

# Chapter 7 Freight

## 7.1 Introduction

Nationally, the east - west transportation corridors linking west coast ports with the interior U. S. have experienced dramatic growth rates in freight over the past few decades as Pacific Rim markets have matured. However, since the mid-1990's NAFTA has fostered increased emphasis on north – south traffic as well. The widening of the Panama Canal will further expose the Gulf of Mexico Ports to more, larger ocean vessels which no longer will have to experience long delays to berth at West Coast ports. Simply stated, the surface transportation network in the United States has not increased at a rate commensurate with growth in freight and passenger traffic. This is true at our local level also.

The types of materials that imports through the Alabama State Docks are Heavy Lift & Oversized Cargo, Containers, Coal, Aluminum, Iron, Steel, Copper, Lumber, Woodpulp, Plywood, Fence Posts, Veneers, Roll and Cut Paper, Consumer Goods, Cement, and Chemicals. The types of materials that exports through the Alabama State Docks are Heavy Lift & Oversized Cargo, Containers, Coal, Lumber, Plywood, Woodpulp, OSB, Laminate, Flooring, Roll and Cut Paper, Iron, Steel, Frozen Poultry, Grain, and Chemicals. In 2018 the Alabama State Port Authority tonnage was 26.8 million tons, with 346,732 TEUs and 158,824 railcars handled.

The Alabama State Port Authority represents the State of Alabama's public, deep-water terminals serving general cargo, container, over-dimensional and bulk cargoes supporting over 134,600 jobs and \$22.4 billion in economic impact to the state, and it is growing. On September 9<sup>th</sup>, 2019, the US Army Corps of Engineers issued a record of decision on the Mobile Harbor to be deepened to 50 feet. On October 2<sup>nd</sup>, 2019, the Pre-Construction, Engineering and Design Agreement was signed so design can begin. Tax revenue from the Rebuild Alabama infrastructure package will supply the necessary state match for the Alabama State Port Authority's \$400 million ship channel project.

The Port has also recently developed an automobile terminal, after being awarded a \$12.7 million Transportation Investment Generating Economic Recovery (TIGER) grant from the US Department of Transportation (DOT). The terminal is developed on the site of a former bulk terminal in the port's upper harbor. It will handle up to 160,000 import and export vehicles a year, including automobiles, military vehicles, trucks, other rolling stock, and high and heavy cargo.

In early 2020, the Alabama State Port Authority (ASPA) and AutoMOBILE International Terminal (AIT) finalized a concession agreement at the Port of Mobile, USA, for a \$60 million finished automobile roll on/roll off terminal. The terminal is under construction as the authoring of this document. When the construction is complete, AIT will operate the facility. AIT is a joint venture between Terminal Zarate, S.A., a Grupo Murchison company, headquartered in Buenos Aires, Argentina, and Neltume Ports, headquartered in Santiago, Chile. The new 57-acre terminal is located on the Alabama State Port Authority's main port multimodal complex, and when completed, will have an annual throughput of 150,000 units.

Along with two post pana-max cranes and two super post panama cranes, the Alabama State Port Authority also has a Phase 3, \$50 Million, 20 plus acre yard expansion, and 2 additional outbound gates that were completed in 2019. In Early 2020, a 400 foot dock extension is scheduled to be completed. There are plans for a 12 million Cubic feet pallet position facility, capable of 30 blast loads daily, that would quadruples the current Blast freeze capacity. The Port is also trying to improve USDA import/Export inspection services, port Drayage, On-Site Processing, and gates outside of APM Terminals.

The growth in freight, coupled with the fact that traditional Travel Demand Forecasting uses only estimates for freight, our overall transportation infrastructure planning and tools must keep pace with our new realities. Freight planning historically, at least for medium sized MPO's like Mobile, has used data analysis including employment numbers and trend forecasting that assumes trends from the past will continue in the future. Recognizing that the efficient movement of freight is vital to the growth of Mobile's economy and further recognizing that our area must provide for superior freight distribution and not become a freight chokepoint, the Transportation Department of the South Alabama Regional Planning Commission (SARPC) is trying to better recognize, understand, track, and predict freight movement in Mobile.

Today, with the availability of the much improved Freight Analysis Framework (FAF4), much of the freight data is derived from FAF4 data; however, the truck counts and Average Annual Daily Traffic (AADT) come from ALDOT. ALDOT has conducted vehicle classification counts for SARPC at over 40 stations within our study area. The 2015 ALDOT traffic counts used for this Long Range Transportation Plan (LRTP) has vehicle classification percentages that are applied to the AADT. Although the FAF4 data does provide a year 2015 and 2045 truck count, it is based on a percentage of the total overall volume for year 2045 projected for each facility.

## 7.2 Projected Freight

- The FAF4 data has Mobile, AL as it is own zone, which freight transportation both in volume (tonnage) and value continues to grow in the Mobile FAF4 Region. The amount of tonnage (all modes) that originates in Mobile, AL is expected to grow by 66 percent from 2015-2045. Likewise, the amount of tonnage that ends up in Mobile is expected to increase by 60 percent for all modes. assisted in creating a 2045 truck volume for the *Envision 2045 LRTP*. The APM Terminal Survey questions were:
- Did this trip originate within Mobile County?
- Did this trip originate outside of Mobile County? If yes, what road did this trip enter Mobile County on?
- Are you dropping off within Mobile County?
- Are you dropping off outside of Mobile County? If yes, what road will this trip leave Mobile County on?
- How many times a week is this trip?

- Does your trip go through downtown Mobile (Water Street)? If so, what road is used to access I-165?
- What is your biggest challenge traveling throughout Mobile County?

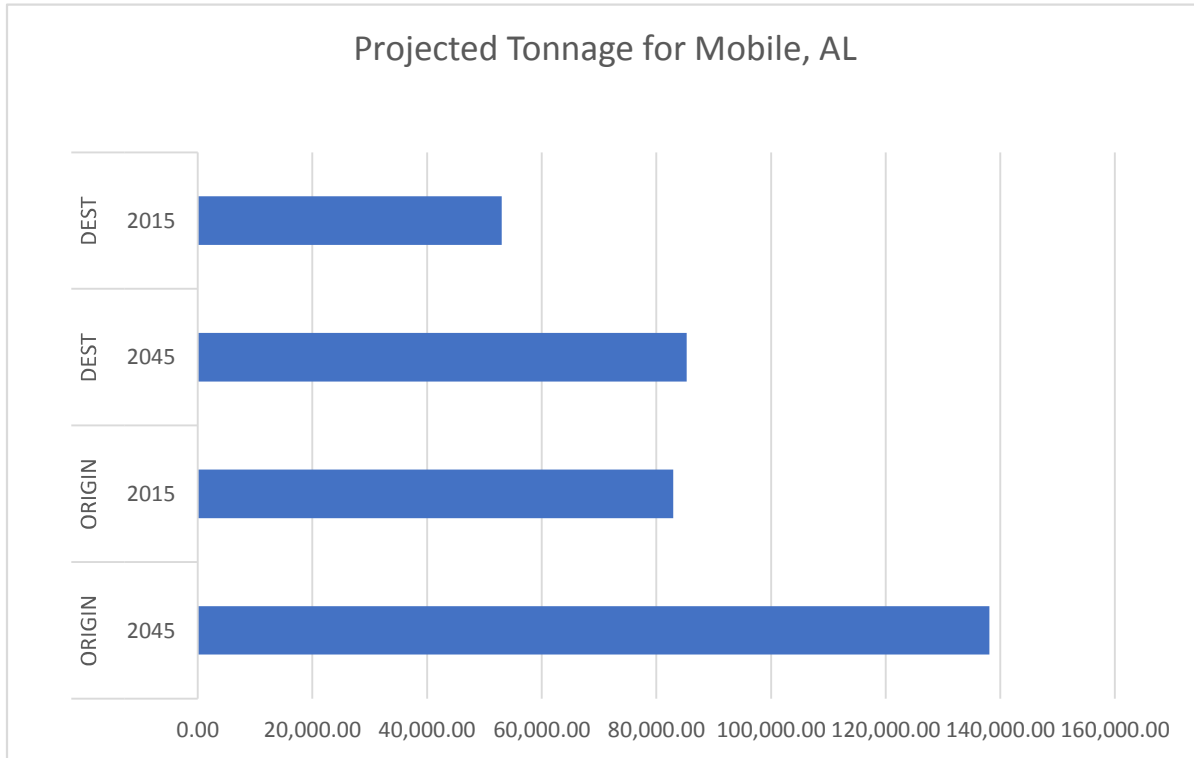
If there was a situation that prevented your regular route to terminal, are you aware of a timely detour?

Figure 7-1 shows the expected growth by tonnage for all modes for both freight originating in Mobile, and Mobile being the destination.

Mobile is the birth place of the modern freight container, and APM Terminals houses the Port's containerized freight facility. Each quarter, APM Terminals surveys trucks that are carrying containerized cargo as they enter the terminal on behalf of SARPC. The data from the surveys is integral in providing a snap shot of the origin and destinations of containerized freight in Mobile. This survey data is also important as it helps validate origin destination truck data purchased from INRIX. In 2017, SARPC purchased data from INRIX that was derived from onboard GPS systems from large trucking companies. The result was a zonal matrix of truck origins and destinations, including external trucks. The APM Terminal survey, INRIX data, and FAF4, are all tools that assisted in creating a 2045 truck volume for the *Envision 2045 LRTP*. The APM Terminal Survey questions were:

- Did this trip originate within Mobile County?
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- What is your biggest challenge traveling throughout Mobile County?
- If there was a situation that prevented your regular route to terminal, are you aware of a timely detour?

**Figure 7-1 Origin and Destination Projected Tonnage**



*(Federal Highway FAF4 Data)*

The fact that the growth rate in freight transportation traffic is generally greater than passenger traffic is especially true in the Mobile MPO area. Part of that is due to Mobile's economic climate. Increased industry is directly correlated to the increased movement and generation of freight.

**Figure 7-2 2015 Average Daily Truck Traffic**



Note: Major flows include domestic and international freight moving by truck on highway segments with more than twenty five FAF trucks per day and between places typically more than fifty miles apart.  
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 4.3.

**Figure 7-3 2045 Average Daily Truck Traffic**



Note: Major flows include domestic and international freight moving by truck on highway segments with more than twenty five FAF trucks per day and between places typically more than fifty miles apart.  
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 4.3.

**Table 7-1 Mobile FAF4 Region's Top Trading Partners by Weight with States and FAF Regions for 2015 and 2045\***

2015 Top Trading Partners by State (KTons)

Partner	Outbound	Inbound	Total
Alabama	25,839	28,872	51,711
Georgia	22,964	765	23,730
Florida	17,550	1,868	19,418
Mississippi	1,161	12,044	13,205
Tennessee	4,120	553	4,673
Texas	1,905	2,676	4,582
Louisiana	955	3,262	4,217
Illinois	3,524	258	3,782
Oklahoma	993	2,763	3,755
New York	767	31	798

2015 Top Trading Partners by FAF Region (KTons)

Partner	Outbound	Inbound	Total
Remainder of Alabama	12,600	10,127	22,727
Remainder of Georgia	13,146	184	13,329
Mississippi	1,161	12,044	13,205
Atlanta, GA	9,188	291	9,479
Miami, FL	7,095	158	7,252
Birmingham AL	1,620	4,125	5,745
Remainder of Florida	3,885	1,318	5,202
New Orleans LA	616	2,861	3,477
Tulsa, OK	316	2,731	3,048
Orlando, FL	2,942	88	3,030

2045 Top Trading Partners by State (KTons)

Partner	Outbound	Inbound	Total
Alabama	46,380	39,154	85,534
Georgia	35,042	1,369	36,410
Florida	27,262	3,903	31,164
Mississippi	2,409	20,668	23,077
Tennessee	8,185	760	8,946
Louisiana	2,044	5,465	7,509
Oklahoma	599	5,241	5,841
Texas	1,530	3,147	4,677
Illinois	3,897	388	4,285
Ohio	1,997	314	2,311

2045 Top Trading Partners by FAF Region (KTons)

Partner	Outbound	Inbound	Total
Remainder of Alabama	18,121	14,322	32,443
Mississippi	2,409	20,668	23,077
Remainder of Georgia	17,315	310	17,625
Atlanta, GA	16,509	806	17,315
Birmingham AL	9,775	6,347	16,122
Miami, FL	11,360	237	11,597
Remainder of Florida	5,469	3,018	8,486
New Orleans LA	1,402	4,983	6,384
Tulsa, OK	291	5,208	5,499
Remainder of TN	4,405	397	4,802

*(Federal Highway FAF4 Data)*

While new industries like the Walmart Distribution Center, Amazon, Airbus assembly plant, Outokumpu and AM/NS Calvert (formerly ThyssenKrupp Stainless), and the Choctaw Point Container Facility, most growth in Mobile's freight still will come from industries and companies already in and expanding in our area. Ship building and the oil and gas associated industries' continued growth remain as drivers of our economy as well.

Commodity flow characteristics that significantly influenced development of the Statewide Freight Plan, and the Mobile MPO Freight Plan, include:

- Trucks are currently, and are projected to remain, the most utilized mode for freight movement. The projected increase in truck freight flow, in conjunction with increasingly limited funding for additional capacity infrastructure, heightens the need for an investment plan addressing Alabama's roadways.

- Although the impacts to future coal demand in response to changing federal regulations may be uncertain, the fact that coal profoundly impacts freight movement in Alabama is not. The impact of coal demand on roadways appears negligible, but the Port of Mobile and rail freight flows could be more significantly affected. Nevertheless, current projections for 2045 indicate increases in coal imports while exports remain near current levels.

- Overall increases in rail and truck traffic confirm the need for continued improvements to at grade rail crossings through the Section 130 Program.

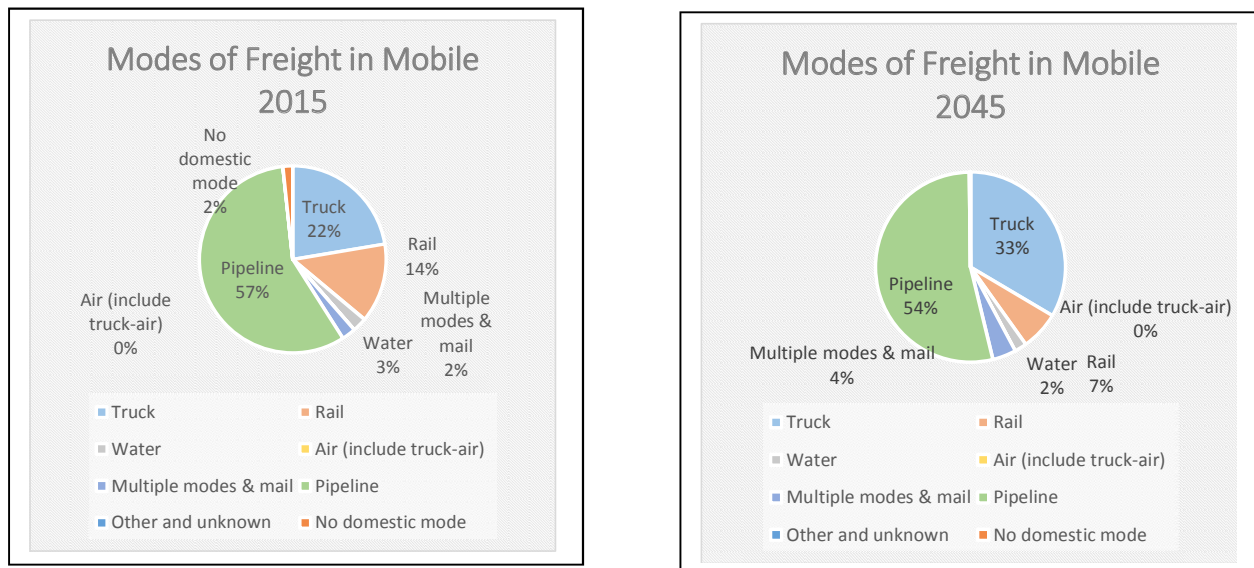
- The share of freight traffic shipped by air is relatively small, but increases are projected for most major commodities shipped via air. Therefore, better roadway connections and access to major

Airports for freight traffic may be needed in the near future.

### 7.3 Freight Modes

Mobile, Alabama is ideally located for trade and business with a network of highways, ports, rivers, railroads and airports. Mobile’s network is also conducive to the interface of all modes of freight travel. Mobile’s freight network is comprised of the Port of Mobile, two major highway interstate systems crossing in Mobile, five Class I railroads, two Class III railroads and the Intracoastal Canal. In terms of modal distribution, it is worth noting that the trucking industry is projected to have more share of the freight than it does today, as portrayed in **Figure 7-4**. The projected 2045 truck traffic discussed in the previous sections, will be carrying a third of all freight coming and going to Mobile, according to the Freight Analyses Framework (FAF4).

**Figure 7-4 Modal Distribution of Freight Flows by Weight (Kilotons) 2015 and 2045 for Mobile FAF4 Region**



(Federal Highway FAF4 Data)

### 7.3.1 Truck Freight

Mobile is the southern terminus of Interstate 65 which runs north/south through Alabama for 366 miles and ending in Chicago, Illinois. Interstate 10 runs from Los Angeles, California to Jacksonville, Florida, passing through the 67 mile wide breadth of southern Alabama and intersecting with Interstate 65 just west of downtown Mobile. The resulting 65 miles of freeway in the urban area of Mobile provides for outstanding flexibility for freight moving through, as well as terminating or originating in Mobile.

Improvements have been underway for some time including intersection improvements in key areas, extensive widening of arterials, building the *new* U.S. Hwy 98, etc. In the future, however, new roadways must be built both for freight considerations and for general growth in the area. There have been discussions in the past about the construction of the north/south *West Alabama Highway* with its terminus in western Mobile taking pressure off Interstate 65, and more importantly the critical proposed I-10 Mobile River Bridge interstate bridge over the Mobile River to alleviate further congestion in the existing tunnel systems under the river, currently in the Visionary Element of this LRTP.

External truck percentages are from FAF4 validated with 2015 vehicle classifications counts from ALDOT. Internal trucks are based of freight analysis zones (FAZ) in the model frateded to year 2045. The truck volumes for the base year 2015 and the projected year 2045, are shown in Figure 7-8. APM Terminal surveys and INRIX data as described in 7.2 Projected Freight was also used.

Interesting to note in Figure 7-5 that the commodity “machinery” is expected increase by 2045. Certainly Airbus, Austal and other go into this factoring. Coal exporting by truck out of Mobile is projected to increase while gasoline is expected to decrease out of Mobile. As noted before, the domestic exploration of crude petroleum in the western portion of the United States contributes this.

Figure 7-4 suggests that the FAF 4 data projects the truck traffic in Mobile will increase from 22 percent to 33 percent by 2045. According the Federal Highway Administration (FHWA) Status of the Nation's Highways, Bridges, and Transit Conditions and Performance: 23rd Edition: Part III: Highway Freight Transportation - Report to Congress, the total tonnage for trucking for the nation is forecasted to grow by almost 45 percent by 2045, and the value of freight is forecasted to increase by 84 percent. This is in line with trend projected for an increase in truck traffic in the next 25 years.

Some key take away from Status of the Nation's Highways, Bridges, and Transit Conditions and Performance: 23rd Edition: Part III: Highway Freight Transportation - Report to Congress are:

- Freight transportation affects everyone.
- By the year 2045, the total value of freight in the United States is expected to nearly double that of 2012.
- Trucks move 64 percent of freight by ton and 69 percent of freight by value—by far the single largest mode.



- Intermodal Connectors provide the “last mile” linkage between freight facilities and the NHS.
- Since the year 2000, States have designated approximately 182 new freight intermodal connectors.
- The lack of safe truck parking in all States, and especially in and around large metropolitan areas, is a growing concern to truckers.

Figure 7-5 Commodities Originating in Mobile by Truck 2015, 2045

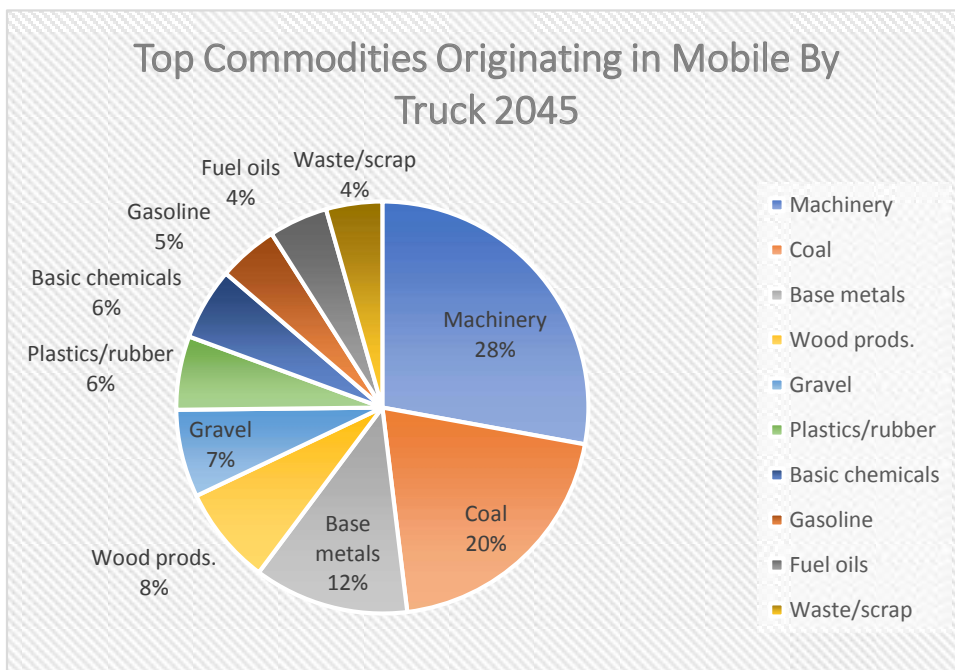
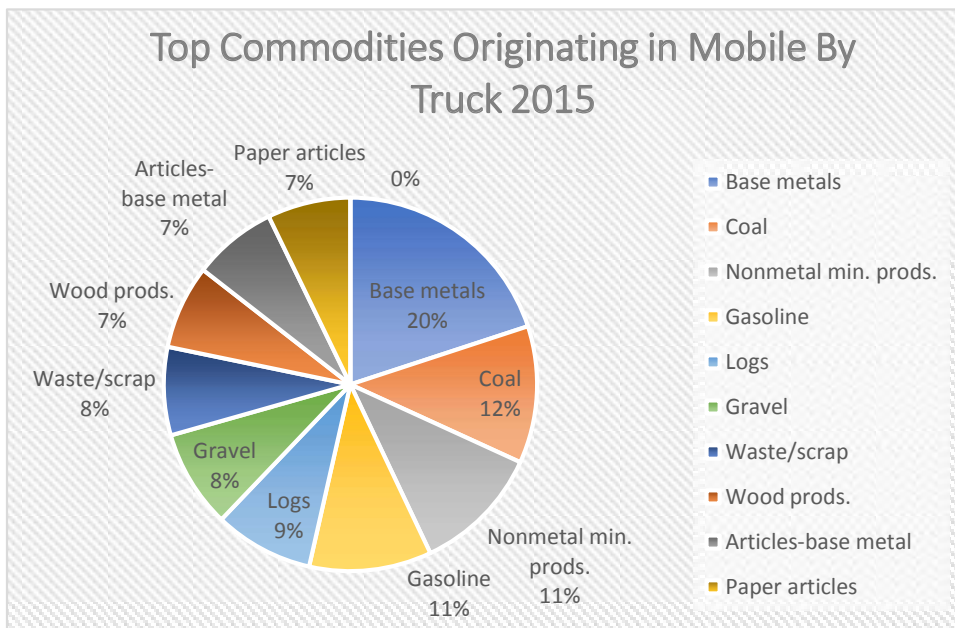


Figure 7-6 Commodities Destined for Mobile by Truck 2015, 2045

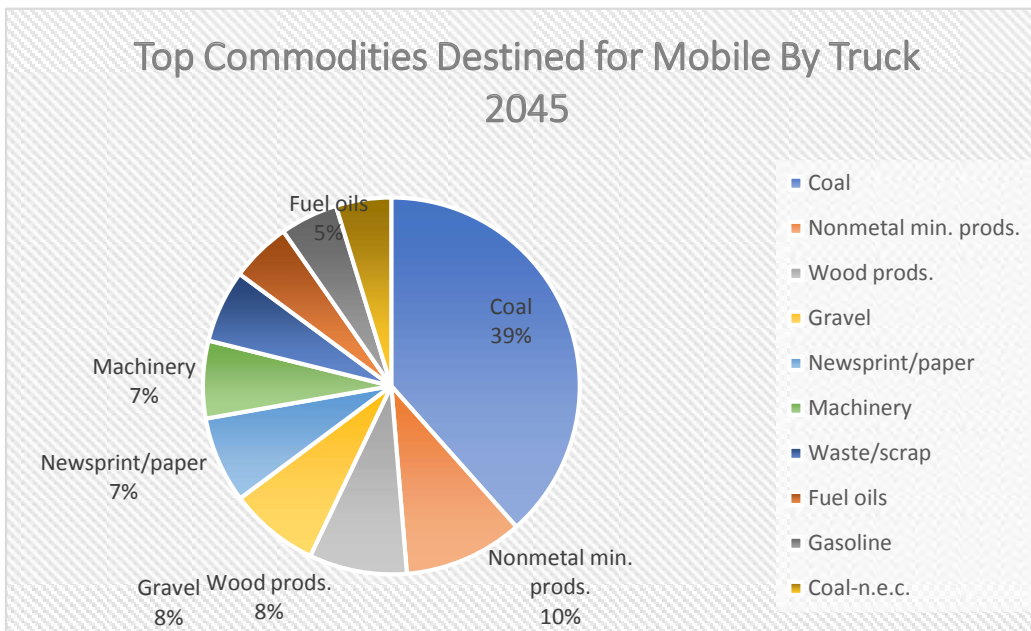
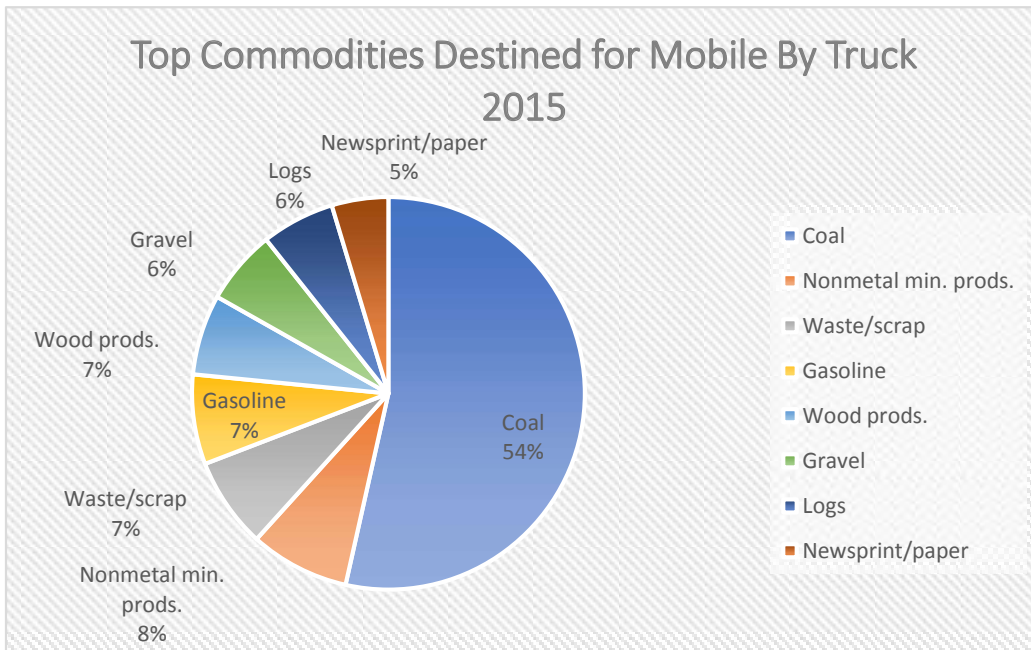
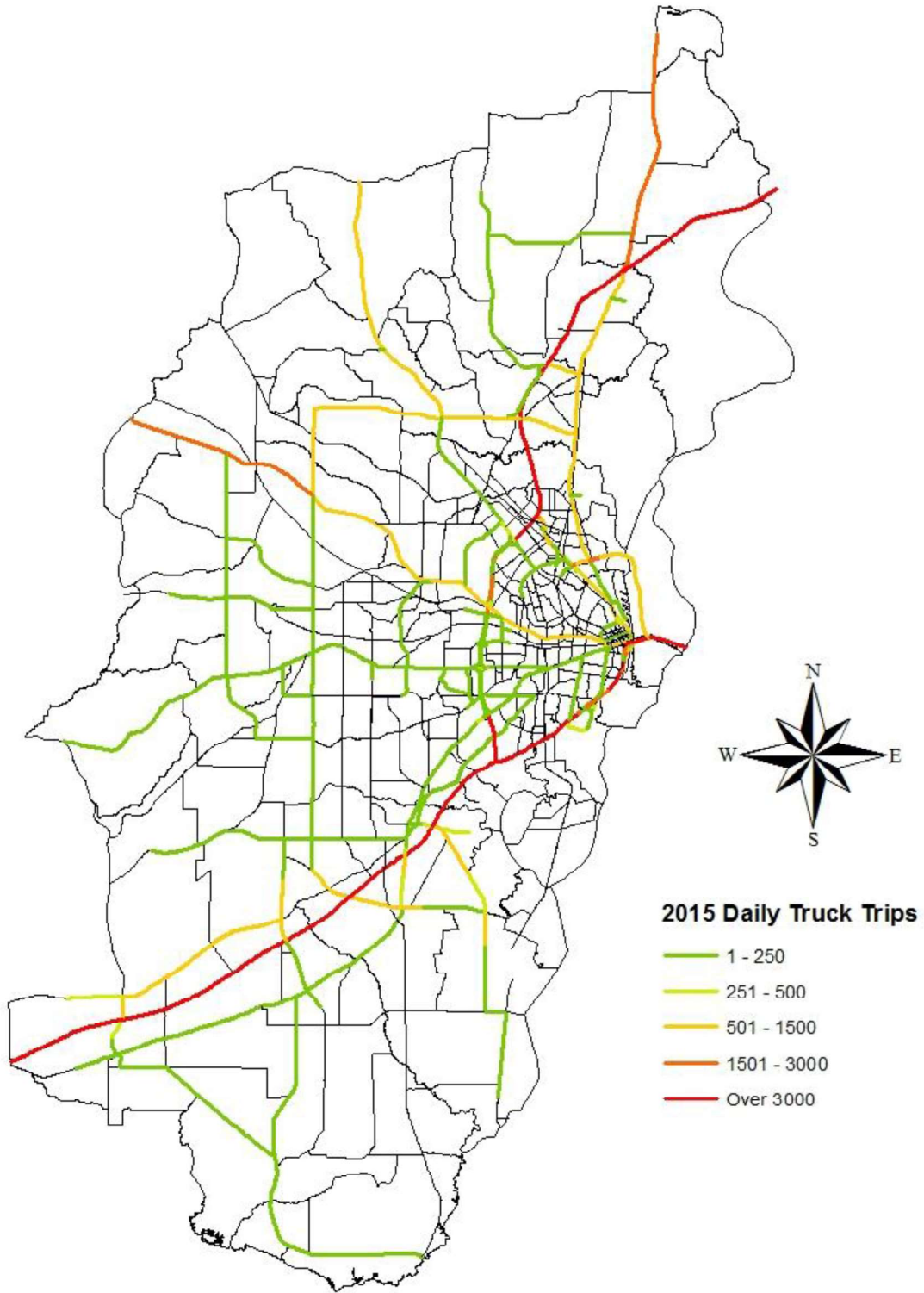
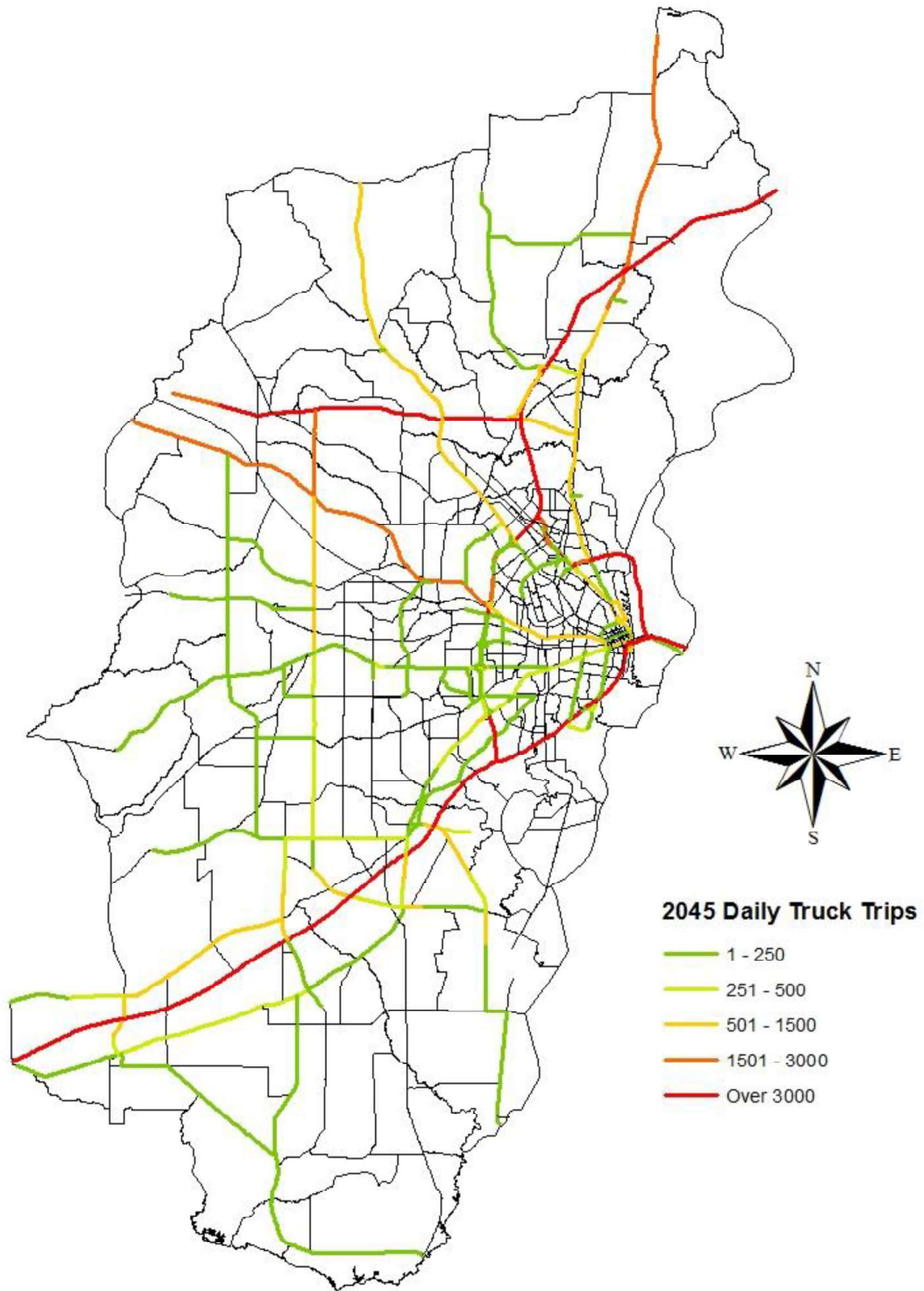


Figure 7-7 Mobile Study Area 2015 Truck Volume



(Mobile MPO)

Figure 7-8 Mobile Study Area 2045 Truck Volume

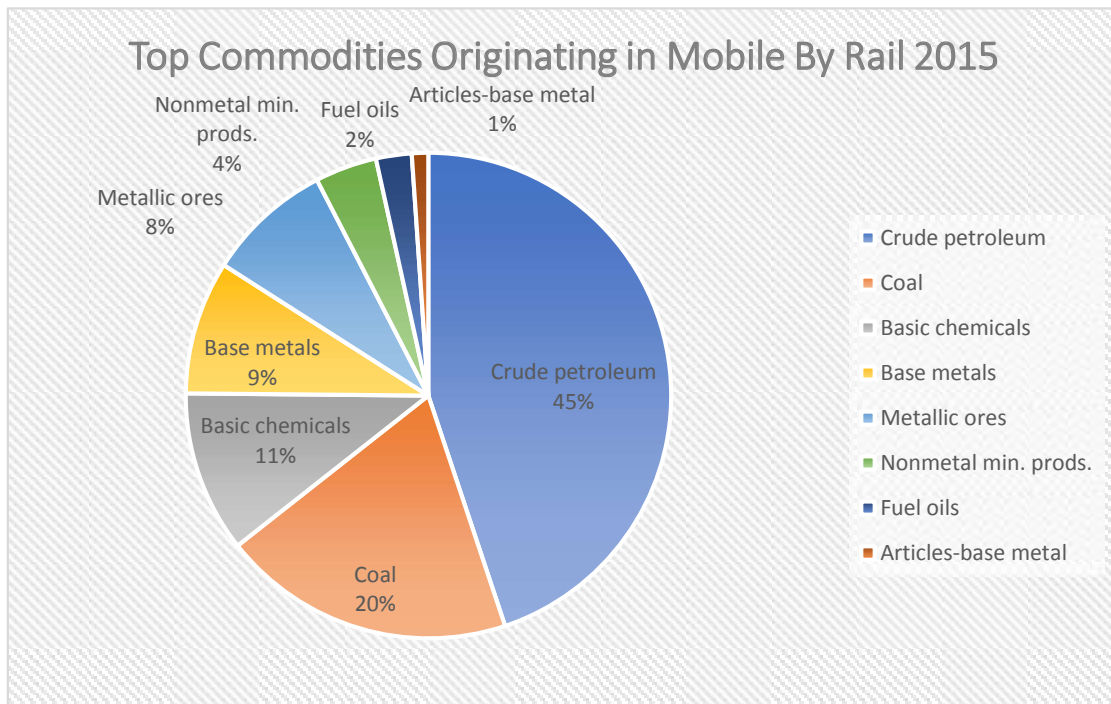


(Mobile MPO)

### 7.3.2 Rail Freight

Serving the Mobile area and the port are five Class I Railroads; CSX, Burlington/Santa Fe, Canadian National, Norfolk Southern, and Kansas City Southern, with an estimated 2,500 railroad cars transiting Mobile daily. According to the Alabama State Port Authority nearly 130,000 revenue producing rail car movements occur annually at the ASPA. Two Class III railroads serve the port including the ASPA's Terminal Railroad serving the Port Authority's facilities and ancillary businesses as well as Brookley Air Center and its Foreign Trade Zone. The Central Gulf Railroad provides rail-on-barge service to Mexico. While little container traffic currently is handled by the railroads in Mobile, this likely will grow as volumes increase. West Coast port congestion, the opening of a widened Panama Canal, and the efficiencies and capabilities of Choctaw Point will further accelerate container volume in Mobile.

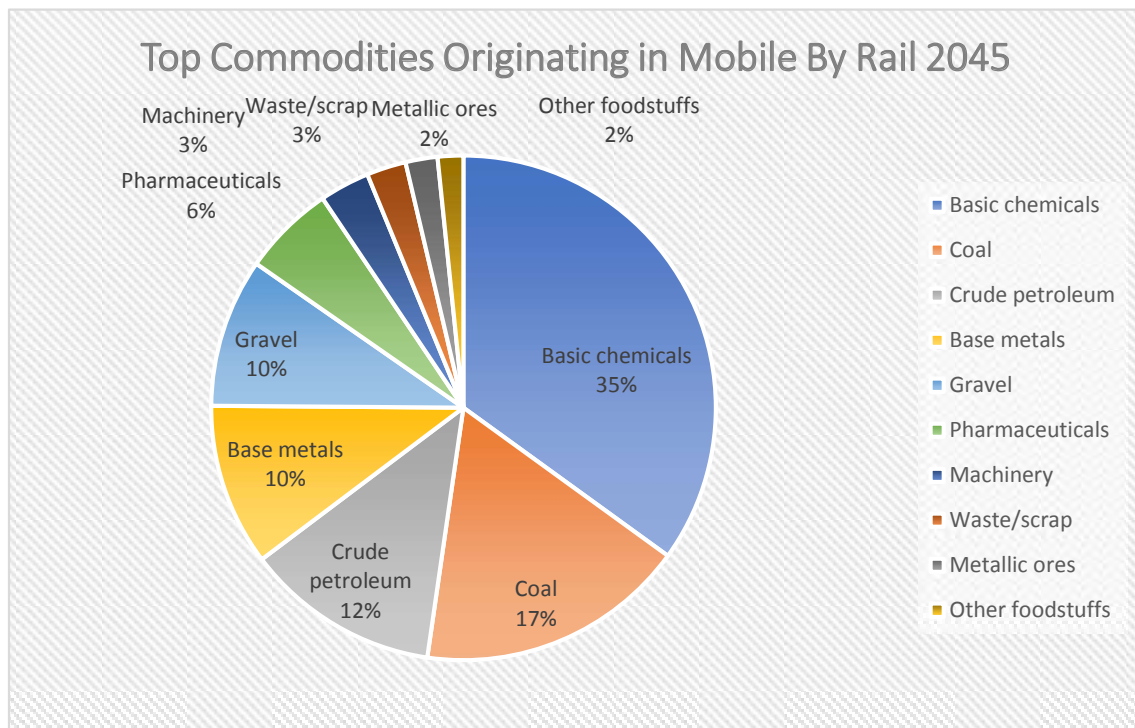
*Figure 7-9 Mobile FAF4 Region's Commodities by Rail 2015*



*(Federal Highway FAF4 Data)*

It is interesting to note the national trends that the FAF 4 provides. For example, **Figure 7-9** portrays that in 2015 45% of the commodities originating in Mobile was crude petroleum. This has a dramatic decrease by year 2045 to only 12% in **Figure 7-10**. This could be contributed to the domestic oil reserves currently being explored in the US.

Figure 7-10 Mobile FAF4 Region's Commodities by Rail 2045



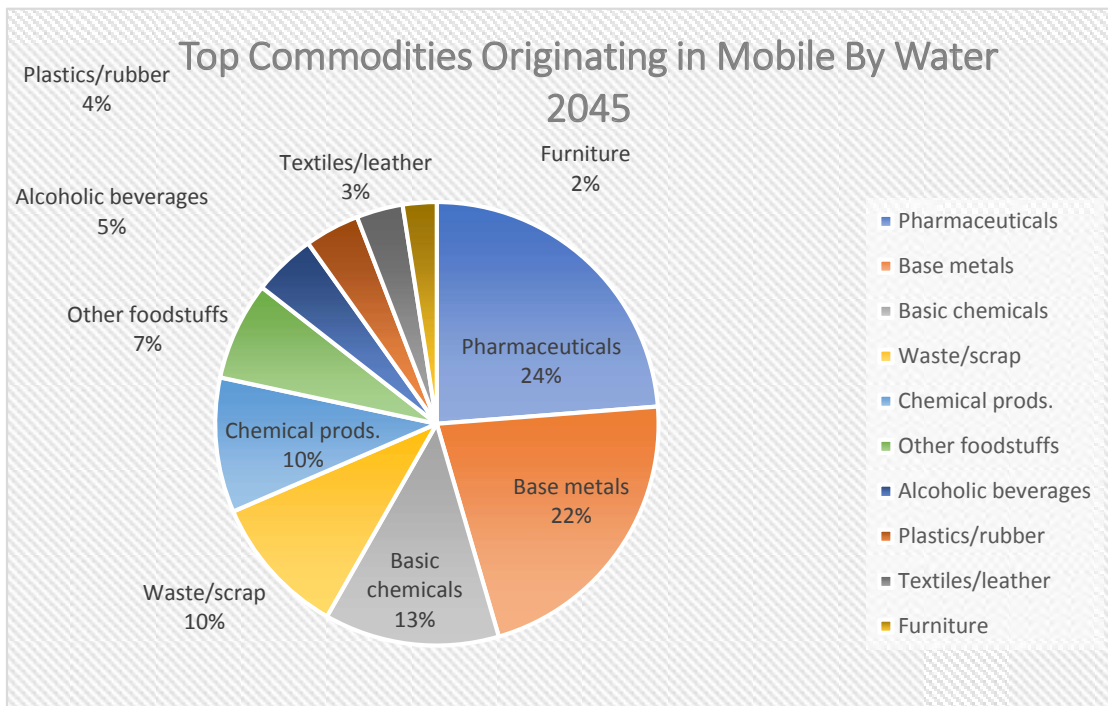
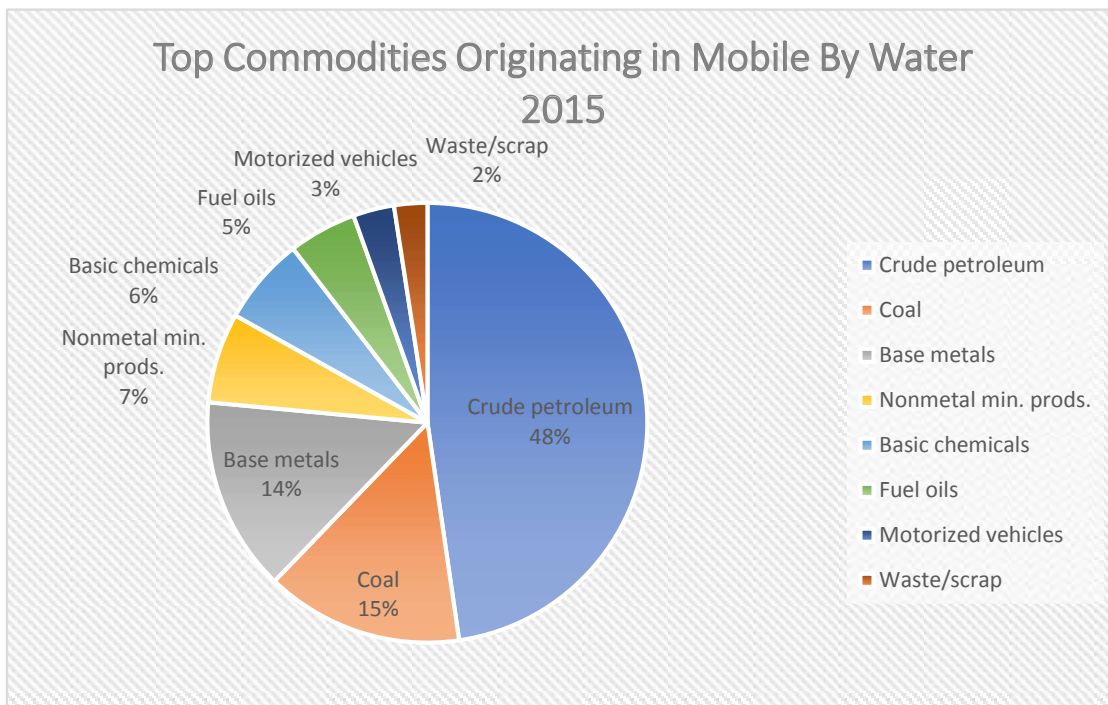
(Federal Highway FAF4 Data)

### 7.3.3 Water Freight

Mobile has abundant and flexible ground and air based freight transportation systems, with very extensive waterway connections. East and West, the Intracoastal Waterway (ICW) connects Texas to Florida with protected passage for barge freight. Virtually on the ICW, Mobile also easily connects to New Orleans and the Mississippi River.

Alabama by itself has over 1,200 miles of navigable waterways carrying some 20 million tons of freight annually. The Warrior – Tombigbee system connects Birmingham with Mobile and the Gulf Coast. The Alabama River does the same for Selma and Montgomery. Additionally, the Tennessee – Tombigbee River system (Tenn-Tom) provides a direct connection at the corners of Alabama, Mississippi, and Tennessee to the Tennessee River and through to the Ohio River. This man made canal saves 800 miles between mid-America and the East Gulf Coast compared with having to transverse the Mississippi to New Orleans and east. Cost savings are thus estimated at \$90 million per year. Some 8 million tons, or 1.3 billion ton-miles, pass annually through this system to or from Alabama, much of it impacting Mobile. Figure 7-11 depicts the Commodities going inland from Mobile.

Figure 7-11 Commodities Originating in Mobile by Water\*



(Federal Highway FAF4 Data)

Barge freight is acknowledged as the lowest cost, safest, and most energy efficient way to move freight, yet our waterways are underutilized. One barge carries the equivalent tonnage of 58

trucks or 15 railcars; 1 gallon of fuel moves a barge 514 miles compared to 202 via rail or 5 to 9 miles via truck. It is estimated carbon monoxide and hydrocarbon emissions would increase 7 times if Tenn-Tom tonnage alone were converted to rail and 9 times if by truck.

#### 7.3.4 Port of Mobile

The Port of Mobile is a large port (see Table 7-2) with access to infrastructure including 2 major highway interstate systems crossing in Mobile, 5 Class A Railroads serving the port, Brookley Air Center adjacent, and direct access to the Intracoastal Waterway as well as the Warrior Tombigbee River, Alabama River, and Tennessee Tombigbee Waterways giving water access to Birmingham, Montgomery, and connecting to the Tennessee and Ohio Rivers and their river ports. Additionally, the 300 year old port including the Alabama State Port Authority (ASPA) and private facilities supports 26 freight forwarders with several of them Customs House brokers, 5 major shipbuilders in the harbor, some 60 trucking companies, and 20 warehousing companies. The port is expanding beyond the container facility construction as the ASPA built a major import steel slab facility to support the Outokumpu /AMNS Calvert (formerly ThyssenKrupp Stainless) steel plant. The nearby Theodore Ship Channel also hosts major cement, chemical, and aggregate companies as well as the oil and gas industry. Additionally, Carnival Cruise Lines operates out of the Port of Mobile, offering passengers Caribbean destinations and tours.

*Table 7-2 Alabama State Port Authority (ASPA)*

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- Acreage: Total – 4,000
- Main Complex: 570
- McDuffie Island: 556
- Choctaw Point: 380+/- acres
- Other Sites: 2,098
- Inland Docks: 462
- ASPA Economic Impact in Alabama
- 134,608 Direct and Indirect Jobs
- \$486.9 Million in Direct and Indirect Tax Impact
- Total Economic Value \$22.4 Billion
- Number of Berths: 41
- Channel Depth: 45 Feet to the Tunnels; 40 Foot in the River Harbor



- Warehouse and Open Yards: 5 Million sq. ft. (2.4 million sq. ft. of yard; 2.6 million sq. ft. of sheds)
- CY2018 ASPA Tonnage: 26.8 Million Tons
- CY2018 ASPA Containers: 346,732 TEUs
- CY2018 Revenue Rail Cars Handled: 158,824 units

*Imports: Heavy Lift & Oversized Cargo, Containers, Coal, Aluminum, Iron, Steel, Copper, Lumber, Woodpulp, Plywood, Fence Posts, Veneers, Roll and Cut Paper, Consumer Goods, Cement, and Chemicals.*

*Exports: Heavy Lift & Oversized Cargo, Containers, Coal, Lumber, Plywood, Woodpulp, OSB, Laminate, Flooring, Roll and Cut Paper, Iron, Steel, Frozen Poultry, Grain, and Chemicals.*

*(Alabama State Port Authority)*

The Alabama State Port Authority's Garrows Bend ICTF services import/export containerized cargoes moving through APM Terminals Mobile as well as domestic containerized cargoes from regional manufacturers. The Garrows Bend ICTF consists of two new process tracks, craneways, container stacking area, loading lanes, new gate area, parking areas, storage track and bad order track. Two new leads tie in on east and west sides to existing transportation tracks owned and shared by CN, CSX and The Alabama Port Authority.

The Alabama State Port Authority alone includes 37 cargo piers including a bulk material handling plant, grain elevator, roll on/roll off dock, container facility and one of the largest and most modern coal export/import facilities in the world. The ASPA also includes 10 terminals along the state waterway systems and Figure 7-12 portrays the various commodities coming into the Port and what is projected in

Figure 7-13. A large portion of what comes into Mobile through McDuffie Coals Terminal is coal NEC, which is Not Elsewhere Classified. Coal is shipped into and out of McDuffie Terminal, and is mixed on site to obtain the optimum level of sulphur, then freighted domestically and internationally.

The Alabama State Port Authority facilities include:

- ASPA Terminals
- McDuffie Terminal
- General Cargo/Intermodal
- Heavy Lift Crane Services
- APM Terminals Mobile

- APM Steel Terminals
- Seaonus (refridgerated)
- Terminal Railway (TASD)
- CG Railway
- Bulk Material Handling Plant
- Pinto Island Terminal
- Marine Liquid Bulk Terminal - Theodore
- Mobile Middle Bay Port - Theodore
- Inland Docks
- Truck Control / Staff

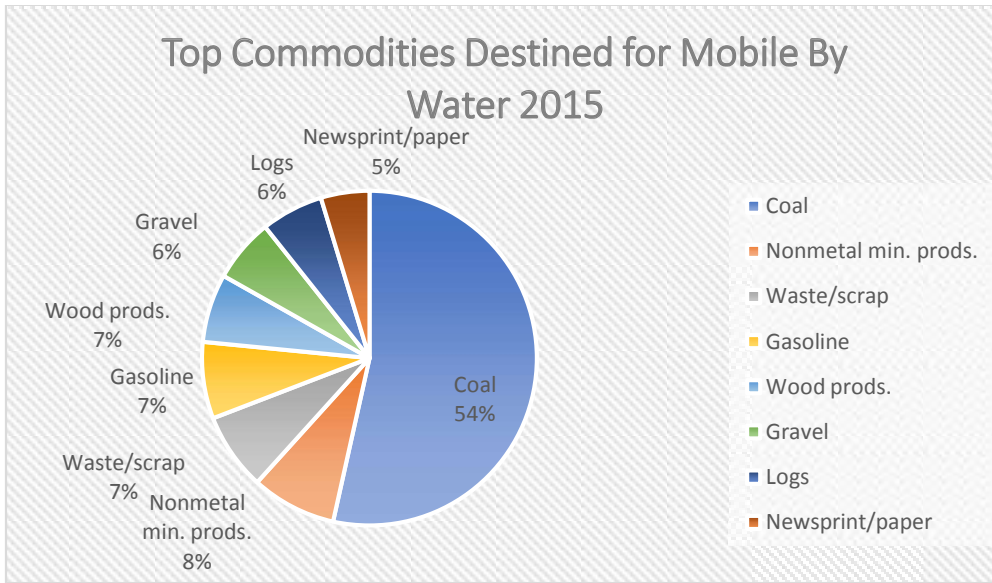
The Alabama Port Authority has several ongoing projects, and several planned projects as part of this LRTP:

- Phase 3 Container Terminal Expansion (\$50 million): Project underway with completion scheduled for 2020. Permanent financing to be done in the 3rd quarter of 2020. Amendment to existing concession agreement done
- Automobile Terminal (\$61 million): Project underway with completion scheduled for March 2021. All financing is in place and the concession agreement is executed.
- Coal terminal equipment replacement program (\$40-60 million); Early planning is beginning now along with customer negotiations to begin in early 2020. Phased project over 3-5 years with earliest equipment order to be done as early as mid-2020. Financing yet to be determined.
- Container Terminal Phase 4 expansion (\$60-65 million): Early cost estimates have been sent to concessionaire. Negotiations on agreement details and financing in first half of 2020 with possible project kickoff at the end of 2020.
- Rebuilding 4,500 linear feet of general cargo wharves (\$60-70 million): Multi-year project with work on first phase to begin in early 2020 from operating cash and balance will be done as financing is identified.
- Dredge material beneficial use project (\$2.7 million for engineering and design study and permitting; construction \$30 million): Port infrastructure to accommodate beneficial use of material generated from ongoing maintenance dredging. If successful, this would enable the port to reduce its long-term dredging cost while building marsh habitat in the

upper part of Mobile Bay. Project is awaiting approval of a \$2 million Federal grant through the RESTORE program.

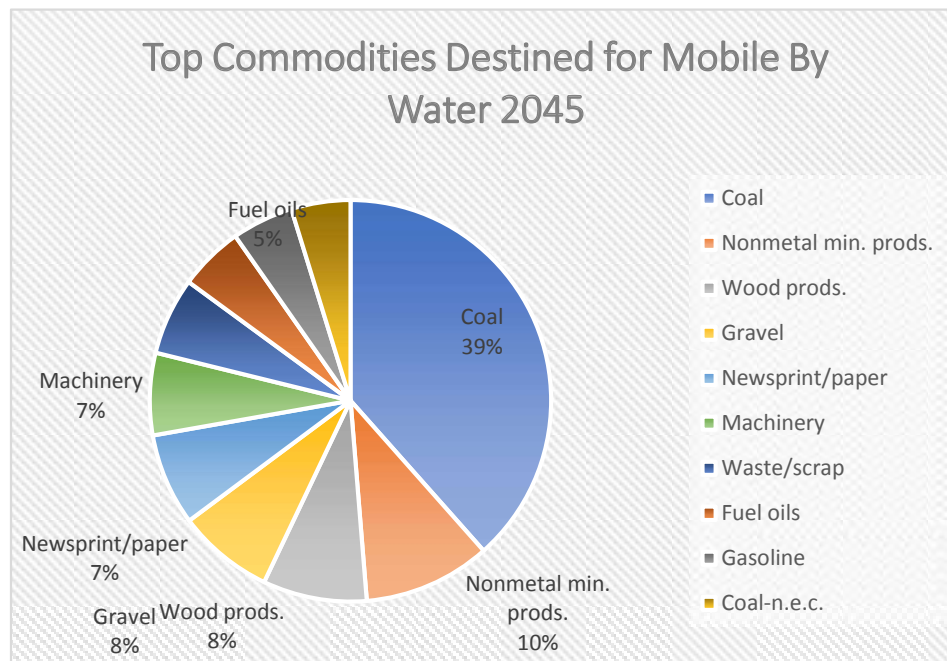
- Planned initiative to establish an inland port to move containerized rail cargo from the port to inland distribution and manufacturing shipper markets. Site undetermined, but estimate costs to service into Central Alabama (\$35 million).

Figure 7-12 Commodities coming into Mobile's Port 2015, 2045



(Federal Highway FAF4 Data)

Figure 7-13 Commodities coming into Mobile's Port 2045



(Federal Highway FAF4 Data)

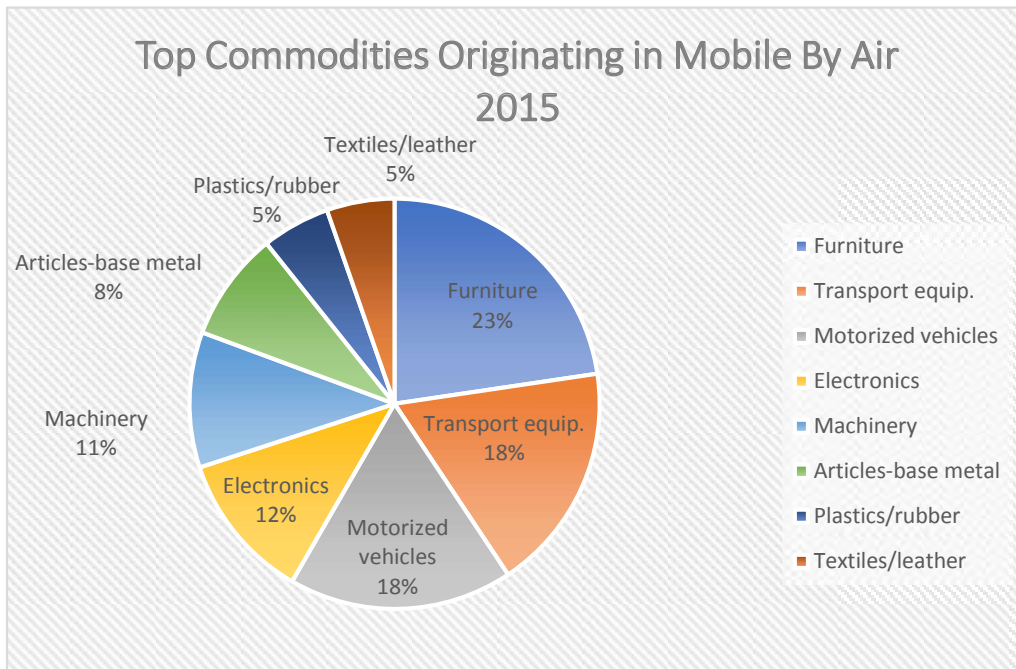
### 7.3.5 Air Freight

The Mobile Regional Airport Authority owns and operates both the Mobile Regional Airport (Bates Field) in west Mobile and the Mobile Downtown Airport at the Brookley Complex adjacent to downtown Mobile. Bates Field is the primary commercial airport with some 30 flights daily and over 300,000 enplanements annually.

Brookley Field serves FedEx, UPS, Emory, and DHL as a regional cargo hub. Brookley operates a 9,600 foot long runway capable of accommodating the largest aircraft flying today. The airfield is housed within the Brookley complex. This 1,700 acre industrial area is home to Mobile Aerospace Engineering, Teledyne Continental Motors, Airbus Engineering Center, and other businesses, industries, and training facilities totaling some 3,700 employees. Brookley is located next to the new Mobile Container Terminal.

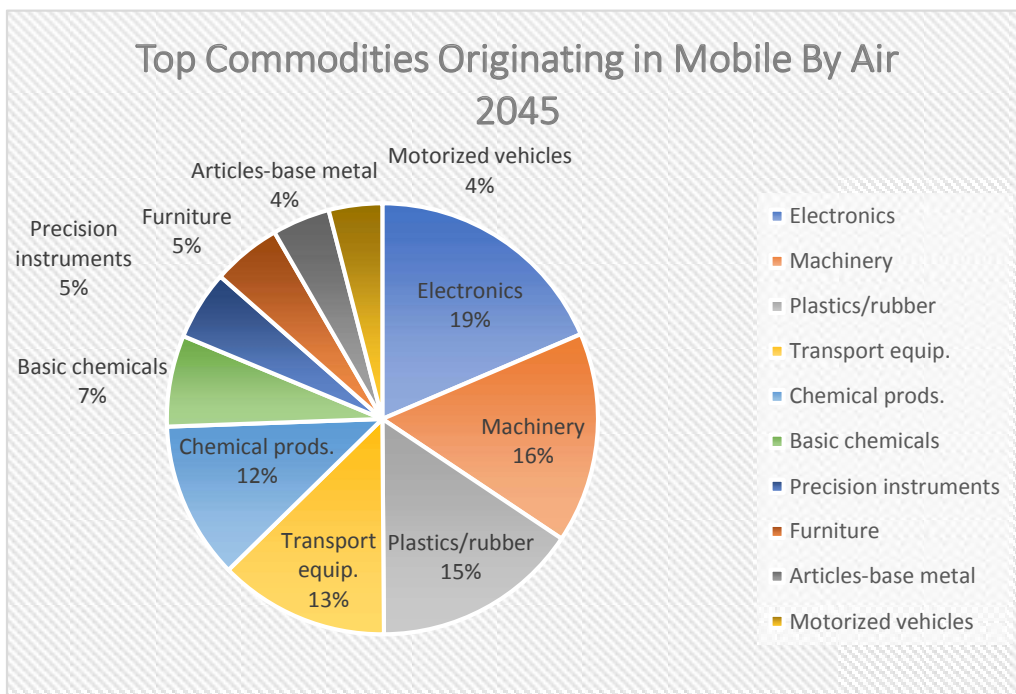
The Mobile Airport Authority contracted with consultant Leigh Fisher to develop a Master Plan, which will support the aerospace and related industries at the Brookley Aeroplex, while also designing options, alternatives and a process for a complete relocation of commercial air passenger service from Mobile Regional Airport to the Mobile Downtown Airport at Brookley. The Master Plan help more effectively serve the regional market, creating competitive service that delivers more options and cost savings. As of the authoring of this document, passenger service carrier

**Figure 7-14 Mobile FAF4 Region's Commodities by Air 2015**



(Federal Highway FAF4 Data)

**Figure 7-15 Mobile FAF4 Region's Commodities by Air 2045**



(Federal Highway FAF4 Data)

Frontier Airlines, no longer provided service at Brookley; however, Frontier is expected to be provided passenger service out of Brookley in the future.

## 7.4 South Alabama Freight Forum (SAFF)

In August of 2018, the South Alabama Regional Planning Commission housed a freight forum which consisted of staff of local governments, and individuals that are involved in the freight community in South Alabama. The idea of the South Alabama Freight Forum (SAFF) was to find out the problems in the freight community, and develop solutions. Because of the large amount freight activity and its growth rate in Mobile right now with the channel to be dredged, Walmart, Airbus, Austal, and it all leads to trucks, and more trucks; they are the backbone of this country.

The forum was also an opportunity to inform the freight community about various surface infrastructure projects like Water Street, McDonald Road Extension, and the I-10 Mobile River Bridge. That agenda item actually seemed to have the most interest from the freight community; what projects are going to be done, and when.

In our efforts to update the freight element of the Long Range Transportation Plan, we have developed a freight survey to be shared with the freight community. The results and data from this survey, will compliment data we purchased from INRIX, and the APM Terminal Survey, to give a snap shot of where trucks are coming from and going to. In the travel demand modeling world, this is an important piece of information.

### 7.4.1 South Alabama Freight Forum (SAFF) Survey Results

Interstates are the most preferred routes, as it is less congested and it is easily accessible to the ports. This is followed by US Routes; US 43, US 98 and US 45. Even though these are the preferred routes, they have also been identified as having chokepoints along them. Throughout I-10, three chokepoints have been identified at the intersections of I-65, SR181, and all along the Bayway beginning at the tunnels. There were complaints that US 43 gets congested because of the low speed limits, despite it being a four lane divided highway. Rail crossings along the route were also pointed out as being a source of congestion. US 98 near the Mississippi state line was recognized as in need of additional lanes to no longer classify as an area of congestion. Aside from the preferred, the intersection of Springhill and Mobile Street was identified as a chokepoint.

Inquiries included on how the Bayway tolling and Water Street improvements would impact businesses. Some surveyors replied that neither should impact their operations. Most replied that it would increase costs and delays, and some said they would pass the costs to manufactures. There were concerns that the Water Street improvements may restrict access to the ship yards, further impacting operations.

Surveyors rated the area routes as a whole and also commented what Law Enforcement Officers (LEO)s could do to help improve it. Access management and road conditions were rated mostly as neutral but leaning slightly unfavorable. LEOs were highly suggested to enforce texting and driving in the left lane, to reduce distracted drivers and make thru traffic more fluid.

## Problem areas Identified by the SAFF

- Several chokepoints on Interstate 10
- US 43 congestion
- Rail crossings
- US 98 at the Mississippi state line needs additional lanes
- Water Street Road Diet
- Potential tolls of a new I-10 Mobile River Bridge
- There is a need to tighten down on texting and driving

## 7.5 Freight Projects

It is important to efficiently and effectively move freight, and is critical in the transformation and growth to the local, state and national economy that the following freight projects be identified by the *Envision 2045 Long Range Transportation Plan* as critical, regional freight projects.

### 7.5.1 I-10 Mobile River Bridge

*The National Interstate 10 Freight Corridor Study (2003)* identifies the Interstate 10 Wallace Tunnels as a major bottle neck and threat to public safety. With almost 8,000 trucks on the Bayway today, and the travel demand forecast model (See section 5.0) estimates almost 12,000 trucks on the Bayway by year 2045, only reiterates the fact the Interstate 10 Wallace Tunnels is a major freight chokepoint. Further, trucks carrying hazardous cargo must detour off of Interstate 10 and travel across the Mobile River via the Cochran Africatown Bridge. These trucks carrying hazardous cargo use Interstate 65 and Interstate 165, or go through the central business district of Mobile. The Environmental Impact Statement suggests close to 300 hazardous material trucks being rerouted per day. This bridge is not only critical for daily vehicular traffic, but imperative for the effective movement of freight.

### 7.5.2 Intermodal Container Transfer Facility Bridge

One of the Alabama State Port Authority (ASPA) critical projects is an Intermodal Container Transfer Facility Bridge. The Alabama State Port Authority's Board of Directors authorized in January of 2013, \$11.5 million for the construction, inspection and testing of a rail access bridge that would connect the Port of Mobile and its proposed Intermodal Container Transfer Facility to five railways. When finished, the bridge would directly connect containerized imports and exports from the Port of Mobile to major railroad lines across the United States. The 3,000-foot bridge will span wetlands and a city drainage area, running behind APM Terminals Mobile, formerly known as the Mobile Container Terminal, toward the property at Broad Street and Interstate 10.

### 7.5.3 Automotive Ro/Ro (Roll On / Roll Off) Terminal

Another Alabama State Port Authority (ASPA) critical project is an Automotive Ro/Ro Terminal on the Alabama State Port Authority's Theodore Ship Channel Turning Basin property located in Theodore, AL. The ASPA's Phase I \$65M Million project will construct on approximately 102 acres an automobile Ro/Ro and processing facility servicing approximately 150,000 units

annually, including but not limited to, new and used automobiles, automobile assemblies, and heavy agricultural and construction vehicles. The project components include a new deep draft ship dock and marginal wharf, administrative and processing facilities, rail infrastructure, paving, lighting and related improvements. The proposed Ro/Ro Terminal would meet import/export markets supporting Alabama's and the Southeast U.S. automotive manufacturing, assembly and transportation logistics industries. AutoMOBILE International Terminal (AIT). AIT will operate the terminal once it is completed in early 2021.

#### 7.5.4 Inland Port

An inland port has been discussed in the past, and as a peer review in the Commonwealth of Virginia, the Virginia Inland Port (VIP) is a success. The VIP occupies 161 acres of land and is approximately 60 miles west of Washington, D.C. The terminal brings the Port of Virginia 220 miles closer to inland markets and enhances service to the Washington D.C. / Baltimore Metro Region by providing rail service to the terminals in Hampton Roads. VIP also consolidates and containerizes local cargo for export. What the VIP does, reduces the need for trucks on a very crowded interstate 95.

In Mobile, Interstate 65 is already at capacity. The 2018 Average Annual Daily Traffic for Interstate 65 is north of Airport Boulevard is 100,554, for in interstate with a capacity of 88,800. In terms of a project to add the capacity, Interstate 65 is land locked, with expensive Right of Way (ROW) from Interstate 10 to at least Interstate 165.

As long range, visionary project, an inland port needs to be looked at to help remove the amount of trucks on Interstate 65. As noted in 7.3.1 Truck Freight of this document, the amount of trucks over the next 25 years is going to dramatically increase, on roads that are already at capacity. The market will determine if it is possible to rail freight north to Montgomery or Birmingham, before it becomes truck freight.

With the Intermodal Container Transfer Facility now established at the Port of Mobile, Port Birmingham, which is positioned 22 miles west of downtown Birmingham in Alabama, links to the Gulf of Mexico and the Port of Mobile by means of the Black Warrior River. It also offers access to the CSX, Norfolk Southern and BNSF railways using the Watco-owned Birmingham Terminal Railway, as well as having direct truck access to Birmingham's six-spoke interstate network.