



**GEORGIA
FORESTRY
ASSOCIATION**

HOUSE RURAL DEVELOPMENT COUNCIL

10/30/2019

CAMDEN COUNTY, GA

Andres Villegas

President & CEO

Georgia Forestry Association

Why Forestry Investment Matters to Georgia

#1 PRIVATELY-OWNED TIMBERLAND

#1 HARVEST VOLUME

#1 EXPORTER OF PULP, PAPER, AND
PAPERBOARD MILL PRODUCTS

#1 EXPORTER OF WOOD FUEL

\$35.9 B ANNUAL ECONOMIC IMPACT

147,380 JOBS

\$970 M STATE TAX REVENUES

48% GROWTH OVER REMOVALS



GEORGIA
FORESTRY
ASSOCIATION

CORE PRINCIPLES



PRIVATE PROPERTY RIGHTS



SENSIBLE TAXES AND REGULATION



HEALTHY MARKETS

The background of the image is a close-up of a wood surface, showing a complex pattern of concentric and radial grain lines. The colors range from light tan to deep brown. On the left side, there is a circular, sunburst-like pattern, possibly a decorative inlay or a specific wood grain feature. The overall texture is organic and detailed.

ECONOMIC STATUS

EXISTING & ANNOUNCED SOFTWOOD LUMBER MILLS IN THE U.S. SOUTH

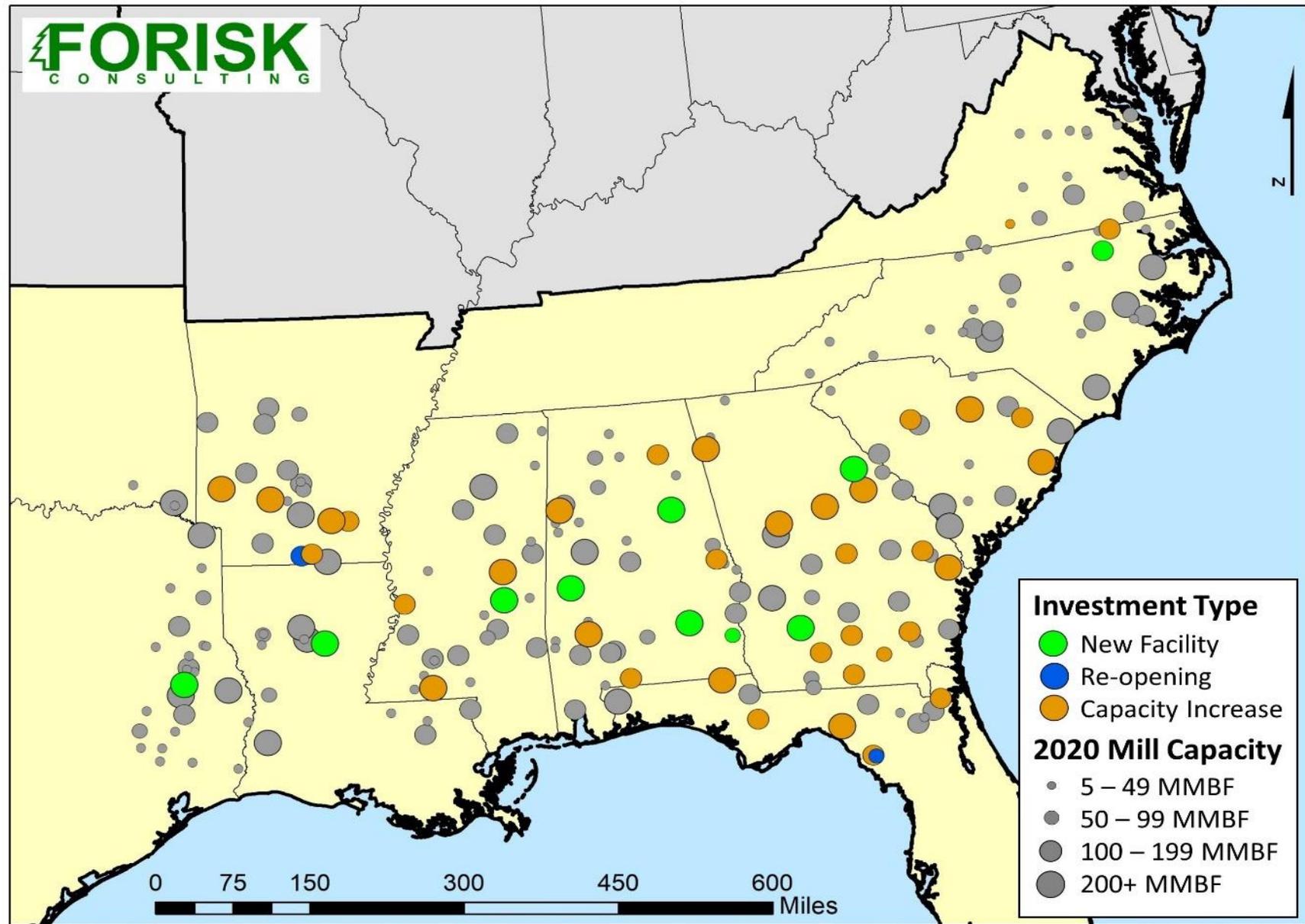
Firms allocated at least \$2.26 billion on sawmill investments or greenfield facilities from 2017-2021 in the South.

\$640 million is for facilities in Georgia (28% of total). This does not include mill purchases.

47 total announcements in 9 states. 14 announcements in Georgia (29.7%).

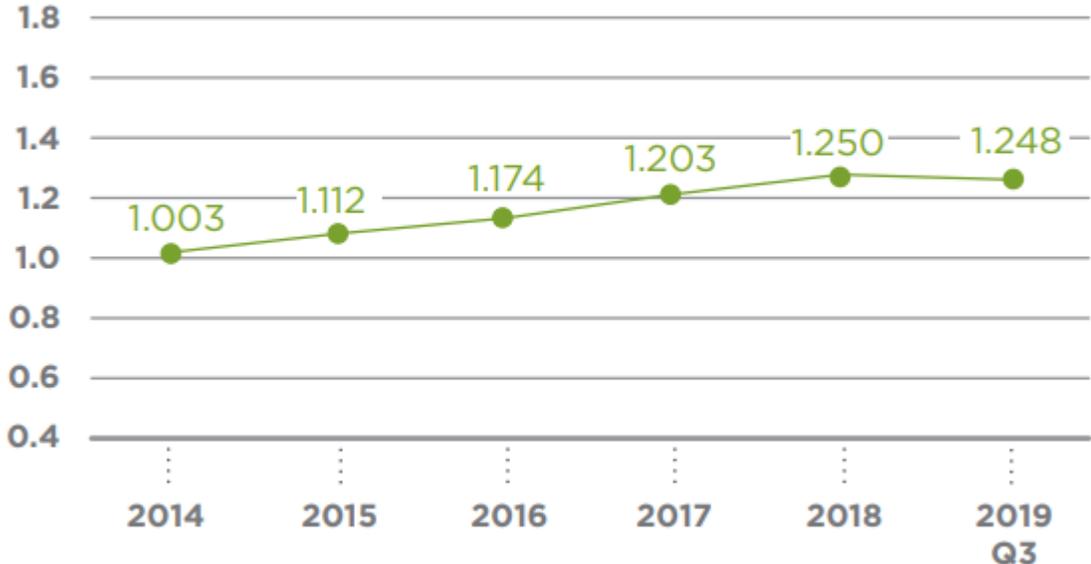
Note: size of circles corresponds to projected capacity after announced projects for 2016-2020 are complete.

Source: Forisk 2018 Multi-Client Study: North American Forest Industry Capacity



ECONOMIC TRENDS

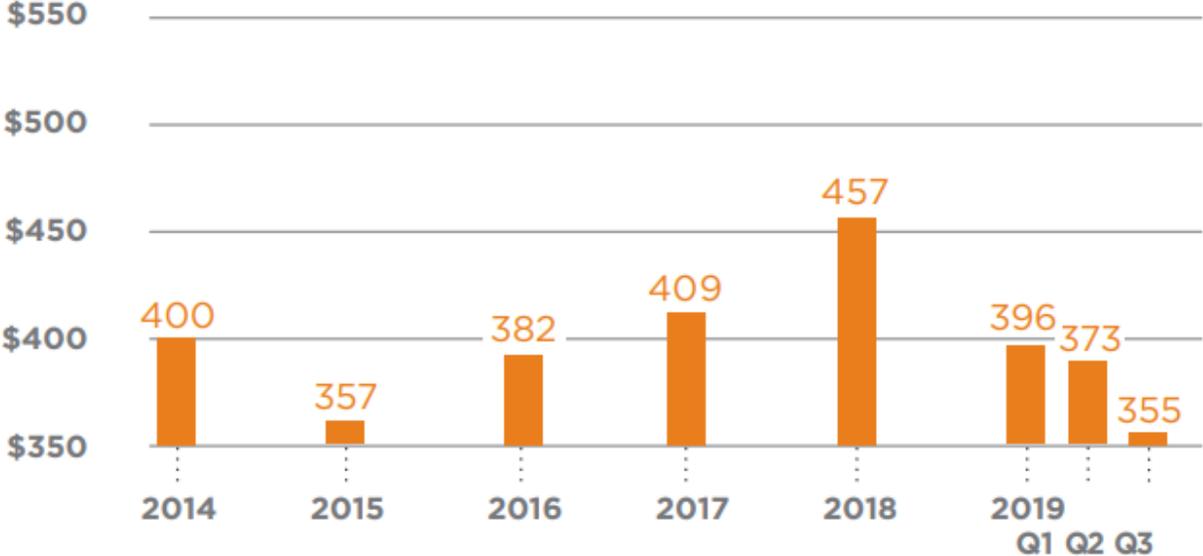
HOUSING STARTS



IN MILLIONS OF UNITS (ANNUALIZED) THROUGH AUGUST

Source: US Department of Commerce

LUMBER PRICES



SOUTHERN PINE—\$/MBF

Source: Random Lengths Southern Pine Composite Index

TRADE

CHINA TRADE

In Focus

-66%

Softwood
Lumber

-28%

Softwood
Logs

-39%

Hardwood
Lumber

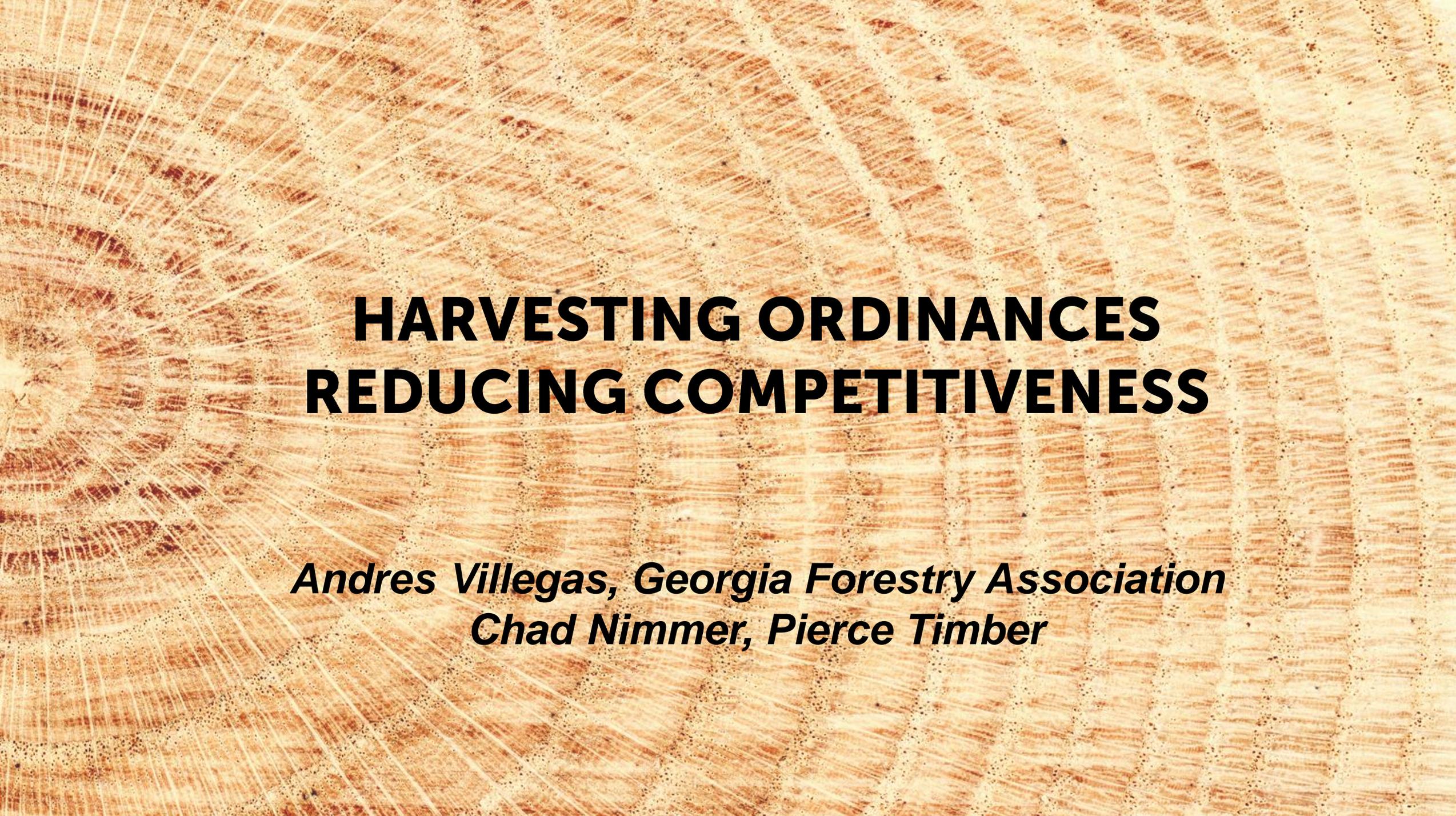
-15%

Wood Pulp

-25%

Paperboard





HARVESTING ORDINANCES REDUCING COMPETITIVENESS

*Andres Villegas, Georgia Forestry Association
Chad Nimmer, Pierce Timber*

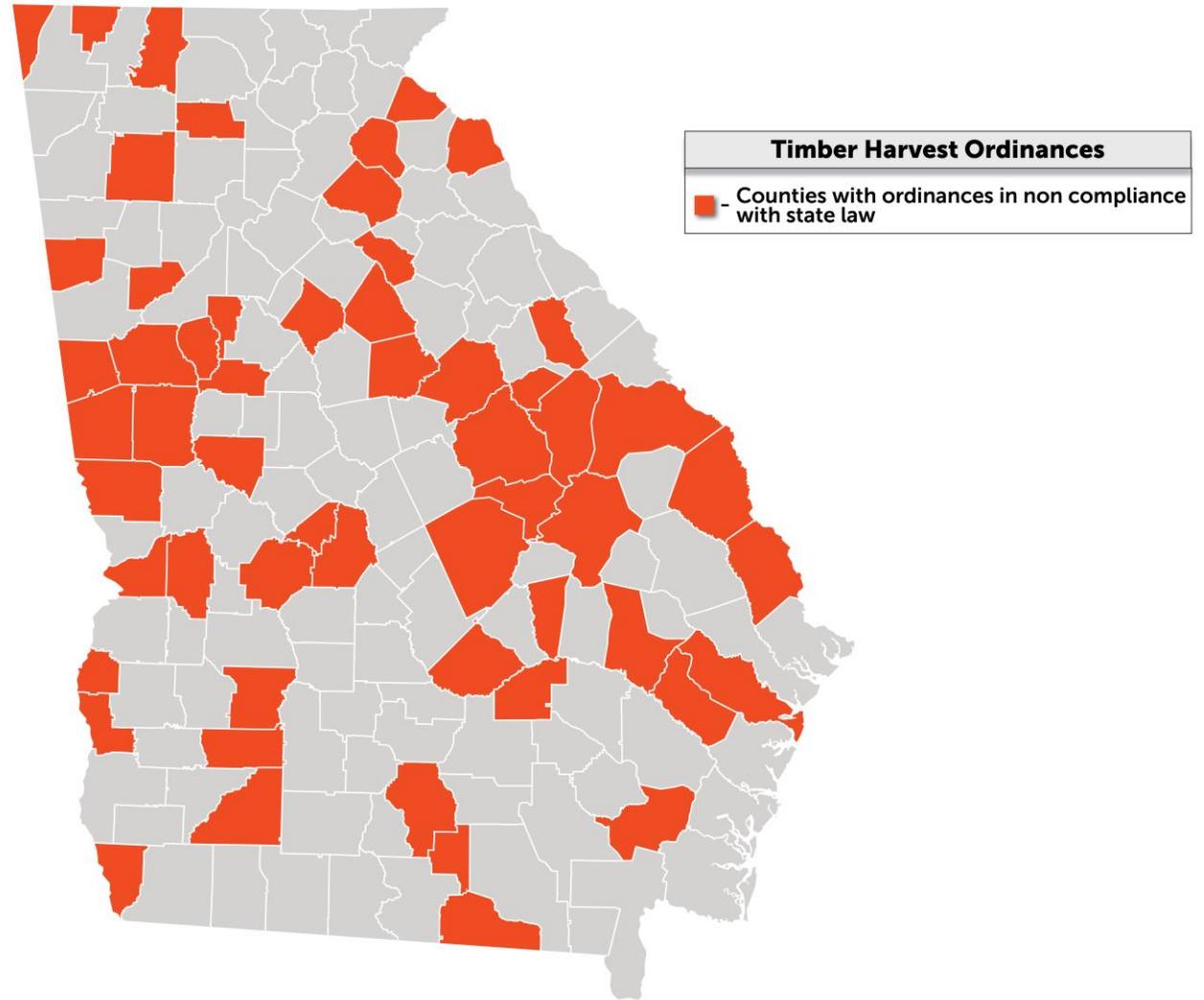
LOCAL HARVEST ORDINANCES

Log harvesting & delivery in Georgia is critically important

2 million log truck loads a year

56 counties that are significantly unaligned with 12-6-24:

- Permitting
- Bonding
- Extraneous requirements
- Broad shutdown authority



LOCAL HARVEST ORDINANCES

In Focus: Dougherty, Clayton, Meriwether, Catoosa, Clay



Meriwether County
Ingress/egress permit + 72 hour notice



Catoosa County
\$50,000 bond + application fee



Clay County
Permit language and permit fee



Clayton County
\$1/acre harvest fee + 25 foot buffer



Dougherty County
Construction grade entrance requirements

LOCAL HARVEST ORDINANCES

ACCG + GFA Discussing Possible Solutions that Include:

- Statewide harvest notification system that would replace the county-by-county system
- Narrowing the scope of the bond to on address damage to roads at the point of ingress/egress onto the County road
- Provide a method for due process regarding bond utilization
- Laddered bond amounts for harvesters who have had their bond pulled
- Increase fines for harvesters that fail to submit harvest notifications
- Collaborate on education efforts of County government officials



WORKFORCE DEVELOPMENT

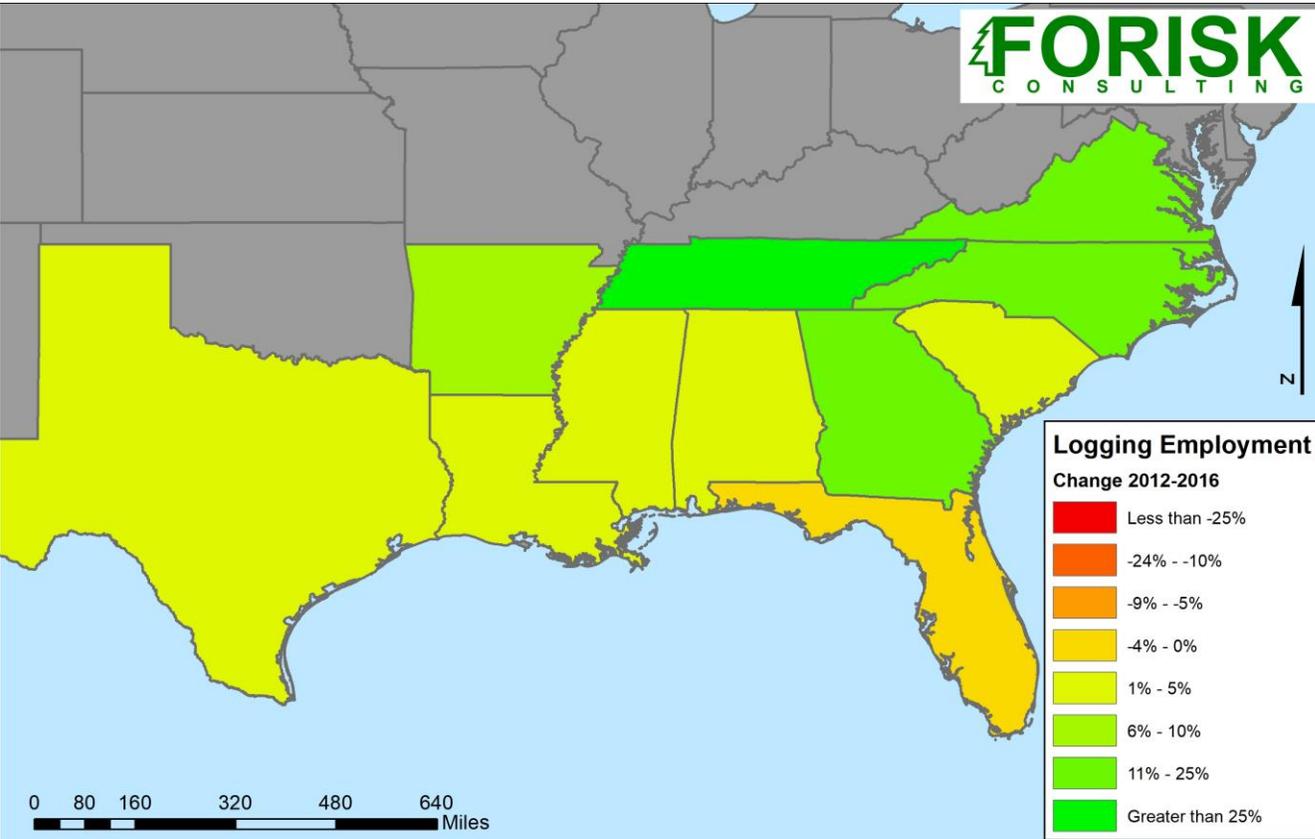
Chad Nimmer, Pierce Timber

Dr. Glenn Diebert, Coastal Pines Technical College

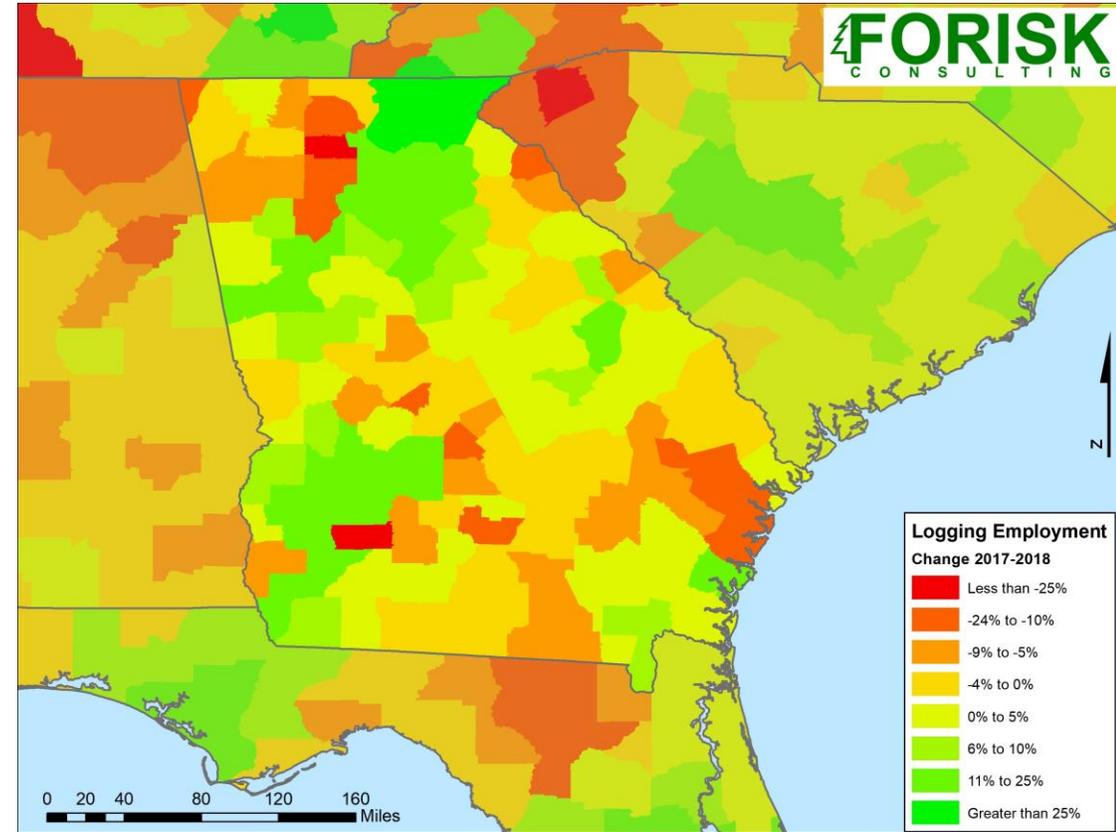
Andres Villegas, Georgia Forestry Association

LABOR

Southern Changes in Logging Employment Post Recession (2012-2016)



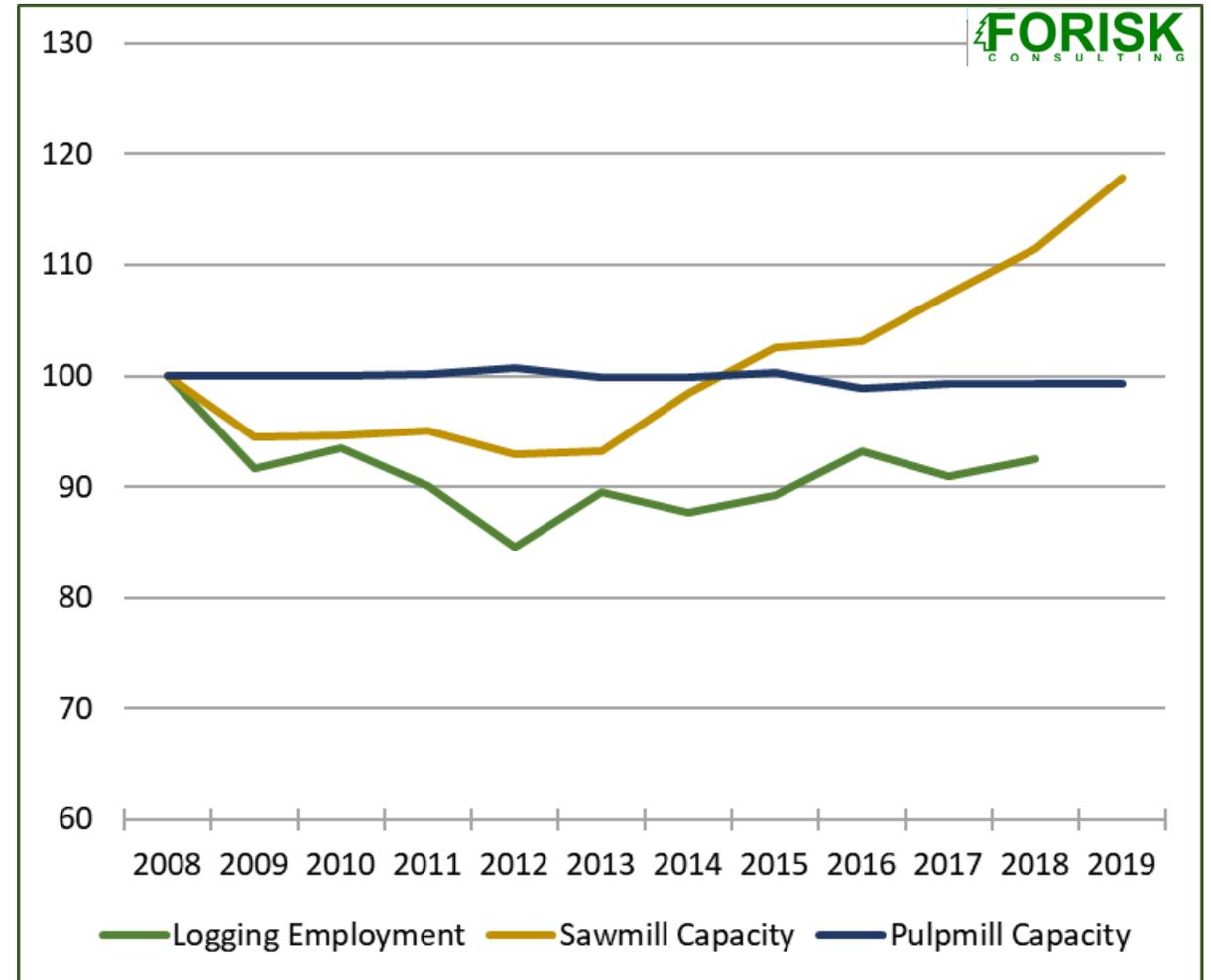
2017-2019 Georgia Logging Employment Declined Across Much of the State



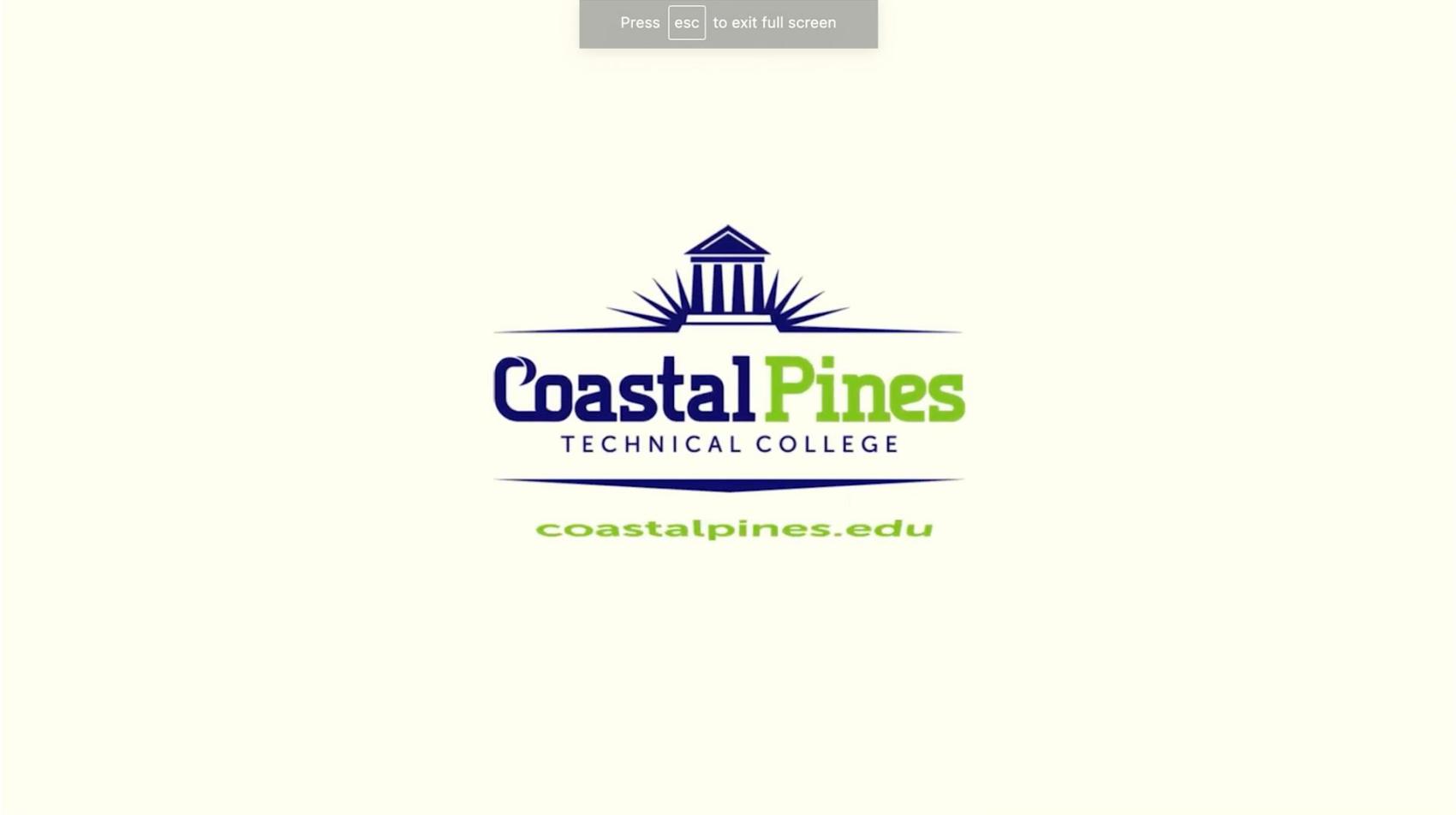
LABOR

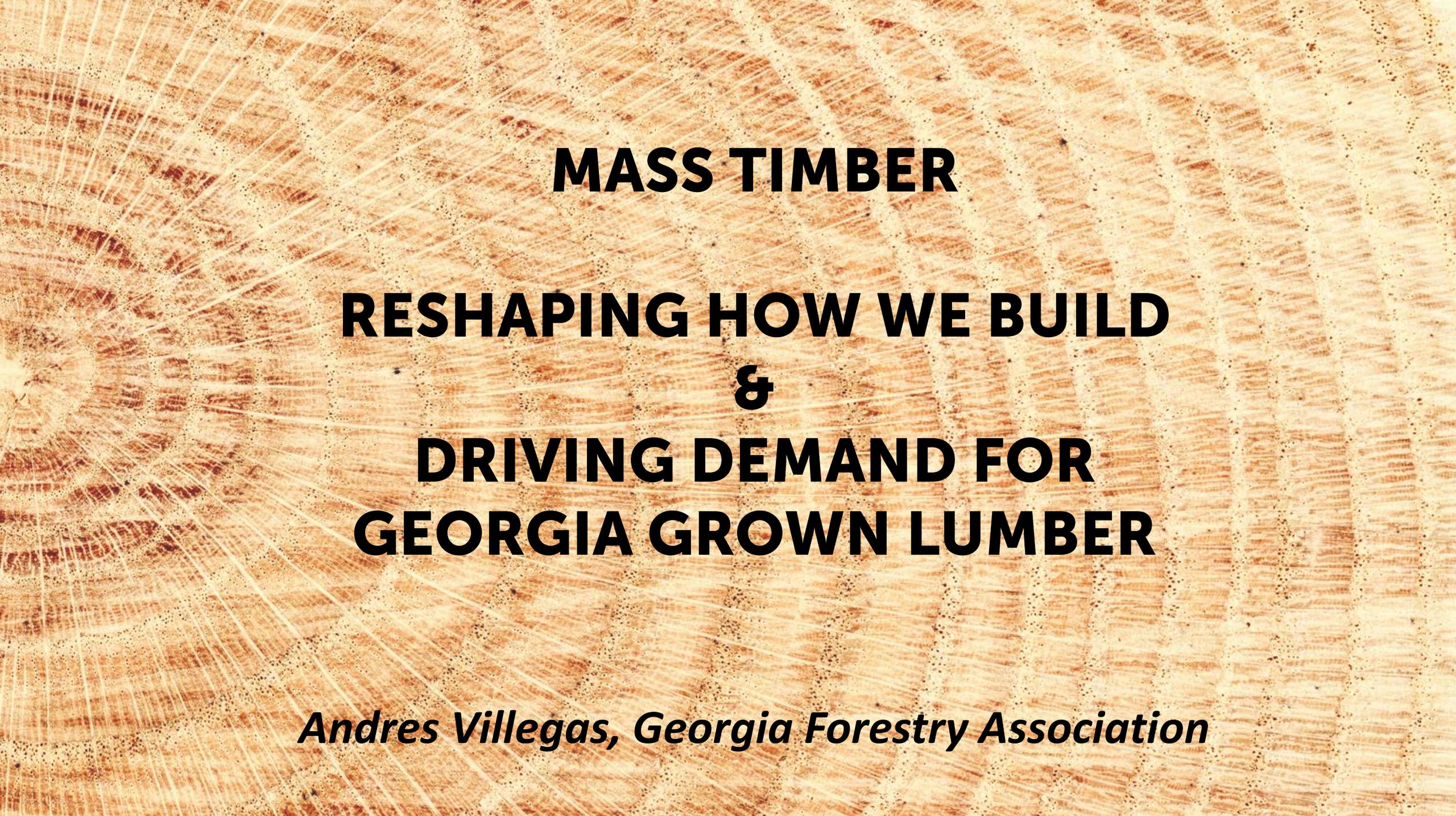
- Sawmill capacity has grown nearly 20% in Georgia since 2008.
- Pulpmill capacity is largely unchanged.
- Logging employment is nearly 10% lower.
 - Growth over the past five years has not kept pace with the sawmill industry
- Logging industry is appreciably older than average workforce:
 - 2018 Logging avg – 48.5 yrs
 - 2018 Total Workforce avg – 42.2 yrs

Source: Shawn Baker, FORISK



LABOR *Technical Colleges are Critical*





MASS TIMBER

RESHAPING HOW WE BUILD

&

DRIVING DEMAND FOR

GEORGIA GROWN LUMBER

Andres Villegas, Georgia Forestry Association

WHAT IS MASS TIMBER



**CROSS LAMINATED
TIMBER (CLT)**



**NAIL LAMINATED
TIMBER (NLT)**



**DOWEL LAMINATED
TIMBER (DLT)**



**MASS PLYWOOD
PANEL (MPP)**



**GLUE LAMINATED
TIMBER (GLUELAM)**

MASS TIMBER *Approved by 2021 IBC*

code UPDATES

Groundbreaking: Tall Mass Timber Construction Types Included in 2021 IBC

Historic Action by ICC Follows Ad Hoc Committee Recommendations

By Kenneth Bland, P.E.

The 2021 *International Building Code* (IBC) will introduce three new types of construction for fire-resistance-rated mass timber structures, the first significant addition to the types of construction in many years. Although still considered combustible construction, the structural frames of these buildings are designed for integrity in the unlikely event of fire exposure.

The Governmental Members of the International Code Council (ICC) approved a package of 14 proposals to recognize these new types of construction and related provisions. ICC's rigorous code development process has led to the recognition of a strong, low-carbon alternative to traditional materials in the building and construction industry. These changes expand the use of mass timber for larger and taller wood buildings up to 18 stories – a move welcomed by architects, engineers, and building developers.

The new construction types are designated as:

- **Type IV-A** – Maximum 18 stories, with non-combustible protection such as gypsum wallboard on all mass timber elements and providing 2- and 3-hour fire resistance.
- **Type IV-B** – Maximum 12 stories, limited exposed mass timber is permitted and providing 2-hour fire resistance.
- **Type IV-C** – Maximum 9 stories, mass timber designed for 2-hour fire resistance.

The approval concludes several years of scientific research and testing, verifying that mass timber meets the performance standards called for by the most widely adopted U.S. building code.

code-change proposals in the ICC process for the 2021 edition of the International codes.

The AHC-TWB determined fire testing was necessary to validate and verify that the performance level of passive fire protection intended by the IBC was retained. Five large-scale fire tests were developed to simulate characteristics of the three new construction types proposed. Using cross-laminated timber (CLT) and glued laminated timber, a two-story building was constructed to resemble a fully furnished, one-bedroom apartment on each level. Additionally, various configurations of exposed mass timber walls and ceilings, in addition to automatic sprinkler system effectiveness, were evaluated. Corridors and an interior stairwell were instrumented to assess tenability conditions.

- **Test 1:** a mass timber structure with all interior surfaces fully protected with 2-layers of gypsum wallboard was subjected to a large furnishings-and-contents fire. The test was terminated after three hours without significant charring on the protected wood surfaces of the structure.
- **Test 2:** approximately 30 percent of the CLT ceiling area in the living room and bedroom were left exposed. The test was terminated after four hours, providing additional time to determine if there would be continued burning from the exposed CLT without intervention to extinguish the fire. Notably, once the fire consumed the furnishings and contents, the exposed CLT essentially self-extinguished due to the formation of char that protected the underlying wood and a gradual reduction in the room temperature.

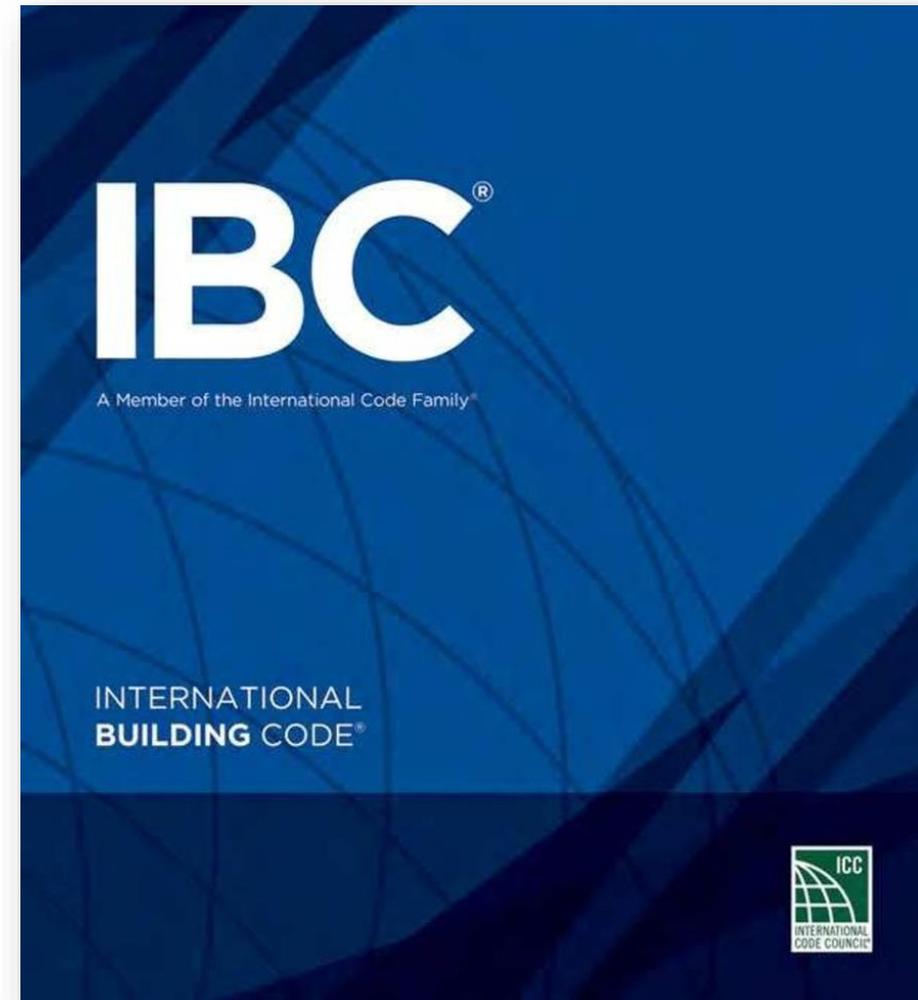
fire was allowed to grow in the compartment for 23 minutes before water was supplied to the sprinklers, which quickly controlled the fire.

The fires in Tests 1 – 3 were left to free-burn and reached a maximum peak heat release rate of 23 megawatts. The tests demonstrated that, if the required sprinkler system failed to operate, the resulting fire would eventually decay to a size easily controlled with limited intervention and without propagating to the next compartment.

After two years of study, the AHC-TWB submitted their proposals for consideration during the ICC 2018 Group A code development cycle. ICC's code development process involves several public opportunities for new code proposals to be deliberated. First, proposals are considered by an ICC Code Development Committee. All 14 of the AHC-TWB proposals were recommended for approval or approval as modified, after considerable testimony. The proposals were deliberated a second time at the Public Comment Hearings where, once again, they received overwhelming support. Final approval occurred during ICC's online voting process, cdpACCESS. Official voting results were announced in February 2019, and each of the 14 tall mass timber proposals was approved.

Moving Forward

ICC's 2021 model code development cycle continues throughout 2019 with the consideration of three additional proposals which address inspection and structural code requirements. The 2021 IBC, containing the complete package of tall wood proposals, is expected to be released in late 2020, along with the full set of 2021 codes.



MASS TIMBER

Save Time and Money

Case Study: First Tech Credit Union Hillsboro, OR

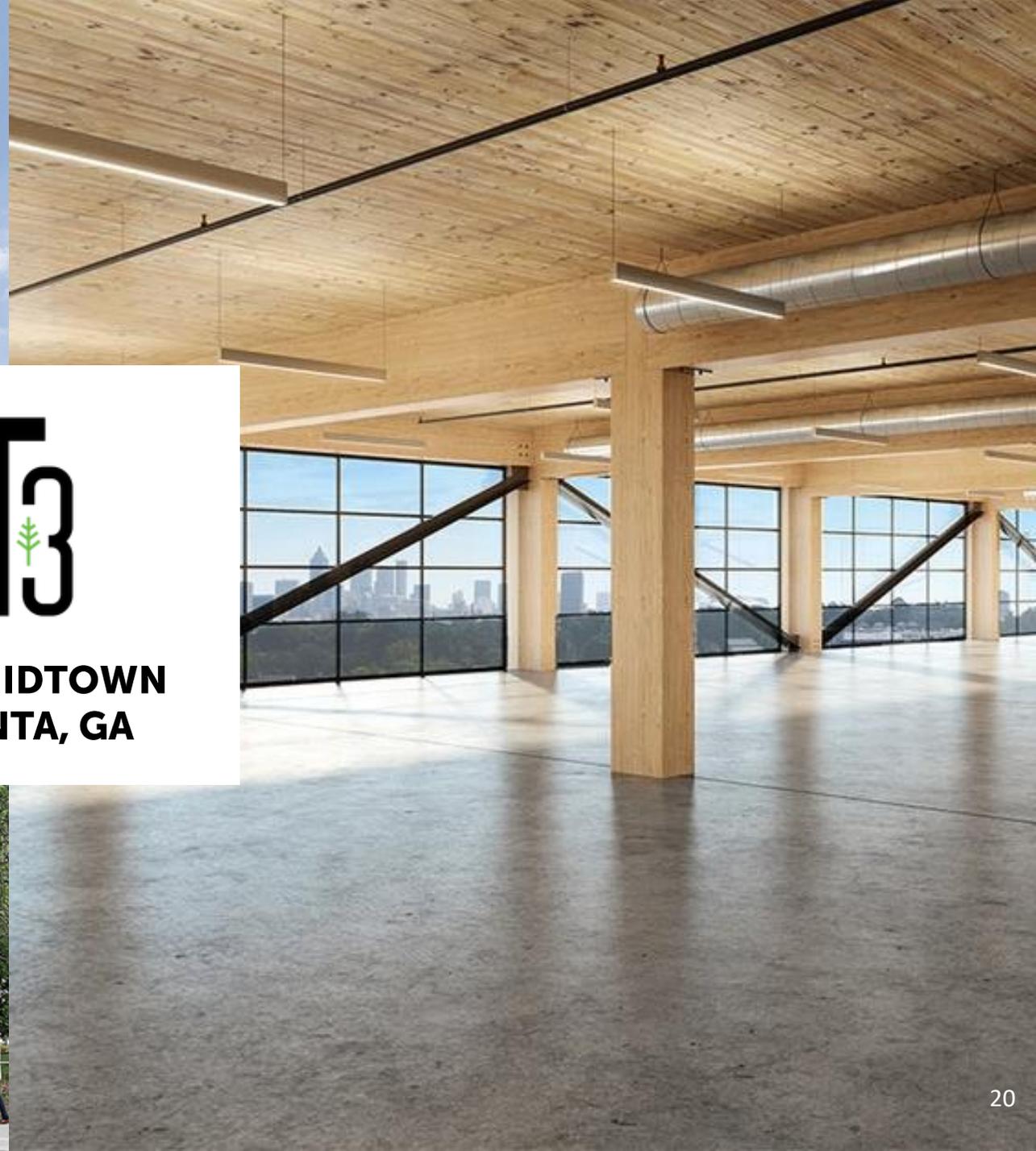
- 4% overall cost savings (vs. traditional construction)
- 4 months less construction time
- 156,000 square foot structure
- 4,621 tons of carbon sequestered
- 1,788 tons of carbon saved (vs. traditional construction)

“We allowed steel to compete with mass timber throughout the evaluation,” said William Silva, Swinerton preconstruction manager. **“From time to erect, fireproofing, foundation systems, and other criteria, wood came out on top every time.”**





**WEST MIDTOWN
ATLANTA, GA**



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