

GEORGIA STATE RAIL PLAN



EXECUTIVE SUMMARY

2021



STATE RAIL PLAN PURPOSE

Georgia's railroads are integral to the economy by keeping people and business moving. GDOT prepares a State Rail Plan every five years as required by the Federal Railroad Administration with a purpose of setting the vision for freight and passenger rail in the state for the next 20 years. The 2020 Georgia State Rail Plan provides updates on conditions that have changed and important short term and long term opportunities for investment including:

- The increasing demand for passenger and freight rail services
- Upgrades to the GDOT owned rail to ensure economic competitiveness
- Supporting operational improvements to maximize efficiency of the rail network and multimodal connections

Since the last plan completed in 2015, the state has made significant investments in rail infrastructure including the opening of the Mason Mega Rail project at the Port of Savannah and has leveraged \$18 million in CRISI grants to improve the short line railroad infrastructure. These investments in rail create a competitive edge for Georgia for growth in freight and logistics. Highlights of the 2020 Georgia State Rail Plan are:

- Role of the rail system in Georgia
- Benefits to the state
- Rail system trends and needs
- Potential investments and opportunities for passenger and freight rail
- Funding sources available for system investments

STATE RAIL PLAN VISION

A SAFE, EFFICIENT, AND RELIABLE STATE RAIL SYSTEM THAT EXPANDS ACCESS AND MOBILITY FOR PEOPLE AND GOODS TO SUSTAIN AND STRENGTHEN GEORGIA'S ECONOMIC COMPETITIVENESS

STATE RAIL PLAN GOALS & OBJECTIVES

 Enhance rail system **SAFETY** and **SECURITY**

 Maintain and improve rail assets to **ENHANCE RELIABILITY**

 Support an **IMPROVED** and **EXPANDED PASSENGER RAIL SYSTEM**

 Promote rail as an **ENERGY** and **ENVIRONMENTALLY SUSTAINABLE CHOICE**

 Upgrade and expand **CONNECTIVITY** and **ACCESS** to rail for people and goods

 Further Georgia's **ECONOMIC DEVELOPMENT** and **COMPETITIVENESS** through the **STATEWIDE REACH** of RAIL

STATE RAIL PLAN STAKEHOLDER OUTREACH

A broad range of stakeholders were identified and invited to participate in the rail planning process. This included the state's: railroads, shippers, rail passenger users, industrial and manufacturing sectors, state, regional, county and city government agencies, elected and appointed public officials, economic development and business interests, special interest and advocacy groups, and the public.



Outreach activities included:

- 3 Steering Committee Meetings
- 7 Festival Outreach Events
- 3 Regional Workshops
- 11 Stakeholder Interviews
- 550 Survey Participants
- 28 RR Questionnaires

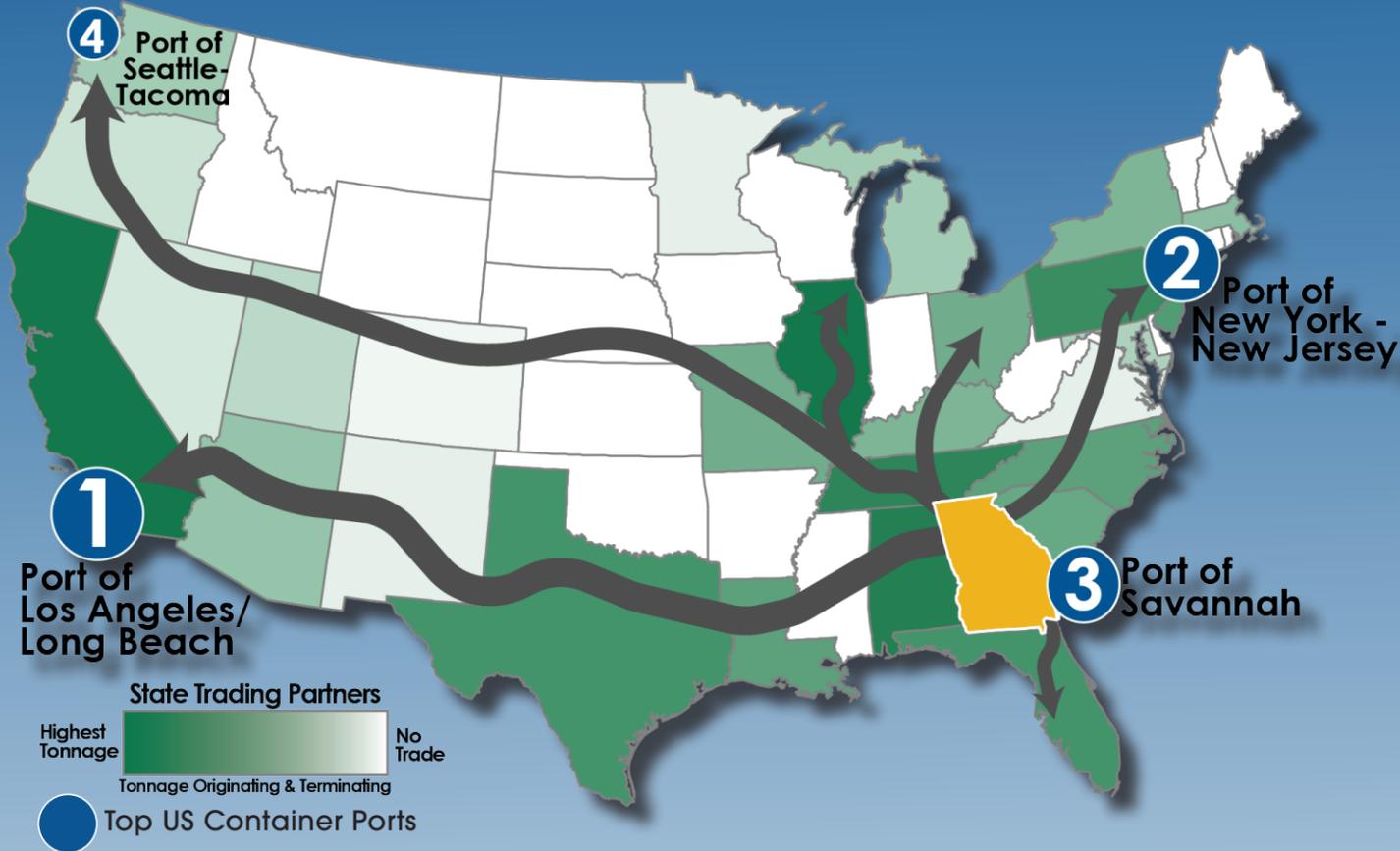
Stakeholders identified several issues and opportunities:

- Blocked crossings in several locations across the state
- Unused rail corridors
- Port issues and opportunities
- Economic development and freight mobility
- Short line railroad improvements
- Expansion of passenger rail



Georgia's Rail Impact: National & Economic

Georgia serves as the epicenter of rail in the Southeast with connections throughout the US.

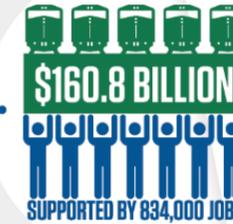


Georgia's strong national position in rail is demonstrated by our change in rankings for key areas assessed by the American Railroad Association.

	NUMBER OF FREIGHT RAILROADS	ORIGINATED RAIL TONS	ORIGINATED RAIL CARLOADS
2017	8 TH	13 TH	5 TH
2012	13 TH	17 TH	7 TH

Georgia's rail system is an economic powerhouse and critical piece of our transportation infrastructure.

According to the economic impact analysis, rail services and the usage of rail services in Georgia generate **\$160.8 billion** dollars of economic output from both passenger and freight rail activity, and from railroad employees in the state.



This **\$160.8 billion** is supported by over **834,000 jobs** in the state, either directly or indirectly, who support industry supply chains or worker spending.



This equates to approximately **one in seven** of every worker in Georgia impacted by the railroad industry. Collectively, these **834,000** workers earn **\$46.3 billion** of income.



Railroads, their users, suppliers, and employees generate **\$6.5 billion** in state and local tax revenue.



17X
MORE TONS PER ROUTE MILE

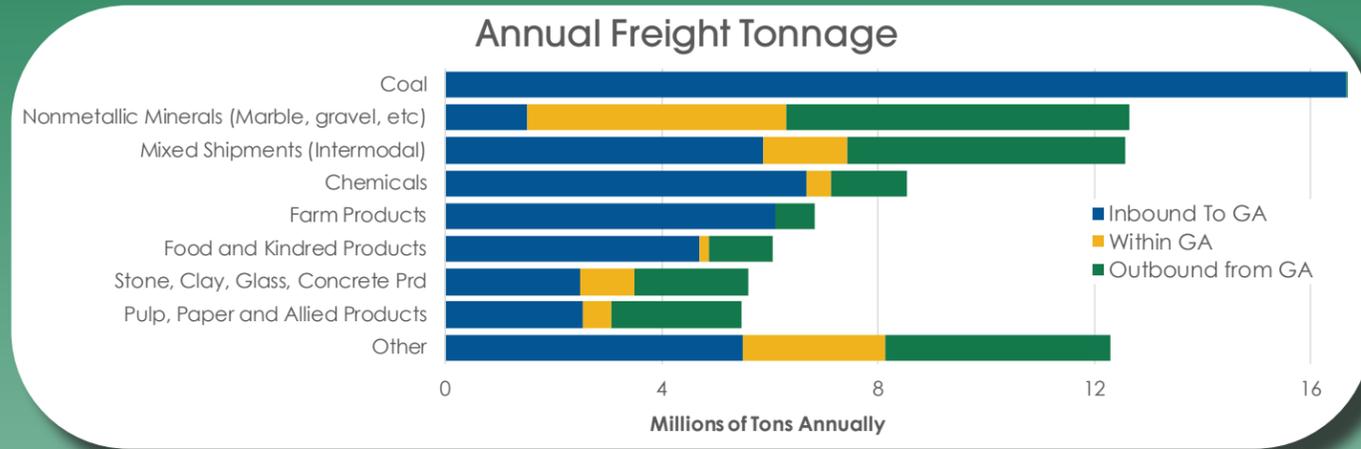


Rail offers an advantage for shipping goods and connecting to regional intermodal hubs and inland ports, especially for containers by providing a competitive option compared to moving goods by truck.

RAIL TRENDS in Georgia

The Top 3 Commodities transported by rail in Georgia are:

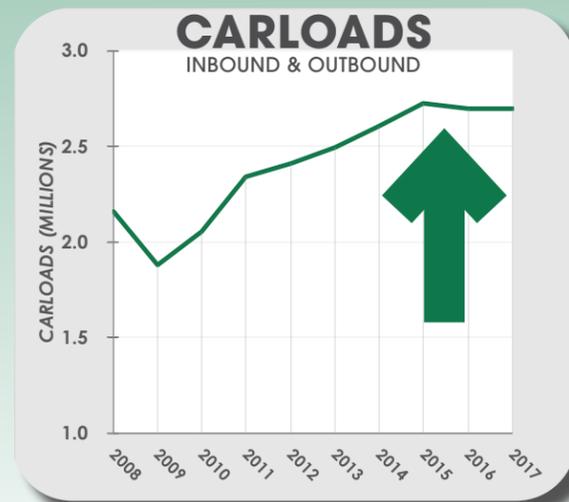
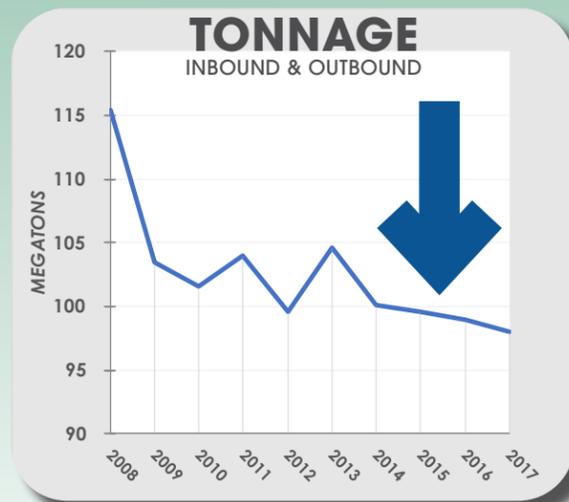
- Coal - exclusively inbound to Georgia
- Nonmetallic Minerals
- Intermodal (Container) Shipments



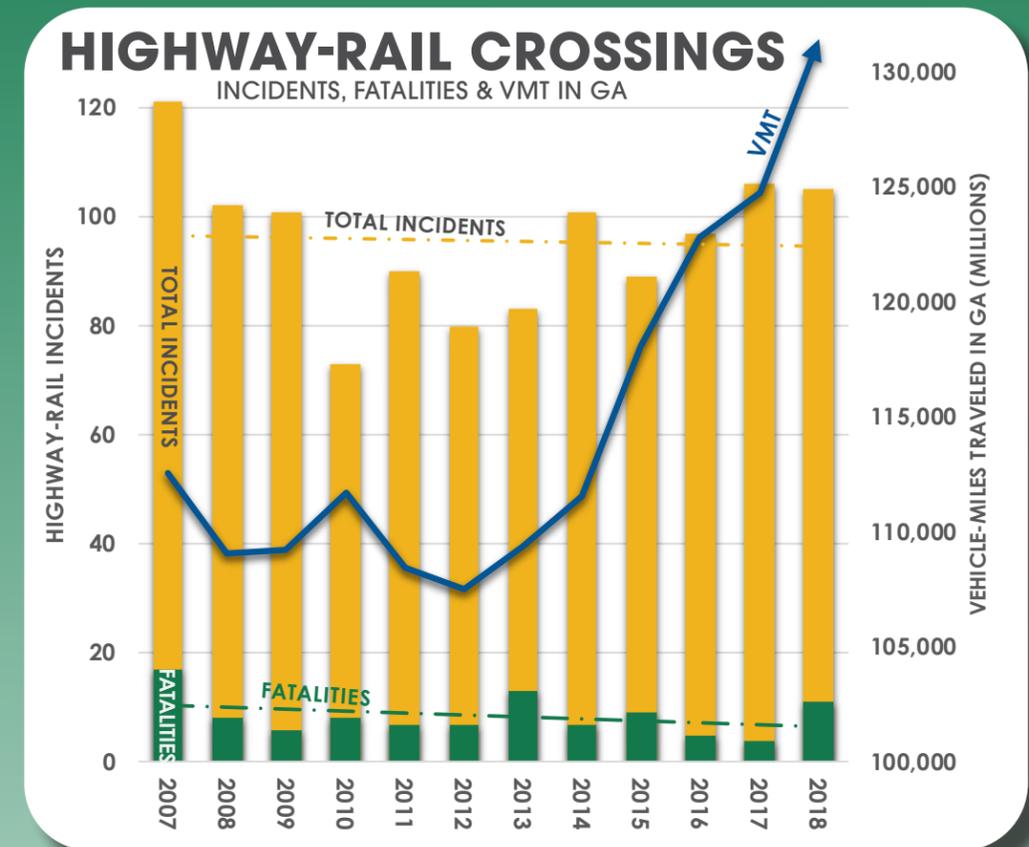
Freight rail traffic is measure in two ways: by total weight shipped - measured in Megatons, or by Carloads - the actual number of loaded railcars transported.

In the last decade, **Rail TONNAGE** in Georgia has **fallen** due to a reduction in the **volume of coal** being shipped into the state as power generation shifts away from coal.

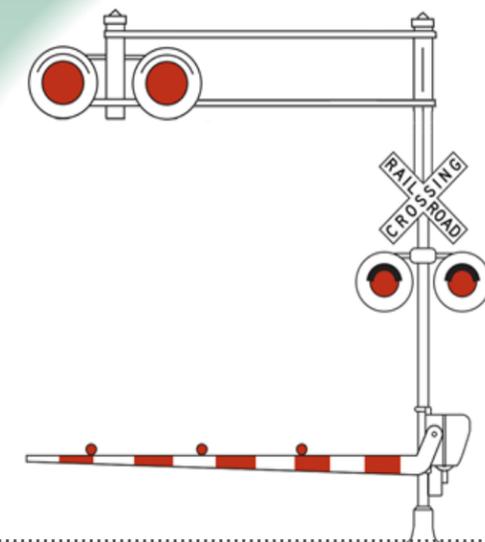
However, over the same period, **Rail CARLOADS** has **increased** with the rise in **intermodal (container) traffic** in the state. This increase in Intermodal traffic has been aided by decades of steady growth at the PORT of SAVANNAH, which has grown to become the 3rd largest container port in the United States.



Safety at Georgia's highway-rail crossings has **IMPROVED** due to ongoing investment in crossing improvements. GDOT continues to identify, reduce, and eliminate hazards at RR crossings.

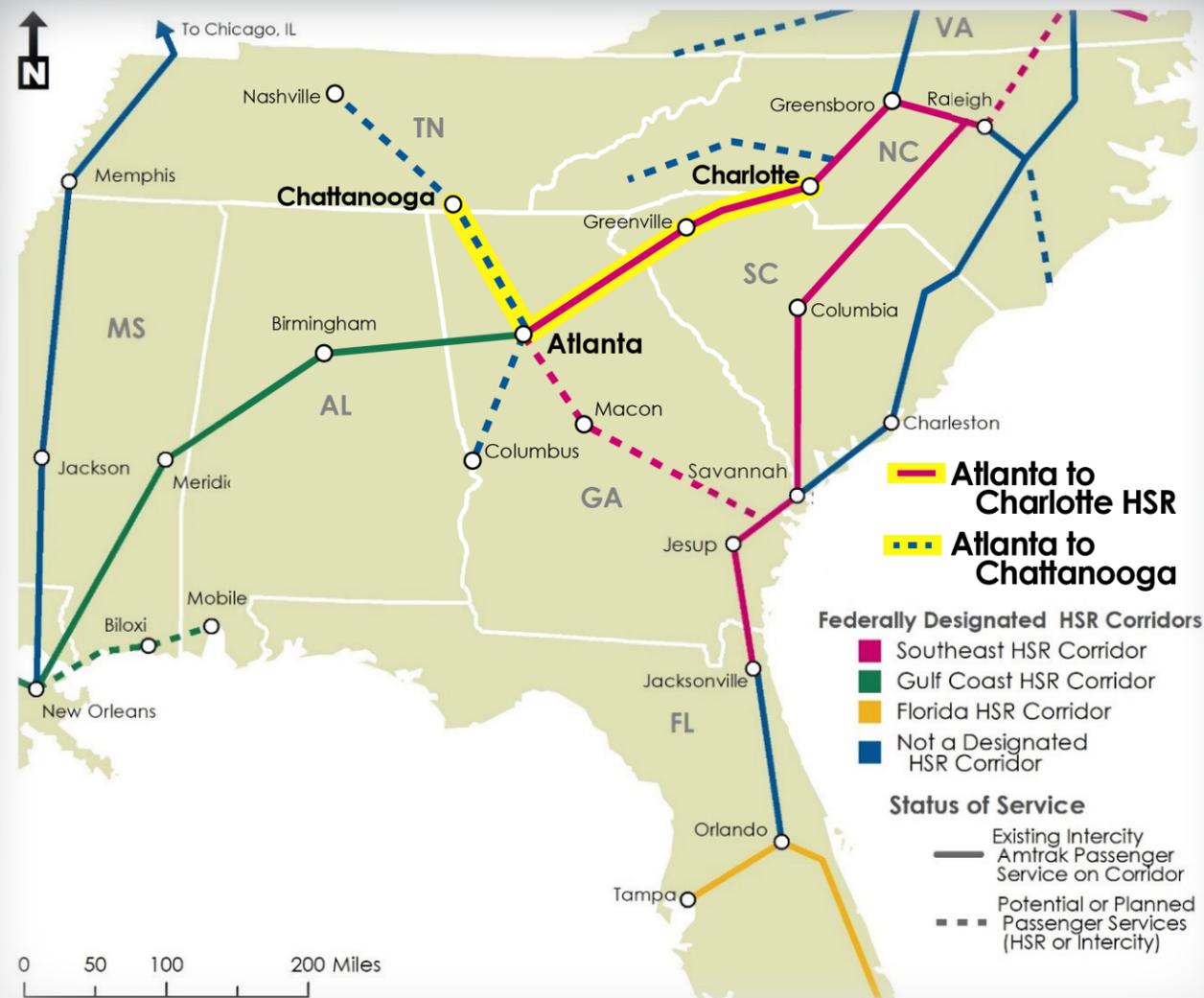


One of GDOT's most important roles related to rail is to minimize conflicts between trains and other users at highway-rail grade crossings. Crossing safety improvements have been an ongoing effort through GDOT's administration of the federal **Railway-Highway Crossings (Section 130) Program**. GDOT invests **\$11.5 million** a year or more to improve crossing safety and has demonstrated success. However, total vehicle miles traveled in Georgia and railroad traffic are both increasing, therefore more funding is necessary to maintain and improve safety across Georgia's road-rail network.



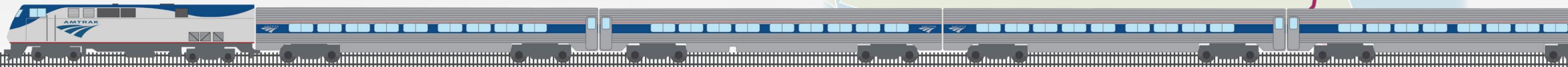
PASSENGER RAIL in Georgia

SINCE 2015, GDOT has invested over \$6 million in advancing passenger rail service with the completion of a tier 1 Environmental Impact Study for both **Atlanta to Charlotte High Speed Rail** and **Atlanta to Chattanooga Passenger Rail**.



Project sponsors are needed to advance the implementation of Passenger Rail in the state. Innovative financing options and private sector sponsors are promising solutions for both Georgia and the nation.

Georgia is served by four Amtrak routes. Amtrak ridership is expected to increase 20% by 2040. GDOT supports the expansion of rail service, station upgrades, and operational improvement plans by Amtrak and will continue to foster partnerships that improve passenger rail growth and efficiency in the State. Planning work in Georgia has also explored improvements to existing Amtrak rail stations.



Rail Opportunities SEA & INLAND PORTS

The connection of rail to the Ports in Georgia is a powerful economic engine that provides Georgia with a competitive advantage through fast connections nationally and globally. Recent investments of \$118 million in port growth and rail connections drive the capacity and ability of the rail and port network to increase job growth, attract new commerce and sustain economic competitiveness.

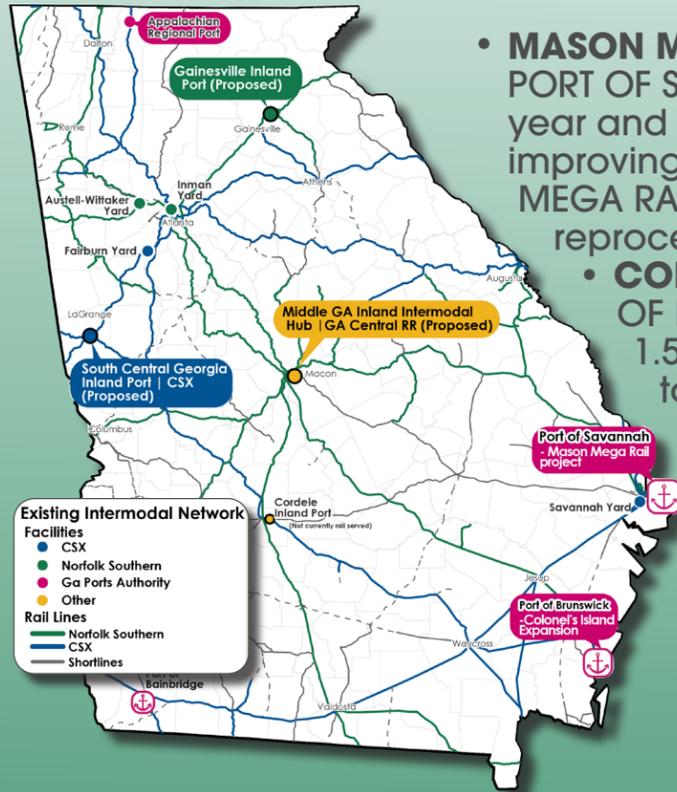
Various projects are planned and underway throughout the state:

SEAPORTS

- **MASON MEGA RAIL** doubles rail capacity at the PORT OF SAVANNAH to 1-Million container lifts per year and allows CSX and NS to build 10,000' trains improving reliability and reach nationally. MASON MEGA RAIL also improves efficiency by reducing reprocessing at interim yards.
- **COLONEL'S ISLAND** auto facility at the PORT OF BRUNSWICK plans to increase capacity to 1.5 Million vehicles per year. They have plans to add an additional rail track to further the access of Class I railroads from the Port of Brunswick to the rest of the country

INLAND PORTS:

- **Appalachian Regional Port** opened in Aug 2018 and performed more than 27,000 annual lifts
- **Northeast Inland Port** is a planned facility in Gainesville / Hall Co.
- Proposed facilities in South Central GA and Middle GA/Macon



APPALACHIAN REGIONAL PORT MURRAY COUNTY



IMAGE SOURCE: GA PORTS AUTHORITY

WHAT IS AN INLAND PORT ?

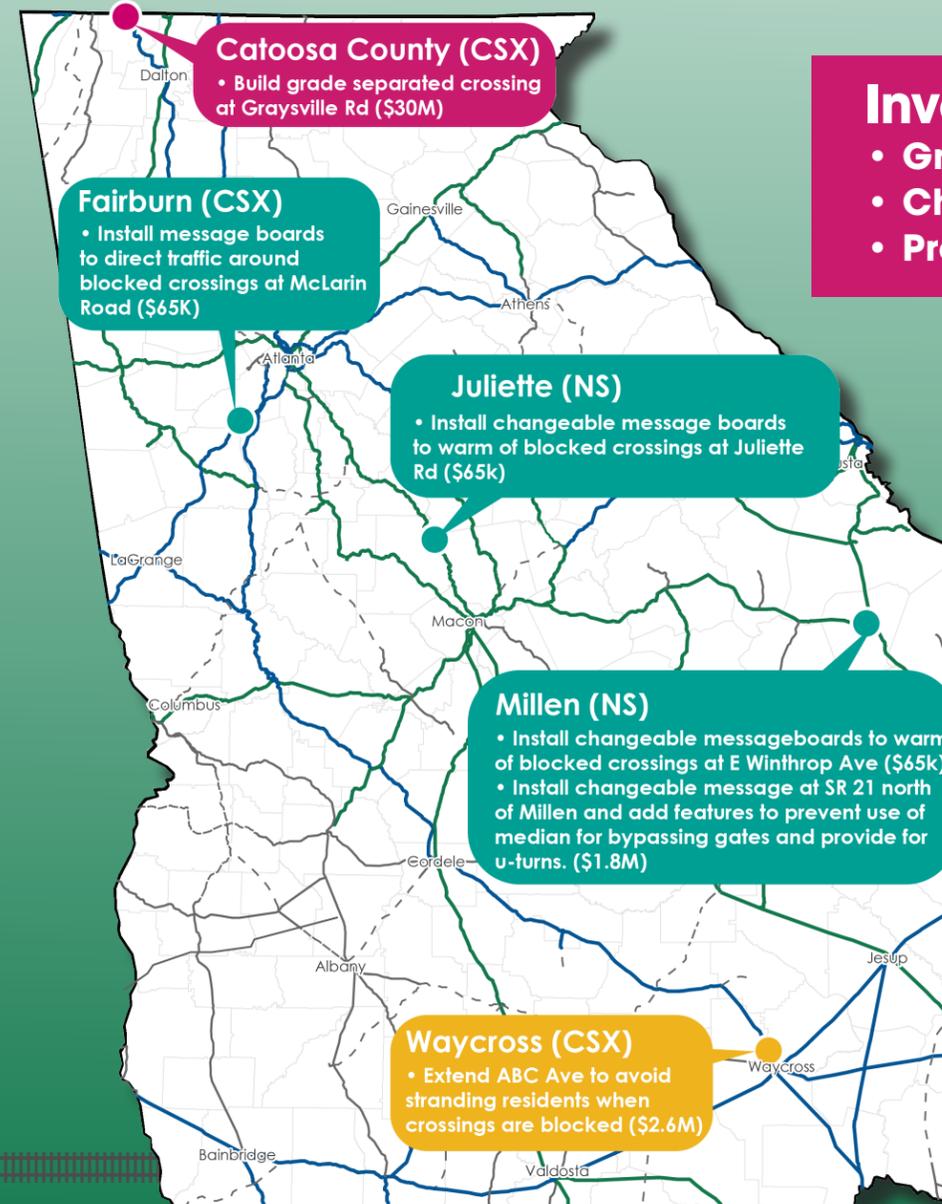
An INLAND PORT is an intermodal terminal that provides rail service between a seaport and an inland location. Inland Ports can help:

- Lower cost to/from Port of Savannah
- Decrease truck traffic on congested highways
- Increased container availability and balance
- Promote economic development near facilities

Rail Opportunities **BLOCKED CROSSINGS**

In some areas, highway-rail crossings are blocked for extended periods of time due to ongoing changes in railroad industry operations. Railroads have prioritized operating fewer total trains while maintaining the throughput of goods. This has resulted in much longer trains which when stopped block more crossings.

These blockages create not only mobility issues —because motor vehicle and pedestrian traffic is impeded—but also safety issues. They can block first responders from responding to calls, and if pedestrians cannot locate a nearby safe crossing around the train, they may choose to traverse the active railroad tracks before the train moves, leading to risk of serious injury or death.



Investment needed for:

- Grade Separation Projects
- Changeable Message Boards
- Providing alternate routes

Crossing Projects

Long-Range Investment Program

- Grade Separation
- ITS - Changeable Message Boards
- Provide Alternate Route

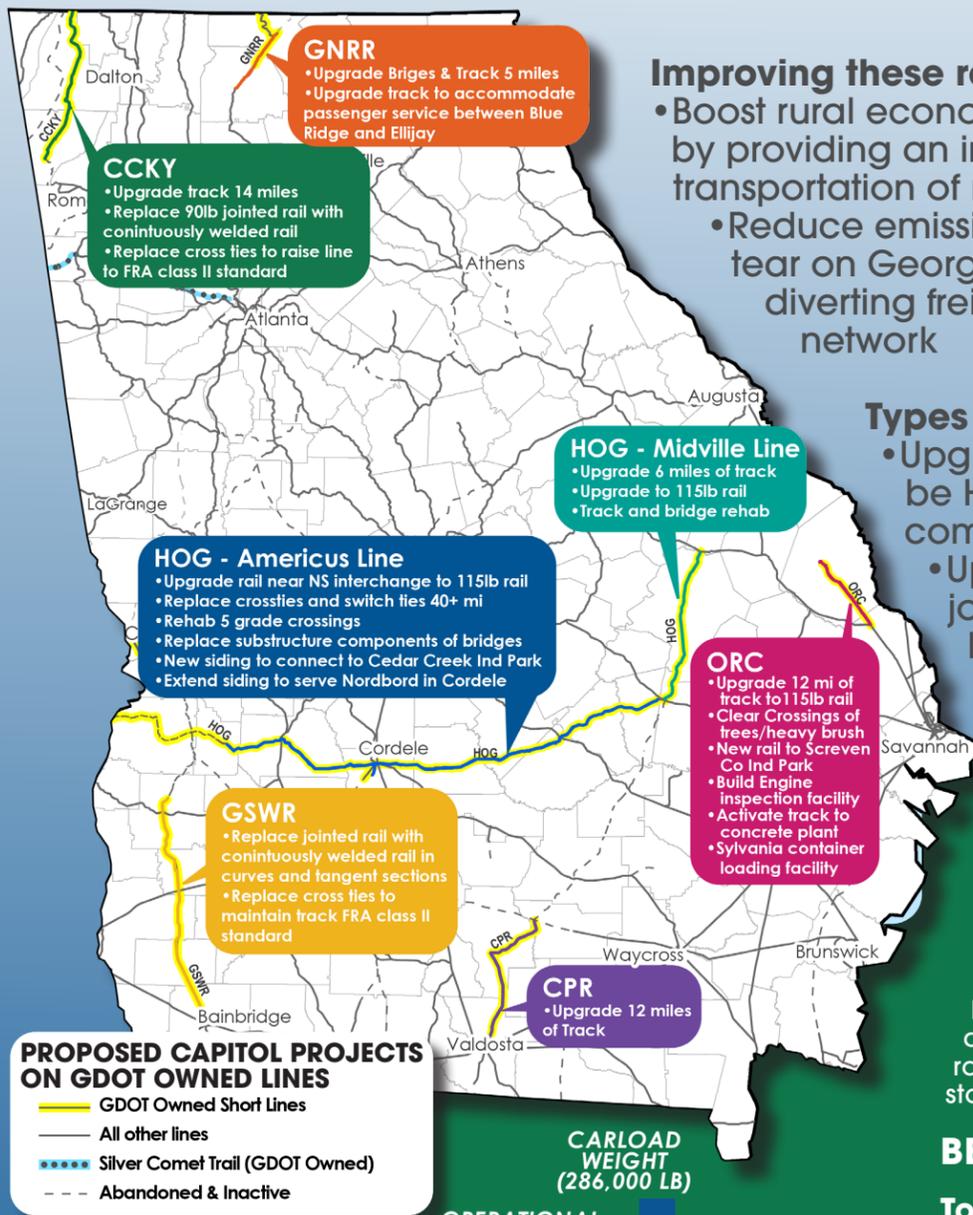
Rail Lines

- Norfolk Southern
- CSX
- Shortlines

Rail Opportunities Short Line Improvements

With upgraded infrastructure, Georgia's small railroads could bring more benefits to local communities and the state's economy.

Georgia's short line network - primarily in more rural parts of the state - presents opportunities to improve and expand.



Improving these railroads can:

- Boost rural economic development by providing an inexpensive option for transportation of raw materials
- Reduce emissions and wear and tear on Georgia's roads and bridges by diverting freight from the highway network

Types of Improvements:

- Upgrading track segments to be Heavy Axle Load (286,000 lb) compliant
- Upgrade rail, ties, ballast, joints, and/or bridges to meet FRA Class II track standards
- Build or restore industrial customer sidings

WHAT IS A HEAVY AXLE LOAD (286K)?

Rail segments that can handle Heavy axle loads refer to the ability to safely operate 286,000 lb railcars, as opposed to the current standard 263,000 lb rail cars.

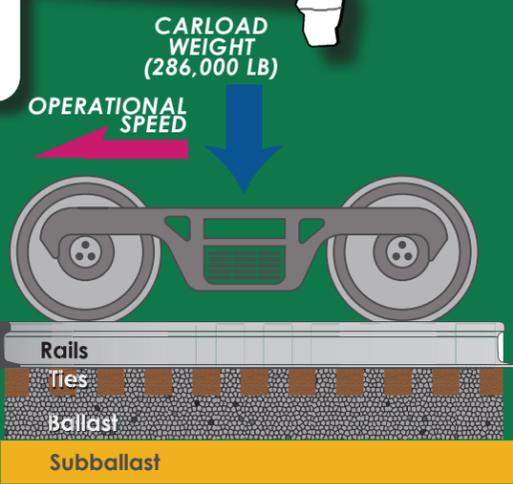
BENEFITS:

To move a fixed amount of weight:

- Fewer railcars needed
- Better fuel economy
- Lower operational costs

Economic Development:

- Easier to coordinate with Class 1 RR operations
- Higher quality service offerings for customers
- Avoids bottlenecks that could otherwise occur



Rail Opportunities Increasing the Usage of Freight Rail

As messaged by stakeholders throughout the planning process and from the findings of the **Freight and Logistics Commission of the Georgia Legislature**, Georgia is well positioned to leverage state rail infrastructure for increased options for freight mobility in the state.

BENEFITS OF FREIGHT RAIL INCLUDE:

- A single freight train can **remove several hundred trucks** from Georgia's highways.
- Rail supports the **rural Georgia economy** by enabling raw materials and other products to move efficiently to and from areas that may not have nearby highway access.
- Rail is **4 times** more fuel efficient than trucking, producing fewer greenhouse gases.
- The rate of **fatal accidents** per ton-mile (moving one ton of freight one mile) associated with rail is **one third** that associated with trucking.
- As the Port of Savannah continues to process more container traffic, rail helps balance the overall freight modal share to support a healthy statewide freight and logistics network.

Rail supports and provides competitive advantages for many of Georgia's Key Industries, and helps Georgia remain the Top State for Doing Business.

KEY INDUSTRY	Uses Rail?	How Does Rail Support the Industry?
Agribusiness	✓	Rail is used to inbound commodities such as animal feed and outbound products like peanuts. Rail can connect Georgia farmers with international markets through intermodal services.
Automotive	✓	Finished vehicles are shipped by rail from Georgia to other parts of the U.S. Automakers and their suppliers receive shipments from North America and around the world through intermodal connections
Energy	✓	Rail carries fuels such as coal, petroleum products, and ethanol. Additionally, rail provides opportunities to producers of renewable fuels such as biomass to economically ship their products.
Food Processing	✓	Food manufacturers use rail to ship in raw materials as well as to ship out a variety of commodities, including cooking oils, flours, and sugar
Logistics & Supply Chain	✓	Georgia's status as a logistics hub in part relates to the state's superior transportation infrastructure, of which the state's position as a rail hub to the Southeast is a major component.
Manufacturing	✓	Rail supports a variety of manufacturing concerns in Georgia, all across the state.

Rail Opportunities **UNUSED RAIL CORRIDORS**



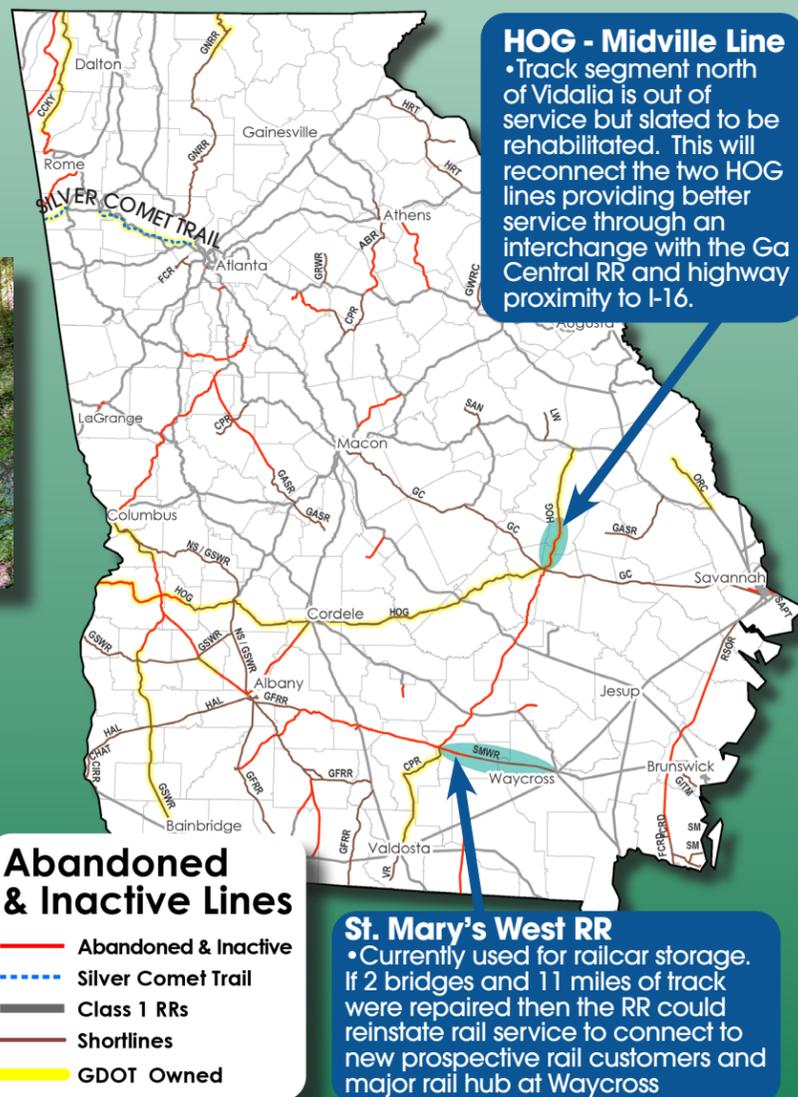
Unused rail corridors in Georgia provide opportunities for reactivation or re-purposing. Unused rail corridors can be 'Railbanked', have rail service restored, or formally abandoned.

RAIL BANKING

"Railbanking" lines provide an opportunity for an "interim use" designation to be applied to the corridor. This allows for use as recreational trails while the rail corridor maintains its legal status as a transportation corridor. The SILVER COMET TRAIL owned by GDOT is a prime example of a Railbanked corridor.

RAIL SERVICE RESTORATION

Unused rail corridors can provide opportunities for economic development by providing access and using available assets to restore service for industry or tourism. These improvements can be eligible for FRA grants, or state funding on state-owned lines.



Pumpkinvine Trestle
Dallas, GA



Brushy Mt Tunnel
Rockmart, GA

RAIL ABANDONMENT

"Abandoned" Rail lines have been through a process with the U.S. Surface Transportation Board that removed their legal status as a continuous corridor. It is recommended that rail abandonment is avoided to leverage opportunities to reuse or restore unused rail corridors.

In order to accomplish the goals and objectives set forth in the STATE RAIL PLAN, GDOT proposes a RAIL SERVICE AND INVESTMENT PROGRAM, which is contingent on funding.

Projects in the Rail Service and Investment Program seek to:

- Increase Rail's modal share
- Modernize Short Line RR infrastructure
- Extend the reach of the Port of Savannah through Inland Ports
- Alleviate blocked crossings
- Promote Passenger Rail Projects opportunities



Project Type	Total Number of Projects	Total Estimated Cost (YOES)
Short-Range Projects		
Short-Range Projects on State-Owned Railroads (2021-2022)	7	\$71.1 M
Short-Range Projects on State-Owned Railroads (2023-2025)	24	\$92.2 M
Short-Range Crossing Projects (2021-2025)	66	\$51.3 M
Short-Range Crossing Needs Shortfall	n/a	\$96.6 M
Short-Range Passenger Rail Improvements (Amtrak Station)	1	\$55.4 M
Short-Range Total:	98	\$366.6 M
Long-Range Projects		
Passenger Rail Studies	6	\$25.5 M
Projects on State-Owned Rail Lines	23	\$112.3 M
Ongoing Maintenance of GDOT-owned short line railroads	n/a	\$319.8 M
Track and Bridge Upgrades of GDOT-Owned short line railroads to carry 286,000 lb railcars	n/a	\$453.2 M
Projects on Privately-Owned Rail Lines	22	\$193.7 M
Inland Ports	3	\$217.3 M
Blocked Crossing Projects	6	\$586.6 M
Long-range Total:	60	\$1,908.4 M
Short-Range & Long-Range Total:	158+	\$2,275.0 M

Thanks to all of our stakeholders and planning partners.

Georgia is driven by rail.



For more information, please visit the State Rail Plan website:

dot.ga.gov/IS/Rail/StateRailPlan

For a State Rail Map of Georgia, please visit:

dot.ga.gov/IS/Rail

Please email any questions to:

railprogram@dot.ga.gov

