

# Vision 2050: Resilient

<ul> <li>Goal: Resilient</li> <li>Objective R.1: Protect critical infrastructure from future disruptions du Strategy R.1a: Harden or sustainably replace at-risk critical infras Strategy R.1b: Right size transportation infrastructure to reduce fu Strategy R.1c: Prioritize improvements along evacuation routes th or response to extreme weather events.</li> <li>Strategy R.1d: Leverage green infrastructure to reduce environment facilities.</li> <li>Objective R.2: Promote compact, walkable, mixed-use development and in that encourage a range of transportation options and imp Strategy R.2a: Support transit-oriented development in infill or key Strategy R.2b: Avoid projects with adverse environmental impacts Strategy R.2c: Cultivate livable transportation environments that a vibrant.</li> <li>Objective R.3: Ensure equity is factored into programming, planning ar Strategy R.3a: Identify and eliminate transportation barriers affect populations.</li> <li>Strategy R.3b: Ensure that projects do not disproportionately burde communities.</li> <li>Objective R.4: Reduce the carbon footprint of the transportation syster Strategy R.4a: Leverage federal best practices such as buy local.</li> <li>Strategy R.4b: Incentivize purchasing of alternate fuel vehicles.</li> <li>Strategy R.4c: Deploy electric vehicle charging infrastructure.</li> <li>Strategy R.4d: Incentivize a shift from driving alone to travel via alt options.</li> </ul>		
Strategy R.1a:Harden or sustainably replace at-risk critical infras Strategy R.1b:Right size transportation infrastructure to reduce fu Strategy R.1c:Prioritize improvements along evacuation routes th or response to extreme weather events.Strategy R.1d:Leverage green infrastructure to reduce environmen facilities.Objective R.2:Promote compact, walkable, mixed-use development and in that encourage a range of transportation options and imp Strategy R.2a:Support transit-oriented development in infill or key Strategy R.2b:Avoid projects with adverse environmental impacts Strategy R.2c:Objective R.3:Ensure equity is factored into programming, planning ar Strategy R.3a:Identify and eliminate transportation barriers affect populations.Strategy R.3b:Strategy R.4a:Leverage federal best practices such as buy local. Strategy R.4a:Objective R.4:Reduce the carbon footprint of the transportation syster Strategy R.4a:Diffective R.4:Deloy electric vehicle charging infrastructure. Strategy R.4d:Incentivize purchasing of alternate fuel vehicles. Strategy R.4d:Deloy electric vehicle charging infrastructure.		
<ul> <li><u>Strategy R.1d</u>: Leverage green infrastructure to reduce environmen facilities.</li> <li><u>Objective R.2</u>: Promote compact, walkable, mixed-use development and rethat encourage a range of transportation options and important strategy R.2a: Support transit-oriented development in infill or key Strategy R.2b: Avoid projects with adverse environmental impacts Strategy R.2c: Cultivate livable transportation environments that a vibrant.</li> <li><u>Objective R.3</u>: Ensure equity is factored into programming, planning an Strategy R.3a: Identify and eliminate transportation barriers affect populations.</li> <li><u>Strategy R.3b</u>: Ensure that projects do not disproportionately burde communities.</li> <li><u>Objective R.4</u>: Reduce the carbon footprint of the transportation syster Strategy R.4a: Leverage federal best practices such as buy local. Strategy R.4b: Incentivize purchasing of alternate fuel vehicles. Strategy R.4d: Deploy electric vehicle charging infrastructure. Strategy R.4d: Incentivize a shift from driving alone to travel via alternate fuel via alternate</li></ul>	<u>Strategy R.1b</u> : F <u>Strategy R.1c</u> : F	Right size transportation infrastructure to reduce fur Prioritize improvements along evacuation routes the second s
<ul> <li>that encourage a range of transportation options and imp <u>Strategy R.2a</u>: Support transit-oriented development in infill or key <u>Strategy R.2b</u>: Avoid projects with adverse environmental impacts <u>Strategy R.2c</u>: Cultivate livable transportation environments that a vibrant.</li> <li><u>Objective R.3</u>: Ensure equity is factored into programming, planning ar <u>Strategy R.3a</u>: Identify and eliminate transportation barriers affect populations.</li> <li><u>Strategy R.3b</u>: Ensure that projects do not disproportionately burde communities.</li> <li><u>Objective R.4</u>: Reduce the carbon footprint of the transportation syster <u>Strategy R.4a</u>: Leverage federal best practices such as buy local.</li> <li><u>Strategy R.4a</u>: Incentivize purchasing of alternate fuel vehicles. <u>Strategy R.4d</u>: Incentivize a shift from driving alone to travel via alternate</li> </ul>	Strategy R.1d: L	everage green infrastructure to reduce environmen
Strategy R.3a:Identify and eliminate transportation barriers affect populations.Strategy R.3b:Ensure that projects do not disproportionately burde communities.Objective R.4:Reduce the carbon footprint of the transportation syster Strategy R.4a:Strategy R.4a:Leverage federal best practices such as buy local. Incentivize purchasing of alternate fuel vehicles.Strategy R.4b:Incentivize purchasing of alternate fuel vehicles. Deploy electric vehicle charging infrastructure. Incentivize a shift from driving alone to travel via all	that e <u>Strategy R.2a</u> : S <u>Strategy R.2b</u> : A <u>Strategy R.2c</u> : C	ncourage a range of transportation options and imp Support transit-oriented development in infill or key woid projects with adverse environmental impacts Cultivate livable transportation environments that a
<u>Objective R.4</u> : Reduce the carbon footprint of the transportation system <u>Strategy R.4a</u> : Leverage federal best practices such as buy local. <u>Strategy R.4b</u> : Incentivize purchasing of alternate fuel vehicles. <u>Strategy R.4c</u> : Deploy electric vehicle charging infrastructure. <u>Strategy R.4d</u> : Incentivize a shift from driving alone to travel via al	<u>Strategy R.3a</u> : Io p <u>Strategy R.3b</u> : E	dentify and eliminate transportation barriers affect oopulations. Ensure that projects do not disproportionately burde
	Objective R.4: Reduce Strategy R.4a: L Strategy R.4b: In Strategy R.4c: D Strategy R.4d: In	ce the carbon footprint of the transportation syster everage federal best practices such as buy local. ncentivize purchasing of alternate fuel vehicles. Deploy electric vehicle charging infrastructure. ncentivize a shift from driving alone to travel via al

lue to climate impacts. structure.

future risk and carrying cost. hat enhance preparation for

ental impacts of transportation

dredevelopmentopportunities nproved public health. ey growth areas.

5.

are safe, comfortable and

and design. cting low income and minority

den historically disadvantaged

m.

lternative transportation

# Resilient

Federal F
Pavement:
Interstate in Good Condition
Interstate in Poor Condition
Non-Interstate NHS in Good Condition
Non-Interstate NHS in Poor Condition
Bridges:
NHS bridges in Good Condition
NHS bridges in Poor Condition
Federal Performance N
Percentage of Palm Tran infrastructure exceeding u
Vehicles - Articulated Bus (> 14 yrs old)
Vehicles - Fixed Route Bus (> 14 yrs old)
Vehicles - Cutaway Bus (> 10 yrs old)
Equipment - Automobiles (> 4 yrs old or 100,000 r
Equipment - Trucks (> 4 yrs old or 100,000 miles)
Facilities (<2.5 on 1-5 scale)
Percentage of Tri-Rail infrastructure exceeding usef
Equipment - Support & Maintenance Vehicles (>8
Equipment - Other vehicles (<2.5 on 1-5 scale)
Rolling stock - locomotives, coach cars, self-prope
Rolling Stock - cutaway buses (>10 yrs old)
Percentage of Tri-Rail facilities with poor condition (
Passenger Terminals
Maintenance Facilities
Administrative Offices
Rail fixed-guideway track with performance restri
TPA
Daily fuel use (gal) per person
Daily Vehicle Miles Traveled per person
% electric vehicles in rubber-tire transit fleet
Percentage of federal aid eligible mileage susceptia
1.2-ft sea level rise & historic storm surge

1% chance of annual flooding

Vision 2050 F	
At-threat facilities improved	Purpose: Mo
Corridor EV-charging station	Purpose: Mo

# Questions or Comments?



https://arcg.is/1WiCfW0

#### Performance Measures (PM2)

Measures (Transit Asset Management Plan)

useful life for:

miles)

eful life for:

yrs old)

elled cars (>39 yrs old)

(<2.5 on 1-5 scale)

rictions

A Performance Measures

able to inundation by:

formance Measures for Consideration

Aonitor threatened facilities and progress toward resilient infrastructure. Aonitor progress building out alternative fuel corridors.



# Vision 2050: Safe, Efficient

# Goal: Safe

**Objective S.1**: Eliminate transportation related serious injuries and fatalities. <u>Strategy S.1a</u>: Implement the TPA Vision Zero Action Plan and Complete Streets Policy. **<u>Strategy S.1b</u>**: Identify and prioritize projects on the High Injury Network. <u>Strategy S.1c</u>: Address transportation barriers in historically disadvantaged communities. **Strategy S.1d**: Leverage innovation and technology with demonstrated safety benefits.

**Objective S.2**: Support regional adoption of safety policies and plans. Strategy S.2a: Establish and implement Vision Zero and Complete Streets policies & plans. Strategy S.2b: Utilize a Safe System decision-making framework in planning & design.

**Objective S.3**: Support emergency management functions including evacuation, response, and post-disaster recovery.

**Strategy S.3a**: Consider projects that maintain or enhance evacuation routes.

<u>Objective S.4</u>: Enhance the safety and security of transit, rail, and other multimodal facilities. Strategy S.4a: Improve existing rail grade crossings with a crash history. Strategy S.4b: Improve bus terminals and stop areas.

<u>Strategy S.4c</u>: Develop microtransit and mobility hubs throughout the county.

# Safe

Federal Performance Measures (PM1)

Number of fatalities

Rate of fatalities per 100 million vehicle miles traveled (VMT)

Number of serious Injuries

Rate of serious injures per 100 million (VMT)

Number of non-motorized fatalities & serious injuries combined

**TPA Performance Measures** 

Number of rail fatalities

Palm Tran Fixed Route & Paratransit Safety

N	vision 2050 Performance Measures for Consideratio
	Purpose:
Safety projects along the HIN	Track safety improvements made to high-crash roa
Tactical interventions in HIN	Track immediate, low-cost interventions on high-cr
Partner safety & complete streets resolutions and action plans	Track safety culture in TPA planning area.
Equity based projects programmed	Track investments in historically disadvantaged cor
Rail crossings improved	Track safety improvements to multimodal railroad
Rail crossings grade separated	Track elimination of at-grade railroad crossings.

ad segments.

crash roads.

### ommunities.

crossings.

# Goal: Efficient

<u> Objective E.1</u> : Prov	vide more efficient use
Strategy E.1a:	Repurpose existing ro
	and mobility for all us
Strategy E.1b:	Implement Transporta
	along congested corrig

**Objective E.2**: Address capacity constraints of the existing transportation system.

transportation system.

efficiency, and convenience. **Strategy E.3a:** Prioritize transit frequency and reliability with technology.

with transportation options.

**<u>Strategy E.4a</u>**: Study and improve transit operations.

**Objective E.5:** Incentivize reduced travel demand during peak periods.

# Efficiency

Percent of reliable person-miles traveled on the Interstate Percent of reliable person-miles traveled on the non-Interstate NHS Truck travel time reliability ratio (TTTR) on the Interstate

Ratio of transit v. car average commute time

Passenger trips per revenue hour:

for Tri-Rail service

for Palm Tran fixed route service

Vision	2050 Per
	Purpose:
Corridors or Routes improved	Track TSN
Households (or Population) served by High-frequency transit	Monitor th
Households (or Population) within First- mile and Last-mile service areas	Monitor th transit, or
Mobility service area coverage	Monitor a services l
Trips taken via alternative transportation modes	Monitor tr

## **Questions or** Comments?



https://arcq.is/1WiCfW0

- and operation of the transportation system. oad space to support economic development, safety sers. tation Systems Management & Operation (TSM&O) along congested corridors, with priority to non-urban centers.
- Strategy E.2a: Identify strategies to improve traffic operation at bottlenecks in the
- **<u>Strategy E.2b</u>**: Add or expand facilities for sustainable modes.
- <u>Objective E.3</u>: Improve public transit, micromobility, and transportation service reliability,

  - **<u>Strategy E.3b</u>**: Provide real-time transportation information & displays.</u>
- **Objective E.4**: Address the economic barrier of automobile ownership and dependence

  - Strategy E.4b: Provide first-mile and last-mile travel solutions.
  - <u>Strategy E.4c</u>: Prioritize transportation opportunity in infill or key growth areas that support new workforce and affordable housing.
  - Strategy E.5a: Leverage transportation demand management (TDM) tools & programs to redistribute demand across space and time.

### Federal Performance Measures (PM3)

**TPA Performance Measures** 

### formance Measures for Consideration

M&O or Complete Streets networks.

the proportion of population with nearby access to frequent transit.

the proportion of population with access to services like on-demand r micromobility.

areas with higher daytime population (ie. offices, retail) with access to like on-demand transit, or micromobility.

trends in walking, bicycling, micromobility over time.



# Vision 2050: Connected, Multimodal

## Goal: Connected

**Objective C.1**: Provide a range of interconnected transportation options to improve accessibility and mobility for all residents, workers, and visitors. Strategy C.1a: Address the unique needs of the elder population, people with disabilities, and those unable to drive. Strategy C.1b: Provide a complete, comfortable network of accommodations for walking, bicycling and micromobility access. **Objective C.2**: Fill gaps in multimodal transportation facilities. Strategy C.2a: Construct the Tier 1 bike/ped network. Strategy C.2b: Improve accessibility between transit or schools and surrounding land uses. **Objective C.3**: Deploy connected technology to enhance traffic operations. Strategy C.3a: Implement emergency vehicle preemption & transit signal and freight priority. Strategy C.3b: Deploy innovative connectivity and monitoring technologies across a complete communications network. <u>Objective C.4</u>: Increase availability of transportation information to support trip decision-making. Strategy C.4a: Provide real time transit, micromobility or other alternative transportation data. Strategy C.4b: Integrate information of all service options under a common platform. <u>Objective C.5</u>: Improve intermodal links that support freight and tourism **<u>Strategy C.5a</u>**: Target bottlenecks accessing intermodal ports.

# Connected

Federal Performance Measures

#### None

#### TPA Performance Measures

Centerline mileage of federal aid eligib	ole roadways that include:	
Separated bike lanes		
10-ft or wider shared use pathways		
8 to 9-ft paved pathways		
Buffered bike lanes		
Designated bike lanes		
Sidewalks		
Percentage of federal aid eligible milea	age with:	
Bicycle facilities within 3 miles of a transit hub		
Pedestrian facilities within 1 mile of a transit hub		
Pedestrian facilities within 2 miles of elementary schools		
Pedestrian facilities within 1/4 mile	of a traditionally underserved community	
Visi	ion 2050 Performance Measures for Consideration	
	Purpose:	
Tier 1 network completeness index	Monitor completeness of TPA's Tier 1 pedestria	
Transit/School connectivity index	Monitor completeness of TPA's Tier 1 networks schools. Measurement may be limited to a spe	
Corridors connected	Track TSM&O networks with connectivity element	
Intersections connected	Track TSM&O nodes with connectivity elements	
Transit stops/stations connected	Track bus stops or rail stations with connectivi	
On-demand use data	Monitor trends in on-demand mobility servies	

Contonline miles as of fode well aid aligible we advecte that include

ian and bicycle networks. ks within proximity of bus stops or ecific area. nents.

ity elements.

over time.

# Goal: Multimodal

for <u>Strategy M.1a</u> : <u>Strategy M.1b</u> :	elop a transportation s all users, including the Identify and prioritize bicycling, and transit. Expand mobility servio
	Enhance connectivity
Strategy M.2a:	ommodate low-stress Provide separation be or micromobility trave
<u>Strategy M.2b</u> :	Improve comfort for tr
	ance multimodal optio Implement complete a

# Multimodal

Fede	r
lone	
TP	A
Valking	
Biking	
ransit	
Annual tonnage of freight for:	
Port of Palm Beach	
Palm Beach International Airport	
Vision 2050 Per	f
ow-stress pedestrian/bicycle facilities provided	F t
lobility service area coverage	F

Corridors w/ frequent & reliable transit



## Questions or **Comments?**



https://arcq.is/1WiCfW0

- system that improves regional accessibility and mobility movement of goods.
- projects that increase commuter mode split for walking,
- ice options in dense activity centers and active corridors. between activity centers via alternative modes.
- travel by sustainable modes.
- etween vehicular traffic and facilities for walking, bicycling
- ransit riders with shelter and other amenities.
- ons in urban centers with persistent congestion
- and comfortable networks of sidewalks and bike lanes.
- Strategy M.3b: Support first-mile and last-mile transportation services.

al Performance Measures

Performance Measures

#### ormance Measures for Consideration

Purpose: Combined measure of various pedestrian or bicycle facilities that are comfortable and convenient for travel. Purpose: Physical areas where services like on-demand transit, or

micromobility are provided. This is a sub-set of the proposed Efficiency measure which considers households or population within the area.

Purpose: Track progress of the 561 corridors.