Clustering of Economic Growth

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Conventional measures of progress

Hawaii vs US real per capita gross domestic product

Thousands 2014$

Source: BEA, BLS, UHERO, gross product is deflated with US and Honolulu CPI.

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TOURISM NOT A LONG RUN GROWTH ENGINE

Source: HTA, BLS, UHERO. Nominal visitor spending deflated using Honolulu CPI.

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Where will the growth come from?

contributions to Hawaii 2014 GDP

State and Local Gov 9.4%

Federal = 13.0%
  5.4% Civilian
  7.6% Military

Trade 10.0%

Tourism = 16.7%

Accom & Food Srvc 8.4%

Health Care 6.4%

Construction 5.7%

Finance & Ins 3.0%

Other 39.6%

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Source: BEA, UHERO, DBEDT.

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Traded industries are concentrated in a subset of geographic areas and sell their products and services to other regions and nations. Traded industries compete globally.

A cluster is a regional concentration of companies, suppliers, service providers, government agencies and other institutions.

Clusters enhance productivity and spur innovation.

### Traded vs Local Share of the U.S. Economy

- **Employment**: Traded 36% vs Local 64%
- **Income**: Traded 50% vs Local 50%
- **Patents**: Traded 97% vs Local 3%

Source: US Cluster Mapping Project, UHERO
Hawaii's traded clusters

most strong traded clusters are small

Source: US Cluster Mapping Project, UHERO

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Maui’s traded clusters

most strong traded clusters are small

Source: US Cluster Mapping Project, UHERO

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Honolulu’s traded clusters

most strong traded clusters are small

Source: US Cluster Mapping Project, UHERO

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Honolulu—clusters

Education & Knowledge Creation subcluster

Source: Economic Modeling Specialists, UHERO

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Honolulu—clusters

Research Organizations subcluster, 2013

Source: US Cluster Mapping Project, UHERO

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Cluster Policy

- Identify and characterize existing clusters.

- Refocus policy on traded clusters and improve general business environment affecting all clusters.

- Support development of innovation ecosystem.

- Recognize that university research and connections to clusters is a necessary ingredient.

- Move toward real-time marginal cost electricity pricing to stimulate clean energy R&D cluster.