

REVISED INDUSTRY FORECAST CHANGES TO 2016

By

**Loren C. Scott, President
Loren C. Scott & Associates, Inc.**

Introduction

Below we present revised forecasts for selected sectors in each of the 8 RLMA's in Louisiana. These revisions were based on several factors. First, we have made phone calls to key players across the state---to specific businesses, chambers of commerce, economic development officials, etc.---to capture changes coming in the future that would not normally be captured by a simple econometric model. Secondly, we examined historical trends in every significant sector (those employing more than at least 2,000 people, some even smaller) to see if model forecasts made historical sense. This was especially a problem in RLMA 1 where the model often did not capture the drop in population effects following Katrina and Rita. Finally, we relied on an extensive data base of newspaper and internet clippings showing new plant announcements and closures. Hopefully, these judgmental corrections have made our forecasts better.

Changes: RLMA 1

This RLMA is the largest in the state in terms of employment. It has a significant petrochemical base, a large, diversified transportation equipment manufacturing base, major universities, and is a tourism hub. The latter is bolstered by the state's only land-based casino and two other riverboat casinos. Forecasting in this RLMA will be seriously affected by the need to account for the aftereffects of Hurricanes Katrina and Rita.

1. **Oil and gas extraction.** Considerable uncertainty exists in forecasting employment in this sector. The uncertainty is caused by President Obama's proposed \$31+ billion in new taxes to be levied on the industry. Our conversations with industry executives (and economic theory) suggest that unless there is Congressional push back on these proposals, these taxes will seriously stymie extraction activity in the U.S. and especially in this RLMA. Absent these new taxes, there are at least two factors favoring solid growth in the extraction and related sectors. One is expected higher oil prices, which at this writing are only \$66 a barrel. Secondly is the discovery of the Lower Tertiary Trend in the deep waters of the Gulf of Mexico---a filed thought to be bigger than the Prudoe Bay discovery. Given these uncertainties we believe the model forecasts for both oil and gas extraction and support activities for mining are reasonable.
2. **Utilities.** The model forecast is reasonable.
3. **Construction Buildings.** The construction sector is one of the most difficult to forecast in normal conditions, but in this RLMA things are complicated by the

RLMA 1 Construction Buildings Continued

recent incentives offered by the Go Zone legislation, which will expire before 2016. We believe the model forecast has over-weighted the impacts of this legislation, and the 2016 forecast should be lowered to 6,041.

4. **Heavy and civil construction.** Here again forecasts are complicated by the recent incentives offered by the Go Zone legislation, which will expire before 2016. The model is forecasting 7,969 in 2016. 2008 employment is higher at 8,210 but this figure is seriously boosted by the huge Marathon refinery project that presently has 8,000 workers on site. Looming ahead to help restore some of these jobs will be the \$1.4 billion planned expansion of the Valero Refinery and possibly the Nucor Iron Mill if it decides to come to Louisiana. All these factors considered, we believe the model forecast is reasonable. We also believe the specialty trade contractor figure is reasonable as well.
5. **Food manufacturing.** There is a new sugar refinery scheduled for this RLMA---Imperial Sugar---that will hire 127 more people, but given past trends, the model forecast look fine.
6. **Petroleum Refining.** The model forecast for 2016 of 4,691 is likely too low for a number of reasons. 2008 employment is already at 4,618. Additional employment associated with the Marathon expansion and the proposed Valero expansion is not in the mix. Plus, there has been an announcement by INCA Refining that it will build a new refinery in St. James Parish. We suggest raising the 2016 forecast to 4,818.
7. **Fabricated Metals.** There has been a post-hurricanes rebound in this sector not captured by the model. 2008 employment is already back up to 2,549. This sector will be impacted somewhat by the slightly lower oil and gas extraction activity projected for the region. We suggest a revision in the 2016 forecast to 2,459.
8. **Chemicals.** The model was not able to capture two key factors which will affect this sector's growth. First there has been a downward trend lately due to the closure of several ammonia fertilizer plants in the area because of high natural gas prices. Those closures are over now and so the downward trend should be arrested---especially so since natural gas prices have come down substantially. Secondly there has been a rebound in employment in this sector post-hurricanes not captured by the model. Thirdly, we expect a recovering national economy and relatively lower natural gas prices to bolster this industry in the future. Employment in 2008 was already up to 5,268. We suggest a revised forecast for 2016 of 5,418.
9. **Primary metals.** The model forecast for this sector appear reasonable, but officials should be aware that this forecast could be radically too low depending

RLMA 1 Primary metals Continued

- on whether or not the state lands the Nucor Iron Mill in St. James Parish. This mill will employ 1,250 people when fully operational. At this writing, Louisiana is THE finalist for the plant, but the company is waiting for the national recession to end and credit markets to ease before making a final decision.
10. **Transportation equipment.** The model's projected decline in employment in this sector is likely to be even worse because of problems at one big player in the New Orleans area---Lockheed Martin Space Systems. LMSS is scheduled to drop its employment by 1,300 as the space shuttle flights end in 2010. Northrop Grumman Shipbuilders is expected to remain steady throughout this period. Small gains may be experienced at Trinity Yachts, Textron Land and Marine, and Bollinger Shipyards. We suggest a revised 2016 forecast to 9,299.
 11. **Wholesale trade – durables.** Model forecasts for 2016 appear too optimistic. Employment in this sector was declining steadily in the 6 years leading up to the hurricanes, fell even further in 2006, and has since recovered a bit. There seems little justification for the rather robust recovery suggested by the model. We suggest a revised 2016 forecast of 12,926.
 12. **Wholesale trade – non-durables.** Model forecasts for 2016 appear too optimistic. Employment in this sector was declining steadily in the 5 years leading up to the hurricanes, fell even further in 2006, and has since recovered a bit. There seems little justification for the rather robust recovery suggested by the model. We suggest a revised 2016 forecast of 8,466.
 13. **Motor Vehicle & Parts Dealers.** The model appears far too optimistic for 2016. In the 9 years prior to the hurricanes, there was virtually no change in employment in this sector. After the hurricane-related drops in 2005-06, there has been a recovery that has shown two years of flat growth. We suggest a revised 2016 forecast of 6,884.
 14. **Building materials.** This sector enjoyed a major boost---as expected---in the aftermath of the storms. The model has employment settling down to a reasonable level.
 15. **Food & beverage stores.** The model forecast for 2016 fails to take into account the reclassification of food stores into general merchandise as this business has flowed from free standing food stores to Wal-Mart and Target stores. Employment in this sector had been declining prior to the storms due to this factor. We see little reason to believe it will be arrested going forward. We suggest a revised 2016 forecast of 9,085.
 16. **Clothing stores.** Model forecast look reasonable.

17. **General merchandise.** The model forecast for 2016 fails to take into account the reclassification of food stores into general merchandise as this business has flowed from free standing food stores to Wal-Mart and Target stores. Employment in this sector had been rising prior to the storms due to this factor. 2008 employment is already at 12,101 compared to the model's 2016 forecast of 10,093. We suggest a model that takes into account the growth trend prior to the storms, which would generate a 2016 forecast of 13,498.
18. **Water transportation.** The model has this sector declining noticeably despite the fact that the sector has been gaining employment for the past 5 years. There should be more work to service the new lower tertiary field in the Gulf and more barge work as the Ports in the area continue to grow. We suggest a revised forecast for 2016 of 4,192.
19. **Transit & Ground Passenger transportation.** Employment in this sector has fallen significantly post-hurricanes, reflecting the lower population in the area. Growth has been stable since, just like before the storms, but at rates much lower than the model predicts. We suggest lowering the 2016 forecast to 1,723.
20. **Couriers & messengers.** Employment in this sector has fallen post-hurricanes, reflecting the lower population in the area. Growth has been stable since, just like before the storms, but at rates lower than the model predicts. We suggest lowering the 2016 forecast to 2,110.
21. **Real estate.** Employment in this sector has fallen post-hurricanes, reflecting the lower population in the area. Growth has been stable since, just like before the storms, but at rates lower than the model predicts. We suggest lowering the 2016 forecast to 4,707.
22. **Rental & Leasing.** Employment in this sector was falling the 5 years before the storms, fell faster the year of the storm, and has recovered to a level that reflects the lower population in the area. The model growth rates are not justified by recent trends or post-hurricane behavior. We recommend a 2016 forecast of 4,208.
23. **Professional, technical, scientific services.** Before the storms, this sector was expanding steadily at a 10-year rate of 6,172 jobs. The storms and population decline dropped this down to a new level. Extrapolating past trends would give a revised 2016 forecast of 32,829.
24. **Management of companies.** Model forecasts do not reflect (a) the flat growth 5 years pre-storms and (b) the decline to a new lower level post storms. We suggest a revised forecast of 7,848.

25. **Administrative and support services.** Model forecasts do not reflect (a) the declining growth 5 years pre-storms and (b) the decline to a new lower level post storms. We suggest a revised forecast of 32,841.
26. **Ambulatory health.** Model forecast appear overly optimistic. Looking at trends pre-storms and the new lower levels post-storms, we recommend a 2016 forecast of 22,959.
27. **Nursing & residential care facilities.** The model does not reflect the drop in this sector due to the much lower population in the area. We recommend a 2016 forecast of 9,832.
28. **Social assistance.** The model projects 2016 at 7,147, and 2008 is already at 7,127. Given trends before the storm we suggest a revised 2016 forecast of 8,060.
29. **Educational services.** The model does not reflect the drop in this sector due to the much lower population in the area. Given pre-storm trends in this sector, we recommend a 2016 forecast of 43,582.
30. **Hospitals.** Model forecasts look reasonable.
31. **Performing arts.** The model does not reflect the drop in this sector due to the much lower population in the area. Given pre-storm trends in this sector, we recommend a 2016 forecast of 3,309.
32. **Amusements, gambling, etc.** The model does not take into account (a) that employment in this sector was declining the 5 years pre-storm, (b) the lower population post-storm, and (c) the loss of a riverboat casino. We recommend a revised 2016 forecast of 8,711.
33. **Accommodations.** The model is badly off the mark in this sector. It assumes a return to pre-storm levels. The sector will get a boost when the Roosevelt reopens and perhaps if the Hyatt reopens, but convention business is projected to be down seriously through 2014 because of poor bookings due to the hurricane effect. It also does not reflect the drop in this sector due to the much lower population in the area. We suggest a revision in this forecast to 12,184.
34. **Eating and drinking places.** The model is badly off the mark in this sector. It assumes a return to pre-storm levels. Convention business is projected to be down seriously through 2014 because of poor bookings due to the hurricane effect. It also does not reflect the drop in this sector due to the much lower population in the area. We suggest a revision in this forecast to 51,611.

35. **Repair and maintenance.** The model does not take into account (a) that employment in this sector was declining the 6 years pre-storm, and (b) the lower population post-storm. We recommend a 2016 forecast of 5,100.
36. **Personal & laundry services.** The model does not take into account (a) that employment in this sector was flat to declining the 5 years pre-storm, and (b) the lower population post-storm. We recommend a 2016 forecast of 5,868.
37. **Federal government.** The model seems far amiss on this sector, forecasting only 7,458 jobs in 2016. 2008 employment is already at 12,207 after rebounding from a drop post-storm. It was declining steadily pre-storm. We suggest a revised forecast of 12,007.
38. **State government.** The model does not capture the lower population in the region post-storm. We recommend a 2016 forecast of 7,116.
39. **Local government.** This is very difficult to forecast since we have no data post-storms to see the recovery rate. But if (a) the recovery rate is similar to say that in personal services and (b) the growth trend pre-storms reoccurs, the revised forecast for 2016 would be 21,392.

Changes: RLMA 2

This RLMA is the most petrochemical-intensive region in Louisiana. Because of the very capital-intensive nature of these industries, construction plays a larger role than normal in the region's economy. Forecasts for the construction sectors will be complicated by recent temporary boosts associated with the Go Zone legislation. In addition, this RLMA is home to the state capitol and two large universities and the largest community college in the state.

1. **Utilities.** After a long period of stable employment in the 2,700-2,800 range, employment in this sector popped up to closer to the 3,500 range. The model forecast 2,634 jobs in 2016; employment in 2008 was already at 3,459. We recommend raising the 2016 forecast to 3,559, especially given the discussions about expanding the nuclear power plant in St. Francisville.
2. **The construction sectors.** We have reviewed all three construction sectors. Go Zone legislation has caused one-time boosts in the construction of buildings and heavy/civil construction that will not last until 2016. Model forecasts for these two sectors for 2016 are actually under 2008 employment levels but we think this is reasonable after (a) discounting the Go Zone bump and (b) accounting for past trends. The specialty trade forecast, which significantly depends on an active petrochemical sector, appears to be in line with past trends. We recommend no changes in the model forecasts for the three construction sectors.

3. **Paper manufacturing.** Model forecast in this sector are overly weighted by the closure of the Tembec paper mill, which created a recent downward trend in employment that the model apparently extrapolated. In fact, the Tembec plant is about to reopen---though at lower employment levels. We recommend a 2016 forecast of 1,968 for this sector.
4. **Chemicals.** We believe the model forecasts in this area are off substantially. There has been a long term downward trend in this sector due to closures in response to higher natural gas prices---especially closures of ammonia fertilizer plants. There are essentially no more ammonia plants left to idle and we also expect natural gas prices to remain rather low due to new supplies coming out of shale plays. Dow has announced a permanent reduction of 160 jobs in this RLMA, but this is offset by the soon to open Shintech plant (+350), an expected announcement that SNF will be coming to the area and creating 600 new jobs, plus smaller additions at Westlake, Criterion, and Taminico. We believe the 2016 forecast should be revised upward to 10,675.
5. **Fabricated metals.** This is another sector where the model could not have captured recent and anticipated changes on the horizon. The model has 2016 forecast at 3,301 and 2008 employment is already at 4,268. Employment has picked up recently due to expansions at Shaw----especially their Sunland Fabricators unit. Plus, Shaw has signed an agreement with the Department of Economic Development to add 150 jobs a year over the next 10-years and keep its headquarters in Baton Rouge. Additionally, if our forecasts for the chemical industry are near the mark there will be a growing demand for the services of fabricators from that sector. We recommend revising the 2016 forecast to 4,468.
6. **Petroleum products.** Again, the model forecast of a loss of 310 jobs over 2006-16 appears too pessimistic. The model forecast for 2016 is 2,386 and 2008 employment is already at 2,867. Dynamic Fuels is constructing a biofuels plant in this region that will add 65 jobs and the refineries are all making substantial environmental investments which suggest they are here for the long term. We suggest a 2016 forecast of 2,932.
7. **Wholesale trade.** Model forecasts in these sectors look fine.
8. **General merchandise.** The model forecast is way below recent trends. In the past 10 years the sector has added 2,468 jobs. We suspect much of this is due to reclassification of food stores into this classification due to the emergence of Wal-Mart and Target in the market. We recommend the 2016 forecast be revised upward to 13,735.
9. **Food stores.** For the identical reason mentioned above for general merchandise stores, the past 10 years this sector has lost 2,049 jobs due to many jobs being reclassified due to Wal-Mart and Target. We recommend a 2016 forecast of 5,534.

10. **Gasoline stations.** Trends in this sector have been trending downward for the last 10 years as Sam's Club and other grocers have cut into this market causing a reclassification into those other areas. We recommend a 2016 forecast of 3,637.
11. **Support activities for transportation.** This sector has been losing employment for the past 6 years. The model shows substantial growth. We recommend lowering the 2016 forecast to 3,016. Forecasts in all other transportation sectors look fine.
12. **Information.** Forecasts for the sectors in this classification look fine.
13. **Real estate.** The model is forecasting growth noticeably higher than past trends, for which we know of no reasonable support. We recommend a 2016 forecast of 3,537.
14. **Rental & leasing services.** The model is forecasting growth noticeably higher than past trends, for which we know of no reasonable support. We recommend a 2016 forecast of 3,350.
15. **Professional, scientific, technical.** The model forecast has clearly been over-influenced by the "Go Zone" effect in 2006. Prior to this the sector grew at a 10-year pace of about 3,200. We suggest a 2016 figure of 24,812.
16. **Administrative and support services.** The model forecast for this important sector appears reasonable. On the positive side, both Staples and Direct Services are adding a number of people at their call centers. On the negative side Capitol One is closing one of their call centers.
17. **Educational services.** Over time this sector's employment has rarely deviated from adding about 7,000 jobs every 10 years. We suggest lowering the 2016 forecast to 47,189.
18. **Healthcare.** Model forecasts in all three sectors look reasonable.
19. **Social assistance.** This is a difficult sector to project because of a recent boost in employment due to the RLMA's population boost post-Katrina/Rita. The model forecast appears a bit over-influenced by this recent population change. We suggest a 2016 forecast of 11,205.
20. **Amusements & gambling.** It is difficult to determine how the model derived such a large projection for 2016. After jumping up in 1995 due to the entry of the two casinos, employment in this sector has risen about 600 over the past 10 years. The new Pinnacle Casino should come on line during the forecast period but our studies indicate when that happens, at least one of the existing casinos in the region will leave. We suggest a more modest forecast of 5,132 for 2016.

21. **Accommodations and eating/drinking places.** Model projections for both sectors look reasonable.
22. **Repair and maintenance services.** The model is forecasting well above past trends with no underlying justification. We suggest a revised forecast for 2016 of 5,599.
23. **Personal and laundry services.** The model is forecasting well above past trends with no underlying justification. We suggest a revised forecast for 2016 of 4,834.
24. **State government.** Since 1998 employment in this sector has been very stable at between 23,000 and 23,700. The model forecast would require a significant break from this past trend. We suggest a 2016 forecast of 24,254.

Changes: RLMA 3

There is a great deal of uncertainty concerning growth rates in this RLMA to 2016. That is because this RLMA is highly dependent on oil and gas extraction and related activities. The uncertainty is caused by President Obama's proposed \$31+ billion in new taxes to be levied on the industry. Our conversations with industry executives (and economic theory) suggest that unless there is Congressional push back on these proposals, these taxes will seriously stymie extraction activity in the U.S. and especially in this RLMA. Absent these new taxes, there are at least two factors favoring solid growth in the extraction and related sectors. One is expected higher oil prices, which at this writing are only \$66 a barrel. Secondly is the discovery of the Lower Tertiary Trend in the deep waters of the Gulf of Mexico----a filed thought to be bigger than the Prudoe Bay discovery.

1. **Support activities for mining.** This forecast appears slightly too low given (a) the need to service the new lower tertiary trend and (b) the announcement of the new Precision Energy expansion at Port Fourchon that will create 250 new jobs. We suggest bumping the 2016 forecast to 6,522. The oil and gas extraction projection looks fine.
2. **Heavy & Civil engineering construction.** We will leave this forecast as is. Recent trends have been heavily influenced by the construction of Highway 1 to Port Fourchon which will be completed before 2016, but that work should be supplanted by coastal restoration monies.
3. **Specialty trade construction.** This sector has been pretty volatile over the past 10 years, but there have been no trends---nor announcements of projects---to suggest that growth predicted by the model. We suggest a 2016 forecast of 3,584.

4. **Fabricated metals.** Projections by the model of 3,902 jobs by 2016 clearly are too optimistic. Employment in this sector varies radically with the price of oil and what happens at the biggest two employers in this sector---Gulf Island Fabricators and J. Ray McDermott. Employment has ranged from a low of about 1,500 to a high of about 3,180. Conversations with these key employers suggest that McDermott may 300 or so if the industry rebounds, and GI may hire 200 more or so, but most of GI's extra work will go to its Texas yard. We suggest lowering the 2016 forecast to 3,380. Obama's tax policy will significantly influence this sector's future.
5. **Transportation equipment.** The model forecast for 2016 of 3,681 could not have captured expansions planned by two key players in this area---Edison Chouest and Bollinger Shipyards. ED is near completion of the LaShip yard near Houma that will require 1,000 more workers to build offshore supply boats, and Bollinger will be hiring more workers to handle large new Navy contracts the company has landed. The new forecast for this sector for 2016 should be 4,281.
6. **Wholesale Trade-Durables.** The model forecast is a little too low for long run trends in this sector. We suggest a 2016 forecast of 1,815. (2008 employment is already at 1,597---one job below the model forecast for 2016.)
7. **Retail trade.** Model forecasts for the retail trade sectors appear reasonable.
8. **Air transportation.** This is the sector that holds helicopter traffic to service the offshore industry which will get even larger as the lower tertiary effort expands. Employment in 2008 (555) was already larger than the model forecast for 2016 of 544. The 2016 forecast should be revised to 801 to reflect trends over the past 10 years.
9. **Water transportation.** The model has vastly under-estimated future employment in this sector which has been adding 260 jobs a year since 2000. Every new boat Edison Chouest builds requires a crew of 20-22. Employment in 2008 (3,245) already exceeded the model's projection for 2016 of 3,240. We suggest revising the 2016 forecast to 4,741.
10. **Truck transportation.** We suggest raising employment forecasts in this sector slightly to 1,764 to reflect the greater truck activity at Port Fourchon to support the expanding offshore exploration/production activity (especially the lower tertiary).
11. **Support activities for transportation.** We suggest raising employment forecasts in this sector slightly to 6,532 to reflect the greater activity at Port Fourchon to support the expanding offshore exploration/production activity (especially the lower tertiary). This fits with trends in this sector's employment since 1993.

12. **Rental & leasing services.** This sector peaked in 1998 at 3,692 and has been flat to declining ever since. Model forecast of 3,890 appears far too optimistic. We suggest a 2016 forecast of 3,490.
13. **Repair & Maintenance.** This sector experienced a sharp jump in employment over 2005-08. Indeed, employment in 2008 (2,303) already significantly exceeds the model's 2016 forecast of 1,944. We suggest a revision in the 2016 forecast to 2,403.
14. **Local government.** This sector's employment peaked in 2004 at 3,849 and has been declining slightly every year since. We suggest a slight downward modification in the local government employment projection to 4,025 in 2016.

Changes: RLMA 4

There is a great deal of uncertainty concerning growth rates in this RLMA to 2016. That is because this RLMA is highly dependent on oil and gas extraction and related activities. The uncertainty is caused by President Obama's proposed \$31+ billion in new taxes to be levied on the industry. Our conversations with industry executives (and economic theory) suggest that unless there is Congressional push back on these proposals, these taxes will seriously stymie extraction activity in the U.S. and especially in this RLMA. Absent these new taxes, there are at least three factors favoring solid growth in the extraction and related sectors. One is expected higher oil prices, which at this writing are only \$66 a barrel. Secondly is the discovery of the Lower Tertiary Trend in the deep waters of the Gulf of Mexico---a field thought to be bigger than the Prudoe Bay discovery. Thirdly, Denbury Corporation is laying a new pipeline from Baton Rouge to Houston right through this RLMA bringing in CO2 to extract more oil out of existing oil fields---a process known as enhanced oil recovery.

1. **Oil and gas extraction.** This sector has demonstrated a distinct upward trend since bottoming out in 2005. The model forecast for 2016 is 2,102 and employment in 2008 was already at 2,543. Whether or not Obama's taxes are passed greatly impacts this sector, as do the three positive effects we mentioned above. We recommend a 2016 forecast of 2,543---in effect stabilizing employment at 2008 levels. The possibility of large errors in this forecasts are particularly high.
2. **Support activities for mining.** The model has this sector growing much faster than the related oil and tends to give a little too much weight to a spike in this sector that occurred over 2001-03. Given the uncertainty surrounding the Obama tax package but giving some weight to the new Denbury activities in the region, we suggest a more modest 2016 forecast of 22,045.

3. **Construction of buildings.** The model forecast is considerably below recent historical trends. We are aware of several building projects planned for the next couple of years that suggest past trends should be maintained. Those projects include the \$211 million Lourdes Hospital project, a \$31.7 million expansion at the local Lafayette Airport, \$40 million in expansions at ULL, and \$39 million on various special buildings and office complexes, plus modest expansions at two other area hospitals. Based on this we believe the 2016 forecast should be raised to at least 2,675 (still slightly below recent trends).
4. **Specialty trade contractors.** Since 1998, employment in this sector has been relatively stable, varying between 9,000 and 10,150. We are aware of no significant events in this RLMA that would change this pattern. We suggest revising the 2016 forecast down to 10,200.
5. **Heavy and civilian construction.** This model forecast appears okay despite a recent spike in this RLMA's employment here. Unless there is a major commitment to expanding I49 south through this RLMA, we see no need to change the model forecasts.
6. **Food manufacturing.** Model forecasts okay.
7. **Fabricated metals.** Given our assumptions about the impact of the President's tax package on the extraction industry, the model's forecasts would be too optimistic. Offsetting this is a new valve firm---Cameron Valves & Measurement---coming to Evangeline Parish and adding 110 jobs. We recommend a 2016 forecast of 5,257.
8. **Machinery manufacturing.** Significant uncertainties surround this sector due to the proposed extraction tax package, but we believe the model forecasts are reasonable.
9. **Transportation equipment.** The model forecasts appear overly pessimistic. Employment is already at the 2,605 level in 2008. Servicing of the lower tertiary trend will require more offshore barges and supply boats. We recommend a 2016 forecasts of at least 2,605.
10. **Administrative and Support services.** The model forecasts seem overly optimistic. This sector has enjoyed underlying growth influenced from period to period by the opening and closing of call centers in the region. NuComm Call Center is at 500 now and hopes to expand to 1,500 during the forecast period if certain contracts are awarded. We recommend that the 2016 forecast be lowered to 13,865 in keeping with past trends.
11. **Education services.** Again the model forecasts appear much too optimistic in this sector. It is projecting growth rates significantly higher than in recent periods (last 10 years). On the positive side is the opening of a new flight

RLMA 4 Education services Continued

- simulator school in Lafayette that will add 100 jobs. On the negative side are the budget problems that will impact ULL and other colleges in the area. We recommend a 2016 forecast of 21,630.
12. **Wholesale trade – durables.** The model forecasts are well below recent trends, though this sector will be impacted if the Obama tax increases go through Congress. We suggest a slightly elevated 2016 forecast to 7,201 (2008 is already at 7,141).
 13. **Wholesale trade – non durables.** We recommend a 2016 forecast of 4,476, keeping in line with trends since 2002, showing little growth in this sector.
 14. **Retail trade.** We reviewed the major employment sectors in retail trade. Only two required any significant adjustment. The building materials sector has dropped off in the past two years. We suggest a return to 10-year trends which would give a 2016 level of 4,127. On the opposite side, the General merchandise sector is significantly under projected relative to more recent trends. We suggest a use of the last 10 years trending factor that would give a 2016 forecast of 7,540.
 15. **Water transportation.** Employment in this sector has been very erratic since spiking back in 2002. By 2008, employment was only at 904. Serving the Lower Tertiary Trend should help this sector, but should not more than double its employment as the model suggests. Employment for 2016: 1,435.
 16. **Truck Transportation.** Employment in this sector has bounced around between 3,000 and 3,500 since the 1990's. We know of no event that should jack its employment above 4,000 as the model suggests. Employment for 2016: 3,636.
 17. **Support activities for transportation.** Model forecasts of a decline of 199 jobs appear way too pessimistic. After dropping significantly from 2001-05, employment has stabilized and shown slight growth, which we believe can be sustained into 2016 to an employment level of 3,500,
 18. **Warehousing.** There is no way the model could have captured first the opening of a major new warehousing facility in 2005, then a closure of a significant one (that used to service Kmart) subsequently. Employment in 2008 was only at 1,085 due to this closure. We project a 2016 employment level of 1,257----much lower than the model forecast of 3,157.
 19. **Telecommunication.** The model appears to be over-weighting as spike that occurred from 2000-04. Since that time, employment has been flat and was only 2,573 in 2008. While some growth should be expected in this sector, a forecast for 2016 of 3,326 seems overstated significantly. We suggest a 2016 forecast of 2,826.

20. **Insurance carriers.** This sector's forecast was over-weighted by an unusual two-year spike in employment in 2005-06. Since then, employment in this sector has returned to its long run, fairly stable level near 2,000. We project only 2,055 in 2016 (2008 was only 1,957).
21. **Ambulatory health.** The model is projecting an employment figure well below trends of the last 10 years, when we are going into a period when the boomers are ageing and really needing more health services. Revise 2016 up to 17,365. All other health care areas look reasonable.
22. **Amusement and gambling.** The model could not have known about the opening of a new riverboat casino in St. Mary Parish which jacked the employment in this sector up so much that it was already at 4,083 in 2008. We project 4,583 for this sector in 2016.
23. **Performing arts.** Model forecasts for this sector are influenced too much by a one-time spike upward in employment that occurred in 2004 followed by stable employment trends. Employment in 2008 was only 1,134. There is a new Performing Arts Center being built in Lafayette that should boost employment slightly. We suggest a revised forecast to 1,293 by 2016.
24. **Repair & Maintenance.** Model forecasts are almost double trends for the past 10 years and appear way too optimistic. We suggest a 2016 projection of 4,609.

Changes: RLMA 5

This RLMA has the second highest concentration of chemical and refining capacity in the state. We reviewed all of the larger employment sectors and examined those in particular that had large absolute changes projected by the model. We recommend the following changes:

1. **Construction.** This sector is relatively large because of the very capital-intensive nature of the area's petrochemical base. We are aware of a steady stream of environmentally related significant construction projects among the chemical plants in the area---averaging about \$300-\$350 million a year. These projects will be the foundation for steady going in the construction sector going forward. In addition, (a) talks are looking more favorable between Entergy and Leucadia to build the huge synthetic gas processing plant---a \$1.6 billion investment that would be the largest single capex project ever in Southwest Louisiana; (b) there are expansions going on at two of the LNG plants in the area though we expect these to slow down going forward due to significant over-capacity in this area; and (c) Pinnacle will be spending \$350 million to construct the new Sugarcane Bayou Resort. All three of these projects, though they will boost construction in the short run, will be completed before 2016. Given all

RLMA 5 Construction Continued

these factors, we believe the model forecasts for all three construction sub-sectors are reasonable and should not be altered.

2. **Fabricated metals manufacturing.** This sector is projected by the model to lose 104 jobs over 2006-16. The model could not have been aware of the announcement by Shaw Industries to open a large facility for the modular construction of nuclear power plants. It is our belief that this plant will be in NAICS code 332 (there is some uncertainty about this classification). Shaw is planning to add 1,400 jobs in this sector. We believe this sector's 2016 employment number should be at least 1,956 because of this addition.
3. **Chemicals.** This is a very large employer in the area. The model is projecting a loss of 312 jobs over 2006-16. 2008 employment was at 4,289, up by over 200 jobs the past two years. Still, this sector has had a long history of becoming more & more labor efficient. We think the 2016 model forecast should be kept.
4. **Refining.** This RLMA is a very refinery-intensive region. Recently, CITGO closed a lube plant costing the area 192 jobs. Still, employment has remained steady in the 2,500 range for some time now. We expect further expansions at the refineries because of the growing demand for gasoline and the fact that no new Greenfield refineries have been built in the U.S. since the 1970s. The NIMBY problem is just too great. As a result, refineries are expanding at their present sites. We expect some of this over 2006-16, plus, if the Leucadia plant is built it will add 150 jobs in this sector. We believe the model projection of a decline of 517 jobs is at variance with recent trends and likely growth in this sector. We recommend a 2016 employment of 2,593.
5. **Support activities for mining.** The model is projecting this sector will add 258 jobs to reach 1,468 by 2016. We believe this number should be revised upward for three reasons. First, 2008 employment is already at 1,409. Secondly, the discovery of the lower tertiary formation in the deep waters of the Gulf of Mexico---a field thought to be as large as Prudoe Bay---insures that there will be an increasing demand for service activity to support this find. Finally, Dynamic Industries has recently announced it will open a new offshore support facility that will create 400 new jobs. We suggest revising the 2016 forecast to 1,709.
6. **Transportation equipment.** It seems apparent the model forecast of a loss of 232 jobs in this sector is relying far too much on a continuation of trends caused by the completion of the JSTARS building project at Northrop Grumman. Now that construction has completed, NG has settled in with a workforce to maintain the JSTARS aircraft; that is, no further cuts are anticipated. Indeed, NG is in the running for a maintenance contract for the KC10 that could result in 350 more jobs. The other big player in this sector---Aeroframe---does repair work for FedEx and while that business fluctuates over the business cycle, the company is

RLMA 5 Transportation equipment Continued

expected to keep a core employment level. We suggest a 2016 forecast of 603 given recent stable trends in this sector.

7. **Textile Mills.** Do you want to add 160 jobs to the textile mills sector since Grupo Zaga is building a \$75 million textile mill in Lacassine?
8. **Wholesale trade.** These model projections appear reasonable.
9. **Building materials.** Forecasts for this sector appear slightly optimistic for two reasons: (a) employment has actually been falling since 2006 and (b) the 1998-08 growth rate was only +186. We suggest revising the 2016 projection to 1,575.
10. **General merchandise.** Forecasts for this sector appear slightly optimistic for two reasons: (a) employment has been flat since 2003 and (b) the 1998-08 growth rate was only +590. We suggest revising the 2016 projection to 4,336.
11. **Management of companies.** The model is giving too much weight to a temporary jump in employment in this sector a few years ago. The 2016 forecast should be reduced to 1,295.
12. **Social assistance.** This sector has a very long term trend of adding about 50 jobs a year with a few exceptions. We suggest revising the 2016 forecast to 2,170.
13. **Amusements, gambling, recreation.** The model forecast suffers from two problems. First the 2006 number of 1,676 was unusually low because not all the casinos had fully recovered from Rita. The 2008 number had jumped to 4,421 already as the casinos recovered and La Berge du Lac casino opened. The model also does not take into account the future opening of the Sugarcane Bayou Casino which will add at least 1,200 new casino employees to the region mix. Too, the Grand Casino Coushatta is planning an expansion of its casino. We suggest revising the 2016 forecast to 5,621.
14. **Food service & drinking places.** Unlike most other areas, this sector has experienced almost no growth for the past 9 years. There will be some growth associated with the opening of the new casino, but the 2016 forecast needs to be revised downward to 8,557.
15. **Repair and maintenance service.** The model has a much more optimistic forecast than past trends. We suggest reducing the 2016 forecast to 1,477.

16. **Local government.** The sector has been flat for the past 8 years. Before that it grew by 90-100 jobs a year, half the rate projected by the model. We propose reducing the 2016 forecast to 8,897.

Changes: RLMA 6

This is the smallest of the RLMA's in employment. We reviewed all of the larger employment sectors and examined those in particular that had large absolute changes projected by the model. We recommend the following changes:

1. **Utilities.** This RLMA is where the Cleco Headquarters are located. Historically, utilities have employed between 450-600 people. Cleco will complete the construction of a new power plant in 2009---Rodemacher. Employment in 2008 was already up to 1,001. Given this new facility, we believe the 2016 forecast should be at least 1,000 to reflect the presence of this new plant. This would represent an upward revision of 644 jobs in utilities.
2. **Federal government.** A key factor influencing this sector which is not captured by the model is new Battlefield Surveillance Brigade coming to Fort Polk in 2011. In addition to 1,800 new military troops, 1,800 civilian contractors are also coming. Too, the GEO Corporation has recently opened a new facility in LaSalle Parish to house and process illegal aliens that has 150 government jobs attached. Because of this influx we suggest raising the 2016 forecast to 3,473---a 1,200-person increase over 2006.
3. **Construction-Buildings.** The model has only a very small increase of 85 jobs in this category. This does not take into account the large influx of personnel coming into Fort Polk or the fact that the base has a \$182 million program underway to upgrade facilities there. Employment in this sector is already at 2,407. This number will move around substantially over the 10 years between 2006 and 2016, but we recommend a 2016 projection of 2,400 for this sector due to these influences.
4. **Construction-Heavy/Civil.** This sector's employment has held steady at about 2,000 jobs until a recent spike upward to 2,636 over the last two years due to TIMED highway projects concentrated in the region and the construction of Cleco's Rodemacher power plant. By 2016, these projects will have been completed and we expect employment to fall again to an equilibrium level closer to 2,079 in 2016---a 200-job reduction from the model forecast.
5. **Specialty trade contractors.** This sector has shown a steady upward trend for the past several years, adding 778 jobs over 1998-08. Employment in 2008 was already at 3,118. There appears to be no compelling reason for the model's flat

RLMA 6 Specialty trade contractors Continued

forecast---especially so since some of these workers will be needed for the expansion at Fort Polk. We recommend a 2016 forecast of 3,694, which is in keeping with past trends in this sector.

6. **Wood Products manufacturing.** The model is projecting a decline of 3,335 jobs in this sector from a 1,930 level in 2006. However, the model was unable to capture the opening of a new Roy O. Martin oriented strand board plant in the area in the past year. Employment has been rising steadily since 2003 and in 2008 was already at 2,012 due to the new plant. There is every reason to believe that employment will remain at that level at least through 2016; hence we recommend a 2016 projection of 2,012---an improvement of 417 over the model forecast.
7. **Transportation equipment manufacturing.** The model has employment in this sector rising from 283 in 2006 to 417 in 2016. There was no way for the model to capture the opening of the Union Tank Car facility in 2007 that caused employment to jump to 696. We recommend that the 2016 estimate be revised to 720 to allow for UTC and some additional growth at UTC.
8. **Fabricated metals manufacturing.** This sector has had a steady upward growth trend since 2003, yet the model has a built in decline. We recommend revising the 2016 forecast to 1,097---an increase of 180 jobs over the model projection.
9. **General Merchandise.** The model projection for this sector appears too low. It is for an employment level of 3,645 and 2008 level is already at 3,858. A projection for 2016 of 3,958 would be more in line with past trends. The other retail trade projections look reasonable.
10. **Professional/scientific/technical workers.** This is a tricky sector to analyze. The model is projecting a hefty jump of 1,359 jobs over 2006-16. To an extent that projection makes sense given the marked climb in employment in this sector since 2003. However, in his case we suspect that much of this jump was due to engineering and technical work on the many TIMED road projects in this RLMA, which will be completed well before 2016. We recommend cutting the projected growth rate at least in half to a 2016 forecast of 5,216.
11. **Hospitals.** Over the period from 1998-08, hospital employment expanded by 2,020. The model is projecting only an increase of 1,633 during a period when the boomers will be ageing and needing more hospital care. We suggest a growth rate of at least 2,200 over 2006-16, leaving a 2016 projection of 10,536.
12. **Nursing and residential care facilities.** There has been a sudden jump in this sector in the past two years that the model has not captured. 2006 employment

RLMA 6 Nursing and residential care facilities Continued

was at 4,629, but for 2007-08 it has averaged about 6,400. Clearly there has been a large facility or a number of large ones opened in the region recently. We recommend a 2016 forecast of 6,635.

13. **Social assistance.** Like #12 above, this sector also enjoyed a marked increase in employment over 2007-08. Employment in 2006 was at 1,626; by 2008 it was at 2,398. We suspect this jump is tied to work associated with (a) the new federal prison at Pollock and the GEO Corporation alien housing facility in LaSalle Parish. The 2016 forecast needs to be boosted to 2,887 to reflect these new additions.

Changes: RLMA 7

We reviewed all sectors, especially those with employment of 2,000 or more. We suggest the following:

1. **Haynesville Shale:** This is a new, very large gas field that only began exploration and production in earnest in late 2008. It is thought to hold 234 TCF of natural gas, making it the largest natural gas field in the U.S. ---and it is at its very young stage. Activity will be ramping up as we enter the forecast period. Forecasts in three areas specifically will need to be revised upward:
 - (a) **Oil and gas extraction:** +300 jobs as the rig count advances (the Shale rig count has increased lately despite low natural gas prices and a national recession);
 - (b) **Support activities** for mining was forecasted at 4,478 for 2016 and is already at 4,219. Schlumberger recently announced a new 400-person facility to be opened soon and we expect more to follow as the Shale is probed further. +700 jobs in this sector
 - (c) **Transportation-Pipelines** projected to decline from 240 in 2006 to 194 in 2016 (-46 jobs). In 2008 this figure was rising because of the Shale and was at 264. Because of the Shale this number needs to be revised upward by +320 for 2016. Energy Transfer Partners has already announced the first of many new pipelines (a \$1.2 billion project) to service the Shale and Center Point Energy Gas Transmission has planned another at \$450 million.
 - (d) **Truck Transportation.** 200 more jobs should be added to this sector as huge amounts of water must be trucked to Shale wells for production purposes.
2. **Transportation equipment manufacturing:** Forecasts in this sector need to be radically reduced. The forecasts were for this sector to grow from 4,082 in 2006 to 4,825 in 2016 (+743 jobs). Clearly this sector is going in the opposite direction. This is where the GM plant is located. At one time this plant had 3,600 workers. Then high gasoline prices in 2008 caused the plant to drop down to just under 800 workers. 195 workers there have been offered and accepted

RLMA 7 Transportation equipment manufacturing Continued

early retirement that has yet to show up in the numbers. At this juncture there is even a very real possibility that the plant will be shut down altogether. The Department of Economic Development is working with a potential client to come to the airport that would add 600 jobs to this sector if the client accepts. We suggest that by 2016, 1,500 people will be employed in this sector, reducing the 2016 forecast by 3,300.

3. We reviewed **amusements, gambling, and recreation**, another big sector of this economy. As long as Texas does not legalize casinos, the model forecast looks fine.
4. **Federal Government** is projected by the model to decline by 215 jobs, in keeping with long term trends. We believe that this projection should be change to flat, that is adding 215 jobs back, because of renewed activity at Barksdale AFB. It has just been announced that the Global Strike Force will be coming to Barksdale, along with a new weapons storage and flight training group, and a new nuclear operations training unit. In addition the new Cyberspace Research Park in opening up nearby. Several hundred military jobs will be added to the economy as a result, but these activities will also bring direct civilian jobs as well.
5. **Wood products Manufacturing:** This sector had 3,094 workers in 2006 and was projected by the model to go to 2,944---a drop of 150 jobs. By 2008 the sector was already down to 2,843 and this was before Georgia Pacific closed a plywood mill in the area. Too, technological change is reducing workforce needs in this industry. We believe the 2016 number should be down even more to 2,700, meaning the forecast needs to be dropped another 244 jobs.
6. **Fabricated Metal Products.** The model forecasts a decline of 805 jobs in this sector, which (1) does not really follow trends---there was actually growth in this sector over 2006-08, and (2) probably over-compensates for the closure of Beaird Industries. This firm has been shuttered before and always reopens in some form. MB Industries is nearly at closure on buying and reopening the facility. A better forecast would be for a decline of only 205 jobs in this sector---adding 600 jobs to the forecast.
7. **Food Services & Drinking places.** Over the 2006-16 period the model has this sector growing by 15.2% or 2,593 jobs. Over the 10 year period from 1998-08 this sector expanded at a rate of 26% or 3,577 jobs. Food outside the home is a very income elastic product. I can think of no good reason for the growth rate in this sector to slow down this markedly. Add 1,000 jobs to this sector.
8. **Nursing & Residential care facilities.** We reviewed all the health care and social services sectors. They all looked fine except for nursing and residential

RLMA 7 Nursing & Residential care facilities Continued

care facilities which grew by 32.2% or about 2,000 jobs over 1998-2008. Given the ageing of the population it is difficult to understand how this growth rate could slow down. We would add 400 jobs to this sector.

9. **Accommodations.** The model has this sector dropping by 161 jobs over 2006-16. This sector has been gradually adding jobs over the past few years and the 2008 employment is up 180 jobs over 2006. The boomers are reaching the age where they travel more. I would have at least some growth in the sector---say 2016 level of 2,200 meaning adding 431 jobs back.
10. **Educational services.** Projections in this sector appear to be very optimistic. Over 1998-08 the sector added only 518 jobs. The model has it adding 2,762 over the 2006-16 period---five times faster than the previous 10 years. We know of no demographic justification for such a large jump in employment. This sector's 2016 estimate should be dropped to about 23,650, a reduction of 1,437 jobs.
11. **Administrative & support Services.** Model projections for this sector appear overly generous. Over 1998-2008 the sector added 1,230 jobs or a 15% growth rate. The model has a 27% growth rate and adding 2,717 jobs to 12,734. 2008 is only at 9,583. An increase of 1,200 jobs seems more in line with past trends putting the 2016 level at 11,217.
12. **Building Material/Garden Supplies.** We reviewed all the retail trade sectors and they each look fine except for this one. The growth rate noticeably exceeds past trends. We would reduce the 2016 forecast to 3,273---a reduction of 300 jobs.

Changes: RLMA 8

This labor market area's growth has been moribund for several years as major employers---such as State Farm, International Paper-Bastrop, and Guide Corporation have left the region. The projection of an 8.7% growth rate over 2006-2016 seems appropriate. We suggest the following changes to the model forecasts:

1. **Transportation equipment manufacturing.** Unfortunately the model does not capture the closing of the Guide plant which cost this sector 840 jobs. The 2016 number should be 237 instead of 1,077---a drop of 840 jobs.
2. **Food manufacturing.** The model has this sector growing by 31.7% to 2,722 by 2016---an increase of 655 jobs. This is very counter to trends in the area. The sector has been losing jobs steadily since 2002 and was down to 1,896 jobs by 2008. The newly closed Pilgrim's Pride chicken plant will be purchased with state help by Foster farms, but it is unclear if it will reopen needing 1,500 workers

RLMA 8 Food manufacturing Continued

- and chicken farmers given the over-supply of chicken in the market. We suggest that a 2016 forecast of 2,000 persons in this sector, a drop of 722 from the model forecast.
3. All the **other manufacturing** sectors look okay. The paper products decline even matches the loss of the IP Bastrop paper mill and the fabricated metals area forecast works with the closure of Shaw Pipe Fabricators.
 4. **Telecommunications.** The model has very modest growth on only 2% in this sector or 18 jobs. We would add 200 jobs to this forecast based on the merger and growth prospects of a key employer in this area---CenturyTel. This would give a 2016 forecast of 1,126 for this sector.
 5. **Credit intermediation.** We believe the model is on target for this important sector due to the presence of Chase Mortgage in the area. This firm should help achieve the greater-than-average growth compared to the region as a whole. No changes for this sector.
 6. **Professional and technical services.** Forecast for this sector are well below past trends. Over 1998-08 this sector added 673 jobs or 24.3%. We see no reason in this market area for this growth rate to back off from at least an increase of 600 jobs, giving a 2016 forecast of 3,795.
 7. **Management of companies and enterprises.** This sector has been losing jobs consistently since 1997 and we know of nothing on the horizon to reverse this trend. Instead of a growth of 338 jobs we suggest a decline of 100 or a 2016 forecast of 1,617. As a point of reference, 2008 employment is already down to 1,668.
 8. **Administrative and support services.** The model has this sector losing jobs over 2006-16, but actually it has a nice growth trend since 2004---steadily adding 563 jobs. Instead of declining by 41 jobs, we would suggest this sector will add 300 jobs, rising to 4,128 by 2016.
 9. **Truck Transportation.** Though this sector has been losing jobs steadily for several years, we believe the projected fall to only 503 jobs in 2016 is too harsh. Trucking in this labor market area is likely to benefit from work hauling water to harvest the Haynesville Shale, parts of which are found in RLMA 8. We suggest a 2016 forecast of 753 for this sector.
 10. **Health care.** Each of the sectors in this large component was examined and reflects recent and expected trends. We recommend no changes in these sectors. Nor do we recommend any changes in the **retail** sector.

11. **Wholesale trade-Durables.** The model forecasts only 34 new jobs for this sector, growing to 2,154 by 2016. Employment was already at 2,233 in 2008 and showing a slight upward trend. We recommend changing the 2016 forecast to 2,383, an addition of 229 jobs over the model forecast. The wholesale trade-non-durables employment sector looks okay.
12. **Heavy and civil engineering construction.** The model has built a sharp decline in this sector based on a weak performance over 2004-06. However, absent major road construction projects, employment in this sector has tended to stay around 1,000. Because of major road projects in the area 2008 employment had jumped to 1,790. These projects will not continue through 2016. We recommend that the 2016 forecast be flat compared to 2006 at 935 (instead of declining by 284 jobs).
13. **Specialty trade contractors.** This is another sector where the model forecast appears overly negative, projecting a loss of 165 jobs. Employment has actually grown somewhat since 2006. A more reasonable forecast would be for flat growth or a 2016 forecast of 2,684.