

**Management Context**

The Mid-Atlantic Region includes the states of New York, New Jersey, Delaware, Maryland, and Virginia. Federal fisheries in this region are managed by the Mid-Atlantic Fishery Management Council (MAFMC) and NOAA Fisheries (NMFS) under seven fishery management plans (FMPs). Two of these FMPs are developed in conjunction with the New England Fishery Management Council (NEFMC). The MAFMC is the lead Council for the Dogfish FMP and the NEFMC is the lead for the Monkfish FMP.

**Mid-Atlantic Fishery Management Plans**

1. Atlantic Mackerel, Squids, and Butterfish
2. Bluefish
3. Spiny Dogfish (with the NEFMC)
4. Summer Flounder, Scup, and Black Sea Bass
5. Surfclam and Ocean Quahog
6. Golden Tilefish
7. Monkfish (with the NEFMC)

Of the stocks or stock complexes covered in these fishery management plans, Atlantic butterfish is currently considered overfished. No Mid-Atlantic species are currently subject to overfishing.

Currently, there are two catch share programs, in the Mid-Atlantic Region. The surfclam and ocean quahog individual fishing quota (IFQ) program was implemented in 1990 and had an ex-vessel value of \$49.0 million in 2007. A second catch share program, also an IFQ, for the golden tilefish fishery was implemented in November 2009. This program had an ex-vessel value of \$4.2 million in 2009 and \$4.5 million in 2007.

**Commercial Fisheries**

Mid-Atlantic fishermen earned over \$452 million for their catch in 2008, and harvested over 678 million pounds of finfish and shellfish. Sea scallop was a significant component of ex-vessel revenue, generating \$166 million in 2008 or 37% of total revenue. Despite accounting for just 0.20% of the total landings in the Mid-Atlantic, Eastern oyster averaged \$7.96 per pound in 2008, the highest annual price of any key species or species group. In terms of landings, menhaden accounted for 53% of total landings in the Mid-Atlantic, over 360 million pounds in 2008. This low value species had an average ex-vessel price of \$0.06 per pound in 2008, and contributed 5% to total revenue in the region.

In 2008, the total revenue in New Jersey was the highest in the region with fishermen generating \$169 million for their catch. Total landings in Virginia (416 million pounds) contributed 61% to total landings in the Mid-Atlantic. Menhaden made up over 85% of landings in Virginia. In terms of finfish revenue and catch, Virginia fishermen generated the most and received \$40 million for 384 million pounds harvested in 2008. Fishermen in New Jersey accounted for most of the shellfish revenue (\$149 million) and landings (100 million pounds). Virginia, Maryland, New York and Delaware followed in both revenue generated and shellfish catch harvested.

**Economic Impacts**

In 2008, the Mid-Atlantic Region's seafood industry generated over a billion dollars in sales in New Jersey (\$2.17 billion), New York (\$1.98 billion) and Virginia (\$1.37 billion). Most of the seafood industry-related jobs in this region were also sustained in the same states with 41,500 full- and part-time jobs in New York, 40,000 jobs in New Jersey, and 31,000 jobs in Virginia. Maryland (1,900 jobs) and Delaware (1,100 jobs) followed in terms of employment supported by the seafood industry. New Jersey also led the region in income impacts with almost \$1.2 billion dollars generated by the seafood industry in 2008.

**Key Mid-Atlantic Commercial Species**

- Striped bass
- Atlantic surf clam
- Quahog clam
- Blue crab
- Summer flounder
- American lobster
- Menhaden
- Eastern oyster
- Sea scallop
- Squid

**Landings Revenue**

Ex-vessel revenue for finfish and shellfish totaled \$452 million in 2008, a 29% increase (3% in real terms) from landings revenue in 1999 (\$350 million), and an 10% increase over revenue generated in 2007 (\$410 million). New Jersey and Virginia fishermen generated most of the 2008 revenue with \$169 million and \$146 million, respectively. Shellfish revenue contributed 80% to total revenue in the Mid-Atlantic, totaling \$362 million in 2008. This was a 48% increase (19% in real terms) over 1999 totals (\$244 million) and a 18% increase (7% in real terms) over 2007 (\$307 million). Finfish revenue decreased from \$106 million in 1999 to \$90 million in 2008, a 16% decrease (33% in real terms) over this period. Finfish revenue also decreased from 2007 to 2008 by 14% (22% in real terms) from \$104 million to \$89.6 million.

Total revenue trends over the 10 year time period varied by state. Delaware experienced a 1% decrease (21% in real terms) in total revenue while total revenue increased in New Jersey (72%, 38% in real terms) and Virginia (34%, 8% in real terms) from 1999 to 2008. These increases were largely driven by increases in shellfish revenue. New Jersey shellfish revenue increased 108% (66% in real terms) and in Virginia, the revenue increased 74% (39% in real terms).

Total shellfish revenue decreased 31% (45% in real terms) in New York, but increased 24% (1% decrease in real terms) in Maryland. This mirrored declines in total revenue (shellfish and finfish) from 1999-2008. New York experienced a 23% (39% in real terms) decrease in total revenue, while Maryland's revenue increased 17% (7% decrease in real terms).

Sea scallop contributed more to the Mid-Atlantic's total revenue in 2008 than any other key species or group: \$166 million or 37% of total revenue. This was a 294% increase (215% in real terms) from 1999 sea scallop revenue (\$42 million) and a 13% increase (1.8% in real

terms) from 2007 (\$147 million). Striped bass (18% increase, 5% decrease in real terms), American lobster (74% decrease, 79% decrease in real terms), and squid (20% decrease, 36% decrease in real terms) also experienced large changes in revenue between 1999 and 2008.

In contrast to shellfish revenue, finfish revenue declined in current and real terms across the Mid-Atlantic: Virginia (16%, 33% in real terms), Delaware (43%, 55% in real terms), New York (2.8%, 22% in real terms), New Jersey (24%, 40% in real terms), and Maryland (14%, 32% in real terms).

At the state level, key species or groups with large changes in landings revenue between 1999 and 2008 include: striped bass (46% increase), spot (67% increase), weakfish (97% decrease), and American eel (71% decrease) in **Delaware**; sea scallop (14,000% increase), menhaden (41% increase), blue crab (34% increase), Eastern oyster (68% decrease), and white perch (20% decrease) in **Maryland**; sea scallop (530% increase), goosefish (49% decrease), quahog clam (14% decrease), Eastern oyster (62% increase), and 48% increase in blue crab in **New Jersey**; sea scallop (7,300% increase), Atlantic surf clam (157% increase), scups or porgies (140% increase), Eastern oyster (632% increase) and lobster (84% decrease) in **New York**; catfishes and bullhead (241%), sea scallop (139% increase), Atlantic croaker (50% increase), black sea bass (36% decrease), and menhaden (30% decrease) in **Virginia**.

### Landings

Fishermen in the Mid-Atlantic landed over 678 million pounds of finfish and shellfish in 2008. This was a 10% decrease from the 753 million pounds landed in 1999, and a 8% decrease from the 738 million pounds landed in 2007. Finfish accounted for 70% of total landings (477 million pounds) in 2008, with a 13% decrease from 1999 (546 million pounds). From 2007 to 2008, finfish landings decreased 14%. Shellfish landings decreased 3% from 208 million pounds in 1999 to 201 million pounds in 2008. These landings increased 11% between 2007 and 2008.

Finfish landings between 1999 and 2008 decreased in all five states across the Mid-Atlantic. The largest decreases were in Delaware where landings decreased 77% and in New York which had a 36% decrease in landings. These decreases were followed by Maryland (34%), New Jersey (19%), and Virginia (9%).

Shellfish landings across the Mid-Atlantic Region mostly declined over the 10 year time period. Decreases occurred in New York (28%), Delaware (26%), and Virginia (22%). Increases in shellfish landings were seen in New Jersey (9%) and Maryland (5%).

Menhaden landings constituted the largest component of total landings with 361 million pounds landed in 2008. Menhaden accounted for 53% of total landings that year, a 13% decrease from 1999 (415 million pounds) but a 24% decrease from 2007 (472 million pounds). Fishermen in Virginia harvested the majority (354 million pounds) of menhaden, 98% of the total landed in 2008 (361 million pounds).

Of the Mid-Atlantic's key species and species groups, sea scallop (194%), squid (29%), and striped bass (6.7%) increased in total landings from 1999-2008. Decreases in landings totals were experienced for all other key species or groups with the largest decrease in Atlantic surf clam (84%), American lobster (80%), and Eastern oyster (59%) landings. Notably, landings totals in 2008 increased for squid (264%) Eastern oyster (55%), and quahog clam (25%), and blue crab (15%) relative to 2007 totals.

### Commercial Fish Facts

#### Landings revenue

- On average, the key species and species groups accounted for 80.3% of total landings revenue in the Mid-Atlantic Region.
- Sea scallops contributed the most to landings revenue in the region, averaging \$116 million over the 10 year time period. In 2008, fishermen in New Jersey generated most of this revenue, contributing 55% of the \$166 million generated from sea scallops that year.
- Squid had the largest annual increase in revenue from 1998-2007, increasing 120% from \$6.5 million to \$14 million (2003-2004). Atlantic Surf Clam had the largest annual decrease in revenue, decreasing 83% from 2007-2008.

#### Landings

- Key species and species groups in the Mid-Atlantic Region contributed an average of 82% annually to total landings.
- Menhaden was a significant contributor to landings, averaging 420 million pounds or 58% of total landings from 1999-2008. Virginia fishermen harvested the majority of this species.
- Landings of squid increased 298% from 2003-2004, only to decrease 70% from 2004-2005. Although squid experienced the largest increase by any year to year comparison, the largest decrease in the region was experienced by Atlantic surf clam 84% from 2007 to 2008 in the region.

#### Prices

- Quahog clam (\$5.94 per pound), Eastern oyster (\$5.70), sea scallop (\$5.29), and American lobster (\$4.45) had the highest average ex-vessel prices between 1999 and 2008.
- Menhaden (\$0.06 per pound), Atlantic surf clam (\$0.56), and squid (\$0.61) had the lowest average ex-vessel prices from 1999 to 2008.
- Squid prices were variable over the 10 year time period, Squid increased 121% from 2004-2005, the largest annual increase. It then decreased 56% from 2007-2008, the largest annual decrease.

### Prices

With the exception of squid, 2008 ex-vessel prices for the Mid-Atlantic's key species and species groups were higher than their 10 year average price per pound. Between 1999 and 2008, Eastern oyster (158%, 8.3% in real terms), blue crab (35%, 8.3% in real terms), sea scallop (34%, 7.2% in real terms), and American lobster (30%, 4.1% in real terms) experienced the largest increases in price per pound.

Squid and menhaden both experienced large decreases in price between 1999 and 2008 in current and real terms. Squid decreased 38% (50% in real terms) and menhaden decreased 25% (40% in real terms).

Relative to ex-vessel prices in 2007, prices for six of the ten key species and species groups decreased in 2008. Squid experienced the largest decrease (56%) followed by

American lobster (16%) and menhaden (14%). Quahog clams experienced the highest increase in price (45%).

At the state level, key species or groups with large changes in ex-vessel price from 1999-2008 include: spot (162%), American eel (95%), and weakfish (89%) all experienced increases while whelk experienced a 21% decrease in **Delaware**; Eastern oyster (214%), Atlantic croaker (97%), and white perch (78%) all experienced increases while clams and other bivalves experienced a 20% decrease in **Maryland**; American lobster and sea scallop both increased 30%, summer flounder and blue crab increased 42%, and sea scallop increased 30% in **New Jersey**; Eastern oyster (268%), softshell clam (94%), sea scallop (66%), and summer flounder (49%) all experienced increases in **New York**; and catfishes and bullhead (183%), black sea bass (119%), spot (69%) all experienced increases while menhaden was the only species to experience a large decrease (25%) in **Virginia**.

**Recreational Fishing**

There were over three million recreational fishermen who took a fishing trip in the Mid-Atlantic Region in 2008. Over 93% of these anglers were residents of a regional coastal county. Of the 21 million fishing trips taken in 2008, over 57% of them were taken from a private or rental boat. Atlantic croaker and summer flounder were the most frequently caught key species or species group with 19.5 million Atlantic croaker and 22 million summer flounder harvested or released in 2008. Together, these key species accounted for 45% of fish caught by anglers in the Mid-Atlantic.

**Economic Impacts and Expenditures**

Recreational fishing activities in New Jersey supported more jobs than any other state in the Mid-Atlantic with approximately 9,612 full- and part-time jobs supported in 2008. Maryland (7,244 jobs), New York (5,766 jobs), Virginia (5,564 jobs), and Delaware (1,462 jobs) followed in terms of employment impacts from recreational fishing activities. The majority of these jobs were related to durable equipment expenditures (versus trip-related expenditures): 69% of jobs in Maryland; 72% of jobs in New York; 59% of jobs in Virginia; 65% of jobs in New Jersey; and 51% of jobs in Delaware.

In terms of employment impacts related to fishing trips taken by anglers, industries that provided services for shore-based fishing trips supported most of the trip-related full- and part-time jobs in Maryland (1,230 jobs) and Delaware (359 jobs). Private or rental boat trips supported most of the trip-related jobs in Virginia (1,728 jobs), New Jersey (1,741 jobs), and New York (748 jobs).

The contribution of recreational fishing activities in the Mid-Atlantic are also reported in terms of state level sales and value-added impacts, and direct expenditures on fishing trips and durable equipment. In 2008, in-state sales and value-added impacts were highest in New Jersey (\$1.6 billion in sales impacts; \$820 million in value-added impacts) and Maryland (\$1 billion; \$504 million). New York (\$875 million; \$457 million), Virginia (\$619 million; \$329 million), and Delaware (\$224 million; \$103 million) followed in terms of sales and value-added impacts. Across

the region, these economic impacts were largely generated from durable equipment expenditures made by anglers.

| Key Mid-Atlantic Recreational Species |                    |
|---------------------------------------|--------------------|
| • Striped bass                        | • Summer flounder  |
| • Bluefish                            | • Winter flounder  |
| • Drum (Atlantic croaker)             | • Porgies (scup)   |
| • Drum (spot)                         | • Black sea bass   |
| • Drum (weakfish)                     | • Wrasses (tautog) |

Total fishing trip and durable equipment expenditures generated \$4.2 billion across the Mid-Atlantic in 2008. Approximately 77% of these expenditures were related to durable equipment purchases. Vehicle (\$1.1 billion), fishing tackle (\$896 million), and boat-related expenses (\$693 million) accounted for the majority of durable equipment expenditures. Expenditures by Mid-Atlantic residents related to fishing trips totaled \$589 million. Most of these purchases were related to fishing trips taken from a private or rental boat (63% of trip-related expenditures by residents). The region’s non-resident anglers generated \$346 million in trip-related expenditures with most of these expenses related to private or rental boat trips (48% of trip-related expenditures by non-residents).

**Participation**

Of the three million recreational fishermen from either a coastal or non-coastal county in the Mid-Atlantic Region<sup>1</sup>, there was a 74% increase from 1999 (1.73 million anglers) and a 12% decrease from 2007 (3.4 million anglers). In 2008, 94% of total anglers who fished in the Mid-Atlantic were residents of a coastal county. The number of coastal county anglers in 2008 increased 77% relative to 1999 (1.6 million anglers) and decreased 12% relative to 2007 (3.23 million anglers). Non-coastal county angler participation increased 7% relative to 1999 (148,000 anglers) and decreased 6.5% relative to 2007 (212,000 anglers).

The majority of recreational fishermen in Maryland, New Jersey, New York, and Virginia were residents of a coastal county within their respective state. These anglers accounted for 84% of total anglers in New York, 61% of anglers in New Jersey, 54% of anglers in Maryland, and 52% of anglers in Virginia. In contrast, the majority of anglers who fished in Delaware were out-of-state residents (58% of total anglers). Anglers from the Mid-Atlantic’s non-coastal counties<sup>2</sup> comprised a minority of total anglers in 2008: 2% of anglers in New Jersey, 3.3% of anglers in New York, 4.1% of total anglers in Maryland, and 9.9% of anglers in Virginia.

<sup>1</sup>At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only Mid-Atlantic Region resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006* (FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler participation totals excludes these anglers.

<sup>2</sup>All resident anglers in Delaware are considered coastal county anglers.

### Fishing Trips

Anglers took 20.5 million fishing trips in 2008. This was a 46% increase from 1999 (14.1 million trips) and a 9.3% decrease from 2007 (22.7 million trips). In 2008, most fishing trips were taken from a private or rental boat: 11.7 million trips or 57% of total fishing trips taken in the Mid-Atlantic. Shore-based fishing trips were also popular with 7.9 million trips taken in 2007, followed by 940,000 fishing trips taken from a for-hire boat.

Most of the fishing trips in the region were taken in New Jersey (33% of total trips in the region) and New York (29% of total trips). In these states, private or rental boat trips was the most popular fishing mode: 53% of trips taken in New Jersey and 55% of trips taken in New York. This mode also accounted for the majority of trips taken in Virginia (69% of trips), Maryland (58% of total trips), and Delaware (52% of trips). Shore-based trips were the second most popular fishing mode in these states: 44% of trips in Delaware, 1% of trips in New Jersey, 40% of trips in New York, 38% of trips in Maryland, and 30% of trips in Virginia.

### Harvest and Release

Of the Mid-Atlantic Region's key species and species groups, Atlantic croaker and summer flounder were the most frequently caught by anglers. In 2008, 19.6 million Atlantic croaker and 22 million summer flounder were caught by anglers fishing in the region. Together, these species accounted for 45% of the key species or species groups caught by recreational anglers and both species were more often released than harvested. In terms of where these fish were caught, the majority of Atlantic croaker were caught in Virginia (69% of fish caught in the region) and most of the summer flounder were caught in New Jersey (46.4% of fish caught).

In 2008, only two of the Mid-Atlantic's key species or groups were harvested more often than released by anglers: spot (61% harvested) and winter flounder (65% harvested). Summer flounder (92% released), black sea bass (92% released), and striped bass (77% released) were examples of key species or groups with a larger percentage of fish released rather than harvested.

Most of the Mid-Atlantic's key species and groups experienced large changes in catch totals between 1999 and 2008. Scup (290%), spot (468%), bluefish (82.5%), and black sea bass (46.8%) all experienced large increases in recreational catch. Only weakfish and winter flounder showed decreases in total recreational catch with 49% and 87% decreases, respectively.

Between 2007 and 2008, large changes in catch totals were observed for scup (40% increase), winter flounder (57% decrease), and weakfish (49% increase). There was a 27% decrease in striped bass caught, a 18% decline in tautog, and a 14% decrease in spot caught.

At the state level, summer flounder was the most frequently caught key species or species group in 2007 with 10.2 million fish caught in New Jersey, 6.7 million fish caught in New York, and 750,000 fish caught in Delaware. Atlantic croaker was the key species most often caught by

recreational fishermen in Virginia with 13.5 million fish caught in 2008. In Maryland, anglers caught 5 million white perch, the key species most commonly caught in this state.

### Recreational Fishing Facts

#### Participation

- In the Mid-Atlantic, an average of 2.6 million anglers fished annually from 1999 to 2008. Most of these anglers fished in Maryland and New Jersey.
- The region's coastal county residents made up 94% of total anglers in 2008. These anglers averaged 93% of total anglers annually from 1999-2008.
- Non-coastal county resident anglers increased 61% from 2004-2005, the largest annual increase in participation in the Mid-Atlantic. Coastal county residents decreased 28% from 2001-2002, the largest annual decrease.

#### Fishing trips

- An average of 19.5 million fishing trips were taken annually in the Mid-Atlantic between 1999 and 2008. Most of these trips were taken in New Jersey and New York.
- Private or rental boat trips accounted for 11.7 million fishing trips in 2008. This mode of fishing trip made up 57% of trips taken that year.
- The largest annual increase was a 43% increase in private or rental boat trips from 1999-2000. The largest annual decrease was a 23% decrease in shore-based fishing trips from 2001-2002. Although all modes of fishing show decreases from 2007-2008, the for-hire mode had the largest decrease (33%).

#### Harvest and release

- The most commonly caught key species or species group in the Mid-Atlantic were summer flounder (22 million ) and Atlantic croaker(19.6 million). Anglers caught an average of 20 million of each fish annually from 1999-2008. Most of these fish were released rather than harvested.
- Most of the Mid-Atlantic's key species or groups were released by anglers rather than harvested. Striped bass (77% released), summer flounder (92%), and black sea bass (92%) are examples.
- Key species or groups more often harvested by anglers were spot (61% harvested) and winter flounder (65%).
- Scup had the largest annual increase in catch, increasing 233% from 1999-2000. Tautog had the largest annual decrease in catch (63%) from 2002-2003.

### Marine Economy<sup>3</sup>

The Mid-Atlantic's gross domestic product by state was 2.3 trillion in 2007. Employee compensation totaled 1.31 trillion and annual payroll totaled 868 billion. These economic measures in the gross domestic product of the Mid-Atlantic increased 60% (22% in real terms), 31% (10% in real terms) in employee compensation, and 57% (31% in real terms) in annual payroll. There were 1.1 million establishments which employed approximately 17 million employees across the region in 2007. This was a 9.3% increase in establishments, and a 11% increase in numbers of employees between 1998 and 2007. A small increase of 0.7% and 0.3% respectively occurred between 2006 to 2007.

In 2007, New York continued to report the highest number of establishment, the highest employee numbers, annual payroll, employee compensation, and gross state product

<sup>3</sup>Data for 2008 were unavailable for this report therefore 2007 information are reported in this section.

levels in the Mid-Atlantic region. It employed 7.5 million workers in 520,000 establishments. The gross state product in New York was 1.1 trillion followed by New Jersey (461 billion), then Virginia (384 billion), Maryland (264 billion) and Delaware (62 billion).

Among the Mid-Atlantic states where data was available, New Jersey had the highest commercial fishing location quotient (CFLQ)<sup>4</sup> at 0.90 in 2007. This was a 1.1% increase from 2006. The 0.90 CFLQ number from New Jersey in 2007 would suggest that the level of employment in commercial fishing-related industries is lower than the level of employment in these industries nationwide. Across the Mid Atlantic, the CFLQ was lower than the national baseline of 1.00: 0.74 in Maryland, 0.55 in Virginia, 0.11 in New York.

### ***Seafood Sales and Processing***

In 2007 there were 211 non employer firms engaged in seafood product preparation and packaging totaling \$14.7 million in annual receipts. This was a 115% increase in non-employer firms and 75% increase (55% in real terms) in annual receipts relative to the 1999 levels. In 2007, New York had the most firms, followed by Virginia and Maryland. Virginia reported the largest increases in the industry with a 467% increase (402% in real terms) in annual receipts and 343% increase in firms.

Employer establishments engaged in seafood product preparation and packaging totaled 84 in 2007. These establishments employed approximately a total of 3,170 full and part-time workers and generated 104 million in annual payroll. Region-wide there was a 21% decrease in establishments engaged in this industry between 1999 and 2007, a 16% decrease in employees and 19% increase in annual payroll totals.

At the state level, the largest number of the seafood product preparation and packaging establishments were located in Virginia with 30 establishments in 2007 (decrease of 9% since 2006). Maryland continued to employ the most people with approximately 1300 employees whereas Virginia only employed 960 people. Virginia had a slightly higher payroll 34,500 compared to 32,300 in Maryland. In Virginia there was a 29% decrease in establishments and a 37% decrease in employees. Annual Payroll in Maryland jumped up 41% (29% in real terms) from 1999.

The Mid-Atlantic's seafood wholesale annual payroll totals increased 32% (17% in real terms) from 1999-2007 to approximately \$202 million in 2007. However, with continued increases in annual payroll, establishments decreased by 14% and employment decreased by 9.1%, although there were increases in relation to 2006 levels at 11% and 10%, respectively. These effects were mimicked at the state level. Delaware experienced the largest decrease in number of establishments at 40% decrease, followed by Maryland at 33% decrease and a 23% decrease in Virginia. Maryland experienced the largest increase in annual payroll with a 108% (84% in real terms) from 1999-2007.

In 2007 there were 551 seafood retail nonemployer firms with total annual receipts of \$53 million across the Mid-Atlantic Region. This was a 6% increase in firms region-wide from 1999 to 2007. Delaware experienced a 200% increase from 1999 and the number of firms in Maryland increased by 39%. Annual receipts increased the most in comparison to 1997 numbers in Delaware (82%, 62% in real terms), Virginia (54%, 37% in real terms) and Maryland (53%, 36% in real terms). New York stood out with a 20% decrease (29% in real terms) in annual receipts. The majority, 46 % of these firms were located in New York.

Employer establishments engaged in the seafood retail increased 26% across the Mid-Atlantic to 690 establishments in 2007. From 2006 to 2007 establishments decreased by 14 establishments. Fifty-four percent of the establishments were located in New York. Across the Mid-Atlantic Region there were approximately 2,770 employees with an annual payroll of \$62 million in 2007. From 1999 to 2007 employee numbers increased 44% and annual payroll increased 86% (65% in real terms). Delaware had the largest increase in payroll (167%, 136% in real terms); with Maryland (90%, 68% in real terms) having the second largest increase in payroll Delaware had the largest increase in establishments (73%) and employees (64%).

### ***Transport, Support, and Marine Operations<sup>5</sup>***

Marina industries had the highest number of establishments in this industry sector with 953 establishments in 2007. This was a 2% increase from the number of establishments in 1999. The majority of the marina establishments were located in New York, New Jersey and Virginia. From 1999 to 2007, the number of establishments rose 6% in both New York and Virginia and 42% in Delaware.

In marina industries there was a 20% increase in employment in Maryland and 23% increase in NY from 1999 to 2007. There was a 72% increase (53% in real terms) from 1999 to 2007 in payroll in Maryland, a 59% increase in New York (41% in real terms), and a 147% increase (119% in real terms) region-wide from 1999 to 2007.

Region-wide ship and boat building establishments increased 33% in Maryland to 48 between 1999 and 2007. The number of ship and boat building employees decreased in New Jersey, Virginia, and Delaware, with a 2% decrease region-wide in establishments. The number of employees decreased in Maryland (54%) and New York (24%), and payroll decreased 48% (54% in real terms) in Maryland but increased 38% (22% in real terms) in New Jersey. At the Mid-Atlantic level, ship and boat building employee determinations cannot be reported.

Other industries with large to modest changes from 1999 to 2007 were coastal and Great Lakes freight transportation (200% increase in establishments in Delaware, 30% decrease in New York, and 21% increase in

<sup>4</sup>The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

<sup>5</sup>Due to confidentiality restrictions, much of the data on this sector are unavailable.

New Jersey). Establishments in Maryland also decreased 11% from 1999-2007. Across the region there was a 100% increase in deep sea passenger establishments since 1999. Port and harbor operations establishments increased in all Mid-Atlantic states. The biggest increases occurred in Maryland (100%) and New York (67%) with a region-wide increase of 50%. There was a region-wide decrease of 16% in marine cargo establishments with the largest decreases in New York (40%) and Delaware (50%). Navigational services to shipping establishments increased 9% overall with a 53% increase in New York, a 38% increase in Virginia and a 38% decrease in Maryland.