

International Transport Forum Paris – February 2013

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Upgrading
to
World
Class

1.27.11

The **Future** *of the*
New York
Region's
Airports



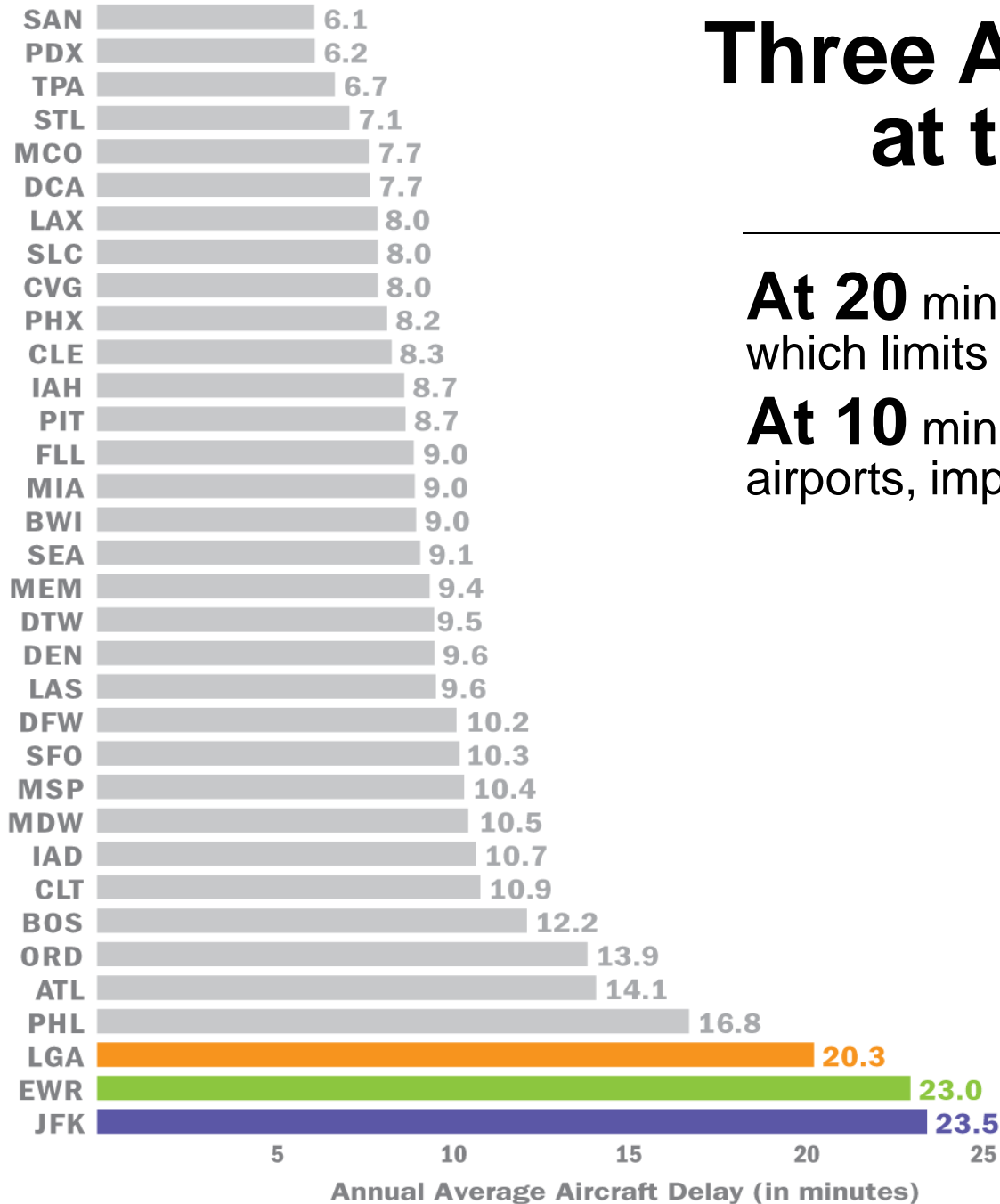
Who Are We?

Regional Plan Association

Not for profit research, planning and advocacy organization in the New York metropolitan region



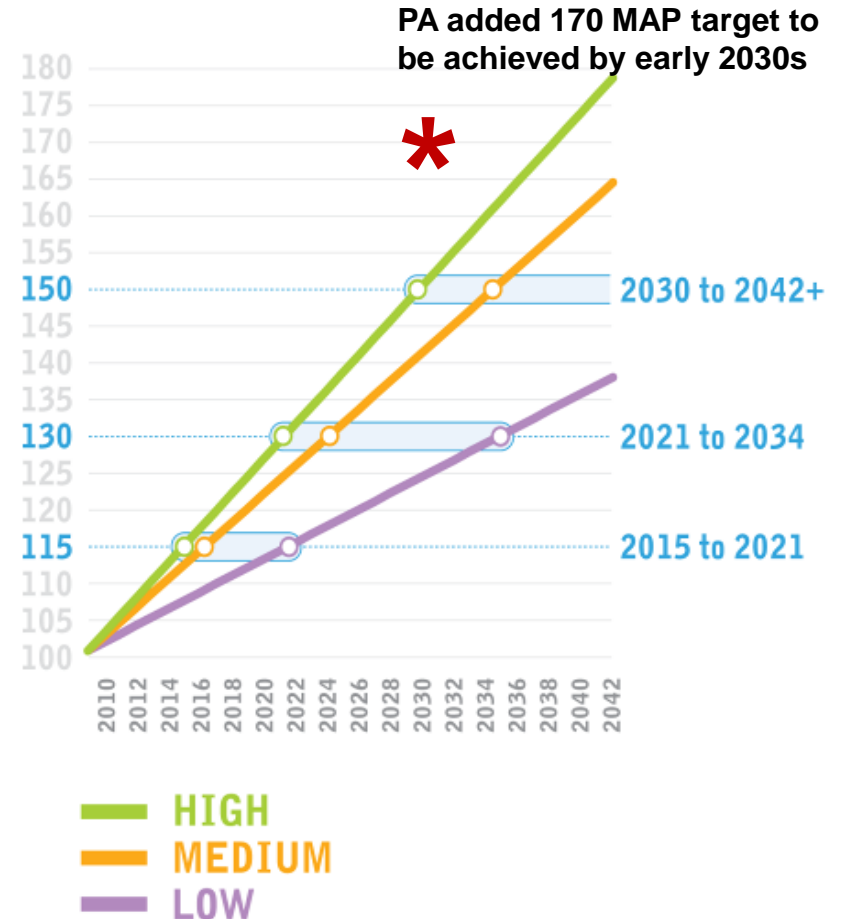
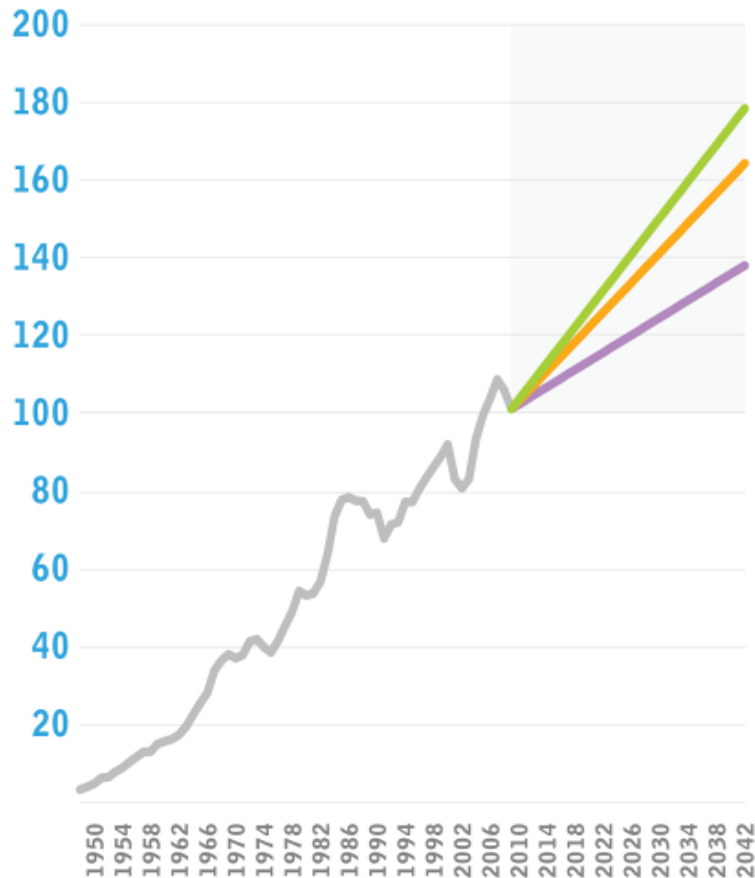
Three Airports Rank at the Bottom



At 20 minutes FAA caps flights, which limits use

At 10 minutes to match most major airports, improving level of service

Air Passengers Projected to Increase 50 Percent by 2030



What's At Stake?

Today

Airports are running out of capacity; each million passengers not accommodated cost the region:

- \$166 million in wages annually
- \$480 million in sales annually
- 4,100 jobs annually

By the mid-2030s

Annually

39 million annual passengers not served

Accumulative

Over **\$100** billion in sales not generated

Over **\$50** billion in wages not earned

Objectives for 2030s

- Global competitiveness – direct access to over 200 markets
- Maintain leadership in tourism growth – internationally and domestically
- Capacity for **78** more aircraft movements per hour (up from 236 today)
- Capacity to serve **39** million more passengers
- Capacity to reduce average delay for today's 20+ minutes or more to 10 minutes

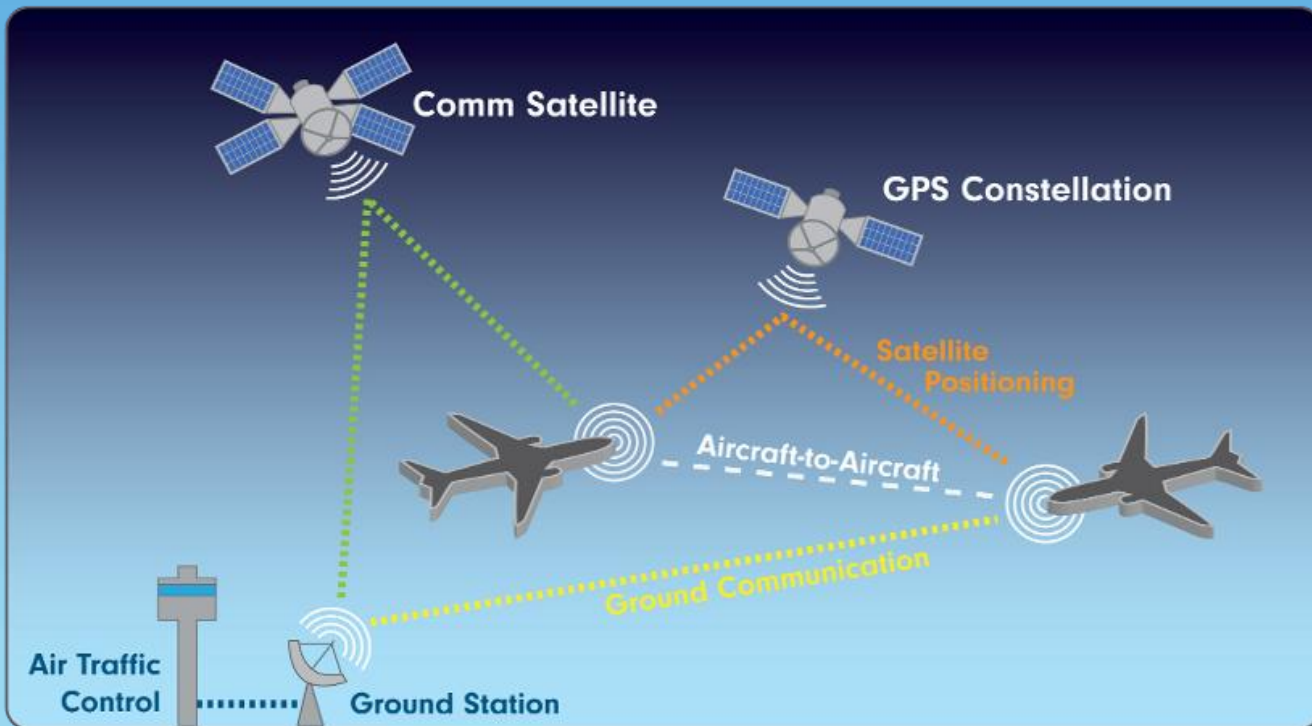


Potential Solutions

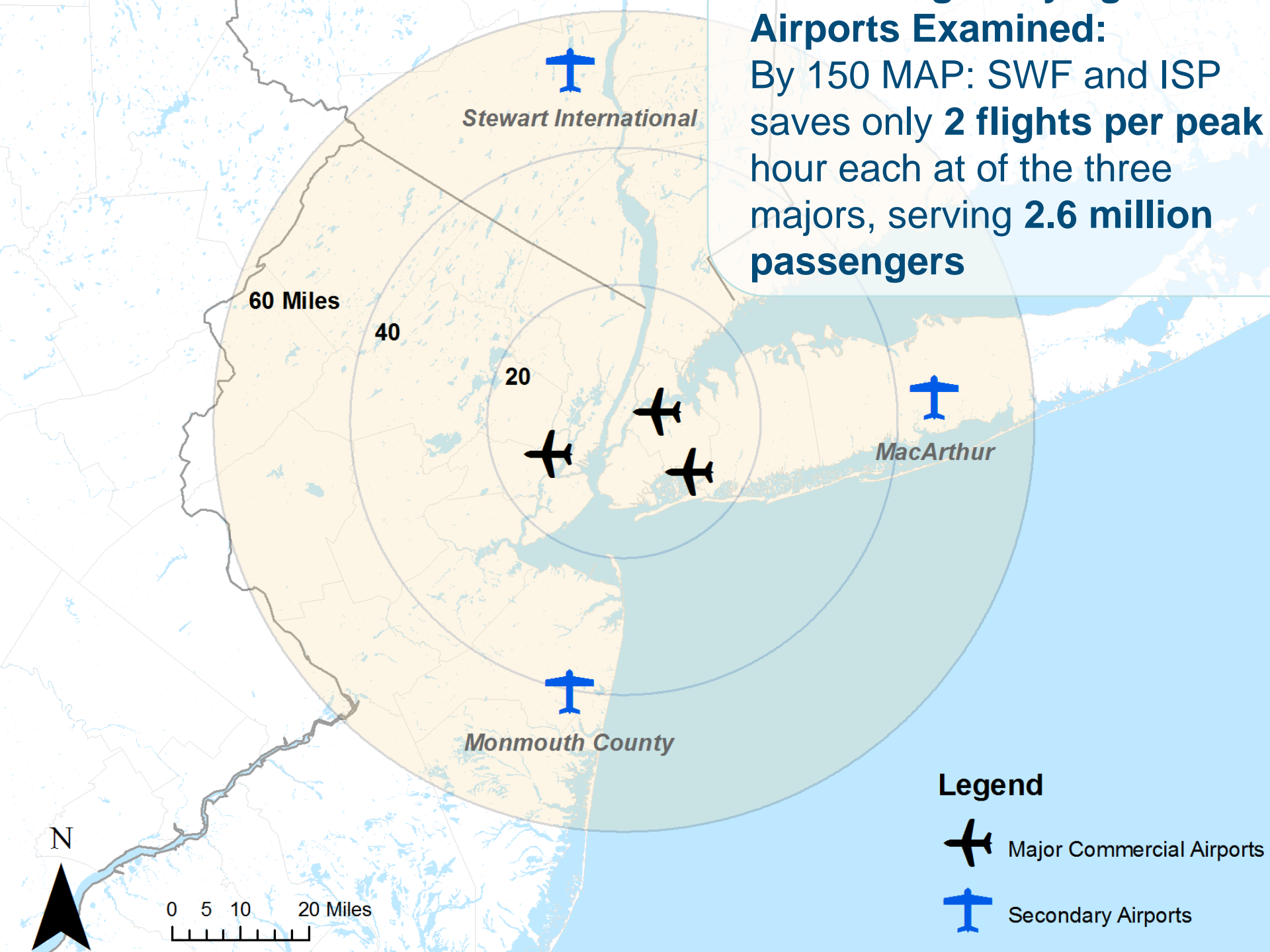
1. NextGen I and II
2. Outlying airports to free up capacity
3. Intercity rail to free up capacity
4. New airport to free up capacity
5. Manage demand to increase aircraft size and use in off-peak hours
6. Expansion at three major airports

NextGen

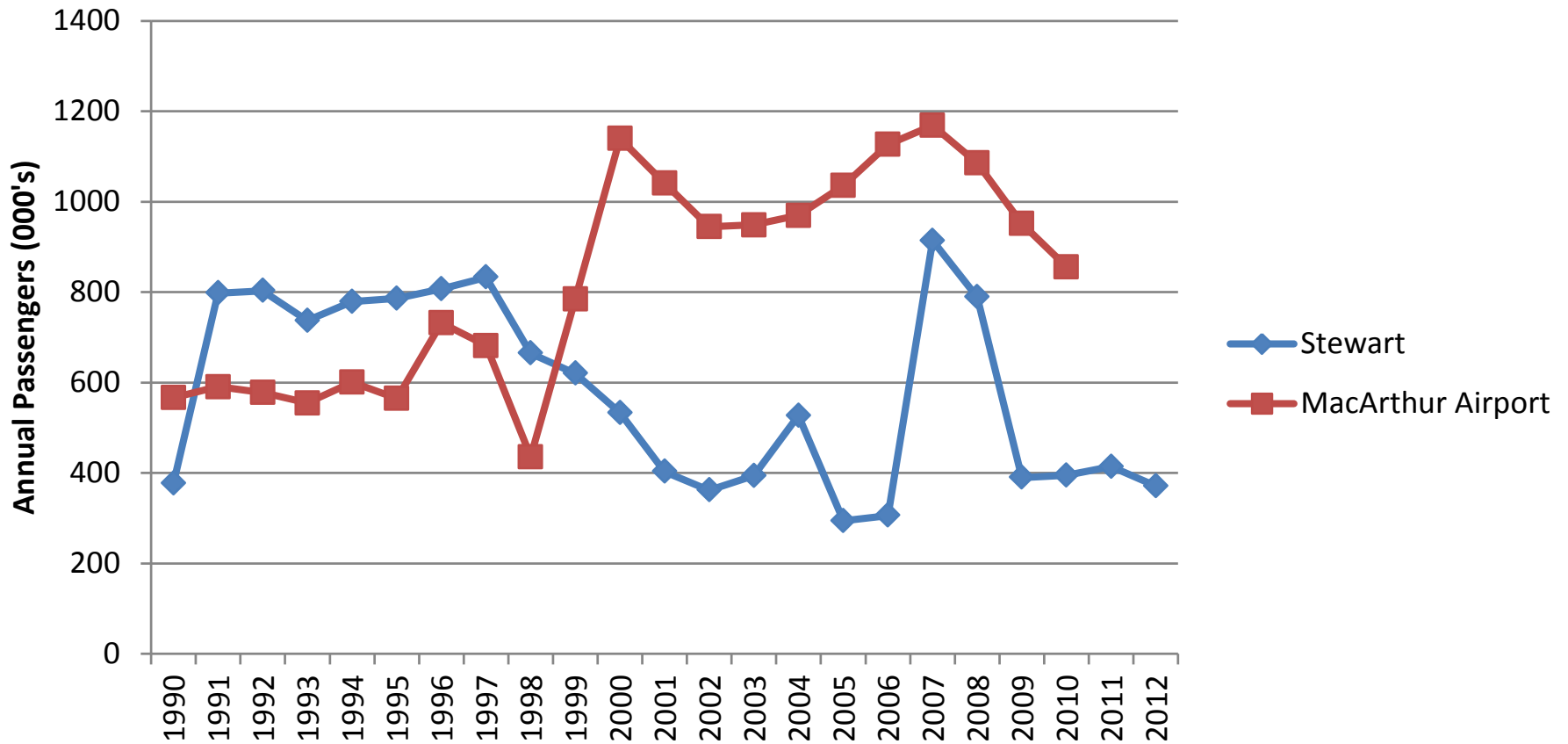
- NextGen I deployment expected by 2018
- NextGen II deployment expected by 2025
- Capacity gains trade-off with delay reductions
- Significant issues remain (i.e. human factors, federal funding and aircraft equipage)



Airports Examined:
By 150 MAP: SWF and ISP
saves only **2 flights per peak**
hour each at of the three
majors, serving **2.6 million**
passengers



Stewart Airport and MacArthur Airport History of Passenger Traffic

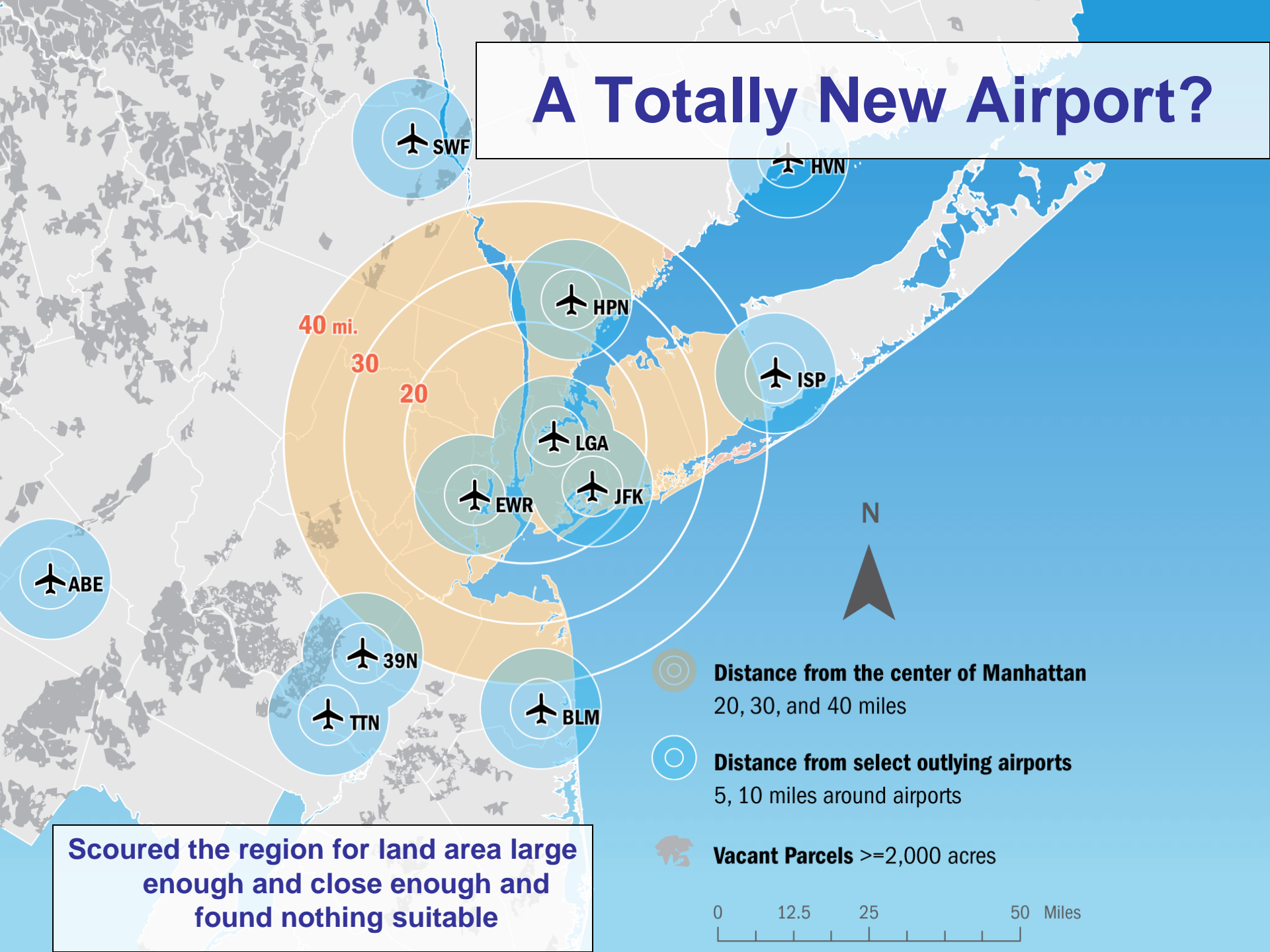


Improved Rail: What Could It Do By 2030s?

- One to two flights per hour at JFK and EWR, more at LGA; serves 2 million passengers.
- If “true” high speed, 3 per hour at JFK and EWR, and 12 at LGA; serves 4 million passengers
- Adds capacity only if airlines drop flights, no lower plane size



A Totally New Airport?




40 mi.

30

20

 Distance from the center of Manhattan
20, 30, and 40 miles

 Distance from select outlying airports
5, 10 miles around airports

 Vacant Parcels $\geq 2,000$ acres

0 12.5 25 50 Miles

Scoured the region for land area large enough and close enough and found nothing suitable

Manage Demand

Passive Actions

- Add few flights in shoulders with slot controls in effect (only 55 more flights of 3,800 daily)

Actions Requiring Regulatory or Legislative Intervention

- Thinning out service between LGA and Boston, DCA, RDU
- Encourage / require airlines to drop flights rather than downsize in reaction to shift to intercity rail and outlying airports

What Doesn't Work

- General aviation bans
- Air-cargo bans
- Pricing

150 MAP

By the 2030's

Status and Actions

Current Slot-Controls Still In Effect

Passive Actions Requiring No Regulatory/Legislative Interventions

Add Off-Peak Flights

Some Shifts to Outlying Airports

NextGen I Delay Reductions Insufficient To Remove Slot Controls

Passive Actions, Added Off-Peak Flights

Speed Up Intercity Rail

NextGen II

Expansion at JFK and/or EWR Underway, Some New Capacity

Higher Speed Intercity Rail

Expansion of JFK and EWR Completed

150 MAP

By the 2030s

Expansion of JFK & EWR

No expansion

people



Exceeds 39 mil additional passengers served provides for growth

31 million passengers unserved

delays



10 minutes

10 minutes

capacity



Meets need beyond 2030s

33 per hr short at JFK;
25 per hr at EWR

money



- 127,000 jobs
- \$16.3 billion sales
- \$5.9 billion in wages
- \$550 million value of delay savings

\$550 mil value of delay savings

Scenario Recap

- **2010s** - Settling for current delay standard, because we have no choice. Can meet capacity needs.
- **2020s** – Targeting 15-minute delay standard, because we are aiming higher. Need for expansion in long run is apparent.
- **2030s** – Achieving 10-minute delay standard, because we are upgrading to world class. Expansion at JFK and EWR must be open by 2030s. LGA may require some service thinning.

Expansion Options Development

Screened for Airspace Feasibility

Screened for Each Airport Feasibility

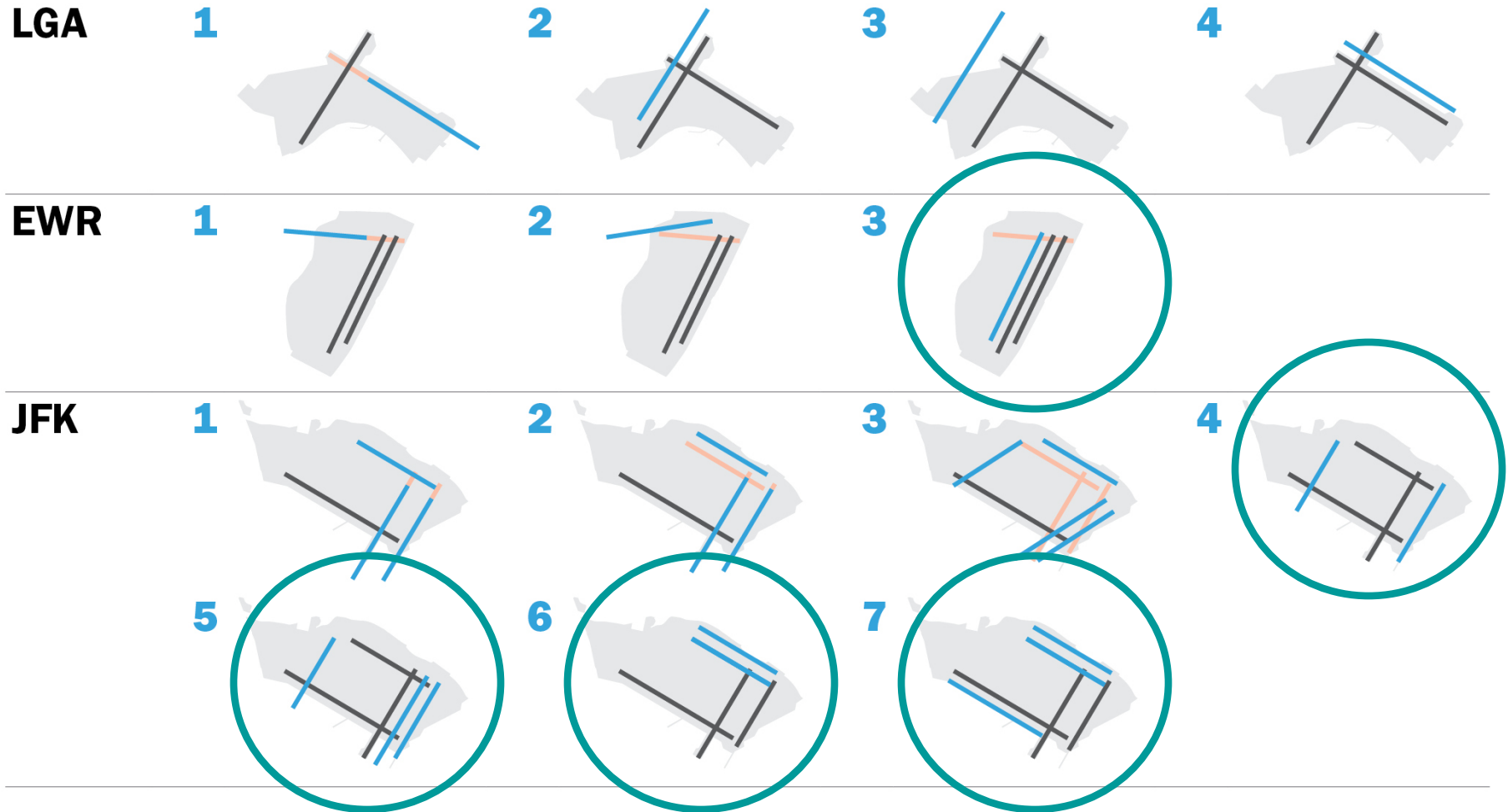
Expansion Options Screening

Second Level Screening = 7 Criteria were used to evaluate the 20 combinations:

- ✓ Capacity
- ✓ Cost
- ✓ Noise Impacts
- ✓ Landfill/Wetland Impacts
- ✓ Off-Airport Land Use/Neighborhood Impacts
- ✓ Historical or Architectural Impacts
- ✓ Construction Impacts

Expansion and Reconfiguration

Airspace screening : LGA – 0, EWR – 1, JFK – 4 or 4 combinations



One Remaining Option at EWR

Pros

- Only workable option
- Can be done within airport footprint
- 21 to 35 more flights per peak hour
- No fill required

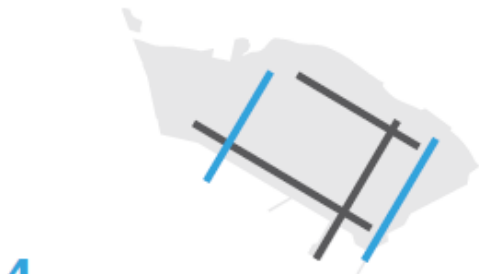
Cons

- Requires moving terminals
- May not be enough if NextGen does not deliver

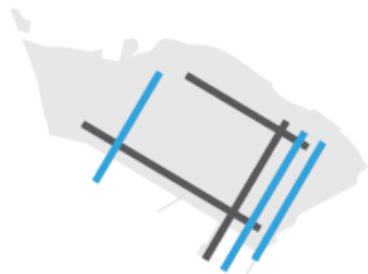


Four Remaining Options at JFK

**New Conventional
Airspace
All 4 – 22**



4

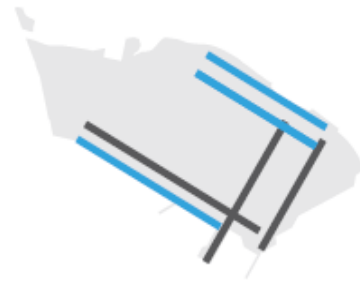


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**New NextGen
Airspace
13 – 31**

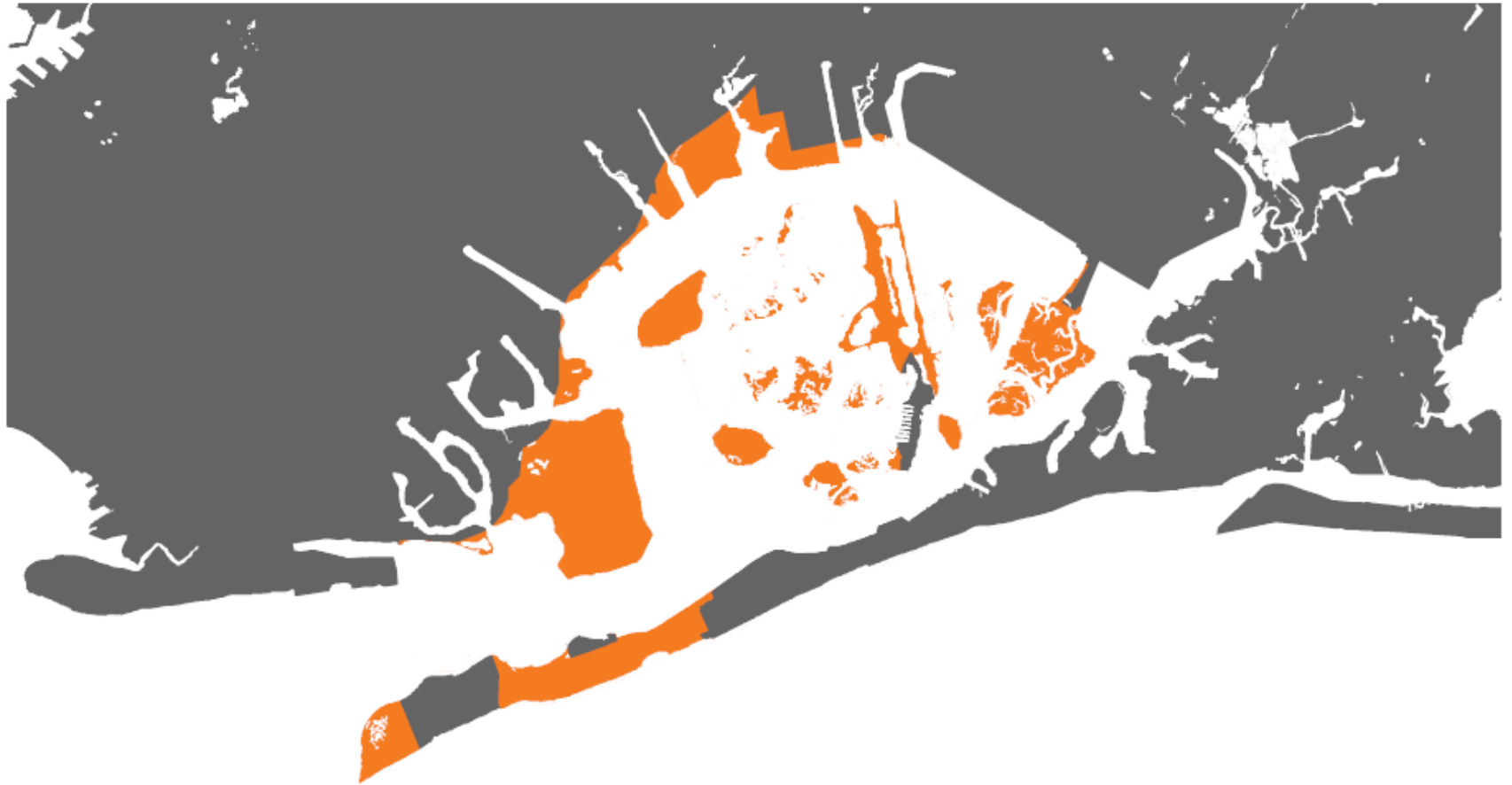


6



7

JFK Expansion in Context: Gateway National Park



6.5 JAMAICA BAY UNIT

The Four JFK Options

- Recommend further study of all remaining options.
- The 4-22 options #4 and #5 are not dependent on NextGen, removing some risk.
- Environmental tradeoffs of the 13-31, no fill or mitigating Grassy Bay, merits continued consideration.
- Ultimate selection depends on environmental and community input, mitigation actions by the Port Authority working with all potentially affected parties.

The Alternative Futures

Without more capacity, we are forced to keep the slot controls which turn away millions of future passengers, and the economic benefit that goes with it,

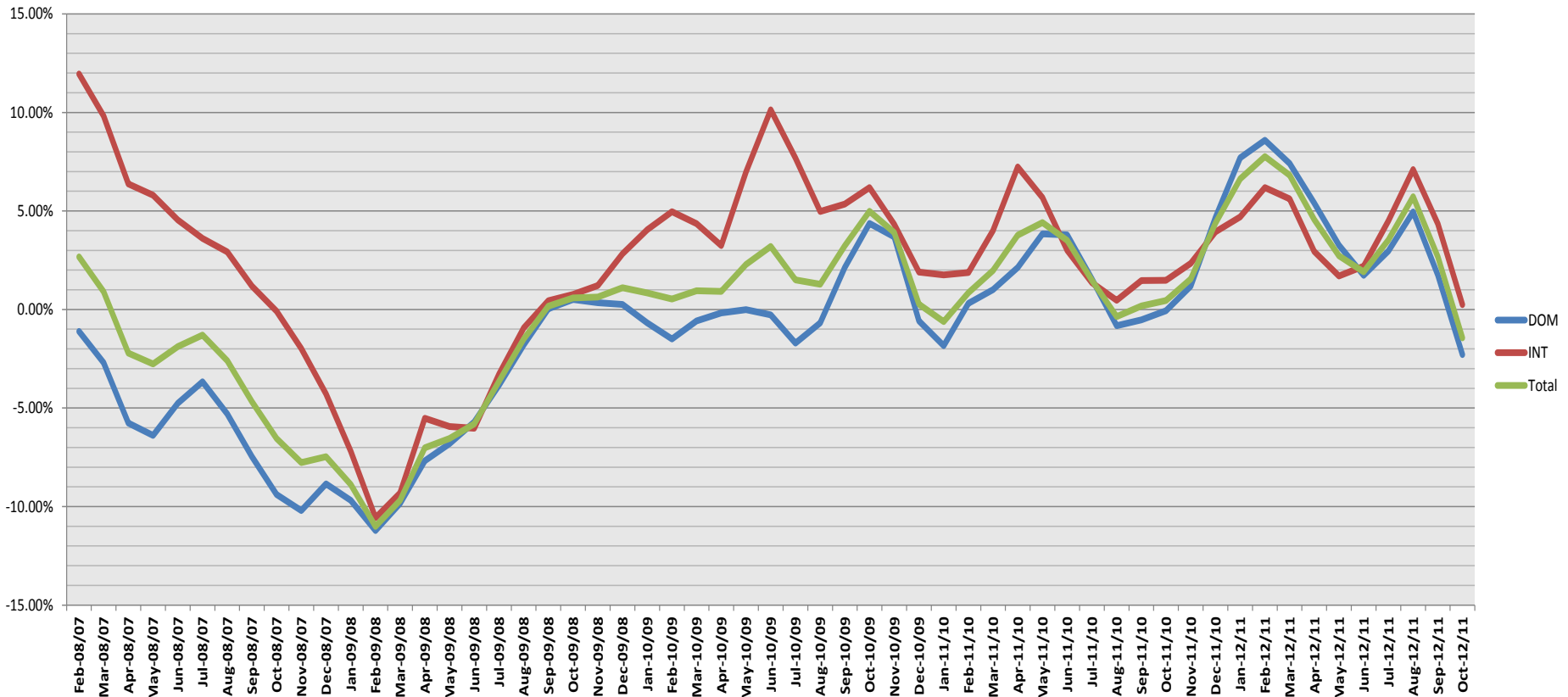
- or -

Create a world class airport system that not only accommodates the growth of the first half of the 21st Century, but with less delay than today

What Has Happened Since?

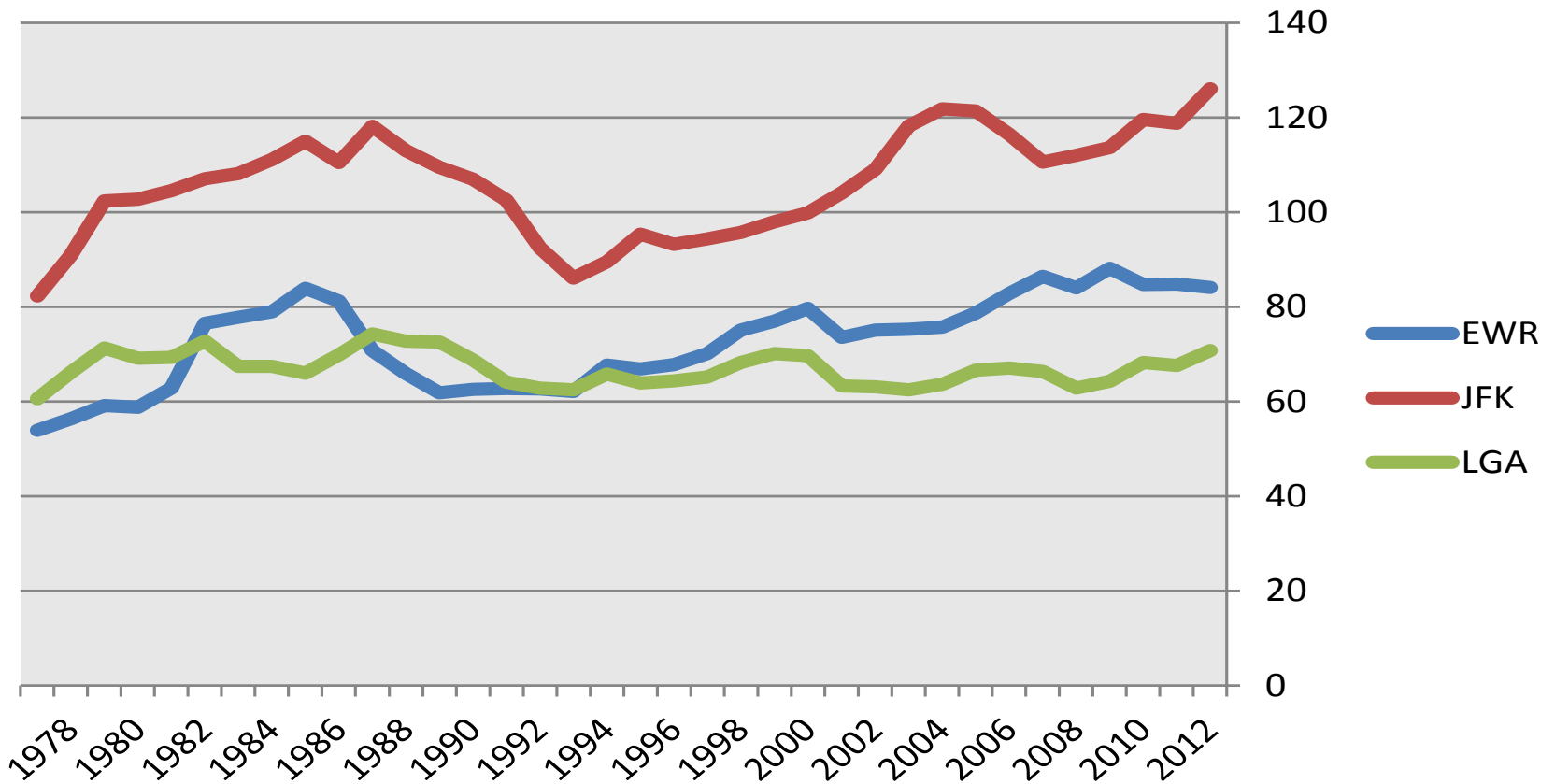
Recovery Continues but Five Years of Growth Lost

Monthly Year to Year Air Traffic Changes
Three New York Airports
February 2007 to October 2012 - Moving Average



Passengers per Flight Continues to Grow

Passengers per Flight (INT and DOM)



Port Authority “Validating” RPA Work; Exploring Physical Options in Detail

What they found so far:

- Anticipated NextGen advances are not materializing; 21 flights per hour assumed in our report is becoming increasingly uncertain.
- RPA findings regarding outlying airports, new airport, managing peak demand and rail diversion are all valid.
- New runway options still being explored with no clear winners in sight

What Might New Developments Mean for Expansion?

- Plane size growing as airlines consolidate schedules to get most out of slots they “own” – **Expansion needed later.**
- Consolidation of industry continues unabated, instability of airlines threatens competitive environment – passengers will pay more – Could result in larger aircraft and more passengers per flight. **Expansion needed later.**
- Slot controls also a major factor driving this trend, opportunity to reform program in 2013 when current rule expires. Could abate the growth in more passenger per flight ratios. **Expansion needed later.**
- Traffic rebounded from free fall in 2008 and 2009; within range of our projections, but PA is using a higher target of 170 MAP. **If growth rates are high, may need expansion sooner.**
- NextGen developments. **May need expansion sooner.**

Other Relevant Developments

- New BRT-like routes to LGA. Could ease problem at JFK slightly.
- PA is moving forward with \$3B plan to redevelop LGA with 34 MAP target. Could ease problem at JFK slightly.
- PA is studying the 2-mile extension of PATH from lower Manhattan to EWR. Could lessen pressure at JFK, but will add pressure at EWR.

Outlook

- Monitor rate of passenger growth
- Monitor factors causing passenger per flight growth
- Work to make NextGen effective as a capacity solution
- Continue to plan for inevitable expansion

Thank you.

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