IMPACTS 2006

Planning for the Unexpected: Natural Disasters

June 30, 2006
Where is Seattle?
A city surrounded by water and hills
A city with a diverse, growing population

• Largest city in Washington state
• 88 languages spoken in our schools*

*NW Regional Education Laboratory
A city of limited transportation options
Earthquakes along the West Coast

169 damaging earthquakes* since 1900

* Magnitude of 5 or above
Earthquakes along the West Coast
1989 Loma Prieta in San Francisco Bay Area (7.1M)

Column failure and collapsed upper deck, Cypress viaduct
Earthquakes along the West Coast

1994 Northridge in Los Angeles (6.7M)

Santa Monica Freeway Damage
Earthquakes along the West Coast
2001 Nisqually near Seattle (6.8M)

Damage to Seattle’s Port

I-5 overpass at Holgate Street
The impacts

• 3 major structures must be replaced
• 37 bridges need seismic upgrades
• 12 bridges need to be rehabilitated or replaced
• $2-4 billion in damage*

* Does not include costs of replacing three major structures
Magnolia Bridge—Must be replaced

- 80 years old
- 20,000 vehicles a day
- Cost: up to $196 million
Magnolia Bridge
What’s being done right now

• Short term repairs
• Monitor
The Great Hashin (Kobe) Earthquake of 1995 (7.2M)
Alaskan Way Viaduct – Must be replaced

- 53 years old
- 110,000 vehicles a day
- Cost: up to $3.7 billion
Alaskan Way Viaduct
What’s being done right now

- Semi-annual inspections
- Truck and bus weight restrictions
- Emergency repair plan
- Emergency traffic management and closure plan
Alaskan Way Seawall—Must be replaced

- 70 years old
- Supports downtown and viaduct
- Cost: up to $800 million
Alaskan Way Seawall
What’s being done right now

- Short term repairs/stabilization
- Monitoring
Alaskan Way Seawall
What’s being done right now

- Emergency stabilization plans
Getting prepared

Informed and coordinated communications

Agency coordination
Getting prepared

Train staff
Getting prepared

Practice
Getting prepared

Store emergency supplies
Getting prepared
3 days, 3 ways

Educate public
Long term investments

Bolster or replace infrastructure
Long term investments

Building a new Emergency Operations Center
Conclusion

• Never completely prepared

• Can anticipate, coordinate and act