Port of Morgan City Market Assessment

Final Report

May 2015

Document Verification

Client: Port of Morgan City

Project name: Port of Morgan City

Document title: Market Assessment

Document sub-title: –

Status: –

Date: May 2015

Project number: –

File reference: –

Revision	Description	Prepared by	Date	Approved by
00	Report	Bobby Khondker	May 2015	Walter Kemmsies

Disclaimer

- Moffatt & Nichol (M&N) has devoted effort consistent with (1) the level of diligence ordinarily exercised by competent professionals practicing in the area under the same or similar circumstances, and (2) the time and budget available for its work, to ensure that the data contained in this report is accurate as of the date of its preparation. In preparing this report M&N used estimates, assumptions, and other information developed by M&N from its independent research, general knowledge of the industry and information provided by the Client and other third-parties. M&N does not assume responsibility for inaccuracies in reporting by the Client, the Client's agents and representatives or any third-party data source used in the preparation of this report. Likewise, M&N undertakes no obligation to update the information contained herein or to notify recipients of events occurring after the date on the front cover that might change the content or conclusion of this report.
- Estimating future supply and demand in the port access and shipping industry is difficult, complex and based on variable assumptions. Accordingly, any estimates, forecasts and predictions provided as part of this study are presented solely on the basis of the assumptions accompanying the estimates, forecasts and predictions. Neither M&N nor its respective affiliates, makes any warranty, expressed or implied, with respect to any information or methods disclosed in this document.
- M&N does not accept any liability for the consequences of this document being used for a purpose other than for which it was commissioned. This document should not be relied upon for any other project without the prior written consent of M&N. This report may not be used in conjunction with any public or private offering of securities, debt, equity, or other similar purpose where it may be relied upon to any degree by any person other than the Client.
- No party may rely on this report except the Client or a party so authorised by M&N in writing. Any recipient of this document other than the Client, by their acceptance or use of this document, releases M&N and its affiliates from any liability for direct, indirect, consequential or special loss or damage whether arising in contract, warranty (express or implied), tort or otherwise, and irrespective of fault, negligence and strict liability.
- Any party who is entitled to rely on this document may do so only on the document in its entirety and not on any excerpt or summary. Entitlement to rely upon this document is conditioned upon the entitled party accepting full responsibility and not holding M&N liable in any way for any impacts on the forecasts or the earnings resulting from changes in "external" factors such as changes in government policy, in the pricing of commodities and materials, price levels generally, competitive alternatives to the project, the behaviour of consumers or competitors and changes in the owners' policies affecting the operation of their projects.
- This document may include "forward-looking statements". These statements relate to M&N's expectations or beliefs regarding the future. These statements may be identified by the use of words like "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "project," "will," "should," "seek," and similar expressions. Such forward-looking statements reflect M&N's views and assumptions with respect to future events as of the date of this study and are subject to future economic conditions, and other risks and uncertainties. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, including, without limitation, those discussed in this study. These factors are beyond M&N's ability to control or predict. Accordingly, M&N makes no warranty or representation that any of the projected values or results contained in this study will actually be achieved.
- The material in this report may have been developed in part through consultations with executives of industry stakeholders. In such cases, their comments have not been attributed for reasons of commercial sensitivity, but M&N recognises their input.

Section 1

White Paper Memorandum

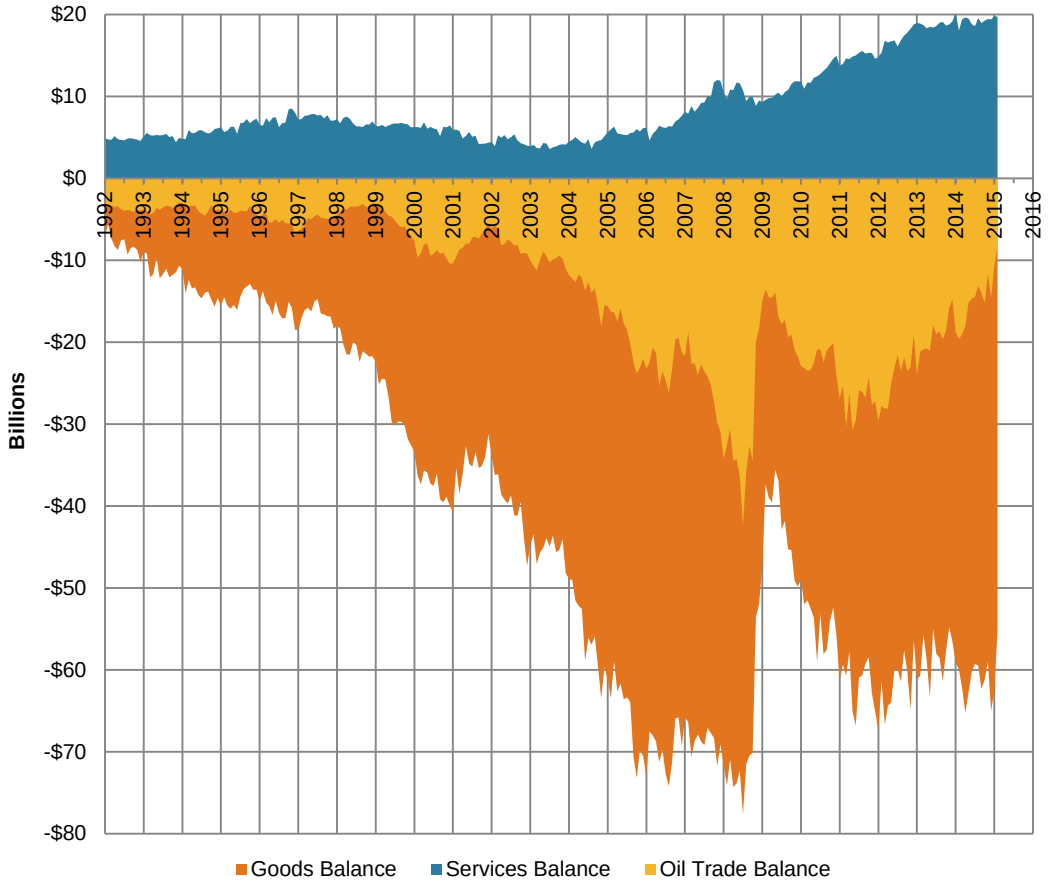
Summary

- Port of Morgan City has been successful in supporting offshore oil and gas operations and has recently begun handling dry bulk import and exports for an agricultural company that trades dry bulk commodities to the Caribbean and Central America.
- It is in the State of Louisiana's interest to see the Atchafalaya Bar Navigation Channel and Atchafalaya Bay Navigation Channel maintained at the mandated depth because:
  - There is a significant possibility that the port will lose its current customer, which needs 20ft of depth, and this would lead to the state losing employment, income and tax revenues.
  - Volume of exports and imports via the Port of Morgan City could be increased if the channel is maintained at 20ft.
  - Louisiana State ports have been losing share of US exports even as they have grown at an average rate of 10% per year.
  - Smaller vessels serving North-South trade could be attracted from the larger Louisiana ports that also serve vessels on the East-West trade lanes to smaller ports such as the Port of Morgan City.
- This memorandum lays out the data and arguments in more detail.

US trade deficit threatens the long-term economic outlook

- Since the early 1990s, the US has developed a substantial foreign trade deficit. The chart decomposes the trade deficit into the services and goods components. The US is a service-based economy and naturally has a services trade surplus. Since US labor is more expensive than foreign labor, particularly in locations like China, it has run a goods trade deficit for a long time.
- The trade deficit worsened after China joined the World Trade Organization in 2001. As the trade deficit worsened, employment growth in the US declined.
- The US has had the lowest employment growth rate since 2001 since such data was first recorded in the 1930s. To increase employment and therefore overall economic growth, the US needs to reduce its trade deficit.
- US oil trade deficit has fallen to a historic low of 14.6% of overall goods trade deficit, attributed to increased oil production supported by infrastructure such as PMC. In addition, Port of Morgan City supports agricultural exports which also reduces the US trade deficit. This is all despite not having a fully dredged navigation channel.

US Trade Balance Components: 1992-2014



Source: US Census Bureau, Moffatt & Nichol

US comparative advantages: agriculture, capital goods and energy

- In terms of volume, the US exports as many tons of goods as it imports, however, its exports have a lower value per ton. The exports tend to be agricultural goods, energy products such as coal and capital goods such as airplanes, oil drilling equipment and other industrial goods. This is shown in the table that ranks products based on their "score" – the revealed comparative advantage score.
- These types of exports use a lot of capital and little labor, and require access to low cost raw materials and fuel. Capital is relatively cheaper in the US. Fuel and raw materials costs are also lower. In a few words, the US has comparative advantages in the production and export of these goods. Although production of these goods does not use a lot of labor, increasing their exports would increase employment, as has been the case for energy sector employment in Louisiana.

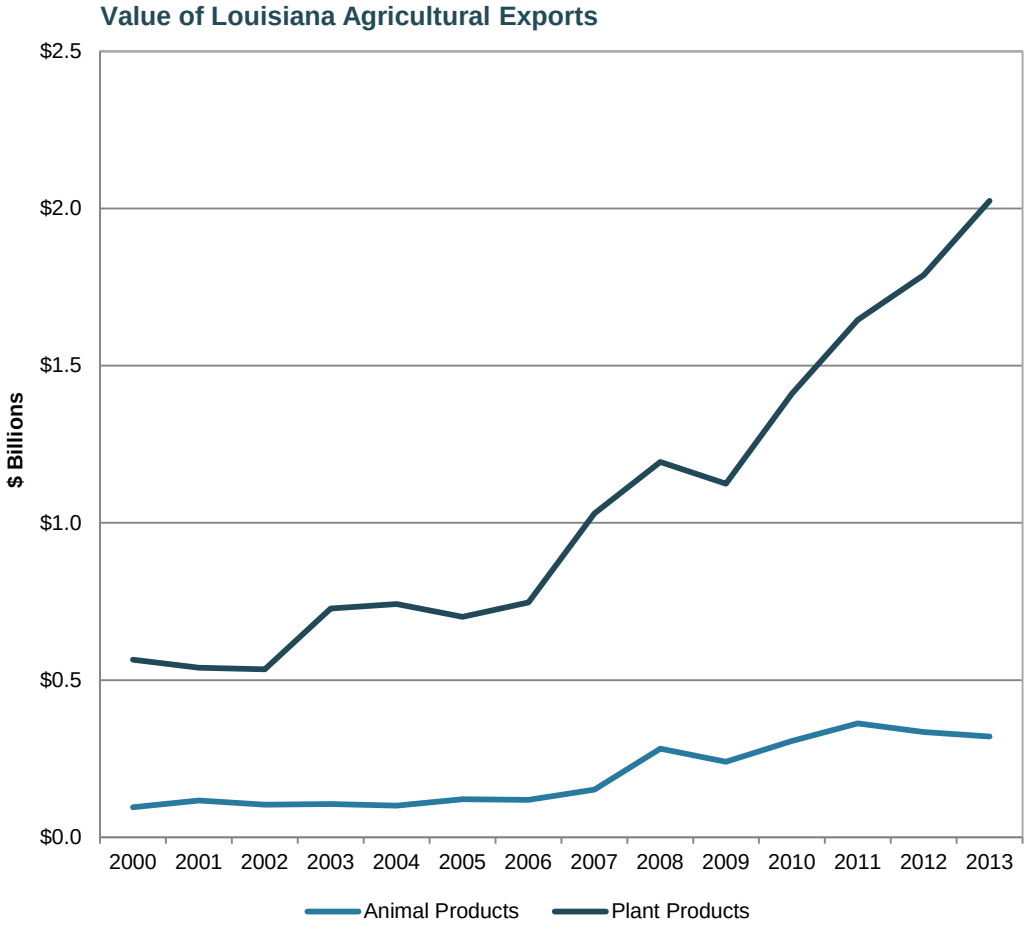
Top 10 High Potential US Net Exports

Containerized	Score
Wood Pulp Scrap and Waste	9.4
Oil Seeds (Soy)	1.1
Raw Hides and Leather	0.8
Cotton – Untreated, Yarn and Woven Fabric	0.7
Animal Feed	0.7
Meat and Other Edible Animal Parts	0.3
Plastics Feedstock and Manufactured Goods	0.2
Iron and Steel	0.1
Paper and Paperboard	0.1
Chemical Products	0.1
Cereals	0.1
Organic Chemicals	0.1
Bulk/Breakbulk	**Score**
Oil Seeds (Soy)	32.7
Meat and Other Edible Animal Parts	28.7
Cereal Grains	3.9
Animal Feed	3.7
Wood and Charcoal	0.4
Crude Oil and Refined Petroleum/Natural Gas Products	0.4
Live Animals	0.3
Wood Pulp Scrap and Waste	0.2
Fish and Crustaceans	0.2
Dairy Products including Eggs and Honey	0.1
Organic Chemicals	0.1
Plastics Feedstock and Manufactured Goods	0.1

Source: US Census Bureau, Moffatt & Nichol

Louisiana has been increasing its agriculture and energy exports

- It is well known that Louisiana's exports of coal, and increasingly, petroleum and natural gas products, have grown substantially in the last 10 years. However, it often escapes notice that Louisiana's agricultural exports have also been growing. USDA data, graphed right, shows that the value of Louisiana agricultural exports have grown at an average rate of 10% between 2000 and 2013.
- Over the same period of time, Louisiana's share of US agricultural exports has increased from 1.3% to 1.8% With improved infrastructure it may be possible to increase this share even further.

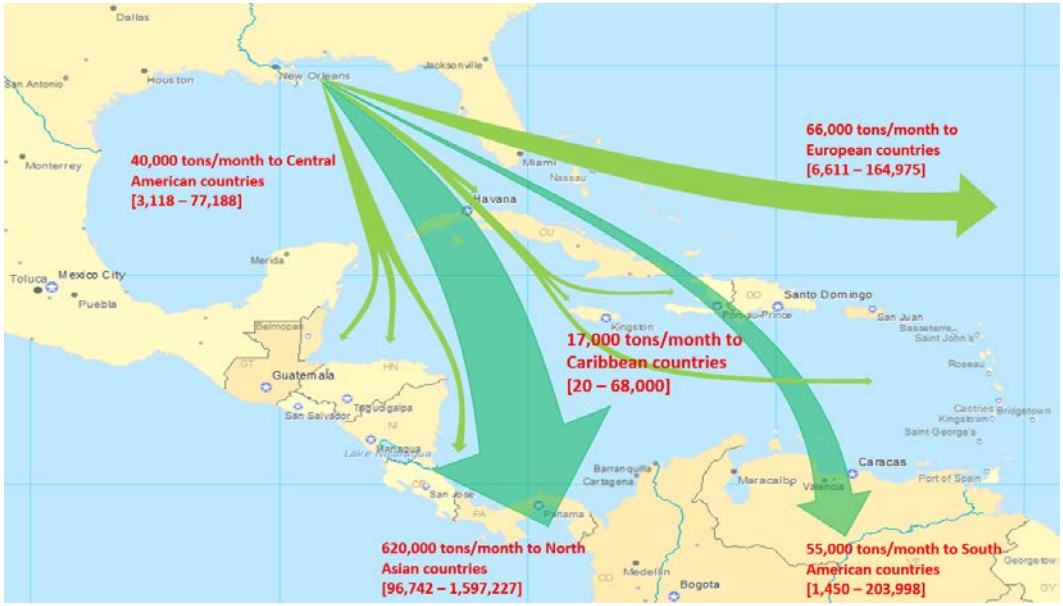


Source: USDA

Louisiana's regional export markets are differentiated

- Agricultural goods exported by ports in the New Orleans custom district go to destinations all over the globe. The average monthly number of tons of dry bulk agricultural goods shipped to countries in various regions of the world are shown in the map below. The average Caribbean country receives 17,000 tons of cereals, oilseeds and/or DDGs per month. Central American and Caribbean countries receive shipments in a range that is best served through smaller capacity vessels that could call at the Port of Morgan City, if its access channel is sufficiently deep.
- Louisiana has three ports that have the depth and berth capacity to handle the large vessels that haul bulk agricultural exports to large markets in Asia and Europe and may benefit from handling the larger vessels. Smaller vessels are better suited for the Central American and Caribbean markets. However, these vessels cannot call at the larger ports without impacting the larger vessels that serve the major East-West trade lanes. Louisiana port facilities could be optimized by having the smaller ports like Morgan City serve the smaller vessels on the lower volume North-South trades.

Average Monthly Oilseed and Grain Shipments from the New Orleans Custom District by Destination Country



Source: US Census Bureau, Moffatt & Nichol

Economic impacts of maintaining a 20ft draft navigation channel

- The Port of Morgan City serves a shipper that presently imports salt and exports DDGS on a regular basis. The shipper also exports rice to Haiti on an “as-needed” basis. These activities have a significant economic impact according to the report delivered by Professor James Richardson, Alumni Professor of Economics, Louisiana State University. The current economic impact is shown in the table on the right captioned “*Under Current Operations*”.
- Each of the 30 calls during the year at the Port of Morgan City generates $270,000 of personal earnings and $35,000 of tax revenues. This income and tax revenue could be lost unless the navigation channel at the Port of Morgan City is maintained at the 20ft mandated by Congress.
- There is a further opportunity cost associated with not maintaining the channel at 20ft in that additional business would be lost at Morgan City. Therefore income, employment and tax revenues related to these additional business would be foregone. This was estimated by Professor Richardson and is shown in the table on the right captioned “*Under Future Expanded Operations (Twofold Increase)*”.

Economic Impact

		Local	State
Under Current Operations			
Jobs	Direct	42	44
	Indirect	92	96
	Total	134	140
Personal Earnings	Direct	$2,427,600	$2,542,571
	Indirect	$5,290,000	$5,520,000
	Total	$7,717,600	$8,062,571
State and Local Tax Collections	Direct	$315,588	$330,534
	Indirect	$687,700	$717,600
	Total	$1,003,288	$1,048,134
Under Future Expanded Operations (Twofold Increase)			
Jobs	Direct	84	88
	Indirect	184	192
	Total	268	280
Personal Earnings	Direct	$4,855,200	$5,085,142
	Indirect	$10,580,000	$11,040,000
	Total	$15,435,200	$16,125,142
State and Local Tax Collections	Direct	$631,176	$661,068
	Indirect	$1,375,400	$1,435,200
	Total	$2,006,576	$2,096,268

Source: “Economic Impact Related to Loss of PMI Operations at The Port of Morgan City” (2015)

Need for maintaining a 20ft draft navigation channel

- Over the last 10 years Louisiana ports have been losing share of agricultural exports to ports in other parts of the US, according to Census Bureau data.
- It is thus imperative that Louisiana pursues every effort to facilitate exports through its ports.

Shares of US Oilseed and Grain Exports By Port District

	2003	2005	2007	2009	2011	2013	2014	+/- Share
New Orleans	61%	52%	51%	52%	48%	49%	52%	-8.7%
Colombia-Snake	14%	16%	16%	15%	18%	20%	19%	5.2%
Seattle, WA	8%	13%	11%	12%	12%	8%	8%	0.2%
Los Angeles, CA	1%	2%	4%	3%	4%	4%	3%	2.1%
Norfolk, VA	1%	1%	2%	2%	2%	3%	2%	1.9%
Other	15%	16%	17%	15%	17%	16%	14%	-0.6%
	100%	100%	100%	100%	100%	100%	100%	

Source: US Census Bureau, Moffatt & Nichol

The larger picture

- Maintaining the navigation channel at 20ft as mandated by Congress would not only help the Port of Morgan City keep the business it has developed with great effort, but could increase that business. But perhaps the important possibility is that smaller vessels calling at larger Louisiana ports could start calling at the Port of Morgan City. These vessels are more efficient in serving the smaller North-South trade lanes. Larger ports could focus on the larger vessels so as to continue growing exports on the large East-West trade lanes. Given that Louisiana producers and its ports have been losing share of US agricultural exports, investing in the Port of Morgan City should be a priority to the state.

Section 2

Executive Summary

Stakeholders and Effects

Stakeholders & Effects

PoMC	PMI	Louisiana (State)	USACE (Nation)
Revenue	Economic competitiveness	Tax Revenue	Operational Cost
Investments		Jobs	Emissions
			Safety

If PMI Leaves…

PoMC stands to lose revenues associated with vessel and cargo handling. Potential loss of any previous investments to infrastructure, such as purchase of equipment or building/pavement improvement.	PMI would concede competitive pricing – passing on increased operational costs to its customers.	If PMI moves to another LA port, only local taxes are affected. If PMI moves out of state, LA stands to lose tax revenues as well as jobs.	A move to another port increases ocean leg miles resulting in increased emission. Competing ports may have lower inland/river distances resulting in lower emission. The net cost/benefit depends on those two mileages.

Key Points

- If the access channel depth is maintained at the federal government mandated 20 feet, the Port of Morgan City can competitively serve a wide range of locations in the mid-section of the US that utilize vessels under 10,000 deadweight tons to carry goods to and from the Central America and Caribbean Basin.
- Despite the channel averaging a 14ft depth, the Port of Morgan City was selected by a shipper operating in the US Midwest/Gulf Coast to Central America/Caribbean market. However, the inability to fully load vessels that would require a 20ft channel depth challenges the sustainability of this activity.
- Each ship call at Morgan City generates about $100,000 to the local and state economy and positively impacts the local economies along the Mississippi Waterway. At 20ft, each call would contribute significantly more.
- Insufficient channel depth maintenance has put the Port of Morgan City at a competitive disadvantage and that has a negative economic and potentially environmental impact.
- Ports with deeper water depth that serve deeper draft vessels would be able to serve them better if vessels requiring less draft could be served at the Port of Morgan City.

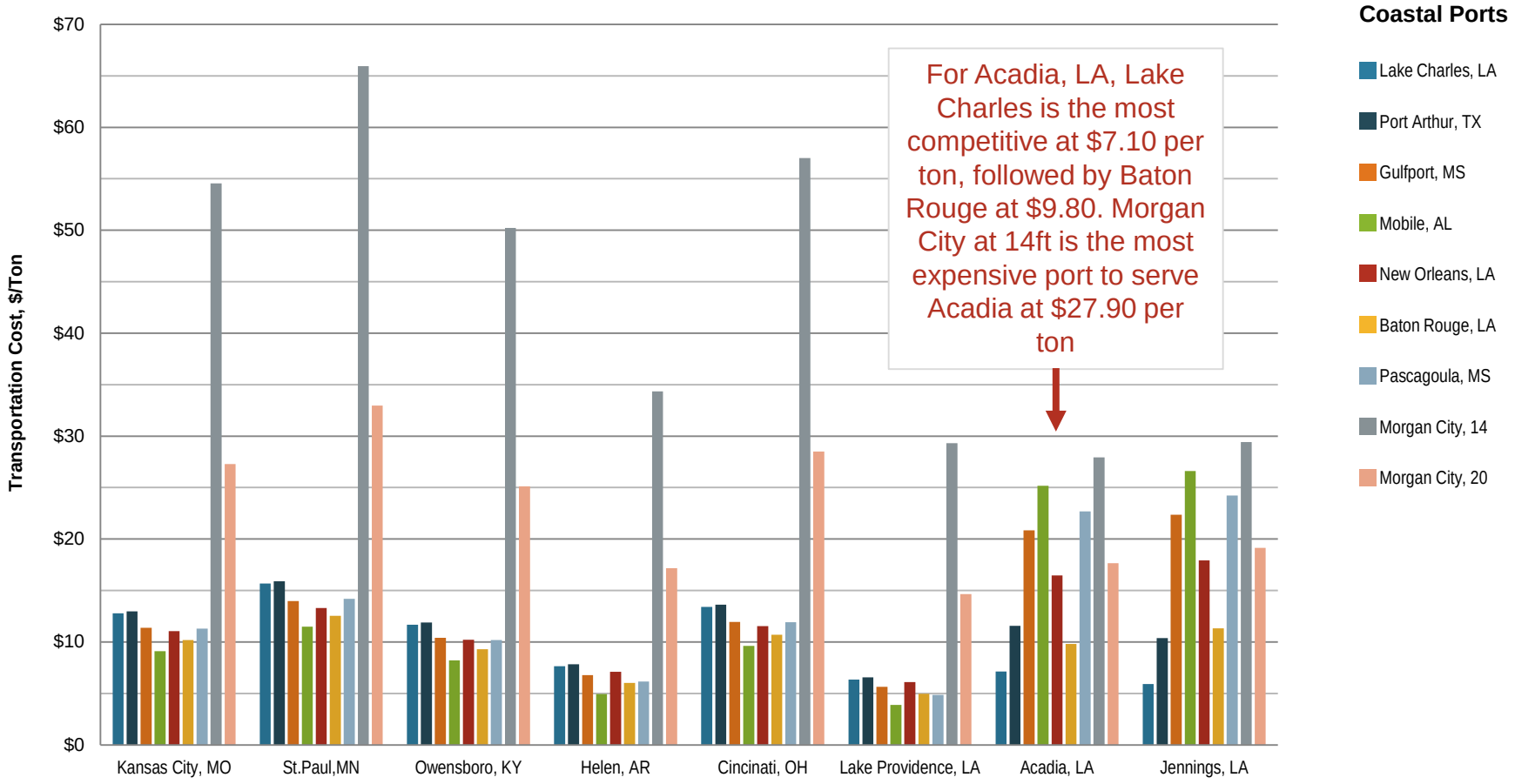
Current Revenue could nearly double if the channel is maintained at 20ft

- **Revenue Analysis:** The following four revenue streams are realized by PoMC for services currently provided to PMI. Operations and invoices related to these tasks were analyzed and revenues were annualized to estimate PoMC's revenue for operations at 14ft and at 20ft.

Operation	Current Annual Estimate Operating at 14ft	Future Annual Estimate Operating at 20ft
Barge	$33,600	$67,200
Vessel	$52,830	$65,610
Rice Exports	$54,800	$54,800
Warehousing	$21,292	$121,667
Total	$162,522	$309,301

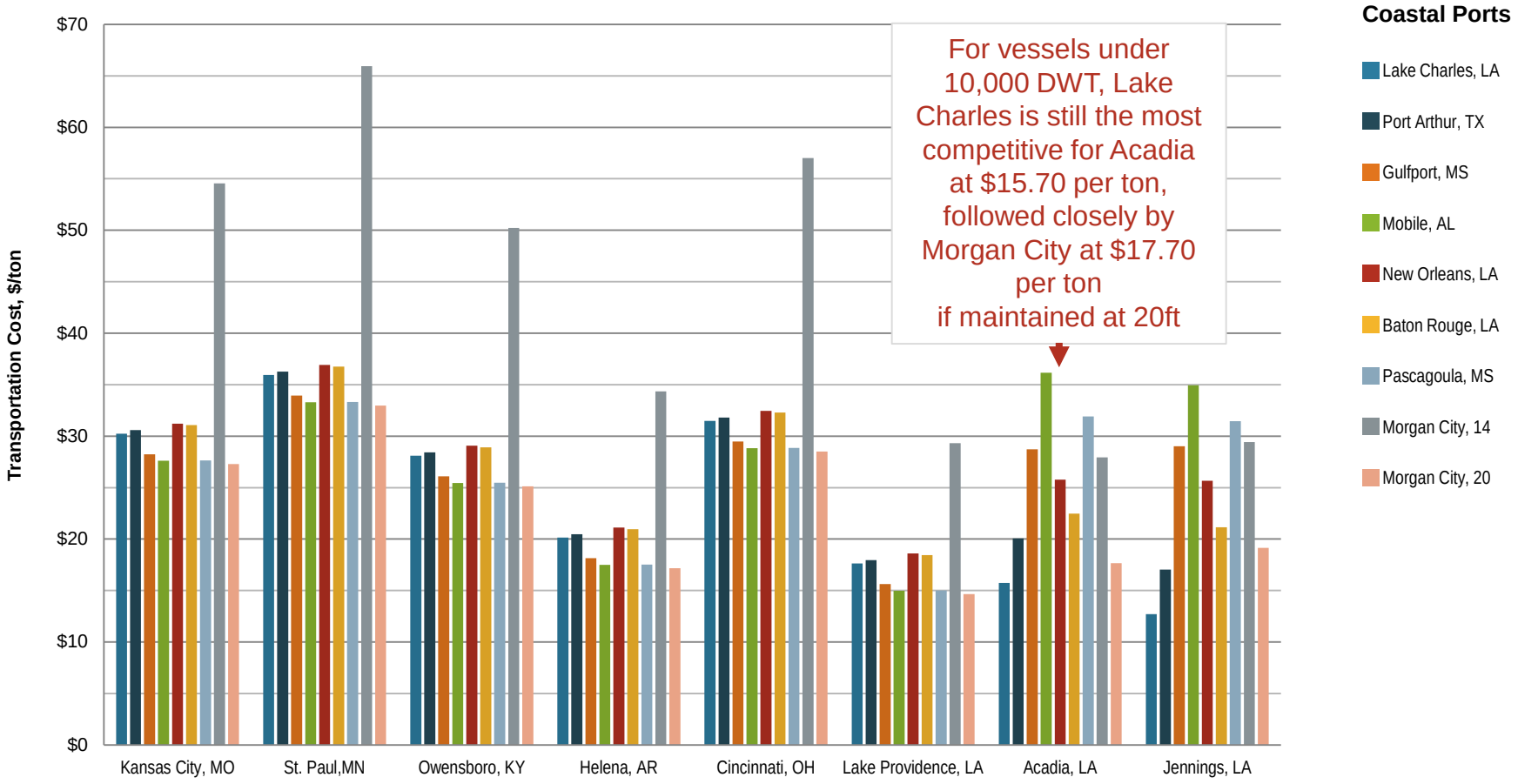
Without Vessel Size Constraint, Mobile and Baton Rouge are most competitive for cargo flows between US inland destinations and Mexico

Transportation Cost Analysis shows a lower $/ton cost for larger vessels, greater than 10,000 DWT that provide economies of scale.



At 20ft PoMC becomes broadly competitive for cargo utilizing vessels less than 10,000 DWT

Not all cargo owners require large vessels. There may be a niche market for vessels less than 10,000 DWT.



Economic Impact Summary

- Based on a report prepared by Professor Richardson of LSU for The Ports Association of Louisiana[1], a partial estimate of the total economic impact generated from operations at 14ft is outlined below:

Economic Impact under Current Operations

		Local	State
Jobs	Direct	42	44
	Indirect	92	96
	Total	134	140
Personal Earnings	Direct	$2,427,600	$2,542,571
	Indirect	$5,290,000	$5,520,000
	Total	$7,717,600	$8,062,571
State and Local Tax Collections	Direct	$315,588	$330,534
	Indirect	$687,700	$717,600
	Total	$1,003,288	$1,048,134

It is anticipated that there will be 30 calls by loaded vessels at the Port of Morgan City.
Each call generates approximately $270,000 to the local and therefore state economy.
The $270,000 estimate does not include impacts at out of state locations that export or import commodities handled at Morgan City.

Notes: These numbers do not include out-of-state jobs generated in food processing plants nor Louisiana rice production, grain elevator, trucking jobs, etc.
[1]The Economic Impact of the Ports of Louisiana, Prepared for the !e Ports Association of Louisiana by Dr. James A. Richardson, March 2012

Benefit Cost Analysis is positive for PoMC at 14ft and 10,000 DWT

PoMC has no pilot fees and has the highest net Benefit to Cost.

- All numbers are relative to PoMC.
- Negative numbers denote costs that are higher at PoMC.
- Positive numbers imply PoMC has an advantage.

Total Annual Cost (Inland, Ocean & Pilot)	Lake Charles, LA	Port Arthur, TX	Gulfport, MS	Mobile, AL	New Orleans, LA	Baton Rouge, LA	Pascagoula, MS
Total Incremental Inland Cost – Annual	$677,633	$826,293	-$211,161	-$632,287	$338,688	-$217,750	-$315,736
Total Incremental Deep Sea Cost (including Pilot Costs) – Annual	$252,141	$193,504	$605,961	$885,479	$1,008,302	$1,620,889	$542,253
Total for 13 Barge Trips and 33 Ocean Trips	$929,774	$1,019,797	$394,800	$253,193	$1,346,990	$1,403,139	$226,517

Since the total amounts are positive for all ports, it implies that PoMC has the best net Benefit to Cost.

Cost of No Dredging amounts to over $2 million annually

Assumptions:

- Upland costs (barge transportation & emissions) remain the same for “No Dredge” and “With Dredge” cases.
- Ocean costs differ due to increased number of trips needed to meet the 340,00 tons demand annually.

	Current Depth (14ft)	Deeper Maintained depth (20ft)
The Minimum depth (ft.) of the outer channel	14	20
Length of the ocean loop	1,776	1,776
Inbound (50% of total vessel capacity based on Immersion Rates)	3,159	5,265
Outbound (50% of total vessel capacity based on Immersion Rates)	3,159	5,265
The volume currently being handled annually (Tons)	340,000	340,000
The number of ocean voyages required for handling annual tonnage	54	33
Total Deep Sea Vessel Total Cost (per Trip)	$108,174	$108,174
Deep Sea Vessel – Total Emission Cost (per Trip)	$5,205	$5,205
Total Deep Sea Transportation Cost (Annual)	$5,841,420	$3,569,757
Total Deep Sea Emission Cost (Annual)	$281,083	$171,773
Total Incremental Deep Sea Cost (Annual)	$6,122,503	$3,741,530
Cost of No Dredging	**$2,380,973**	

Section 3

Background of the Project

Purina Mills International is the only breakbulk tenant at the Port of Morgan City (PoMC)

- Purina Mills International currently runs an import/export breakbulk operation out of the Port of Morgan City.
- The operating costs are dependent on the vessel size deployed in addition to the vessels' utilization.
- The channel cannot be reliably maintained at 20ft year-round without intervention / modified processes.
- The current shallow depth (~ 14ft) necessitates the use of a smaller vessels operating with lightened loads.
- Under current constrained operating conditions, PMI may relocate to a different port.
- This objective of study is to estimate the effects of two outcomes:
  - PMI leaving PoMC to start operations at a different port.
  - PMI continuing operations at PoMC with deeper channel depths year-round.

Purina Mills International operations include upland barge transport as well as deep draft ocean voyages

- PMI's operations can broadly be segmented into two parts:
  - Upland/outbound movement of freight along the inland waterways using barges.
  - Ocean-going operation that includes ports in Mexico and Haiti.
- The upland/outbound operation brings freight such as DDG/S, rice, and other commodities by barge to PoMC where they are transloaded to ocean-going vessels with destinations in the Caribbean.
- The inbound operation includes transporting commodities imported from Mexico, such as salt, for use at PMI's domestic facilities.
- The ocean segment of the operation includes a deep sea vessel calling on Mexican and Haiti ports before returning to PoMC. Currently, PMI employs an OSLO Bulker vessel for its operations.

A comprehensive assessment of Revenue, Transportation, and Economic Aspects of PMI operations was carried out

- **Revenue Analysis** – Detailed analysis of PoMC operations and client invoices.
- **Transportation Cost** – Assessment of $/ton transportation costs for vessels less than 10,000 DWT and over 10,000 DWT.
- **Economic Impact** – Estimated direct and induced jobs and taxes related to PMI operations.
- **Benefit Cost** – This analysis computes the net impact of operation, emission, and safety costs associated with shifting the PMI operation from one port to another.

PoMC is assumed to be able to handle Increased Vessel Calls in the future to meet volumes two times that of today

- There will be increased trade volume in future years.
  - These increased trade volumes will necessitate either or both of:
    - Increased vessel utilization, requiring 20ft maintained channel depth year-round at PoMC.
    - Increased number of both barge trips and ocean trips in and out of PoMC.
- Moffatt & Nichol has provided an assessment of current and future trade volume potential that supports the assumption of future trade growth.

Section 4

Revenue Analysis

Estimates of current and future revenues earned by PoMC for services provided to barges, ocean vessels, rice exports and warehousing.

Background

- There are a number of services that the Port of Morgan City (PoMC) provides that directly impact the port in terms of revenue earned and employment. These services have a cascading effect on direct and indirect ancillary services – and thus regional employment and revenues – that support the core operations at PoMC.
- The objective of this section is to establish estimates of current and future annual revenue earned for the PoMC. It is to be noted that breakbulk operations have started only very recently, and as a result, long-term operational and financial data were not available for this study. In addition, with each subsequent vessel call, supplementary and new operations have been used, such as cleaning of barges after unloading or streamlining existing operations. As such, best judgment based on existing invoices has been used to derive average parameters for replication of operational and financial practices.
- The items analyzed were Barge Operations, Vessel Operations, Rice Exports, and Warehousing.

Current Barge Operations generate an estimated revenue of over $33,000 annually

- Barges have to be requisitioned in anticipation of their use.
- In some cases, barges may arrive one or more days before they are utilized.
- Barges may also remain at PoMC after the departure of the ocean vessel for maintenance services.

- Presently, on a monthly basis, there is an average of 8 salt barges staying at the port for 8.25 days and 2 grain barges staying for 7 days.
- Monthly Average Barge Days: (8 x 8.25) + (2 x 7) = 80 barge days.
- Monthly Average Revenue related to Barge Operation: 80 barge days x $35.00/day = $2,800.
- Potential current annual revenue: 12 months x $2,800 per month = **$33,600.**

Future Barge Operations for PoMC operating at 20ft generates an estimated revenue of over $67,000 annually

- It is expected that by maintaining channel depth at 20ft year-round, vessels such as the Oslo Bulk 9 will be able to sail at higher utilization, close to its design capacity of 8,000 DWT. Thus, it is realistic to expect a doubling of current operations.
- Monthly Average Barge Days: (16 x 8.25) + (4 x 7) = 160 barge days.
- Monthly Average Revenue related to Barge Operation: 160 barge days x $35.00/day = $5,600.
- Potential future annual revenue: 12 months x $5,600 per month = **$67,200.**

Vessel Operations

- Typical vessel calling at PoMC currently : M/V Oslo 9 bulker.
- Revenues primarily from dockage and harbor fees
  - Some supporting services such as providing fresh water to the vessel.
- Vessel stays at the dock for an average of 3 days each trip.
- It is expected that an average of 2.5 trips will be made per month.
- The published tariff specifies a dockage of $2.00/foot/day.
  - However, negotiated rate is $1.40 .
  - Future corresponding negotiated target rate is $1.80.

Current Vessel Operations generate estimated revenues of over $50,000 annually

- Dockage: 355 feet x $1.40/foot/per day x 3 days = $1,491.00.
- Harbor Fee: Per Trip = $250.00.
- Freshwater: 4,000 gallons x $5.00/1,000 gallons = $20.00.
- Total Revenue: per trip = $1,761.00.
- Expected number of Annual Trips: 2.5/month x 12 months = 30 trips.
- Potential current annual revenue: 30 trips x $1,761.00/trip = **$52,830.**

Future Vessel Operations conservatively assumes the same vessel profile and the same number of annual trips but with increased dockage fee

- It is assumed that volume per trip will significantly increase with a maintained depth of 20ft throughout the year. While this will reduce the total cost per ton for PMI operations – staying on the conservative side – additional trips may not be required.
- It is expected that dockage would increase to $1.8/foot/day generating $1,917 per trip. Adding harbor fees and freshwater services totals the amount to $2,187 per trip.
- In such a scenario, the future revenues associated with vessel operations become: 30 trips x = $2,187/trip = **$65,610.**

Rice Exports

- Rice arrives at the port from the rice farmers in truck as bulk.
- The farmers / exporters provide their own conveyer system equipment to transfer the rice from the trucks to stand-by barges
  - And then from the barges to the ocean vessel.
- PoMC generates revenues from these operations by providing crane services and dock labor.
- Two shipments, each of 2,000 tons, of rice coming into PoMC are needed for one export trip.
- On average, each barge needs 2 hours of crane service, in addition to 2 hours of crane operator labor.
- It is estimated that PoMC will become the port of choice for LA rice exporters and handle to up to 8 export trips annually with each trip handling 4,000 tons.
- Export of rice is generally not affected by demand of importing economies because US rice is not price competitive with foreign producers. Rather, rice exports are primarily driven by US foreign aid policies that may change periodically. Hence, to remain conservative, no future growth in rice exports is assumed.

Current and Future Rice Exports are estimated to generate about $55,000 annually

- The table provides average fees charged to the client for rice operations.
- One export shipment requires 2 shipments of rice delivery, each shipment being 2,000 tons. So, for each shipment, PoMC generates $3,425 x 2 = $6,850.
- The associated current/future annual revenue is thus estimated to be: 8 annual trips x $6,850 / trip = **$54,800.**

Typical Revenue generated for processing 2,000 tons of rice

Item	Quantity	Unit Rate	Amount
35 Ton Crane	2	$135.00	$270.00
Crane Operator Hours	2	$135.00	$270.00
Dock Labor Hours	11	$35.00	$385.00
Dockage for Barge	1	$2,500	$2,500.00
Total			**$3,425.00**

Warehousing

- PoMC rents its warehouse to customers for storage until such commodities are exported.
- Presently, PoMC has been renting out warehouse space for DDG.
- PoMC has 20,000 SFT of warehousing space that it can rent out.
- Current Estimates are for PoMC to rent out 7,000 SFT for 365 days a year.
- Future Estimates are for PoMC to rent out all 20,000 SFT for 365 days a year.
  - It is expected that as a result of maintaining 20ft channel depth at PoMC throughout the year, exports of DDG and/or other agricultural commodities will increase, at which time the entire warehouse will be rented throughout the year.
  - At that time, the rent rates are expected to increase to $0.50 per SFT per 30 days.
- Current negotiated rent is $0.25 / SFT per 30 days of storage.
- This works out to be $0.25/30 = $0.0083 per SFT per day.
- Future target rent is $0.50 / SFT per 30 days of storage.
- This works out to be $0.50/30 = $0.0167 per SFT per day.

Future Warehouse revenue is estimated at over $120,000 annually, almost 6 times the revenue estimated from current operations

- An average computation for a full year, or 365 days, assuming 7,000 SFT to be stored year-round at current negotiate rate is: 7,000 SFT x 365 days x $0.008333/day/SFT = **$21,291.67.**
- Future estimates are based on renting out 20,000 SFT for 365 days a year at $.50/SFT/30 days or $0.0167/SFT/day. Under these conditions, the potential annual revenue is calculated as follows: 20,000 SFT x 365 days x $0.0167/day/SFT = **$121,666.67.**

Future operations could double revenues earned under current operations

- The current and future estimated revenues are summarized in the table.
- Impact of adding more ships calls:
  - Subject to physical infrastructure at the port, additional vessel calls per month could have the potential for increasing barge and vessel-related revenues.
  - Warehousing revenue can only increase through an increase of rates, as the future estimates of $121,667 is based on 100% utilization of the warehouse.

Operation	Current Annual Estimate	Future Annual Estimate
Barge	$33,600	$67,200
Vessel	$52,830	$65,610
Rice Exports	$54,800	$54,800
Warehousing	$21,292	$121,667
Total	**$162,522**	**$309,301**

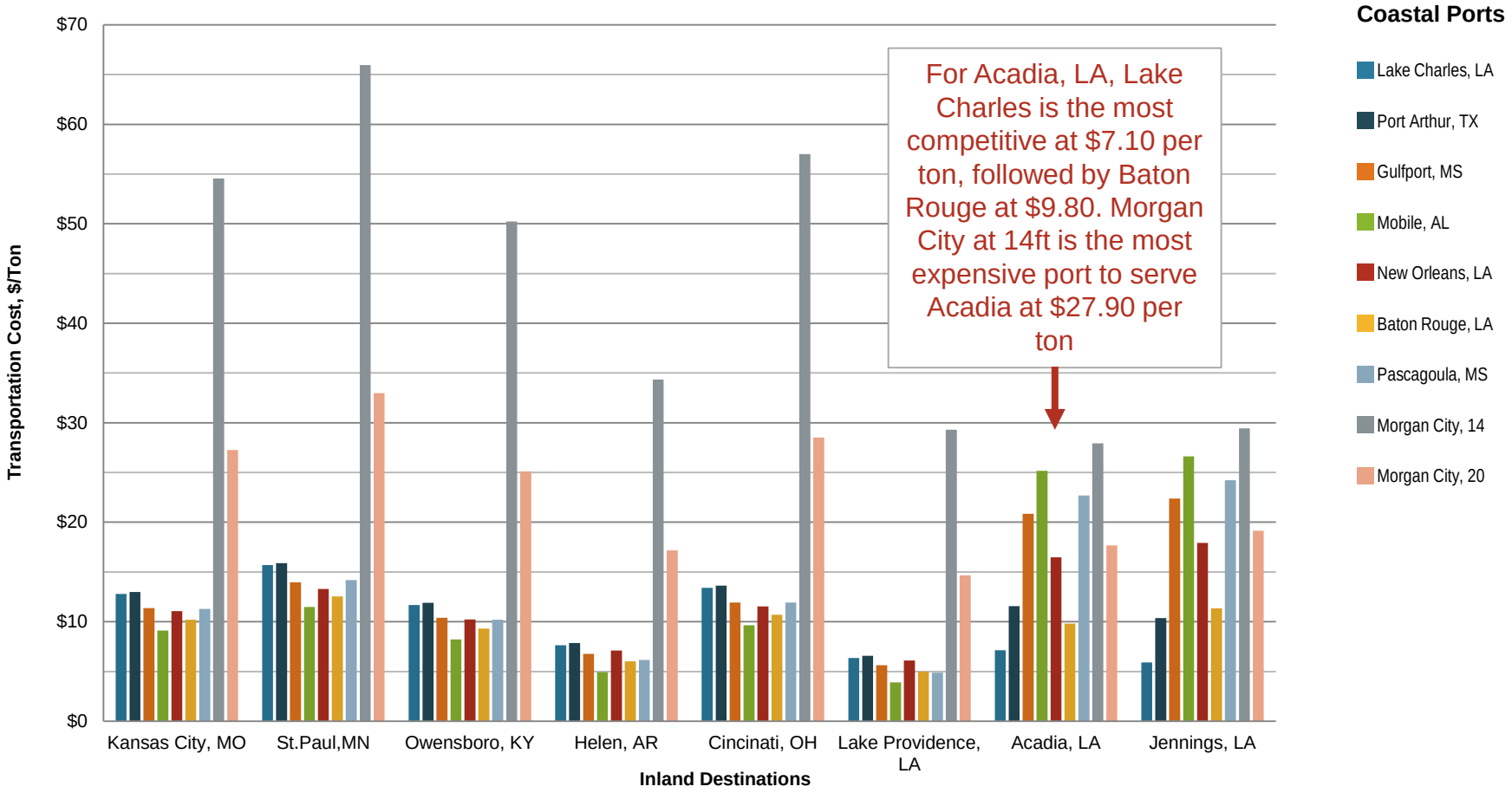
Section 5

Least Cost Market Areas

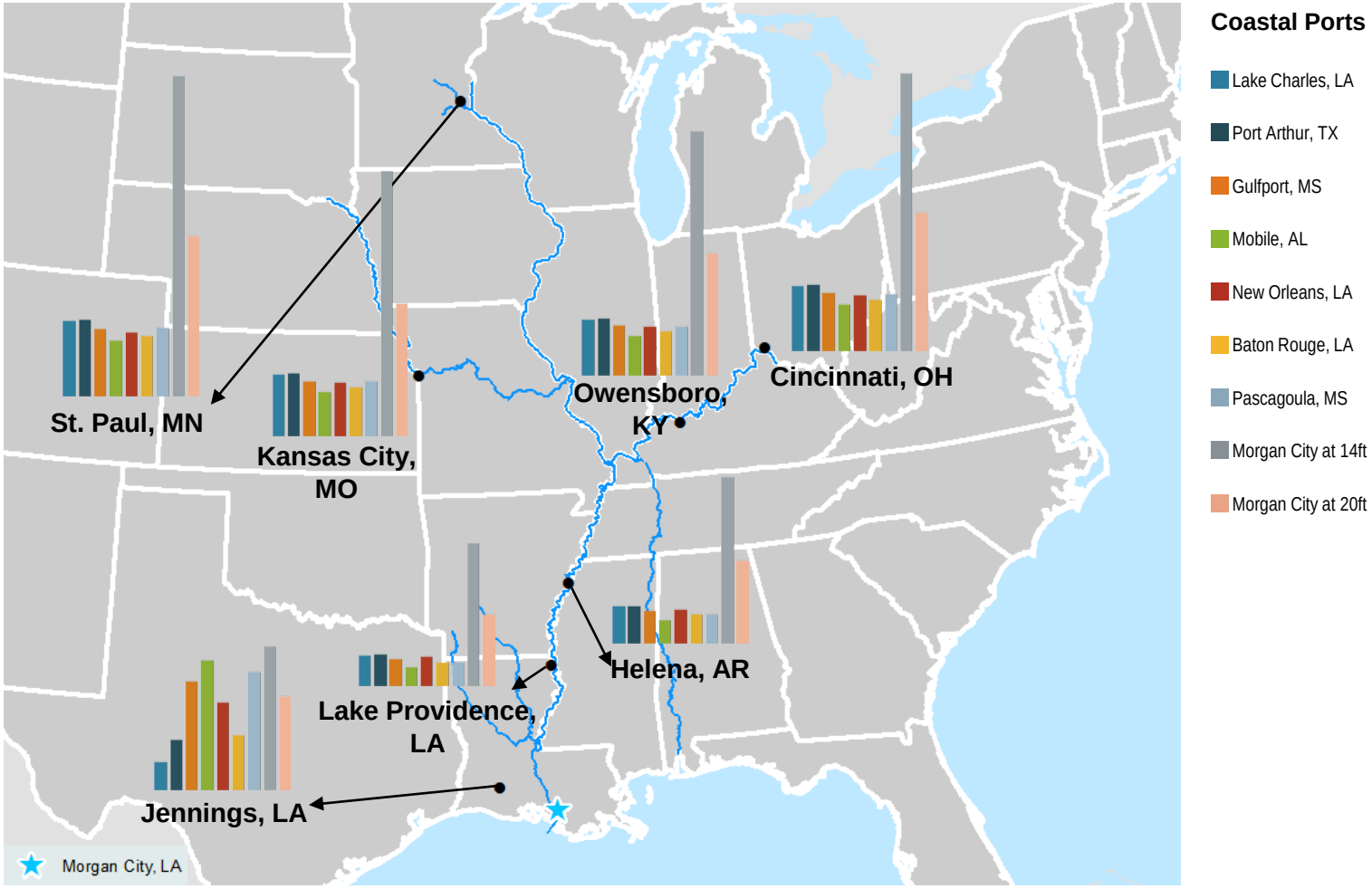
Analysis of transportation costs to serve various inland locations via competing ports under different vessel sizes.

Without Vessel Size Constraint, Mobile and Baton Rouge are most competitive for cargo flows between US inland destinations and Mexico

- Transportation Cost Analysis shows a lower $/ton cost for larger vessels, greater than 10,000 DWT that provide economies of scale.

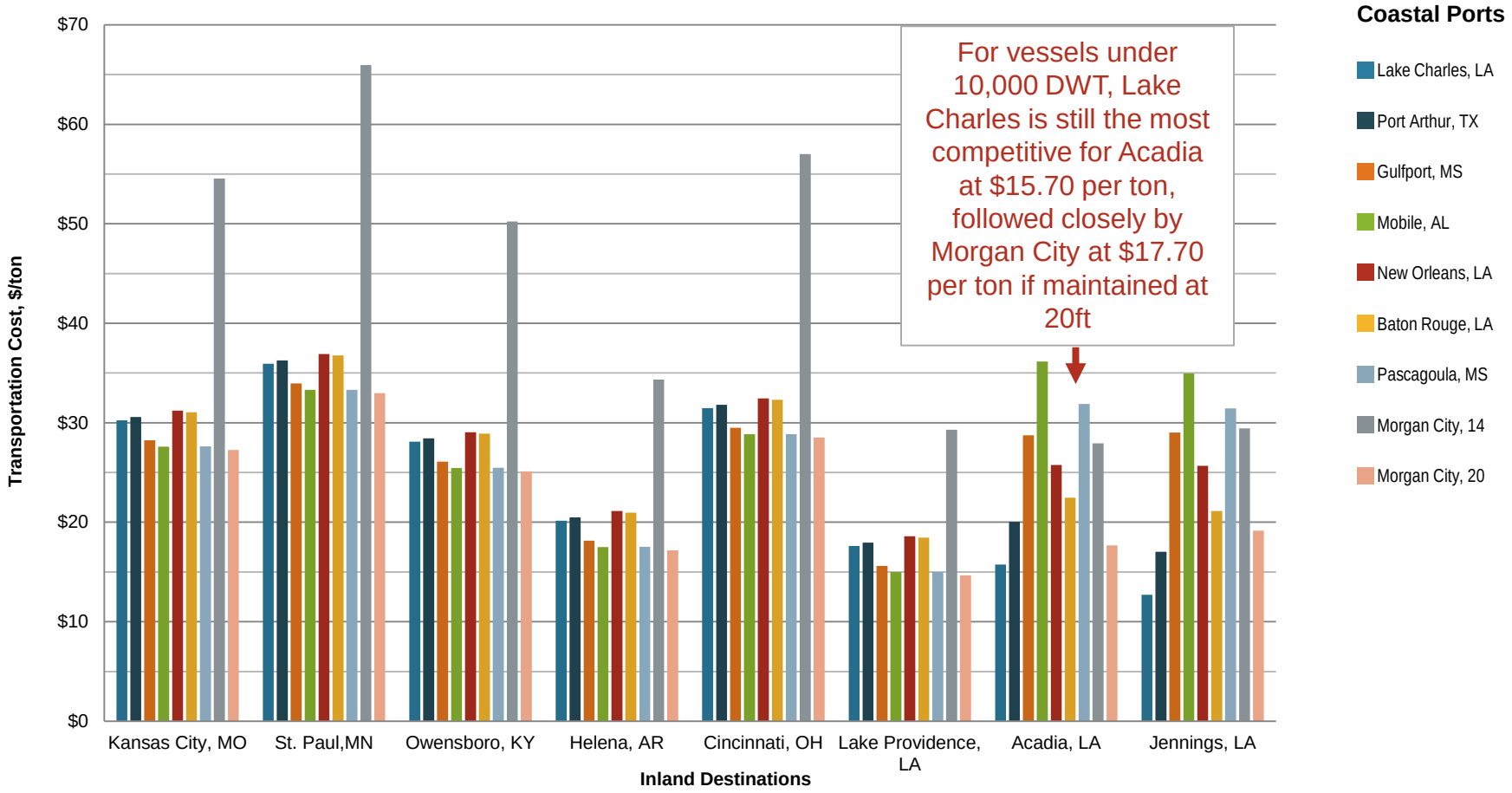


Assuming the need for large vessels, PoMC at 14ft is not competitive to serve nearby inland destinations like Jennings and Lake Providence, LA

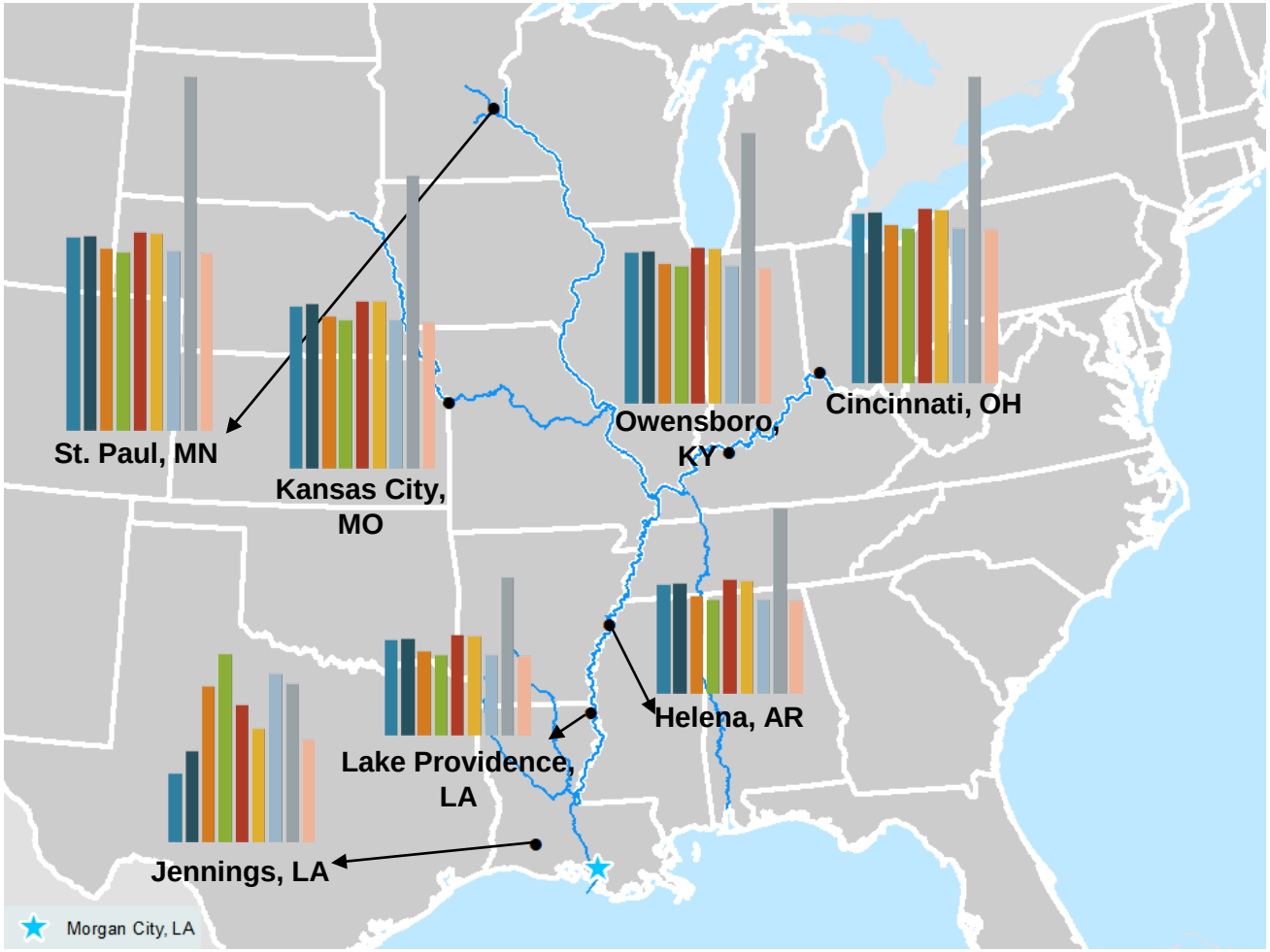


At 20ft PoMC becomes broadly competitive for cargo utilizing vessels less than 10,000 DWT

- Not all cargo owners require large vessels. There may be a niche market for vessels less than 10,000 DWT.



PoMC is broadly competitive for vessels < 10,000 DWT and at 20ft



Coastal Ports

- Lake Charles, LA
- Port Arthur, TX
- Gulfport, MS
- Mobile, AL
- New Orleans, LA
- Baton Rouge, LA
- Pascagoula, MS
- Morgan City at 14ft
- Morgan City at 20ft

Section 6

Cargo Volume Trends

Analysis of existing flows to identify potential cargo for doubling existing volumes at Port of Morgan City.

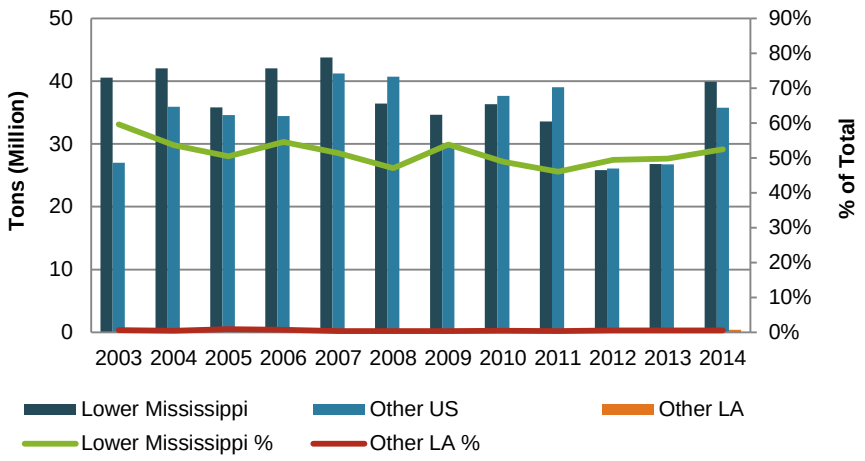
Exports of Ag Products and imports of salt and fertilizers show potential for increased volume

Approach:

- Compare the growth of international import & export trade at the national level to the New Orleans Port District (NO) as a whole and a subset of ports (“Other LA”) [excludes those on the Lower Mississippi like Baton Rouge, Grammercy, and New Orleans].
- Identify the trends in volume growth, market share.
- Assess both the existing volume of available cargo that could be directed through PoMC, and the growth trend that these cargoes could potentially follow.

Potential Cargos Considered	
Exports	**Imports**
Cereals/Grains	Salts
Soybeans	Fertilizers
DDGS	

Cereal Exports – Lower Mississippi historically matches rest of US export volumes. After a lean period in 2012-2013, volumes are recovering



	CAGRs	
CEREALS	10Yr	5Yr
Other US	-0.1%	-2.3%
Lower Mississippi	-2.1%	-1.3%
Other LA	-1.4%	7.2%
US Total	-1.2%	-1.7%

Existing Potential Capture Tonnage ~415,000 tons annually

Recent Trends:

- Stagnant/weak growth nationally, hurt by 2012/2013 drought (-).
- NO District appears to recover some share (+).
- Other LA ports (ex. Lower Miss) also trending higher (+).

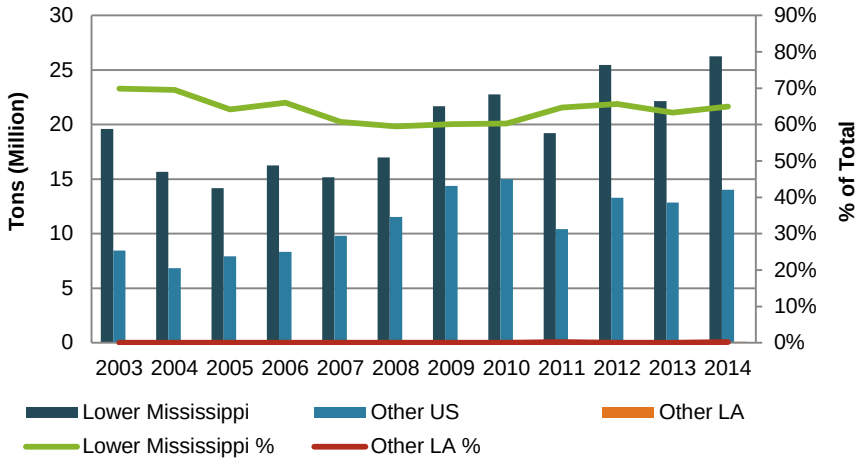
Projected Regional Trends:

- 0.5 – 1.5% growth per year (+).

Rationale:

- Global population growth demand for food, animal feed underpins long-term growth.
- Sector is recovered from drought (2012/2013). 2014 was a record crop year for many commodities, which are reflected in the higher export volumes.
- Mississippi River continues to face competition from rail & West Coast ports.
- Local production of rice and sorghum support shipments through other LA ports.
- Sorghum exports, used for feed, increased dramatically in 2014 as a result of Chinese restrictions on corn.
- US dollar appreciation could negatively impact export volumes.

Soybean Exports – Lower Mississippi maintained steady volumes in recent years and handles double the volume than other gateways



	CAGRs	
SOYBEANS	10Yr	5Yr
Other US	5.8%	0.7%
Lower Mississippi	3.2%	4.6%
Other LA	NA	NA
US Total	4.1%	3.1%

Existing Potential Capture Tonnage ~93,000 tons annually

Recent Trends:

- Strong export commodity at the national and more recently LA District-level.
- Soybean farming has become increasingly more concentrated in the US South.

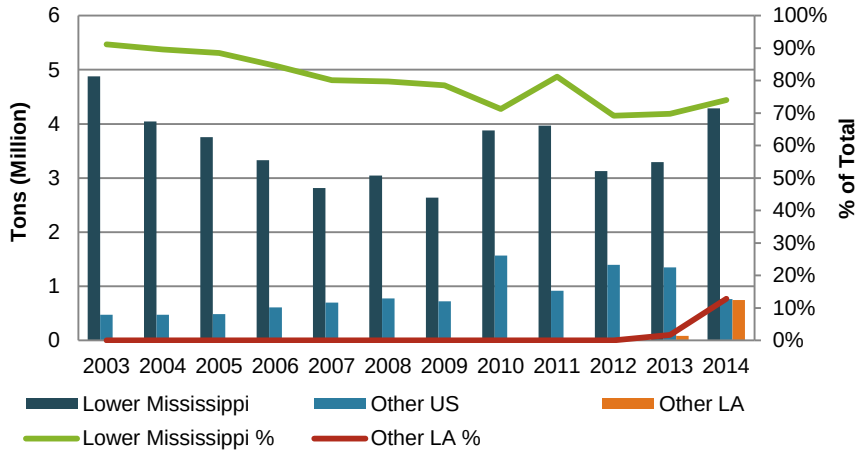
Projected Regional Trends:

- 1.5 – 3.0% growth per year (+).

Rationale:

- Soybeans are one of the most sought after global agriculture commodity.
- Mississippi River is still the dominant export gateway.
- Soy production in Arkansas and Northern-Louisiana have increased.
- $US appreciation against the Brazilian Real could reduce demand for US product.
- Soy production has shifted south, could cycle north again.

DDGS Exports – strong growth seen in Lower Mississippi as well as in "Other LA" more recently. Clearly outperforms "Other US"



	CAGRs	
DDGs	10Yr	5Yr
Other US	8.3%	7.1%
Lower Mississippi	-1.6%	5.9%
Other LA	NA	NA
US Total	0.6%	7.9%

Existing Potential Capture Tonnage ~750,000 tons annually

Recent Trends:

- Export volumes, though trending up, have increased dramatically in the last year as US ethanol production ramp-up and global demand increased for feed products.

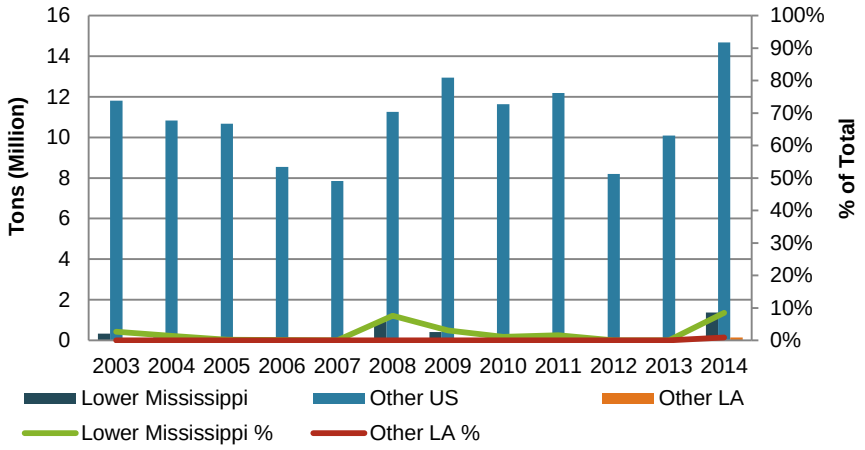
Projected Trends:

- 1.5 – 3.0% growth per year (+).

Rationale:

- The trend has been choppy, and potential trade restrictions imposed by China may continue to be a source of volatility.
- Demand from secondary sources has shown stable, increasing trends, particularly Central and South America.
- Decline in price of Soybean meal may reduce demand for DDGS.
- Competition from other producers and $US dollar appreciation may put downward pressure on exports in the near-term.
- Long-term demand is expected to continue to be driven by growing population growth and meat consumption.

(Edible) Salt Import – though small compared to “Other US” volumes, Lower Mississippi volume trends are expected to rise



	CAGRs	
SALT	10Yr	5Yr
Other US	0.9%	0.5%
Lower Mississippi	11.3%	0.5%
Other LA	NA	NA
US Total	1.3%	0.6%

Existing Potential Capture Tonnage ~140,000 tons annually

Recent Trends:

- Import trends are very volatile through the NO District and the sub set of ports (including PoMC).
- These volumes appear to be associated with a small number of particular operations (as opposed to broad market demand).
- Nationwide, import growth has generally trended with population and/or food production.

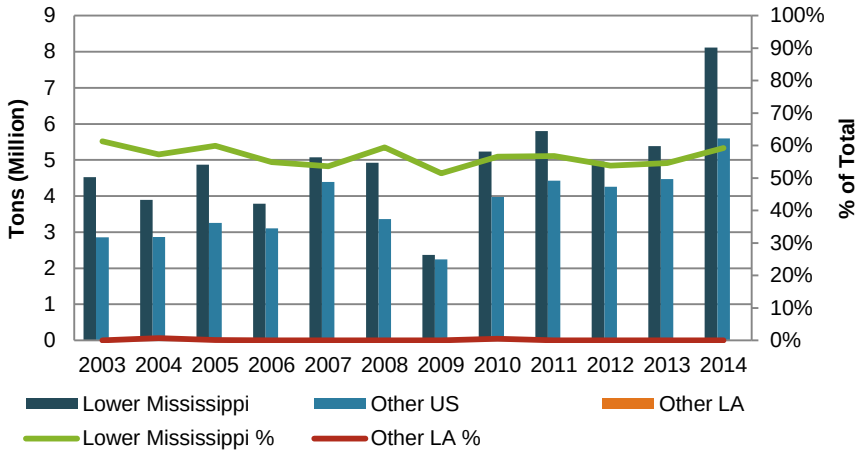
Projected Trends:

- 0.5 – 1.5% growth per year (+).

Rationale:

- Provided the business and logistics supply chain remain as is, export volumes would be expected to trend with the national average.
- Central and South America remain the primary import origins for imported salt into the US.

Fertilizer Imports – Lower Mississippi clearly leads imports and has shown strong growth, providing opportunity for new moves through PoMC



	CAGRs	
FERTILIZERS	10Yr	5Yr
Other US	5.8%	12.4%
Lower Mississippi	4.8%	13.1%
Other LA	NA	NA
US Total	5.2%	12.8%

Existing Potential Capture Tonnage ~ NA (no moves through "Other LA" ports recorded)

Recent Trends:

- Imports of fertilizer have traditionally experienced strong growth nationally, with the NO District accounting for more than half the total volume.
- Asia, Europe, Latin America and increasingly Africa are the largest sources of these commodities.

Projected Trends:

- 1.5 – 3% growth per year (+).

Rationale:

- 2014 was a record year for fertilizer imports, as much of the US recovered and endured drought conditions.
- Would expect the longer-term trend to be near 3.0% (historical 3.3% prior to 2014).
- NO District appears to have lost share during the 2009 low (when Asia became the largest source), but has hence recovered.
- US will likely continue to be a global source of grains, fruits and vegetables and therefore demand fertilizer.
- $US appreciation may increase imports above trend.

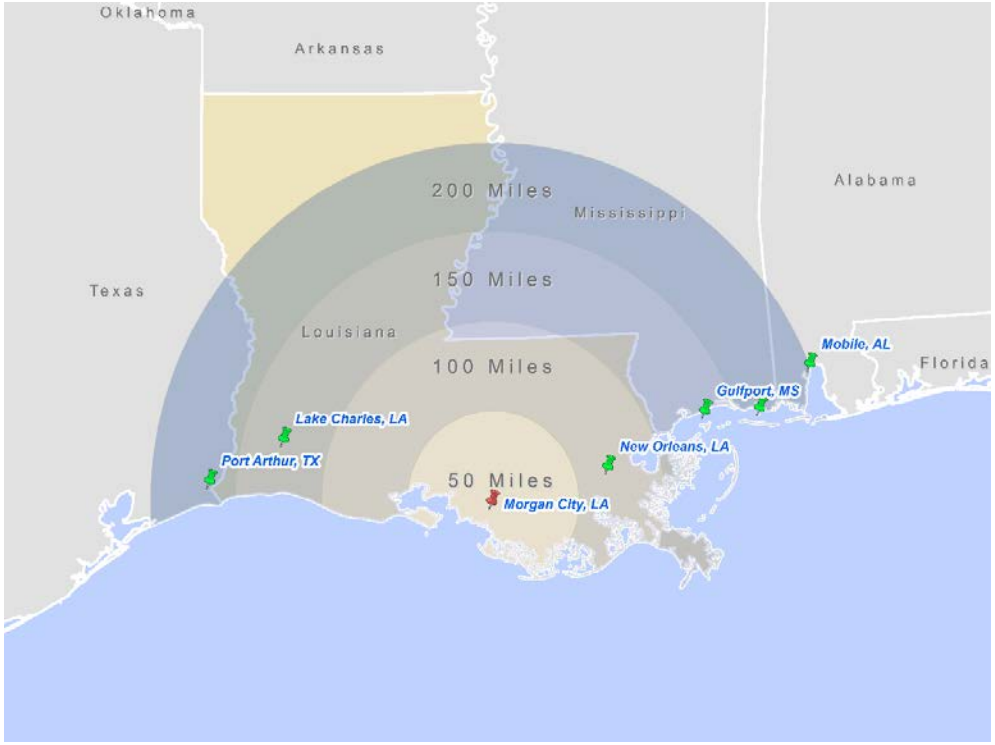
Section 7

Agriculture Production

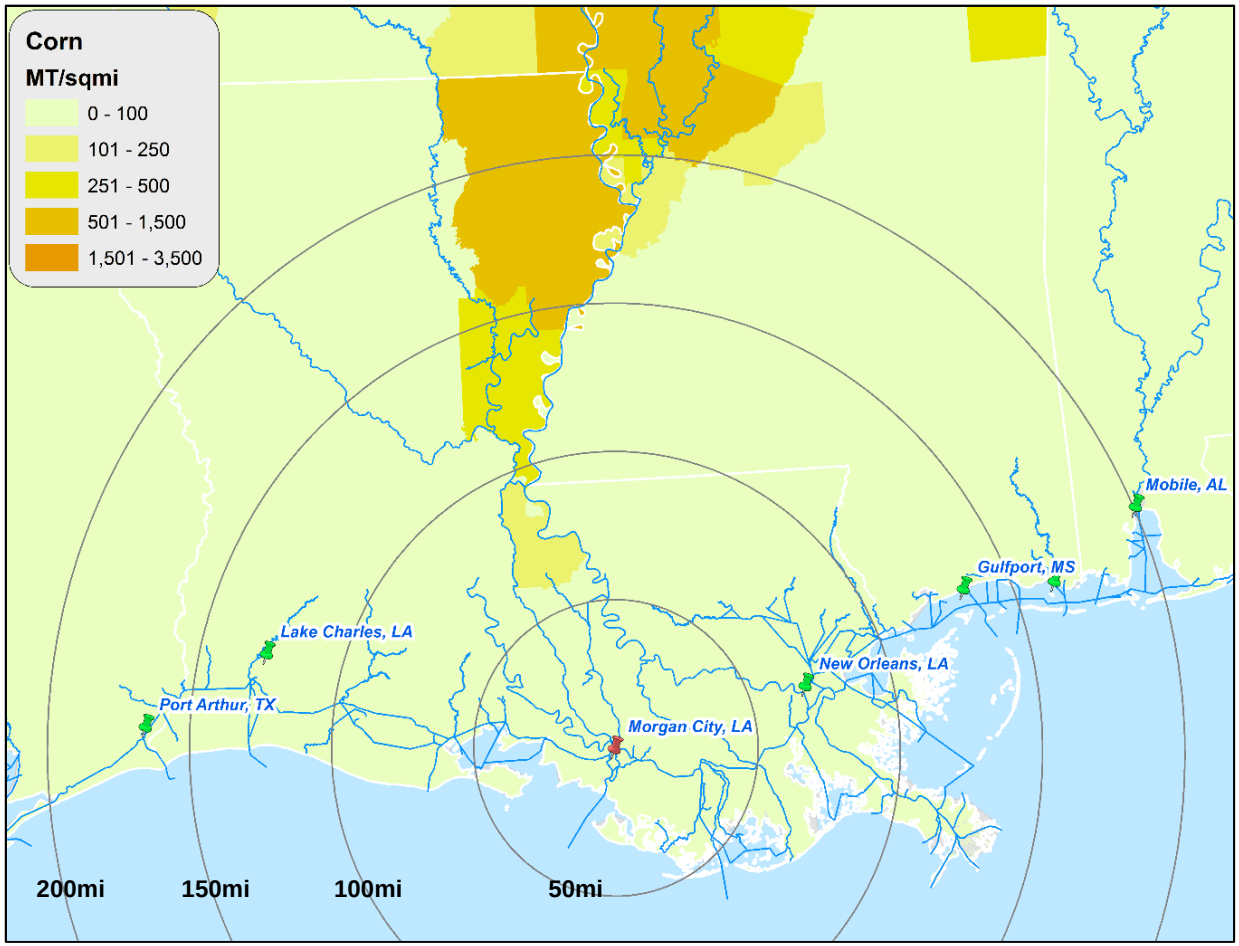
Spatial analysis to identify production areas and volume leading to a potential for increased agricultural exports.

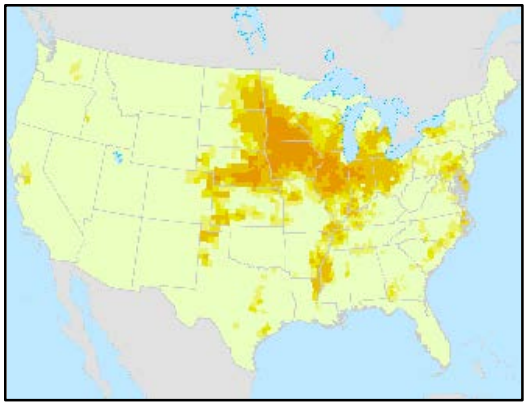
Data from USDA shows over 500,000 tons of agricultural production (excluding sugarcane) within 50 miles of Morgan City

Miles From PoMC	Corn for Grain	Rice	Sorghum	Soybeans	Wheat	Animal Feed	Total
50	244	294,658	1,850	97,907	905	117,588	513,151
100	455,727	2,036,154	336,629	1,208,639	125,118	662,680	4,824,948
150	1,501,582	3,706,163	854,536	2,413,599	249,229	1,418,211	10,143,320
200	6,467,006	4,353,704	1,126,313	4,431,661	556,164	2,772,077	19,706,926



Production (2012) – Corn [Grain]

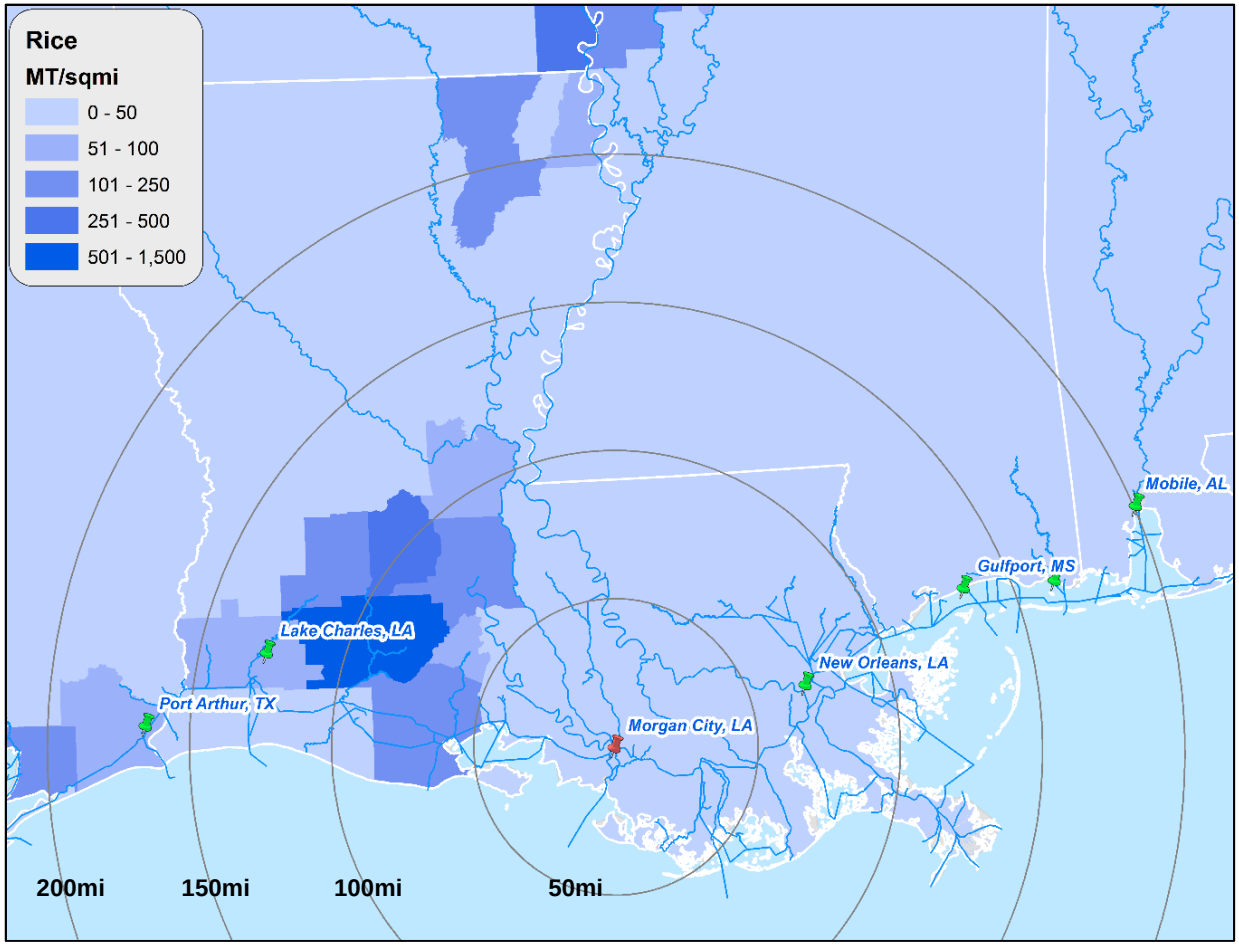


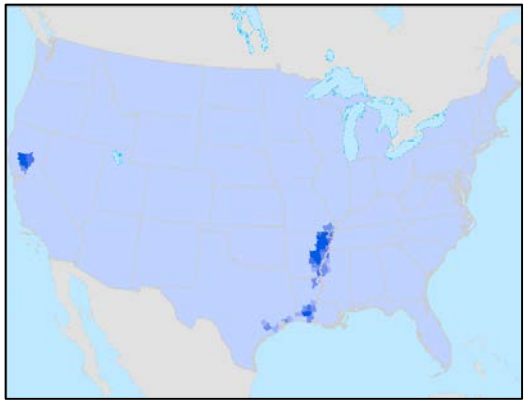


Mi from PoMC	Cumulative Corn – Grain (MT)
50	244
100	455,727
150	1,501,582
200	6,467,006

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Rice

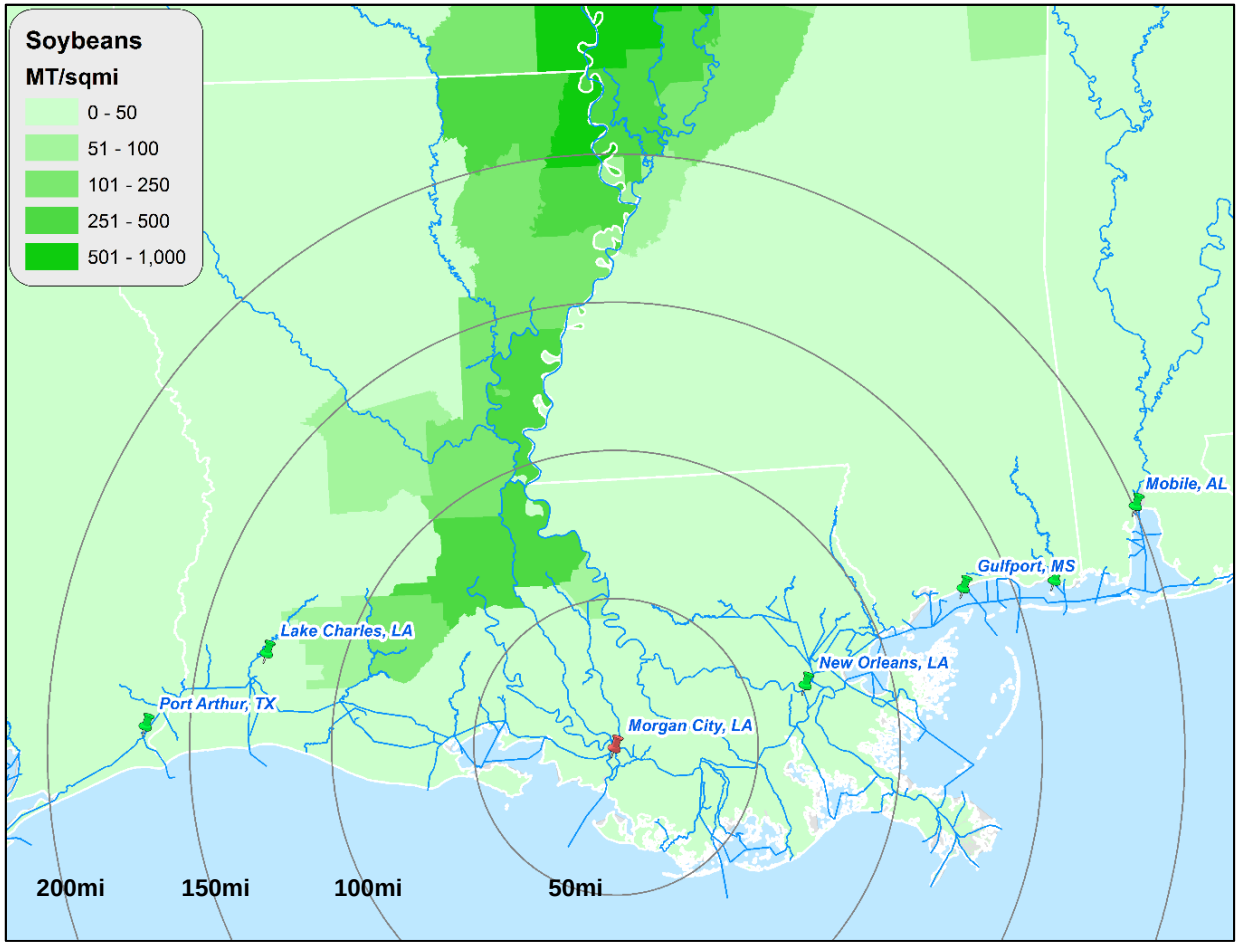


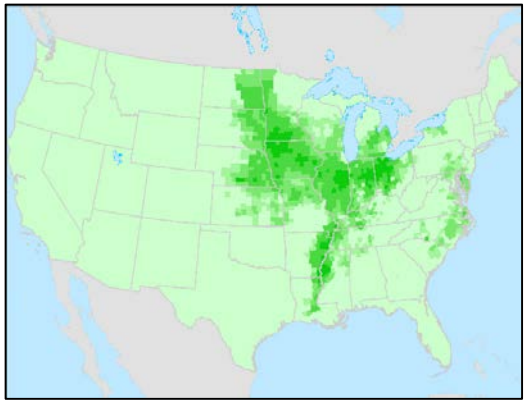


Mi from PoMC	Cumulative Rice (MT)
50	294,658
100	2,036,154
150	3,706,163
200	4,353,704

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Soybeans

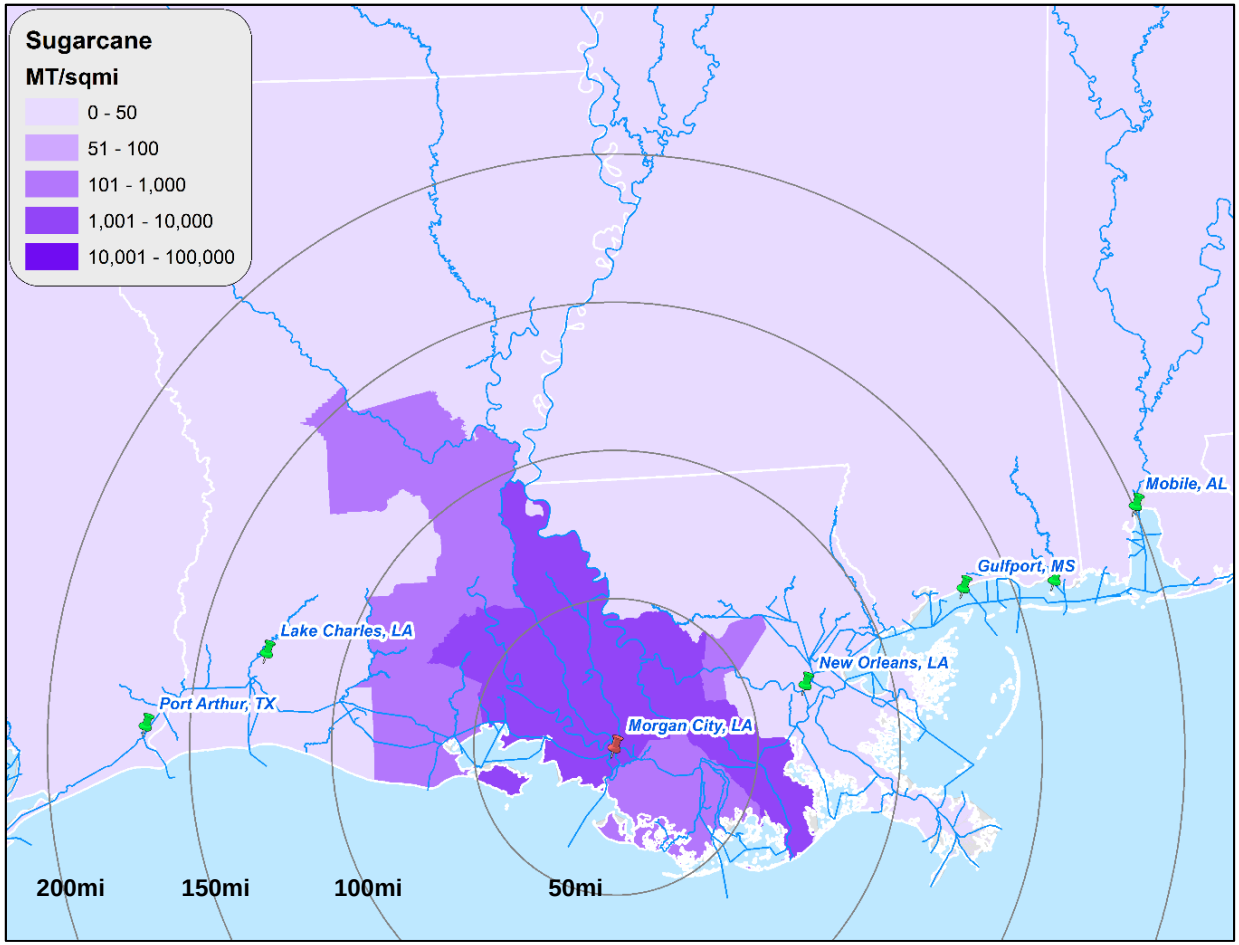


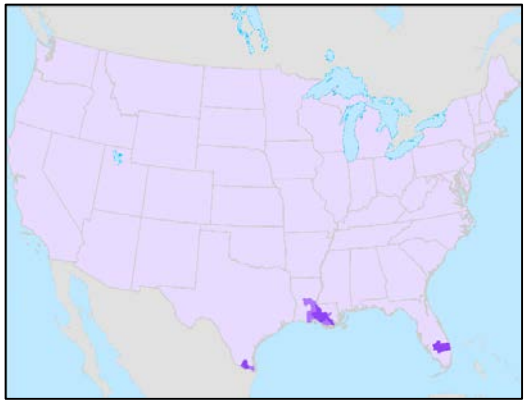


Mi from PoMC	Cumulative Soybeans (MT)
50	97,907
100	1,208,639
150	2,413,599
200	4,431,661

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Sugarcane

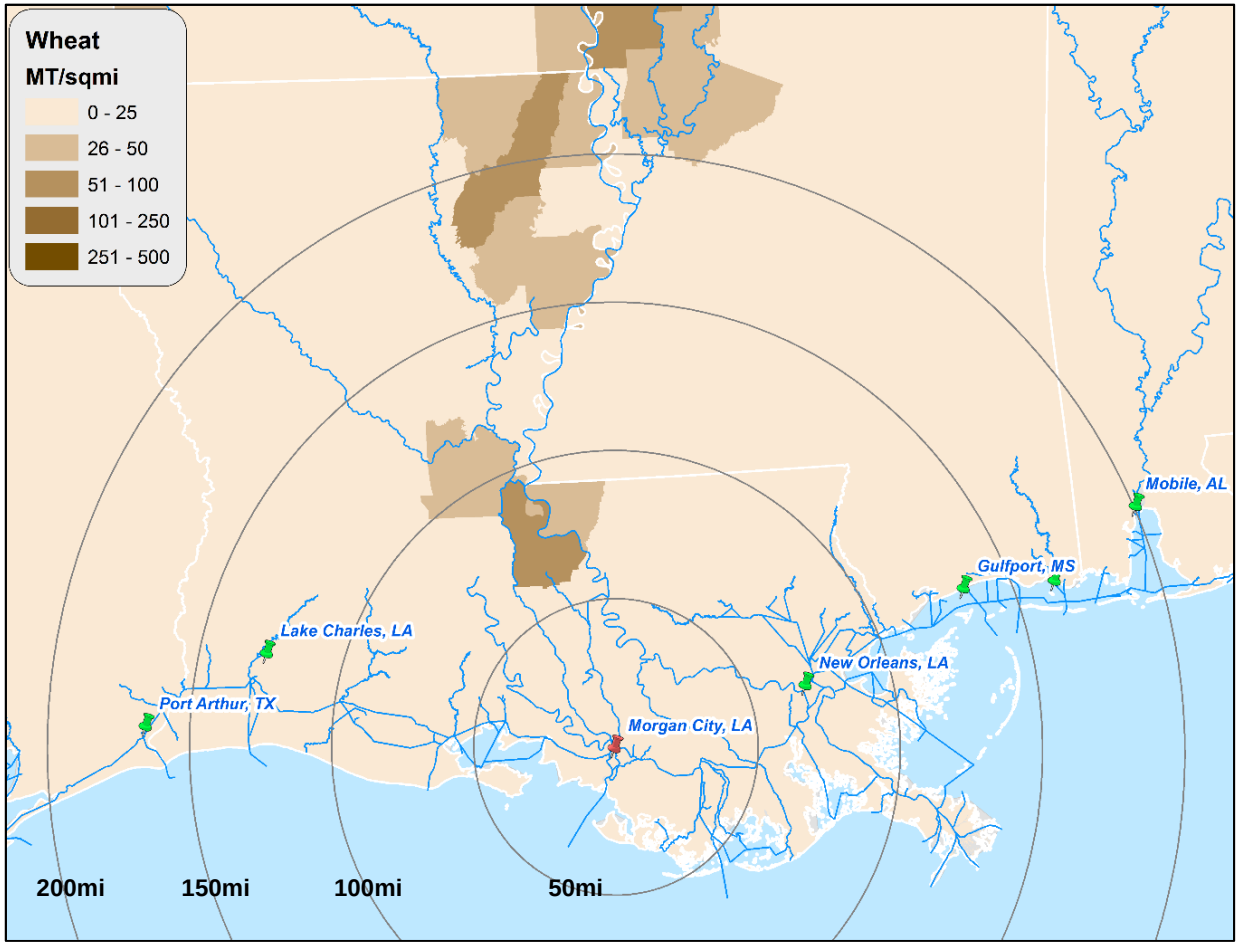


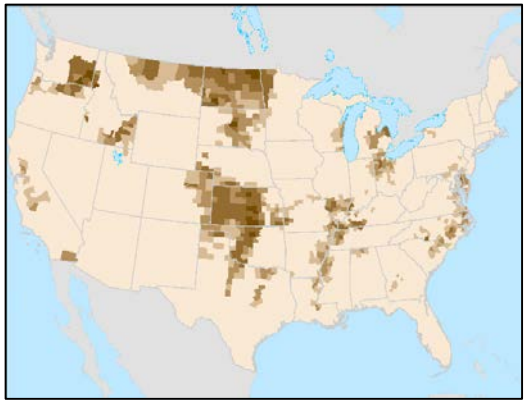


Mi from PoMC	Cumulative Sugarcane (MT)
50	18,469,741
100	34,106,865
150	35,621,835
200	36,332,907

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Wheat

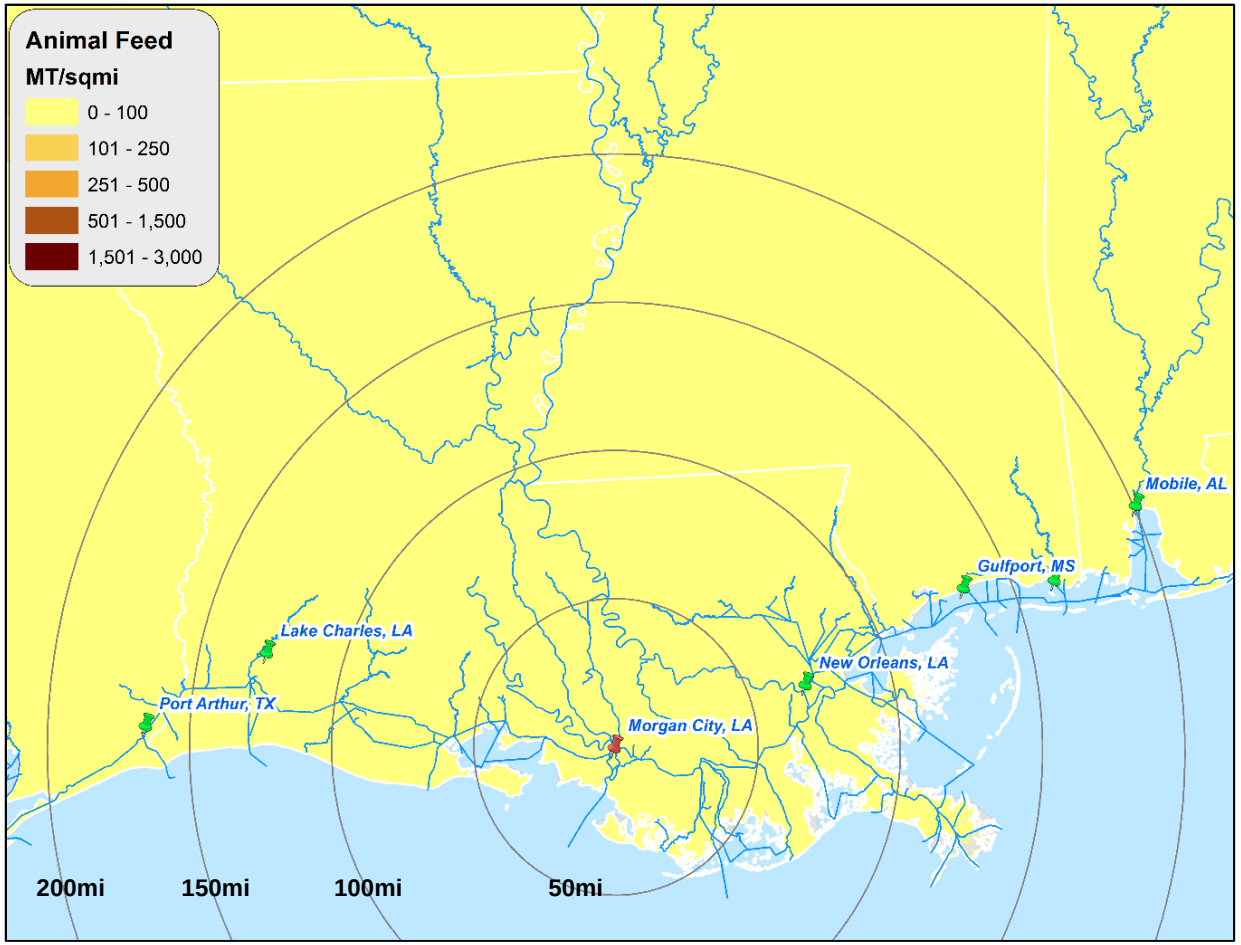


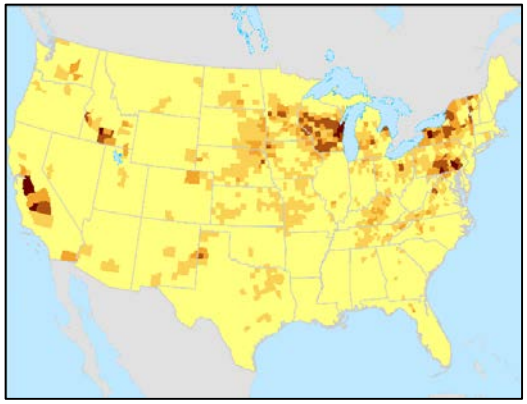


Mi from PoMC	Cumulative Wheat (MT)
50	905
100	125,118
150	249,229
200	556,164

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Animal Feed [Corn Silage, Hay, & Alfalfa]

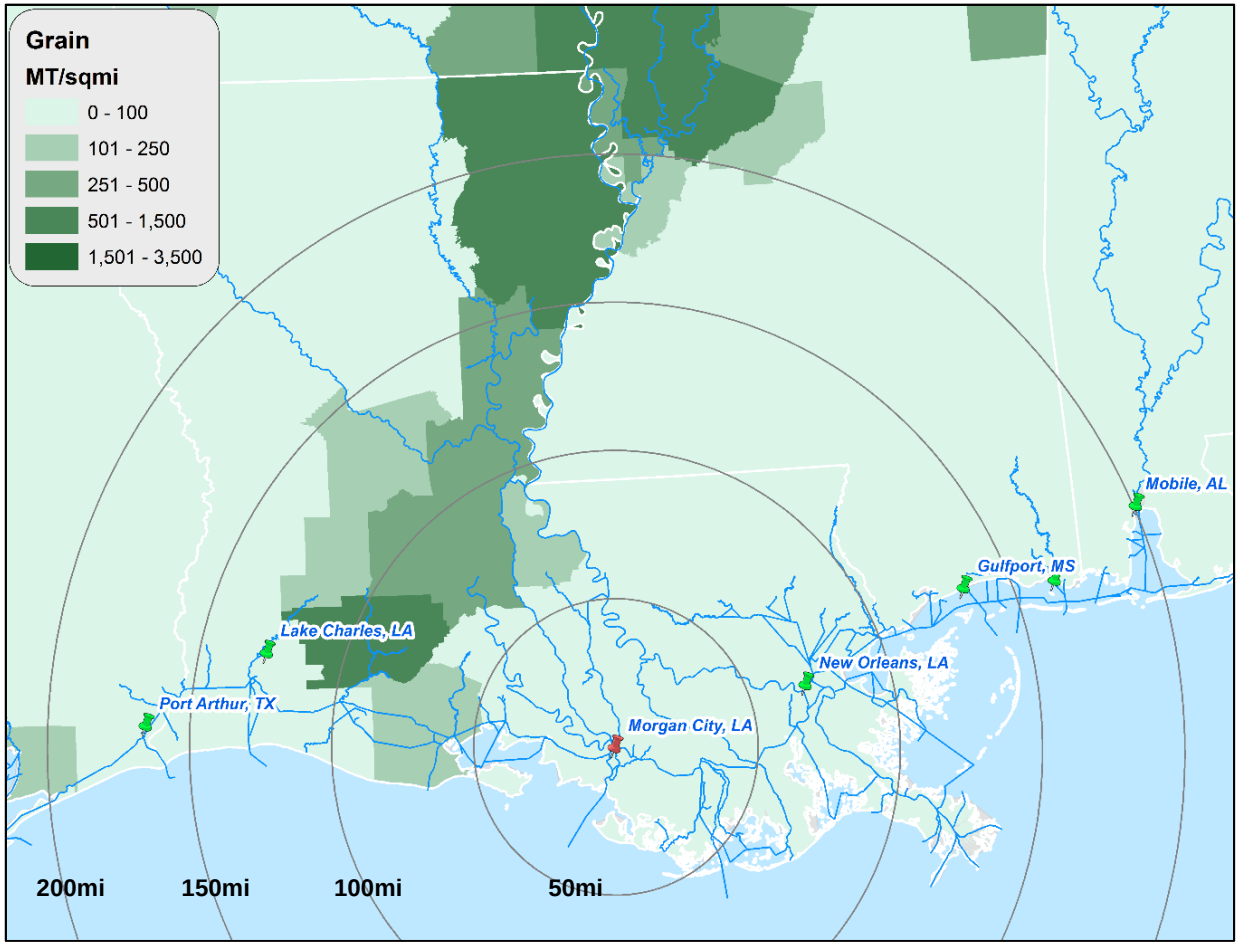


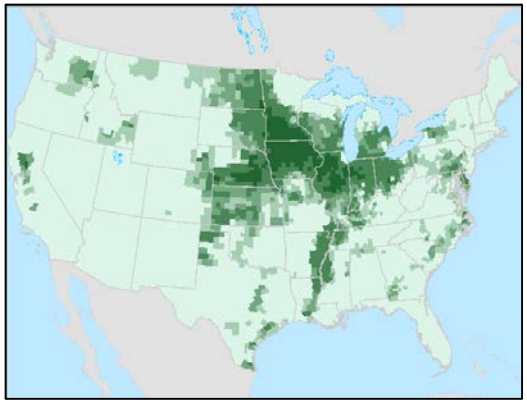


Mi from PoMC	Cumulative Animal Feed (MT)
50	117,588
100	662,680
150	1,418,211
200	2,772,077

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Grain [Wheat, Rice, Corn, Barley, Sorghum, Oats, and Rye]

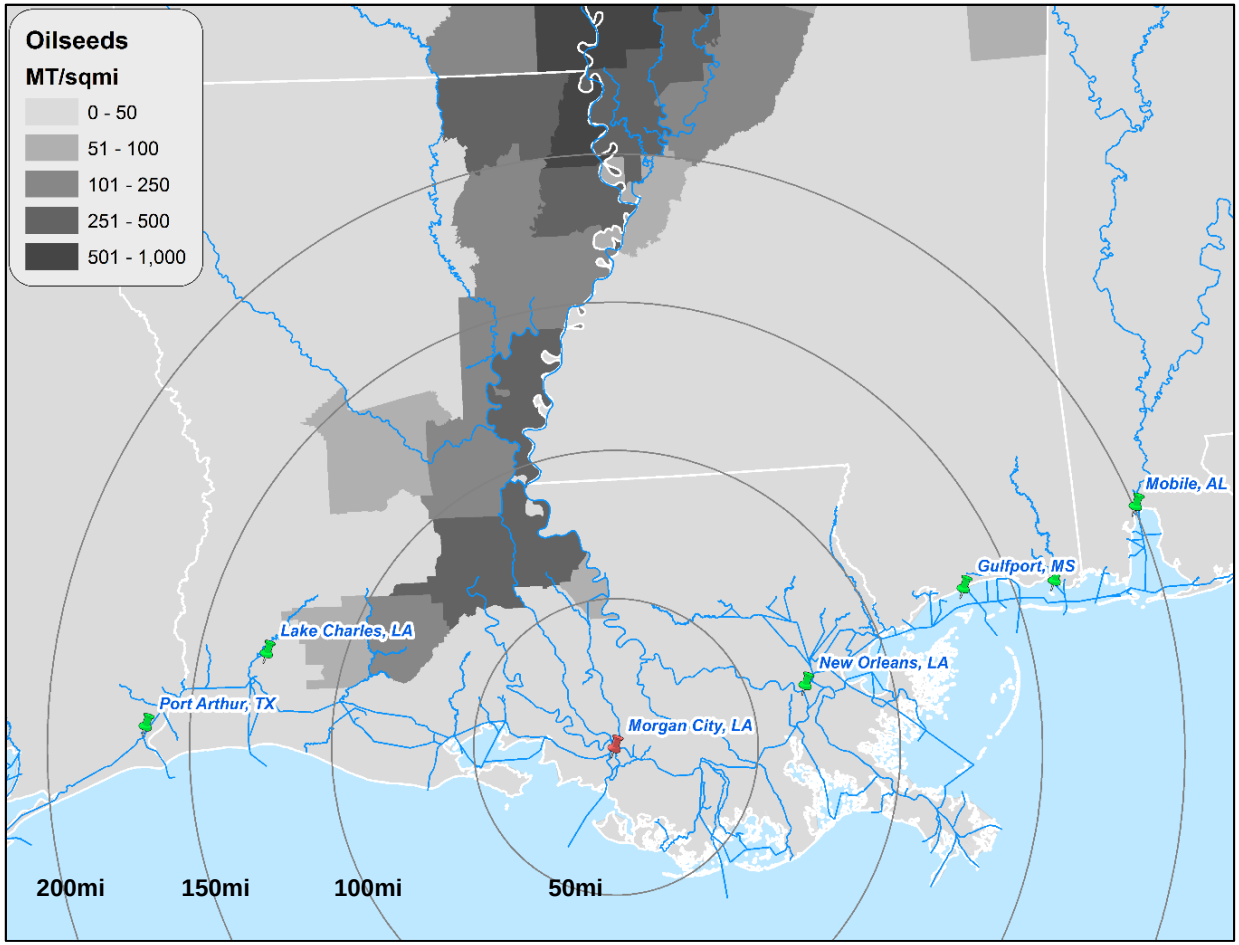


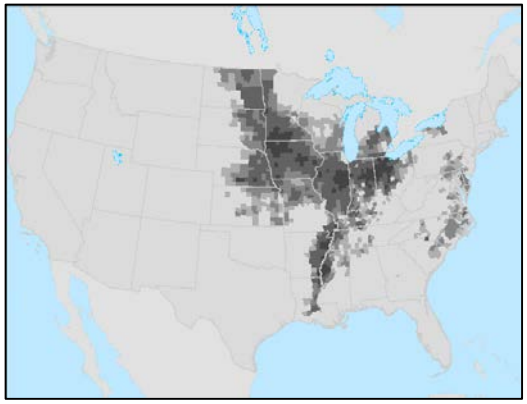


Mi from PoMC	Cumulative Grain (MT)
50	297,656
100	2,953,629
150	6,311,617
200	12,505,544

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Oilseeds [Soybeans, Canola, Rapeseed]

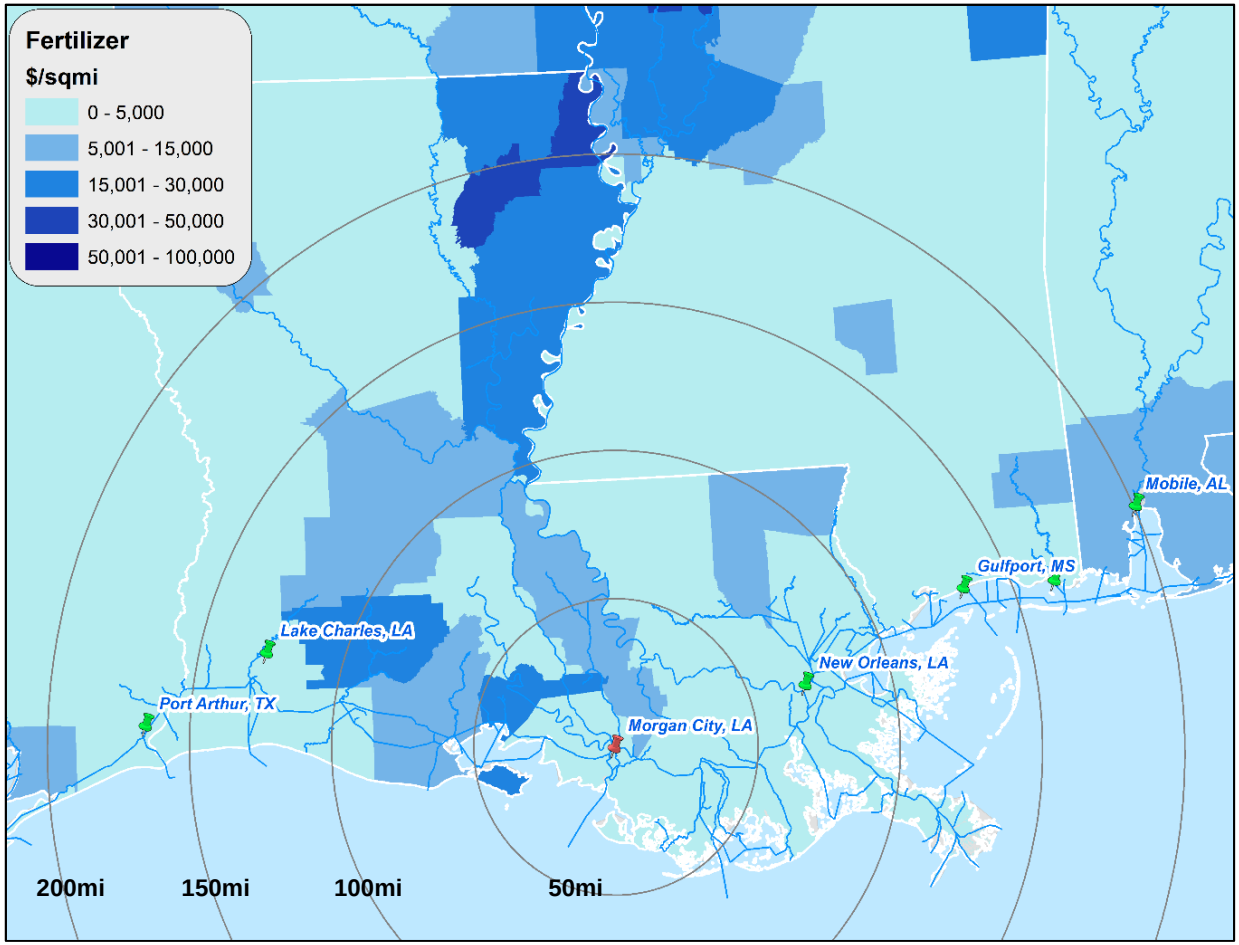


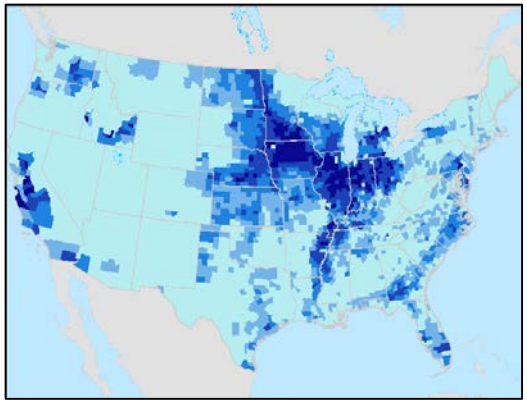


Mi from PoMC	Cumulative Oilseeds (MT)
50	97,907
100	1,208,639
150	2,413,599
200	4,431,661

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Production (2012) – Fertilizer





Mi from PoMC	Cumulative Fertilizer ($000)
50	$159,726
100	$725,578
150	$954,289
200	$1,325,592

Sources: United States Department of Agriculture (USDA), Moffatt & Nichol

Section 8

Benefit-Cost Analysis

The national benefit and costs that include transportation, emission and safety assessments.

Upland Barge Operation

A number of parameters are compared for competing ports against PoMC. Figures in parenthesis refer to numbers less than that of PoMC.

Barge Towboat	Lake Charles, LA	Port Arthur, TX	Gulfport, MS	Mobile, AL	New Orleans, LA	Baton Rouge, LA	Pascagoula, MS
Incremental miles a barge has to travel (upland) to competing ports	158	193	(49)	(148)	79	(51)	(81)
Incremental time in days required to barge to competing ports	0.83	1.01	(0.26)	(0.77)	0.41	(0.27)	(0.42)
The incremental fuel used by the barge towboat as compared to PoMC	2,008	2,449	(626)	(1,874)	1,004	(645)	(1,027)
The incremental fuel cost by the barge towboat as compared to PoMC	$6,104	$7,443	($1,902)	($5,696)	$3,051	($1,961)	($3,122)
Incremental Total Per Trip Cost – Fuel Cost for Average Power use in 2014 $	$4,809	$5,864	($1,499)	($4,488)	$2,404	($1,545)	($2,460)
Fuel Cost + Non-Fuel operation cost	$10,913	$13,308	($3,401)	($10,183)	$5,455	($3,507)	($5,581)
Barge Convoy							
The number of barge trips needed to meet that Annual Volume	13	13	13	13	13	13	13
The cost of operating the Barge/Convoy in 2014 $ (per trip)	$1,002	$1,222	($312)	($935)	$501	($322)	($513)
The total barge cost incremental (Fuel + Non-Fuel) for all the annual trips	$154,904	$188,887	($48,271)	($144,538)	$77,423	($49,777)	($79,222)
Barge-Related Emission							
The Annual cargo Ton Miles for the barge moves	26,928,000	32,835,500	(8,391,200)	(25,126,000)	13,458,900	(8,653,000)	(13,771,700)
The Cost of HC in 2014 $	$345,178	$420,904	($107,563)	($322,079)	$172,524	($110,919)	($145,710)
The Cost of NOx in 2014 $	$177,551	$216,502	($55,328)	($165,669)	$88,742	($57,054)	($90,804)
Total Incremental Environmental Costs	$522,729	$637,406	($162,891)	($487,749)	$261,266	($167,973)	($236,514)
Total Incremental Inland Cost – Annual	**$677,633**	**$826,293**	**($211,161)**	**($632,287)**	**$338,688**	**($217,750)**	**($315,736)**

Ocean Operation

Ocean Vessel	Lake Charles, LA	Port Arthur, TX	Gulfport, MS	Mobile, AL	New Orleans, LA	Baton Rouge, LA	Pascagoula, MS
The volume currently being handled annually (tons)	170,000	170,000	170,000	170,000	170,000	170,000	170,000
The number of ocean voyages required for handling annual tonnage	33	33	33	33	33	33	33
Incremental miles OSLO has to travel (to Mexico and back) compared to PoMC	61	54	251	384	330	533	227
Incremental Ocean travel time per trip compared to PoMC (days)	0.20	0.18	0.84	1.29	1.11	1.79	0.76
Fuel consumption for the incremental miles travelled based on Vessel Data	2.66	2.36	10.96	16.77	14.42	23.28	9.92
Incremental Ocean Fuel Cost	$1,332	$1,179	$5,482	$8,387	$7,208	$11,641	$4,958
Incremental Fixed Cost of Deep Sea Vessel (per Trip)	$2,383	$2,110	$9,806	$15,002	$12,892	$20,823	$8,868
Incremental Deep Sea Vessel Total Cost (per Trip)	$3,715	$3,289	$15,288	$23,389	$20,100	$32,465	$13,826
Ocean Vessel-Related Emissions							
Additional Fuel Consumption Per Ocean Trip** (Gallons)	575	509	2,365	3,618	3,109	5,022	2,139
Deep Sea Vessel – Total Emission Cost (per Trip)	$179	$158	$736	$1,125	$967	$1,562	$550
Total Incremental Ocean Vessel Cost	**$3,894**	**$3,447**	**$16,024**	**$24,515**	**$21,067**	**$34,027**	**$14,376**

Pilot Costs and Totals

Since the *Total Costs* are all positive, it implies that the costs are more than that of using PoMC. The port most competitive to PoMC is Pascagoula, MS but even that has a greater cost than PoMC by over $225,000

Pilot Cost	Lake Charles, LA	Port Arthur, TX	Gulfport, MS	Mobile, AL	New Orleans, LA	Baton Rouge, LA	Pascagoula, MS
The pilotage cost per trip based on OSLO vessel characteristics	$3,746	$2,416	$2,339	$2,318	$9,487	$15,091	$2,056

Total Annual Cost (Inland, Ocean & Pilot)	Lake Charles, LA	Port Arthur, TX	Gulfport, MS	Mobile, AL	New Orleans, LA	Baton Rouge, LA	Pascagoula, MS
Total Incremental Inland Cost – Annual	$677,633	$826,293	($211,161)	($632,287)	$338,688	($217,750)	($315,736)
Total Incremental Deep Sea Cost (including Pilot Costs)- Annual	$252,141	$193,504	$605,961	$885,479	$1,008,302	$1,620,889	$542,253
Total for 13 Barge Trips and 33 Ocean Trips	**$929,774**	**$1,019,797**	**$394,800**	**$253,193**	**$1,346,990**	**$1,403,139**	**$226,517**

Section 9

Cost of No Dredging

Assessment of the cost at keeping the navigation channel at 14ft as compared to maintaining it at 20ft

Cost of no dredging amounts to over $2 million annually

Assumptions:

- Upland (Barge) costs (Transportation & Emissions) remain the same for “No Dredge” and “With Dredge” cases.
- Ocean costs differ due to increased number of trips needed to meet the 340,00 tons demand annually.

	No Dredging	With Dredging
The Minimum depth (ft.) of the outer channel	14	20
Length of the ocean loop	1,776	1,776
Inbound (50% of total vessel capacity based on Immersion Rates)	3,159	5,265
Outbound (50% of total vessel capacity based on Immersion Rates)	3,159	5,265
The volume currently being handled annually (tons)	340,000	340,000
The number of ocean voyages required for handling annual tonnage	54	33
Total Deep Sea Vessel Total Cost (per Trip)	$108,174	$108,174
Deep Sea Vessel – Total Emission Cost (per Trip)	$5,205	$5,205
Total Deep Sea Transportation Cost (Annual)	$5,841,420	$3,569,757
Total Deep Sea Emission Cost (Annual)	$281,083	$171,773
Total Incremental Deep Sea Cost (Annual)	$6,122,503	$3,741,529
Cost of No Dredging	**$2,380,973**	

Section 10

Pilot Costs

The pilot costs for an Oslo size vessel for transiting competing ports.

Representative Vessel Characteristics: OSLO BULK 7

Parameter	Value
Name	Oslo Bulk 7
IMO Number	9485801
LOA	355 Feet
LBP	340.9
Beam	59.71 Feet
Draft	24.28 Feet
Gross Tons	5629
Engine Horsepower	4017 HP
Service Speed	12.4 MPH
Fuel Consumption	13 Tons/Mile
DWT	8046 Tons
Immersion Rate	43.88 Tons/Inch

Source: Clarksons. Immersion rates obtained from USACE

Summary of Pilot Fees

Port	*Pilot Charge for Oslo 7*	
	One-way	Round Trip
Morgan City, LA	$0	$0
Pascagoula, MS	$1,028	$2,057
Mobile, AL	$1,159	$2,318
Gulfport, MS	$1,169	$2,339
Port Arthur, TX	$1,208	$2,416
Lake Charles, LA	$1,873	$3,746
New Orleans, LA	$5,492	$10,984
Baton Rouge, LA	$11,219	$22,439

Note: Morgan City and Fourchon do not require pilots.

All values reflect the least-cost pilot charges to arrive at each port with Oslo 7 vessel characteristics.

Pilot Fee Assumptions

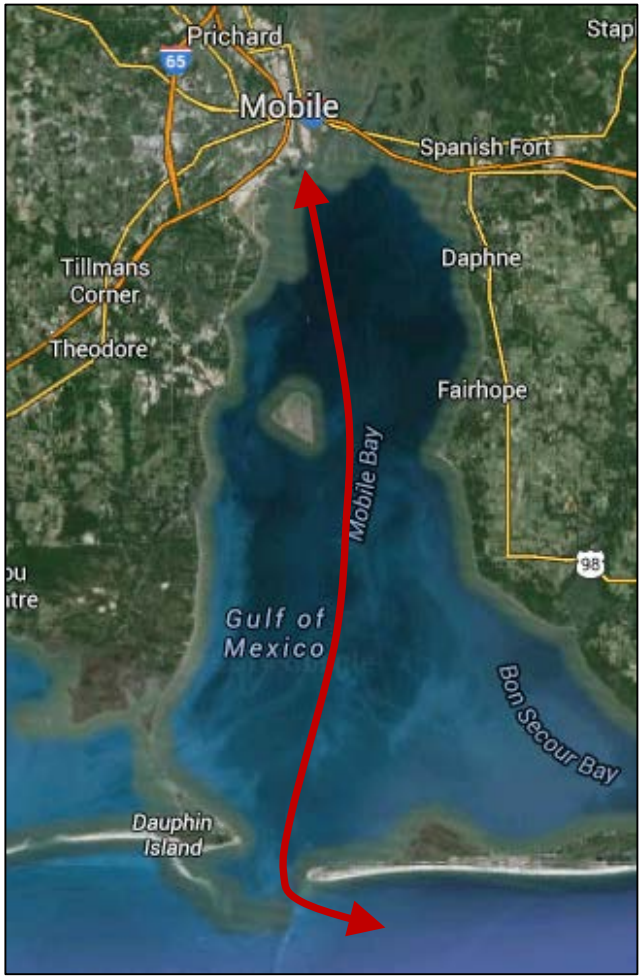
- Pilot Charges were compiled from a variety of sources including:
  - Port tariffs
  - Legislative filings
  - Pilot company websites
  - Louisiana Maritime Association
- For this analysis, a set of vessel parameters were used as assumptions:
  - Oslo 7
    - LOA: 355.1’
    - Max Width: 59.71’
    - Draft: 24.28’
    - DWT: 8,043

Port of Pascagoula

Cost Category	Vessel Assumption	Rate	Fee
Per Draft Foot	24.28	$34.37	$834.50
Gross Tons	5,269	$36.81	$193.95
TOTAL			**$1,028.46**

Port of Mobile

Cost Category	Vessel Assumption	Fee
Main Harbor to above Cochrane Bridge		Not Applicable
Main Harbor to below McDuffie Terminal	1	$926.10
Vessels up to 499.9 feet in length (355')	1	$232.99
TOTAL		**$1,159.09**

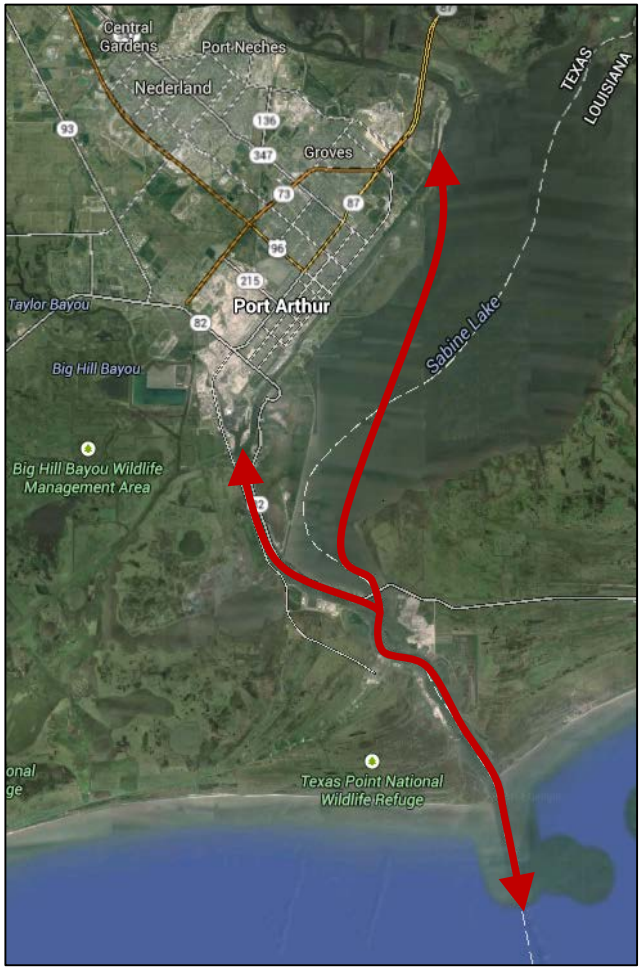


Port Arthur

Oslo Bulk 5	Vessel Characteristics	Units
LOA	355.1	355.1
Max Width	59.71	59.71
Draft	24.28	24.28
Calculated Units		**514.81**

Units	Rate/Unit	Pilot Fees
2,000	$0.55	$283
3,000	$0.54	$0
4,000	$0.50	$0
5,000	$0.49	$0
6,000	$0.47	$0

Pilotage		$283.20
Boat Fee		$925.00
TOTAL		**$1,208.20**



Port of Gulfport

Cost Category	Vessel Assumption	Fee
Per Draft Foot	24.28	$801.24
Per 1000 Gross Registered Tons (min 10,000)	8,043	$284.24
Per Docking and Undocking	1	$39.27
Boarding Fee	1	$44.58
TOTAL		**$1,169.32**

Port of Lake Charles

	Vessel Characteristics	Used in Calculation
LOA	355.1	355.1
Max Width	59.71	59.71
Draft	24.28	24.28
Calculated Units		**212.03**

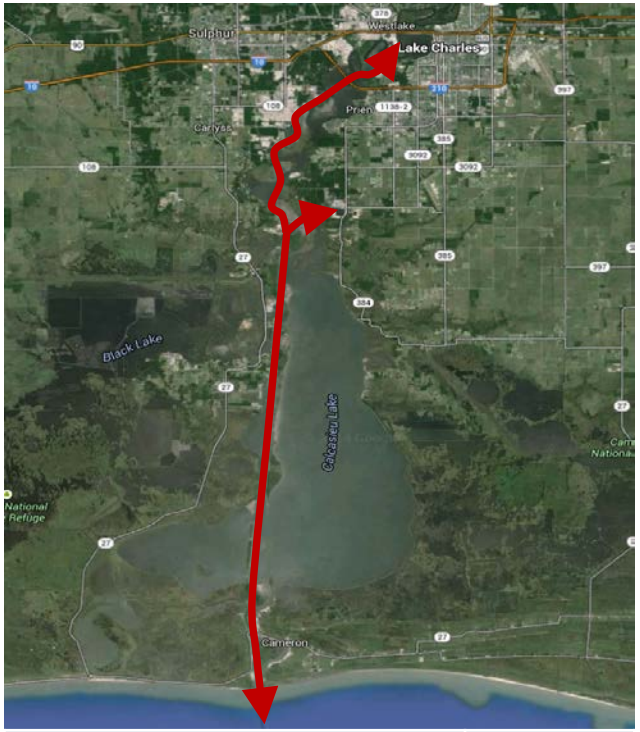
Unit Rate Schedule		
Units	**Rate/Unit**	**Pilot Fees**
0-500	$0.00	$0
500	$2.11	$0
1000	$4.60	$0

Pilotage Fees through bars and Passes	
Boarding at Buoy #36 Coordinates: 29.693,-93.332	$0

Docking, Undocking and Anchoring Fees	
< 300'	$ 67.68
300' to 600' (355')	$ 101.52
600' to 800'	$ 135.37
> 800'	$ 203.06

Capital Improvement Surcharge	
Per Unit	$ 0.2046

Pilotage Fee Commission Surcharge	
Inbound	$ 20.00
Outbound	$ 20.00



Draft Rate Schedule	$1,708.29
Unit Rate Schedule	$0.00
Pilotage Fees through Bars and Passes	$0.00
Docking, Undocking and Anchoring Fees	$101.52
Capital Improvement surcharge	$43.38
Pilotage Fee Commission Surcharge	$20.00
TOTAL	**$1,873.19**

Port of New Orleans (Part 1)

Associated Branch Pilots (BAR)		2014 Charge	Assumptions	Charge
Draft Charges		**Vessel Draft**	**24.28**	
20 feet or less		$1,117.75		$1,118
Per additional foot		$55.89	4.28	***$239***
Tonnage Charges				
21,000 DWT or less		$217.89	8043	$218
Per additional 1,000 tons				
	<60,000 DWT	$26.40		$0
	>60,000 DWT	$32.07		***$0***
Detention Charges				
Per hour for 1 to 3 hours		$253.92		$0
Per additional hour over 3		$433.12		***$0***
ETA Charges				
Less than 3 hours		$240.64	1	$0
Immediate Service (No ETA)		$1,546.65		***$0***
Out To Sea Charges				
		$3,362.95		$0
Communications Charge				
		$3.00	1	$3
Other Charges				
		$205.41		$205.41
		TOTAL		**$1,783**

Port of New Orleans (Part 2)

Crescent River Port Pilots Association	2014 Charge	Assumptions	Charge
Draft Charges	**Vessel Draft**	**24.28**	
Per foot, deepest Freshwater Draft	$62.15	4	$266
Minimum Draft (20 feet)	$1,243.00		***$1,243***
Tonnage			
Up to 21,000 DWT	$244.66	8043	$245
21-60,000 per 1,000	$29.71		
>60,000 per 1,000	$36.09		
Zones		**11**	
<21,000 DWT/zone	$71.74		$789
21-60,000/zone	$181.30		
>60,000/zone	$292.26		
Docking/Undocking		**355.1'**	
Under 300'	$177.17		
300-600	$382.43		$382
>600	$519.29		
Other Charges			
	$783.30		$783.30
	TOTAL		**$3,326**
PORT OF NEW ORLEANS TOTAL			**$5,492**

Port of Baton Rouge

NOBRA Pilots Association	2014 Charge	Assumptions	Charge
Draft Charges	**Vessel Draft**	**24.28**	
Per foot, deepest Freshwater Draft	$88.61	4	$379
Minimum Draft (20 feet)	$88.61	20.00	***$1,772***
Tonnage			
Up to 21,000 DWT	$195.58	8043	$196
21-60,000 per 1,000	$37.46		
>60,000 per 1,000	$42.66		
Docking/Undocking			
Under 300'	$490.66		
300-600	$538.89	355.1'	$539
>600	$602.11		
Discharge			
Mile 90.5 – 106.0	$631.19		
Mile 106.1-222	$723.42		
Mile 222.1-232.2	$631.19		
Mileage			
Vessels Less than 21,000 DWT	$20.75		$2,807
Vessels between 21,000 and 59,999 DWT	$24.41		
Vessels greater than 60,000 DWT	$28.07		
Head Down			
	$145.66		$146
Compass Adjusting			
	$145.66		$146
Other Charges			
	$125.28		$125
	TOTAL		**$6,110**
PORT OF BATON ROUGE TOTAL**			**$11,219**

**Includes the two pilot charges to get to New Orleans (minus the $382 Crescent Pilot Docking cost)

Section 11

Findings

Summary of Findings

- If the access channel depth is maintained at the Federal Government-mandated 20 feet, the Port of Morgan City can competitively serve a wide range of locations in the mid-section of the US that utilize vessels under 10,000 deadweight tons to carry goods to and from the Central America and Caribbean Basin.
- By maintaining the channel depth at 20ft PoMC revenues could almost double from $162,522 to $309,301.
- Economic Impact Analysis shows that if PMI leaves PoMC, the following loss could be expected from stopping current operations:
  - Employment: ~ 50
  - Personal Income: about $3 million
  - State Taxes: over $200,000
  - Local Taxes: over $150,000
- Cost-Benefit analysis indicates that PoMC has the best net benefit to cost.
- The cost of not maintaining the channel at 20ft is estimated to be over $2 million annually.

Moffatt & Nichol, New York
529 5th Avenue, New York, NY 10017, USA
T +1 (212) 768-7454 | mncommercialgroup@moffattnichol.com

www.moffattnichol.com