

Impact to Oregon's Economy from a M9.0 Cascadia Event

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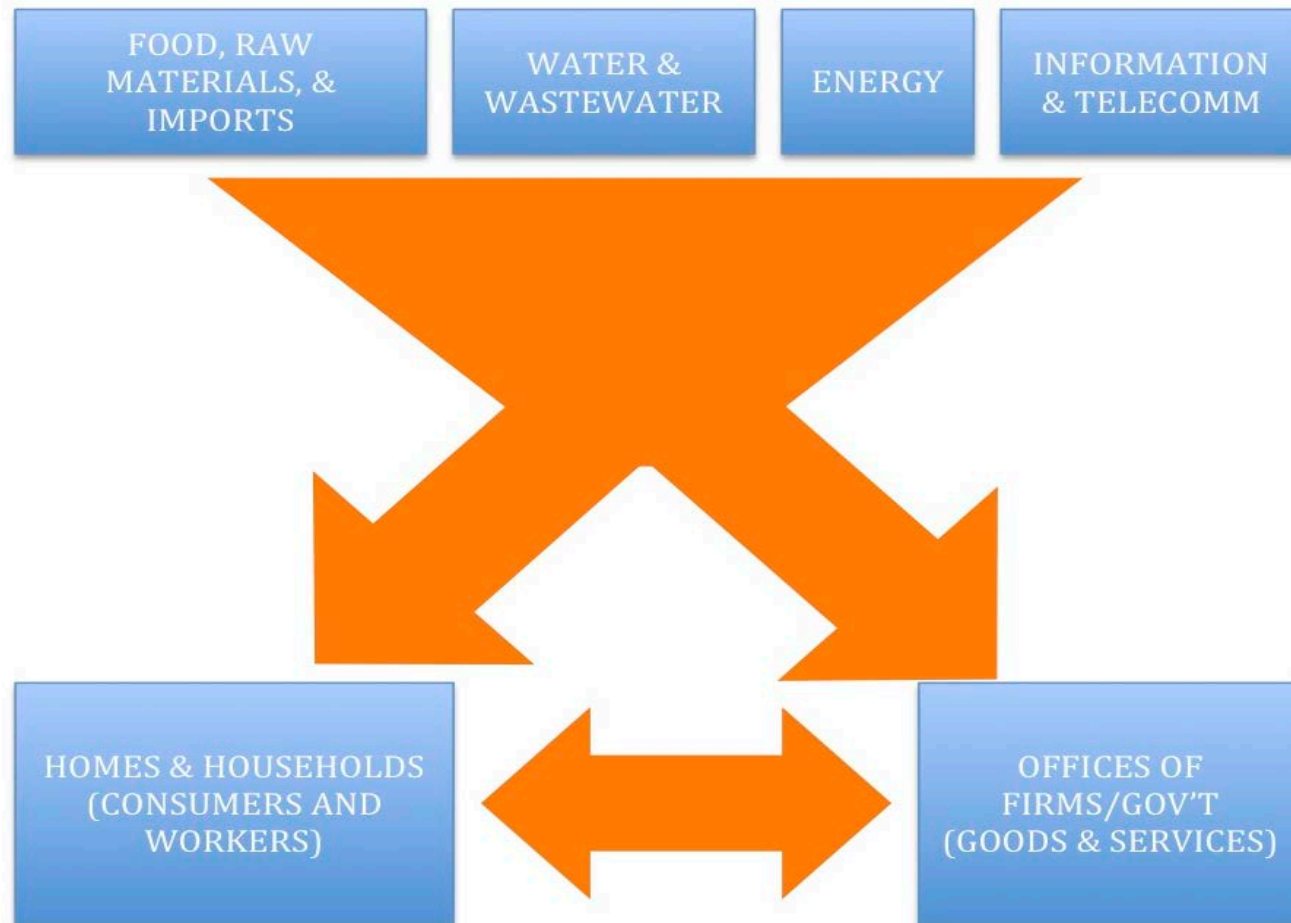
Earthquakes Break Stuff



Stuff (or Capital) is Essential for Economic Activity



Core Economic Relationships Affected by Natural Disasters



Two Types of Damage

- Direct Damage
 - Fixing what breaks, Short Run
- Indirect Damage
 - Economic output lost because broken stuff cannot be used, Short/Intermediate Run
 - Economic output lost because people or firms leave (or do not migrate in), Long Run

How Much Direct Damage?

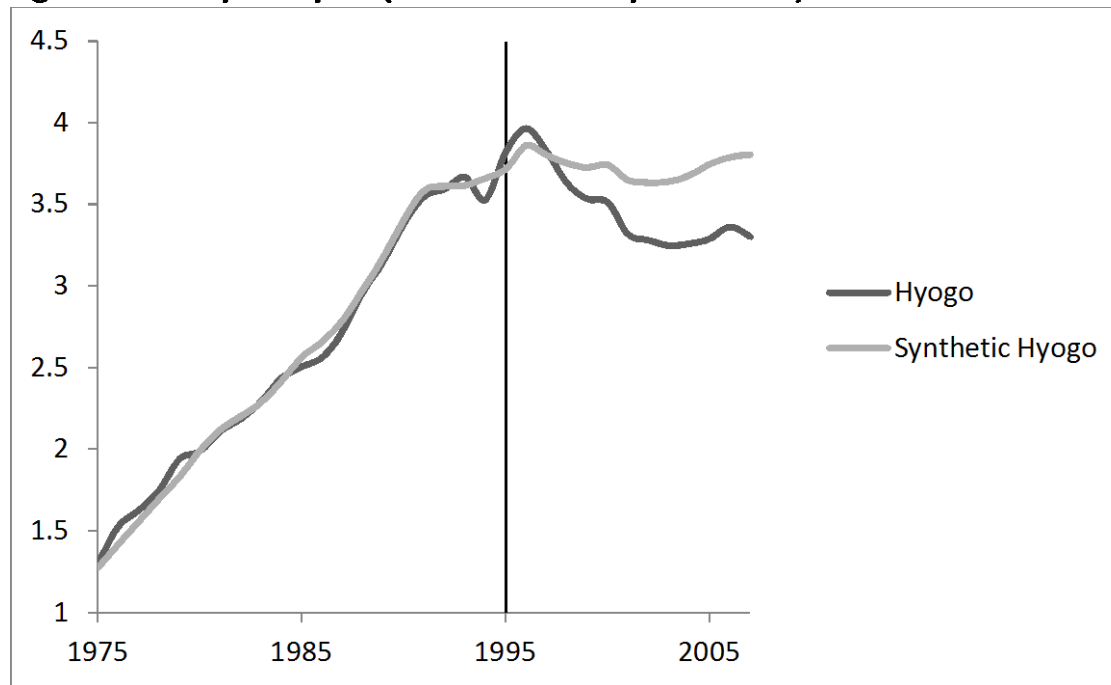
Event	Direct Damage Estimate	Share of GDP in Most Affected Area
Tohoku	\$210B-\$303B	56-81% (4 most affect prefectures)
Kobe	\$100B	61% (most affected prefecture)
Katrina	\$90B-\$125B	27-38% (LA+MS GDP)
Chile 2010	\$30B	78% (most affected regions)
Cascadia (Oregon)	\$50-\$150B??	Oregon GDP 2011 -- \$195B (25%-75%)

Damage unique to event and determined by magnitude, location, resiliency. It is impossible to predict in advance.

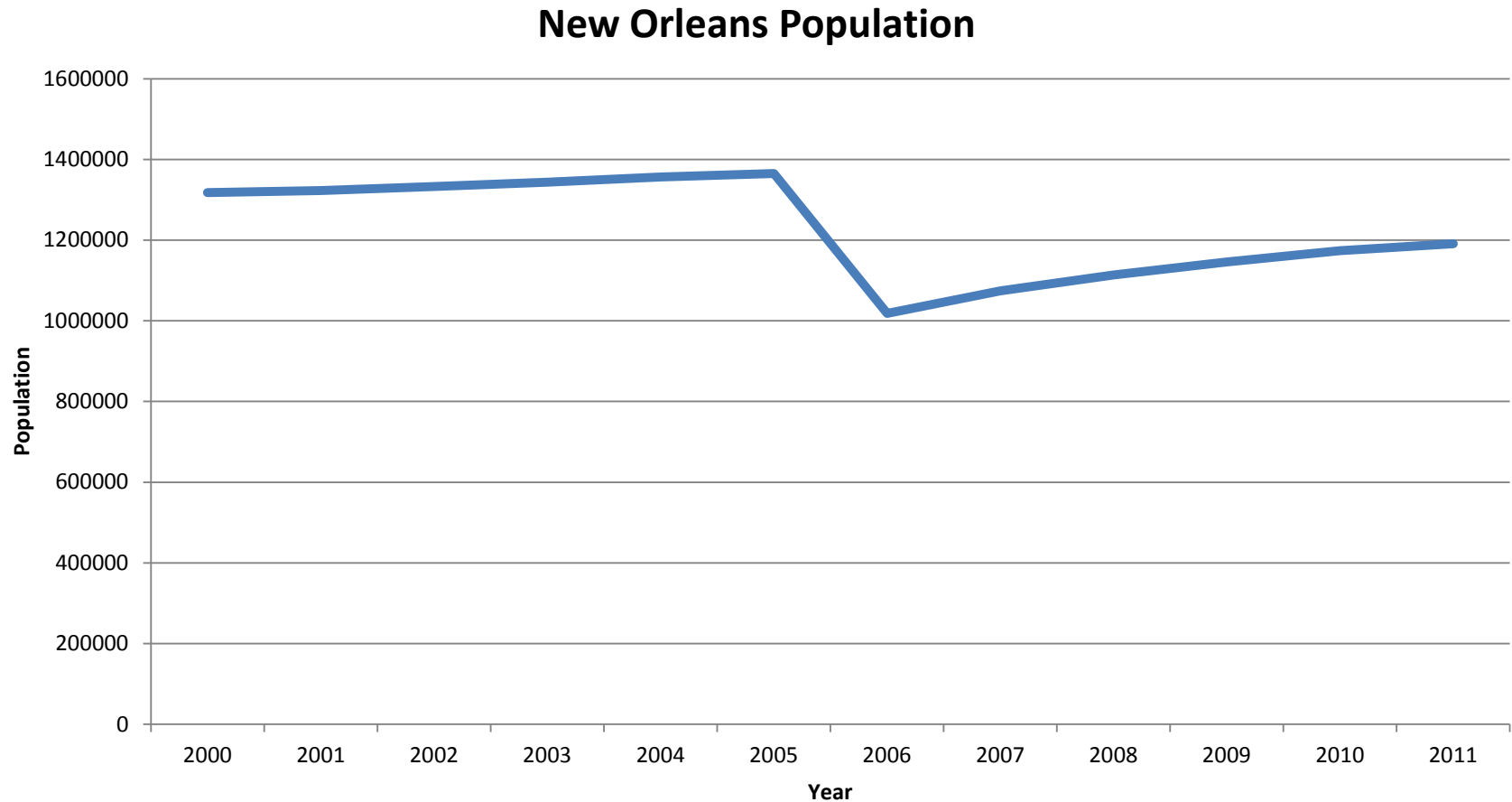
How Much Indirect Damage?

Long Run Impact of Kobe: GDP per capita 13% below where it would have been but for quake. (DuPont and Noy 2012)

Figure 3: GDP per capita (Millions of Yen per Person)



How Much Indirect Damage?



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