

# Workers' Compensation Advisory Committee (WCAC)

*December 8, 2022*



# AGENDA

## Workers' Compensation Advisory Committee (WCAC) Quarterly Meeting

Thursday, December 08, 2022  
Hybrid – L&I Auditorium and Zoom  
9:00am-12:00pm

Time	Topic	Presenter(s)
9:00 am - 9:10 am	<b>Welcome</b>	Mike Ratko Joel Sacks Sharon Perkins
	<ul style="list-style-type: none"><li>• Introductions</li><li>• Motion to approve minutes</li><li>• Safety Message</li></ul>	
9:10 am – 9:30 am	<b>General Updates</b>	Mike Ratko Joel Sacks
	<ul style="list-style-type: none"><li>• COVID-19</li><li>• TNC</li><li>• ProviderOne</li><li>• WCSM</li><li>• 2023 Rate Adoption</li></ul>	
9:30 am – 10:00 am	<b>Long COVID</b>	Dr. Ji Young Nam
10:00 am – 10:15 am	<b>Operational Health Dashboard</b>	Mike Ratko
10:15 am – 10:25 am	<b>Break</b>	
10:25 am – 10:50 am	<b>Conning – National WC update</b>	Daniel Erickson
10:50 am – 11:05 am	<b>Program Spotlight – Employer Services</b>	Keith Bingham
11:05 am – 11:20 am	<b>Program Spotlight – Field Audit</b>	Bryan Jewell
11:20 am – 11:35 am	<b>Industrial Insurance State Fund Financial Overview</b>	Rachel Swanner
11:35 am – 11:50 am	<b>Board of Industrial Insurance (BIA) Update</b>	Holly Kessler
11:50 am – 12:00 pm	<b>Closing Comments &amp; Adjourn</b>	Mike Ratko Joel Sacks

# Safety Message

*Sharon Perkins, Digital Education Manager, Division of Occupational Safety and Health (DOSH)*



# Vehicle Emergency Kits

Every vehicle should have an emergency supply kit in the trunk.

Kits should be checked every six months and expired items should be replaced regularly.

# What should you keep in the car?

- A properly inflated spare tire, wheel wrench, and tripod jack
- Jumper cables
- Tool kit and/or a multipurpose utility tool
- Flashlight and extra batteries
- Reflective triangles and brightly colored cloth to make your vehicle more visible
- Compass

# What should you keep in the car?

- First aid kit with:
  - Gauze, tape, bandages
  - Antibiotic ointment, aspirin, hydrocortisone
  - A blanket
  - Non-latex gloves
  - Scissors
  - Thermometer
  - Tweezers
  - Instant cold compress

# What should you keep in the car?

- Nonperishable high-energy foods such as unsalted nuts, dried fruits, and hard candy
- Drinking water
- Reflective vest in case you need to walk to get help
- Car charger for your cell phone
- Fire extinguisher
- Duct tape
- Rain poncho

# What should you keep in the car?

Additional items for cold weather include:

- Snow brush
- Shovel
- Chains and a small rug
- Windshield washer fluid
- Warm clothing
- Cat litter for traction
- Blankets



# What should you keep in your phone?

- Family phone numbers
- Emergency phone numbers including:
  - your auto insurance provider
  - a towing company

Source: The National Safety Council

# General Updates



COVID-19

ProviderOne

WCSM

Transportation  
Network  
Companies  
(TNC)

2023 Rate  
Adoption

# COVID Claims

	State Fund	Self-Insured	Total
<b>Accepted total</b>	<b>11,299</b>	<b>8,077</b>	<b>19,376</b>
<i>Open</i>	267	667	934
<i>Closed</i>	11,032	7,410	18,442
<b>Rejected</b>	<b>2,119</b>	<b>676</b>	<b>2,795</b>
<b>Pending</b>	<b>233</b>	<b>25</b>	<b>258</b>
Total	13,651	8,778	22,429

## Fatal Claims

State Fund	38
Self-Insured	18
Total	56

Accepted Claims	State Fund	Self-Insured	Total
Time-loss	9,624	7,789	17,413
Medical	784	165	949
KOS	891	123	1,014
Total	11,299	8,077	19,376

	State Fund	Self-Insured	Total
Healthcare related	6,431	4,016	10,447
First responders	2,062	1,389	3,451
Miscellaneous Services	1,681	49	1,730
Government	438	778	1,216
Misc. Professional and Clerical	199	875	1,074
Schools	85	816	901
Stores	129	18	147
Transportation and Warehousing	59	59	118
Agriculture	97	4	101
Food Processing and Manufacturing	51	16	67
Miscellaneous Manufacturing	13	26	39
Temporary Help	11	10	21
Trades	16	5	21
Other	27	16	43
Total	11,299	8,077	19,376

# Miscellaneous Services - COVID Claims by Risk Main

	<b>State Fund</b>	<b>Self-Insured</b>	<b>Total</b>
Boarding Homes and Retirement Centers	1,262	12	1,274
Chore Services	238		238
Restaurants and Taverns	73		73
Home care services/consumer directed employer program	38		38
Automobile Dealers, Rentals and Service Shops	25		25
Community Service Workers		18	18
Motels and Hotels	12	1	13
Janitorial Service	13		13
DOE Contractors Administrative and Professional Employees		12	12
Property and Building Management Services	4	5	9
Card Rooms, Bingo Parlors and Recreational Centers	4		4
All Other	12	1	13
	<b>1,681</b>	<b>49</b>	<b>1,730</b>

# Long COVID

*Dr. Ji Young Nam, MD, MPH  
Office of the Medical Director*



# Topics

- General overview
  - Terms and definition
  - Symptoms
  - Prevalence & Pathogenesis
  - Risk factors
- Challenges of Long COVID
  - Clinical setting
  - Causation
  - Mental health aspects
  - Return to work
- Future direction

# General Overview

- Terms and definitions
- Symptoms
- Prevalence estimate in WA
- Pathogenesis
- Vaccination and Long COVID



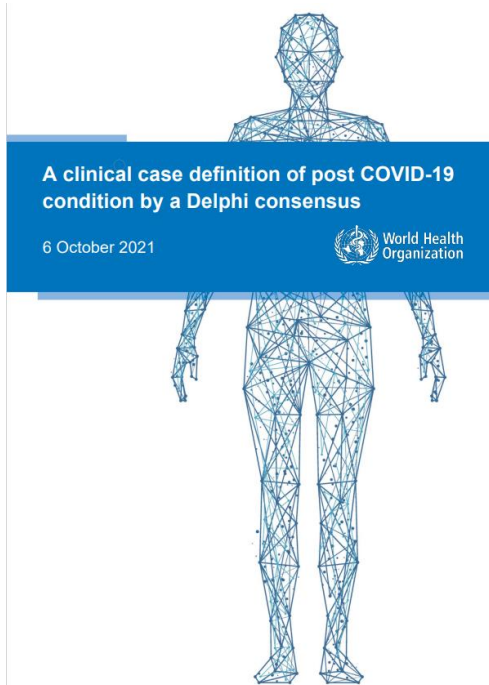
# Terms and definitions

- Long COVID
- Post COVID-19 condition (WHO)
- PASC, or Post-Acute Sequelae of SARS-CoV-2 (NIH)
  
- Post-COVID conditions (CDC): Umbrella term for wide range of physical and mental health consequences, present **four weeks and beyond** after infection with SARS-CoV-2, *including for patients who had initial mild or asymptomatic acute infection.*

# Post COVID-19 condition (WHO)

- Post COVID-19 condition occurs in individuals with a **history of probable or confirmed SARS-CoV-2** infection, **usually 3 months from the onset of COVID-19 with symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis**. Common symptoms include fatigue, shortness of breath, cognitive dysfunction but also others and generally have an **impact on everyday functioning**. Symptoms may be **new onset** following initial recovery from an acute COVID-19 episode or **persist** from the initial illness. Symptoms may also **fluctuate** or **relapse** over time.

# WHO consensus

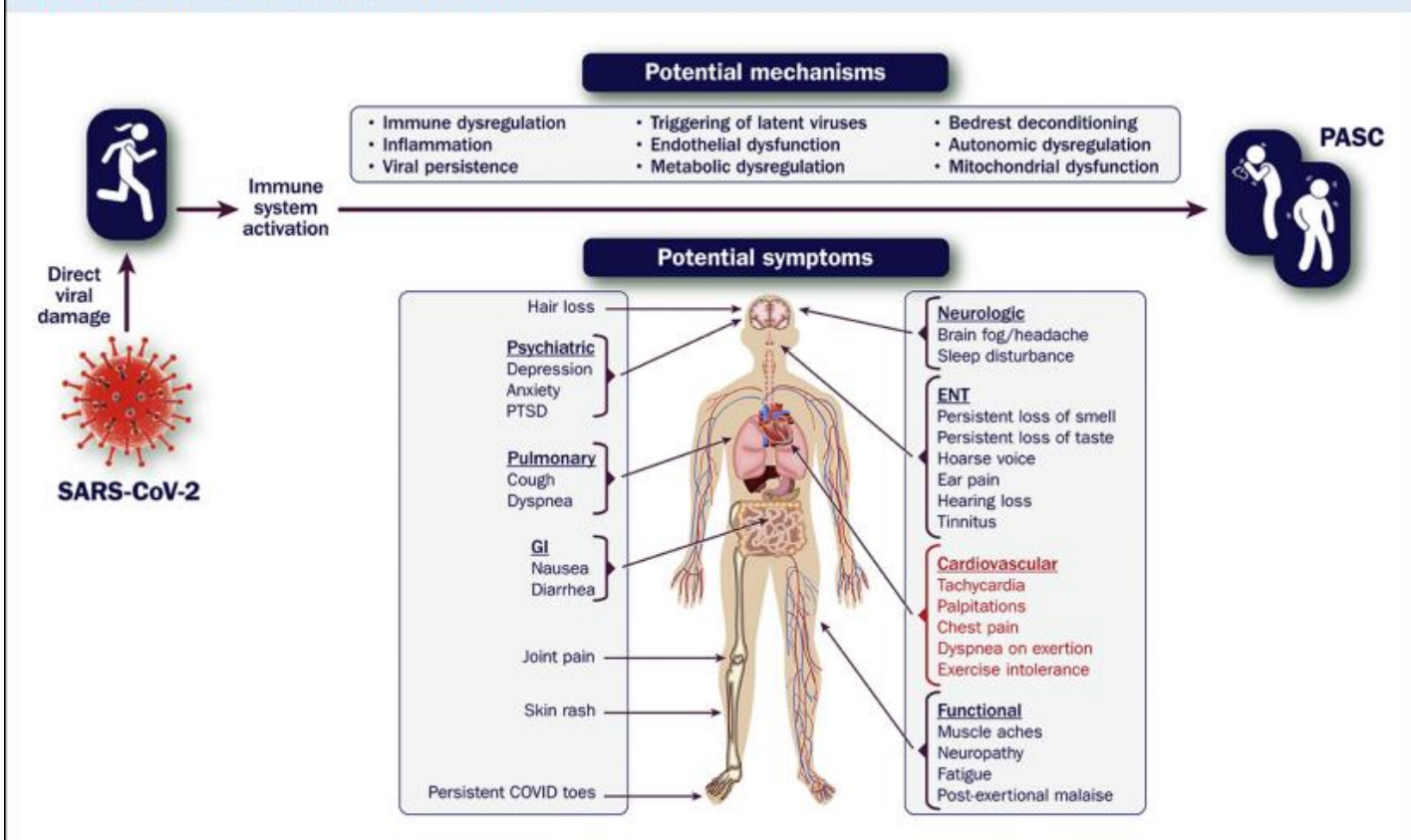


Domain number	Domain name
1	History of SARS-CoV-2 infection
2	SARS-CoV-2 laboratory confirmation
3	Minimum time period from onset of symptoms (or from date of positive test for asymptomatic) <u>3 months</u>
4	Minimum duration of symptoms <u>at least 2 months</u>
5	Symptoms and/or impairments: <b>cognitive dysfunction, fatigue, shortness of breath, others</b>
6	Minimum number of symptoms
7	<u>Clustering of symptoms</u>
8	Time-course nature of symptoms: ( <u>fluctuating</u> , increasing, <b>new onset</b> , <b>persistent</b> , <u>relapsing</u> )
9	Sequelae of well-described complications of COVID-19 (stroke, heart attack, etc.)
10	<b>Symptoms cannot be explained by an alternative diagnosis</b>
11	Application of definition to different populations: <i>Include separate definition for children, others</i>
12	<i>Impact on everyday functioning</i>

# Symptoms seen in post-COVID conditions

- General symptoms
  - Tiredness or fatigue that interferes with daily life
  - Post-exertional malaise
  - Fever
- Respiratory and heart symptoms
  - Dyspnea
  - Cough
  - Chest pain
  - Heart palpitations
- Digestive symptoms
  - Diarrhea
  - Stomach pain
- Neurological symptoms
  - Difficulty thinking or concentrating (“brain fog”)
  - Headache
  - Sleep problems
  - Lightheadedness
  - Pins-and-needles feelings
  - Change in smell or taste
  - Depression or anxiety
- Other symptoms
  - Joint or muscle pain
  - Rash
  - Changes in menstrual cycles

**FIGURE 5** Symptoms of PASC and Potential Mechanisms



[2022 ACC Expert Consensus Decision Pathway on Cardiovascular Sequelae of COVID-19 in Adults](#)

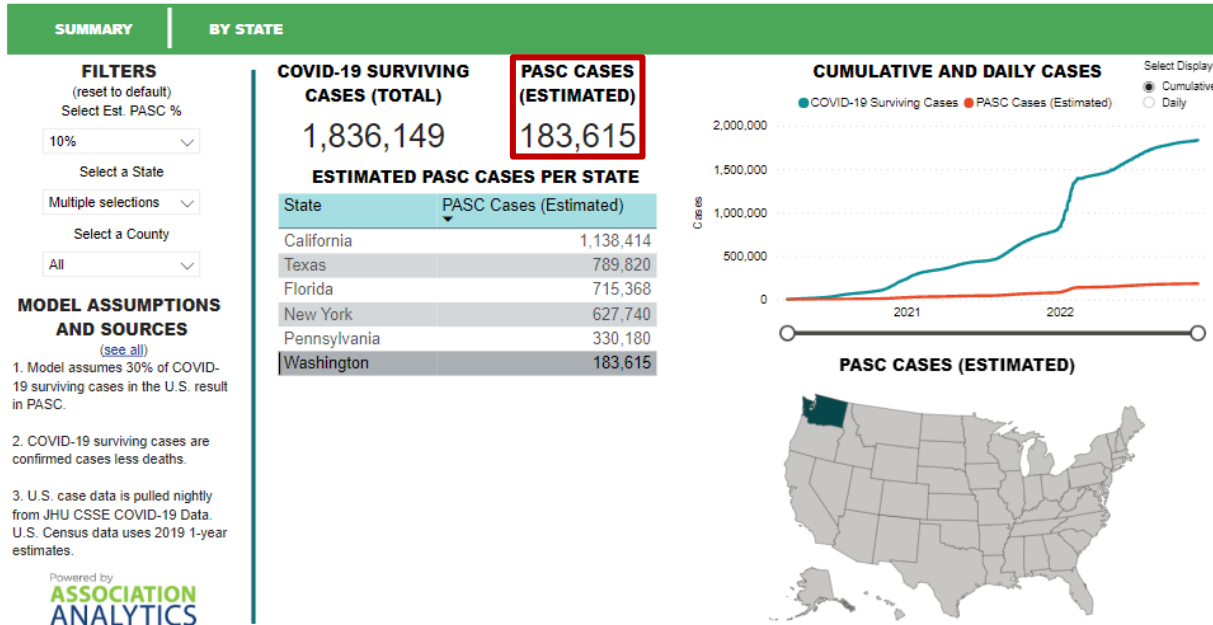
# Long COVID in Washington state

## Post-Acute Sequelae of SARS-CoV-2 Infections (PASC) Estimates and Insights

American Academy of Physical Medicine and Rehabilitation

Data as of 11/27/2022

[View Dashboard Assumptions, Methodology, and Sources](#)



# Pathogenesis of Long COVID (Peluso et al., 2022)

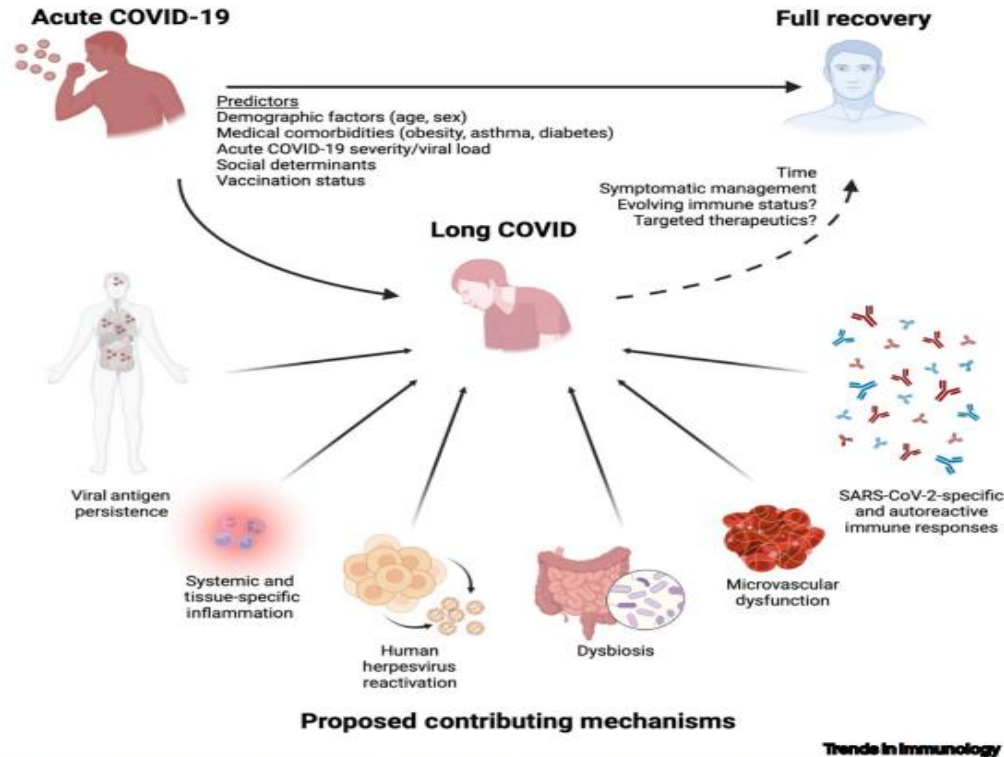


Figure 1. Predictors and proposed pathophysiologic mechanisms of long coronavirus disease

# Risk factors of long COVID

- Symptoms and risk factors for long COVID in **non-hospitalized** adults (Subramanian et al., Nature Medicine 2022)
- Method: The risk factor analysis included 384,137 individuals (Long COVID symptoms n=29,869) infected with SARS-CoV-2 between 1/31/20 and 4/15/21 with a minimum of 12 weeks of follow-up in the UK.
- Females, ethnic minority, socioeconomic deprivation, smoking, obesity
- Comorbidities at baseline
  - **COPD** (aHR 1.55, 95% CI 1.47-1.64)
  - **Fibromyalgia** (aHR 1.37, 95% CI 1.28-1.47)
  - **Anxiety** (aHR 1.35, 95% CI 1.31-1.39)
  - **Depression** (aHR 1.31, 95% CI 1.27-1.34)
  - Migraine (aHR 1.26, 95% CI 1.22-1.30)
  - Multiple sclerosis (aHR 1.26, 95% CI 1.03-1.53)
  - Irritable bowel syndrome (aHR 1.20, 95% CI 1.15-1.24)



# Risk factors of long COVID (cont.)

- Population-Based Estimates on Post-acute Sequelae of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection (PASC) Prevalence and Characteristics (Hirschtick et al., Clinical Infectious Diseases 2021)
- Method: Population-based probability survey of adults with COVID-19 infection in Michigan. Among 2000 selected, 629 completed the survey between June-December 2020.

Severity of COVID-19 illness (n=593)	30-day post-COVID conditions (Adjusted)		60-day post-COVID conditions (Adjusted)	
	RR	95% CI	RR	95% CI
Mild	1.00		1.00	
Severe	1.91	1.25-2.93	1.36	0.81-2.26
Very severe	2.25	1.46-3.46	1.71	1.02-2.88
Hospitalized	1.37	1.12-1.69	1.40	1.02-1.93

# Vaccination and Long COVID

- Association Between BNT162b2 Vaccination and Long COVID After Infections Not Requiring Hospitalization in Health Care Workers (Azzolini et al., JAMA 2022)
- Method: Observational cohort study from 3/2020 and 4/2022 in individuals working in 9 Italian health care facilities. Of 2560 participants, 739 individuals (29%) had COVID-19, of whom 229 (31%) had long COVID.
- Conclusion: The prevalence of long COVID varied across the pandemic waves, from 48.1% in wave 1 to 35.9% in wave 2 to 16.5% in wave 3. **2 or 3 doses of vaccine** compared with no vaccination were associated with lower long COVID prevalence.

# Azzolini et al., JAMA August 2022

Table 2. Multivariable Logistic Regression Analysis of the Association of Long COVID (N = 229) With Patient Characteristics<sup>a</sup>

	OR (95% CI)	P value
Male sex	0.65 (0.44-0.98)	.04
Age <sup>b</sup>	1.23 (1.01-1.49)	.04
BMI <sup>b</sup>	1.10 (0.92-1.31)	.30
Allergies	1.50 (1.06-2.11)	.02
No. of comorbidities <sup>c</sup>	1.32 (1.04-1.68)	.03
COVID-19 wave		
2	0.72 (0.48-1.08)	.11
3	1.34 (0.26-7.01)	.73
Vaccine dose <sup>d</sup>		
1	0.86 (0.21-3.49)	.83
2	0.25 (0.07-0.87)	.03
3	0.16 (0.03-0.84)	.03

Abbreviations: BMI, body mass index; OR, odds ratio.

<sup>a</sup> Reference model: women in COVID-19 wave 1 with 0 doses of vaccine, with no allergies and no comorbidities.

<sup>b</sup> Age and BMI have been standardized (mean = 0; SD = 1). Age SD = 11.3 years; BMI SD = 3.9.

<sup>c</sup> Number of comorbidities is a discrete variable ranging from 0 to 4, where 4 represents 4 or more different comorbidities.

<sup>d</sup> At least 14 days prior to infection.

# Challenges of Long COVID

- Clinical setting
- Causation analysis
- Mental health aspects
- Cognitive impairment
- Return to work

# Clinical case example

- 40yF RN with ongoing brain fog, dyspnea on exertion, dizziness, worsening mood symptoms, insomnia, fatigue and post-exertional malaise after COVID infection in August 2020.
- Extensive cardiac, pulmonary and neurologic evaluations were unremarkable.
- PMH: Obesity, depression, anxiety, obstructive sleep apnea, GERD, prediabetes
- Back to work for 2 shifts/week after several months off work, but her psychologist recently recommended extended medical leave for recovery.
- “I feel totally exhausted after my shifts and do not feel getting better at all.”

# Challenges of Long COVID

- Complexity and Challenges of the Clinical Diagnosis and Management of Long COVID (O'Hare et al., JAMA 2022)
  - Method: Qualitative analysis on data from EHRs of a national sample of **200** patients receiving care in the department of VA with positive COVID test from 02/27/20 to 12/31/21 and ICD-10 diagnostic code for long COVID from 10/01/21 to 03/01/22.
- Findings
  - ✓ Clinical Uncertainty
    - Encountering Medical Complexity
    - Limited Functional Reserve
    - Reliance on Patient Reports
    - Monitoring, Diagnostic Testing, and Referral
  - ✓ Care Fragmentation
    - Siloed Approach
    - Limited Care Coordination
    - Potentially Burdensome Care

# O'Hare et al., JAMA November 2022

**Table 1. Baseline Characteristics of the 200 Sampled Patients With a Diagnostic Code for Long COVID**

Characteristics	No. (%)
Age, y	
Mean (SD)	60.0 (14.5)
<60	92 (46.0)
60-74	75 (37.5)
≥75	43 (16.5)
Sex	
Men	173 (86.5)
Women	27 (13.5)
Race	
Black	45 (22.5)
White	136 (68.0)
Other <sup>a</sup>	6 (3.0)
Missing	13 (6.5)

Comorbidities	
Diabetes	63 (31.5)
Congestive heart failure	16 (8.0)
Chronic obstructive pulmonary disease	54 (27.0)
Posttraumatic stress disorder	54 (27.0)
Major depressive disorder	85 (42.5)
Charlson Comorbidity index, median (IQR)	1 (0-3)
Care during initial infection	
Hospitalized within 30 d	60 (30.0)
Mechanical ventilation within 30 d	8 (4.0)
Time period of first positive PCR test result for SARS-CoV-2	
Before May 20, 2020	12 (6.0)
June 1-October 31, 2020	28 (14.0)
November 1, 2020, to April 30, 2021	67 (33.5)
May 1-September 30, 2021	41 (20.5)
October 1-December 31, 2021	52 (26.0)
Time from baseline to earliest diagnostic code for long COVID, median (IQR), d	287 (48-385)

# O'Hare et al., JAMA November 2022 (cont.)

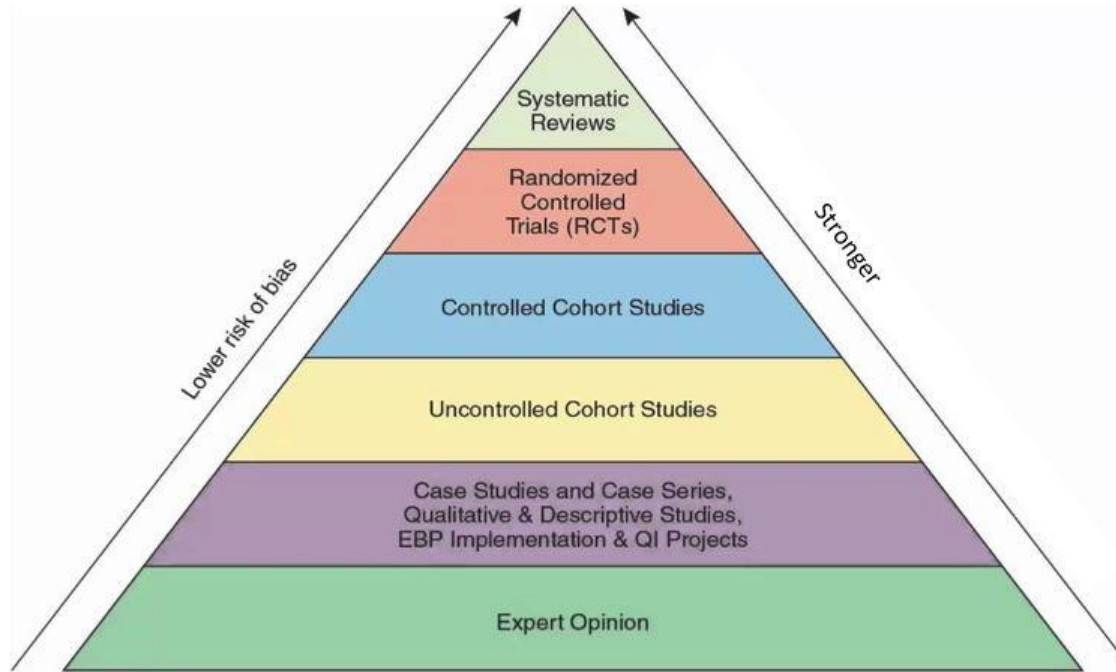
Note title	Date	Exemplar quotation
Pulmonary consult	May 2021	"She also relates a history of asthma and chronic cough. Difficult at this time to separate out post COVID recovery from potential underlying asthma."
Social work note	August 2021	"[Patient] has several different cognitive issues that affect his memory and ability to process frustrations. He has traumatic brain injury, the aftermath of long-term COVID-19, and the effects of long-term alcoholism."
Physician ED note	March 2021	"She [patient's wife] expressed concerns about [patient's] ongoing substance abuse and deterioration of cognitive functioning ever since he was on ventilator due to complications of COVID-19 infection."
Mental health note	January 2021	"Veteran reported primary concerns is panic attacks, increasing in frequency/intensity over the past 3+ months in the context of various psychosocial stressors (COVID pandemic, 4 children at home, working part time, planning/getting married...moving...contracting COVID)."
Telephone encounter note	September 2021	"[Patient] says he had a CT done which was ordered by the COVID team. He has not received any results... CT shows L upper lobe nodule which no one told him about, my telling him is new information to him."



# Causation challenges related to Long COVID

- Causation analysis
  - “Inextricably intertwined”
  - Causal relationship vs. alternative diagnoses?
    - Pre-existing conditions: Adequacy of available information
    - Association with syndromic illness: ME/CFS, fibromyalgia syndrome.
    - Subjective symptoms with no objective findings.
    - “Medically unexplained physical symptoms (MUPS)”
  - Various conditions are attributed to post-COVID conditions.
    - Different, often multiple organs and systems involved.
    - Aggravation vs. natural disease progression vs. pre-existing, undiagnosed conditions? e.g. DM, asthma, OSA, adrenal insufficiency, etc.
    - Questionable medical literature with quality concerns. → **No reliable or established medical evidence on causality.**

# Hierarchy of Evidence



# NIOSH/ACOEM Steps for the Determination of Work-Relatedness of a Disease

1. Identify evidence of disease
2. Review and assess the available epidemiologic evidence for a causal relationship
3. Obtain and assess the evidence of exposure
4. Consider other relevant factors
5. Judge the validity of testimony
6. Form conclusions about the work-relatedness of the disease in the person undergoing evaluation.

# Bradford Hill Criteria for Causation

- **Temporal relationship**
- Strength of association
- Dose-Response relationship
- Consistency
- Plausibility
- Consideration of alternate explanations
- Experiment
- Specificity
- Coherence

# Clinical Case Example (cont.)

- 40yF RN with ongoing brain fog, dyspnea on exertion, dizziness, worsening depression/anxiety, insomnia, fatigue and post-exertional malaise after COVID infection in August 2020.
- Currently working 3 shifts/week in modified duty
- “Hard to remember verbal orders when I am tired and I have to triple check myself before dispensing medications. My words get stuck or I cannot find the right word at times.”
- Tolerated 4 shifts/week but had to go back to 3 shifts/week due to worsening mood and fatigue after stressful family event.

# Long COVID and Mental Health

- Risks of mental health outcomes in people with covid-19: cohort study (Xie et al., BMJ 2022)
  - Method: Cohort of 153,848 people who survived the first 30 days of SARS-CoV-2 infection, and two control groups of a contemporary group (n=5,637,840) with no evidence of SARS-CoV-2, and a historical control group (n=5,859,251) that predated the covid-19 pandemic.
  - Increased risk of incident mental health outcomes at one year in COVID-19 group compared with the contemporary control group
    - Anxiety disorders: HR 1.35, 95% CI 1.30-1.39
    - Depressive disorders: HR 1.39, 95% CI 1.34-1.43
    - Stress and adjustment disorders: HR 1.38, 95% CI 1.34-1.43
    - Opioid use disorders: HR 1.34, 95% CI 1.21-1.48
    - Sleep disorder: HR 1.41, 95% CI 1.38-1.45

# Xie et al., BMJ February 2022

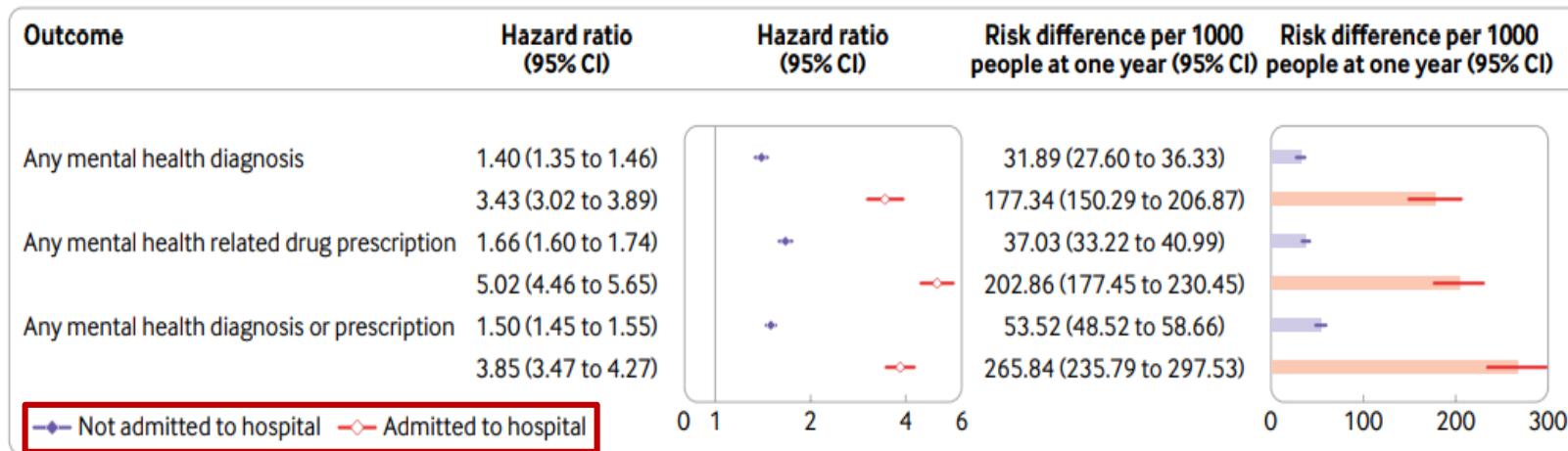


Fig 6 | Risks of incident composite mental health outcomes in covid-19 group compared with contemporary control group by care setting. Outcomes were ascertained 30 days after the initial SARS-CoV-2 positive test result until end of follow-up. Hazard ratios are estimated through the follow-up and adjusted for age, race, sex, area deprivation index, body mass index, smoking status, number of outpatient encounters, history of hospital admission, use of long term care, cancer, chronic kidney disease, chronic lung disease, dementia, diabetes mellitus, dysautonomia, hyperlipidemia, hypertension, estimated glomerular filtration rate, systolic and diastolic blood pressure, and algorithmically selected high dimensional covariates. Risk differences are estimated at one year

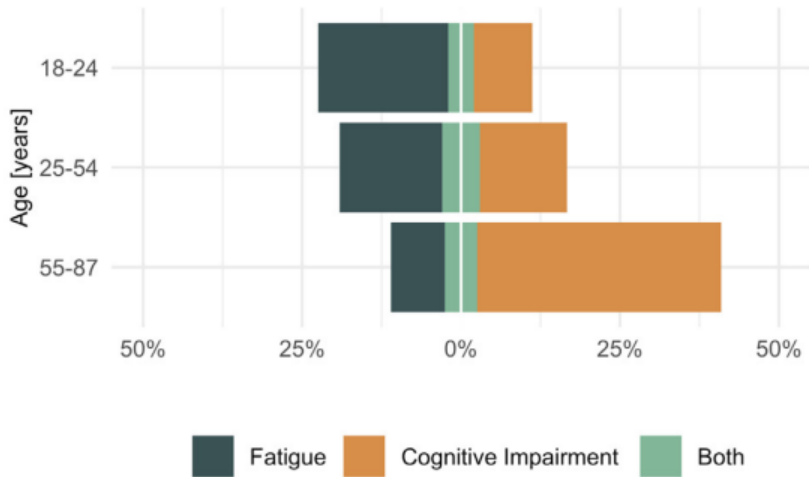
# Fatigue and cognitive impairment after COVID-19: A prospective multicenter study

- Hartung et al., Lancet 2022
- Method: Frequency of post-COVID fatigue and cognitive impairment were assessed in 969 patients  $\geq 6$  months after SARS-CoV-2 infection with validated instruments (FACIT-Fatigue scale, MoCA test) between 11/15/20 and 9/29/21 compared to 969 matched non-COVID controls.
- Findings: On average 9 months after infection, **19%** of patients had clinically relevant fatigue, compared to 8% of matched non-COVID controls ( $p < 0.001$ ). **26%** of patients had mild and **1%** had moderate cognitive impairment.



# Fatigue and cognitive impairment after COVID-19

Hartung et al., Lancet 2022



Hadad et al., Journal of NeuroVirology, 2022

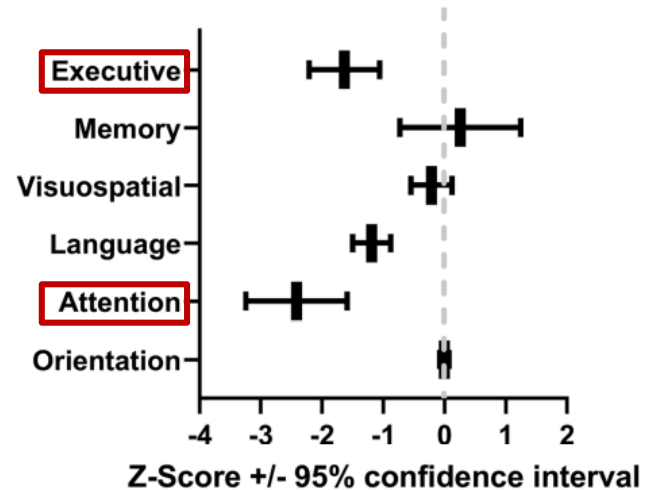


Fig. 1 Impact of long COVID syndrome on MoCA index scores

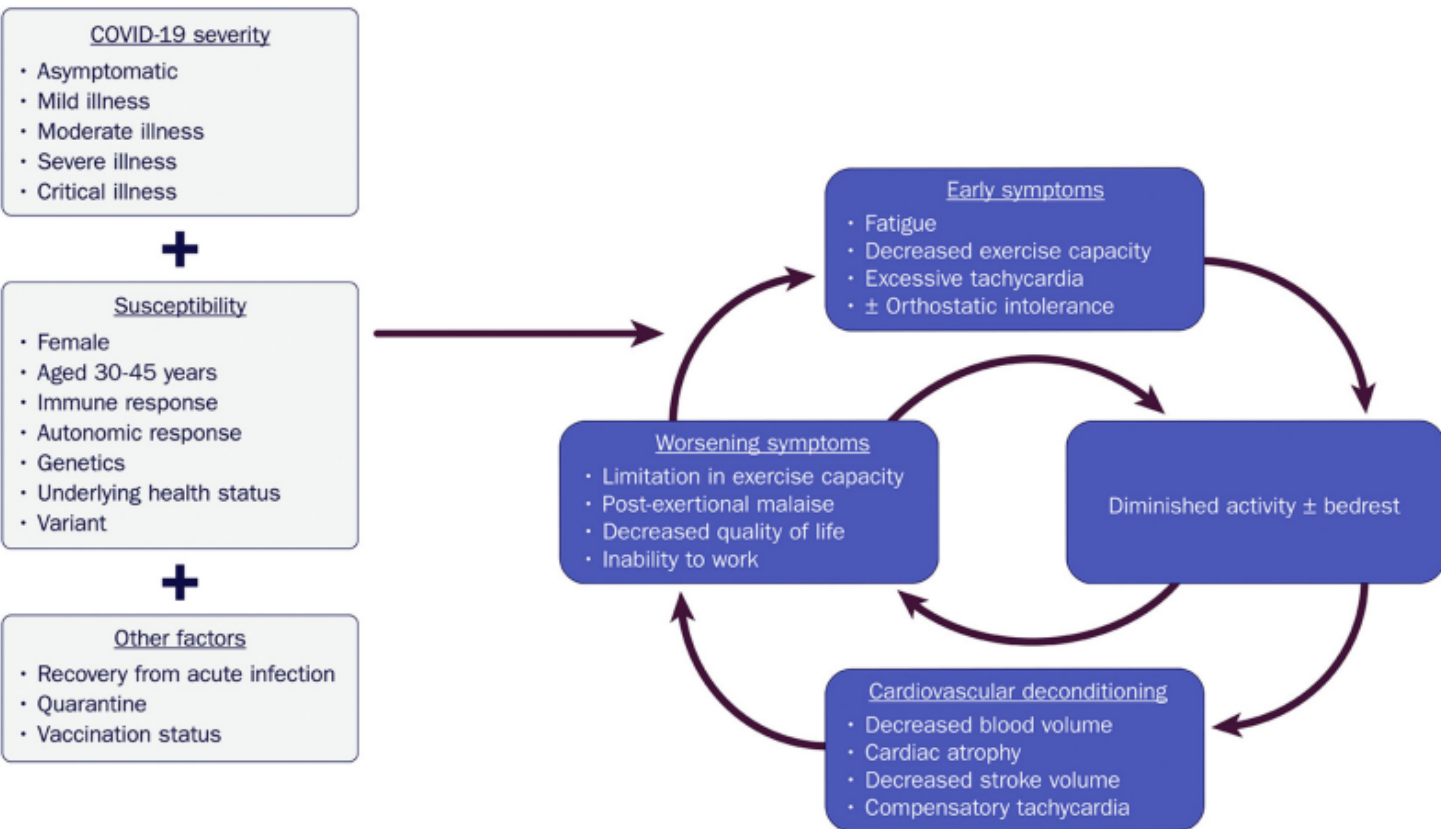
# Treatment

- No universal treatment of long COVID yet.
- Helpful resources
  - AAPM&R Multi-disciplinary PASC collaborative (fatigue, cognitive symptoms, autonomic dysfunction, breathing discomfort, cardiovascular complications)
  - VA Guidebook on Long COVID
  - 2022 ACC Expert consensus on Cardiovascular sequelae of COVID-19 in Adults

**TABLE 4** PASC fatigue treatment recommendations

#	Statement
1	Begin an individualized and structured, titrated return to activity program.
2	Discuss energy conservation strategies.
3	Encourage a healthy dietary pattern and hydration.
4	Treat, in collaboration with appropriate specialists, underlying medical conditions, such as pain, insomnia/sleep disorders (including poor sleep hygiene), and mood issues that may be contributing to fatigue.

**FIGURE 6** Downward Spiral of Deconditioning: A Potential Mechanism of Exercise Intolerance and Excessive Tachycardia in COVID-19

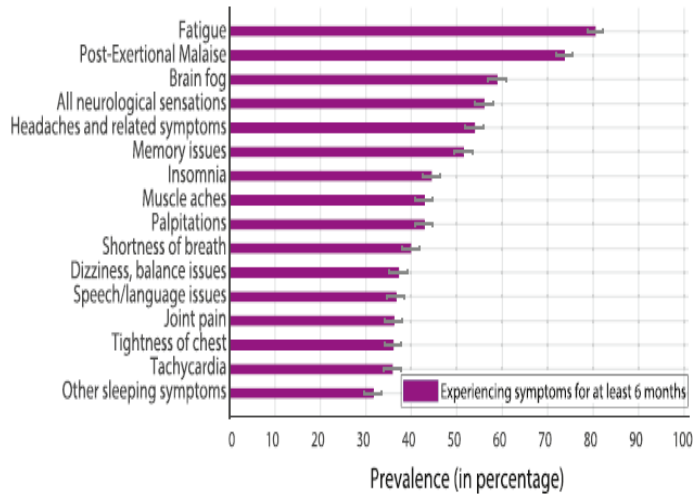


# Return to Work

16

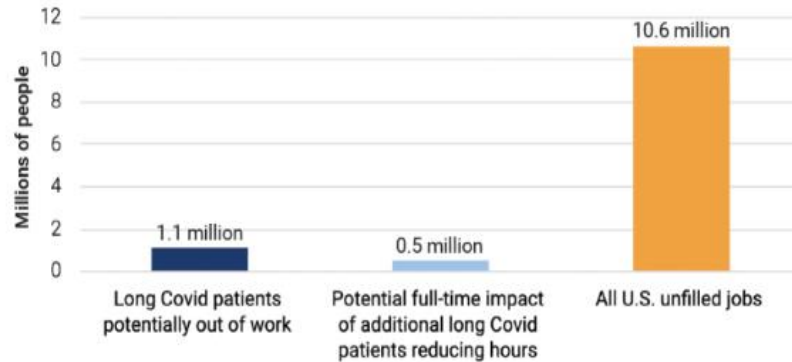
H.E. Davis et al. / *EClinicalMedicine* 38(2021)101019

## a. Remaining symptoms after month 6 (prevalence > 30%)



**Figure 2: The U.S. labor market may be missing 1.6 million full-time workers due to long Covid**

That would account for 15% of all unfilled jobs



Source: Author's estimate based on data from the UK Trades Union Congress, *The Lancet*, and the Bureau of Labor Statistics

**B** Brookings Metro

# Tabacof et al., American Journal of PM&R 2022

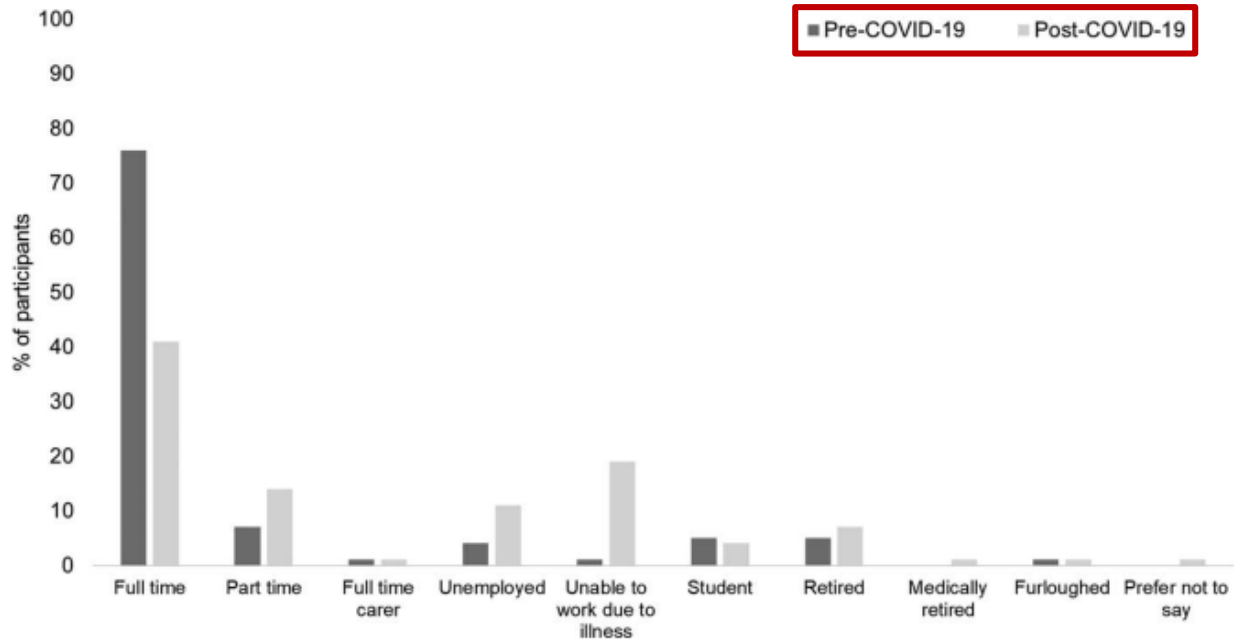
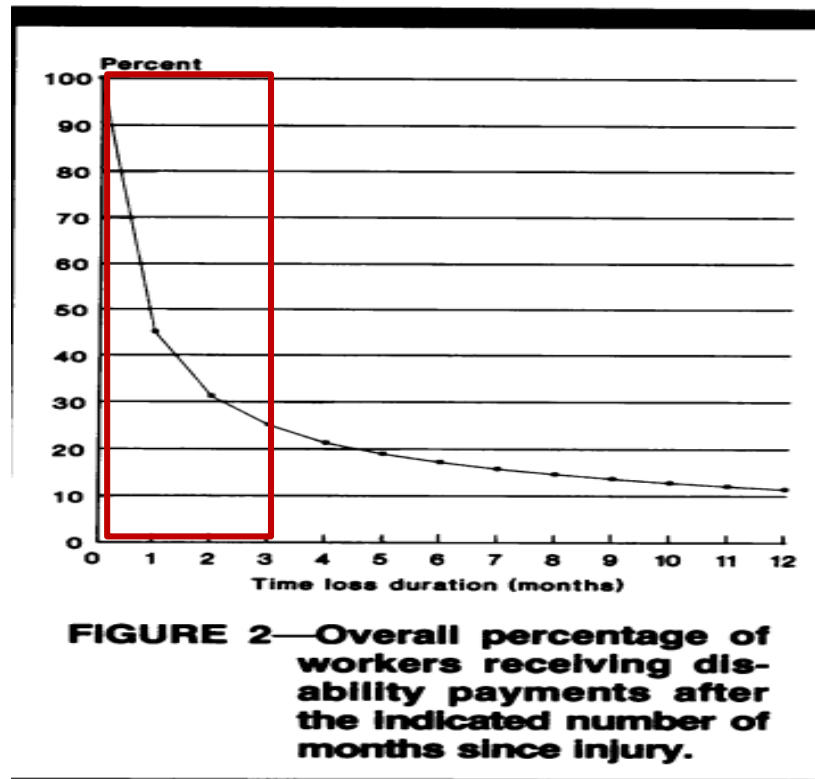


FIGURE 4. Employment status before and after COVID-19 infection in participants who answered employment questions ( $n = 134$ ).

# Return to Work (cont.)

## ■ Barriers

- Job accommodation
  - Availability of modified duty?
  - Workplace environment
- Psychosocial factors
  - Catastrophic thinking
  - Symptom exacerbation fears
  - Disability belief
  - Anxiety after failed initial RTW attempt
  - Fear of re-exposure to COVID
- Deconditioning
- Post-hospital syndrome



[Cheadle et al., 1994 American Journal of Public Health](#)

# The S.P.I.C.E Model by Colledge and Johnson, Occupational Medicine 2000

- Simplicity: Simple benign conditions treated in a complicated fashion becomes complicated.
- Proximity: Benefit of keeping injured worker at work
- Immediacy: Benefit of early intervention
- Centrality: All parties' common philosophy and goals
- Expectancy: Set positive expectations for recovery. Patients tend to fulfill expectations placed upon them.

# Future Direction

- National research plans
- Americans with Disabilities Act (ADA)
- Relevant issues



# The Federal Government's Response

April 2022

- President's memo organized government-wide response to address Long COVID and the longer-term impacts of COVID-19

Conducted listening sessions with community members, patients, and partners

**14 agencies collaborated** to identify existing federal services available and outline a national research agenda

August 2022

- Released two reports
- Services and Supports for Longer-Term Impacts of COVID-19
- National Research Action Plan on Long COVID

[Long COVID Research, Services, And Supports: A Call To Action | Health Affairs](#)

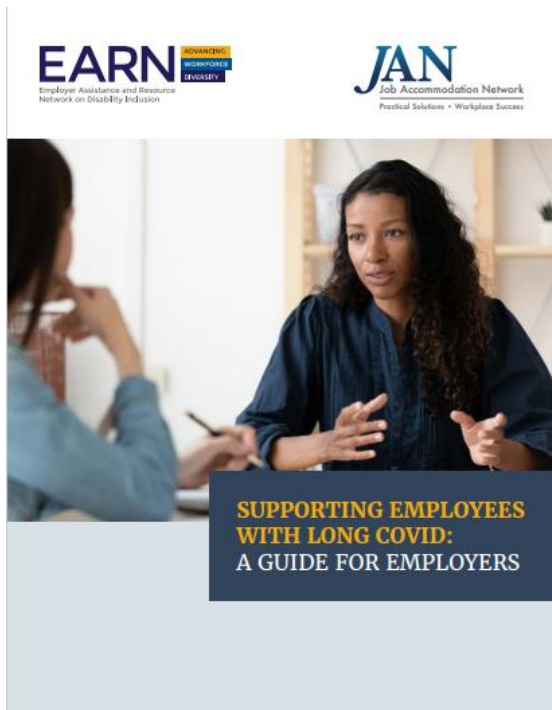
# Services and Supports for Longer-Term Impacts of COVID-19

- Outlines federal services available to the public, addresses longer-term effects of COVID-19, including Long COVID and related conditions, addresses other impacts on individuals and families.
- Provides information on
  - Federal supports and services for people experiencing Long COVID
  - Resources for health care personnel
  - Services for individuals confronting challenges related to **mental health**, **substance use**, and **bereavement**

# National Research Action Plan

- Research priorities
  1. Identify range of Long COVID conditions
  2. **Understand how the disease works in the body**
  3. Track cases across communities and understand risk factors
  4. Learn more about impacts on quality of life
  5. **Design safe and effective treatments**
  6. Develop better support services
  7. Enhance quality of care and study costs
  
- Throughout the report
  - Highlights the importance of harmonized approach, inclusion of patient voices and those with lived experience, and strategies to mitigate health inequities

# Long COVID and ADA



- Long COVID can be a disability under the ADA, Section 504, and Section 1557 if it substantially limits one or more major life activities.
- Accommodation ideas
  - Dyspnea on exertion
  - Extreme fatigue
  - Brain fog
  - Insomnia
  - Tachycardia
  - Joint pain/body aches
  - Headaches

[Supporting Employees with Long COVID: A Guide for Employers \(dol.gov\)](https://www.dol.gov/eis/whd/long-covid)

# Relevant Issues

- What are the essential job tasks?
  - Work schedule
  - Physical work environment
  - Mental and cognitive performance
  - Physical performance
- Job characteristics
  - Safety sensitive work?
  - Decision critical work? (Continued occupational performance depends on the ability to consistently exercise judgment and insight. Fan et al., 2016)
- Workplace environment
  - Available support? e.g. Employee assistance program

# Current activities and plans

- Long COVID workgroup
  - Consists of claims and occupational nurse consultant staffs.
  - To discuss complex long COVID cases and to develop medical resources for claim support.
  - To become the “go-to person” inside the department
  - To identify areas of intervention and generate ideas.
- Presentations and educations on long COVID
- Utilizing internal & outside resources to prevent disability from long COVID
  - [Activity Coaching \(wa.gov\)](https://www.wa.gov): Progressive Goal Attainment Program (PGAP®)
- Collaboration with SHARP long COVID researchers
  - Health policy guided by the WA workers’ compensation data study.
- Focused research on long COVID and return to work
- Connecting with outside experts

**Thank you!**

# Operational Health Dashboard

*Mike Ratko*

*Assistant Director for Insurance Services*



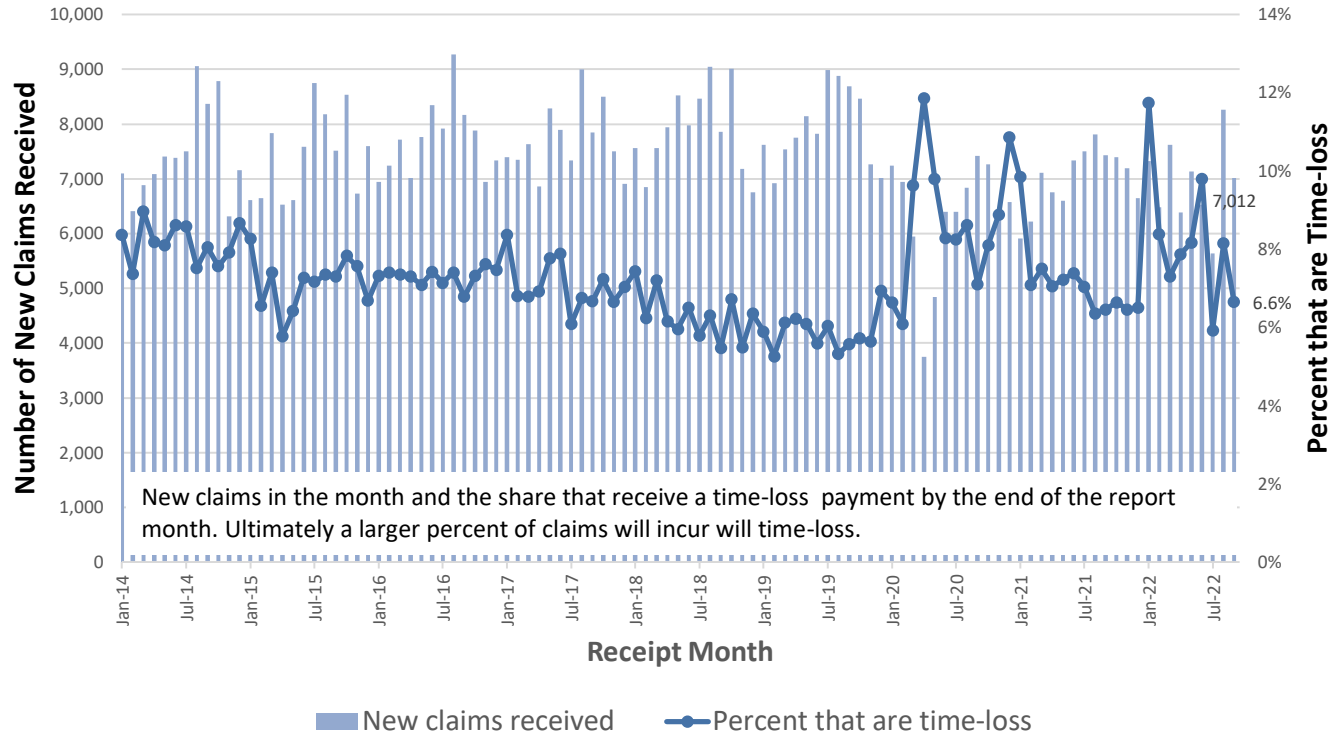


# Operational Health Dashboard

Measure	Trend	Status	Definition
Percent of new claims that are time-loss	down	●	Claims new (received) in the month and percent with a time-loss payment by the end of the month – increase in percent that are time-loss indicates a more severe claim mix.
Long-term disability rate	neutral	—	Percent of all compensable claims with a time-loss payment 12 months post injury – decrease indicates less long-term disability
Pensions funded	neutral	—	Number of pensions funded in the quarter – decrease indicates less permanent total disability
Covered hours and claim rate	steady	●	Claims received per 100 FTE indicates the rate of claims considering volume of work - increase indicates higher claim frequency.
Operational efficiency	steady	●	Percent of operational measures meeting target greater than 80 percent– increase indicates more measures exceeding target.

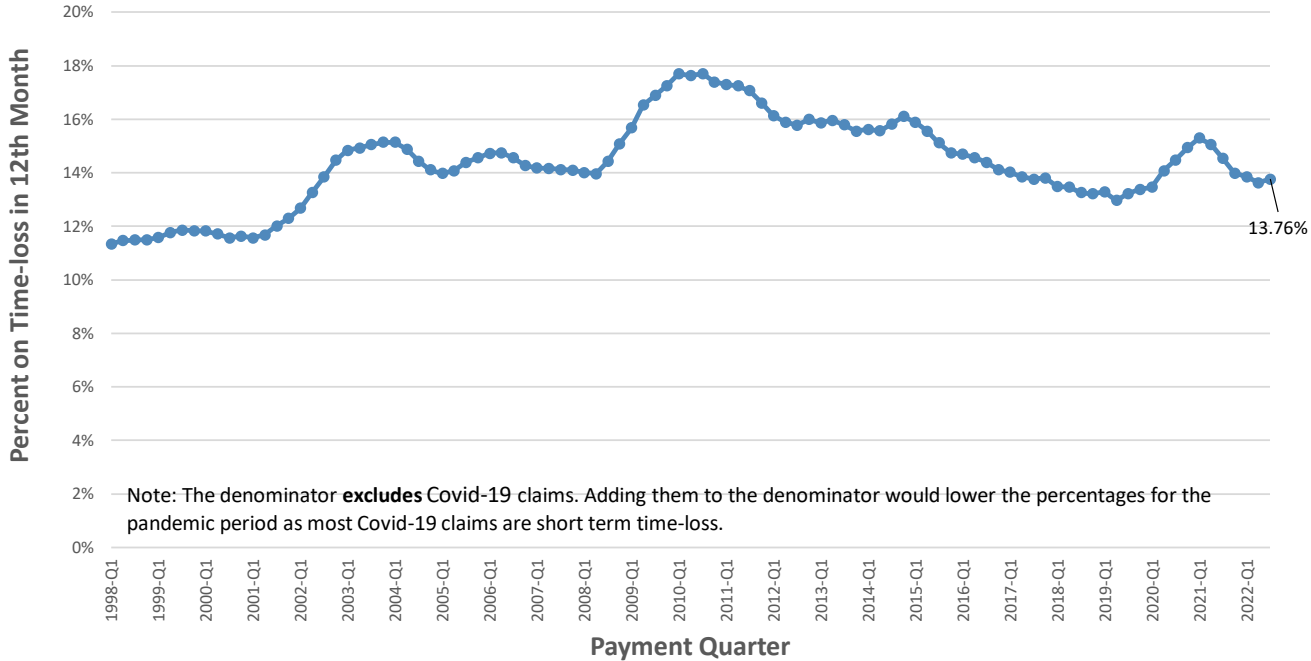
● Right direction — Neutral ▲ Wrong direction

# Number of New State Fund Claims and the Percent that are Time-loss

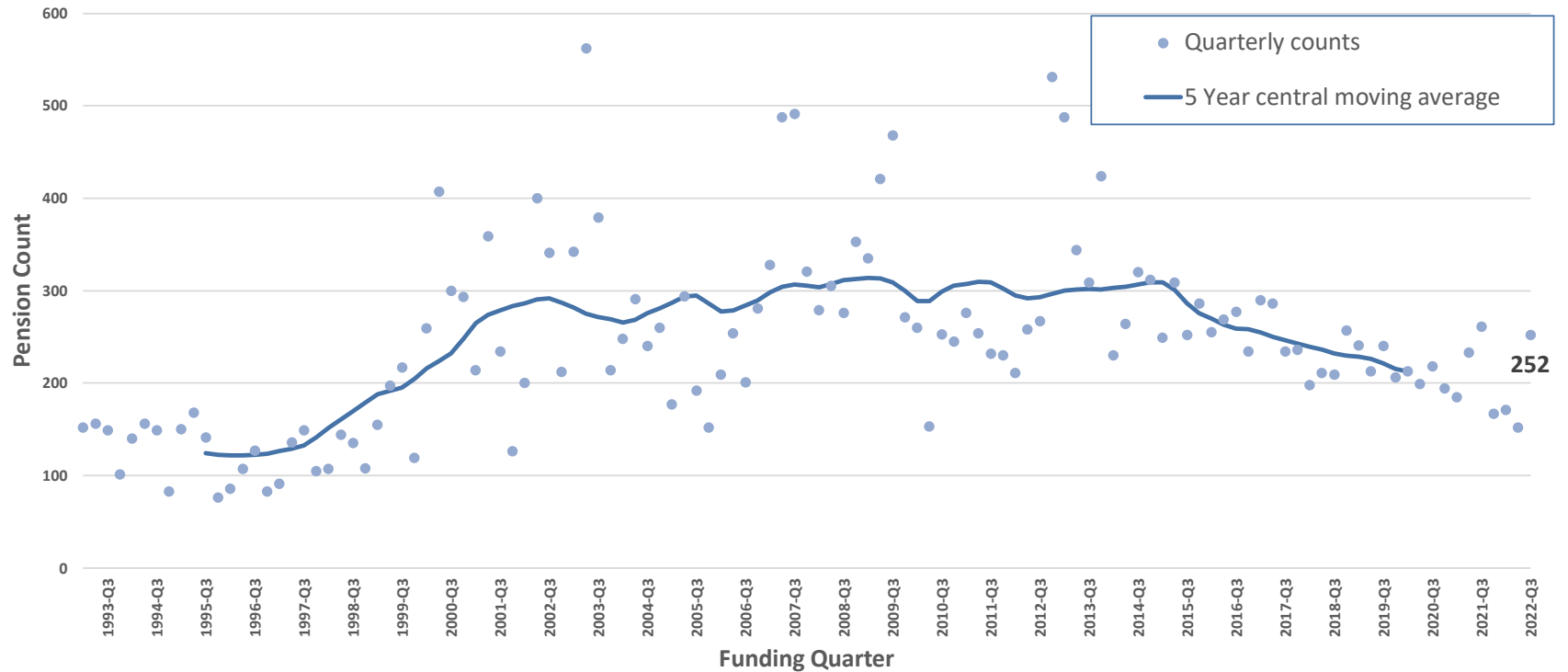


# Long Term Disability Claims

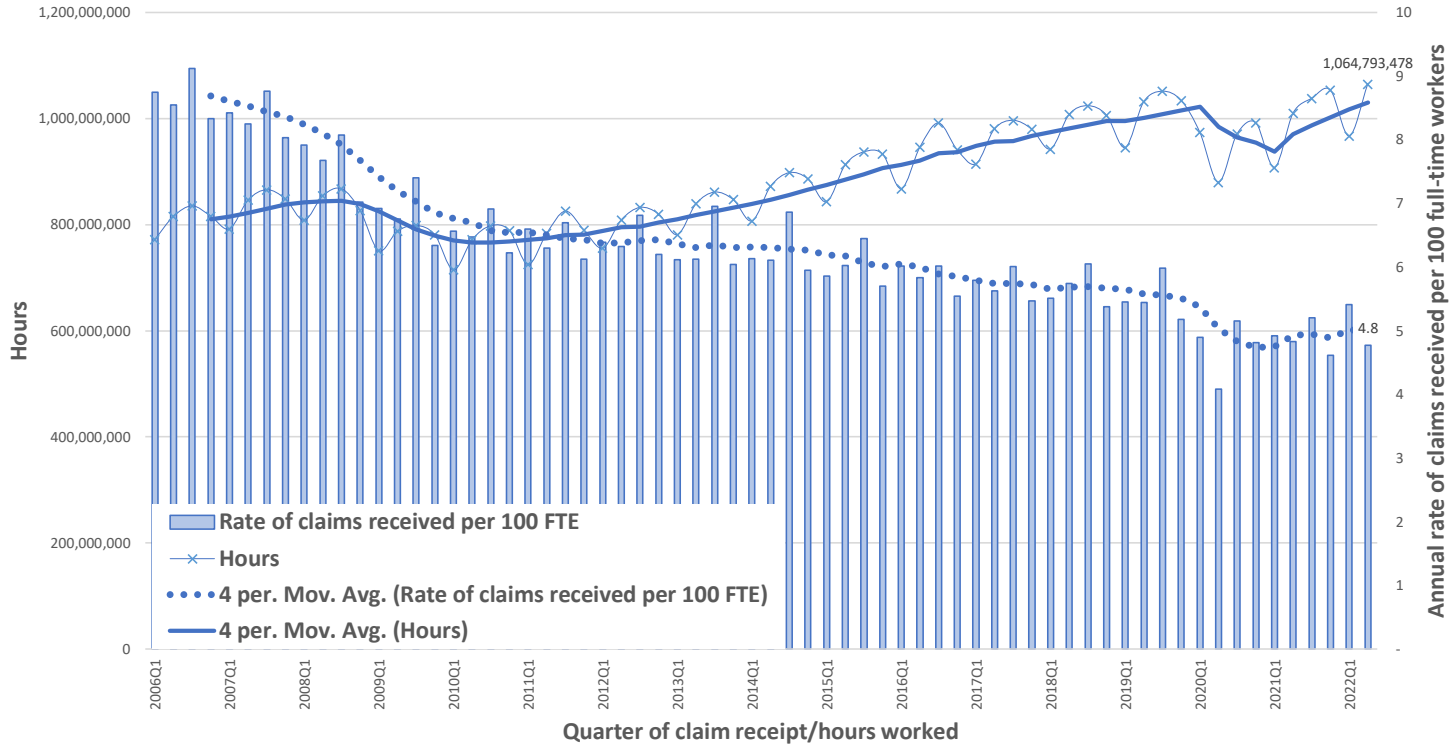
The percent of injured workers with compensable claims that have time-loss paid in the 12th month post injury: *smaller percentage indicates less long-term disability*



# State Fund Total Permanent Disability Pensions Funded per Quarter

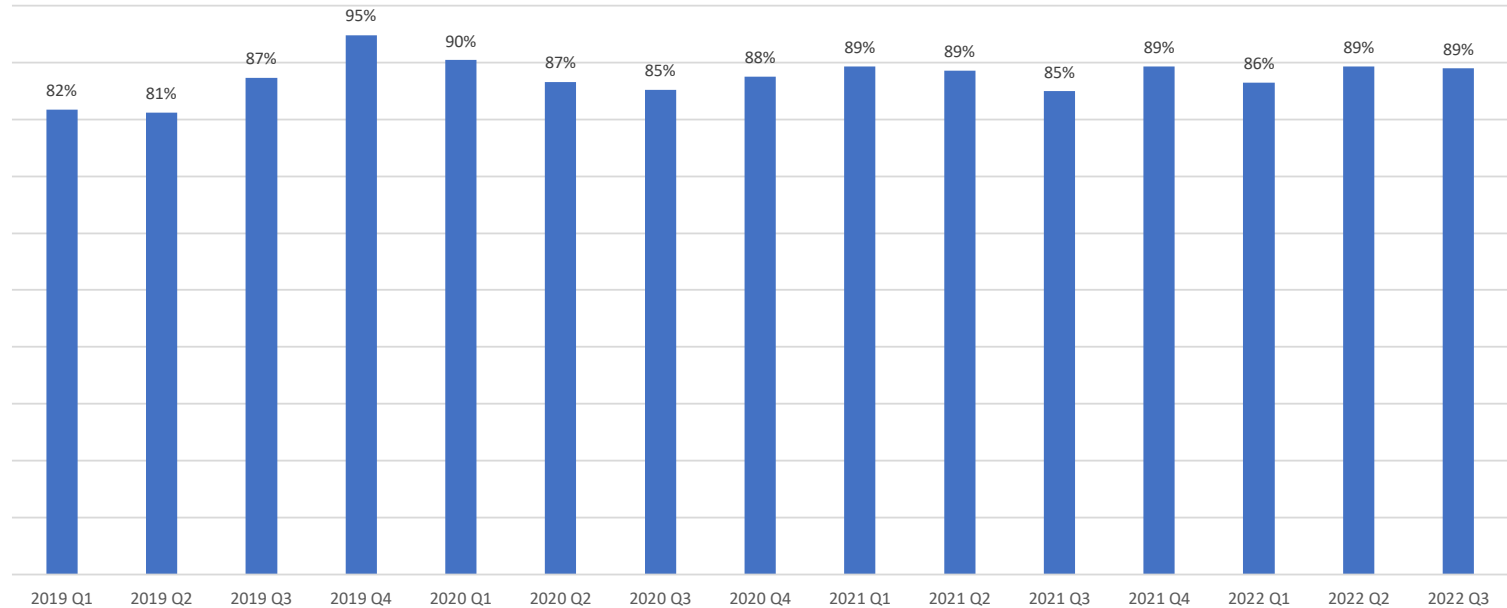


# Covered Hours and the Rate of Claims Received



# Percent of Workers' Comp Operational Measures Meeting Target

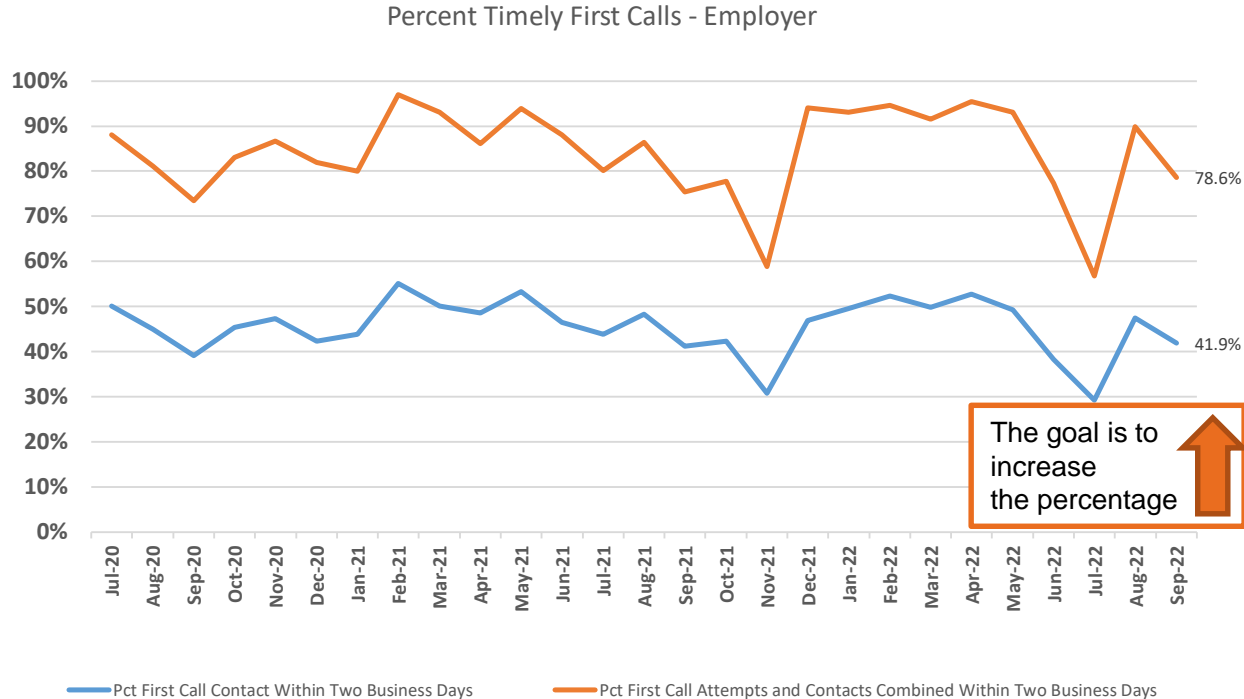
The percent of operational measures that meet operational targets is consistently above 80%.



Currently there are 38 active operational measures in Insurance Services

# December 2022 – Appendix Slides

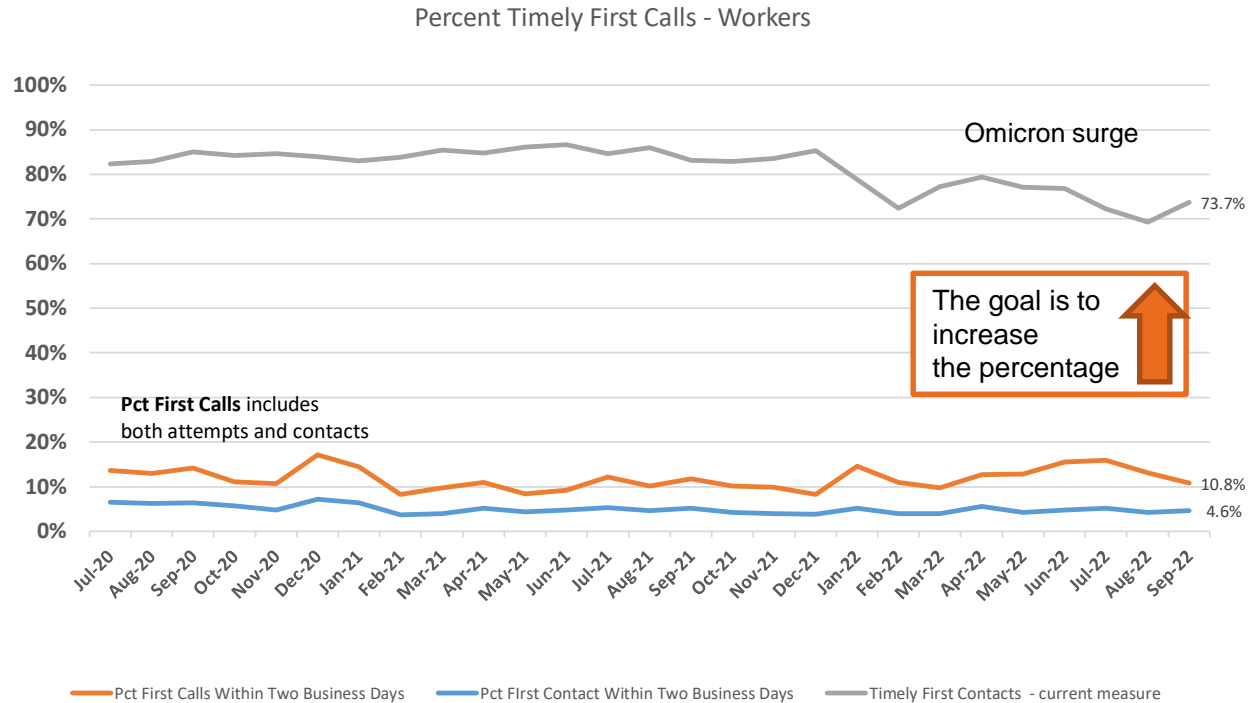
# JLARC recommended employer contact measure



Note: Clock starts when claim is established in the system.



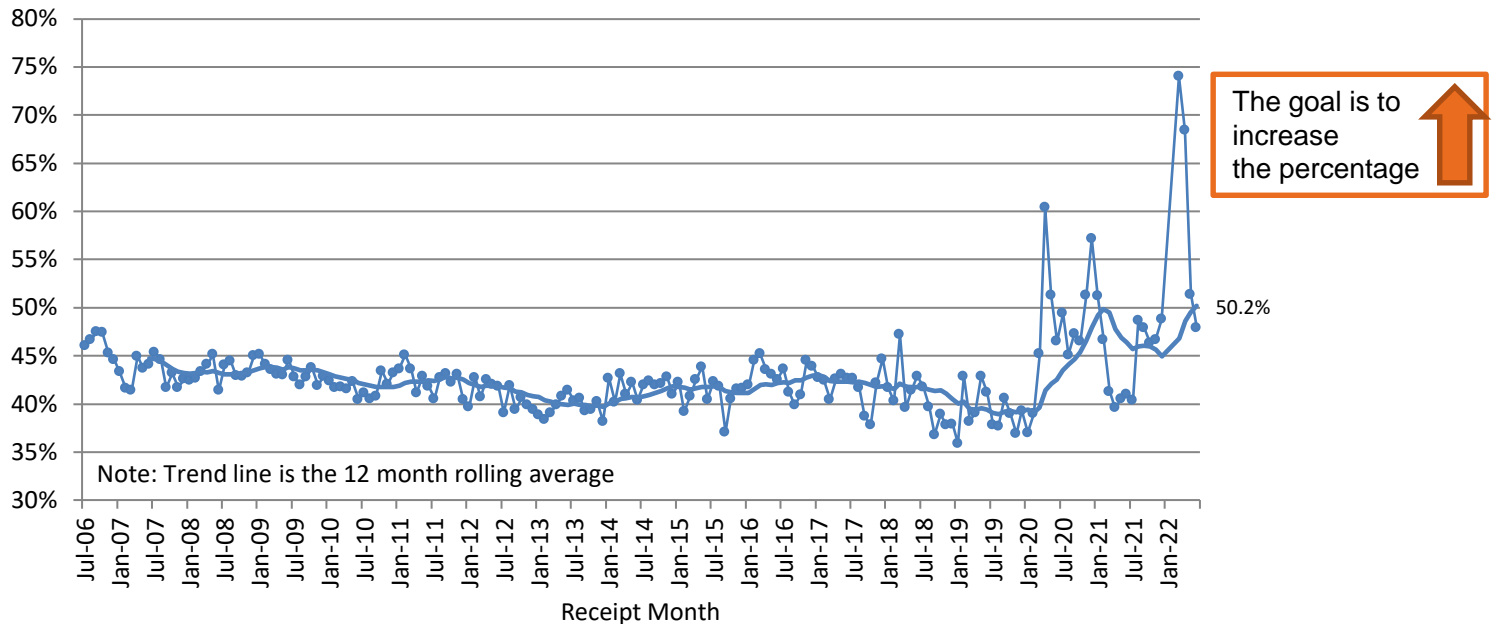
# JLARC recommended worker contact measures & L&I's current measure



Note: Clock starts when firm and class are assigned on the JLARC recommended measure and when time loss is first paid on the current operational measure.

# The share of time-loss claims resolved six months after claim receipt

Share of time-loss claims resolved six months after claim receipt



# Transitioned to COTS

## Workers newly on opioids transitioned to chronic opioid therapy

57

Workers Transitioned to COT

-16%

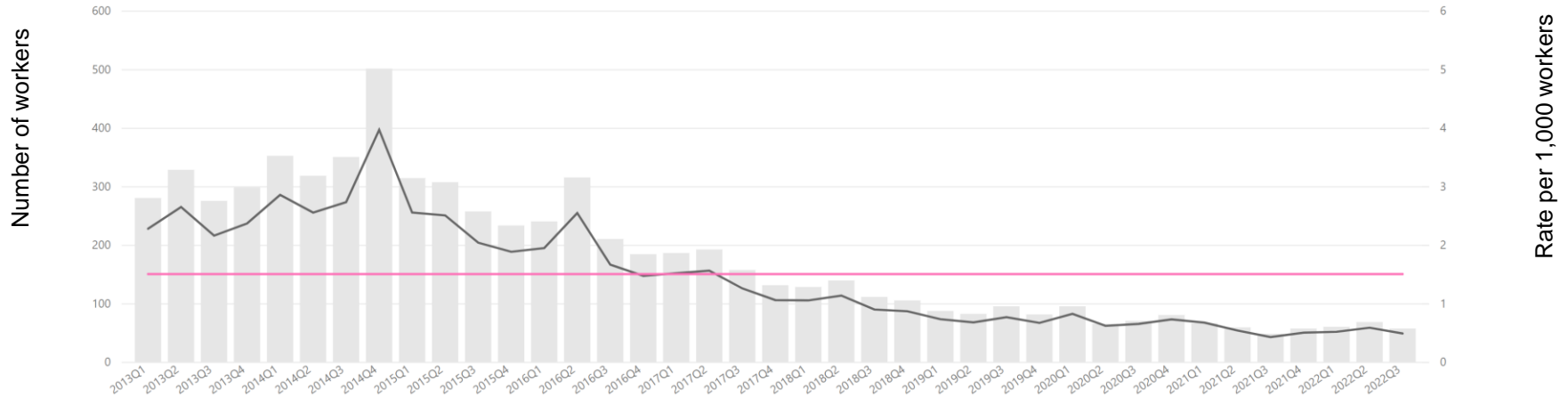
Change Since Previous Quarter

0.49

Rate per 1000 Injured Workers

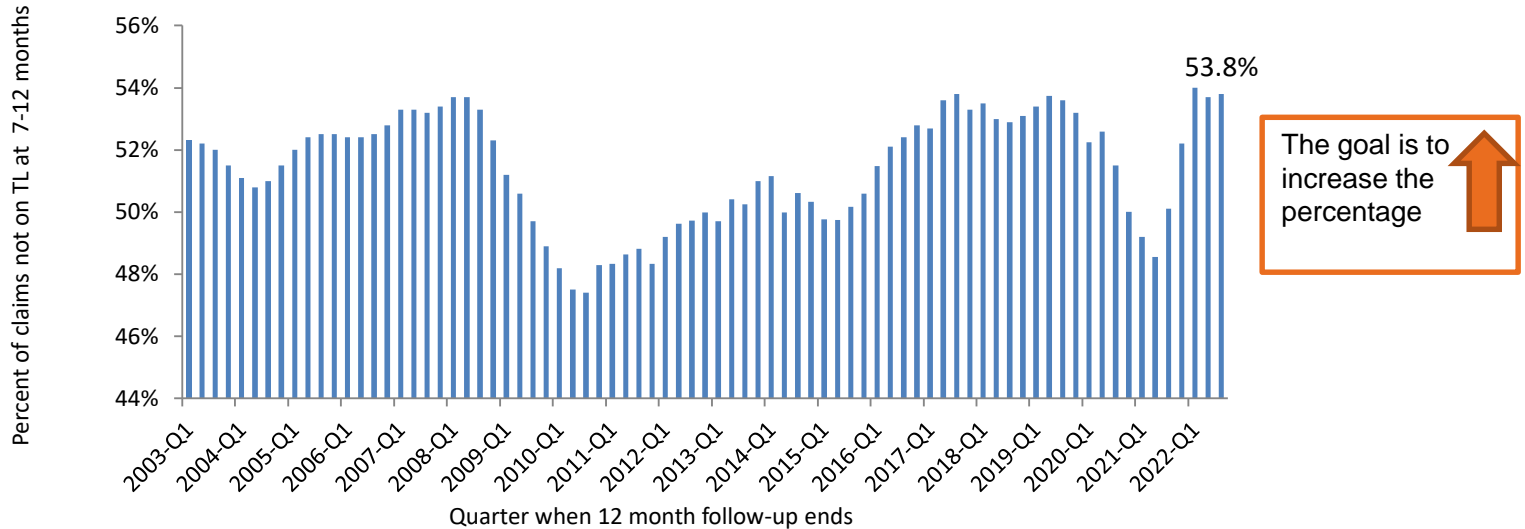
Workers Transitioned to COT

● Workers Transitioned to COT ● Rate of Workers Transitioned to COT ● Threshold Rate = 1.5



## High risk claims – Initiatives in the first year are improving RTW outcomes

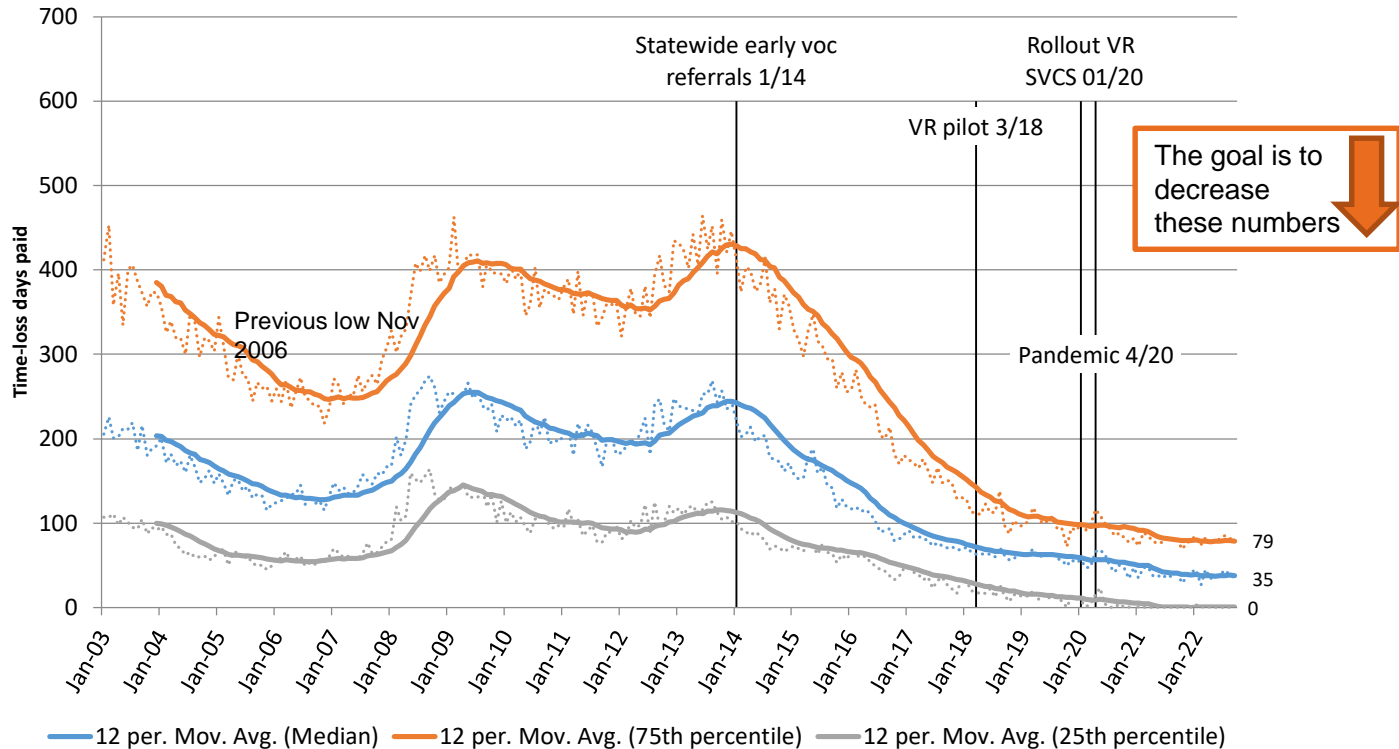
The share of injured workers off work 40 days after claim receipt who are likely to have returned to work: Note: 12-month rolling average



High risk workers are defined as those being disabled on the 40th day following claim receipt, about 1,400 claims per quarter. RTW is defined as the status of not receiving disability benefits between 7 and 12 months

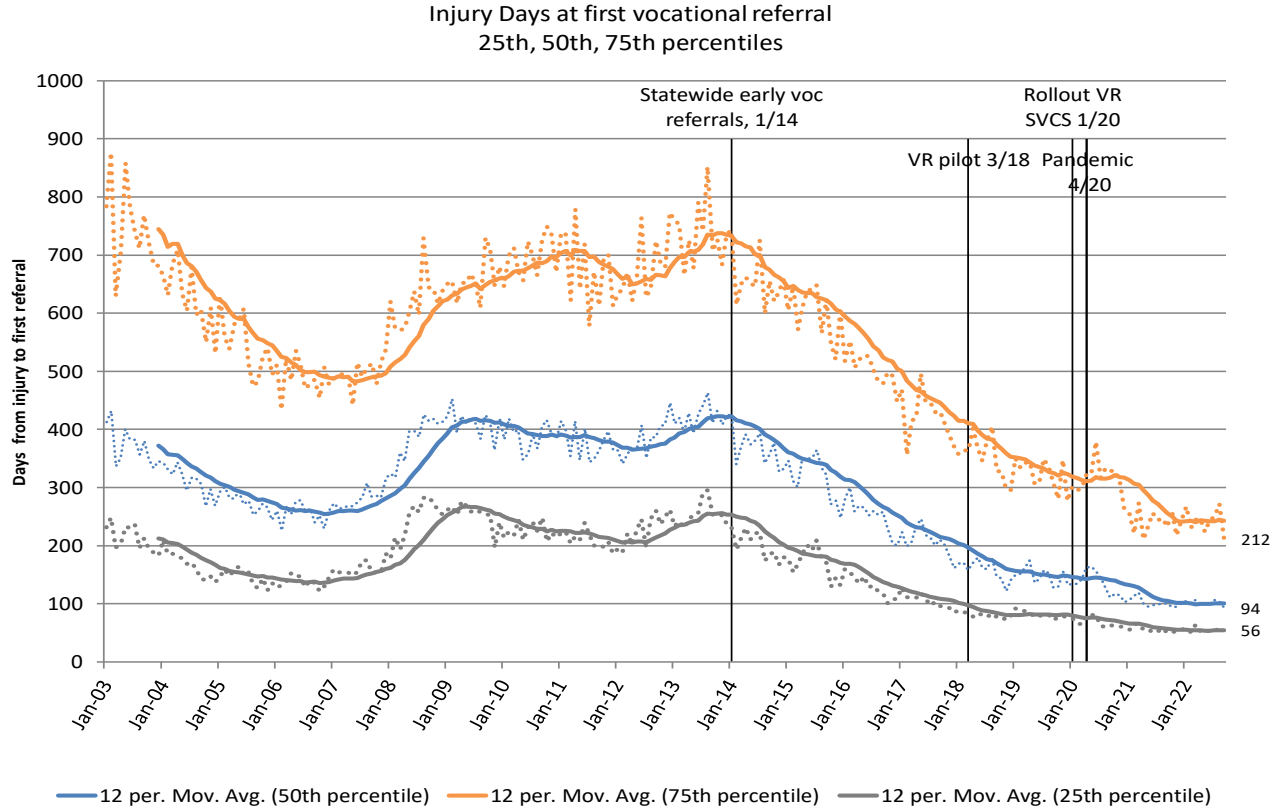
# Referrals are now targeted to address the onset of disability

Time-loss days paid at first vocational service referral



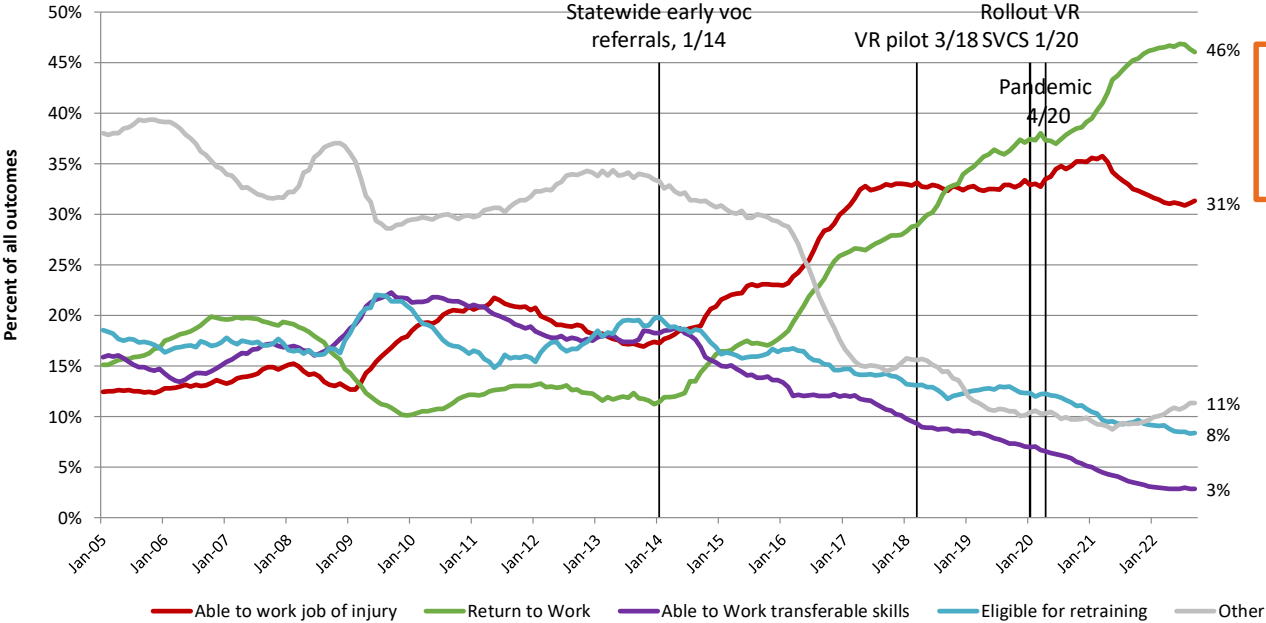
# Referrals are now targeted to address the onset of disability


- days from date of injury



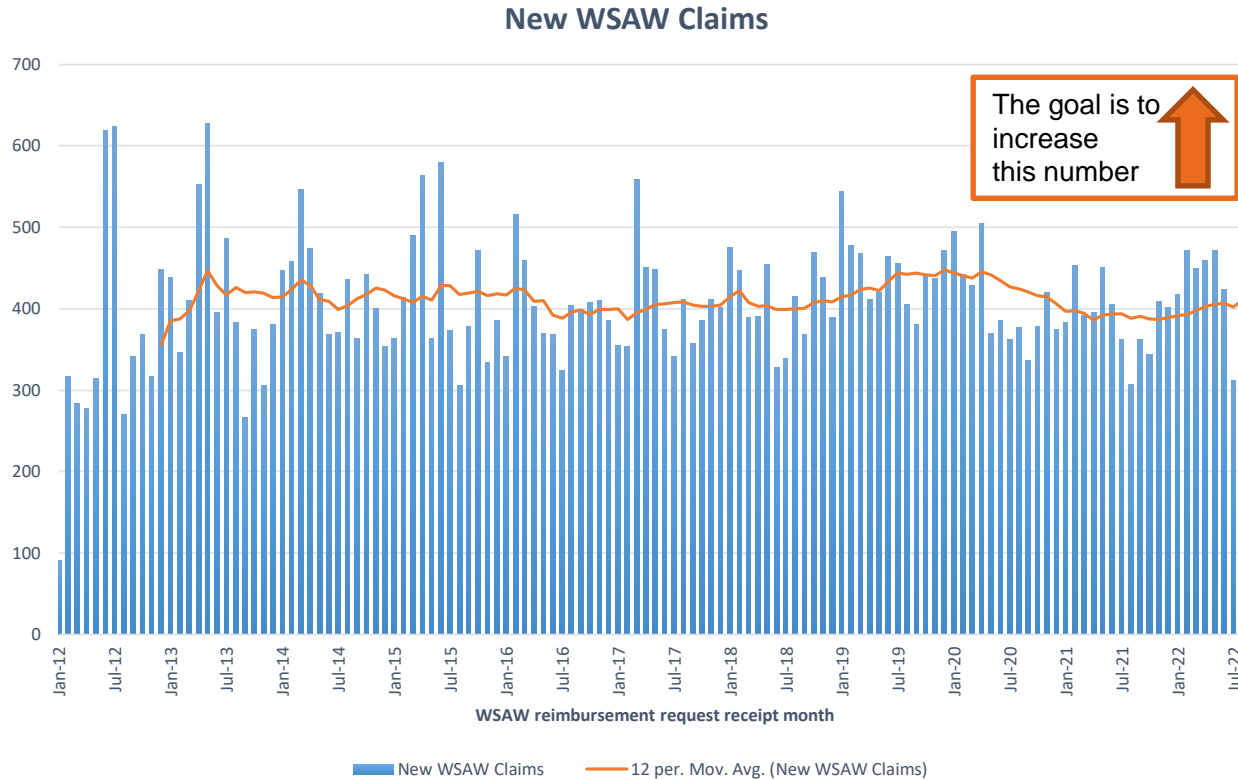
# New focus on return to work has increased positive employable outcomes for all first vocational service referrals

Outcome distribution, first vocational service referrals, select outcomes (12-month average)



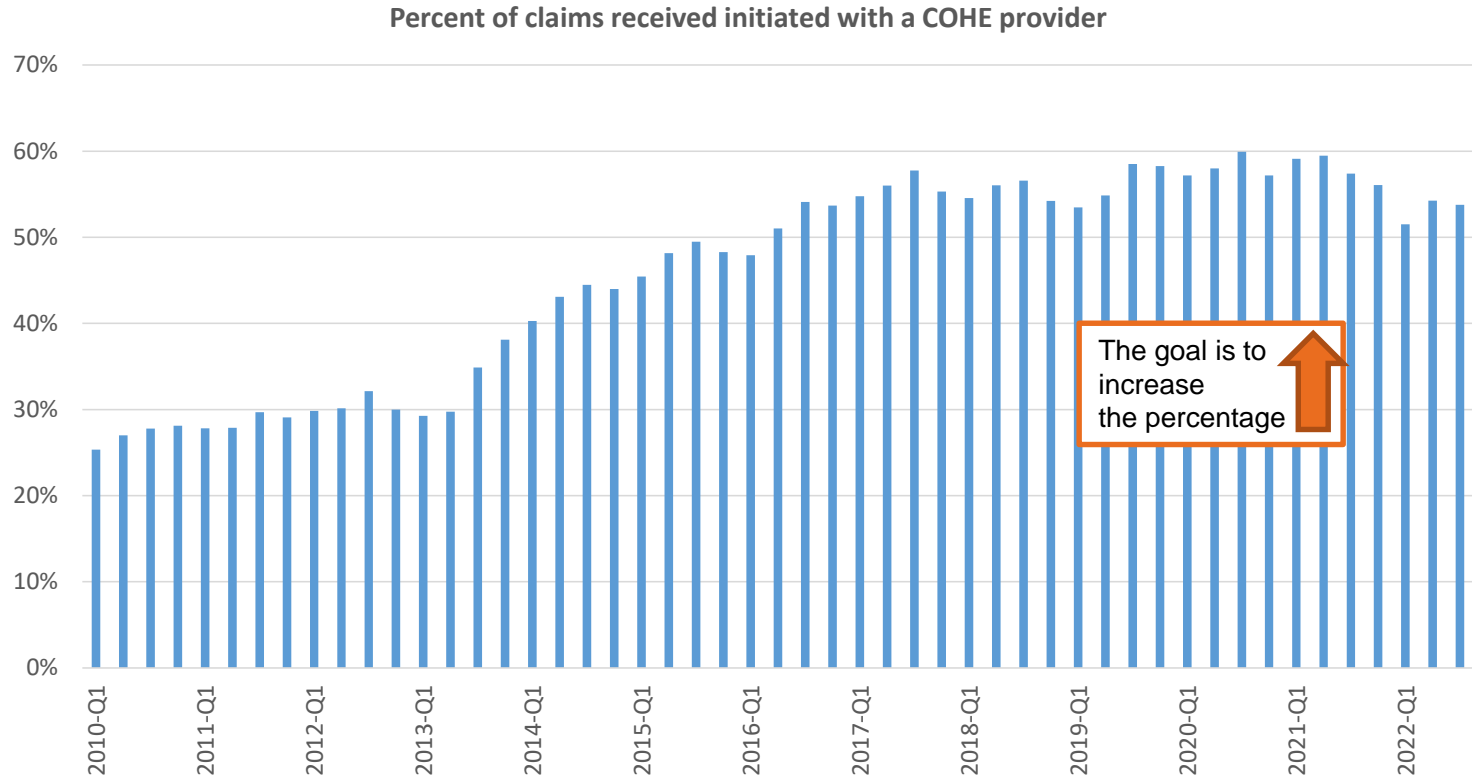
The goal is to increase the share of RTW outcomes 

# Participation in light duty job assignments helps maintain the employer/injured worker relationship.





# Percentage of claims for injured workers initiated with a COHE provider



\*Average share for most recent 4 quarters.

# Break Time



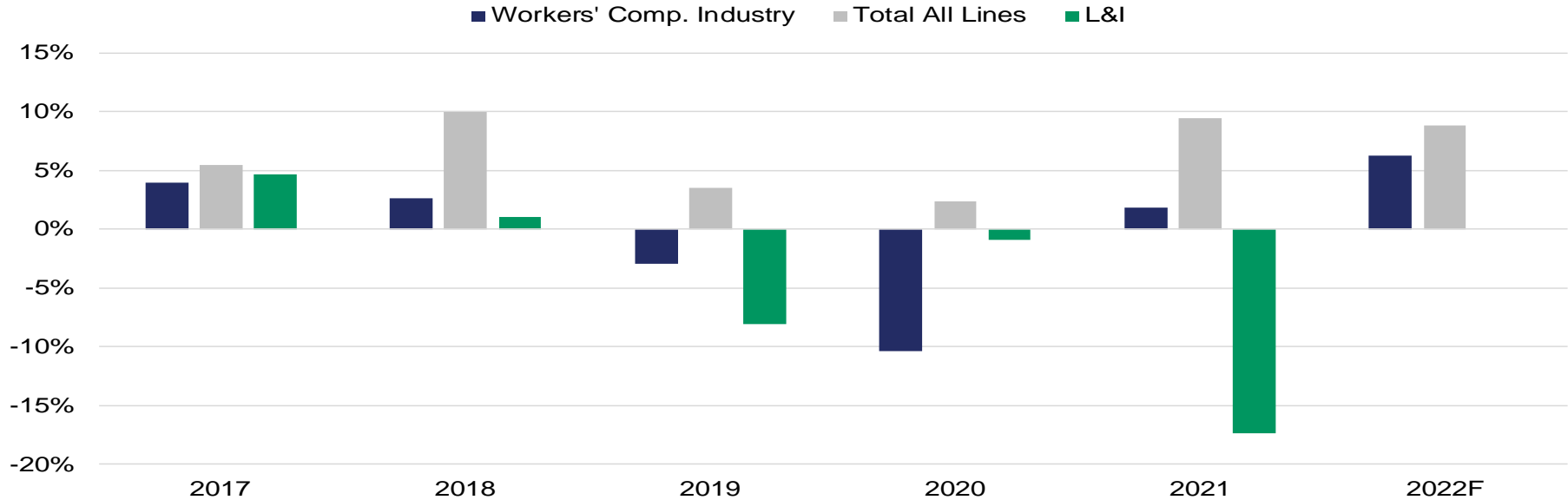
# Conning – National WC Update

*Daniel Erickson, Vice President, Insurance Research  
Conning*



# Workers' Compensation Net Premium Growth

## Net Premium Growth



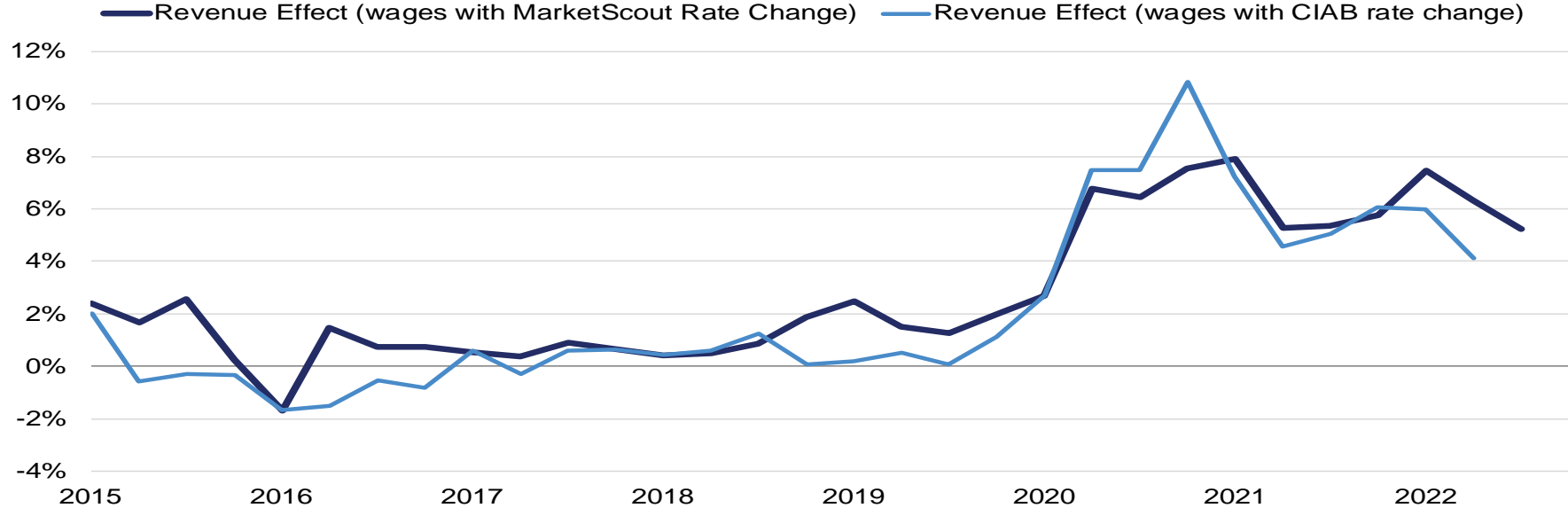
We forecast a trend of positive workers' compensation premium growth following the increase in premium in 2021, which was the first increase in net premiums in two years. In 2021, despite flat to negative rates, payrolls increased as the economy recovered and employment increased. This has continued into 2022, where we are also seeing an increase in wages.

Prepared by Conning, Inc. Historical data source: ©2022 S&P Capital IQ Pro. Forecast ©2022 Conning, Inc., Washington State L&I Financials

# Workers' Compensation: Pricing

## Selected Workers' Compensation Pricing Trends

% change year over year

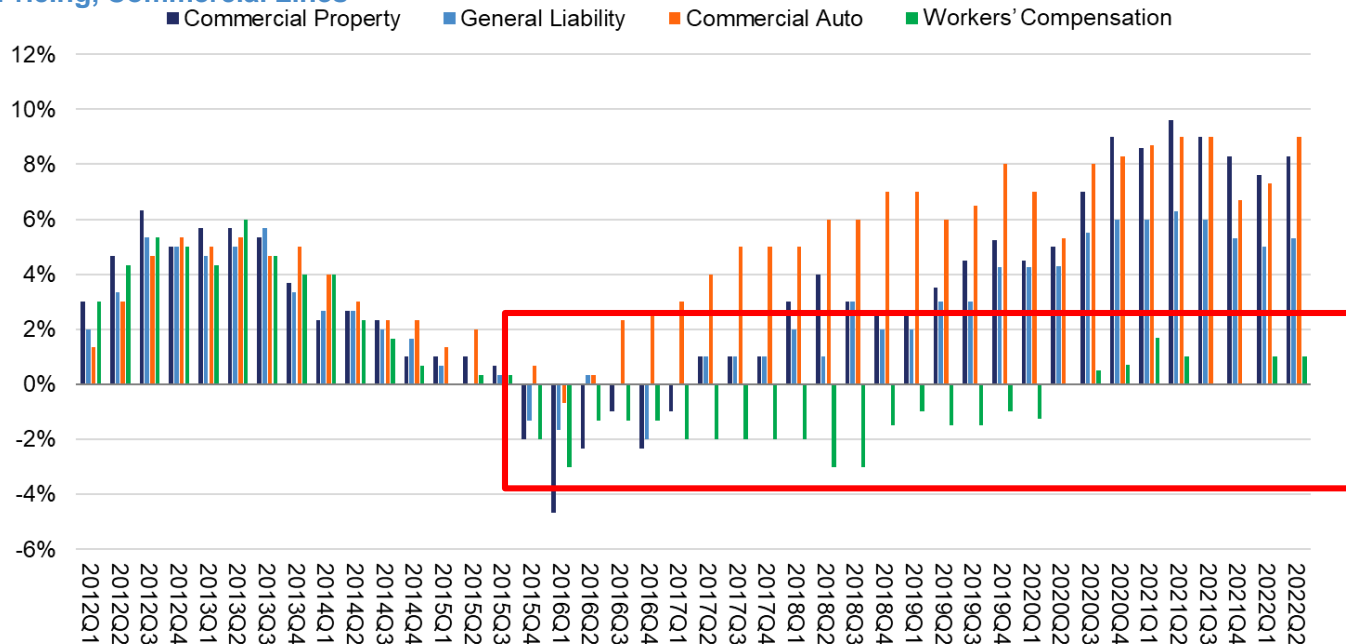


Rate changes are projected to remain flat to negative in 2022 and into 2023. Continued profitability and decreasing claim frequency in the competitive workers' compensation line suggest that eventual rate increases may more likely be seen in the latter part of 2023 to 2024. When we add the revenue effect, the Y-O-Y percentage change in average weekly wages, we see that beginning in 2020, wage increases have been a driving force.

Prepared by Conning, Inc. Source: MarketScout; Council of Insurance Agents & Brokers; Bureau of Labor Statistics, U.S. Department of Labor (2022)

# WC Rates Remain Low Compared To Commercial Lines

## Average Renewal Pricing, Commercial Lines

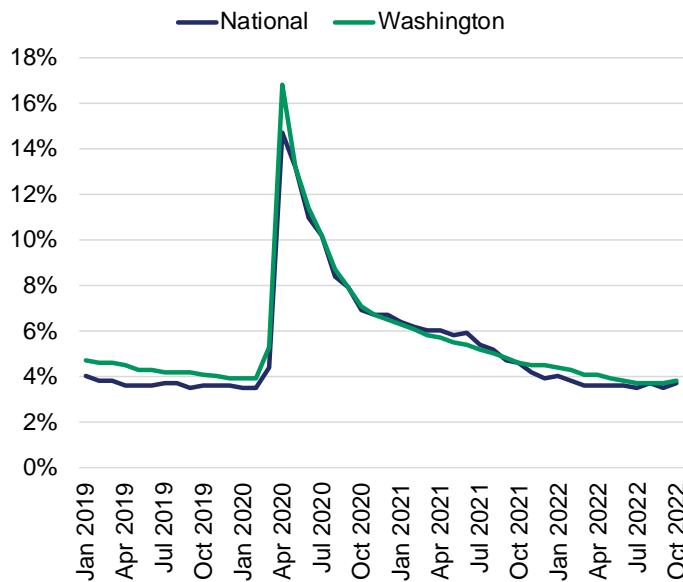


Property price increases continue to be driven by above-average catastrophic events and higher reinsurance costs. Casualty price increases are due to a combination of factors including deterioration in underwriting results, higher severity of claims due in part to social and economic inflation, as well as a withdrawal of capacity. Prices for workers' compensation remain well below other commercial lines.

# Economy Still Supportive of Exposure Growth?

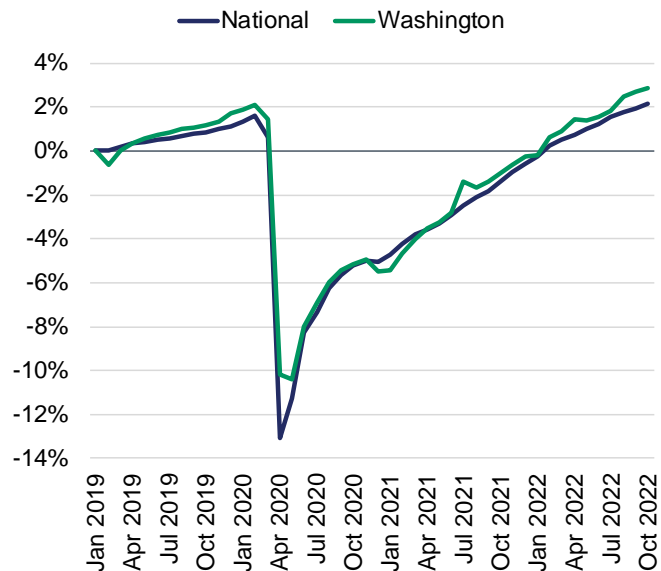
## Unemployment Rate

Through September 2022



## Nonfarm Payroll Change

Seasonally adjusted through September 2022



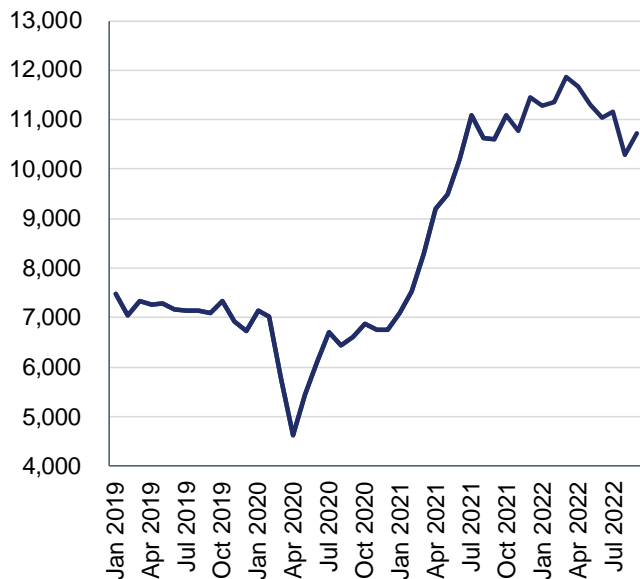
**Looking from a macro perspective, we believe the economy is still supportive of exposure growth as it relates to workers' compensation and the labor market. The national unemployment rate rose to 3.7% in October and Washington's unemployment rate was similar at 3.8%. Both Washington and the national nonfarm payrolls have grown above the pre-pandemic levels.**

Prepared by Conning, Inc. Source: Bureau of Economic Analysis, U.S. Department of Commerce (2022); Bureau of Labor Statistics, U.S. Department of Labor (2022); forecast by Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters (2022)

# Job Openings

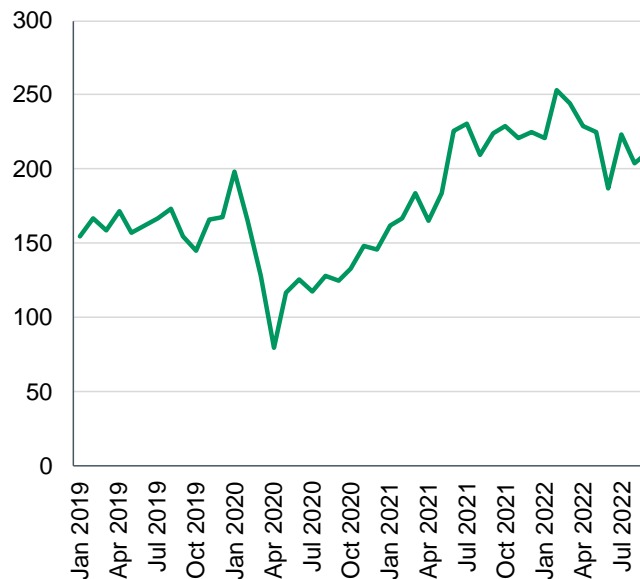
## National Job Openings Total Nonfarm

Level in thousands



## Washington Job Openings Total Nonfarm

Level in Thousands



Prior to the pandemic, the average monthly job openings were around 7.1 million nationally. Despite decreasing to a low of 4.6 million in April 2020, the number of job openings has skyrocketed and as of September 2022 was 10.7 million. In Washington, before the pandemic, the average monthly job openings were around 161,000, but has increased to an average of 223,000 between June 2021 and September 2022.

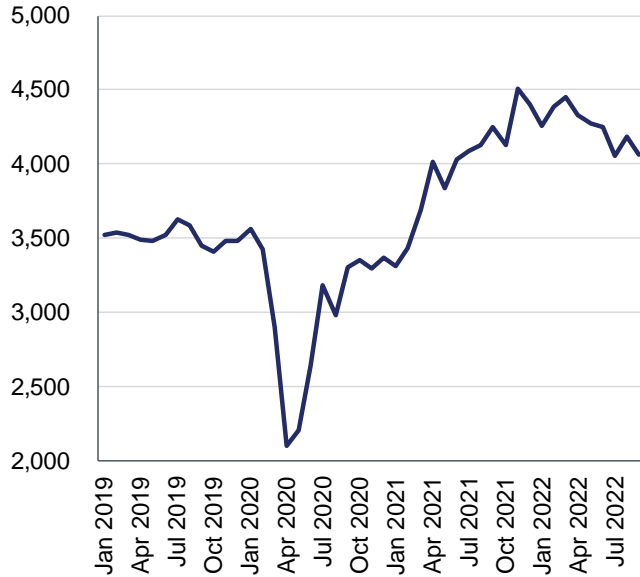
Prepared by Conning, Inc. Source: Bureau of Labor Statistics, Department of Labor



# Quits

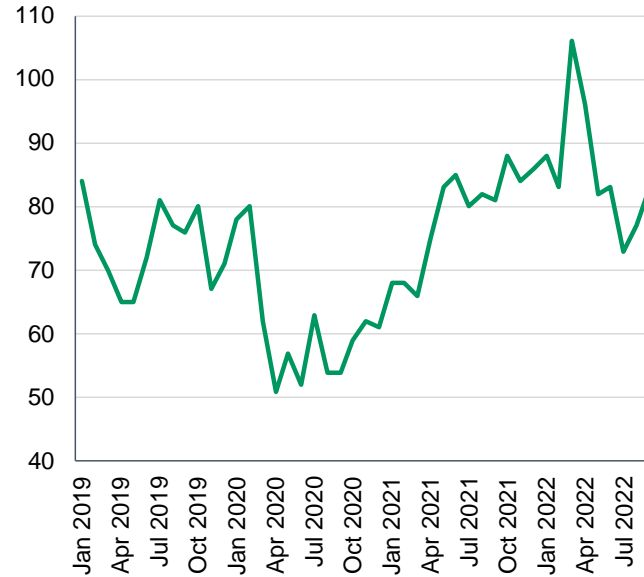
## National Quits Total Nonfarm

Level in thousands



## Washington Quits Total Nonfarm

Level in Thousands



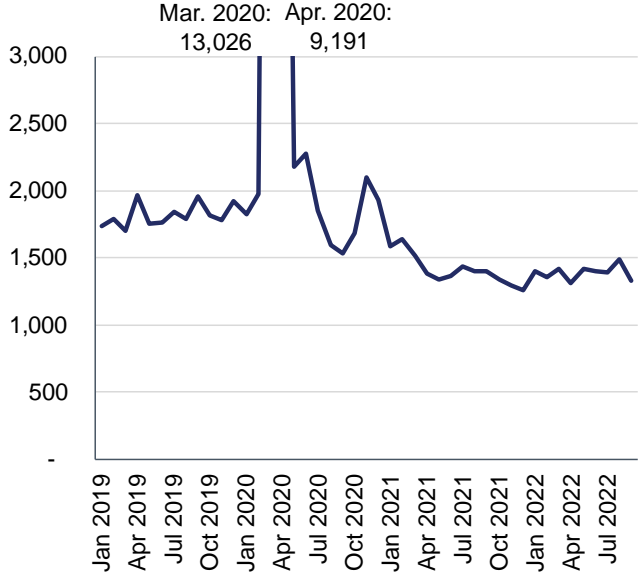
**The number of individuals who quit their job each month averaged about 3.5 million per month nationally and 73,500 per month in Washington before the pandemic. In April 2020, this decreased to a low of 2.1 million nationally and 51,000 in Washington but has since increased. As of September 2022, almost 4.1 million individuals nationally and 83,000 Washingtonians quit their job.**

Prepared by Conning, Inc. Source: Bureau of Labor Statistics, Department of Labor

# Layoffs & Discharges

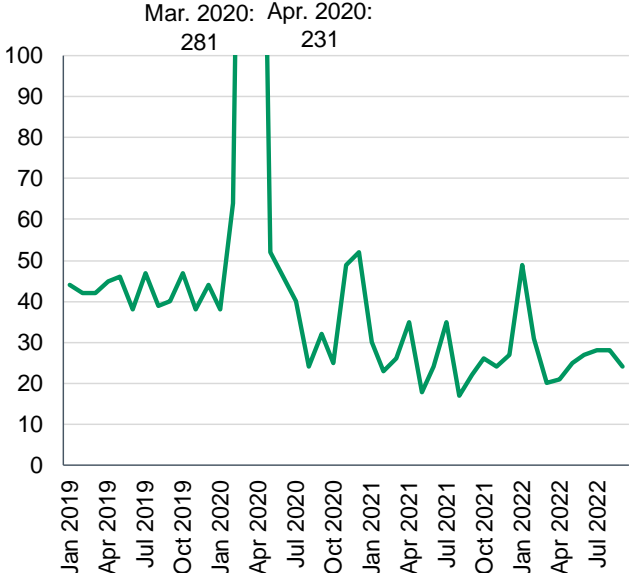
## National Layoffs & Discharges Total Nonfarm

Level in thousands



## Washington Layoffs & Discharges Total Nonfarm

Level in Thousands



Despite the increase in high-profile tech layoff announcements, the levels of layoffs and discharges continues to be below pre-pandemic levels.

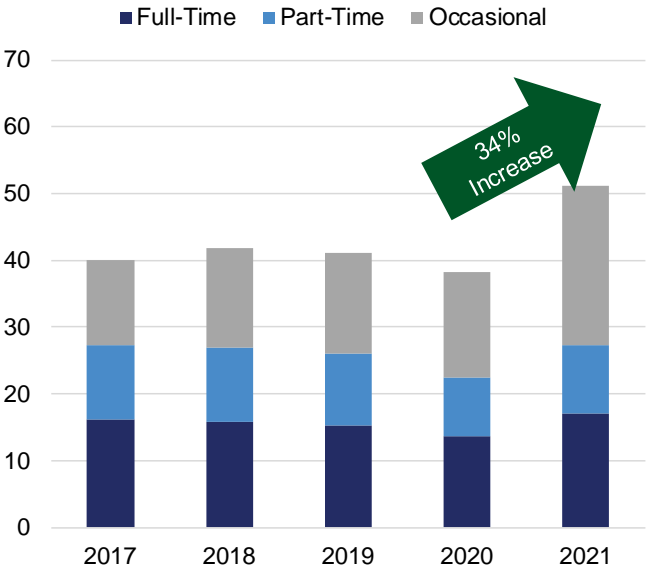
Prepared by Conning, Inc. Source: Bureau of Labor Statistics, Department of Labor



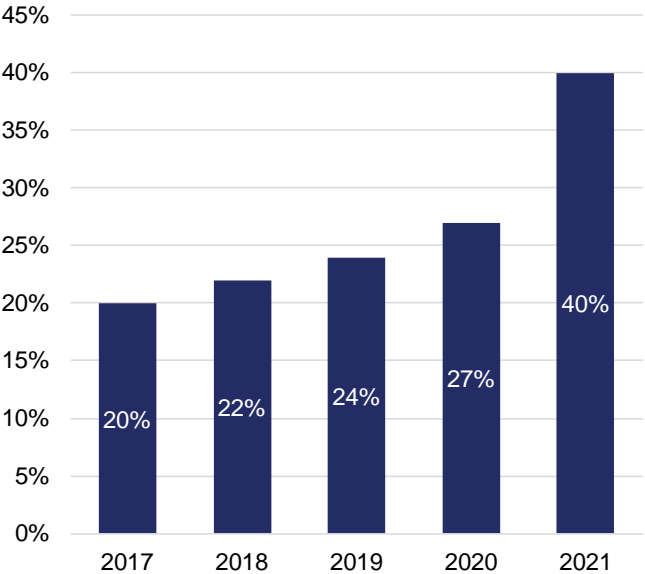
# The Rebound of the Gig Economy in 2021

## Total Independent Workforce

# in millions



## Percentage Using Online Talent Platform in last 12 months



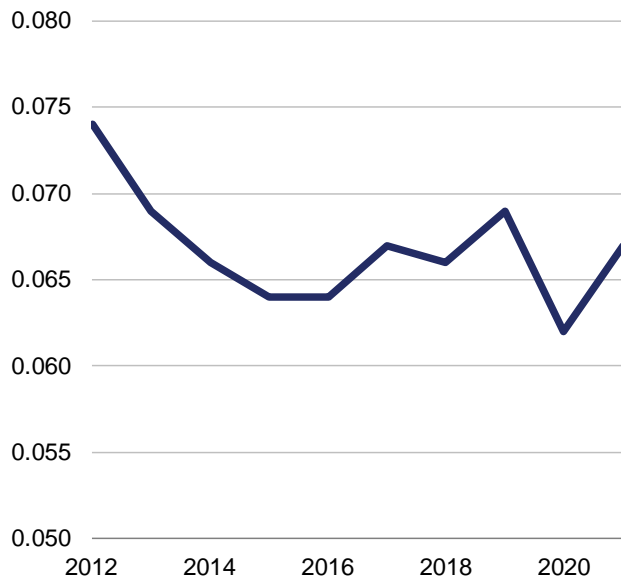
The number of gig workers within the labor force is increasing. This trend is expected to increase over the next few years, as employers look to move some positions toward independent contractors. While a handful of states have enacted or are working on laws regarding gig workers, the DOL recently issued a proposal to reassess what determines an employee or an independent contractor under the Fair Labor Standards Act.

Prepared by Conning, Inc. Source: MBO Partners 2021 "State of Independence" Report, Pew Research Center "The State of Gig Work in 2021"

# Frequency & Severity

## Frequency

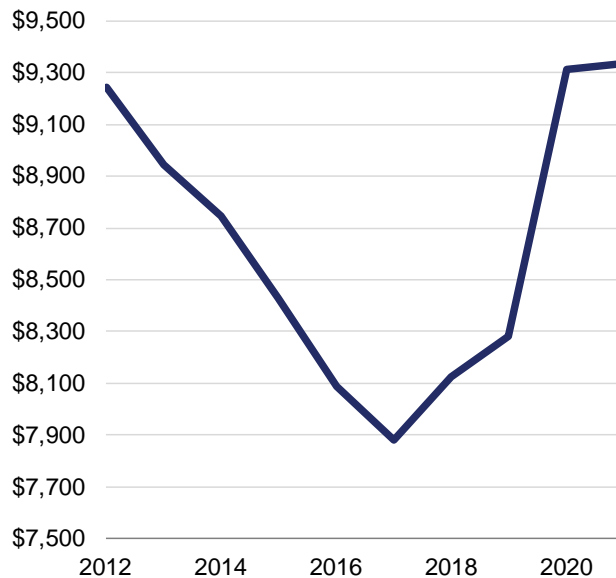
Ultimate claim counts/NPE × 1,000



**Beyond the Covid-19 dip in 2020, frequency has been relatively stable over the last few years.**

## Severity

Carried/booked ultimate loss & ALAE/claim counts

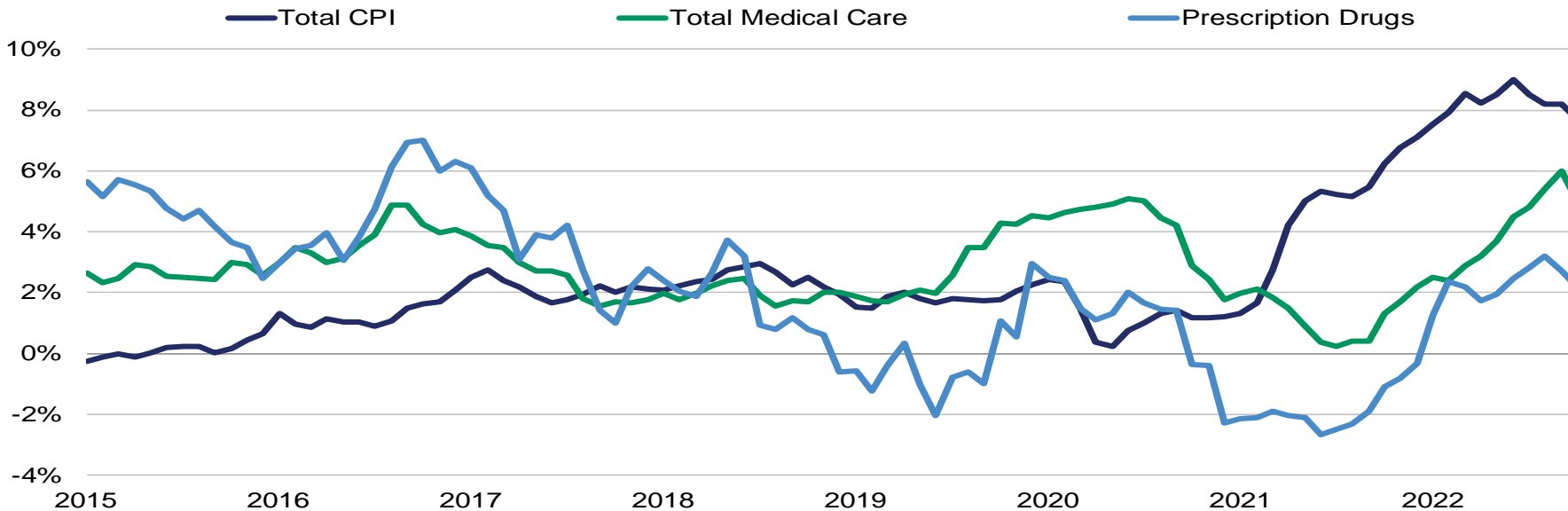


**An aging workforce, rising medical costs, and treatment innovations are all factors that have seen severity increase since 2017.**

# Medical Inflation Impact on Workers' Compensation

## Medical Inflation

% change year over year, as of October 2022

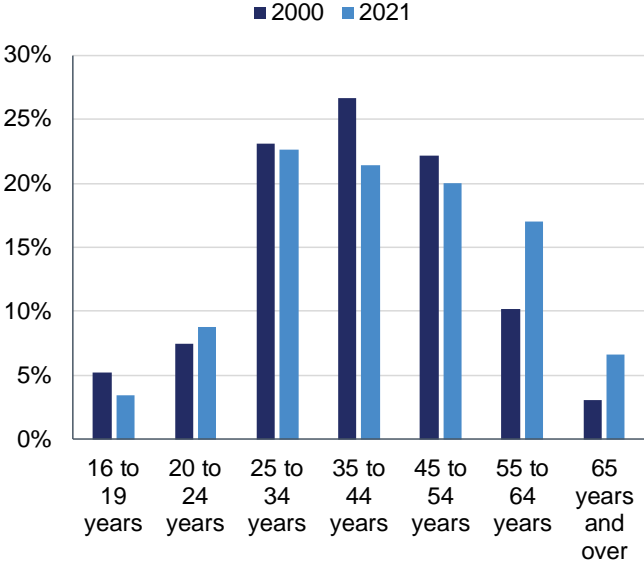


Between January 2012 and February 2021, total CPI annual inflation rates averaged 1.6%, whereas total medical care CPI annual growth rates averaged 2.9% during the same period. Beginning March 2021, total CPI annual growth rate accelerated and through October 2022 has averaged 6.8%, compared to 2.6% for total medical care CPI rates.

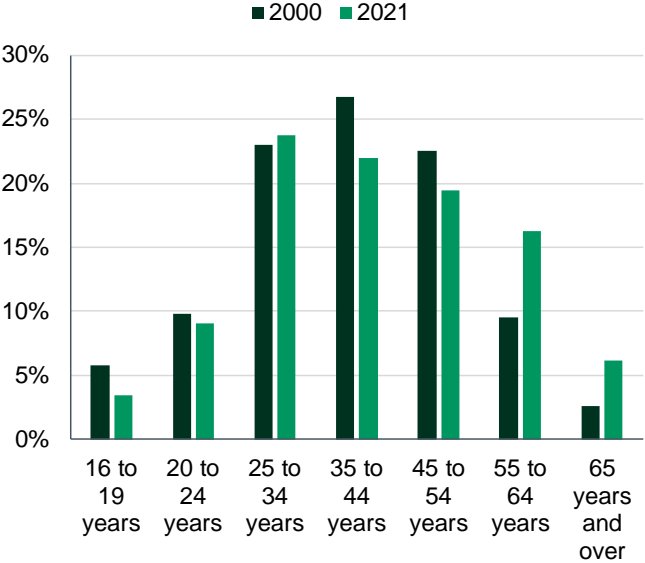
Prepared by Conning, Inc. Source: Bureau of Labor Statistics, U.S. Department of Labor (2022)

# An Aging Work Force

National Shift in Work Force Age Between 2000 and 2020



Estimated Washington State Shift in Work Force Age Between 2000 and 2020



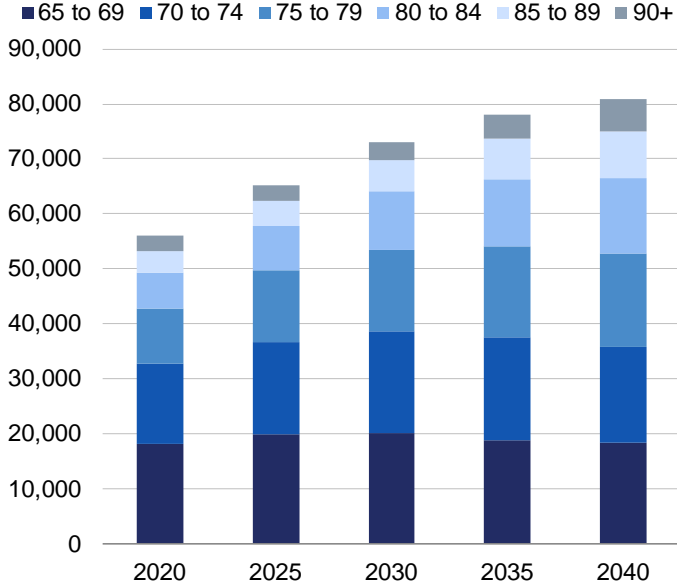
As the U.S. workforce continues to age, those reaching retirement age are less likely to retire. Between 2000 and 2021, those age 55 and over saw their portion of the U.S. labor market increase from 13.3% to 23.6%.

Prepared by Conning, Inc. Source: Bureau of Labor Statistics, Department of Labor

# Population Projection for Selected Age Groups

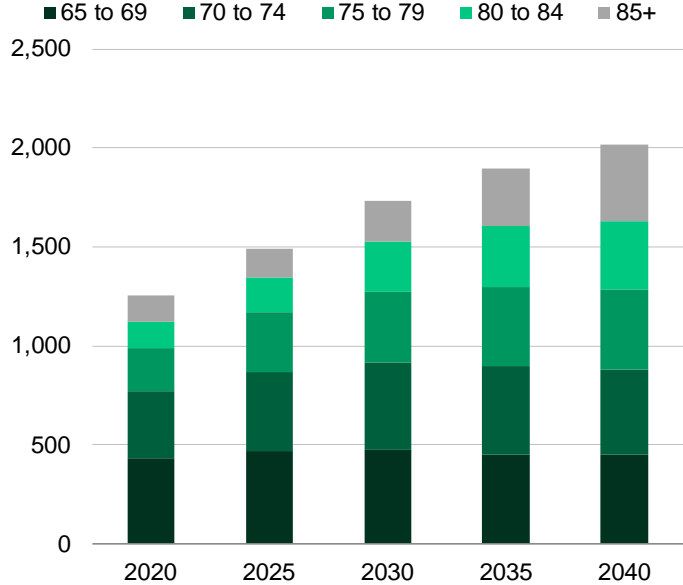
## U.S. Population Projection

In thousands



## Washington State Population Projection

In thousands



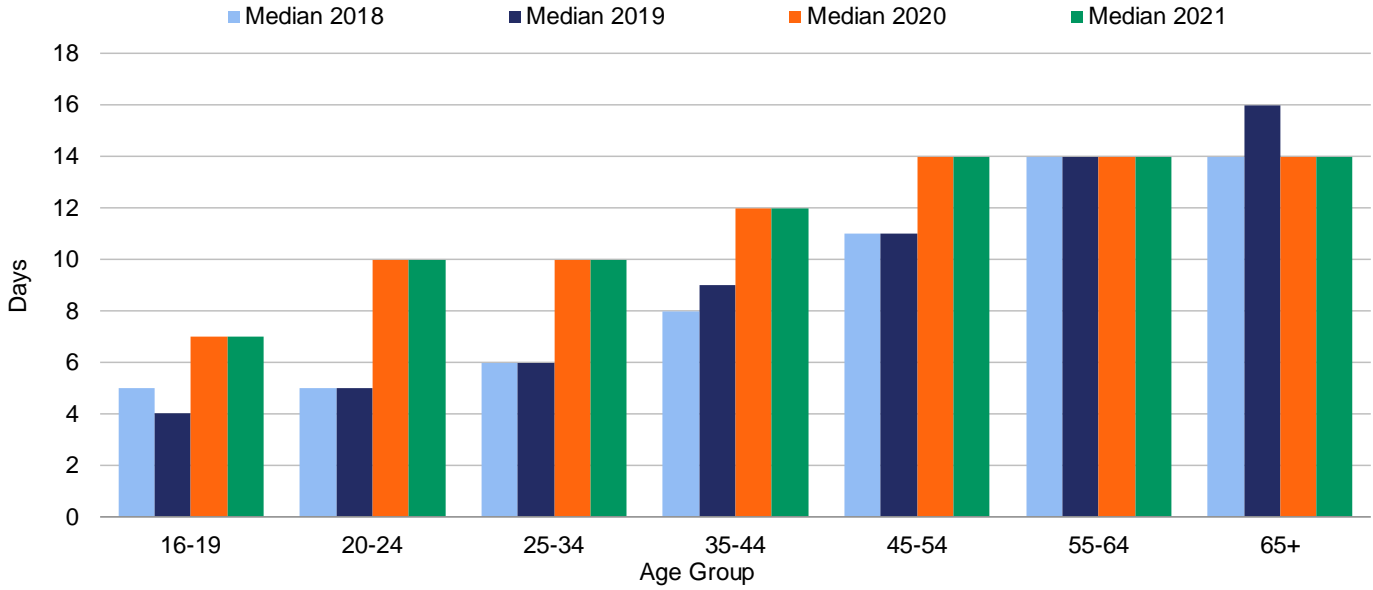
**Over the next twenty years, this increase in the population over the age 65 is expected to increase, both at a national level as well as the state of Washington.**

Prepared by Conning, Inc. Source: Census Bureau, U.S. Department of Commerce (2021), Washington Office of Financial Management State Population Forecast – as of November 2022

# Nonfatal Occupational Injuries & Illnesses

## Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work

by selected worker characteristics and number of days away from work, private industry sector, 2020

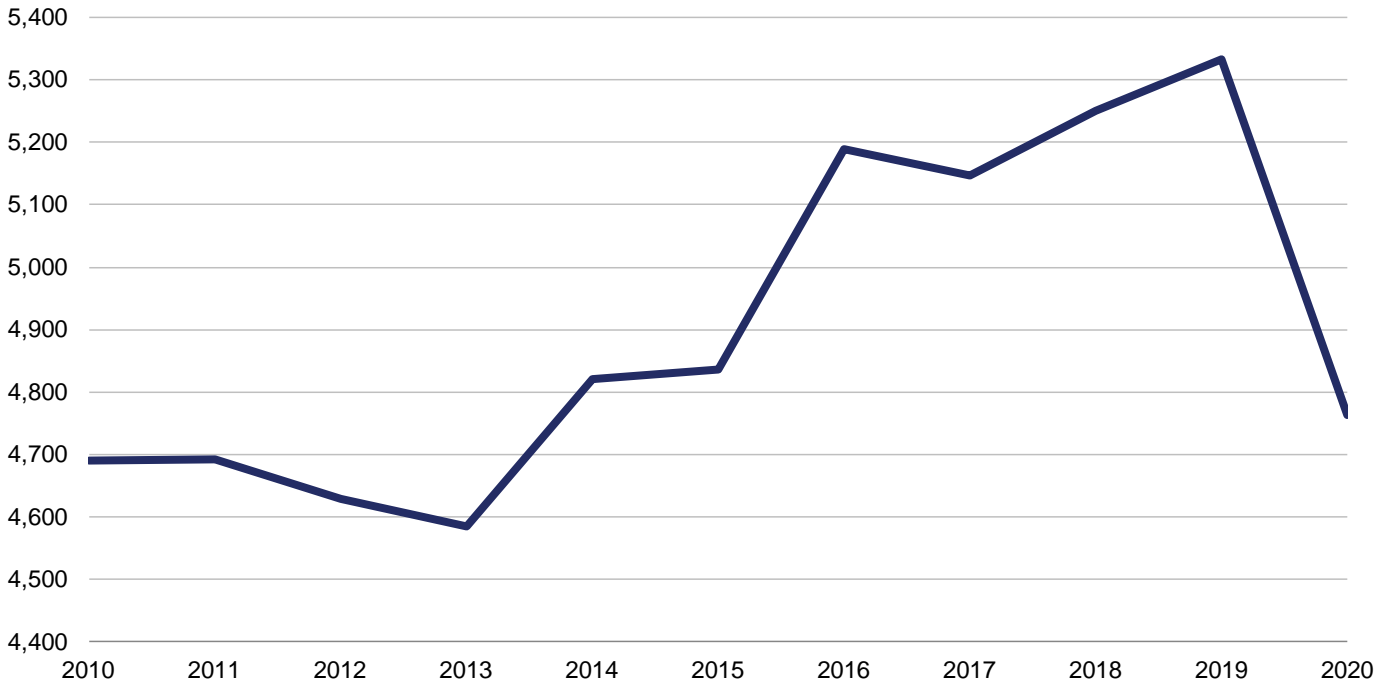


The number of nonfatal occupational injuries & illnesses has either increased or remained stagnant over the last four years. However, the higher the age group, the longer injured or ill individuals remain away from work.

Prepared by Conning, Inc. Source: Bureau of Labor Statistics, U.S. Department of Labor (2022)



# Number of Fatal Work Injuries



The latest release by the BLS reported a total of 4,764 fatal work injuries in 2020, down 10.7% from 5,333 in 2019. This is the lowest number seen since 2013 and is due largely to Covid-19. Transportation and construction-related incidents were the most frequent type of fatal event, totaling 47.4% of all fatal occupational injuries in 2020. There were 1,282 transportation-related fatalities and 976 construction-related fatalities in 2020.

Prepared by Conning, Inc. Source: Bureau of Labor Statistics, U.S. Department of Labor (2022)

# Long Covid and the Effect on Employment

24%

- Estimated percentage of Covid-19 patients identified as long haulers

26%

- Estimated percentage of Covid-19 long haulers reporting negative impact on employment

3 to 6

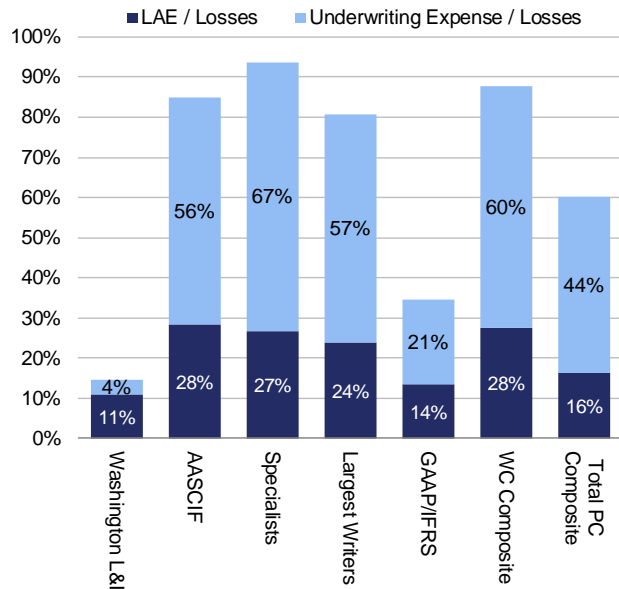
- Range of months long hauler employment impacted

**Based on the most recent NCHS (National Center for Health Statistics) survey in November 2022, an average of 16.7% of respondents age 18 to 59 reported long Covid symptoms, above the 11.2% for 60-69 and 7.2% for 70-79 age groups. In the survey, 13.1% of individuals from the State of Washington reported experiencing long Covid symptoms, below the national average of 14.6%.**

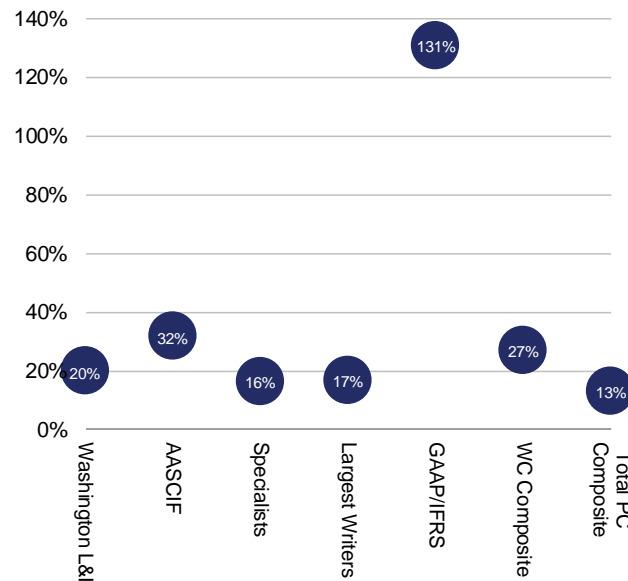
Prepared by Conning, Inc. Source: Minneapolis Federal Reserve "Long-Haulers and Labor Market Outcomes" Dasom Ham, Institute Working Paper 60, published July 7, 2022, Centers for Disease Control and Prevention [Long COVID Household Pulse Survey - November 2022](#)

# Expenses as a % of Benefits (Loss Expense), 2021 Median

## Expense Ratio, Workers' Compensation



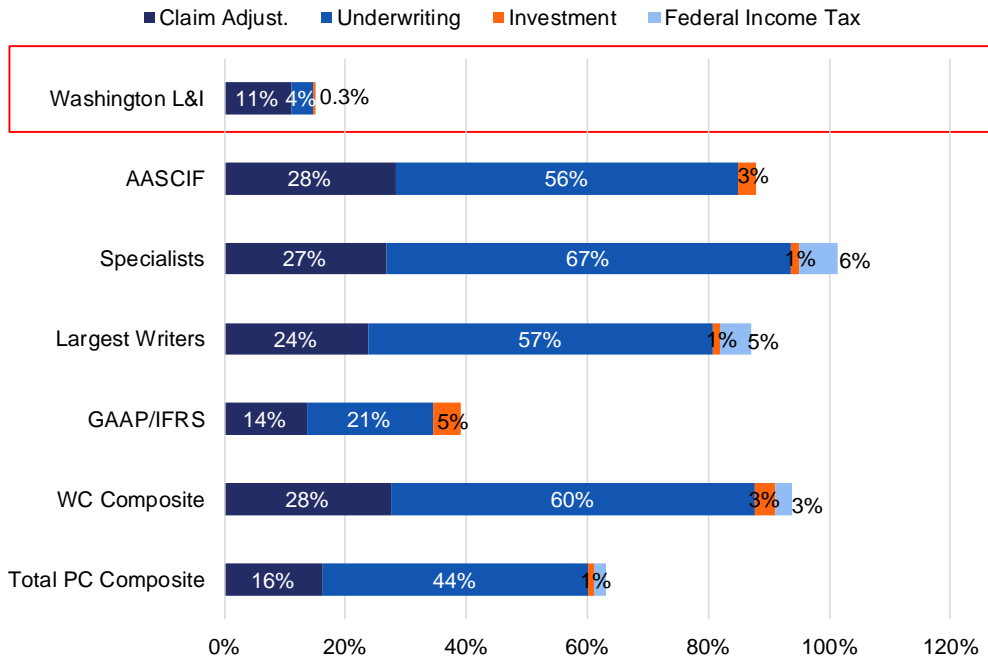
## Investment Income/Losses, Total All Lines



These graphs use loss (benefits) expense as the basis for the LAE, expense, and investment income ratios. This is a useful approach for evaluating the relative costs of administering claims, as it removes potential distortions arising from different levels of premium rates.

Prepared by Conning, Inc. Source: ©2022 S&P Capital IQ Pro

# Major Expenses as a % of Benefits (Loss Expense), 2021 Median, Total All Lines



## Hypothetical L&I Savings based on expense ratio in comparison to:

\$ in millions

- AASCIF: \$1,735
- Specialists: \$2,051
- Largest Writers: \$1,716
- GAAP/IFRS: \$573
- WC Composite: \$1,874
- Total PC Composite: \$1,144

## Hypothetical L&I Savings based on investment expenses in comparison to:

\$ in millions

	Basis Points	\$ in Mil.
AASCIF	20	\$33.5
Specialists	12	20.3
Largest Writers	17	29.3
GAAP/IFRS	27	46.1
Workers' Comp	27	45.6
Total PC Composite	16	26.7

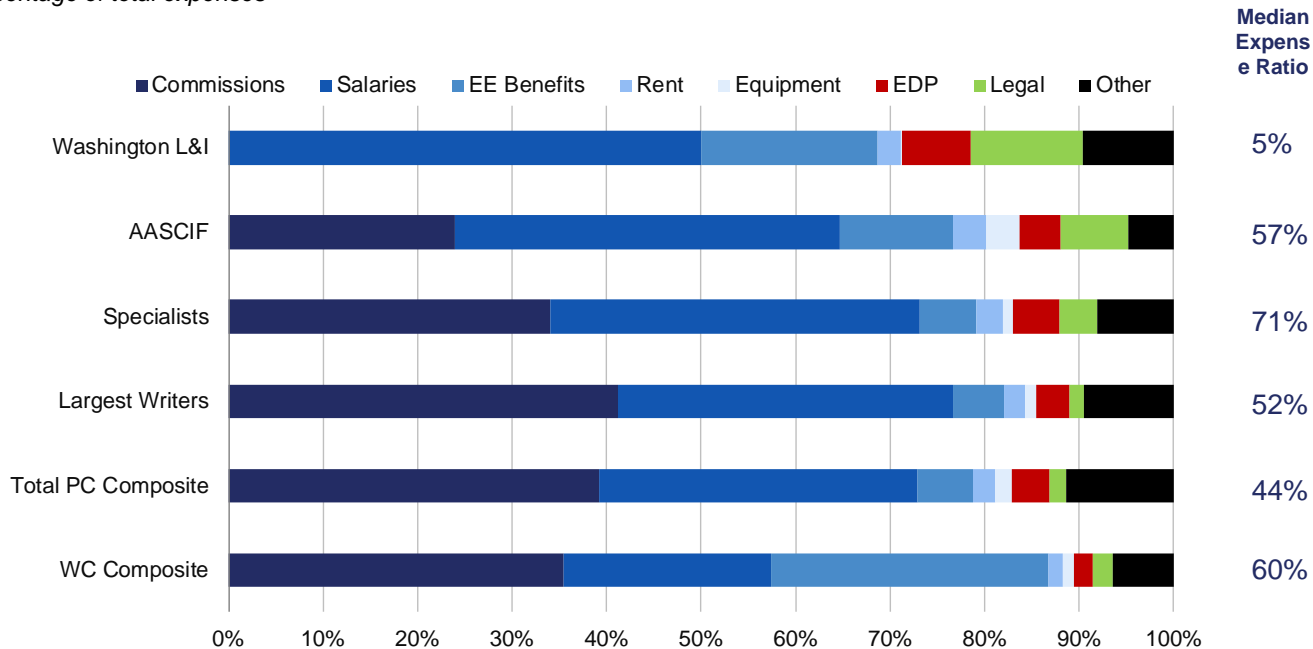
This graph shows the major categories of expenses as a percentage of loss (claims, benefits) expense, to provide insights into the relative cost of managing claims, as well as other expenses.

The figures to the right show the hypothetical additional costs, in millions of dollars, L&I would incur if its expense structure was the same as the peer averages, as well as a focus on investment expenses.

Prepared by Conning, Inc. Source: ©2022 S&P Capital IQ Pro

# Distribution of Underwriting Expenses by Category, 2021 Aggregate, Total All Lines

Percentage of total expenses

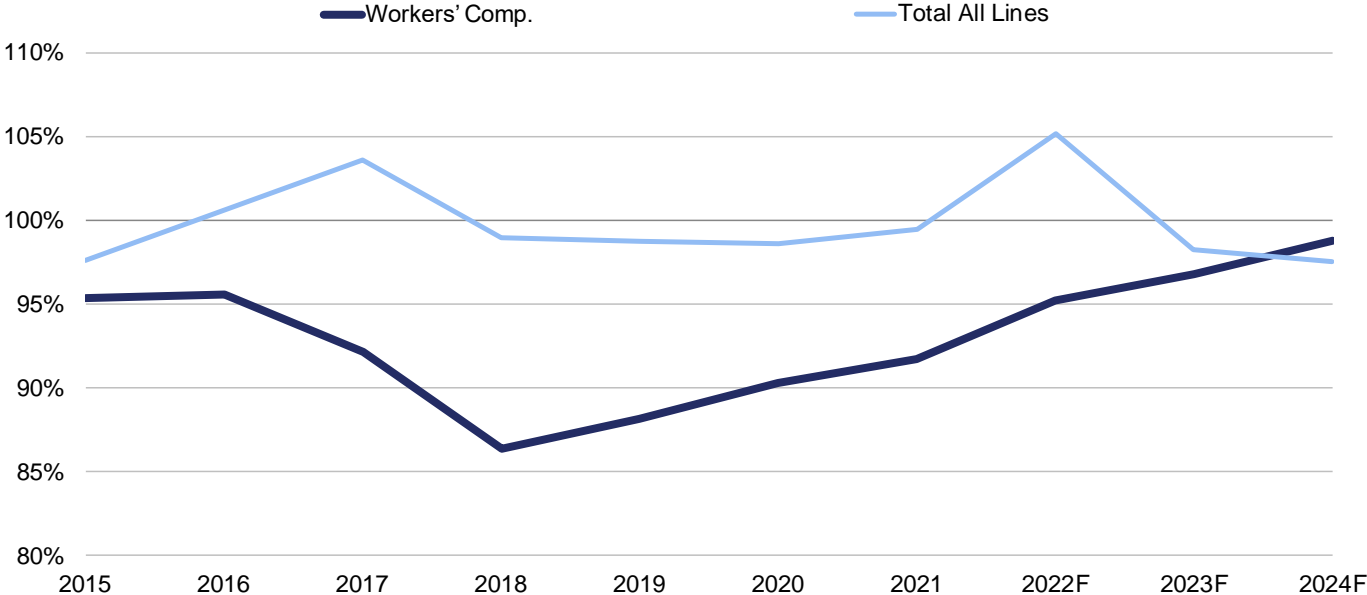


The majority of expenses consists of commissions and employee expenses (payroll & benefits). EDP, as a proxy for technology spending, falls in the 3%-4% range of total expenses.

Prepared by Conning, Inc. Source: ©2022 S&P Capital IQ Pro

# Historical Results & Projections: Workers' Compensation

## Combined Ratio



**With a combined ratio of 91.7% in 2021, workers' compensation reported its seventh consecutive year of profitability. This trend is projected to continue with the forecast of 95.2% for 2022, 96.8% in 2023, and 98.8% in 2024.**

Prepared by Conning, Inc. Historical data source: ©2022 S&P Capital IQ Pro. Forecast ©2022 Conning, Inc.

# Workers' Compensation: Trends and Assumptions

<b>Price/Rates</b> Flat to negative in 2022 and low single-digit increases in 2023 & 2024	<ul style="list-style-type: none"><li>▪ The 2022Q2 CIAB rate survey reported a workers' compensation renewal rate decrease of -1.2%.</li><li>▪ The 2022Q2 MarketScout Commercial Lines Rate Barometer reported workers' compensation rates increased 1.0% during the quarter.</li></ul>
<b>Exposures</b> Up mid-single digits in 2022 and low single-digit increases in 2023 & 2024	<ul style="list-style-type: none"><li>▪ Forecast unemployment rate of 3.7% for 2022, 3.9% in 2023, and 3.9% in 2024.</li><li>▪ Average hourly earnings are projected to increase in the low to mid-single digits from 2022 through 2024.</li></ul>
<b>Frequency</b> Increasing in 2022-2024	<ul style="list-style-type: none"><li>▪ Claims increased in 2021.</li><li>▪ Higher claim frequency is expected in 2022-2024 due to increased employment as well as a return to more normalized work patterns/loss exposures resume.</li></ul>
<b>Severity</b> Up low-to-mid single digits in 2022-2024	<ul style="list-style-type: none"><li>▪ Medical costs continue to increase as medical inflation has begun to increase, though remain below inflation rates in other areas of the economy.</li><li>▪ As employers struggle to hire needed workers, employers' hiring standards will decrease, which could lead to an increase in the risk for higher-severity accidents.</li></ul>
<b>Loss Reserves</b> Favorable reserve development continued in 2021.  Anticipate additional favorable loss development over the forecast period.	<ul style="list-style-type: none"><li>▪ In 2021, reserves for prior accident years developed favorably by \$5.9 billion.</li><li>▪ Favorable prior-year development in 2021 reduced the calendar-year loss ratio by 13.7 points.</li><li>▪ All prior accident years developed favorably in 2021. Reserves for accident years 2011 and prior were the largest contributor with \$1.1 billion of favorable development.</li></ul>

Prepared by Conning, Inc. Source: Bureau of Labor Statistics, U.S. Department of Labor (2022)

---

# DISCLOSURES



# Disclosures

Conning, Inc., Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., a FINRA-registered broker-dealer, Conning Asset Management Limited, Conning Asia Pacific Limited, Octagon Credit Investors, LLC and Global Evolution Holding ApS and its group of companies ("Global Evolution") are all direct or indirect subsidiaries of Conning Holdings Limited (collectively, "Conning") which is one of the family of companies owned by Cathay Financial Holding Co., Ltd., a Taiwan-based company. Conning has investment centers in Asia, Europe and North America.

Conning, Inc., Conning Investment Products, Inc., Goodwin Capital Advisers, Inc., Octagon Credit Investors, LLC, and Global Evolution USA, LLC are registered with the Securities and Exchange Commission ("SEC") under the Investment Advisers Act of 1940 and have noticed other jurisdictions they are conducting securities advisory business when required by law. In any other jurisdictions where they have not provided notice and are not exempt or excluded from those laws, they cannot transact business as an investment adviser and may not be able to respond to individual inquiries if the response could potentially lead to a transaction in securities. SEC registration does not carry any official imprimatur or indicates that the adviser has attained a level of skill or ability.

Conning, Inc. is also registered with the National Futures Association and Korea's Financial Services Commission. Conning Investment Products, Inc. is also registered with the Ontario Securities Commission. Conning Asset Management Limited is Authorised and regulated by the United Kingdom's Financial Conduct Authority (FCA#189316), Conning Asia Pacific Limited is regulated by Hong Kong's Securities and Futures Commission for Types 1, 4 and 9 regulated activities, Global Evolution Fondsmæglerselskab A/S is regulated by Finanstilsynet (the Danish FSA) (FSA #8193), Global Evolution Fondsmæglerselskab A/S (London Branch) is regulated by the United Kingdom's Financial Conduct Authority (FCA# 479582) and Global Evolution Manco S.A. is regulated by The Commission de Surveillance du Secteur Financier (the Luxembourg FSA) (CSSF# S00001031). Conning primarily provides asset management services for third-party assets.

All investment performance information included in this document is historical. Past performance is not a guarantee of future results. Any tax-related information contained in this document is for informational purposes only and should not be considered tax advice. You should consult a tax professional with any questions.

For complete details regarding Conning and its services in the U.S., you should refer to our Form ADV Part 2, which may be obtained by calling us.

## Legal Disclaimer

©2022 Conning, Inc. This document and the software described within are copyrighted with all rights reserved. No part of this document may be distributed, reproduced, transcribed, transmitted, stored in an electronic retrieval system, or translated into any language in any form by any means without the prior written permission of Conning. Conning does not make any warranties, express or implied, in this document. In no event shall Conning be liable for damages of any kind arising out of the use of this document or the information contained within it. This document is not intended to be complete, and we do not guarantee its accuracy. Any opinion expressed in this document is subject to change at any time without notice.

This document contains information that is confidential or proprietary to Conning (or their direct or indirect subsidiaries). By accepting this document you agree that: (1) if there is any pre-existing contract containing disclosure and use restrictions between your company and Conning, you and your company will use the information in this document in reliance on and subject to the terms of any such pre-existing contract; or (2) if there is no contractual relationship between you and your company and Conning, you and your company agree to protect the information in this document and not to reproduce, disclose or use the information in any way, except as may be required by law.

ADVISE®, FIRM®, and GEMS® are registered trademarks in the U.S. of Conning, Inc. Copyright 1990-2022 Conning, Inc. All rights reserved. ADVISE®, FIRM®, and GEMS® are proprietary software published and owned by Conning, Inc.

*This document is for informational purposes only and should not be interpreted as an offer to sell, or a solicitation or recommendation of an offer to buy any security, product or service, or retain Conning for investment advisory services. The information in this document is not intended to be nor should it be used as investment advice.*

## About Conning

Conning ([www.conning.com](http://www.conning.com)) is a leading investment management firm with a long history of serving the insurance industry. Conning supports institutional investors, including insurers and pension plans, with investment solutions, risk modeling software, and industry research. Founded in 1912, Conning has investment centers in Asia, Europe and North America.

## Insurance Research

Conning publishes over 100 unique insurance industry research reports annually, including its Insurance Segment Reports with periodic line-of-business reviews; its Forecast & Analysis service, which offers a forward look at the industry; the Focus Series which offers a concise analysis of strategic issues, and its well-known Strategic Study series offering an in-depth view of key products and trends and issues of critical industry importance. All are available for individual or enterprise-wide subscription through our web-based insurance research portal Conning Library (<https://library.conning.com>). In addition to its published research, Conning offers proprietary research and consulting focused on the insurance industry.

For more information on our insurance research services, please call 888-707-1177 or visit [www.conning.com/insurance-research](http://www.conning.com/insurance-research).

*This presentation has been prepared for and distributed exclusively to specific clients and prospects of Conning. No part of the information may be distributed, reproduced, transcribed, transmitted, stored in an electronic retrieval system or translated into any language in any form by any means without the prior written permission of Conning. Statements and information in this report were compiled from sources that we consider to be reliable or are expressions of our opinion. The presentation is not intended to be complete, and we do not guarantee its accuracy. It does not constitute and must not be considered investment advice. Conning, Inc., Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., a FINRA-registered broker-dealer, Conning Asset Management Limited, Conning Asia Pacific Limited, and Octagon Credit Investors, LLC, which are all direct or indirect subsidiaries of Conning Holdings Limited (collectively, "Conning"), which is one of the family of companies owned by Cathay Financial Holding Co., Ltd., a Taiwan-based company.*

The names of certain companies, products, and product brands, and the logos and images related thereto, are trademarks of their third-party owners. They are used herein for illustrative and informational purposes only. Nothing herein implies sponsorship or endorsement of those companies or products by Conning, or an endorsement by such trademark owners of Conning or its products and services.

*This Conning presentation uses data sourced from Copyright 2021, S&P Capital IQ Pro of any information, data or material, including ratings (“Content”) in any form is prohibited except with the prior written permission of the relevant party. Such party, its affiliates and suppliers (“Content Providers”) do not guarantee the accuracy, adequacy, completeness, timeliness or availability of any Content and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such Content. In no event shall Content Providers be liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with any use of the Content. A reference to a particular investment or security, a rating or any observation concerning an investment that is part of the Content is not a recommendation to buy, sell or hold such investment or security, does not address the suitability of an investment or security and should not be relied on as investment advice. Credit ratings are statements of opinions and are not statements of fact.*

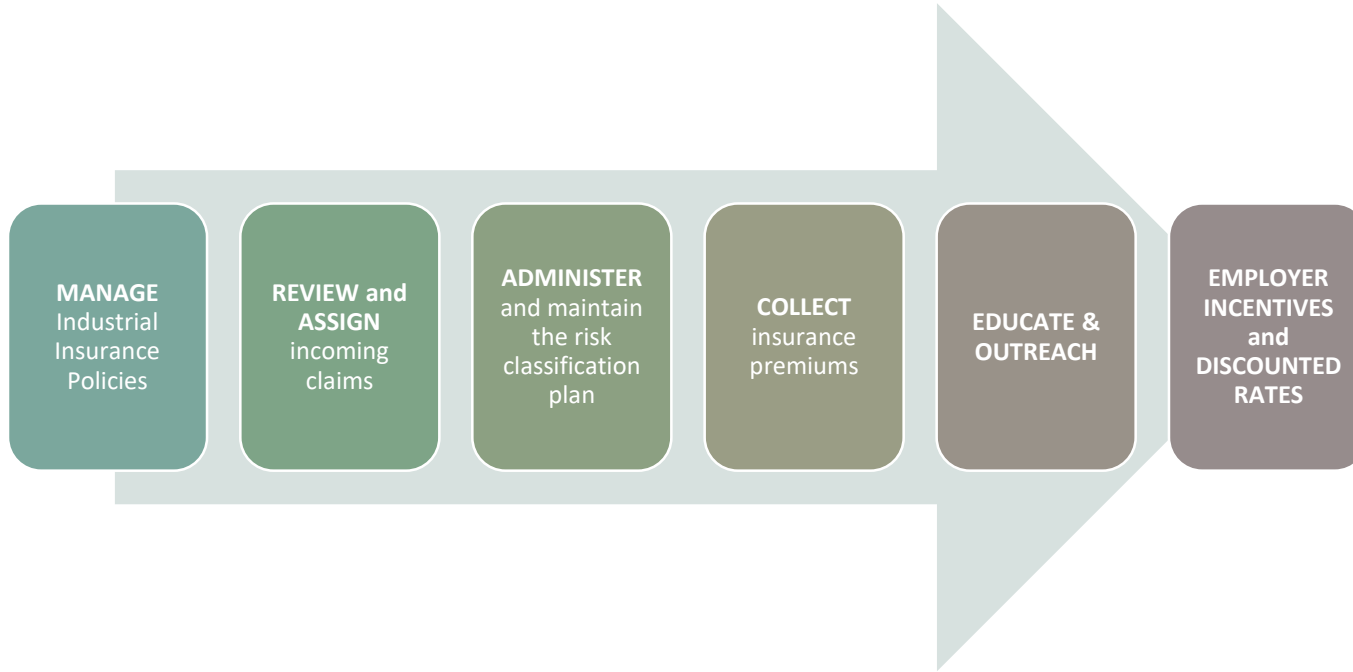
# Program Spotlight – Employer Services

*Keith Bingham, Program Manager for Employer Services*



# What We Do

Employer Services provides key services to more than 220,000 Washington businesses.



- **Employer Services consist of two program areas:**
  - Classifications Services
  - Account Services

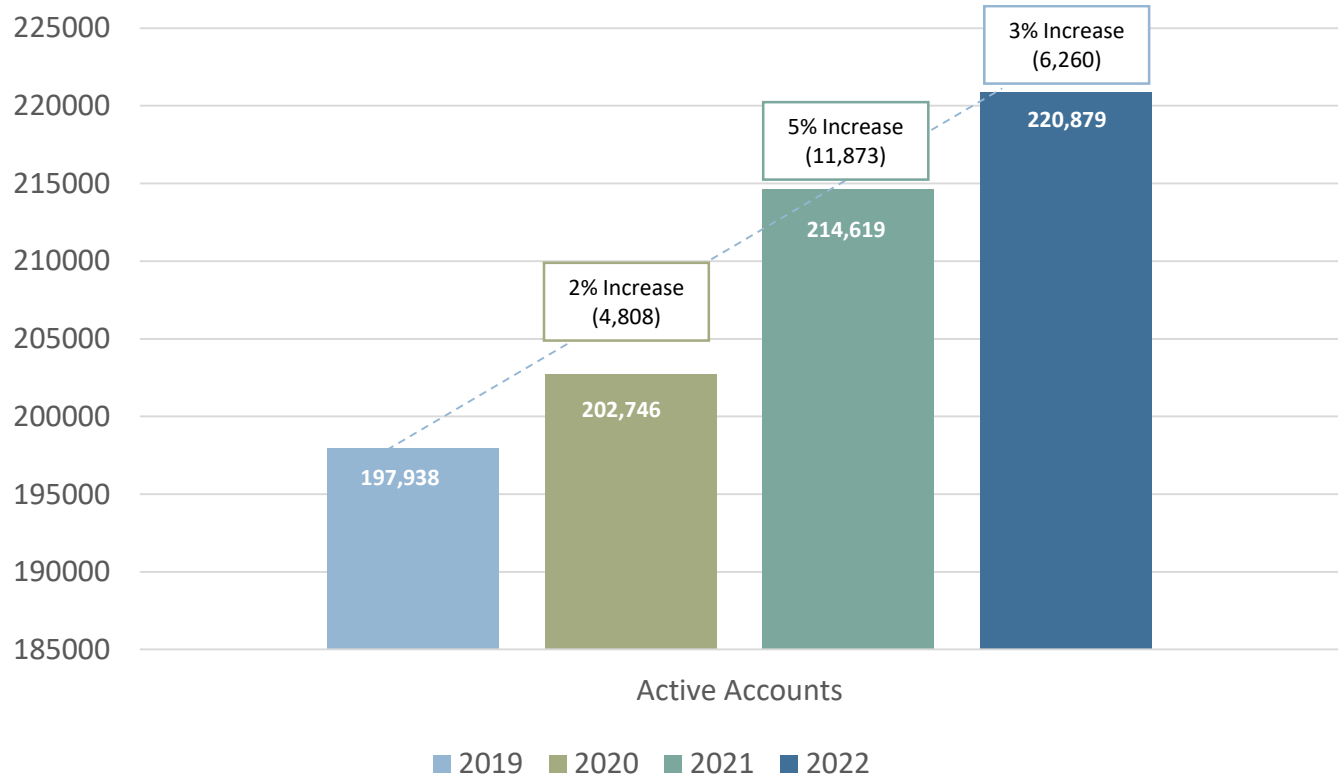
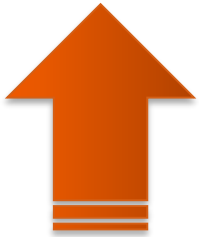
# Account Services



Account Services is the larger group, managing core account maintenance functions.

# Active Accounts

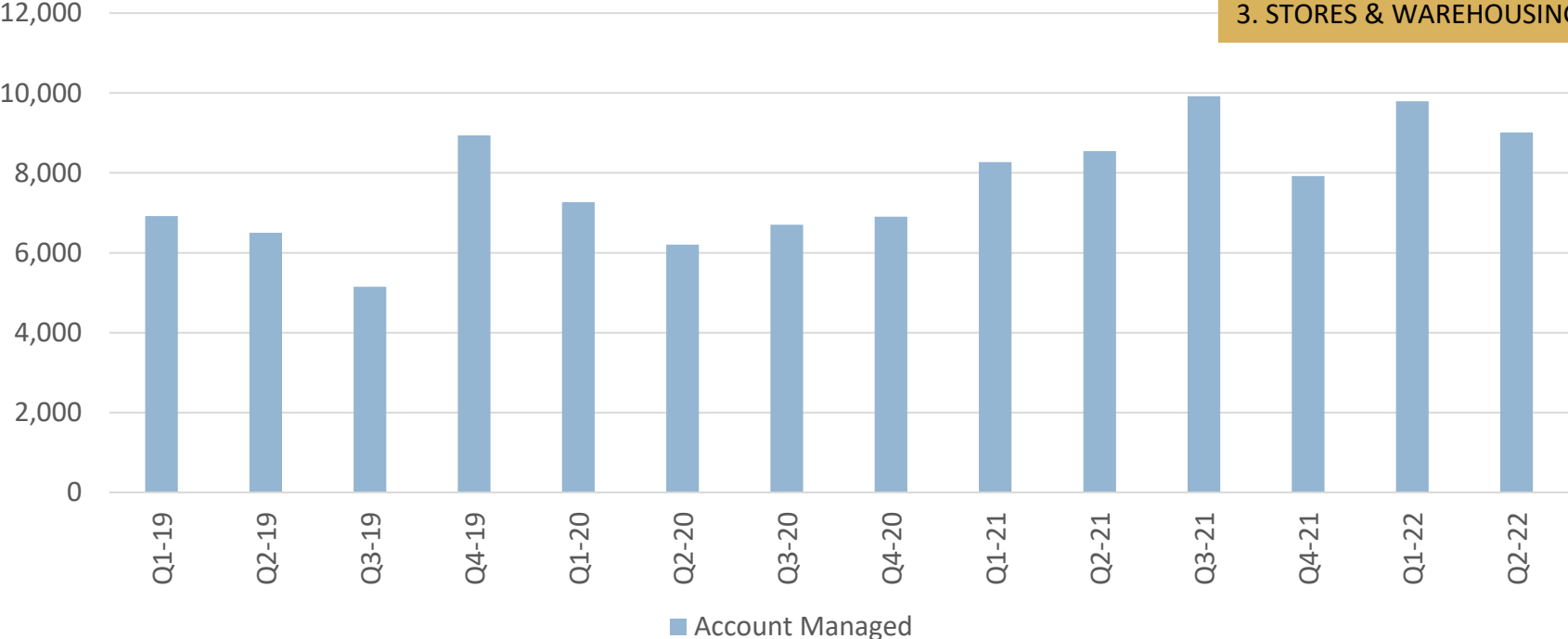
10% Increase  
since 2019



# New Workers Compensation Policies

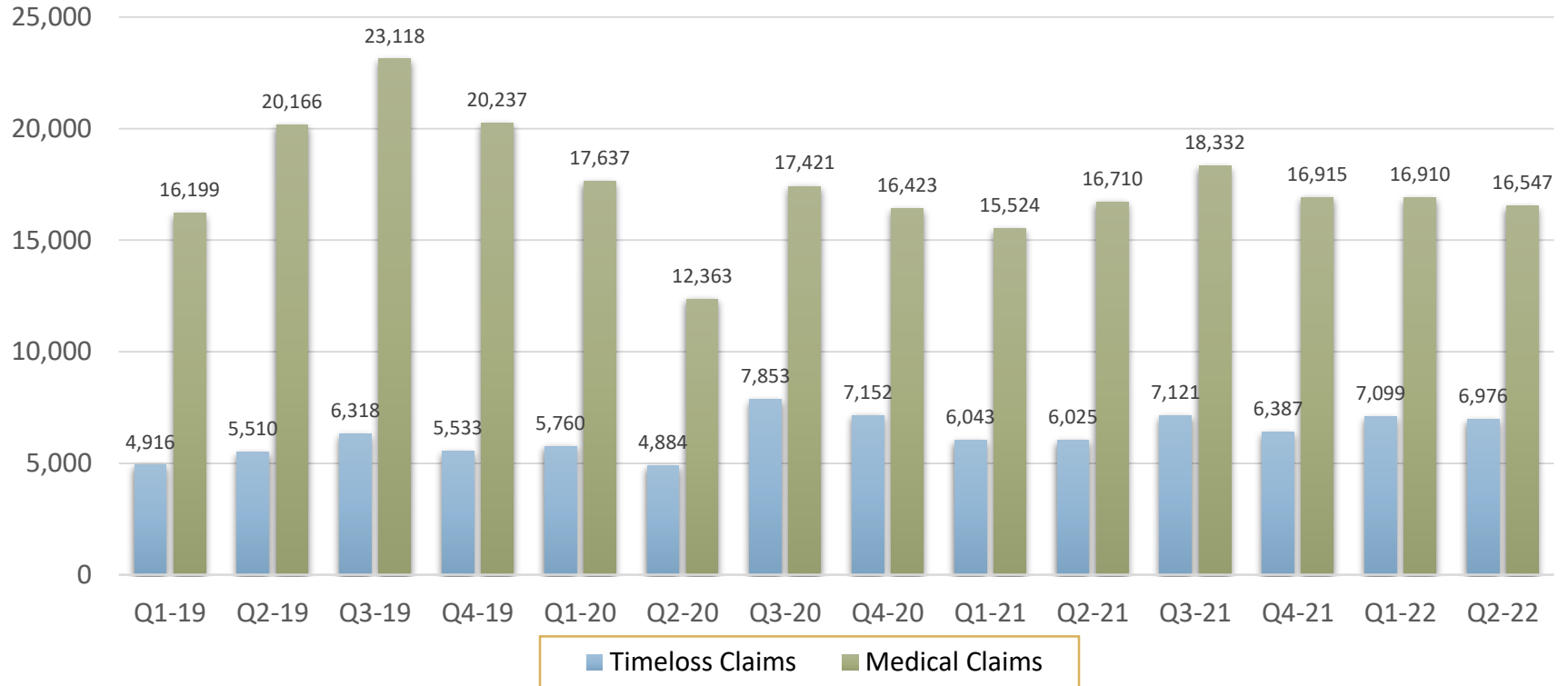
**Top Business Accounts Open**  
1. PROFESSIONAL OCCUPATIONS  
2. CONSTRUCTION/ENGINEERING/  
PROPERTY MGMT  
3. STORES & WAREHOUSING

New Accounts Created



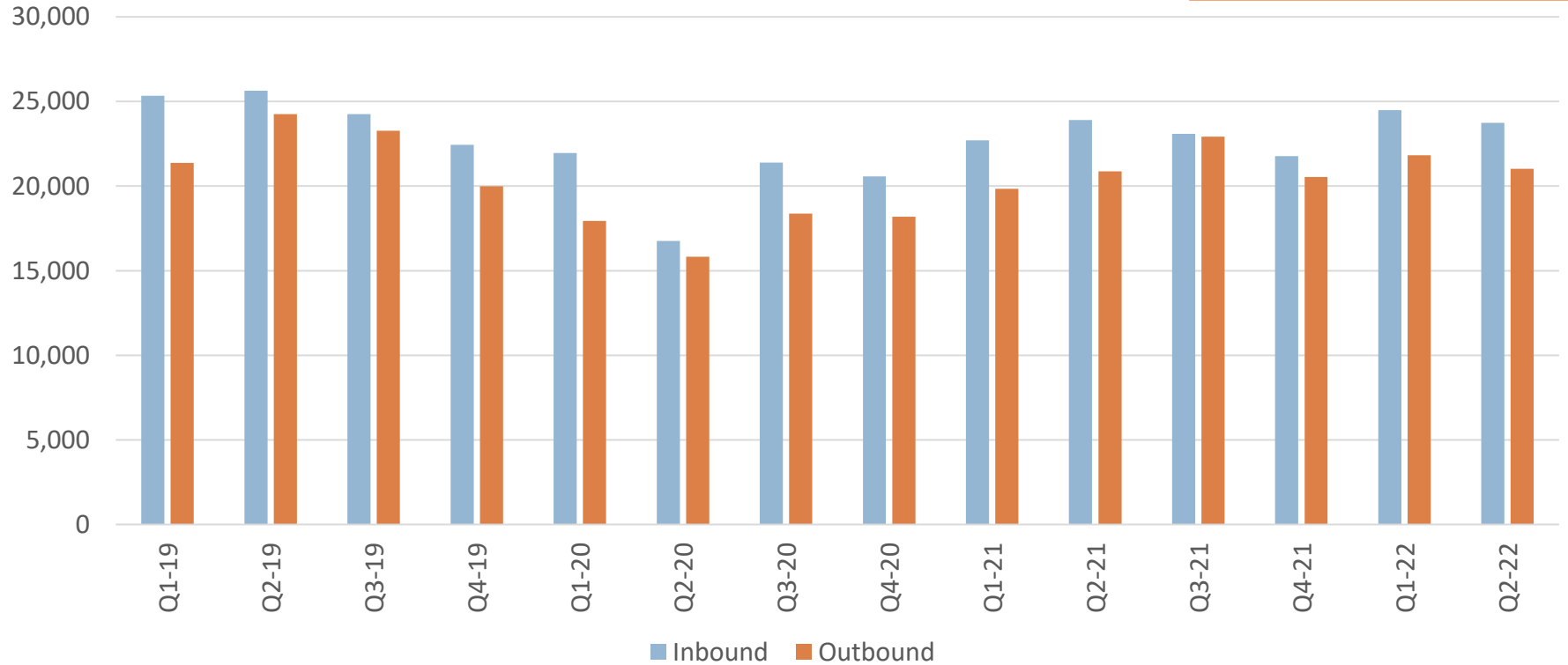


# Claim Assignments



# Customer Contact by phone

Incoming /Outgoing



# Classification Services



Classification Services is a diverse program of specialized teams

# Challenges and Opportunities

## Challenges



### Review Book of Business

- Resource limitations



### Mainframe Business System

- Staff struggle with legacy business systems



### Vacancies – 8%

- Retirements and promotions
- Losing Institutional Knowledge

## Opportunities



Develop strategy to conduct scheduled reviews of all Workers' Compensation policies



Support WCSM project



Streamline the recruitment process

# Program Spotlight – Field Audit

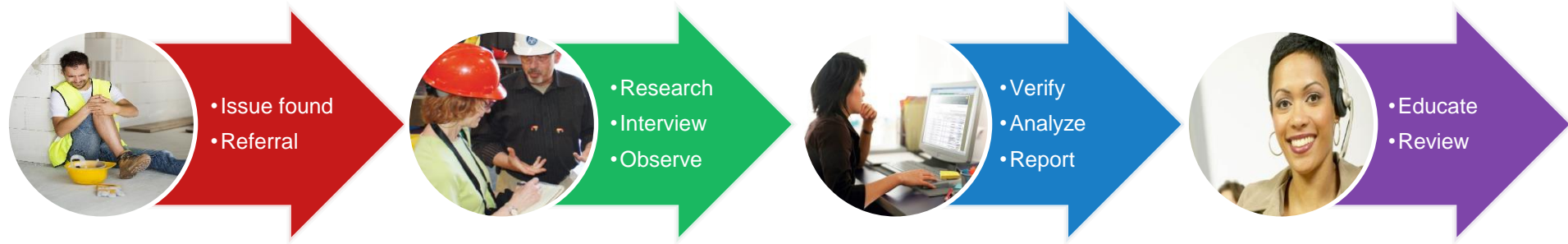
*Bryan Jewell, Audit Technical Expert*



# Field Audit Program | Overview

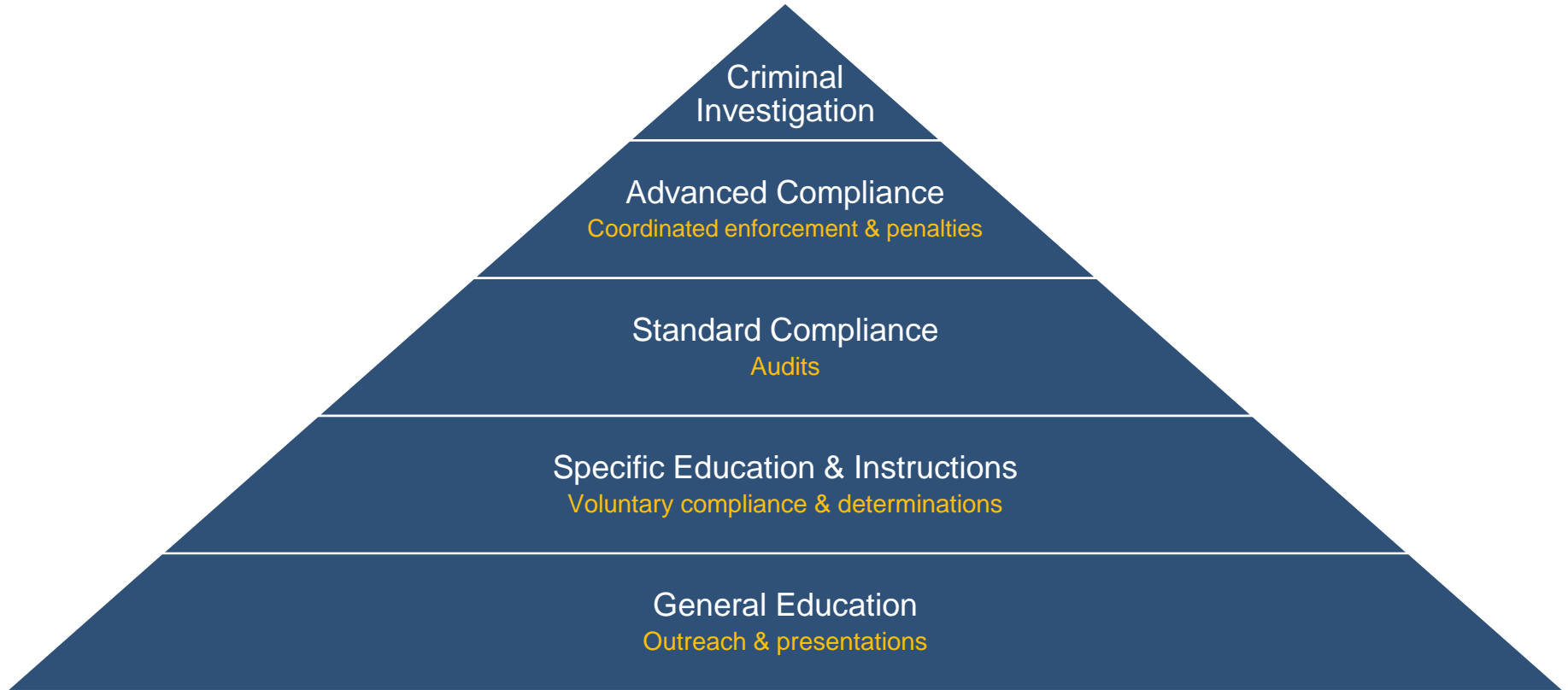
---

**Mission:** To promote the integrity of the industrial insurance system by ensuring employer compliance with industrial insurance laws, rules, and regulations.

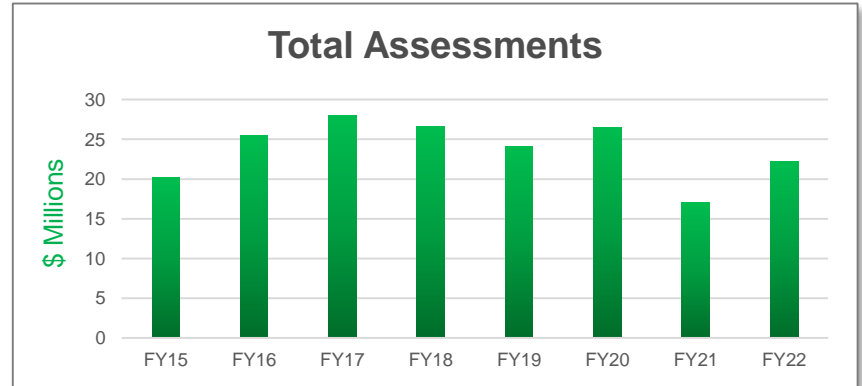
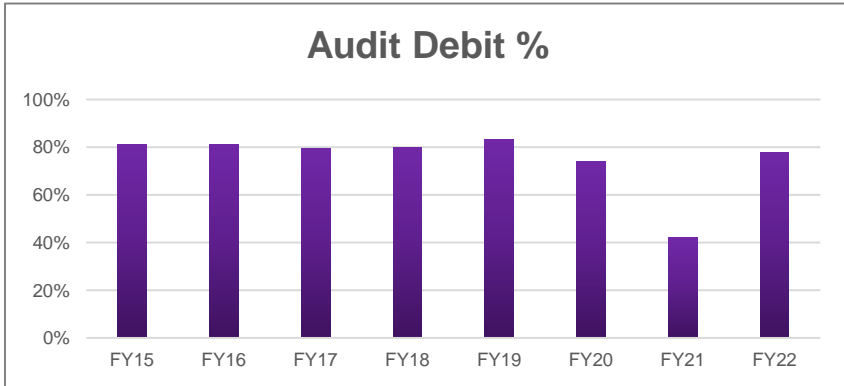
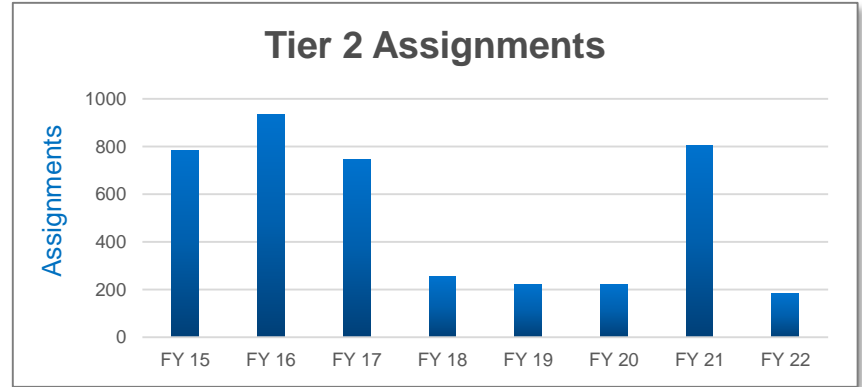
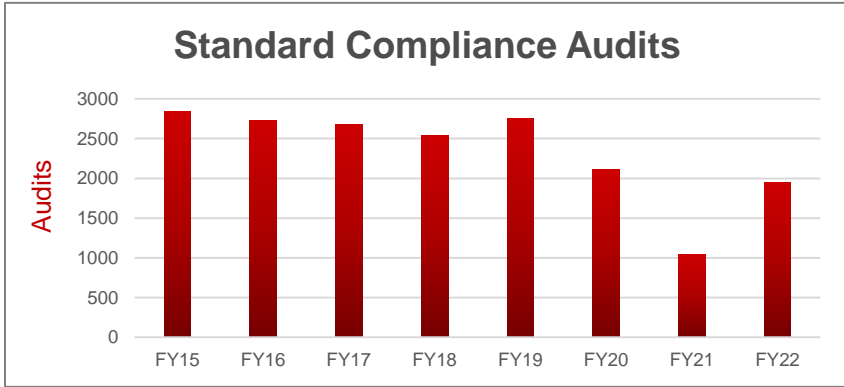


# Field Audit Program | Premium Escalation

---



# Field Audit Program | Snapshot





## **Industrial Insurance (State) Fund Financial Overview**

**Statutory Financial Information**  
**Fiscal Year 2023**  
**July 2022 – September 2022**

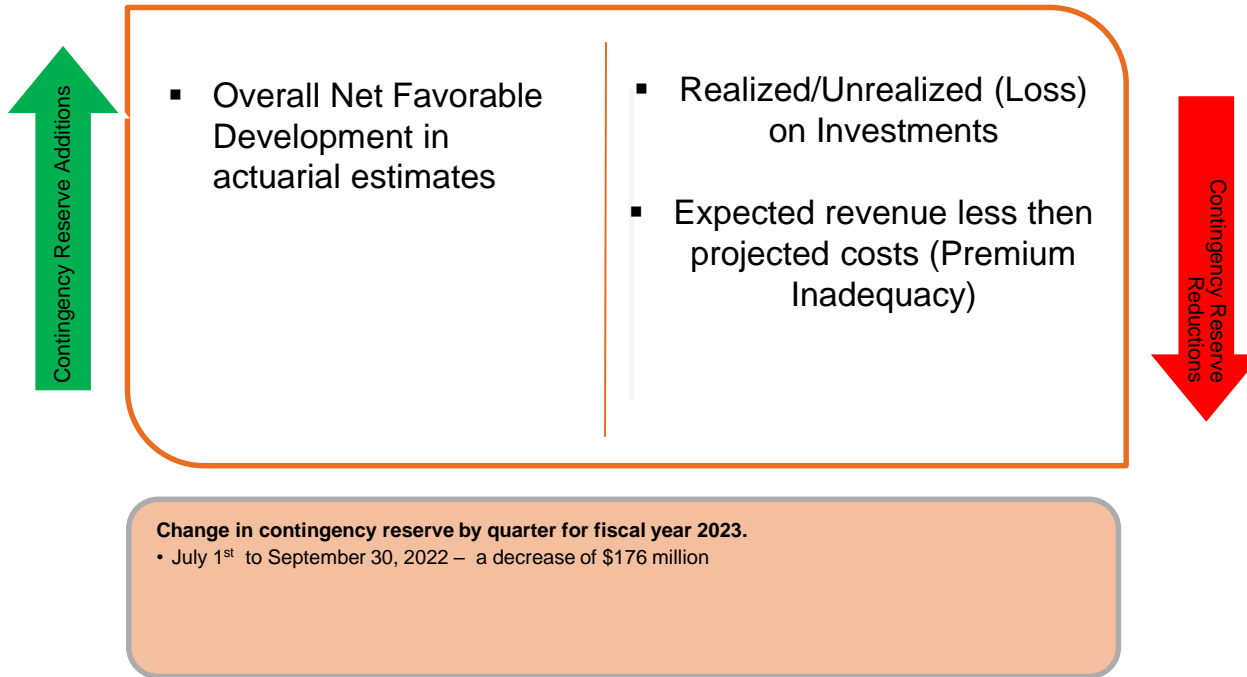
*Rachel Swanner, Workers Compensation Accounting Manager*



# Significant Financial Highlights

July 2022 through September 2022

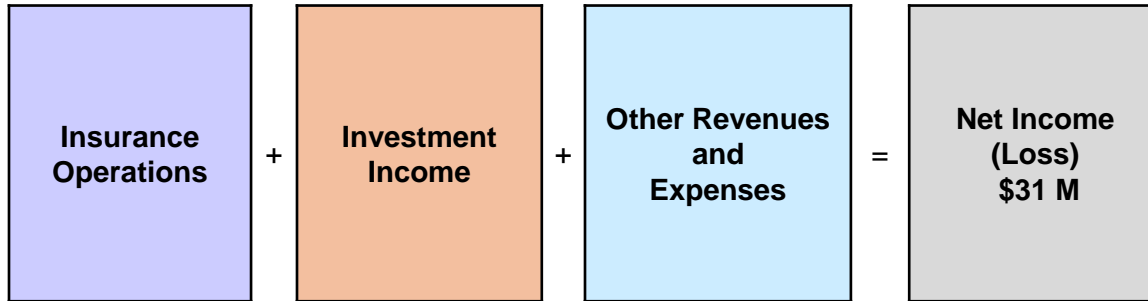
The contingency reserve decreased **\$176 million**, from \$4,314 million on July 1, 2022 to \$4,138 million on September 30, 2022.



# State Fund Results

“Net Income”

July 2022 through September 2022



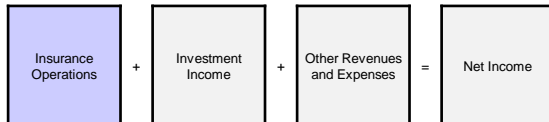
# Insurance Operations

July through September 2022  
(in millions)

## Three Months Ended

		September 30, 2022	September 30, 2021
We took in (Premiums Earned)	+	\$ 511	\$ 540
We spent (Expenses Incurred)			
Benefits Incurred		513	381
Claim Administrative Expenses		51	55
Other Insurance Expenses		25	24
Total Expenses Incurred	-	589	460
Net Income (Loss) from Insurance Operations	=	\$ (78)	\$ 80

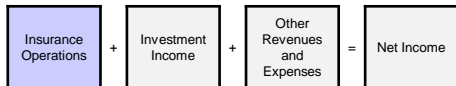
Net loss from insurance operations is normal for workers compensation insurers who routinely rely on investment income to cover a portion of benefit payments.



# Premiums Earned

July through September 2022  
(in millions)

	Three Months Ended		Difference
	September 30, 2022	September 30, 2021	
Standard Premiums Collected	\$519	\$505	
Less Retrospective Rating Adjustments	(12)	(22)	
Less Ceded Reinsurance Premiums	(4)	(7)	
Net Premiums Collected	503	476	
Changes in future Premium Amounts To Be Collected	(10)	78	
Changes in future Retrospective Rating Adjustment Refunds	18	(14)	
Net Premiums Earned	\$ 511	\$ 540	\$ (29)

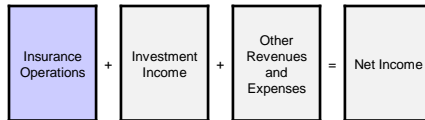


# Benefits Incurred

July through September 2022  
(in millions)

## Three Months Ended

	September 30, 2022	September 30, 2021	Difference
Benefits Paid	\$ 418	\$ 405	\$ 13
Change in Benefit Liabilities	95	(24)	119
<b>Total Benefits Incurred</b>	<b>\$ 513</b>	<b>\$ 381</b>	<b>\$ 132</b>

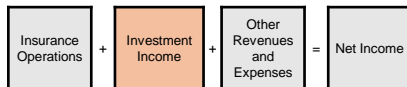


# Investment Income

July through September 2022  
(in millions)

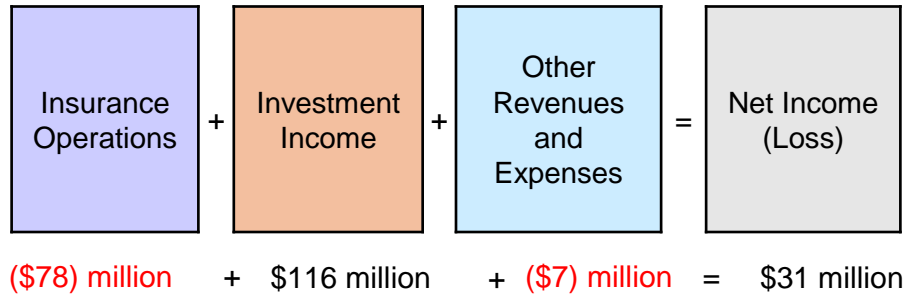
## Three Months Ended

		September 30, 2022	September 30, 2021
Investment Income Earned from Interest on bonds	+	\$119	\$ 112
Realized Gain/(Loss) from Fixed Income Investments Sold	+	(3)	55
Realized Gains from Stocks (Equity Investments) Sold	+	0	0
<b>Total Investment Income</b>	<b>=</b>	<b>\$ 116</b>	<b>\$ 167</b>



# Results of Operations

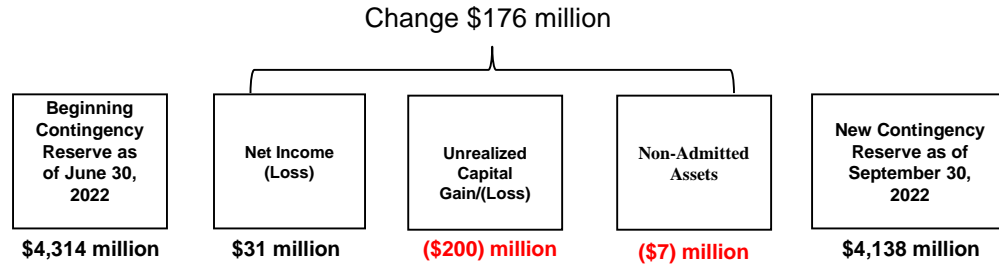
July 2022 through September 2022





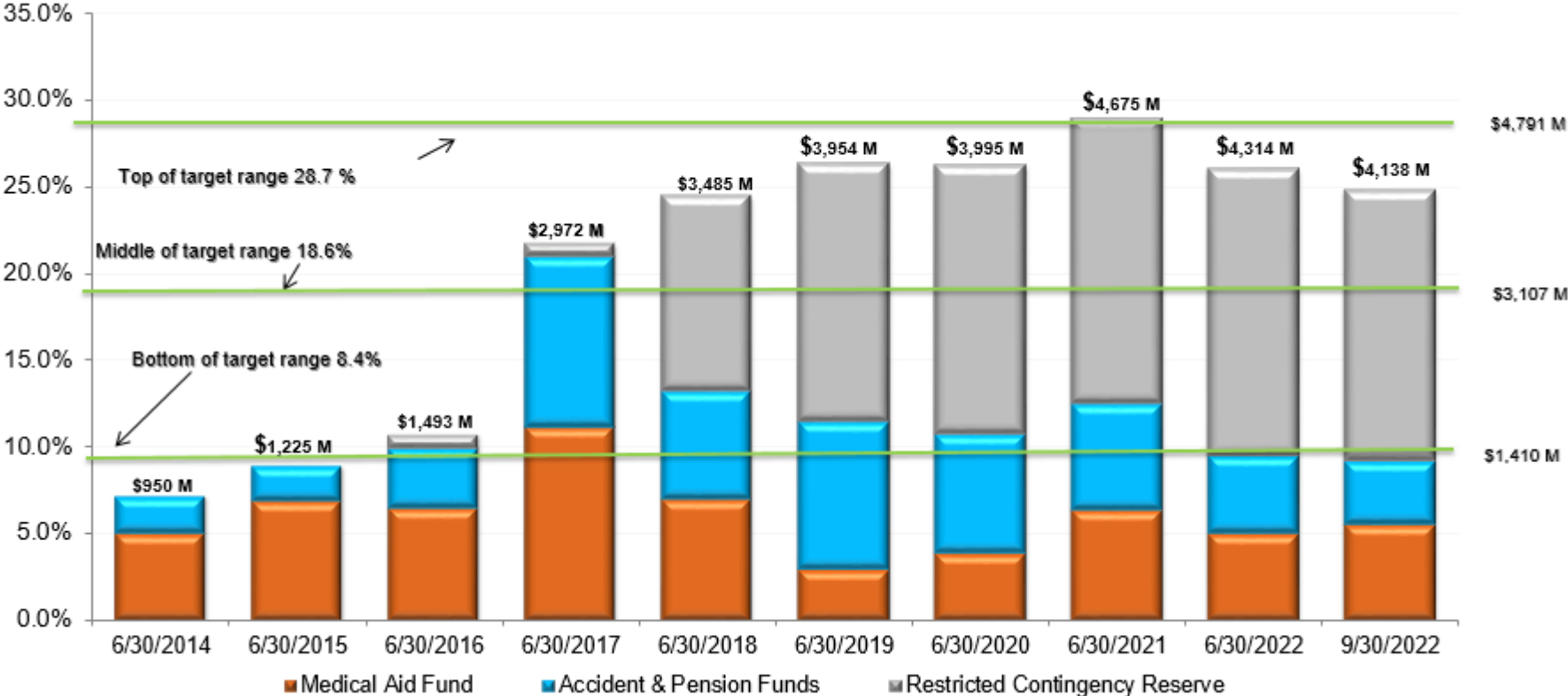
# How Did Contingency Reserve Perform?

July 2022 through September 2022



# Combined Contingency Reserve vs. Targets

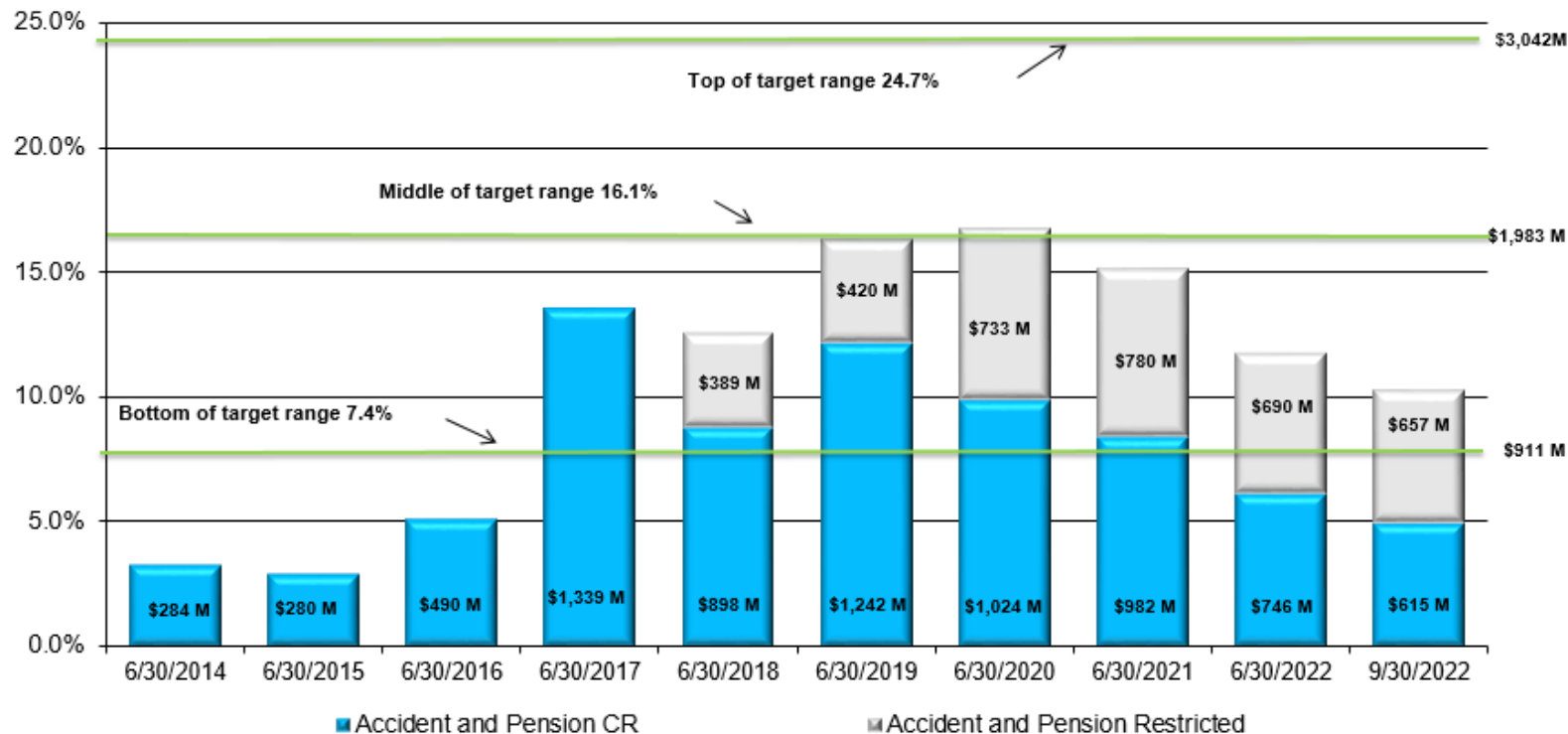
## Combined Contingency Reserve is 24.8% of Total Liabilities



*Restricted is based on final September 30, 2022 financial information and the change in the value of investments through 9-30-22.  
 The WCAC Target has historically been the midpoint between the bottom and middle target.*

# Accident, Pension & Restricted Contingency Reserve is 10.3% of Liabilities

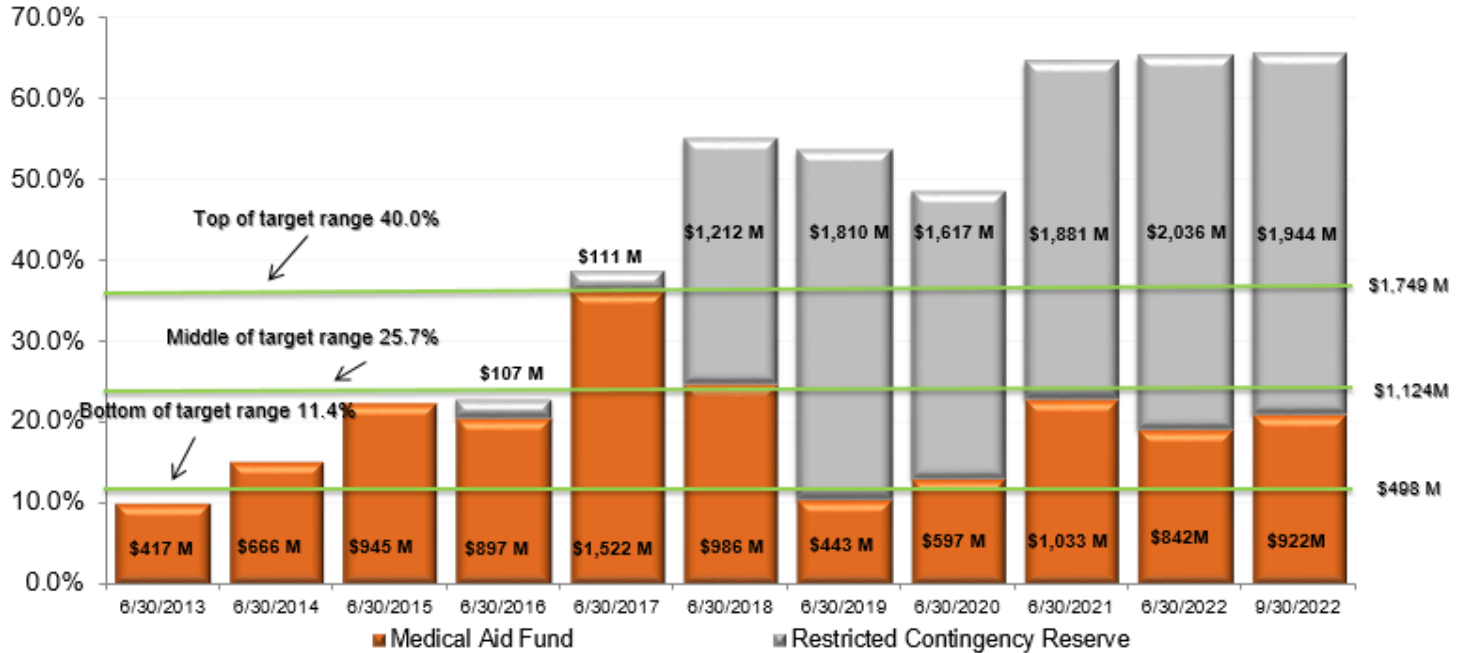
## Accident & Pension Contingency Reserve vs. Targets



The WCAC Target has historically been the midpoint between the bottom and middle target.

# Medical Aid & Restricted Contingency Reserve is 65.6% of Liabilities

## Medical Aid & Restricted Contingency Reserve vs. Targets



Restricted is based on final September 30, 2022 financial information and investment earnings through 9-30-22

The WCAC Target has historically been the midpoint between the bottom and middle target.

# Key Financial Ratios

as a percentage of premium earned

Ratios	Quarter Ended September 30, 2022		Fiscal Year Ended June 30, 2022	Fiscal Year Ended June 30, 2021
	State Fund	Industry Forecast		
Current Year Benefit (Loss Ratio)	102.2%		104.3%	117.1%
Prior Year Benefit (Loss Ratio)	(1.8)%		(9.2)%	30.0%
<b>Total Benefit (Loss Ratio)</b>	<b>100.4%</b>	<b>50.9%</b>	<b>95.1%</b>	<b>147.1%</b>
Current Year CAE Ratio	12.4%		12.5%	14.4%
Prior Year CAE Ratio	(2.4)%		(1.5)%	1.8%
<b>Total Claim Administration Expense (CAE) Ratio</b>	<b>10.0%</b>	<b>13.2%</b>	<b>11.0%</b>	<b>16.2%</b>
Sub-Total: Benefit and Claim Administration Expense Ratios	110.4%	64.1%	106.1%	163.3%
Underwriting Expense Ratio includes all insurance administrative expenses except CAE	5.0%	27.9%	5.0%	6.1%
<b>Combined Ratio (Industry omits dividends)</b>	<b>115.3%</b>	<b>92.0%</b>	<b>111.1%</b>	<b>169.4%</b>
Investment Income Ratio	23.4%	17.3%	24.7%	28.9%
<b>Operating Ratio</b>	<b>91.9%</b>	<b>74.7%</b>	<b>86.4%</b>	<b>140.5%</b>

*Note: a ratio of 100% would indicate that costs = premium for the period.*

## Questions & Comments

Contact Rachel Swanner,  
Workers Compensation Accounting Manager

- Phone: 360-902-6263
- Email: [Rachel.swanner@lni.wa.gov](mailto:Rachel.swanner@lni.wa.gov).

Thank You!

# Reconciliation of Change in Benefit Liabilities

(In \$1,000s)

July 1, 2022 Benefit Liability Beginning Balance	\$14,768,690
Prior Year Benefit Payments	(\$396,287)
Prior Year Development and Model Change (Unfavorable)	(\$92,628)
Self Insurance Prefunded Pension Transfers	\$0
Regular reserve discount reduction	\$83,713
Net Total Prior Year Benefit Liability as of September 30, 2022	<u>\$14,363,488</u>
New Current Year Benefit Liabilities	\$500,690
September 30, 2022 Benefit Liabilities Ending Balance	<u><u>\$14,864,178</u></u>
<b>Change Between Beginning and Ending Balance</b>	<b>\$95,488</b>

# Highlights of Changes in the Contingency Reserve

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Actuarial Development <sup>1</sup>	\$149M	\$543M	\$147M	\$926M	\$941M	\$352M	\$(197)M	\$287M	\$526M	\$93M
Rate Changes	\$58M	\$59M	\$38M	\$27M	\$(14)M	\$(120)M	\$(110)M	\$(44)M	\$(29)M	-
Greater (less) than expected changes in the stock market	\$279M	\$(29)M	\$(101)M	\$411M	\$199M	\$50M	\$340M	\$1,263M	\$(639)M	\$(223M)
Mortality table change	-	\$(146)M	-	-	-	-	-	-	-	-
Adjustments to avoid double counting 2011 reform savings	\$(130)M	\$(83)M	-	-	-	-	-	-	-	-
Discount rate reduction	\$(256)M <sup>2</sup>	\$(31)M	\$(31)M	\$(36)M	\$(646)M <sup>3</sup>	-	\$(90)M <sup>4</sup>	\$(384)M <sup>5</sup>	\$(6)M <sup>6</sup>	-

1. Includes numerous, offsetting factors including model changes, operational influences, and the state of the economy.

2. Model change for 13-year plus claims \$102 M; Pension Discount change \$154 M.

3. Pension Discount Rate reduction from 6.2% to 4.5%

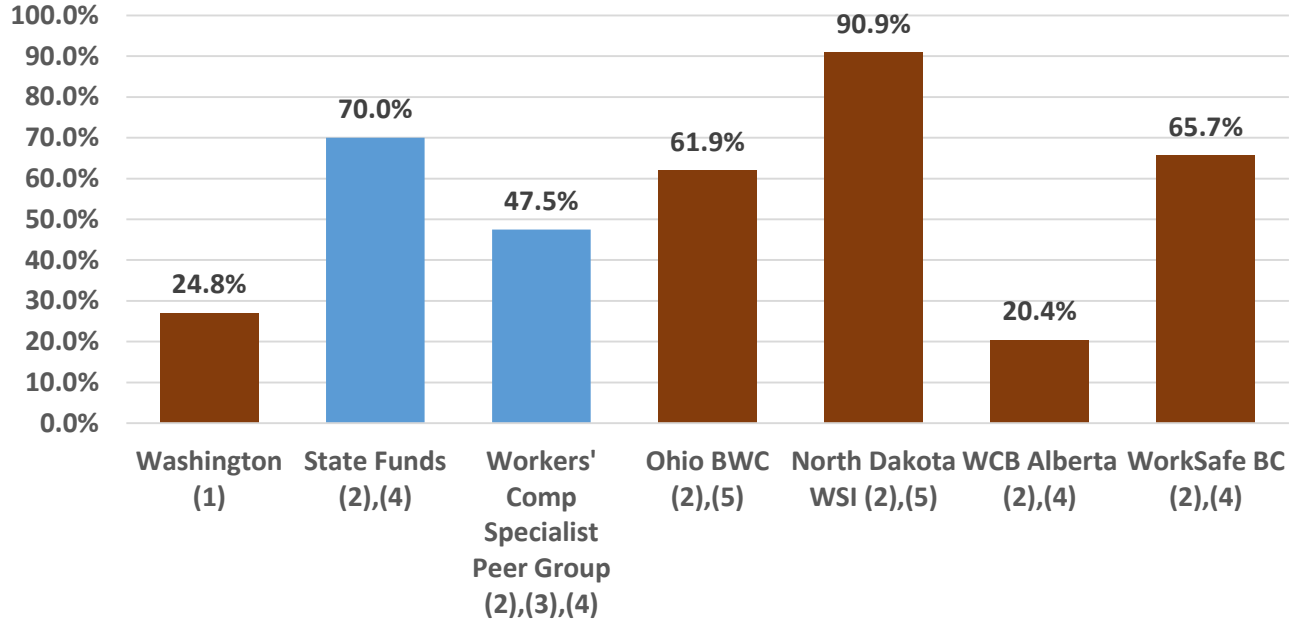
4. Non-Pension Discount Rate reduction from 1.5% to 1.0%

5. Proposed Pension Discount Rate 4.5% to 4.0%

6. Self-insurance prefunded rate reduction from 5.8 to 5.7%



## Washington's CR is below most other funds as a percent of liabilities



(1) Preliminary as of 9/30/2022

(2) Source: Conning Peer Analysis, August 17, 2022

(3) Worker's Comp Specialist Peer Group—workers' compensation specialist insurers including some state funds

(4) As of 12/31/2021

(5) As of 9/30/2021

# Historic Results of Operations

July through September

(in millions)

As of Quarter Ended September 30,	Insurance Operations	+	Investment Income	+	Other Revenues & Expenses	=	Net Income (Loss)
2022	(78)		116		(7)		31
2021	80		167		(6)		241
2020	(161)		173		(18)		(6)
2019	(203)		188		4		(11)
2018	(85)		123		10		48
2017	175		214		20		409
2016	(168)		128		18		(22)
2015	(194)		184		20		10
2014	(81)		132		16		67
2013	(36)		158		15		137
2012	(11)		144		8		141
2011	(104)		135		18		49

# Historical Investment Performance

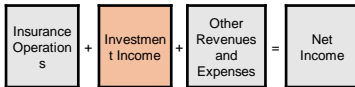
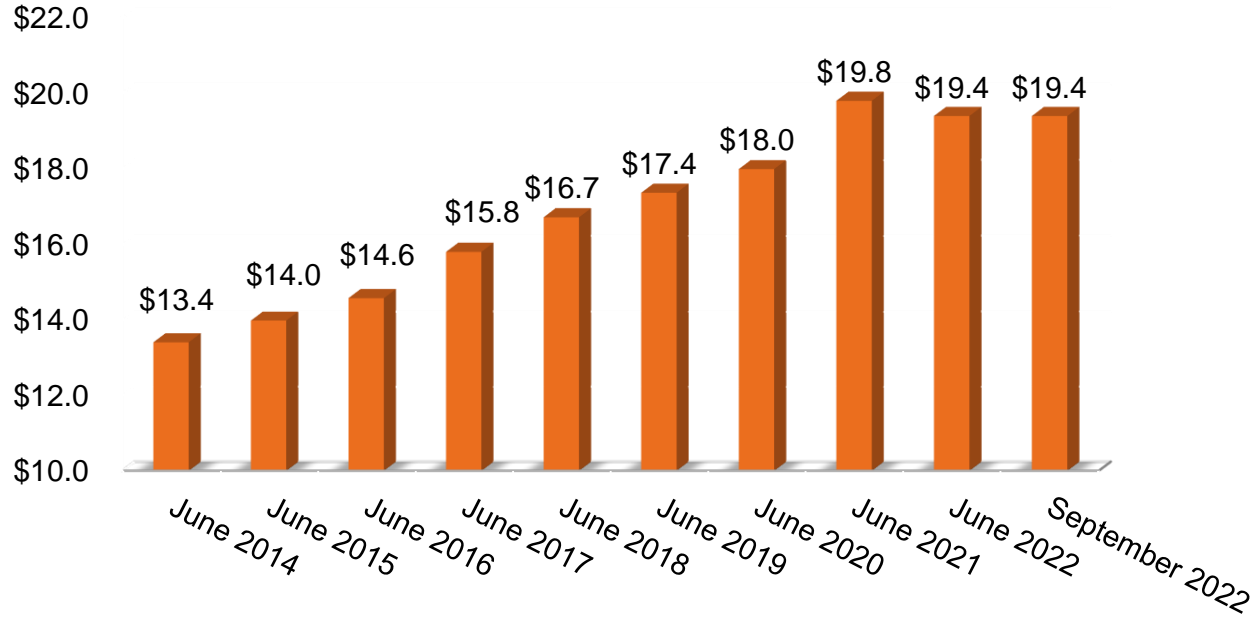
## Fiscal Year Ended

	Quarter Ended September 30, 2022	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018
Investment Income	119,479,000	456,375,000	462,700,000	496,981,000	498,626,000	481,048,000
Realized Gain (Loss)	(3,369,000)	141,857,000	299,787,000	272,266,000	(23,498,000)	1,092,446,000
Unrealized Gain (Loss)	(202,467,000)	(676,444,000)	1,069,560,000	161,264,000	151,820,000	(812,942,000)*
Total Invested Assets	19,412,913,000	19,420,354,000	19,793,907,000	17,992,984,000	17,443,448,000	16,728,166,000

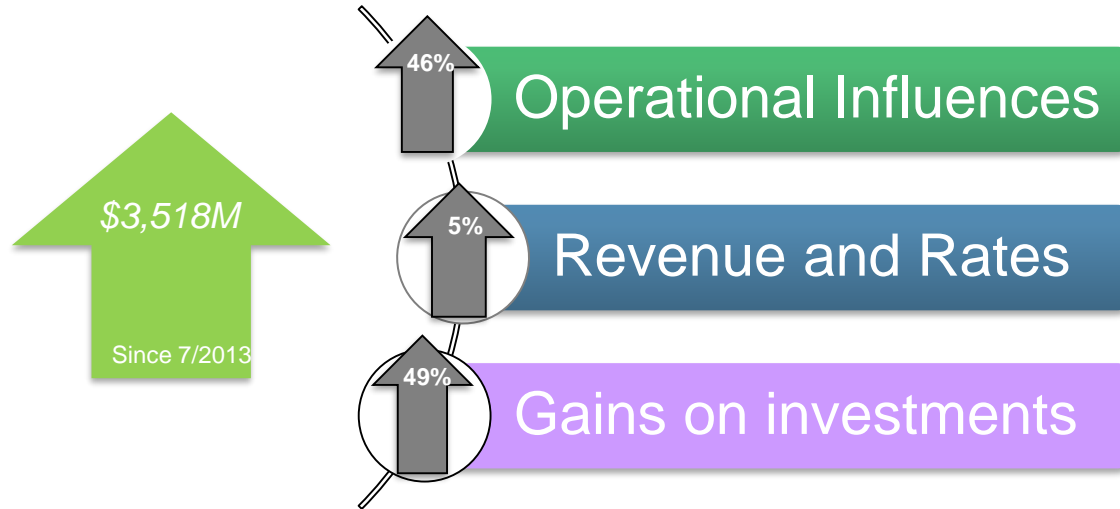
**\*Unrealized gains in prior years that increased the contingency reserve were removed from unrealized and included in realized gains when equities were sold in fiscal year 2018.**

# Total Investments

(rounded to billions)



## Contingency Reserve Drivers



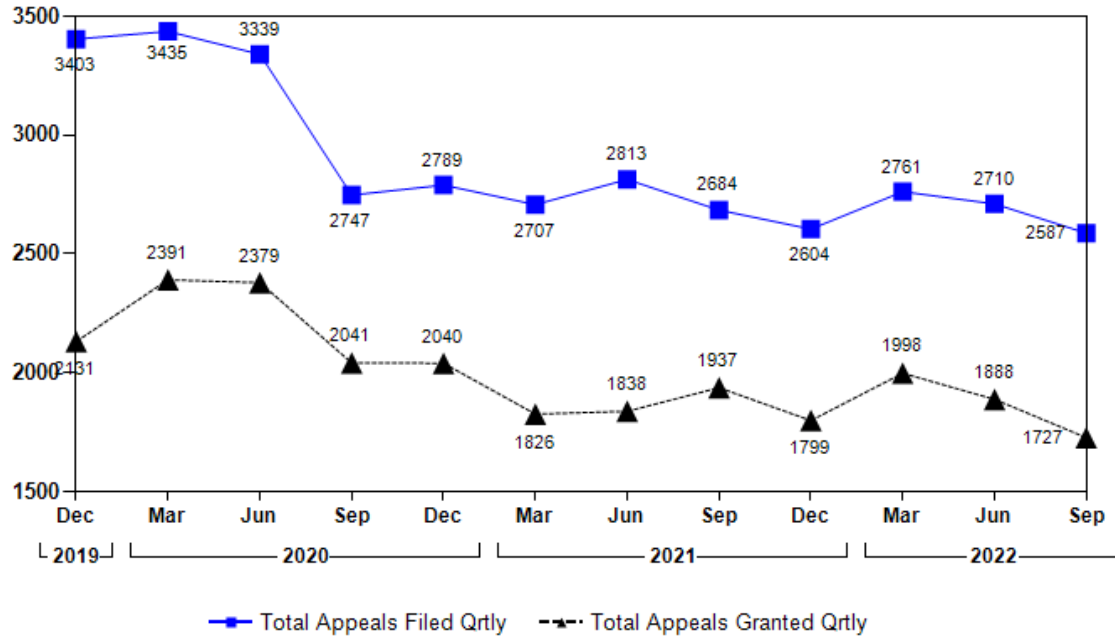
As of 9/30/2022 the CR is at \$4,138M.

# Board of Industrial Insurance Appeals (BIIA) Update

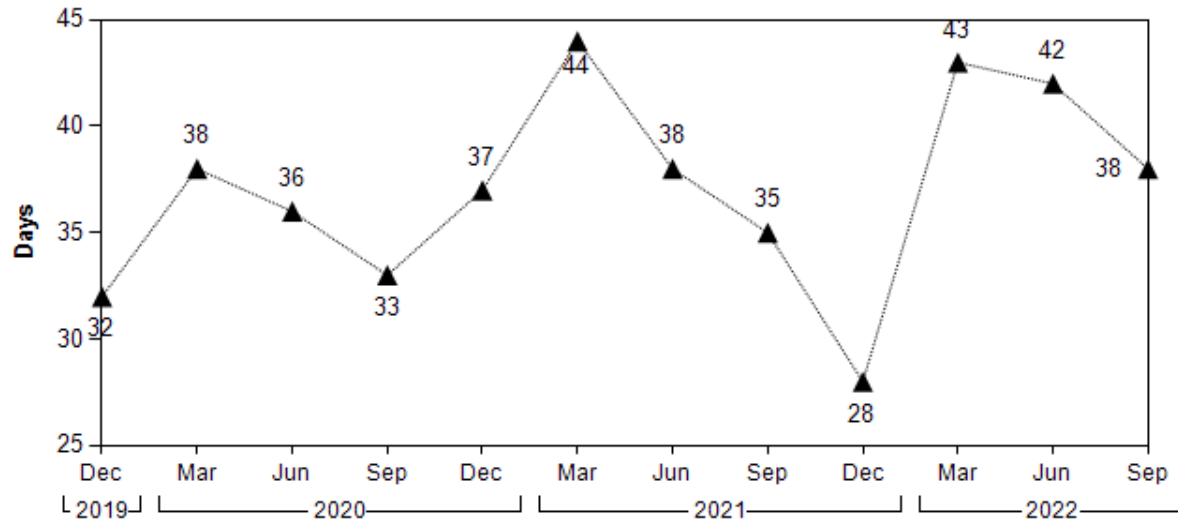
*Holly Kessler, Chair*



# Total Appeals Filed and Granted

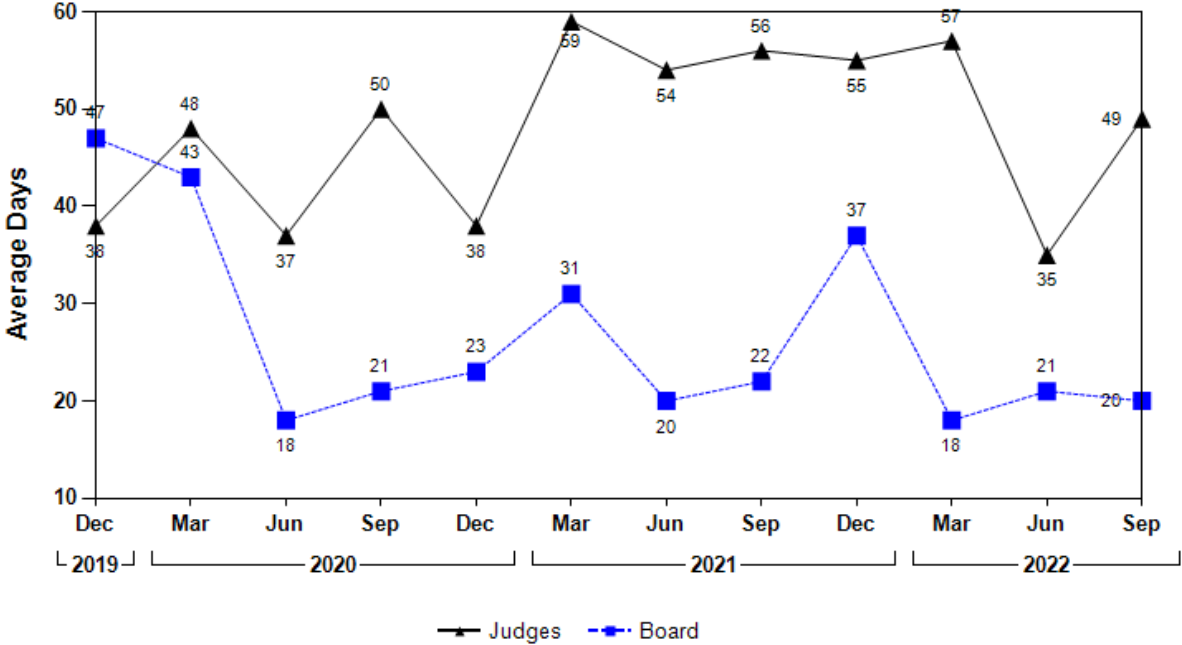


# Average PD&O\* Time-lag by Quarter for Hearing Judges

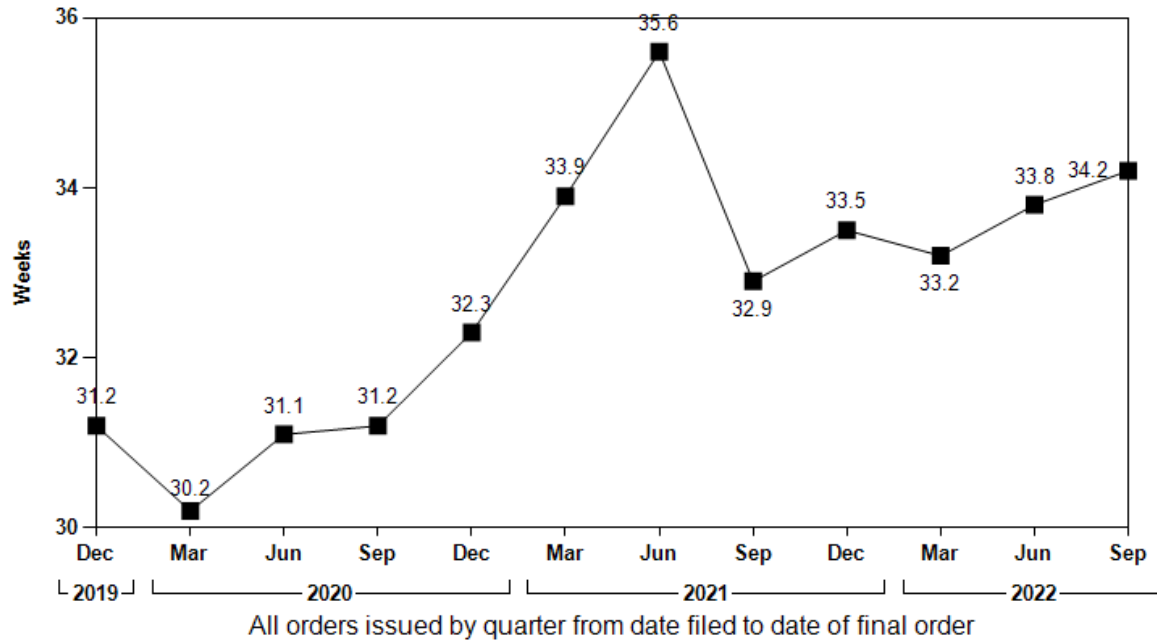




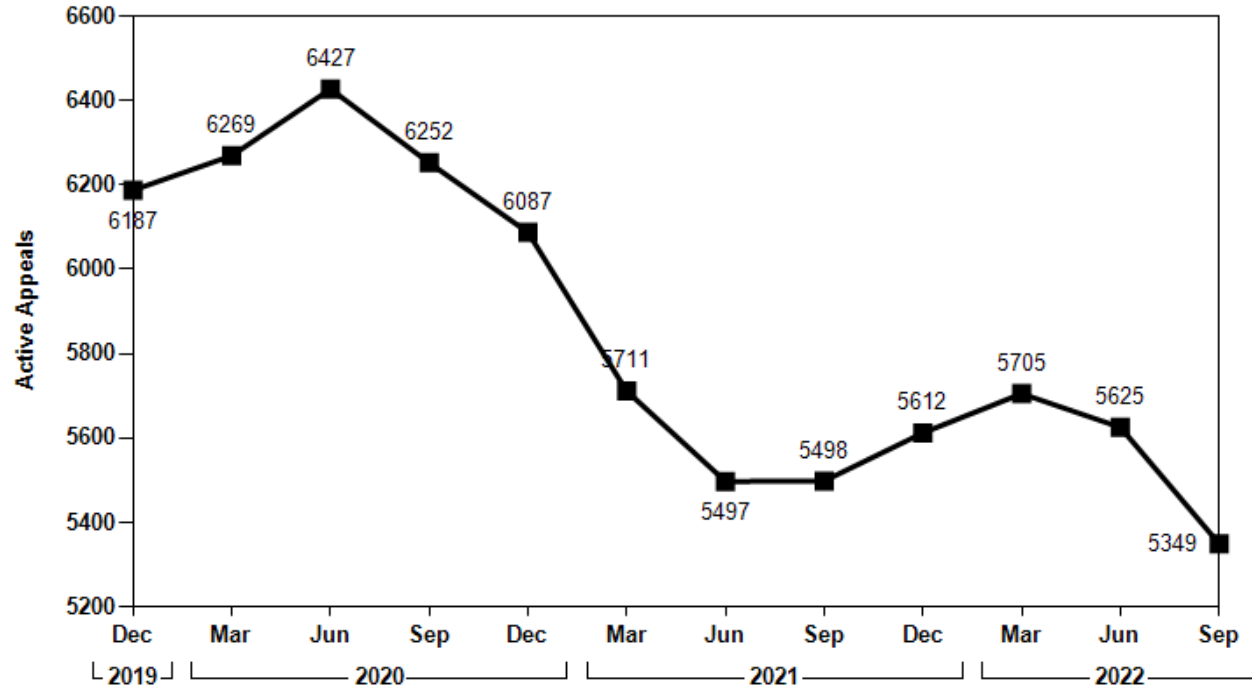
# D & O\* Time-Lag by Quarter



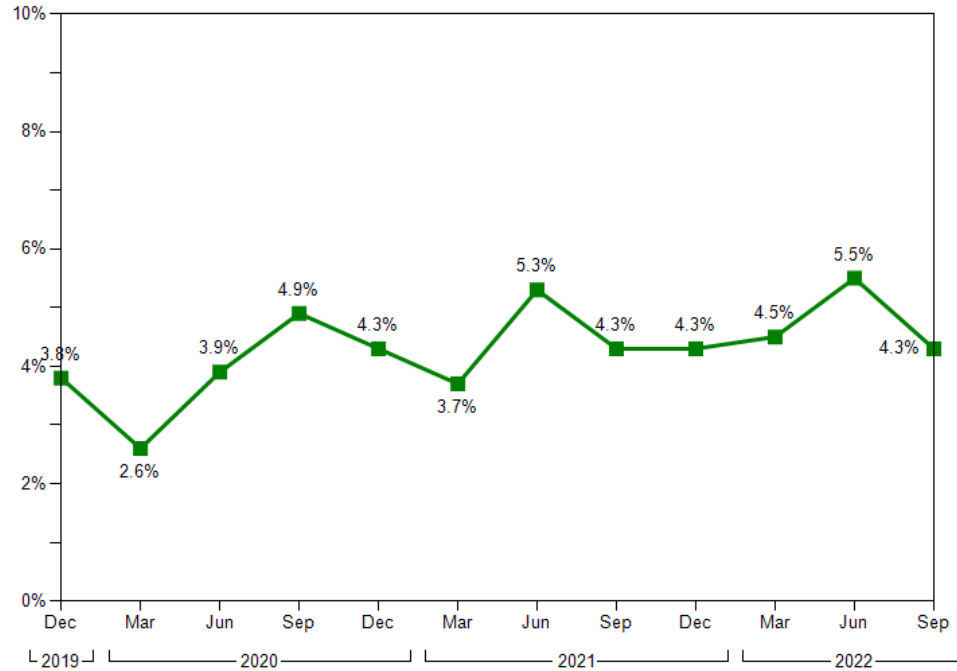
# Quarterly Average Weeks to Completion



# Caseload at End of Quarter



# Percentage of Final Orders Appealed to Superior Court - Quarterly



# Closing Comments & Adjourn

*Mike Ratko, Assistant Director for Insurance Services*  
*Joel Sacks, Agency Director*



# Next Meeting

- March 30, 2023
  - Hybrid – L&I Tumwater Auditorium and Zoom