

The 7E7 Imperative

June 2003

Agenda

- **Boeing's Impact on the State of Washington**
- **Global Competitive Environment Facing Boeing**
- **The Change Imperative**

Boeing -- Washington State Employment

- **Boeing employs 60,000 in Washington today**
- **Estimate 32,000 employment increase in all industries due to 7E7 project and derivatives (16,000 in aerospace)**
 - Boeing 7E7 direct manufacturing employees 1,200
 - Boeing support employees 2,800 (assumes approximately 3:1 of manufacturing, historically the ratio is 7:1)
 - Increase in aerospace employment (excluding Boeing) is conservatively estimated at 4,000 employees at full ramp up
 - Increase in employment in industries outside aerospace is conservatively estimated at 8,000 employees
 - 7E7 derivatives add another 16,000 jobs in the state
- **With phase-down of the current Boeing programs and future programs moved out of state, potential loss of 10,000 to 20,000 aerospace employees without 7E7 Project in WA**
 - Continued reduction in employees – forecasters suggest leveling out for now and slow reductions over the course of time
 - Suppliers would start ramping-up operations at 7E7 selected locations and reducing certain operations in Washington

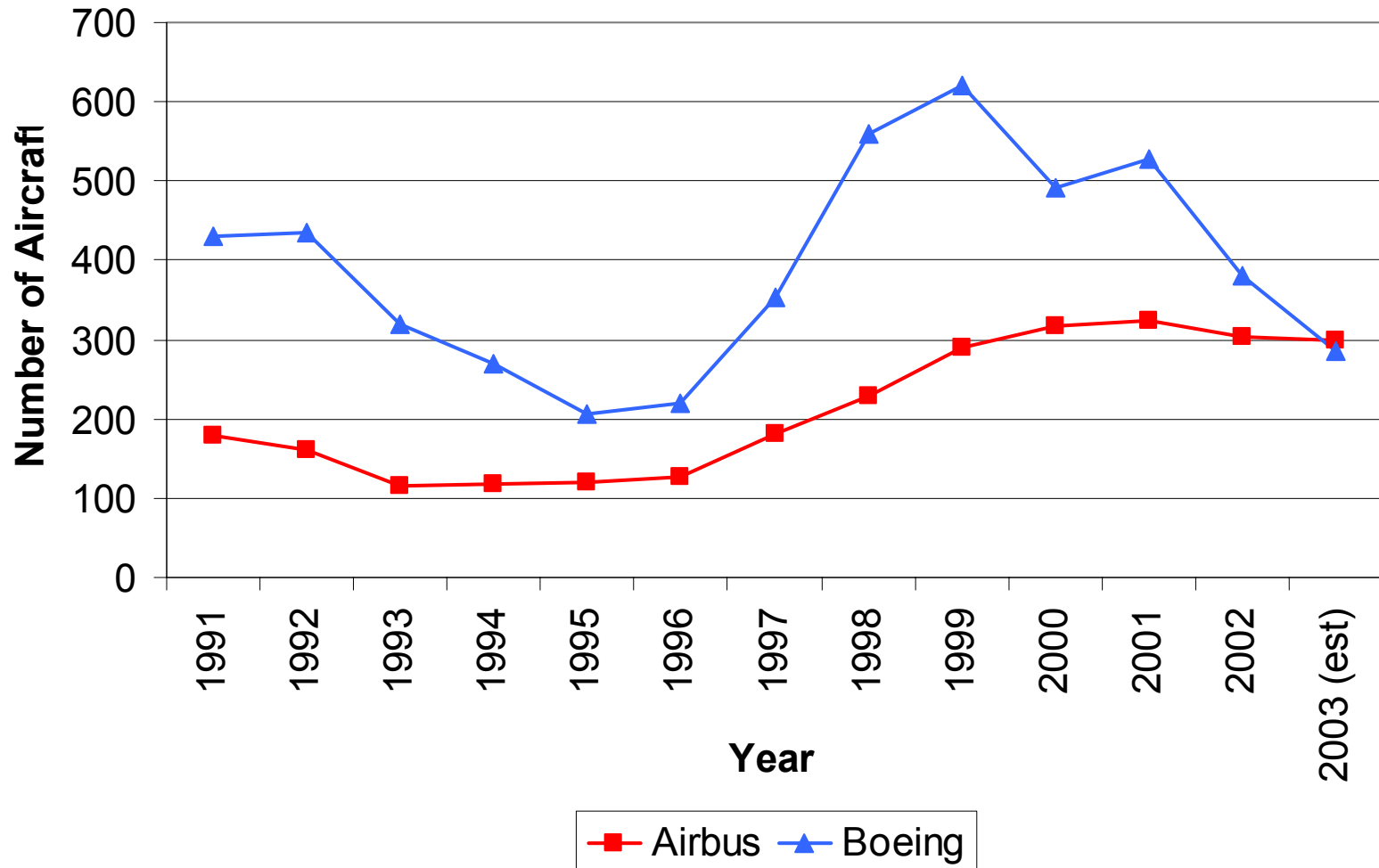
Boeing -- Washington Economic Impact

- **Aerospace is highest wage tier in the state**
- **\$2B+ payments to Washington suppliers/vendors**
- **\$37M+ charitable contributions (direct & in-kind)**
- **\$600M in annual tax revenues or 6% of general tax fund (\$10B in 2002)***

* These are conservative estimates during a cyclical downturn

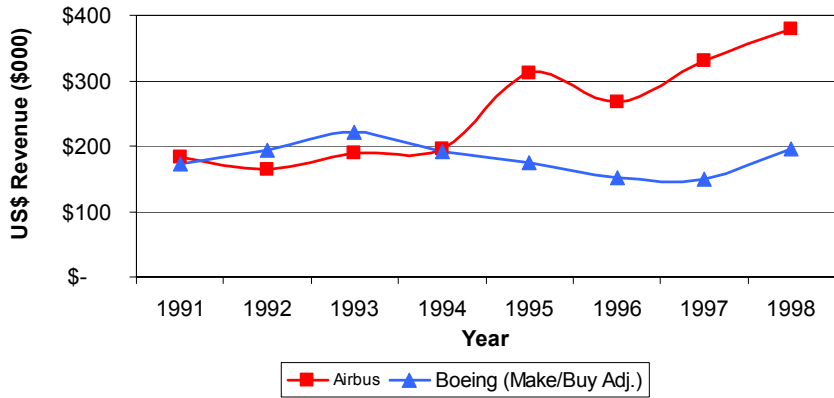
Airbus has equal market share with Boeing

Annual Aircraft Delivered

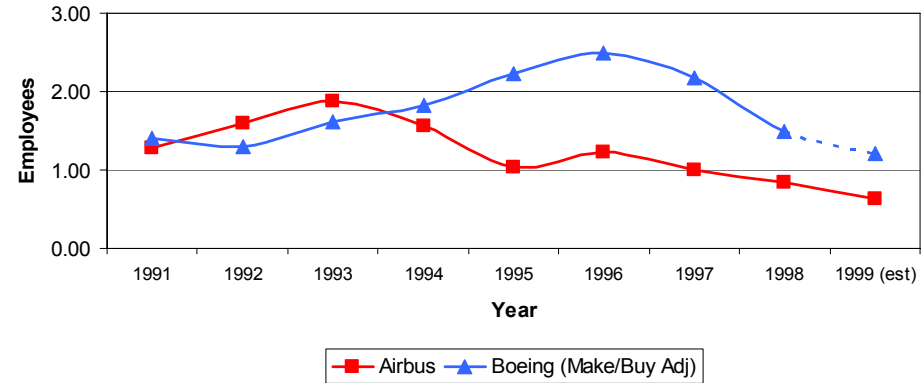


Productivity: Airbus maintains an approximate 20% productivity advantage over Boeing

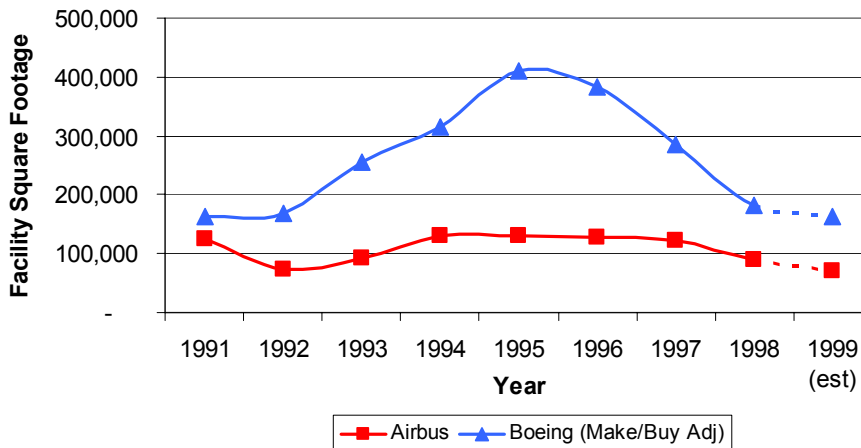
**Boeing vrs Airbus
US\$ Revenue Per Employee**



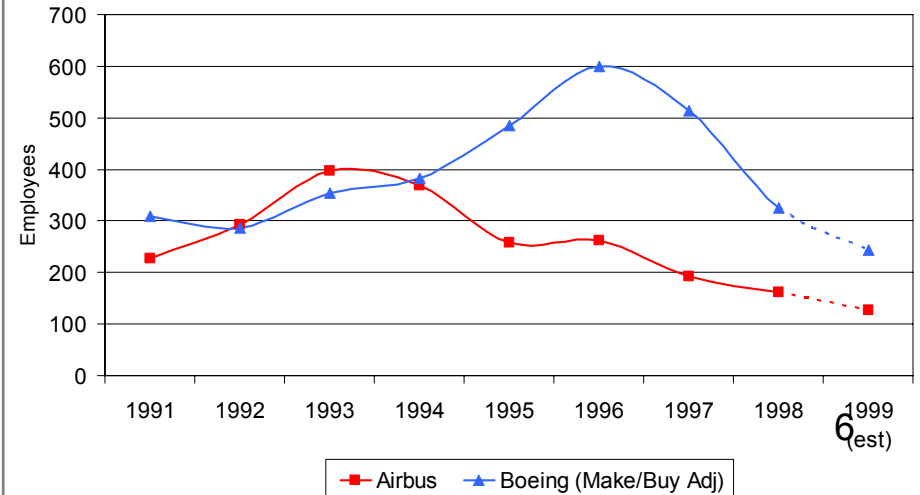
**Boeing vrs Airbus
Employees Required to Produce Each Airplane Seat**



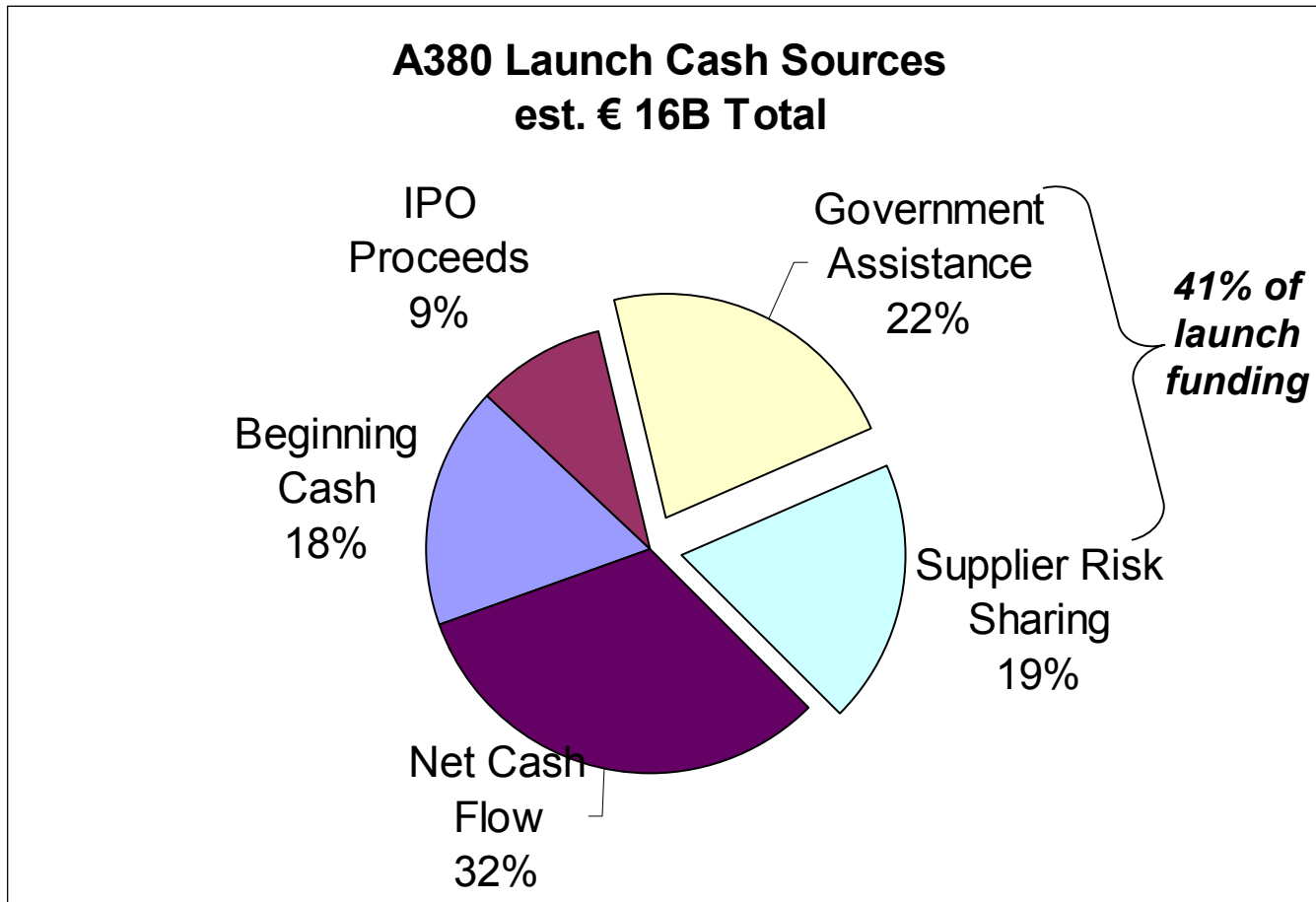
**Boeing vrs Airbus
Facilities Required to Produce Each Airplane**



**Boeing vrs Airbus
Employees Required to Produce Each Airplane**



Airbus receives significant external support: The A380 launch was 40% funded with government and supplier aid



Note: Additional available indirect Government funding is estimated at € 2.5+ B

Washington must provide an extraordinary response to provide a competitive environment for the 7E7

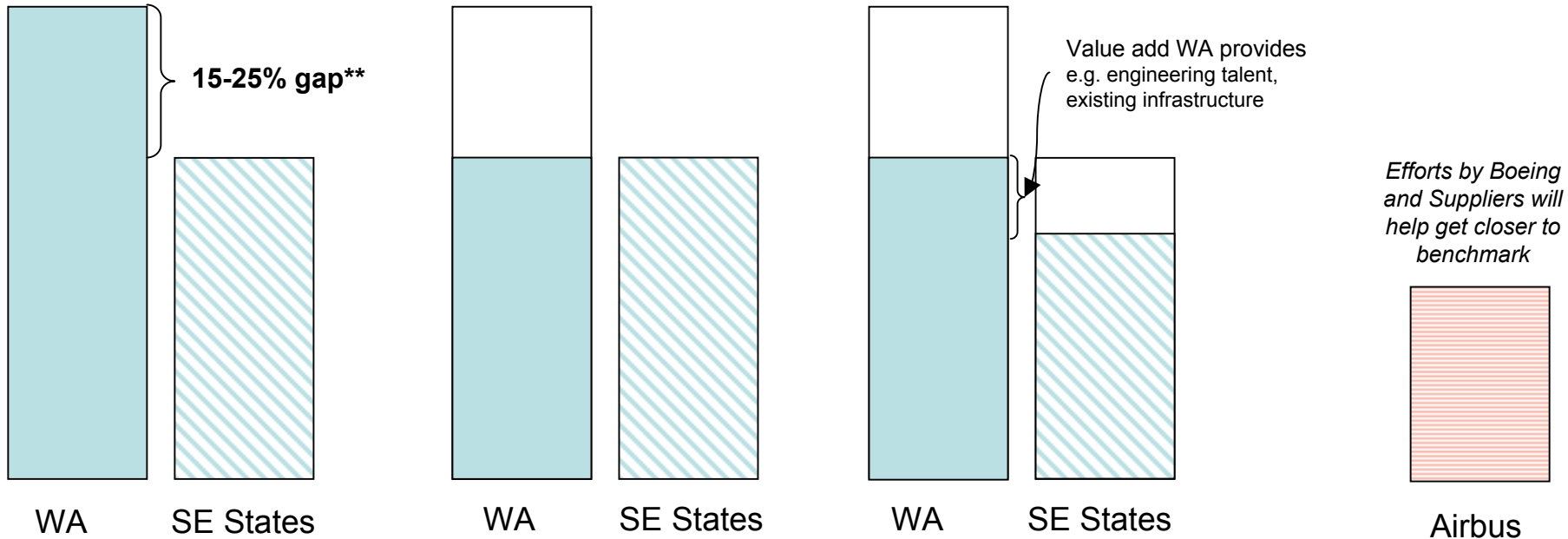
Operating Expenses* (notional only)

Current Situation

with WA incentives

with SE incentives

Note:
Benchmark



* Includes wages, land, construction costs, utilities, taxes, etc.

** based on mfg. wages (2001) and construction costs (2002)

Sources: Bureau of Labor Statistics (2001) and Marshall & Swift (2002)

Competing Locations

- **Several states are potential suitors for the 7E7 facility.**

7E7 Project Candidate States			
Alabama	Florida	Louisiana	South Carolina
Arizona	Georgia	Mississippi	Texas
Arkansas	Illinois	Missouri	Virginia
California	Indiana	Ohio	Washington
Colorado	Kansas	Pennsylvania	Wisconsin

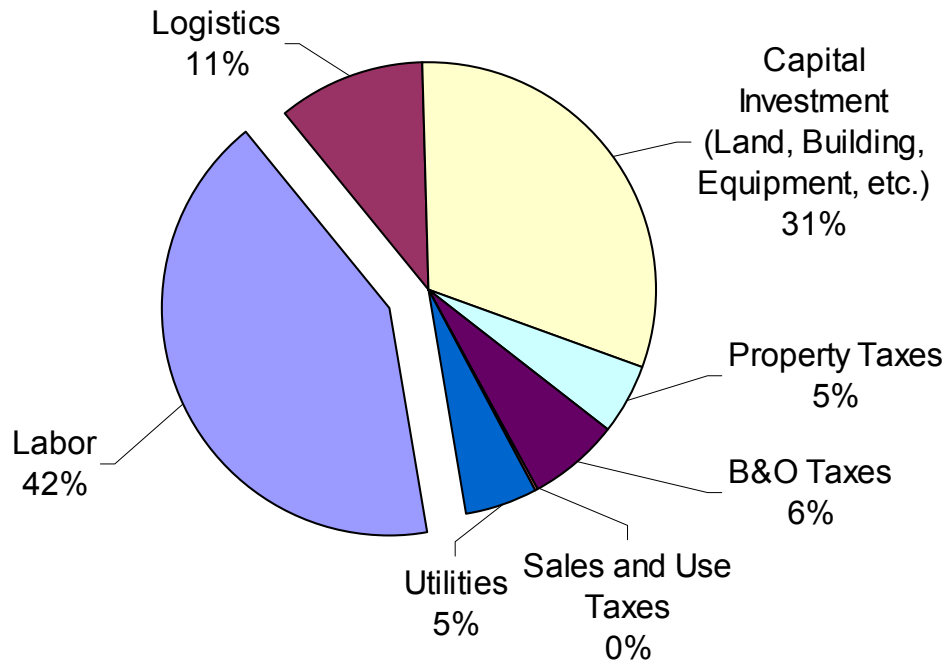
- **The following states are likely to offer the strongest competition for the new project.**
 - Alabama
 - California
 - Georgia
 - Texas
 - Kansas

Total Project Costs

- Estimate geographically variable cost components of the 7E7 project.

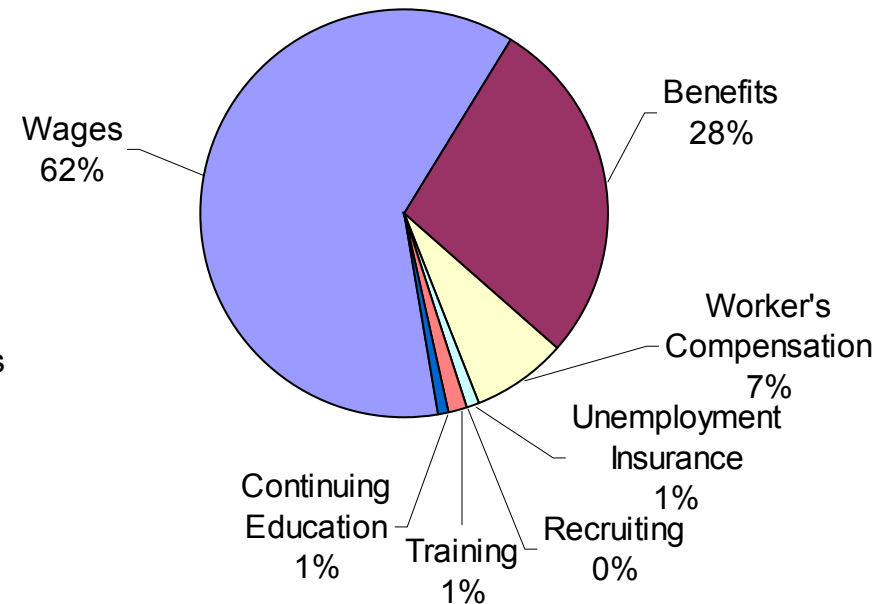
Total Cost Factors

7E7 Major Cost Factors - Existing Everett Facility
(20 Year NPV @ 8%)



Labor Cost Factors

7E7 Major Cost Factors - Existing Everett Facility
(20 year NPV @ 8%)



Competitive Assessment Factors

- **Cost Factors Considered in Analysis**

- Labor
- Unemployment insurance
- Worker's compensation insurance
- Construction
- Utilities
- State and local tax rates
- Potential incentives

- **Conditions**

- Manufacturing expansions
- Labor availability
- Education
- Existing facilities
- Transportation infrastructure (airport, highway, rail)
- Port access
- Utility service
- Character of life
- Environmental permitting and zoning
- Climate
- Natural disaster risk
- Emergency services
- Business climate (Bond rating)
- Boeing footprint
- Projected state budgets (FY 2004)
- Intangibles

Operating Costs

Factor	Estimated Importance to Project	Washington Competitiveness Rating
Labor costs	Very High	Disadvantage
Unemployment insurance	Very High*	Disadvantage
Worker's compensation	Very High*	Disadvantage
Construction costs	Very High	Disadvantage
Site preparation / infrastructure costs	Very High	Advantage
Utility costs	Moderate	Neutral
State & local tax rates	High	Disadvantage
Potential incentives	Very High	Strong Disadvantage
Logistics costs (proximity to Japanese suppliers)	High	Advantage

*Worker's compensation and unemployment insurance are usually secondary factors in a site selection project, but are a stated concern to Boeing due to the impact on existing Boeing operations in the State.

Operating Conditions

Factor	Estimated Importance to Project	Washington Competitiveness Rating
Labor availability	High	Advantage
Existing facilities	Moderate	Advantage
Education	High	Advantage
Port access	High	Advantage
Utility service	High	Neutral
Environmental permitting	Moderate	Disadvantage
Character of Life	Moderate	Advantage
Climate	Moderate	Advantage
Natural disaster risk	Moderate	Disadvantage
Business Climate	High	Disadvantage
Boeing footprint	Moderate	Advantage
Intangibles	TBD	TBD

Incentives offered by other states, excluding regulatory and legislative change

Ad Valorem Tax Abatements

- Land & building
- Machinery & equipment
- Pollution control
- Accelerated depreciation

Corporate Income Tax Credits

- Job creation
- Investment
- Payroll

Sales & Use Tax Exemptions

- Machinery & Equipment
- Construction materials
- Pollution control
- Energy, fuels and utilities

Land Acquisition

- Reduced/free land
- Reduced/free site improvements
- Free site testing and permitting
- Expedited permitting
- Creative financing/ownership
- Zoning/ covenant variances

Financing

- Bonds (various types)
- Reduced-rate financing
- Tax increment financing
- Creative leases/buy-backs
- Off-balance sheet
- Grants

Relocation Assistance

- Personnel
- Machinery and equipment
- Cash grants
- Transition space
- In-state tuition

Infrastructure Assistance

- Railroad extensions, switching equipment
- Utility service extensions
- Road improvements
- Redundant utility service

Education

- Customized program development
- Dedicated materials and facilities

Other states offer aggressive incentives for large projects, especially in the Southeast

Company & Location (Year)	Facility Jobs & Investment	Total Package (millions)	Incentives Awarded
Boeing Delta IV Rocket Plant - Decatur, AL (1997)	3,000 employees \$450 million investment	\$149	\$70 MM tax exemptions; \$30 MM for training center; and \$49 MM site acquisition and infrastructure improvements
DaimlerChrysler AG Sprinter Van Assembly Plant - Savannah, GA	3,300 employees \$750 million investment	\$322	\$24 MM site; \$70 MM cash grants; \$50 MM tax abatements; reduced road, port, and rail rates
Hyundai Assembly Plant Montgomery, AL (2002)	2,000 jobs (excluding suppliers) \$1,000 million investment	\$252	\$77 MM tax abatement; \$31 MM utility improvements; \$34 MM for site and preparation; \$29 MM road and \$8 MM rail improvements; \$62 MM training
Auto Alliance International (Ford/Mazda assembly plant) - Flat Rock, MI (2002)	1390 new employees 1,960 retained employees \$664 million investment	\$133	\$133 State and local tax abatements
Nissan Assembly Plant Expansion - Canton, MS (2002)	5,300 total jobs \$1,400 million investment	\$363	\$68 MM for new expansion of 500 jobs
BMW Plant Expansion - Greer, S.C.	400 new employees \$400 million investment	\$80	Infrastructure aid through newly passed Economic Development Bond Act
Honda Assembly Plant Expansion - Lincoln, AL (2000)	2,000 employees \$425 million investment	\$90	\$57 MM training & site and infrastructure improvements; \$33 MM state and local tax abatement
DaimlerChrysler AG Plant Expansion - Vance, AL (1999)	\$600 million investment	\$119	\$54 MM tax abatement; \$65 MM site prep and worker training

The change imperative is enormous – Winning the 7E7 project requires an extraordinary and significant effort

- **This is more than just site selection for the final assembly plant**
 - What can the State do to help Boeing's competitive position versus Airbus?
 - More broadly the 7E7 product life cycle – encompassing larger issues and providing the state a larger platform
- **The imperative for the State reaches beyond the 7E7 program**
 - Larger job retention issue for future Boeing investment and jobs and eventual disinvestment
 - Competitiveness of state (economic vitality)