INDIANA HARDWOODS STRATEGY

PRELIMINARY FINDINGS

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INDIANA STATE DEPARTMENT OF AGRICULTURE

ISDA will support growth in Indiana agriculture by serving as an advocate at the local, state and federal levels; defining and nurturing economic opportunity in the food, feed, fuel, and fiber sectors; and enhancing the stewardship of natural resources on agricultural land.

INDIANA
STATE DEPARTMENT OF
AGRICULTURE

INDIANA HARDWOOD INDUSTRY

- Employs **35,000+** people
- **$1.2 billion** annual payroll
- **$53 million** in state and local payroll taxes
- **$16.6 billion** impact
- **$51** economic impact for each board foot processed

Indiana’s annual growth in sawtimber is **133%** of the volume harvested.

AMERICAN HARDWOOD EXPORT COUNCIL

HOWEVER . . .

In 2016, Indiana exported $32M in logs, $57M in lumber, and $58M in veneer

The amount of industrial roundwood produced in Indiana has increased, but the number of in-state mills has declined

ISDA is interested in reducing this economic "leakage."

IN HARDWOOD STRATEGY — OBJECTIVES

- **Identify the assets and strengths of the resources and the industry to establish a baseline**
- **Map the current primary and secondary hardwood operations in Indiana**
- **Assess:**
  - **Transportation infrastructure**
  - **State and federal regulatory environment**
  - **Consumer demand**
  - **Competition from other states.**

ADVISORY TEAM

- **Indiana State Department of Agriculture**
- **Indiana Hardwood Lumberman's Association**
- **Indiana Department of Natural Resources**
- **Business leaders from multiple sectors of Indiana's hardwood industry.**

PROJECT TEAM

DJCase & associates

PURDUE UNIVERSITY

Center for Regional Development
Advancing Collaboration : Energizing Regions

Dr. Satish Ukkussuri, Purdue University

PRELIMINARY FINDINGS

- Forest Resources
- Industry Baseline
- Challenges to Growth
- Opportunities
- Next Steps.

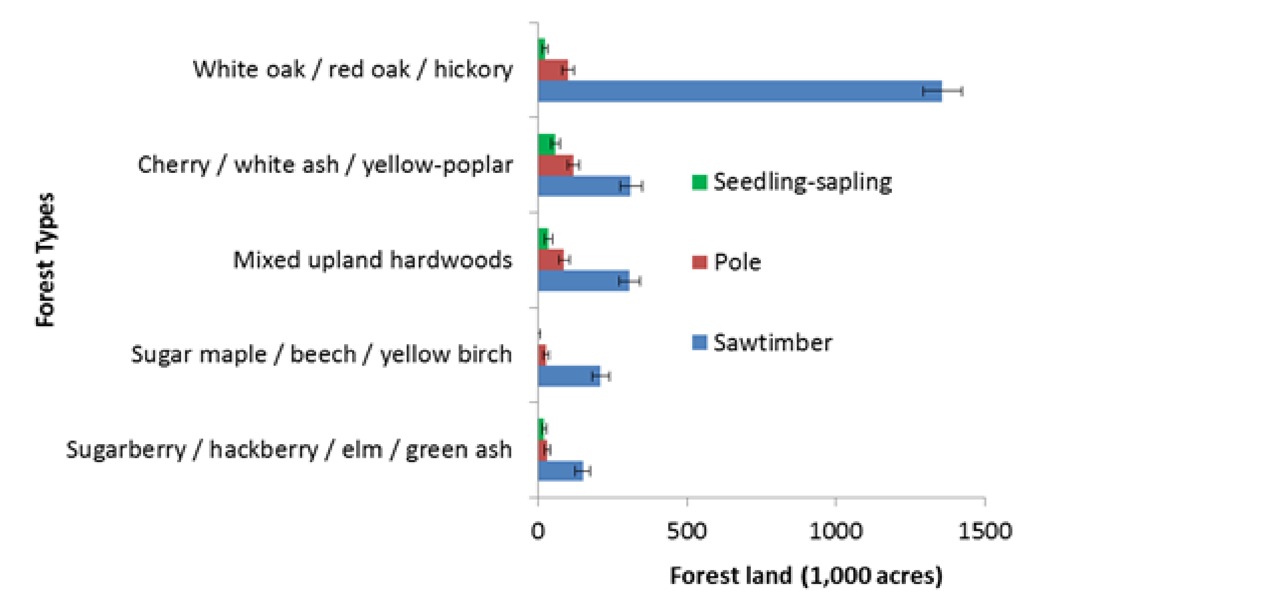
INDIANA HARDWOODS STRATEGY

FOREST RESOURCES OF INDIANA

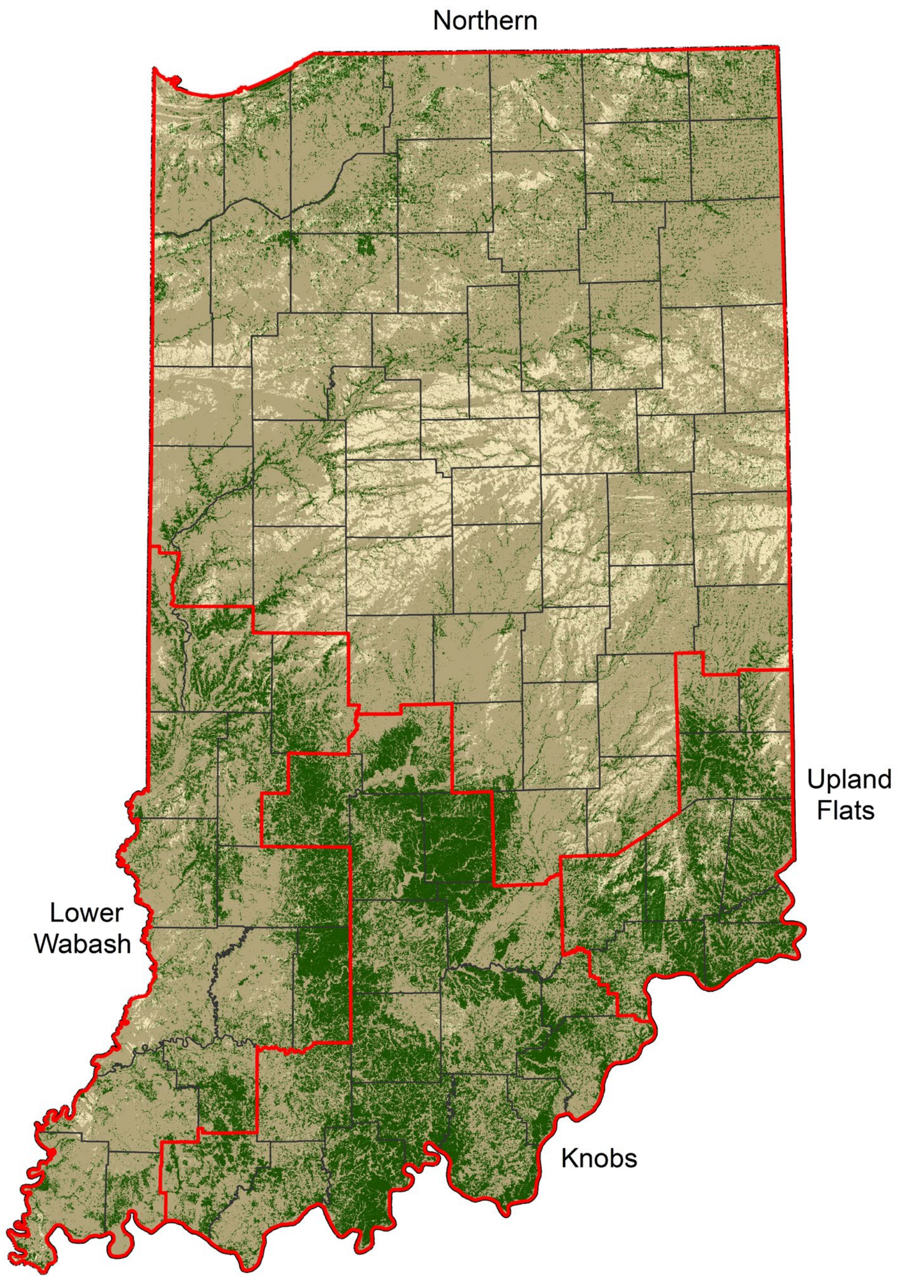
FOREST RESOURCES

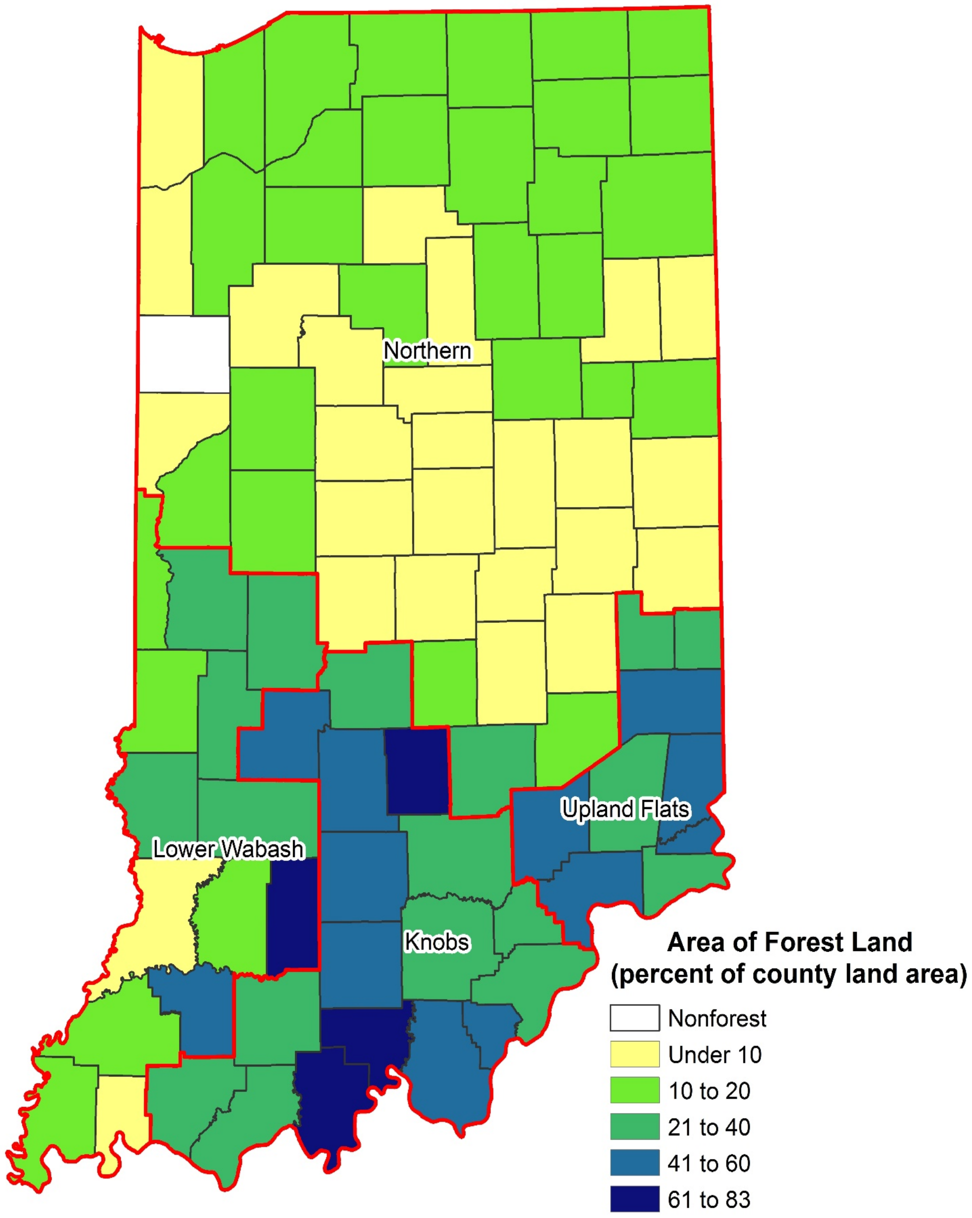
Indiana has substantial, sustainable forest resources

- 4.9 M acres of forest (21% of state)
- 4.7 M acres not in reserved or protected status
- Net volume of live trees is 11M cubic feet, a 5% increase since 2012
- Net volume of sawtimber trees is 27.2 billion board feet, ~10% increase since 2012
- Nearly 80% of forest is in sawtimber stands; 13% poletimber; 7% regenerating



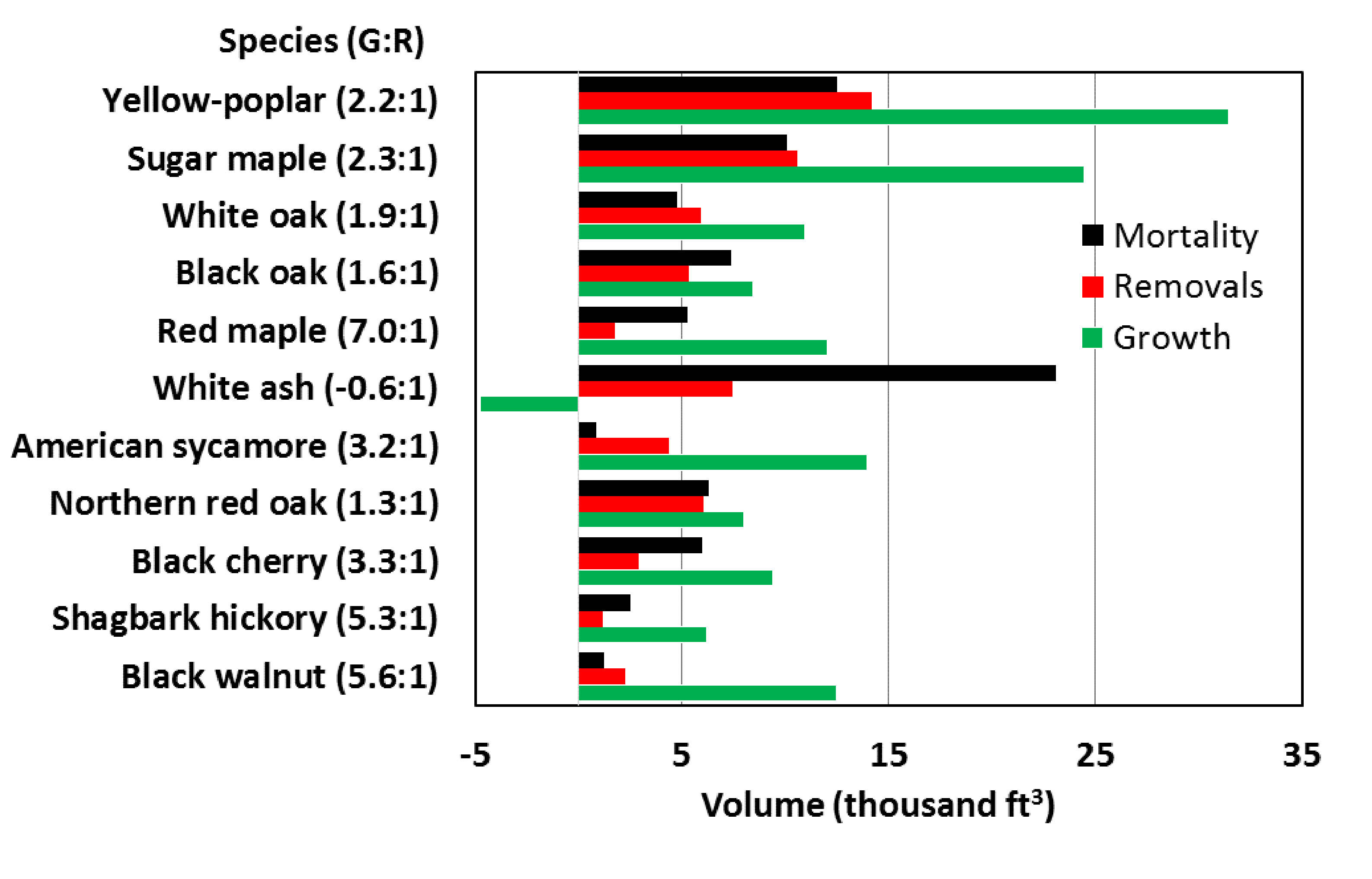
Highest densities of forest in south-central Indiana





FOREST RESOURCES

Growth-to-removals ratios are positive for most species.



FOREST RESOURCES

Forest Ownership

- 84% (4.1M acres) privately held
- 8% (394,000 acres) state and local government
- 7.5% (388,000 acres) federal government
- State forest system certified by Sustainable Forestry Initiative® and Forest Stewardship Council®

FOREST RESOURCES

Private Forest Lands

- 3.7M acres in private holdings of 10 acres or more (91,000 ownerships)
- Average family ownership is 37 acres
- Only 21% of family forest owners said timber products were an important or very important property objective
- Only 20% reported selling trees in the past 5 years
- Huge potential to improve stand quality and health through interactions with professional foresters
- Great need to reach more private forest owners!

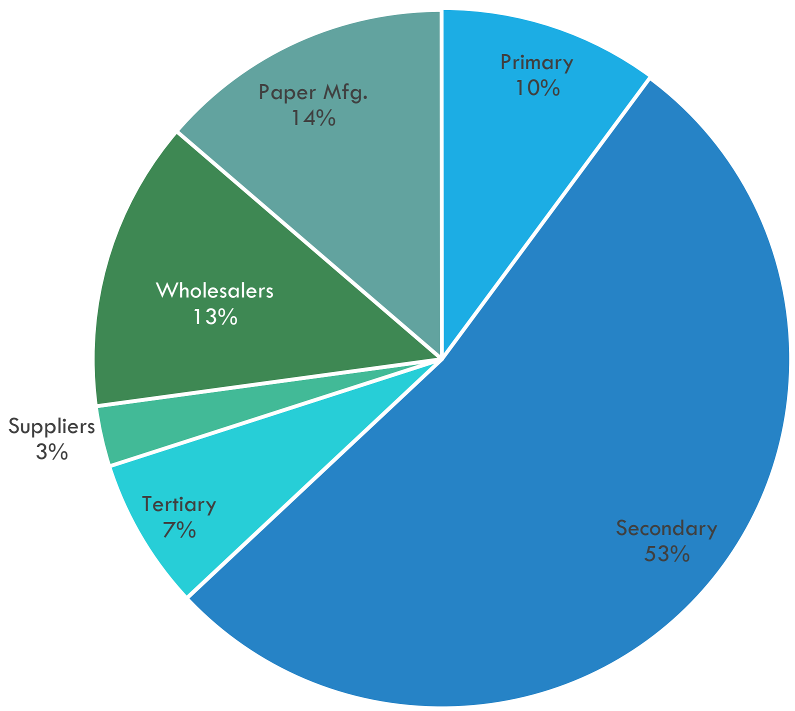
INDIANA HARDWOODS STRATEGY

INDUSTRY BASELINE

INDUSTRY BASELINE

Hardwood is significant sector within Indiana's agricultural economy

- Considerable presence across the supply chain (relative to US as a whole)
- Analysis included primary, secondary, tertiary plus suppliers, wholesalers and paper
    - Together, employed 70,000 workers in 2016
    - Over half were in secondary industry (53%)
    - Paper had 14%
    - Wholesalers 13.5%
    - Primary 10%
  - Most have faced employment declines
  - Net loss of 19k over 15 years
  - 75% of loss in primary, 2ndary, tertiary.



INDUSTRY BASELINE

But there is good news

- Some sectors have shown employment gains
- In spite of employment losses, most primary and secondary are doing very well
- Positive competitive effect values—hardwood sector outperformed national and industry employment predictions
- 2/3 of all hardwood industries have higher employment concentration in Indiana than they do nationwide, as evidenced by high Location Quotient—net exporters
- High prevalence of self-employed workers. Can inspire innovation, but makes collaboration difficult.

INDUSTRY BASELINE

Comparison to Other States (KY, OH, TN, WV, IL, IA, MO, MI, PA)

- IN has 14% of all jobs
- 10% of all establishments
- 11% of all job losses over last 15 years
- IN has highest location quotient in secondary and tertiary wood products sectors
- IN does not have the largest number of jobs or establishments in each sector, but has a strong wood products concentration and has a competitive advantage in all sectors except tertiary.
- Industry representatives don't really see other states as competitors for resources: "They take some raw materials from us; we take some from them."

INDUSTRY BASELINE

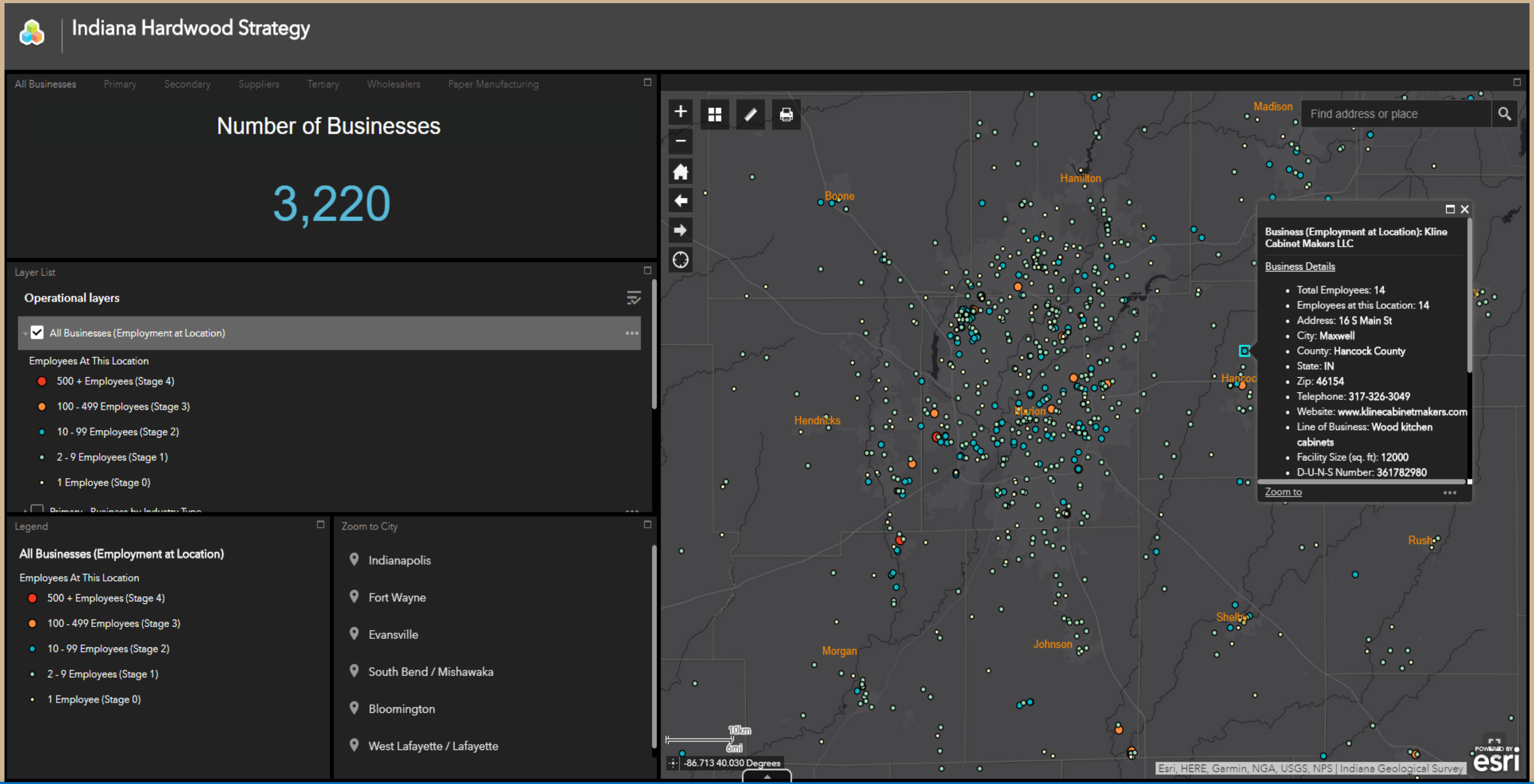
Economic Contribution Analysis (IMPLAN Analysis)

- Primary, 2ndary & Tertiary industries directly contribute $3B of added value to Indiana economy
- Indirect and induced benefits push the figure to $5.5B
- Employment multiplier is 1.71 (47,000 known workers; 18,000 additional workers supported by their spending)
- Approx $366M paid in local and state taxes by 3 sectors of the wood products industry in Indiana
- Approx $825M in federal taxes
- $1.1B total taxes.

INDUSTRY BASELINE

Interactive Mapping of Hardwood Industries

- Contains more than 3,200 businesses from Hoover's Database
- Used NAICS codes at 6-digit level, further classified into 6 sectors



INDIANA HARDWOODS STRATEGY

CHALLENGES TO GROWTH

CHALLENGES

Transportation

- 8% of Indiana’s 19,000 bridges are structurally deficient (similar to neighbors)
- Two of nation’s top 100 bottlenecks occur in Indianapolis (I-65 at I-70)
- Need improved connectivity between primary and secondary roads in south
- Railroad system is not of sufficient density for hardwood industry. Need to connect southern counties with main RR terminals in Chicago
- Need another inter-modal terminal in south
- IN has four ports, but not used much by the hardwood industry
- Weight limits on roads could be limiting (Toll Road is the exception)
- Lack of trucks and drivers is a huge problem for hardwood industry.

CHALLENGES

Workforce – Biggest Challenge!

- Huge difficulty finding entry-level labor (engineers too), despite good wages and benefits (Same for transportation sector)
- High turnover (30%)
- Hard to compete with other industries that offer “easier” work
- “Younger generation doesn’t want to work that hard”
- “Everyone is encouraged to go to college, not into the trades”
- Low unemployment rate
- Difficult finding workers who can pass a drug screen.

CHALLENGES

Technology and its Impacts

- Love-hate relationship with technology
  - Hanging on to the “old ways”
  - Averse to technology
- High start-up cost is biggest barrier to automation
- Growing interest—especially as a hedge against labor shortage
- Reluctant to replace workers, but can’t find labor
- Some jobs require human touch—can’t be automated.

CHALLENGES

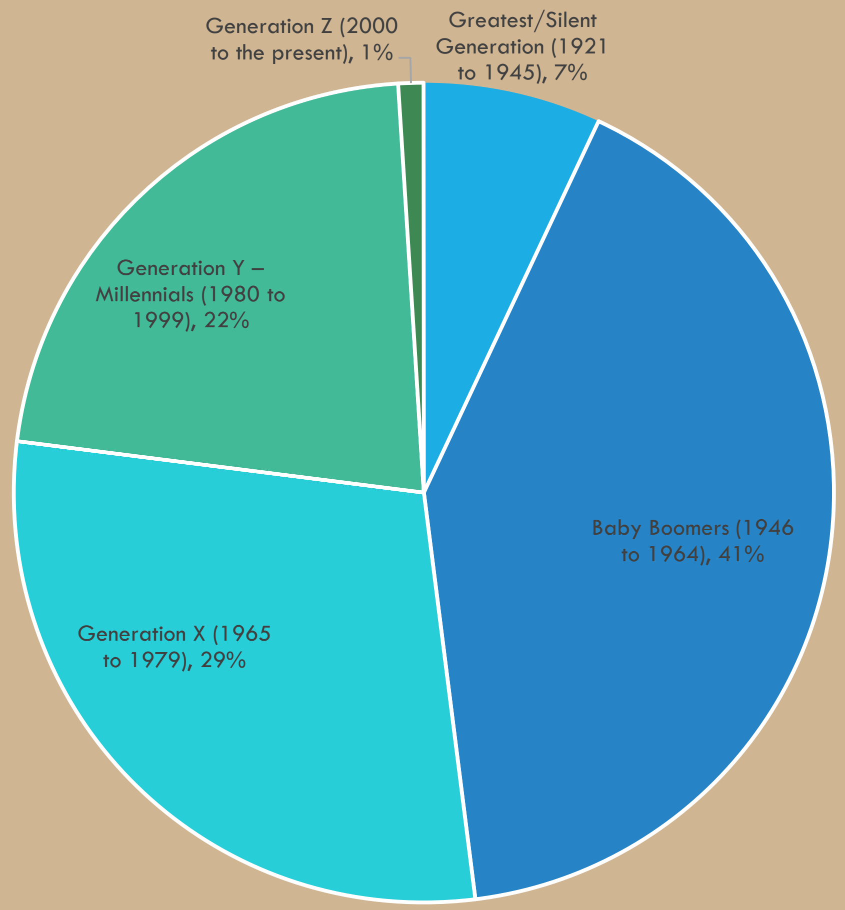
State and Federal Regulatory Environment

- Not really a problem in Indiana—some even welcome it to level the playing field
- A few issues:
  - Truck weight restrictions—difficult to estimate weight in remote locations
  - Need higher weight limits on interstates and connecting roads—maybe seasonal
  - Air quality restrictions not applied evenly across the state—greatly increase paperwork (cost) for limited benefit. Regulators can be inflexible
  - New EPA regulation may prevent companies from burning wood for heat/energy (dioxin)
  - Tariffs on steel are adding 10-15% cost to metal screws and hardware for furniture
- No apparent problems with current state tax structure.

CHALLENGES

Consumer Demand and Trends

- Changing demographic trends in the market
- Boomers and Gen X still biggest buyers
- Millennials now the largest generation, and their consumption is growing fast.



CHALLENGES

Consumer Demand and Trends -- Millennials

- Highly educated, tech savvy; research and seek references online
- Shifting away from “classic” stained wood finish and heirloom furniture
- Affecting kitchen design
  - Like a clean, open, multi-functional design
  - Smooth, painted wood finish is “hot”
  - Designers looking for contrasting colors and tones to popular hardwood floors
- Affecting office design
  - Work in open spaces
  - Smooth, painted wood furniture (or composite, steel, plastic)
  - Useful, playful vibe
  - Comfortable, “homey” feel (emphasis on softness and upholstery).

CHALLENGES

Additional Challenges

- Global market (cheap labor)
- Supply of wood is a problem for some sectors – need to cut more in Indiana!
- Opposition to cutting
- Public perceptions of the industry (irresponsible; interfering with nature)
- Need ways to encourage more timber management on private lands—to grow high-quality trees and to support sustainable harvest
- Need new markets for chips, bark and sawdust. This is a large and growing concern.

INDIANA HARDWOODS STRATEGY

COMPANIES TO TARGET

COMPANIES TO TARGET

No “Smoking Gun”

- Did not detect any obvious areas for expansion
- Hardwood industry is reasonably healthy, but reluctant to grow
- Memory of recession is fresh
- Shortage of labor, transportation and (for some) raw materials is stifling growth
- None was actively pursuing expansion (except by acquisition)
- None could identify gaps in the industry that other companies could fill.

COMPANIES TO TARGET

The Bright Spot

- Some would expand current operations (more lines, shifts, etc.) right now if they could find reliable labor and raw material.

INDIANA HARDWOODS STRATEGY

NEXT STEPS

NEXT STEPS

- Advisory Committee reviewing preliminary report
- Contractor Team incorporates edits and submits final report
- Advisory Team develops strategies and actions based on findings
- ISDA develops marketing package to implement strategies.

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QUESTIONS?