A special supplement to

THE DATEY

RECORD

November 9, 2002



Md.'s Economy: Beyond the Financial Fog

By Robert L. Rager Special to The Daily Record

t first glance, Maryland's economy in not unlike a handful of others' the past few years — patiently enduring the hard knocks of generally tough economic times. Nonetheless, the recent financial fog masks a state that remains fundamentally sound, economically diverse and

its 49 union brethren on several key economic fronts.

Unemployment mood swings

poised to outperform a majority of

In 1998, Maryland's job growth was expanding at a healthy 2.5 percent annual rate, according to the U.S. Department of Labor's Bureau of Labor Statistics. It was the sixth consecutive year of uninterrupted job growth in the state, with more than 57,000 jobs added in 1998 alone.

In 2000, the state's unemployment rate was hovering around 4 percent, but by early 2001 the climb was on. The state's unemployment rate poked its nose over 5 percent this spring — high for Maryland, but still a full percentage point lower than the national average. Hiring freezes and layoffs amid a climate of general uncertainty had become a daily fact of life nationwide.

Continuing to mirror the U.S.

trend, Maryland's unemployment rate began a turn for the better as the spring turned to summer. As of July, the statewide unemployment rate was back down to 4.2 percent, a 0.2 percent drop from the previous month. Within the state, the Eastern Shore has both ends of the unemployment scale covered — with Talbot County reporting a

Continued on page 32



Though the manufacturing industry has been hard-hit in Maryland recently, electronics-maker Northrop Grumman still registers among the state's top employers.

statewide low of 2.5 percent in July and Dorchester turning in a rate of 6.3 percent, highest among all Maryland counties and second only to Baltimore City's 7.8 percent figure.

The bureau's unemployment figures break the state down by both county and market area. In general, Maryland inemployment tends to be higher away from the state's economic core—the Baltimore-Washington corridor, where you'll find about 87 percent of the state's 2.96 million civilian workers.

Economic overhaul

With more than 12,000 working farms and 4,600 manufacturers statewide, most of Maryland's outlying counties have strong historical ties to agriculture and/or manufacturing. Both industries have been particularly hard hit in recent years; the former due to severe drought, the latter because of a dramatic and continuing overhaul of the state's economic engine.

Looking at the Maryland Department of Business and Economic Development's "Economic Pulse," the state fiscal picture appears a bit weak on some fronts. From July 2001 to July 2002, Maryland's business services sector lost 17,000 jobs, a decline DBED says is "singly responsible" for the state's May job growth rate of negative 0.7 percent. May was a particularly gloomy month for the entire nation in this category, as only 13 states and the District of Columbia showed positive job growth.

However, positive signs for the July 2001 to July 2002 period include the addition of 6,800 new government jobs and 5 200 health services jobs, according to DBED representatives. Then there's the service revolution. Between 1990 and 2000, the number of service jobs in the state soared from 592,000 to 766,000. About one-third of today's service jobs are in retail.

But experts are most impressed

with Maryland's high-tech sectors, specifically information technology and biotech. While agriculture, manufacturing, retail and tourism will remain important cogs in the state's economic engine, future financial horsepower clearly will depend on Maryland's ability to sell its technological strengths.

Fortunately, the state is getting help where it really counts — reputation.

Progressive Policy Institute's recently released report "The 2002 State New Economy" ranks Maryland fifth among all states in IT jobs; third in managerial, professional and tech jobs; second in aggregated knowledge jobs; seventh in initial public offerings; third in scientists and engineers as a percentage of the work force; sixth in venture capital invested as a percentage of gross state product; 10th in patents issued; and first in work-force education.

Not bad for the little state that ranks 41st in size and 19th in population.

Name	Agency/Department	City	County	Web site
Beltsville Agricultural Research Center	Department of Agriculture	Beltsville	Prince George's	www.barc.usda.gov
Census Bareau Consomer	Department of Commerce	Suitland	Prince George's	www.census.gov
Product Safety Commission	(Independent commission)	Bethesda	Montgomery	www.cpsc.gov
Goddard Space Flight Center	National Aeronautics and Space Administration	Greenbelt	Prince George's	www.gsfc.nasa.gov
Internal Revenue Service	Department of Treasury	New Carrollton	Prince George's	www.irs.gov
National Archives at College Park	National Archives and Records Administration	College Park	Prince George's	www.nara.gov/nara/
National Institute of Standards and Technology	Department of Commerce	Gaithersburg	Montgomery	www.nist.gov
National Institutes of Health		Bethesda	Montgomery	www.nih.gov
National Oceanic and Atmospheric Administration	Department of Commerce	Silver Spring	Mentgomery	www.nesdis.noaa.gov
Nuclear Regulatory Commission	(Independent commission)	Rockville	Montgomery	www.nrc.gov
Washington National Records Center	National Archives and Records Administration	Suitland	Prince George's	www.nara.gov/records/

Maryland's Largest Employers

(Listed alphabetically)

Employer	Product or Service
Adventist Health Care	Health care services
Allfirst Bank	Commercial banking
Aramark Services	Food services, managed services
Bank of America	Commercial banking
Baltimore Gas & Electric	Gas and electric utility
Bethlehem Steel	Steel manufacturing
Black & Decker	Power tools and home products manufacturing
Blue Cross of Maryland	Health care services
Chevy Chase Savings & Loan	Commercial banking
Citicorp Credit Services	Financial services
Comcast Cablevision	Communications services
Computer Sciences Corp.	Information technology
Dayco Restaurants	Restaurants
Dimensions Health	Health care services
Food Lion	Retail grocer
Giant of Maryland	Retail grocer
Greater Baltimore Medical Center	
Helix Health Systems	Hospital, health services Health care services
Home Depot	Retailer/home products
	
Hughes Network Systems	Electronics and communications
IBM Corp.	Business products and services
J.C. Penney	Retailer/department stores
Johns Hopkins Applied Physics Lab	R & D systems engineering
Johns Hopkins Bayview Medical Center	Hospital, health services
Johns Hopkins Hospital	Hospital, health services
Johns Hopkins University	Education
Kaiser Permanente	Health care services
Lockheed Martin	Aerospace, communications
Lowe's Home Centers	Retailer/home products
Marriott International	Food and lodging services
May Department Stores	Retailer/department stores
McDonalds Restaurants	Restaurants
Northrop Grumman	Electronics
Pro Lease	Personnel services
Rite Aid	Retailer
Safeway Stores	Retail grocer
Sears Roebuck	Retailer/department stores
Sinai Hospital	Hospital, health services
St. Agnes Hospital	Hospital, health services
Super Fresh Food Markets	Retail grocer
T. Rowe Price Associates	Financial services
Target Stores	Retailer/department stores
University of Maryland Medical System	Hospital, health services
United Parcel Service	Courier services
U.S. Airways Inc.	Airline
Verizon Maryland	Telecommunications
Verizon Services Corp.	Telecommunications services
Wal-Mart Associates	Retailer/department stores
Weis Markets	Retail grocer

Source: Maryland Department of Labor, Licensing and Regulation, Office of Labor Market Analysis and Information, and the Maryland Department of Business and Economic Development, 2001

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Target Industries

BY ROBERT L. RAGER

Special to The Daily Record

o just what's driving Maryland business these days? Despite the horrendous drought of 2002, farming is still an essential part of Maryland life. And the public payroll maintains a strong influence on the economy, with one-fifth of the work force employed by federal, state or local government.

Manufacturing and construction sectors employed around 170,000 in fiscal year 2002. Tourism has even rebounded from an understandable post-Sept. 11, 2001 slump, with hotel/motel occupancy rates rising in May.

But to really look into Maryland's economic prospects, a quick look back to the 1990s is in order.

According to the Maryland Office of Labor Market Analysis and Information, eight counties transitioned to a service-dominated economy between 1990 and 2000. Allegany, Anne Arundel, Baltimore, Frederick, Kent, Prince George's, Washington and Wicomico counties were dominated by trade employment in 1990. By 2000, employment in all eight of these counties was led by service-related jobs.

Other counties strengthened their existing service-

dominated status during the same period. Montgomery County moved from having 34.6 percent of its jobs in services to 41.2 percent; Howard County went from 29.7 percent to 34 percent. Statewide, fully one-third of all jobs were in the services sector in 2000, up from 27.7 percent in 1990. During the same period, trade, government, manufacturing and construction jobs all declined as a percentage of the total work force.

Clearly, Maryland is shedding its blue-collar past and emerging as a service-oriented state, with concentrations in retail, health care, professional services and technology.

This last component — technology — can be difficult to define in terms of employment. Parts of the technology sector could be considered service-oriented, while other parts (e.g., research and development) cannot be classified so easily. And some analysts consider biotech and engineering as part of high-tech, while others do not. Still, no matter how you slice it, Maryland's technology pie has the state and many high-tech industries salivating.

Here is a brief overview of Maryland's technological prowess and a peek at several non-tech industries that together form the state's complex and evolving economic picture.

Company	Product or Service	New / Expansion	County
Allied Signal Technical Services	Engineering services	Expansion	Howard
Allison Transmission	Automotive transmissions	New	Baltimore County
Ameritrade	Electronic brokerage	New	Anne Arundel
Bank One Services	Check remittance processing center	New	Baltimore City
Bertelsman	Fulfillment; distribution	New	Carroll
BioRetiance	Biotechnology testing	Expansion	Montgomery
Black & Decker	Headquarters; manufacturing	Expansion	Baltimore County
Bookham Technology	Telecommunications: optical circuits and modules	New	Howard
Closet Maid	Plastic coafed wire baskets	New	Garrett
Digex	Internet service provider	Expansion	Prince George's
Discovery Communications	Cable television programming	Expansion	Montgomery
Litton-Amecom	Aerospace and defense electronics	Expansion	Prince George's
Merkle Computer Systems	Direct mail and database services	Expansion	Prince George's
Mid Atlantic Medical Services	Health maintenance organization	Expansion	Frederick
NOVA Telecommunications	Manufacture of telecommunications equipment	Expansion	Howard
Petsmart	Distribution of pet supplies	New	_ Washington
Qiagen	Bioscience manufacturing	New	Montgomery
Shire Laboratories	Biotechnology	Expansion	Montgomery
Sierra Military Health Services	Health care services	Expansion	Baltimore City
Tellahs Gaithersburg	Communications	Expansion	Montgomery
USinternetworking	Internet data services	Expansion	Anne Arundel

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BIOTECH/BIOINFORMATICS

If ever a budding industry were tailor-made for Maryland, it would have to be biotech. With the National Institutes of Health in Bethesda, The Johns Hopkins University in and around Baltimore and a federal presence in Washington that runs the gamut from prescription drugs to post-Sept. 11 bioterrorism defense posturing, Maryland finds itself ideally situated to bring biotech demands and resources together in a big way.

Rockville-based Celera Genomics put Maryland on the international map in September 1999, when it claimed the world's first complete mapping of human DNA. And biotech is still in its infancy, so mammoth firms such as Celera can co-exist with upstarts and even share resources and technologies if necessary.

One opstart already on the rise is Avalon Pharmaceuticals, which is preparing to move into a new, 55,000-square-foot facility in Germantown. While the planned move is not frontpage news, consider that Avalon emerged from the Maryland Technology Council's incubator after



Overall, Maryland is home to more than 300 biotech/bioscience companies, agencies and research institutions.

just 10 months and afready has secured \$80 million in funding.

Avalon develops technologies that help speed the drug discovery process, with a concentration on cancer-fighting drugs. The firm has grown to 56 employees, and it "continue[s] to hit all our milestones as we lay them out," says President Ken Carter.

Overall, Maryland boasts more than 300 biotech/bioscience compa-

nies, agencies and research institutions. Private-sector companies include GenVec, Human Genome Sciences, BioReliance, Gene Logic, TherImmune and MedImmune. The Brookings Institution recently ranked the Baltimore-Washington corridor among the nation's nine leading biotechnology centers because of the area's strong research facilities and ability to commercialize key research findings.

While it requires enormous financial input, biotechnology seems to be a sector that feeds on its own energy. A Maryland Technology Development Corp. (TEDCO) report in conjunction with Johns Hopkins noted that most of the industry's entrepreneurs come from the research arena, specifically NIH.

Successes such as Celera's induce more interest into biotech education and research. Up-and-coming researchers work on new technologies and potential products that, in turn, lead to new companies and even whole new industries. Evidence of this cycle can be seen at the University of Maryland College Park, where a bioinformatics practice track recently was added to the Master of Science in Biotechnology Studies Program.

ndustry	Average Weekly Wage	
Total Employment	9735	
Government Sector	\$837	
Federal Government	81.153	
State Government	8743	
Local Government	8497	
Private Employment	871:2	
Contract Construction	\$776	
Education and Health Services	\$670	
Financial Activities	8080	
Information	81,073	
Leisure and Hospitality	\$320	
Manufacturing	\$906	
Professional and Business Services	\$802	
Real Estate	8724	
Retail Trade	8363	
Transportation, Communication and Utilities	9618	

and Information

AEROSPACE AND DEFENSE

highly skilled IT work force is garnering recognition for Maryland's aerospace and defense industries as well. About 75 private-sector businesses are directly or indirectly involved in Maryland's aerospace community. More than half of these are core aerospace companies, employing just more than 13,000 workers in 1909, according to the most recent figures from the Department of Labor, Licensing and Regulation (DLLR).

While NASA and the Naval Air Warfare Command Center are obvious signs of the industry's presence, Maryland has a wide variety of public and private-sector concerns involved in its aerospace and defense efforts.

The University of Maryland boasts a Center for Hypersonic Education and Research and a Neutral Buoyancy Research Facility; the University of Maryland Eastern Shore offers an aeronautical engineering curriculum; and Johns Hopkins boasts a Chemical Propulsion Information Agency in addition to its renowned Applied Physics Lab.

National defense priorities naturally have taken hold in Maryland's private sector, with giants such as Lockheed Martin, Northrop Grumman, Raytheon, Orbital Sciences and Litton leading the way.

While specific employment is difficult to pinpoint because of classified work, DLLR reports that in 1999, about 9,800 defense and aerospace jobs in the state focused on search and navigation equipment; 2,591 were dedicated to guided missiles and space vehicles; and 684 to aircraft and parts. Federal contracts in aerospace and defense total almost \$10 billion annually in Maryland.

nstallation	County	Web site	
Aberdeen Proving Ground	Harford	www.apg.army.mil	
Andrews Air Force Base	Prince George's	www.andrews.af.mil	
Army Research Laboratory, Adelphi Laboratory Center	Prince George's	www.arl.army.mil	
Coast Guard Yard	Baltimore City	www.uscg.mil/systems/gse/yard	
Fort Detrick	Frederick	www.armymedicine.army.mil/detrick	
Fort George G. Meade	Anne Arundel	www.ftmeade.army.mil	
Indian Head Naval Warfare Center	Charles	www.ih.navy.mil	
National Naval Medical Center	Montgomery	www.nnmc.med.navy.mil	
Naval Surface Warfare Center at Carderock	Montgomery	www.dt.navy.mil	
Office of Naval Intelligence	Prince George's	www.nmic.navy.mil	
Patuxent River Naval Air Station	St. Mary's	nas.nawcad.navy.mil	
U.S. Naval Academy	Anne Arundel	www.nadn.navy.mil	
Walter Reed Medical Center	Montgomery	www.wramc.amedd.army.mil	

SMALL BUSINESS

ike many business sectors, the classification "small business" can be sliced an infinite number of ways when it comes to statistics. Because of self-employment and the frequency with which small businesses come and go, it is difficult to maintain an accurate picture of small business in any state or economy.

The most recent data on business firm size, from 1999, shows that 97.6 percent of Maryland's businesses could be considered "small" (less than 500 employees), according to the U.S. Small Business Administration's definition.

The number of small businesses in Maryland inched up 1.1 percent in 2001 to 132,049, according to the U.S. Small Business Administration Office of Advocacy. Additionally, nearly 154,000 Marylanders were selfemployed in 2001 (self-employment is not considered small business), a 3 percent drop from the previous year.

Business bankruptcies for the same period jumped 12 percent to 758. In 2001, the number of new small businesses (20,072) was just about equal to the number of business terminations (20,667), according to the U.S. Department of Labor.

If nothing else, Maryland's smallbusiness picture provides a glimpse at just how critical both big and small business can be to an economy.

Even though small firms represent nearly 98 percent of the total firms in the state, they collectively account for little more than half — 52.3 percent of the state's nonfarm, private-sector employees, State-by-state comparisons in 2000 showed that Maryland ranked 18th in terms of the number of smallbusiness firms, seventh in forming small businesses and 36th in the number of self-employed individuals.

Nationwide, the SBA's smallbusiness indicators were predominantly positive from 1999 to 2000, with self-employment the only negative tick, off 1.8 percent. The United States had 5.8 million small-business employer firms in 2000, with 9.9 million individuals claiming to be self-employed.

The industry with the most smallbusiness employees in Maryland in 2001 was construction. Two years earlier, a U.S. Department of Commerce survey found that most small-business firms in Maryland engaged in professional, scientific and technical services (15 percent of total small businesses), construction (14.6 percent), retail (12.3), and health care and social assistance (10.4 percent).

FINANCIAL SERVICES

hile almost no part of the nation's economy was unaffected by the tragedies of last Sept. 11, perhaps no sector was harder hit than insurance was. Losses due to the one-day terrorist acts have been estimated at \$50 billion — the largest single-event loss in the nation's history.

In Maryland, the insurance industry employs about 20,000 workers.

The U.S. Census Bureau's comprehensive 1997 Economic Census was released in 2000, the most recent year available. According to the Census, Maryland had just more than 7,000 financial- and insurance-related businesses in 1997, generating more than \$4.4 billion in annual payroll. Nearly half of these firms were in banking, lending and securities.

Not surprisingly, the sluggish national economy has taken a toll on local investment firm employment. Industry powerhouse T. Rowe Price has a strong presence in Maryland, but even it was forced to cut more than 200 jobs last year.

In banking, a homegrown is leading the way. It began as Mechanics Bank of Baltimore in the early 19th century, one of a mere two dozen or so banks in the young nation. Today, Allfirst is Maryland's largest bank, with 250 branches throughout Maryland, Washington, Northern Virginia, Pennsylvania and Delaware.

Maryland's Board of Revenue Estimates reports that Allfirst has "decentralized control of many of its business lines, creating nine divisions, and has created a corporate finance unit providing merger and acquisition and other corporate finance services to middle-market businesses."

Allfirst reported net income to common stockholders of \$61.6 million for the first six months of 2002, compared with a loss of \$4.3 million for the same period in 2001.

Maryland is home to 70 statechartered banks and 11 statechartered credit unions.

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INFOTECH/TELECOM

aryland has a huge federal government presence and a work force that the Bureau of Labor Statistics ranks first in the nation in terms of professional and technical workers. The result has been a high-tech employment explosion.

The Miliken Institute's New Economy Index, released at the end of 2001, ranked Maryland fifth in the nation in terms of overall preparedness for success in the modern technology-driven economy. The American Electronics Association's Cyberstates 2002 report called Maryland "the 11th-fastest-growing cyberstate" and noted that the addition of 2,400 high-tech jobs in 2001 brought the total for this sector to 119,100.

Maryland's 6,500 high-tech firms employ 60 out of every 1,000 privatesector workers in the state, with hightech workers earning an average annual wage of \$65,800 — 86 percent more than the average private-sector wage in 2000.

Maryland ranks eighth in the nation in software services employment, with 41,800 jobs, and 10th in communications equipment manufacturing, with 8,100 jobs. While venture capital investments plummeted 56 percent from 2000 to 2001, the \$1 billion VC commitment in 2001 was still good enough to place Maryland eighth in the country in this category.

Ross DeVol, director of regional and demographic studies for the Miliken Institute and creator of the New Economy Index, said the states that rank highest are those that are able to turn their research capabilities into commercial products and help their economies grow.

Some people have given up on the New Economy because of so many dotcom failures, and the implosion of tech stock valuations," said DeVol. "That's a big mistake. The Internet and technology will continue to improve productivity, and those regions that can take advantage of high-tech will be rewarded. Our index shows which states are in the best position to do that."

While the telephone/telecommunications industry continues to shake out, much attention now is being focused on cable television — and not just as an alternative to rabbit cars or satellite TV. Many cable companies offer internet access and voice telephone service, and the industry is beginning to put competitive pressure on traditional telecommunications companies.

Maryland's local telephone service provider, Verizon, and cable giant Comcast are both among Maryland's largest private employers.

TOURISM

ot surprisingly, post-Sept. 11 tourism dropped just about everywhere. The Southern Governors Association noted a tourism decline in each category in every member state in the last quarter of 2001.

In Maryland, hotel/motel sales tax revenue dropped 7.8 percent over the same period in 2000; auto/truck rental sales tax revenue was off 5.2 percent, and the number of state welcome center visitors was down 3.3 percent.

Actual fiscal year 2002 tourism figures — which will measure the true impact of last Sept. 11 on state travel and tourism — have not been released yet.

For fiscal year 2001, however, the state's 14 welcome centers reported 2.25 million visitors, a 7.6 percent increase over the previous year. Statewide, the hotel/motel tax brought in \$65.7 million during that time, a 9.8 percent increase over the previous year. The amusement/admission tax showed a more modest 2.9 percent

increase, up to \$46.6 million last fiscal year.

One-fourth of the amusement tax was generated by Prince George's County, while Baltimore City, Baltimore County and Anne Arundel County teamed up to generate half of the state's hotel/motel tax revenue in fiscal year 2001. Baltimore City took about \$7.5 million of the state's \$19.2 million budget during fiscal year 2001.

Looking at the state by region, the Office of Tourism Development found that the most-visited cities were Baltimore in the central region, Ocean City on the Eastern Shore, Solomons Island in the south, Hagerstown in the west and Frederick in Suburban Maryland.

The relationship between travel, tourism and construction appears healthy no matter the economy. Hyatt just opened its incredible Hyatt Regency Chesapeake Bay Golf Resort, Spa and Marina in Cambridge, on Maryland's Eastern Shore. Located on 340 acres, the new facility is "one of the most multifaceted resorts that



Althought Sept. 11 caused tourism to drop almost everyhere, attractions such as Renditions Golf Course in Davidsonville make the Greater Baltimore area a popular tourist destination.

Hyatt operates today ... and it's going to make an incredible meeting destination," according to the hotel's Sales and Marketing Director Rob Stirling.

Hotel activity is brisk around BWI Airport as well. A 131-room Hampton Inn & Suites next to Arundel Mills mall is under construction, and a 129room Wingate Inn is planned just north of BWI Airport.

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MANUFACTURING AND DISTRIBUTION

From 1990 to 2000, manufacturing jobs as a percentage of total employment in Maryland fell 2.5 percent. Only four counties showed slight growth in manufacturing, with five counties each showing a decrease of 5 percent or more.

Dorchester County on the Eastern Shore moved from a work force where an incredible 41.3 percent of jobs were in manufacturing in 1990 to a manufacturing work force of 32.3 percent in 2000, according to the state's Office of Labor Market Analysis and Information.

The Board of Revenue Estimates notes that while slight increases in manufacturing employment are expected in 2004 and 2005, Maryland "will continue to lag behind the nation in this sector."

Bright spots in the state's manufacturing outlook include General Motors, which decided to keep its Baltimore truck plant operating at least through 2005. The nearly 70-yearold Broening Road plant employs 1,500 workers and produces the Astro and Safari minivans.

GM also has delighted autoworkers with its White Marsh plant, which manufactures Allison Transmissions for use in commercial vehicles. The plant represents a \$400 million investment and employs more than 800 workers.

In Garrett County, ClosetMaid has opened a new, 200,000-square-foot manufacturing plant. The company expects the facility to grow to more than a half-million square feet by 2005, bringing a total of 800 jobs to an area that welcomes — and usually needs — new employment opportunities.

The Board of Revenue Estimates noted that manufacturing employment is expected to decline from 179,800 in 2000 to 168,300 in 2003, "shrinking at rates of 2.6 percent and I percent in 2002 and 2003, respectively. While Maryland will have slightly fewer people employed in manufacturing in 2004 than it had in 1999, manufacturing employment in the United States will have grown 2.8 percent in the same period."

Company	City	Product Description	
Airpax	Cambridge Frederick	Magnetic circuit breakers, protectors and packages Thermostats and thermosensors	
Alcoa Eastalco Works	Frederick	Aluminum billets, ingots and slabs	
Baltimore Aircoil	Jessup	Cooling towers, vapor condensers, heat exchangers, air conditioning equipment and industrial water coolers	
Bethiehem Steel	Sparrows Point	Plate, cold- and hot-rolled sheet steel, tin mill products and coated sheet products	
Black & Decker	Towson, Easton, Hampstead	Portable electric, power and lawn and garden tools; faucets and lock	
COMSAT	Bethesda	Satellite communication equipment	
Duron Paints and Wallcoverings	Beltsville	Varnish, latex paints and stains	
FILA USA	Sparks	Athletic footwear	
Filtronic Comtek	Salisbury	Electronic assemblies for the cellular industry	
Garden State Tanning	Williamsport	Leather tanning	
General Motors	Baltimore	Automobile assembly	
Grace Chemical	Curtis Bay	Chemicals: silica gels; research and development	
Hughes Network Systems	Germantown	Communications equipment and systems	
KandL Microwave	Salisbury	Microwave and RF components, filters, switches and digital tuners	
Litton Advanced Systems	College Park	Detection equipment, electronic warfare, digital graphic communications and telecommunications systems, air traffic con electronic, communication and voice switching systems	
Lockheed Martin	Bethesda	Space and defense systems and products; aircraft components, computerized information and communication systems	
Mack Trucks	Hagerstown	Class-8 diesel engines and transmissions	
McCarmick & Co.	Hunt Valley; Sparks	Spices and packaging	
Medlmmune	Gaithersburg	Pharmaceutical research and development	
Middle River Aircraft Systems	Middle River	Aerospace equipment and launching systems	
Northrop Grumman	Baltimore Sykesville Annapolis	Surveillance radar and fire control systems Electronic counter-measure equipment Electro-optical and spaceborne sensors, sonar and air traffic control systems	
PerkinElmer Fluid Sciences	Beltsville	Aerospace components: metallic seals, aircraft ducting components and seals used in computers	
Poly-Seal	Baltimore	Plastic closures	
Procter & Gamble Cosmetic	Hunt Valley	Cosmetics	
Raytheon Systems	Towson	Military identification systems, communications equipment and air traffic control systems	
Sweetheart Cup	Owings Mills	Plastic straws, foam and paper cups and plates	
Westvaco	Luke	Fine printing paper	

HEALTH CARE

mployment growth in Maryland's health care sector has been stagnant for some time, but not for lack of demand. The Maryland Hospital Association cited 3,700 hospital positions that went unfilled in 2000. Nearly half of those were for registered nurses. What makes the health care labor shortage particu-

larly noteworthy is that it is almost impossible to refer to it in the past tense — year after year, the labor market just can't keep up.

A 2001 Maryland Hospital Association survey reported an increase in vacancy rates for registered nurses (RNs) for the third consecutive year. The survey claimed a vacancy rate of 15.6 percent in 2001, explaining that more than 2,000 RN positions went unfilled in Maryland hospitals.

The association's annual Hospital Personnel Survey in 2001 also found that 18 of the 42 job categories surveyed had vacancy rates exceeding 10 percent, particularly radiography and diagnostic imaging positions.

"Aggressive action is needed now to help stem the shortage. Maryland must find innovative approaches to finance the cost of recruiting and educating new nurses and other critical hospital personnel," said MHA President Calvin Pierson.

Maryland's Board of Revenue Estimates noted that more than a third of the state's hospitals lost money in 2000, and Medicaid debt is forecast to continue climbing. The National Council of State Legislatures, in its Fiscal Year 2002 State Fiscal Outlook, noted simply, "Expenditures are exceeding budgeted amounts by about \$200 million. Most of the overage is in Medicaid."

The state's Board of Revenue Estimates did point to a bright spot in health care, noting, "outside of direct-service provision, many health services businesses are prospering in the state."

Examples include Columbiabased Magellan Behavioral Health and Baltimore-based ViPS. Magellan now serves more than 3 million federal employees and their families and is the largest provider of employee assistance program services to federal employees in the country.

ViPS is an IT firm providing esolutions for the health care industry. ViPS recently teamed with Computer Sciences Corp. to provide IT solutions to the National Institutes of Health and other federal agencies as part of a \$19.5 billion, multiple-award contract.

