# Smart Growth Compatibility with Goods Movement and Environmental Justice

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#### **NEJAC's Definition of GM**

".. distribution of freight by all modes of transportation including marine, air, rail, and truck. GM facilities include seaports, airports, and land ports of entry (border crossings), rail yards and rail lines, highways and high truck traffic roads, and warehouse and distribution centers.."

### International Cargo 个 2-3X by 2020



### **Projected Growth Areas**



#### **Growth in U.S. Ports**

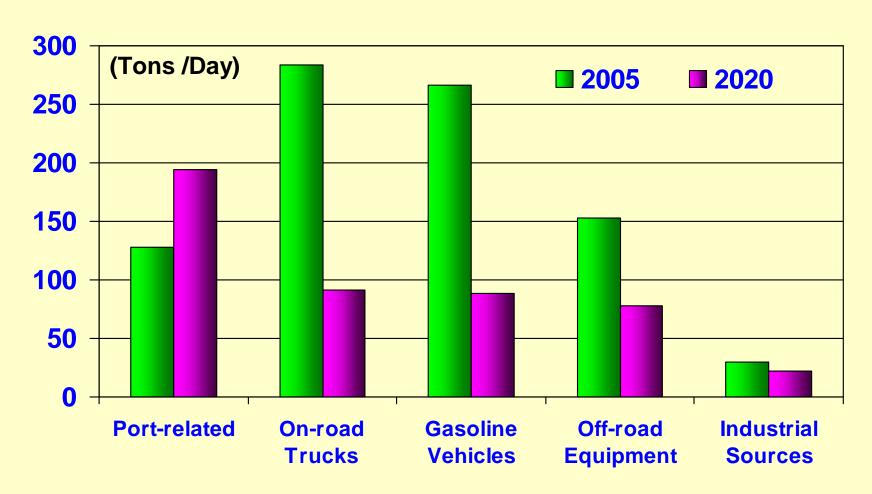


- Almost all the U.S. ports are planning expansions to accommodate more imports
- California ports vital to Pacific Rim freight traffic
  e.g. Los Angeles and Long Beach port complex
  - likely to increase throughput 2-3 times by 2020

### Port expansion (Los Angeles) - TEUs

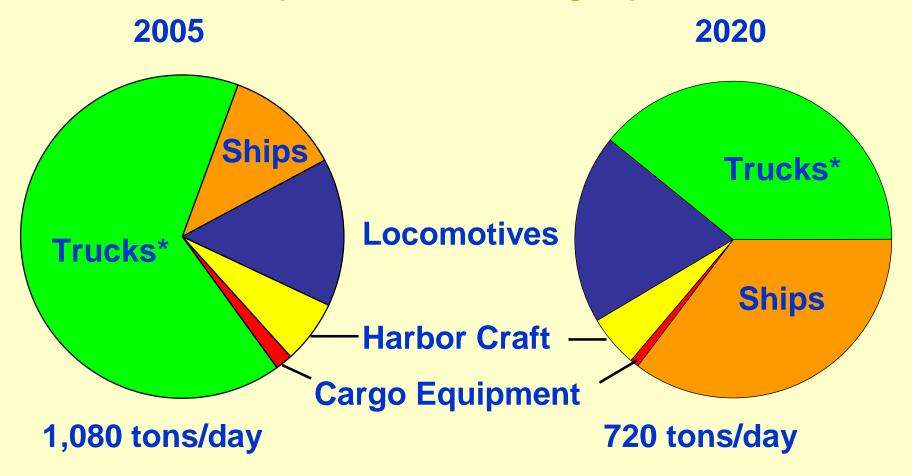
Year	In-bound	Out-bound
2000	2.6 M	2.2 M
2010	4.0 M	3.7 M

# Increasing Port-Related NOx Emissions (South Coast Air Basin, 2005 & 2020)



#### **NOx from Goods Movement**

(without new strategies)



<sup>\*</sup> Includes TRUs

# 2005 Health Impacts from Goods Movement

	Cases/Year
Premature death*	2,400
Hospital admissions (heart)	830
Hospital admissions (lung)	2,000
Acute bronchitis	5,100
Asthma/other respiratory	62,000
Absences/restricted days	4.4 million

<sup>\*</sup>Uncertainty range is 720 to 4,100 deaths/year

#### Ports-Increased Cancer Risk Ports of Los Angeles & Long Beach\*

#### Year 2002



Lifetime Risk (chances/million)

People impacted

>500

50,000

>200

400,000

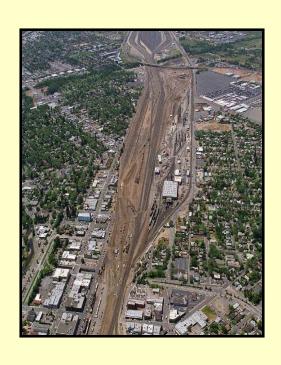
>100

1 million

>10

>2 million

#### Rail Yards-Increased Cancer Risk Roseville Rail Yard\*



Year 2000

Lifetime Risk (chances/million)

100-500

10-100

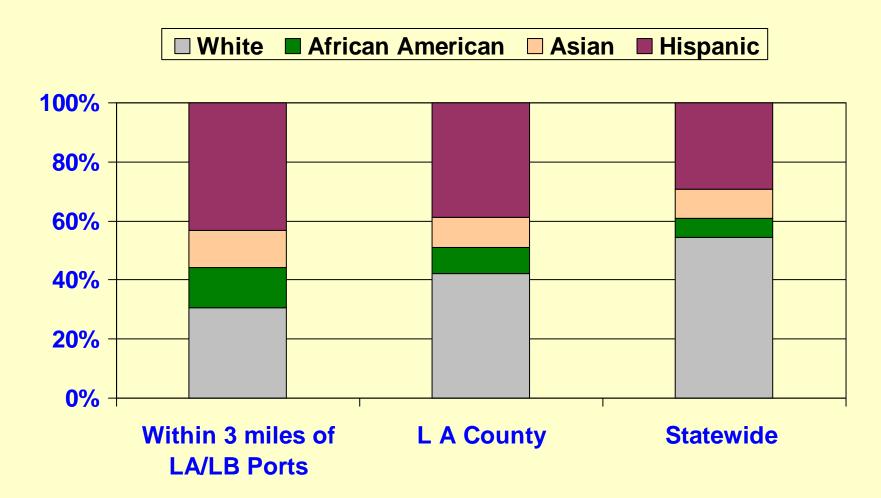
People

impacted

20,000

150,000

### **Ethnicity Distribution**



# **BNSF** Railroad plans at Gardner, Kansas

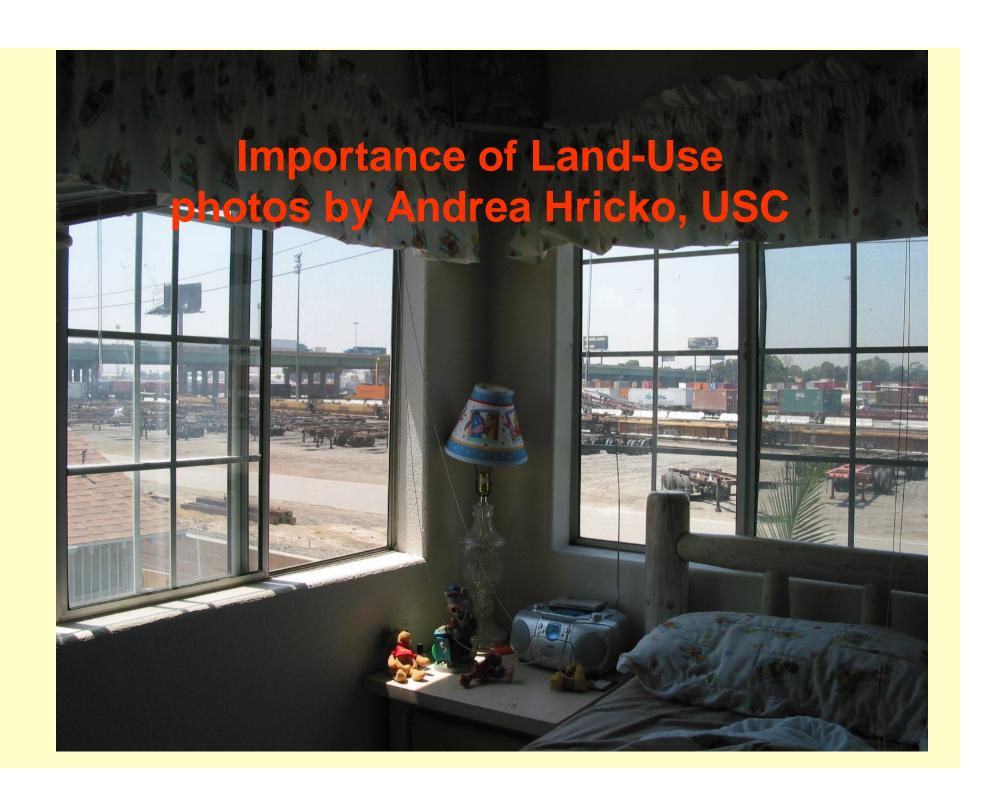
## RR main line from California to Chicago goes through Gardner

#### Plans:

- New intermodal facility (300 acres)
- New distribution center facility (1000 acres)
- 2000 additional truck trips a day at start
- 5000 additional truck trips a day at "build-out"
- Little discussion of diesel health effects at public meetings in Gardiner

#### **Key Recommendations of NEJAC**

- Communities' capacity and effectiveness to engage & influence decision making
- Identify and prioritize areas/communities maximally exposed or likely to be impacted
- Guidance on land- use decisions to separate sensitive receptors and sources
- Incentives, Funding mechanisms, Regulatory actions, and research















#### **Take Home Message**

- Land- use decisions are critical
- Internalize cost of mitigation to all projects
- Technology cannot solve all problems
- Incentives / Regulation area specific
- New funding mechanisms
- Political will
- Public participation