

FHWA: Designing for Pedestrian Safety

JANUARY 23-24, 2023

MATT FALL, BIKE-PED COORDINATOR



American Planning Association
Florida Chapter
First Coast

Creating Great Communities for All



THANK YOU!



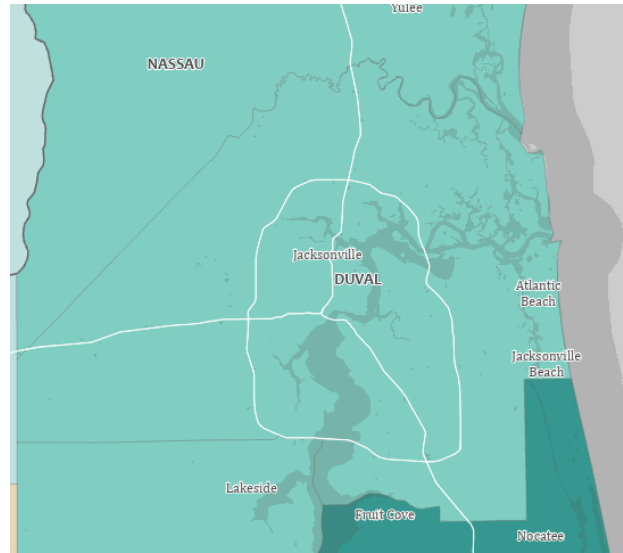
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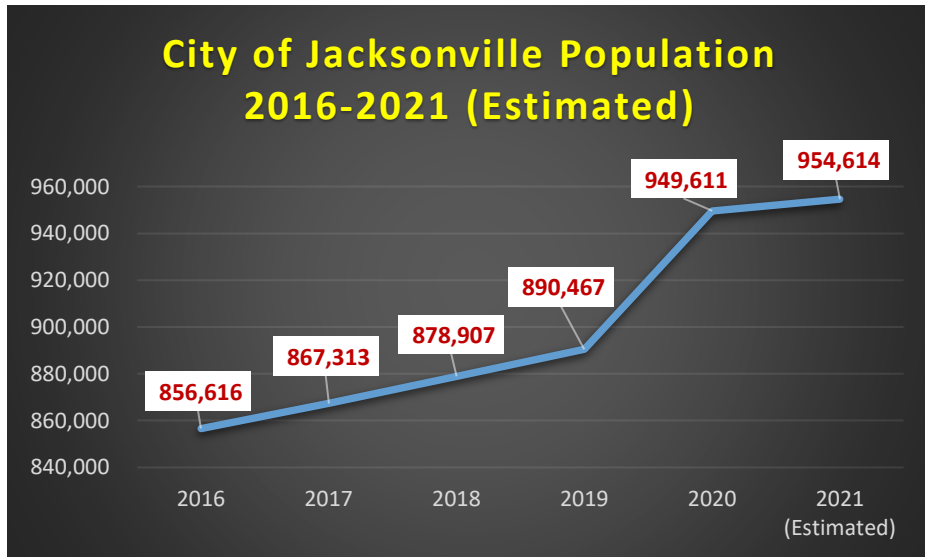


2021 Population: 954,614

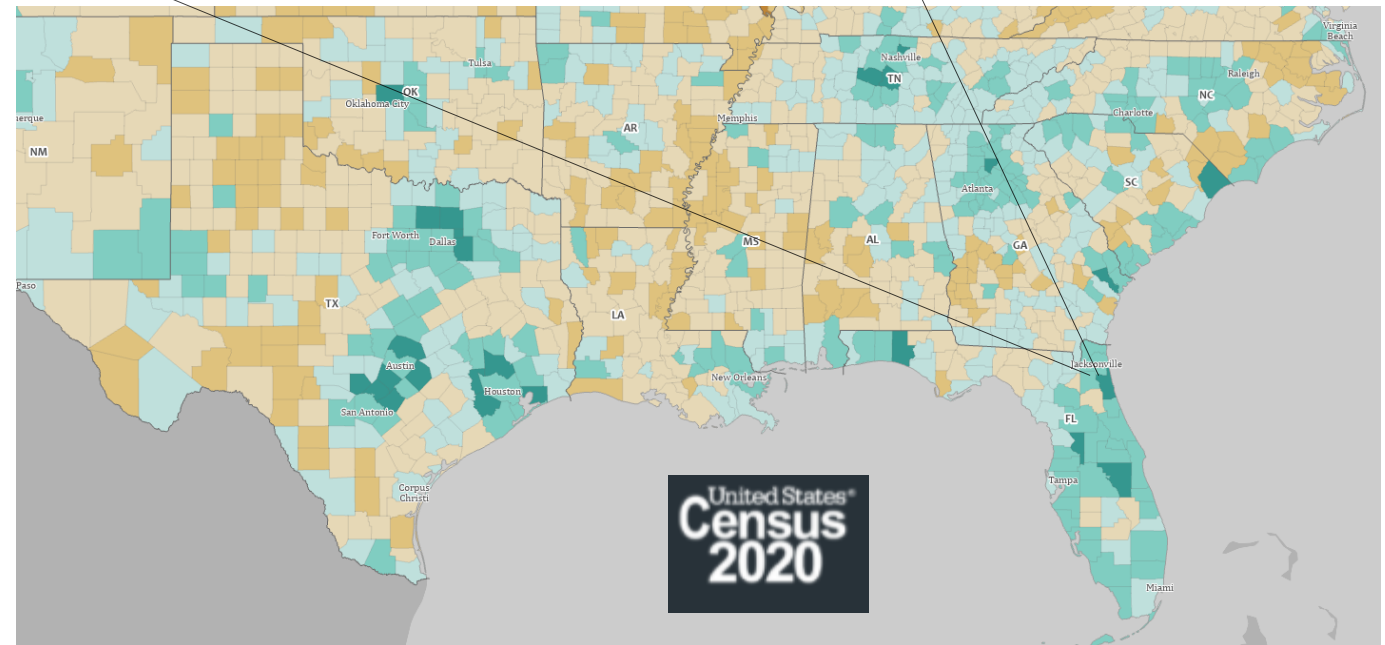
Percentage COJ population change between 2010 and 2020: Source census.gov



City of Jacksonville Population 2016-2021 (Estimated)



Source: US Census Data





JAX DAILY RECORD

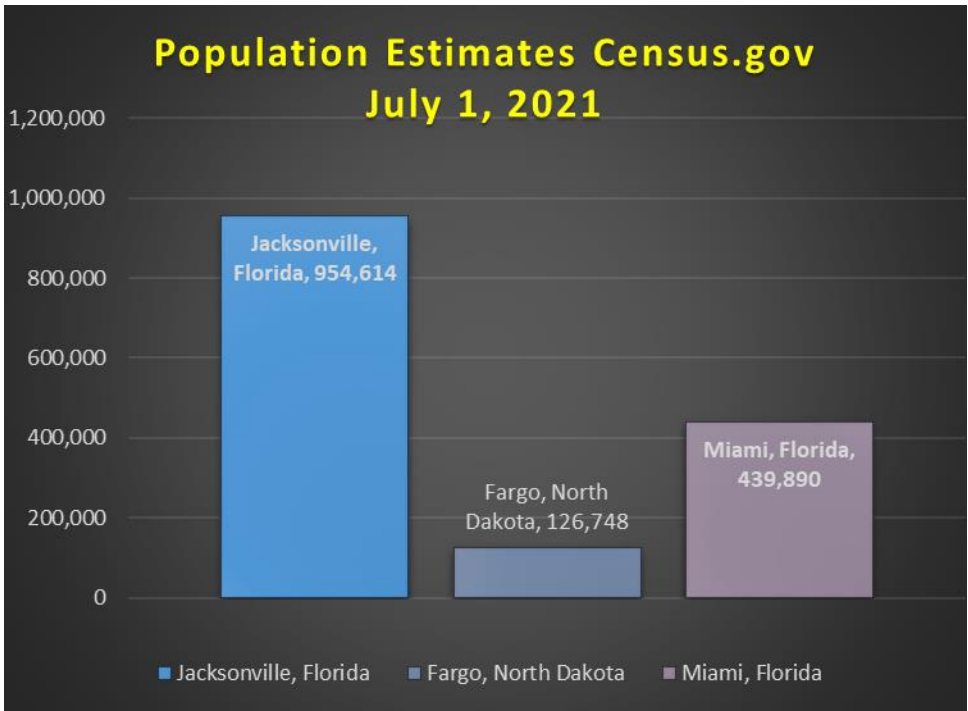
WEDNESDAY, JAN. 11, 2023 12:20 AM EST

Duval at 1 Million: Demands on infrastructure rise with population

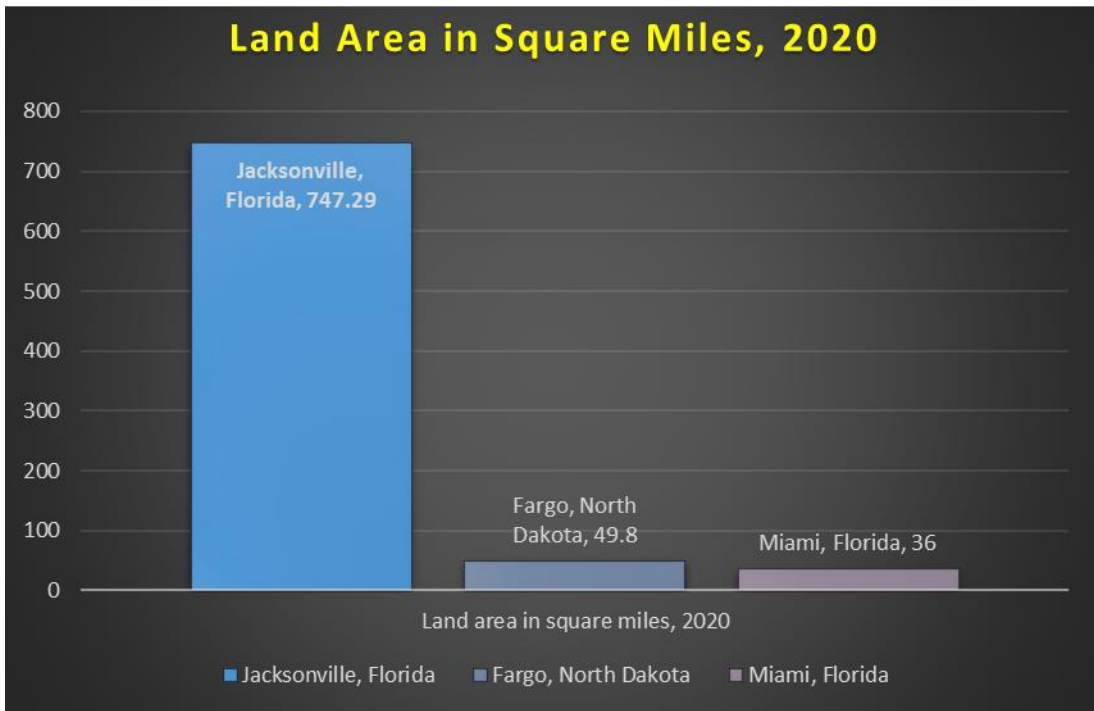
SOURCE: jaxdailyrecord.com/article/duval-at-1-million-demands-on-infrastructure-rise-with-population



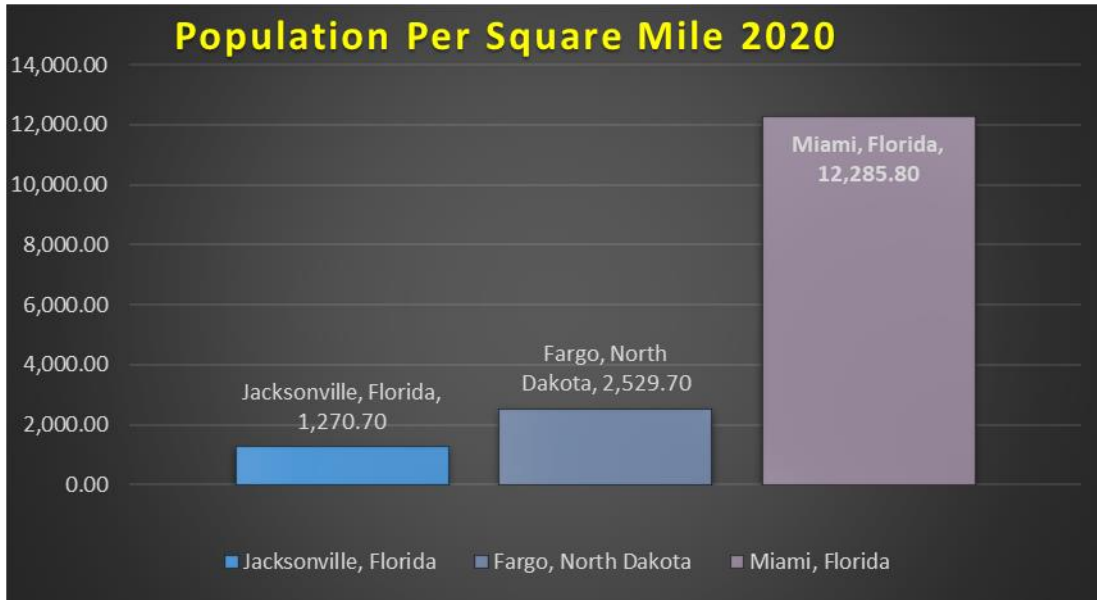
1



2

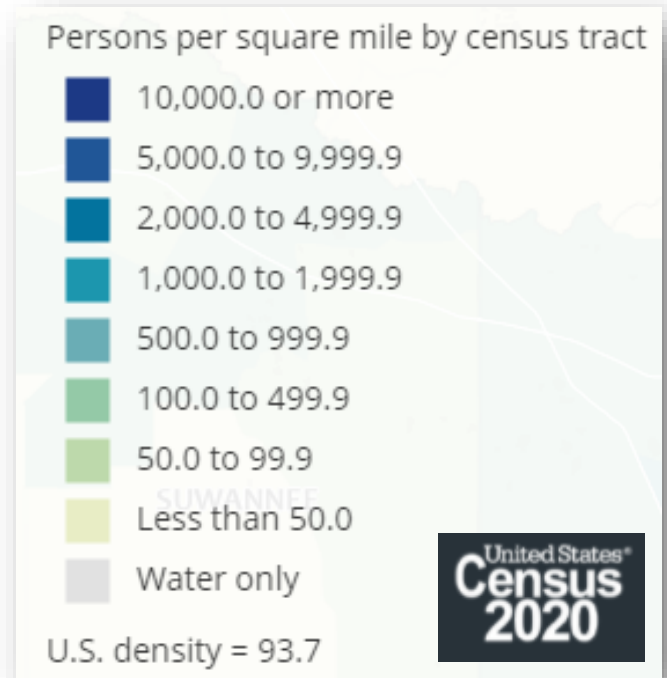
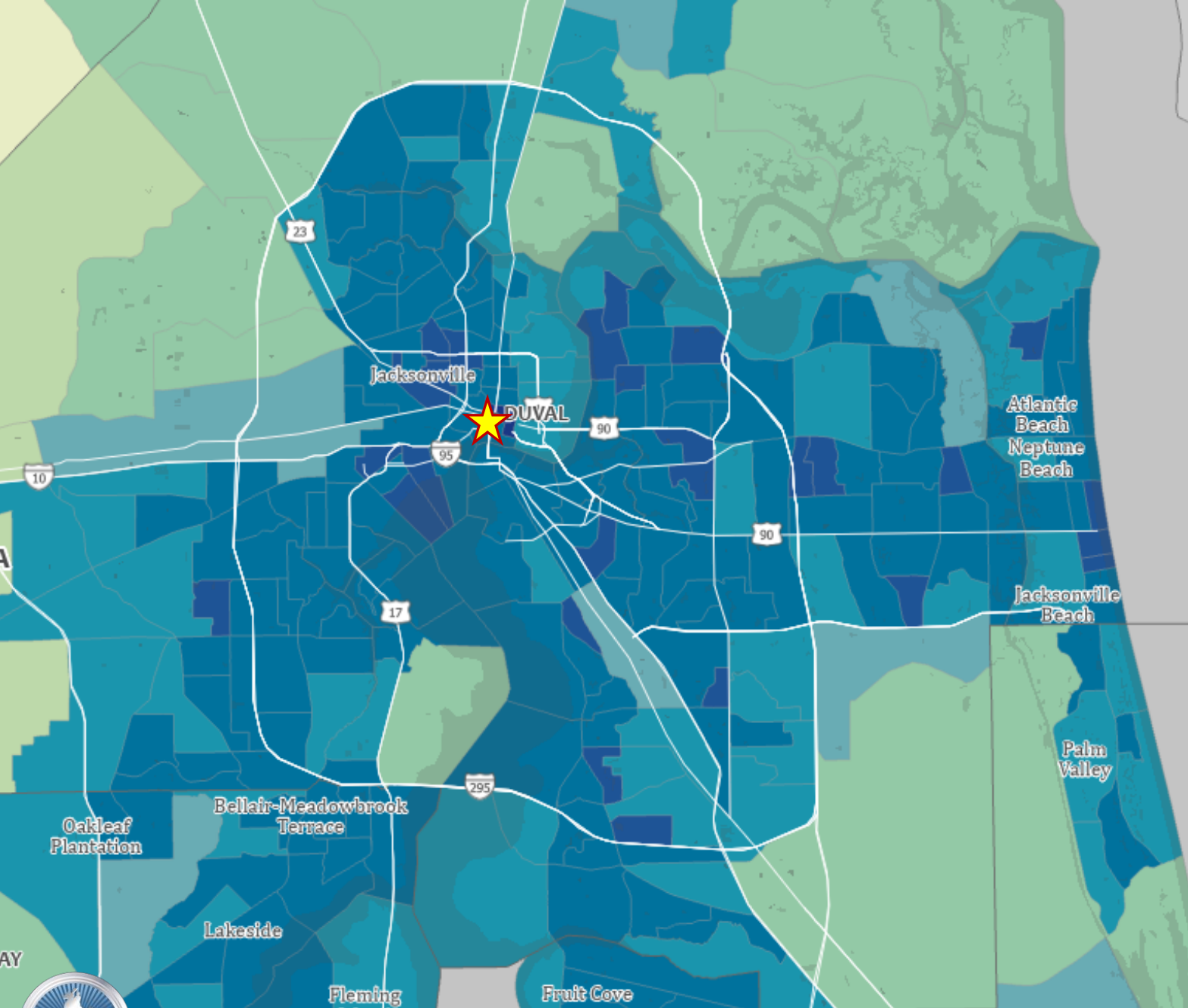


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Population Density

2020 Census Demographic Data Map Viewer

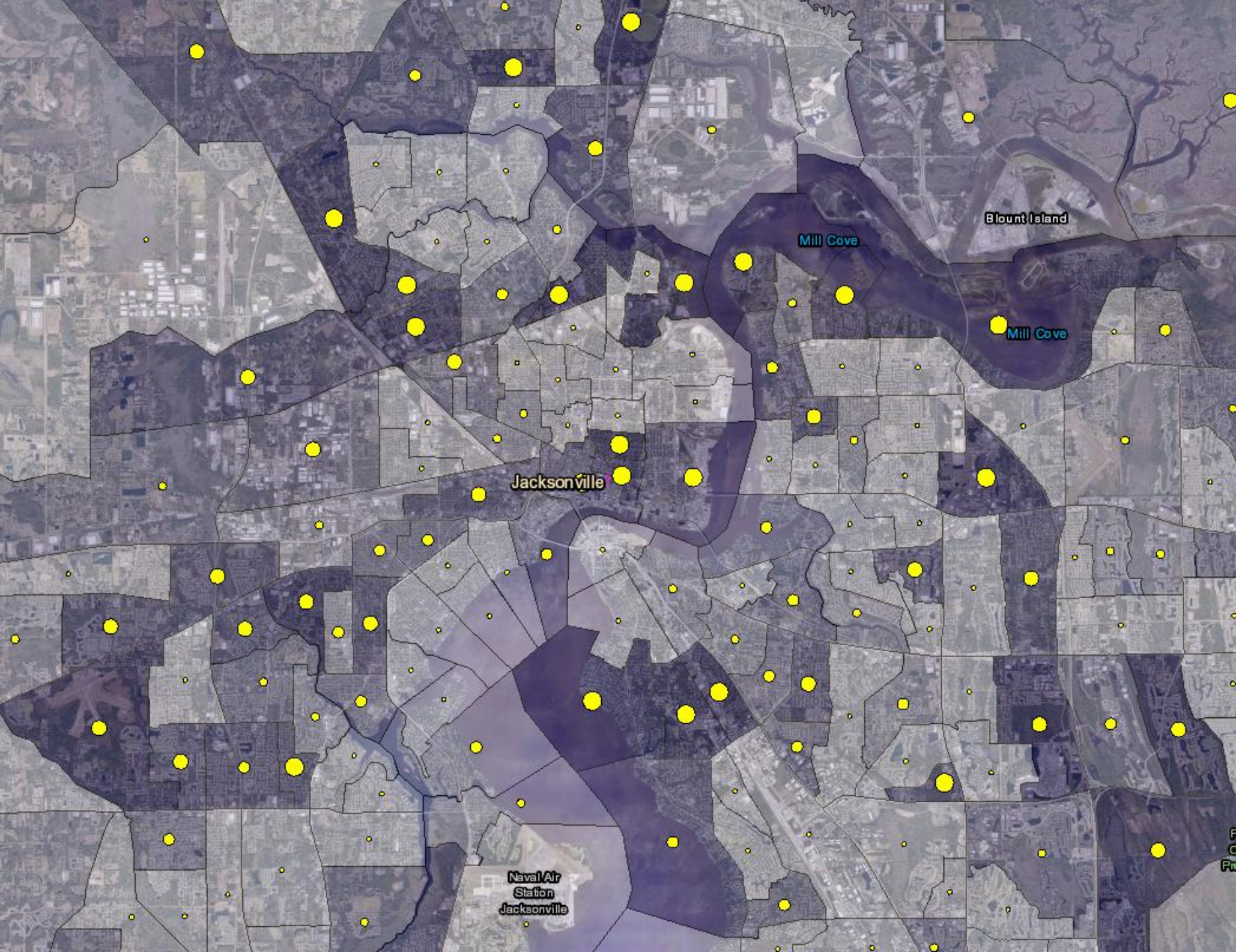


SOURCE: ejscreen.epa.gov/mapper/

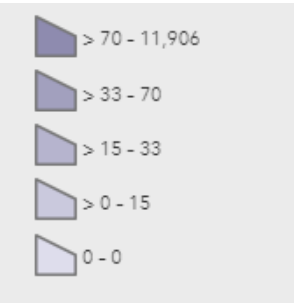


Commuting by Foot

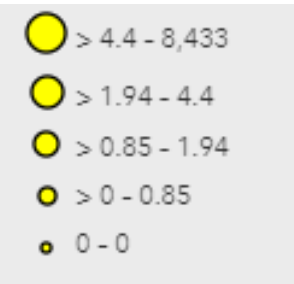
2020 Census Demographic Data Map Viewer



NUMBER OF JACKSONVILLE RESIDENTS THAT COMMUTED TO WORK BY WALKING IN 2016-2020 ACS (TRACT)



PERCENTAGE OF JACKSONVILLE RESIDENTS THAT COMMUTED TO WORK BY WALKING IN 2016-2020 ACS (TRACT)

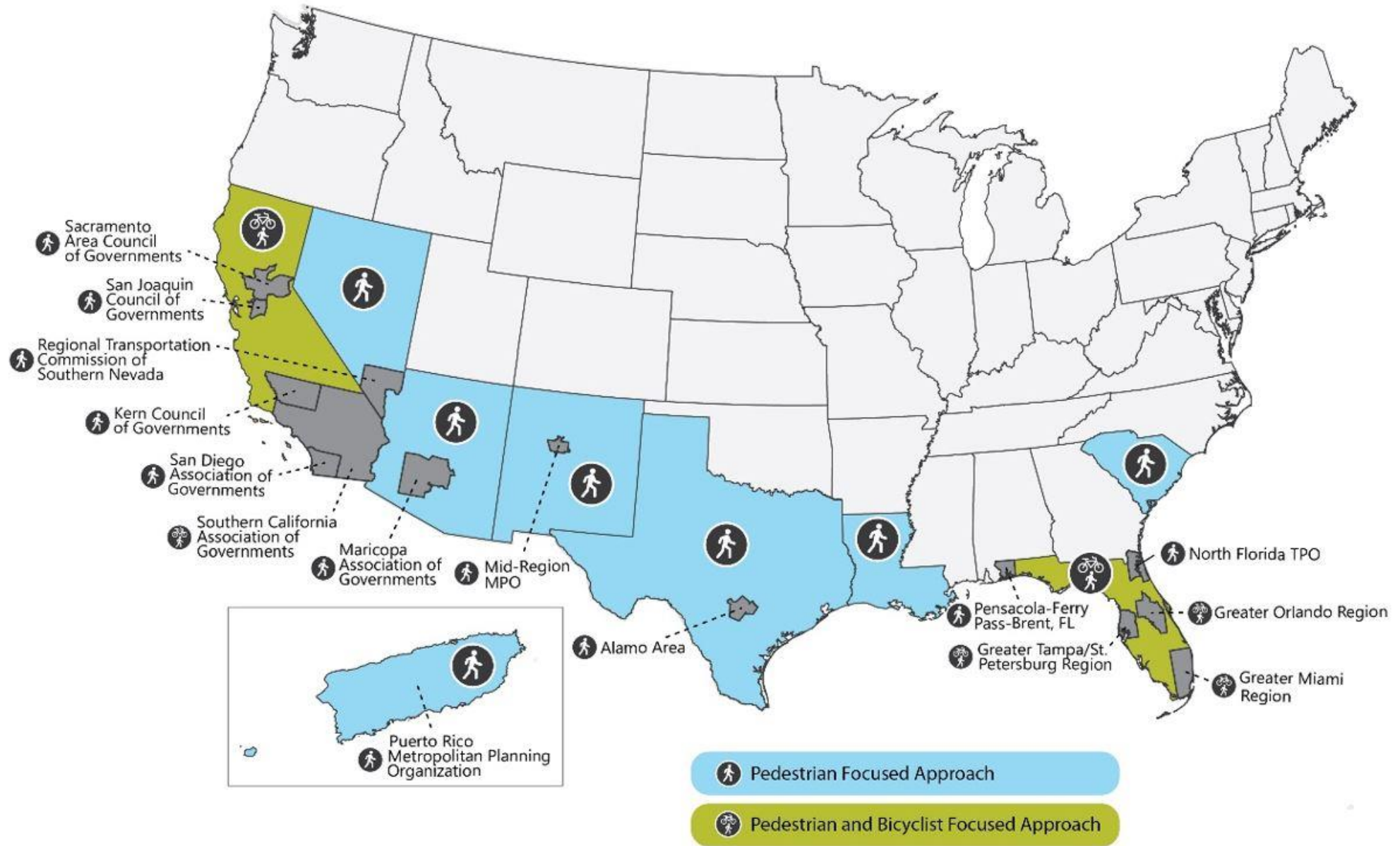


Top 20 Most Dangerous Metropolitan Areas for Pedestrians (2016-2020)



Source: Dangerous by Design 2022





National Pedestrian Crash Trends and Stats

Pedestrian Fatal Crash Trends:

- 76% at night
- 46% some alcohol involvement
- 70% male
- Highest risk at 55-64 years old
- 1 in 5 crashes are "hit-and-run."

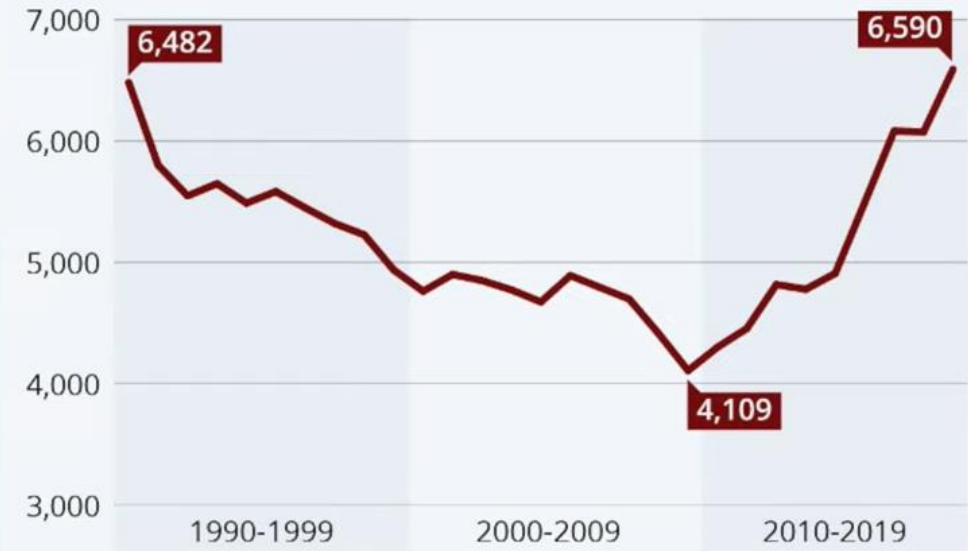


Source: FHWA, 2019

SOURCE: FDOT's - trafficsafetyteam.org/complete-streets/

U.S. Pedestrian Deaths Hit Highest Level In 30 Years

Pedestrian fatalities in the U.S. by year*



* 2019 is a projection

Source: Governor's Highway Safety Association



statista



District Two Pedestrian Crash Trends



Pedestrian crashes account for nearly 20% of total fatal crashes in FDOT District Two.

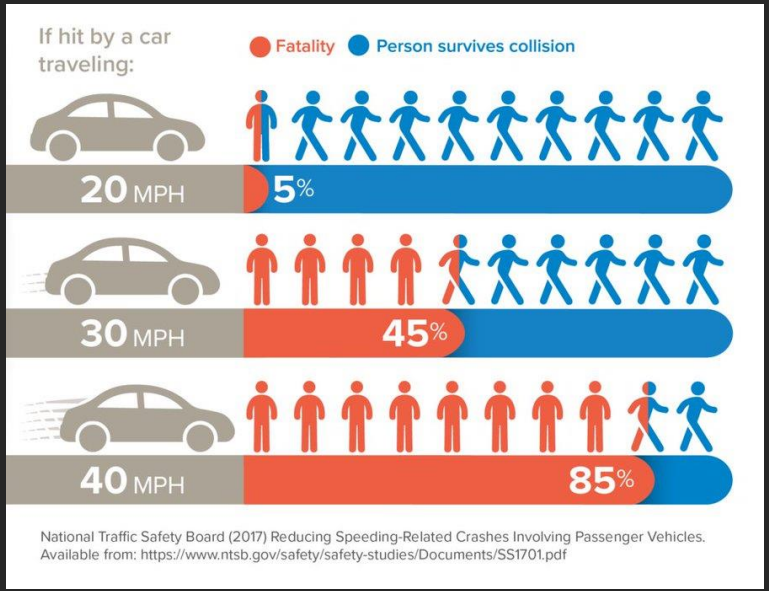
- Four counties (Alachua, Clay, Duval & St. Johns) account 73% of fatal pedestrian crashes and 80% of all reported pedestrian crashes
- 77% of fatal pedestrian crashes occur at night
- 42% of all public road pedestrian crashes and 73% of fatal pedestrian crashes occur on state and US highways



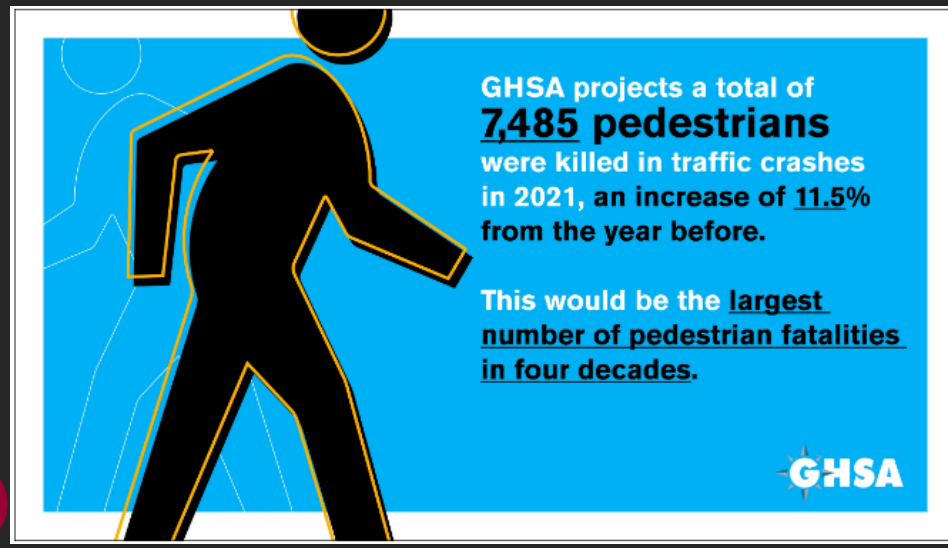
Source: Crash Data Management System, 2015-20

SOURCE: FDOT's - trafficsafetyteam.org/complete-streets/

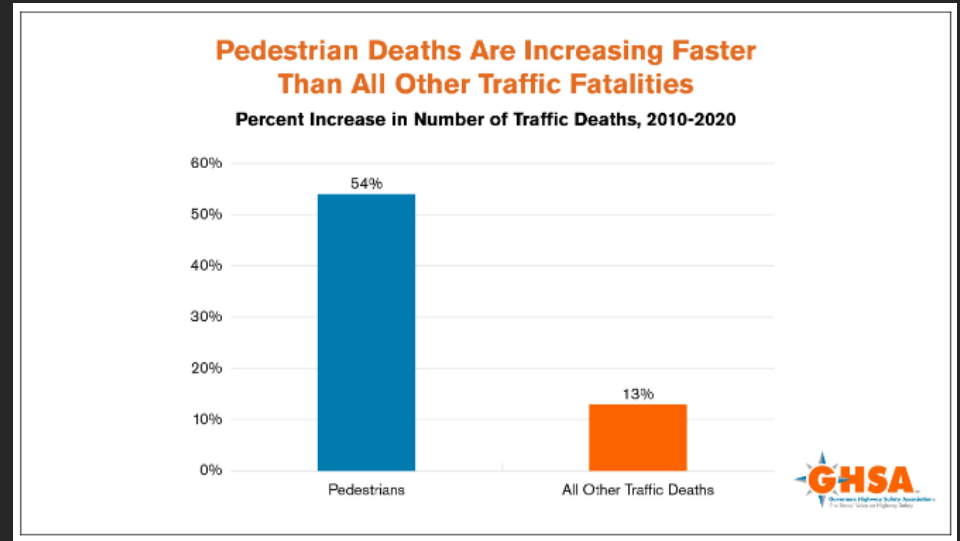




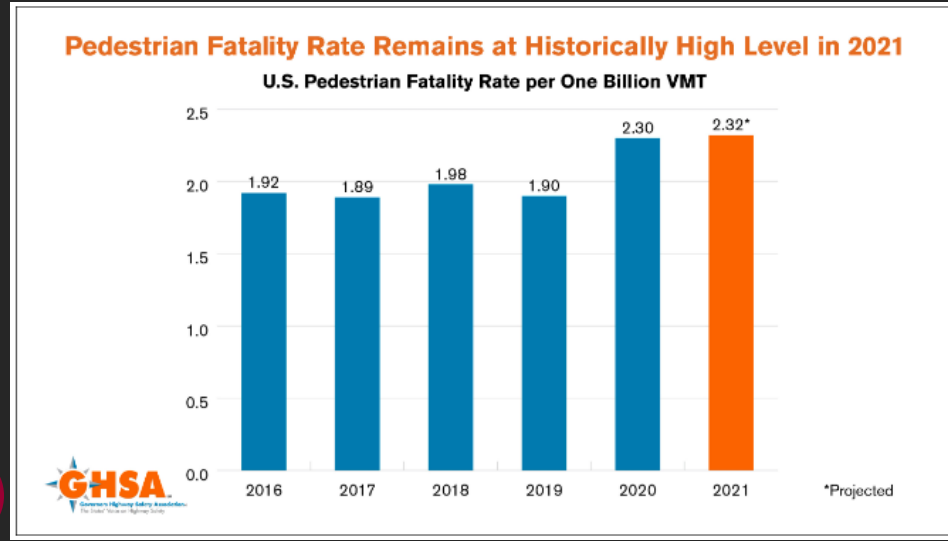
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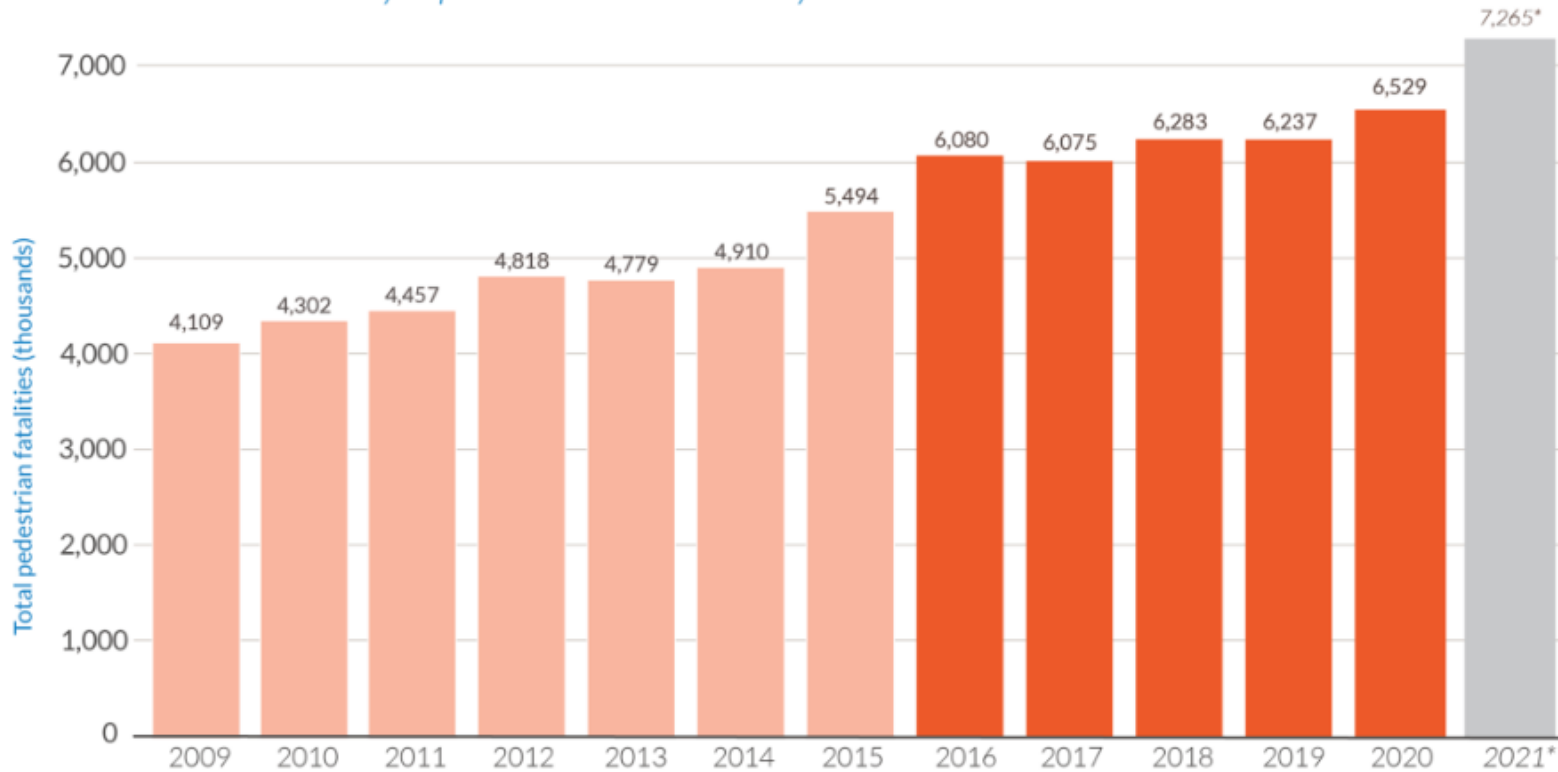
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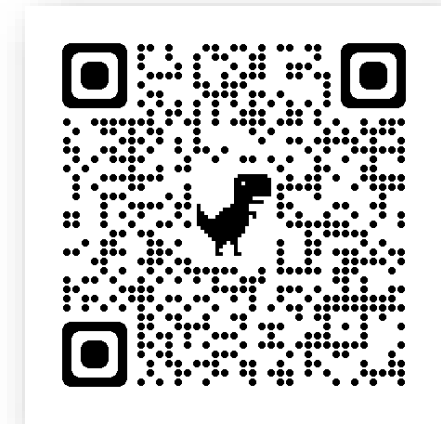


Driving went down in 2020, but deaths of people walking increased 4.7%

2021 deaths will likely represent a historic one-year increase



*This estimate for 2021 is produced by applying the 11.5 percent increase for 2021 projected by the Governors Highway Safety Administration (GHSA) to the federal FARS data for 2020 used in this report.



Dangerous by Design 2022 Ranked Top 101 Most Dangerous Metropolitan Areas for Pedestrians

Jacksonville Fell from 10th Place (2021) to 6th (2022)

Rank	Metro area	Average ped deaths/100k people per year	Pedestrian deaths (2016 - 2020)	Difference in average daily walking trips, 2019 to 2020*	Pandemic change in fatality rate (Avg. 2016-19 vs 2020)	Long term trend in fatality rate (Five-year averages for 2011-15 vs 2016-20)
1	Deltona-Daytona Beach-Ormond Beach, FL	4.25	140	61%	0.68	0.97
2	Albuquerque, NM	4.19	192	35%	-0.48	1.91
3	Memphis, TN-MS-AR	3.93	264	49%	2.15	1.77
4	Tampa-St. Petersburg-Clearwater, FL	3.55	559	50%	-0.41	0.54
5	Charleston-North Charleston, SC	3.54	140	56%	1.36	1.57
6	Jacksonville, FL	3.44	264	60%	0.19	0.24
7	Bakersfield, CA	3.41	152	31%	0.06	0.68
8	Orlando-Kissimmee-Sanford, FL	3.37	431	22%	-0.72	0.6
9	Stockton, CA	3.35	126	44%	-0.74	1.52
10	Fresno, CA	3.25	161	24%	1.22	1.24



Source: Dangerous by Design 2022





1

Source: Dangerous by Design 2022



2

Source: COJ - 103rd St



3

Source: COJ - Cesery Bridge



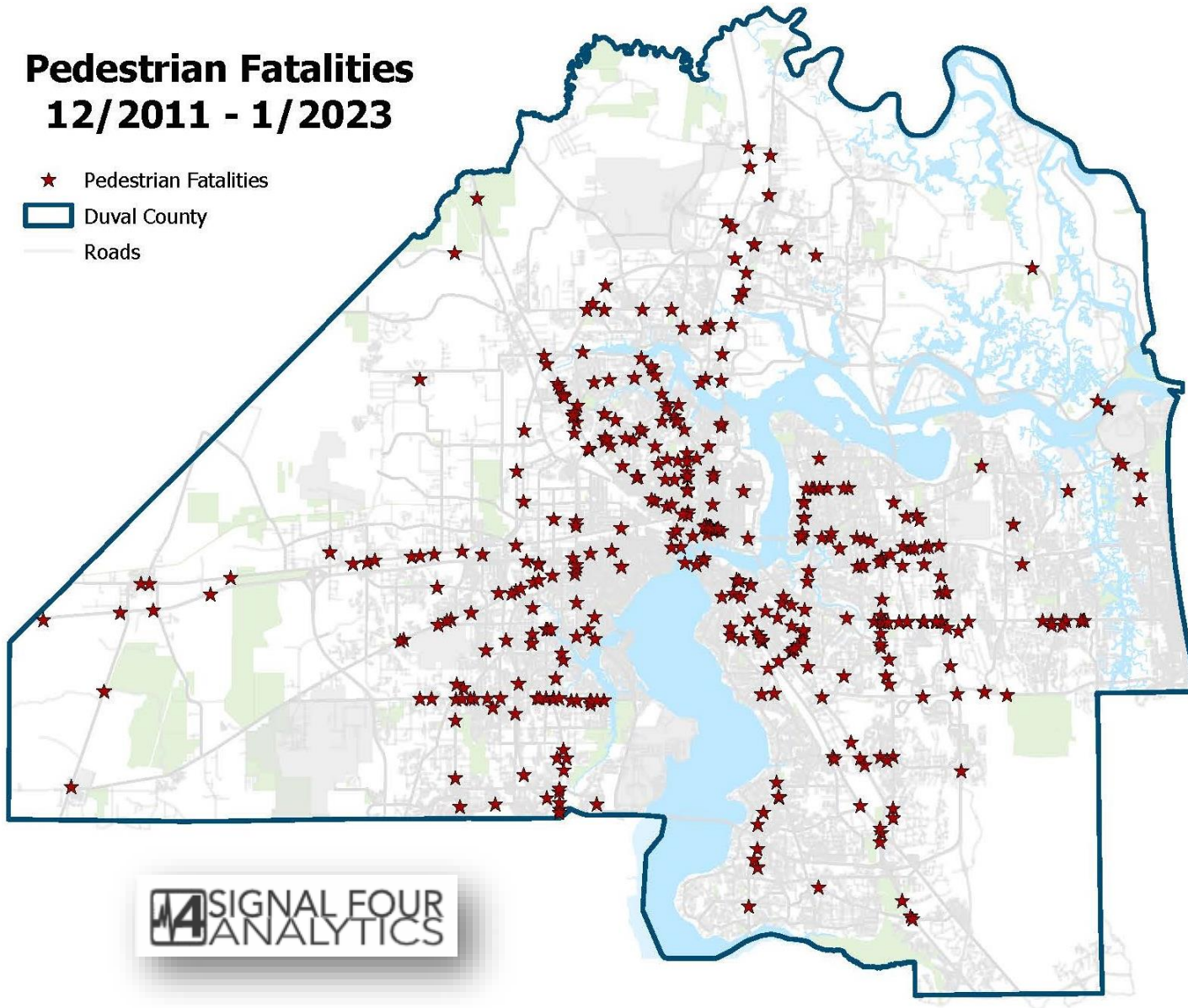
4

Source: COJ - State St



Pedestrian Fatalities 12/2011 - 1/2023

- ★ Pedestrian Fatalities
- ▭ Duval County
- Roads



Duval County

416

Pedestrian Fatalities

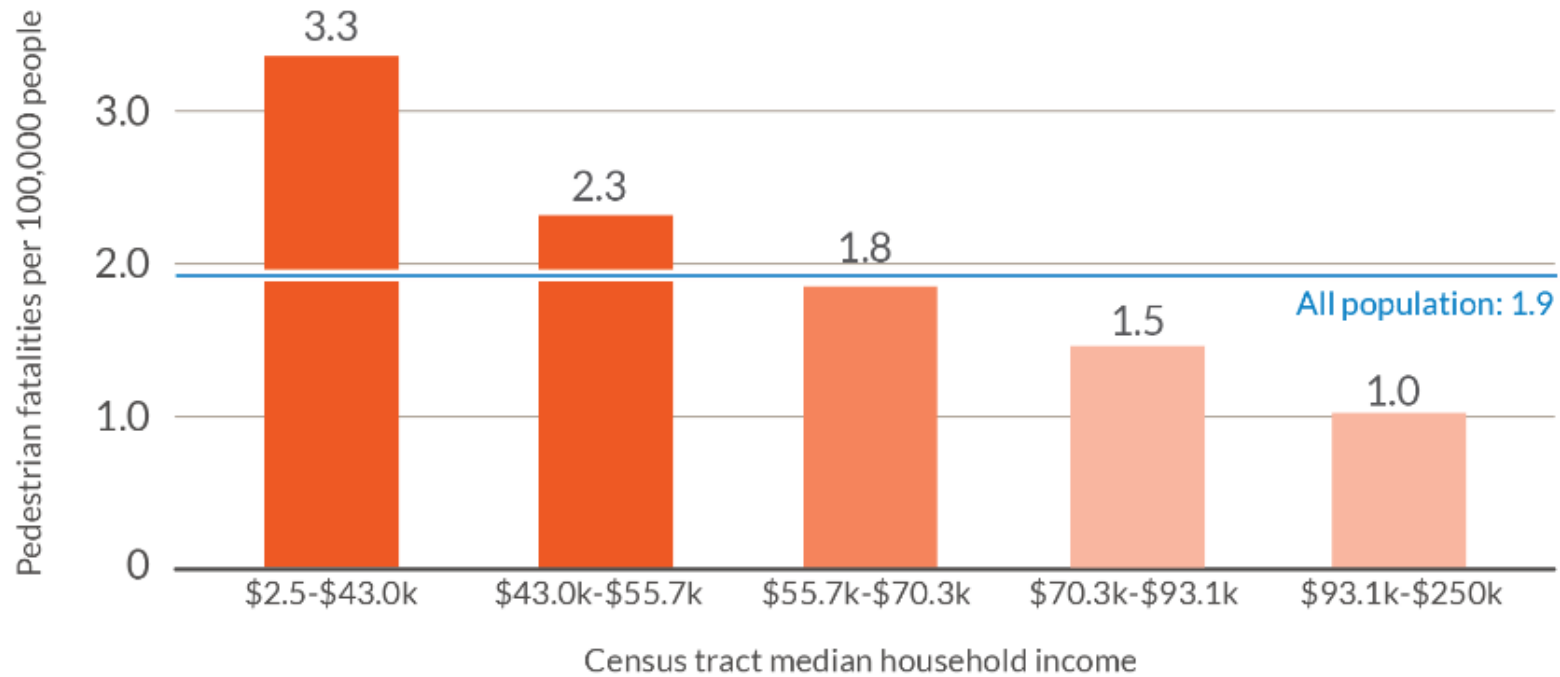
Between
12/2011 - 1/2023

Source: COJ, using Signal 4 Analytics



People walking in lower-income areas are killed at far higher rates

Pedestrian fatalities per 100k people by census tract income



Source: Dangerous by Design 2022

Persons in poverty 2017-2021

14.9%

Source: Census Bureau QuickFacts: census.gov

Median Household Income (in 2021 \$)

\$58,263

Source: Census Bureau QuickFacts: census.gov

Mean travel time to work workers 16+ 2017-2021

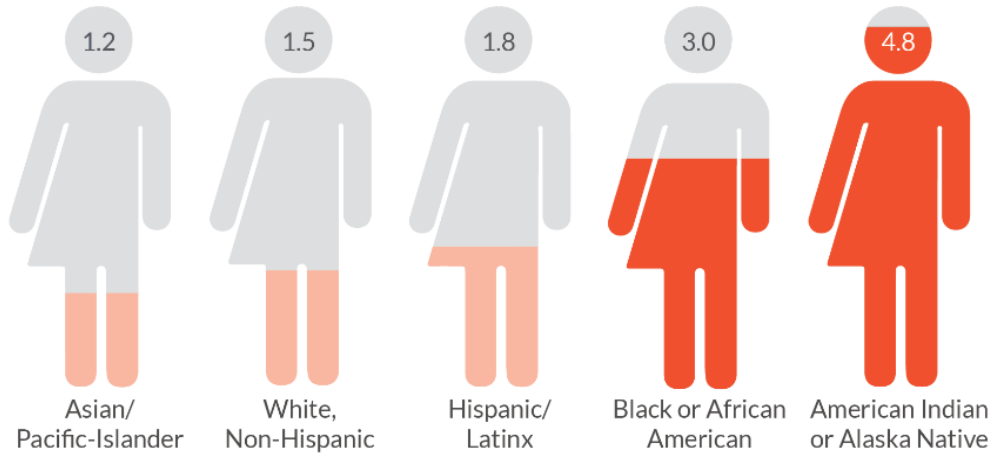
24.6 minutes

Source: Census Bureau QuickFacts: census.gov



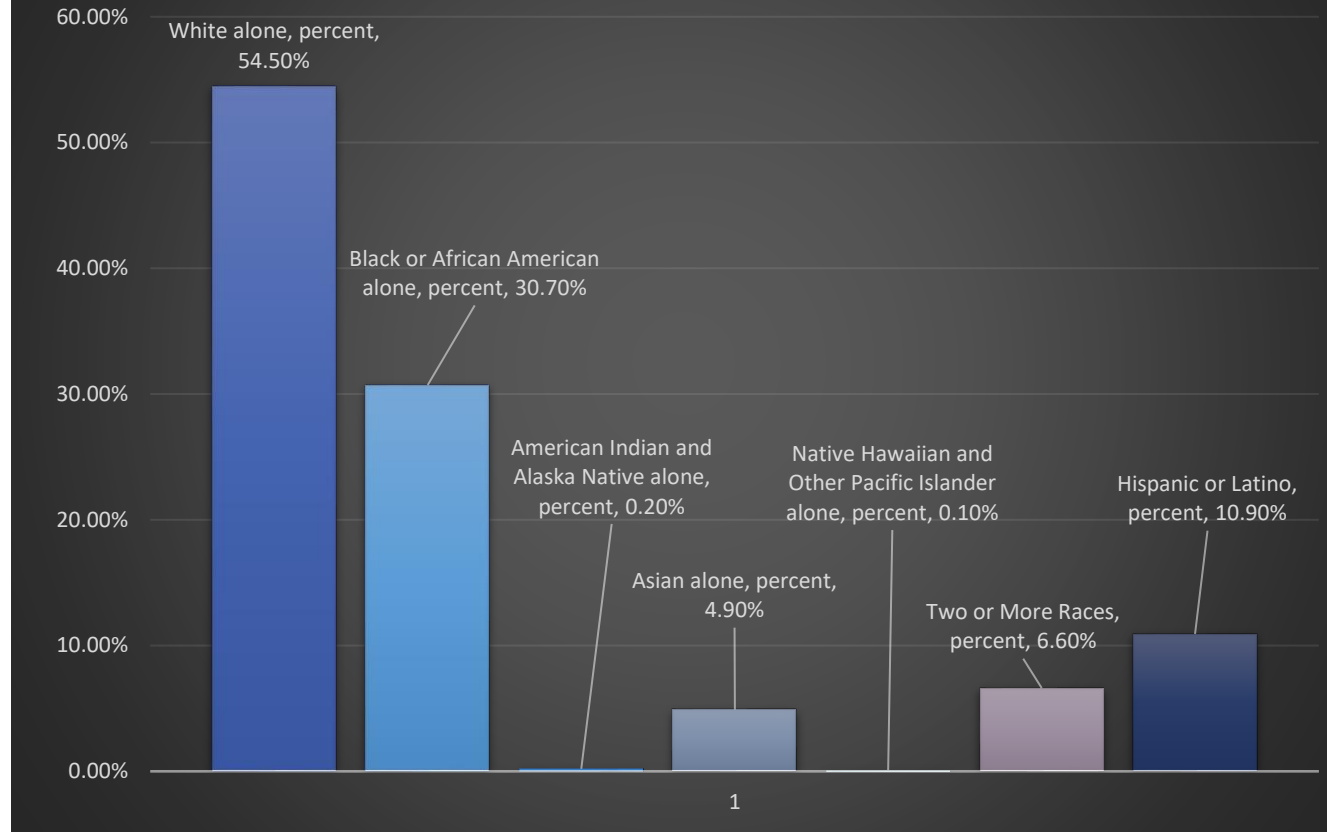
People of color, particularly Native and Black Americans, are more likely to die while walking than any other race or ethnic group

Pedestrian deaths per 100,000 by race & ethnicity (2016-2020)



Source: Dangerous by Design 2022

Racial Demographics in Jacksonville, FL

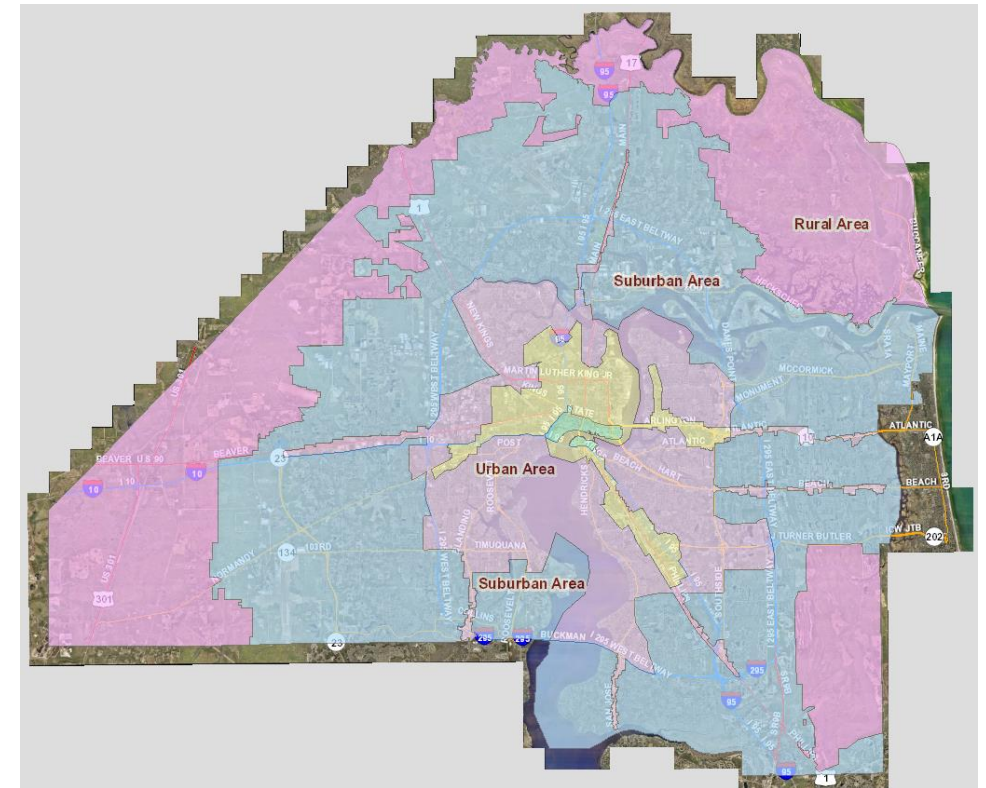


City Sidewalk Ordinances

2.2.2 GENERAL SIDEWALK REQUIREMENTS

Below are the minimum sidewalk width requirements for new and reconstructed streets in each Development Area, unless other specified in 2.2.1 Residential Subdivision Sidewalk Options (Per Sec. 654.133). Refer to the Development Area map for boundaries.

Development Area	Sidewalk Location	Required Sidewalk Width (feet)
Downtown	Both sides of street	8
Urban Priority Area	Both sides of street	8 6
Urban Area	Both sides of street	6
Suburban Area	Both sides of street	6
Rural Area	Both sides of street	5



Source: COJ Ordinances: coj.net/departments/planning-and-development/development-services-division/land-development-procedures-manual



City Sidewalk Ordinances

2.2 SIDEWALKS

2.2.1 RESIDENTIAL SUBDIVISION SIDEWALK OPTIONS

Option A: Provide five-foot (5') wide unobstructed sidewalks on both sides of all local streets, except as follows:

1. A cul-de-sac street with less than 15 lots-sidewalks are not required. (Note: corner lots shall be included in the lot count)
2. Cul-de-sac streets and minor roads that serve between fifteen (15) lots and thirty (30) lots. A five-foot (5') wide sidewalk required on one side.

Option B: Provide a six-foot (6') wide unobstructed sidewalk on one side of the street for all local streets, , as long as the sidewalk establishes good interconnections and is located on the side of the street that will serve the most residential lots.

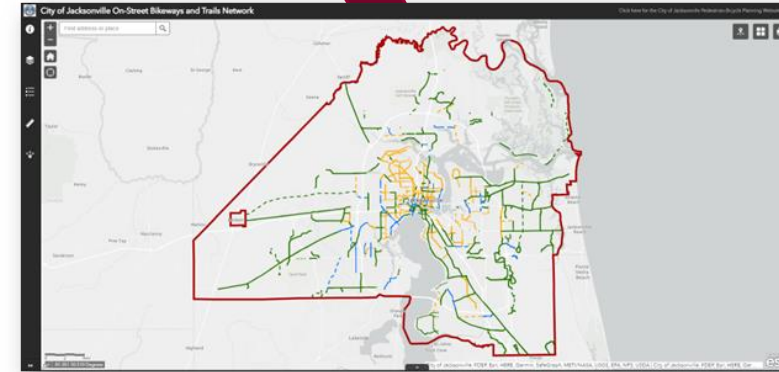
Source: COJ Ordinances: coj.net/departments/planning-and-development/development-services-division/land-development-procedures-manual



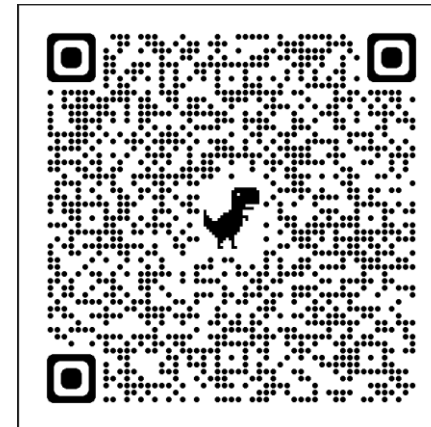
Pedestrian & Bicycle Planning

Bicycle and pedestrian planning are administered by the Transportation Planning Division, Planning and Development Department. Projects, programs, and planning efforts are prioritized to support the expansion of safe, comfortable, and connected bicycle and pedestrian networks, designed to serve users of all ages and abilities. Biking and walking are widely regarded as cost-effective ways to address air quality and mobility issues, while concurrently improving the quality of life.

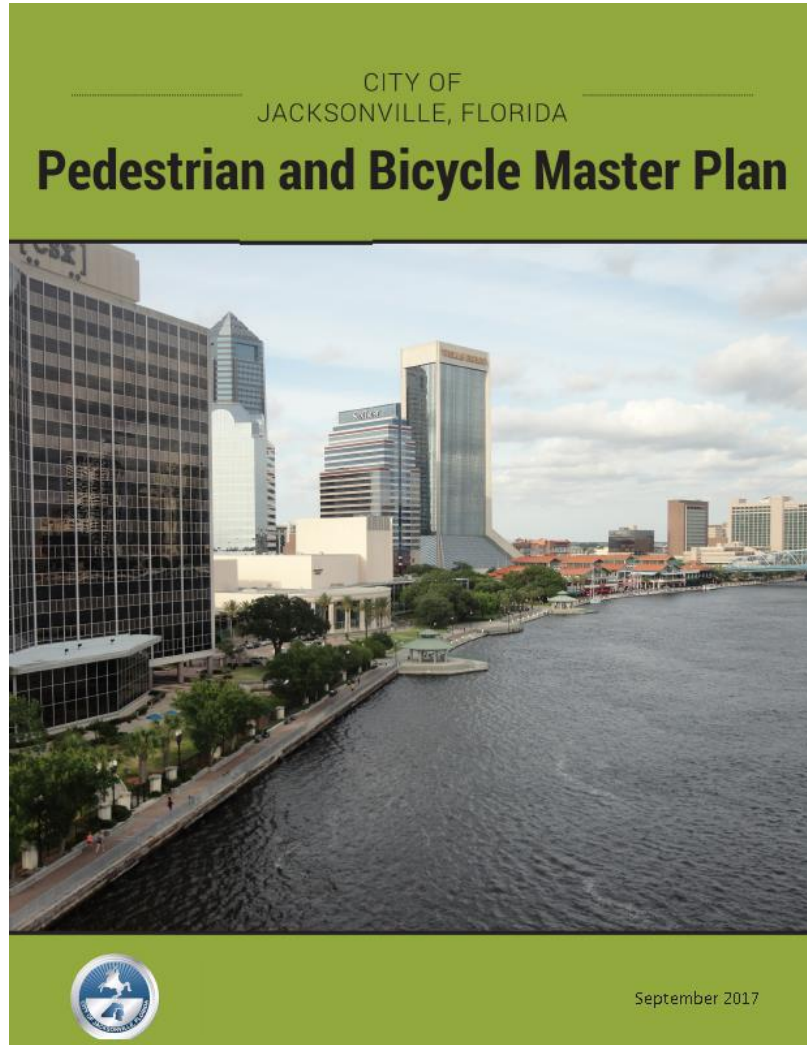
Click on the tiles below for more information on each topic:



COJ.NET/PEDBIKE



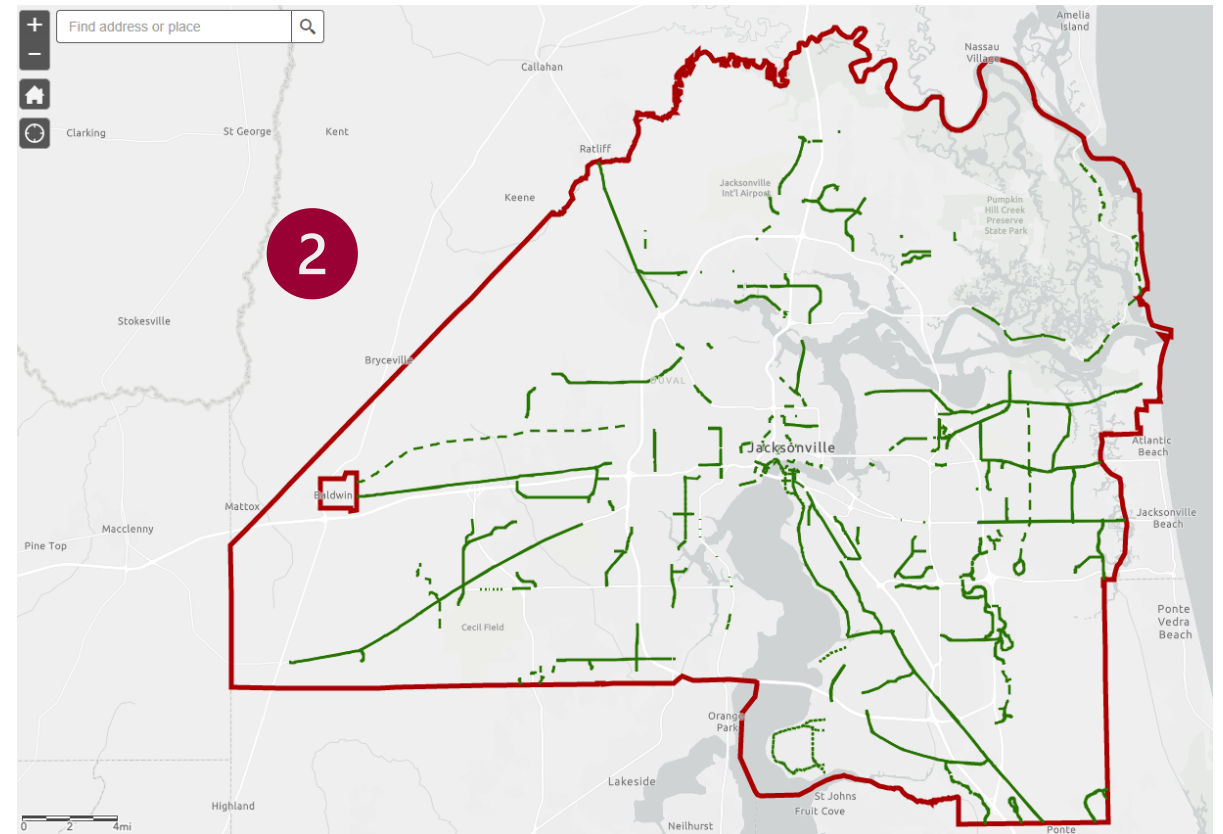
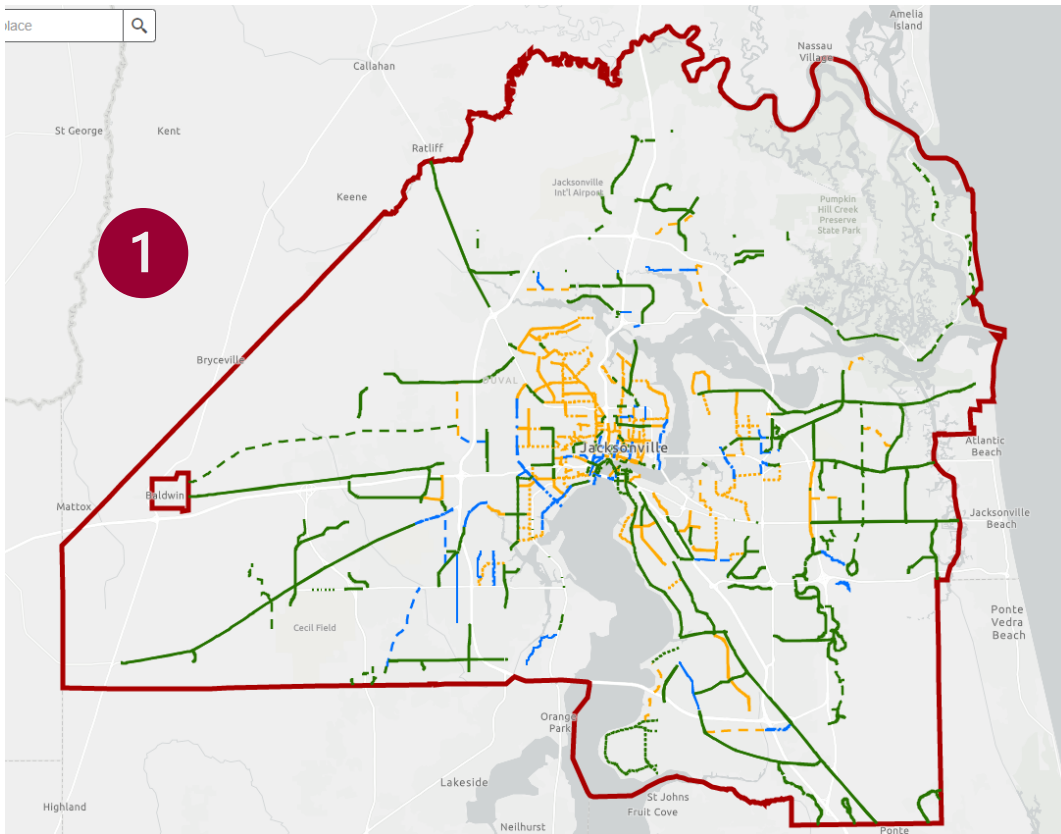
Pedestrian & Bicycle Master Plan



The absence of reliable baseline data on the extent and nature of pedestrian and bicycling infrastructure throughout the city is a significant challenge moving forward. We recommend that the City undertake a comprehensive inventory of sidewalks, crosswalks, shared use paths, and bikeways to facilitate a more deliberate and data-driven approach to completing a bikeway network and improving conditions for walking.



Bikeways and Trails Network Inventory: Holistic Perspective



COJ.NET/PEDBIKE

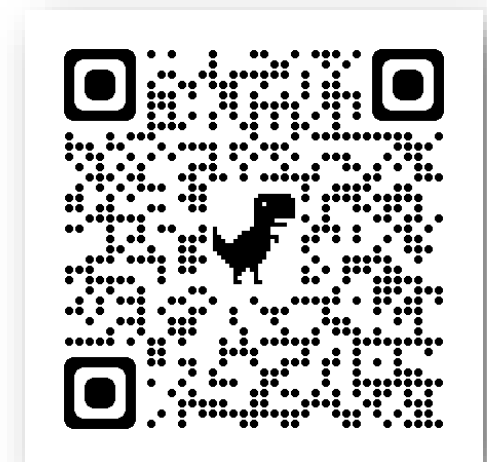




Buffered Bike Lanes	Existing	25.56
	Funded	28.93
	Planned	27.48
		Total 81.97
Protected Bike Lanes	Existing	0.69
	Funded	8.61
	Planned	12.64
		Total 21.93
Shared Lanes	Existing	29.6
	Funded	2.98
	Planned	86.58
		Total 119.16
Shared-Use Paths (Trails)	Existing	55.19
	Funded	22.66
	Planned	39.19
		Total 117.04
Unbuffered Bike Lanes	Existing	442.65
	Funded	27.47
	Planned	76.84
		Total 546.95
Total Mileage of Facilities (E,F,P)		887.05



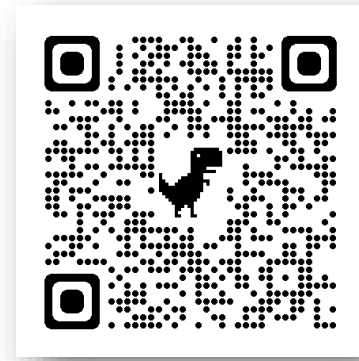
The Emerald Trail: Urban Core Connectivity



Core-2-Coast Connection to the Atlantic



East Coast Greenway: From Maine to Florida



Location of Bicycle/Pedestrian Fatalities and Incapacitating Injuries

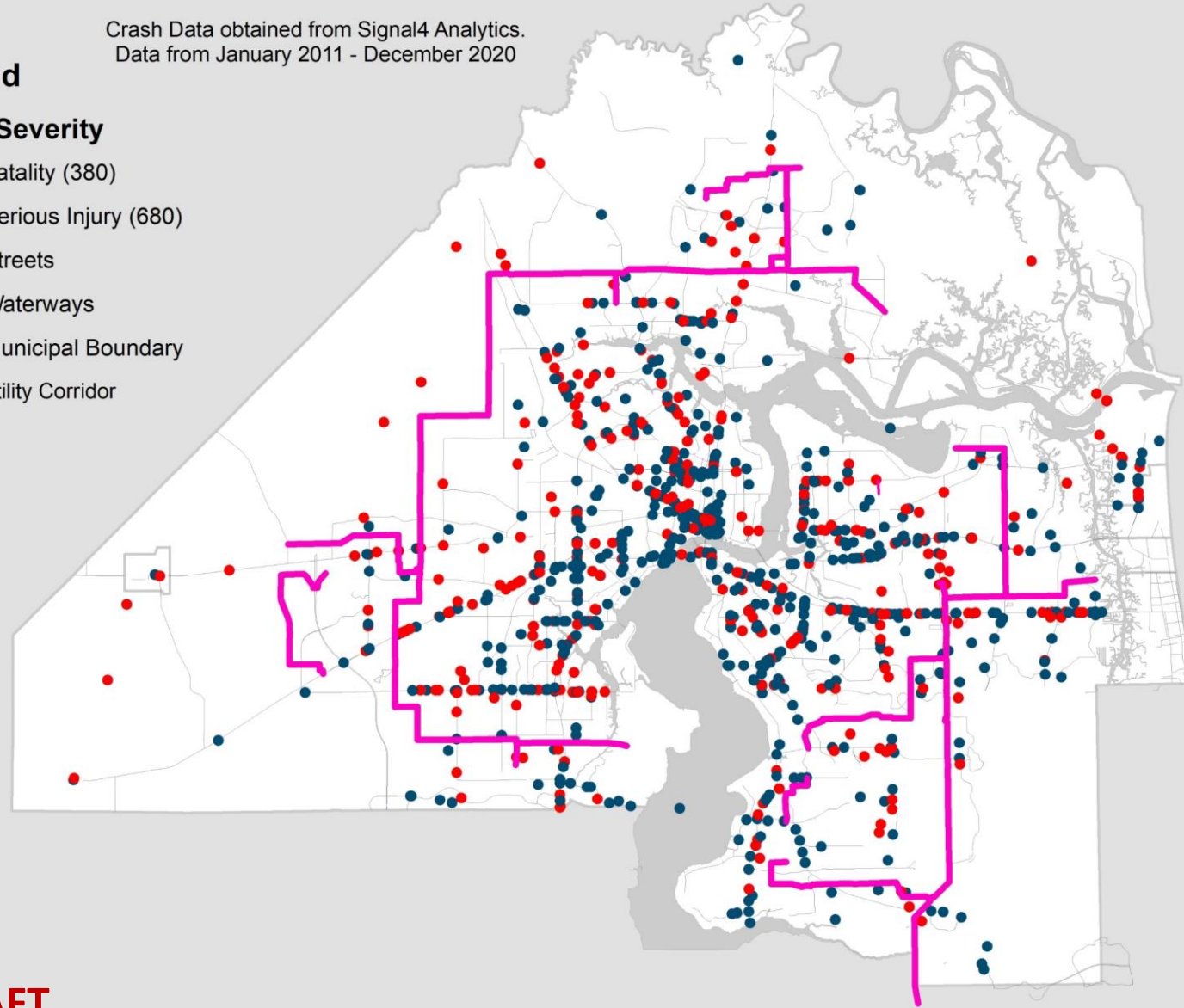
Crash Data obtained from Signal4 Analytics.
Data from January 2011 - December 2020



Legend

Crash Severity

- Fatality (380)
- Serious Injury (680)
- Streets
- Waterways
- Municipal Boundary
- Utility Corridor

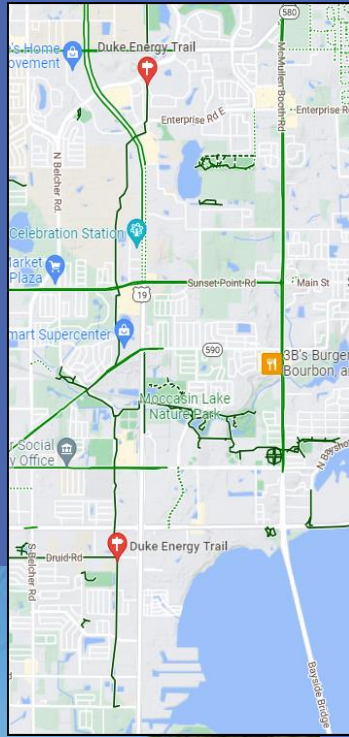


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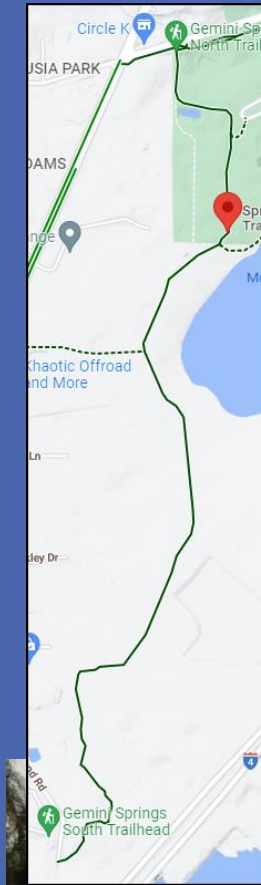
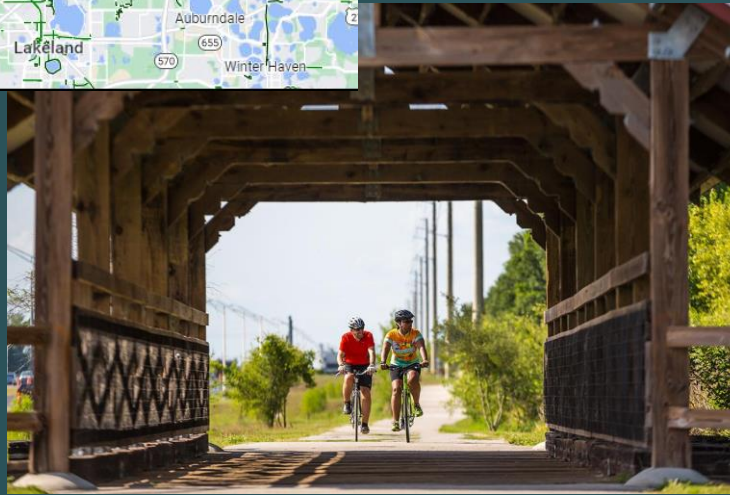
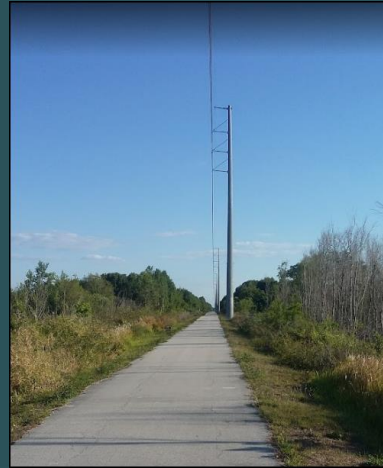
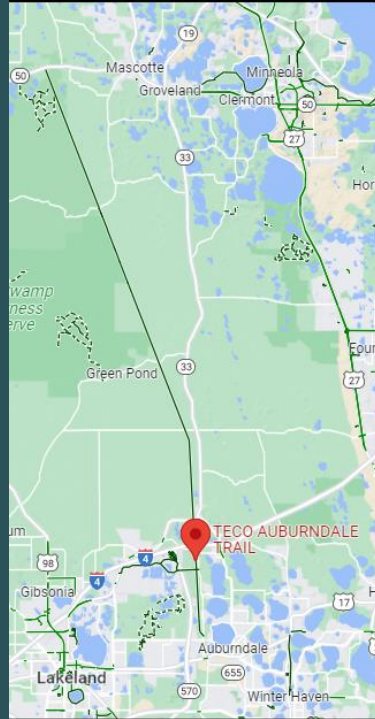




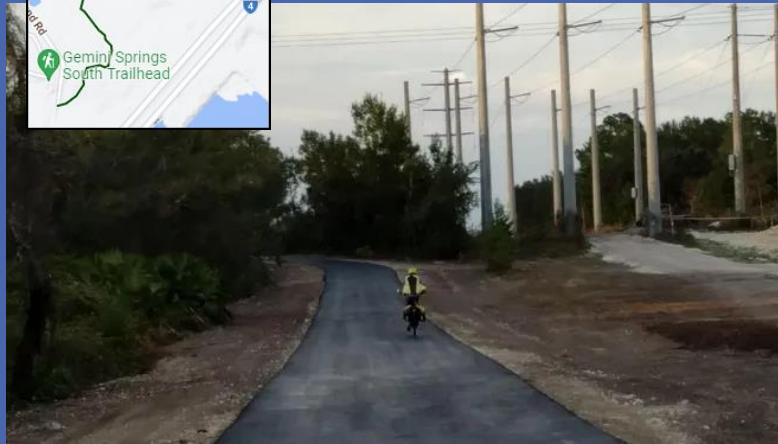
**PINELLAS COUNTY, FLORIDA:
DUKE ENERGY TRAIL: 4.1 MILES**



**AUBURNDALE, FLORIDA: TECO
GAS AUBURNDALE TRAIL:
6.6 MI**

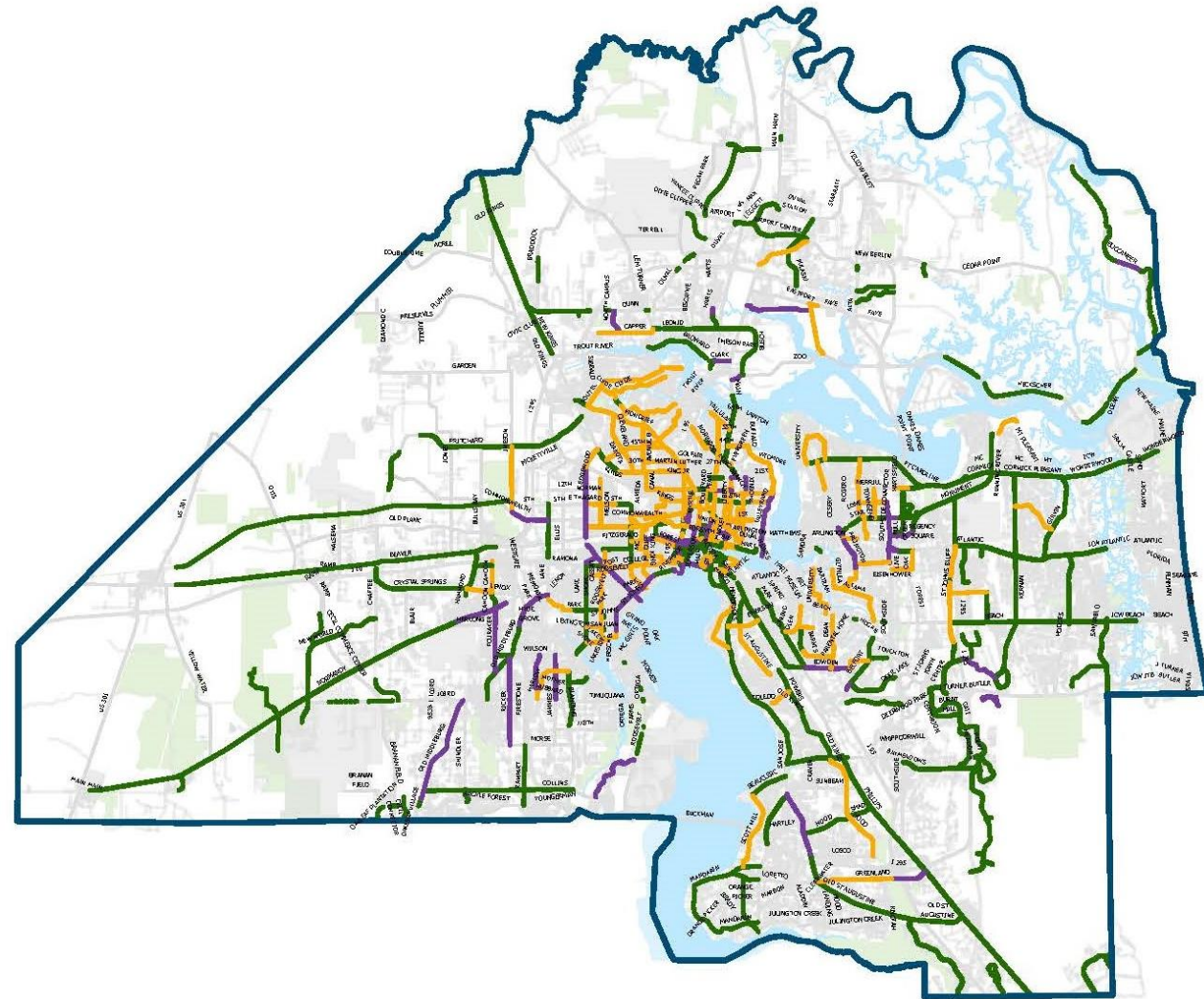


**VOLUSIA COUNTY,
FLORIDA:
SPRING-TO-SPRING
TRAIL: VARIES**



Goals & Performance Targets:

- Expand the On-Street Bikeway and Trails (shared-use paths) network by 333.38-Lane Miles by the year 2027
- Add buffers to existing unbuffered bike lanes and upgrade existing buffered lanes to protected lanes
- Expand Safe Routes to School Program citywide
- Continue to analyze the use of utility corridors to be used for shared-use paths





Goals & Performance Targets:

- Develop & implement a Vision Zero Action Plan
- Support micromobility and bicycle share programs
- Complete targeted corridor safety studies
- Complete first/last mile studies to transit



Context Sensitive Streets Standards Committee (CSSSC)

Background:

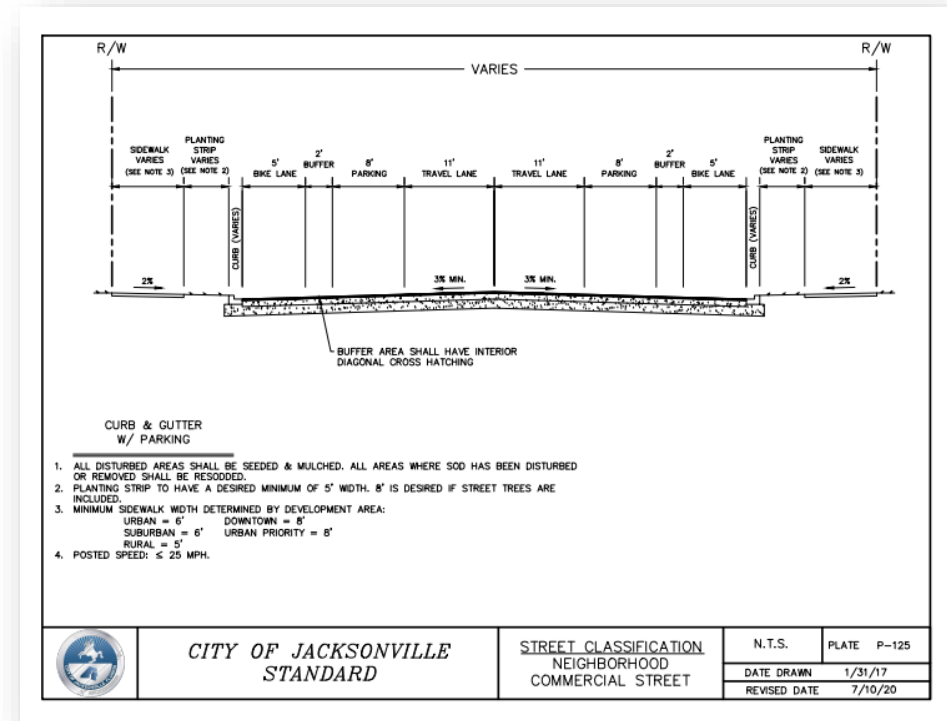
13-Member committee established by Ordinance 2013-185-E

Purpose:

Created to review and revise City standard specifications, City standard details and the Land Development Procedures Manual (LDPM) and recommend amendments to the Ordinance Code and 2030 Comprehensive Plan relating to transportation, traffic engineering and roadway design, including but not limited to parking, sidewalks, bicycle and pedestrian use and transit, and advise the appropriate Council committee of its decisions

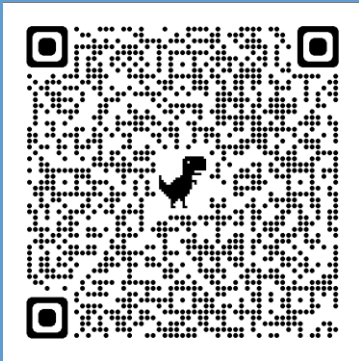
Deliverables:

Typical cross sections now included in the LDPM



On the Ground

As COJ's active transportation needs grow, groups like the **Bicycle Pedestrian Advisory Committee (BPAC)** continue to be critical advocates for bike-ped programs and projects





CONTACT:

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