



# **Portland's Local Energy Assurance Plan**

**Planning & Sustainability Commission Meeting**

**December 14, 2010**

**Carmen Merlo, Director**

**Tricia R. Sears, LEAP Project Manager**





# What is Energy Assurance?

**Energy assurance** is a confidence that energy will be available when needed. To accomplish that level of security and availability of energy, we must take actions to reduce vulnerability to a disaster and to prepare for a disaster.





## What is the Portland LEAP?

A **plan** that addresses our dependency on energy before, during and after an energy disruption of any scale.

An **emergency plan** that will provide an understanding of roles, responsibilities, and response actions for emergency response organizations, energy providers and energy distributors during an energy disruption. The plan also includes mitigation actions and recovery actions.





## By March 2012 We Will Have:

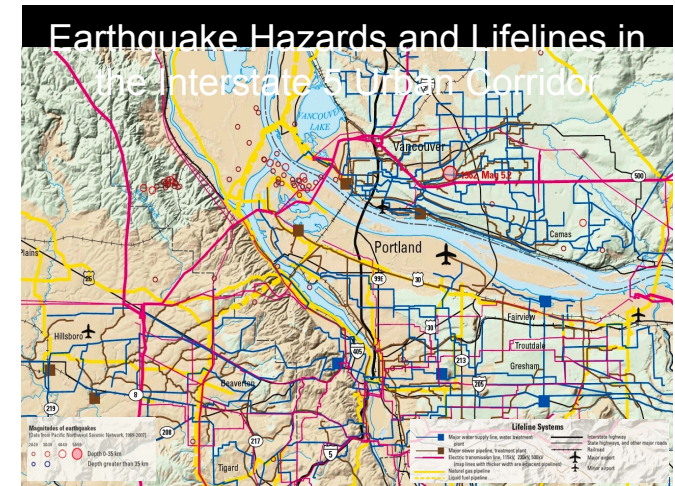
- A plan that includes coordinated response between business, government and community.
- A plan that relates today's supply with tomorrow's resource availability.





# What is Critical Infrastructure?

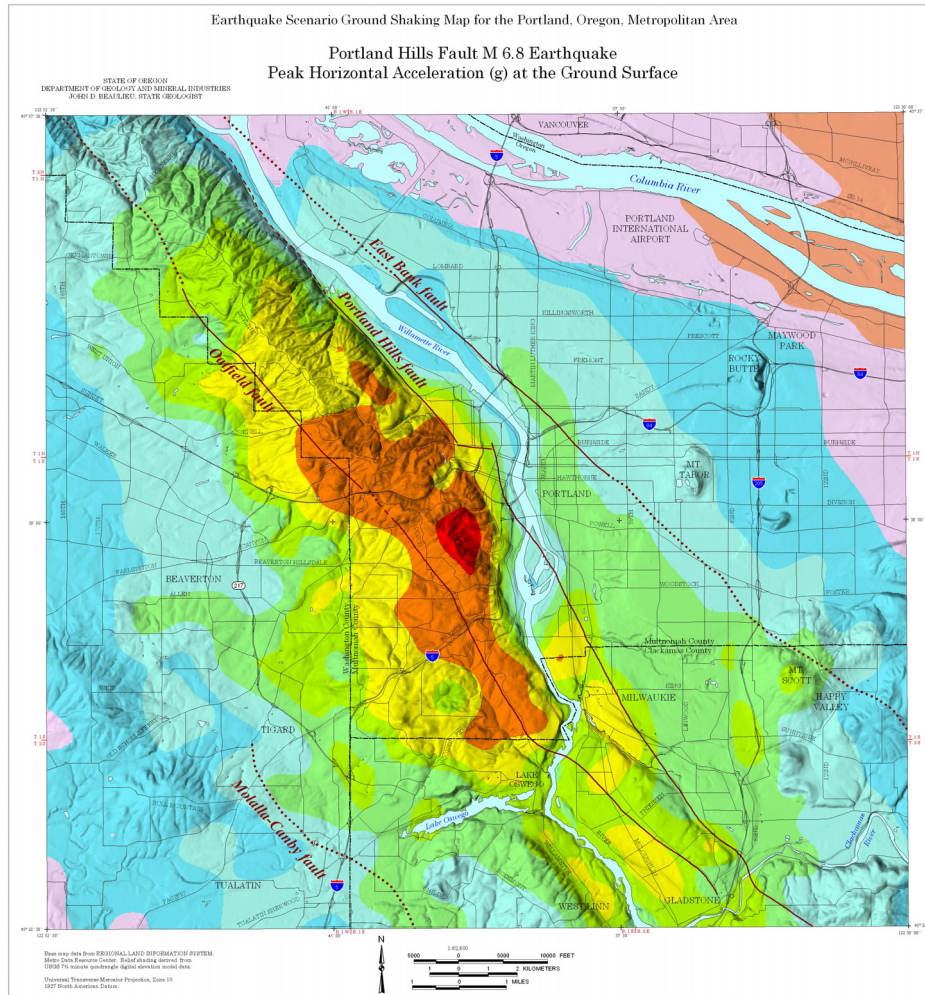
**Critical infrastructure** - Publicly and privately controlled systems and assets, including the built and natural environments and human resources, essential to the sustained functioning of our city.



These are **lifelines!**





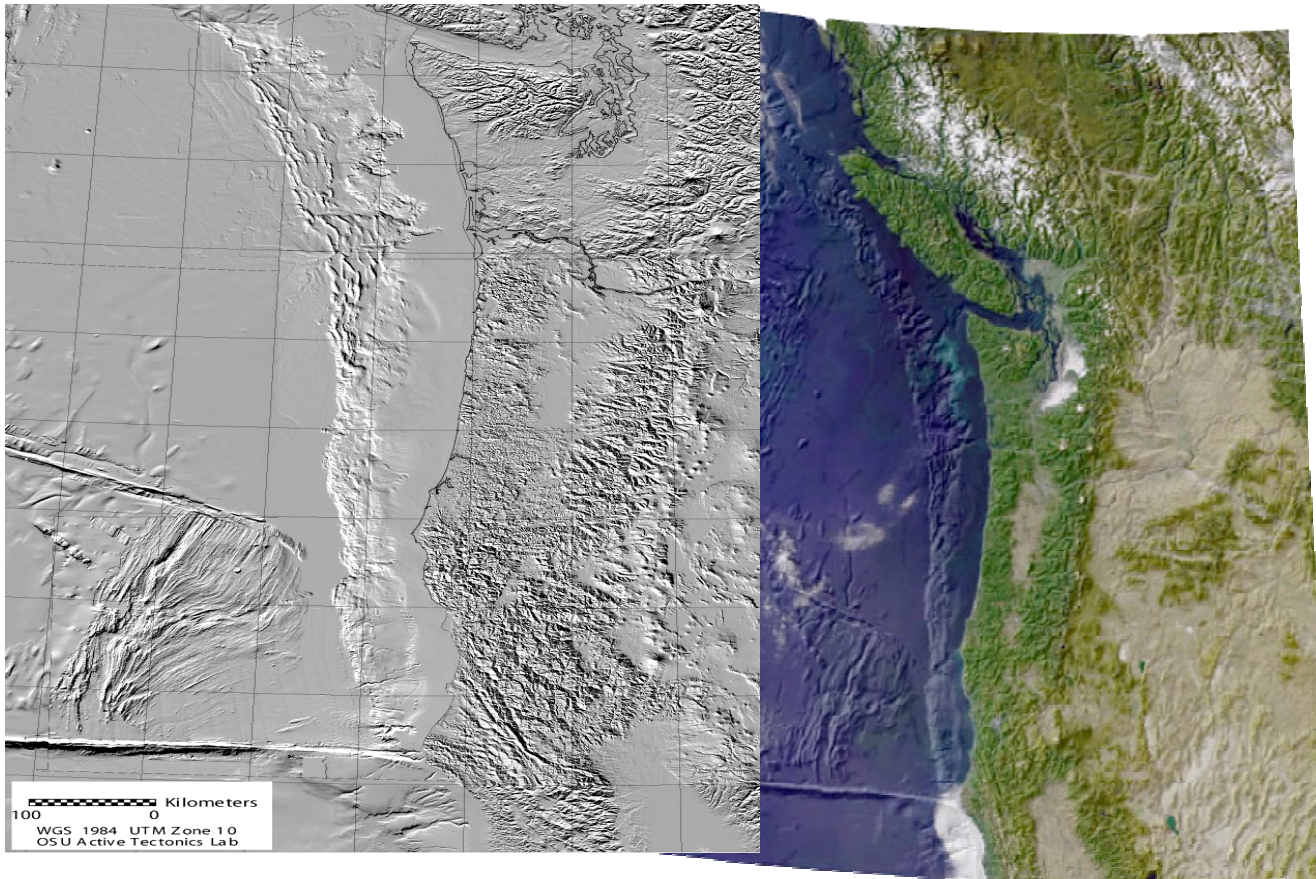


# Earthquake Fault Lines in Portland





# Cascadia Subduction Zone







# Portland Hills Fault







## Scenario for LEAP

**An 8.0 earthquake occurs at noon on a Wednesday in November.**

The resulting week-long impacts to the energy system include:

- Olympic Pipeline - the pipeline is damaged and inoperable;
- Williams Pipeline - the pipeline is damaged and inoperable;
- PGE and Pacific Power - electric power is down.





## Why Should the Planning & Sustainability Commission Care about LEAP?

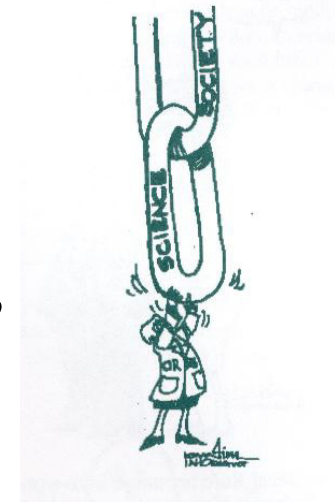
- Energy relates to everything and we use it everyday!
- Portland's energy sources are primarily in one area.
- The location is subject to numerous potential hazards.





# Planning for Our Community

- **Goals** – 20 minute neighborhoods
- **Analysis** – Buildable Lands Inventory, Asset Status and Conditions Report
- **Projects** – Citywide Tree Project
- **Plans** – Portland Plan, Climate Action Plan,







# What are We Willing to Risk?



Portland Office of Emergency Management

Carmen Merlo, Director

Sam Adams, Mayor





# Vulnerability, Mitigation & Resiliency

- **Vulnerability** - The degree to which people, property, resources, systems, and cultural, economic, environmental, and social activity is susceptible to harm, degradation, or destruction.
- **Mitigation** – Risk Reduction. Comprised of strategies and actions to lower or lessen the impacts of a disruption or disaster. The can occur before, during and after a disaster.
- **Resiliency** -The ability to respond effectively to an emergency and recover quickly from damage “bounce back”.





## POEM

### Promote resilience –

- Resource robustness
- Adaptability

### Practice sustainability –

- Economic
- Environmental
- Social

## Planning & Sustainability

### Sustainability is -

Everything's connected. The environment, economy, community and our own personal health.

Whatever you do today affects tomorrow.

It's all about the future.







## LEAP Today and Tomorrow

- Here today to inform you of our project, highlight its relevance to you.
- Note the handouts we gave you – overall project schedule, LEAP FAQ, and statement.
- We will keep you apprised as we move forward to City Council (resolution in March 2012).





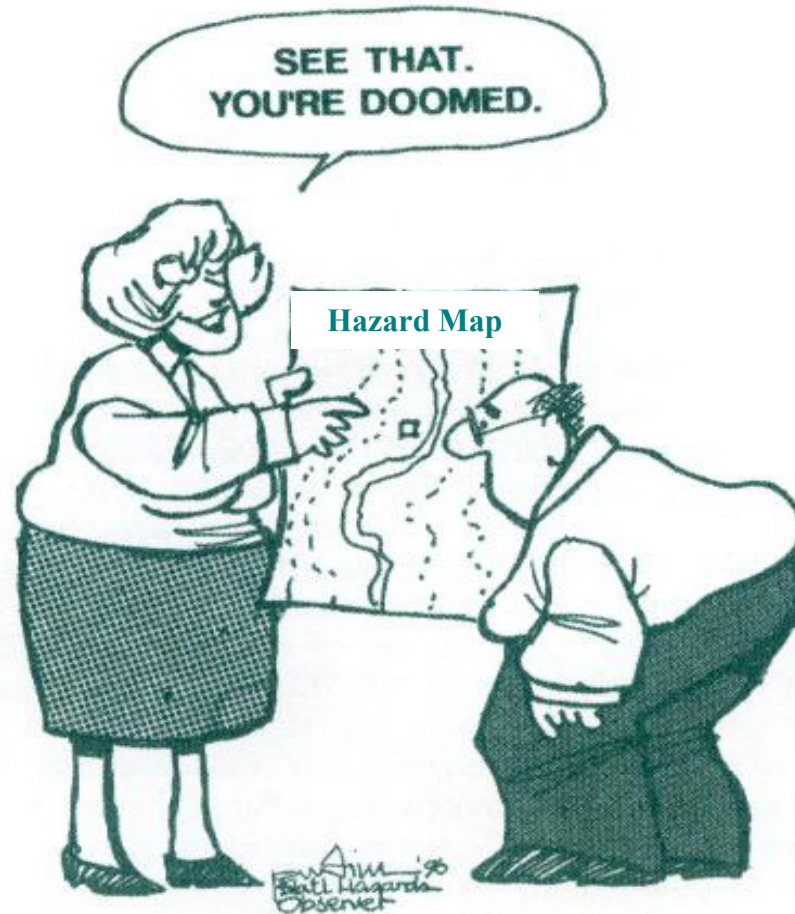
# Any questions?

## Contact

Tricia R. Sears

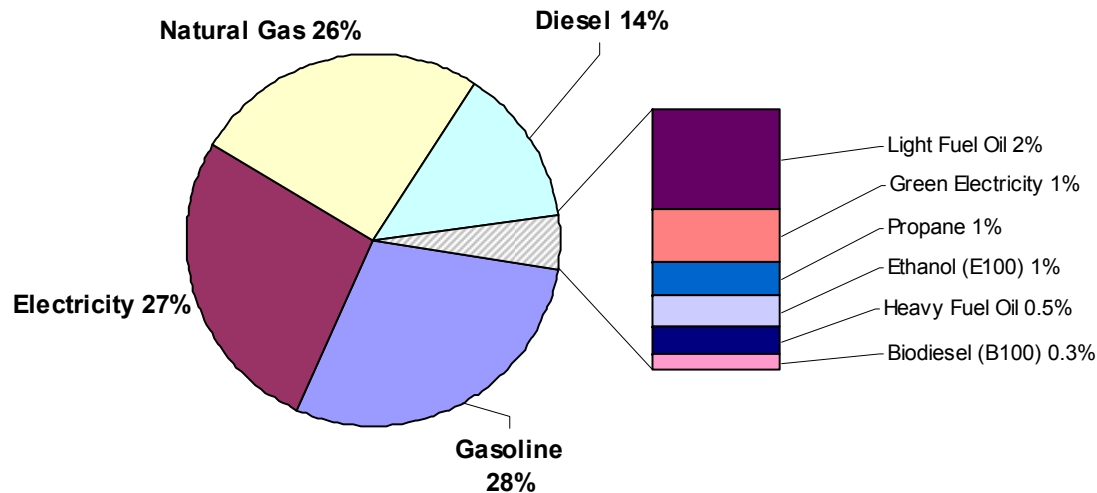
LEAP Project Manager

Phone #503-823-2360



# Sources of energy used in Portland

**Total 2007 Portland Energy Use by Fuel Source**  
in percent of Millions of BTU



Total energy used from all fuel sources = 105,077,140 Million British Thermal Units (MBTU).