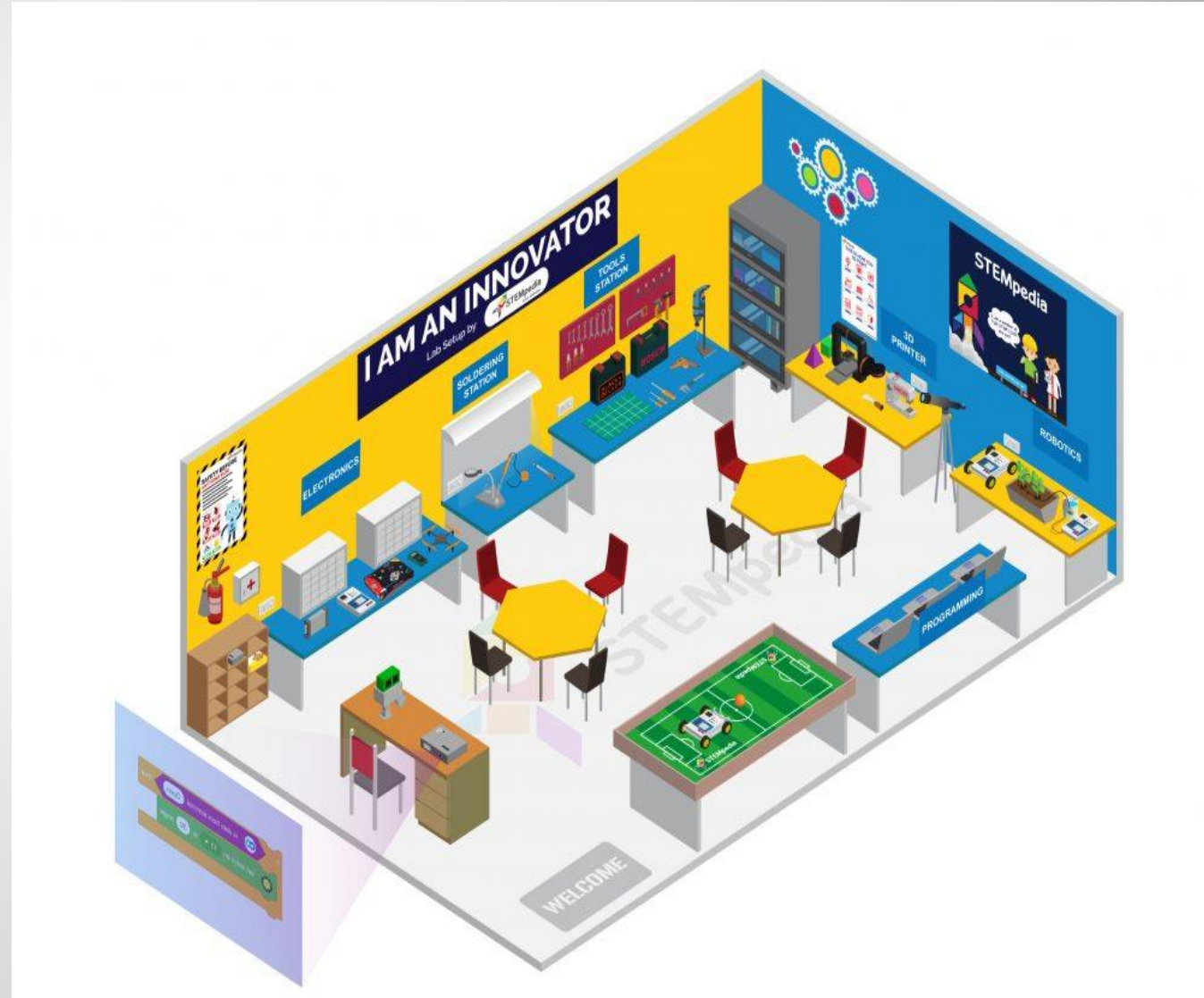
Initiative in progress

- Porters Community Center: Free Wi-Fi program.
- Pop-up learning lab.

Pilot Location

Porters area.
Community Center.

Project and features:



Funding opportunity

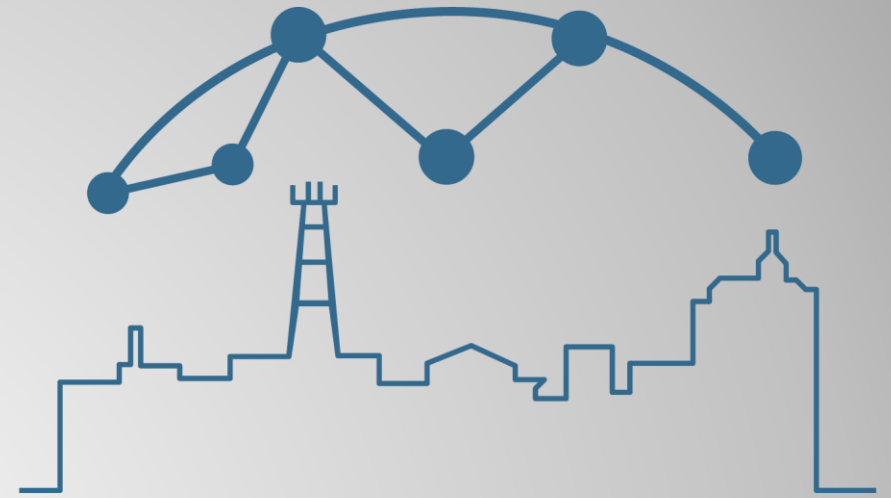


Features

- Robotics
- Programming
- 3D Printer
- AR/VR
- Drone
- Electronics
- Computer lab
- DIY kits
- Construction materials

Hands-on tech center aims to provide neighbors with the necessary tools and training to analyze and create in a technology-driven era.

Problem Statement



The City of Gainesville seeks to create opportunities for neighbors communication, wellness, interaction, engagement supporting the development of civic participation by bringing cultural, artistic, and outdoor activities endeavors. The sense of innovation and inclusion extends towards our relationship with the community as they become more connected.

One way to integrate aspects of the community livability and create a larger social ecosystem is to enhance the city's infrastructure and promote public spaces that aid socialization and interaction.

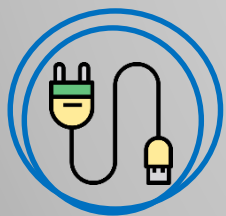
Proposed Solution: Smart Benches

Street furniture is the simple point of entering smart cities. Smart benches are new urban furniture pieces that will help parks, retail, city squares, or business centers to create better, safer, and more user-friendly environments.

These are long seats, usually for several persons, that are outfitted with technological features. Most often, they are solar-powered and contain USB-charging ports for electronic devices. Other features can be added, e.g., wi-fi hotspots, environmental sensors (noise, CO2, temperature, humidity, air pressure), e-scooters charging, Bike toolkit (racks and pumps), the business adds, ambient lights, temperature control.

Aligned: A great place to live (revitalize downtown and eastside).

Neighbor Survey:



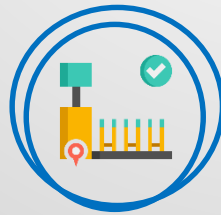
US Charging



Solar panel



light



Bike toolkit



Wi-fi hotspot



Noise sensors



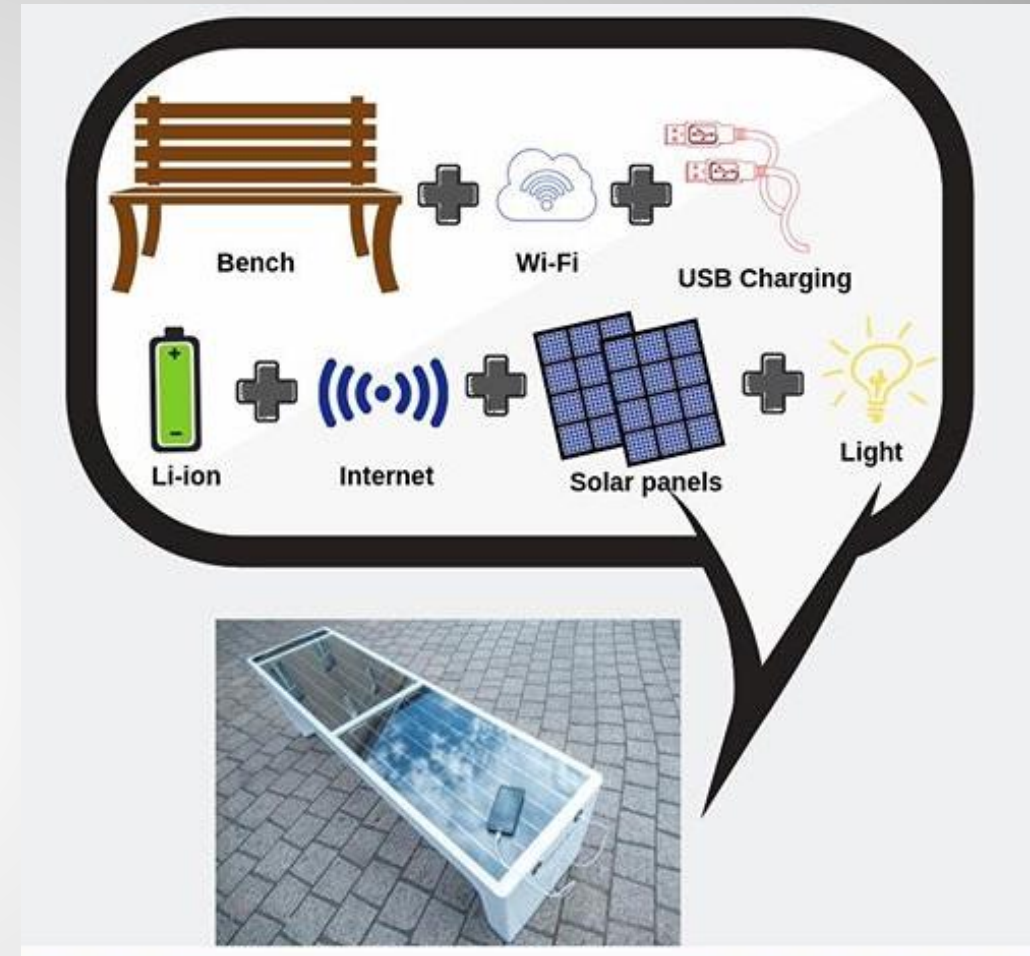
Temperature control

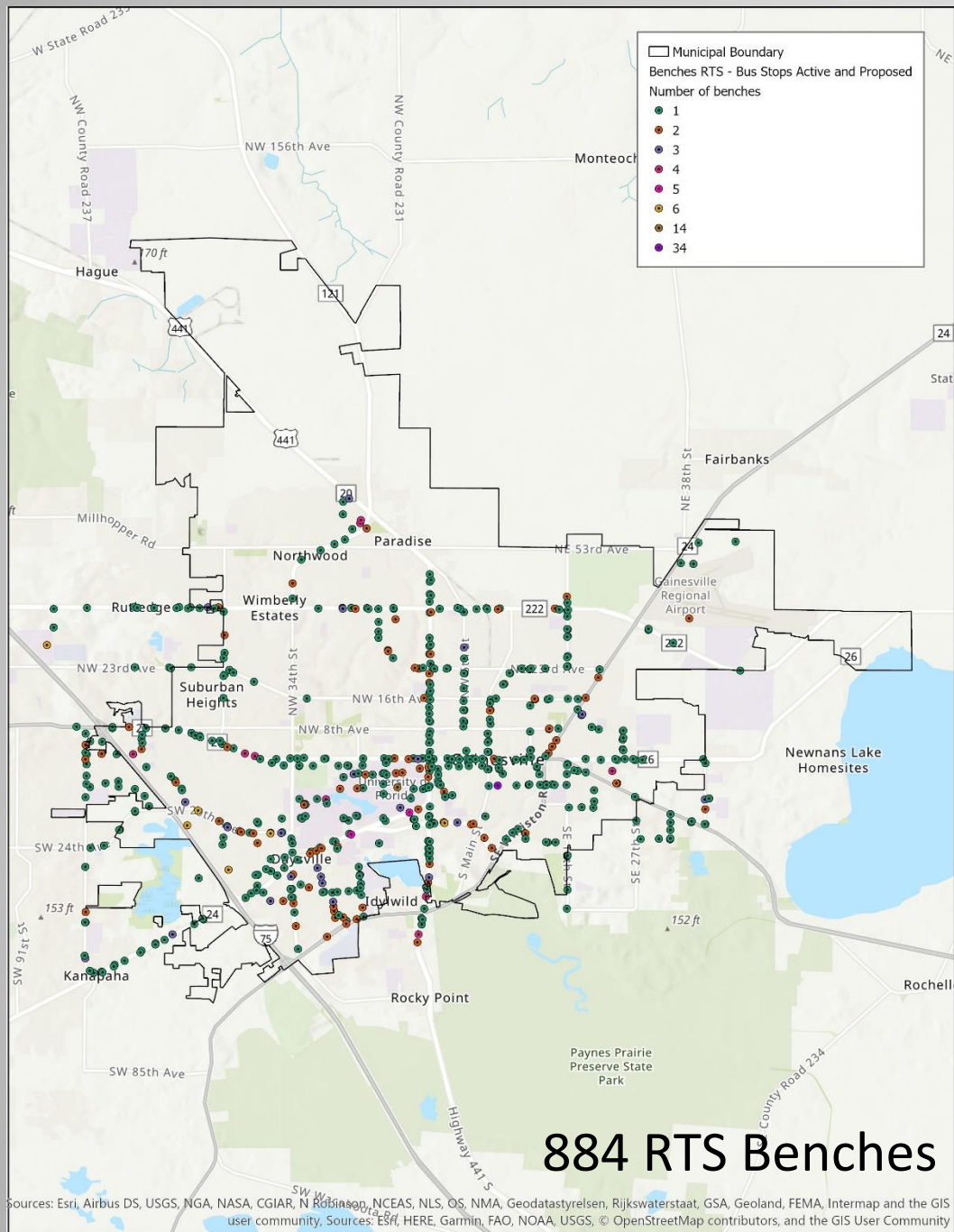


Environment Sensor

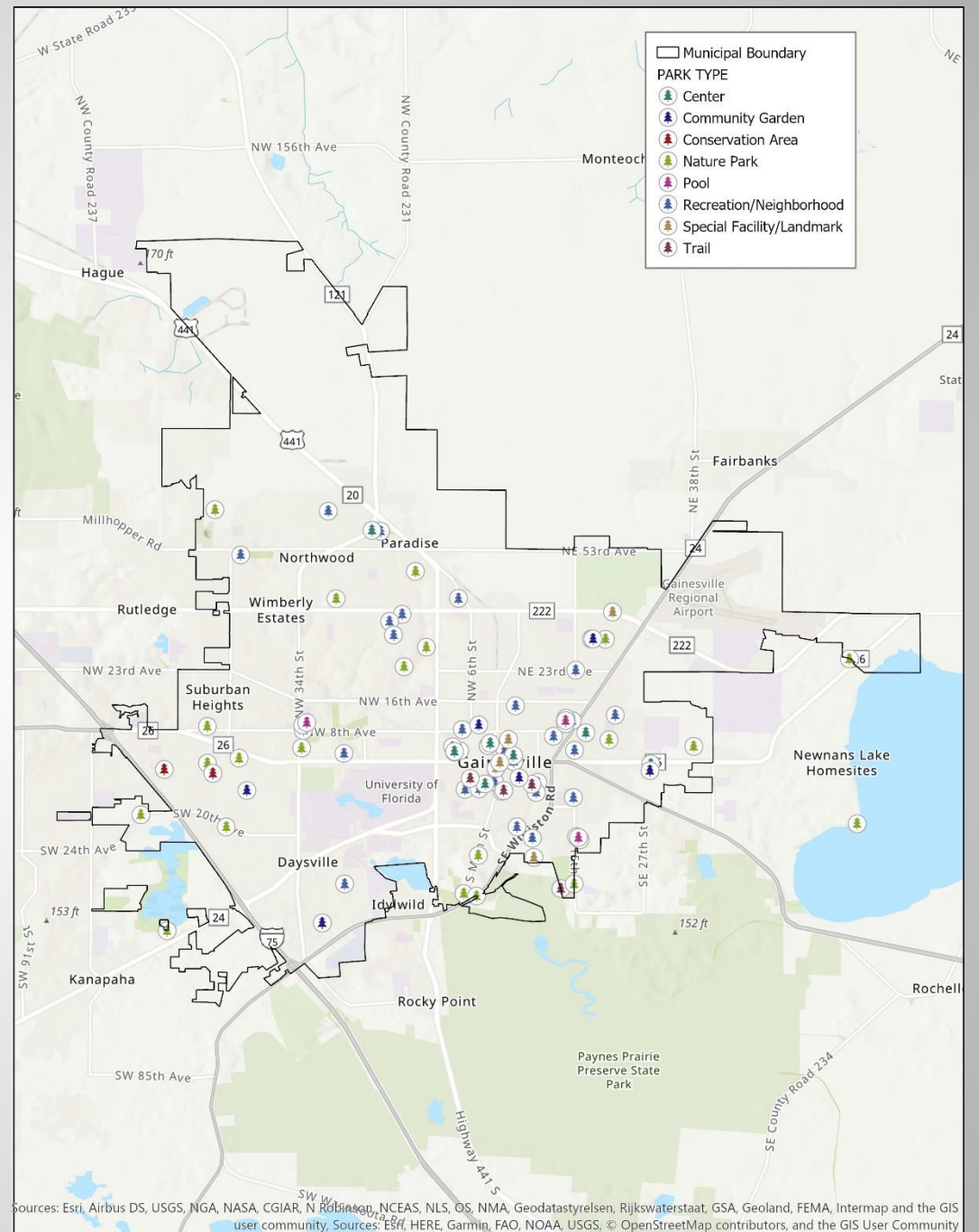


A place to sit and socialize





884 RTS Benches



Engo Smart Bench

\$5500 + shipping

- Wi-fi Internet
- Charging Station for Mobile Phones
- Display for Advertisement
- Rest Spot
- Environment Sensors
- Efficient Solar Panel
- No Energy Cost
- Easy Installation



Isun Energy

\$4,999 + shipping

\$20 month/bench recurring fee.

- 5G Capable
- Wi-fi Hotspot
- footlight,
- emergency bottom
- USB charger
- other sensors included (environment, noise, counter)
- web-based dashboard
- scheduling program



ZANO

\$5850 + shipping

- USB Charger
- Solar Energy
- LED Light
- Wi-Fi Hotspot
- Speaker built in memory



SEEDIA

\$3700 + shipping

\$1175 yearly

- USB Charger
- LED footlight
- Speaker
- Wi-fi Hotspot
- Smog Sensor
- Mobile App Ads
- Remote Management





Pilot Location

High-frequency locations: East side of the city (parks), bus stops, hospital areas.

The benches can be part of a "Smarter Parks" initiative to better understand how public spaces are used and improve parks through technology's innovative use. Not only do the benches let you charge your phone or tablet – but they also aid Parks in understanding how many people visit that location by counting the number of Wi-Fi-enabled mobile devices that pass by. These visitor counts will lead to better park design, maintenance, and programming for all neighbors' benefit.



Social Free Wi-Fi Project

- UF Researchers have most of the equipment to work on Lynch Park – Intended to be deployed in July/2021 upon arrival of equipment on May/2021.
- Meeting with COX and UF March 25th – Initiate new agreement and schedule of site surveys to redesign the network.
- Phase I Pilot Areas: Lynch Park, Porters Community, and Depot Park.
- Acceptable Use Policy Approved.



Sites design -



Porters Community

Pedestal Options

MODEL 3032 \$900

Light Weight Bollard




- Polyethylene plastic Bollard - 12" diameter, select height and color (15 standard colors)
- Anchor base
- Equipment stand, AP and antenna mount
- Economical
- Low-voltage powered gear only
- Temporary or permanent installation
- Weight 17 lbs

Cable Channel Pedestal - \$400






Depot Park

Smart City Program Portal – Data dashboard.

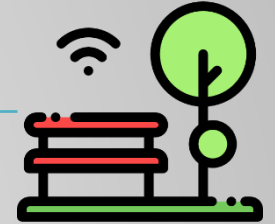
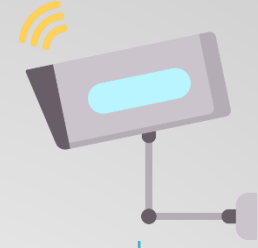
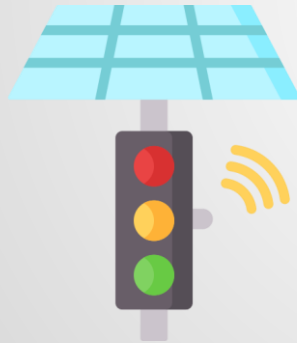
One of the Smart City Initiatives' significant benefits is to produce real-time city-data that manage the urban flow. This data promote fact-driven decisions that improve our neighbors' quality of life and increase the City's service delivery and infrastructure management efficiency. In this sense, it is essential to have all the data together in one location to correlate various occurrences and get some data-driven insights.

Smart City Portal

SDI – Spatial Data Infrastructure

Big data Analysis – Real time data

Cost Effective decisions



Data-centric platform creates actionable, real-time insights that will help us make informed decisions.