EMPLOYING INNOVATION ACROSS AMERICA

The glossary below provides definitions for the economic indicators included in the study *Employing Innovation Across America*. The indicators are listed in alphabetical order within the following eight categories:

- 1. Research & Development (R&D)
- 2. Intellectual Property Protection
- 3. Jobs
- 4. Wages

- 5. Economic Contributions
- 6. Sales
- 7. Exports
- 8. State Profile

GLOSSARY

1. Research & Development (R&D)

- Academic R&D performance: Total value of R&D conducted by public and private colleges and universities and funded by all sources.
- **Federal R&D performance:** Total value of R&D conducted and funded by federal agencies, as well as administrative support for R&D projects funded by the federal government and conducted by others (e.g., industry or academic institutions).
- **Industry R&D performance:** Total value of R&D conducted by companies and funded by the company and others (e.g., federal or state governments).
- Other R&D performance: Total value of federally funded R&D conducted by Federal Research & Development Centers (FFRDCs) and other non-profit organizations.
- Small Business Innovation Research (SBIR) awards: A competitive awardsbased program, funded by federal agencies, that enables small businesses to engage in R&D that has the potential for commercialization.
- State R&D performance: Total value of R&D conducted and funded by state government agencies.
- **Total R&D performance:** Total value of academic, federal, industry, state, and other R&D performance.
- **R&D per civilian worker**: Total R&D investment (academic, federal, industry, state, and other) per civilian worker (both private and public sector workers).

2. Intellectual Property Protection

- Copyrights: The number of copyrights issued to state residents.
- Copyrights per 10,000 residents: The number of copyrights issued per 10,000 state residents.
- Patents: The number of patents issued to state residents.

- Patents granted per 10,000 residents: The number of patents issued per 10,000 state residents.
- **Trademarks**: The number of trademarks issued to state residents.
- Trademarks registrations per 10,000 residents: The number of trademarks issued per 10,000 state residents.
- **Total innovations per 10,000 residents:** The total number of patents, trademarks and copyrights registered per 10,000 state residents.

3. Jobs

- **Direct IP jobs:** The number of workers employed by IP-intensive companies in the private sector. IP-intensive companies include companies that invest in R&D and companies in six copyright-concentrated industries (motion pictures, newspapers, performing arts, broadcasting, independent artists, and software).
- Indirect IP jobs: The number of workers that support activities of IP-intensive companies. The number of indirect IP jobs is calculated by applying the U.S. Bureau of Economic Analysis regional employment multipliers to the number of direct IP jobs.
- Non-IP related jobs: The number of non-IP related workers in the private sector (total private sector jobs minus direct and indirect IP jobs).
- Share of direct IP jobs in the private sector: Direct IP jobs as a percentage of total private sector jobs.
- Share of indirect IP jobs in the private sector: Indirect IP jobs as a percentage of total private sector jobs.
- Share of non-IP related jobs in the private sector: Non-IP related jobs as a percentage of total private sector jobs.
- **Total private sector jobs:** The number of workers in the private sector, including all private non-farm industries.

4. Wages

- Average wage per direct IP worker: The average annual wage or salary of a
 worker at IP-intensive companies across all industries. IP-intensive companies
 include companies that invest in R&D and companies in six copyright-concentrated
 industries (motion pictures, newspapers, performing arts, broadcasting, independent
 artists, and software).
- Average wage per private sector worker: The average annual wage or salary of a private sector worker.
- Share of direct IP wages in the private sector: Total wages of direct IP workers as a percentage of total private sector wages.

- Share of indirect IP wages in the private sector: Total wages of indirect IP
 workers as a percentage of total private sector wages. Indirect IP wages are
 calculated by applying the U.S. Bureau of Economic Analysis regional earnings
 multipliers to direct IP wages.
- Share of non-IP related wages in the private sector wages: Total wage of non-IP related workers as a percentage of total private sector wages (total private sector wages minus direct and indirect IP wages).
- **Wage premium:** The ratio of average wage of an IP worker to the average wage of a private sector worker.

5. Economic Contributions

- Economic contribution (value-added) per IP worker: The value of goods and services produced by a direct IP worker, excluding intermediate values.
- Economic contribution (value-added) per private sector worker: The value of goods and services produced by a private sector worker, excluding intermediate values.

6. Sales

- **Direct sales of IP companies:** Total gross sales of IP-intensive companies across all industries. IP-intensive companies include companies that invest in R&D and companies in six copyright-concentrated industries (motion pictures, newspapers, performing arts, broadcasting, independent artists, and software).
- Indirect sales of IP companies: Total gross sales of products and services that support IP-intensive companies. Indirect IP sales are calculated by applying the U.S. Bureau of Economic Analysis regional output multipliers to direct IP sales.
- Share of direct IP sales in the private sector: Direct sales of IP-intensive companies as a percentage of total private sector sales.
- Share of indirect IP sales in the private sector: Indirect sales of IP-intensive companies as a percentage of total private sector sales.
- **Total private sector sales**: Total gross sales, also referred to as gross receipts, gross revenue, total output of the private sector. This includes sales to final users in the economy as well as sales to other industries, including intermediate values.

7. Exports

• IP merchandise exports of the manufacturing sector: The value of goods exported by IP-intensive companies in the manufacturing sector. IP-intensive companies include companies that invest in R&D and companies in six copyright-concentrated industries (motion pictures, newspapers, performing arts, broadcasting, independent artists, and software).

- IP merchandise exports of the manufacturing sector as % of total merchandise exports of the manufacturing sector: The value of goods exported by IP-intensive companies in the manufacturing sector as a percentage of total exports by companies in the manufacturing sector.
- Jobs created by IP merchandise exports in the manufacturing sector: The number of workers that support the production of goods exported by IP-intensive companies in the manufacturing sector.

8. State Profile

- **Civilian labor force**: The number of potential workers (employed plus unemployed workers).
- **GDP per capita:** Gross state product divided by population.
- **Gross state product:** State-level GDP (the total dollar value of final products and services).
- **Population:** The number people who reside in a state.