# 33L Departures

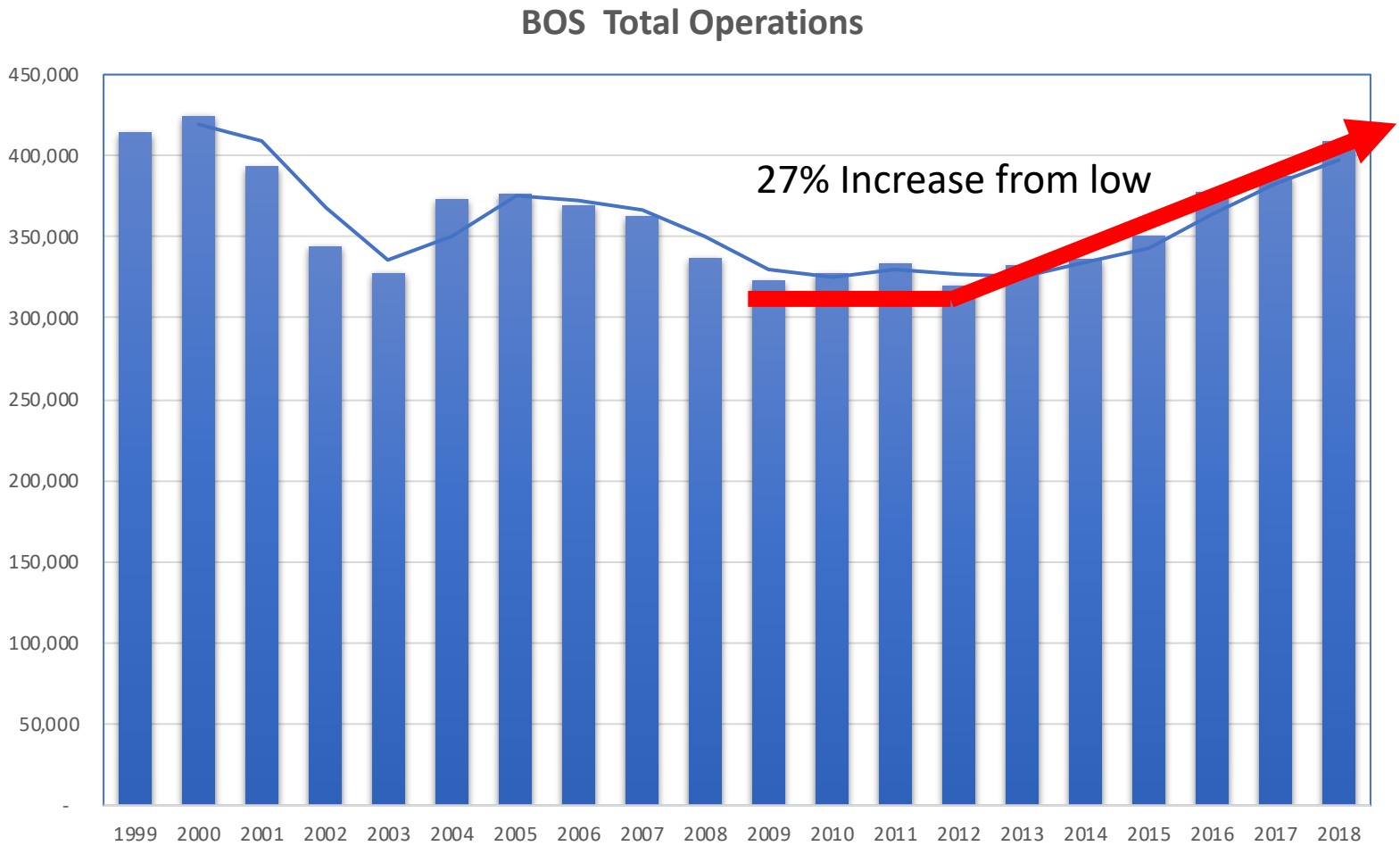
Four Factors

1. Logan Volume post 2008 recession
2. 33L Use post 14/32 (Nov. 2006)
3. Operations by Hour
4. 33L RNAV SID (June 2013)

*V3 revised 5/24/19: Corrected to add 22R departures to slides 3,4,5*

***Disclaimer: all analysis done by volunteers on best efforts basis using referenced data sources***

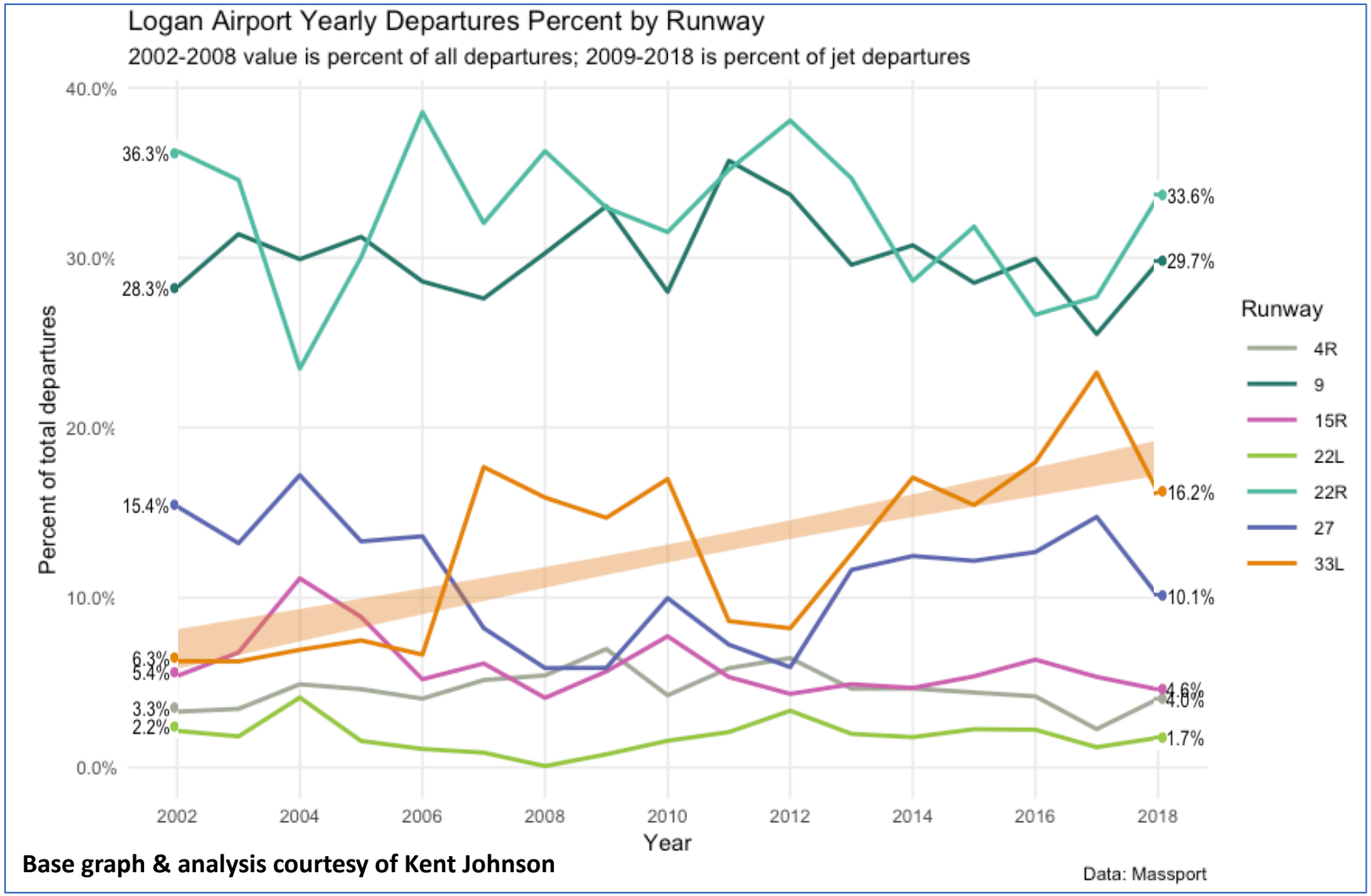
# Growth has resumed




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (000) | 414 | 424 | 393 | 344 | 328 | 373 | 376 | 369 | 363 | 337 | 323 | 327 | 333 | 320 | 332 | 336 | 350 | 378 | 387 | 409 |

Source: FAA Aviation System Performance Metrics (ASPM: https://aspm.faa.gov/apm/sys/main.asp )

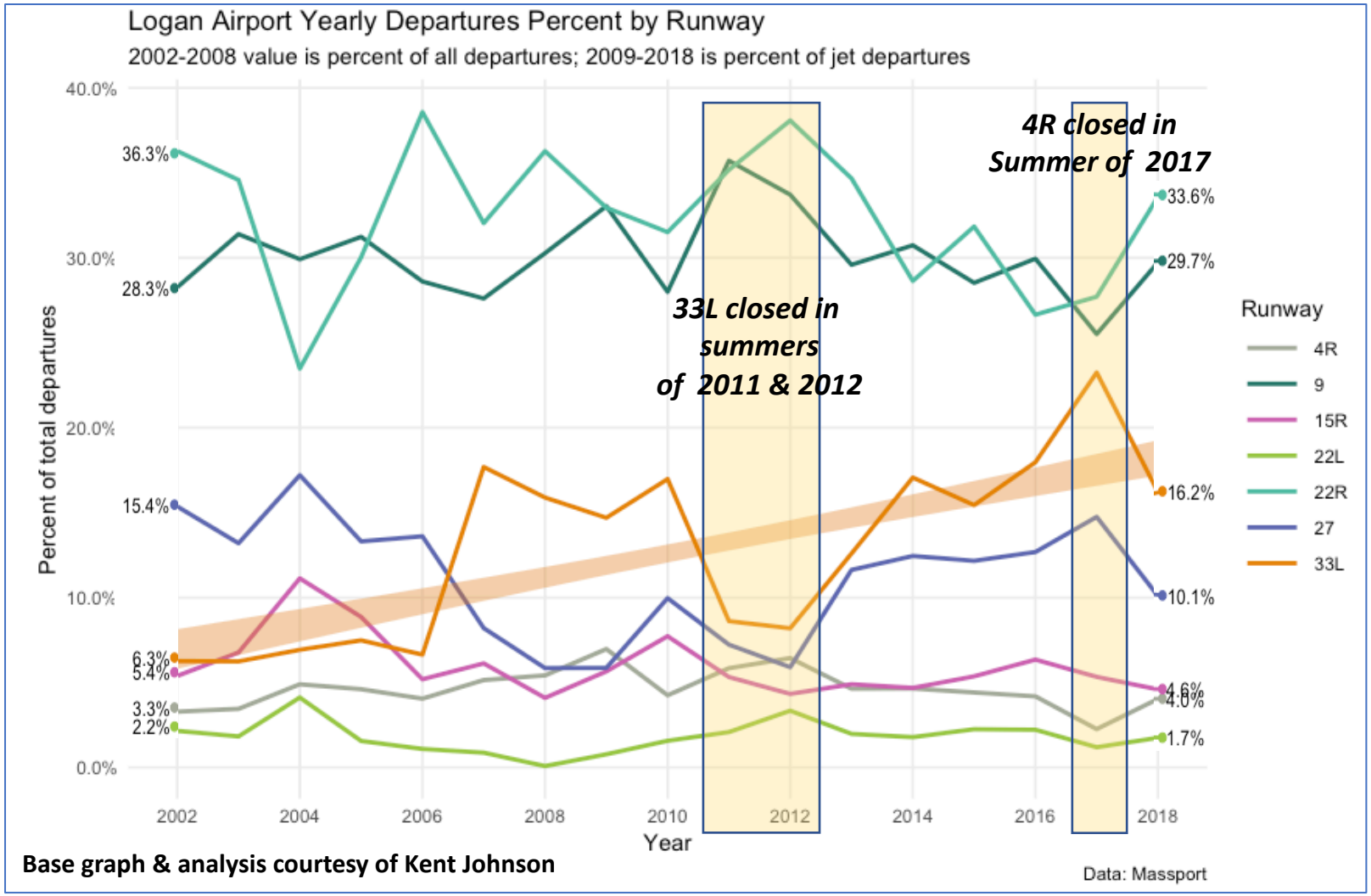
# Logan Departures 2002-2018 V3 revised 5/24/19




**Base graph & analysis courtesy of Kent Johnson**

Source: http://kentsj.com/BWFS/Logan_Runway_Use_2002-2018.html

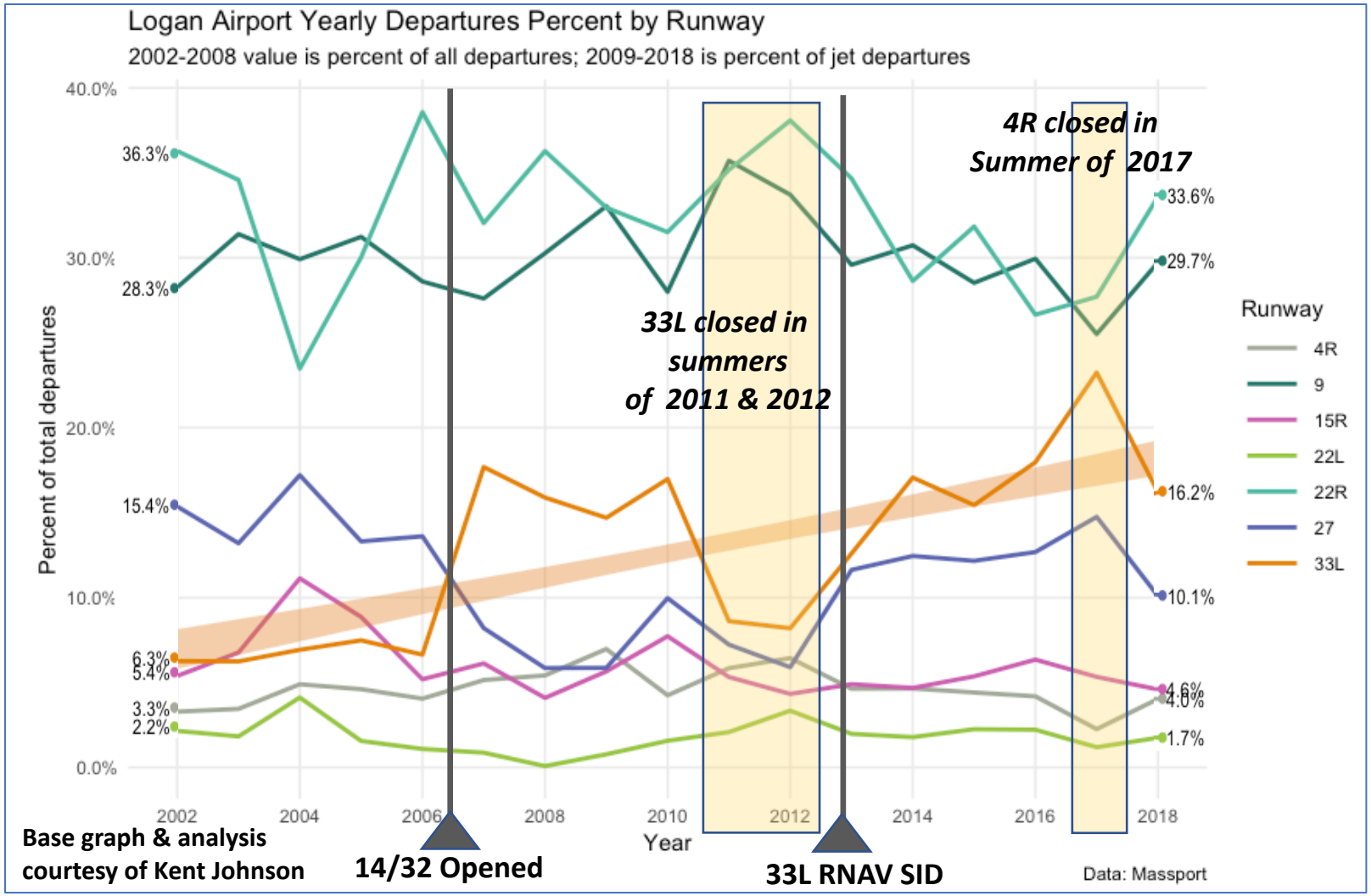
# Logan Departures 2002-2018 V3 revised 5/24/19




**Base graph & analysis courtesy of Kent Johnson**

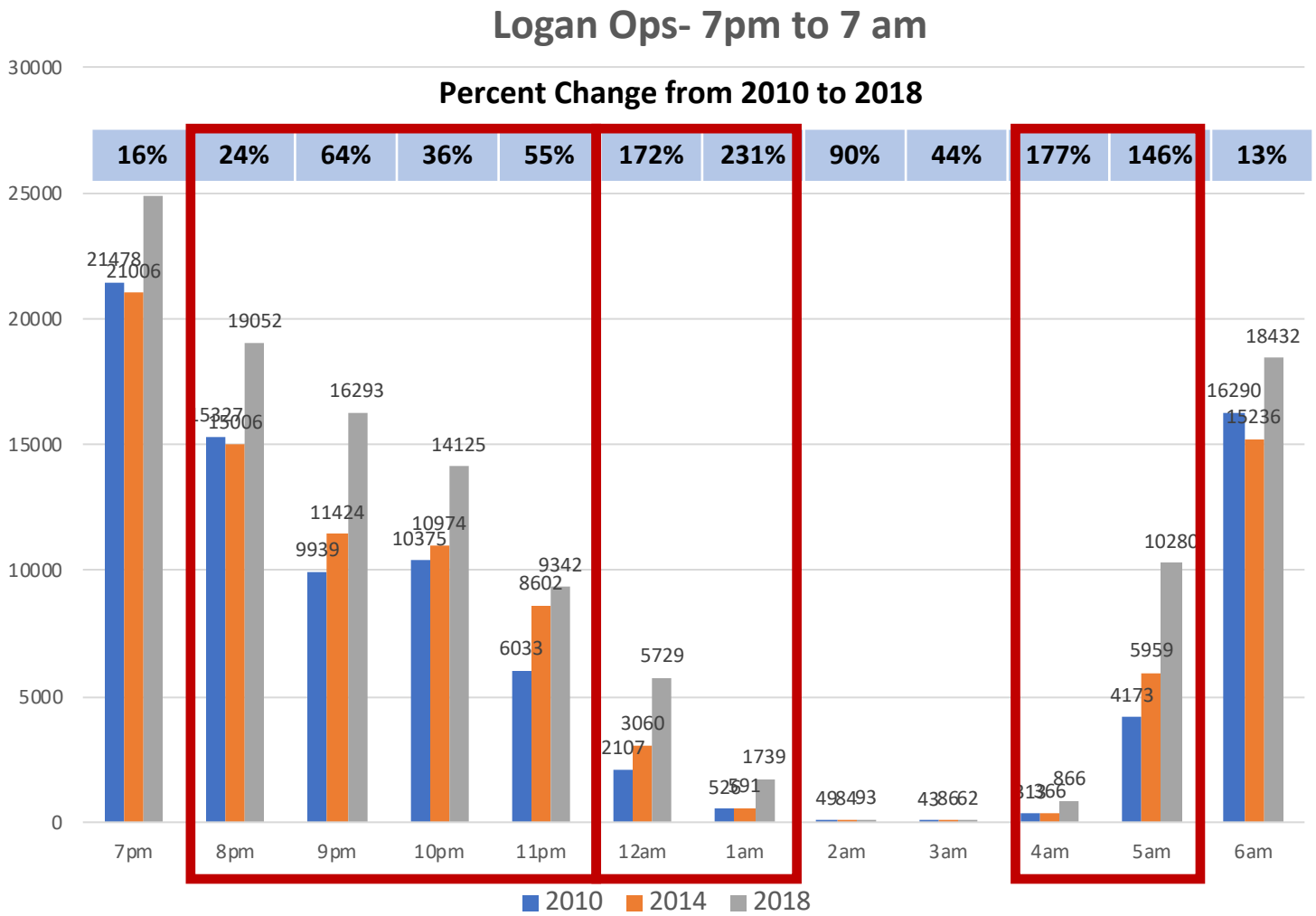
Source: http://kentsj.com/BWFS/Logan_Runway_Use_2002-2018.html

# Logan Departures 2002-2018 V3 revised 5/24/19



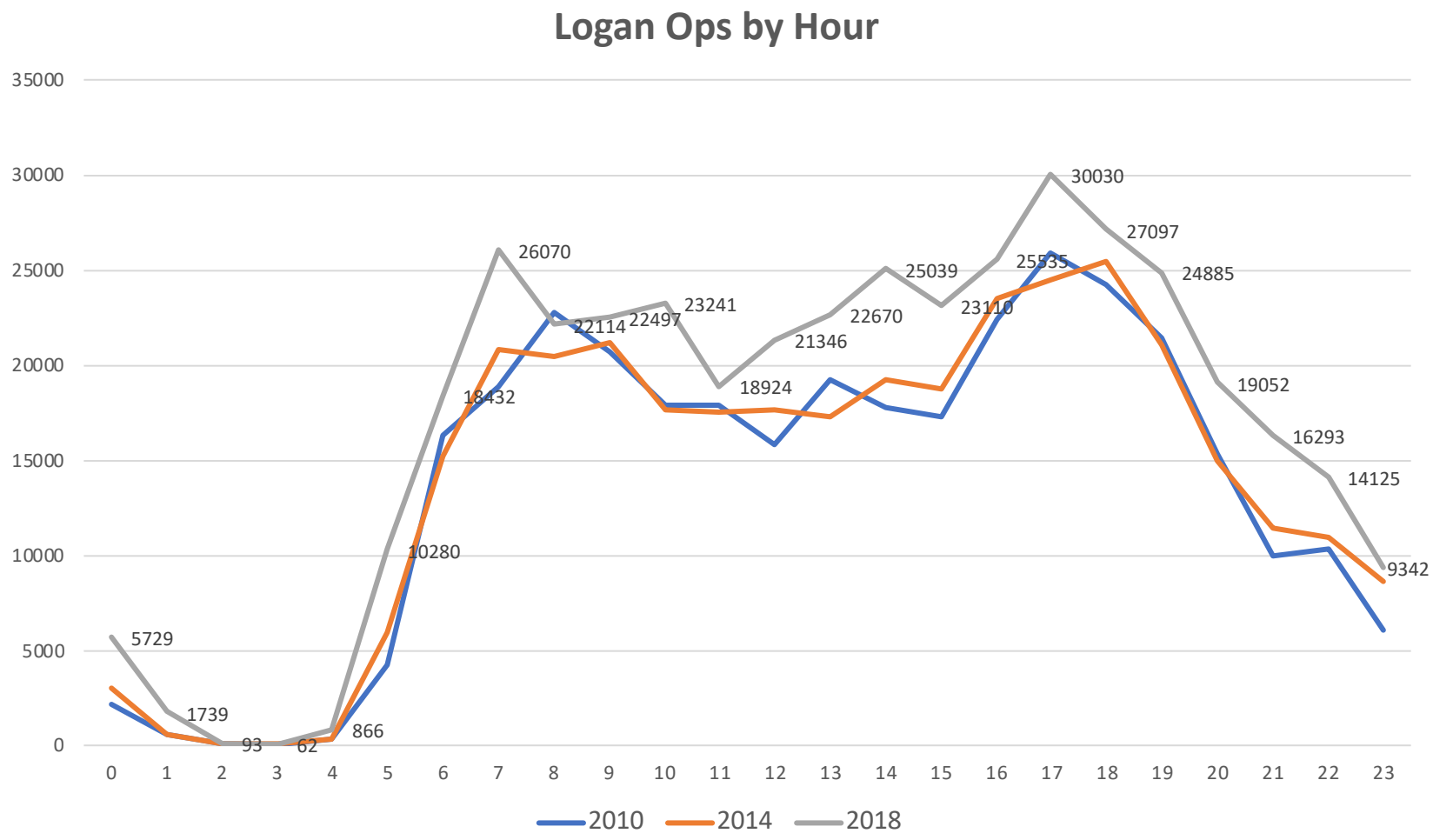

Source: http://kentsj.com/BWFS/Logan_Runway_Use_2002-2018.html

# Ops by Hour – 2010, 2014, 2018




Source: FAA Aviation System Performance Metrics (ASPM: https://aspm.faa.gov/apm/sys/main.asp )

# Ops by Hour – 2010, 2014, 2018




Source: FAA Aviation System Performance Metrics (ASPM: https://aspm.faa.gov/apm/sys/main.asp )

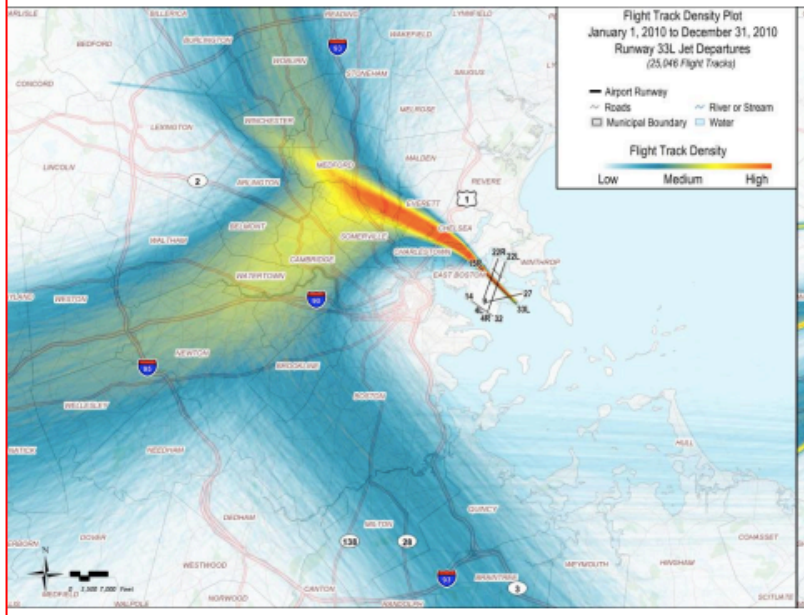
# 33L RNAV SID (June 2013)

MIT ICAT

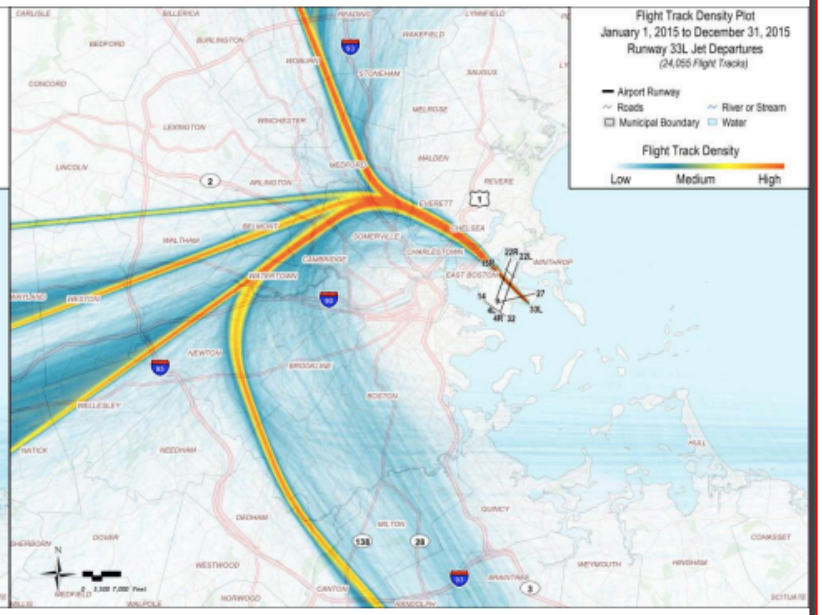
## Runway 33L Departures: 2010-2015

***We all know what happened here***

2010




2015




Source: http://massportcac.org/wp-content/uploads/2019/05/April-2019-RNAV-MCAC-Presentation.pdf

# Dispersion concepts (Block 2)

Altitude-Based 3000ft | Altitude-Based 4000ft | Controller-Based | Divergent Headings | RNAV Waypoint Relocation

- No ”magic wand” solution
- Each concept has some issues/limitations
- Volume and time of use increases complicates matters
- Any option that lessens impact for one neighborhood – increases impact for a different neighborhood. Burden shifting.
- For some to get less others will get more. Who decides what is fair?
- Challenge will be to gain consensus on one or more preferred options

Source: http://massportcac.org/wp-content/uploads/2019/05/April-2019-RNAV-MCAC-Presentation.pdf

# Summary

- Overall Volume at Logan has increased more than 25% since 2009 low
- 33L use rose from 6% pre 14/32 (2006) to 16-18% now
- Huge increases in three time slots
  - 8 pm – Midnight = +41%
  - Midnight to 2 am = +184%
  - 4 am – 6 am = +148%
  - Only 2 hours of respite 2 am – 4 am
- Logan is now an International Hub and a near 24 hr./day operation.
- 33L Municipal Working Group (Officials, Reps & Legislators) to meet and review and get clarification on dispersion options.