

**Virginia Air
Transportation
System Plan
Update**



2013 Virginia Air Transportation System Plan Update

Presented to:

VATSP Webinar #1: May 14, 2013



Agenda

→ Who

- Project Team

→ Progress to Date

- Inventory
- Forecasts

→ Next Steps

→ Q & A



Who – Your Project Team



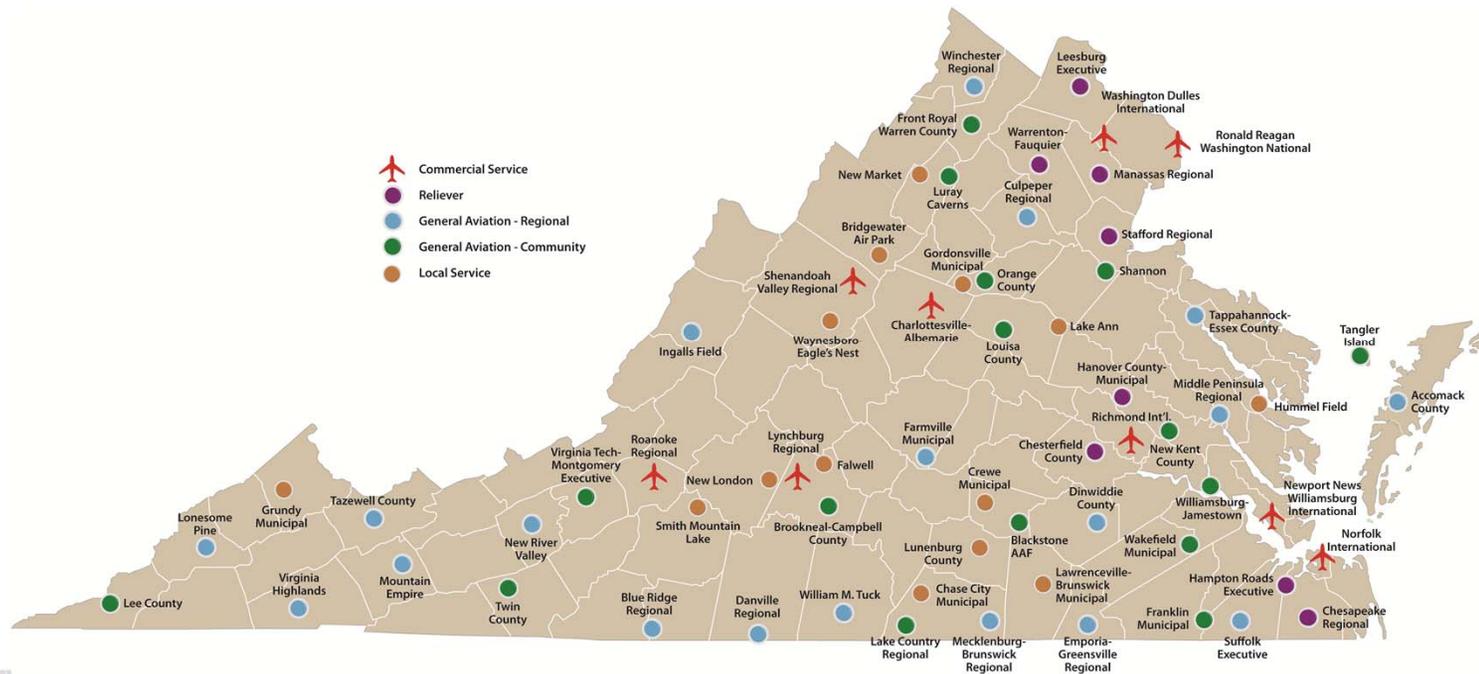
CAMPBELL AND PARIS ENGINEERS, P.C.



Progress to Date

Inventory Purpose

- Comprehensive Snapshot of Current System
- Identification of System Changes & 2003 VATSP Implemented Recommendations
- Baseline for Multiple Technical Tasks for the System Plan Update



Progress to Date Inventory Process

- Identify Data Sets Needed to Support System Plan Update
- Review and Collect Data from Secondary Data Sources
- Develop and Populate a Comprehensive Inventory Database
 - Airport Sponsors to Review, Comment, and Provide any Outstanding Data in the Sponsor Survey Forms
- Contact Airport Sponsors for Information Updates and Missing Data
- Prepare a Final Database to Support System Analysis

18. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

WASHINGTON, DC

11 ASSOC CITY: WASHINGTON 4 ESTATE DC LOC ID: HEP FAA SITE NR: 80001A
 12 AIRPORT NAME: MANASSAS JOHN HARRY P. DAVIS FIELD 5 COUNTY: PRINCE WILLIAM DC
 3 CDB: 10 AIRPORT (RNF) 26 WSW 8 REGION/NO: AEADCA 7 SECT AIRPORT: WASHINGTON

10 OWNERSHIP: PVT GENERAL REVISED
 11 OWNER: CITY OF MANASSAS
 12 ADDRESS: 1000 HARRY J. FARRISH MANASSAS, VA 20110
 13 PHONE NR: 703.363.1800
 14 MANAGER: JOAN RIVERA
 15 ADDRESS: 1000 HARRY J. FARRISH MANASSAS, VA 20110
 16 PHONE NR: 703.363.1800
 17 ATTENDANCE SCHEDULE: ALL ALL 080-2300

18 AIRPORT USE: PUBLIC
 19 AIRPT LAT: 38-43.15 88TH ESTIMATED
 20 AIRPT LONG: 077-50.264W
 21 AIRPT ELEV: 191.9 SURVEYED
 22 ACRES: 600
 23 RIGHT TRAFFIC: 34E, 14R
 24 NON-COMM LANDING: ---
 25 NPAS/EFD AGREEMENT: ---
 26 FAR 135 INDEX: ---

10 FUEL: 100L A
 71 AIRFRAME BRGS: MAJOR
 72 PWR PLANT BRGS: LOW
 73 BOTTLE CONVEN: LOW
 74 BULK OXYGEN: HIGH/LOW
 75 TANT STORAGE: HOR. TIE
 76 OTHER SERVICES: AVIATION, INSTR, INTL, SALES

10 AIRPT BGN: ---
 11 AIRPT LOT SHED: SEE RMK
 12 UNCOM: ---
 13 WIND INDICATOR: YES
 14 SEGMENTED CIRCLE: YES
 15 ON CONTROL TWR: YES
 16 FFS: ---
 17 FFS ON ASPT: ---
 18 FFS PHONE NR: ---

90 SINGLE ENG: 257
 91 MULTI ENG: 38
 92 ET: 27
 TOTAL: 322
 93 HELICOPTERS: 16
 94 SOLDIERS: 1
 95 MILITARY: 0
 96 MULTILIGHT: 0

100 AIR CABER: 0
 101 AIR TAXI: 1,800
 102 A LOCAL: 41,775
 103 A AIRPORT: 95,150
 104 MILITARY: 1,050
 105 TOTAL: 139,550
 OPERATIONS FOR 12 MONTHS ENDING: 06/30/2012

VATSP Update - Sponsor Form

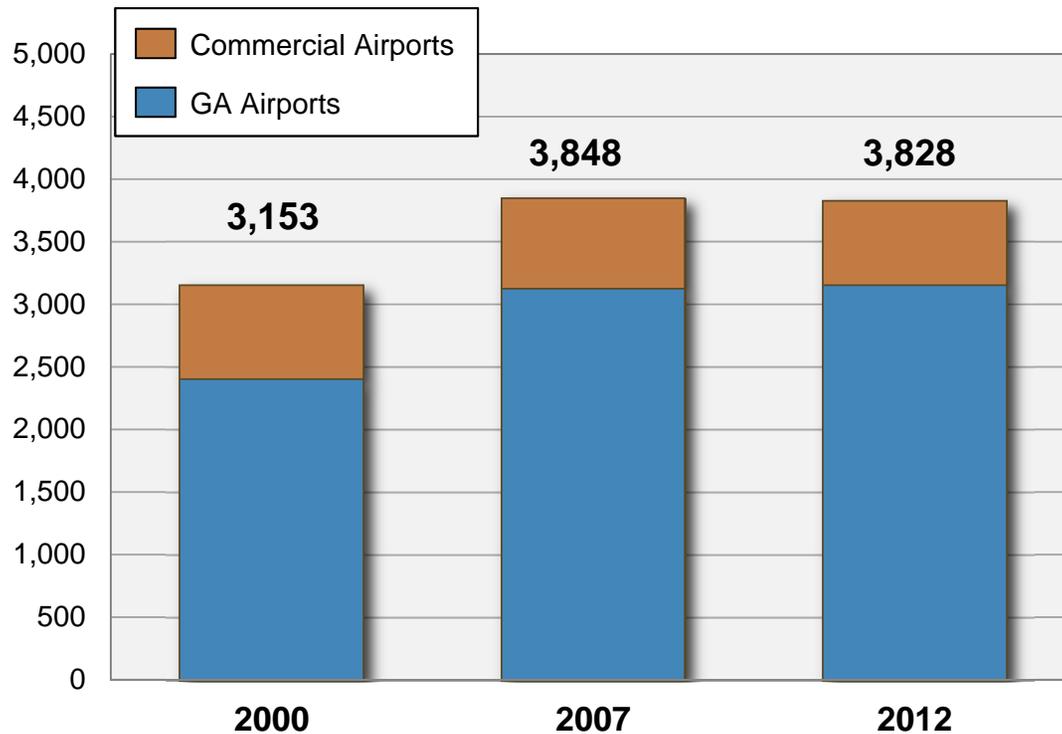
AIRPORT INFORMATION	Manassas	CHANGES OR COMMENTS
AIRPORT IDENTIFIER	HEP	
LOCALITY	Manassas	
CONTACT	Joan Rivera 703.363.1800	
NO OF EMPLOYEES	530	
OWNER CLASSIFICATION		CHANGES OR COMMENTS
NATSP SERVICE ROLE	RL	
AIRPORT APPROACH CATEGORY (AAC)	C	
BIPLANE DESIGN GROUP (ADG)	50	
OWNERSHIP (PUBLIC OR PRIVATE)	Public	
BASED AIRCRAFT AND OPERATIONS		CHANGES OR COMMENTS
BASED AIRCRAFT	404	
ME	314	
JP	30	
TJ	7	
HELD	22	
OTHER	1	
TOTAL OPERATIONS (PER FAA TAF OR FORM 5010)	74,828	
TOTAL OPERATIONS IN PEAR MONTH	6,469	
MORE THAN 500 ANNUAL JET OPS? (Y/N)	Yes	
ANNUAL SERVICE VOLUME (PER AC 150/5060-5)	305,000	
PLN CAPACITY (TOTAL ANNUAL OPS/AV)	27%	
FAKES/REMARKS		CHANGES OR COMMENTS
ACTIVE RUNWAYS	2	
INSTRUMENT APPROACH CAPABILITY	Precision	
LOWEST EXISTING INSTRUMENT APPROACH MINIMA	442/4	
WEATHER EQUIPMENT	ASDF000	
CLEARANCE DELIVERY COMMUNICATIONS SYSTEM	Discrete/RTS	
GPS APPROACH AVAILABLE	Yes	
GLDE SLOPE ON AIRPORT?	Yes	
LOCALS ON AIRPORT?	Yes	
PAPI ON AIRPORT?	Yes	
RELS ON AIRPORT?	Yes	
RADAR SITE ON AIRPORT?	No	
RETC ON AIRPORT?	Yes	
NOB ON AIRPORT?	No	
APPROACH LIGHTS TYPE? (EX: MALSR, COALS)	MALSR	
VISUAL NAVAIDS ON AIRPORT? (EX: WIND CONE & SEGMENTED CIRCLE)	Both	
CIRCLE	Both	
VISUAL NAVAIDS (EX: VASI, VOR)		
RUNWAYS		CHANGES OR COMMENTS
RUNWAY RUNWAY DESIGNATOR	16L/34R	
RUNWAY LENGTH	5,700	
RUNWAY WIDTH	50	
RW PAVEMENT STRENGTH	5W 50.0	
RW PAVEMENT CONDITION	Good	
EXISTING RW LIGHTS	HWS	
RELS? (Y/N)	Yes	
TAXIWAY TYPE (FULL PARALLEL, PARTIAL PARALLEL, NO TAXIWAY)	Full Parallel	
RUNWAY 2 IF APPLICABLE		CHANGES OR COMMENTS
RUNWAY 2 DESIGNATION	16R/34L	
RUNWAY LENGTH	3,054	
RUNWAY WIDTH	50	
RW PAVEMENT STRENGTH	5W 12.5	
RW PAVEMENT CONDITION	Good	
EXISTING RW LIGHTS	MWS	
RELS? (Y/N)	Yes	
TAXIWAY TYPE (FULL PARALLEL, PARTIAL PARALLEL, NO TAXIWAY)	Full parallel	
RUNWAY 3 IF APPLICABLE		CHANGES OR COMMENTS
RUNWAY 3 DESIGNATION		
RUNWAY LENGTH		
RUNWAY WIDTH		
RW PAVEMENT STRENGTH		
RW PAVEMENT CONDITION		
EXISTING RW LIGHTS		
RELS? (Y/N)		
TAXIWAY TYPE (FULL PARALLEL, PARTIAL PARALLEL, NO TAXIWAY)		



Progress to Date Based Aircraft Forecast

Virginia's Based Aircraft Grew Significantly Faster than the U.S. Fleet

Historic Based Aircraft at Virginia Airports
2000 – 2012



Airports	Historic CAGR		
	00-07	07-12	00-12
Commercial	-0.4%	-1.5%	-0.9%
GA	3.8%	0.2%	2.3%
Total VA	2.9%	-0.1%	1.6%
U.S.	0.9%	-0.8%	0.2%



Source: 2003 VATSP; DOAV Based Aircraft Surveys; FAA, Aerospace Forecast FY13-FY33, March 2013

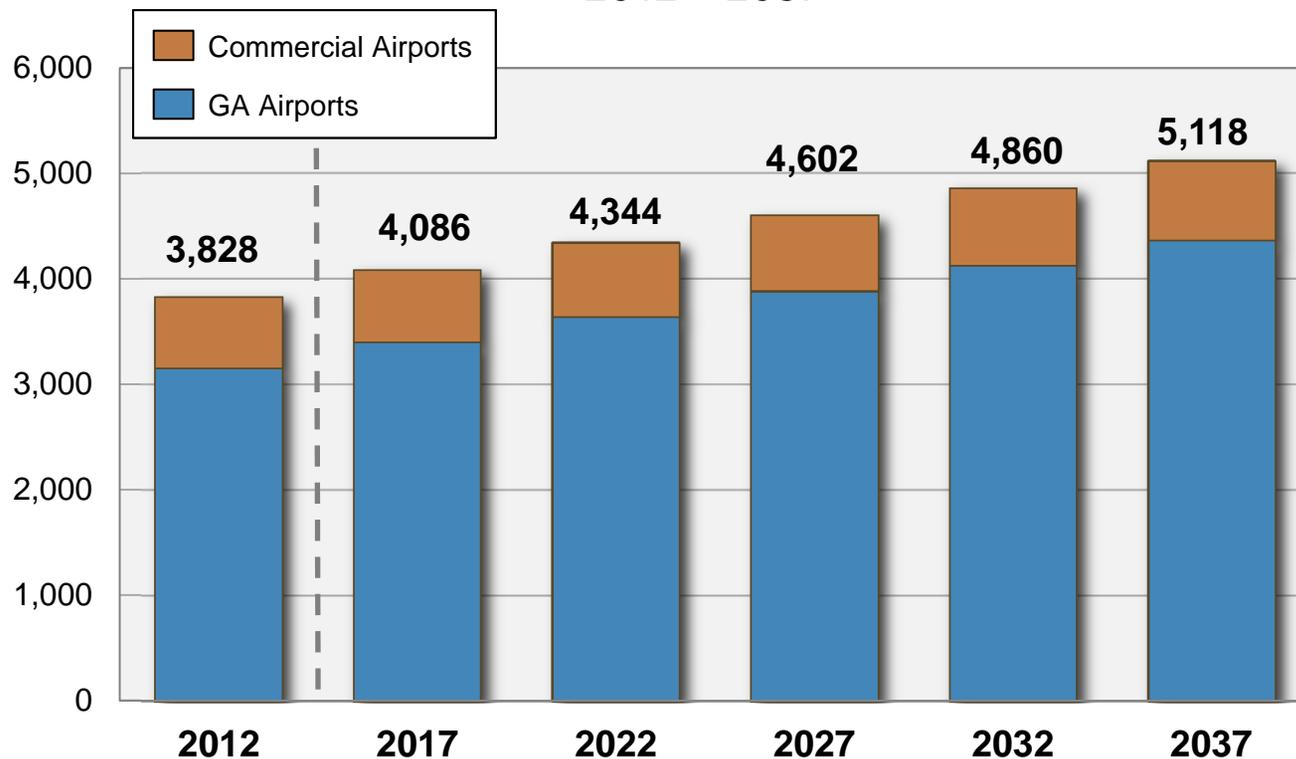


Progress to Date Based Aircraft Forecast

Based Aircraft are Forecast to Increase to more than 5,000 Aircraft in 2037

Forecast Based Aircraft at Virginia Airports

2012 – 2037



Airports	Forecast CAGR 12-37
Commercial	0.5%
GA	1.3%
Total VA	1.2%
U.S.	0.5%*



Source: ICF SH&E; FAA Aerospace Forecast FY13-FY33, March 2013

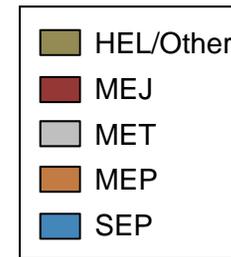
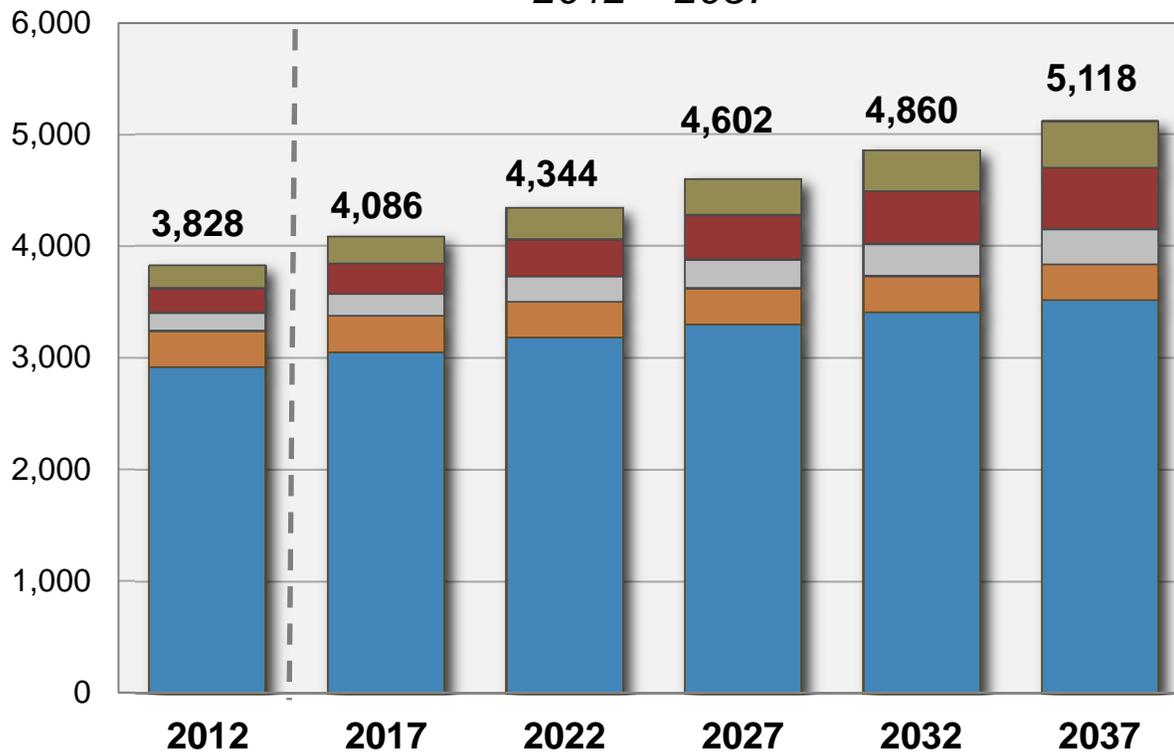
*Forecast is through 2033



Progress to Date Fleet Mix Forecast

Jets and Turboprops are Forecast to Grow the Fastest

Forecast Fleet Mix at Virginia Airports
2012 – 2037



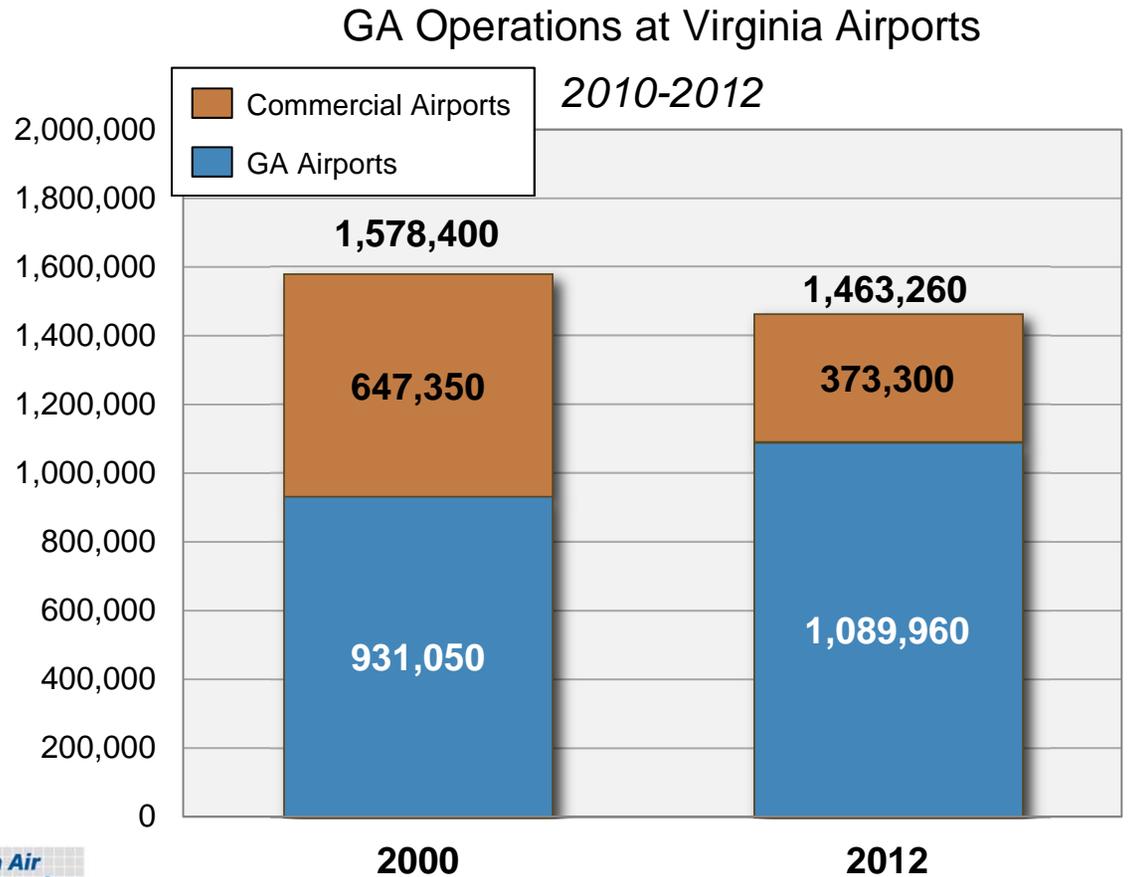
Aircraft Type	Forecast CAGR 12-37	
	VA	U.S.
SEP	0.7%	-0.2%
MEP	0.0%	-0.6%
MET	2.7%	1.7%
MEJ	3.7%	3.5%
HEL/Other	2.9%	1.5%
Total	1.2%	0.5%



Source: ICF SH&E; FAA Aerospace Forecast FY13-FY33, March 2013

Progress to Date GA Operations Forecast

Virginia's GA Operations Have Been Declining, but at a Slower Rate than the National Decline



Airports	Historic CAGR 00-12
Commercial	-4.5%
GA	1.3%
Total VA	-0.6%
U.S.	-3.7%

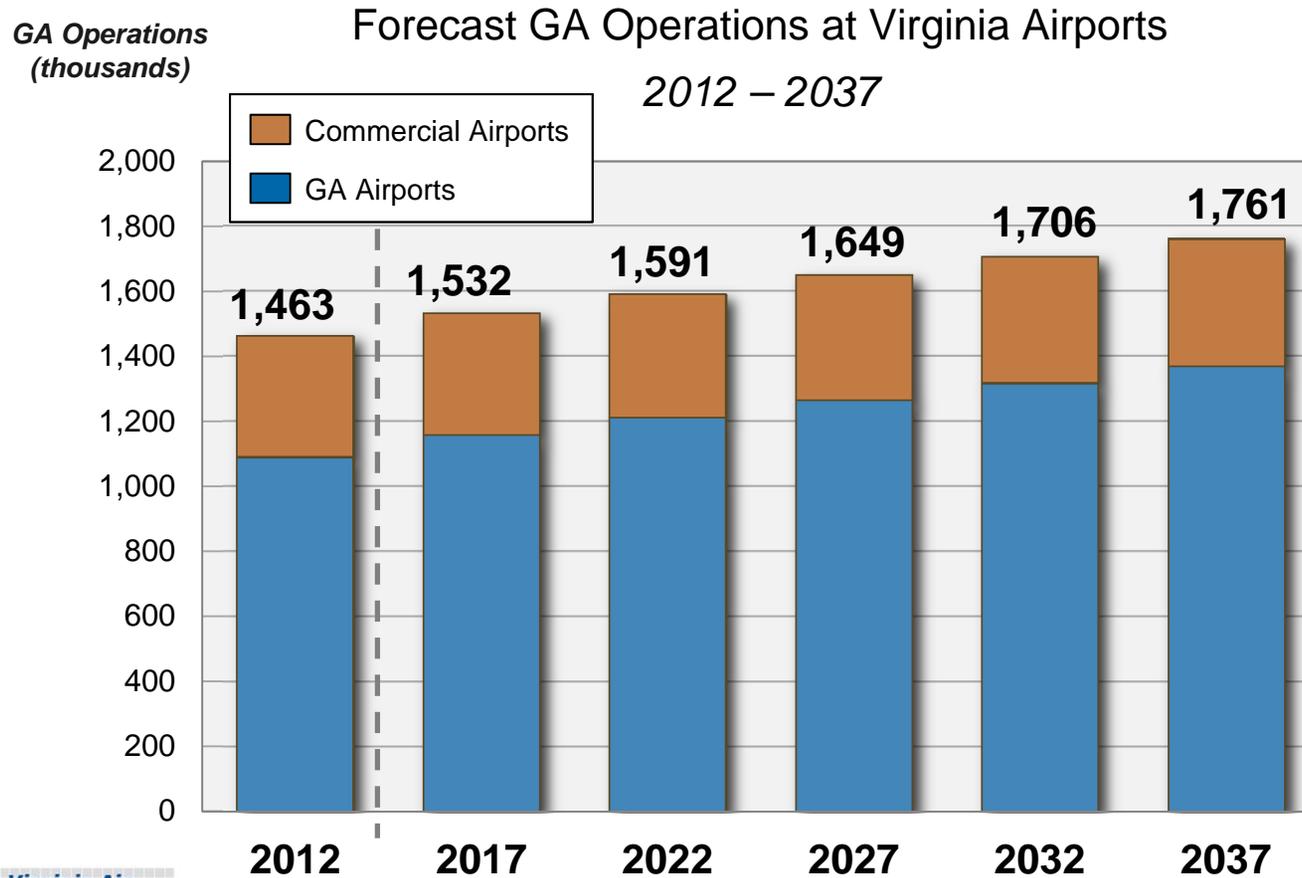


Source: 2003 VATSP; FAA ATADS; FAA TAF FY12-FY40; Form 5010; U.S. DOT, T100 (YE Nov. 12)



Progress to Date GA Operations Forecast

GA Operations are Forecast to Grow by 0.7% Per Year to Nearly 1.8 Million in 2037



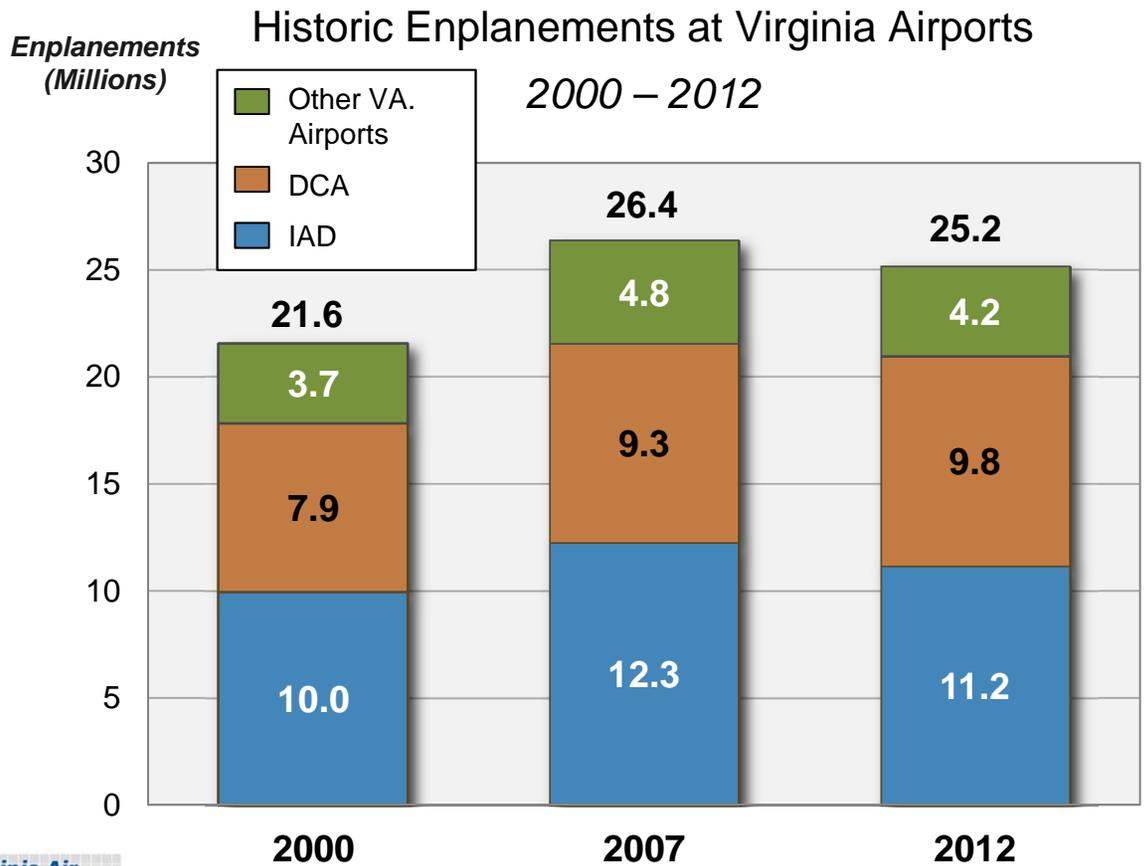
Airports	Forecast CAGR 12-37
Commercial	0.2%
GA	0.9%
Total VA	0.7%
U.S.	0.4%*



Source: ICF SH&E; FAA Aerospace Forecast FY13-FY33, March 2013 *Forecast is through 2033

Progress to Date Enplanements Forecast

Virginia and Total U.S. Enplanements have Declined Over the Past 5 Years



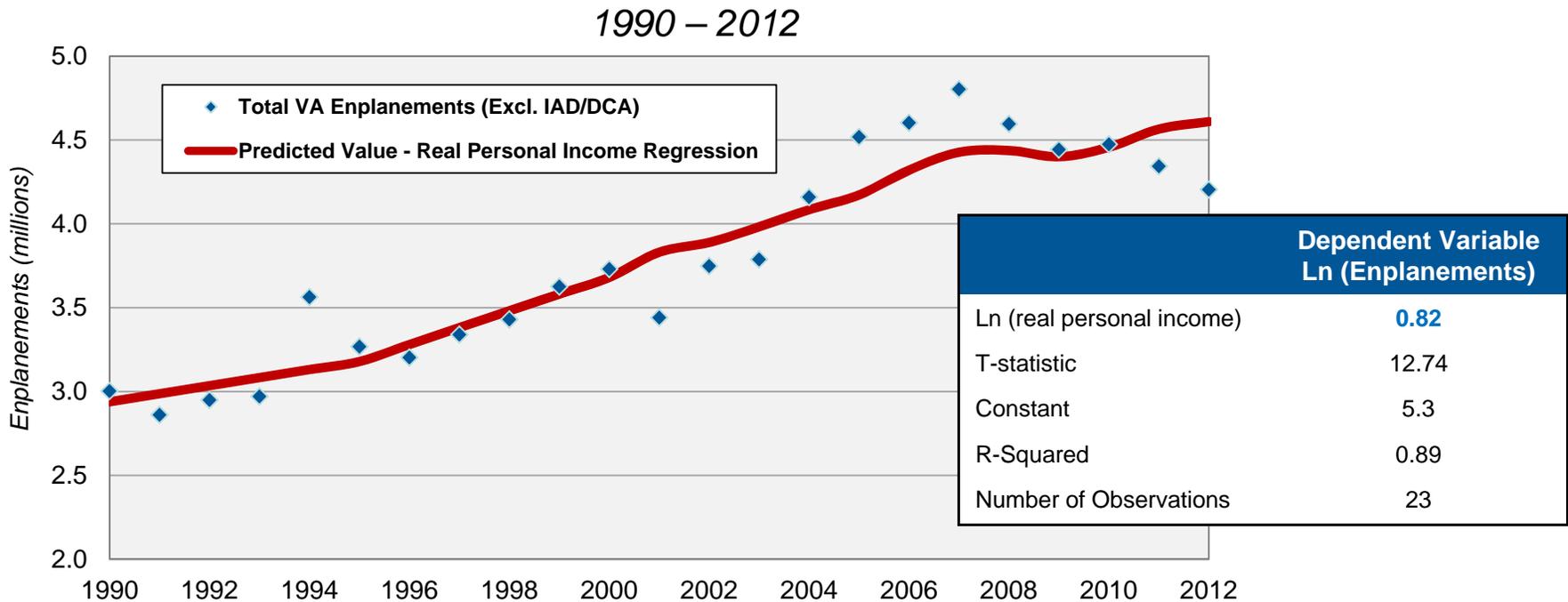
Airports	Historic CAGR		
	00-07	07-12	00-12
IAD	3.0%	-1.9%	1.0%
DCA	2.4%	1.0%	1.8%
All Other	3.7%	-2.6%	1.0%
Total VA	2.9%	-0.9%	1.3%
U.S. *	1.1%	-1.2%	0.1%

* U.S. Flag commercial carriers only

Progress to Date

Total Historical Enplanements

Total Historical Enplanements at VA Commercial Airports (Excl. IAD and DCA) and Predicted Values from Real Personal Income Regression

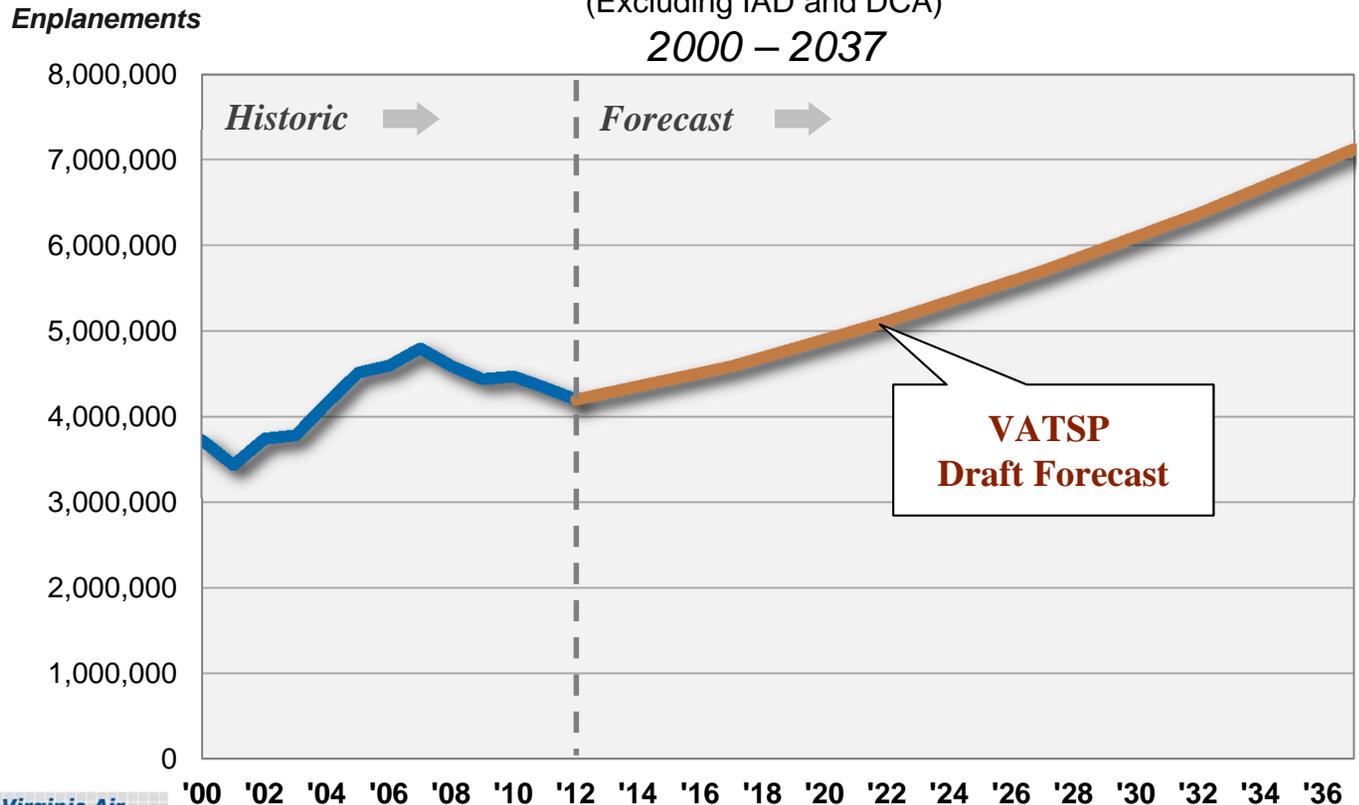


- A log-log regression showed an income elasticity of 0.82, which is within the range of elasticity expected for commercial airports in the U.S.
 - This elasticity was applied to projected income growth in Virginia State to forecast total enplanements at Virginia commercial airports (excluding IAD and DCA).

Progress to Date Enplanements Forecast

Virginia Commercial Airports Enplanements are Forecast to Exceed 7 Million in 2037

Enplanements at Virginia Commercial Airports
(Excluding IAD and DCA)
2000 – 2037



Period	Compound Annual Growth
VA	
2000-12	1.0%
2012-37	2.1%
US *	
2012-37	1.9%



* U.S. Domestic Enplanements

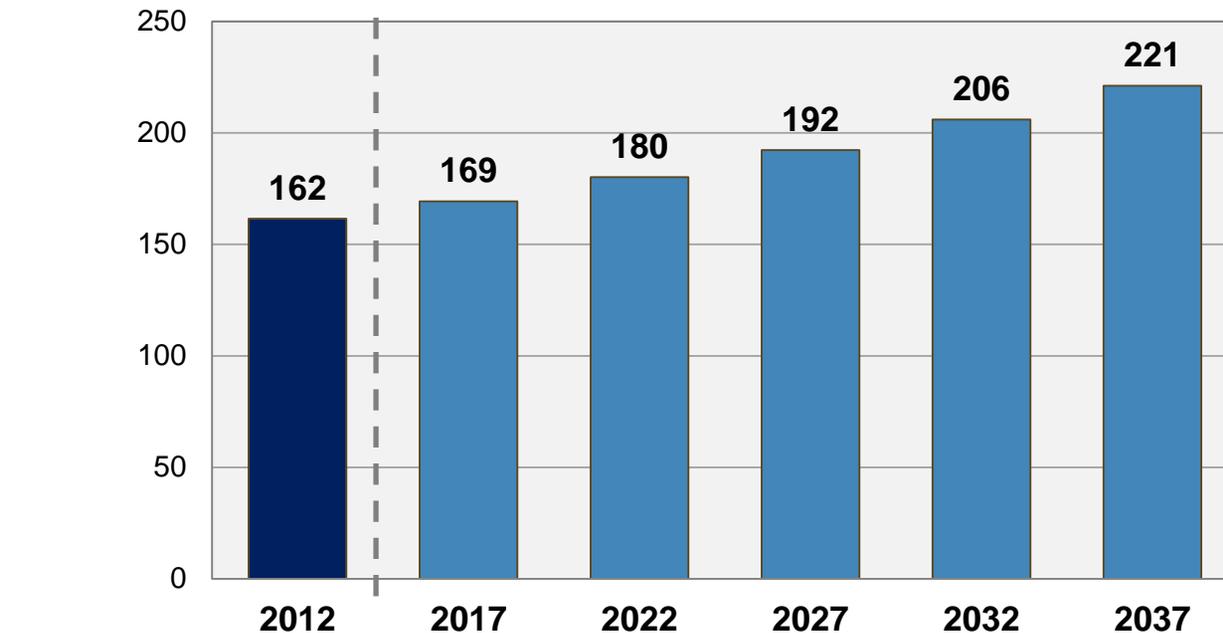
Source: ICF SH&E and FAA, Aerospace Forecasts, FY 2013 to FY 2033, March 2013



Progress to Date Commercial Operations Forecast

Commercial Passenger Aircraft Operations are Forecast to Reach 221,000 in 2037

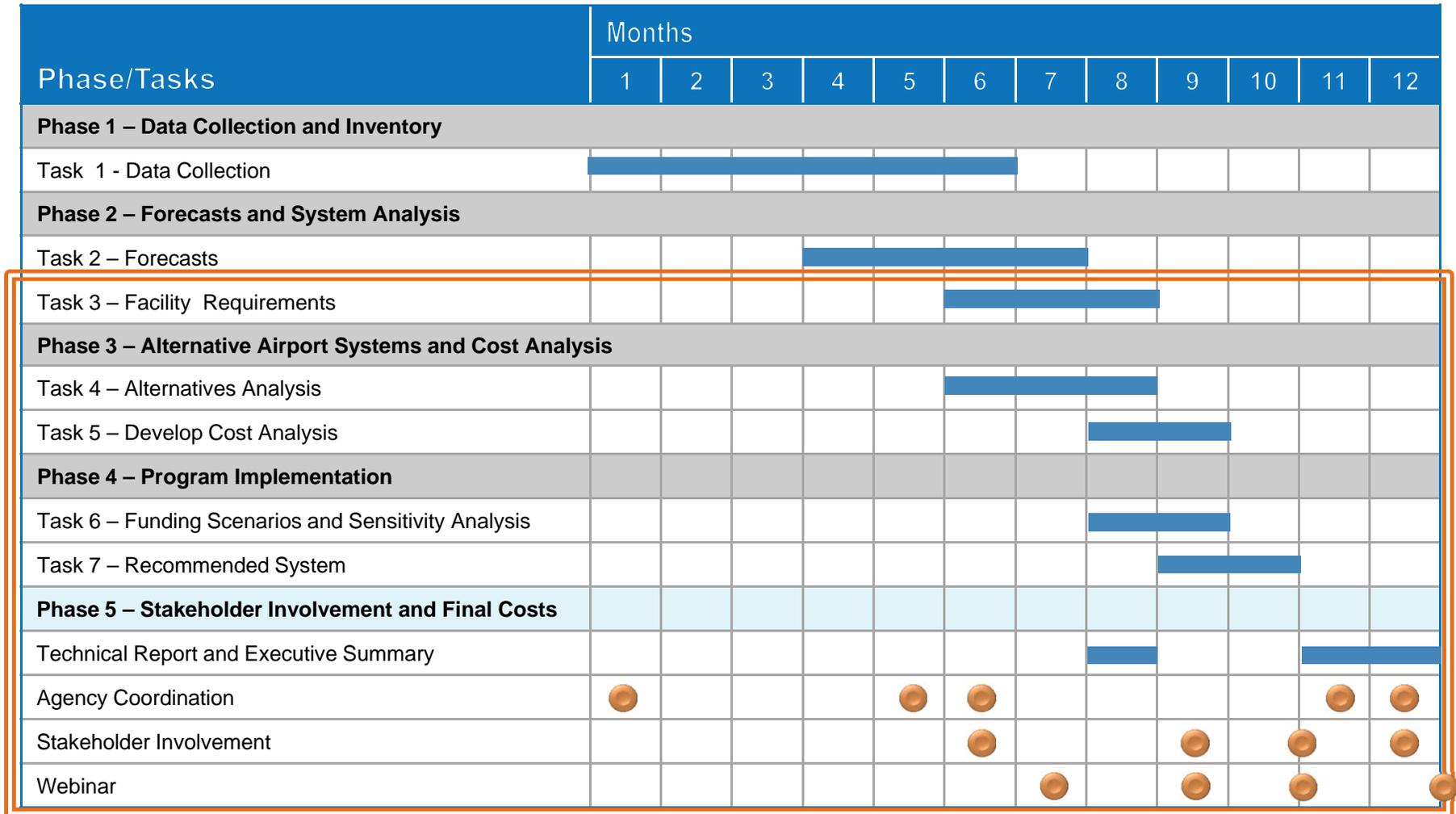
Forecast Commercial Passenger Aircraft Operations
(Excluding IAD and DCA)
2012 – 2037



	VA	U.S.
Forecast CAGR	1.3%	1.5%

- Average load factor increases from 74% to 77%
- Average aircraft size increases from 71 to 84 seats

Next Steps



Sponsor Involvement

- **Sponsor Survey – April 2013**
- **VAOC Workshop – May 2013**
- **Web Page Updates – Periodically Throughout the Study**
 - *http://www.doav.virginia.gov/VATSP_update_2013.htm*
- **Webinar Participation – 3 More Following Today’s Webinar**
- **VATSP Update Status Reports**
 - **VAB Meetings, VAOC Meetings, VA Aviation Conference**
- **Reach Out to Our Team with Questions or Comments**
 - **DOAV – Rusty Harrington, Manager, Planning & Environmental Section**
 - **Rusty.Harrington@doav.virginia.gov, 804-236-3632, ext. 106**
 - **AECOM Team – Reiner Pelzer, Senior Project Manager**
 - **Reiner.Pelzer@aecom.com, 215-399-4323**



Virginia Air Transportation System Plan Update

Thank you!

Questions?

