## FACT SHEET Downtown Obstructions and Future Air Service for San José and Silicon Valley



This year the San José City Council will attempt to balance two very important goals for the economy for San José and Silicon Valley:

- Encouraging more intense development of Downtown San José as a community and regional business and cultural hub; and
- Ensuring the capability of Mineta San José International Airport (SJC) to attract and keep air service that meets the needs of Silicon Valley residents and businesses.

Major airlines serving San José raised concerns about potential downtown high-rise development projects that could affect their ability to fly long-haul routes economically from SJC.

Over the past three years the City and downtown economic development stakeholders have been working on studies to evaluate alternatives that will protect the capability of SJC to provide long-distance air service while allowing for the optimal development of future high-rise buildings in Downtown San José.

## Background

The primary aircraft approach and departure paths for SJC are directly over portions of Downtown San José. In 2005, major airlines serving San José raised concerns about potential downtown high-rise development projects that could affect their ability to fly long-haul routes economically from SJC. The City retained technical consultants to review existing high-rise development, Federal Aviation Administration regulations, and airline emergency operational protocols to

FAA requires airlines to plan for an engine failure as an essential safety precaution. determine height limits that would be necessary to protect the viability of current and future flights to long-haul domestic and international destinations.

The City completed an initial set of findings and policy recommendations in late 2006. In response to concerns expressed by downtown development interests, however, the City, San José/Silicon Valley Chamber of Commerce, San José Downtown Association, and San José

Redevelopment Agency partnered on further study to validate the technical work, explore additional possible solutions, and update the findings and recommendations. The San José City Council mostly likely will take action on policy priorities on the matter fall 2009.

#### The Issue

"One Engine Inoperative" (OEI) refers to the rare occasion when an aircraft loses power in one engine during takeoff. With less power and less ability to climb, the pilot must have a clear route available to return the aircraft safely to the airport. At SJC almost all airline operations are by two-engine aircraft, and an OEI incident would mean an aircraft would have only half of its power. The FAA requires all airlines to be able to perform their specific OEI procedures for every takeoff in the event of engine failure as an essential safety precaution.



## SJC Downtown Obstruction Study

Most SJC flights depart to the north into prevailing winds, but about 15 percent of takeoffs are to the south over downtown due to wind shifts or changes in other Bay

"Weight penalties" needed to clear obstructions have an economic cost to airlines that could lead to losing current or future flights at SJC.

Area air traffic flows. The presence of obstructions in the takeoff path must be accounted for in airline OEI procedures for all flights leaving SJC, regardless of direction of takeoff. Airlines will not allow their planes to take off if they cannot clear obstructions safely. This means they may have to reduce the weight of the plane by

limiting passengers, cargo, or fuel in order to take off safely. These "weight penalties" have an economic cost to airlines that could result in a decision to eliminate a flight at SJC, or to not introduce one to this market at all.

#### Why Now?

Both the City and the community have encouraged high rise construction in the Downtown area as well as the modernization and expansion of SJC, but the potential conflict between high-rise development and air service because of OEI was identified only in 2005. Now is an ideal time to resolve the Airport/Downtown obstruction issue in order to provide clear guidelines for downtown development when the economy recovers.

#### Impacts of Preserving OEI Protection on Downtown Development

The OEI routes currently established for airlines at SJC account for existing downtown buildings. Some airlines have OEI routes that avoid the downtown high-rises

by turning to the west of Highway 87 over the Diridon/Arena area ("West Corridor") where buildings currently are lower. Preserving these established OEI routes would require height limits on new high-rise development, and would mean that new buildings might not be as high as previously envisioned in the downtown core and West Cor- downtown San José. ridor. Substantial high-rise development

**Preserving OEI routes would** require height limits on new high-rise development, and new buildings might not be as high as previously envisioned for

could still occur depending on location, however, and developers would be able to design buildings to a known height limit.

#### Impacts of Losing OEI Protection on Air Service for Silicon Valley

The creation of new obstructions to OEI routes could have undesirable air service and economic impacts to the region. Airlines will not fly routes that are not eco-

SJC could become a regional airport with direct flights only to cities on the West Coast and the western US.

nomically practical due to OEI-required weight penalties, and SJC would therefore risk losing existing or potential future air service, particularly to long-haul destinations. This could eventually result in SJC becoming a "regional" airport primarily providing direct flights only to cities along the West Coast and

in the western half of the United States. SJC would no longer be able to serve nonstop flights to the East Coast, Hawaii, or overseas to Asia or Europe.

This scenario could adversely affect economic development and jobs in Silicon Valley, send SJC flights to other airports, and contribute to congestion at San Francisco and Oakland airports. Moreover, this scenario would undercut the substantial investments made at SJC to create a world-class international airport for San José and Silicon Valley. Since 2000 San José also has spent well over \$1.5 billion to lengthen and upgrade its runways, build a new International Arrivals Building, and undertake the current modernization program to build and upgrade terminals, parking garage, and roadways.



#### The New Airport - Investing for the Future

The Airport Master Plan adopted by the City Council in 1997 provides the long-term framework for major investments necessary to create a world-class international airport for San José and Silicon Valley.

The City Council also adopted its comprehensive San José Economic Development Strategic Plan in December 2003 that made the creation of a world-class airport facility and international air services it first strategic priority.

The current airport modernization program is a \$1.3 billion investment to help achieve this goal. It includes the new Terminal B, comprehensive upgrade for Terminal A, 3350-space rental car garage, and improved roadways to enhance convenience and comfort for SJC travelers.



Construction for the project is now almost 100 percent committed and about 50 percent complete. It remains on schedule and on budget for completion in 2010.

Since 2000 San José also has invested \$165 million to lengthen and upgrade its runways that meet the needs of large aircraft flying to Asia and Europe. The new International Arrivals Building was built in 2002 to support federal inspection and customs services.

#### What Next?

The San José City Council Community and Economic Development Committee is currently scheduled to consider the Obstruction Study and alternatives that could protect both long-term air service and long-term downtown development potential on June 22, 2009.

The Committee could then make recommendations to the full City Council, which would likely schedule consideration of the issue in fall 2009.

For information, call SJC Communications Office, (408) 501-7600.





## San José Obstruction Study Frequently Asked Questions

- 1. What is the "Obstruction Study" all about?
- 2. What's happened since 2005?
- 3. What does "OEI" One Engine Inoperative mean, and what is its significance for downtown obstructions and potential development in this area?
- 4. How often do aircraft need to fly over downtown San José?
- 5. Is this a safety issue?
- 6. Why is this an issue for the City Council now?
- 7. Why is the study taking so long to complete and bring back to the City Council?
- 8. If this is an issue for only 15% of take-offs, why can't the carriers live with that?
- 9. Is the Chamber opposed to recommended height limits?
- 10. What happens if tall buildings that create aviation obstructions are ultimately allowed by the City Council?
- 11. Is there a conflict within City Hall between Redevelopment Agency and the Airport?
- 12. What's the difference between a "regional" airport and a long-haul international airport?



- 13. Why can't all the Bay Area's long-haul and international flights be served out of SFO?
- 14. How much has San Jose invested in creating an airport capable of serving long-haul and overseas flights?
- 15. What is the City's policy goal for SJC?
- 16. What specific steps has the City taken in support of its long-term goal of building a world-class airport?
- 17. Boston, Phoenix, Miami, San Diego, Orange County, Burbank, Honolulu and many other airports have special takeoff procedures. Why couldn't such procedures be implemented in San José?
- 18. Why couldn't developers build to FAA general height standards that are higher than OEI heights in the downtown corridor and raise the *non-precision approach minimums* to allow greater heights for new buildings south of downtown?
- 19. If the airlines do not change their takeoff procedures, would they suffer a "weight penalty"?
- 20. Why can't the airlines just use the OEI procedure in the West Corridor between Highway 87 and HP Pavilion?
- 21. Does an OEI procedure using the west corridor preserve the ability of the airlines to fly transcontinental and transoceanic flights?
- 22. Doesn't limiting building heights in the downtown limit the potential for increasing customers to use the Airport?
- 23. Can the City require the airlines to use the west corridor on takeoffs and to use a different climb rate over the Diridon Station/HP Pavilion area?
- 24. What options do the airlines have if they do not/cannot use the West Corridor and the City wants to allow taller buildings in the downtown?
- 25. If an airline doesn't want to take a weight penalty, why not just use the West Corridor OEI procedure and avoid the penalty?
- 26. What happens next?



## 1. What is the "Obstruction Study" all about?

- In 2005, carriers serving San Jose raised concerns about potential high-rise development in downtown San Jose that could affect their ability to fly long-haul routes economically.
- The City retained technical consultants to review development plans, FAA regulations, and airline operational protocols to determine whether and where revised downtown height limits would be necessary to retain current and future airport capability to serve long-haul routes.

## 2. What's happened since 2005?

- A draft set of findings and recommendations were completed late 2006. In response to concerns from downtown developers and the San Jose/Silicon Valley Chamber of Commerce, a "validation study" was conducted to ensure that the findings were accurate and all practical alternatives were evaluated.
- Since early 2007, the Airport, the Chamber, and the San Jose Redevelopment Agency have been exploring alternatives that would achieve the City's goals for protecting the current and future capability of long-haul air service and for protecting potential downtown high-rise development.

## 3. What does "OEI" – One Engine Inoperative – mean, and what is its significance for downtown obstructions and potential development in this area?

- One Engine Inoperative refers to the rare occasion when an aircraft loses power in one engine, right at the point of takeoff from the airport. A plane would have less power and less ability to climb, and it would need to have a clear route available without obstructions to return safely to the airport.
- Airlines are required to have OEI procedures by the FAA. Every flight departure must be able to perform its OEI procedures in the event of engine failure.
- Almost 100% of all airline operations at SJC are by two-engine aircraft, and therefore an OEI incident means the affected aircraft has only half of its power.
- Most flights from SJC take off heading north into prevailing winds. About 15% of the take-offs, however, are to the south and over downtown when there is a seasonal wind shift or when Bay Area air traffic requires it.
- Tall buildings in certain areas would block the OEI routes, which would require carriers to fly with lighter loads or fewer passengers to ensure their ability to clear obstructions.



#### 4. How often do aircraft need to fly over downtown San José?

• Most flights from SJC take off heading north (towards Santa Clara) into prevailing winds. About 15% of the take-offs, however, are to the south and over downtown when there is a seasonal wind shift or when Bay Area air traffic requires it.

## 5. Is this a safety issue?

- No. It's really an economic issue. Under FAA regulations, the carriers will not allow their planes to take off if they can't meet OEI safety requirements.
- That means they have to reduce the weight the plane carries by limiting passengers, cargo, or fuel before the plane takes off to be able to clear any obstructions.
- Reducing weight means that long-haul flights would become unprofitable for a carrier if there are obstructions in the OEI routes.

## 6. Why is this an issue for the City Council now?

- Only over the past decade have both the City and the development community have encouraged opportunities for high-rise construction in the greater downtown area.
- The potential conflict between high-rise development and the ability of the Airport to support transcontinental and transoceanic service because of the impact of OEI procedures was identified only in 2005.
- Since the end of 2006, the Council's discussion of the study findings has been rescheduled several times in order to provide additional time for more technical analysis.
- Because of the current economic recession, this is an ideal time to resolve the obstruction issue and the policy conflict in order to provide clear guidelines for efficient and timely development when economy turns around.

#### 7. Why is the study taking so long to complete and bring back to the City Council?

- The study is complex with many technical questions. There is significant uncertainty about future impacts on carriers and on development, and there has been ongoing involvement from many different airlines and stakeholders.
- It's important that desire to make sure we've answered all questions



- Recent staff discussions identified further possibilities to refine alternatives that might allow greater heights in certain sections of downtown, which led to deferring the issue until June 2009.
- The City Council's Community and Economic Development Committee is currently scheduled to hear the matter on Monday, June 22. The obstruction study most likely will be heard by the full City Council this fall, but this will depend on the Committee's recommendations in June.

#### 8. If this is an issue for only 15% of take-offs, why can't the carriers live with that?

- Carriers book passengers on 100% of their flights.
- Because taking off to the south is usually a weather-related requirement, there is no way
  an airline can just cancel flights or not schedule them for these unpredictable conditions.
- This would make serving San Jose completely impractical and uneconomical for the carriers.

## 9. Is the Chamber opposed to recommended height limits?

- Both the Chamber and the Airport want a win-win solution that will protect the maximum practical development potential in downtown San Jose while preserving long-haul air service for Silicon Valley.
- Due to existing downtown buildings, some airlines have developed OEI routes that avoid the downtown core and instead go over part of downtown west of Highway 87 that is currently not developed.
- Preserving an OEI route for long-haul flights over the Diridon/Arena area would significantly limit the potential for high-rise, high density development in portions of this area.
- On the other hand, an obstruction in the Diridon/Arena area could make long-haul flights uneconomical for carriers, thus would also have a regional economic impact.

## 10. What happens if tall buildings that create aviation obstructions are ultimately allowed by the City Council?

- According the airlines, they will not fly routes that are not profitable.
- Obstructions that affect OEI procedures and weight penalties would reduce airline profitability by requiring them to reduce passengers and loads for long-haul flights flying from San Jose.



- If long-haul flights are not economically desirable at SJC, then carriers would not fly them at here and would relocate them and aircraft to other airports that can better support profitable operations.
- For San Jose, the loss of long-haul service would mean that Silicon Valley would not have flights to the East Coast, overseas, or to Hawaii.

## 11. Is there a conflict within City Hall between Redevelopment Agency and the Airport?

- Creating a world-class international airport and encouraging downtown greater density and high-rise development are both fundamental long-term policy goals of the City and the City Council.
- The Airport, San Jose Office of Economic Development, Redevelopment Agency, and Planning Department are working together to develop a joint recommendation for a solution that will generally achieve both these goals.
- The City Council ultimately will determine which alternative is best for San Jose and Silicon Valley and for the regional economy.

## 12. What's the difference between a "regional" airport and a long-haul international airport?

- A regional airport serves short-haul routes with smaller aircraft.
- Regional flights from SJC would likely range no further than the Midwest, thus limiting direct flights only to cities along the West Coast and in the western half of the United States.
- For San Jose, the loss of long-haul service would mean that Silicon Valley would not have flights to the East Coast, overseas, or to Hawaii.

#### 13. Why can't all the Bay Area's long-haul and international flights be served out of SFO?

- San Jose has already invested nearly \$2 billion over the past ten years to create a modern airport for Silicon Valley that is capable of serving virtually all international and domestic destinations.
- Silicon Valley businesses and residents prefer the convenience of SJC when carriers offer the range of long-haul flights that travelers want.

- Without international and long-haul service at SJC, South Bay travelers must drive another hour on congested Bay Area highways to reach SFO, which has a negative impact on traffic and air quality.
- SFO has already projected capacity constraints that would cause overall Bay Area air service and on-time performance to deteriorate in the face of aviation demand if longhaul flights are restricted at SJC.

## 14. How much has San Jose invested in creating an airport capable of serving long-haul and overseas flights?

- Since 2000, SJC has invested \$165 million to lengthen and upgrade its runways that are fully capable of meeting the needs of large aircraft flying to Asia and Europe, as well as constructing a new International Arrivals Building to support federal inspection and customs services in San Jose.
- The airport modernization program, on schedule for completion in 2010, is a \$1.3 billion project. Construction is now almost 100% committed, and the work is now about half complete.

## 15. What is the City's policy goal for SJC?

- The Airport Master Plan adopted by the City Council in 1997 and amended over time provides the long-term framework for major investments for the airfield and terminal improvements necessary to create a world-class international airport for San Jose and Silicon Valley.
- The City Council adopted its comprehensive San Jose Economic Development Strategic Plan in December 2003 that made building a world-class airport facility and air services it first strategic priority.

## 16. What specific steps has the City taken in support of its long-term goal of building a world-class airport?

- In December 2003 the City Council adopted its first comprehensive San Jose Economic Development Strategic Plan. The first of the 15 strategic initiatives for the City in the document: GLOBAL GATEWAY/Strategy #1: Build a World-Class Airport Facility and Air Services.
- In 2005 Council adopted Mayor's June Budget recommendation that specifically called for increasing international service.
- In June 2006 Council adopted the air service incentive program to specifically encourage long-haul and international flights.

- In 2006-2007, a new position of Air Service Director was approved to focus efforts on the retention and development of San José air service. Resources directly related to air service development include a \$250,000 approved addition in this budget specifically to support new international air service.
- The City has committed \$1.5 billion to modernize the Airport to attract a wider range of air carriers to connect to a wider range of destinations. This figure doesn't include the millions of dollars expended to lengthen both runways for larger, longer haul aircraft.
- 17. Boston, Phoenix, Miami, San Diego, Orange County, Burbank, Honolulu and many other airports have special takeoff procedures. Why couldn't such procedures be implemented in San José?
  - While some airports use special takeoff procedures, in every case those procedures are required to mitigate specific local terrain obstructions or noise impacts. We are not aware of any U.S. airports that have implemented OEI procedures involving an immediate turn solely for the purpose of preserving potential off-airport land use development.
  - Boston, Phoenix, and Miami have worked with their local communities and the FAA to establish protection for <u>straight-out OEI</u> procedures, which is what San José is considering as well. Of these three major airports, only at Boston do a few long-haul airlines choose to use an OEI procedure that involves a slight turn to avoid an existing downtown building.
  - San Diego, John Wayne, Burbank, and Honolulu airports all have special departure procedures for noise mitigation or terrain avoidance purposes rather than for land use development. At San Diego, all airline OEI procedures are straight-out until high terrain becomes an obstruction. At John Wayne, all airline OEI procedures are straight-out. At Burbank, all airline OEI procedures involve a turn due to nearby high terrain. At Honolulu, all airline OEI procedures are initially straight-out until turning over the ocean to avoid downtown buildings and terrain.
- 18. Why couldn't developers build to FAA general height standards that are higher than OEI heights in the downtown corridor and raise the *non-precision approach minimums* to allow greater heights for new buildings south of downtown?
  - Changes to FAA flight procedures are solely within the purview of the Federal Aviation Administration. The FAA has indicated that it would <u>not</u> be agreeable to a local proposal to raise the "non-precision approach minimums" in the absence of local OEI protection in return. The FAA believes that such a proposal does not improve aviation access to the Airport.

- A "non-precision approach" allows aircraft to land without the use of sophisticated landing instrumentation provided they can visually see the airport from defined minimum heights. Non-precision approaches generally are used more by general aviation aircraft than by commercial aircraft that have sophisticated landing technology onboard. The "non-precision approach minimum" is the lowest height an aircraft is allowed in order that it can see the airport and make a non-precision landing.
- The suggestion to raise the non-precision minimums would raise the minimum landing height over the downtown for non-precision landings by about 60 feet while eliminating the OEI in the downtown core. This would allow taller buildings to be built in the downtown area. However, raising the non-precision minimum heights would make it even more difficult for aircraft to land at SJC. Further, by removing OEI protection over the downtown core, it would force airlines to use less desirable OEI procedures. While this would allow for somewhat taller buildings in the downtown area, it provides no benefit for the aircraft using the Airport. In fact it would make it more difficult for aircraft to land and take off from the Airport by raising landing heights and removing the OEI corridor over downtown.

## 19. If the airlines do not change their takeoff procedures, would they suffer a "weight penalty"?

• If the airlines plan to use an OEI corridor over a downtown with taller buildings that are obstructions, then they would be required to offload paying passengers, cargo, or fuel to lighten the plane's load so that it could clear the obstruction. This is the "weight penalty" that would make a flight unprofitable, especially in an extremely competitive industry.

## 20. Why can't the airlines just use the OEI procedure in the West Corridor between Highway 87 and HP Pavilion?

Airlines have indicated their support of preserving both the option of the West Corridor OEI and maintaining the straight-out OEI corridor. From an aircraft performance perspective, a procedure that requires turning does not gain altitude as quickly as a straight-out and level procedure. A turn is also non-standard and therefore a more complicated maneuver to perform, a concern when faced with one engine inoperative. Some airlines are unable or unwilling to use a turn procedure, and they would have to accept weight penalties in order to continue using a straight-out procedure, a condition that risks loss of existing or future service at SJC.

## 21. Does an OEI procedure using the west corridor preserve the ability of the airlines to fly transcontinental and transoceanic flights?

 Whether or not an a West Corridor OEI procedure would allow an airline to offer long haul service would ultimately depend on what buildings and/or facilities are constructed in the corridor.



## 22. Doesn't limiting building heights in the downtown limit the potential for increasing customers to use the Airport?

- Adopting OEI protection over both the downtown core and West Corridor would continue to allow for substantial new downtown high-rise building development.
- Most existing high-rises in downtown San Jose have <u>not</u> been built to the maximum heights allowable under FAA standards. Furthermore, constraints on airline service may have undesirable regional economic impacts if San José airline service is reduced to only short or medium-haul nonstop destinations.
- Although the Airport is owned and operated by the City of San José, it is a regional asset that serves not only San José but the surrounding communities in Santa Clara County as well as adjacent regions in Alameda, Santa Cruz, San Benito and Monterey counties.
- Limiting downtown building heights may limit the potential downtown customers for the Airport to a marginal degree but limiting the Airport's ability to provide more than shorthaul service to the region will have a far greater impact on the number of customers the Airport will be able to serve.

## 23. Can the City require the airlines to use the west corridor on takeoffs and to use a different climb rate over the Diridon Station/HP Pavilion area?

- The City cannot unilaterally require the airlines to take a particular corridor or take a specific climb rate. Any change in the departure corridor or procedures would have to be approved by the FAA.
- Even with FAA's approval, the City still runs the serious risk of losing at least some airline service if the airlines consider the change as unprofitable.

## 24. What options do the airlines have if they do not/cannot use the West Corridor and the City wants to allow taller buildings in the downtown?

The airlines would have to take the "weight penalty." As an alternative, they could declare the penalty makes the flight unprofitable and decide to not offer the service in San José and instead utilize the asset that is the plane on more profitable routes.

## 25. If an airline doesn't want to take a weight penalty, why not just use the West Corridor OEI procedure and avoid the penalty?

 Weight penalties could still apply to the OEI West Corridor due to existing obstructions, currently defined by the HP Pavilion.



 Also some airlines may simply choose not to serve San José rather than design a less desirable, more complicated, airport-specific OEI turn procedure in order to operate economically out of San José.

## 26. What happens next?

- June 22, 2009: Community and Economic Development Committee
- Fall 2009: City Council (depending on CEDC recommendation)



# San José Downtown Obstruction Study





# Two economic development goals for San José and Silicon Valley:

- Develop Downtown San José as a regional business and cultural hub.
- Create a world-class international airport for Silicon Valley.

San Jose City Council will resolve potential policy conflicts between goals this year.





# "One Engine Inoperative" (OEI)

- The rare occasion when an aircraft loses one engine during takeoff.
- With less power and less ability to climb, must have a clear route to return safely.
- FAA requires airlines to have OEI procedures as an essential safety precaution.





# **Obstructions**

- Obstructions such as tall buildings in the takeoff path must be accounted for <u>all</u> flights.
- About 15% of takeoffs go over downtown due to weather.
- Planes will not take off if they cannot clear obstructions safely.





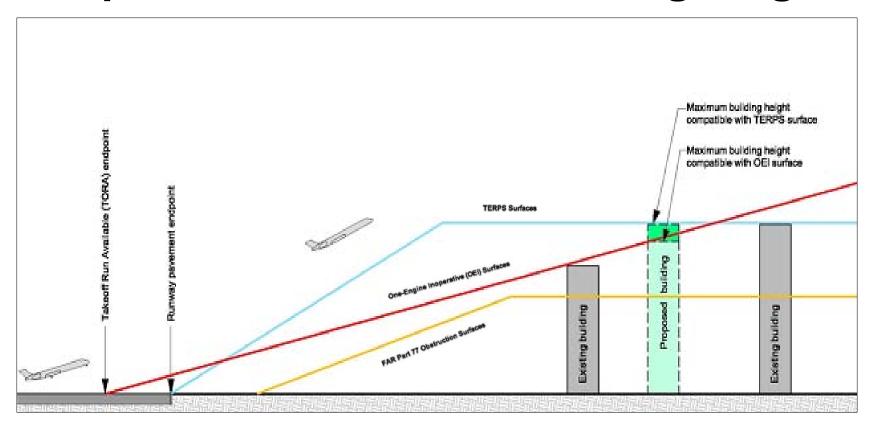
## **Obstructions**

- To clear obstructions safely, airlines may have to reduce weight: reduce passengers, cargo, or fuel.
- "Weight penalties" are an economic cost to airlines – less revenue, less profit, less desirable.





## **Airspace Protection and Building Heights**







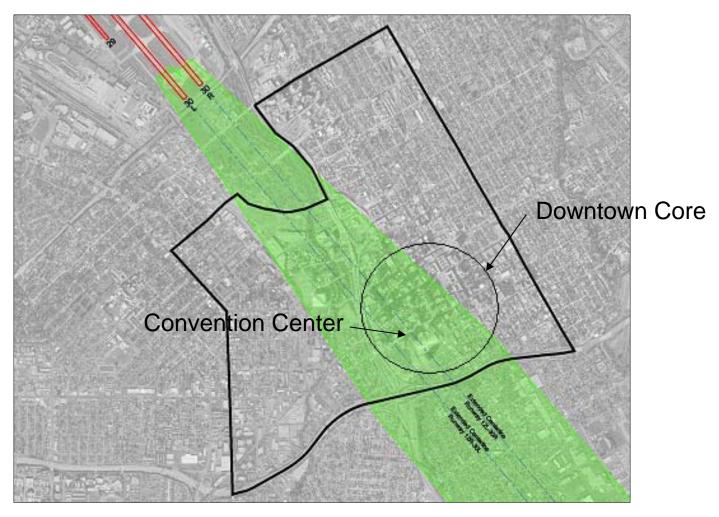
# **OEI and Downtown Development**

- Current OEI routes account for existing downtown buildings.
- Some airlines avoid downtown high-rises by going over the Diridon/Arena area where buildings currently are lower.
- Preserving OEI routes would require some height limits on new high-rise development.



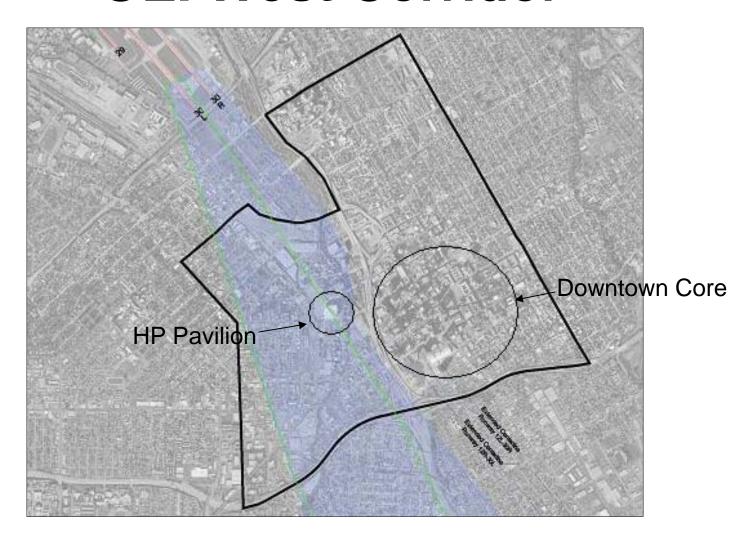


# **OEI Straight-out**



May 11, 2009

# **OEI West Corridor**



May 11, 2009

# **OEI and Downtown Development**

# Depending on City Council's decision about preserving OEI routes:

- New downtown buildings might not be as high as previously envisioned.
- High-rise development might not be as dense in some locations.
- Substantial high-rise development could still occur in various other downtown locations.





# **OEI** and Future Air Service

- Obstruction in OEI routes could make long-haul flights uneconomical, and airlines could decide to move flights to other airports.
- SJC might lose current or future non-stop flights to the East Coast, Hawaii, Asia, or Europe.
- SJC might become a "regional airport," primarily serving only cities in Western US.





# Investment at SJC

- Since 2000 San José has committed over \$1.5 billion to create a world-class airport.
- SJC runways can handle long-haul flights and aircraft for any international destination.
- New International Arrivals Building built 2002.
- Modernization program is building a new terminal, parking garage, and roadways – on schedule and on budget for completion in 2010.





# **Policy Questions for Council**

- 1. What are the economic tradeoffs between potential downtown San Jose high-rise development and long-haul air service for Silicon Valley?
- 2. How much development potential would be lost by preserving OEI routes, and how much still possible?
- 3. Who would feel the impacts of benefits, costs, and service tradeoffs?





## What Next?

- San José Community and Economic Development Committee will consider Obstruction Study on June 22, 2009.
- San José City Council could schedule consideration Fall 2009.









