

**NAS**Operations  
ATO SysOps



# Friends and Partners of Aviation Weather Summer 2016 Meeting

Date:  
August 3, 2016

Surface Winds

Presented to:  
FPAW

Presented by:  
Kevin Johnston



**FAA**  
Air Traffic Organization

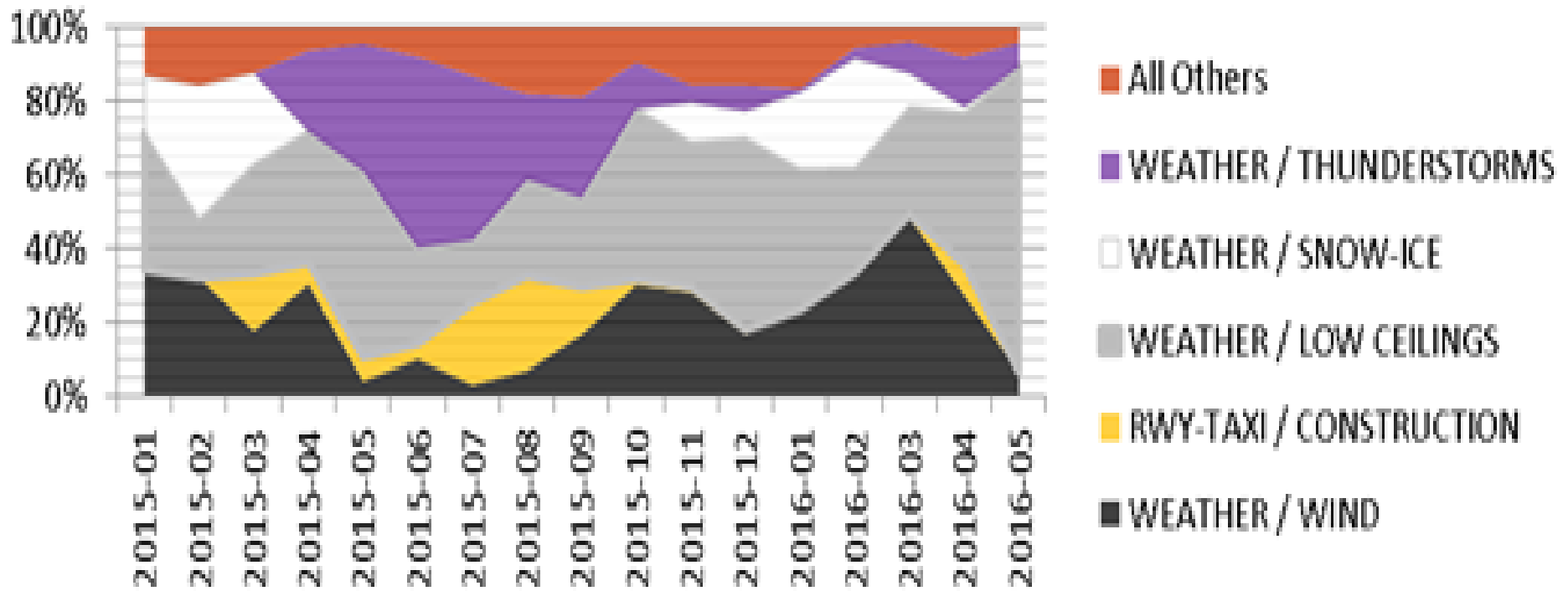
# Surface Wind Challenges?

- **During Center Weather Service Unit (CWSU) Site Reviews, NWS and FAA team members received feedback from Traffic Flow Managers that wind forecasts in the NWS Terminal Aerodrome Forecasts (TAF) do not assist/support TFM decisions.**
- **Do we have a problem? If so, how do we resolve it?**
- **How often are TMI implemented for wind?**
- **Where do we go from here?**

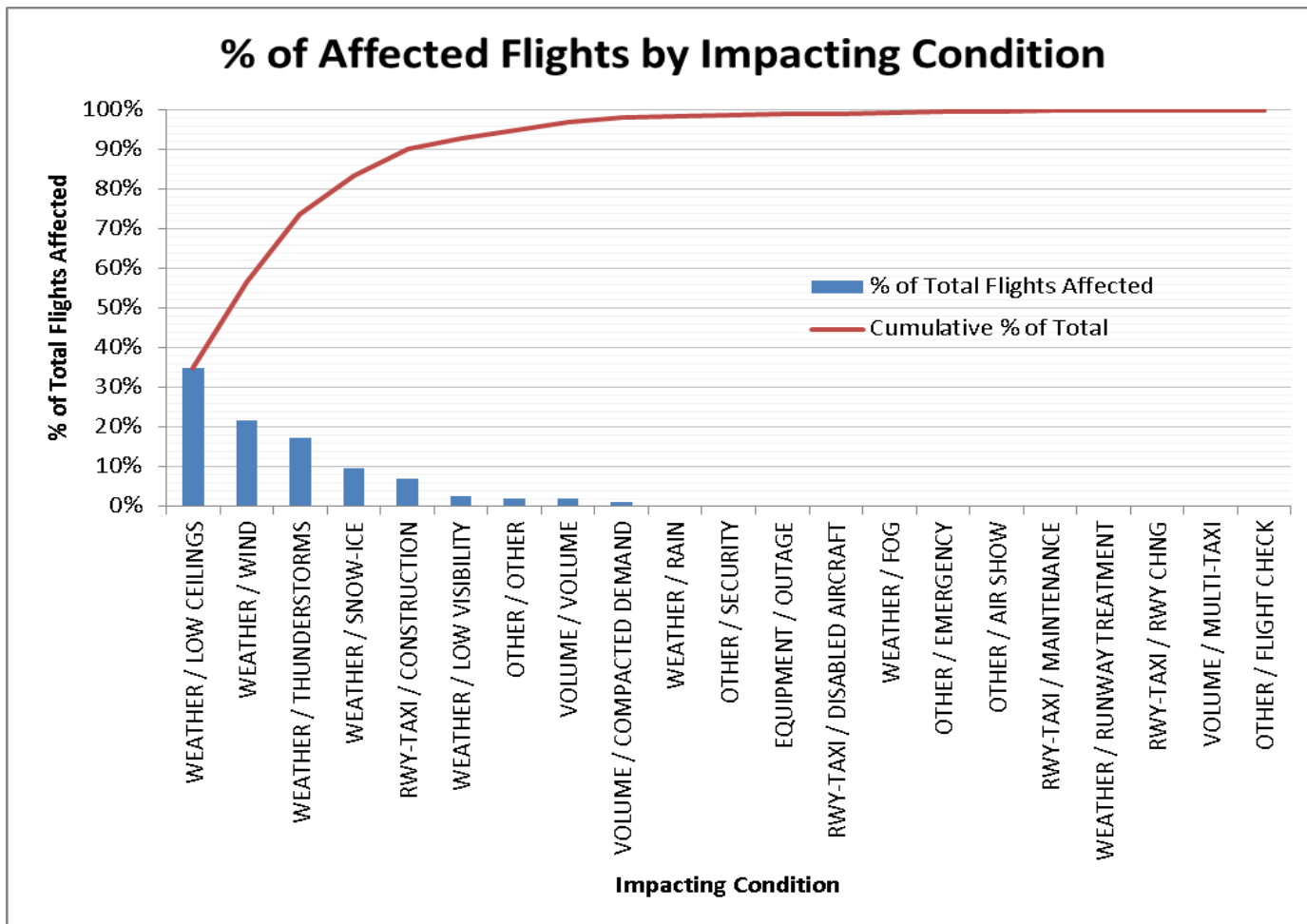
# Ground Delay Programs

## Jan 2015-May 2016

### % of Total Affected Flights Over Time



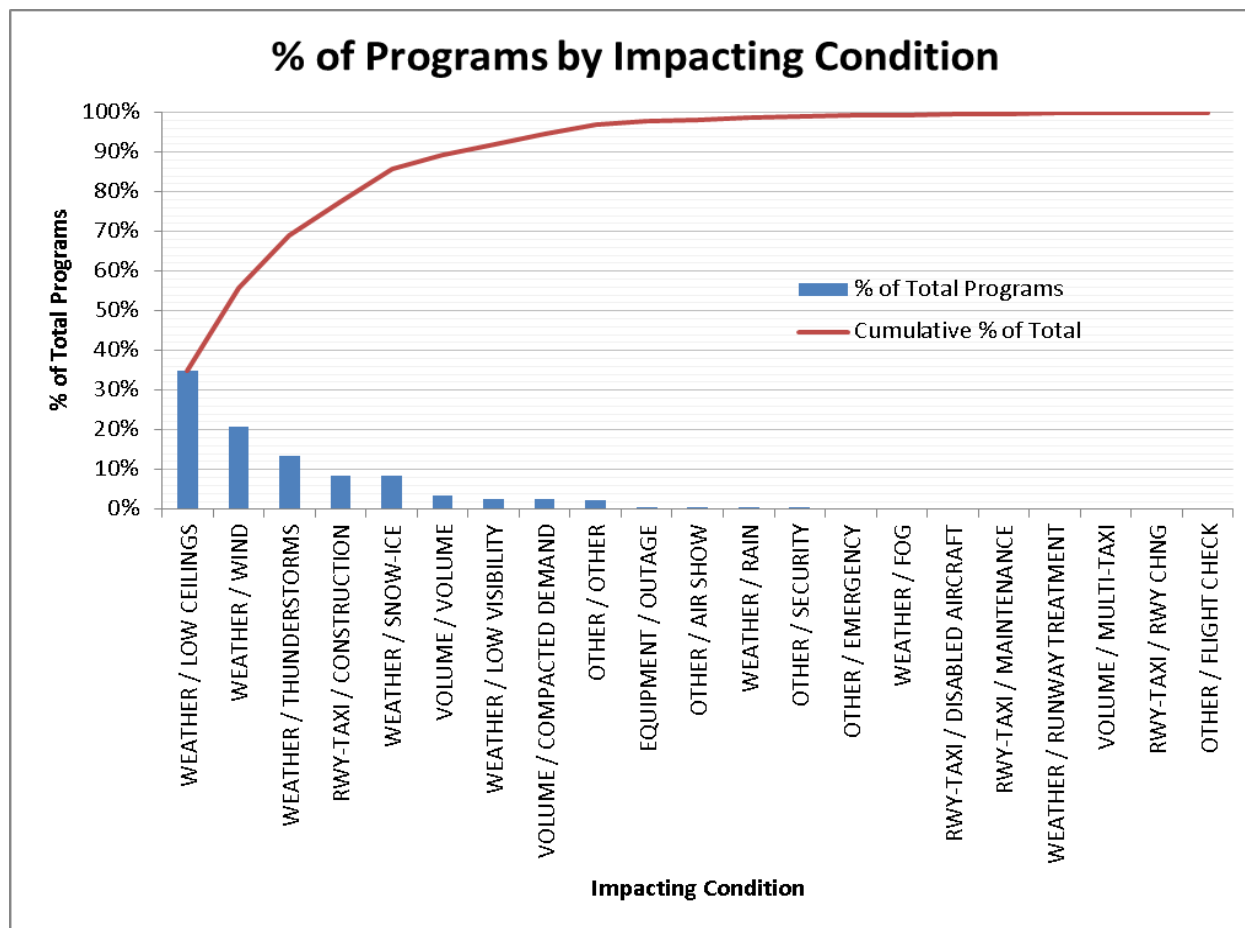
# Wind: Second Most Percentage of Flights Affected



# Wind: Second Most Percentage of Flights Affected

YYYY-DD	# Flights Affected: WEATHER/WIND	# Flights Affected: All Others	% Wind
2015-01	8296	15036	36%
2015-02	9231	18759	33%
2015-03	5586	24907	18%
2015-04	7223	16383	31%
2015-05	1273	27835	4%
2015-06	4064	34966	10%
2015-07	1171	32473	3%
2015-08	2206	28072	7%
2015-09	3194	15482	17%
2015-10	6898	15801	30%
2015-11	6884	17423	28%
2015-12	5735	27174	17%
2016-01	5201	16463	24%
2016-02	9278	17707	34%
2016-03	14398	14406	50%
2016-04	6356	16079	28%
2016-05*	858	11388	7%
<b>Total</b>	<b>97852</b>	<b>350354</b>	<b>22%</b>

# Wind: Second Most Percentage of GDPs Issued



# Wind: Where Are the GDPs?

Airport	# of Flights Affected	# of GDPs
LGA	23530	60
EWR	15204	44
JFK	14559	58
SFO	10842	24
ORD	9453	15
CYYZ	5551	21
LAS	3192	11
MSP	2714	24
DEN	2334	8
BOS	1868	7
PHL	1345	5
TEB	1225	7
LAX	990	2
IAH	951	2
SEA	878	5
DFW	865	1
MEM	597	4
CYUL	525	3
DCA	485	2
IAD	335	2
CLT	309	1
DTW	100	1

# Possible Next Steps

- **Engage industry...**
  - Work with industry and determine if finer resolution wind forecast, tied to traffic flow management decisions, would be helpful or is this a government only concern?
- **Why aren't more GDPs for wind implemented?**
  - Are we too reactive when it comes to wind? If so, how can we improve?
- **Is wind forecasting only important at the surface?**
  - If not, what levels above the surface are needed?
- **Further discussion and exploration likely needed.**