



INDUSTRIAL DISTRICTS ATLAS

2004

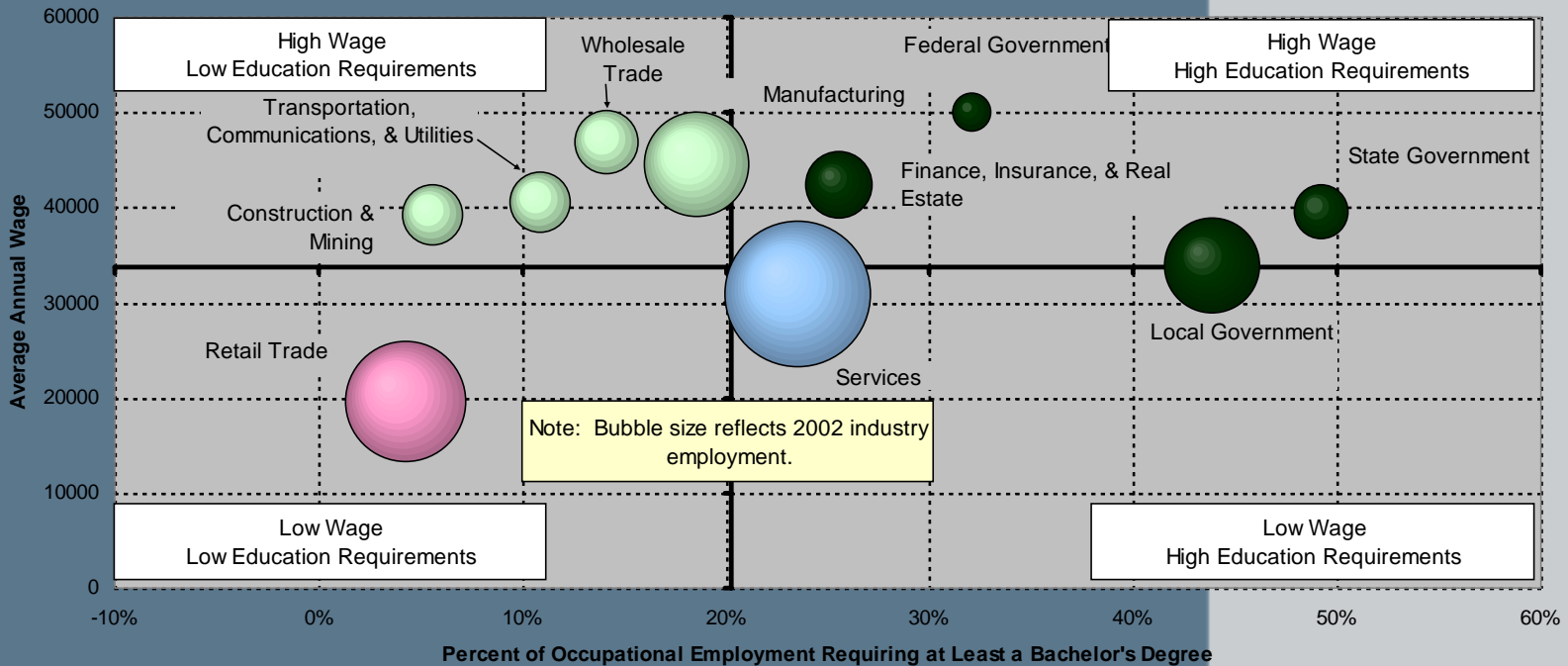
PORTLAND, OREGON

Industrial Districts Matter

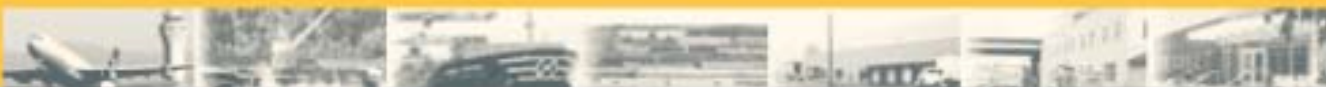
1. Good jobs
2. Traded sector land supply

Oregon: Broad Industry Employment, 2002

Percent of Occupational Employment Requiring at Least a Bachelor's Degree
by Industry Average Annual Wage



Source: Industry and Occupational Forecasts, 2002-2012; Industry wage data is from Covered Employment and Wages.



Data as Economic Development

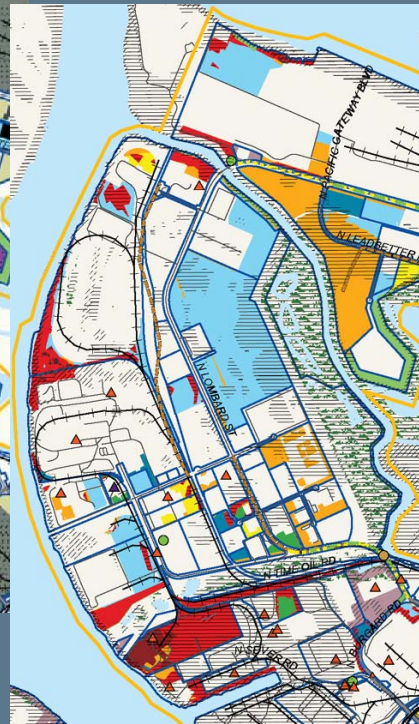
METHODOLOGY



Largest employers



Facility types



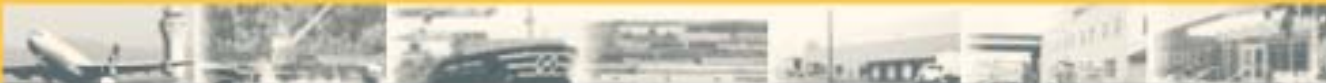
Growth Capacity

15,500 acres of industrial land in 8 districts

Data definitions matter

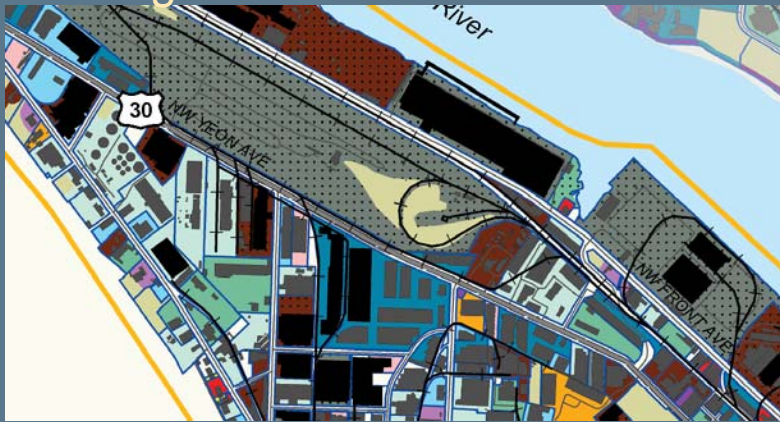
Potential future research:

- Regional context
- Trends analysis

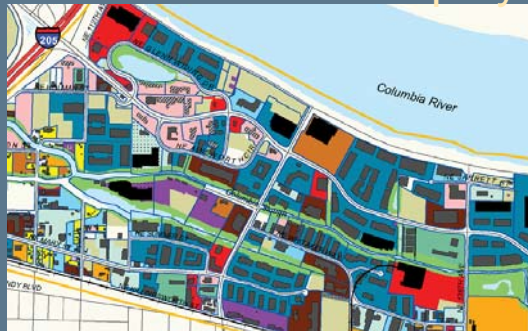


How Districts Differ

Freight hub districts



Mixed Industrial/Employment districts



Dispersed areas

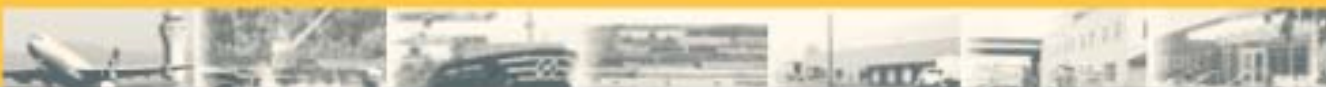


District types:

- Freight hub districts
- Mixed industrial/employment districts
- Dispersed areas

Implications:

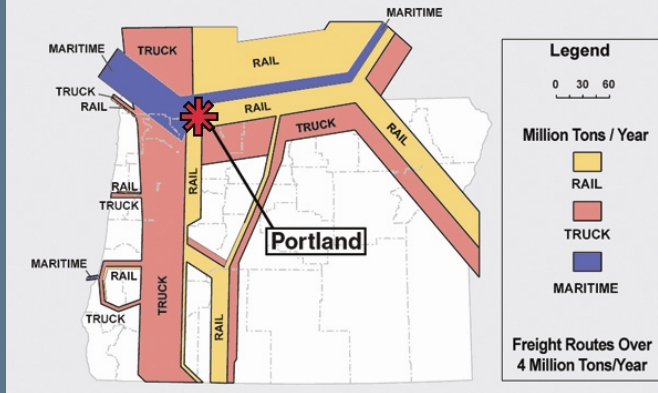
- Industry mix, land use, & infrastructure are interrelated
- Districts reveal city economic structure



Freight Hub Districts

Portland is Oregon's Freight Hub

Volume (Millions of Tons) of Freight Moved on Major Corridors in Oregon, 1996



A West Coast freight hub concentrated in 4 districts

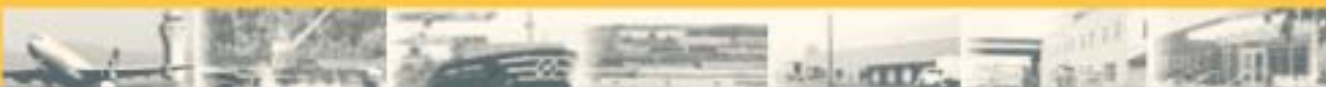
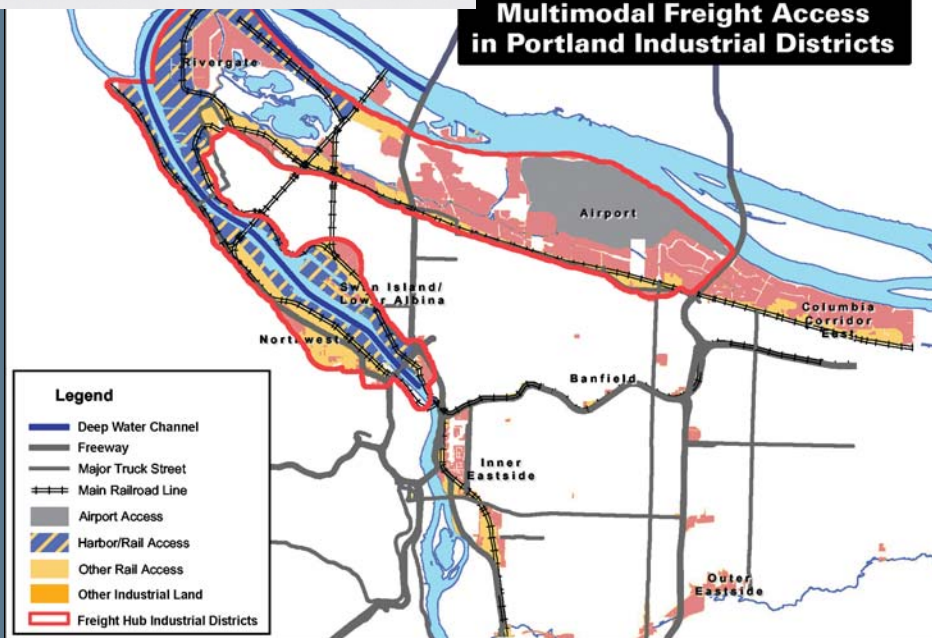
57% of land has harbor, rail, or runway access

56% of occupied land in heavy industrial use

Leading sectors: transportation, manufacturing

A TYPOLOGY OF DISTRICTS

Multimodal Freight Access in Portland Industrial Districts



Mixed Industrial/Employment Districts



Flex space in Columbia Corridor East



Urban street in Inner Eastside

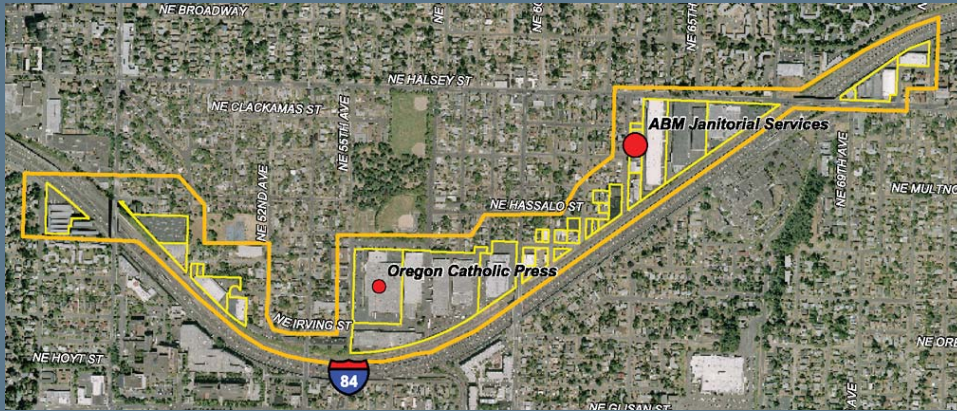
Services are leading sector: 45% of area jobs

High job density: 25 jobs per occupied acre

Juxtaposition of Inner Eastside and Columbia Corridor East



Dispersed Areas



Part of Banfield District

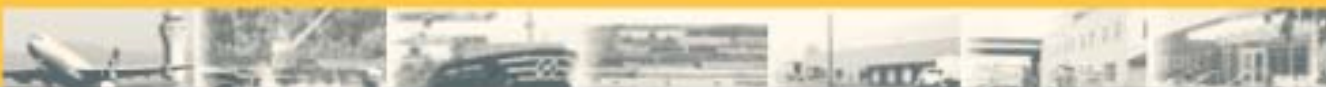


Part of Outer Southeast District

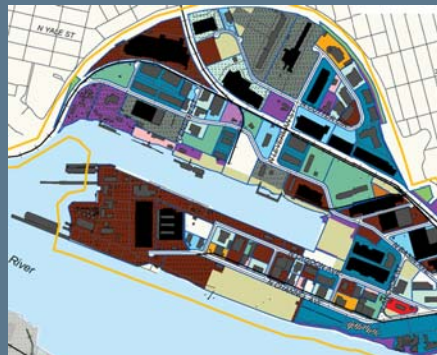
Small areas along I-84,
I-205, & Johnson
Creek

Fit into larger
neighborhoods

Grouping of metals
manufacturers



Industry Mix



1,260
101,000 Occupied
Jobs Acres

Production	34%	17%
Distribution	34%	57%
Terminals		32%
Services	32%	17%
Multi-Tenant		18%

Mix of industries varies if measured by jobs or land area

Freight terminals are land-intensive, but are also anchors of freight hub districts

Non-industrial acres

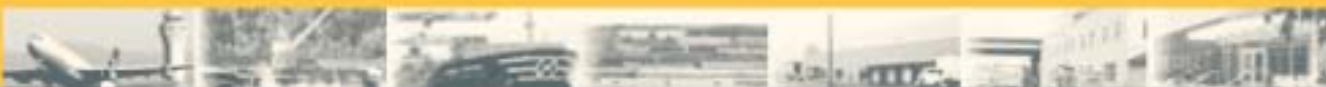
- Industrial zones – 5%
- General Employment zones – 37%

Which sectors need industrial land?

- 84% of manufacturing jobs are in industrial districts
- 75% of distribution jobs

Swan Island Facilities

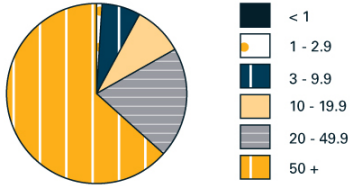
Heavy Industrial Heavy Industrial (overlay)	Distribution Freight Transportation Wholesale	Industrial Services Public Rental & Maintenance	Open Space Vacant Land 3+ Story (overlay) Structures >100,000 Sq Ft Other Structures	Transportation Infrastructure Railroads Freeways Major Truck Streets Streets
General Industrial Manufacturing Utilities Construction	Multi-Tenant 4+ Employers 2-3 Employers	Non-Industrial Retail Services Residential	Site Boundary Inventory Area Boundary	 0 305 610 1,220 1,830 2,440 Feet



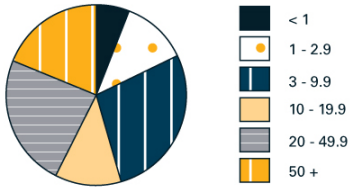
Site & Structure Size

Site Size

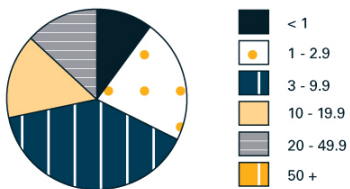
Heavy Industrial Facilities



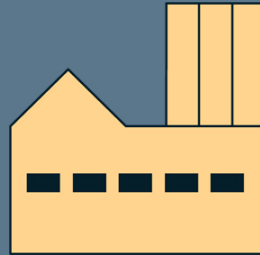
Manufacturing Facilities



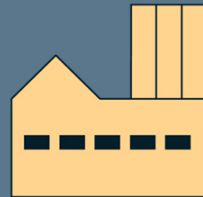
Wholesale Facilities



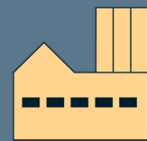
Structure Size



189,000 sf.



60,000 sf.



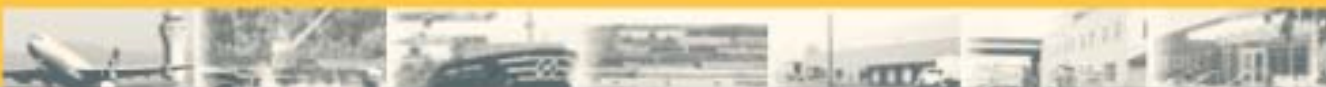
36,000 sf.



Industrial facilities are diverse

Outdoor use is not under-use:

- Average site coverage is 25%
- Average outdoor area in heavy industrial sites is 20 acres



Labor, Land, & Infrastructure



SITE CONDITIONS

Measurable indicators of district competitiveness:

Labor access

- Central access to 1 million metro workers

Industrial land supply

- Compatibility – 5% of land in non-industrial use
- \$4.70 per square foot average land value

Freight access

- 79% of land is within 3 miles of freeway ramp
- 33% has rail access
- 22% has harbor access

How Much Vacant Land?

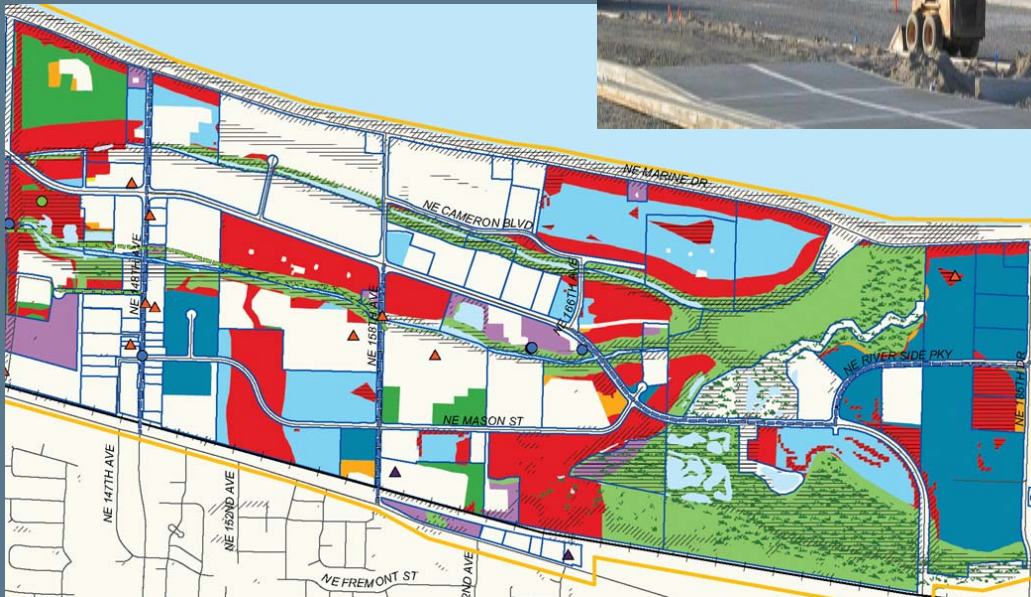


3,900 vacant acres
- open space
- public/utility sites
= 2,900 acre supply

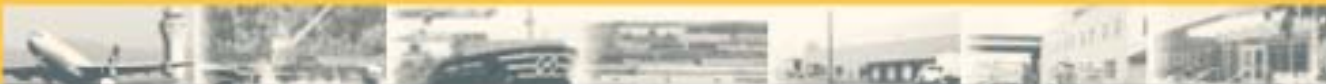
25-year demand
= 1,900 gross acres

Site constraints
create policy
challenges:

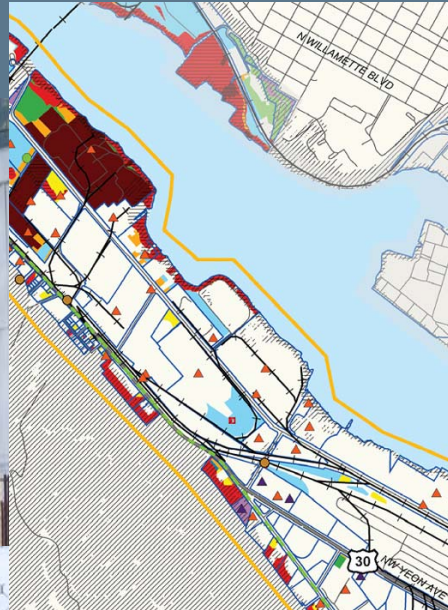
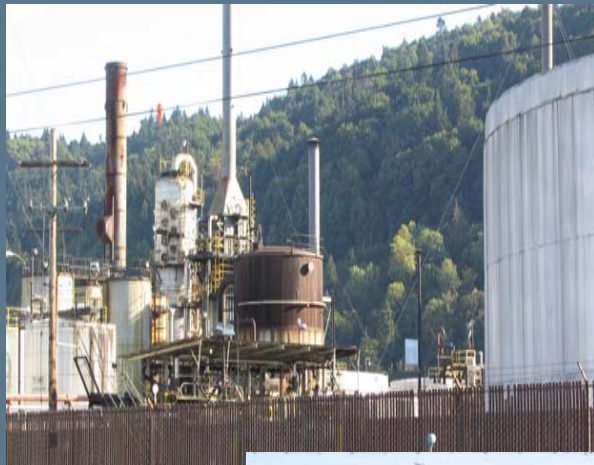
- 1,100 of 2,900 acres is "partly buildable" (e.g., floodplain, habitat)
- 900 of 2,900 acres is brownfield



GROWTH CAPACITY



How Much Land in Brownfields?



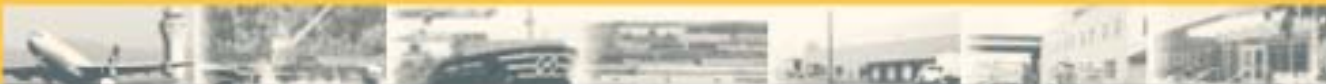
Potentially 8% of industrial land:

- 320 acres on unoccupied sites
- 920 acres of vacant land (unimproved)
- Many caveats

Emerging challenges:

- Easier recycling of industrial land
- Using land more efficiently

More research, tools, and incentives are needed



Looking to the Future



As regional industry grows, what should the urban core districts strategically evolve toward?

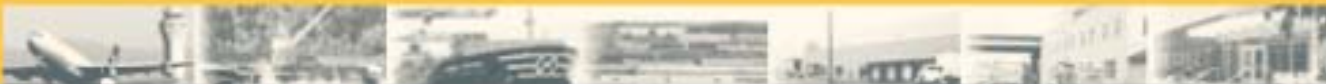
How do we get there?

Projects underway

- Willamette Industrial Urban Renewal Area
- Freight Master Plan
- Harbor planning
- Regional strategies

Emerging directions

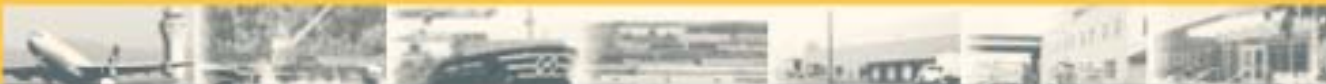
- Brownfield recycling
- Short-term land supply
- Catalyst infrastructure
- Workforce development
- New financial resources
- Regulatory improvements



The Industrial Districts Atlas is available at
www.portlandonline.com/planning



QUESTIONS



INDUSTRIAL DISTRICTS ATLAS