



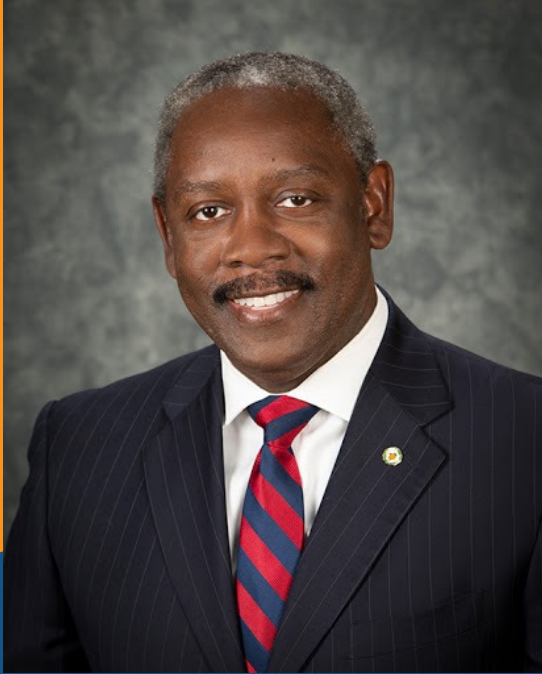
Orlando
**Orange County
Convention Center**



Smart & Healthy Buildings Readiness Cohort

SmartCitiesCouncil
LIVABILITY | WORKABILITY | SUSTAINABILITY

LEADERSHIP



**MAYOR JERRY L.
DEMINGS**

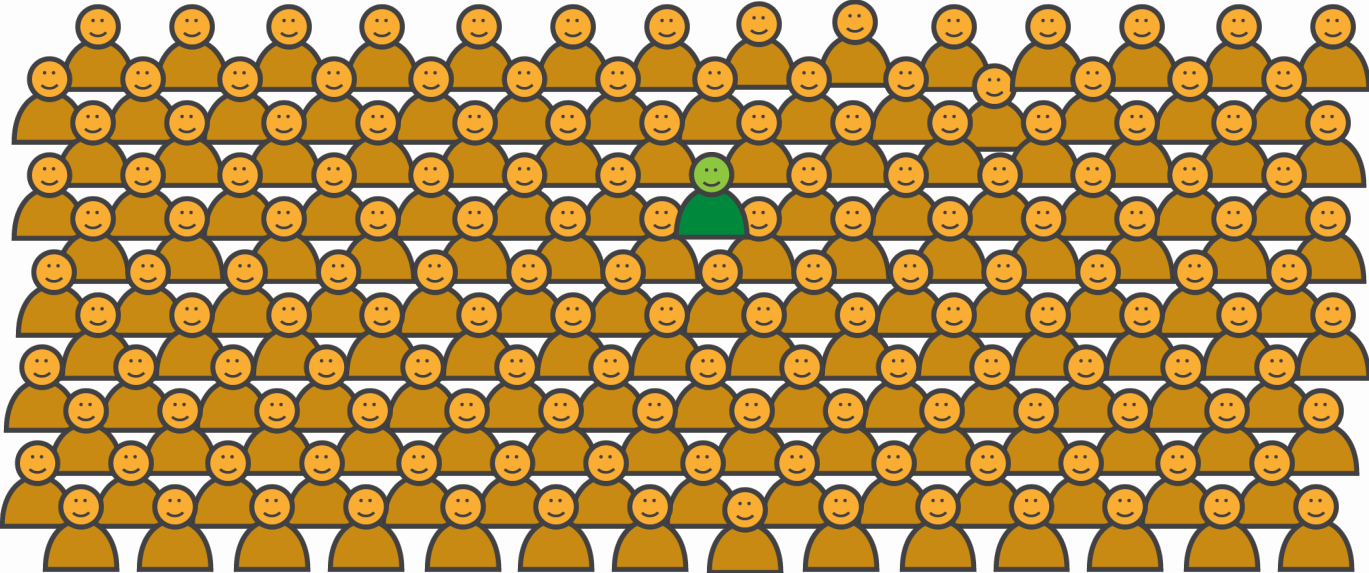


INNOVATION

COLLABORATION

INCLUSION

1 Resident x 62 Tourists each year



Orange County Convention Center



MORE THAN
29,300
INDIVIDUALS ARE
EMPLOYED BY THE
ACTIVITY GENERATED
AT THE OCC

\$2,229
AVERAGE
ECONOMIC
IMPACT PER
DELEGATE

\$3 BILLION
IN ESTIMATED ECONOMIC IMPACT
FISCAL YEAR 2018 - 2019

MORE THAN
1,200
BUSINESSES
IMPACTED
BY OCC
ACTIVITY

CENTER'S ACTIVITY
YIELDS TAX SAVINGS OF
\$121 PER
ORANGE COUNTY
HOUSEHOLD


Economic Impact

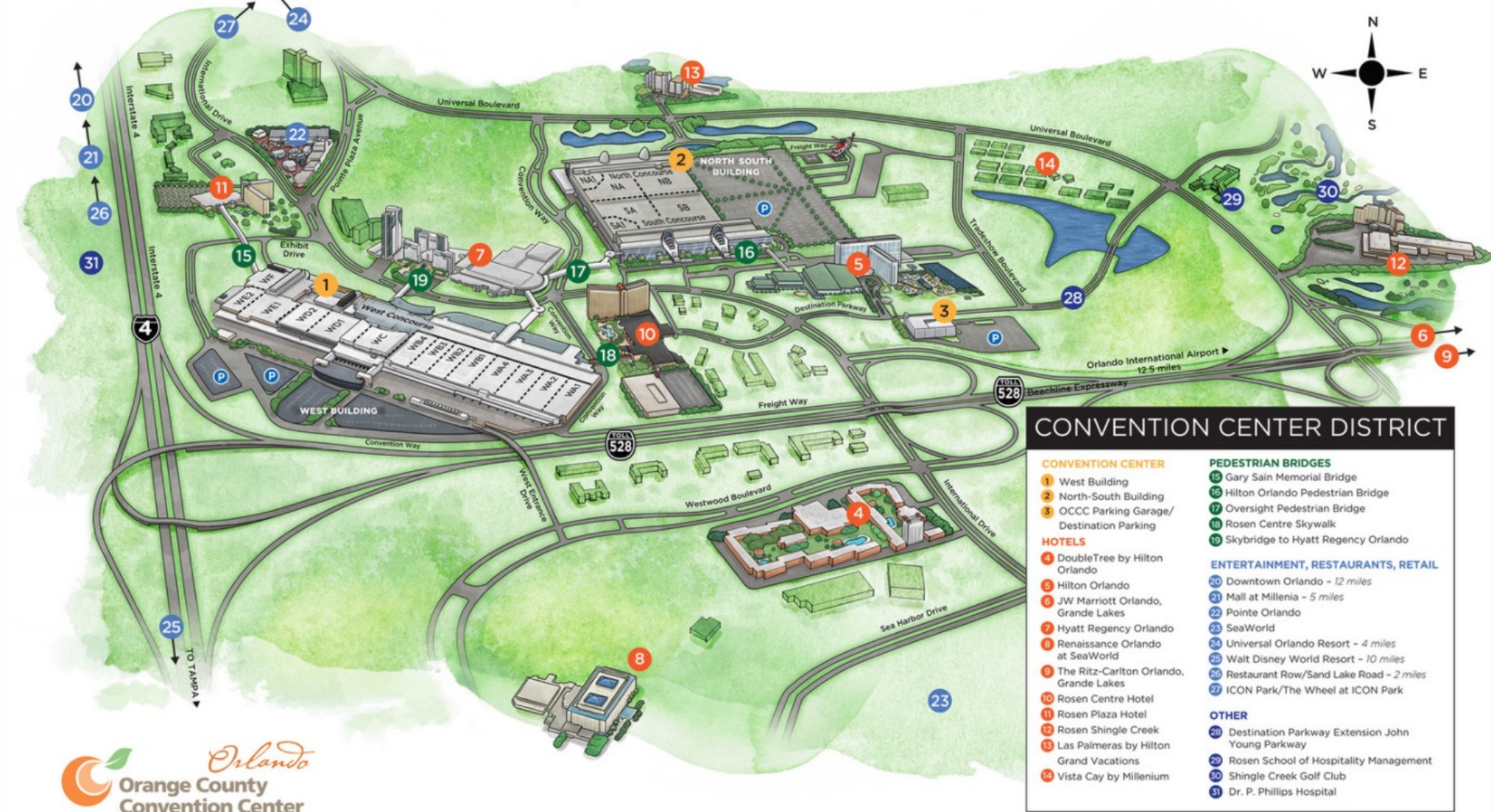
- Approximately \$3 billion in economic impact to the Central Florida region
- Nearly 200 events, conventions, and trade shows
- More than 1.5 million attendees to the destination annually.



Orange County Convention Center



- 2nd largest Convention center in the U.S.
- More than 7 million square feet across two main buildings
- Certifications 
 - LEED Gold for Existing Buildings
 - GBAC Star
 - ISO 14001 EMS
- 3 full-service restaurants & 8 food courts



CONVENTION CENTER DISTRICT

CONVENTION CENTER

- 1 West Building
- 2 North-South Building
- 3 OCCC Parking Garage/ Destination Parking

HOTELS

- 4 DoubleTree by Hilton Orlando
- 5 Hilton Orlando
- 6 JW Marriott Orlando, Grande Lakes
- 7 Hyatt Regency Orlando
- 8 Renaissance Orlando at SeaWorld
- 9 The Ritz-Carlton Orlando, Grande Lakes
- 10 Rosen Centre Hotel
- 11 Rosen Plaza Hotel
- 12 Rosen Shingle Creek
- 13 Las Palmeras by Hilton Grand Vacations
- 14 Vista Cay by Millenium

PEDESTRIAN BRIDGES

- 15 Gary Sain Memorial Bridge
- 16 Hilton Orlando Pedestrian Bridge
- 17 Oversight Pedestrian Bridge
- 18 Rosen Centre Skywalk
- 19 Skybridge to Hyatt Regency Orlando

ENTERTAINMENT, RESTAURANTS, RETAIL

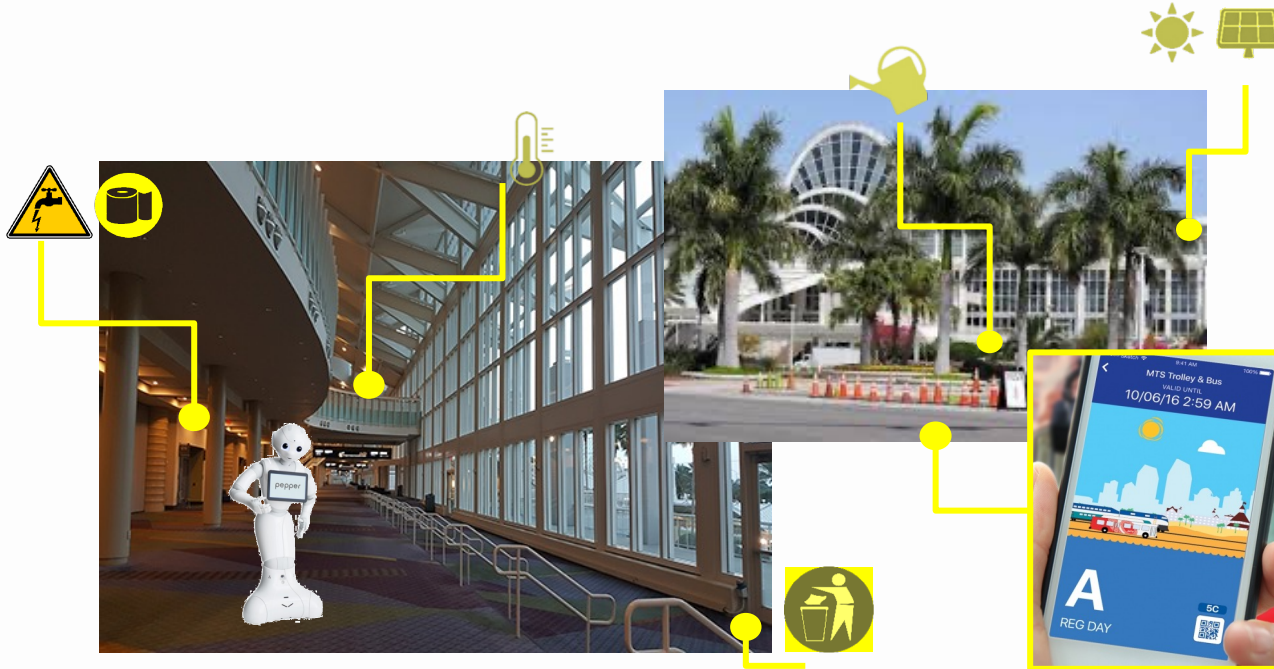
- 20 Downtown Orlando - 12 miles
- 21 Mall at Millenia - 5 miles
- 22 Pointe Orlando
- 23 SeaWorld
- 24 Universal Orlando Resort - 4 miles
- 25 Walt Disney World Resort - 10 miles
- 26 Restaurant Row/Sand Lake Road - 2 miles
- 27 ICON Park/The Wheel at ICON Park

OTHER

- 28 Destination Parkway Extension John Young Parkway
- 29 Rosen School of Hospitality Management
- 30 Shingle Creek Golf Club
- 31 Dr. P. Phillips Hospital

Making OCCC a Model of Innovation & Health Safety

- 'Back to Business' Performance & Assurance real-time monitoring
- Launch customer facing applications for improved user experience



Orange County Convention Center

SUSTAINABILITY ACTION PLAN 2040 GOALS



GOAL 4:

BEGINNING IN FY21, COUNTY-FUNDED BUILDINGS AND INFRASTRUCTURE WILL MEET NEW HIGH-PERFORMANCE AND GREEN BUILDING STANDARDS

GOAL 5:

ALIGN ENERGY MANAGEMENT STRATEGIES ACROSS COUNTY DEPARTMENTS TO REDUCE 30% OF BUILDING AND INFRASTRUCTURE ENERGY USE BY 2025

GOAL 6:

REDUCE RISKS FOR COUNTY SERVICES AND INFRASTRUCTURE BASED ON REGIONAL RESILIENCE INDICATORS AND UPDATED MITIGATION PLANS



**BUILDINGS &
INFRASTRUCTURE**

What we will achieve

- **Safety & Health:** “Back to business” and occupant level comfort and confidence.
- **Cost Savings:** Building operations efficiencies and risk mitigation
- **MEP Infrastructure Asset Tracking:** Inventory management, CIP planning, and predictive/preventative maintenance
- **Human Experience:** Improved user and occupant experiences
- **Revenue Co-Generation:** Location based attendee experience

Metrics / KPIs

- **Safety & Health:** Satisfaction surveys, Air Quality Status Shareable Dashboard:

Conference Room						Now
76 °F	22 %	1066 ppm	820 ppb	0 µg/m ³	0 µg/m ³	759 ppb
Temperature	Humidity	CO ₂	VOC	PM _{2.5}	PM ₁₀	O ₃
warm ?	dry ?	moderate ?	unhealthy ?	good ?	good ?	hazardous ?

- **Cost Savings:** Building operations efficiencies and risk mitigation
 - Metrics: kWh, kW, kGal, therms, CW tons (\$)
 - Forecasted based on real building data and verified with BAS and load management system



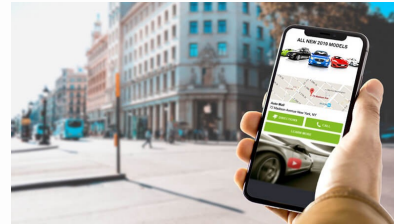
ENERGY STAR®
PortfolioManager™



Metrics / KPIs

- Revenue Co-Generation:

- Product Sales
- Ads and clicks
- Company relocations
- Economic development
- Research to commercialization
- Mergers and acquisitions
- % of Local sales
- # of local jobs created



Applications

- Large areas, long range, remote monitoring, remote alarms
- Indoor air quality, health, and safety monitoring
- Electric/Gas/Water for whole building data
- Life/Safety systems – Fire
- Leak detection
- CCTV upgrade enhancements
- Predictive/Preventative maintenance: pumps, AHUs, bathrooms, water lines
- Digitization of asset status, condition, performance

HVAC Desired Control Points

- Particulate
- CO2
- VOC
- Foreign contaminant
- Bipolar ionization
- Static Pressure
- In room sensors at breathing level



System Integration

- BAS: JCI / Honeywell
- Door: Lenel
- Fire: Simplex
- Lighting: Lutron (partial)
- CCTV: Aviglion



Discovery & Development Toolkit

- Drawings
- Inventory/Scope
- Utility metrics
- Equipment brands
- Minimum specs
- IT Enterprise Security Standards & Requirements
- MWBE Requirements

