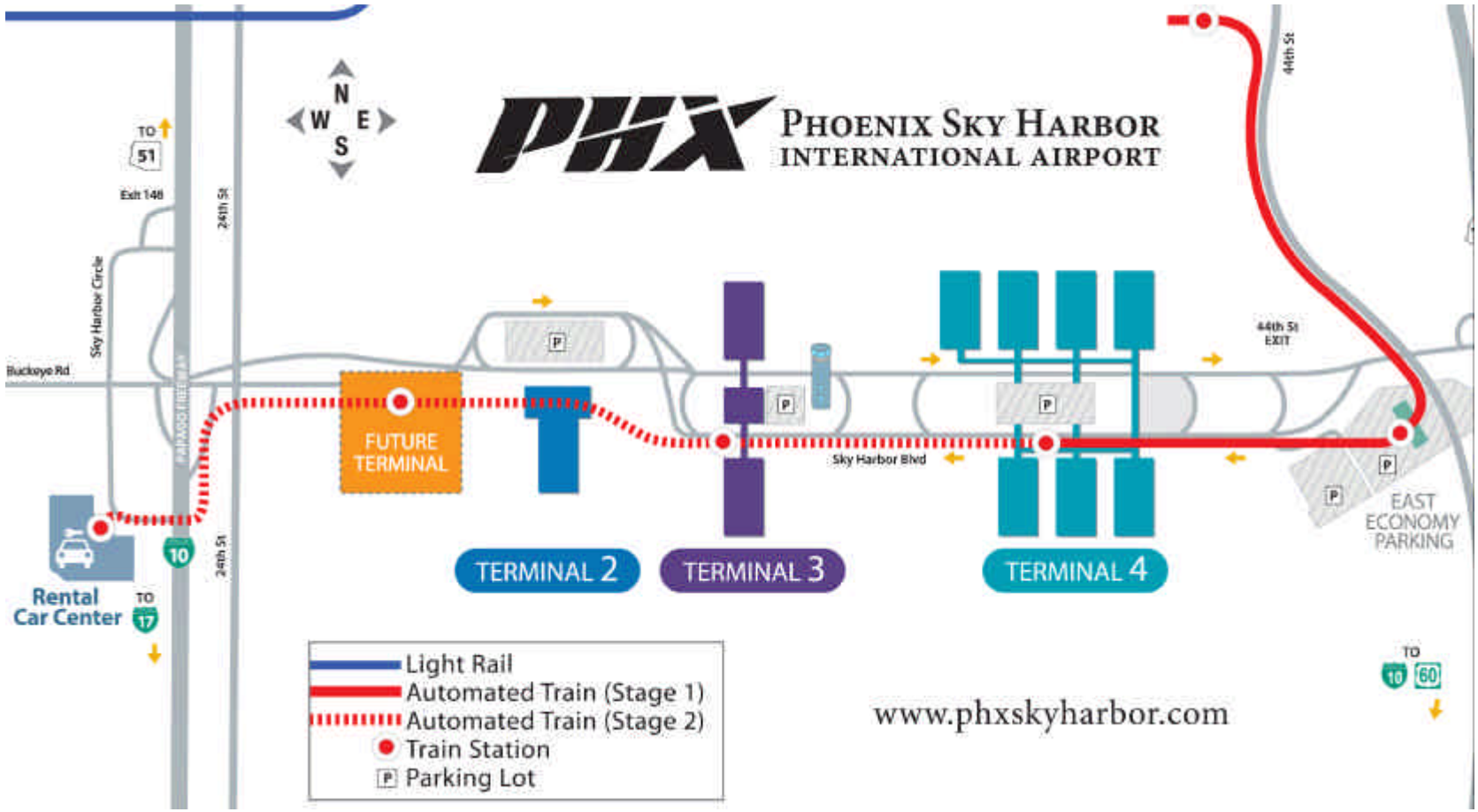
Phoenix Sky Harbor People Mover



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Phoenix Sky Harbor People Mover

- **Key Elements:**
  - **A people mover that accesses the terminals and parking structures at the Airport**
  - **An intermodal center, which will allow connections to the City's light rail and local bus systems**
- **Phasing:**
  - **Phase 1 (Intermodal Center – Terminal 4): 2013**
  - **Phase 2 (Terminal 4 – West parking structures including rental car center): 2020**
- **Sponsoring Agency:**
  - **Project is being completed by the City of Phoenix, Department of Aviation**

Phoenix Sky Harbor People Mover

- **Project Cost:**
  - **Construction – 50% of Total**
  - **Total – $3 billion (including bond financing and interest costs)**
- **Plan of Finance:**
  - **90% of the project is PFC eligible**

Funding source	Estimated Amount (Approx. $millions)	Percentage
PFCs	**975**	**65%**
Airport Revenue Bonds	**525**	**35%**
Total	**1,500**	**100%**

- **A greater portion of the project will be paid by PFCs if the maximum PFC level is raised to $6.00**

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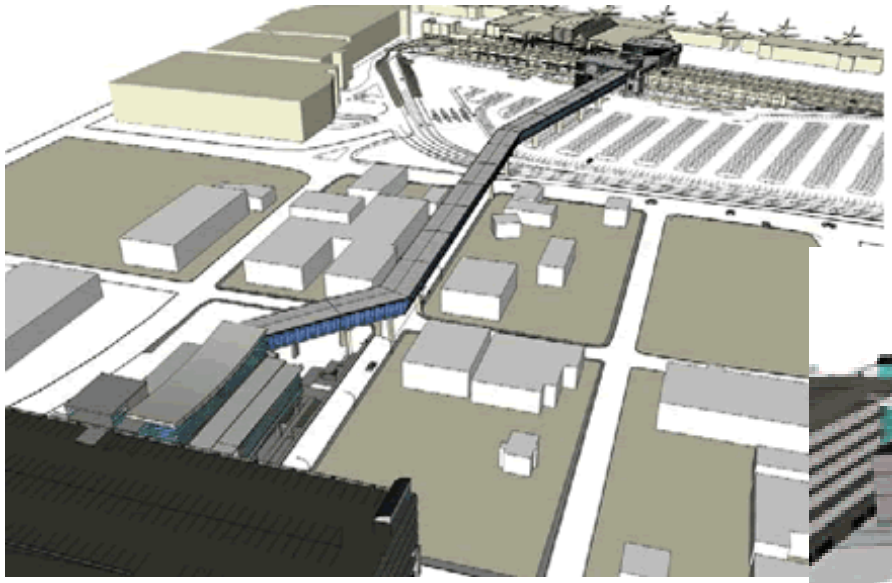
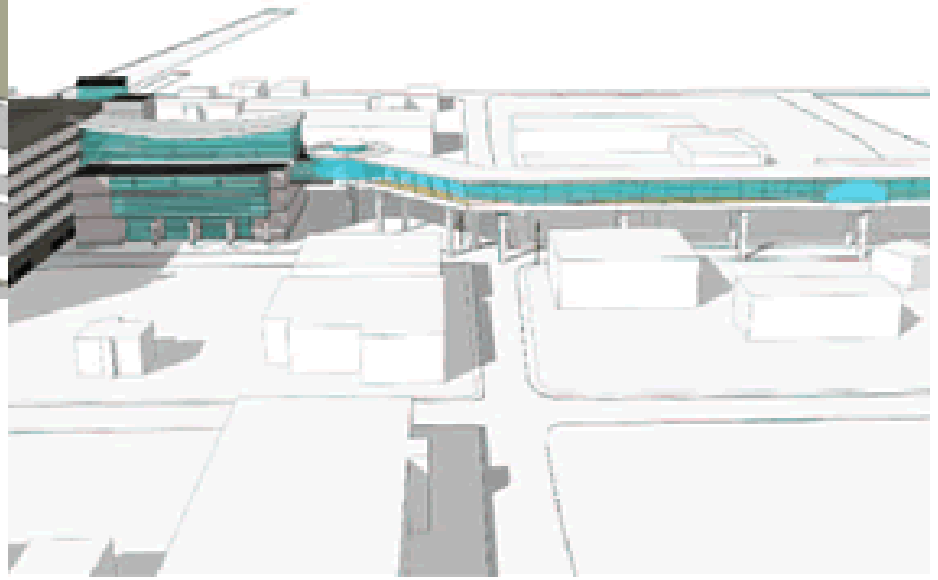
T.F. Green Airport Intermodal Center

T.F. Green Airport (Providence, RI) is a constrained airfield facility located directly adjacent to a busy intercity rail corridor.





T.F. Green Airport Intermodal Center

- **Key Elements:**
  - **Rail platform**
    - Massachusetts Bay Transportation Authority Commuter Rail service to Providence and Boston
    - Amtrak will not be using this facility in the foreseeable future
  - **Parking garage with**
    - 1,800 spaces for rental cars
    - 800 spaces for commuters
  - **Skywalk connecting center to Airport Terminal; skywalk will be approximately 1,200 ft long**
  - **Bus hub for local and intercity buses**
- **Project phasing:**
  - **Currently under construction; to open for train service in 2010**
- **Sponsoring agencies:**
  - **Joint effort between Rhode Island DOT and the Rhode Island Airport Corporation**

T.F. Green Airport Intermodal Center

- **Project cost:**
  - **$267 million (most recent data)**
- **Plan of finance:**

Project Financing		Uses of Funds	
Source	Amount ($millions)	Use	Amount ($millions)
CFCs	29.0	Rental Car - Garage	46.9
State Grants	22.2	Rental Car - Other	40.2
Federal Highway Grant	88.9	Train Platform	22.9
TIFIA	42	Commuter Parking	28.1
Economic Dev. Corp. (EDC) Bond	39.6	Skywalk	57.6
		Other	26
Total	221.7		221.7

Note: Plan of finance only available for a previous project total estimate.

- **Possible revenue streams include CFCs, rentals revenues and parking revenues.**

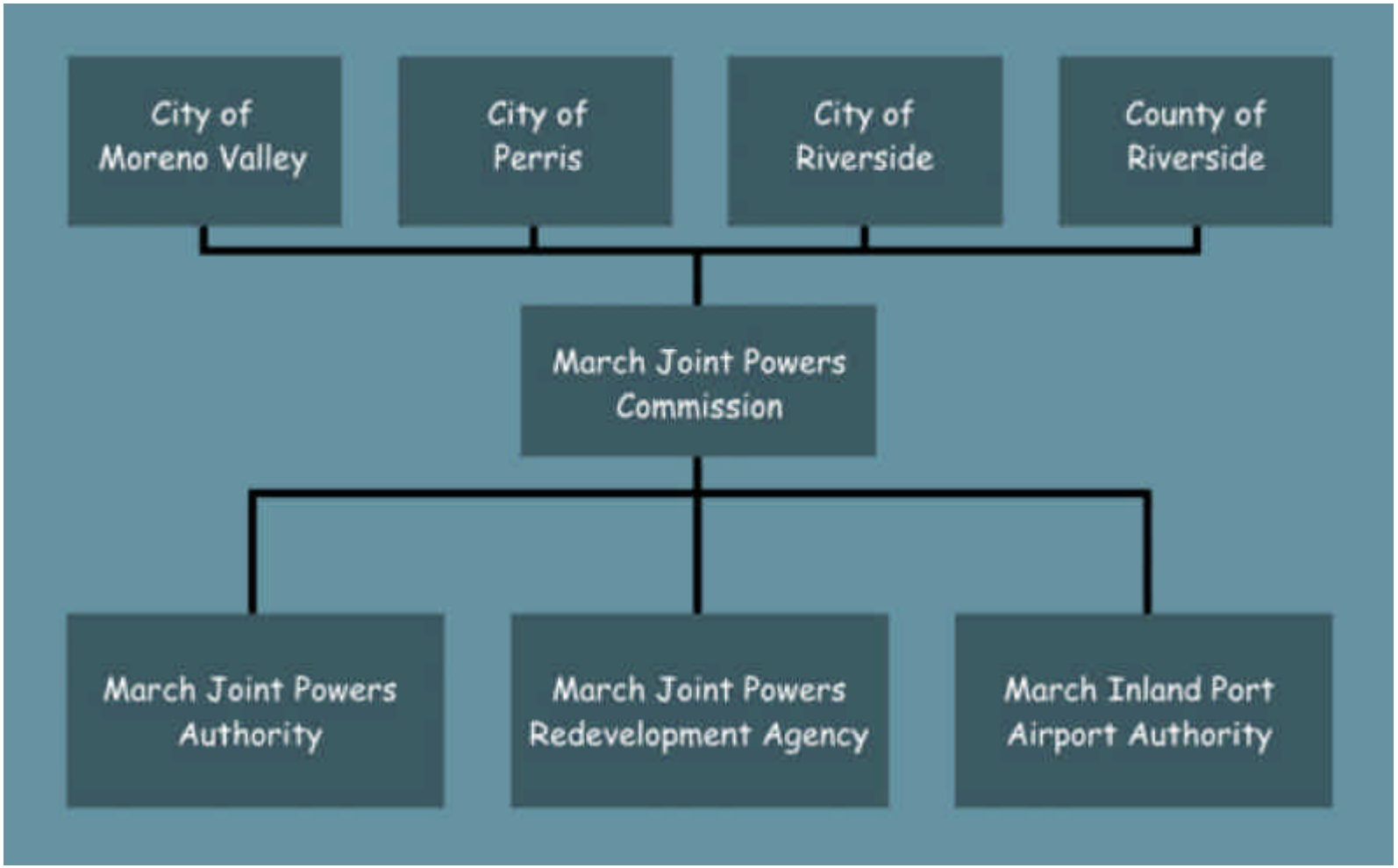
March Joint Powers Authority

- **Location:**
  - **March Air Reserve Base (formerly March Air Force Base) is located in the western Riverside County region of Southern California**
- **Composition of the Authority:**
  - **The March Joint Powers Authority was created through a joint use agreement in 1993, and is comprised of four jurisdictions whose boundaries touch March Air Force Base**
    - County of Riverside
    - City of Moreno Valley
    - City of Perris
    - City of Riverside
  - **Each jurisdiction selects two of its elected officials to serve on the March Joint Powers Commission, the governing body of the Authority**

March Joint Powers Authority

- **The responsibilities of the Authority include:**
  - **Federally recognized reuse authority for the former active duty base**
  - **Land use authority for the 4,400 acres of on-base land deemed surplus and available for disposal actions, as well as 450 acres adjacent to the base**
    - March JPA now develops the building codes and standards for buildings constructed within its jurisdiction
    - Done as “March Joint Powers Redevelopment Authority”
  - **Development and execution of General Plan, Master Environmental Impact Report and the Final Reuse Plan**
  - **Operation of the Airport (now a joint-use military/civilian aviation facility)**
    - Named the “March Inland Port Airport Authority”

March Joint Powers Authority Organization



Pease Development Authority

- **Location:**
  - **Portsmouth International Airport at Pease (formerly Pease Air Force Base) is located in Portsmouth, NH**
- **Composition of the Authority:**
  - **Originally called the "Pease Redevelopment Commission", which was charged to redevelop the base after it was closed in 1989**
  - **Governed by a seven member Board, which serves 3-year terms**

Board Members	Who Selects Them
1 (Chairman)	Governor
1	Senate President (State)
1	Speaker of the House (State)
1.5	City of Portsmouth
1.5	Town of Newington
1	County of Stratford
7	Total

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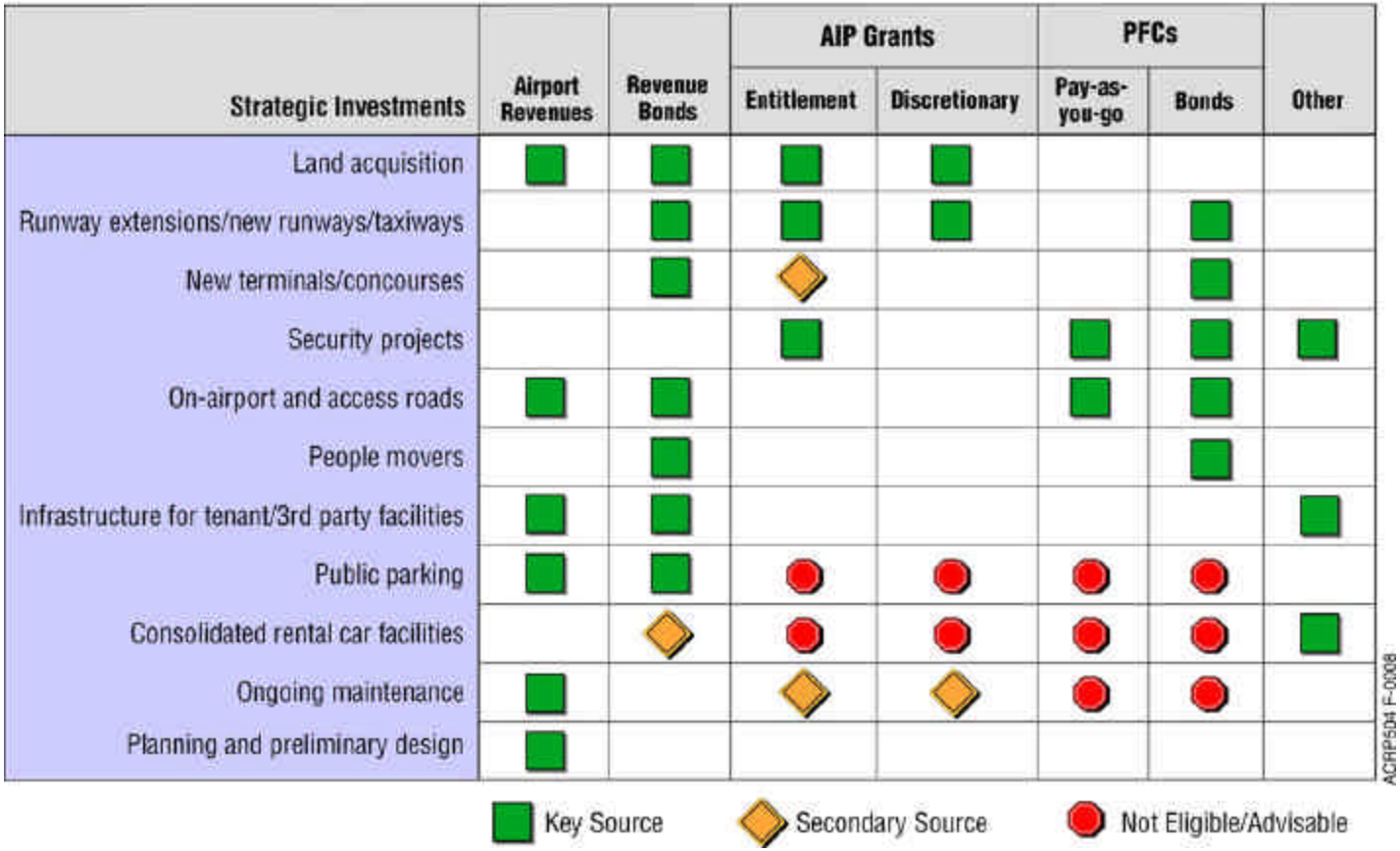
Pease Development Authority

- **Responsibilities of the Authority include:**
  - **Implementation of the Redevelopment Plan created by the Pease Redevelopment Commission**
  - **Oversight of the Maintenance, Operations and Development of:**
    - Pease Airport
    - Beginning Nov 1, 2009, the Pease Development Authority also began operating Skyharbor Airport in Rochester, NH
    - The Port of Portsmouth
  - **Has the authority to levy PFCs and is eligible for AIP funds**

Potential Project Management Structure

- **Attributes:**
  - **Inclusive**
    All agencies and public/private contributors need to be part of the team
  - **Meet grant obligation requirements**
    Conform to requirements of each funding source (e.g., AIP/PFC funded projects must have airport as the lead)
  - **Authoritative**
    Agencies and contributors must delegate authority to project team—requires high level participation
  - **Simple**
    Project management structure should be easy to set up and not turn into a separate bureaucracy
- **A Portland or Warwick-style project management structure would allow for diverse agencies and private interests to be represented and conforms to federal grant obligation requirements**

Strategic Targeting of Airport Funding Sources



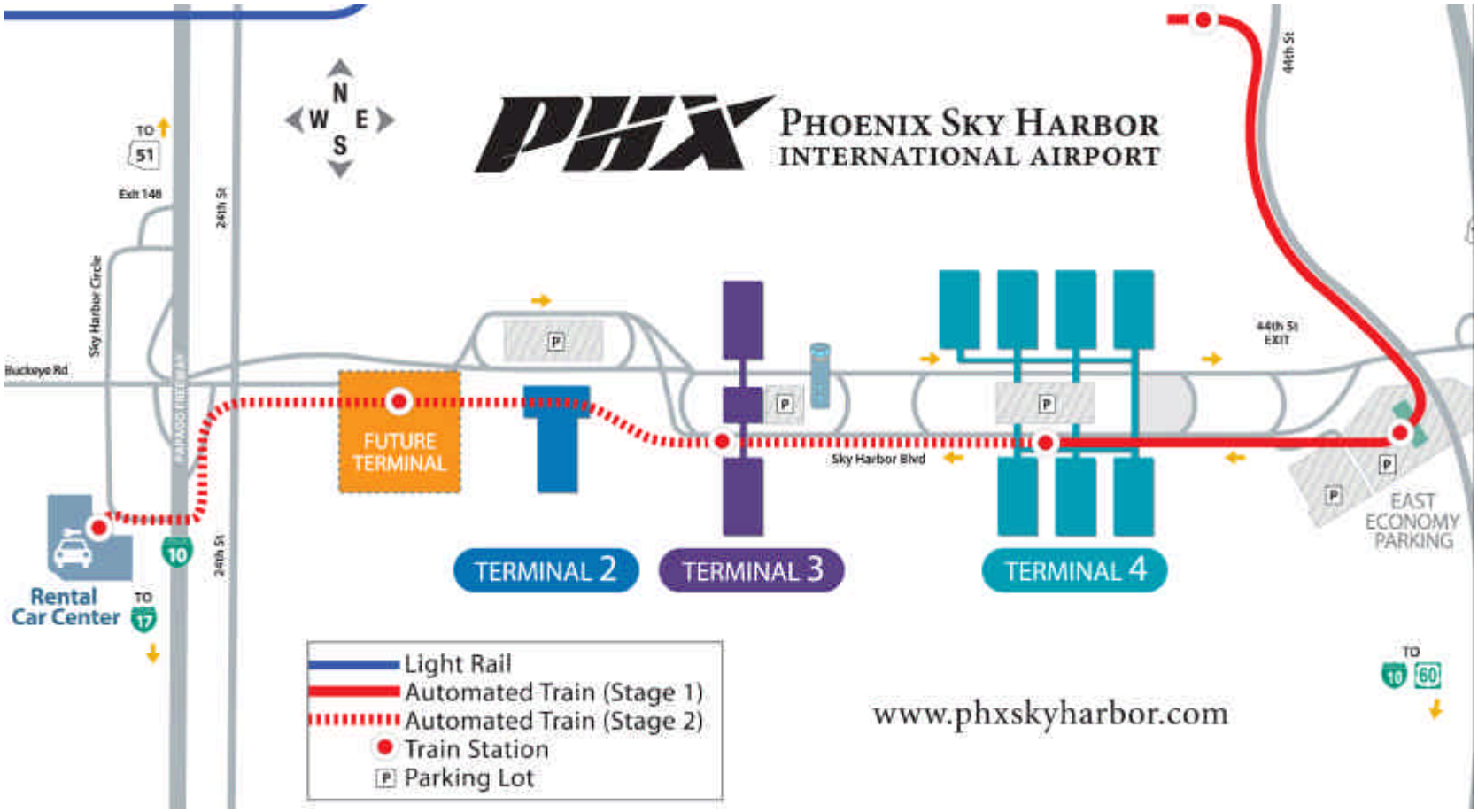
Note: Strategic targeting of airport funding sources does not guarantee the availability of actual funds. Federal funding is subject to availability and competition with other airports and development programs.

Federal Rules and Priorities for Airport Funding

- **On-Airport/aviation purpose**
  - **Federal eligibility for grant funds limited to on-airport projects.**
  - **PFC and airport revenue limited to on-airport and facilities that serve exclusively airport purposes (only "incidental use" by non-aviation interests permitted). Some exceptions for pro-rating airport share of total traffic (or purpose) may be available.**
  - **Conclusion: on-airport projects easier to justify; if federal sources a large part of project financing, acquisition of property should be a priority.**
- **Airside needs receive priority**
  - **The National Airspace System's runways and airside infrastructure receive the vast majority of federal discretionary grant funding.**
  - **Use of PFCs requires at a $3.00 level showing of a capacity, noise, or competition benefit. A PFC greater than $3.00 requires that a "significant contribution" be made to safety, noise or reduction of congestion. PFCs above $3.00 very challenging for access projects.**
  - **Conclusion: Justifying the use of PFCs will require modeling of benefits to demonstrate system benefits.**

Phoenix Sky Harbor People Mover – Additional Discussion

❸ Financial Considerations



Preliminary Potential Funding Sources for Destination Lindbergh Projects

	Airport Revenues (Retained Earnings)	Airport Revenue Bonds	AIP Grants		TSA Grants	PFCs*		CFCs	TIFIA Loans	Federal Highway/ Transit Grants	State/Local Grants
			Entitlement	Discretionary		Pay-as-you-go	Bonds				
Planning and Preliminary Design	■					■					
Land acquisition		■	■	■						◆	◆
Passenger Terminal											
Processing functions: ticketing, baggage claim		■	◆			◆	■				
Gates/concourses		■	◆			◆	■				
Security			◆		■	◆	■				
Airfield											
Airfield pavements (runways/taxiways/etc.)		■	■	■		◆	■				
Apron pavements (adjacent to gates and RON)		■	■	■		◆	■				

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* There are different eligibility criteria for $3.00 and $4.50 PFCs.

LEGEND:
Primary funding option = ■ Secondary funding option = ◆

Note: Strategic targeting of airport funding sources does not guarantee the availability of actual funds. Federal funding is subject to availability and competition with other airports and development programs.

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Preliminary Potential Funding Sources for Destination Lindbergh Projects (continued)

	Airport Revenues (Retained Earnings)	Airport Revenue Bonds	AIP Grants		TSA Grants	PFCs*		CFCs	TIFIA Loans	Federal Highway/ Transit Grants	State/Local Grants
			Entitlement	Discretionary		Pay-as-you-go	Bonds				
Roadways/circulation/access											
On-airport roadways	■	■	◆			◆	■				
Off-airport roadways									◆	■	◆
Automated people mover		■					■		◆		
Transit line to Airport (on-Airport portions)							■			■	◆
Ground Transport											
Intermodal transit center (public buses, trolley, commuter rail)—on Airport portions		◆					◆		■	■	◆
Rental cars (CONRAC)								■	■		
Public parking (garage and surface)		■									
Ancilliary											
Airport support facilities (ATCT, ARFF, fuel farm, Authority office space)	◆	■	◆								
Infrastructure for tenants/3rd parties (GA, aircraft/GSE maintenance, air cargo)	■	■									
Ongoing Major Maintenance of Existing Facilities	■	◆	■			◆					

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* There are different eligibility criteria for $3.00 and $4.50 PFCs.

LEGEND:
Primary funding option = ■ Secondary funding option = ◆

Note: Strategic targeting of airport funding sources does not guarantee the availability of actual funds. Federal funding is subject to availability and competition with other airports and development programs.

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Other Funding Opportunities

- **Federal Transportation Policy in Flux**
  - **New surface authorization legislation provides opportunities (current authorization expires 9/3/2009)**
  - **Climate change and emission reduction strategies may create new federal eligibilities for transit, rail, airport, and congestion management projects**
    - Airport sponsors should inventory airport based emissions (including induced emissions on the landside)
  - **Federal credit programs such as TIFIA, SIBs and development banks may provide additional funding opportunities for multimodal projects**

Other Funding Opportunities (continued)

- **Be opportunistic: take advantage of policy opportunities --**
  - **Collaborate with transit, planning, and other federal, state, and local agencies to ensure project is part of all planning efforts, thereby increasing eligibility and funding options**
  - **Inventory airport based emissions (including induced emissions on the landside) to demonstrate project's net environmental benefits**
  - **Investigate myriad of public-private-partnership (PPP) programs to take advantage of best credit opportunities**

4

Development Alternatives Evaluation

- **Refined concept review**
- **Methodology and assumptions**

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Refined Concept Review

- **Four remaining alternative concepts**
  - **A2 – North processing, south gates**
  - **A3 – North and south processing, south gates**
  - **A8 – South processing, south gates**
  - **B7 – North processing, north gates**
- **Support facilities added to concepts**
  - **Air cargo**
  - **General aviation**
  - **Fuel farm**
  - **Airport traffic control tower**

Alternatives Screening Process

❹ Alternatives Evaluation

Previously completed

Today's workshop

PRIMARY SCREENING
- Is the alternative feasible from a practical perspective?
- Does the alternative appear to meet the goals and objectives?

→ **Eliminate less favorable alternatives**

SECONDARY SCREENING

Relative comparison of alternatives based on sustainability criteria:
- Economic / financial
- Operational
- Natural resources
- Social responsibility

- **Are the capital and O&M costs reasonable?**
- **Does the alternative extend useful life of Airport through operational improvements?**
- **Is the alternative environmentally prudent?**
- **Is the alternative socially responsible?**

APPLY PRUDENT JUDGMENT
- Examine alternatives ranking
- Evaluate merits of each alternative

Recommended Development Alternative

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Alternatives Evaluation Process

Each alternative is evaluated for each criteria

Alternatives are ranked from 1 to 4 for each criteria, with 1 representing the best score

In case of a tie ranking, the next lower ranking value is skipped

Rankings are summed for all criteria; lowest score represents the best alternative(s)

Screening Results

SUMMARY MATRIX	A2	A3	A8	B1
Economic/financial factors	11	12	14	10
Operational factors	16	22	25	14
Environmental factors	11	14	20	18
Social responsibility	8	10	10	16
TOTAL SCORE	46	58	69	58

Note:
Lowest score represents the best alternative(s)

Performance Metrics

- **Intermodal transit center cost per daily trip***
  - **Alternative A2: $126 – $217 per annual trip**
  - **Alternative B1: $133 – $229 per annual trip**
  - **With lower transit ridership, Alternatives A3 and A8 ratios would be greater**

Uses ITC costs only

- **Total capital cost per annual airline passenger**
  - **Alternative A2: $287 per annual passenger**
  - **Alternative A3: $265 per annual passenger**
  - **Alternative A8: $314 per annual passenger**
  - **Alternative B1: $304 per annual passenger**

Uses total capital cost, including ITC costs

*Calculation based on high ITC cost allowance; range accounts for trips estimated with and without high-speed rail.

Economic Criteria

ECONOMIC CRITERIA	A2 Data	A2 Rank	A3 Data	A3 Rank	A8 Data	A8 Rank	B1 Data	B1 Rank
Capital cost allowances[1]								
Airside (billions)	**$1.0 – $1.3**		**$0.7 – $1.0**		**$0.7 – $1.0**		**$0.7 – $1.0**	
Terminal (billions)	**$0.9 – $1.3**		**$1.0 – $1.3**		**$2.1 – $2.8**		**$1.1 – $1.5**	
Landside (billions)[2]	**$3.8 – $5.2**		**$3.6 – $4.9**		**$3.5 – $4.8**		**$4.0 – $5.4**	
Support facilities (billions)	**$0.1 – $0.1**		**$0.1 – $0.1**		**$0.1 – $0.1**		**$0.3 – $0.4**	
Total capital cost allowance	**$5.8 – $7.9**	2	**$5.4 – $7.3**	1	**$6.4 – $8.7**	4	**$6.1 – $8.3**	3
Operational costs								
APM operational cost	length	4	length	3	length	2	length	1
Baggage transport	length	3	length	4	length	2	length	1
Duplication of passenger processing functions	qual	1	qual	3	qual	3	qual	1
Funding source(s)	#	0	#	0	#	0	#	0
Revenue evaluation	qual	0	qual	0	qual	0	qual	0
Environmental mitigation cost	qual	1	qual	1	qual	3	qual	4
Rankings subtotal		11		12		14		10

1. Capital costs are for comparative purposes only. Refined capital costs will be developed for preferred concept(s).

2. includes cost of ITC (including modifications to rail lines) ranges from $1.7B – $2.4 B

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Operational Criteria

OPERATIONAL CRITERIA	A2		A3		A8		B1	
	Data	Rank	Data	Rank	Data	Rank	Data	Rank
Airport operations								
Runway crossings	qual	1	qual	3	qual	2	qual	3
Complexity of baggage system	qual	4	qual	3	qual	2	qual	1
Complexity of phasing – duration	qual	3	qual	2	qual	4	qual	1
Passenger experience								
Short-term parking	n/a	0	n/a	0	n/a	0	n/a	0
Long-term parking	n/a	0	n/a	0	n/a	0	n/a	0
Average walking distance (ft)	~1,300	1	~1,600	2	~3,800	4	~2,400	3
Complexity of phasing – passenger service	qual	3	Qual	2	Qual	4	qual	1
Traffic criteria								
Reduction in VMT	traffic	1	traffic	3	traffic	4	traffic	1
Impacts to Interstate 5	n/a	0	n/a	0	n/a	0	n/a	0
Competitive position auto v. transit	transit	1	transit	3	transit	4	transit	1
Overall roads level of service	traffic	2	traffic	4	traffic	1	traffic	3
Rankings subtotal		16		22		25		14

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Environmental Criteria

ENVIRONMENTAL CRITERIA	A2		A3		A8		B1	
	Data	Rank	Data	Rank	Data	Rank	Data	Rank
Air Quality								
Total emissions	VMT	1	VMT	3	VMT	4	VMT	1
Concentration of emissions near residential areas		3		2		1		4
Impervious surface area	area	1	area	2	area	4	area	3
Hazardous materials	qual	1	qual	1	qual	3	qual	4
Effect on T&E species	qual	2	qual	3	qual	3	qual	1
Historic properties	qual	2	qual	2	qual	2	qual	1
Aesthetics (view shed)	qual	1	qual	1	qual	3	qual	4
Rankings subtotal		11		14		20		18

Social Responsibility Criteria

SOCIAL RESPONSIBILITY CRITERIA	A2		A3		A8		B1	
	Data	Rank	Data	Rank	Data	Rank	Data	Rank
Enhance mission of MCRD	qual	1	qual	1	qual	1	qual	4
Land acquisition								
Residential (acres)	0.2	1	0.2	1	0.2	1	0.2	1
Commercial (acres)	12	1	12	1	12	1	12	1
Institutional (acres)	9	1	9	1	9	1	36	4
Potential community controversy*	qual	1	qual	2	qual	2	qual	4
Change in revenue to governmental entities	n/a	1	n/a	1	n/a	1	n/a	1
Opportunities for off-airport land redevelopment	area	1	area	4	area	3	area	1
Rankings subtotal		7		11		10		16

*Includes assessment of traffic on public roadways, concentration of air emissions, and viewshed impacts on residential areas of Point Loma and Mission Hills neighborhoods.

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Traffic Analysis Results Summary

- **Alternative A8 results in the best average LOS* for all roadway segments analyzed**
- **Alternative A3 results in the worst average LOS for all roadway segments analyzed due to 30% of terminal processing remaining on North Harbor Drive**
- **Alternatives A2 and B1 result in an acceptable LOS on North Harbor Drive**
- **Pacific Highway remains at an acceptable LOS in all alternatives**
- **India Street remains at an unacceptable LOS F in all alternatives due to the high volume of background (non-airport) traffic**

*Acceptable Level of Service (LOS) defined as C or better

Traffic Analysis Assumptions

- **Traffic Analysis Assumptions**
  - **Airport traffic increases relative to passenger, cargo and general aviation growth**
  - **Airport traffic was redistributed to roadway links corresponding to the location of terminal processing, parking, rental car, cargo and general aviation facilities in each alternative**
  - **"Regional" background (non-airport) traffic growth was based on SANDAG regional transportation forecast model**
  - **Terminal traffic vehicle mode share and volumes adjusted in accordance with SANDAG's airport transit ridership forecasts**
    - Alternatives A2 and B1: PAL 2 Transit Ridership = 19% (includes shared-ride vans)
    - Alternatives A-3 and A-8: PAL 2 Transit Ridership = 11% (includes shared-ride vans)

Traffic Analysis Results (1 of 2)

TRAFFIC SEGMENTS	A2	A3	A8	B1
North Harbor Drive				
Rental Car Rd – Laurel	3	6	5	3
Grape Street				
Harbor – Pacific	4	5	3	4
Pacific – Kettner	6	6	6	6
Kettner – I-5	6	6	6	6
Hawthorn Street				
Harbor – Pacific	4	5	3	4
Pacific – Kettner	2	3	2	3
Kettner – I-5	6	6	6	6
Laurel Street				
Harbor – Pacific	1	1	1	1
Pacific – Kettner	4	4	5	4
Kettner – I-5	3	3	3	3
Subtotal	**39**	**45**	**40**	**40**

Key:
LOA A = 1, LOS B =2, LOS C =3,
LOS D = 4, LOS E = 5, LOS F =6

- **Harbor Drive**
  - **LOS F for A3 and without project**
  - **Improves to acceptable LOS with A2 and B1 (from F to C)**
  - **Slight improvement but still unacceptable LOS with A8 (from F to E)**
- **Grape Street**
  - **LOS F on all segments without project**
  - **Harbor/Pacific segment improves to acceptable LOS with A8 (from F to C)**
  - **Pacific/Kettner and Kettner/I-5 segments remain LOS F with all alternatives**
- **Hawthorn Street**
  - **LOS F on all segments without project**
  - **Harbor/Pacific segment improves to acceptable LOS with A8 (from F to C)**
  - **Pacific/Kettner and Kettner/I-5 segments remain LOS F with all alternatives**
- **Laurel Street**
  - **Unacceptable LOS on all segments without project**
  - **Harbor/Pacific segment improves to LOS A under all alternatives**
  - **Pacific/Kettner segment improves but remains at unacceptable LOS under all alternatives**
  - **Kettner/I-5 segment improves to LOS C under all alternatives**

Traffic Analysis Results (2 of 2)

TRAFFIC SEGMENTS	A2	A3	A8	B1
Pacific Highway				
Washington – Sassafras	2	2	2	2
Sassafras – Palm	3	3	1	3
Palm – Laurel	3	3	1	3
Laurel – Hawthorn	3	3	3	3
Hawthorn – Grape	3	3	3	3
India Street				
Laurel – Palm	6	6	6	6
Palm – Sassafras	6	6	6	6
Sassafras – Washington	6	6	6	6
Rosecrans				
Barnett – Sport Arena	3	3	4	3
Quimby – Barnett	4	4	4	4
Nimitz – Quimby	4	4	4	4
Subtotal	43	43	40	43
TOTAL	82	88	80	83
OVERALL RANKING	**2**	**4**	**1**	**3**

Key:
LOA A = 1, LOS B =2, LOS C =3,
LOS D = 4, LOS E = 5, LOS F =6

- **Pacific Highway**
  - **LOS acceptable for all segments with or without project**
  - **Slightly higher use with A2, A3 and B1**
  - **Slight improvement to LOS with A8 on select segments**
- **India Street –**
  LOS F on all segments with or without project
- **Rosecrans**
  - **LOS unacceptable on all segments without project**
  - **Barnett/Sport Arena segment improves to acceptable LOS with A2, A, and B1; remains unacceptable LOS with A8**
  - **Quimby/Barnett segment remains at unacceptable LOS with all alternatives**
  - **Nimitz/Quimby segment improves slightly with all alternatives but remains at unacceptable LOS (from E to D in all cases)**

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5

Conclusions and Next Steps

- **Project schedule**
- **Next steps**

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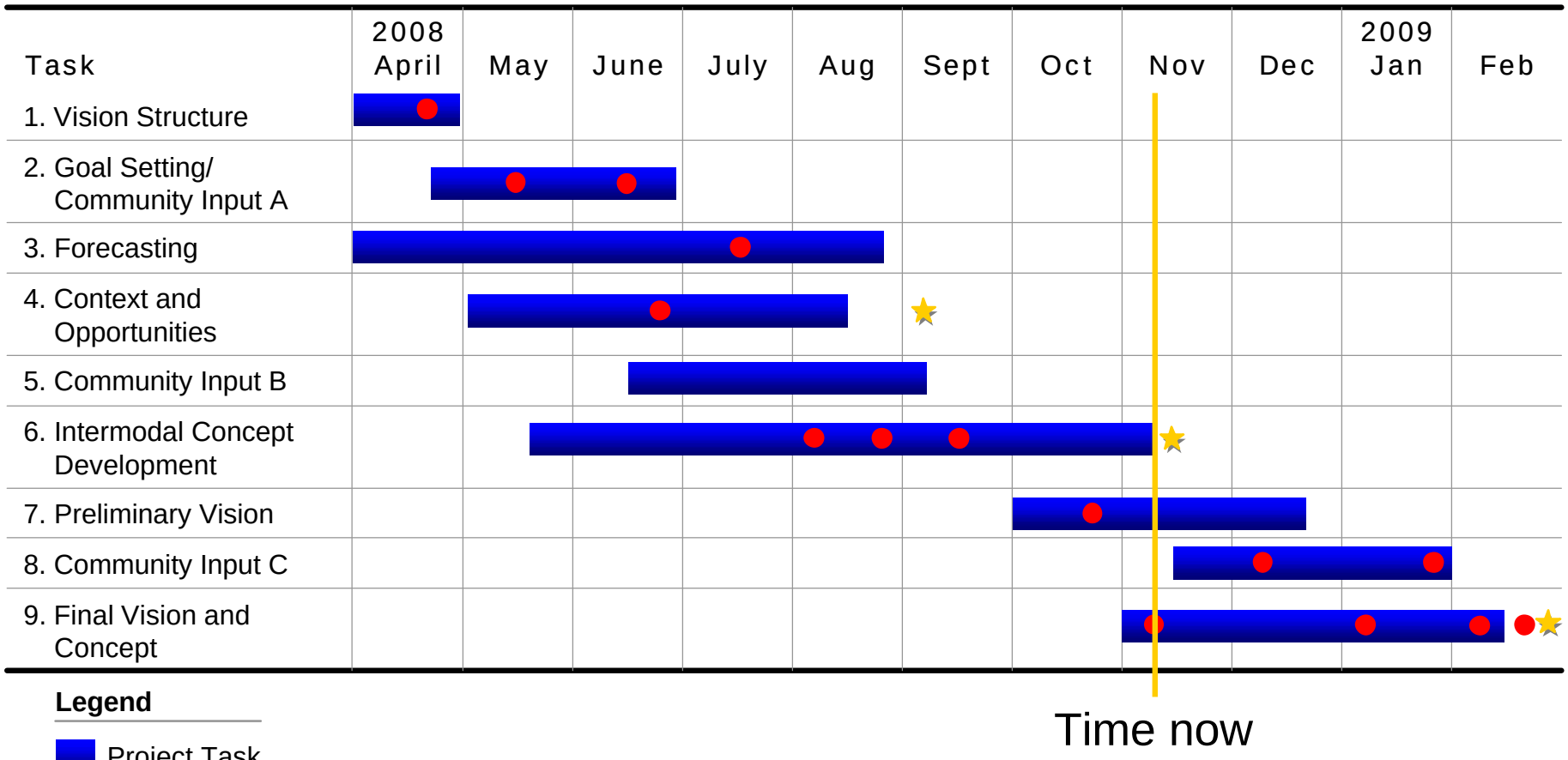
Schedule


Task
2008 April
May
June
July
Aug
Sept
Oct
Nov
Dec
2009 Jan
Feb
1. Vision Structure
2. Goal Setting/ Community Input A
3. Forecasting
4. Context and Opportunities
5. Community Input B
6. Intermodal Concept Development
7. Preliminary Vision
8. Community Input C
9. Final Vision and Concept
Time now
Legend
Project Task
Meeting
Report

Next Steps

- **Act on Policy Committee direction regarding alternatives**
  - **Concept refinement and further development**
- **Initiate financial plans**
  - **Cost estimate refinement**
- **Begin project conclusion activities**
  - **Summary report**

Thank You!

- **Questions**
- **Comments**
- **Discussion**

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Appendices

- **Alternatives analysis ranking rationale**
- **Additional traffic analysis information**

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Economic Ranking Rationale

- **Capital cost "allowances" – unit costs and order of magnitude cost estimates for the project can be used to compare one alternative to another**
- **Operational cost**
  - **Automated People Mover (APM): based on length of system, secure vs. non-secure control, and number of stations**
  - **Baggage system: length of conveyance system to move inbound/outbound baggage from check-in to gate; from gate to baggage carousels**
  - **Duplication of passenger functions: consolidated processing area involve lower operational cost**
- **Key findings**
  - **While Alternative A3 has lowest capital cost, it has the highest operational costs**
  - **Alternative B1 and A2 perform best under economic criteria**

Operational Ranking Rationale

- **Airfield operations criteria**
  - **Runway crossings relative to location of RON parking; RON parking ideally on same side of runway as terminal**
  - **Baggage system complexity: optimal alternative minimizes distance required to move baggage**
  - **Phasing duration: optimal alternative would require least amount of time to construct**
- **Passenger experience criteria**
  - **Equivalent amount of parking provided in each alternative**
  - **Walking distance is reflected by average distance to gate**
  - **Phasing complexity: optimal alternative would provide more seamless transition from existing to new facilities**
- **Key findings**
  - **Alternative B1 performs best due to consolidation of facilities**

Environmental Ranking Rationale

- **Key considerations included:**
  - **Air quality emissions**
  - **Impact to natural resources, hazardous materials, historic properties, and aesthetics (viewshed)**
- **Distinguishing factors:**
  - **A2 ranks best overall due to emissions, aesthetics, and impervious area**
  - **A3 ranks second best due to emissions, T&E and impervious area**
  - **B1 ranks worst on concentration of emissions, impact to views, and potential for disturbance of hazardous materials**
  - **B1 may not impact historic ASIG building or the California Least Tern nest sites; others do**
  - **A8 ranks worst on impervious area and total emissions**

Social Ranking Rationale

- **Key considerations included:**
  - **Enhance mission of MCRD**
  - **Land acquisition**
  - **Potential community controversy**
  - **Opportunities for off-airport land redevelopment for public use**
- **Distinguishing factors:**
  - **A2 ranks best on all factors**
  - **B1 ranks worst regarding MCRD, land acquisition, and potential for community controversy**
  - **A2 and B1 rank best on opportunity for off-airport land redevelopment for public use**

Traffic Changes Due to Alternatives

- **North Harbor Drive**
  - **Alternatives A2 and B1 place all passenger processing on the north removing terminal traffic from North Harbor Drive**
  - **Alternative B1 would incur slightly greater traffic than Alternative A2 on North Harbor Drive due to relocation of cargo facilities; however both alternatives result in an acceptable LOS**
  - **Alternative A8 places all terminal traffic coming from I-5 and I-8 (66% of total terminal traffic) on an internal airport access roadway removing it from North Harbor Drive; however all local terminal traffic (34% of total terminal traffic) remains on North Harbor Drive; this results in an unacceptable LOS**
  - **Alternative A3 places passenger processing for 70% of the airline gates on the north; however, the remaining 30% of passengers would be processed in a southern terminal facility along North Harbor Drive resulting in an unacceptable LOS**

Traffic Changes Due to Alternatives

- **Grape and Hawthorn Streets**
  - **Alternatives A8, A2 and B1 move all terminal traffic arriving from I-5 and I-8 to direct freeway ramps**
  - **Alternatives A2 and B1 funnel Grape and Hawthorn Street airport traffic to Pacific Highway to access passenger processing in the north (removing airport traffic from Kettner Boulevard and North Harbor Drive)**
  - **Alternative B1 relocates cargo traffic arriving from I-5 south from Washington Street ramps to Grape and Hawthorn ramps to access southern cargo facilities**
  - **Under Alternative A3, 30% of terminal traffic arriving from I-5 south continues to use Grape and Hawthorn Streets to reach southern terminal facilities**
- **Laurel and India Streets**
  - **Alternatives A2 and B1 move all terminal traffic arriving from I-5 and I-8 to direct freeway ramps reducing traffic along Laurel and India Streets**
  - **Alternatives A3 and A8 maintain a portion of terminal traffic along Laurel to access southern facilities**
    - 30% of terminal traffic in Alternative A3
    - 34% of terminal traffic (non-freeway traffic) in Alternative A8
  - **All Alternatives reduce traffic on India Street; however, LOS remains poor due to the overall volume of traffic**

Traffic Changes Due to Alternatives

- **Pacific Highway**
  - **Pacific Highway operates at an acceptable LOS C or better under all alternatives**
  - **Alternative A8 maintains passenger processing in the south and reduces traffic along Pacific Highway by developing an internal on-Airport roadway adjacent to Pacific Highway**
  - **Alternative A3 places passenger processing for 70% of the aircraft gates on the north and utilizes Pacific Highway for local traffic accessing these facilities**
  - **Alternatives A2 and B1 place all passenger processing in the north and utilize Pacific Highway for local traffic accessing these facilities**
- **Rosecrans Street**
  - **Alternatives A2, A3 and B1 move a portion of terminal traffic to the north reducing traffic along Rosecrans Street**
  - **Alternative A8 maintains all processing facilities in the south and a portion of terminal traffic continues to utilize Rosecrans Street**