



DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES

2015 - 2017 Biennial Report

October 2017

INTRODUCTION

The 244 regulated professions and industries within the Department of Safety and Professional Services (DSPS) have a significant impact on the economy and the health, safety, and welfare of Wisconsin's residents. This report assesses the contribution of DSPS to Wisconsin's economy specifically focusing on the health care, construction, and real estate industries. Without the Department's regulatory oversight, proper functioning of these industries could not be maintained.

Highlights from this report include:

- Since its creation, DSPS has made great strides to increase responsiveness, drive productivity, and reduce operational costs to meet the increasing demands of its customers while making efficient use of valuable taxpayer dollars.
- Earning \$19 billion annually on average, health and business professionals credentialed by DSPS are a vital component to economic growth in Wisconsin.
- In 2014, health care professionals credentialed by DSPS generated \$50 billion in economic activity, roughly 17% of Wisconsin's gross state product.
- With DSPS regulatory oversight, the construction sector safely and competently contributed approximately \$10.5 billion to Wisconsin real gross domestic product (GDP) in 2016.
- With DSPS regulatory oversight, the construction sector provided over 170,000 well-paying jobs to Wisconsin workers in 2016.
- Construction projects regulated by DSPS can be effective economic stimuli that create jobs and increase spending in a wide range of other sectors of the economy.
- With DSPS regulatory oversight, the real estate industry accounted for \$33.5 billion or 12.3% of Wisconsin GDP in 2016.
- When a real estate professional credentialed by DSPS sells a home in Wisconsin, it generates over \$13,000 in income from real estate related industries; over \$5,000 in additional expenditures on consumer items such as furniture, appliances, and paint services; and over \$3,000 in expenditures on remodeling within two years of the home purchase.

MISSION

The mission of the Department of Safety and Professional Services is to promote economic growth and stability while protecting the citizens of Wisconsin as designated by statute.

PURPOSE

- competent practice of licensed professionals
- safety of the construction and use of public and private buildings
- compliance with professional and industry standards

The contribution this Department makes to Wisconsin's economy far exceeds these numbers alone, as every day over 445,000 credential holders go to work in a DSPS regulated industry.¹

This report contains four parts. The first section provides a general overview of the Department's roles and responsibilities and describes recent process improvements for greater Departmental productivity. The second section assesses the economic contribution of DSPS through the regulation of the health care industry. The third section examines the impact of DSPS on the Wisconsin economy through the regulation of the construction industry. The fourth section evaluates the economic impact of DSPS through the regulation of the real estate industry.

¹ For a complete list of DSPS regulated industries please visit: <http://dsps.wi.gov/Licenses-Permits/Credentialing>.

GENERAL RESPONSIBILITIES AND RECENT ACCOMPLISHMENTS

DSPS protects the citizens of Wisconsin by ensuring safe and competent practice of licensed professionals and safe and sanitary conditions in public and private buildings. Divisions within DSPS perform a variety of tasks to successfully accomplish this mission.

DIVISION RESPONSIBILITIES

The Division of Policy Development (DPD) provides administrative support and policy guidance to a wide variety of state professional regulatory boards and councils, as well as Department advisory committees* by facilitating meetings and serving as a Department liaison. DPD also oversees credentialing examination and education requirements and the update of administrative rules for both board-regulated and Department-regulated professions and industry and manages the Wisconsin enhanced Prescription Drug Monitoring Program Database. *From July 2015 – June 2017, DPD provided administrative services to over 50 boards and councils and facilitated approximately 449 meetings related to board activities.*

The Division of Professional Credential Processing (DPCP) processes all credential applications and oversees credential eligibility, renewal, and continuing education requirements for regulated professions. *Between July 2015 and June 2017, DPCP processed roughly 72,000 initial applications for licensure and over 385,000 applications for licensure renewal. As of June 2017, there were over 445,000 active credential holders.*

The Division of Legal Services and Compliance (DLSC) provides legal services to professional boards and the department regarding the investigation and discipline of licensed credential holders for violations of professional regulations. The Division is also responsible for the complaint intake process, monitoring compliance with disciplinary orders, managing a confidential program for impaired professionals, performing audits of trust accounts, and conducting business inspections for pharmacies, drug distributors and manufacturers, funeral establishments, tattoo and body art establishments and barber and cosmetology schools and establishments.

The Division of Industry Services (DIS) is comprised of two bureaus and an Administrative Services Section.

The Bureau of Field Services performs inspections of commercial buildings, amusement rides, boilers, elevators, pressurized gas systems, magazine and fireworks manufacturing facilities, and private onsite wastewater treatment systems. The bureau also performs plan review of elevators, boilers, and private onsite wastewater treatment systems, administers the MSHA Grant Program, which distributes federal

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funds to provide mine safety training courses, and is responsible for auditing third party and municipal inspection agencies.

The Bureau of Technical Services performs commercial building, plumbing and fire suppression plan review. The bureau is also responsible for administering the Uniform Dwelling Code program, the federal HUD Manufactured Housing program, the electrical program, and provides consultations and training to local building officials and commercial and residential contractors. The Fire Prevention Program administers the 2% Fire Dues program and provides consultation, support, and training to over 800 fire departments throughout the state.

In the past biennium, DIS conducted approximately 32,000 plan reviews and more than 237,000 inspections.

Since its creation, DSPS has made great strides to increase responsiveness, drive productivity, and reduce operational costs in order to meet the increasing demands of its customers while making efficient use of valuable taxpayer dollars.

The Administrative Services Section provides administrative support to internal and external stakeholders. It also administered the Rental Weatherization program for rental properties.

The Division of Management Services provides administrative services to the Office of the Secretary and all other Divisions within the Department. These services include human resources, payroll, planning, budget, employment relations, information technology, safety, fleet management, facilities management, and accounting.

RECENT ACCOMPLISHMENTS

In the past biennium, DSPS has made great strides to increase responsiveness, drive productivity, and reduce operational costs to meet the increasing demands of its customers while making efficient use of valuable taxpayer dollars.

Reducing Prescription Drug Abuse

Wisconsin Enhanced Prescription Drug Monitoring Program (WI ePDMP)

Since June 2013, the Wisconsin Prescription Drug Monitoring Program (WI PDMP) has been a powerful tool to combat the prescription drug misuse and abuse problem in Wisconsin. As a highly secure database, the WI PDMP stores data about controlled substances dispensed to individuals in

Wisconsin. Pharmacies and other dispensers of prescription drugs collect and submit data to the WI PDMP database. From there, authorized users, such as physicians, physician assistants, dentists, advanced practice nurse prescribers, pharmacists, and other healthcare professionals, may obtain data stored in the WI PDMP database to verify prescription information before prescribing or dispensing controlled substances to their patients. The WI PDMP also discloses data as authorized by law to governmental and law enforcement agencies. In June 2017, the database stored over 48 million prescription records submitted by over 2,000 pharmacies and dispensing practitioners.

In January 2017, DSPS launched the Wisconsin Enhanced Prescription Drug Monitoring Program (WI ePDMP), which allows for value-added healthcare workflow integration, improved data quality capabilities, and maximized public health and public safety use. The WI ePDMP contains analytics and visualizations to draw attention to the most relevant and potentially concerning data in each patient report, such as a high level of opioid consumption or a dangerous combination of drugs.

The enhancements and visualizations are part of an effort to make using the WI ePDMP as user friendly as possible, which became of particular importance when the requirement for prescribers to review patient PDMP records before issuing a controlled substance prescription order went into effect on April 1, 2017. Prior the requirement going into effect, there were approximately 18,000 registered healthcare users performing approximately 5,000 patient queries per day. In June 2017, there were nearly 40,000 registered healthcare users, including delegates, and the system recorded an average of 30,000 patient queries per day.

Many physicians and their delegates have also begun accessing WI ePDMP patient reports directly from within their electronic medical record. Five health systems were live with the direct Electronic Health Record (EHR) integration in June 2017, and several other health systems were testing or configuring the connection. Feedback about the EHR integration with the WI ePDMP has been overwhelmingly positive.

In March 2016, 2015 Wisconsin Act 268 began requiring the submission of reports to the WI PDMP by law enforcement agencies about suspected controlled substance overdose events, violations of the Controlled Substances Act involving prescription drugs, and reports of stolen controlled substance prescriptions. The WI PDMP is then required to release information about the incidents to relevant WI PDMP users, thereby providing prescribers with a more complete picture of their patients' involvement with controlled substances.

Since its inception, the WI PDMP has proven to be a very effective tool in promoting safe controlled substance prescribing practices. In March 2016, 2015 Wisconsin Act 267 was enacted providing that PDMP reports be released 30 days after the end of each quarter. The first report released in October 2016 showed that between July 1 and September 30, 2016, there was a 9.63 percent reduction in

Between April 1 and June 30, 2017, there was a 9.8 percent reduction in prescriptions and an 11.9 percent reduction in drug doses as compared to the same period in 2016; a 17.5 million drug dose reduction.

prescriptions and a 9.89 percent reduction in drug doses as compared to the same period in 2015; an 8.2 million drug dose reduction. Between April 1 and June 30, 2017, there was a 9.8 percent reduction in prescriptions and an 11.9 percent reduction in drug doses as compared to the same period in 2016; a 17.5 million drug dose reduction.

Prescribing Guidelines

DSPS supported the passage of 2015 Wisconsin Act 269, which authorized the Medical Examining Board, Podiatry Affiliated Credentialing Board, Board of Nursing, Dentistry Examining Board, and Optometry Examining Board to issue guidelines regarding best practices in prescribing controlled substances. All 5 of these boards have issued guidelines encouraging their credential holders to implement best practices for responsible prescribing.

Continuing Education Requirements

The Medical Examining Board, Dentistry Examining Board, and Board of Nursing revised their administrative rules to require continuing education related to prescribing controlled substances. For biennium ending in 2017 and 2019, physicians authorized to prescribe controlled substances are required to complete 2 hours of continuing education relating to the prescribing guidelines issued by the Medical Examining Board. For biennium ending in 2019 and 2021, dentists are required to complete 2 hours of continuing education on responsible prescribing of controlled substances for the treatment of acute dental pain. Beginning with the biennium ending in 2018, advanced practice nurse prescribers are required to complete 2 hours of continuing education on responsible prescribing of controlled substances.

Since the implementation of Nursing OLAS, the processing time between receipt of an application and NCLEX authorization has decreased by 90 percent on average.

Issuing Licenses More Quickly

DSPS issues credentials to more than 244 professions. Prompt license issuance is vitally important to help individuals enter the workforce quickly. Swift licensure is also central to creating a broad base of talented individuals to fill the many employment openings in the state of Wisconsin.

DPCP developed the Online License Application System (OLAS) that allows individuals to apply and pay fees for professional credentials online. This system significantly decreases the turnaround time for applicants to receive their professional credential and begin working in Wisconsin.

Since the implementation of OLAS, many professions have seen a significant decrease in the number of days between receipt of an application and granting of licensure.

A sample of 10 percent of nursing applicants in 2013 showed that DSPS granted OLAS applicants permission to take the required National Council Licensure Examination (NCLEX) one to two business days after the receipt of the OLAS application from the school and *granted OLAS applicants a license*

one to two business days after receipt of NCLEX exam results. Using the paper method it took one to five business days for the application to reach credentialing staff from the mail room and another 17 business days (on average, while waiting for additional paperwork) before DSPS granted permission to take the NCLEX exam. Since the implementation of Nursing OLAS, the processing time between receipt of an application and NCLEX authorization has decreased by 90 percent on average.

As of June 2017, DPCP has implemented OLAS for physicians; licensed practice nurses; registered nurses; real estate brokers, business and salespersons; timeshare salespersons; private detectives and private detective agencies; private security personnel; substance abuse counselors; and all boxing and mixed martial arts professionals. DPCP continues to expand OLAS to other professions.

Number of days saved, on average, by applicants using the OLAS credentialing system	
Physicians	117 days
Real Estate Broker	110 days
Real Estate Salesperson	75 days
Licensed Practical Nurse	57 days
Registered Nurse	44 days

DPCP has also encouraged applicants to renew their credentials online via the website. *As a result, 96% of health and business credential holders renewed their licenses electronically in the past biennium.* The Division staffs a live call center that allows customers and the general public to contact the Department via telephone and speak with a live representative to address their immediate concerns.

In 2015, DPCP introduced the Online License Verification System (OLVS). OLVS allows Wisconsin credential holders to electronically request license verifications be sent to other state credentialing authorities when individuals are seeking licensure in other states. *OLVS saves, on average, 5-6 days in the verification process.*

Creating Efficiencies

DSPS Division of Industry Services

In 2015, DIS began distributing industry information, statutory and regulatory updates, and information about upcoming Board and Council meetings through an automatic email service. Tradespeople can receive timely updates about topics that will affect their professional practice directly from DIS, ensuring the information is both factual and trustworthy.

DIS Programs use single points of contact to industry with the use of email technical boxes, which are used by the general public to ask technical questions of program staff. These inboxes are managed by DIS staff on a rotating basis and ensures a consistent, single point of contact for the trades industry. *These email boxes expedite DSPTS response time and ensure that all inquiries and subsequent responses are logged.*

Single points of contact ensure consistent and accurate responses to tradespeople across Wisconsin.

Inspection Support under the Administrative Services Program completed a lean project for boiler registrations, enabling customers to complete an online form and submit their form to an online mailbox. This streamlined procedure shortens processing time and eliminates paper and file space.

The Uniform Dwelling Code program revised the soil erosion audit process that municipalities are required to complete every three years. The audit process was moved to an electronic survey that is more efficient for municipalities to complete and easier for Department staff to review. This allows Department staff to provide technical support in the office to customers and ensures in-person audits are conducted with those municipalities who require it.

DSPTS Division of Legal Services and Compliance

In 2017, DLSC began using a new software system for monitoring compliance with disciplinary orders. The new system assists division staff in managing their work lists, which improves their efficiency. The Monitoring Case Management System (MCMS) allows credential holders subject to a disciplinary order to review the status of their order requirements, reducing the need to call the department for updates. MCMS also allows third parties, like employers and treaters, to submit reports online. Additionally, through MCMS, credential holders that owe costs or forfeitures can make online payments. MCMS improves the interaction with the department for external customers and assists employees internally, as well.

Clearing the Red Tape

Under the guidance of DPD, a number of Boards and Councils updated administrative rules to provide common-sense and up-to-date guidance in licensure and regulation of professions. For example:

- The Dentistry Examining Board created rules implementing 2013 Wisconsin Act 244, which provides for the regulation of mobile dentistry programs. The rules establish registration requirements, procedures for patients to access their records, standards of conduct, and activities that constitute the operation of a mobile dentistry program.
- The Psychology Examining Board revised its administrative rules relating to continuing education to provide clear guidance to credential holders and continuing education providers. The rules establish the minimum number of hours of continuing education, the topic areas that

The Division of Policy Development and the professional boards managed by the Division identified and changed administrative rules that hindered job creation and small business growth including implementing less burdensome paths to licensure.

continuing education must cover, and the criteria for approval of continuing education programs and courses and sponsors of continuing education.

- As a result of the passage of 2011 Wisconsin Act 190, which separated the regulation of barbering and cosmetology, the Cosmetology Examining Board conducted a comprehensive review and update of the rules governing cosmetology practice in Wisconsin.
- The Medical Examining Board created rules regulating the use of telemedicine by physicians. The rules define telemedicine; provide that a physician-patient relationship may be established through telemedicine; and create standards for the practice of medicine using telemedicine, including requirements for the use of equipment and technology and Internet diagnosis and treatment. Under the rules, a physician is held to the same standards of practice and conduct regardless of whether health care services are provided in person or by telemedicine.

DPD has worked to *create predictability* in the enforcement of administrative rules by updating forms to better align with statutory requirements and codifying internal policy procedures; this gives members of the public *clear expectations* of what they can expect when they walk through the doors of our agency. The Division has also greatly *increased transparency* in the rule writing process by using the website to notice public comment periods on all rule projects.

DPD continues to offer twice-yearly board member trainings, to educate board members of the statutorily derived board roles and processes. These trainings result in more efficient and effective board operations.

Saving Taxpayer Dollars

In 2017, DLSC rolled out an online complaint form. Accepting complaints through an online portal makes the department more accessible to the public. For complaints received online, the division replaced a physical postcard acknowledgement with an email sent automatically. This Lean project is estimated to annually save the department \$2,500 in printing, postage, and staff time. Further enhancements to the online complaint system will eliminate data entry tasks and reduce the time from complaint to resolution, therefore enhancing protection of the public while creating additional cost savings.

In 2017, DPCP began providing renewal notices for health and business credentials electronically

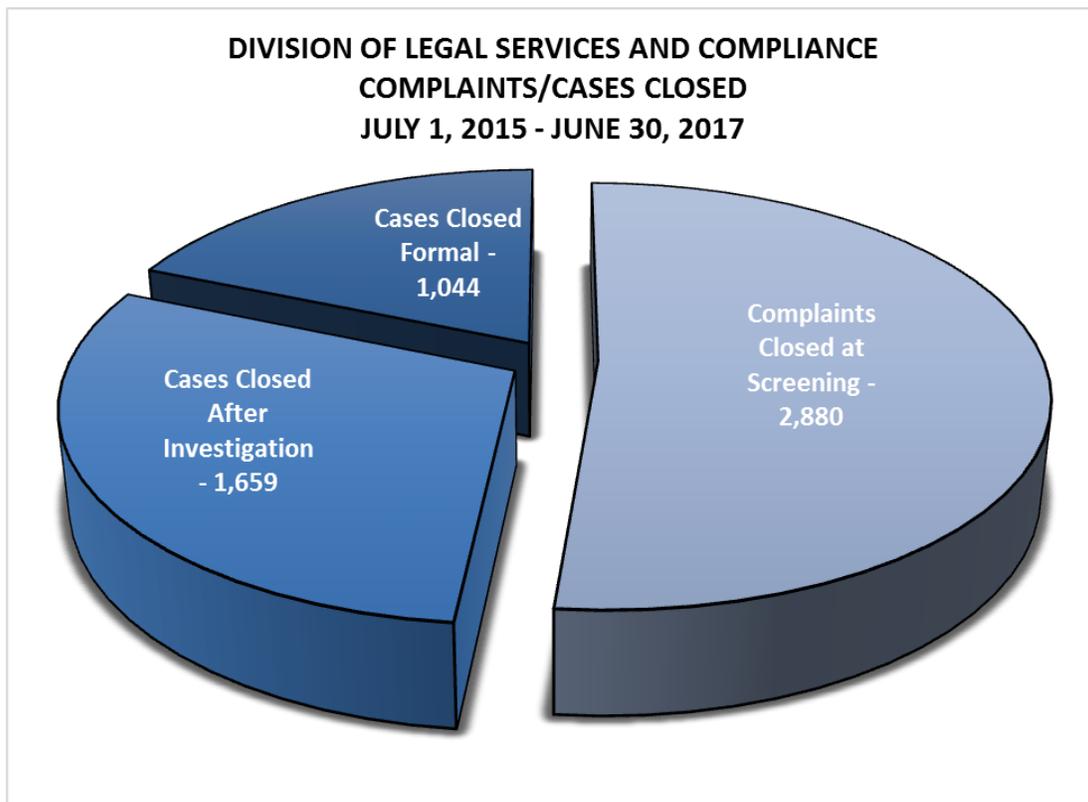
versus the paper postcards that were previously used. *Electronic renewal notices provide a cost-effective and more efficient method for notifying credential holders of their impending renewal.*

A new system that allows Compliance Statements for Supervising Professionals to be submitted to the Department electronically was rolled out in June 2016. Compliance Statements are required at the end of a commercial building construction project, and their purpose is to inform the Department that construction has been completed. Previously, these statements were required to be completed via a paper form and mailed to the Department. *The online system creates efficiency for our customers as well as Department staff and saves an annual estimated amount of \$2,420.*

The DSPS places great focus on building a strong foundation for Lean Government with staff, and provides multiple Lean trainings for staff across the state, in addition to sending staff to Lean training provided by the Department of Administration. *Since 2015, DSPS staff have completed 13 lean projects, for an estimated cost avoidance of over \$20,000.*

Protecting the Public

From July 2015 – June 2017, DLSC received 5,782 complaints from the public. In that same time frame, DLSC resolved 4,539 complaints; 1,044 of those cases were closed by assigning formal discipline or licensure limitations.



DLSC also administers the Professional Assistance Procedure (PAP). PAP is a voluntary program that encourages individuals to seek help for their substance abuse impairment in a non-disciplinary environment. PAP monitors participants' progress in treatment with an approved provider, as well as random drug and alcohol screens. There are currently 67 credential holders participating in the PAP program. *The goal of the PAP is to assist licensed professionals in recovering from substance abuse, while also ensuring the safety of the public by supervising an individual's treatment.*

As part of its role in protecting the public, DLSC monitors compliance of approximately 1,200 credential holders that have been issued a disciplinary order. Monitoring ensures compliance with disciplinary requirements assigned by the Department or a Board or Council. DLSC also completed 219 inspections of pharmacies, drug distributors and manufacturers, funeral establishments, tattoo establishments and barber and cosmetology schools and establishments within the past biennium.

Improving Customer Service

In 2017, DIS staff rolled out an updated automatic plan entry system, which in addition to allowing customers to electronically schedule their plan reviews, it provides immediate confirmation of plan review date, plan reviewer, and assigned office. This service allows customers to immediately know when their plan has been scheduled, with whom, and where.

The DIS Plumbing Program has worked to cross-train all plan reviewers and inspectors to allow for smaller districts across the state, providing less drive time for staff and more time for them to work with customers in the field and office.

HEALTH AND BUSINESS REGULATION

Occupational regulation in Wisconsin began in 1882 with the creation of the Pharmacy Examining Board. This board set the credential requirements for pharmacists, granted credentials, promulgated administrative rules applicable to pharmacists, and collected credential fees. Between 1882 and 1965, 16 additional independent examining boards or councils were created that had separate budgets and directly employed staff (Austin 2013).

Earning \$19 billion annually on average, health and business professionals credentialed by DSPS are a vital component to economic growth in Wisconsin.

Several extensive reorganizations of Wisconsin state government in the mid-1960s sought to improve operational efficiency and responsiveness to the public. A substantial reorganization of the executive branch resulted from the Kellett Commission, named after its chair, William R. Kellett. Many of the Kellett Commission's proposals impacted occupational licensure in Wisconsin, including the creation of a single Department of Regulation and Licensing (DRL) to provide centralized administrative services to the existing independent examining boards and councils. Under the consolidated administrative

structure, each board maintained the independent regulation of its own profession, and the Department took on the direct regulation of specific professions where no examining board existed. These recommendations became law in 1967 (Chapter 75, Laws of 1967; Austin 2013).

In 2011, the Department of Safety and Professional Services was created and assumed all responsibilities performed by the former DRL and certain functions performed by the former Department of Commerce (2011 Wisconsin Act 32; Austin 2013).

Currently, DSPS credentials 244 professions, 134 of which are related to health and business. In June 2017, over 385,000 health and business professionals credentialed by DSPS worked in the state of Wisconsin earning around *\$19 billion dollars annually on average*.² These professionals contribute to economic growth in Wisconsin by spending their earnings at Wisconsin businesses, providing in-state capital for business investment and job creation, and supporting state and local governments through the payment of a variety of taxes.

In 2014, health care professionals credentialed by DSPS generated \$50 billion in economic activity, roughly 17% of state gross domestic product.

HEALTH CARE INDUSTRY

The Centers for Medicare and Medicaid Services (CMS), a federal agency within the United States Department of Health and Human Services (DHHS), estimates that *roughly \$50 billion³ were spent on health care services in Wisconsin in 2014* (Centers for Medicare and Medicaid Services 2017).⁴ Professionals credentialed by DSPS account for the vast majority of health spending in Wisconsin. DSPS ensures the safe and competent practice of 62 different health professions. Appendix A provides a complete list of health-related professions and boards under the purview of DSPS.

Between July 2015 and June 2017, the Department processed approximately 35,000 initial credentials and over 209,000 renewals for health care professionals. As of June 2017, there were over 241,000 active Wisconsin credential holders in health care professions. DSPS provides administrative services to 27 health-related boards and councils.

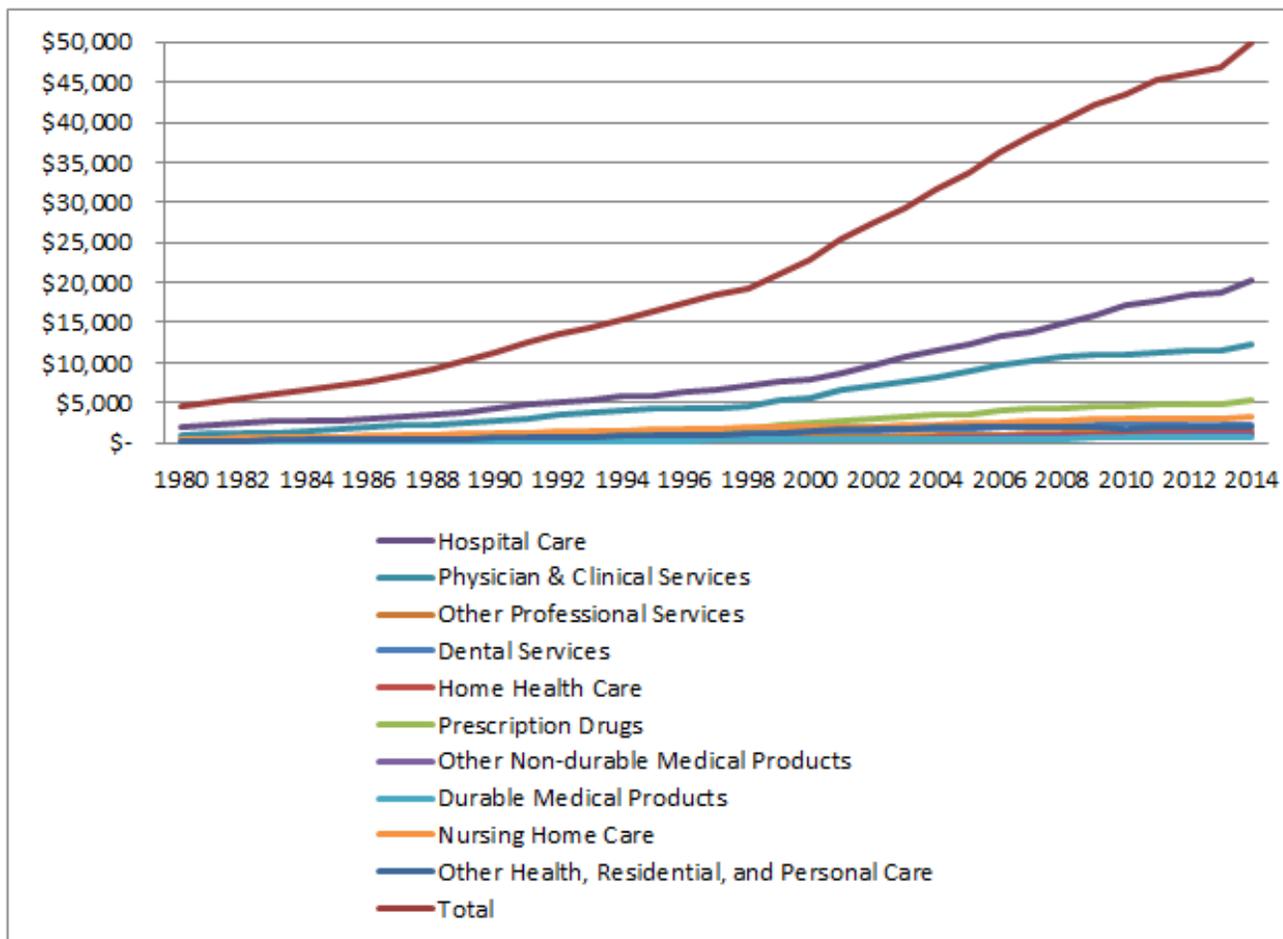
² Annual average earnings for professions with many subcategories such as Professional Engineering were calculated by taking a weighted average based on May 2013 employment estimates of the subcategories. Annual average earnings for professionals “in-training” were calculated by dividing the annual average earning for a fully credentialed professional by two. The total annual earnings for all credential holders in each profession were estimated by multiplying the number of active licenses in each profession by the most recent estimates of average annual earnings for professions in Wisconsin as provided in the Occupational and Employment Statistics (Wisconsin Department of Workforce Development 2013).

³ The data used in this report are state-of-provider estimates which reflect spending for services delivered in each state to residents and nonresidents. These estimates are useful in measuring the role of health spending in a state's economy.

⁴ Health care spending data produced by the National Health Expenditure Accounts (NHEA) of the Department of Health and Human Services Center for Medicare and Medicaid Services are larger than those produced by Bureau of Labor Statistics Consumer Expenditure Survey (CE); however, both are valid and widely utilized estimates of health care expenditures. Differences in definitions, sources, and methods are responsible for differences in the estimates. See <https://www.bls.gov/cex/nhe-compare-201215.pdf> for more a more detailed explanation.

Figure 4 shows the composition of total health care expenditures by service category in Wisconsin. The economic activity of each service category is either directly or indirectly generated by health care professionals credentialed by DSPS. Appendix C details the service categories and DSPS involvement in each category.

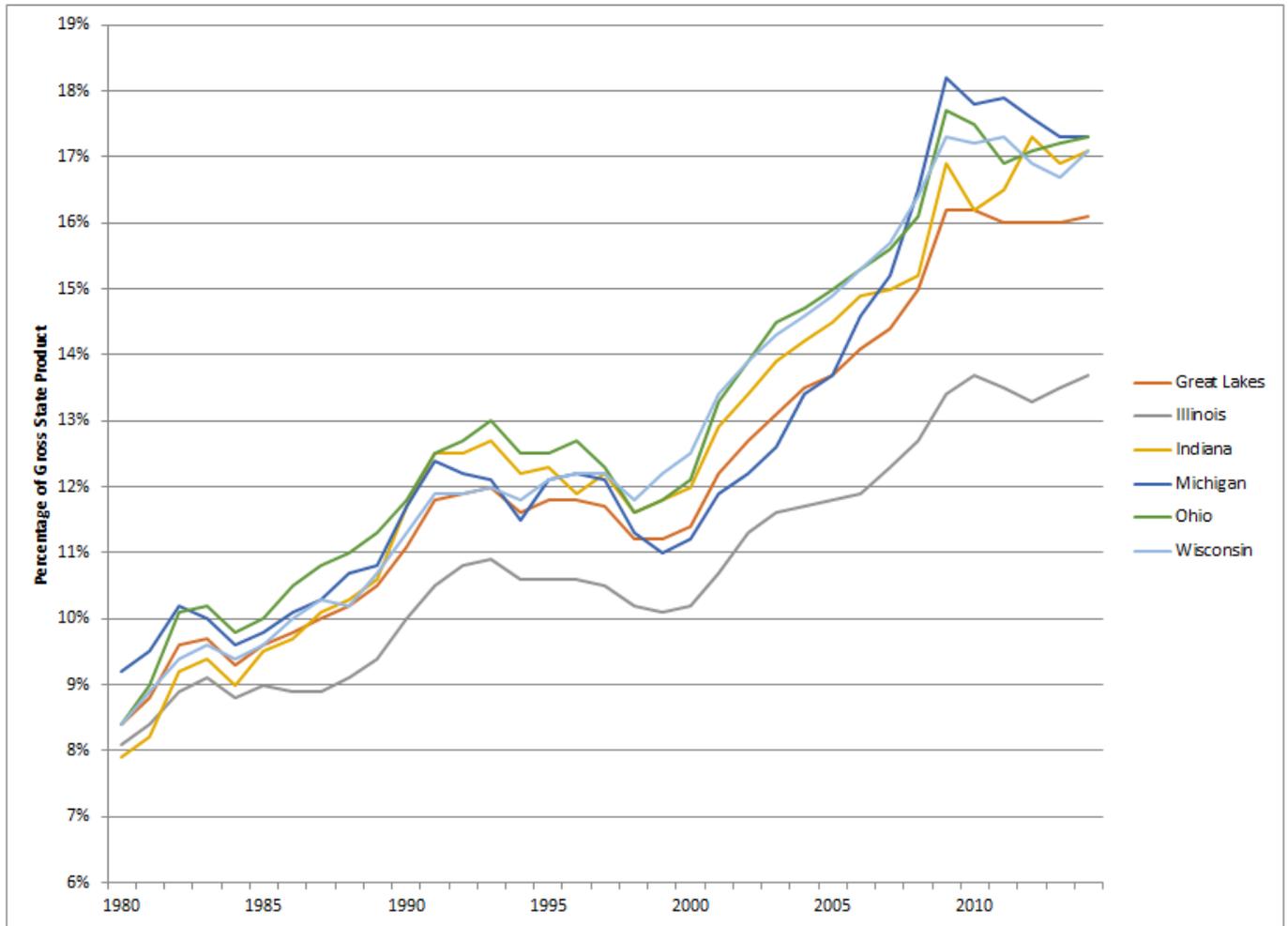
Figure 4: Health Care Spending in Wisconsin by Service (in millions), 1980-2014



Source: Centers for Medicare & Medicaid Services (2017), National Health Expenditure Accounts

Over the past 30-plus years, the health care industry has comprised a growing share of the state’s gross domestic product (GDP). As shown in Figure 5, between 1980 and 1991, expenditures generated by health care professionals grew from 8.4% to 11.9% of the GDP and remained at this level for roughly eight years. Health care expenditures in Wisconsin grew from 12.2% of state GDP in 1999 to 17.1% in 2014.

Figure 5: Health Care Expenditures as a Percentage of State Gross Domestic Product in Great Lakes States, 1980-2014



Source: Centers for Medicare & Medicaid Services (2017), National Health Expenditure Accounts

Also shown in Figure 5, Wisconsin’s neighboring states have experienced similar growth in health care industry expenditures (Centers for Medicare and Medicaid Services 2017). *If these trends continue, DSPS will play an even more vital role in the state’s economy as these health care professionals continue generating increased economic activity.*

CONSTRUCTION SECTOR

Between July 2015 and June of 2017, the Department processed approximately 13,000 initial credentials and over 57,000 renewals for construction sector professionals. As of June 2017, there were *over 71,000 active DSPS credential holders in construction sector professions*. In the past biennium, Bureau of Technical Services staff completed *over 32,000 plan reviews and 237,000 inspections*. With DSPS

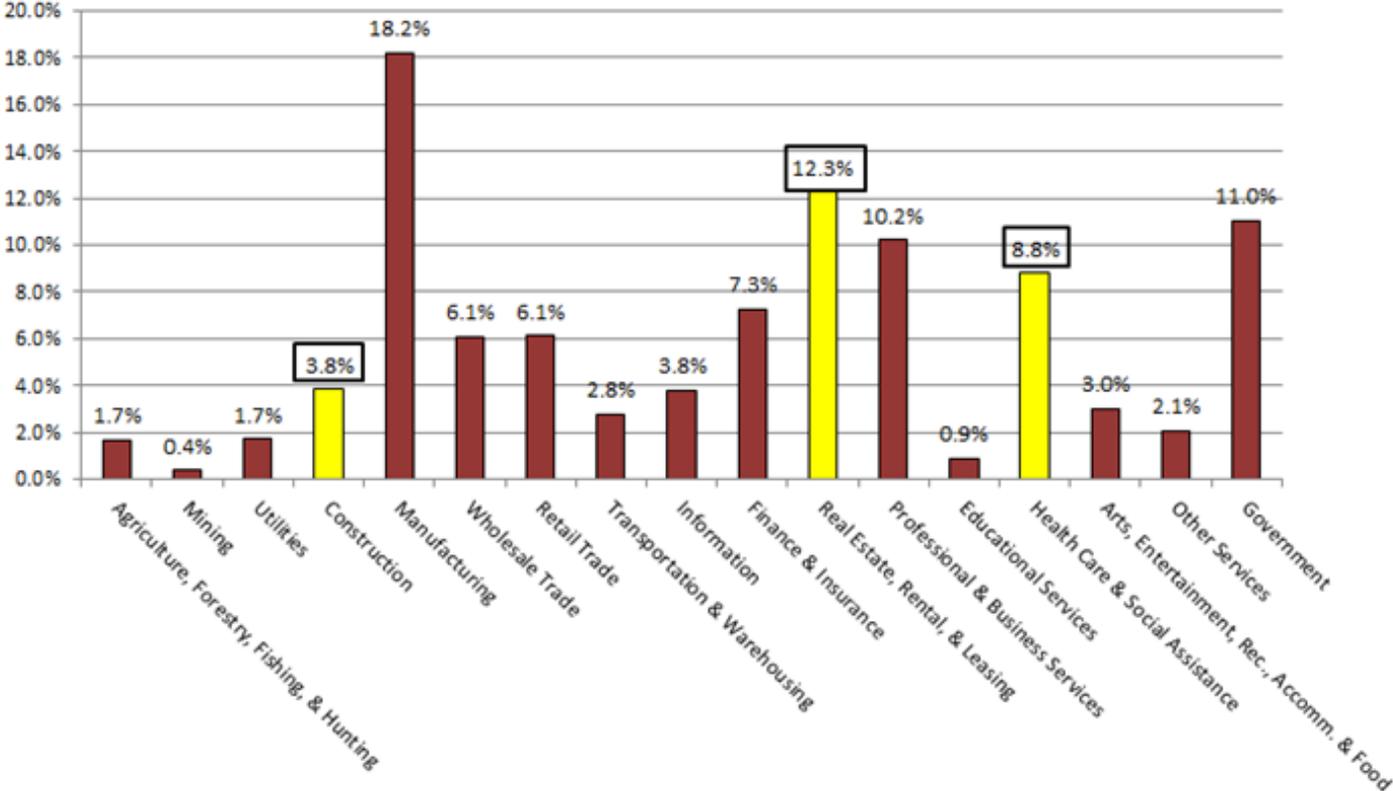
regulatory oversight, the construction sector safely and competently contributed approximately \$10.5 billion to Wisconsin real GDP in 2016 (U.S. Bureau of Economic Analysis 2017).

With DSPS regulatory oversight, the construction sector safely and competently contributed approximately \$10.5 billion to Wisconsin gross state product in 2016.

A handful of mid-sized industrial sectors, including construction, comprise the core of the Wisconsin economy. This is demonstrated using conventional measures of economic activity including output (gross domestic product) and employment. The U.S. Bureau of Economic Analysis (BEA) publishes annual estimates of Real Gross Domestic Product (RGDP) by state and provides estimates of shares of Wisconsin RGDP produced by each major industrial sector.

As shown in Figure 6, compared to the other major industrial sectors, construction is a moderate contributor to Wisconsin GDP. In 2016, the construction sector directly produced approximately \$10.5 billion or 3.8% of Wisconsin RGDP (U.S. Bureau of Economic Analysis 2017).

Figure 6: Sectoral Shares of 2016 Wisconsin Real GDP⁵



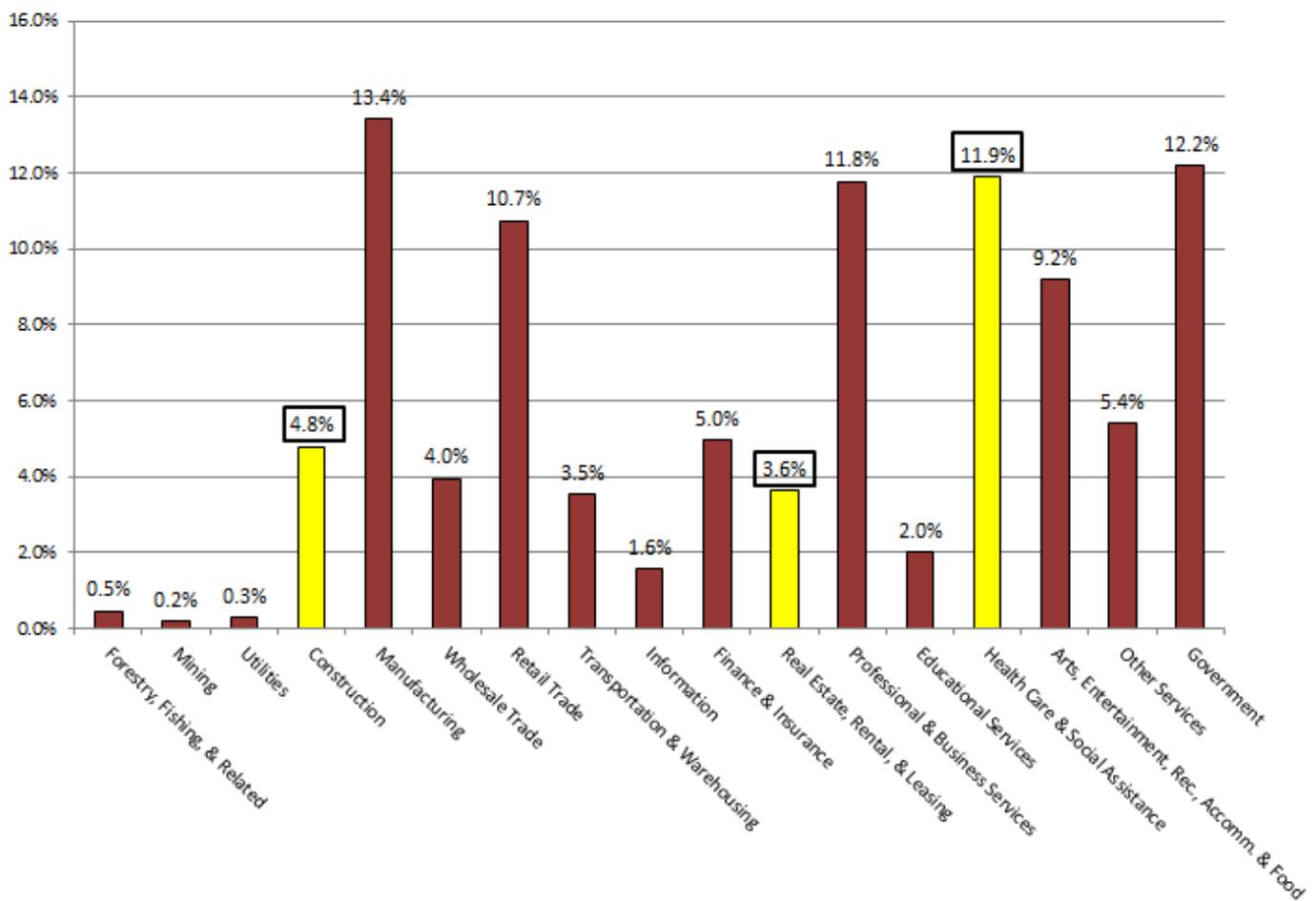
Source: U.S. Bureau of Economic Analysis (2017)

⁵ Health care spending data produced by the National Health Expenditure Accounts (NHEA) of the Department of Health and Human Services Center for Medicare and Medicaid Services (used in the previous section) are larger than those produced by Bureau of Labor Statistics Consumer Expenditure Survey (CE); however, both are valid and widely utilized estimates of health care expenditures. Differences in definitions, sources, and methods are responsible for differences in the estimates. See <https://www.bls.gov/cex/nhe-compare-201215.pdf> for more a more detailed explanation.

With DSPS regulatory oversight, the construction sector provided over 170,000 well-paying jobs to Wisconsin workers in 2016.

Construction is a mid-sized component of the overall Wisconsin labor market. The sector contained over 170,000 jobs in 2016 and accounted for 4.8% of the overall 2016 state employment⁶ as shown in Figure 7.

Figure 7: Wisconsin 2016 Employment Share by Sector

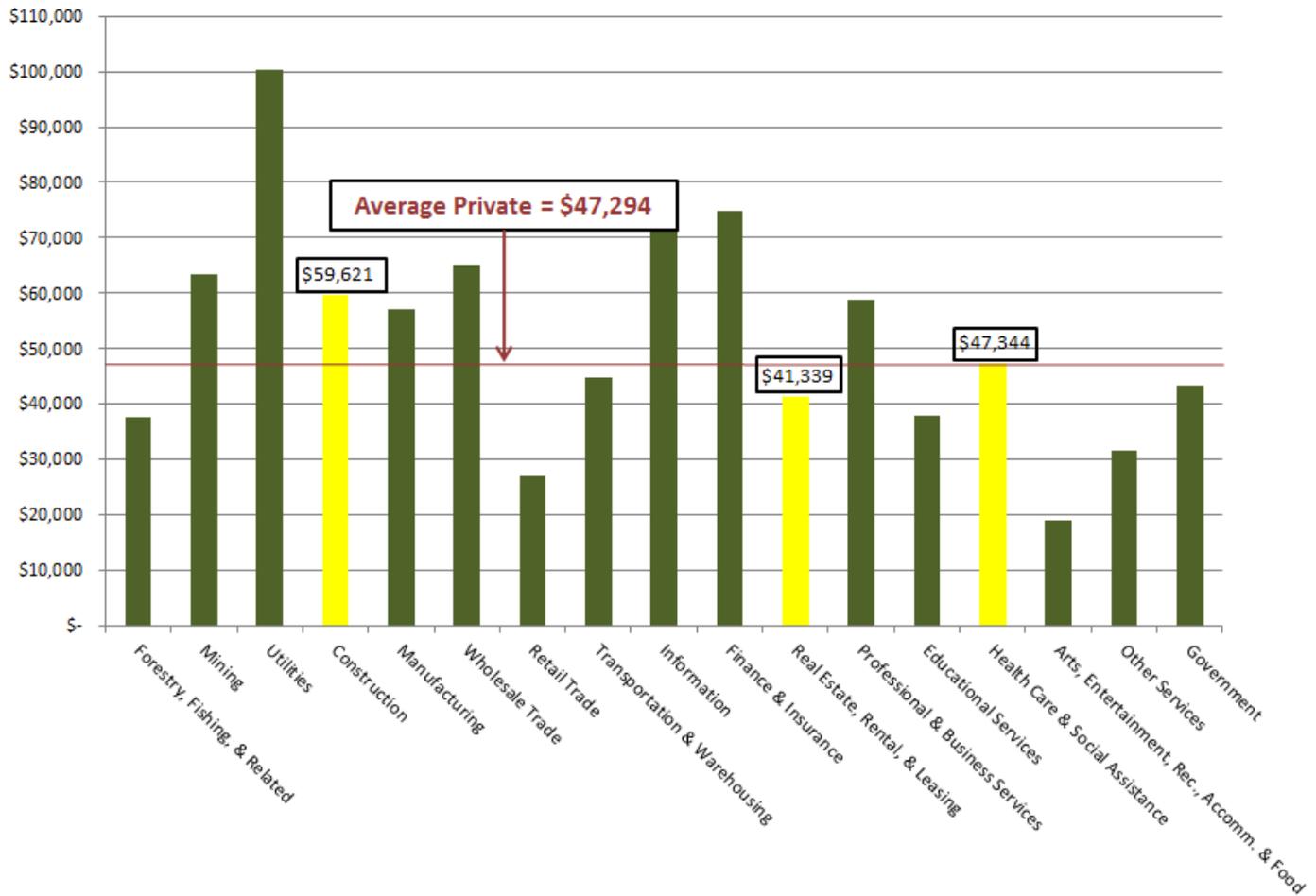


Source: U.S. Bureau of Economic Analysis (2017)

⁶ Non-farm employment.

Construction jobs tend to be relatively high skilled and high paying. Figure 8 provides the wage profile showing the average wage and salary income in Wisconsin for the year 2016 by major NAICS sector.⁷ The construction sector had an annual average wage greater than 11 of the major NAICS sectors of roughly \$60,000, over \$10,000 above the average.

Figure 8: 2016 Wisconsin Average Annual Wage and Salary by Industry



Source: U.S. Bureau of Economic Analysis (2017)

In addition to being an important component of the Wisconsin economy, the construction sector plays a vital role in stimulating economic growth. Construction projects generate output, income, and employment within the construction sector and create “ripple effects” in a wide range of other sectors of the economy.

⁷ The annual wage and salary income is calculated by dividing the Bureau of Economic Analysis total for wage and salary disbursements (Table SA07N) by wage and salary employment (Table SA27N). Wage and salary employment measures the average annual number of full-time and part-time jobs in each area by place-of-work. All jobs for which wages and salaries are paid are counted. Full-time and part-time jobs are counted with equal weight.

In a report prepared for the Skill Integrity Responsibility Council, Inc., researchers estimated the total economic impact of two hypothetical construction projects: (1) A \$10 million new building project, and (2) A \$1 million remodeling project (Clark and Crane 2011).⁸ Table 1 summarizes their findings.

Table 1: Total Economic Impact of Hypothetical Construction Projects

Industry	Case Study 1:			Case Study 2:		
	\$10 Million New Building Project			\$1 Million Remodeling Project		
	Total Economic Impact	Total Job Increase	Total Tax Revenue Generated	Total Economic Impact	Total Job Increase	Total Tax Revenue Generated
Construction Sector	\$10.1 million	91	x	\$1 million	10	x
All Other Sectors	\$9.1 million	79	x	\$0.92 million	8	x
Total	\$19.2 million	170	\$853 thousand	\$1.92 million	18	\$91 thousand

Source: Clark and Crane (2011)

As shown in Table 1, a \$10 million new building project translates into \$19.2 million in economic impact, 170 jobs (91 jobs in the construction sector and 79 jobs elsewhere in the economy), and \$853 thousand in tax revenue. The total value added (after inputs are subtracted) from a \$10 million new building project is *\$10.3 million, with 75% of that coming from labor income*. Also shown in Table 1, a \$1 million remodeling project for a nonresidential building translates into *\$1.92 million in total economic impact, 18 jobs* (10 jobs in construction and 8 jobs elsewhere), and *\$91 thousand in state and local tax revenues*. The total value added (after inputs are subtracted) from a \$1 million dollar remodeling project is \$1.1 million, with 73% of that coming from labor income (Clark and Crane 2011).⁹ The findings of this report show that construction projects regulated by DSPS can be effective as short run economic stimuli. Furthermore, the resulting infrastructure leads to improved economic productivity in the long run.

Construction projects regulated by DSPS can be effective economic stimuli that create jobs and increase spending in a wide range of other sectors of the economy.

⁸ Crane and Clark used the IMPLAN Input-Output or I-O modeling developed by the U.S. Department of Agriculture to measure the “ripple effects” that cause construction projects to have a greater impact on the state economy. This model has been widely tested and used for state and sub-state regional impact analysis.

⁹ The model used to estimate these impacts assumes that no capacity constraints will prevent the economy from expanding to the full impact. In reality, very large construction projects can cause bottlenecks that may prevent the full scalable impact from being realized.

REAL ESTATE INDUSTRY

As of June 2017, over 27,000 real estate industry professionals credentialed by DSPS contributed to the Wisconsin economy. The Real Estate Examining Board and Real Estate Appraisers Board attached to DSPS regulate real estate brokers, real estate salespersons, timeshare salespersons, real estate business entities, licensed appraisers, certified residential appraisers, and certified general appraisers in Wisconsin. According to the United States Bureau of Economic Analysis estimates, the real estate industry accounted for *\$33.5 billion or 12.3% of Wisconsin GDP in 2016* (as shown above in Figure 6). In 2016, the real estate industry comprised roughly 3.6% of overall 2016 state employment (as shown above in Figure 7).¹⁰

When a real estate professional credentialed by DSPS sells a home in Wisconsin, it generates over \$13,000 in income from real estate related industries; over \$5,000 in expenditures on consumer items; and over \$3,000 in expenditures on remodeling.

When a real estate professional credentialed by DSPS sells a home in Wisconsin, it generates over \$13,000 in income from real estate related industries; over \$5,000 in additional expenditures on consumer items such as furniture, appliances, and paint services; and over \$3,000 in expenditures on remodeling within two years of the home purchase. Aside from house-related expenditures, a new home sale results in greater spending at restaurants, sporting events, and charity events of approximately \$11,000 on average (NAR Research 2013).

Wisconsin's real estate industry has strengthened tremendously in recent years. Home sales in 2016 were 20.7 percent above 2007 levels, the year the Great Recession officially began, and

57.6 percent higher than sales in 2011, the year when housing sales bottomed out. 2016 YTD housing sales are at the highest level since 2007. At \$172,500 in October of 2017, median home prices have grown 5.8 percent compared to prices in October of 2007 (Wisconsin REALTORS® Association). These trends indicate that DSPS will continue to play an essential role in Wisconsin's economy through its regulation of the real estate industry.

¹⁰ Components of the BEA real estate industry estimates are not regulated by DSPS.

Appendix A: Health Care Professions and Boards under purview of DSPS

Health Care Professions

Acupuncturist	Occupational Therapy Assistant
Advanced Practice Nurse Prescriber	Optometrist
Anesthesiologist Assistant	Perfusionist
Art Therapist	Pharmacist
Athletic Trainer	Pharmacy (In State)
Audiologist	Pharmacy (Out of State)
Behavior Analyst	Physical Therapist
Chiropractic Radiological Technician	Physical Therapist Assistant
Chiropractic Technician	Physician
Chiropractor	Physician Assistant
Clinical Substance Abuse Counselor	Podiatrist
Clinical Supervisor In Training	Prevention Specialist
Controlled Substances Special Use Authorization	Prevention Specialist in Training
Dance Therapist	Private Practice School Psychologist
Dental Hygienist	Professional Counselor
Dentist	Psychologist
Dietitian	Registered Nurse
Drug or Device Manufacturer	Registered Sanitarian
Hearing Instrument Specialist	Respiratory Care Practitioner
Home Medical Oxygen Provider	Sign Language Interpreter
Independent Clinical Supervisor	Sign Language Interpreter (Restricted)
Intermediate Clinical Supervisor	Social Worker
Licensed Midwife	Social Worker- Advanced Practice
Licensed Practical Nurse	Social Worker- Independent
Licensed Radiographer	Social Worker- Licensed Clinical
Limited X-Ray Machine Operator Permit	Social Worker- Training Certificate
Marriage and Family Therapist	Speech-Language Pathologist
Massage Therapist or Bodywork Therapist	Substance Abuse Counselor
Mobile Dentistry Program	Substance Abuse Counselor in Training
Music Therapist	Tanning Facilities
Nurse-Midwife	Tattooing/Body Art Establishment
Occupational Therapist	Tattooist/Body Artist
	Wholesale Distributor of Prescription Drugs

Health Care Boards

Examining Boards

Chiropractic Examining Board

Dentistry Examining Board

Hearing and Speech Examining Board

Marriage and Family Therapy, Professional Counseling and Social Work Examining Board

Medical Examining Board

Board of Nursing

Nursing Home Administrator Examining Board

Optometry Examining Board

Pharmacy Examining Board

Physical Therapy Examining Board

Psychology Examining Board

Radiography Examining Board

Veterinary Examining Board*

Boards

Controlled Substances Board

Credentialing Boards Attached to the Medical Examining Board

Athletic Trainers Affiliated Credentialing Board

Dietitians Affiliated Credentialing Board

Massage Therapy and Bodywork Therapy Affiliated Credentialing Board

Occupational Therapists Affiliated Credentialing Board

Podiatry Affiliated Credentialing Board

Councils

Council on Anesthesiologist Assistants

Examining Council on Registered Nurses

Examining Council on Licensed Practical Nurses

Perfusionist Examining Council

Pharmacist Advisory Council

Council on Physician Assistants

Respiratory Care Practitioners Examining Council

Sign Language Interpreter Council

Appendix B: All Boards and Councils under purview of DSPS

Examining Boards

Accounting Examining Board
Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, and Land Surveyors
Chiropractic Examining Board
Cosmetology Examining Board
Dentistry Examining Board
Funeral Directors Examining Board
Examining Board of Professional Geologists, Hydrologists, and Soil Scientists
Hearing and Speech Examining Board
Marriage and Family Therapy, Professional Counseling, and Social Work Examining Board
Medical Examining Board
Board of Nursing
Nursing Home Administrator Examining Board
Optometry Examining Board
Pharmacy Examining Board
Physical Therapy Examining Board
Psychology Examining Board
Radiography Examining Board
Real Estate Examining Board
Veterinary Examining Board

Boards

Auctioneer Board
Building Inspector Review Board
Cemetery Board
Controlled Substances Board
Real Estate Appraisers Board

Affiliated Credentialing Boards

Athletic Trainers Affiliated Credentialing Board
Dietitians Affiliated Credentialing Board
Massage Therapy and Bodywork Therapy

Affiliated Credentialing Board
Occupational Therapists Affiliated Credentialing Board
Podiatry Affiliated Credentialing Board

Councils

Council on Anesthesiologist Assistants
Crematory Authority Council
Automatic Fire Sprinkler System Contractors and Journeymen Council
Contractor Certification Council
Conveyance Safety Code Council
Dwelling Code Council
Manufactured Housing Code Council
Multifamily Dwelling Code Council
Examining Council on Registered Nurses
Examining Council on Licensed Practical Nurses
Perfusionist Examining Council
Pharmacist Advisory Council
Plumbers Council
Council on Physician Assistants
Council on Real Estate Curriculum and Examinations
Respiratory Care Practitioners Examining Council
Sign Language Interpreter Council

Advisory Committees¹¹

Alteration and Change of Occupancy Council
Amusement Ride Code Council
Boiler and Pressure Vessel Code Council
Commercial Buildings Code Council
Conveyance Safety Code Council
Electrical Code Council

¹¹ Under Wisconsin Statute 440.042, the Secretary of DSPS may convene an advisory committee to advise on any matter related to the regulation of credential holders.

Energy Conservation Council
Erosion and Stormwater Council
Fire Department Safety and Health Code
Council
Fire Prevention Code Council
Fire Protection Systems Council
Fire Safety Council
Gas Systems Code Council
General Task Group
HVAC Council
Means of Egress Council
Mechanical Refrigeration Code Council
Passenger Ropeways Code Council

Plumbing Code Council
Pool Code Council
POWTS Code Council
POWTS Technical Committee
Public Employee Safety and Health Code
Council
Rental Unit Energy Efficiency Code Council
Stormwater Workgroup
Structural Review Council
Substance Abuse Counselors Certification
Review Committee
Wisconsin Fund Code Council

Appendix C: Health Care Service Categories

Health Care Service Category	Relation to DSPS
<p>Hospital Care: Covers all services provided by hospitals to patients. These include room and board, ancillary charges, services of resident physicians, inpatient pharmacy, hospital-based nursing home and home health care, and any other services billed by hospitals in the United States. The value of hospital services is measured by total net revenue, which equals gross patient revenues (charges) less contractual adjustments, bad debts, and charity care. It also includes government tax appropriations as well as non-patient and non-operating revenues.</p>	<p>These services are generated by DSPS credentialed health care professionals.</p>
<p>Physician and Clinical Services: Covers services provided in establishments operated by Doctors of Medicine (M.D.) and Doctors of Osteopathy (D.O.), outpatient care centers, plus the portion of medical laboratories services that are billed independently by the laboratories. This category also includes services rendered by a doctor of medicine (M.D.) or doctor of osteopathy (D.O.) in hospitals, if the physician bills independently for those services. Clinical services provided in freestanding outpatient clinics operated by the U.S. Department of Veterans' Affairs, the U.S. Coast Guard Academy, the U.S. Department of Defense, and the U.S. Indian Health Service are also included.</p>	<p>DSPS credentials Doctors of Medicine and Doctors of Osteopathy.</p>
<p>Other Professional Services: Covers services provided in establishments operated by health practitioners other than physicians and dentists. These professional services include those provided by private-duty nurses, chiropractors, podiatrists, optometrists, and physical, occupational and speech therapists, among others.</p>	<p>DSPS credentials nurses; chiropractors; podiatrists; optometrists; physical, occupational, and speech therapists; among other health professionals. See Appendix A for a complete list.</p>
<p>Prescription Drugs: Covers the "retail" sales of human-use dosage-form drugs, biological drugs, and diagnostic products that are available only by a prescription.</p>	<p>DSPS credentials pharmacists, pharmacies, wholesale distributors of prescription drugs, drug or device manufacturers, and professionals with the authority to prescribe.</p>
<p>Other Non-Durable Medical Products: Covers the "retail" sales of non-prescription drugs and medical sundries.</p>	<p>DSPS credentials pharmacists, drug or device manufacturers, and</p>

	the health professionals advising purchases of non-durable medical products.
Nursing Home Care: Covers nursing and rehabilitative services provided in freestanding nursing home facilities. These services are generally provided for an extended period of time by registered or licensed practical nurses and other staff. Care received in state and local government facilities and nursing facilities operated by the U.S. Department of Veterans Affairs are also included.	DSPS credentials registered nurses, licensed practical nurses, and advanced practice nurse prescribers.
Dental Services: Covers services provided in establishments operated by a Doctor of Dental Medicine (D.M.D.) or Doctor of Dental Surgery (D.D.S.) or a Doctor of Dental Science (D.D.Sc.).	DSPS credentials dentists and dental hygienists.
Home Health Care: Covers medical care provided in the home by freestanding home health agencies (HHAs). Medical equipment sales or rentals not billed through HHAs and non-medical types of home care (e.g., Meals on Wheels, chore-worker services, friendly visits, or other custodial services) are excluded.	DSPS credentials health professionals responsible for providing home health care. See Appendix A for a complete list of health professions regulated by DSPS.
Medical Durables: Covers “retail” sales of items such as contact lenses, eyeglasses and other ophthalmic products, surgical and orthopedic products, hearing aids, wheelchairs, and medical equipment rentals.	Health professionals credentialed by DSPS directly and indirectly induce the consumption of medical durables.
Other Health, Residential, and Personal Care: This category includes spending for Medicaid home and community based waivers, care provided in residential care facilities, ambulance services, school health and worksite health care. Generally these programs provide payments for services in non-traditional settings such as community centers, senior citizens centers, schools, and military field stations. The residential establishments are classified as facilities for the intellectually disabled and mental health and substance abuse facilities. The ambulance establishments are classified as Ambulance services.	DSPS credentials health professionals typically responsible for health, residential, and personal care including professional counselors, substance abuse counselors, psychiatrists, and psychologists. See Appendix A for a complete list of health professions regulated by DSPS.

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