



Fiscal Year
2018 Annual Report



**Bureau of Workers'
Compensation**

Governor John R. Kasich
Administrator/CEO Sarah D. Morrison

2018 Report

Ohio Bureau of Workers' Compensation

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Letter from the Administrator

Dear Governor Kasich:

I am pleased to present the annual report of the Ohio Bureau of Workers' Compensation for fiscal year 2018.

Over the last year, we increased our commitment to protect Ohio's workers and employers, improved the lives of injured workers and worked with local businesses and governments to bolster economic development. Among our accomplishments:

- Our Board of Directors approved a \$1.5 billion rebate for Ohio's private and public employers, the fourth rebate of \$1 billion or more since 2013.
- We announced plans to invest \$44 million over the next two years to improve wellness and safety for workers across Ohio. This includes boosting our Safety Intervention Grant program to \$20 million a year, up from \$15 million a year.
- Our latest safety initiative also continues funding for programs and equipment that reduce cancer risks for firefighters and improve the safety of those who work with children and adults with disabilities. In its inaugural year, our Firefighter Exposure to Environmental Elements Grant exceeded our expectations, drawing more than 500 applications.
- We launched our new safety, health and wellness program for workers in industries that have a higher risk for on-the-job injuries. Called Better You, Better Ohio!™, the program targets workers in companies that employ 50 or fewer people.
- Our board approved an average 6.1-percent reduction in premium rates for public employers. The reduction, which became effective in January this year, saves public employers \$11.8 million over the previous year's premiums.
- Our board also approved a 12-percent rate reduction for private employers that became effective July 1. The move saves private employers \$163.5 million over FY2018 premiums.
- We hosted our 88th annual Ohio Safety Congress & Expo in March along with our third annual Ohio Workers' Compensation Medical & Health Symposium. More than 8,000 registered to attend the combined event, a record.

We are working diligently on exciting improvements and initiatives to come in fiscal year 2019. We are more committed than ever to the safety, health and economic well-being of our state and its citizens.

Sincerely,



Sarah D. Morrison, Administrator/CEO
Ohio Bureau of Workers' Compensation

Introduction

This report documents actions we took in fiscal year 2018 (FY18) to improve the quality of life for Ohio's workers and to be a positive influence for economic growth in Ohio. Our focus on preventing workplace accidents, lowering rates and caring for those injured on the job is making Ohio a better place for businesses and workers. This focus and our commitment to the principles of service, simplicity and savings helped us operate efficiently during FY18.

Our FY18 administrative cost budget of \$285.6 million was 1.1 percent less than appropriated by the Ohio General Assembly. With assets of approximately \$28.9 billion, we are the largest state-fund insurance system in the U.S. In addition, we're one of the top 10 largest underwriters of workers' compensation insurance in the nation. Insuring 240,639 Ohio employers, we provide insurance coverage to approximately 60 percent of Ohio's workforce. In FY18, we approved 85,136 new claims, a decrease of 1,154 from FY17. Contributing reasons for this decrease include:

- Continued safety funding.
- Continued promotion of safe and healthy workplaces.
- More employers putting safety education resources to work.



Accomplishments

Enhanced service and savings for employers

More Than a Billion Back

Gov. Kasich joined us in April to announce plans to distribute a \$1.5 billion rebate to public and private employers this summer. This marked our fourth rebate of \$1 billion or more since 2013. Our initiative returned \$1.1 billion to private employers and \$157 million to public employers. The rebate included \$48 million to local schools.

Along with previous rebates, credits and rate reductions, our agency has saved Ohio employers \$8 billion in workers' compensation costs since 2011.

Base-rate reduction for employers

Our board approved an average 6.1-percent reduction in premium rates for public employers in September 2017. The reduction became effective in January 2018. It saves public employers \$11.8 million over 2017's premiums.

Our board also approved a 12-percent rate reduction for private employers that became effective July 1, 2018. In FY2019, the move will save private employers \$163.5 million over FY18 premiums.

New program to enhance safety and savings at small workplaces

We created the Policy Activity Rebate (PAR) program. This new program offers small employers a new option for lowering their workers' comp premiums and increasing worker health and safety.

Under PAR, employers earn credits for completing activities designed to improve workplace safety practices and encourage attentive management of their workers' comp policies. Employers can receive a 50-percent premium rebate, up to \$2,000. To be eligible, they must select from among 33 available activities and earn 11 credits.

Other States Coverage

In FY18, we more than doubled enrollment in our Other States Coverage program. The program provides workers' compensation insurance to Ohio employers when their employees work outside of the state. Launched in FY16, this program streamlines the once difficult process of purchasing out-of-state coverage.

We issued 424 Other States Coverage policies in FY18. Premiums totaled \$2.24 million. We received 17 claims during that time for injuries in 12 states. Since its inception, the program has issued 798 policies. Premiums totaled \$4.2 million.

Educational opportunities for employers

Our Employer Services Division developed multiple outreach programs during FY18. These programs educate and assist all Ohio employer's in managing their workers compensation programs.

Among them:

- We invited new employers to participate in a monthly webinar. Participants gained information on the five most important items they need to know as they begin their operations.
- We offered educational webinars twice each month. These webinars covered a variety of topics that are important for all employers.
- Through a series of workshops, newsletters and participation in association meetings, we gave self-insured employers and providers a forum to develop relationships and strategies to ensure injured workers receive the best treatment for a full recovery and return to a normal life.

Division of Safety & Hygiene

Safety and Wellness

In July 2017, we launched our Firefighter Exposure to Environmental Elements Grant Program (FEEG). The program helps fire departments purchase safety gear and equipment designed to protect firefighters from carcinogens and other harmful elements encountered during a fire fight.

We originally allotted \$2 million a year for the program for two years. However, the demand for funding quickly exceeded our expectations. At the end of FY18, we had received 394 applications totaling \$4.05 million. Of these, we awarded 237 grants for a total of \$2.4 million. We will process the remainder in FY19.

FEEG is part of our broader Safety Grant Program, which awarded 593 grants totaling \$9.1 million in FY18.

As part of our More Than a Billion Back initiative, we announced a \$44 million health, safety and wellness plan designed to create a culture of safety throughout Ohio.

The plan calls for a boost to safety grant funding from \$15 million per year to \$20 million per year in FY19 and FY20. As part of that increase, we set aside \$4 million for Ohio police departments and \$4 million for schools to increase their safety and security. We also devoted \$2 million for state agencies whose missions have inherent safety concerns. The Department of Rehabilitation and Corrections is one example.

Better You, Better Ohio!™

In February, we launched Better You, Better Ohio! We designed our new safety, health and wellness program for workers in industries that have a higher risk for on-the-job injuries. The program targets workers in companies that employ 50 or fewer people. Its goals are to boost employee health, reduce workplace injuries and save employers money on medical, legal and other costs associated with injury claims and poor health.

As of June 30, the program had 1,309 workers enrolled. We are expanding the program in FY19 to workers in companies that employ up to 150 employees.

Ohio Safety Congress & Expo/Medical & Health Symposium

We held our annual Ohio Safety Congress & Expo in March in conjunction with our third Ohio Workers' Compensation Medical & Health Symposium. The combined event drew a record-setting crowd of more than 8,000. The symposium offered free continuing education credits and participation in a combination of lectures and interactive panel discussions. Panels featured leading national and state experts covering best practices related to the care of injured workers.

Medical and health services

The vision of our Medical & Health Services Division is to ensure and support prompt, quality, cost-effective health care for injured workers. This vision facilitates a safe and timely return to work and life.

Multiple medical strategies and initiatives are in progress or planned to support this vision. You can find more information in the attached Health Partnership Program annual report in the appendix.

Overcoming behaviors that impede recovery

Our board approved a rule in January aimed at correcting behaviors that impede an injured worker's recovery. Under our Health and Behavior Assessment and Intervention rule, we will pay for counseling and coaching sessions that help injured workers:

- Overcome negative thinking.
- Poor coping skills.
- Lack of motivation.
- Other behavioral barriers to recovery.

The goal is to address these barriers before they spiral into a more serious condition or disease such as depression and opioid abuse. Research indicates behavioral barriers can have three times or more the impact than pain alone in slowing an injured person's recovery.

Spinal fusion rule

A new rule that requires workers with lower back injuries to undergo at least 60 days of comprehensive conservative care before considering a surgical option became effective Jan. 1. Conservative care includes physical therapy, chiropractic care and rest, anti-inflammatories, ice and other non-surgical treatments.

The rule follows several studies that found fusion patients suffered considerably worse outcomes than non-fusion patients. Outcomes included:

- Chronic opioid dependence.
- Increased disability.
- High rates of failed-back syndrome.
- Additional surgery.
- New psychiatric comorbidities.

As always, our goal is the best possible outcome for injured workers. Given the rule is still in its infancy, we don't have enough data yet to measure its efficacy. Lower back injuries are among the top workplace injury types reported to BWC each year.

Innovative pharmacy management reduces opioid dependence

Our pharmacy department continues to increase operational efficiencies. These actions better serve Ohio's injured workers and reduce the use of opioids and other dangerous substances.

Our innovations and continuous clinical oversight have reduced opioid dependence in our injured worker population 65 percent since FY2011 to 2,813. Our research indicates anyone taking at least 60 morphine equivalent doses a day for at least 60 days is clinically dependent. In addition, we reduced prescriptions for:

- Skeletal muscle relaxants by 84 percent since 2011.
- Anti-ulcer agents by 88 percent.

Finally, we spent nearly \$82.1 million on prescription drugs in FY2018. That's \$52.4 million less than we did in FY2011, a 39-percent drop.

The International Association of Industrial Accident Boards and Commissions (IAIABC) honored our pharmacy department this year. The IAIABC named the department the winner of its second annual Innovation Award for its work curbing opioid use and abuse.

Special investigations

Fraud efforts generate results

Our special investigations department (SID) celebrated its 25th year of protecting the State Insurance Fund. SID accomplished this by investigating, detecting and deterring fraud. The department's 121 dedicated members accomplished several impressive results:

- \$60.1 million in savings, 44 percent more than last year.
- 3,150 allegations, 36 percent more than last year.
- 1,622 closed cases, a 38 percent increase over 2017.

The average closed founded case identified \$78,973 in savings to our workers' compensation system. That's 12 percent more than last year.

Since its inception in FY1994, SID has:

- Fielded 122,726 allegations of fraud.
- Secured 2,802 convictions.
- and Saved the State Insurance Fund \$1.8 billion.

Other accomplishments

Inclusion & Diversity

In April, we hired our first **director of inclusion & diversity** to lead our efforts to recruit and retain top talent that reflects, values and meets the needs of our increasingly diverse customers. Carolina Thatcher assumed the role following a similar stint with the Ohio Department of Job and Family Services.

Improving customer service

- In October 2017 we **expanded our Customer Contact Center** by adding a call center and 11 jobs to our Portsmouth Service Office. We expect this action will improve service for employers and injured workers across the state. The new call center complements our main call center in Pickerington. That center fields approximately 400,000 inquiries a year. The goal is to reduce customer wait times and the potential for total service interruptions. In September 2017, a power outage in Pickerington left hundreds of customers unable to reach us for nearly two days.
- In May we launched a redesigned website to provide our customers with easier navigation and more relevant content. The old site dated to 2000. Visitors to BWC's [new homepage](#) will find the most-requested information right up front. In addition, they will discover easy pathways based on our main users, including workers, employers and providers.

BWC year-end statistics

	FY 2018	FY 2017	FY 2016
State-fund claims filed			
Lost time	10,662	10,745	10,932
Medical only	73,967	75,030	76,648
Occupational disease	280	360	407
Death	227	155	183
Disallowed or dismissed	12,049	11,641	10,912
Total	<u>97,185</u>	<u>97,931</u>	<u>99,082</u>
Net allowed injuries	85,136	86,290	88,170

NOTE: Every claim is evaluated at 60 days after filing for purposes of claim type, State fund versus self-insured, combine status and allowance status. Values exclude combined and Self-Insured claims.

Open claims (per statute)			
Lost time	223,318	242,778	263,618
Medical only	448,870	461,978	488,694
Total	<u>672,188</u>	<u>704,756</u>	<u>752,312</u>

Benefits paid			
Medical benefits paid	\$ 526,379,567	\$ 550,569,114	\$ 580,294,319
Compensation paid			
Wage loss	\$ 7,525,535	\$ 8,371,994	\$ 9,810,677
Temporary total	197,894,421	204,141,166	219,298,295
Temporary partial	3,511	4,361	7,226
Permanent partial	23,021,440	19,632,350	19,708,785
% Permanent partial	57,430,490	55,294,805	65,019,190
Lump sum settlement	145,946,543	134,602,047	159,289,682
Lump sum advancement	17,456,267	19,902,247	21,852,376
Permanent total & DWRF	376,041,549	381,508,395	402,054,481
Death	81,210,663	83,177,378	85,945,428
Rehabilitation	26,417,263	30,083,940	33,080,852
Other	4,054,993	4,046,402	5,535,475
Total compensation paid	\$ 937,002,675	\$ 940,765,085	\$ 1,021,602,467
Total benefits paid	<u>\$ 1,463,382,242</u>	<u>\$ 1,491,334,199</u>	<u>\$ 1,601,896,786</u>
Managed care organization fees paid	\$ 170,755,316	\$ 170,797,091	\$ 169,229,310

Fraud statistics			
Fraud dollars identified	\$ 60,098,139	\$ 41,764,061	\$ 56,571,121
\$\$\$ saved to \$\$\$ spent ratio	4.81 to 1	3.48 to 1	4.61 to 1
Prosecution referrals	166	163	198

NOTE: Due to improvements in BWC data capture and reporting systems, prior year data may not agree with amounts previously reported.

BWC year-end statistics

	FY 2018	FY 2017	FY 2016
Active employers by type			
Private	236,591	237,249	239,331
Public (local)	3,784	3,796	3,796
Public (state)	115	121	121
Self-insured	1,173	1,166	1,178
Black Lung	28	28	31
Marine Fund	121	114	138
Total	<u>241,812</u>	<u>242,474</u>	<u>244,595</u>

BWC personnel	1,760	1,785	1,842
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BWC combined funds financial data (000s omitted)

	Unaudited FY 2018	Audited FY 2017	Audited FY 2016
Operating revenues			
Premium and assessment Income, net of provision for uncollectibles and ceded premiums	\$ 1,162,940	\$ 1,541,988	\$ 1,439,143
DWRF II unbilled assessment	-	-	(1,499,600)
Other income	9,407	10,016	12,442
Total operating revenues	<u>\$ 1,172,347</u>	<u>\$ 1,552,004</u>	<u>\$ (48,015)</u>
Operating expenses			
Workers' compensation benefits and compensation adjustment expenses	\$ 804,021	\$ 1,199,363	\$ 1,211,609
Other expenses	153,472	143,572	119,419
Total operating expenses	<u>\$ 957,493</u>	<u>\$ 1,342,935</u>	<u>\$ 1,331,028</u>
Non-operating revenues			
Net investment earnings	\$ 667,899	\$ 672,003	\$ 633,497
Increase (decrease) in fair value	668,680	1,205,642	731,967
Net investment income	<u>\$ 1,336,579</u>	<u>\$ 1,877,645</u>	<u>\$ 1,365,464</u>
Net dividends, rebates and credits	\$ 1,298,778	\$ 1,097,412	\$ (6,674)
DWRF I alternative funding expense	\$ (20,128)	\$ (16,348)	\$ 507,891
Total assets	\$ 28,882,130	\$ 28,918,232	\$ 27,439,254
Total liabilities	\$ 18,944,355	\$ 19,240,643	\$ 18,742,292
Total net position	\$ 9,926,864	\$ 9,758,071	\$ 8,753,885

NOTE: Due to improvements in BWC data capture and reporting systems, prior year data may not agree with amounts previously reported.



2018 Report **Investment Class Comments**

Investment Class Comments

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U.S. economy

The U.S. economy gained increasing momentum in fiscal year 2018 (FY18). The economy sustained its ninth consecutive year of economic growth following the financial shocks and recessionary period of FY09. The current U.S. economic expansion beginning in July 2009 (111 months through September 2018) is now the second-longest between recessions in U.S. history. It covers 33 business cycles to date going back to 1854. Only the U.S. economic expansions from March 1991 to March 2001 (120 months) has been longer to date. This current economic expansion has surpassed the 106-month expansionary period from February 1961 to December 1969.

Real gross domestic product (GDP) averaged 2.9-percent growth quarter-over-quarter for the four quarters of FY18. This was a significant increase over its 2.2-percent average quarter-over-quarter growth for FY17 and its tepid 1.3-percent average quarter-to-quarter growth for FY16. The FY18 first quarter (calendar year 3Q2017) and last quarter (calendar year 2Q18) exhibited stronger real GDP growth of 2.8 percent and 4.2 percent, respectively. Whereas the two middle quarters of FY18 covering the autumn and winter periods of 4Q17 and 1Q18 had slower but still respectable real GDP growth of 2.3 percent and 2.2 percent, respectively. The significant corporate tax rate cuts and reduction in personal income tax rates approved by the U.S. Congress in December 2017, combined with an improved regulatory environment for U.S. business, have stimulated domestic economic growth during calendar year 2018 to date.

The national unemployment rate continued its decline in FY18 from 4.3 percent in June 2017 to 4 percent in June 2018 after reaching 3.9 percent in April 2018 and 3.8 percent in May 2018. This represents an impressive decline over the past five years from 7.5 percent in June 2013 and 5.3 percent in June 2015. It's now near historical lows. There is an assertion that the U.S. is nearing full employment as there will always be a certain amount of frictional unemployment. The Federal Reserve and others emphasize the growing mismatch in the labor market between a shortage of labor for skilled jobs and many of the unemployed and part-time workers lacking the requisite skills to fill these growing and more demanding jobs. This predicament has led to a continued widening in the gap in compensation paid to skilled, highly educated knowledge workers compared to less skilled, less educated workers. The U.S. civilian worker employment cost index accelerated during FY18. It reached a 12-month increase of 2.8 percent compared to 2.4 percent for FY17, 2.3 percent for FY16 and an annual 2 percent or lesser increase over the prior fiscal year periods 2012-2015. Overall, there is now roughly one open job for every person identified as unemployed, the lowest ratio of available workers per open position in nearly two decades.

After finally raising the benchmark federal funds rate by 0.25 percent in December 2015 for the first time since before the Great Financial Crisis of 2008-2009, the Federal Reserve raised the federal funds rate on three occasions during FY17 by 0.25 percent each. It continued on this path in FY18 by raising its rate by the same 0.25 percent three additional times. The latest rate increase in FY18 occurred in June 2018 to a range of 1.75 percent to 2 percent. This represented a total increase of 1.75 percent since December 2015. This reversal of its very accommodative monetary policy necessary to navigate through the Great Financial Crisis of 2008-2009 and its aftermath is the result of the Fed moving toward a more normalization of interest rate levels. It is the position of the Fed that these interest rate increases are now necessary and will not harm U.S. economic growth. This position has turned out to be correct to date. These interest rate increases the Fed made are in sharp contrast to the still very accommodative monetary policies maintained by the two most important other central banks in the world, the European Central Bank (ECB) and the Bank of Japan. These banks want to stimulate economic growth in their regions and prevent sliding back into recession. These accommodative policies, especially that of the ECB, have been successful in stimulating economic growth in the Eurozone and in Japan over the past several years.

The consumer price index (CPI) for all items accelerated in FY18 with its annualized year-over-year increase being 2.8 percent. It was 2.3 percent for all items, excluding food and energy. The CPI year-over-year FY18 increase was 1.4 percent for food and a high 12 percent for energy. The 2.3-percent CPI increase, excluding food and energy in FY18 represented an increase of 0.6 percent from its 1.7-percent increase for FY17. The core personal consumption expenditures price index (CPE) is a favored measurement of inflation of the Federal Reserve Bank for the U.S. economy. It captures price movements across a wide range of consumer expenses, excluding food and energy and reflects changes in consumer behavior. The PCE price index showed a year-over-year increase of 2 percent for July 2018. The Federal Reserve has stated it wants the U.S. inflationary rate to rise to a targeted 2 percent and can even accept a slightly higher rate. It appears the Fed has finally reached this objective after falling short for many preceding years.

U.S. financial markets

In a continuation of FY17, the U.S. equity markets exhibited very strong performance in FY18. Except for a sharp pullback of just more than 10 percent in broad U.S. equity indexes in late January into early February 2018, the U.S. equity markets were in a consistent upward trajectory during FY18. The major U.S. equity markets achieved more record highs toward the end of FY18. Investors and businesses perceived the Fed interest rate hikes in FY18 as representing Fed confidence in a strong U.S. economy. This allowed the economy to easily absorb such hikes. The U.S. equity markets reacted positively to the reduction in corporate taxes and personal income taxes approved by Congress in December 2017, as well as significant deregulation. They also overcame the concerns of enacting or threatening to impose tariffs on many important imported goods and the negative impact tariffs might have on future economic growth and inflation. In addition, the economies of important European countries continued to exhibit respectable economic growth with Eurozone real GDP increasing to 2.5 percent for calendar year 2017, its fastest growth rate since 2007. The Chinese economy maintained its economic growth near 7-percent GDP throughout FY18 in a continuation of its similar growth rate for FY17. The U.S. dollar exchange rate experienced rather wide fluctuations against important foreign currencies during FY18. However, the U.S. dollar exchange rate ended FY18 little changed from the end of FY17 when compared to the market value weighted basket of currencies comprising the BWC non-U.S. equity portfolios.

Also, in a continuation of the trend for FY17, bond yields of U.S. government and corporate issues continued to increase during FY18. Whereas equity investors viewed tax cuts and deregulation favorably, bond investors viewed these as a negative, which could result in higher economic growth and inflation. The three Federal Reserve interest rate increases occurring in FY18 totaling 0.75 percent also added to the concern of bond investors. Intermediate-term bond yields rose between 0.70 percent to 0.95 percent (70-95 basis points) for the several intermediate-term bond benchmark indexes of the BWC portfolio during FY18. Whereas long-term bond yields rose between a lesser 0.20 percent to 0.45 percent (20-45 basis points) during FY18 for the several long-term bond benchmark indexes of the BWC portfolio. This dichotomous movement resulted in the term yield curve flattening with shorter maturity bond yields rising more than longer maturity bond yields over the course of FY18.

In summary, FY18 exhibited strong and consistent U.S. equity market momentum throughout the period except for one sharp 10-percent correction in early 2018. The broad Russell 3000 index increased 14.8 percent for FY18, the large-cap S&P index gained 14.4 percent and the small-cap Russell 2000 index rose 17.6 percent. The broad non-U.S. MSCI ACWI ex-U.S. index was up a relatively more modest 7.3 percent for FY18 with foreign currency exchange having a negligible impact on its return. This lesser performance compared to the U.S. equity markets is attributable to weaker economic growth of developed foreign countries compared to the U.S. during this period combined with escalating trade tensions between the U.S. and its global trading partners, with special negative impact on emerging market economies. The intermediate-term bond indexes serving as benchmarks for BWC fixed income portfolios returned a positive 2.1 percent for U.S. TIPS in FY18, helped by the rising CPI index. The other BWC intermediate-bond indexes returned between a negative 0.1 percent and a negative 0.6 percent in FY18. The important long credit bond index representing approximately one-half of BWC fixed income assets returned a negative 1.3 percent in FY18.

Portfolio returns

The BWC investment portfolio in FY18 provided a total return (net of management fees) of 5.1 percent and net investment income of \$1,337 million. The annualized net return of the BWC investment portfolio for the three-year and five-year fiscal periods ending June 30, 2018, were 6.1 percent and 6.7 percent, respectively. It returned 7.0 percent for the 10-year fiscal period ending June 30, 2018. Each of these period returns exceeded the 4.0-percent discount rate applied to future liabilities.

The BWC fixed income portfolio returned a negative 0.1 percent in FY18 from a combination of bond interest income earned of 3.6 percent and market value depreciation of 3.7 percent. This resulted from the moderate increase in U.S. interest rate levels for the portfolio over the course of FY18. The BWC equity portfolio returned a strong 12.8-percent net return in FY18. It was comprised of a 15.4-percent net return for its U.S. equity portfolio and a 7.3-percent net return for its non-U.S. equity portfolio. The BWC real estate portfolio comprised of 21 pooled real estate commingled funds at the end of FY18 provided a net return after management fees of 8.3 percent in FY18. The BWC real estate strategy has an emphasis on core real estate assets with only moderate leverage used. The real estate asset class has provided strong but recent moderating net returns of 7.6 percent in FY17, 10.2 percent in FY16, 14.5 percent in FY15 and 11.4 percent in FY14.

Asset allocation policy revisions

BWC investment consultant RVK conducted and completed an asset allocation study for the State Insurance Fund (SIF) in FY18. After several months of review and discussion, the Investment Committee and the BWC Board of Directors approved at their respective May 2018 meetings asset allocation revisions impacting the SIF fixed income and real estate portfolios. The RVK and investment staff recommendations for SIF portfolio allocation changes approved by the Board significantly impact the SIF fixed income portfolio. The objective is to reduce its duration to an estimated 10 years from more than 11.5 years. This more closely matches the current estimated 10-year duration of SIF liability payments. These approved policy changes will result in reducing interest rate sensitivity risk of the SIF fixed income portfolio and lower its market value volatility.

These approved SIF investment policy changes resulted in an increase in the real estate allocation for the SIF portfolio to a targeted 15 percent of total invested assets from the prior 12-percent target. These changes also resulted in a matching reduction in total fixed income asset allocation to a targeted 55 percent (including 1-percent cash target) from the prior 58 percent of total invested assets.

With respect to the objective of reducing the SIF fixed income portfolio duration and interest rate sensitivity risk, the investment policy changes approved reduced the target portfolio allocation of SIF long duration fixed income assets to 22 percent from 32 percent. This was achieved by:

- Eliminating the 4-percent target asset allocation to passive managed long duration U.S. government bonds.
- Reducing the active managed long duration credit fixed income target asset allocation from 28 percent to 22 percent.

A new passive managed intermediate duration U.S. Treasury bond mandate with a 4-percent target asset allocation replaces the eliminated 4-percent target long duration U.S. government bond allocation.

The remaining 6-percent target asset allocation policy reduction of the long duration credit fixed income mandate was replaced by:

- Increasing the target asset allocation of the active managed intermediate duration U.S. Aggregate core plus fixed income mandate to 18 percent from 15 percent.
- Rising the core real estate fund target allocation to 9 percent from 7 percent.
- Increasing the core plus real estate fund target allocation to 4 percent from 3 percent.
- Leaving the value-added real estate fund target allocation at 2 percent.

The investment staff implemented and completed the execution of the fixed income allocation policy changes for the SIF portfolio by the end of September 2018. The investment staff contracted a transition manager to conduct the necessary trading of most of the SIF fixed income assets necessary to complete these major fixed income portfolio asset shifts in satisfaction of the current investment policy.

The SIF approved investment policy change increased the Core Plus Real estate fund target portfolio allocation from 3 percent to 4 percent. In response, the investment staff recommended and received Board approval in June 2018 to invest an additional \$125 million of capital in four of its current active core plus real estate funds. It was not necessary to increase capital commitments toward any existing SIF core real estate funds as BWC already achieved the approved new 9-percent asset allocation target for this asset class.

Portfolio compliance

The investment portfolios were in compliance with the BWC Investment Policy at the end of each month of FY18 except for four matters involving external managers.

At the end of December 2017, one of the SIF active managed Mid Cap Core U.S. equity portfolios had a cash balance of \$10.9 million. This represented 5.57 percent of its portfolio market value of \$195 million or approximately \$1.1 million above the 5 percent imposed limit for cash balances. The cash balance of this portfolio subsequently fell below the 5-percent limit on Jan. 9, 2018.

One of the SIF active managed U.S. Aggregate Core Plus fixed income portfolios inadvertently purchased a prohibited investment, per the BWC imposed guidelines for the account due to an internal coding deficiency. The issue in question was a private placement collateralized commercial mortgage-backed principal-only security. The internal coding error failed to recognize this security as a prohibited investment, per the BWC-imposed portfolio guidelines for this account. Interest-only and principal-only securities associated with collateralized securities are prohibited investments, per the BWC-investment policy statement. This prohibited issue was mistakenly purchased on May 25, 2018, at a cost of approximately \$2 million. This prohibited investment was sold on June 5, 2018, at a small capital gain promptly after the error was discovered.

There were two separate one-day end-of-month waivers granted by the chief investment officer at the end of both April and May 2018. These waivers allowed a SIF active long credit manager to temporarily have a portfolio exposure to a single corporate credit slightly above (by +0.06 percent and +0.19 percent) its prescribed investment guideline limit at these respective month-end dates. These new issue securities purchased were added to the benchmark index the first day of the following month. Once these respective new issues were added to the benchmark index, this portfolio returned to in compliance.

Valuation and performance

As reflected in Columns A and B of the table provided at the end of this Annual Report, total investment assets at fair value held by BWC were \$26,951 million on June 30, 2018. This represented an increase of \$156 million when compared to \$26,795 million on June 30, 2017. SIF invested assets were \$24,811 million at fair value on June 30, 2018. This represented 92.1 percent of total BWC invested assets at FY18 year-end. As stated earlier, the total rate of return on invested assets of BWC for FY18 ended June 30, 2018, was 5.1-percent net of management fees. The total rate of return on SIF invested assets for FY18 was 5.2-percent net of management fees.

BWC net investment income was \$1,337 million for FY18, comprised of \$519 million of interest income, \$98 million of stock dividend income, \$113 million of real estate dividend income, \$3 million of miscellaneous investment income (from corporate and legal actions), \$669 million net appreciation in fair value of investments, offset by \$65.2 million of investment expenses, including \$63.8 million in investment manager fees.

Investment manager fees

The investment manager fees for FY18 totaling \$63.8 million represented an annual fee of between 24-25 basis points (24/100 of 1 percent) of total average month-end market value of fixed income, equity and real estate assets (all invested assets excluding cash and cash equivalents).

The investment expenses of \$65.2 million for FY18, including \$63.8 million in investment management fees, compares to \$61.1 million of total investment expenses for FY17. This includes \$59.8 million in investment management fees (between 23-24 basis points of average month-end investment assets excluding cash).

The increase in investment management fees of \$4 million in FY18 totaling \$63.8 million from \$59.8 million is entirely attributable to the SIF real estate funds. SIF real estate management fees increased year-over-year by \$4.6 million to \$31.7 million for FY18 from \$27.1 million for FY17. This year-over-year increase in real estate fund management fees is a result of a combination of the growth in assets resulting from additional capital commitment drawdowns and net asset value appreciation from existing funds in FY18. Net asset value appreciation for several high performing funds resulted in additional incentive fees either paid or accrued in FY18. The fair value of SIF real estate assets has increased from \$2,253 million on June 30, 2016, to \$2,806 million on June 30, 2017, to \$3,267 million on June 30, 2018.

A reduction in active U.S. equity management fees partially offset the \$4.6 million year-over-year increase in real estate fund management fees for FY18. This reduction of active U.S. equity management fees was the result of the transfer of U.S. equity assets of the SIF Minority-Owned and/or Women-Owned Business Enterprise (MWBE) investment program. The transfer of these assets represented a targeted 1 percent of SIF assets from active management to passive management approved by the Board in June 2017. This resulted in the actual transfer of U.S. equity assets of approximately \$250 million from 15 separately managed accounts at the end of November 2017 to the approved passive manager of the assets. The remaining \$37 million of SIF assets from these active MWBE manager accounts was transferred to the SIF operating cash account on the same date. This decision to move from active to passive management resulted in a reduction of MWBE program management fees of more than \$1.1 million in FY18 compared to FY17 (\$1.85 million for FY17 versus \$730,000 for FY18).

Excluding the MWBE U.S. equity management program, remaining active U.S. equity management fees increased in FY18 by approximately \$650,000 to \$13.15 million from \$12.5 million in FY17 due to continued market value appreciation. Total passive manager fees for BWC fixed income and equity assets remained constant year-over-year at \$2.15 million for both FY18 and FY17.

Active manager performance

The six-active long credit bond managers in the aggregate provided a combined return for FY18 on SIF assets of negative 1 percent before management fees and negative 1.17 percent after management fees. This exceeded the Long Credit benchmark index return of negative 1.30 percent by 0.30-percent gross of fees and 0.13-percent net of fees. BWC estimates this slight excess net return of 0.13 percent above the benchmark in the aggregate provided incremental net investment income for SIF of \$9 million in FY18. This estimated incremental net investment income is based on an average-month-end balance of \$7.0 billion in asset market value for long credit bonds in FY18. These six active long credit managers have collectively outperformed the benchmark index by an annualized 0.49-percent net of fees from their inception date of June 1, 2012.

The four SIF active core plus intermediate duration bond managers provided a combined total return of 0.71-percent gross of fees and 0.57-percent net of fees in FY18. This exceeded the U.S. Aggregate benchmark return of negative 0.40 percent by 1.11-percent gross of fees and 0.97-percent net of fees. Based on an average month-end balance of asset market value of \$3.26 billion under management for this asset class, BWC estimates the excess net returns of 0.97 percent above the benchmark in the aggregate provided incremental net investment income for SIF of \$31 million in FY18.

The 13 SIF active mid-cap and small-cap U.S. equity managers provided a combined total return for FY18 of 16.22-percent gross of fees and 15.58-percent net of fees. This exceeded the Russell composite small/mid cap custom blended index return of 13.93 percent by 2.29-percent gross of fees and 1.65-percent net of fees. The nine active mid-cap U.S. equity managers provided a combined total return of 14.87-percent gross of fees and 14.32-percent net of fees. This exceeded the Russell mid-cap U.S. equity benchmark index of 12.33 percent by 2.54-percent gross of fees and 1.99-percent net of fees. The four active small-cap U.S. equity managers provided a combined total return of 21.38-percent gross of fees and 20.39-percent net of fees. This exceeded the Russell 2000 small-cap equity benchmark return of 17.57 percent by 3.81-percent gross of fees and 2.82-percent net of fees. Based on an average month-end market value of assets under management of \$2.38 billion for these 13 SIF equity managers for FY18, BWC estimates the aggregate net excess performance of these managers to the BWC custom blended benchmark represented an incremental increase of SIF net investment income of \$39 million for FY18.

Asset allocation mix

The asset allocation mix of the BWC investment portfolio based on represented fair value on June 30, 2018, was 47.6-percent bonds, 35.1-percent equities, 13.2-percent real estate and 4.1-percent cash and equivalents. This asset mix compares to 55.1-percent bonds, 32.8-percent equities, 10.5-percent real estate and 1.6-percent cash and equivalents on June 30, 2017.

Approximately \$900 million of cash was provided to the SIF operating account in late May 2018 with the elimination of the SIF passive long duration U.S. government bond mandate as this account was terminated with the approved investment policy change of May. These redemption proceeds stayed in the U.S. government money market fund at June 30, 2018. The investment staff positioned the proceeds to fund the first phase of the Billion and Half premium rebate program. This redemption action had the impact of reducing the June 30, 2018, BWC bond allocation by 3.7 percent with the cash and equivalents allocation increasing by the same 3.7 percent.

Asset class transfer activity

Columns D, E and F of the table provided at the end of this Annual Report summarizes the asset class transfer activity occurring over FY18. These activities are important to highlight because they had a material impact on the respective fair value levels of the bond, equity and real estate portfolios over the course of FY18. The significant asset transfer activity shown in Column E largely reflects redemption activity of bonds and U.S. equities to fund the entire Third Billion Back premium rebate program that occurred between July–October 2017 as well as the first stage of the next Billion and Half premium rebate program approved by the Board in April 2018.

BWC redeemed \$650 million of long duration bonds (\$600 million long credit bonds and \$50 million long U.S. government bonds) and \$370 million of U.S. equities (\$200 million mid-cap and \$170 million large-cap) to fund all of the Third Billion Back program. In response to the Board approved elimination of the 4-percent target asset allocation to passive managed long duration U.S. government bonds for the SIF portfolio occurring in May 2018, BWC redeemed all assets in this managed account in late May, which totaled \$905 million. BWC transferred these sale proceeds to the SIF cash operating account to fund the first stage of the Billion and Half premium rebate program commencing in July 2018.

BWC made the \$46 million of bond redemptions shown in column D of the table to fund real estate capital calls. The remaining \$200 million of real estate asset inflows shown in column D were from the SIF cash operating account. Whereas the \$31 million for real estate assets shown in column E of the table represented real estate fund distributions from value-added funds transferred into the SIF cash operating account. BWC applied an additional redemption of \$132 million of large cap U.S. equities toward funding additional SIF operating needs.

There were also U.S. equity redemptions totaling \$30.5 million from the Disabled Workers' Relief Fund (DWRF) and \$1.9 million from the Coal Workers' Pneumoconiosis Fund (CWPF) made in FY18 to fund their operating cash requirements.

Bond portfolio values and return

The total fair value of the BWC bond portfolio was \$13,229 million on June 30, 2018. This compared to \$14,763 million on June 30, 2017. The bond portfolio had net outflows totaling \$1,605 million during FY18 (see Column F of table). This resulted largely from \$650 million of long duration credit and long duration U.S. government bond redemptions to fund the 2017 Third Billion Back premium rebate program. In addition, it was the result of a full redemption of all long duration U.S. government bonds totaling \$905 million to fund the first stage of the 2018 Billion and Half premium rebate program. Adjusted for these net bond sale outflows, the fair value change of the BWC bond portfolio increased \$71 million. The total net return for the BWC portfolio was negative 0.1 percent for FY18.

The BWC bond portfolio net return of negative 0.1 percent in FY18 consisted of bond interest income yielding an average of 3.6 percent and market value decline of 3.7 percent. The bond portfolio in FY18 earned \$513 million in interest income and had net realized/unrealized losses of \$500 million and \$16 million of management fees. The net realized/unrealized losses of \$500 million resulted from interest rate levels rising across the bond yield curve during FY18 by between 75-100 basis points for short and intermediate duration bonds and between 25-50 basis points for long duration bonds. The U.S. TIPS portfolio representing 20 percent of total market value of the BWC portfolio as of June 30, 2018, was the best performing bond asset class sector for BWC in FY18 and returned 2.12-percent net of fees. The SIF long duration asset portfolio, which represented 51 percent of total market value of the BWC portfolio on June 30, 2018, returned a negative 1.17-percent net of fees in FY18.

Bond portfolio quality and duration

The BWC bond portfolio had an average quality of between “AA” and “A” at the end of June 30, 2018. Of those, 28 percent of the fair value of bonds held on June 30, 2018, were U.S. government issues of “AAA” quality (by credit rating agencies Moody’s and Fitch) and “AA” rated by Standard & Poor’s notable downgrade in August 2011. A total of 27.7 percent of fair value of bonds owned on June 30, 2018, were U.S. Treasury issues, including 20.3 percent represented by U.S. TIPS. Issues held on June 30, 2018, rated below investment grade represented 3.9 percent (\$512 million) of total fair value of bonds owned. These below investment grade bonds were owned mostly in the active core plus fixed income managed accounts with a modest amount owned in active long duration managed accounts. BWC permits these specified accounts to own such below investment grade bonds within BWC’s imposed percentage ownership limits. The weighted average effective duration of the bond portfolio on June 30, 2018, was 9.6 years. This is based on the individual asset class duration calculations of the BWC investment accounting vendor as represented in the FY18 audited financial statements. This effective duration of the bond portfolio matches well with the projected future liability payments of the SIF portfolio, which is approximately 10 years as provided by the BWC Actuarial Division.

Equity portfolio values and return

The total fair value of the BWC equities portfolio was \$9,382 million on June 30, 2018. This was an increase of \$588 million compared to \$8,794 million on June 30, 2017. There were net outflows of \$539 million (see table Column F) from the BWC equities portfolio in FY18. These net outflows were all from its U.S. equities portfolio. There were \$370 million of U.S. equities redemptions made to fund the 2017 Third Billion Back premium rebate program. The remaining \$169 million of U.S. equities redemptions funded BWC operations. Accounting for these significant outflows, the adjusted fair value increase in the BWC total equities portfolio was \$1,127 million in FY18. The total net return of the BWC equities portfolio was 12.8 percent for FY18.

The total fair value of the BWC U.S. equities portfolio was \$6,504 million on June 30, 2018. This was an increase of \$392 million compared to the fair value of \$6,112 million on June 30, 2017. Accounting for the net outflows of \$539 million during FY18, the adjusted fair value increase of the U.S. equities portfolio was \$931 million during FY18. This represented a net return of 15.4 percent. The U.S. equities portfolio represented 69.3 percent of the fair value of the BWC total public equities portfolio on June 30, 2018.

The total fair value of the BWC non-U.S. equities portfolio was \$2,878 million on June 30, 2018. This was an increase of \$196 million in fair value compared to \$2,682 million on June 30, 2017. There were no inflows or outflows of funds during FY18 involving the passively managed non-U.S. equity commingled fund used by each of SIF, DWRF II and CWPF for all assets owned by BWC in this asset class. The BWC non-U.S. equities portfolio had a total net return of 7.3 percent. Unlike the past several fiscal years, the U.S. dollar had no change in exchange rate value compared to the composite basket of foreign currency stocks for the BWC owned commingled fund portfolio at year-end FY18 versus year-end FY17. The BWC commingled fund portfolio owned stocks was denominated in 40 separate foreign currencies as of June 30, 2018. The most prominent currencies represented in the BWC non-U.S. equities portfolio are the Euro, Japanese Yen and British Pound. These currencies represented a combined 50.4 percent of this portfolio’s fair value as represented in the FY18 audited financial statements. The Euro was the largest foreign currency representation at 23.9 percent of portfolio fair value.

Real estate portfolio values and return

The total fair value of the BWC real estate portfolio was \$3,267 million on June 30, 2018. This was an increase of \$461 million in fair value compared to \$2,806 million on June 30, 2017. There were additional capital investments totaling \$246 million made toward real estate funds in FY18. BWC made new capital investments totaling \$181 million toward three core plus real estate funds. BWC made the remaining \$65 million of capital investments toward seven value-added real estate funds.

BWC also received \$31 million in cash distributions from eight closed-end value-added real estate funds in FY18 that are not subject to reinvestment within these funds. Cash distributions received are starting to accelerate from early property investments made by BWC value-added funds. The \$31 million in cash distributions received in FY18 from value-added funds was double the \$15 million of cash distributions received in FY17. As a result, total net cash inflows invested toward real estate funds during FY18 amounted to \$215 million (see table Column F). Due to this investment activity, the adjusted fair value increase for real estate assets in FY18 was \$246 million as reflected in Column G of the table.

The real estate portfolio provided a solid total return net of fees of 8.3 percent in FY18. This was a higher net return compared to 7.6 percent for FY17. Real estate fund returns over the past two years remain good but have moderated as expected from their unsustainable high returns achieved by BWC of 10.2 percent for FY16, 14.5 percent for FY15 and 11.4 percent for FY14. The \$246 million of adjusted fair value increase of real estate assets for FY18 was comprised of \$113 million of dividend income and \$165 million of net realized/unrealized capital gains. Management fees expenses reduced this figure by \$32 million.

The total fair value of the BWC real estate portfolio on June 30, 2018, of \$3,267 million representing 12.1 percent of total BWC invested assets and 13.2 percent of total SIF invested assets. The real estate portfolio was represented on June 30, 2018, by seven core funds with total fair value of \$2,262 million, six core plus funds at \$726 million fair value and nine value-added real estate funds at \$279 million fair value. On June 30, 2018, core real estate funds comprised 8.4 percent of total fair value of BWC assets with core plus and value-added real estate funds comprising 2.7 percent and 1 percent, respectively, of total fair value of BWC assets.

Cash and cash equivalents

Total BWC cash and cash equivalents had a fair value of \$1,073 million on June 30, 2018, (4.0 percent of total assets at fair value). This compared to \$432 million on June 30, 2017, (1.6 percent of total assets at fair value). This large cash balance held at the end of FY18 was largely attributable to \$905 million of asset value liquidated from the SIF passive managed long duration government bond account eliminated with the investment policy revisions approved by the Board in May 2018 as discussed in this report. BWC positioned this large cash amount to fund the first phase of the Billion and Half premium rebate program that occurred in July 2018.

BWC used an institutional U.S. government money market fund offered by its custodian bank (JP Morgan Chase Bank) during all FY18 to earn interest income on its short-term invested assets. This included all overnight cash held by its outside investment managers in all managed separate accounts. In a continuation of FY17 when the Federal Reserve Bank raised its target federal funds rate by three times at 0.25 percent each, the Federal Reserve Bank raised this target rate three additional times by 0.25 percent each in FY18 to a range of 1.75 percent to 2 percent in June 2018. These actions resulted in the seven-day yield on the JP Morgan government money market fund to steadily increase during FY18 from 0.85 percent on June 30, 2017, to 1.79 percent on June 30, 2018. BWC earned \$6.2 million in interest income from cash and cash equivalents (via JP Morgan government money market fund) in FY18. This represented an average month-end net return on daily cash balances of 1.21 percent.

Portfolio interest rate sensitivity

BWC investment consultant RVK prepared an updated SIF fixed income portfolio sensitivity analysis based on the market value and composition of the SIF bond portfolio as of Sept. 30, 2018. This annual sensitivity analysis examined estimated changes in the aggregate market values of the SIF fixed income portfolio for given hypothetical increases in interest rate levels.

The annual RVK sensitivity analysis report examined the Sept. 30, 2018, SIF fixed income portfolio of assets since the composition of that portfolio has materially changed in asset class mix and related duration since the end of FY18 ended June 30, 2018. This is because of the significant SIF investment policy changes approved by the BWC Board of Directors in May 2018 and subsequently implemented by the investment staff for completion by the end of September 2018.

The SIF bond portfolio with a market value of \$12.44 billion on Sept. 30, 2018, had an estimated effective duration of 8.7 years on that date and an estimated duration of SIF total liability payments of approximately 10 years. This relatively close matching of the duration of SIF fixed income assets with its duration of liability payments is intentional and consistent with the stated investment policy. Because of the longer-term nature of many of its liability payments and its supporting long duration bond portfolio, the SIF bond portfolio market value is sensitive to movements in interest rate levels in both directions.

Below are some observations made from the RVK fixed income sensitivity analysis on the Sept. 30, 2018, SIF fixed income portfolio. These observations are based on defined interest rate movements over a one-year (12 month) time frame across the entire yield curve from 0 year to 30+ year maturities.

If interest rate levels remain unchanged, the total SIF fixed income portfolio could earn a return of +3.5 percent, resulting in an increase in market value of +\$439 million.

If interest rate levels increase by +0.50 percent, the total SIF fixed income portfolio could decline in value by -0.6 percent, resulting in a decrease in market value of -\$78 million.

If interest rate levels increase by +1 percent, the total SIF fixed income portfolio could decline in value by -4.4 percent, resulting in a decrease in market value of -\$550 million.

If interest rate levels increase by +2 percent, the total SIF fixed income portfolio could decline in value by -10.9 percent, resulting in a decrease in market value of -\$1,357 million.

Summary table

As referenced throughout this Annual Report, the table that follows provides a summary of asset class valuations, asset class sales to fund operations, transfers of funds involving transition activity and performance returns of asset classes of the total portfolio for FY18.

Prepared by: Bruce Dunn, CFA
BWC Chief Investment Officer
Nov. 7, 2018

Ohio Bureau of Workers' Compensation
Asset Class Fair Value/Performance Summary
Fiscal Year Ending June 30, 2018

(\$millions)	(A)	(B)	(C)	(D)	(E)	(F)	(G)	FY 2018 Annual Net Return
<u>Asset Class</u>	Fair Value 6/30/2018	Fair Value 6/30/2017	Actual Fair Value Change	Net from Portfolio Transitions	Net for Operations Fundings	Total Net Inflow/ (Outflow)	Adjusted Fair Value Change	
Bonds	\$ 13,229	\$ 14,763	\$ (1,534)	\$ (46)	\$ (1,559)	\$ (1,605)	\$ 71	- 0.1%
U.S. Equities	6,504	6,112	392		(539)	(539)	931	+ 15.4%
Non-U.S. Equities	2,878	2,682	196				196	+ 7.3%
Total Public Equities	9,382	8,794	588		(539)	(539)	1,127	+ 12.8%
Real Estate	3,267	2,806	461	246	(31)	215	246	+ 8.3%
Cash & Cash Equivalents	1,073	432	641	(200)	2,129	1,929	(1,288)	+ 1.2%
Net Change				0	0	0	156	
Total Invested Assets	<u>\$ 26,951</u>	<u>\$ 26,795</u>	<u>\$ 156</u>				*1,444	+ 5.1%

Column Definitions
C = A minus B
F = D plus E
G = C minus F

* Represents all fair value Asset Class changes except Cash & Cash Equivalents

Asset Class fair values shown include accrued investment income and Cash includes net trade payables/receivables

Amounts rounded to nearest \$1 million



2018 Report
**Outcomes and Savings of the Health
Partnership Program**

Outcomes and Savings of the Health Partnership Program

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The Health Partnership Program

The Health Partnership Program (HPP) has operated as BWC's system for providing managed care services since its implementation in March 1997. Per Ohio Revised Code (ORC) 4121.44 (H)(3), BWC must publish a report on the measures of HPP's outcomes and savings. BWC submits the report to the president of the Senate, the speaker of the House of Representatives and the governor. BWC prepares the annual report under division (F)(3) of section 4121.12 of the ORC. BWC's chief medical services and compliance officer directs the program under the direction of BWC's chief medical and health officer. The chief medical services and compliance officer coordinates management of the HPP with the chief medical officer and the chief of medical operations, appropriately using and making available a network of providers and managed care organizations (MCOs).

How HPP works

While determining compensability and paying indemnity benefits, BWC contracts with MCOs to manage the medical component of workers' compensation claims. MCOs educate employers and injured workers on HPP. They also process *First Report of an Injury, Occupational Disease or Death* (FROI) applications. In addition, MCOs help employers establish transitional/early return-to-work programs. Finally, MCOs process medical bills and make provider payments.

BWC monitors MCOs' managed care performance. For example, it measures the effectiveness of the MCOs' return-to-work efforts using the Measurement of Disability metric. BWC also measures MCOs' FROI timing, FROI data accuracy, bill timing and bill data accuracy. Further, it publishes most of these measures in an annual MCO Report Card, available on www.bwc.ohio.gov. BWC encourages employers to view this report before selecting an MCO. Twelve MCOs serve Ohio's employers and injured workers.

BWC Medical Services objectives

BWC strives to ensure prompt, quality, cost-effective health care for injured workers to facilitate their early, safe and sustained return to work and quality of life. BWC's Medical Services and Compliance Division, the Chief Medical Officer Division and the Medical Operations Division coordinates health-care delivery through a network of certified providers and MCOs. BWC accomplishes this by using management, pricing and payment strategies that benefit injured workers and employers. Specific supporting responsibilities include:

- Developing, maintaining and executing quality and cost-effective medical and vocational rehabilitation benefits plans and associated fee schedules.
- Developing and supporting the appropriate managed-care processes, including contract management and training.
- Establishing and maintaining a quality pool of medical and vocational service providers to ensure injured workers have access to quality, cost-effective and timely care.
- Developing and implementing appropriate medical and vocational policies, rules and training, which address the management from inception to resolution of all medical and vocational issues arising out of an allowed claim.
- Evaluating and processing medical bills, guaranteeing proper and timely payment consistent with benefits plan criteria.

During fiscal year 2018 (FY18), BWC made positive progress on initiatives undertaken to support existing divisional and BWC enterprise business objectives and strategies. The remainder of this report provides selected highlights of HPP activities and outcomes.

External engagements

BWC's chief medical services and compliance officer and chief medical officer participated in Rising Healthcare at the sixth annual Workers' Compensation Benchmarking Study invitation-only, think tank event. This day-long study symposium, held in Chicago in June 2018, explored how industry leaders are driving success in the challenging area of medical inflationary trends. The symposium's focus group research will be the foundation for this year's annual Workers' Compensation Benchmarking Study Report.

The chief medical officer presented BWC's outcomes in response to the opioid epidemic at the Workers' Compensation Research Institute's Annual Research Meeting in Boston in March 2018. The group regarded the ongoing efforts and results from our pharmacy department as exemplary.

The chief medical officer staff also actively participates in the International Association of Industrial Accident Boards and Commissions (IAIABC). The IAIABC is an association of workers' compensation jurisdictional regulatory agencies and industry stakeholders. The organization finds solutions to reduce harm and aid recovery from occupational injuries and illnesses. The director of the medical program is the Medical and Health Division's representative. Our representative participates as a member of the IAIABC Medical Issues Committee. Initiatives participated in include monthly teleconference calls, the IAIABC Annual Forum (held in the spring) and the fall Annual Conference. IAIABC initiatives actively supported included the recent release of the IAIABC Opioid Policy Inventory and a 2018 forum on telehealth use in workers' compensation. The opioid policy inventory was a collaborative among members to examine and publish 23 strategies states have implemented to make a positive difference on the opioid epidemic.

The Medical and Health Division collaborated with other agencies and partners to continue to address the opioid epidemic's impact on Ohio's workforce. BWC made a \$5 million commitment over two years to improve workplace health and safety by assisting employers in hiring, retaining and managing workers in recovery. This Opioid Workplace Safety Pilot Program will fund drug testing, management, training and provide a forum for second-chance employers to present their successes. Local ADAMH boards in Montgomery, Ross and Scioto counties will manage the funding.

The division also supported the Ohio Department of Job and Family Services (ODJFS) in its proposal for National Health Emergency Dislocated Worker Demonstration funds. If awarded, the funds could work in synergy with the workplace safety pilot by providing wage support, job training, management and human resources training and peer support.

ODJFS also received a phase 1 grant (\$2.5 million) for the Ohio Retaining Employment and Talents After Injury/Illness Network demonstration project. Ohio was one of the eight states awarded funding. Medical and Health Division staff will serve as subject matter experts for the medical care model. They will also liaison with the health-care partner for the project. If successful in phase 1, Ohio will be eligible for a \$19.7 million phase 2 grant, awarded to four states. This demonstration project is to test the application of successful, evidence-based occupational medicine practices to non-occupational injuries and illnesses which put workers at risk for separation from work.

Finally, in collaboration with the State of Washington Labor and Industries and the University of Washington, the division will participate in a \$2.5 million grant from the Patient Centered Outcomes Research Institute to study strategies to prevent unsafe opioid prescribing.

HPP rules

Ohio Administrative Code (OAC) 4123-6-33 Payment for Health and Behavior Assessment and Intervention Services

Medical Services implemented this new rule, which provides standards and criteria governing reimbursement for health and behavior assessment and intervention (HBAI) services offered to injured workers who:

1. May benefit from an assessment that focuses on identifying behavioral barriers impeding the injured worker's recovery.
2. And which the intervention services may address.

The focus of HBAI services is not on mental issues but on appropriately assessing, identifying and addressing cognitive, emotional, social, behavioral and psychological barriers to the treatment and recovery of physical health problems. Application of HBAI services in the workers' compensation system, as in the broader health-care system, is for individuals who do not meet the criteria for a psychiatric allowance and/or diagnosis.

The complete actions taken to fully implement the BWC approach to HBAI services included:

1. Modifying the coverage status for the Assessment, Reassessment and Coaching/Counseling services codes from not routinely covered to covered. This change became effective Jan. 1, 2018. This coverage change was to accommodate the new lumbar fusion surgery rule, which requires an HBAI assessment and related services if needed as part of the conservative care approach prior to performance of a lumbar fusion surgery.
2. As indicated above to address concerns and provide clarification to all parties on HBAI services, we completed and released a HBAI policy on April 1. Just prior to the release of that policy the Medical and Health Division conducted two lunchtime WebEx training sessions on HBAI services utilization. Our chief medical officer and our medical programs director executed the training. After that training, we provided a Frequently Asked Question document to augment information covered at the training to the attendees and the MCOs.
3. Finally, we completed the HBAI services rule, which further clarified specific expectations and guidelines for application and use of HBAI services. This rule became effective in July 1, 2018.

Benefits plan design

Prompt, effective medical care is crucial for those injured on the job. Such care is often the key to a quicker recovery, timely return to work and quality of life for injured workers. Maintaining the right benefit plan design and service-level reimbursement ensures access to quality, cost-effective service.

Access for injured workers means the availability of appropriate treatment. Having access to appropriate treatment facilitates faster recovery and a prompt, safe return to work. For employers, it also means the availability of appropriate, cost-effective treatment provided based on medical necessity.

Implementing a sound and effective provider fee schedule is a critical component of maintaining an effective benefit plan. As required by rules and law, and to ensure injured workers access to quality care, BWC establishes discounted yet competitive fee schedules. BWC annually reimburses more than 28,000 providers for medical and vocational services rendered to Ohio's injured workers. An equitable and competitive fee for the right medical service is essential to maintain a quality provider network across the wide range of necessary provider disciplines.

BWC continuously improves its medical, vocational rehabilitation and pharmaceutical services offerings. This results from executing quality methodologies and protocols for revising benefits plans and their corresponding fee schedules. We strive to review all fee schedules annually.

BWC paid providers nearly \$531 million for medical and vocational services during FY18, which is \$18.3 million less than payments made in FY17. For FY17 BWC paid \$549.3 million, which is \$29.5 million less than payments made in FY16.

BWC has achieved those reductions while continuing to follow four objectives:

1. To maintain stability in the environment and reimbursement methodologies.
2. To ensure injured workers access to quality care.
3. To promote efficiency in the provision of quality services.
4. To maintain a competitive environment where providers can render safe effective care.

Those four objectives also continued to guide BWC’s evaluation of Ohio’s reimbursement methodologies and the development of recommendations for FY18-19. As a result, BWC made minimum changes to most of the agency’s reimbursement methodologies and protocols. Per adopted recommendations for FY17 and FY18, BWC expects total medical and vocational services reimbursements to remain relatively stable depending on injury mix and services utilization mix and rates. Below is a summary of the fee schedules, their effective dates and projected impacts on the medical and vocational service spend.

Chart 1

Fee schedule	Effective date	Board presentation and approval periods	Fee schedule description
Medical providers and services	Jan. 1, 2019	August 2018 September 2018 December 2018	Covers all medical providers and medical services not covered by any of the other schedules (OAC 4123-6-8) Projected 2019 impact: 0.4-percent spending increase
Hospital outpatient	May 1, 2018	November 2017 December 2017	Covers facilities for outpatient services (OAC 4123-6-37.2) Projected 2018 impact: 2-percent spending increase
Hospital inpatient	Feb. 1, 2019	August 2018 September 2018	Covers facilities for inpatient services (OAC 4123-6-37.1) Projected 2019 impact: 0.4-percent spending decrease
Ambulatory surgical centers (ASC)	May 1, 2018	November 2017 December 2017	Covers surgical procedures not requiring inpatient hospitalization (OAC 4123-6-37.3) Projected 2018 impact: 3-percent spending increase
Vocational rehabilitation services	TBD	TBD	Covers all vocational rehabilitation services (OAC 4123-18-09)

The Medical Services Division performs routine audits to maintain the integrity of the system, clarifying or adjusting benefits and policies as needed to promote the objectives outlined. The hospital review unit audits approximately 573 hospital bills annually. 31.9 percent, or 183 of those bills yielded an error in payment or an omission of data elements. Of 87 high-dollar hospital bills, BWC re-priced four after the audit resulted in an overpayment variance of \$510,653.

The reimbursement and coding department provides policy support to MCOs, BWC departments and providers. During the past year, the department addressed 388 inquiries. In addition, it processed another 61 requests for payment above the fee schedule. Payment above fee schedule requests offer BWC the opportunity to consider and to provide a second level of authorization for special circumstances when an injured worker has unique needs that require payment above the fee schedule. BWC also uses that opportunity to consider if factors occur often enough that the fee schedule might need adjusted for the items most frequently requested for above the fee schedule consideration.

To ensure the fee schedule development process adheres and supports BWC's goals and objectives discussed previously, BWC includes the recommendations of national Medicare expert consultants to evaluate the appropriateness of the fee schedule strategy. This process occurs in line with the annual rule release by Medicare for the inpatient, outpatient, professional provider and ambulatory surgical center (ASC) fee schedules. Medicare has made significant advances transitioning to more of a pay for performance methodology versus straight fee for service. In FY18, BWC began planning for a two-day strategy session with national consultant, Nimmit Consulting, to include developing future strategies BWC could employ to accomplish a transition to more pay for performance. Additionally, this consultant assisted in planning and executing an update to the Medical Services and Safety Committee of the BWC Board of Directors, as well as BWC's internal departments and external stakeholders. We planned this 30,000-foot view of the shifting health-care payment paradigm from volume to value in FY18 and delivered it early in FY19. Value-based strategies include bundles or episodes of care, which incentivize providers to coordinate care across specialties, reduce unnecessary and duplicate testing, and meet cost benchmarks.

Members of the reimbursement and coding department attended nationally attended Medicare reimbursement boot camps focused on hospital and professional provider strategies, to evaluate the alignment of BWC's fee schedules to current Medicare fees. In FY19, the team plans to attend four additional nationally attended revenue cycle boot camps. This will further solidify our expertise, and improve the coverage and fee schedule knowledge. We will continue to evaluate the value-based strategies, considering the best application for BWC's population. This work will continue throughout FY19.

Ambulatory Surgical Centers' Arthroplasty Program

BWC continues to evaluate and undertake initiatives to improve access to care for Ohio's injured workers. As part of the 2016 ASCs' reimbursement development activities, BWC initiated actions to develop a certification program that begins allowing physicians to perform certain joint arthroplasties within ASCs. An arthroplasty is a surgical replacement or reconstruction of a joint. This expansion of services for the ASC setting is an exercise of a unique departure from BWC's normal determination of which services physicians will perform at ASCs. BWC will generally follow Medicare's determination of which services physicians can perform in the ASC setting. However, when appropriate, BWC deviated from Medicare in not only reimbursement methodologies but also services available for injured workers.

This willingness to deviate from Medicare when it's appropriate occurred in 2014 when BWC, with the BWC Board of Directors' approval, began to allow physicians to perform the service of lumbar microdiscectomies in ASC facilities. In 2014, Medicare did not allow physicians to perform that procedure in the ASC setting. It changed that position in 2015.

Guiding BWC's determination to deviate from Medicare is the fact that Ohio's workers' compensation population is quite different from the Medicare population. The injured worker population is younger and generally in better condition than Medicare patients. This presents a greater opportunity for physicians to perform other types of services safely and effectively in the ASC setting.

BWC will eventually include 10 procedures in the arthroplasty program. As illustrated in Chart 2, physicians perform two of the procedures in hospital inpatient and outpatient settings. Physicians perform the remaining eight only in an inpatient setting.

Chart 2

CPT	Description	2017 Medicare coverage	BWC Coverage
23470	Arthroplasty, glenohumeral joint; hemiarthroplasty	Hospital inpatient and outpatient	Added ASC May 2016
23473	Revision of total shoulder arthroplasty, including allograft when performed, humeral or glenoid component	Hospital inpatient and outpatient	Added ASC May 2016
23472	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement)	Hospital inpatient only	To be added outpatient and ASC May 2018
27125	Hemiarthroplasty, hip partial	Hospital inpatient only	To be added outpatient and ASC May 2018
27130	Arthroplasty, acetabular and proximal femoral prosthetic, with or without autograft or allograft	Hospital inpatient only	Added Outpatient and ASC May 2017
27132	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft	Hospital inpatient only	To be added outpatient and ASC May 2018
27445	Arthroplasty, knee, hinge prosthesis	Hospital inpatient only	To be added outpatient and ASC May 2018
27447	Arthroplasty, knee, condyle and plateau, medial and lateral compartments with or without patella resurfacing	Hospital inpatient only	Added outpatient and ASC May 2017
27702	Arthroplasty; ankle, with implant (total ankle)	Hospital inpatient only	To be added outpatient and ASC May 2018
27703	Arthroplasty, ankle; revision, total ankle	Hospital inpatient only	To be added outpatient and ASC May 2018

ASCs provide a safe and convenient alternative to having these procedures performed in a hospital setting. Allowing physicians to perform these procedures in ASCs will improve access to care by giving injured workers additional treatment options. It also potentially reduces costs for the system. ASCs are a more cost-effective alternative, as they have much lower cost structures than hospitals. In 2011, Medicare reimbursements as a percentage of hospital outpatient department reimbursement were about 56 percent.

For the program’s initial phase, BWC on May 1, 2016, implemented two hospital outpatient procedures — a partial shoulder replacement (CPT 23470) and a revision of a total shoulder replacement (CPT 23473). As of May 1, ASC facilities that BWC certified to perform arthroplasty procedures could also undertake those two procedures.

Phase two of the arthroplasty expansion included two additional procedures, which BWC will permit in the outpatient and ASC settings. BWC included total hip (CPT 27130) and total knee (CPT 27447) in the 2017 implementation of the Outpatient and ASC fee schedule updates effective May 2017. BWC will complete phase three with the fee schedule updates scheduled for May 2018 and will include the remaining six services from Chart 2.

BWC wants to make sure it has adequate requirements in place to ensure physicians perform these procedures safely and effectively. Thus, as part of the program setup, ASC facilities will need additional certification to have physicians perform these services at their facilities. As detailed in the proposed rule, ASCs that apply to participate in this program must meet the following criteria:

- BWC-certified.
- Joint replacement program in place for at least one year.
- Target procedure(s) previously performed at the ASC.
- Adequate physician credentialing criteria.
- Adequate patient selection criteria.
- Reports Medicare and the Ohio Association of Ambulatory Surgery Centers OAASC quality measures (data potentially used to develop quality thresholds in the future).

Medical Services will collect data on the program to ensure injured workers receive quality medical care. The division will review the outcomes of each BWC injured worker against the established quality measures for Medicare and the OAASC. It also will track other measures such as return-to-work time frames to determine program impacts. In addition, the Medical Services and Compliance Division will track and monitor overall program outcomes such as:

- Number of and credentials of surgeons performing the service.
- Number of participating ASCs.
- Volume of services performed.
- Individual ASC performance (i.e., report cards).
- Estimated cost savings.
- Feedback and suggestions from ASCs, physicians, MCOs on workflows and administrative issues.

If any BWC claimant experiences an MCO or ASC reported or BWC-identified complication, or perceived negative outcome, Medical Services will send the case to a BWC clinical review committee and/or the HCQAAC. The committee or HCQAAC will assess the severity of the outcome and recommend action.

Finally, BWC will re-credential and re-certify these facilities every two years to ensure these facilities and the treating physicians continue to provide high quality care for our injured workers.

To date, BWC has billed 20 procedures. However, BWC only reimbursed three due to providers not meeting the program certification requirements. Physicians performed 304 procedures in the hospital outpatient location.

Performance based metrics

Medical Services' goal is to include performance based metrics embedded in each fee schedule methodology. Currently, BWC uses these metrics for reimbursement of the inpatient prospective fee schedule and has done so since 2013. One of those performance outcome components was the hospital readmissions reduction program. This program penalized hospitals that have an excess of patient readmissions after discharge. BWC chose in 2013 not to adopt this outcome measure at that time as the program was new and somewhat controversial. However, we re-evaluated the applicability of this measure in 2015 and chose to recommend adoption. Since 2015, BWC implemented all CMS quality metrics for this fee schedule.

Chart 3 below graphically demonstrates the financial impacts to hospitals from not waiving the penalties associated with quality indicators for inpatient care in both 2017 and the proposed impact for 2018.

Chart 3

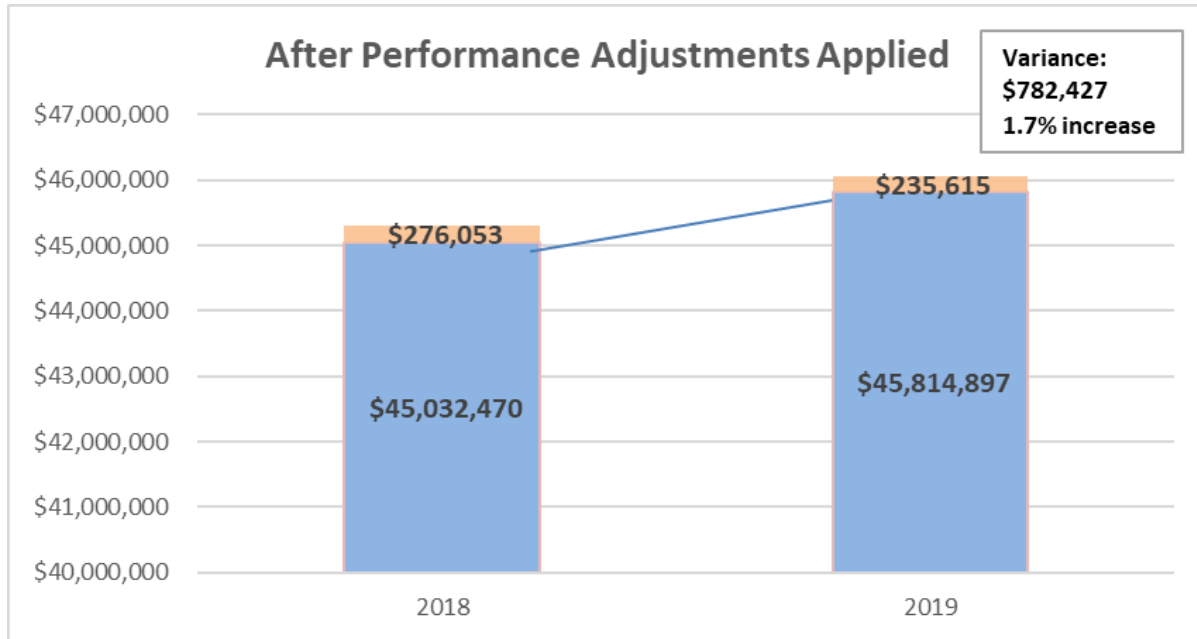


Chart 4 includes all relevant quality metrics currently incorporated in the inpatient fee schedule.

Chart 4

Program	Description	Incentive Type	Estimated Impact
Inpatient quality reporting	Hospitals must report quality measure or face reduction	Penalty	\$476 reduction for both programs
Electronic health record (EHR) meaningful use	Hospitals receive reduction for not adopting EHR technology	Penalty	
Value based purchasing	Hospitals rewarded or penalized for quality performance	Reward or penalty	\$24,703 reduction
Hospital acquired conditions	Hospitals not paid for treatment of hospital acquired conditions	Penalty	N/A, case based
Hospital acquired conditions reduction	Lowest performing hospitals (25%) face additional reduction	Penalty	\$113,260 reduction
Hospital readmissions reduction	Hospitals with excess readmissions for certain conditions face reductions on all claims	Penalty	\$97,176 reduction

Policy coordination

The Medical Services Division initiated a process to develop symmetry between the look and feel of reimbursement and coding policy. The *Billing and Reimbursement Manual* underwent a complete review, which resulted in a re-release in October 2017. Relevant and interested department representatives from across the organization participated in this update.

The *MCO Policy and Reimbursement Guide* is also under review to incorporate more appropriate complementary language referring to the Billing and Reimbursement Manual when appropriate, instead of repeating the manual. Therefore, reducing the risk of contradictory information between the guides.

During the past year, BWC released three policy alerts clarifying max unit updates for cognitive therapy, pass-through billing limitations and MCO pricing override requirements. Medical Services has initiated a quarterly *Billing and Reimbursement Manual* update schedule that began in FY18 with three releases. These included development and release of detoxification treatment program reimbursement guidelines, health behavior and risk assessment, and intervention services and treatment plans involving lumbar fusion. BWC continues progress in the development of comprehensive reimbursement policies for upper and lower limb prosthetics, and telemedicine for FY19 expected release.

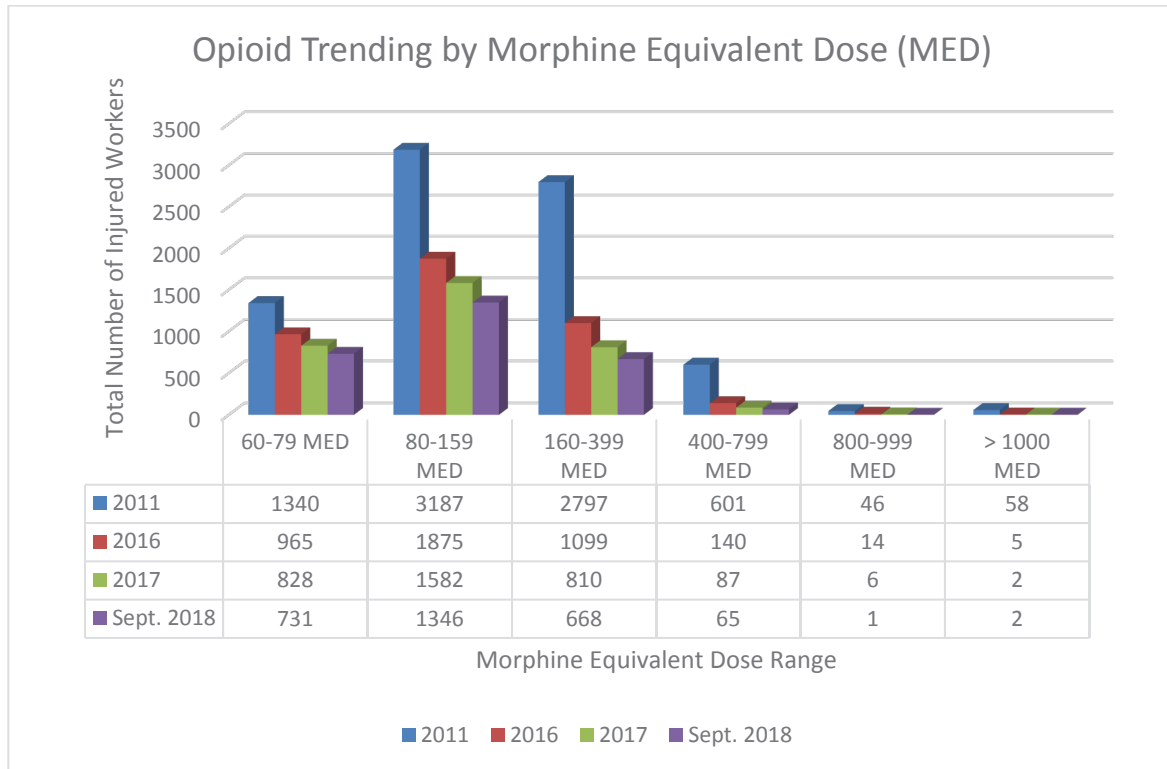
Pharmacy program

BWC's pharmacy program implemented a formulary for prescription drugs that became effective Sept. 1, 2011. When comparing FY18 with the base FY11 before the formulary became effective, the agency experienced:

- An 84-percent reduction in prescriptions for skeletal muscle relaxants.
- A 64-percent decline in prescriptions for opioids.
 - This represents a drop of nearly 27 million doses of opioids covered by BWC.
- An 88-percent reduction in prescriptions for anti-ulcer agents.

In January 2010, the BWC pharmacy program initiated a monitoring program focused on opioid use among injured workers. The total average opioid load (as measured in milligrams of morphine equivalent doses) of injured workers has consistently declined for the past 32 quarters. Chart 5 shows the morphine equivalent dose monitoring from 2011 through September 2018. BWC pharmacy program innovations and continuous clinical oversight has led to a 65-percent decrease in injured workers taking greater than or equal to 60 morphine equivalent doses per day.

Chart 5



BWC experienced a \$52.4 million (39 percent) reduction in total prescription drug costs in FY18 compared with FY11.

To improve the prescription review process for providers, in August of 2016, the pharmacy program assumed responsibility for processing manual prior authorization requests. Response time has improved from an average of 2.5 days to less than four hours.

To enhance the health care of injured workers, in October 2016, the pharmacy program enacted a new rule (OAC 4123-6-21.7) that requires the use of best practices as defined in national and Ohio prescribing guidelines when prescribing opioids for longer than 12 weeks. The rule also allows for treatment of opioid dependency without that condition having to be allowed in the claims.

Managed-care processes

From June 2017 to April 2018, BWC approved three mergers of MCOs. This brought the number of MCOs under contract with BWC to 12. Throughout any merger process, BWC gives the employers assigned to the non-surviving MCO the option to select a different MCO. This ensures employers maintain their right to select an MCO of their own choice. The surviving MCO inherits the performance of the non-surviving MCO. This also ensures all claims remain actively managed, regardless of whether the claim originated with the surviving MCO or not. The current contractual term covers Jan. 1, 2018, through Dec. 31, 2020.

MCO 2016-2017 contract

BWC and the MCOs executed a contract that became effective on Jan. 1, 2018. It remains effective to Dec. 31, 2020. The terms of the contract continue to build on the work begun under the most recent BWC-MCO contracts. The contract reflects the following BWC goals:

- A greater focus on quality outcomes for injured workers and employers.
- Increased effectiveness of the MCOs in execution of their responsibility for the management of the medical portion of a claim.
- Increased effectiveness of the MCOs in execution of their responsibility for return-to-work and remain-at-work management.
- Increased collaboration between BWC' claims staff and the MCOs' medical management staff in:
 - Capturing and exchanging relevant medical documentation and information.
 - Reducing redundancy in communicating with medical services providers, employers and injured workers.
- Increased focus of the MCOs in providing on-site case management to Ohio's most seriously injured workers.
- Increased MCOs' incorporation of innovative approaches to managing medical care.
- Reduction of redundancy and duplication of efforts.

Relying on those goals, BWC continues to place emphasis on finding methods to foster continued focus on meeting these objectives. The four areas of focus are:

1. Ways in which the HPP can better mainstream with standard health-care delivery and medical management approaches to address medical and vocational needs arising out of a workplace accident.
2. Increasing the focus on MCOs actively managing the medical portion of claims from day one of a workplace injury.
3. Identifying ways to reduce the use of prescriptive policies and/or rules that dictate how to perform tasks by implementing better performance and quality outcomes metrics, which allow the MCOs to determine the best approach to execute the HPP intent and related tasks.
4. Enhancing the approach to MCO services reimbursement to better align payments to reflect MCOs' success on high-valued returns versus perceived imbalance of current compensation for basic administrative tasks.

With the execution of the 2018-2020 MCO Agreement, BWC continued to focus on MCOs performing on-site case management visits with injured workers, their families and providers in furtherance of managing the medical portion of claims. The policy developed a strong focus on the use of this tool for catastrophic claims. However, we also accepted the utility of on-site visits in non-catastrophic cases when certain barriers to recovery or return to work are noted.

BWC's expectations are that effective on-site case management will:

1. Result in an improvement in tracking of injured worker progress and treatment compliance.
2. Facilitate the sharing among providers of critical information such as medications, diet and upcoming medical appointments.
3. Help reduce complications and errors, which cost both time in recovery to the injured worker and increased expenditures to the compensation system.

BWC reimbursed on-site visits at \$250 per visit. BWC recognized that not all MCOs might have the infrastructure to execute this task in-house. Thus, BWC implemented a rule change that provided the MCOs the opportunity to outsource this service. Before pursuing this option, MCOs must receive approval from BWC and continue to maintain their requirements to manage the medical part of the claim. To gain this approval, the MCOs must submit a detailed request to BWC for consideration. At present, one MCO requested and received approval to contract for these services through a vendor.

Continuing the approach initiated with the 2016-2017 MCO Agreement, BWC kept in place a series of exceptional performance incentive programs. BWC designed these incentives to improve the quality of life for an injured worker, reduce the risks associated with medication use and/or increase the potential for an injured worker to return to the workforce. Under the terms of the contract, MCOs could earn incentive monies for exceptional performance in the following four key areas:

- a. Medication management – 25-percent opportunity.
- b. Transitional work – 20-percent opportunity.
- c. Vocational rehabilitation – 25-percent opportunity.
- d. Legacy claim management– 30-percent opportunity.

The total incentive opportunity available to the MCOs under the 2018-2020 MCO Agreement is \$4.5 million dollars during each year of the contract. BWC allocates that amount across the four areas based on a consideration of the challenge, impact opportunity and optimal end-objective.

A summary description below provides additional insight on each of the measures and the overall impact during 2017.

Exceptional performance measures description

1. Medication management

Medication management consists of two primary areas of focus: elderly injured workers and injured workers on high-risk drug regimens. In both instances, two expectations drive the incentive measures.

- Ensure injured workers take appropriate medications.
- Monitor them to ensure the medication they take are not harmful or place the injured workers at greater risk of death due to an overdose.

For elderly injured workers, the population includes those more than 65 years of age who take a medication on the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults (2015) as published by the American Geriatrics Society. To earn incentive payments for this measure, BWC requires MCOs to intervene with prescribers to either eliminate the medication from the injured workers regimen or provide guidance in the selection of a more suitable medication not on the Beers list.

For injured workers prescribed high-risk drug regimens, the population includes injured workers who take four or more of eight Generic Product Identifier (GPI) groupings known to increase the risk of patient death when taken in combination. To receive incentive payments for this measure, MCOs must work with prescribers to reduce the number of therapeutic classes prescribed to an injured worker to three or fewer or reduce the dosage amounts by 15 percent or more.

Five MCOs earned payment for the medication management measure during 2017. The MCOs efforts resulted in a positive change to injured workers' medication therapy based on 225 interventions with prescribers. During these interventions, MCOs educated and informed the prescribers of the risks noted in each case.

2. Transitional work

The transitional work measurement consists of two key areas:

- Increasing the award of transitional grants to employers.
- Increasing the use of transitional return to work opportunities.

BWC has a Transitional Work Grant Program. However, the program is not reaching its potential, as BWC is not awarding the grant monies that are fully possible. Recognizing a need to grow the Transitional Work Grant Program, BWC designed this measure to incentivize MCOs in assisting employers to develop complete transitional work grant applications, which BWC may approve and then award a grant. With more transitional work programs in place, BWC expects injured workers will have a better path to return to the workforce earlier in the life of a claim and in jobs that can accommodate any restrictions until the injured worker has recuperated.

The second key component of the transitional work measurement is the use of transitional return to work. This holds true regardless of whether an employer has an approved transitional work grant program. For this measurement, MCOs will need to work closely with providers to determine whether an injured worker may safely return to work with restrictions. The MCO will then work with an employer to see that an injured worker returns to work in a light duty/transitional work capacity and remains at work for at least 30 days. As experience has shown, the longer an injured worker remains out of the workforce, the more difficult it becomes for him or her to return to work. BWC designed this measurement to encourage the safe, effective return to work early in the life of a claim and to remove any barriers that may impede an injured worker's ability to return to work.

Twelve MCOs earned payment for the transitional work measurement. That represented the awarding of 65 new transitional work grants, a 54-percent increase over the prior year. More than 2,484 injured workers returned to work and remained at work in a transitional work setting, a 58-percent increase over the prior year.

3. Vocational rehabilitation

Unlike the transitional work incentive, BWC aimed the vocational rehabilitation incentive at increasing the use of vocational services when it is unlikely that an injured worker can return to his or her same employer or same job and has been out of the workforce for three years or less. This measurement also has two key areas: appropriate decision-making and positive outcomes.

BWC's noted experience with the use of vocational rehabilitation indicates only about 2 percent of eligible claims are referred for vocational rehabilitation. BWC wants to see that percentage increase. Therefore, BWC designed this measurement to increase the number of appropriate referrals while ensuring staff assigns referrals to a vocational rehabilitation case manager, resulting in the development of vocational rehabilitation plans. Conversely, BWC does not expect to see an increase in the percentage of pre-plan closures. This would otherwise indicate the injured workers referred were not appropriate for using vocational rehabilitation services.

With appropriate claim selection for referrals, BWC expects the outcomes in those claims will result in more injured workers returning to the workforce for sustained periods of 30 days or more.

Thirteen MCOs received payment based on their efforts in the vocational rehabilitation measure. More than 455 injured workers returned to the workforce and remained at work for sustained periods of time, a 67-percent increase over the prior year.

4. Legacy claim return to work

As the last measurement piece on the return-to-work continuum, BWC aimed the legacy claim return-to-work measure at addressing injured workers who are out of the workforce for three or more years. BWC gives MCOs broad discretion to determine what tools they may best use to assist an injured worker with returning to the workforce. MCOs will receive credit for each injured worker that they successfully return to work for at least 30 days. BWC recognizes these claims may be the most difficult to resolve. However, these claims have the greatest impact on the workers' compensation system and on injured workers' lives. The ability to return even one injured worker to the active workforce:

- Reduces the compensation paid.
- Improves the opportunities for the injured worker to increase her or her earnings and receive benefits.
- Facilitates the injured worker in becoming a productive member of society once again.

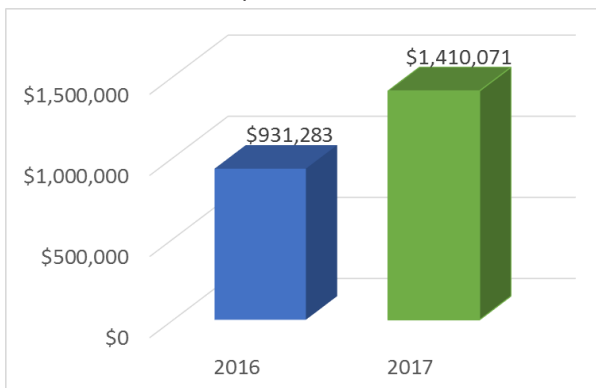
For these reasons, this measurement consists of 30 percent of the possible payments for all exceptional performance payments.

BWC also initiated a new Exceptional Performance Measure in March 2018 to support the Better You, Better Ohio!™ wellness initiative. BWC designed this measure to encourage injured workers who had a recent work-related injury and one or more of nine specified comorbidities to enroll in the wellness program and complete a health risk assessment. With greater emphasis on overall health and encouragement to reduce factors such as smoking and obesity, BWC and the MCOs are working together to create a healthier workforce, and one that can avoid injuries or rebound from injuries more quickly.

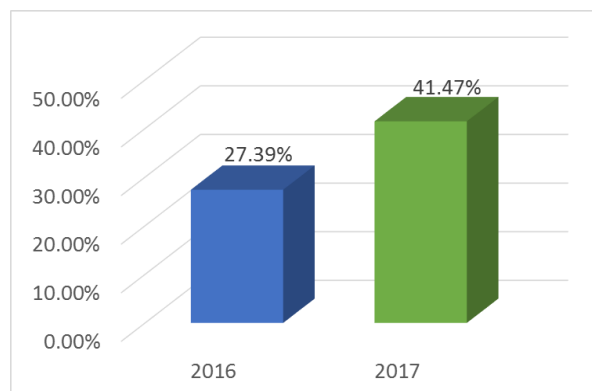
MCO 2016 and 2017 exceptional performance results

Except for the wellness program exceptional performance measure, all other exceptional performance measures have been in place for 2016 and 2017. MCO performance over all exceptional performance measures increased. Exceptional performance payout increased by 51 percent.

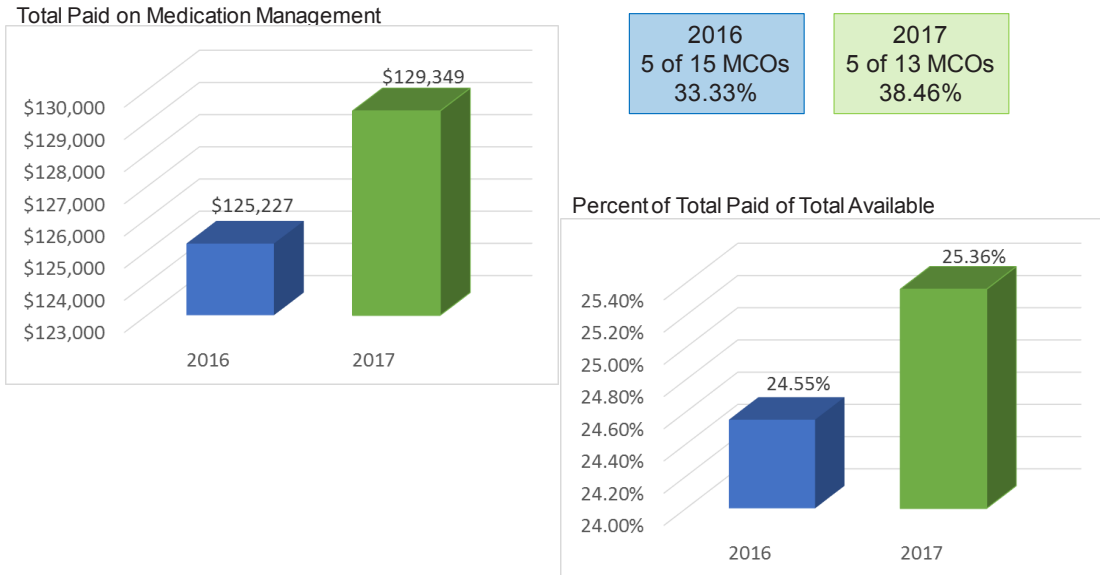
Total Paid on All Exceptional Performances



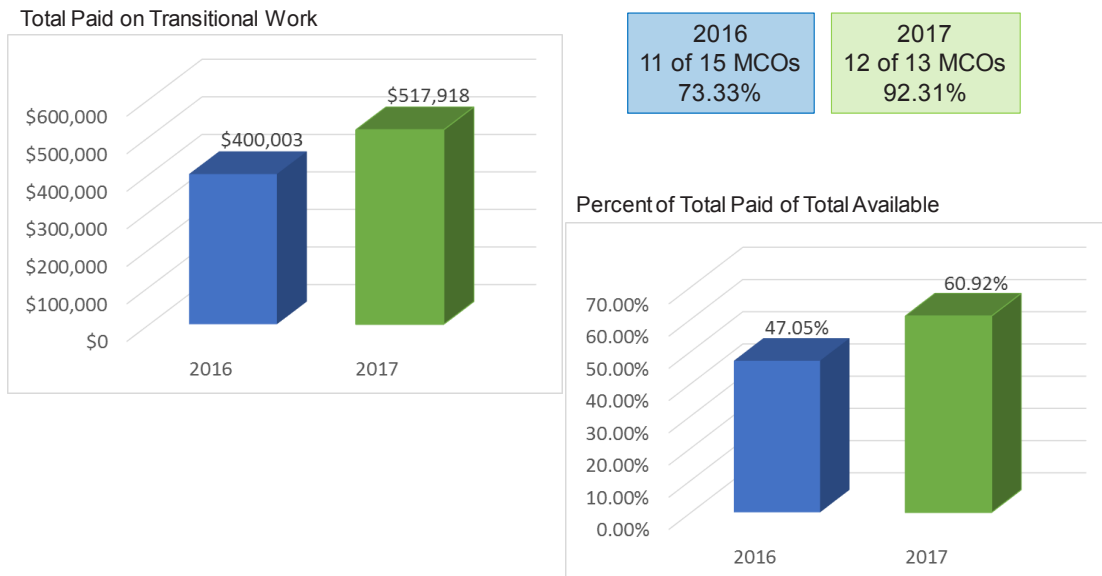
Percent of Total Paid of Total Available



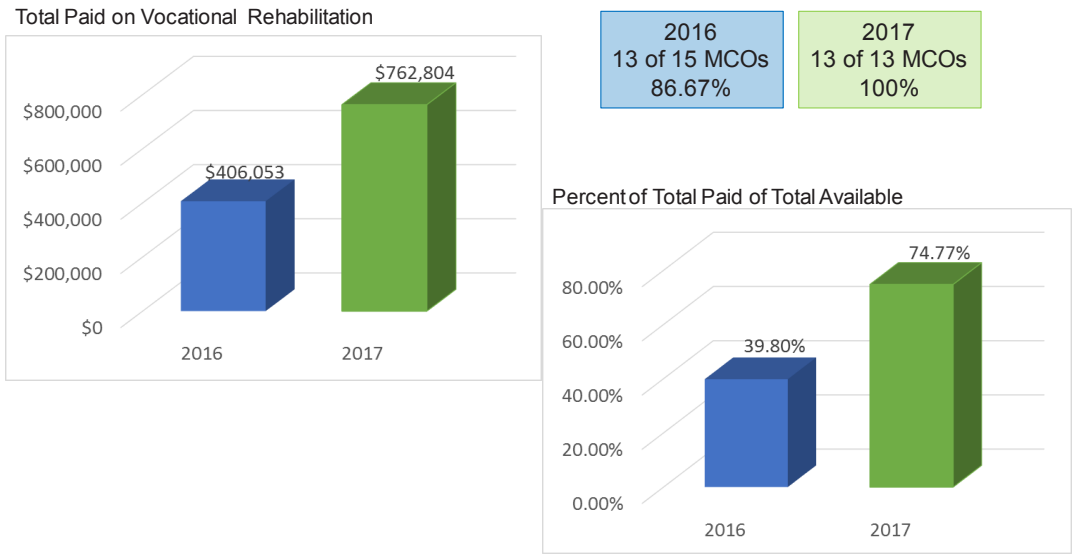
As illustrated by the graph below, improvement between 2016 and 2017 occurred in medication management. However, it was evident that opportunity still existed. The payout for this measure increased by 3.3 percent. Therefore, as part of the actions taken to improve in this area, BWC had the MCO, which performed the best, provide a presentation to the other MCOs highlighting the actions steps it took to achieve exceptional performance. In addition, there has been individual medical services staffing with other MCOs to help identify improvement opportunities.



The MCOs performed much better with transitional work, with the payout increasing by 29.5 percent.



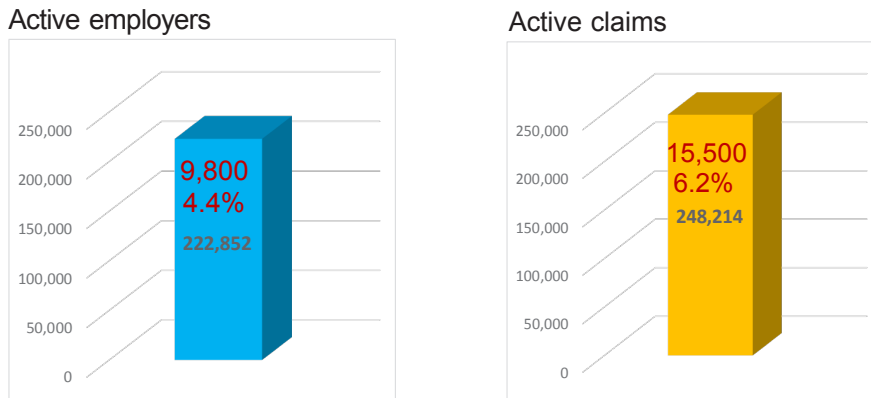
Vocational rehabilitation showed the most improvement, with payout increasing by 87.9 percent.



There were no incentives paid for legacy-claim activity. While there were no monies paid, this does not mean there were no successes. Rather, the level of success did not hit the benchmarks established. Therefore, we re-examined the graduated earning methodology around this measure under the 2018-2020 MCO Agreement. We anticipate that MCOs will successfully earn incentives in 2018. BWC remains committed to seeing that injured workers who have been out of the workforce for more than three years remain an area of focus. BWC wants the MCOs to continue to actively manage these claims.

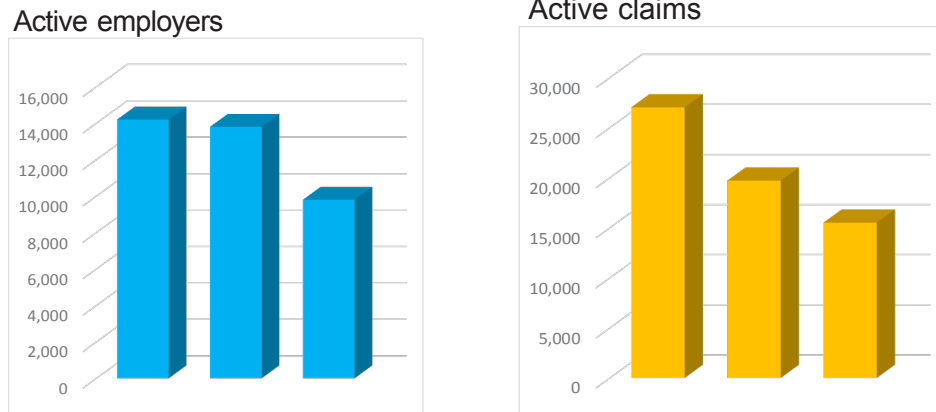
MCO open enrollment

The last half of FY18 included the key activity of MCO open enrollment. This process runs every two years. It provides employers the opportunity to select a new MCO to manage the employer’s workplace injuries. This period’s open enrollment activity ran from April 29 to May 25. Overall, the process executed very smoothly, with the medical services staff managing the first open enrollment under PowerSuite. In addition to PowerSuite, the open enrollment occurred after the team successfully completed an MCO merger. This action added the complexity of differentiating between those employers the new MCO absorbed versus those employers selecting the same MCO due to open enrollment.



The above graphs provide a summary view of the results of the 2018 open enrollment. There were more than 222,000 active employers impacted by the process. Of those employers, 4.4 percent or more than 9,800 employers changed MCOs. The number of active claims impacted by the process was more than 248,000. With the 4.4 percent employer change, 6.2 percent or more than 15,000 active claims also changed.

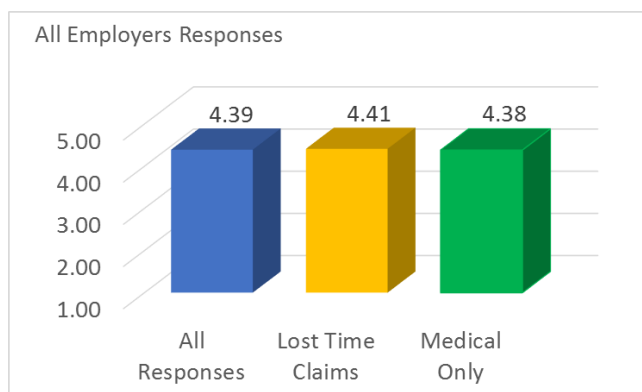
So, how does 2018 open enrollment compare to the last two open enrollment periods? The active employers graph below illustrates the number of employers' changes was lower for those employers than the previous two periods. The percent of active employers changing in 2014 and 2016 was stable at 6.3 percent. Whereas for 2018, there was a decrease of 1.9 percent points in the number of employers changing.



The active claims graph illustrates that the percentage of claims impacted by employer changes has seen a consistent decrease over the past three open enrollment periods.

To assist employers in their selection, medical services provided an *MCO Selection Guide* and *MCO Report Card*. During the past few years, feedback from employers indicated they would like to see an employer satisfaction survey as part of the *MCO Report Card* data points. Thus, in preparation for the 2018 open enrollment, BWC initiated a survey of employers. The *MCO Report Card* contained the results. The last time BWC included this information in the report card was 2007.

BWC distributed the survey to employers with 2017 filed claims, which reflected 27,044 eligible employers, with a response rate of 12 percent or 2,813 employers. The below graph reflects the overall survey rating.



On a rating scale of 1 to 5, with 5 being the highest, all responses reflected a 4.39 satisfaction level. The satisfaction level was a bit higher for those employers who had at least one lost-time claim versus those with medical-only claims. Thus, there seemed to be a correlation in the satisfactory level of employers with MCOs depending on their level of engagement.

MCO imaging project

About two years ago an MCO raised the possibility of sending claims-related documents to the BWC system for automatic uploading in injured workers' claims. The benefit of this type of innovation also became the purpose of the project to:

- Improve MCO and BWC current document imaging process.
- Streamline and reduce process duplication points.
- Decrease time to index images into a claim.

Those goals led medical services to undertake the project to identify, implement and test a tool that would allow MCOs to take claims documents indexed into their systems and electronically send those to BWC. And without human intervention, systematically upload those documents into injured workers' claim files.

Under the current process, BWC assigns each MCO a 1-800 right fax number that providers and others use to submit claims documents to that MCO. When a provider sends the document using the 1-800 number, BWC intercepts a copy of the document as the document moves on to the MCO. BWC and the MCO staff then manually index the document into their respective claim systems.

So, what is changing? Under the modified process, the provider will still use the 1-800 number to send documents related to claims. However, BWC will not intercept a copy of the document as it moves to the MCO. The MCO will continue the normal process of indexing the document to its system. At the same time, the MCO's data system will call the new BWC service and pass the index document along with relevant indexing information. The new BWC service receives and automatically indexes the document with no manual intervention.

The BWC team, with that vision, took up the challenge to identify a web service that would provide the appropriate system solution. After a successful proof of concept, on April 16, 2018, Medical Services went live with the pilot testing of the new BWC service. The pilot test involved three MCOs, all of different sizes: Health Management Solutions (HMS), Genex, and CareWorks. This gave the team an understanding to determine if we could do this. It also allowed the team to understand the efforts that MCOs of different sizes and sophistication would experience in implementing the solution. The efficiency impact of the pilot testing was immediate. Prior to the implementation, staff manually uploaded more than 53,000 pages into BWC and MCO systems daily. Nineteen days after the implementation of the three pilot MCOs, the manual process duplication decreased by 53 percent or 23,076 pages.

The successful pilot testing of the process validated that BWC could successfully implement the process. It also improved system efficiency in the reduction of the manual processing of redundant and unnecessary documents. Additionally, the system experienced documents being visible in the claims files quicker, which makes them available to all parties quicker. In some instances, the process has been so efficient that BWC received documents before assigning claim numbers. BWC implemented process changes with the MCOs to address challenges while maintaining the success realized with the new process.

Medical Services has implemented phase 2 of the project. The BWC team is actively working with the next three largest MCOs. It developed a rollout schedule to bring all MCOs on the new system by the second quarter of 2019.

Medical providers

Education, outreach and communication

Quality providers meeting the needs of Ohio's injured workers are critical to managing a positive return to work and quality of life. Therefore, in the summer/fall 2017 educational initiative, BWC held meetings at 10 service offices where we offered basic and advanced learning/participatory sessions to 368 attendees. In addition, we visited large practices where we provided information on the day-to-day operations of managing a workers' compensation claim to 100 attendees.

In addition, BWC expanded educational efforts to provider office staff at our Ohio Workers' Compensation Medical & Health Symposium. Not only did this day of operational training allow for the concerted learning of the providers, it also provided their teams with knowledge to increase office efficiencies. One hundred twenty-five attendees registered for the event. BWC will continue this focus in our annual Medical & Health Symposium efforts.

BWC communicates regularly with our providers, their professional associations and interested parties. Each month, we continue to release *Provider eNews*, a two to four-page electronic newsletter to a provider list serve containing approximately 1,400 members and growing. BWC distributes the newsletter via email, using a just-in-time method to share pertinent updates of policies, processes, rules or other relevant information to our providers.

In addition, BWC began considering new ways to educate providers in real-time methods. Thus, we held our first webinar to assist our providers with the health behavior assessment services. We believe this is a more effective means for us to offer information. Providers can access this method without traveling, and they can listen to a recorded version for review later. A new schedule featuring BWC's chief medical officer and BWC's staff chiropractic physician will launch a peer-to-peer level educational effort for our treating providers about BWC's medical initiatives. This effort will replace our biannual provider stakeholder meetings that most practitioners couldn't attend.

Another large effort in this reporting year was the BWC website. Research showed our website contained too much information on a page, was archaic in navigation and users could not find much information due to a poor search feature. Medical Services staff were heavily involved in the revamping of the provider website. Staff members continue to improve the website's look and content information to allow our provider customers better information, faster!

Network volume

A continued focus of BWC is to support HPP's goal of having and maintaining a strong, effective network of certified providers. BWC's system reflects providers in two ways — certified providers and enrolled providers. Enrolled providers have rendered service at least once to an injured worker. However, enrolled providers have either not taken steps to become BWC-certified or are ineligible for certification. Enrolled providers cannot generally render ongoing care to an Ohio injured worker. Certified providers have completed the BWC provider application process and have agreed to abide by the Ohio workers' compensation fees, laws and policies. They can render ongoing treatment to an injured worker. There are 61,132 certified and 52,364 enrolled providers captured in the BWC system for FY18.

In FY18, BWC's provider relations business unit managed the following enrollment/certification provider activities:

■ New provider enrollments:	3,321.
■ Re-certified providers:	4,650.
■ Providers whose certification lapsed and BWC did not recertify:	3,407.
■ Providers who BWC decertified from the system:	1,594.
■ Annual number of providers enrolled and certified in FY2018:	8,988.

To further promote our simplicity and service goals for providers, the provider enrollment and credential review areas began a multi-year, multi-step plan for modernizing our provider system. We started a seven-phase approach to enhance the 10-year-old database, beginning with the immediately needed system user updates. These phases will result in an online option to our providers to apply for enrollment and certification, and demographic updates of their information. Optional provider programs within the HPP will also become available for online sign-up. Medical Services is achieving these changes through a work prioritization method within IT that allows shorter, quicker deliverables for a more efficient IT service.

Medical and vocational service administration support

Increasing the quality of services to injured workers that will drive increased positive outcomes has been a key focus for BWC during the past year. That focus underlies BWC's continued evaluation of the care initiatives such as catastrophic claims, transitional work, health and wellness support, health behavior and assessment services and others.

Catastrophic claims

Eighty-two new catastrophic injuries occurred during FY 2018 in the state-funded population managed by MCOs. This statistic does not include catastrophic injuries that resulted in the death of the injured worker within the first five days following the accident. Catastrophic injuries include brain and spinal cord injuries, amputations and multiple trauma injuries. The graph below shows the types of catastrophic injuries that occurred during FY 2018.

Type of injury	Number of claims	Percent of total claims
Traumatic brain injuries	33	41%
Spinal cord injuries (quadriplegia, paraplegia)	5	6%
Amputations, major extremity	25	30%
Multiple trauma (complex fractures, crush injuries)	19	23%

Case management is essential in catastrophic claims management. The HPP places emphasis on a consistent, cooperative approach to catastrophic case management by MCOs and BWC. The MCOs have a designated core group of catastrophic nurse case managers that are knowledgeable of the critical care needs and services required for catastrophically injured workers.

During FY2016, BWC established policy that would increase the use of on-site case management services and became a required component of the catastrophic case management model. This continues to be a focus. To illustrate the impact of on-site case management, let's look at a catastrophic injury that occurred this fiscal year. A young male worker sustained a serious head injury, including skull fractures, many complex facial fractures and bilateral collapsed lungs after a blast explosion at work. The MCO case manager was having difficulty communicating with the injured worker and his mother telephonically. The case manager could not obtain information or establish any dialogue. The MCO made an on-site visit to the hospital to meet with the injured worker and his mother. During the visit, the MCO established a relationship with the injured worker and his mother. The MCO explained the workers' compensation system to his mother, explained her role and reviewed available services. The MCO reported the mother repeatedly expressed her gratitude and stated, "It's good to know that we are not in this alone." The on-site visit also allowed the MCO to talk with the injured worker and build trust. In this case, the MCO case manager recognized the need for adjustment counseling. The case manager facilitated making arrangements for the counseling service to begin quickly. The counseling service helps individuals cope with traumatic incidents and injuries.

In last year's HPP report, BWC provided an overview of the catastrophic claim program pilot that began in January 2013 and concluded at the end of calendar year 2016. BWC selected Paradigm Management Services as the vendor through a request for proposal process. As reported last year, the pilot concluded in 2016 after BWC's medical leadership determined not to integrate the pilot model into the HPP system. The decision did not impact claims in active Paradigm management. At the end of FY2018, there were 12 catastrophic claims that remained in active Paradigm management. Upon achievement of the clinical outcomes for each injured worker, BWC will transition these claims to the MCO for continued management of the medical portion. BWC anticipates the 12 claims remaining in Paradigm management will close during FY 2019.

Health and wellness program

Studies show wellness programs reinforce workplace injury prevention and enhance workers' compensation outcomes. Furthermore, the future of workplace safety involves integrating employee's protection with health and wellness promotion. In 2017, BWC took steps to design a health and wellness program that benefits Ohio's workforce by:

1. Preventing injuries by improving workforce health.
2. Potentially reducing the severity of an injury.
3. Increasing the speed of recovery.
4. Reducing time away from work due to an injury.

On Feb. 1, 2018, BWC launched Better You, Better Ohio!™ a health and wellness program designed to reinforce workplace injury prevention and enhance workers' compensation outcomes. Active Health Management (AHM), a subsidiary of Aetna, became the vendor for this initiative. Upon the start of this program, BWC offered this program to two distinct populations:

1. Workforce participants.
2. Invited injured workers.

At the start of the program, eligible workforce participants included those employees who:

1. Worked for an employer with 50 employees or fewer.
2. Were not offered nor participated in a health and wellness program.
3. Worked in high-risk industries such as agriculture, automotive and repair, construction, firefighters, health care, manufacturing, police and public safety, public employer, restaurant and food service, transportation and trucking, trash collection, and wholesale and retail.

In addition to this, eligible invited injured workers included those who:

1. Worked for an employer with a paid premium of \$180,000 or less.
2. Did not participate in a health and wellness program.
3. Experienced a date of injury within in the last 12 months.
4. Had at least one identified comorbidity.

MCOs invite injured workers to participate after confirming they fit the criteria listed above. An addendum to the Exceptional Performance Contract provided to the MCOs included incentivizing them \$100 per referral. To count as a valid referral, the injured worker must register to enroll as a participant on the AHM website. He or she also must complete the health assessment provided. The MCOs must document through their notes that they had verified approval from the employer that the injured worker may participate, they contacted the injured worker and the injured worker agreed to participate.

Prior to some late programmatic changes in October 2018, MCOs were to gain the consent from the employer for their injured worker to participate. BWC has since eliminated this requirement.

As of October 2018, programmatic modifications occurred to both participant groups. Everything remained the same for the workforce participant group except the number of employees changed from 50 employees or fewer to 150 employees or fewer. As for the invited injured worker, BWC eliminated the constraints of a date of injury within the last 12 months and at least one identified comorbidity. The intent of these modifications is to widen the net to increase additional participation among Ohioans. At this point, the number of eligible participants is 1,822. That includes 223 injured workers invited by MCOs and 1,599 workforce members.

Transitional work grant and bonus programs

Transitional work grants provide a 3-to-1 matching grant to employers with more than 10 employees. Employers work with a transitional work developer to develop customized policies and procedures, work with their union and establish a relationship with health-care providers. Employers received job analyses performed in the job classification they select and training on how to identify appropriate transitional work tasks workers can perform based on their medical restrictions. In 2016, the BWC Board of Directors approved a change to OAC 4113-17-55 Transitional work development grant and performance bonus. The change removed the requirement of a lost-time claim in the employer’s experience to be eligible for a grant. This requirement discouraged businesses from investing in a transitional work program. In addition, it did not align with BWC’s goal and strategies of early return to work.

Prior to the rule change, BWC saw a steady decline in the number of grants paid to employers. After the rule change, transitional work grants paid to employers increased 55.1 percent from the previous year. In 2017, employers’ interest in BWC’s Transitional Work Grant Program declined again. This decrease may be partly due to the introduction of a vast variety of new grants BWC offers to employers. To infuse new life in the grant program, BWC will soon implement a change to the employer policy eligibility. This is a transitional work grant policy change regarding the eligibility of combined and predecessor-successor employer policies. Today, BWC excludes an employer’s successor policy number from participating in the grant program if the predecessor policy number received a transitional work grant in the past. However, we learned that when a company changes ownership, the transitional work grant program once developed becomes lost or typically does not transfer to the new company or new owner. According to Rule 4123-17-55(C)(3), an employer may be eligible for no more than one transitional work program development per policy grant. Since the new company, which is the successor employer, receives a new policy number, that policy number is eligible for a grant. This policy change coincides with a policy change recently implemented by BWC involving the Transitional Work Bonus Program (TWBP). This program rewards employers with premium rebates for using transitional work by making accommodations for their injured workers with restrictions. In this program change, a policy combined or transferred to a successor policy, becomes automatically enrolled or eligible to enroll in the TWBP.

Fiscal year	Number of TW grants paid	Loss/Gain	Percentage change
2012	126	-	-
2013	86	-40	-31.75%
2014	57	-29	-33.72%
2015	49	-8	-14.04%
2016	76	+27	+55.10%
2017	50	-26	-34.21%

BWC transitional work developers develop the employer’s transitional work grant program. The number of providers qualifying to be a BWC accredited transitional work developer has gradually declined since 2015. This resulted in less providers available to offer the grant development services to Ohio employers. A transitional work developer is a vocational rehabilitation case manager, occupational therapist (OT) or a physical therapist (PT). Per 4123-17-55(A)(6), BWC must certify the provider as an HPP provider. He or she also must have verified experience in developing transitional work programs or verified mentoring experience with an accredited transitional work developer. In addition, the provider must complete a bureau-sponsored transitional work training prior to delivering transitional work programs.

BWC presented a rule change to the BWC Board of Directors Medical Services and Safety Committee on Sept. 27, 2018. This change proposed to eliminate the requirement that a transitional work developer be BWC certified. Certification of providers allows BWC to pay a provider directly for their services. However, BWC provider enrollment typically does not individually certify those OT and PT providers employed by a facility such as a hospital or rehabilitation company. These facilities are certified and enrolled as the servicing and pay-to provider. Their OT and PT employees do not directly bill BWC, nor does BWC directly pay these providers for services they render through the facility which employs them. Based on BWC’s certification policy, a provider’s certification lapses every 18 months for non-activity requiring extra work by the BWC provider enrollment to re-certify these providers. In the case of this grant program, the employer pays the transitional work developer. The employer receives reimbursement for the developer’s services through their transitional work grant. Therefore, BWC would not require certification.

A second change to the rule eliminates the requirement that a transitional work developer have experience in developing transitional work programs or have mentoring experience with a developer of transitional work services prior to attending the transitional work developer orientation course. OTs, PTs and case managers do not possess education in transitional work development since this is a program and accreditation unique to BWC. Finding a mentor in the process of developing a transitional work plan is difficult to coordinate. In addition, the pre-training requirement does not have relevance until after the provider takes the BWC-sponsored Transitional Work Developer Accreditation Orientation Class. The goal of this rule change is to allow more providers to be eligible to become a BWC-accredited transitional work developer while still providing the necessary education needed to develop transitional work programs for Ohio’s employers. The chart illustrates the number of BWC accredited developers by their licensure type per year.

Developer cert type counts by year							
	2012	2013	2014	2015	2016	2017	2018
Physical therapist	13	21	15	17	14	14	13
Occupational therapist	13	16	10	12	13	13	10
Case managers	32	47	40	43	33	31	30
Totals	59	84	65	72	60	58	53

Transitional Work Bonus Program

Destination: Excellence is a bundle of programs that can help employers improve workplace safety, enhance injured worker care and save money on workers’ compensation costs. BWC created Destination: Excellence to give employers choices in developing a comprehensive discount program. The program encourages employers to use BWC’s valuable complementary safety services and implement strategies that prevent injuries and can help their injured employees recover faster.

Since its introduction in July 2012, thousands of employers signed up for at least one of the safety or care programs of Destination: Excellence, saving tens of millions of dollars through incentives. In the future, these employers may possibly save much more when their premiums decline because of less accidents and lower claims costs.

One of the programs of Destination: Excellence, the TWBP provides up to a 10-percent bonus for using an established transitional work plan to return workers back to work. It is a yearlong program in which BWC evaluates all the claims with injury dates that occur during the program period in which the employer participates. Employers must be willing to accommodate the injured worker’s restrictions with appropriate transitional work tasks when released to return to work by his or her physician before returning to full duty.

BWC calculates an employer's performance bonus based upon the percentage of claims eligible and successful in transitional work. BWC multiplies the percentage by a percentage of the employer's pure premium. Below is a summary of the financial successes employers participating in the TWBP realized since the program began in July 2012.

Destination: Excellence Transitional Work Bonus Program							
Bonus period	Eligible employers	Employers with eligible claims	Employers receiving a TW Bonus	Bonus amount paid in the period	Largest bonus paid to employer	Employers receiving over \$5,000	Employers receiving 10%
July 2012 PA	858	447	330	\$3,086,602.13	\$138,284.66	205	225
January 2013 PEC and PA	422	232	187	\$1,943,678.91	\$48,364.90	131	127
July 2013 PA	837	442	357	\$3,749,979.77	\$99,768.25	245	261
January 2014 PEC & PA	587	349	291	\$3,979,045.57	\$123,690.89	201	231
July 2014 PA	731	413	339	\$3,135,625.37	\$121,059.63	249	245
January 2015 PEC (PA moved to July 2015)	454	259	195	\$801,550.65	\$47,076.09	80	99
July 2015 PA	1,326	587	490	\$4,043,306.00	\$101,703.00	268	405
January 2016 PEC	172	113	98	\$1,744,212.00	\$521,554.00	76	84
July 2016 PA	987	585	434	\$3,981,098.00	\$89,897.00	251	329
January 2017 PEC	188	114	94	\$1,283,890.00	\$413,759.00	60	61
Total				\$27,748,988.40			

Employers participating in the program received substantial rebates on their premium for every year they participate in the program. Many employers receive the full 10 percent. The results demonstrate a substantial return on their investment for employers who invest in a transitional work grant program and participate in TWBP.

Employer	TW grant	BWC reimbursement 75%	Employer contribution 25%	TW bonus	TW bonus payment	Return on investment
Paving company	\$7,800.00	\$5,850.00	\$1,950.00	10%	\$ 60,922.01	3024%
Leasing company	\$1,620.00	\$1,215.00	\$405.00	10%	\$ 45,962.39	11248%
Construction company	\$6,300.00	\$ 4,725.00	\$1,575.00	10%	\$33,683.88	2038%

Medical-bill processing

ADR processing

Alternative dispute resolution (ADR) is a means of resolving disputes over medical issues that arise between the MCO, BWC, employer, injured worker and/or provider. These issues arise from the MCO's decision regarding a medical treatment reimbursement request.

BWC's ADR department oversees the medical treatment disputes process from appeal of the *Request for Medical Service Reimbursement or Recommended for Additional Conditions for Industrial Injury or Occupational Disease (C-9)* to the Ohio Industrial Commission's (IC) staff hearing officer level outcome when the treatment may become payable.

On Nov. 15, 2016, BWC launched PowerSuite 7, BWC's new core integration combining BWC's claim and policy management into one system. This change brought about a new ADR application for the MCOs. In the spring of 2019, BWC will upgrade to the newest version of PowerSuite 8. The newly formatted screens will allow the PowerSuite user to personalize their work while keeping the processes the same. This system increased the efficiency to track treatment reimbursement decisions appealed throughout the life cycle of the claim from creation to completion.

The case also interfaces with the IC to capture the case jurisdiction, venue location, notice of hearing date, proceeding type, date and time of hearings, including cancellations and continuances. The MCO creates the exam scheduling case in the claim when it determines to order an independent medical exam (IME) to reach the most appropriate decision. When the MCO creates the exam case through PowerSuite, BWC systematically sends the Claimant Notice of Exam letter to the claimant and parties to the claim about details of the exam location, date and time. When the professional review is complete, the MCO systematically submits the recommended decision to the dispute in Documents in PowerSuite. Twenty-four hours later, BWC batches and mails the letter. This new system integrated more of the appeal process between BWC, the MCOs and the IC, resulting in greater sharing of information and improved efficiency. The chart below illustrates the number of ADR order issued per year. A single BWC order may contain multiple appealed issues. BWC must obtain an independent level of medical review, which consists of either a file review or an IME.

The chart below demonstrates the number of appeals processed in relation to the number of IMEs scheduled in making a determination.

Alternative dispute resolution			
Calendar year	ADR orders	IMEs scheduled	IMEs as a percentage of ADRs
2012	24,723	3,825	15.47%
2013	31,305	3,551	11.34%
2014	28,393	4,059	14.30%
2015	24,212	3,631	15.00%
2016	26,833	3,727	13.89%
2017	23,123	3,629	15.69%

Adjustment and subrogation

BWC processed more than two million medical services and provider bills during FY18. Key supporting activities in the proper payment of submitted bills are timely adjustments to payment errors. Adjustments can reflect either additional payments to providers, as well as recovery of overpayments. During FY18, Medical Services processed more than 46,000 adjustments with an average daily lag time of 5.4 days in adjustment. Additionally, during FY18, medical billing and adjustments recovery recouped \$17,357.20. As bill processing significantly improved, recoveries and overpayments decreased.

Medical Services remains responsible for the subrogation of Medicare Secondary Payor Act and the subrogation and reimbursement of private insurers such as United Healthcare (UHC) and Aetna. The division performs these efforts by working with two vendors; one for each responsibility. During FY18, Medical Services worked with CGI Federal, the recovery vendor for the Centers for Medicare & Medicaid Services (CMS). In February 2018, CMS awarded its new contract to Performant, as its recovery agent. Medical Services works with Performant in the processing of Medicare's Conditional Payment Letters (CPLs), Conditional Payment Notices (CPNs), Intent to Refer and Treasury Demands. During FY18, Medical Services responded to 111 demands, while reimbursing \$38,163 to Medicare and \$131,669 to the Treasury.

Health Management Systems (HMS) is the recovery vendor for private insurers. HMS has a data exchange agreement with BWC to use the BWC's billing system to process those subrogated claims. During FY18, Medical Services reimbursed more than 6,000 lines to UHC and Aetna, totaling \$38,310.

Throughout FY18, Medical Services worked closely with IT to develop, test and implement a new Medicare tracking and reporting system. BWC will interface this new system with PowerSuite to pull needed claims data into the tracker reducing the time it takes for entry of the cases. This new system will also create a work list of assigned cases for staff to provide better control of accomplishments.

Selected HPP measurements

All dollar amounts are shown in \$1,000s.

The figures below are limited to the HPP.

The table below reflects a historical trend of selected HPP performance data by Ohio fiscal year. Data for certain measurement variables can differ based on the impact of new information received before or subsequent to the compiling of the data for this report.

Table 1 Selected HPP measurements

Measurement	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY2018
Active employers (1)	227,487	227,370	225,466	225,513	219,840	219,092
Active claims (2)	316,935	306,268	294,326	288,379	262,781	250,211
FROI timing (3)	16.28	14.28	15.18	15.63	16.07	16.55
% of FROIs filed within seven days of date of injury (4)	74.61%	75.94%	75.17%	74.38%	74.43%	72.29%
% of claims determined within 14 days of filing date (5)	57.88%	57.44%	55.02%	63.71%	71.12%	70.80%
Bill timing (6)	86.28	76.01	77.19	75.52	75.27	74.17
LDOS–MCO	71.19	61.98	62.86	61.59	61.43	60.28
MCO–BWC	6.53	5.46	5.82	5.47	5.32	5.36
BWC–MCO	7.16	7.18	7.21	7.15	7.21	7.20
MCO–Provider	1.39	1.39	1.31	1.31	1.31	1.33
Total regular medical payments (7)	682,401	640,525	593,827	559,396	529,619	504,170
Payments for file reviews and IMEs (8)	18,930	17,754	17,569	17,410	16,165	17,567
MCO fees (9)	169,815	169,581	170,688	169,229	170,797	170,755
Total medical payments, plus MCO fees	871,147	827,859	782,084	746,035	716,582	692,493
Total indemnity payments (10)	1,062,656	1,048,049	1,019,954	1,009,016	925,928	925,358
Grand total (11) Benefits paid (Total regular medical payments, plus MCO fees, plus total indemnity payments)	1,914,872	1,858,155	1,784,469	1,737,641	1,626,344	1,600,283

(1) Average number of employers in an active, reinstated or debtor in possession status assigned to an MCO during the time frames noted.

(2) Average number of active claims (claims with a payment or application submitted to us within a specified length of time) assigned to an MCO during the periods noted.

(3) Average time, in calendar days, from date of injury to the date BWC received a FROI for all FROIs received during the time frames noted for claims assigned to an MCO.

(4) Percent of claims assigned to an MCO where BWC receipt of the FROI is within seven calendar days from the date of injury where BWC received the FROI during the periods noted.

(5) Percent of claims assigned to an MCO determined within 14 calendar days of the filing date where the determination was during the time frames indicated regardless of date of injury or filing date. BWC considers a claim determined when we place it in allow/appeal or disallow/appeal status.

During FY16, BWC expanded the list of diagnosis codes that are eligible for automatic claim adjudication. This contributed to the increased percent of claims determined within 14 days.

(6) Average time, in calendar days, between the last date of service billed (LDOS) to a check issued to the provider for bills processed by the MCOs. This does not include bills for prescription drugs processed through BWC's pharmacy benefits manager. It is further broken down into the component steps of the process:

- LDOS–MCO: LDOS to MCO receipt.
- MCO-BWC: MCO receipt (for review and payment determination) to BWC receipt.
- BWC-MCO: BWC receipt (for review and final payment determination) to date monies are deposited into the MCO's provider account.
- MCO-Provider: MCO receipt of the final payment information and monies to the MCO issuing the check to the provider.

BWC bases the MCO-provider information on a desk audit of the MCOs' check issuance timing, updated in CY2014.

(7) Payments for medical services made on claims assigned to an MCO during the time frames noted. Amounts include payments on claims associated with bankrupt self-insured claims assigned to the MCOs. It also includes payments for prescription drugs processed through BWC's pharmacy benefits manager. Regular denotes this category includes payments for physicians, hospitals, therapies, diagnostic testing, etc. It excludes payments made for file reviews and IMEs requested to facilitate administrative decisions in the claim.

(8) Payments made during the time frames noted for file reviews and IMEs requested to facilitate administrative decisions in the claim.

(9) Payments issued to the MCOs during the time frames noted per the MCO Agreement for their services. BWC bases MCO contracts on calendar years. Fluctuations in the amounts paid to the MCOs between fiscal years are attributable to several factors, including:

- Changes in the overall amount available to the MCOs from year to year.
- Timing of different types of payments (administrative payments are monthly, outcome payments are quarterly, and in the past, we made exceptional performance payments annually).

(10) Payments for salary compensation made on claims assigned to an MCO during the time frames noted. This includes payments for temporary total, living maintenance, wage loss, lump sum settlements, etc. Amounts include payments on claims associated with bankrupt self-insured claims assigned to the MCOs.

(11) Excludes payments for file reviews and IMEs as these are not benefits paid to or on behalf of an injured worker but are conducted to facilitate administrative decisions in the claim.



2018 Report
Division of Safety & Hygiene

Division of Safety & Hygiene

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Division of Safety & Hygiene Financials

BWC's Division of Safety & Hygiene (DSH) budget appropriation for Fiscal Year 2018 (FY18) was \$22 million. In addition to the DSH operating budget, BWC appropriated:

- \$6 million for the Better You, Better Ohio!™ (BYBO) health and wellness program.
- \$875,645 for a safety advertising campaign.
- \$15 million for safety grants (safety intervention, firefighter, developmental disabilities, drug-free workplace training and workplace wellness).

Additional funding came from:

- Two federal Bureau of Labor Statistics (BLS) grants amounting to \$195,104.
- A federal National Institute for Occupational Safety and Health (NIOSH) grant amounting to \$200,000.
- A federal Occupational Safety and Health Administration (OSHA) On-Site grant amounting to \$1,653,900.

The total premium assessment for DSH for FY18 was approximately \$16.1 million. Table A describes FY18 premium assessments according to employer type.

Table A: FY18 DSH premium assessments

Employer type	Assessments (\$)
Private	\$13,416,209
Public taxing districts	\$1,755,074
Public state	\$487,979
Self-insured	\$487,706
Total assessments	\$16,146,968

As of June 30, 2018, DSH disbursements and open encumbrances for safety services and programs amounted to about \$22 million. This included about \$735,000 in research grants to Ohio higher education institutions. Safety grants disbursements and open encumbrances amounted to approximately \$9.1 million. Disbursements and open encumbrances for the BYBO Program and the safety campaign amounted to about \$2.1 million. Disbursements and open encumbrances for the BLS, OSHA On-Site and NIOSH federal grants amounted to about \$1.9 million. DSH safety services and programs include:

- Education and training services in 13 statewide locations.
- Eighty-three safety councils across Ohio.
- Ohio Safety Congress & Expo (OSC).
- Safety grants.
- OSHA On-Site Consultation Program.
- Public Employment Risk Reduction Program (PERRP).
- Field consulting services in occupational safety and health, industrial hygiene and ergonomics.
- Specialized occupational safety and health, workers' compensation and rehabilitation library services.
- BYBO health and wellness program.
- Ohio Occupational Safety and Health Research Program.
- BLS Survey of Occupational Injuries and Illnesses (SOII).
- BLS Census of Fatal Occupational Injuries (CFOI).

Table B provides a general description of the DSH disbursements and open encumbrances as of June 30, 2018.

Table B: Division of Safety & Hygiene disbursements and open encumbrances (Disbursements in \$)

Department	Safety admin	Field consultations	Outreach programs and services	Education and training services	Meetings and conventions (safety councils and congress)	Library	Quality Assurance & Tech Support	OSHA state-fund match (14%)	PERRP	Training overhead (extras)	BLS state-fund matches (50%)	Totals	BYBO	Safety campaign	Safety grants	NIOSH federal grant	BLS federal grants (50%)	OSHA federal grant (86%)	Totals including grants
10-Payroll	\$917,472	\$11,008,080	\$400,256	\$648,868	\$422,753	\$252,463	\$779,003	\$240,185	\$1,032,553	\$0	\$114,395	\$15,816,028	\$0	\$0	\$0	\$143,404	\$114,395	\$1,475,406	\$17,549,233
10-Overtime	\$2,262	\$1,233	\$1,342	\$2,599	\$1,000	\$0	\$0	\$0	\$1,722	\$0	\$260	\$9,418	\$0	\$0	\$0	\$731	\$260	\$0	\$10,409
13-Purchased services	\$6,969	\$1,885	\$92,567	\$482,031	\$82,510	\$10,492	\$5,950	\$1,664	\$15,571	\$0	\$16,540	\$716,179	\$1,245,170	\$875,645	\$0	\$0	\$16,540	\$10,223	\$2,863,757
15-Other personal services	\$24,769	\$1,998	\$0	\$1,884	\$1,066	\$896	\$2,216	\$29	\$335	\$0	\$0	\$33,193	\$0	\$0	\$0	\$202	\$0	\$176	\$33,571
Total	\$951,472	\$11,013,196	\$494,165	\$1,135,382	\$506,329	\$263,851	\$787,169	\$241,878	\$1,050,181	\$0	\$131,195	\$16,574,818	\$1,245,170	\$875,645	\$0	\$144,337	\$131,195	\$1,485,605	\$20,456,970
20-Edible products	\$0	\$167	\$0	\$0	\$51,876	\$0	\$0	\$0	\$0	\$0	\$0	\$52,043	\$0	\$0	\$0	\$0	\$0	\$0	\$52,043
21-Supplies	\$24,288	\$24,064	\$775	\$22,299	\$8,952	\$93,511	\$187,525	\$1,147	\$9,904	\$0	\$142	\$372,607	\$0	\$0	\$0	\$79	\$142	\$8,849	\$381,677
22-Vehicle maintenance	\$1,473	\$64,160	\$0	\$1,249	\$1,422	\$0	\$3,675	\$1,543	\$5,869	\$0	\$0	\$79,391	\$0	\$0	\$0	\$0	\$0	\$10,209	\$89,600
23-Travel	\$6,579	\$45,291	\$625	\$10,197	\$41,844	\$429	\$19,734	\$2,112	\$19,510	\$0	\$2,769	\$149,090	\$0	\$0	\$0	\$5,714	\$2,769	\$30,447	\$188,020
24-Communications	\$14,275	\$0	\$0	\$11	\$24,953	\$16,487	\$6,856	\$575	\$46	\$0	\$0	\$63,203	\$0	\$0	\$0	\$0	\$0	\$4,143	\$67,346
24-IT Lic Commun	\$177,405	\$87,598	\$1,798	\$28,098	\$2,232	\$1,166	\$4,722	\$2,008	\$9,503	\$0	\$385	\$314,915	\$0	\$0	\$0	\$0	\$385	\$14,112	\$329,412
25-Fuel/Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26-Maintenance/Repairs	\$502,558	\$39,293	\$0	\$46,109	\$2,233	\$0	\$2,545	\$801	\$35,246	\$0	\$0	\$628,785	\$0	\$0	\$0	\$0	\$0	\$5,056	\$633,841
27-Rentals	\$504,846	\$50	\$0	\$5,880	\$315,305	\$0	\$995	\$0	\$0	\$0	\$0	\$827,076	\$0	\$0	\$0	\$0	\$0	\$0	\$827,076
27-ISTV/Goods/Svs	\$230,080	\$17,438	\$5,571	\$80,354	\$15,850	\$2,410	\$1,761	\$573	\$5,772	\$0	\$110	\$359,919	\$19	\$0	\$0	\$150	\$609	\$11,453	\$372,150
28-Printing/Advertising	\$4,638	\$210	\$889	\$0	\$29,198	\$33,720	\$0	\$0	\$2,270	\$0	\$0	\$70,925	\$0	\$0	\$0	\$0	\$0	\$0	\$70,925
29-General other/Subsidies	\$735,041	\$8,694	\$0	\$0	\$1,053,675	\$0	\$500	\$448	\$535	\$16,124	\$169	\$1,815,186	\$0	\$0	\$9,127,504	\$67	\$169	\$2,778	\$10,945,704
Total	\$2,201,183	\$286,965	\$9,658	\$194,197	\$1,547,540	\$147,723	\$228,313	\$9,207	\$88,655	\$16,124	\$3,575	\$4,733,140	\$19	\$0	\$9,127,504	\$6,010	\$4,074	\$87,047	\$13,957,794
30-Food handling	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31-Office equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
32-Motor vehicles	\$440,576	\$0	\$0	\$0	\$0	\$0	\$0	\$17,931	\$0	\$0	\$0	\$458,507	\$0	\$0	\$0	\$0	\$0	\$78,771	\$537,278
34-Commun equip	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35-Med/Lab/Therapeut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,030	\$0	\$0	\$30,030	\$0	\$0	\$0	\$0	\$0	\$0	\$30,030
36-Educat//Recrnt	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37-Data proc equip	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,688	\$0	\$0	\$197,688	\$0	\$0	\$0	\$0	\$0	\$0	\$197,688
38-Copy/Print equip	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39-Other equip	\$0	\$0	\$0	\$0	\$2,768	\$0	\$0	\$0	\$0	\$0	\$0	\$2,768	\$0	\$0	\$0	\$0	\$0	\$0	\$2,768
Total	\$620,576	\$0	\$0	\$0	\$2,768	\$0	\$0	\$17,931	\$47,718	\$0	\$0	\$688,993	\$0	\$0	\$0	\$0	\$0	\$78,771	\$767,764
Grand total	\$3,773,231	\$11,300,161	\$503,823	\$1,329,579	\$2,056,637	\$411,574	\$1,015,482	\$269,016	\$1,186,554	\$16,124	\$134,770	\$21,996,951	\$1,245,189	\$875,645	\$9,127,504	\$150,347	\$135,269	\$1,651,623	\$35,182,528

BWC's occupational safety and health services

DSH provides a variety of occupational safety and health services to Ohio employers and employees. Primarily, DSH's services include safety education and training, safety councils, OSC, safety grant programs, BYBO, loss prevention consulting services, PERRP, the OSHA On-Site Consultation Program and library services. Table C provides general statistics about the number of employers who benefited from these services in FY18.

Table C: FY18 occupational safety and health services statistics by policy type

Service type	Private employers	Public employers	State agencies	Self-insured	Marine fund	Black lung	Undetermined	Total
Training and education	6,082	334	22	224	0	0	21	6,683
OSC	2,327	267	37	331	1	0	28	2,991
Safety council	6,849	966	6	395	0	1	51	8,268
Safety grants*	244	294	0	0	0	0	3	541
Video library	893	104	9	73	0	0	4	1,083
Specialized field operations consulting - visit only	3,202	574	28	204	1	0	27	4,036
OSHA On-Site	540	0	0	0	0	0	0	540
PERRP field consulting – visit only	10	203	5	9	0	0	0	227
BYBO	583	92	0	0	0	0	0	675

* = 593 grants awarded to 541 employers.

Education and training services

BWC's safety education and training services include classroom and web-based safety courses.

BWC offers classes covering:

- Industrial and construction safety.
- Industrial hygiene.
- Ergonomics.
- Risk and safety management.

Course completions for classroom, web-based and on-site training totaled 18,554 completions by 11,714 students, representing 6,683 employers. BWC offered 96 courses through 407 classes at 13 locations. These classes resulted in 7,958 completions by students representing 3,186 employers. Field staff conducted 62 additional on-site classes, resulting in 1,012 completions by students representing 203 employers. BWC's learning management system offered 17 online courses, resulting in 9,584 completions by students representing 3,854 employers.

Safety Council Program

Through monthly meetings, the Ohio Safety Council Program provides a forum for more than 8,200 Ohio employers for promoting:

- Occupational safety and health.
- Loss prevention.
- Workers' compensation cost control and management.
- Health and wellness.
- Networking.

BWC co-sponsors 83 safety councils throughout the state, organized through chambers of commerce, trade and manufacturing associations, safety education providers and other local community organizations.

BWC provided \$1,053,550 million in subsidies toward the direct costs of these councils. In addition, BWC paid \$9.3 million in premium rebates to employers who met the safety councils' enrollment, active participation and performance requirements. Beyond subsidies and rebates, BWC presented awards to about 4,500 employers through a program to recognize companies for their efforts in injury and accident prevention. Safety councils held 1,200 meetings during FY18.

Ohio Safety Congress & Expo

The annual OSC continues to be the largest occupational safety and health state conference in the United States. This year's safety congress hosted a record number of participants, 8,155 individuals, representing 2,991 Ohio businesses. The free, three-day event offered general sessions, workshops, lectures, panel discussions, simulations and demonstrations. Additionally, the event featured an exposition marketplace and a Safety Innovation Awards Program with cash awards for top contenders. The safety congress also co-hosted the third annual Ohio Workers' Compensation Medical & Health Symposium. This program offered educational sessions on the comprehensive care of injured workers for physicians and health-care providers. The symposium also introduced a track of sessions specifically designed for office support staff.

A record-setting 273 product and service providers participated in the exposition, which sold out for the fourth year running. They provided \$356,226 in event revenue to BWC. These providers displayed the latest advances in safety and health training, equipment, technology and services. Local and national experts presented 200 educational sessions and workshops.

Of those who attended safety congress, 93 percent indicated they were completely satisfied or satisfied with the event. In addition, nearly 85 percent indicated they intend to participate in the future. Furthermore, OSC offered 16 types of continuing education credits for professional development and professional certifications. These included certified medical education credit for physicians, chiropractors and health-care providers.

Safety grant programs

The primary focus of BWC's safety grant programs is to assist employers in managing the financial costs associated with implementing safety measures to prevent accidents and injuries in the workplace. Another major goal is to establish safety best practices in the field of occupational safety and health.

The grant programs include the Safety Intervention Grant (SIG) Program, the Firefighter Exposure to Environmental Elements Grant (FEEEG) Program, the Employers Working with Persons with Developmental Disabilities (EWPDD) Grant Program, the Drug-Free Safety Program (DFSP) Grants and the Workplace Wellness Grant Program (WWGP). In FY18, BWC awarded 593 grants totaling \$9,127,504 to 541 employers.

Safety Intervention Grant Program

The SIG Program, now in its 19th year, provides financial assistance to employers to purchase equipment to make their workplaces safer. The program provides 3-to-1 matching funds, up to a maximum of \$40,000, per an employer's eligibility cycle. The total payroll report for the last full policy year determines the eligibility cycle for an employer. Employers can only use funds toward the purchase or improvement of equipment to significantly reduce or eliminate hazard exposure and thereby, the risk of injury. The program requires employers to evaluate their interventions and share their results with BWC.

In FY18, BWC awarded 263 SIG grants totaling \$6,364,859 to 259 employers. In comparison, BWC awarded 492 SIG grants totaling \$12,273,706 to 471 employers in FY17. Most employers who participated in the program were in the manufacturing (22 percent), townships (18 percent) and construction (11 percent) industry sectors.

To establish industry best practices in occupational safety and health, employers receiving grant funds through the SIG program must provide one year-end case study and provide quarterly reports to document their experience with the equipment purchased through the grant. BWC uses the collected data to establish baseline best practices in safety, advance knowledge in occupational safety and health, and benefit other employers with similar hazards at their workplaces.

Last fiscal year, 315 safety grant companies completed their one-year cost benefit analysis report. These companies reported \$3,166,257 in annual productivity savings, \$1,117,138 in annual claim cost savings and \$1,540,178 in other savings (quality, absenteeism, etc.). The return on investment on the cost of the interventions based on this reported information is 2.2 years.

Firefighter Exposure to Environmental Elements Grant Program

BWC implemented the FEEEG Program on July 1, 2017. BWC uses the FEEEG Program to partner with Ohio employers to minimize exposure to dangerous environmental elements. The program is available to eligible Ohio employers who wish to purchase diesel exhaust systems, extractors/washing machines for turn-out gear, hoods with barrier protection and washable gloves for optimal protection against these exposures.

Qualified employers with payroll equal to or greater than \$500,000 are eligible for a 5-to-1 matching grant, up to a maximum grant award of \$15,000, for the duration of the FEEEG program. This means BWC gives \$5 for every \$1 the employer contributes. Qualified employers with payroll less than \$500,000 are eligible for a \$15,000 grant for the duration of the FEEEG program. There is no match to the grant for payroll less than \$500,000.

In FY18, BWC awarded 237 FEEEG grants totaling \$2,412,049 to 235 employers.

Employers Working with Persons with Developmental Disabilities Grant Program

BWC introduced the EWPDD Grant Program on July 1, 2017. BWC uses the EWPDD Grant Program to assist Ohio employers with ensuring the safety of their staff when carrying out the services they provide to developmentally disabled children and adults. The program is available to eligible Ohio employers who wish to purchase training and/or equipment to substantially reduce or eliminate injuries to employees who work with developmentally disabled children and adults.

Qualified employers may receive up to \$20,000 with a 5-to-1 match for equipment or no match for training for the duration of the EWPDD Grant Program.

In FY18, BWC awarded 16 EWPDD grants totaling \$211,848 to 15 employers.

Drug-Free Safety Program Grant

DFSP is BWC's voluntary safety program developed to address workplace use and misuse of alcohol and other drugs. It's designed to help state-fund employers more effectively prevent on-the-job injuries and illnesses by integrating drug-free efforts into their overall workplace safety program. DFSP can help employers achieve both long-range safety and cost-saving benefits.

In FY18, BWC awarded 14 DFSP grants amounting to \$13,648 to 14 employers. In comparison, in FY17, BWC awarded 30 grants amounting to \$34,698 to 29 employers.

Workplace Wellness Grant Program

Designed to assist Ohio employers with the development and implementation of workplace wellness programs, the WWGP is now in its sixth year. The program's goal is to control the escalating cost of workers' compensation claims through addressing health-risk factors. The WWGP's collateral goals are to reduce health-care costs for employers and improve the health of the workforce.

Participating employers may receive \$300 per participating employee during a four-year period, up to a maximum amount of \$15,000 per policy. Employers participating in the WWGP must use wellness grant funds to conduct health-risk assessments (HRAs), biometric screenings and subsequent activities designed to address the results of the HRAs and biometric screenings. Participating employers receive grant funds after completing the HRAs and biometric screenings, and providing BWC the aggregate results of the HRAs and biometric screenings of the participating employees.

During FY18, BWC approved 24 employers to participate in the WWGP, bringing the participating employers' total to 370. BWC gave \$125,100 to 63 employers in the program during FY18.

Loss prevention operations

Loss prevention operations comprises the three safety and health consulting units and the quality assurance and technical support unit. Two of the consulting units serve specific employer populations while the third serves all employers. The three collaborate to provide industrial and construction safety, industrial hygiene and ergonomics services that help employers develop and become self-sufficient in managing their own safety and health processes. These services include hazard identification, risk assessment and mitigation, safety programming and management system development, training, and the introduction of safety and health interventions in the workplace.

OSHA On-Site Consultation Program

The OSHA On-Site Consultation Program is 86-percent funded by a federal OSHA grant amounting to \$1,676,000. BWC funds the remaining 14 percent (\$266,657). BWC distributes this money during the federal fiscal year.

The program provides highly specialized services to relatively small employers (work sites with fewer than 250 employees) in high hazard/risk private industries. The program also administers the Safety and Health Achievement Recognition Program (SHARP). This OSHA cooperative program provides recognition and exemptions for small employers with exemplary safety and health management systems. During FY18, 11 SHARP participants renewed their participation in the program and three new employers became participants in SHARP. There are 28 employer sites in the Ohio SHARP.

Program field consultants conducted 929 visits to workplaces throughout Ohio belonging to 540 employers with 121,867 employees. There were 4,183 hazards discovered, including 3,266 serious hazards. Employers corrected these serious hazards and eliminated the risks for injury among employees. In addition, the program provided on-site safety training for 3,198 employees.

Public Employment Risk Reduction Program

PERRP governing statutes in Ohio Revised Code (ORC) chapter 4167 ensure public employees in Ohio have safe and healthful working conditions. PERRP adopts and enforces occupational safety and health standards, and conducts enforcement inspections and investigations to ensure compliance. PERRP also provides free voluntary compliance assistance services that explain regulatory requirements and raise awareness of occupational injury and illness risk factors and strategies to reduce risk. At the 2018 OSC and throughout the year, PERRP celebrated the 25th anniversary of the program with an expanded outreach effort focusing on assisting high risk public employers.

During FY18, PERRP provided 579 on-site services to 227 employers and provided valuable occupational safety and health information to 235 unique employers through 549 virtual consultations. Staff conducted 159 enforcement visits and provided 420 compliance assistance activities that resulted in the correction of more than 1,500 workplace hazards.

PERRP completed the five-year rule review of Ohio Administrative Code (OAC) chapter 4167 during 2018. The following are highlighted rule amendments:

- Added new definitions.
- Reorganized the list of all adopted OSHA standards.
- Changed the reporting of catastrophic injuries to include reporting of incidents resulting in hospitalizations, amputations and loss of an eye.
- Added compliance assistance inspections to the list of inspections and investigations.

PERRP supported other DSH programs by assisting 63 public employers enrolled in the Industry-Specific Safety Program (ISSP) and provided these employers with risk reduction services that qualified for 103 ISSP activity credits. During FY18, PERRP also helped 10 public employers with SIG applications and associated visits.

Specialized field operations consulting services

Specialized consulting services provided through local loss prevention offices help employers:

- Implement safety programs.
- Identify workplace ergonomics, environmental and physical hazards.
- Develop and execute hazard abatement plans.
- Establish workplace safety and ergonomics committees.
- Use the BWC safety grant programs.

These field activities include thousands of noise surveys for hearing protection, air quality sampling, ergonomic surveys and safety audits in workplaces throughout Ohio. In FY18, BWC's field operations consultants made 10,528 visits to Ohio workplaces belonging to 4,036 employers. They provided consulting services in industrial hygiene, industrial and construction safety, and ergonomics.

Quality assurance and technical support unit

BWC's quality assurance and technical support unit provides specialized technical support to BWC loss prevention operations staff in these areas:

- Industrial and construction safety and health.
- Ergonomics.
- Industrial hygiene.

The technical advisors serve as subject matter experts in establishing, developing and maintaining policy relative to the BWC safety programs and services. These include rebate and grant programs such as the ISSP, DFSP, SIG Program and WWGP. They also serve as liaisons to external organizations such as ASTM Committee F48 on Exoskeletons and Exosuits, AWS Committee SH1 - Fumes & Gases and the CPWR/NIOSH Research-to-Practice partnership.

The unit assists loss prevention operations management staff with reviewing job applications, interviewing candidates and mentoring new safety, ergonomics and industrial hygiene field consultants as well as assuring the quality of loss prevention service delivery and work products. They also arrange professional development events and discipline-specific staff meetings. In addition, they lead special projects and safety initiatives, serve as safety congress liaisons, coordinate DSH participation at the Farm Science Review and review Safety Innovation Awards applications to determine semi-finalists.

This unit also maintains and updates the specific safety requirements codes in the OAC. In FY18, none of the codes applicable to all workshops and factories were scheduled for review. The rule review cycle resumes in FY19, with recommendations due for first (committee) and second (Board) readings in June and July 2019, respectively. The unit partners with internal and external stakeholders to disseminate information on new advancements in safety research, consulting tools, standards and technology. Finally, the technical advisors provide technical support for the development and revision of:

- The safety portion of the BWC website.
- Safety publications.
- Training courses.
- Presentation modules.

The technical advisors also teach several occupational safety, ergonomics and industrial hygiene courses.

Industrial hygiene instrument laboratory

BWC's industrial hygiene instrument laboratory provides a variety of support services to BWC consultants. The laboratory handles the inventory repairs, maintenance and calibration of more than 900 measurement devices and tools used by DSH staff. Last year, the laboratory performed certified calibration of 755 devices, with estimated savings of approximately \$125,360.

Industrial hygiene analytical laboratory

BWC industrial hygienists, working with an accredited external laboratory, coordinated 9,604 specialized analyses of air quality samples to measure workers' exposures to a variety of chemicals at over 342 Ohio workplaces.

Library services

The BWC library offers access to information, training materials and videos and experienced librarians to help employers with their workplace safety and health activities, workers' compensation and risk management, and rehabilitation. In addition, BWC librarians provide training on researching web-based and media resources for safety and health, rehabilitation and public safety information. Additionally, the librarians provide support to the BWC research and development department and researchers. They do this by conducting specialized and detailed literature searches in a variety of literature databases and resources along with preparation of literature summaries. BWC's library is the only library of its kind in Ohio and among a few in the nation with such specialized services.

Library resources include:

- Safety codes and standards.
- Sample charts, forms, templates and written safety programs.
- Chemical safety information.
- Occupational disease and injury management.
- Research studies and statistics.
- Training resources.
- Historical BWC materials.

Customers of the library services include private businesses, local and state government entities, attorneys, health-care professionals, researchers, representatives of business and labor trade organizations, and students, as well as the public and BWC employees. The library's book collection is part of the statewide OHIOLINK library network. This year the library circulated 251 books and 763 periodicals, acquired and furnished 1,638 scientific articles to customers, and provided 558 detailed, specialized reference and literature search services.

The video library houses a video collection, which includes 847 workplace safety and health DVDs and training aids, including many titles in languages besides English. The library is a convenient and popular source for Ohio employers to obtain quality workplace safety and health training aids for their employees. The video library has partnered with a streaming video vendor, offering 265 titles in electronic format for Ohio employers. This year, the video library circulated 4,485 DVDs to 756 employers. In addition, 435 employers and their employees accessed 14,315 online safety and health streaming videos.

BetterYou, Better Ohio!™

BWC's BYBO program, offers health and wellness services to Ohio workers and injured workers that do not have access to these services through their employers. The program began in FY18, serving specified segments of injured workers and workers working for small employers in high-risk industries.

The objective of the BYBO program is to provide health and wellness resources and services to the workforce in Ohio to improve their health and safety. The program aims to prevent injuries, reduce absenteeism, reduce severity of injury, increase speed of recovery from injury and reduce time away from work due to injury. This in turn will reduce the costs associated with workers' compensation and medical insurance. The program services include:

- Online health assessments.
- Biometric screening.
- Interactive, digital health and wellness coaching modules.
- Online health, wellness and nutrition training resources.
- Health and wellness mobile application.
- Specialized lifestyle and disease management coaching.
- Nurse line services.

BWC implemented BYBO in February 2018. From that time through the remainder of FY18, 1,309 total workers from 675 employers requested to enroll in the program, with 152 of those being injured workers. Of these, there were 802 active members in the program at the end of FY18. These active members engaged in online coaching, biometric screening and/or a health assessment.

New DSH initiatives for FY18 and FY19

DSH began several new initiatives in FY18 and FY19 to continue to improve occupational safety and health services to Ohio employers and employees.

In FY18, DSH continued the Safety Leaders Fellowship Program, piloted in FY17. The objective of this program is to provide recent college graduates in the fields of occupational safety and health, engineering, industrial hygiene, and/or physical/natural sciences an opportunity to receive on-the-job training to build a professional career in the fields of occupational safety and health, ergonomics, industrial hygiene and risk management. Since its implementation, the program has gained much interest from other BWC divisions and state agencies to serve as a model for recruiting new college graduates to work in state public service.

BWC hired six fellows in FY17. As of the first quarter of FY19, two of the first group of fellows have accepted employment offers in the fields of occupational safety and health at organizations outside of BWC. Four of the fellows have accepted full-time employment offers from BWC. DSH expects a second group of fellows to begin employment at BWC by the end of the 2018 calendar year.

Starting in FY18 and continuing into FY19, BWC is investing \$2.5 million to fund a statewide safety awareness and educational campaign to prevent injuries caused by slips, trips and falls, overexertion and motor vehicle accidents. Injuries associated with these causations account for more than 60 percent of workplace injuries. BWC developed the campaign in conjunction with Fahlgren Mortine. The effort includes television, online and mobile advertisement as well as training resources that address safety at home and at work. The campaign uses a classic symbol of protection, guardian angels, and humor to prompt Ohioans to think about their own safety at work and at home.

As of July 2018, PERRP launched the new Safety Partnership Agreement (SPA) program designed to recognize and partner with public employers that maintain an exemplary safety and health program. Public employers interested in SPA will apply to PERRP. Employers who are approved:

- Will become a leader in their industry and attract skilled workers.
- Can lower workers' compensation costs and increase productivity.
- Will receive recognition from PERRP for their achievements.
- Create a better, safer, healthier environment for their workers.

In October 2018, BWC joined OSHA and Ohio's craft brewery associations to form the Ohio Craft Brewery Alliance to elevate workplace safety among employers and employees working in Ohio's expanding craft brewery industry. The alliance's goal is to raise awareness about safety and prevent injuries by developing safety education and training resources specific to the industry. Industry partners include the Ohio Craft Brewers Association, the Master Brewers Association of the Americas and the Brewers Association. BWC will connect participating breweries to the array of safety resources and programs available through DSH and the OSHA On-Site Consultation Program.

In FY19, BWC is partnering with the Ohio Department of Developmental Disabilities (DODD) to provide online web-based training courses targeted toward workers who provide care to disabled adults and children. BWC and DODD will work with supplier Elsevier to provide access to quality online training. Training includes skill development and safety and health training modules to employers and employees of direct service providers caring for disabled children and adults. BWC is sharing the cost of the Elsevier license. BWC will contribute \$134,519.34 or a 46 percent share of the services.

Also, beginning in FY19, BWC is expanding its safety grant program to improve safety in law enforcement agencies, schools and state agencies. In FY19 through FY20, BWC will set aside \$4 million each for safety grant funding for Ohio police departments and schools, in addition to \$2 million for state agencies.

In collaboration with the Office of the Ohio Attorney General, BWC developed the Ohio Law Enforcement Body Armor Grant Program in September 2018. The program provides money to eligible law enforcement organizations for the purchase of body armor vests. An eligible local law enforcement agency may request up to \$40,000 of grant money during FY19 for the purchase of body armor vests, with a local match of 25 percent. The Office of the Ohio Attorney General of Ohio administers the program with oversight by BWC.

DSH is working with stakeholders, including the law enforcement community, the Ohio Department of Public Safety and the Ohio Homeland Security's Center for Safety & Security on designing and launching a grant program for improving the safety and security of schools. DSH will also work with state agencies to help develop innovative ways to promote safety among the businesses they work with. This work with the stakeholders will determine how they can best spend the grant funding to meet their needs and to structure the programs to have the maximum amount of impact.

Research activities and initiatives

DSH administers the Ohio Occupational Safety and Health Research Program. The program is a competitive research program. It emphasizes maximizing the impact of research efforts in the areas of occupational safety and health on the overall safety, health, productivity and competitiveness of Ohio's workforce. BWC modeled the program, with minor modifications, after the NIOSH National Occupational Research Agenda (NORA). The program provides funding for research projects, up to \$250,000, per project. BWC limits the duration of each research project to 12 to 24 months.

The program is an open competition for researchers in Ohio's not-for-profit higher education institutions and research organizations. BWC funded three projects in FY18 addressing the following research areas:

- Designing an organic grain dust simulator to better understand environmental health concerns of on-farm grain storage facilities and improve farmer respiratory protection practices.
- Biomechanical evaluation of exoskeletons for overhead occupational tasks.
- Assessing the potential of exoskeletons for Ohio industries.

BWC released new, interactive web-based guidelines for evaluating back and shoulder injury risks associated with job-related pushing and pulling tasks. BWC's Ohio Occupational Safety and Health Research Program funded the development of these guidelines by the Spine Research Institute at The Ohio State University. Based on biomechanics instead of psychophysics, the guidelines protect workers' shoulders as well as the low back.

In FY18, BWC and NIOSH continued to collaborate and use their respective strengths and resources on projects that improve public policy. BWC and NIOSH achieve this goal by using workers' compensation data as part of research that informs public policy for preventing occupational injuries and illnesses and improving workers' compensation systems.

During FY18, BWC renewed a grant from the Centers for Disease Control and Prevention to expand efforts to study injury trends using workers' compensation data. The cooperative agreement compiles, analyzes and disseminates workers' compensation data to promote the prevention of occupational injuries, illnesses, fatalities and exposures to hazards within Ohio and throughout the nation.

BWC and NIOSH co-authored a journal article published in January 2018 in the Journal of *Occupational and Environmental Medicine* titled, "Applying Machine Learning to Workers' Compensation Data to Identify Industry-Specific Ergonomic and Safety Prevention Priorities." This study leveraged data from BWC's claims and policy systems and used machine learning techniques to target prevention efforts by injury causation and industry. The researchers developed injury causation auto-coding methods to code more than 1.2 million BWC claims for the purposes of the study. The study ranked industry groups for soft-tissue musculoskeletal claims that may have been preventable by eliminating ergonomic or slip/trip/fall hazards and risks.

Additionally, several safety and health experts from BWC serve on the NORA industry sectors and cross-sectors councils assembled by NIOSH. NORA councils bring together occupational safety and health research leaders with representatives from businesses and industry and labor organizations to define the national occupational safety and health research needs and priorities in the various economic sectors.

Survey of Occupational Injuries and Illnesses

BWC renewed the cooperative agreement with the BLS for the SOII for FY18. The survey is the only comprehensive measure of work-related injuries and illnesses in U.S. workplaces. The agreement allows BWC to continue to administer the survey in Ohio.

The BLS developed this federally mandated survey as part of the Occupational Safety and Health Act of 1970. The BLS provides 50 percent of the funding and BWC provides 50 percent.

The survey provides information on the number and frequency of non-fatal injuries and illnesses occurring in workplaces. It also provides demographic and case characteristics information for serious injuries requiring time away from work. The BLS uses the information gathered through this report to generate state and national benchmarks for incidence of occupational injuries and illnesses. The report is a valuable research tool for the development of prevention policies and training toward improving safety standards in workplaces at both state and national levels.

The survey gathered data on occupational injuries and illnesses for the 2017 calendar year. The BLS randomly selected 4,600 establishments (both private and public) as a representative sample for the entire Ohio workforce. The survey achieved a 97-percent response rate with more than 5,300 cases of occupational injuries and illnesses reported. This number includes a sampling of cases with job restriction and transfer and all recordable cases involving days away from work. BWC coded all reported cases using the Occupational Injury and Illness Classification System and the Standard Occupational Classification System for comparison and analysis.

The BLS and BWC will make comprehensive statistics and publishable data available to the public later this year. In preparation for FY19 survey cycle, the BLS pre-notified 4,641 establishments of their inclusion in the SOII program. The FY19 survey will gather occupational injury and illness data for the 2018 calendar year.

Last year, the program successfully published the survey statistics available from the BLS survey for calendar year 2016 for Ohio. Results from the survey for the past two years show lower incidence rates of occupational injury and illness in Ohio in comparison to the nation and Ohio's neighboring states.

To ensure accessibility of the survey data, BWC created a webpage for the program at www.bwc.ohio.gov. BWC updates the page with educational articles on safety and prevention using results from the survey.

The department facilitated two educational presentations related to the SOII at the 2018 OSC. The first presentation provided information on occupational injury and illness statistics in major private industry sectors in Ohio from 2013 to 2016 using data from the SOII and other sources. The second presentation provided information on injury and illness statistics in the Ohio health-care industry. BWC will offer these presentations and more at the upcoming 2019 OSC.

Census of Fatal Occupational Injuries

BWC renewed a grant from the BLS to administer the CFOI program in Ohio for FY18. The grant is under a cooperative agreement between BWC and the BLS. It requires commitment from both agencies to split the cost of administration equally with the expectation that the parties will meet all defined deliverables within the agreement. CFOI is an occupational health and safety surveillance program. It's designed to identify, verify and meticulously document important variables associated with cases of fatal occupational injuries with the goal of providing robust and aggregated statistics. The program produces comprehensive, accurate and timely counts of fatal workplace injuries at state and national levels. CFOI runs on federal-state collaborative efforts. Since 1992, all 50 states and the District of Columbia have implemented CFOI.

CFOI is the most complete count of fatal occupational injuries in the United States. The census uses multiple data sources such as death certificates, workers' compensation reports, media reports and federal and state agency administrative reports to identify and verify fatal occupational injury cases. BWC obtains information about each workplace fatal injury such as deceased worker's occupation and other characteristics, equipment involved and causation variables by cross-referencing multiple sources of information. BWC substantiates all cases included in the census with at least two independent source documents or a source document and a follow-up questionnaire.

The BLS designed the census to provide information on rate and number of fatal traumatic occupational injuries occurring in workplaces across the nation. It also provides demographic and case characteristics details on fatal workplace injuries. The BLS uses information acquired through the census to estimate benchmarks for incidence of fatal injuries in workplaces at state and national levels. It also provides industry and occupation-specific information that serve as tools for developing and evaluating:

- Occupational safety standards.
- Preventive interventions.
- Policies.
- Training toward improving safety in workplaces across the nation.

The FY18 census gathered data on all cases of occupational fatal traumatic injuries for the 2017 calendar year. The program scope includes the entire workforce population in Ohio and the nation. It also includes cases of fatal occupational injuries that occurred in Ohio within this time frame. BWC coded all identified cases using the Occupational Injury and Illness Classification System and the Standard Occupational Classification System for comparison and analysis. The BLS and BWC will make comprehensive statistics and publishable data available to the public later this year.

Results from this program expand BWC's research effort into occupational safety and health. It is also a resource for assessing workplace safety in Ohio. In addition, it offers opportunities for identifying areas to further focus preventive efforts. BWC renews the program annually and expects it to continue into the foreseeable future.

Ohio occupational fatalities for calendar years 2013 through September 2018

Self-insured employers, private employers and government entities in Ohio report fatality claims to BWC. At the time of this report, BWC had reviewed more than 750 death claims in calendar years 2013 through 2018, including 70 work-related injury fatalities (excluding occupational disease-related fatalities) in calendar year 2017. Of these:

- Fifty-five workers died on the date of their injury.
- Ten workers died after the day of their injury in calendar year 2017;
- Five workers died in calendar year 2017 from injuries sustained in a previous calendar year.

There were 28 occupational disease (OD)-related fatalities in 2017.

Below is an analysis of work-related injury fatalities reported to BWC during calendar years 2013 through September 2018. The focus of this analysis is on fatalities that occurred in 2017. The analysis does not include fatalities that resulted from ODs or those in which the death was not determined to result from the occupational injury.

Figure 1 provides a general overview of occupational injury fatalities in Ohio for 2013 through September 2018 (excluding occupational disease fatalities).

For each year, the chart depicts:

- Fatalities where the worker died on the date of injury.
- Fatalities where the worker died on a date after the date of injury during the same year.
- Fatalities where the worker died in that year from injuries sustained in an earlier year.

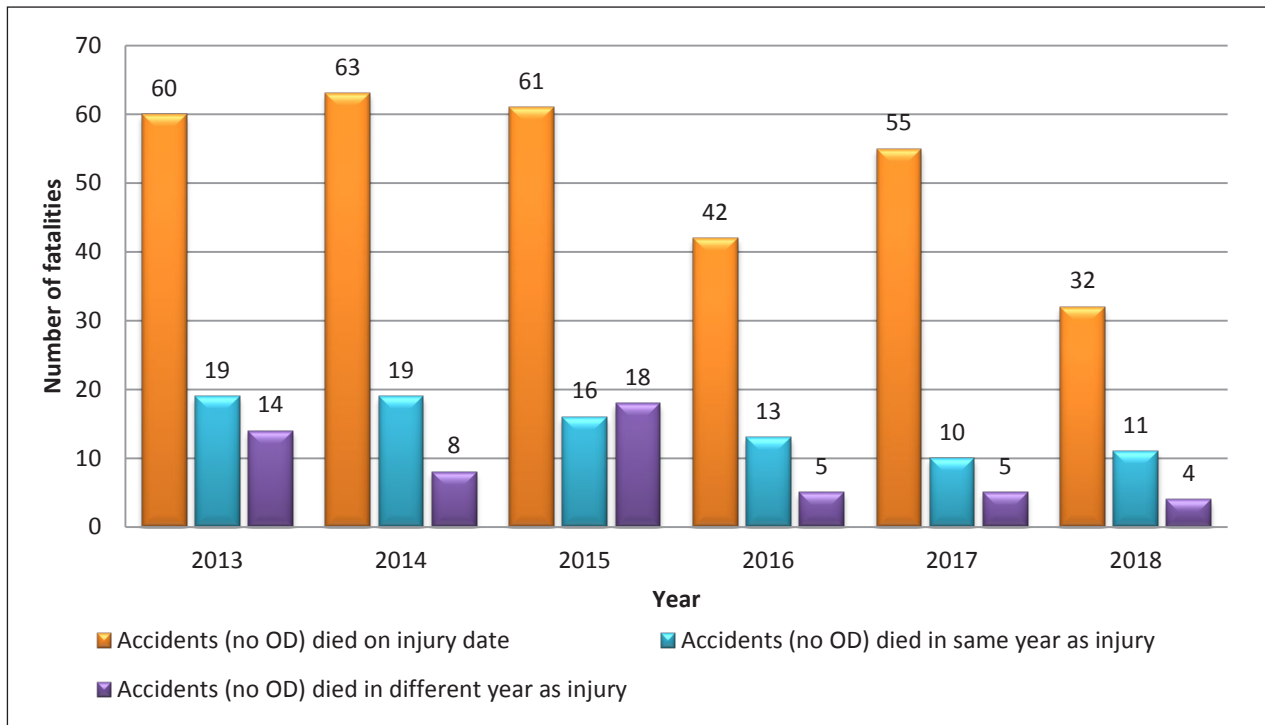


Figure 1: Ohio occupational injury fatalities (excluding OD fatalities) for calendar years 2013 through September 2018

Generally, occupational injury fatalities in Ohio have followed a downward trend. However, there was an increase from 60 fatalities in 2016 to 70 fatalities in 2017. Calendar year 2016 had the lowest number of fatalities among the six years included in the analysis.

2017 fatalities according to source of injury/illness (causation)

Figure 2 provides a summary of the primary causations for the fatalities from occupational injuries and ODs for calendar year 2017. The chart depicts the number and percentage of fatalities for 2017 grouped by causation. BWC determines fatality causations by various criteria, primarily based on a review of:

- *First Report of an Injury, Occupational Disease or Death* (FROI) documents.
- Medical records.
- Coroner reports.
- Police reports.
- Ohio Industrial Commission determinations.
- U.S. Department of Labor data.
- Physician reviews.
- Other BWC determinations.

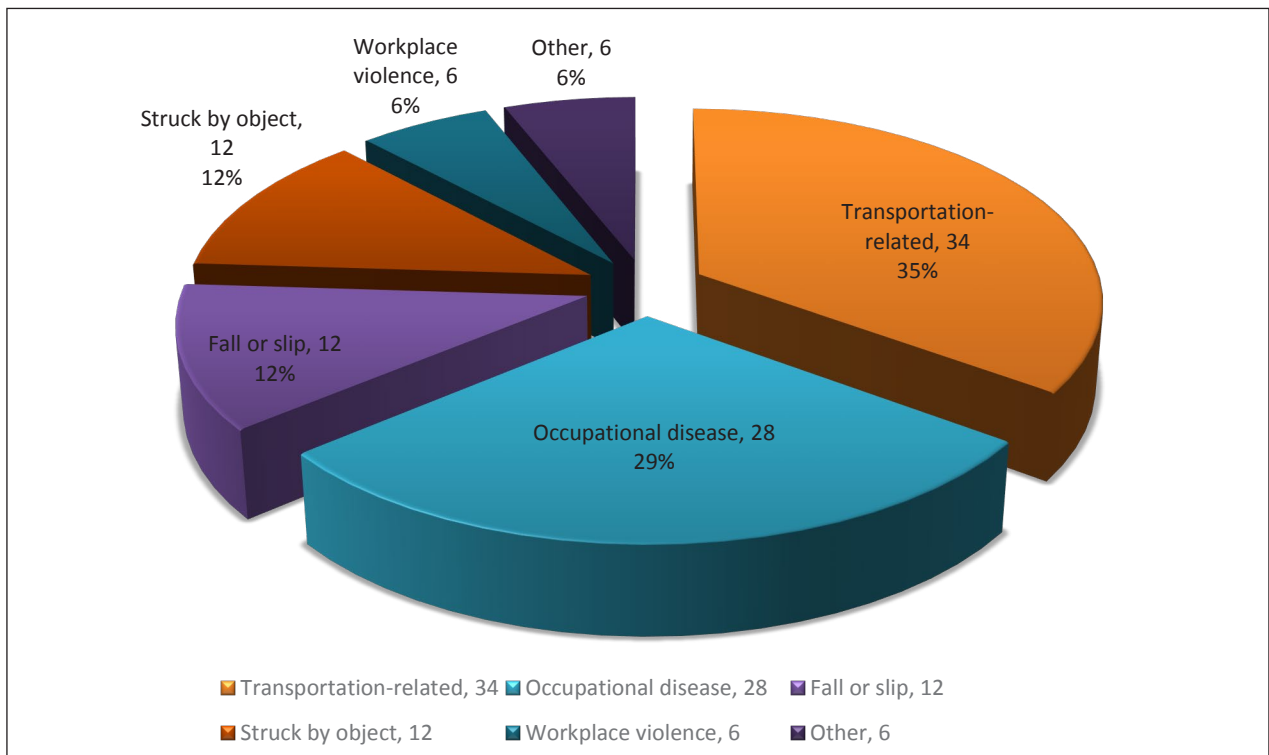


Figure 2: Calendar year 2017 fatalities by causation

In Ohio, transportation-related accidents continued to be the leading cause of non-OD work-related fatalities in 2017. These accidents increased from 30 in 2016 to 34 in 2017, a 13.3-percent increase. Of these transportation-related injuries:

- Twenty-four workers died in motor vehicle accidents as a driver or passenger.
- Five workers died when a vehicle struck them while working on or by a roadway.
- Three workers died as pedestrians hit by a vehicle.
- One worker died in an accident related to forklifts or construction equipment.
- One worker fatality involved a train.

The second leading causes of fatalities in Ohio for 2017 were slips and/or falls, and being struck by an object. These two types of accidents caused 12 fatalities each. Compared to 2016, fatalities from slips and/or falls remained the same for 2017. However, fatalities from being struck by an object doubled in 2017 from the six recorded in 2016.

The remaining coded causations for calendar year 2017 non-OD work-related fatalities are as follows:

- Six workers died because of workplace violence.
- Two workers died because of engulfment.
- One worker died from being caught in, on or between a machine or machine parts.
- One worker died because of electrocution.
- One worker died because of an animal/insect attack.
- One worker died because of an explosion/flareback.

OD-related fatalities decreased from 41 in 2016 to 28 in 2017. This is a 31.7-percent decrease.

2017 fatalities according to industry sector

Figure 3 depicts the number of fatalities by industry sector from 2013 through September 2018.

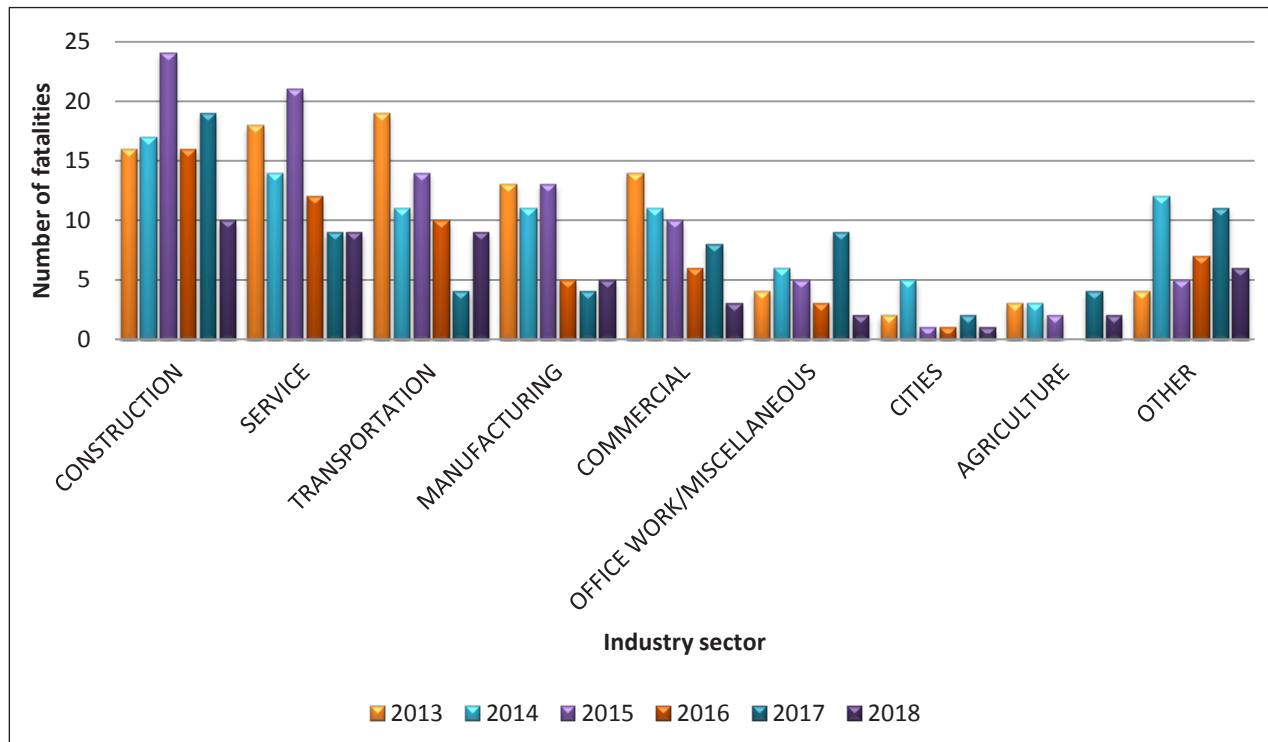


Figure 3: Fatalities by employer industry sector from calendar year 2013 through September 2018

The industry sector with the most fatalities in 2017 was the construction sector with 19 fatalities, compared to 16 in 2016. The primary cause of these fatalities was slips and/or falls.

In 2017, the service and office work/miscellaneous industry sectors had the second highest number of fatalities, nine each, compared to 12 in 2016 for the service sector and three in 2016 for the office work/miscellaneous sector. The leading cause of fatalities in the service sector was workplace violence and the leading cause for the office work/miscellaneous sector was motor vehicle accidents. The commercial industry sector had the fourth highest number of fatalities in 2017 with eight fatalities, compared to six in 2016.

The transportation sector is trending in a positive direction. The data represent a downward trend in fatalities in the transportation sector from a high of 19 in 2013 to a low of four in 2017. There were 10 transportation sector fatalities in 2016. The five-year average number of fatalities in the transportation sector has decreased 9.38 percent from the 2012 to 2016 period compared to the 2013 to 2017



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Letter from the Chairman

I am delighted to present the Ohio Industrial Commission's (IC) Annual Report for Fiscal Year (FY) 2018.

Throughout the previous fiscal year, our agency has adjudicated more than 112,000 workers' compensation appeals throughout the state. Simultaneously, we implemented countless innovative ideas at a minimal cost.

This report is a snapshot of our agency's accomplishments and demonstrates the IC is committed to being a leader in customer service.

FY 2018 highlights include:

- Biennium 2018/2019 was the fifth consecutive period where the total appropriation request was less than the preceding biennium period.
- Budget stability continued as expenditures for FY 2018 totaled \$46 million. This marks the sixth consecutive year that expenses have remained between \$45 million and \$46 million despite mandated pay increases and rising fringe rate costs.
- Maintained a consistent Administrative Cost Fund rate environment whereby assessed rates remained unchanged for three risk groups. The rate increased modestly for one risk group.
- Exceeded the statutory threshold for expenditures directed toward certified Minority Business Enterprises for the eighth consecutive year with a 33.5 percent rate.
- Decreased mandamus complaints filed in the Tenth District Court of Appeals by 27 percent in FY 2017-18.
- Embarked on a comprehensive review of the current Resolution Index, which documents IC policies, to determine which, if any, resolutions we should amend or rescind.
- Implemented electronic logging of access to confidential personal information (CPI) to ensure all accesses are valid.
- Updated our policy addressing the disclosure of CPI. This enables the agency to timely notify persons of a disclosure as well as to stop the dissemination of the disclosed information.
- Implemented case manager solutions for the hearing administration and Commission continuance/cancellation processes.
- Upgraded the Industrial Commission Online Network (ICON) to display the pre-hearing conference schedule on the representative hearing calendars.
- Rolled out new personal computers with faster processing speeds and enhanced security.
- Replaced the representative and employer identification cards with new identification cards that you can save on a mobile phone.
- Established connections for all IC offices to the Ohio One Network.

I look forward to new challenges and opportunities that come with each fiscal year.

In the future, the IC will continue to be dedicated to a simple objective: Manage our public funds in a responsible, conservative manner while providing Ohio's injured workers and employers with timely, impartial resolution of their workers' compensation appeals.

Sincerely,



Tim Bainbridge
Chairman

About the IC

Since 1912, the IC has resolved issues between parties who have a dispute in a workers' compensation claim. The IC conducts more than 112,000 hearings each fiscal year. Most of these hearings take place within 45 days of the original claim appeal. That means you may expect first-class customer service as the IC provides a forum for appealing BWC and self-insuring employer decisions. With each claim, the agency is dedicated to offering information and resources to help customers navigate through the appeals process.

The IC conducts hearings on disputed claims at three levels: The District level, the Staff level, and the Commission level. The Governor appoints the three-member Commission, and the Ohio Senate confirms these appointments. By previous vocation, employment or affiliation, one member must represent employees, one must represent employers and one must represent the public.

During this fiscal year, Chairman Thomas H. Bainbridge represented the employees; Jodie M. Taylor represented employers; and Karen L. Gillmor represented the public.

FY 2018 highlights

In addition to the Commissioners, there are 82 hearing officers — all attorneys — in five regional and seven district offices throughout the state.

In FY 2018, the IC heard 112,250 claims. District hearing officers (DHO) heard 79,055 claims. Staff hearing officers (SHO) heard 32,936 claims and the Commission heard 259 claims. The IC consistently achieved a high success rate in adjudicating claims well within the periods mandated by law throughout this fiscal year. From filing date to hearing date, district level (first level) hearings averaged 38 days. Staff level (second level) hearing appeals averaged 35 days. Both averages are well below the 45 days mandated by law. The statistics of filing date to mailing date were just as positive. For the district level, filing date to mailing date was 42 days on average. For the staff level, it averaged 39 days.

ICON is the primary reason for our continued success because it has made it easy to file appeals online. There were 51,301 first-level motions and appeals filed on ICON this fiscal year. There were also 51,151 second-level (or above) appeals filed on ICON during the fiscal year.

Customer Service received and responded to 1,032 AskIC submissions during this fiscal year. The department also scheduled 1,392 interpreters for injured workers hearings. In addition, our toll-free customer service line and two local customer service lines received 10,018 calls this fiscal year. Staff personnel assisted 22,530 people at our Columbus office. Customer Service also processed 72,549 documents.

Commission performance highlights – FY 2018

Formal hearings and administrative reviews account for most of the IC's activity. In FY 2018, the IC made approximately 180,338 decisions on issues arising from workers' compensation claims.

During FY 2018, the IC performed 68,172 administrative reviews and heard 112,250 claims at all adjudicatory levels. Claims heard includes hearings at the DHO, SHO, Deputy and Commission venues. Administrative reviews incorporate issues that do not initially require formal adjudication via hearing (Hearing Administrator issues, Commission requests, cancellation requests, etc.). These issues receive review and processing at the claims examining, word processing and hearing officer levels. However, they do not typically reflect in routine production reports under DHO or SHO dockets. These issues may subsequently result in a hearing under the normal adjudicatory process. They reflect accordingly under respective hearing venues.

The DHO hearing volume accounts for 70 percent of the overall hearings during FY 2018 at 79,055 claims heard. The SHO volume recorded 32,936 claims heard. Deputy venue claims heard totaled 91 in FY 2018 while the Commission venue recorded 168 claims heard. Total claims heard includes continuances, referrals, dismissals and other final determinations made because of a hearing.

Regionally, the distribution of FY 2018 claims heard at DHO and SHO hearing levels is as follows (figures rounded): Columbus at 33 percent, Cleveland at 22 percent, Akron at 18 percent, Cincinnati at 18 percent and Toledo at 8 percent.

The DHO and SHO conducted hearings on 246 days during FY 2018. The DHOs and SHOs heard an average of 455 claims per hearing day. DHOs averaged 321 claims heard per day while SHOs averaged 134 claims heard per day.

Ohio Revised Code (ORC) 4123.511 sets forth hearing time frame performance mandates for the DHO, SHO and Commission hearing venues. On average, all IC offices and venues performed within the statutory limits that require the IC to hear a claim within 45 days of a motion or appeal filing. Ohio law sets the overall IC performance benchmarks for filing to mailing at 52 days for each hearing venue. This performance measure is based on the combination of the two statutory periods: Filing to hearing and hearing to mailing (45+7).

DHO performance

DHOs conduct hearings on two formal docket types – Allowance (primarily injury allowance, compensation and treatment issues) and C-92 (permanent partial disability issues). Only allowance docket issues fall under time frame requirements outlined in ORC 4123.511. DHOs heard a total of 61,872 allowance docket claims during FY 2018. Of those, 44,227 qualified for inclusion in time studies. On average, the IC completed the DHO process (filing of motion/appeal to mailing of DHO order) within 42 days during FY 2018.

SHO performance

SHOs conduct hearings on five formal docket types:

- Appeal (primarily injury allowance, compensation and treatment issues).
- Permanent total disability.
- Reconsideration (permanent partial disability issues).
- Violations of Specific Safety Requirements.
- Miscellaneous (other issues not designated to a pre-defined docket type).

Only appeal docket issues fall under time frame requirements outlined in ORC 4123.511. SHOs heard a total of 27,926 appeal claims during FY 2018. Of those, 25,034 qualified for inclusion in time studies.

ORC 4123.511(D) states the IC must hear staff Hearing level appeals within a 45-day period. In FY 2018, the staff appeal processes averaged 35 days for the statutory filing to hearing period.

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