



MPOAC GOVERNING BOARD MEETING

June 07, 2018
Hyatt Place Orlando
8688 Palm Parkway, Orlando, FL





Call to Order
&
Pledge of Allegiance



Approval of Minutes February 01, 2018



Public Comments (non-agenda items)



Executive Directors Report

UPWP Report
Legislative Summary

UPWP Report

A decorative graphic consisting of several overlapping, curved, light blue and white shapes that resemble a stylized wave or a ribbon, positioned to the right of the main title.

Accomplishments are in the meeting packet

Legislative work

Performance Measures

Weekend Institute

Expenses are running slightly under budget



Legislative Report

Overall Summary

3192 Bills filed

200 Bills passed both chambers

Governor vetoed 2

Very few transportation related bills

Facility specific

Autocycles

Mobile Carriers

Ingress/Egress with Universities



Legislative Report

Transportation Budget

\$10.8 Billion Total

Work Program \$9.8B

Operating \$780M

Debt Service \$201M



Legislative Report

HB 575 – The MPO Bill

- Was unexpected
- Moving target
- July Policy and Technical Committee
 - Workshop this issue
- Summary Report – August 02 Meetings

Florida DOT Presentation

A decorative graphic consisting of several overlapping, wavy, light blue and teal lines that curve across the top right portion of the slide.

- Transportation Performance Targets and Data Sharing
- MPOAC Leadership Meeting
- Consolidated Grant Program
- Recap of Annual Joint Certification Process
- LRTP Revenue Forecast Schedule
- Status of Various Research Efforts



FHWA Florida Division Presentation

Transportation Performance Measurement

Updates

June 2018



U.S. Department of Transportation
Federal Highway Administration

Recent Milestones



- FHWA Approved FDOT Freight Plan: Feb 12
- MPOs Set Safety 2018 Target: Feb 27
- FDOT Initial Asset Management Plan: Apr 30
- FDOT Set Bridge, Pavement and System Performance Targets: **May 18**
- Planning Rule Effective: May 27
 - All LRTP & S/TIP Amendments Address Safety TPM
 - Underlying Planning Requirements Addressed



What's New for FL?

- Updates to FL Division Website
 - Summary of Requirements As They Apply to FDOT
 - » Safety Measures (PM1)
 - » Bridge Measures (PM2)
 - » Pavement Measures (PM2)
 - » Asset Management
 - Q&A from MPO One on One
<https://www.fhwa.dot.gov/fldiv/tpm.cfm>



What's New Nationally?

- Performance Management Form (PMF)
 - New Electronic Reporting Tool
 - FDOT Enters Data for all targets except Safety
 - Due Oct 1, 2018 and every 2 years after
 - Khoa Nguyen, Director of Tech Services, is FL Division POC
- State 2017 Safety Targets Published:
https://safety.fhwa.dot.gov/hsip/spm/state_safety_targets/



What's New in Guidance?

- HSIP Implementation Plan Guidance – March 2018
 - For States that do not meet or make significant progress towards their safety performance targets
- Bridge Measures – Computation for determining Significant Progress – April 2018
- Pavement Measures - Computation for determining Significant Progress – April 2018
- Average Vehicle Occupancy Factors for Computing Travel Time Reliability Measures and Total Peak Hour Excessive Delay Metrics – April 2018
- System Performance Measures - Computation for determining Significant Progress – May 2018
 - Travel Time Based and Percent Non-Single Occupancy Vehicle Measures

<https://www.fhwa.dot.gov/tpm/guidance/>



Transportation Asset Management Plan (TAMP) Clarifications

- TAMP – required by Asset Rule 23 CFR 515
- Pavement/Bridge Measures and Targets – PM2 Rule – 23 CFR 490 – due May 20, 2018
- TAMP uses targets to manage assets and address 515 requirements



Transportation Asset Management Plan (TAMP) Clarifications

- Initial TAMP: Apr 30, 2018
 - Optional to have targets identified
 - FDOT chose not to so as to not start the MPO's 180-day clock
- Final TAMP: June 30, 2019
 - Must include measures, targets, and analyses



Transportation Asset Management Plan (TAMP) Clarifications

- FDOT has chosen to only include pavement and bridges.
 - No other measures/targets for MPO to address in LRTPs/TIPs
 - TAMP won't be a source for establishing targets;
 - Integrate goals/objectives from TAMP (pg 2-1) directly or by reference in LRTPs adopted/amended after Apr 30, 2018.
- If FDOT has not developed/implemented TAMP and not established NHS Pavement and Bridge targets by Nov 20, 2018, FHWA will not approve NHPP funded projects (per 23 CFR 515) until FDOT has TAMP and targets in place.



October 2018 TIPs

- Address Safety Measures/Targets
 - Designed the TIP to achieve targets
 - Describe how MPO/FDOT linked project selections and investments to anticipate target achievement
- No targets in FDOT Freight Plan
- No targets in Asset Management Plan
- Bridge, Pavement and System Performance targets not required to be addressed
- Underlying Planning Processes Addressed
 - Coordination Documentation
 - New Public Participation Entities
 - Planning Factors



Future TIPs

- In subsequent TIPs:
 - Explain how the program of projects from the prior TIP achieved results; OR
 - what progress was made if results were not achieved



On the Horizon



- June 15:
 - FDOT HPMS Submittal for new PM3 travel time metrics
 - FDOT Submits Urbanized Area Boundaries if setting PM3 urbanized targets
- Aug 31: FDOT Sets Safety 2019 Target
- Oct 1:
 - S/TIP with Safety Targets Addressed
 - FDOT request for Using FDOT/MPO equivalent data sources (PM3)
 - FDOT to Report BR/Pvmt/Sys Perf Targets to FHWA
 - Baseline Reports for BR/Pvmt/Sys Perf (Interstate only)
- ~~Nov 16~~ **Nov 14**: MPO Sets Bridge, Pavement and System Performance Targets



For Additional Information



- Danielle Blackshear – Districts 1, 3 – danielle.blackshear@dot.gov
- Teresa Parker – Districts 2, 5, 7 - teresa.parker@dot.gov
- Stacie Blizzard – Districts 4, 6 – stacie.blizzard@dot.gov
- FHWA FL Division Website: www.fhwa.dot.gov/fldiv/tpm.cfm





MPOAC STAFF DIRECTORS' BUSINESS ITEMS & PRESENTATIONS





Election of Board Chair

Term to go until first
meeting of the calendar year



MPOAC Freight Committee Project Priorities List



2018 MPOAC Meeting Schedule



SURVEY QUESTIONS AND RESPONSES

Survey and Report Prepared by: Nicole Tremblay, CUTR

June 7, 2018



How are your meeting dates determined? Choose all that apply.

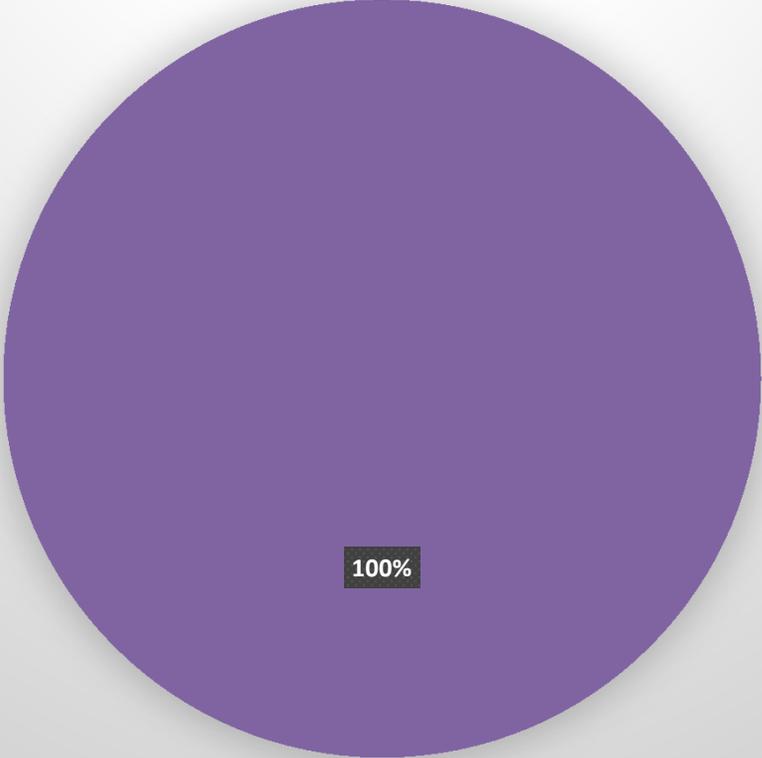


Explanations for “Other:”

- “Staff decision based on work product and annual due dates.”
- “The Board has met the second Thursday of the month for 30 or more years”
- “Based on when the UPWP tasks and activities are to be completed”
- “Each year a draft Board meeting schedule is distributed in the last quarter for the next calendar year, and adjusted based on any Board member comments received. That schedule is then presented to the Board and published for the upcoming year.”
- “Normally the first or second Monday of designated months. But meeting days are adjusted for availability of the ... County Commissioners Meeting Room. We use that as it is set up for live broadcast and recording of our meetings.”

Does your governing board meet on a regular schedule?

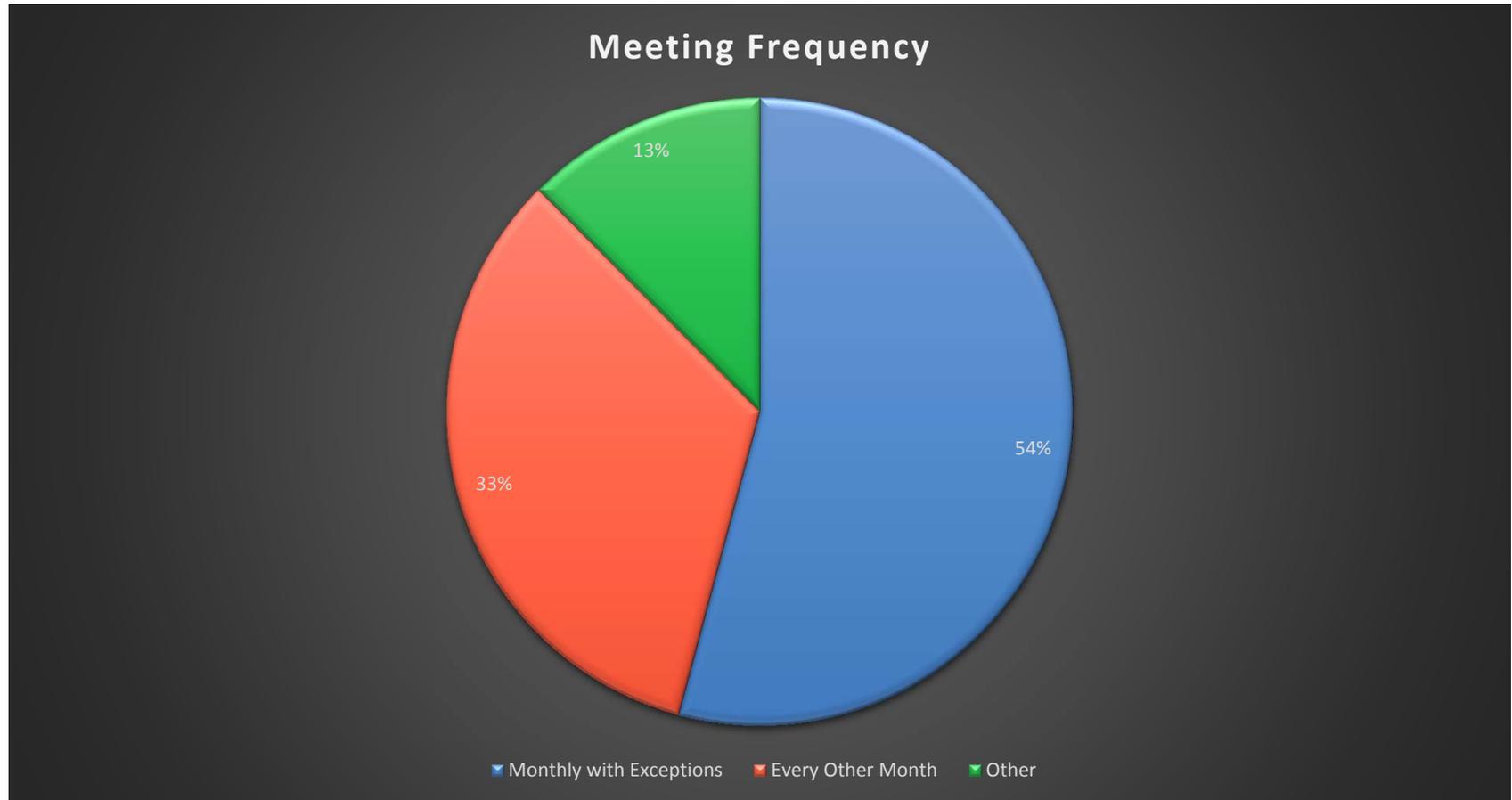
Regular Schedule for Meetings



100%

MPOAC

How often does your governing board meet?

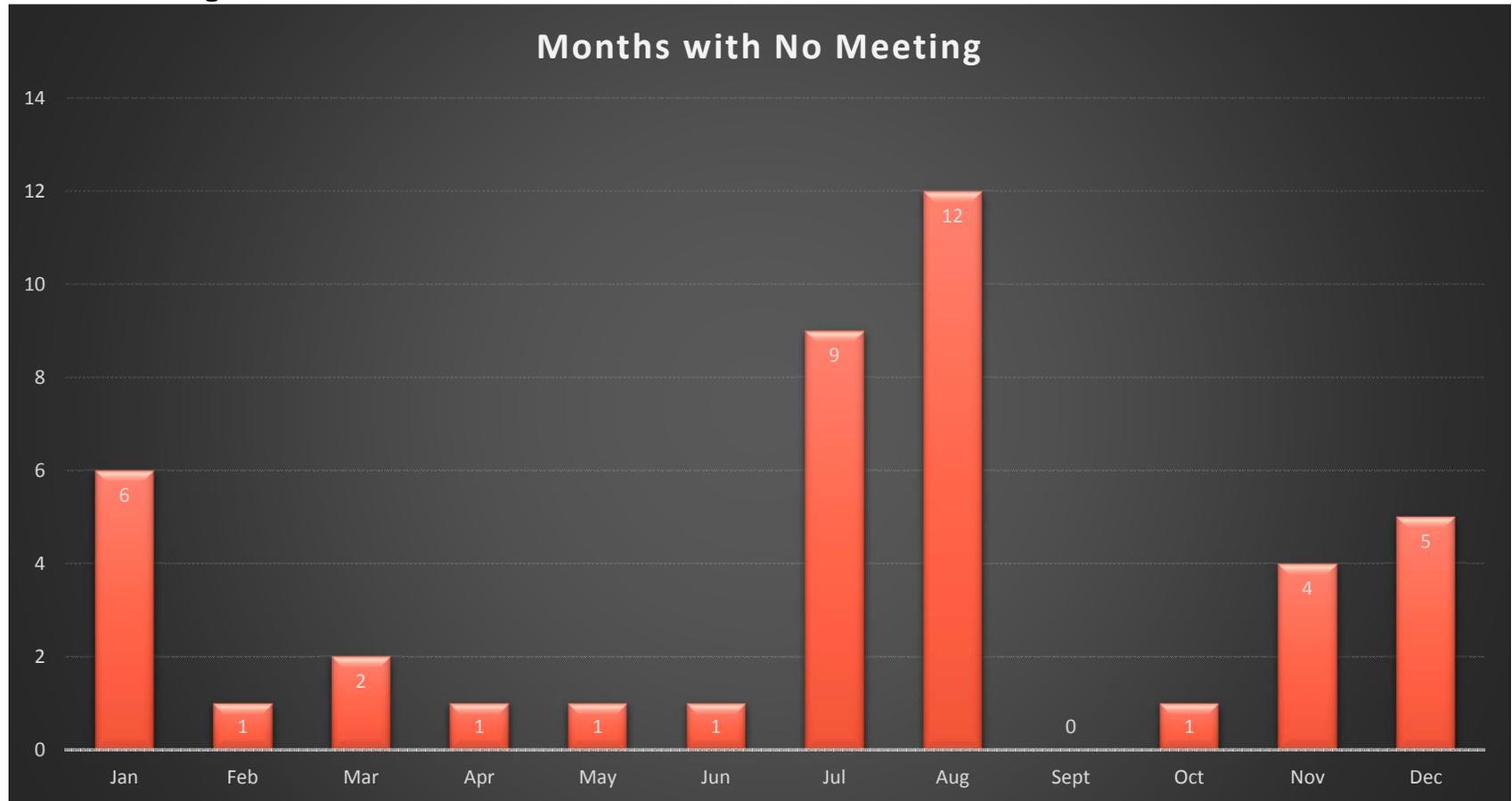


Explanations for “Other:”

- “Typically, the ... MPO Board meets 6 times per year: every other year a 7th meeting has been added when the Legislature meets in January; no meetings in July and August; and meetings are held in April, May and June in order to review documents and meet deadlines before the end of the fiscal year.”
- “Regular meetings are five times/year corresponding to required Board actions on for MPO business.”
- “Executive Committee meets first Thursday and Full Board on second Thursday.”



If you selected “Monthly with Exceptions,” which months are the exceptions?



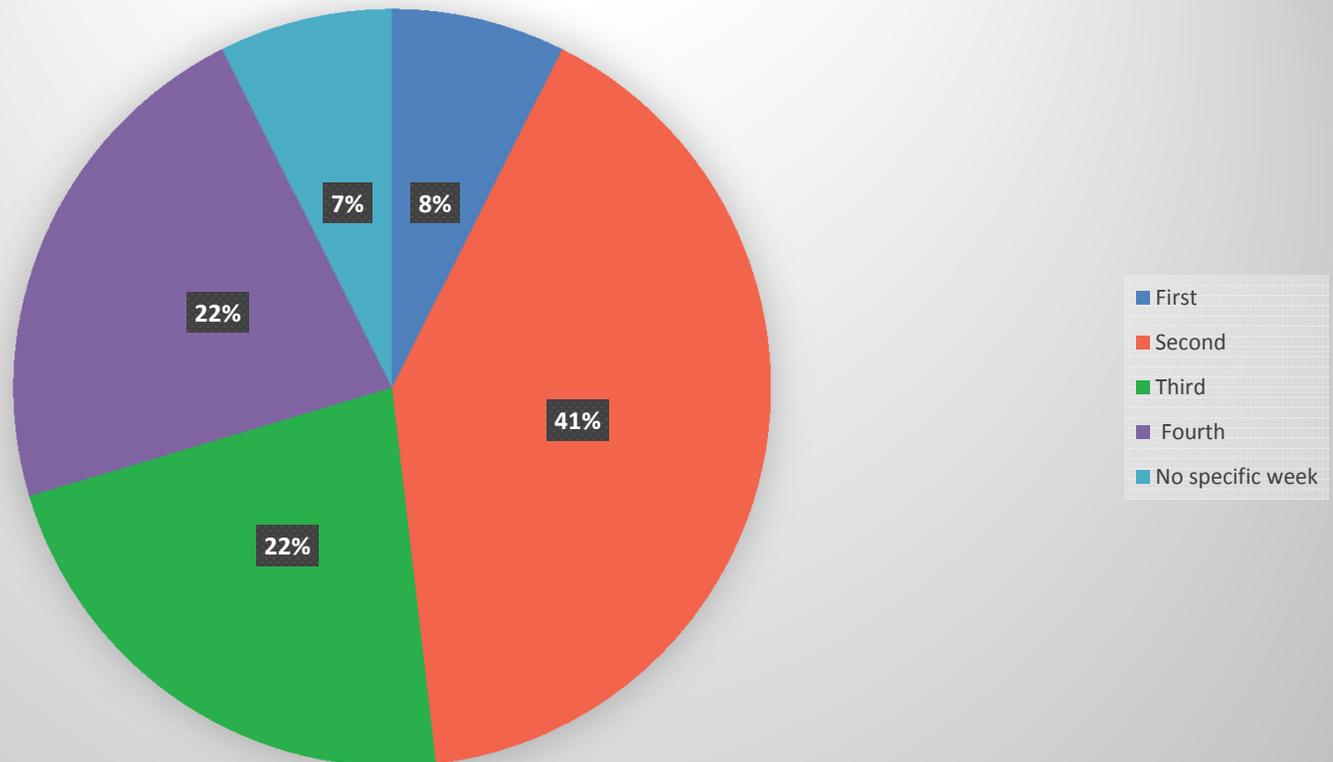
Explanations for “Other:”

- “Because Christmas and New Year's/**vacations** it is too difficult to get agenda packages prepared and distributed for a January Meeting. We do not meet in July because it is difficult to get a quorum due to summer vacations.”
- “**The Counties and the cities take off in July and August** and in addition the Board recently discussed cutting down the number of meetings and that is why December came out as well.”
- “Not needed to conduct business”
- “August is traditionally skipped for **vacations**. December is a more recent change to balance work load, but contingent on hurricane season.”
- “Meetings are held in February and August but later in the month due to MPO Board members having **conflicting meetings**. Usually our meetings are held on the second Thursday of the month outlined in the MPO Board Bylaws.”
- “expected lack of attendance”
- “expected lack of attendance due to summer vacations and holiday vacations”
- “These meetings are **not necessary** to comply with all requirements in the business cycle.”
- “Schedules are developed based **MPO product due dates** and on anticipated Board actions such as adoption of UPWP, Priorities, TIP, Performance Measure targets, LRTP, amendments, etc., and on local jurisdiction preference, such as some of our jurisdictions recess (do no meet) in July and/or August and members requested that the MPO Board not meet in those months.”
- “January - agenda package has to be prepared over Christmas. Problem for staff
June - County Commission vacation month.”
August - Conflict with **League of Cities annual meeting**”
- “In January our TPA attends the **regional Safe Streets Summit** that rotates locations between Broward, Miami-Dade and Palm Beach.”
In August and November we do not hold meetings as these months usually have lower attendance due to vacations.”
- “Expected lack of attendance. Also, meetings that are held typically correspond to the **Federal and State Deadline Calendar** (ie Priorities are due in September; the UPWP is due in May; the TWP is typically reviewed in October or November); etc.”
- “July, August - Summer break for the City ... and ... County board members
December – holidays”



During which week of the month are your meetings held?

Meeting Dates by Week of the Month

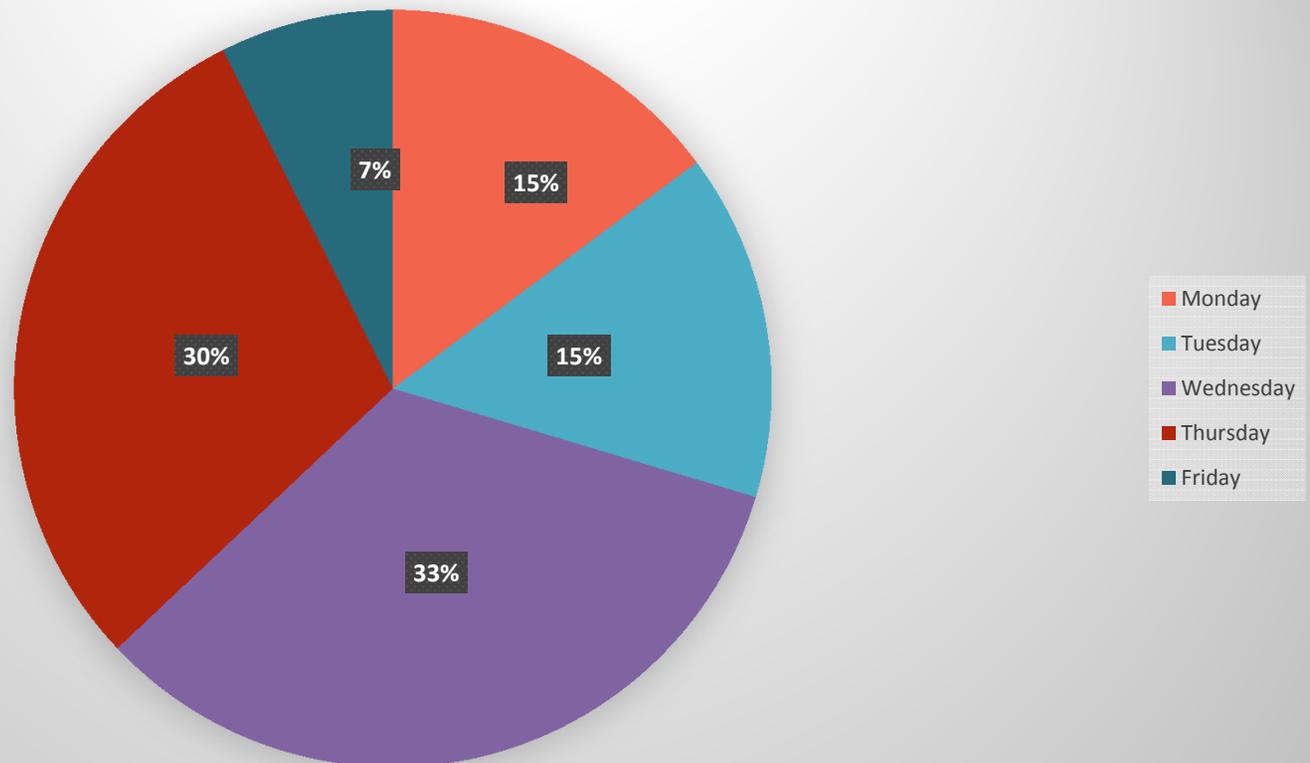


Explanations for “Other:”

- “Typically, the Board meets on the third Monday of the month unless it conflicts with a holiday (Presidents' Day) or is considered too close to a holiday (Christmas) or there is a deadline that needs to be accommodated (UPWP/May 15th every other year).”
- “The Governing Board usually meets on the third or fourth week. However, in the month of December they will meet the 1st Thursday of the month.”

On which day of the week do you typically hold meetings?

Meeting Dates by Day of the Week



Meeting Schedule by MPO

Bay County	4 th	Wednesday	Every other Month (EOM) (beginning Feb)
Broward	2 nd	Thursday	
Capital Region	3 rd	Tuesday	Except Jul/Aug/Dec
Charlotte County-Punta Gorda	2 nd	Monday	
Collier	2 nd	Friday	Except Jan/Jul/Aug
Florida-Alabama	2 nd	Wednesday	EOM (beginning Feb)
Forward Pinellas	2 nd	Wednesday	Except Jul/Dec
Gainesville	4 th	Monday	EOM (beginning Jan)
Heartland	3 rd	Wednesday	EOM (beginning Jan), except Jul
Hernando-Citrus	3 rd	Tuesday	EOM (beginning Jan)
Hillsborough	1 st	Tuesday	
Indian River County	2 nd	Wednesday	Except Jan/Jul/Aug
Lake-Sumter	4 th	Wednesday	Except Mar/Jul/Nov
Lee County	3 rd	Friday	Except Jul/Aug/Dec
Martin	No specific	Monday	
MetroPlan Orlando	2 nd	Wednesday	Except Jan/Apr/Aug/Oct
Miami-Dade	No specific	Thursday	
North Florida	2 nd	Thursday	Except Jan/Jul
Ocala-Marion	4 th	Tuesday	
Okaloosa-Walton	3 rd	Thursday	EOM (beginning Feb)
Palm Beach	3 rd	Thursday	Except Jan/Aug/Nov
Pasco County	2 nd	Thursday	Except Feb/Aug
Polk	2 nd	Thursday	EOM (beginning Jan)
River to Sea	4 th	Wednesday	Except Jul/Dec
St. Lucie	1 st	Wednesday	EOM (beginning Feb)
Sarasota/Manatee	4 th	Monday	Except Mar/May/Jul/Aug/Nov
Space Coast	2 nd	Thursday	Except Jan/June/Aug



YEAR 2018

MPOAC Meeting Dates

JANUARY

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

FEBRUARY

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	1	2	3
4	5	6	7	8	9	10

MARCH

25	26	27	28	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

APRIL

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5
6	7	8	9	10	11	12

MAY

29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

JUNE

27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

JULY

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

AUGUST

29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

SEPTEMBER

26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

OCTOBER

30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

NOVEMBER

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

DECEMBER

25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

YEAR 2019

MPOAC Meeting Dates

JANUARY

30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

FEBRUARY

27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	1	2
3	4	5	6	7	8	9

MARCH

24	25	26	27	28	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

APRIL

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

MAY

28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

JUNE

26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

JULY

30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

AUGUST

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

SEPTEMBER

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5
6	7	8	9	10	11	12

OCTOBER

29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

NOVEMBER

27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

DECEMBER

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

YEAR 2020

MPOAC Meeting Dates

JANUARY

29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

FEBRUARY

26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
1	2	3	4	5	6	7

MARCH

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

APRIL

29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

MAY

26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

JUNE

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

JULY

28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

AUGUST

26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

SEPTEMBER

30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

OCTOBER

27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

NOVEMBER

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5
6	7	8	9	10	11	12

DECEMBER

29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

YEAR 2021

MPOAC Meeting Dates

JANUARY

27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

FEBRUARY

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	1	2	3	4	5	6
7	8	9	10	11	12	13

MARCH

28	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

APRIL

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

MAY

25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

JUNE

30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

JULY

27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

AUGUST

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

SEPTEMBER

29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

OCTOBER

26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

NOVEMBER

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

DECEMBER

28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8



Open Days
1st and 4th Thursday



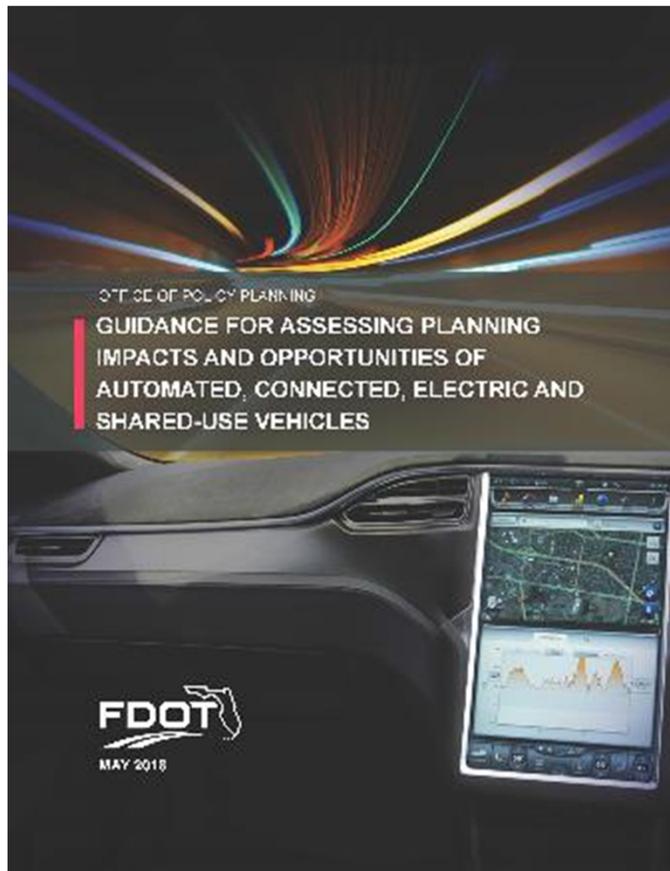
Final MPOAC
FY 2019-2020
UPWP Approval



Disabled Veterans and Florida Tolls



AV/CV Market Penetration in MPO LRTPs



Planning for the Future(s)

Guidance on ACES
Considerations into Long
Range Transportation Plans

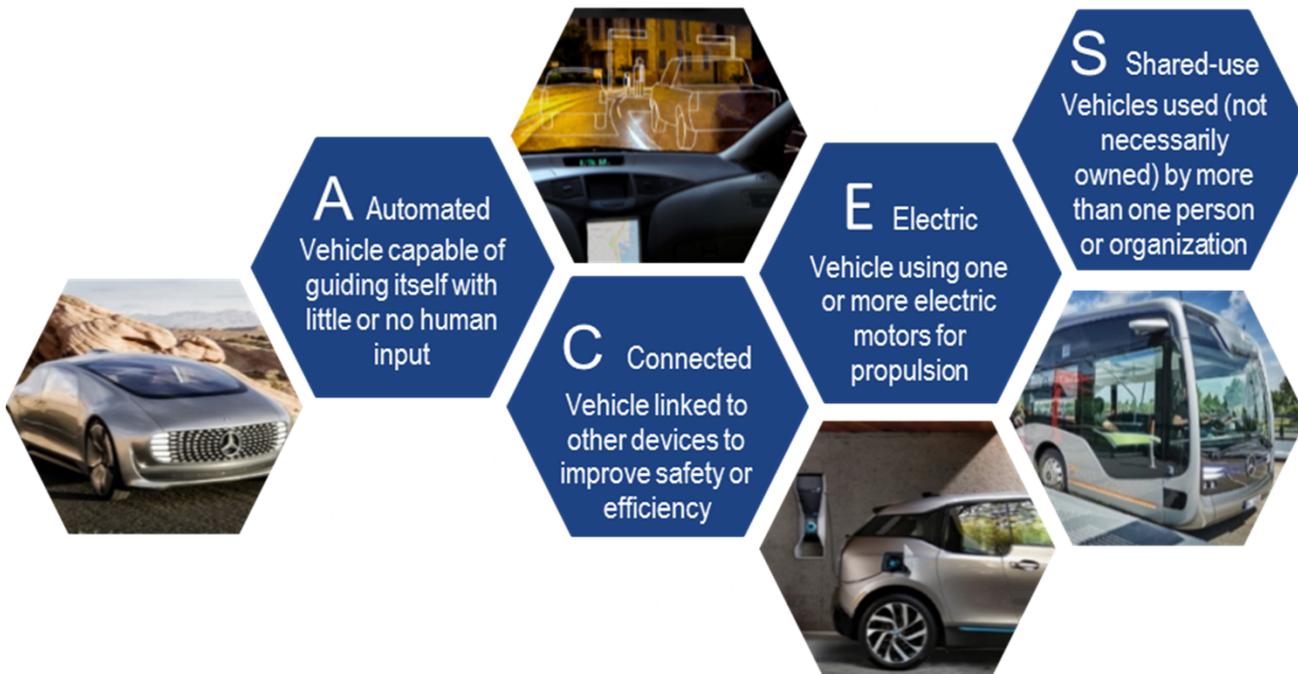
Agenda

- Definitions
- Purpose & Approach
- Guide Overview
- Key Findings
- Questions



Source: www.tmcnet.com

ACES Defined



Purpose & Approach

Volkswagen expects first self driving cars on the market by 2019

GM: Autonomous cars could be deployed by 2020 or sooner

BMW to launch autonomous iNext in 2021

First autonomous Toyota to be available in 2020

NVIDIA to introduce level-4 enabling system by 2018

Ford CEO announces fully autonomous vehicles for mobility service by 2021

Audi to introduce a self-driving car by 2020

NuTonomy to provide self driving taxi service in Singapore by 2018, expand to 10 cities around the world by 2020

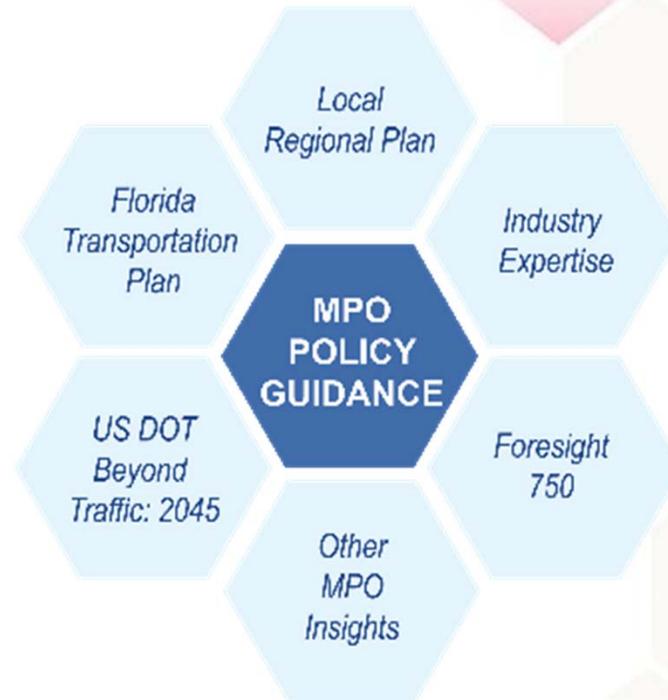
Delphi and MobilEye to provide off the shelf driving system by 2019

Uber fleet to be driverless by 2030.

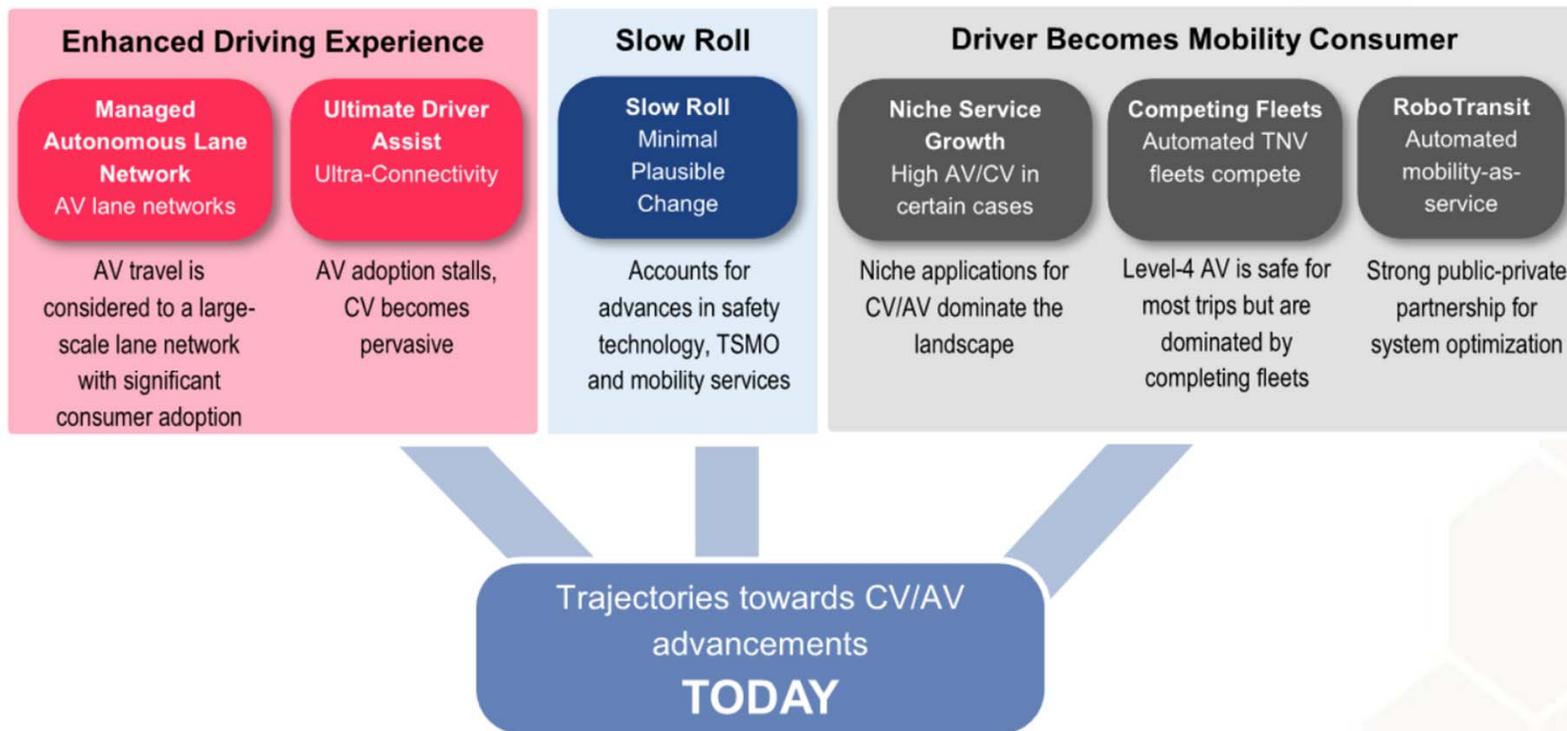
Source: http://www.driverless-future.com/?page_id=384

Purpose & Approach

- Literature Review
- MPO Survey and Interviews
- FHWA scenarios
- 4-step Travel Demand Modeling



ACES Planning Process



ACES Planning Process



Policy Guide at a Glance

- Technology Overview
- Safety Impacts
- Travel Demand Impacts
- Highway System Impacts
- Transit System Impacts
- Funding Impacts
- Planning Processes
- Education & Engagement
- Considerations



This graphic image is from www.bing.com and licensed under [CC BY](https://creativecommons.org/licenses/by/4.0/)

Key Points: Safety

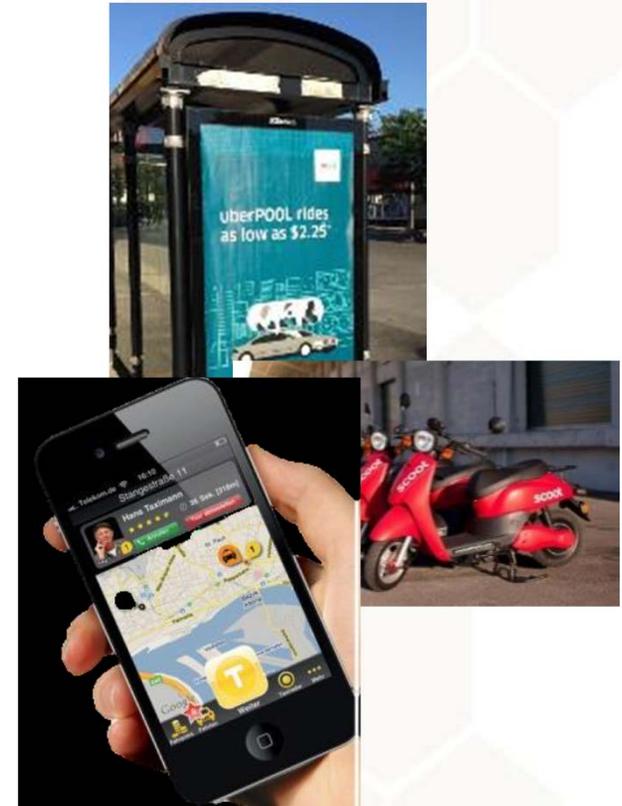
- Fatalities in Florida are on the rise, ACES may help reverse the fatalities trend.
- During transition, partial automation may increase risks associated with distracted driving.

Technology	Received Benefit
Forward collision warning	<ul style="list-style-type: none"> ▼27% Front-to-rear crashes ▼20% Front-to-rear crashes with injuries ▼7% Claim rates for damage to other vehicles ▼14% Claim rates for injuries to people in other vehicles
Forward collision warning plus autobrake	<ul style="list-style-type: none"> ▼50% Front-to-rear crashes ▼56% Front-to-rear crashes with injuries ▼13% Claim rates for damage to other vehicles ▼21% Claim rates for injuries to people in other vehicles
Lane departure warning	<ul style="list-style-type: none"> ▼11% Single-vehicle, sideswipe and head-on crashes ▼21% Injury crashes of same types
Blind spot detection	<ul style="list-style-type: none"> ▼14% Lane-change crashes ▼23% Lane-change crashes with injuries ▼9% Claim rates for damage to other vehicles ▼12% Claim rates for injuries to people in other vehicles
Rear automatic braking	<ul style="list-style-type: none"> ▼62% Backing crashes ▼13% Claim rates for damage to the insured vehicle ▼26% Claim rates for damage to other vehicles
Rearview cameras	<ul style="list-style-type: none"> ▼17% Backing crashes
Rear cross-traffic alert	<ul style="list-style-type: none"> ▼22% Backing crashes

Source: IIHS

Key Points: Transit

- ACES may indirectly reduce demand for transit but create opportunities for more cost effective and customer friendly service.
- MPOs are in a unique position to help local transit agencies adapt by transforming into “mobility managers” that help broker trips using multiple providers across an area.



Key Points: Funding

- Financial scenarios can help evaluate the impact on MPO fiscally constrained capital programs.
- Transportation funding relies heavily upon the motor fuel tax; the future of which is uncertain.
- Coordination with federal and state agencies is crucial to develop new funding mechanisms that will be successful in the face of ACES.



Key Points: Planning Processes

- ACES will transform performance-based planning and, with it, the types of projects MPOs prioritize and plan.
- Collecting, storing, and the use of data will change
- Finding locally meaningful data may require MPOs to conduct or participate in pilot ACES projects.



Key Points: Engagement

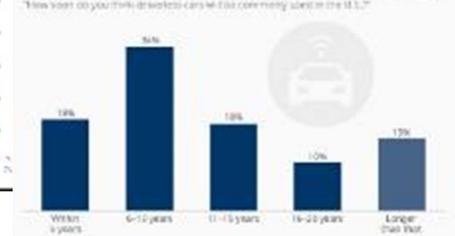
- ACES introduce equity and other issues that may affect how MPOs define their community visions, goals and performance measures.
- MPOs will face new and perhaps unprecedented demands on engagement staff, resources and technical knowledge to address new needs and new stakeholders.
- ACES opens up new and more complex communication needs and opportunities across many broad topic areas.



Consumers Desire More Automated Automobiles
Consumers Trust Driverless Cars

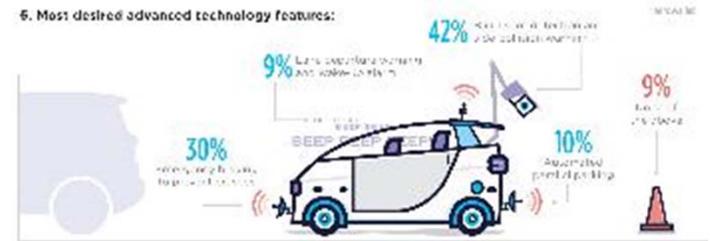


Americans Expect Driverless Cars to Be Common in 10 Years



Considerations Topics

- Education and Engagement
- Fiscal Planning
- Planning
- Policy
- Project Generation and Prioritization



Benefits of Autonomous Car

Benefit	Percentage	Potential Annual Benefits (US \$bil)
Reduction in Accidents	90%	\$100B from 2000 to 2050
Reduction in Wasted Time	80%	\$10B from 2000 to 2050
Reduction in Fuel Consumption	40%	\$10B from 2000 to 2050
Reduction in CO2 Emissions	40%	\$10B from 2000 to 2050
Reduction in Parking Space	40%	\$10B from 2000 to 2050
Reduction in Traffic Congestion	40%	\$10B from 2000 to 2050

Source: Deloitte, "The Impact of Autonomous Vehicles on the U.S. Economy," 2015. © 2015 Deloitte Developmental Corporation. All rights reserved.

Considerations – Education and Engagement

4 Identify and develop staff skills and knowledge on advances in ACES to help them better inform and serve the public, local decision-makers and other participants in the planning process.

1	Coordinate with other organizations regarding ACES communication roles and responsibilities.
2	Report ACES impact on transportation system performance and other community vision, goals, objectives and assets.
3	Collaborate with the private sector to deploy ACES technologies in more uniform, predictable ways.
4	Identify and develop staff skills and knowledge on advances in ACES to help them better inform and serve the public, local decision-makers and other participants in the planning process.
5	Help the public understand ACES technology so that community decisions about related investments and impacts are made in a timely, factual and sustainable fashion.
6	Develop a roadmap of appropriate interactions between MPOs and industry, legislatures, federal government and others to facilitate ACES deployment and accelerate the accompanying societal benefits.
7	Consider developing an ACES committee to inform other policy committees on the trade-offs of ACES.
8	Develop an industry council to identify opportunities for private-sector ACES interactions and collaboration.



Considerations – Fiscal Planning

1 Determine potential effects of ACES on infrastructure funding, revenue sources and stakeholder support.

1	Determine potential effects of ACES on infrastructure funding, revenue sources and stakeholder support.
2	Explore funding scenarios to evaluate effects of revenue shortfalls and alternative revenue sources on capital programs.
3	Investigate road pricing and other non-traditional funding sources that better support desired community outcomes.
4	Coordinate with ACES committee and the public to weigh the benefits and drawbacks of non-traditional funding sources to determine whether there is the political will to adopt and sustain those sources in support of a community vision.
5	Coordinate with federal and state agencies to ensure that new funding mechanisms create opportunities to replace local revenue sources disrupted by ACES.
6	Capitalize on the funding opportunities at federal, state and/or local funds.

BLACK VEATCH

HOW SMART CITY INITIATIVES SHOULD BE FINANCED

	By Organization Type		
	Government/ Municipality	Smart Services Providers	Total
Public/Private Partnerships	67.6%	83.8%	74.5%
Government Grants/Subsidies	52.2%	51.5%	51.9%
Tax Incentives	39.0%	45.5%	41.7%
Property Taxes	5.1%	23.2%	12.8%
Only Municipal Funds	8.1%	8.1%	8.1%
Only Private Funds	4.4%	7.1%	5.5%

One funding method is notably higher/lower than compared to all other groups combined.

Q3-12. What would be the most effective financing model for "smart city" initiatives? (Select all that apply)

Considerations – Planning

b. Identify and prioritize major corridors where fixed route transit can be most effective in an ACES future and plan for supporting transit features and land use.

1	Refine or re-evaluate MPO goals in light of ACES opportunities, impacts and uncertainties.
2	Link local ACES-related long-term goals with state and federal goals to take advantage of benefits and future opportunities.
3	Use regional planning processes such as development of unified work program and scenario planning to capture new data and trends that can be used to achieve regional vision and goals.
4	Transit Planning
a.	Reconsider current transit development plan in light of ACES-related opportunities and threats.
b.	Identify and prioritize major corridors where fixed route transit can be most effective in an ACES future and plan for supporting transit features and land use.
c.	Support integration of transportation payment and trip planning systems across public and private mobility service providers
d.	Identify locations for mobility hubs where flexible taxi services can interface with fixed route transit.
5	Performance Measures
a.	Develop and continually refine a flexible approach to determining ACES-driven system performance needs and measures.
b.	Create and test new or refined performance measures that better reflect federal and state regulatory requirements while better meeting community needs, preferences and expectations.
6	Smart Cities
a.	Work with municipalities and the private sector to define, collect and share "smart cities" data relevant to transportation
b.	Facilitate the development of smart city data and applications that support transportation planning and operations
c.	Partner with municipalities and the private sector to develop, collect and share "smart cities" data relevant to transportation

b. Create and test new or refined performance measures that better reflect federal and state regulatory requirements while better meeting community needs, preferences and expectations.



Considerations – Policy

2 Coordinate with local governments on land-use and parking policies to achieve local and regional goals.

1	Identify ACES solutions to mitigate potentially increased VMT and vehicle emissions.
2	Coordinate with local governments on land-use and parking policies to achieve local and regional goals.
3	Work with the local transit agency to develop policies that integrate ride hailing and TNCs with traditional transit, including integrated payment.
4	Develop a comprehensive freight strategy that addresses private sector and military freight needs and trends.



Source: www.planetizen.com



Considerations – Project Generation and Prioritization

1 Build consensus with MPO members regarding how to account for ACES in project development and prioritization.

a. Increased road marking implementation and maintenance for machine vision (e.g. electronic lane markings that allow use of V2I to provide more accurate lane markings and to provide changing road lanes for work zones.)

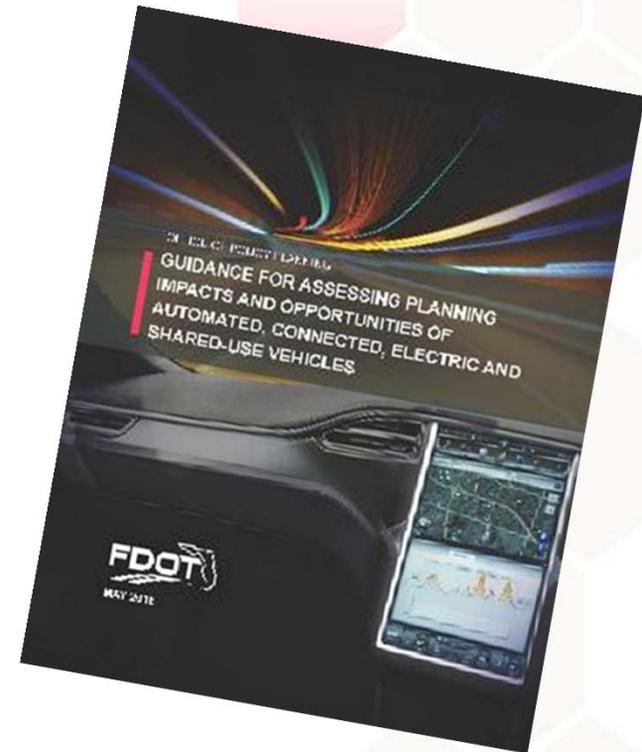
1	Build consensus with MPO members regarding how to account for ACES in project development and prioritization.
2	Explore how best to implement new ACES-related infrastructure needs and standards into project planning, including such considerations as the need for:
	a. Increased road marking implementation and maintenance for machine vision (e.g. electronic lane markings that allow use of V2I to provide more accurate lane markings and to provide changing road lanes for work zones.)
	b. Increased pavement maintenance for safe automated vehicle operation
	c. Electric vehicle charging and related power generation and distribution systems
	d. Supplementary or supportive ITS investments
	e. Dedicated or priority lanes for exclusive use by ACES vehicles (intermittently or uniformly)
	f. Signal priority for ACES vehicles
	g. Parking access and priority for ACES vehicles
	h. Evaluation of future operations related to lane management and restrictions (truck platoons operating in the left lanes rather than the right lanes, for example), pick up zones for transportation network companies, etc.
	i. Other ACES-related needs as identified
	j. ACES-related impacts on non-transportation related programs (911, Meals on Wheels, Air Quality, etc.)
	k. Incorporate into existing or planned Complete Streets projects
3	Incorporate ACES-related investments into already programed TIP/STIP and fiscally constrained LRTP infrastructure plans and individual projects.



Source: www.wonderfulengineering.com

Next steps and deliverables

- Complete travel demand model efforts (June 2018)
 - Demand Analysis
 - Model Scripting
- Distribute complete Guidance Document (July 2018)



Questions and discussion



Source: Mercedes Benz
(mbusa.com/mercedes/future/model/model-All_New_F015_Luxury)



Source: Buick Avista Concept interior
(<http://st.motortrend.com/uploads/sites/5/2016/01/Buick-Avista-concept-interior-5.jpg>)



DBE Database and MPO Participation



TRAC-N-Rides Program Update



Communications



Member Comments



Adjournment

Next Meeting – August 02, 2018
Orlando, FL