Downtown Airspace and Development Capacity Study

Airport Commission

January 14, 2019

The Challenge

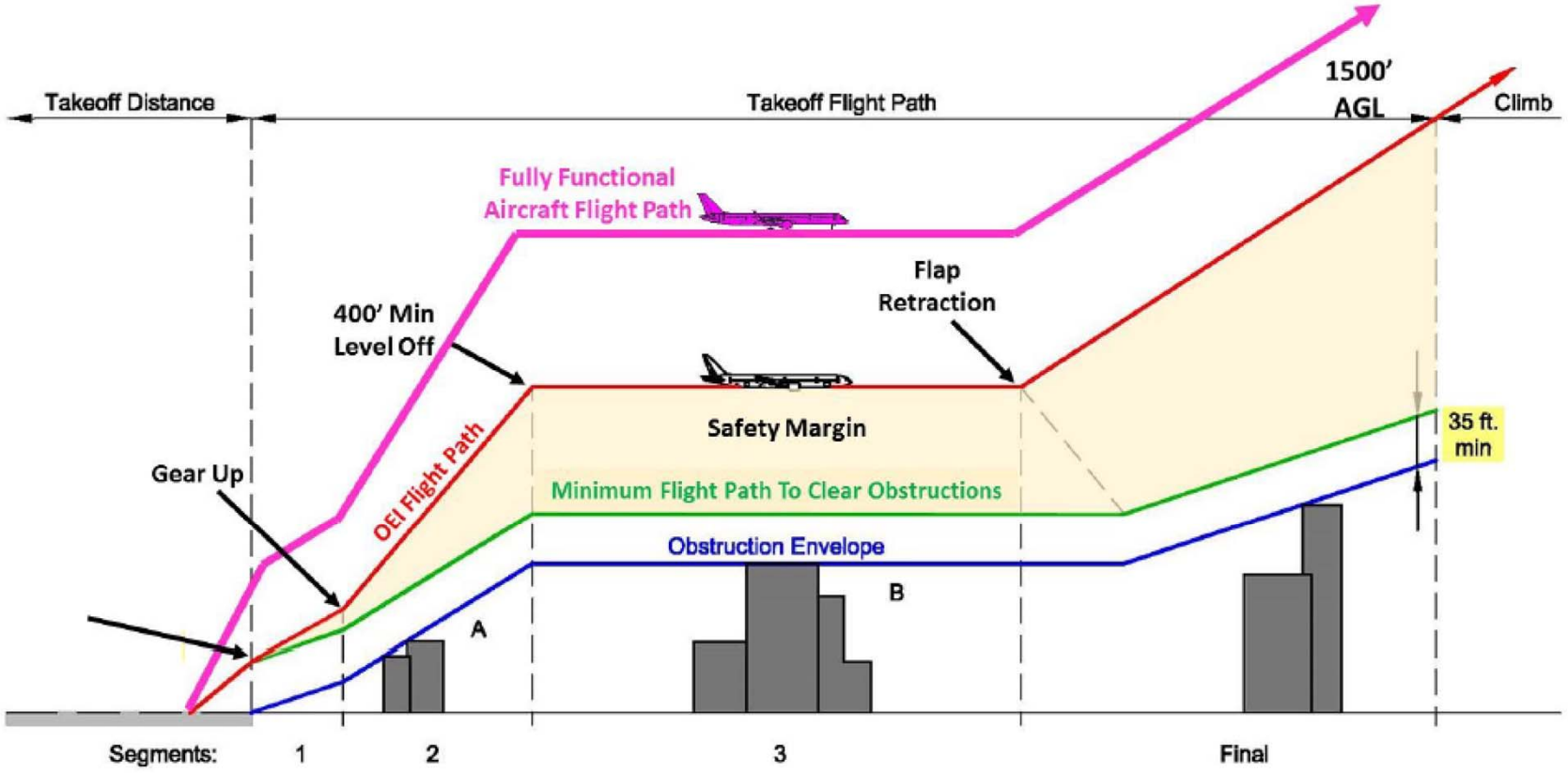
- Downtown and Airport are two of San Jose's economic priorities
- FAA protection of airspace invisible "surfaces" (via "FAR Part 77" and "TERPs")
- FAR Part 77 and TERPs do not consider specific airline emergency procedures known as one-engine inoperative (OEI)
- OEI study last conducted in 2007, establishing straight out and west corridor OEI protections

Airspace Surfaces

- OEI Surfaces – Runway 12L/12R
  - FAA AC 120-91 Obstacle Accountability Area
  - ICAO OEI Surface
  - West OEI Corridor
- Initial TERPS Surfaces – Runways 12L/12R
  - TERPS Initial Climb Area Departure Surface
  - TERPS ILS Final and Missed Approach Surfaces
- Part 77 Approach, Transitional and Horizontal Surfaces

Study Evaluation Area

What is One Engine Inoperative



Airline Response to Obstacles

- Request another runway (wind, weather, air traffic permitting)
- Off-load passengers and/or cargo (weight penalty)
- Make a refueling stop
- Cancel current day's flight
- Change aircraft
- Change OEI procedure
- Cancel air service if payload loss affects financial viability

Project Steering Committee

Community Representatives

Teresa Alvarado – SPUR

Scott Knies – San Jose Downtown Association

Matt Mahood – Silicon Valley Organization

David Bini – Santa Clara & San Benito Counties Building & Construction Trades Council

Josue Garcia – Santa Clara County Residents for Responsible Development

Matt Quevedo – Silicon Valley Leadership Group

Julie Matsushima – Airport Commissioner and Downtown Resident

City Staff

John Aitken and Judy Ross – Airport Department

Kim Walesh and Blage Zelalich – City Manager's Office/Office of Economic Development

Rosalynn Hughey – Planning, Building and Code Enforcement

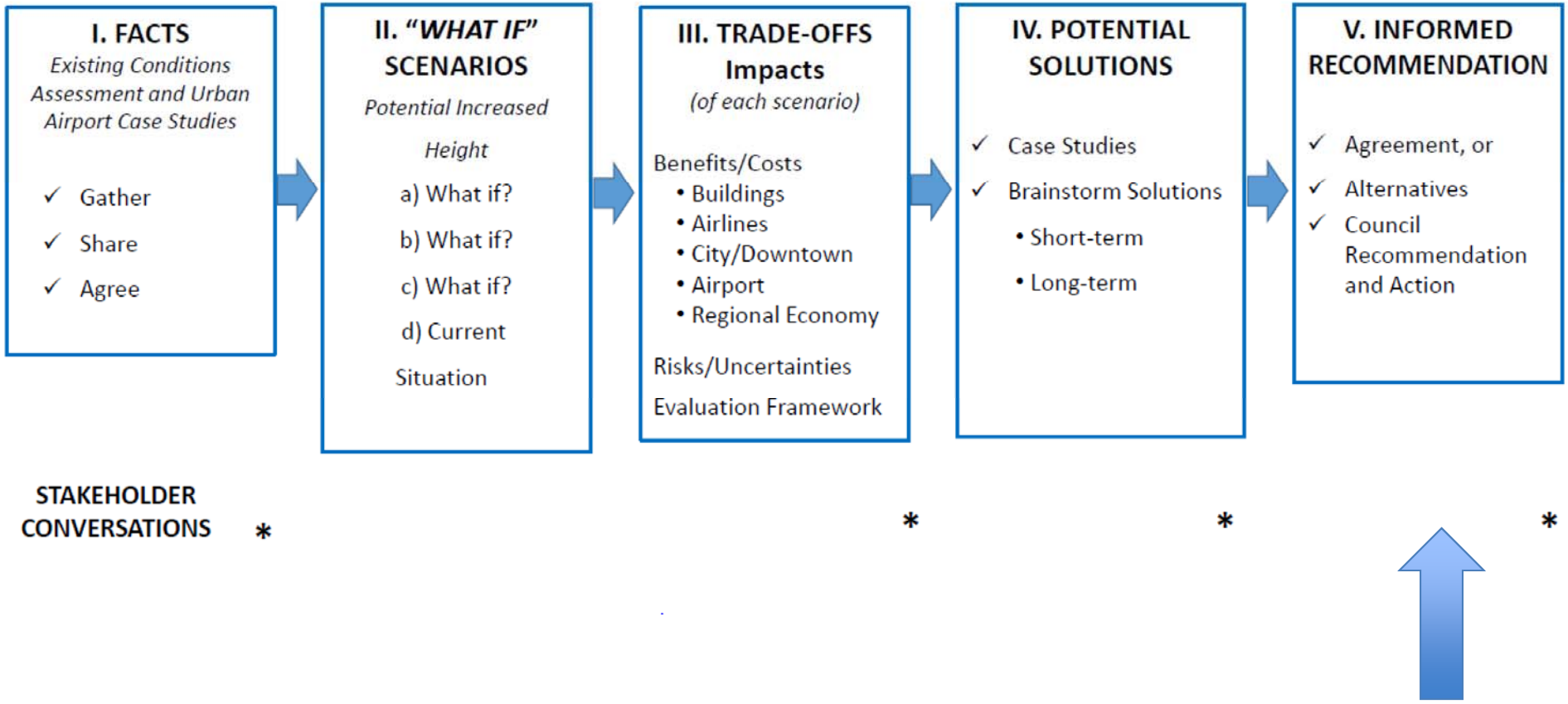
David Hai Tran & Christina Ramos– District 3 Office

Kelly Kline – Mayor's Office

Consultants

Landrum and Brown and Jones, Lang, and LaSalle

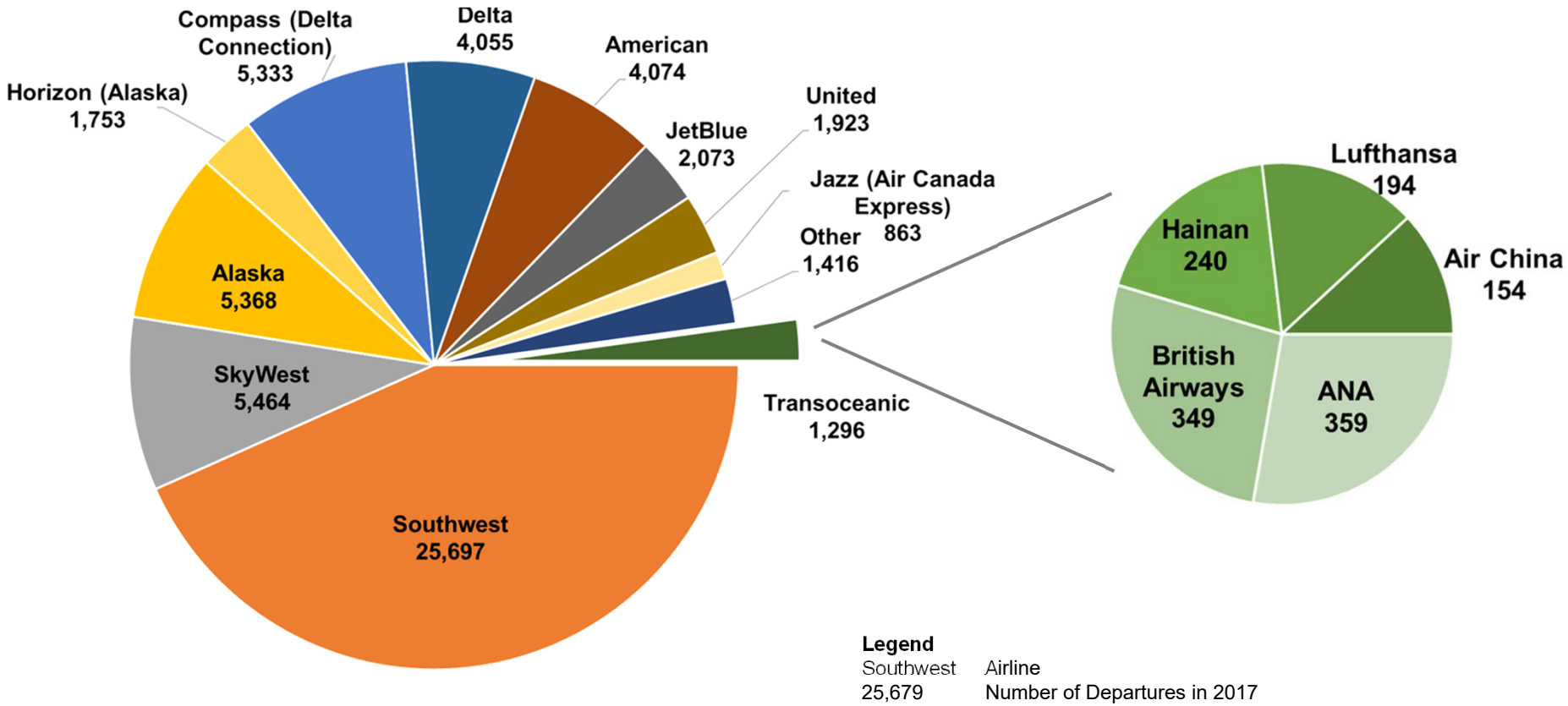
Collaborative Process



Progress to Date

Airline Market Share – Passenger

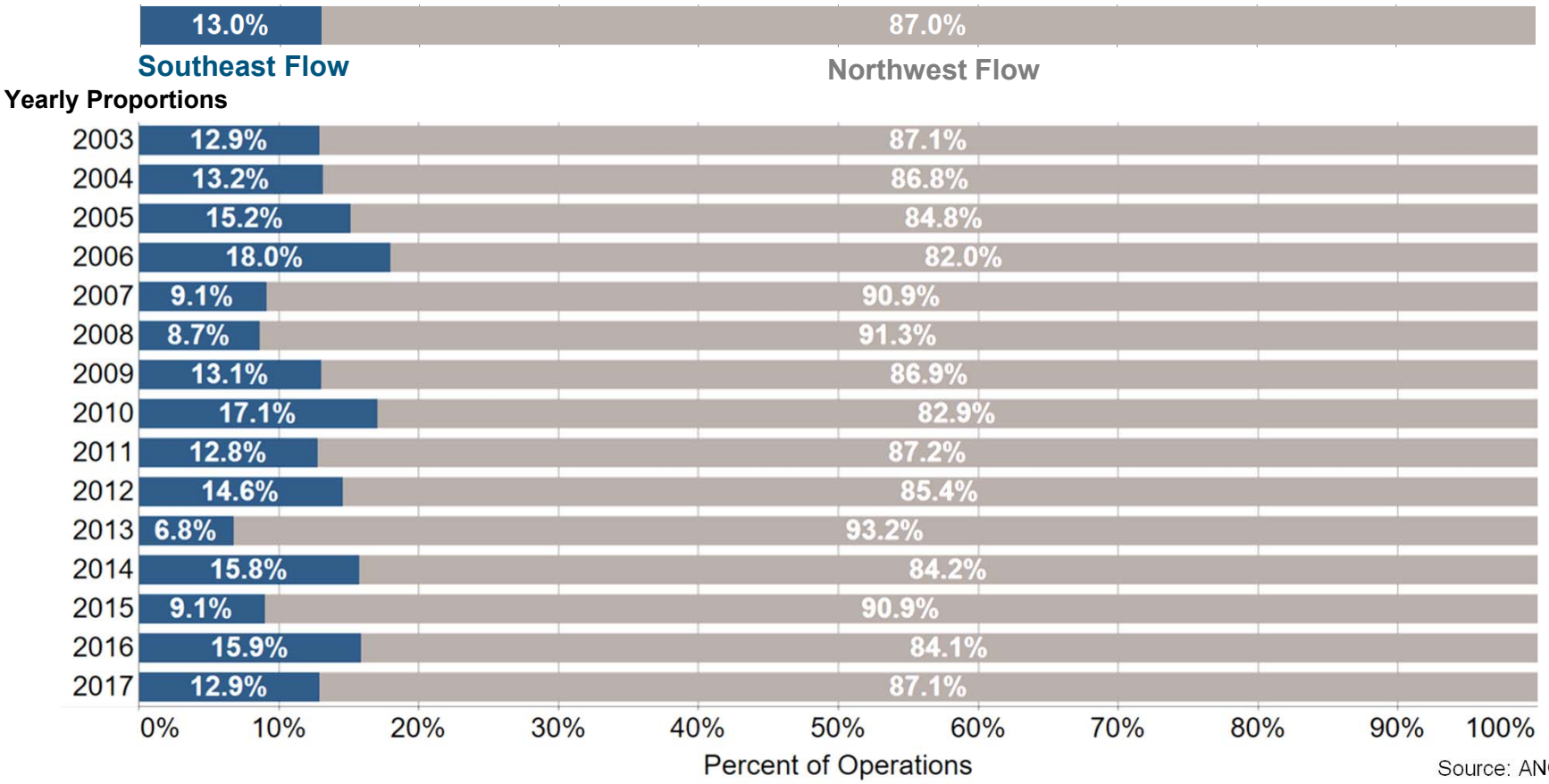
Passenger airline market share in 2017



Source: ANOMS

Yearly Operations by Flow

2003 – 2017 Average



Source: ANOMS

“What If” Scenario Assessment

Airspace Protection Scenarios

Four Airspace Scenarios

- **Scenario 4**: No OEI protection, TERPS only
- **Scenario 7**: Straight-out OEI protection only
- **Scenario 10**: Straight-out OEI with West OEI Corridor alternatives
- **Scenario 9**: No OEI, increased FAA height limits

Selected Aircrafts

- Boeing 737-800
- Airbus 321-NEO (Original was Airbus 320-200)
- Boeing 787-9
- Boeing 777-300ER

Current OEI Heights to TERPS Heights

Scenario	Additional Height Downtown Core	Additional Height Diridon Station Area
Scenario 4 – No OEI, TERPs Only	5' - 35'	70’ to 150’
Scenario 10 Options - Straight-out OEI projection with West Corridor Alternatives		
Option A	0'	15'-25'
Option B	0'	30'-55'
Option C	0'	45'-85'
Option D	0'	65'-115'
Scenario 7 - Straight-out OEI protection without the OEI west corridor	0'	70'-150'
Scenario 9 - No OEI protection with increase FAA height limits	35'-100'	80'-220'

AIRCRAFT PERFORMANCE CITY PAIR ASSESSMENT

Aircraft Performance Assumptions
City Pair Assessment

AIRCRAFT FLEET EVALUATION

Aircraft	Engine	Maximum Takeoff Weight (MTOW) (lbs.)	Seats
A320-200	CFM56-5B4	171,960	150
B737-800	CFM56-7B26	174,200	175
B787-9	GENX-1B74-7	560,000	290
B777-300ER	GE90-115BL	775,000	370

SEASONAL TEMPERATURES

Winter		
Aircraft Type	**Temperature (°F)**	**Notes**
A320-200 & B737-800	63°F	Early morning and evening departures
B787-9 & B777-300ER	68°F	Morning and afternoon departures
Summer		
A320-200 & B737-800	81.3°F	Boeing 85% reliability temperature
B787-9 & B777-300ER	81.3°F	Boeing 85% reliability temperature

CITY PAIR ASSESSMENT

Origin	Destination	Distance (Statue Miles)
Domestic		
SJC	JFK	2,569
SJC	HNL	2,417
International		
SJC	FRA	5,703
SJC	PEK	5,942

JFK: John F. Kennedy International Airport (New York)
HNL: Honolulu International Airport (Hawaii)
FRA: Frankfurt International Airport (Germany)
PEK: Beijing International Airport (China)

Transcontinental Weight Penalty Assessment

New York - JFK Winter (63° F)		A320-200 (150 seats/2,384 lbs. cargo)		B737-800 (175 seats/1,604 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	-	**1,067**	-	-
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	-	-	-	-
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	-	-	-
	Opt 10B: 115' - 224' AGL	-	-	-	-
	Opt 10C: 129' - 240' AGL	-	-	-	-
	Opt 10D: 146' - 260' AGL	-	**106**	-	-
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**8**	**2,384**	-	**583**

New York - JFK Summer (81.3° F)		A320-200 (150 seats/2,384 lbs. cargo)		B737-800 (175 seats/1,138 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	**3**	**2,384**	-	-
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	-	-	-	-
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	-	-	-
	Opt 10B: 115' - 224' AGL	-	-	-	-
	Opt 10C: 129' - 240' AGL	-	-	-	-
	Opt 10D: 146' - 260' AGL	-	**1,378**	-	-
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**13**	**2,384**	**3**	**860**

Hawaii Weight Penalty Assessment

Hawaii - HNL Winter (63° F)		A321 NEO (189 seats/18,481 lbs.)		B737-800 (173 seats[1]/No Cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	-	-	-	-
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	-	-	-	-
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	-	-	-
	Opt 10B: 115' - 224' AGL	-	-	-	-
	Opt 10C: 129' - 240' AGL	-	-	-	-
	Opt 10D: 146' - 260' AGL	-	-	-	-
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	-	**2,537**	**3**	-

Hawaii - HNL Summer (81.3° F)		A321 NEO (189 seats/21,658 lbs.)		B737-800 (175 seats/1,599 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	-	**593**	-	-
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	-	-	-	-
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	-	-	-
	Opt 10B: 115' - 224' AGL	-	-	-	-
	Opt 10C: 129' - 240' AGL	-	-	-	-
	Opt 10D: 146' - 260' AGL	-	-	-	-
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	-	**3,565**	**1**	**1,599**

Note:
HNL is fuel capacity limited in Feb to 173 PAX and no cargo (i.e., not a takeoff weight limitation) for the B737-800.

Europe Weight Penalty Assessment

Frankfurt - FRA Winter (68° F)		B787-9 (290 seats/26,198 lbs. cargo)		B777-300ER (370 seats/62,240 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	-	**21,580**	-	**4,400**
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	-	**15,338**	-	-
Scenario 10	Existing Conditions: 85' - 166' AGL	-	**10,000**	-	-
	Opt 10A: 100' - 195' AGL	-	-	-	-
	Opt 10B: 115' - 224' AGL	-	**9,349**	-	-
	Opt 10C: 129' - 240' AGL	-	**14,096**	-	-
	Opt 10D: 146' - 260' AGL	-	**19,282**	-	**2,027**
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**29**	**26,198**	-	**11,735**

Frankfurt - FRA Summer (81.3° F)		B787-9 (290 seats/23,514 lbs. cargo)		B777-300ER (370 seats/62,240 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	**2**	**22,911**	-	**7,811**
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	-	**16,407**	-	-
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	**4,217**	-	-
	Opt 10B: 115' - 224' AGL	-	**9,353**	-	-
	Opt 10C: 129' - 240' AGL	-	**14,270**	-	-
	Opt 10D: 146' - 260' AGL	-	**19,612**	-	**3,876**
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**41**	**23,514**	-	**15,397**

Asia Weight Penalty Assessment

Beijing - PEK Winter (68° F)		B787-9 (290 seats/10,853 lbs. cargo)		B777-300ER (370 seats/56,089 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	**51**	**10,853**	-	**19,278**
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	**25**	**10,853**	-	**11,801**
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	**4,534**	-	**5,479**
	Opt 10B: 115' - 224' AGL	-	**9,408**	-	**6,673**
	Opt 10C: 129' - 240' AGL	**13**	**10,853**	-	**10,537**
	Opt 10D: 146' - 260' AGL	**34**	**10,853**	-	**16,929**
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**93**	**10,853**	-	**26,672**

Beijing - PEK Summer (81.3° F)		B787-9 (290 seats/9,542 lbs. cargo)		B777-300ER (370 seats/55,588 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	**56**	**9,542**	-	**20,597**
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	**30**	**9,542**	-	**13,268**
Scenario 10	Existing Conditions: 85' - 166' AGL	-	-	-	-
	Opt 10A: 100' - 195' AGL	-	**3,933**	-	**5,293**
	Opt 10B: 115' - 224' AGL	-	**8,725**	-	**10,223**
	Opt 10C: 129' - 240' AGL	**15**	**9,542**	-	**11,020**
	Opt 10D: 146' - 260' AGL	**36**	**9,542**	-	**17,545**
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**95**	**9,542**	-	**28,076**

Airline Responses

The following airlines participated in the aircraft performance assessment for the various airspace scenarios presented.

Responded	No Response
AeroMexico	Air Canda/Jazz
Air China	California Pacific
Alaska	Frontier
American	Lufthansa
ANA	UPS
British Airways	
Delta	
FedEx	
Hainan Airways	
Hawaiian	
Southwest	
United	
Volaris	

Respondent Analysis Results (1 of 3)

- ANA
  - Evaluated B787-8 (max 169 PAX configuration)
  - No PAX penalty impacts in Scenarios 1,4,7 and 10, however cargo impact.
  - Scenario 9 results in PAX penalties between 30-37 PAX in Summer temperatures (92º F), including additional cargo penalties
- Hainan Airways
  - For B787-8/9, Scenario 4 obstacles results in significant reduction in cargo and PAX payload (50+ PAX for B787-9) due to loss of the West Corridor

Respondent Analysis Results (2 of 3)

- British Airways
  - Scenarios 4 and 7 have no impact at all to current operations
  - Scenario 9 results in greatest impact when operating on Runways 12L/12R
  - Scenario 10 has no impact on 12L when departing straight-out, however a payload and engine impact for 12R when making a right course correction
- Alaska, American, Aeromexico, Delta, and Southwest, Volaris
  - No penalties for operations below 92º F.
- United
  - Significant PAX and cargo penalties for B737-900ER operation in Scenarios 1, 4, 7 and 9
  - Minor PAX and cargo penalties in Scenario 4 for B737-800; moderate PAX and cargo penalties in Scenario 9 for B737-800

Respondent Analysis Results (3 of 3)

- Hawaiian (Aircraft - A321 NEO)
  - HNL, OGG, or KOA has no passenger penalties, some cargo penalties.
  - LIH has minimal passenger penalties and some cargo penalties.
- Federal Express
  - Cargo Penalties in most scenarios; however, will cube out before weight out.

Weight Penalty Assessment
Additional Domestic Markets

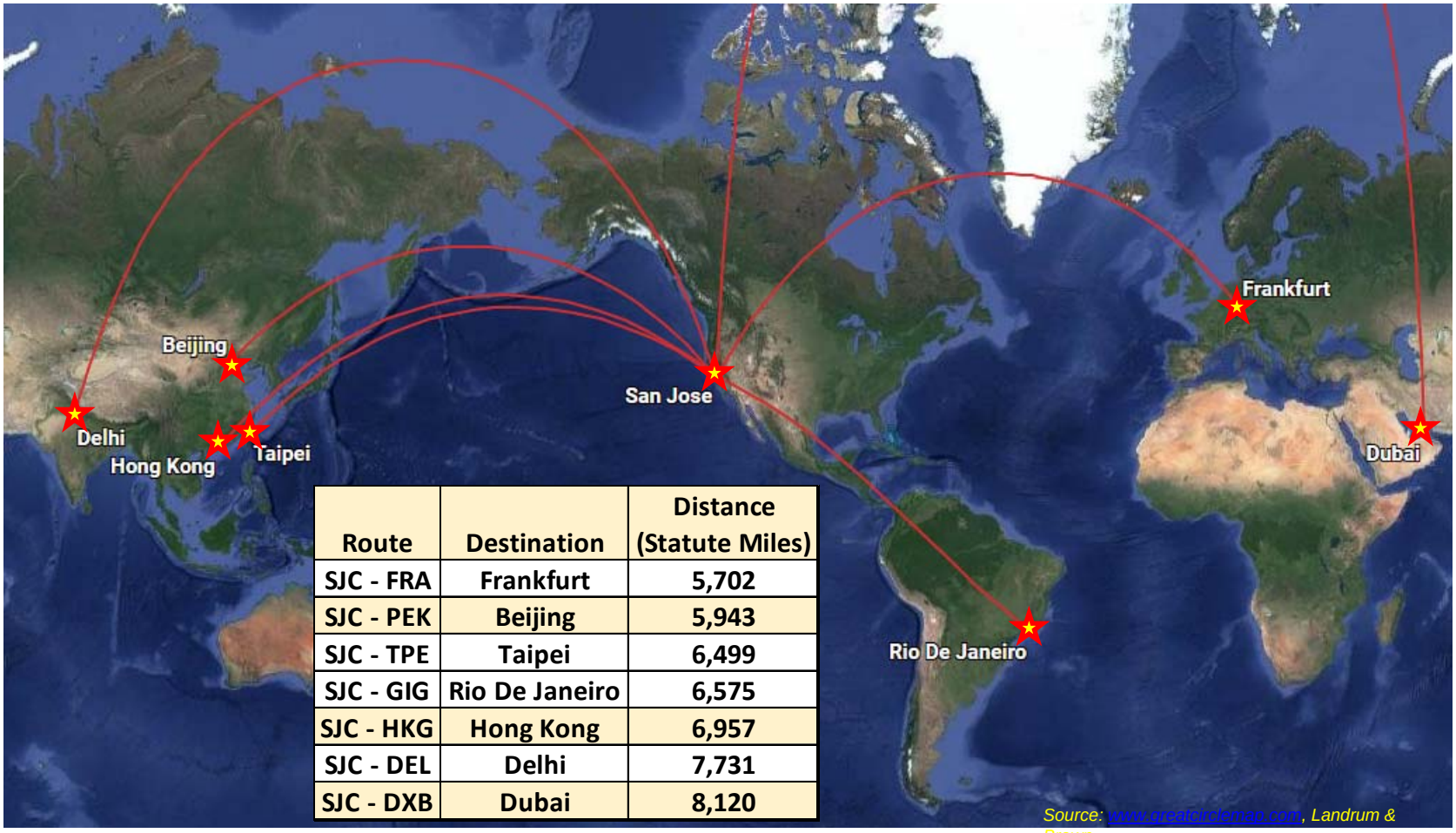
Anchorage - ANC Summer (81.3° F)		A320 (150 seats/1,379 lbs. cargo)		B737-800 (175 seats/7,100 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	-	-	-	-
Scenario 4	TERPS Only	-	-	-	-

Boston - BOS Summer (81.3° F)		A320 (150 seats/0 lbs. cargo)		B737-800 (175 seats/0 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	7	-	1	-
Scenario 4	TERPS Only	23		1	-

Miami - MIA Summer (81.3° F)		A320 (150 seats/0 lbs. cargo)		B737-800 (175 seats/0 lbs. cargo)	
		PAX Penalty	Cargo Penalty (lbs.)	PAX Penalty	Cargo Penalty (lbs.)
Scenario 1	Existing airspace protection	1	-	3	-
Scenario 4	TERPS Only	17		3	-

Note - 1 and 3 Pax penalties as being due to Max Structural Takeoff Weight limits (and not related to the obstacles or runway length.)

Weight Penalties Assessment for Additional International Markets



Route	Destination	Distance (Statute Miles)
SJC - FRA	Frankfurt	5,702
SJC - PEK	Beijing	5,943
SJC - TPE	Taipei	6,499
SJC - GIG	Rio De Janeiro	6,575
SJC - HKG	Hong Kong	6,957
SJC - DEL	Delhi	7,731
SJC - DXB	Dubai	8,120

Source: www.greatcirclemap.com, Landrum & Brown

Aircraft Evaluated: A330-200, A350-900, B777-300, B787-9

Weight Penalty Assessment
Additional International Markets

Rio de Janeiro - GIG **Summer (81.3° F)** 6,575 miles	A330-200 (284 seats/39,344 lbs cargo)		A350-900 (325 seats/37,963 lbs cargo)		B777-300ER (370 seats/48,211 lbs cargo)		B787-9 (290 seats/7,144 lbs cargo)	
	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)
Existing Straight Out OEI*							51	
West OEI Corridor								
TERPS Only		20,072		23,528		18,975	60	7,144

Taipei - TPE **Summer (81.3° F)** 6,499 miles	A330-200 (284 seats/28,577 lbs cargo)		A350-900 (325 seats/27,582 lbs cargo)		B777-300ER (370 seats/35,569 lbs cargo)		B787-9 (290 seats/0 lbs cargo)	
	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)
Existing Straight Out OEI*							89	
West OEI Corridor							12	
TERPS Only		1,976		23,195		18,742	96	

Hong Kong - HKG **Summer (81.3° F)** 6,957 miles	A330-200 (284 seats/18,283 lbs cargo)		A350-900 (325 seats/17,182 lbs cargo)		B777-300ER (370 seats/20,785 lbs cargo)		B787-9 (290 seats/0 lbs cargo)	
	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)
Existing Straight Out OEI*			15				128	
West OEI Corridor							51	
TERPS Only	5	18,283	23	17,182		17,980	134	

Delhi - DEL **Summer (81.3° F)** 7,731 miles	A330-200 (284 seats/5,014 lbs cargo)		A350-900 (325 seats/3,132 lbs cargo)		B777-300ER (370 seats/106 lbs cargo)		B787-9 (290 seats/0 lbs cargo)	
	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)
Existing Straight Out OEI*	48		69		62		178	
West OEI Corridor							103	
TERPS Only	55	5,014	77	3,132	72	106	184	

Dubai - DXB **Summer (81.3° F)** 8,120 miles	A330-200 (284 seats/3,537 lbs cargo)		A350-900 (325 seats/2,688 lbs cargo)		B777-300ER (370 seats/1,828 lbs cargo)		B787-9 (290 seats/0 lbs cargo)	
	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)	PAX Penalty	Cargo Penalty (lbs)
Existing Straight Out OEI*	57		71		62		184	
West OEI Corridor							107	
TERPS Only	65	3,537	79	2,688	72	1,828	191	

*Existing Straight Out OEI calculations use different cargo capacity numbers than West OEI and TERPS Only.

Economic Impact Assessment

Density Increase in the Downtown Core and Diridon Station Area

Downtown Core

- Significant density is currently available for the Downtown Core study area and will not have an aggregate impact for a long period of time.
- Although discrete development sites may still experience small gains in the Downtown Core.

Diridon Station Area

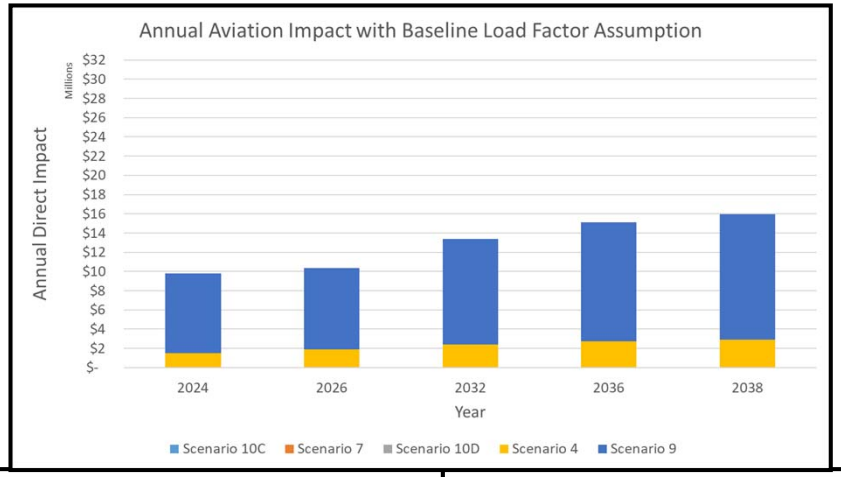
Scenario	Net New Square Feet
4: No OEI	8,600,000
7: Straight-Out OEI	8,500,000
9: No OEI, incr. height limits	10,000,000
10A: Straight-Out OEI w/ West OEI Alts.	1,100,000
10B: Straight-Out OEI w/ West OEI Alts.	3,100,000
10C: Straight-Out OEI w/ West OEI Alts.	4,900,000
10D: Straight-Out OEI w/ West OEI Alts.	6,800,000

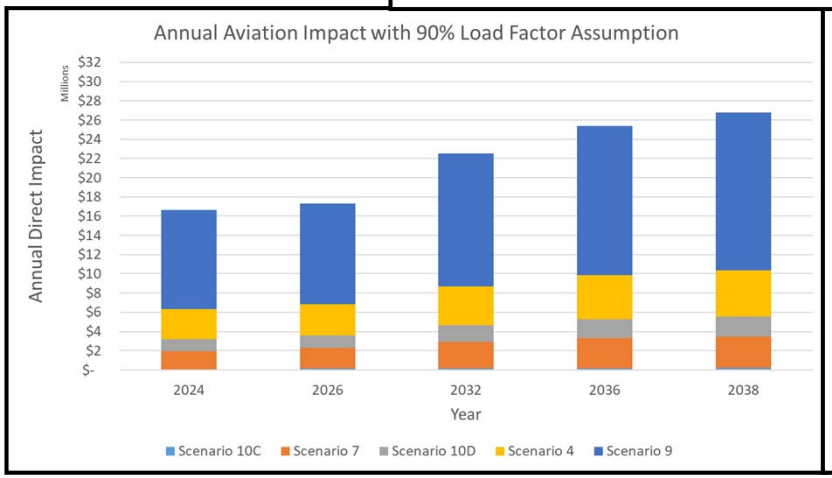
Summary Of Year 2024 Annual Direct Impacts

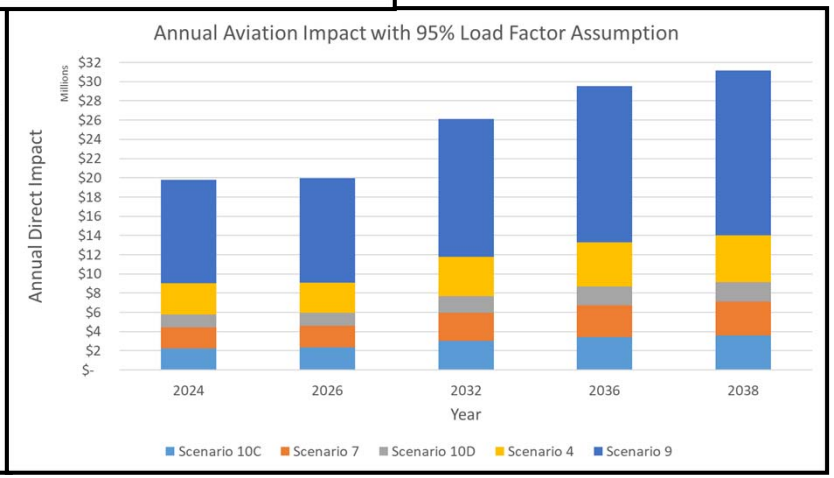
HISTORICAL LOAD FACTORS

Summary of Loses		Airline Revenue	PFC Revenue	Terminal Concession Spending (Airport Share)	Terminal Concession Spending (Concession Share)	Indirect Other Airline Impacts
Scenario 1	Existing airspace protection	**$0**	**$0**	**$0**	**$0**	**$0**
Scenario 4	TERPS Only	**$802,000**	**$10,000**	**$5,000**	**$31,000**	**$669,000**
Scenario 7	Straight-Out ICAO OEI surface protection without West OEI Corridor	**$0**	**$0**	**$0**	**$0**	**$0**
Scenario 10	Existing Conditions: 85' - 166' AGL	**$0**	**$0**	**$0**	**$0**	**$0**
	Opt 10A: 100' - 195' AGL	**$0**	**$0**	**$0**	**$0**	**$0**
	Opt 10B: 115' - 224' AGL	**$0**	**$0**	**$0**	**$0**	**$0**
	Opt 10C: 129' - 240' AGL	**$0**	**$0**	**$0**	**$0**	**$0**
	Opt 10D: 146' - 260' AGL	**$0**	**$0**	**$0**	**$0**	**$0**
Scenario 9	TERPS only with increased TERPS departure climb gradients and approach procedure minima	**$5,566,000**	**$57,000**	**$32,000**	**$191,000**	**$3,966,000**

Summary of 20-year Direct Impacts with Load Factor Sensitivity Test







Induced Economic Impact Assessment

Induced Economic Impact Assessment Summary

Airspace Scenario	Aviation Impact		Real Estate Impact	
	Employment	GDP Gain/Loss	Employment	GDP Gain/Loss
10A	-	-	1,000	$184,000,000
10B	-	-	2,400	$438,000,000
10C	-	-	4,300	$700,000,000
4, 7, 10D	-27	-$2,000,000	4,900	$747,000,000

Estimated City of San Jose Portion of Sales Tax

Airspace	2024		2026		2032		2036		2038	
Scenario	Airline/Airport	Real Estate	Airline/Airport	Real Estate	Airline/Airport	Real Estate	Airline/Airport	Real Estate	Airline/Airport	Real Estate
4	$2,100	-	$2,600	-	$3,200	$110,000	$3,500	$206,800	$3,700	$253,400
7	-	-	-	-	-	$110,000	-	$206,800	-	$253,400
9	$13,700	-	$14,200	-	$17,800	$110,000	$19,600	$206,800	$20,500	$253,400
10A	-	-	-	-	-	$110,000	-	$57,700	-	$57,700
10B	-	-	-	-	-	$110,000	-	$141,100	-	$137,400
10C	-	-	-	-	-	$110,000	-	$206,800	-	$226,800
10D	-	-	-	-	-	$110,000	-	$206,800	-	$253,400

Approval of Propose Recommendation to City Council

Recommend to the City Council approval of:

1. Acceptance of a completed Downtown Airspace and Development Capacity Study, with selection of Scenario 4, which would affirm the City's development policy to use Federal Aviation Administration (FAA) Terminal Instrument Procedures (TERPS) surfaces to determine maximum building heights in the Downtown Core and Diridon Station .
2. Direction to the Administration and City Attorney's Office to explore, and report back to Council on, the feasibility of establishing a "Community Air Service Fund" to financially mitigate any adverse air service impacts that might arise from implementation of Scenario 4 of the Downtown Airspace and Development Capacity Study.
3. Direction to the Administration to consider potential refinements to the development review process for projects subject to a FAA TERPS airspace determination including:
    a. Requiring applicants to have the technical data on the FAA submittal forms be prepared by a licensed civil engineer and that the forms identify the location and elevation of the highest points of the proposed building, including any mechanical rooms, screens, antennas, or other accessory structure.
    b. Requiring applicants to also identify the location and elevation of the highest points of the proposed building and accessory extensions thereof, on their City development permit application plans, including any mechanical rooms, screens, antennas, or other accessory structure.
    c. Require that a construction survey prepared by a licensed civil engineer be submitted by applicants to the FAA upon completion of the high-point of the structure and accessory extensions thereof, prior to City issuance of an occupancy certification.
    d. Requiring a development permit amendment application for any proposed modification or addition to an existing or approved building that would create a new and/or relocated roof-top high point.
    e. Develop a construction crane policy in the Downtown Core and Diridon Station area to minimize impacts on airline service during construction.
4. Direction to the Administration to initiate amendments, as determined applicable, to the General Plan and other key policy documents to incorporate the above recommendations and conduct outreach with the downtown development community to provide information and guidance on development height restrictions.