

The Florida Senate  
**COMMITTEE MEETING EXPANDED AGENDA**

**TRANSPORTATION**  
**Senator Harrell, Chair**  
**Senator Perry, Vice Chair**

**MEETING DATE:** Tuesday, October 12, 2021  
**TIME:** 3:30—5:30 p.m.  
**PLACE:** *Toni Jennings Committee Room*, 110 Senate Building

**MEMBERS:** Senator Harrell, Chair; Senator Perry, Vice Chair; Senators Berman, Bracy, Gainer, Jones, Rodriguez, and Wright

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
	Update on Digital Driver Licenses and Identification Cards by the Department of Highway Safety and Motor Vehicles		Presented
	Presentation on Transportation Infrastructure Resiliency by the Department of Transportation		Presented
	Other Related Meeting Documents		

**Smart.  
Secure.  
Convenient.**



Senate Transportation Committee | 12 October 2021

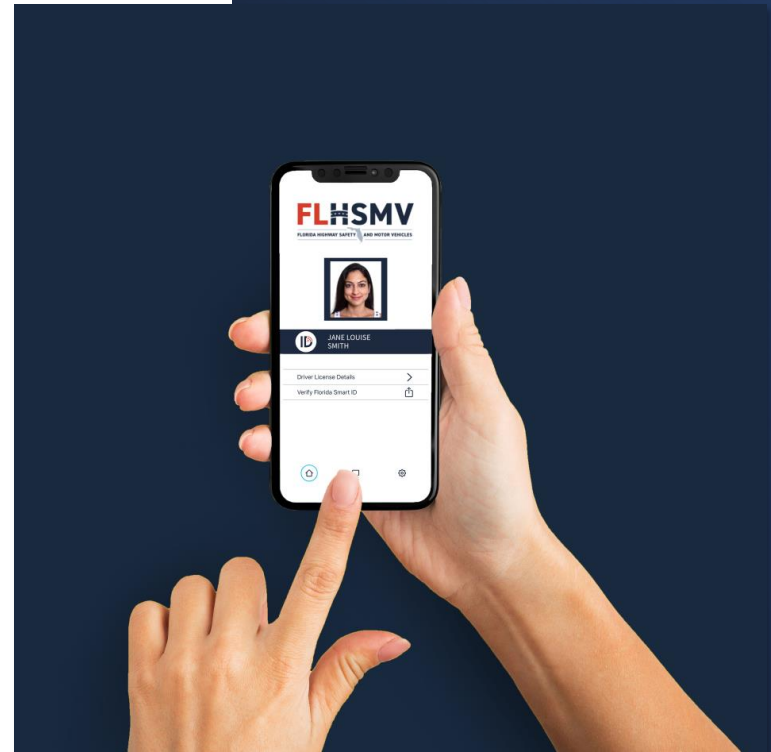
# Florida Smart ID

- Application-based version of driver license (DL) or identification card (ID). Not a digital image of DL/ID.
- Must be used with a Verifier app.
- Meets American Association of Motor Vehicle Administrators (AAMVA) and International Organization for Standardization (ISO) standards.
- For use on iOS and Android smart devices (phones and tablets).
- Will be available in the App Store and Google Play.

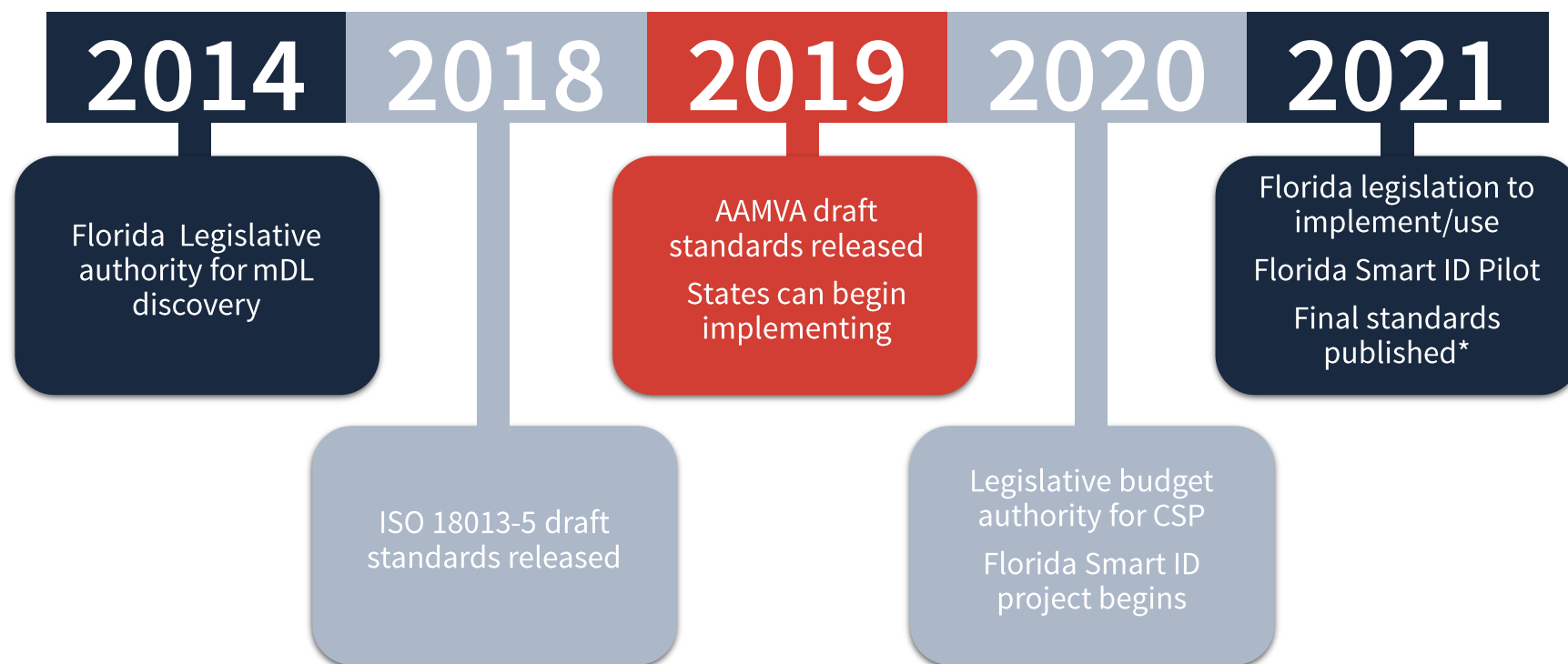


# Benefits

- Convenient ***option*** for proof of age or driving privilege.
- DL/ID credential required by law.
- Up-to-date status verified by FLHSMV.
- Can't be faked or falsified.
- Consent-based...***only show what they need to know.***
- Contactless communication (device never leaves your hand).
- Will be expanded for more use cases.



# Timeline



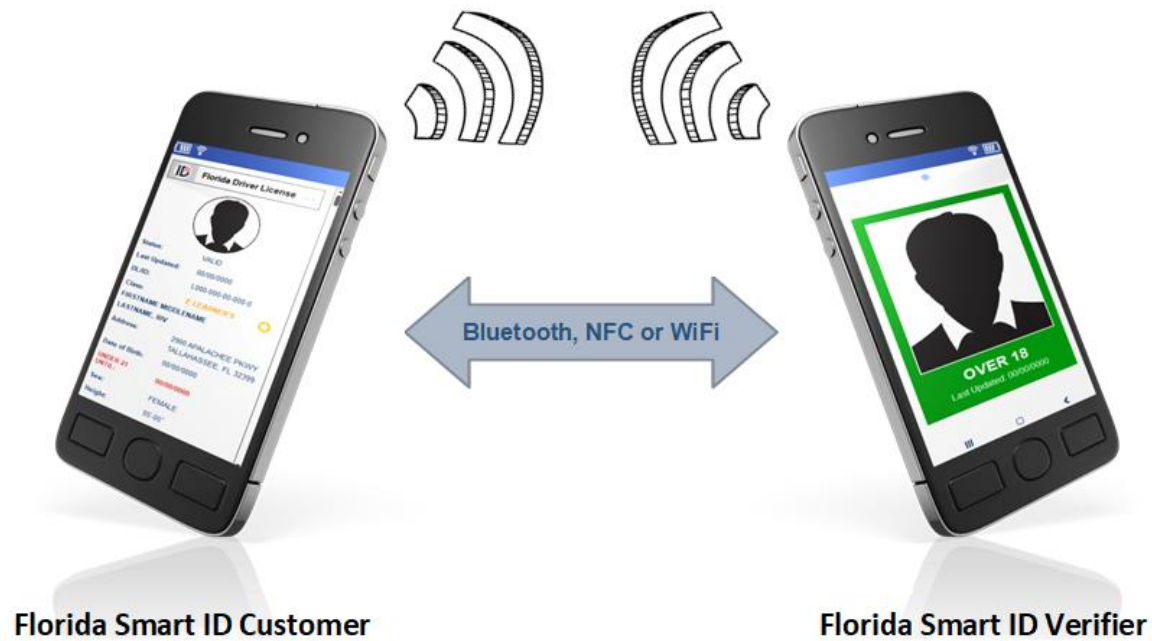
*\*ISO 18013-5 final and AAMVA implementation guidelines ETA 10/2021.*

A photograph showing two people's hands holding smartphones. Both screens display the LHSMV app interface, which includes the text 'LHSMV FLORIDA HIGHWAY SAFETY AND MOTOR VEHICLES' and 'Present this QR code to be verified'. A QR code is visible on each screen. Below the QR code, there are buttons for 'Verify', 'Create', 'Offline Law Enforcement', and 'Online Law Enforcement'. The background is slightly blurred, showing a brown paper bag and some greenery.

How does it work?

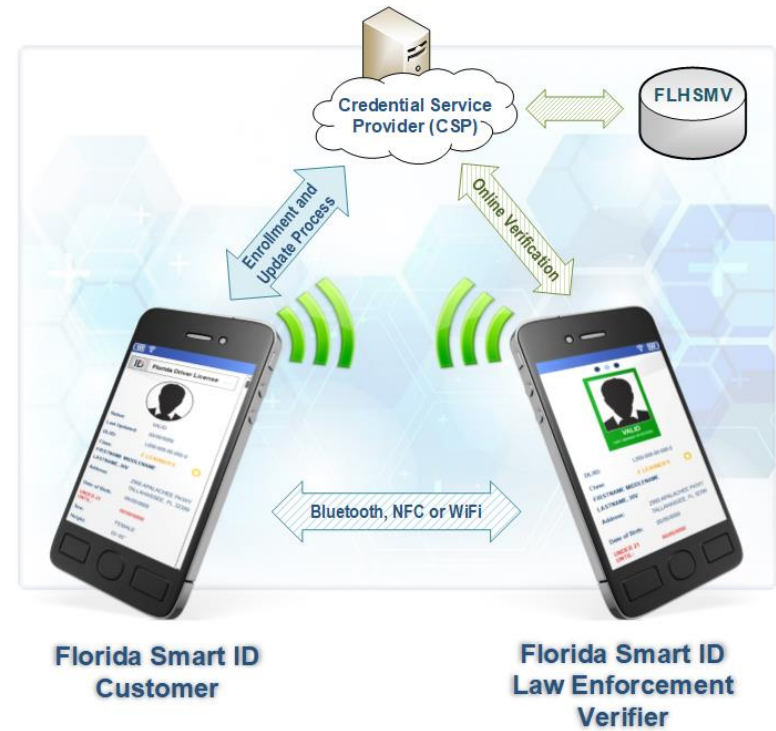
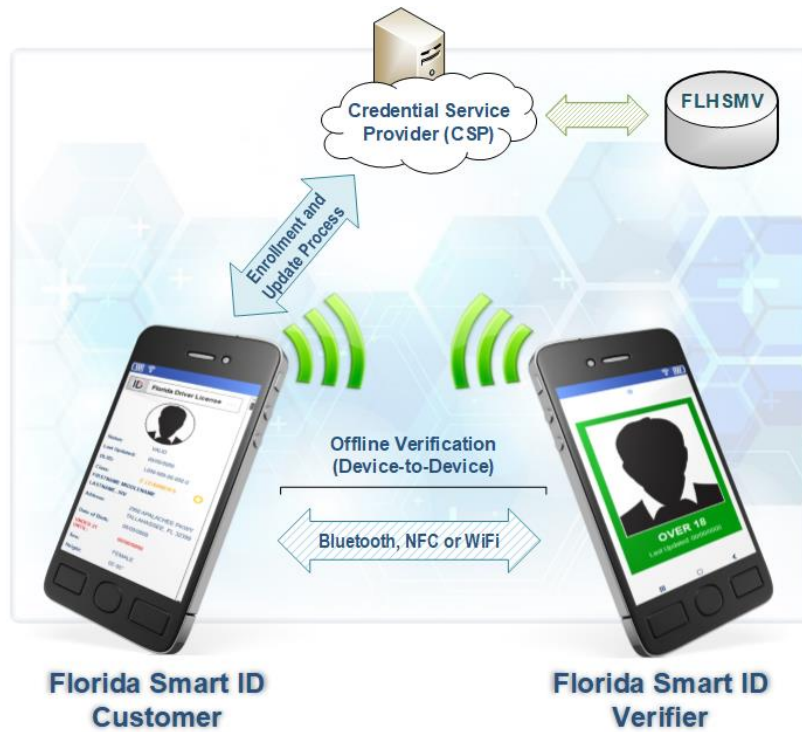
# The Handshake (device to device)

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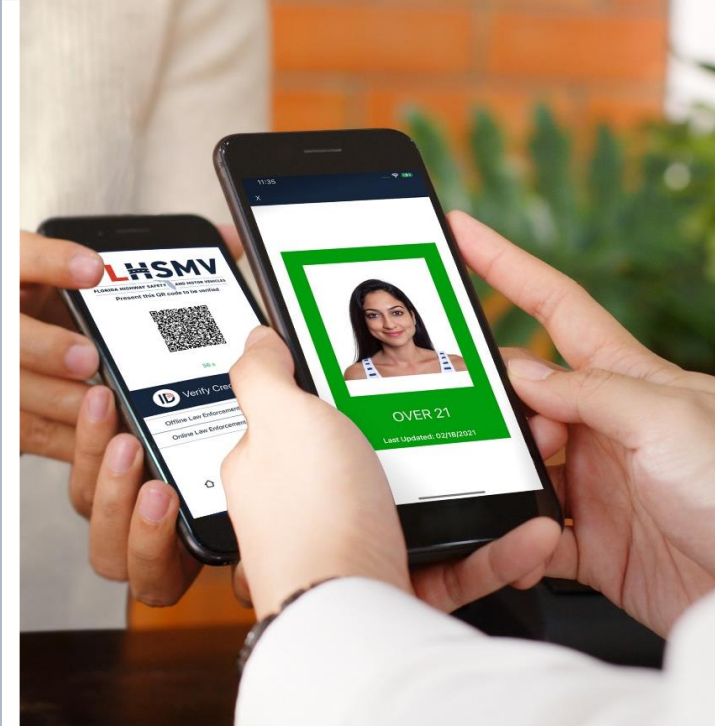




# Offline and Online Verification

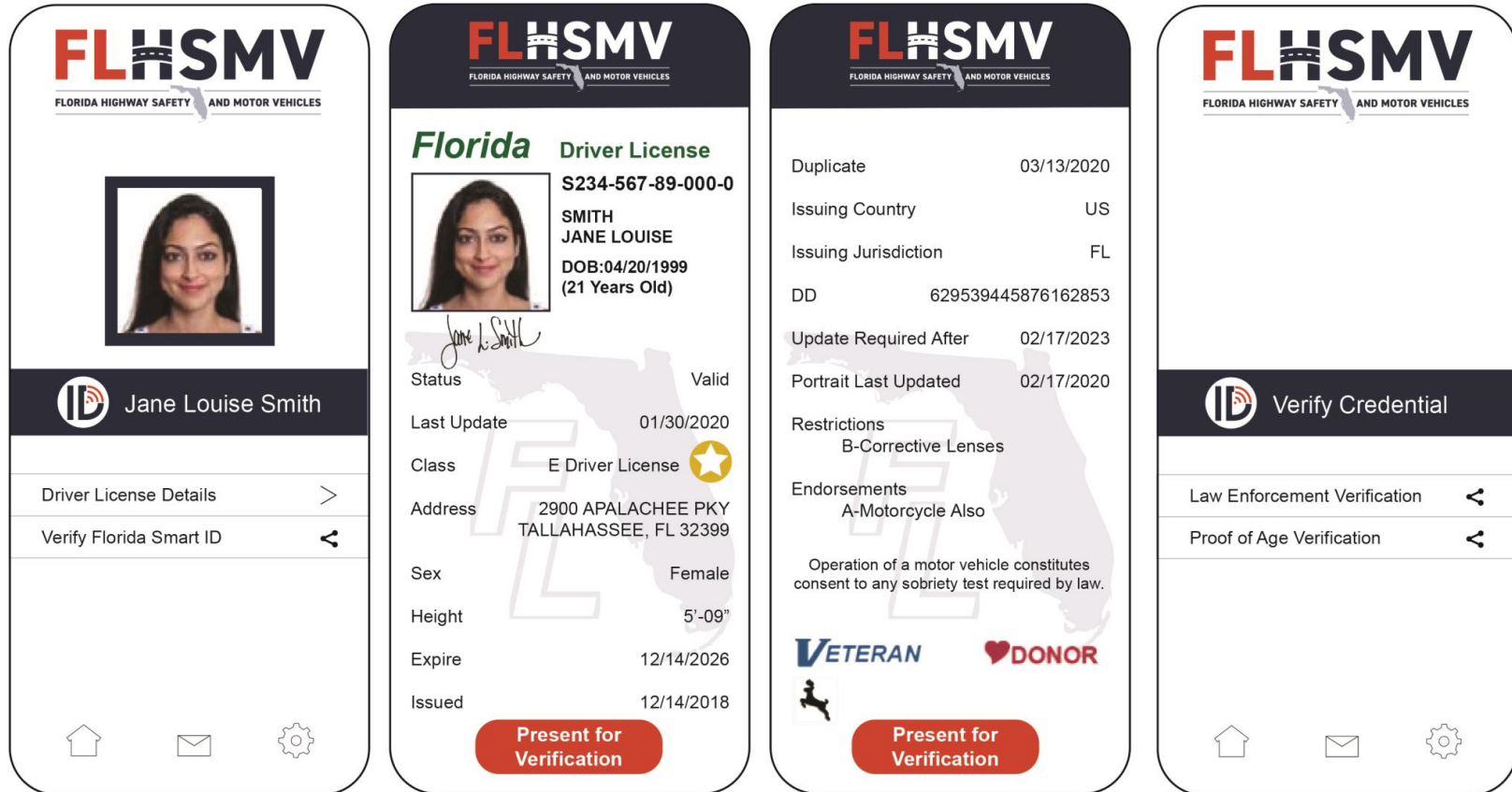






PRESENT—CONSENT—VERIFY

# Florida Smart ID (Holder)



HOME

DRIVER LICENSE DETAILS

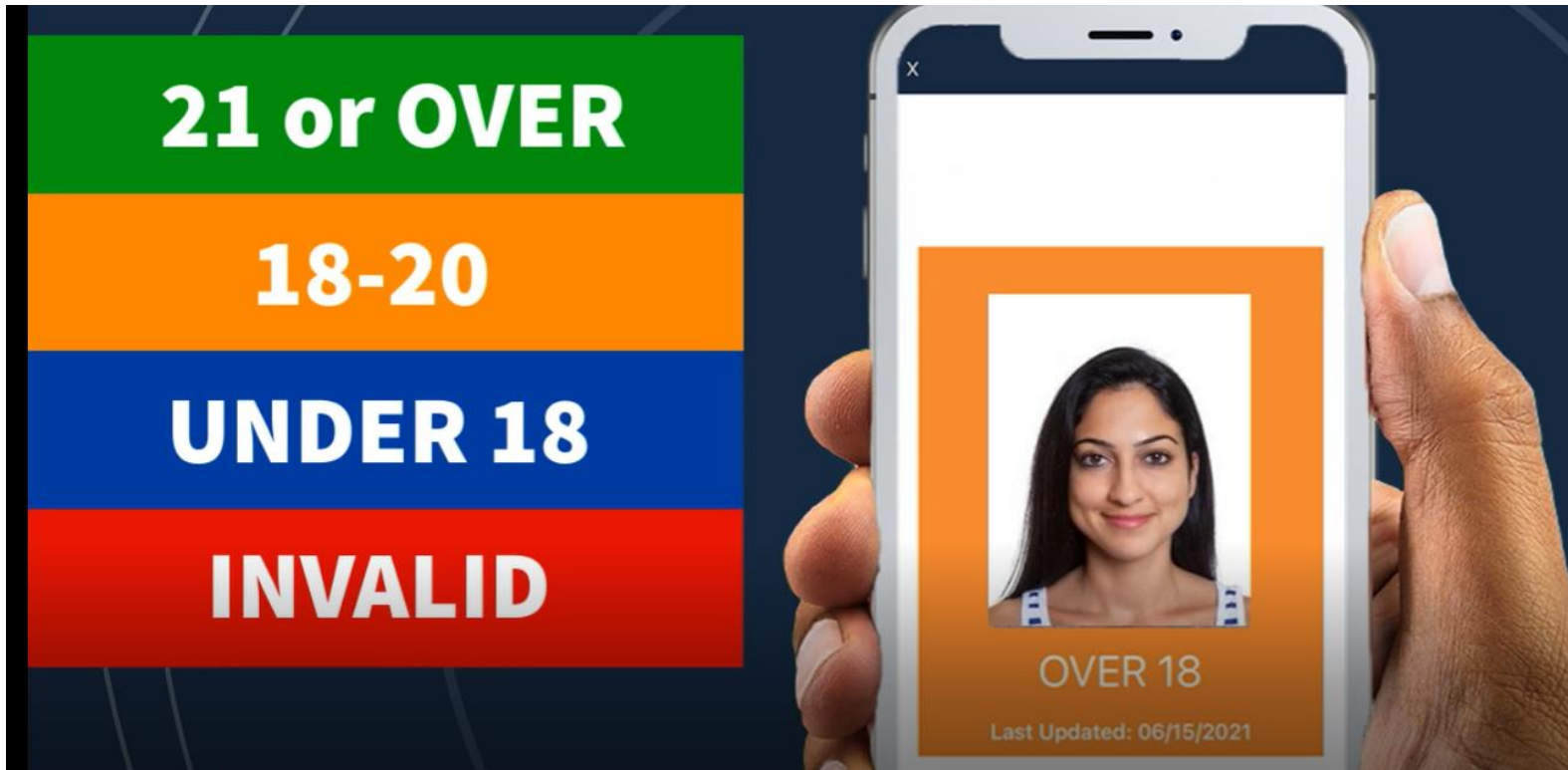
VERIFY





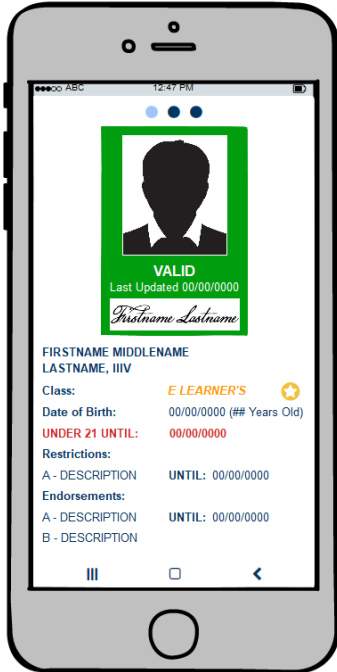
Verification Use Cases

# Proof of Age Verification

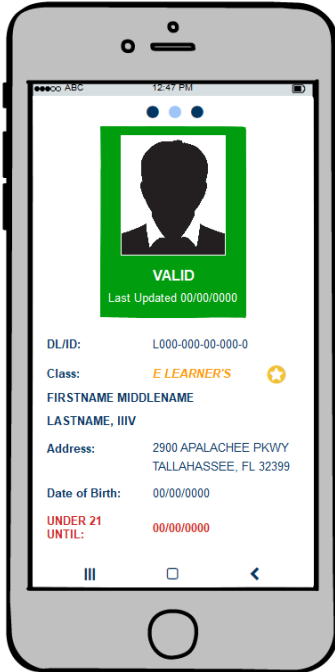


# Law Enforcement Verification

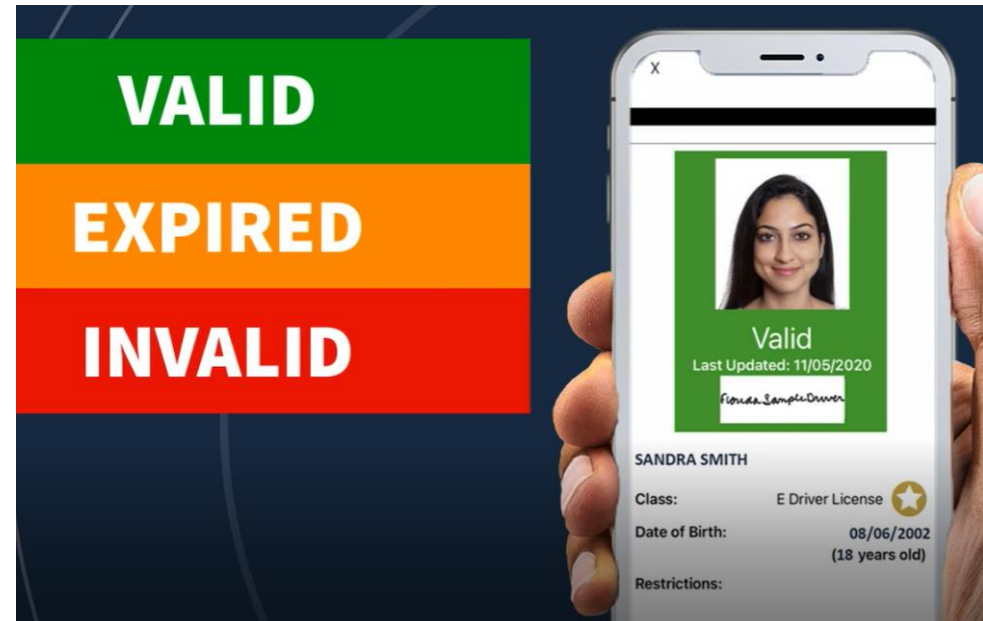
Page 1 - Quick View



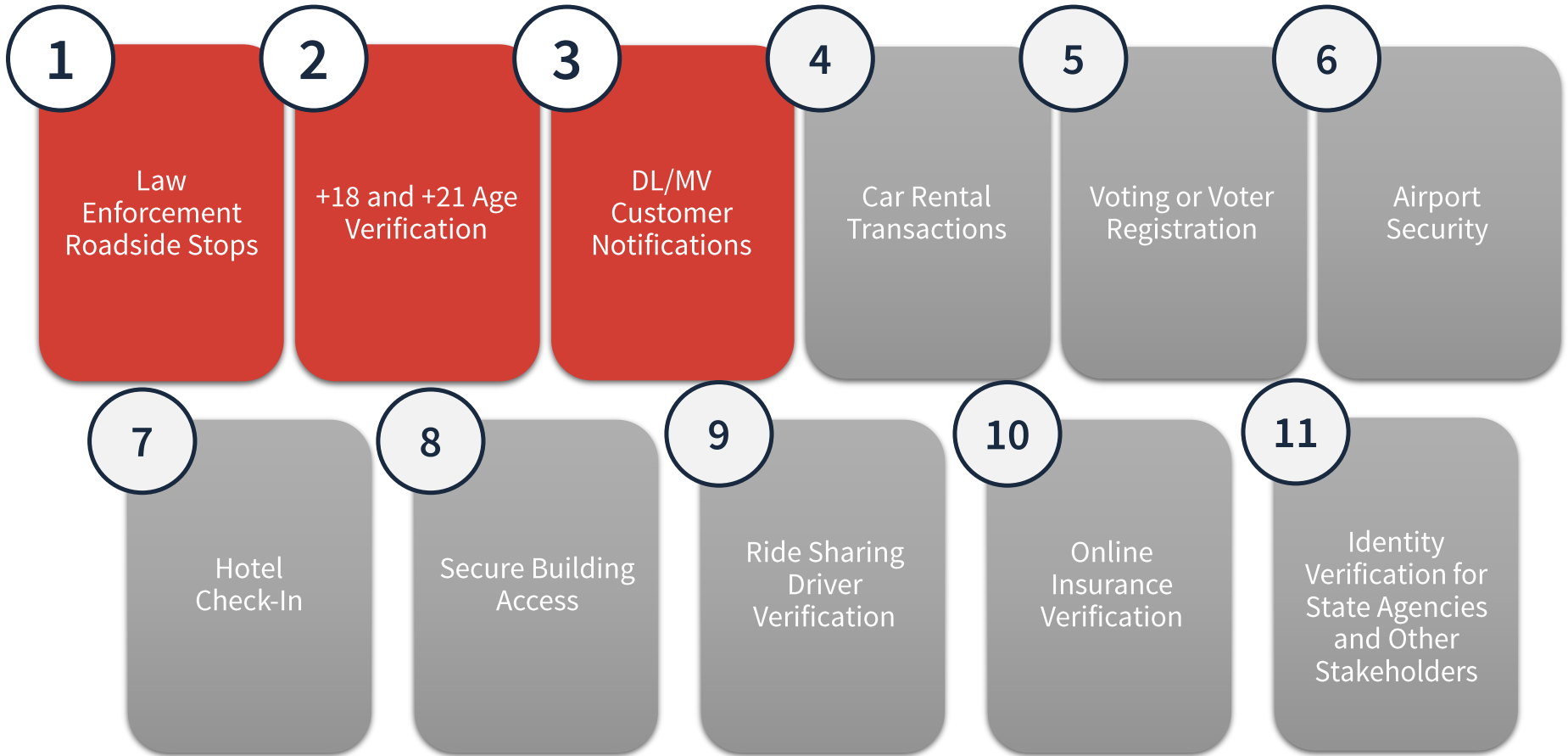
Page 2 - Full License Details



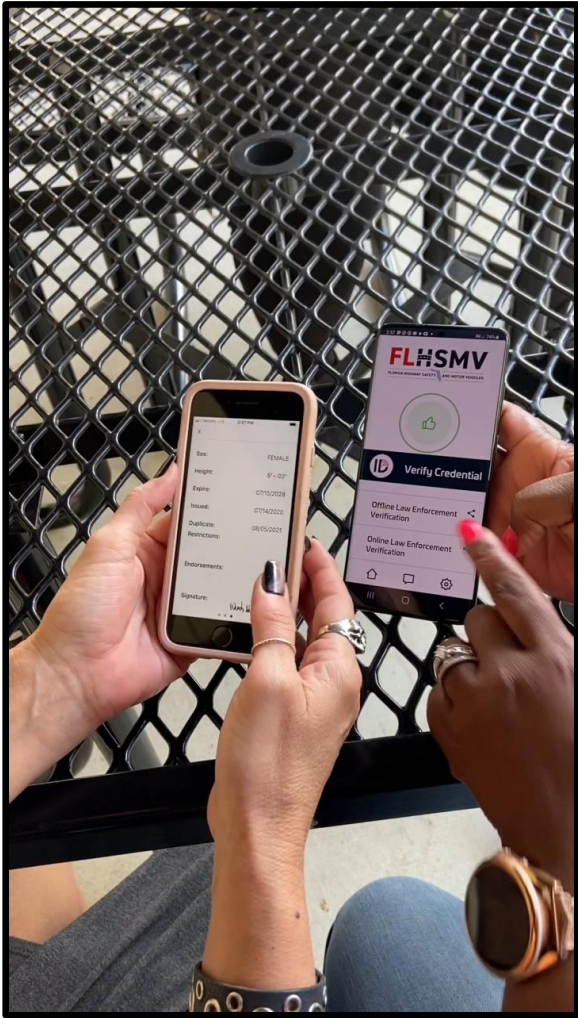
Page 3 - Full License Details



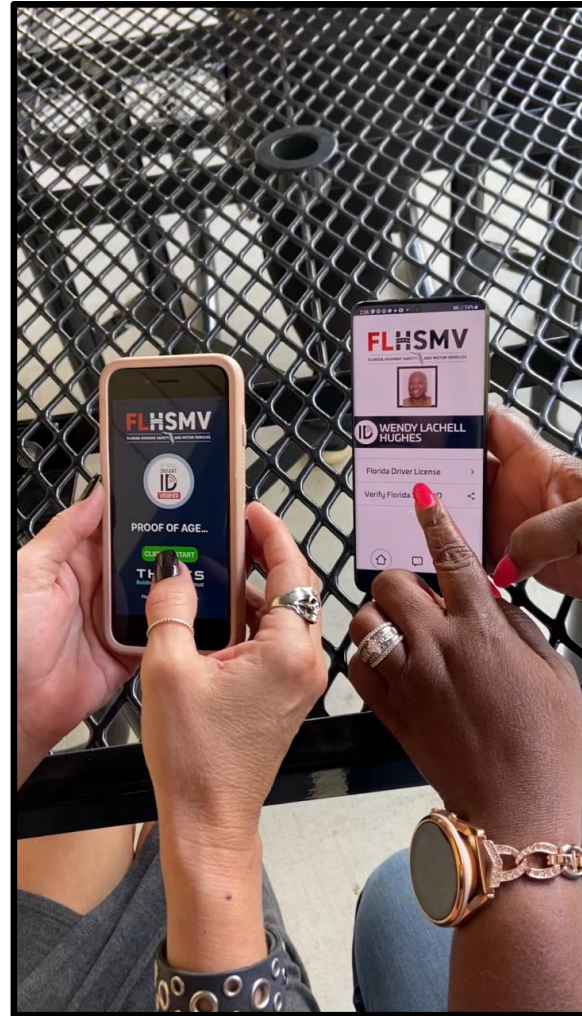
# Use Cases







Law Enforcement



Proof of Age



**Thank you!**

The Florida Senate

# APPEARANCE RECORD

Deliver both copies of this form to  
Senate professional staff conducting the meeting

16-12-21

Meeting Date

Bill Number or Topic

Transportation

Committee

Amendment Barcode (if applicable)

Name

Terrence Samuel DHSMV

Phone

Director

Address

Office of Motorist Modernization

Email

terrence.samuel@flhsmv.gov

Street

City

State

Zip

Speaking:

For

Against

Information

**OR**

Waive Speaking:

In Support

Against

**PLEASE CHECK ONE OF THE FOLLOWING:**

I am appearing without  
compensation or sponsorship.

I am a registered lobbyist,  
representing:

I am not a lobbyist, but received  
something of value for my appearance  
(travel, meals, lodging, etc.),  
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This form is part of the public record for this meeting.

S-001 (08/10/2021)

The Florida Senate

# APPEARANCE RECORD

Deliver both copies of this form to  
Senate professional staff conducting the meeting

Meeting Date  
Transportation

Bill Number or Topic

Committee  
Name Chad Hutchinson DHSMV

Amendment Barcode (if applicable)  
Phone 856 617 2179

Address Chief Technology Officer  
Street

Email chadhutchinson@flhwy.com

City State Zip

Speaking:  For  Against  Information **OR** Waive Speaking:  In Support  Against

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# Transportation and Resiliency in Florida

Senate Transportation Committee  
Tuesday, October 12, 2021



**Huiwei Shen**  
Chief Planner  
Florida Department of Transportation

**Will Watts, P.E.**  
Chief Engineer  
Florida Department of Transportation



# Overview

*Planning and Policy*

*Implementation Update*

*Resiliency in Engineering & Operations*

*Innovative Solutions*

*Materials Research*

*Next Steps*







# ***PLANNING AND POLICY***



# Florida Transportation Plan



SAFETY AND SECURITY FOR  
RESIDENTS, VISITORS, AND BUSINESSES

TRANSPORTATION  
SOLUTIONS THAT  
ENHANCE FLORIDA'S  
ENVIRONMENT

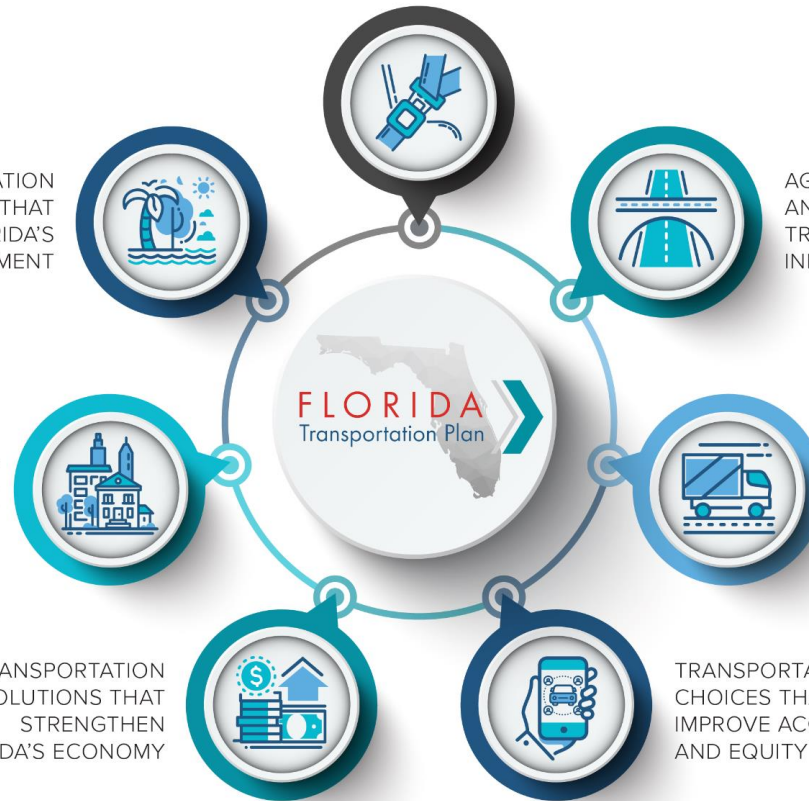
AGILE, RESILIENT,  
AND QUALITY  
TRANSPORTATION  
INFRASTRUCTURE

TRANSPORTATION  
SYSTEMS THAT  
ENHANCE  
FLORIDA'S  
COMMUNITIES

CONNECTED,  
EFFICIENT, AND  
RELIABLE MOBILITY  
FOR PEOPLE  
AND FREIGHT

TRANSPORTATION  
SOLUTIONS THAT  
STRENGTHEN  
FLORIDA'S ECONOMY

TRANSPORTATION  
CHOICES THAT  
IMPROVE ACCESSIBILITY  
AND EQUITY



# FDOT Vital Few – Resiliency



## *Improve Safety*

- Reduce impacts of transportation-related public health, safety, and security risks
- Improve emergency response and recovery times



## *Enhance Mobility*

- Minimize vulnerabilities and disruption/damage due to extreme weather
- Improve supply chain efficiency/resilience

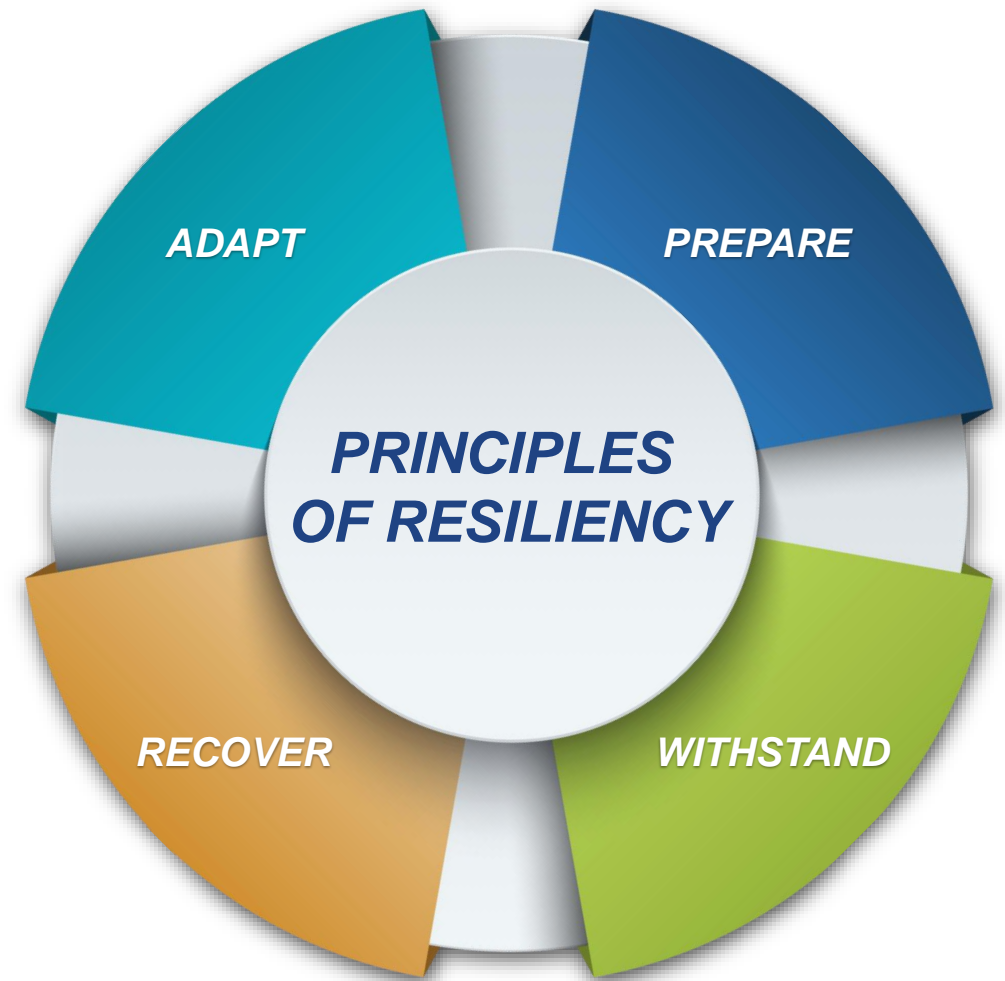


## *Inspire Innovation*

- Support resilient and diverse economy
- Innovate to adapt and enhance infrastructure resilience

# Resiliency Policy

- Ability to **adapt** to changing conditions and **prepare** for, **withstand**, and **recover** from disruption
- Identify risks, particularly related to:
  - *Storms*
  - *Flooding*
  - *Sea level rise*
- Assess potential impacts
- Employ strategies to avoid, mitigate, or eliminate impacts







# ***IMPLEMENTATION UPDATE***



# Implementation Update

***Planning***

***Statewide Coordination***

***Manuals and Guidance***

***Innovative Solutions***





# SIS Policy Plan



## DESIGNATION POLICIES

Consider vulnerabilities in SIS community and environmental screening process



## NEEDS & PRIORITIZATION POLICIES

Identify resilience strategies as part of capacity needs and projects

Expand SIS funding eligibility for adaptation/retrofit of existing infrastructure

Expand definition of capacity to include increasing redundancy or providing alternatives to mitigate vulnerabilities



## PLANNING & COLLABORATION POLICIES

Expand collaboration with MPOs, RPCs, water management districts, local governments, regional collaboratives, industry on resilience strategies

Strengthen coordination with other state agencies (DEO, DEM, DEP) to leverage programs and funding



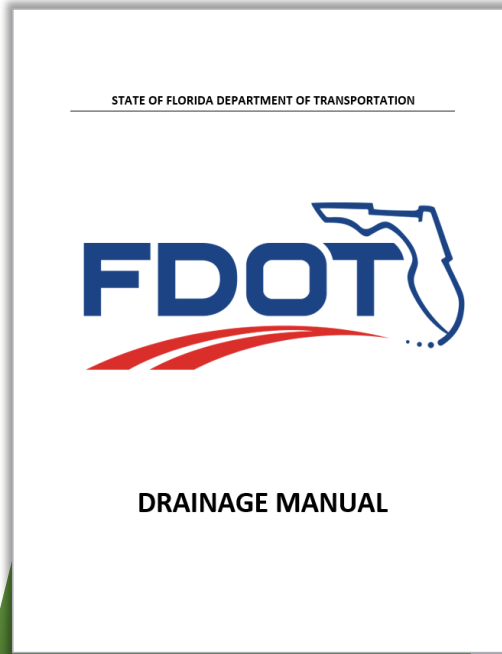
# ***RESILIENCY IN ENGINEERING & OPERATIONS***



# Manual Updates

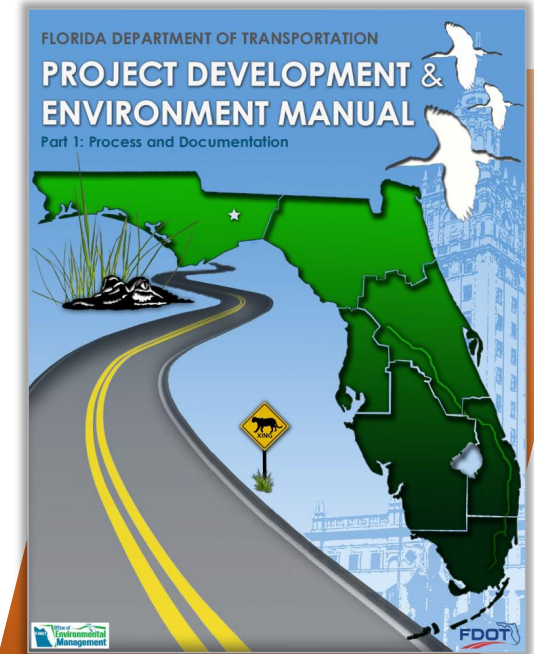
## Drainage Manual

- *Include a section on Resiliency Considerations*
- *Identify multiple ways we are inherently resilient in our drainage designs*



## PD&E Manual

- *Provide guidance on new statutory requirement to perform Sea Level Impact Projection (SLIP) Study if within Coastal Building Zone*



# Inherent Resiliency in Design

- Traffic Signals
- Pavement Markings
- Roundabouts
- High Mast Lighting
- Materials
- Pavements
- Drainage



# Emergency Management & Resiliency

- All Hazard approach in all phases of an incident/event
  - *Planning, operations & response, recovery, and mitigation*
- Mass evacuation planning and implementation of the Emergency Shoulder Use
- Roadway debris removal operations, repairs, and betterments







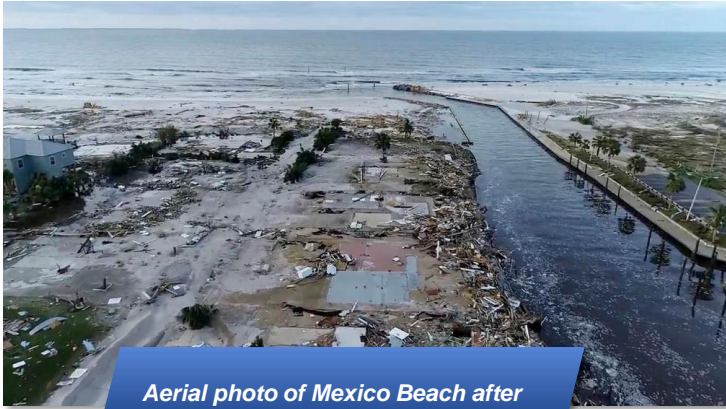
# ***INNOVATIVE SOLUTIONS***





# Innovative Solutions – Hurricane Recovery

## Hurricane Michael (2018) Mexico Beach & Coastal Flooding Impacts along U.S. 98 in Franklin County



*Aerial photo of Mexico Beach after  
landfall from Hurricane Michael, U.S.,  
October 11, 2018. Time Magazine*



*US 98 in Franklin County. FDOT*



*Articulating Concrete Block  
(ACB) Repairs along U.S. 98*

# Innovative Solutions – Flooding & Sea Level Rise

## SR A1A

### *Indian Creek Drive Flood Mitigation*



# Innovative Solutions – Erosion & Extreme Events



## LIVING SHORELINES SUPPORT RESILIENT COMMUNITIES

Living shorelines use plants or other natural elements—sometimes in combination with harder shoreline structures—to stabilize estuarine coasts, bays, and tributaries.



**One square mile** of salt marsh stores the carbon equivalent of **76,000 gal of gas** annually.



Marshes trap sediments from tidal waters, allowing them to **grow in elevation** as sea level rises.



Living shorelines improve **water quality**, provide fisheries **habitat**, increase **biodiversity**, and promote **recreation**.



Marshes and oyster reefs act as natural **barriers** to waves. **15 ft** of marsh can **absorb 50%** of incoming wave energy.



Living shorelines are **more resilient** against storms than bulkheads.



**33%** of shorelines in the U.S. will be **hardened** by **2100**, decreasing fisheries habitat and biodiversity.



Hard shoreline structures like **bulkheads** prevent natural marsh migration and may create seaward **erosion**.





# Innovative Solutions – Living Shoreline

## Barracuda Bridge Replacement New Smyrna Beach, FL

- Oysters on rip-rap
- Environmental commitments to NMFS
  - *Relocate oysters where possible*
  - *Facilitate USACE permit*
- Partnering with FFWCC and local Marine Discovery Center
- Marsh restoration support
  - *Oysters will help maintain created tidal creeks*



# Innovative Solutions – Living Shoreline

## US 1 Erosion Study Melbourne, FL

- US 1 experiencing severe erosion
  - *Embankment being undermined by wave action*
  - *Roadway at risk*
- Indian River Lagoon
  - *Environmentally sensitive area*





# Innovative Solutions – Living Shoreline

## US 1 Erosion Study Melbourne, FL

- Existing rip-rap along the corridor
- “Voids” created where no rip-rap exists
  - *Wind driven system*
  - *Little natural shoreline left*
- Feasibility study to examine all options:
  - *Additional armoring*
  - *WADs*
  - *Living shorelines*
  - *Hybrids*





# ***MATERIALS RESEARCH***



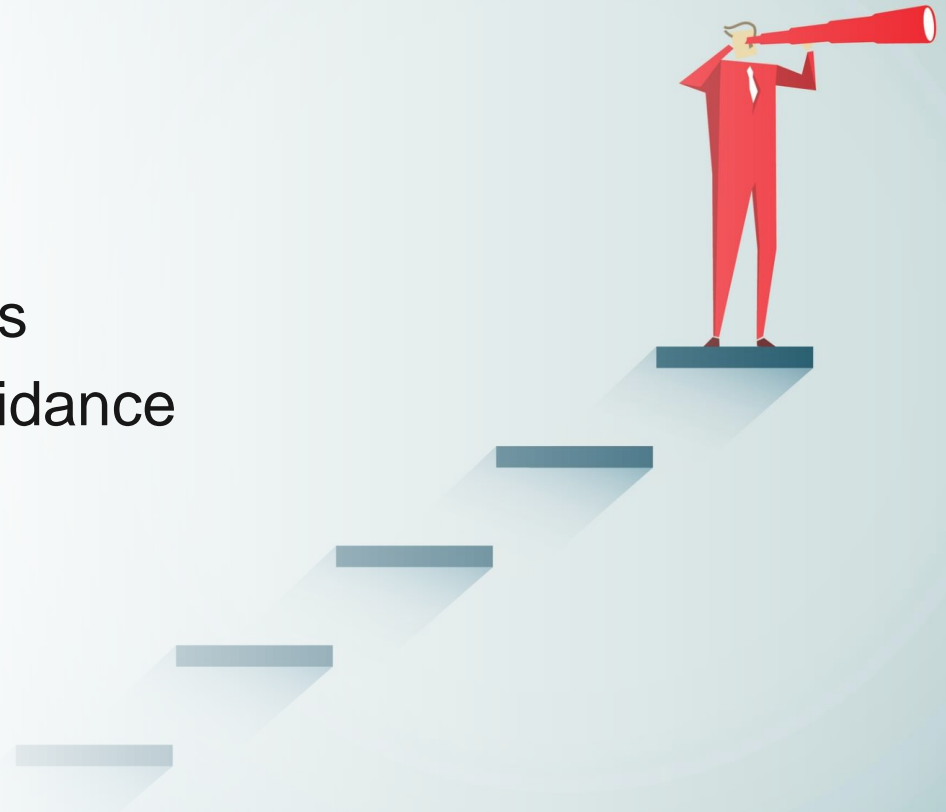
# State Materials Office Resiliency Research

- Improved Resilience of Asphalt Pavements Due to Flooding
  - *Evaluate the resilience of flooded asphalt*
  - *Improve asphalt mixtures to resist impacts of flooding*
- Improved Resilience of Rigid Pavement Systems
  - *Improve the resilience of concrete pavements subject to flooding and sea level rise.*
  - *Evaluate the entire pavement structure – concrete, base, subgrade*



# Next Steps

- Policy Implementation
- Training & Capacity Building
- Resiliency Information in GIS Tools
- Further Updates to Manuals & Guidance
- Collaboration and Partnerships
- Innovative Solutions in Projects



PEDESTRIAN  
SAFETY  
MONTH



#MoveOverFL



MOVE OVER

or slow down for emergency lights.

## October is National Pedestrian Safety Month

*Safety is a shared responsibility*

At some point in the day, we are all pedestrians. It is up to all road users to look out for one another, and take the necessary steps to arrive safely.







# Questions?

**Huiwei Shen**  
Chief Planner

Florida Department of Transportation

**Will Watts, P.E.**  
Chief Engineer

Florida Department of Transportation

The Florida Senate

APPEARANCE RECORD

FDOT Resiliency Presentation

Bill Number or Topic

10/12/21

Meeting Date

Deliver both copies of this form to Senate professional staff conducting the meeting

Transportation

Committee

Amendment Barcode (if applicable)

Name Huiwei Shen

Phone 850-414-4147

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Email huiwei.shen@dot.state.fl.us

Street

Tallahassee

FL

32399

City

State

Zip

Speaking: [ ] For [ ] Against [x] Information OR Waive Speaking: [ ] In Support [ ] Against

PLEASE CHECK ONE OF THE FOLLOWING:

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S-001 (08/10/2021)

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Amendment Barcode (if applicable)

Name Will Watts, P.E.

Phone 850-414-4147

Address 605 Suwannee St.

Email Will.Watts@dot.state.fl.us

Street

Tallahassee

FL

32399

City

State

Zip

Speaking: [ ] For [ ] Against [x] Information OR Waive Speaking: [ ] In Support [ ] Against

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S-001 (08/10/2021)

# CourtSmart Tag Report

**Room:** SB 110  
**Caption:** Senate Transportation Committee

**Case No.:**

**Type:**  
**Judge:**

**Started:** 10/12/2021 3:30:57 PM

**Ends:** 10/12/2021 4:42:23 PM

**Length:** 01:11:27

**3:30:55 PM** Meeting called to order by Chair Harrell  
**3:30:58 PM** Roll call by CAA Marilyn Hudson  
**3:31:28 PM** Quorum present  
**3:31:41 PM** Comments from Chair Harrell  
**3:32:19 PM** Introduction of Tab 1: Update by the Florida Department of Highway Safety and Motor Vehicles on Digital Driver Licenses and Identification Cards by Kevin Jacobs, Legislative Affairs Director by Chair Harrell  
**3:34:42 PM** Presentation by Mr. Terrence Samuel, Director, Office of Motorist Modernization and Mr. Chad Hutchinson, Chief Technology Officer, DHSMV  
**3:53:31 PM** Question from Senator Berman  
**3:53:38 PM** Response from Mr. Hutchinson  
**3:54:58 PM** Comments from Chair Harrell  
**3:55:26 PM** Follow-up question from Senator Berman  
**3:55:34 PM** Response from Mr. Hutchinson  
**3:56:25 PM** Question from Senator Jones  
**3:56:30 PM** Response from Mr. Samuel  
**3:57:44 PM** Follow-up question from Senator Jones  
**3:57:52 PM** Response from Mr. Samuel  
**3:58:31 PM** Question from Chair Harrell  
**3:58:57 PM** Response from Mr. Samuel  
**4:00:21 PM** Follow-up question from Chair Harrell  
**4:00:30 PM** Response from Mr. Samuel  
**4:01:03 PM** Follow-up question from Chair Harrell  
**4:01:09 PM** Response from Mr. Samuel  
**4:01:23 PM** Follow-up question from Chair Harrell  
**4:01:48 PM** Response from Mr. Hutchinson  
**4:03:02 PM** Follow-up question from Chair Harrell  
**4:03:16 PM** Response from Mr. Hutchinson  
**4:03:48 PM** Follow-up question from Chair Harrell  
**4:04:09 PM** Response from Mr. Jacobs  
**4:04:51 PM** Comments from Chair Harrell  
**4:05:00 PM** Response from Mr. Samuel  
**4:05:15 PM** Comments from Chair Harrell  
**4:05:49 PM** Introduction of Tab 2: Presentation by the Florida Department of Transportation on Transportation Infrastructure Resiliency by Chair Harrell  
**4:07:35 PM** Presentation by Ms. Huiwei Shen, Chief Planner, and Mr. Will Watts, Chief Engineer, Florida Department of Transportation  
**4:26:50 PM** Question from Chair Harrell  
**4:26:57 PM** Response from Mr. Watts  
**4:28:27 PM** Comments from Chair Harrell  
**4:29:28 PM** Question from Senator Jones  
**4:29:32 PM** Response from Mr. Watts  
**4:30:31 PM** Follow-up question from Senator Jones  
**4:30:42 PM** Response from Mr. Watts  
**4:31:47 PM** Follow-up question from Senator Jones  
**4:31:56 PM** Response from Mr. Watts  
**4:33:18 PM** Question from Senator Perry  
**4:33:23 PM** Response from Mr. Watts  
**4:33:31 PM** Comment from Senator Perry  
**4:34:22 PM** Question from Senator Perry  
**4:34:28 PM** Response from Mr. Watts  
**4:34:44 PM** Follow-up question from Senator Perry  
**4:34:52 PM** Response from Mr. Watts

**4:36:24 PM** Follow-up question from Chair Harrell  
**4:36:51 PM** Response from Mr. Watts  
**4:37:13 PM** Question from Senator Perry  
**4:37:22 PM** Response from Mr. Watts  
**4:37:51 PM** Follow-up question from Senator Perry  
**4:37:58 PM** Response from Mr. Watts  
**4:39:18 PM** Question from Senator Berman  
**4:39:22 PM** Response from Mr. Watts  
**4:40:19 PM** Follow-up question from Senator Berman  
**4:40:28 PM** Response from Mr. Watts  
**4:40:52 PM** Comments from Chair Harrell  
**4:41:51 PM** Introduction of Secretary Kevin J. Thibault by Chair Harrell  
**4:42:01 PM** Senator Wright moves to adjourn  
**4:42:08 PM** Meeting adjourned