

## CONTACT

For more information about this report or the ongoing projection work including data support please contact:



Nik Ives-Allison, PhD
Cultural Mapping & Research Officer
Cultural Development and Initiatives Unit, City of Ottawa
nik.allison@ottawa.ca

To participate in this research please contact:



Marisa Gallemit
Research Coordinator
Ottawa Arts Council
research@ottawaartscouncil.ca

## TABLE OF CONTENTS

Overview	4	
Where We Are   The First Six Months	10	
Where We're Going   Projections through June 2021	24	
End Matter   Occupation Classifications	43	



## COUNTING THE COST OF COVID-19

Counting the Cost of COVID-19 is an effort to understand the existing and predicted economic impact of business interruptions and transformations in the arts, culture and heritage sector in Ottawa-Gatineau related to the ongoing pandemic.

This is a joint research project of the City of Ottawa's Cultural Development & Initiatives Unit (CDI) and the Ottawa Arts Council. Counting the Cost of COVID-19 builds on the early projection modelling work done by CDI and the Council's surveying of the local arts, culture and heritage community.

Work on this project is ongoing. Projections are updated regularly as the situation on the ground evolves and additional insight into the situation faced by artists, workers, businesses and non-profit organizations is shared through our survey and interview tools.

# COUNTING THE COST OF COVID-19 | INCOME & JOB LOSS IN THE ARTS, CULTURE AND HERITAGE SECTOR

This report presents key findings from the eighth major update to the income loss and workforce projections for 31 key occupations in the arts, culture and heritage sector of the Ottawa-Gatineau CMA.

It presents both the expected to-date income and job losses for the first six months of the pandemic and projects out through the end of June 2021 covering the fifteen months following the declaration of states of emergency in Ontario (March 17) and Quebec (March 27) under a number of potential scenarios including additional full-scale and rotating or regional shutdowns.

Both the income loss and workforce projections included here help us to understand the financial impact of the pandemic on artists, arts, culture & heritage workers, and their families. They help us to identify work areas most impacted, estimate the scale of the impact in relation to typical earnings and help us understand the challenges of recovery from an individual level perspective.

#### The economic impacts of the pandemic are not felt equally across the sector.

Reflecting trends elsewhere in the local and national economy, those who are more easily able to work from home and who have job security are expected to fare better than those who are self-employed and/or whose work depends on bringing people together through events, festivals performances and other live experiences.



What is clear, at this point in the crisis, is **our economic outcomes are dependent on our public health outcomes**. Even if businesses are able to re-open for business, recovery in the sector depends on our ability to secure and maintain low levels of local community transmission.

When local community transmission is low, the risks of bringing people together are lower as are the odds of any business, organization or event being confronted with an outbreak situation. Low levels of community transmission make it safer for a greater number of community members to engage with institutions, businesses and events in person safely, including the many local residents who face greater risk of serious complications from COVID-19 infection.

### PROJECTION MODELLING IS AN INEXACT SCIENCE.

Projection modelling uses the best available information in an effort to predict the most likely range of outcomes. As a result, projections are most accurate in the short-term and should be seen as having a lower degree of certainty around them the farther out we look.

The modelling work presented here does not assume that the world, our region or even the arts, culture & heritage sector will look on July 1, 2021 the same as it did on July 1, 2019. Even in the case that effective treatments or a vaccine are widely available by this time, there are some aspects of the currently public health measures that may remain in place and it will take time for the public to adjust.

It is also important to remember that while the pandemic is the largest force of economic change within the sector, it is not the only force of change. The story of 2020 in the Ottawa-Gatineau arts, culture and heritage sector is not only a story of job losses, business closures and dried up revenue streams. There are new projects, spaces and leaders emerging, thriving and already having an impact on their industries and the local cultural landscape as a whole.

## NOTES

A more detailed discussion of how the figures included in this report were generated can be found in the tables and accompanying user guide. A few key notes:

- The base (starting point) workforce and income figures are taken from the 2016 Census as reported by Statistics Canada with workforce adjusted for underreporting (see methodology and tables)
- Figures presented are for the Ottawa-Gatineau census metropolitan area (CMA)
  - Many in our artistic and cultural community live and work across the provincial border. Looking only at what is happening within the City of Ottawa and in the immediate surrounding communities on the Ontario side of the border would miss a significant part of the story of what's happening in our artistic, cultural and heritage ecosystem.
- Figures have been adjusted to take into account: underreporting in the artistic and cultural occupations in the census; income seasonality; full- and part-time work; re-opening phase; ease of maintaining public health measures at work; and differences between traditional employment and self-employment or other forms of non-traditional employment.



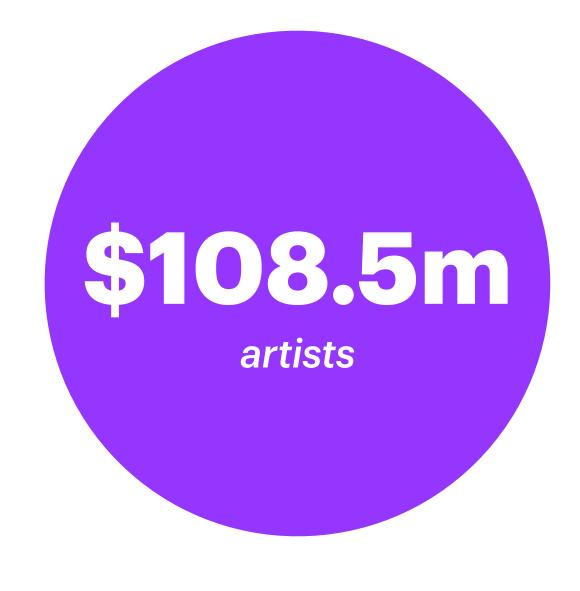
Through September 30, it is estimated that income losses most closely resemble the 'Slow and Steady' scenario (see Scenario Guide for more details).

While a number of local museums, galleries, venues, walking tours and other arts, culture & heritage institutions and businesses had re-opened as part of both provinces' phased re-opening plans, many had not or were open in a very limited way. Capacity restrictions and other public health requirements made it impossible for some to open in a way that was economically viable while others expressed concerns about reopening

### ESTIMATED COLLECTIVE INCOME LOSS

For the sector as a whole, pandemic-related income loss for the period between March 15 and September 30 is projected to have been **\$220.6 million** with a low-end estimate of \$211.7 million and a high-end estimate of \$229.5 million. Artist occupations, incur nearly half (49%) of these income losses despite only accounting for 42.5% of collective incomes during this period.

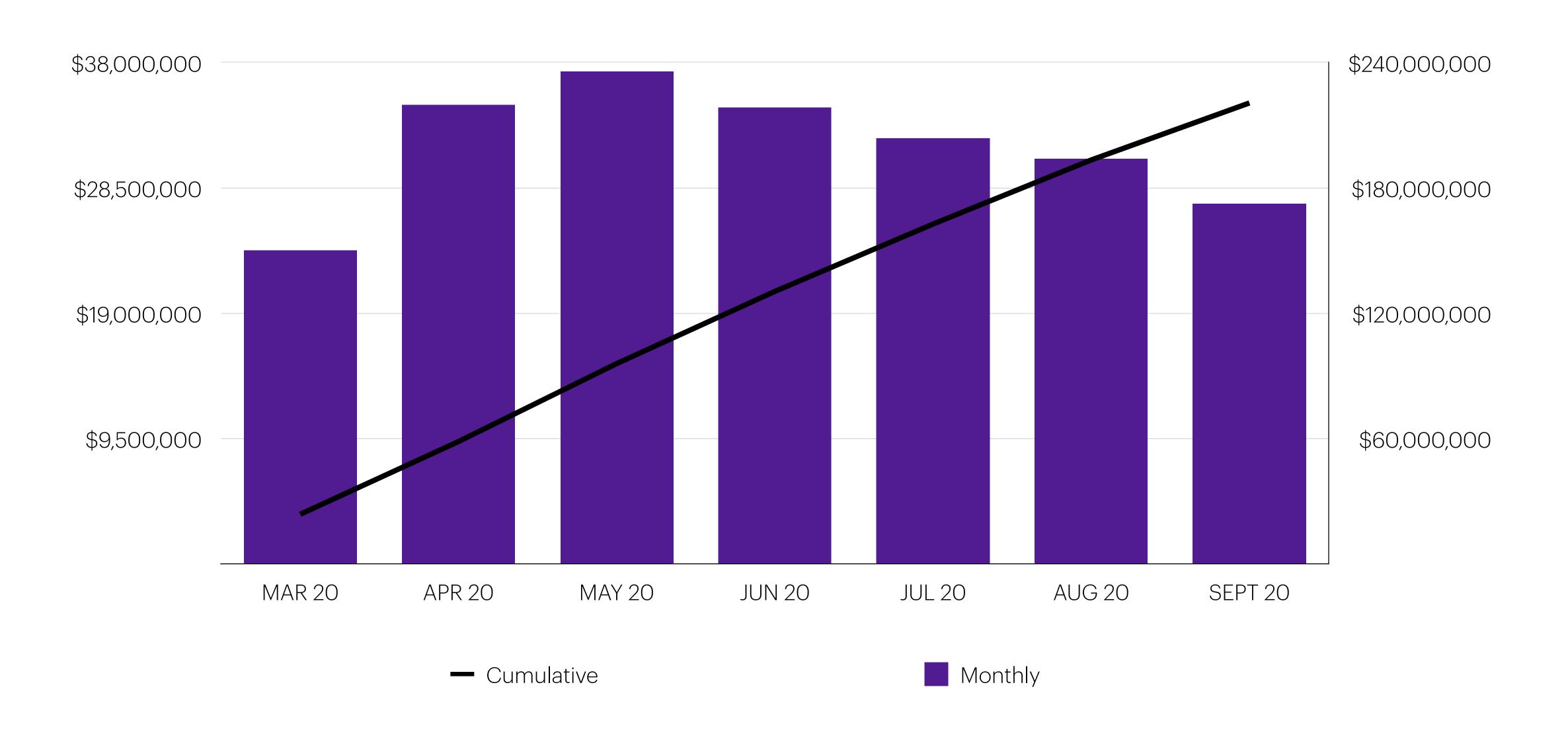






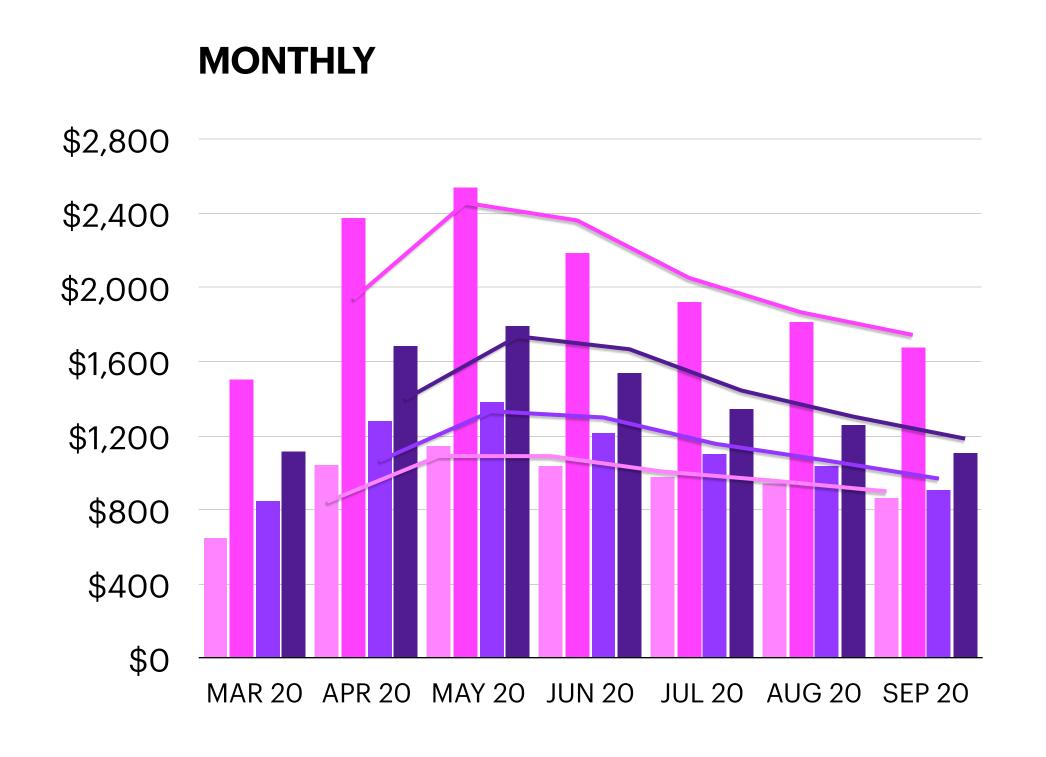


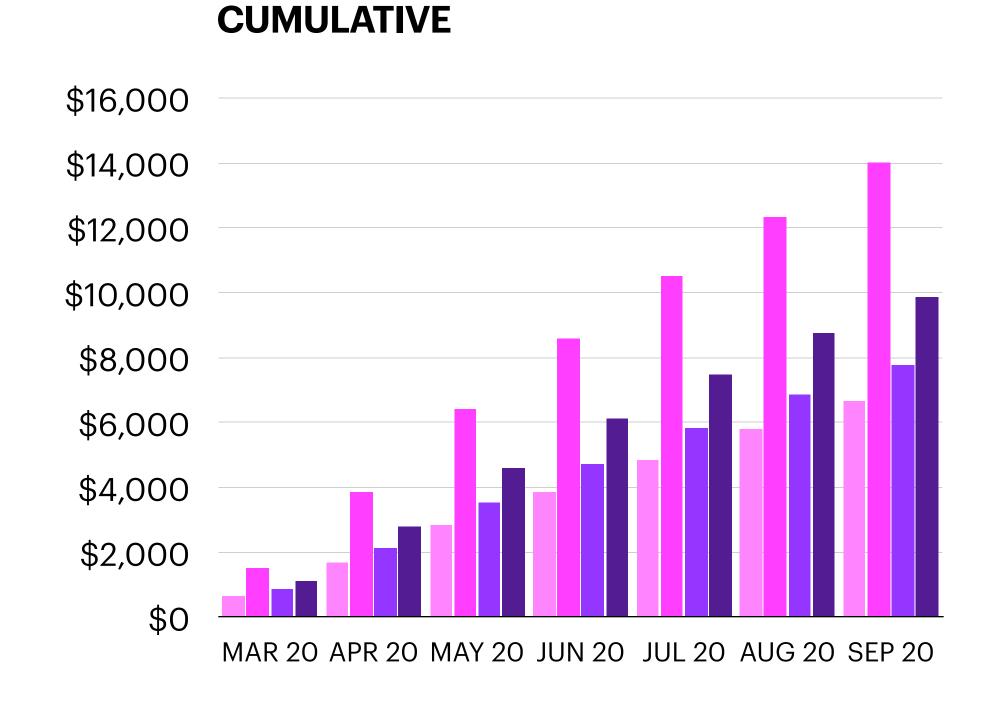
# ESTIMATED MONTHLY COLLECTIVE INCOME LOSS (ALL OCCUPATIONS)



### ESTIMATED AVERAGE INCOME LOSS | BY EMPLOYMENT TYPE

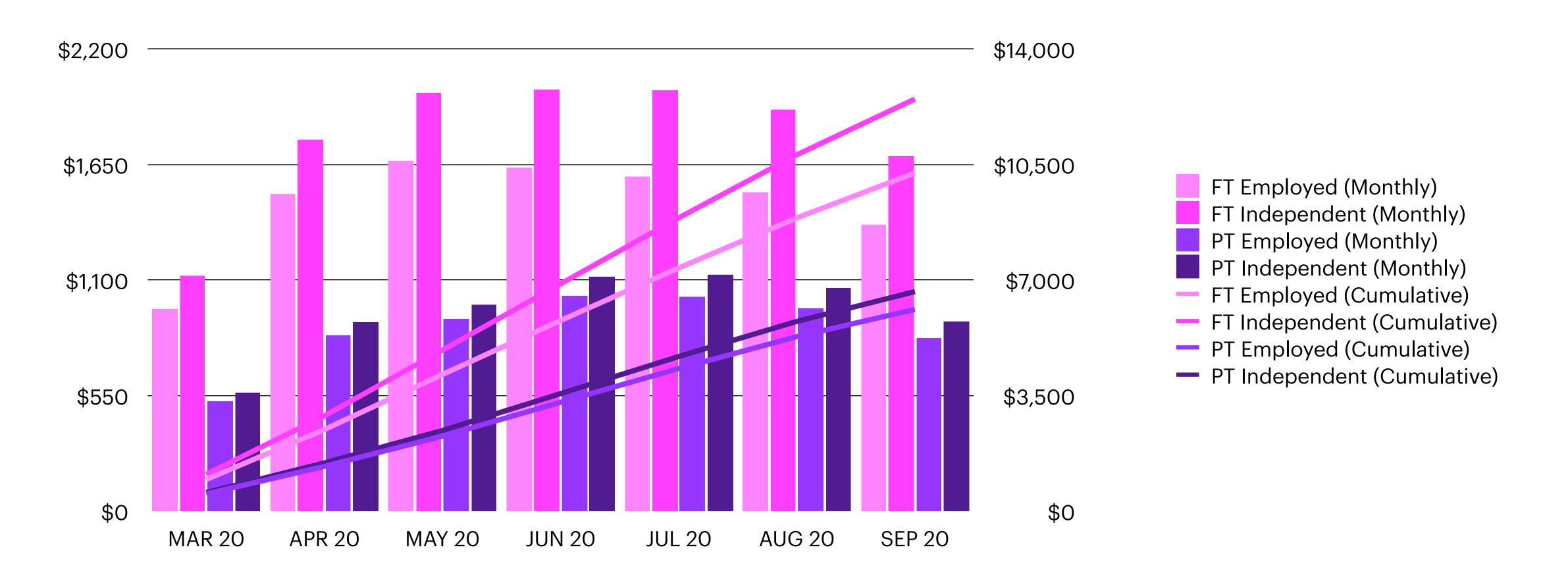
Full-time independent workers, a category which includes freelancers, independent contractors and other forms of gig workers are estimated to be most vulnerable to income losses. Concentrated in artist and technical occupations, it can be more difficult for many of these workers to transition to work from home. Further, without the security of a traditional employment contract, when cuts to operating budgets need to be made those in contract or freelance roles are expenses that can more easily be cut. Full-time independent workers are estimated to have lost approx. \$14,000 on average by the end of September.





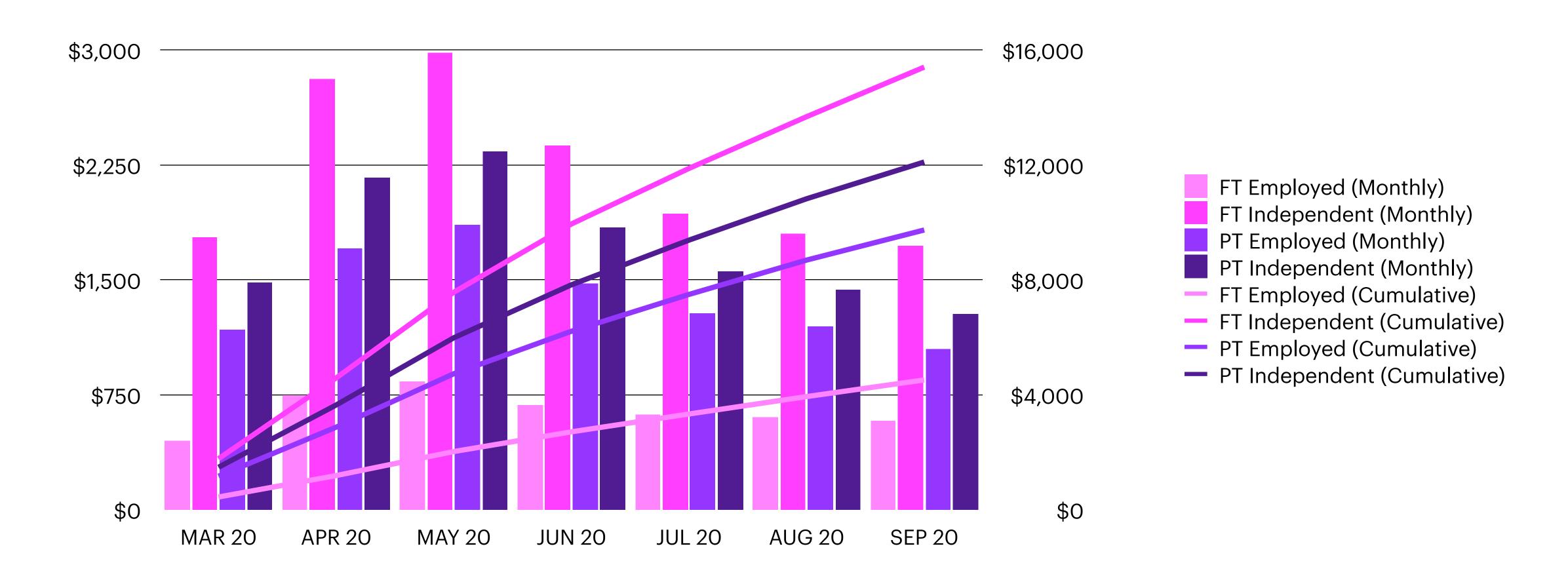
### ESTIMATED AVERAGE INCOME LOSS | ARTIST OCCUPATIONS

Within the artist occupations, full-time traditional employment has less of an insulating effect than in other parts of the sector. Traditionally employed workers comprise a very small minority (~8%) of the artist workforce in Ottawa-Gatineau and are expected to face the same challenges when it comes to working from home as their independent counterparts.



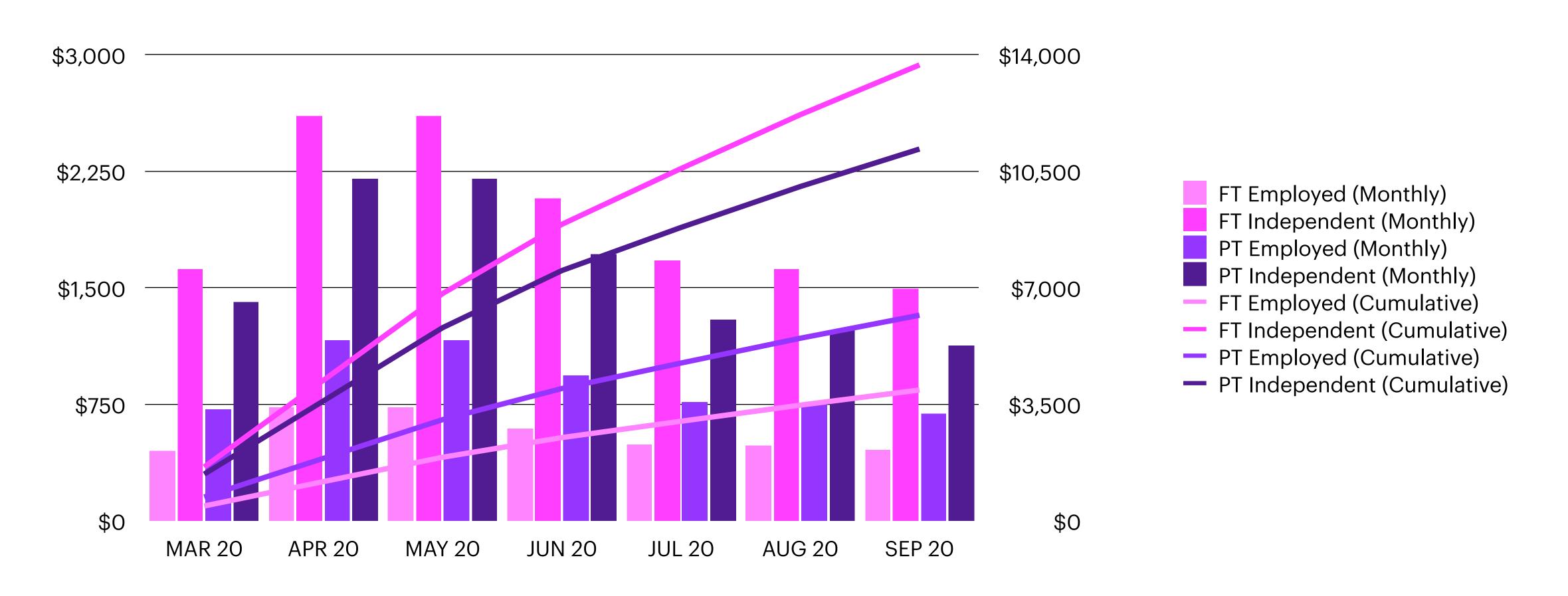
### ESTIMATED AVERAGE INCOME LOSS | TECHNICAL OCCUPATIONS

In the technical occupations, those with full-time traditional employment, are far more insulated than those in other forms of employment. While full-time independent workers are expected to have incurred the greatest losses, part-time workers were (and remain) particularly vulnerable to cuts in working hours.



### ESTIMATED AVERAGE INCOME LOSS | MANAGEMENT OCCUPATIONS

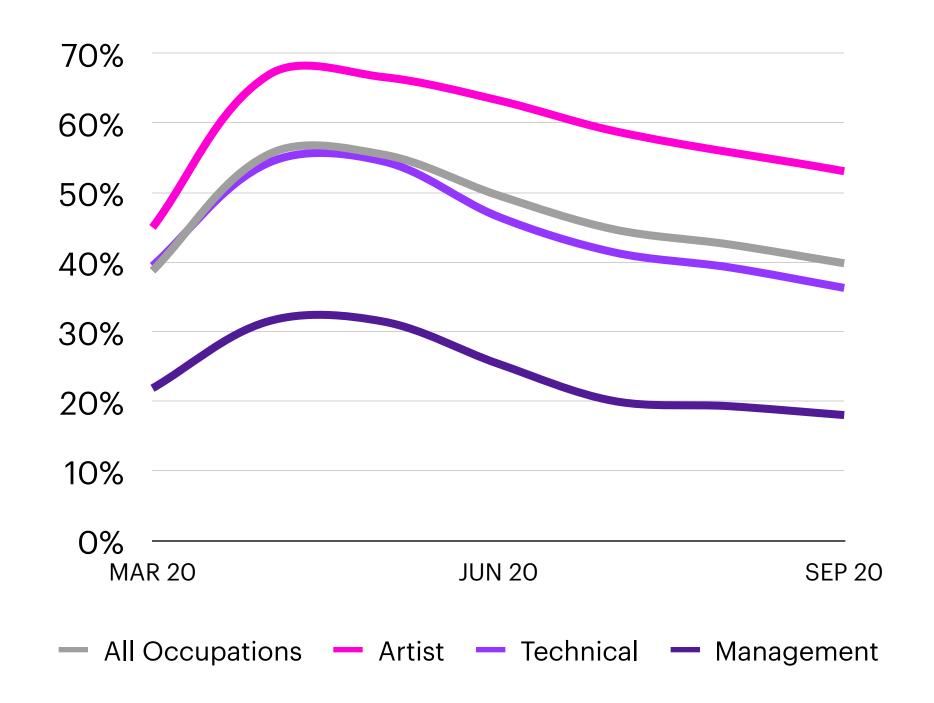
In the five management occupations (which account for 12.5% of the cultural workforce), those in traditional employment (82% of those in management occupations) experience milder effects of the pandemic on their incomes. These roles benefit from greater compatibility with remote work. In many cases these roles may be considered more essential to the organization's continued operation particularly in times of turmoil and change.



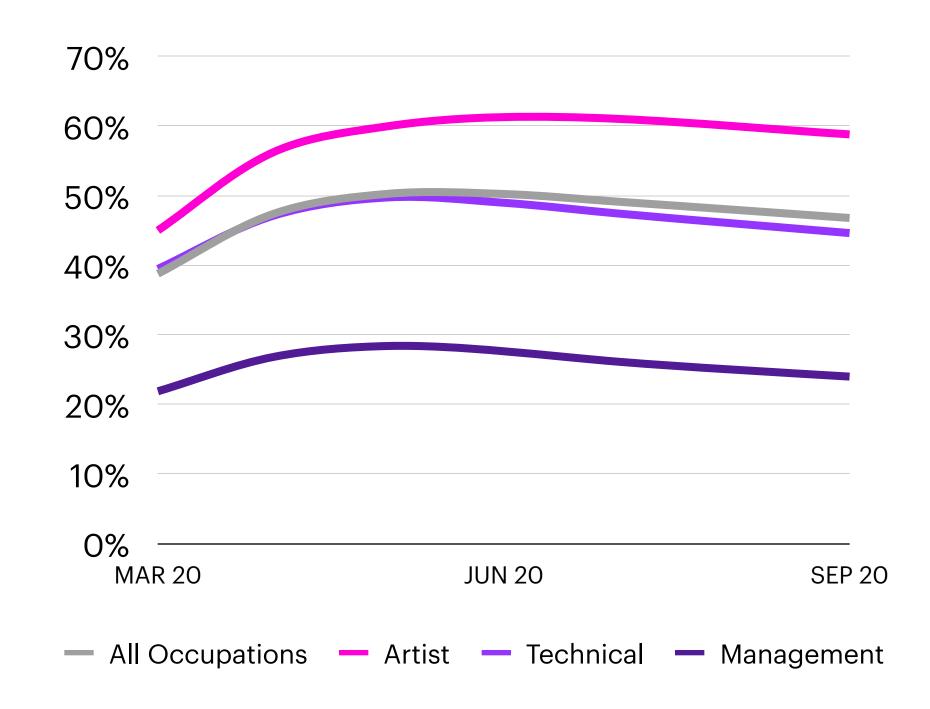
#### % OF COLLECTIVE INCOME LOST BY OCCUPATION TYPE

In looking at the occupation categories as a whole, artist occupations have lost a greater share of their income than either technical or management occupations and experienced less of an initial recovery than the other occupation types, driven largely by the continued public health concerns over both events & gatherings of any kind and additional concerns around the effect of heavy breathing, vocalization & wind instruments on spread of respiratory droplets affecting many types of live music and dance performance.

#### **MONTHLY**

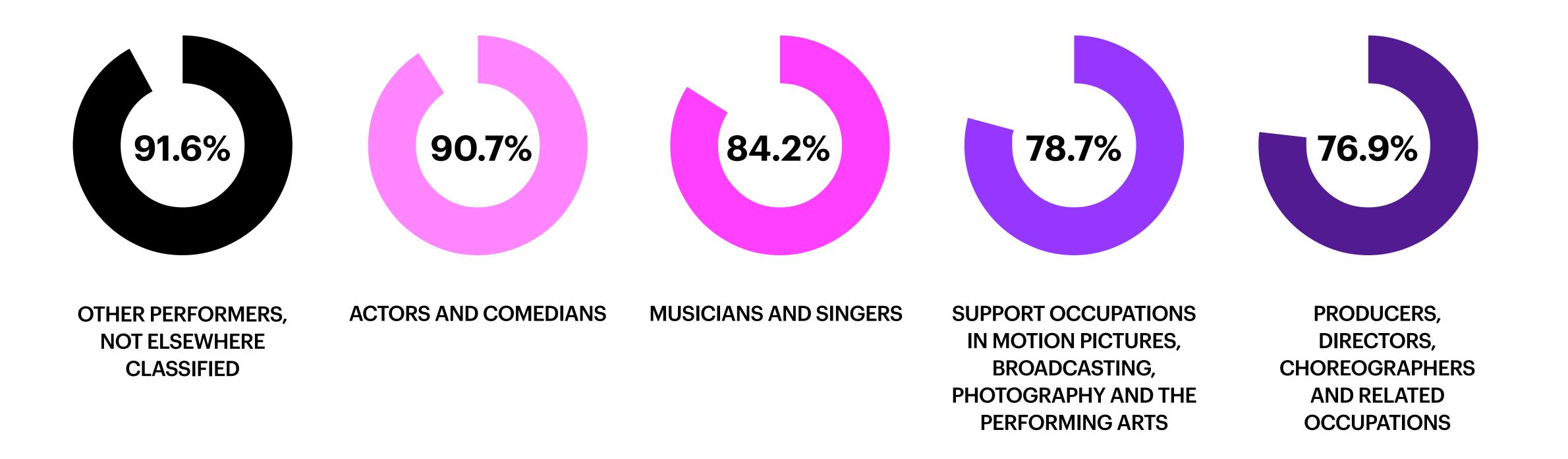


#### **CUMULATIVE**



## ESTIMATED INCOME LOSS | OCCUPATIONS WHERE LOSS REPRESENTS GREATEST % OF INCOME

Across the arts, culture and heritage occupations under consideration, those in music, film and the performing arts are most vulnerable. While some - such as musicians and other performers - have been greatly affected by the cancellation of most events and festivals through the end of 2020, the local film industry faces the dual challenge of returning to work while maintaining social distance between staff and crew as well as bringing talent over the closed Canada-US border.



## ESTIMATED TO-DATE INCOME LOSS | OCCUPATIONS WHERE LOSS REPRESENTS SMALLEST % OF INCOME

In all cases, those occupations where estimated income losses are smallest relative to income are ones where working from home or in isolation is possible. Most of the occupations on this list (60%) are characterized by high levels of traditional employment and many also feature high full-time to part time ratios.

	% OF INCOME LOST
1. Computer programmers and interactive media developers *	10.94%
2. Supervisors, library, correspondence and related information workers	12.57%
3. Desktop publishing operators and related occupations	13.51%
4. Records management technicians	14.07%
5. Authors and writers	14.54%
6. Editors	17.43%
7. Library, archive, museum and art gallery managers	18.52%
8. Archivists	20.93%
9. Librarians	25.88%
10. Painters, sculptors and other visual artists	33.74%

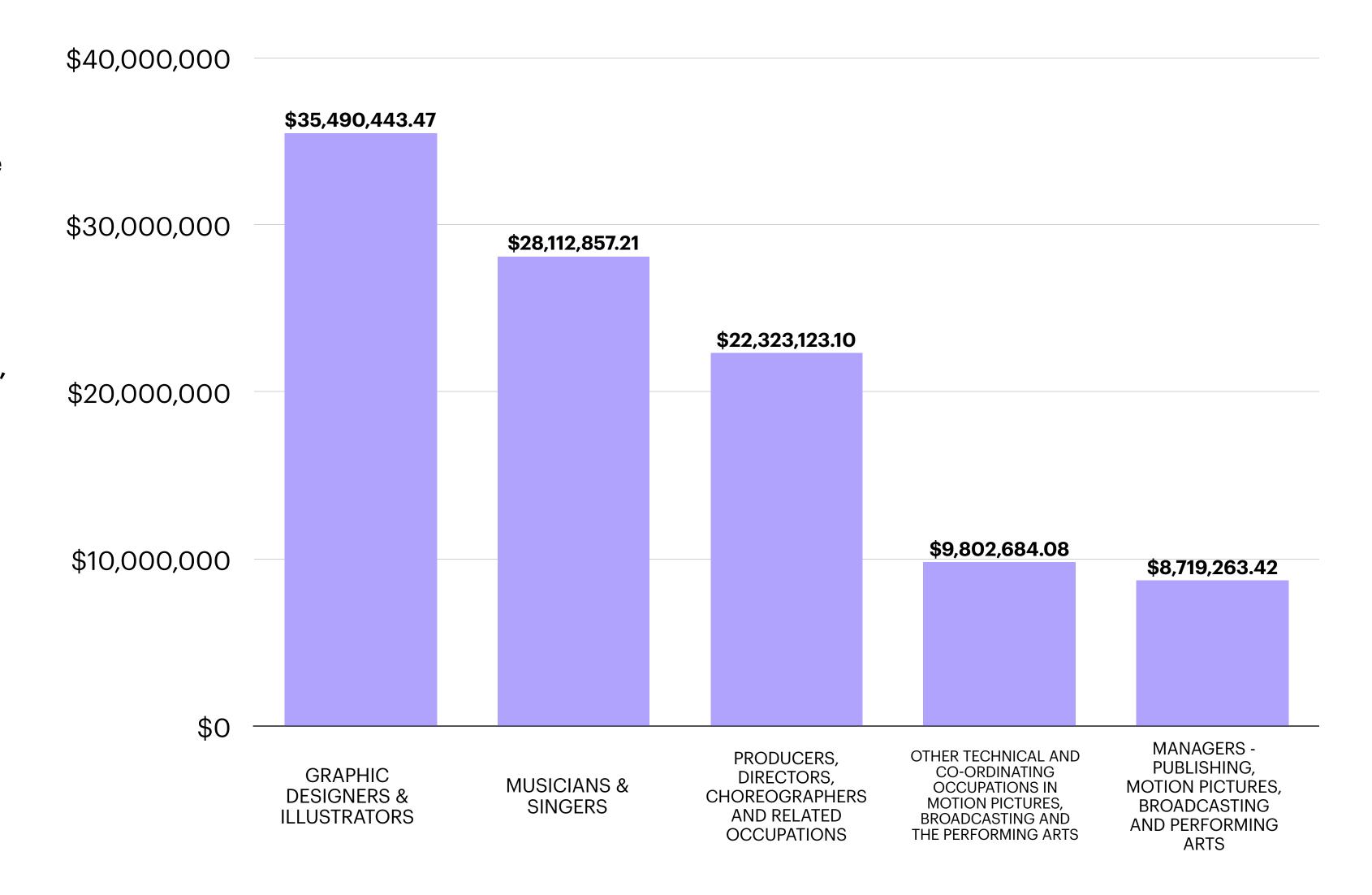
<sup>\*</sup> For this occupation category losses are calculated based on an estimated 10% of workforce working as interactive media developers falling within the sectors under study (arts, culture and heritage including the creative industries).

# ESTIMATED TO-DATE INCOME LOSS | OCCUPATIONS WITH GREATEST COLLECTIVE LOSSES (AS OF 30 SEPTEMBER)

Music and film are also strongly represented when looking at overall to-date income losses within the occupation. This speaks to the relative local strength of these two particular fields which sit at the intersection of the arts and cultural industries.

While Graphic Designers & Illustrators account for the greatest overall losses, with an estimated workforce of 3,354 compared to 2,657 musicians and singers, the larger workforce size accounts for much of this difference.

It is worth noting that all of the five occupations with greatest collective income loss are defined by high levels of self-employment, contract and precarious work.



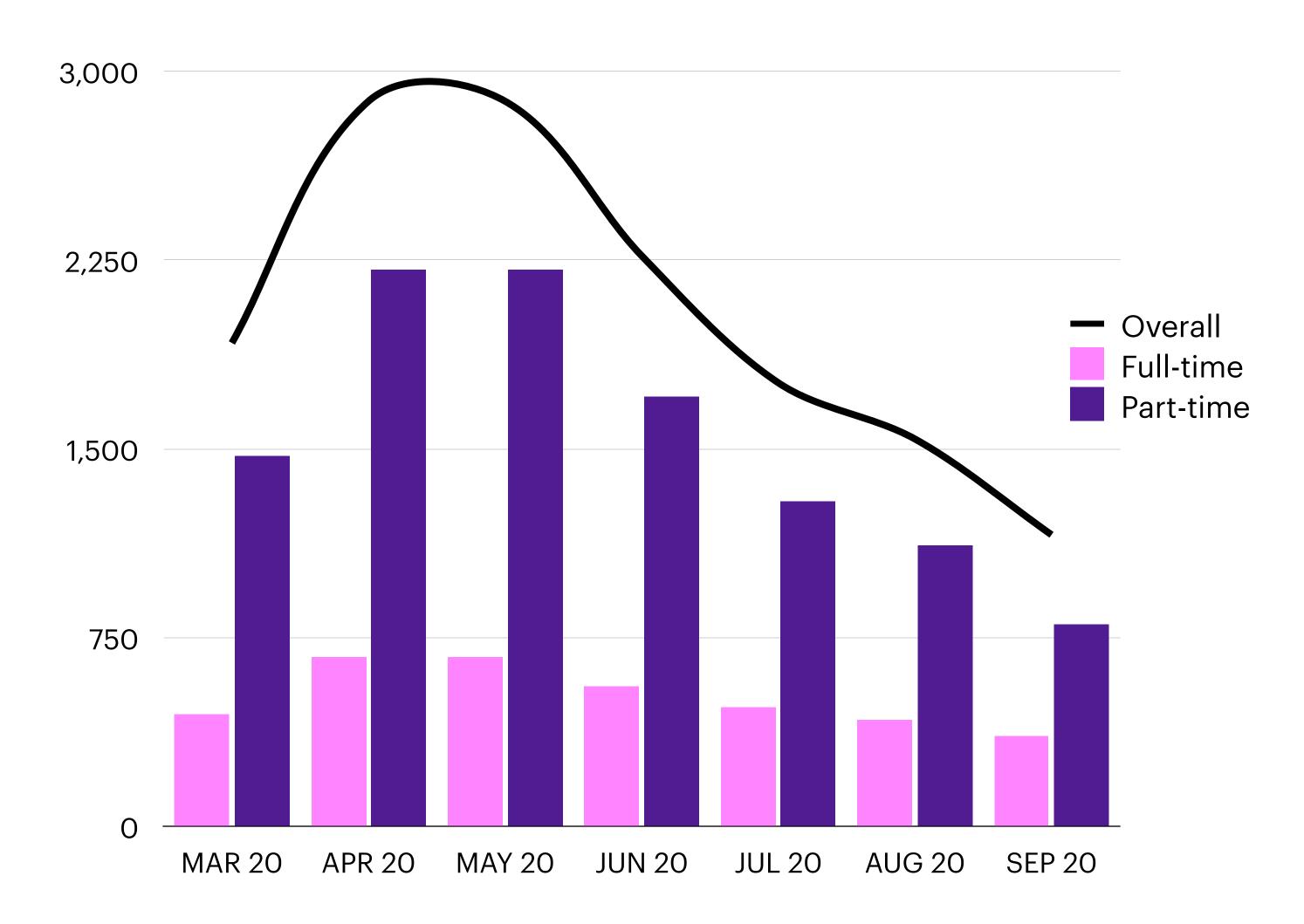
### ESTIMATED JOB LOSSES (FIRST SIX MONTHS)

Job losses are expected to ebb and flow throughout the course of the pandemic. In this report, job losses include anticipated permanent layoffs as well as temporary layoffs (including furloughs).

Job loss rates are affected by factors including: reopening phase and risk profile; availability of wage subsidies and/or other support to keep people on payroll; and permanent business closures. For most occupation types part-time jobs are more vulnerable than full-time jobs.

In this report, estimated job losses are only calculated for those believed to be in traditional employer-employee relationships.

As with income losses, job losses are expected to have followed the **Slow + Steady** scenario over the past six months, with a noticeable recovery starting in late May.



#### OCCUPATIONS WITH GREATEST ESTIMATED JOB LOSSES (ON 30 SEPTEMBER 2020)

#### **JOBS LOST (EST.)** 300 1. Library assistants and clerks 240 2. Technical occupations related to 212 museums and art galleries 3. Graphic designers and 155 225 illustrators 4. Library and public archive Part-time 133 technicians Full-time 5. Managers - publishing, motion 150 103 pictures, broadcasting and performing arts 100 6. Editors 7. Theatre, fashion, exhibit and 75 100 other creative designers 91 8. Librarians 9. Records management **74** technicians GRAPHIC MANAGERS -LIBRARY & **LIBRARY TECHNICAL DESIGNERS &** PUBLISHING, PUBLIC **ASSISTANTS & OCCUPATIONS** 10. Film and video camera **ILLUSTRATORS MOTION 53 ARCHIVES CLERKS** RELATED TO operators PICTURES AND **TECHNICIANS** MUSEUMS AND **BROADCASTING GALLERIES**



The City of Ottawa began to experience its second wave of coronavirus infections mid-September, with Gatineau following late September. This timing coincided with that predicted under the Second Wave, Second + Third Wave and Worst Case projection scenarios. Although the return to greater restrictions impacting the arts, culture & heritage sectors was not formally announced until the weekend of October 9th in both key cities, the Second Wave was already taking a toll on the sector through reduced gathering limits and strong public health advice to avoid public places except with members of your own household.

The summary projections included in this section will include the projections for both the Best Case and Slow + Steady scenarios. In showing what might have been, we can see the strong correlation between positive public health outcomes and economic outcomes in the sector. It is the people who work and participate in arts, culture & heritage that are the sector's greatest economic asset. Their health defines the health of the sector.

While it is too late to avoid the second wave, it is still possible to avoid the Worst Case or even a third wave of cases and disruption in the sector.

### SCENARIO OVERVIEW

#### Plan for the worst. Hope for the best.

Current projections are modelled under five different scenarios ranging from a speedy and steady recovery beginning in May 2020 through to an attempted recovery in the summer thwarted by high case counts and the need for frequent additional lockdowns from late September 2020 through June 2021.

Best Case	Slow + Steady	Second Wave	Second + Third Wave	Worst Case
Single full shutdown (March - May 2020) with no additional major business disruptions.	Single full shutdown (March - May 2020) with no additional major business disruptions.	Initial full shutdown (March - May 2020) with short restart before a second shutdown in fall 2020 (starting mid-to-late	Initial full shutdown (March - May 2020) with short restart before second and third shutdowns in fall 2020	Initial shutdown (March - May 2020) followed by attempted restart in summer 2020.
Phasing in of cultural activity with small events returning in August/September 2020.	Gradual phasing in of cultural activity and events.	September).  Gradual phasing in of cultural	(starting mid-to-late September) and winter 2020 coinciding with back-to-school	Second shutdown in fall 2020 followed by numerous regional/provincial shutdowns
Gradual scaling up of indoor		activity and events following second shutdown with no	and the peak of flu season.	due to frequent fluctuations or consistently high level of
event sizes.		additional major business disruptions.	Cautious phasing in of cultural activity and events following	community spread.
Large outdoor events (festivals) permitted as of spring 2021.			third shutdown.	Large events, particularly indoors, do not resume during this period.

## PROJECTED INCOME LOSS

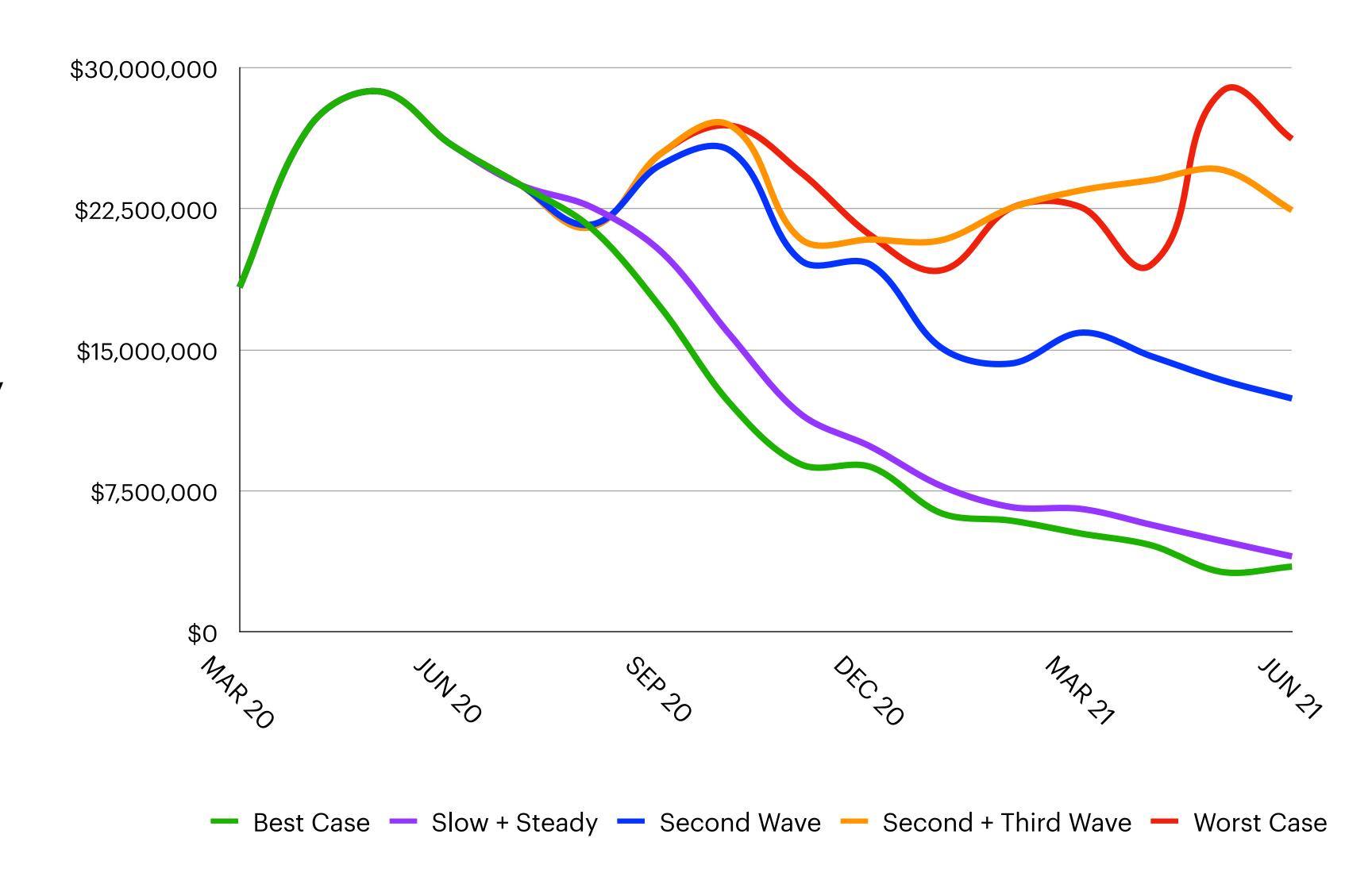
# PROJECTED MONTHLY INCOME LOSS (FULL SECTOR)

The presence of additional waves of local COVID-19 transmission has a significant impact on the shape of income losses in the sector.

Without the presence of a second wave, recovery was predicted to have continued fairly quickly and fulsomely.

In the Second Wave and Second + Third wave scenarios, recovery is significantly stalled. In the case of the latter, by June 2021 there isn't much in the way of recovery at all.

In the Worst Case scenario, attempts to force a recovery in the spring following a projected third wave leads to a short term recovery immediately followed by a full and rapid shutdown of non-essential businesses in a manner similar to spring 2020.

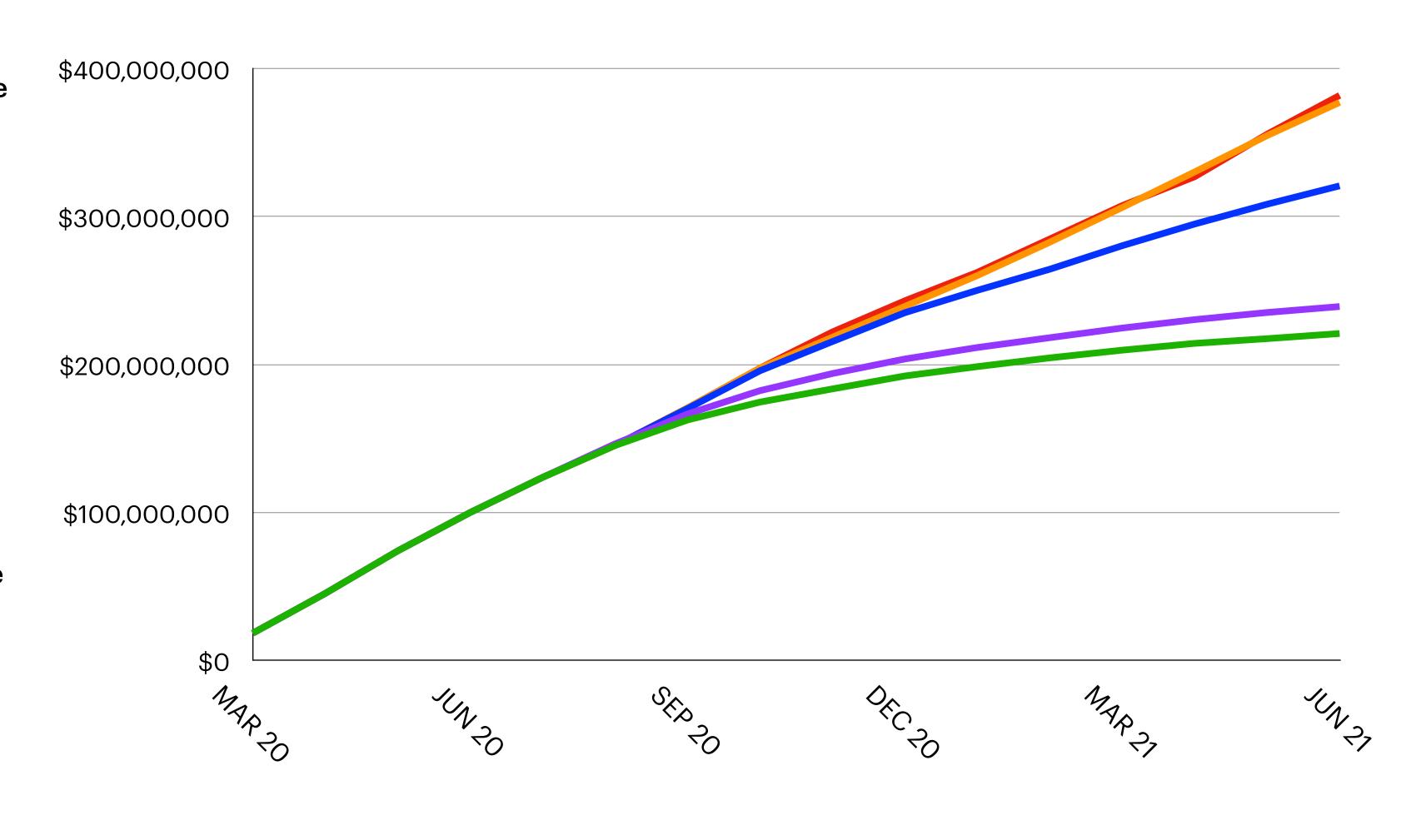


# PROJECTED CUMULATIVE INCOME LOSS (FULL SECTOR)

In this chart we see that it really is in September where the trajectory of the sector's recovery drastically changed shape.

Where Ottawa-Gatineau's losses most closely resembled the Slow + Steady recovery scenario through mid-September, a path which would have seen collective income losses of ~\$239 million at the end of June 2021, the reality of a Second Wave means that the sector is now on track for losses of at least \$320 million dollars.

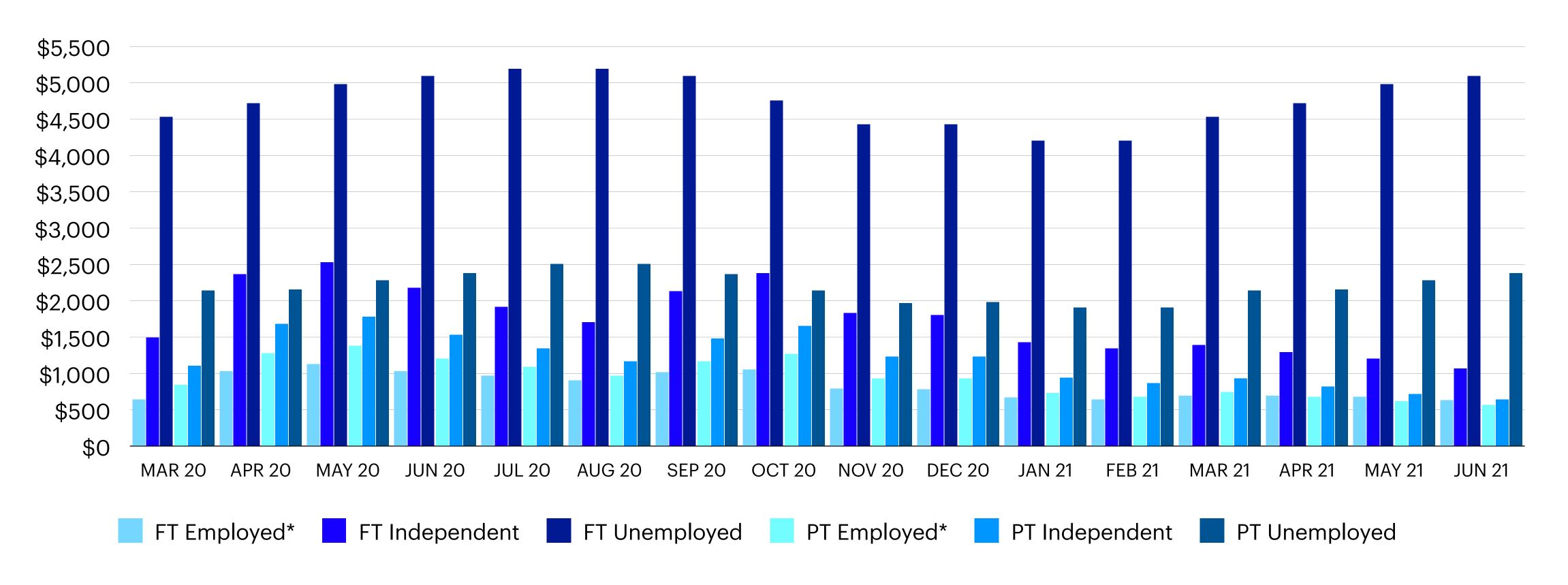
Avoiding a third wave would help save the sector an additional \$56.4 million in income losses.



Best Case
 Slow + Steady
 Second Wave
 Second + Third Wave
 Worst Case

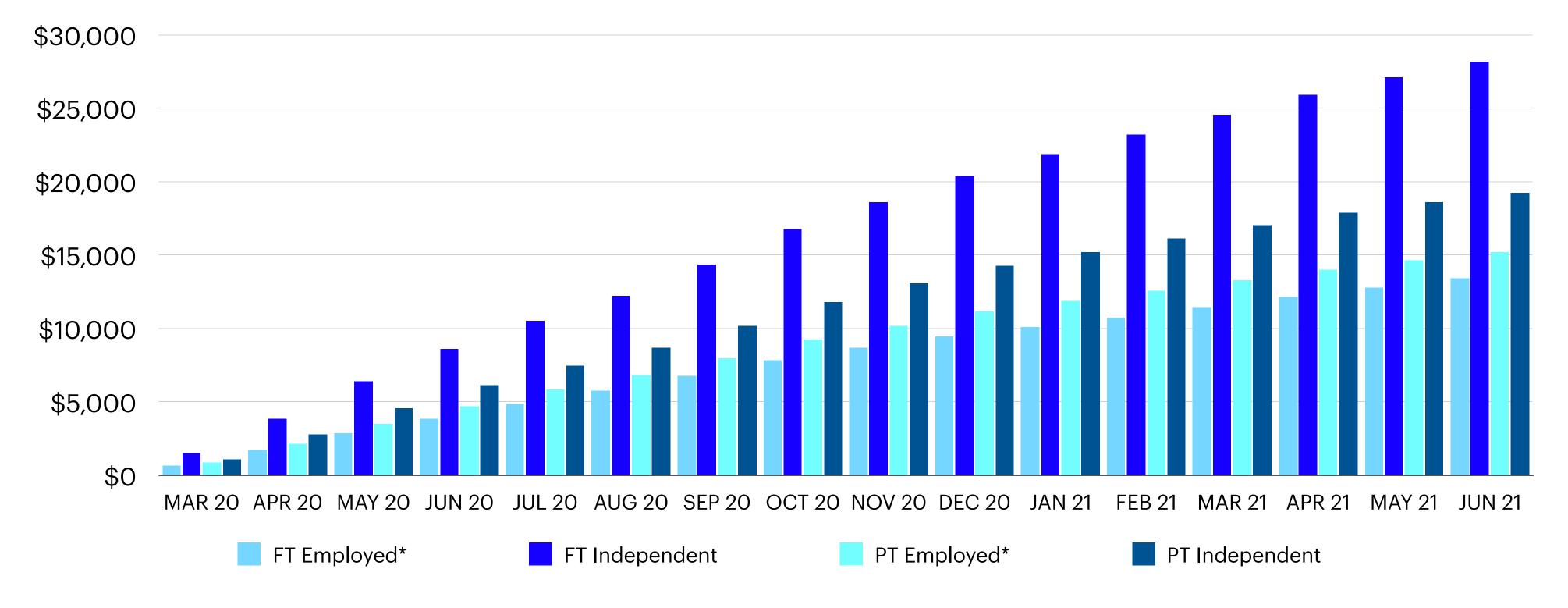
### SECOND WAVE AVERAGE MONTHLY INCOME LOSS (BY EMPLOYMENT TYPE)

Under a Second Wave case scenario, recovery made in the summer of 2020 is nearly entirely wiped out mid-autumn with the acceleration of the second wave. Although, of those in work, full-time independent workers will be hardest hit throughout, it is projected that they will experience a slightly faster recovery than their part-time counterparts. The tendency for full-time independent workers' to have multiple revenue clients or revenue streams likely plays a significant role here. Still, for all types of workers from the second wave will be slower than from the first.



### SECOND WAVE AVERAGE CUMULATIVE INCOME LOSS (EMPLOYEES)

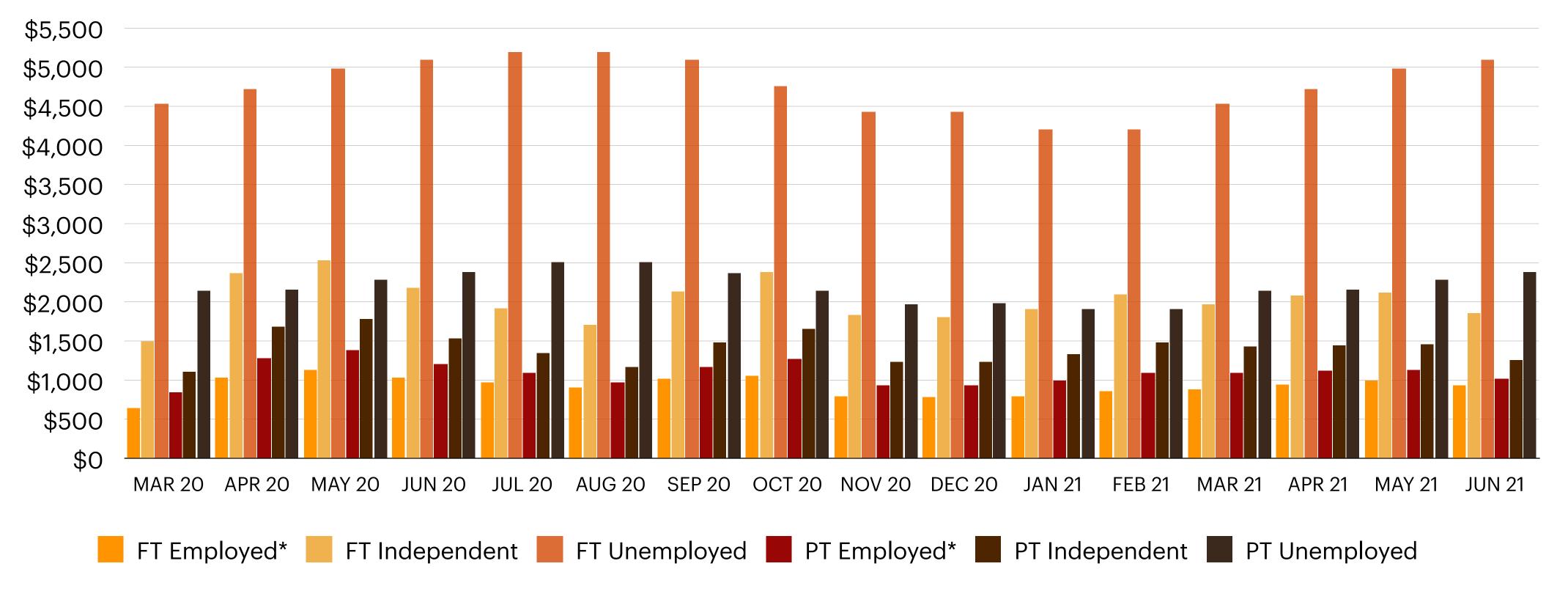
Under the Second Wave scenario, full-time independent workers are expected to have lost a staggering \$9,424 by December, \$11,431 by March 2021 and \$13,454 by June 2021 (margin of error ~3.82%) with considerable variance between the occupations. Independent full-time producers, directors, choreographers and related are projected to lose ~\$65,700. On the other hand, authors, editors and others who are more easily able to work from home or are less reliant on in-person experiences & events are projected to lose less than \$10,000. Whether full or part-time, though not spared from the effects of the pandemic, employed workers are on average less severely affected in absolute terms.



<sup>\*</sup> Average figures by employment type **do not** include those who were unemployed during periods of business interruption. Because many employees have moved in and out of periods of employment, it is not possible to estimate cumulative losses including periods of unemployment with any degree of accuracy at the occupation level.

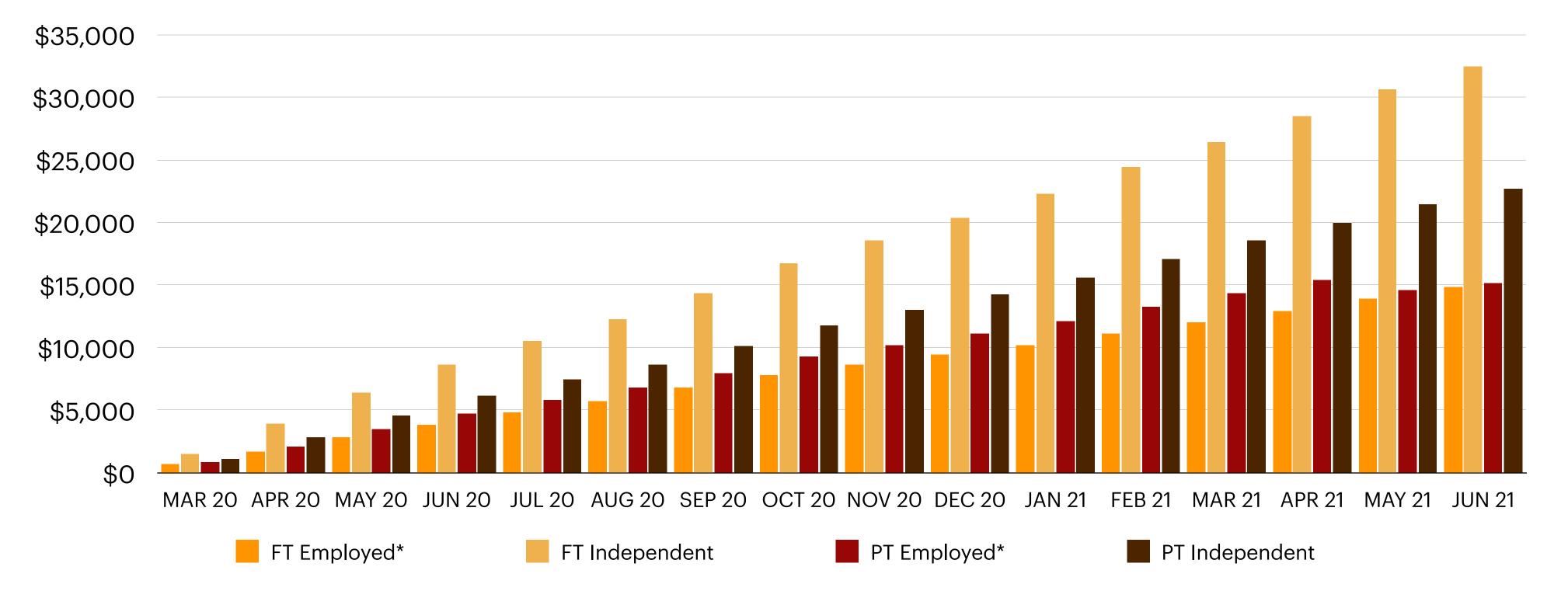
### SECOND + THIRD WAVE | AVERAGE MONTHLY INCOME LOSS (BY EMPLOYMENT TYPE)

In the case of a second wave in the autumn followed by a third wave in the winter, it becomes more difficult to speak of a true 'recovery' within the sector - at least by June 2021. Uncertainty will impede planning for the 2021 summer festivals & events season even where reduced-scale events could be held once capacity limits begin to slowly increase come May/June. The unsustainable losses faced by independent workers, mean that many highly skilled individuals may consider leaving the sector entirely as, unlike other small businesses, it is often impossible for the freelancers and 'solopreneurs' to access enhanced wage subsidies and business support.



### SECOND + THIRD WAVE | AVERAGE CUMULATIVE INCOME LOSS (EMPLOYEES)

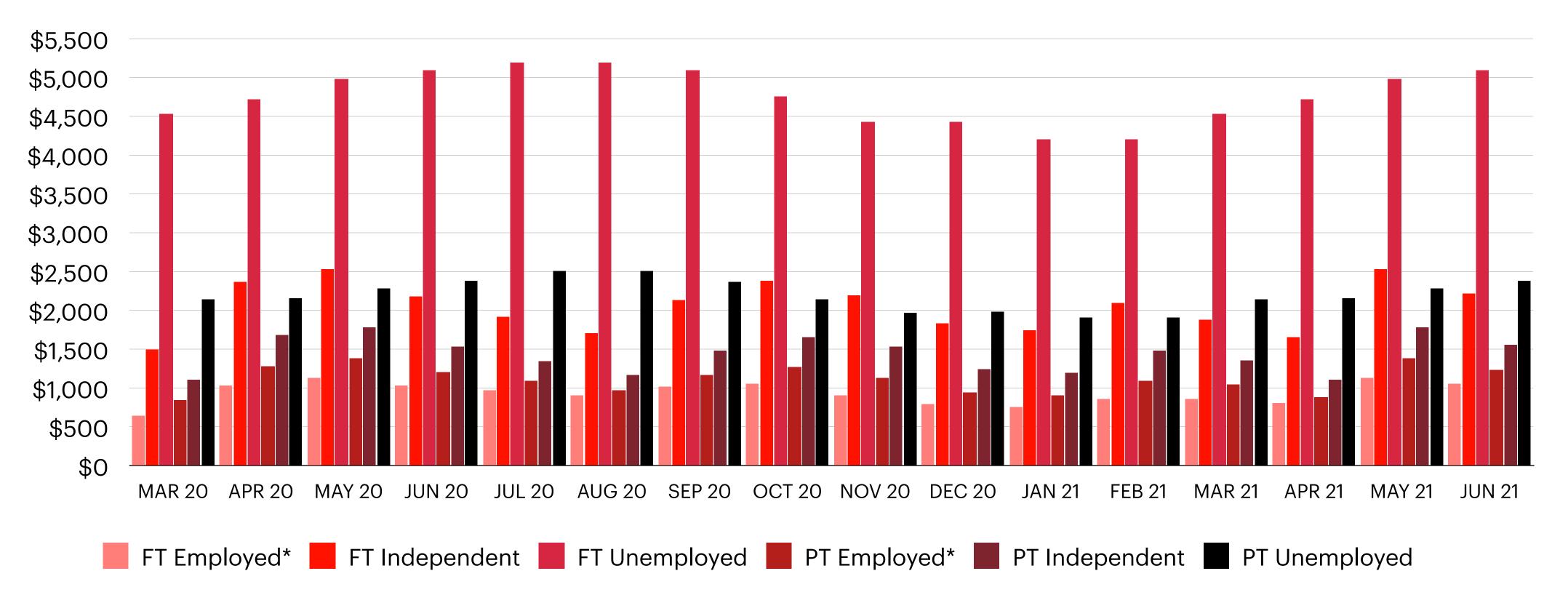
A second and third wave during this period would be devastating for the local cultural workforce. Full time independent workers would stand to lose over \$32,000 on average (margin of error 3.8%). This represents an average loss of 60% of typical income for the period March 2020 - June 2021. The average full-time employee, as of June 2021, is expected to lose almost exactly as much as the average part-time employee under this scenario speaking to the scale of instability within the sector, highlighting that in this case even the type of stable full-time employment that's relatively insulated even through a second wave.



<sup>\*</sup> Average figures by employment type **do not** include those who were unemployed during periods of business interruption. Because many employees have moved in and out of periods of employment, it is not possible to estimate cumulative losses including periods of unemployment with any degree of accuracy at the occupation level.

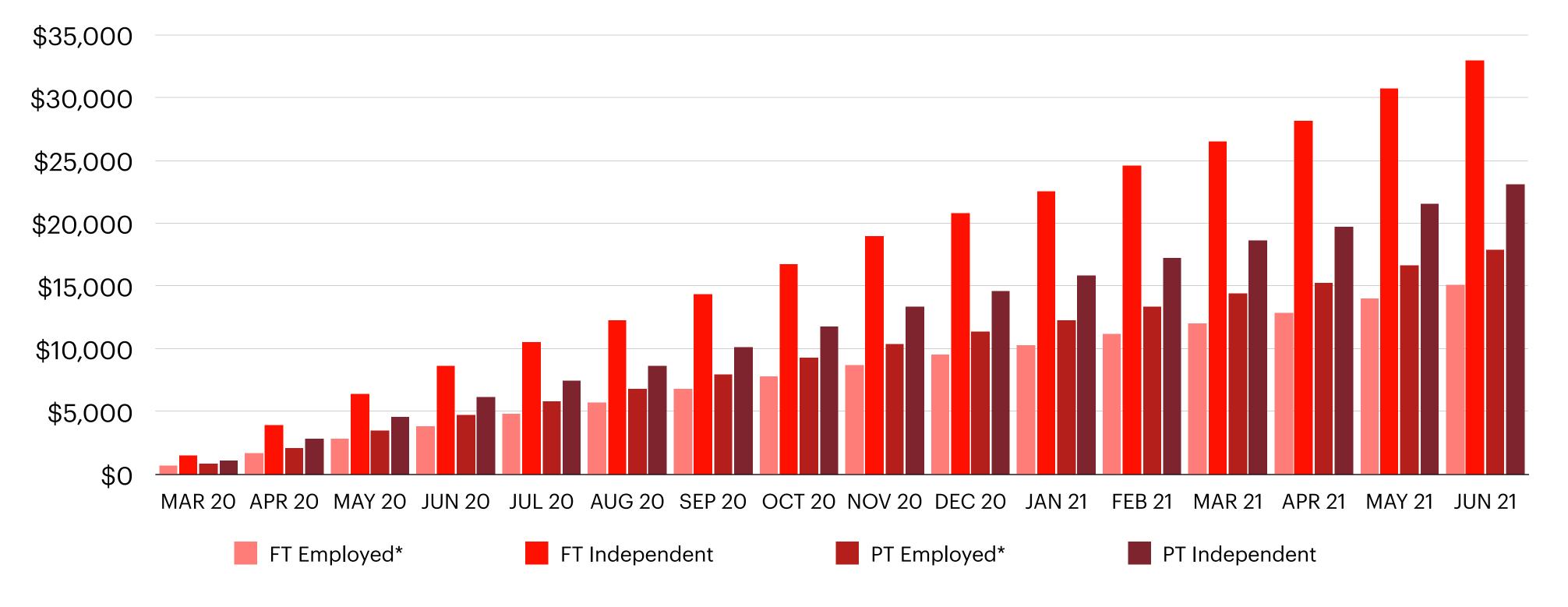
### WORST CASE AVERAGE MONTHLY INCOME LOSS (BY EMPLOYMENT TYPE)

In a worst case scenario where significant business interruptions become routine every few months during the projection period, significant monthly income losses persist through the end of 2021. Average monthly income loss in this scenario actually peaks in May 2021 as very strict limits on outdoor gatherings at the start of what would be another tourism and festivals season stunt planning efforts and leave many in the sector without their typical sources of income (in contrast to May 2021 which saw some arts, culture & heritage activity return as part of Phase 1 reopening).



### WORST CASE AVERAGE CUMULATIVE INCOME LOSS (EMPLOYEES)

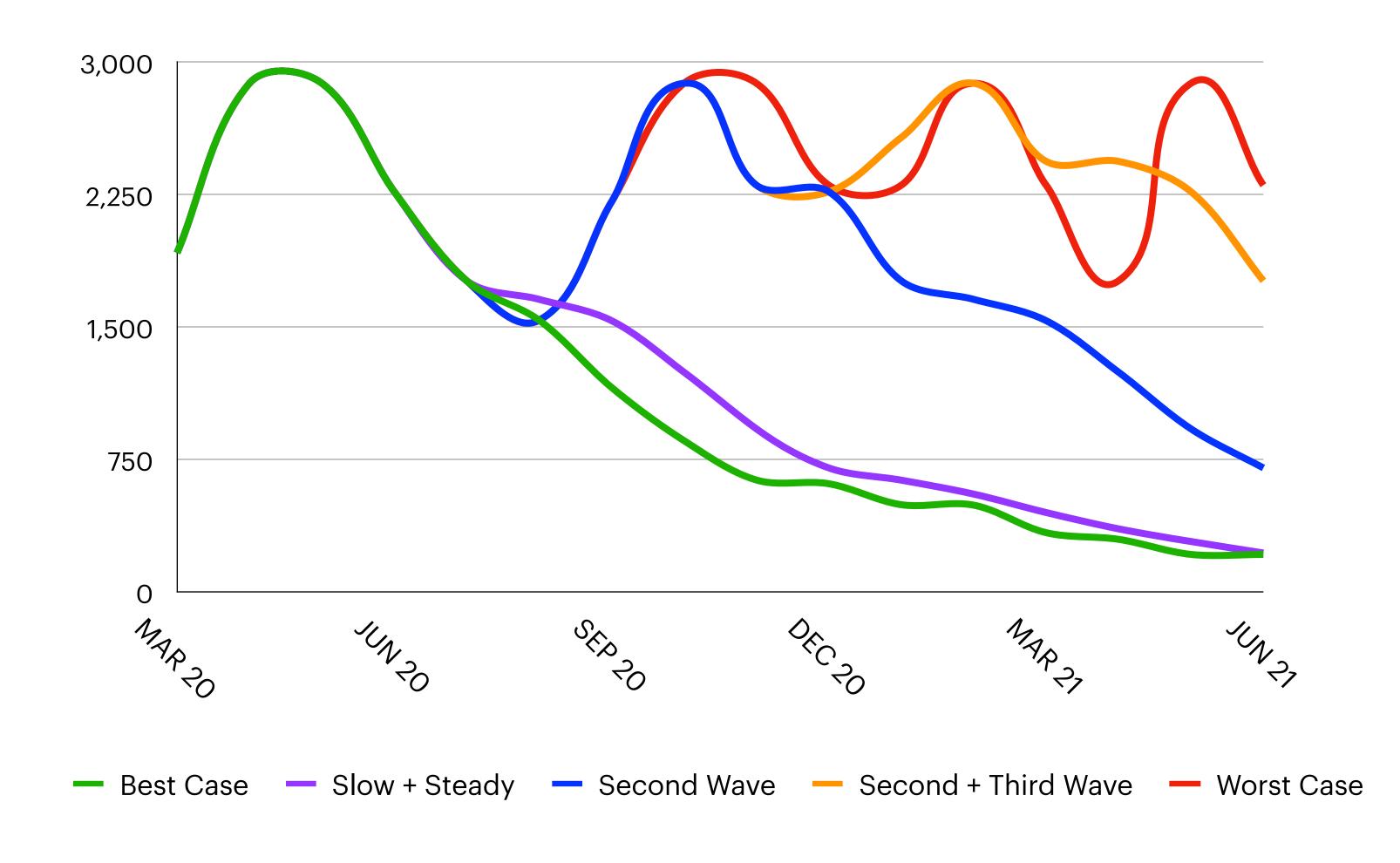
When looking over the full March 2020 - June 2021 time period, the average worker in the arts, culture and heritage sector can expect to incur income losses very similar to those in the case of a second and third wave. Full-time independent workers can expect to bring in approximately \$486 less under this scenario than with a second and third wave (margin of error 3.8%) while part-time independent workers earn \$392 less (margin of error 3.9%). For workers in traditional employment relationships, the difference is less than \$200 and not statistically significant. Importantly, income losses are not experienced equally. Independent full-time producers, directors, choreographers and related occupations are expected to lose an average of ~\$73,000 while those employed full-time as library assistants and clerks are projected to lose, on average, a total of only \$536 (margin of error 1.5%) in pay during the pandemic period with the reality that many will not incur losses at all.



<sup>\*</sup> Average figures by employment type **do not** include those who were unemployed during periods of business interruption. Because many employees have moved in and out of periods of employment, it is not possible to estimate cumulative losses including periods of unemployment with any degree of accuracy at the occupation level.

## PROJECTED WORKFORCE IMPACTS

# PROJECTED MONTHLY LAYOFFS/FURLOUGH (ALL EMPLOYMENT TYPES)



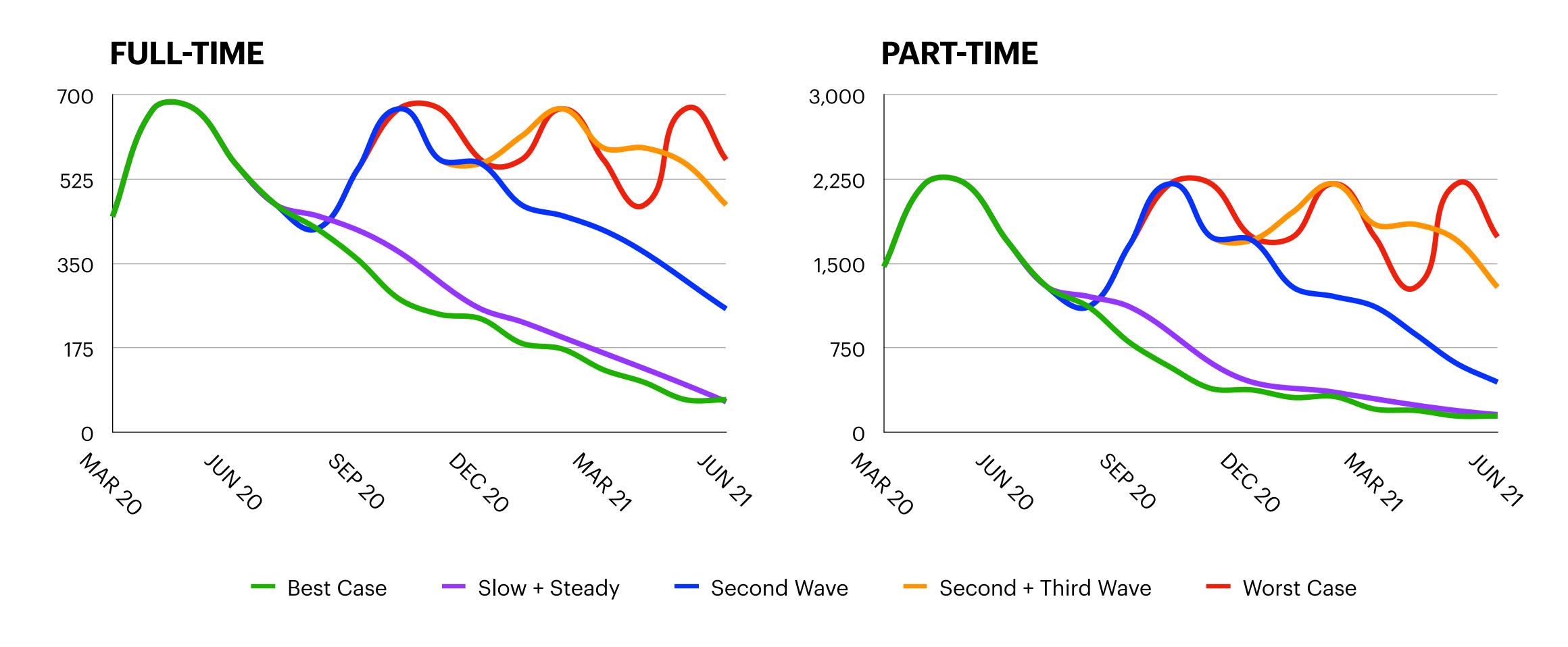
While, as would be expected, a single wave of transmission and related shutdown would have allowed for the most robust employment recovery, there is a very large gap between the projected outcomes for a Second Wave and the cases where there are additional waves.

## Avoiding a third wave is key for employment recovery in this sector.

Although in both the Second + Third and Worst Case scenarios, the additional waves of disruption mean that 'recovery' will occur beyond the June 2021 window, it is highly likely that many of those positions impacted will be unlikely to return as a result of business closures and staffing reductions as those who do weather the storm manage to do so by reducing expenses wherever possible.

# PROJECTED MONTHLY LAYOFFS/FURLOUGH (BY EMPLOYMENT TYPE)

Across the sector, recovery on the employment side is expected to follow the same patterns for both full-time and part-time workers, albeit at a different scale.

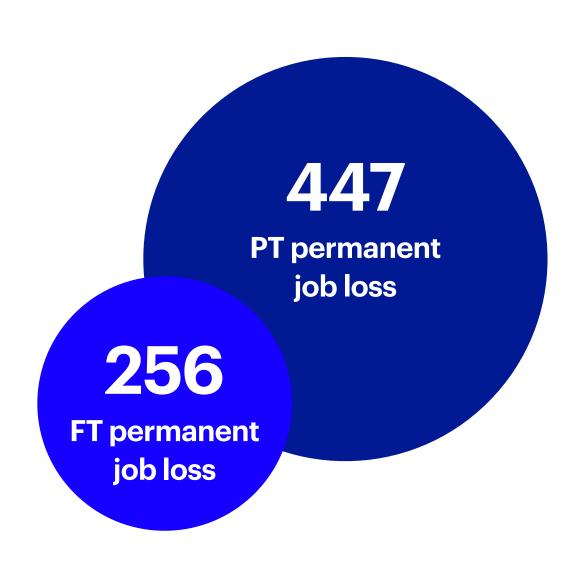


## PERCENTAGE OF PRE-PANDEMIC EMPLOYEES EMPLOYED (31 DECEMBER 2020)

\$400,000,000 **72.5**% **DECEMBER 2020** 92.7% 91.4% **72.9**% **72.9%** \$300,000,000 ,000 \$200 **MARCH 2021 72.5**% 81.6% 96% 94.5% 70.9% \$100,000,000 **72.5**% **JUNE 2021 78.9%** 955% 97.3% 91.6%

#### SECOND WAVE | PROJECTED PERMANENT JOB LOSSES

In the case of a Second Wave, not only will there be two periods of significant temporary unemployment within the sector, the impact of the second wave on the recovery trajectory means that a much greater number of jobs can be considered permanently lost by the end of June 2021. Although the recovery will continue, given that it is technical and artist occupations connected to the private/commercial galleries and the creative industries that are at greatest risk in this scenario it would be difficult for them to be reabsorbed into the sector.



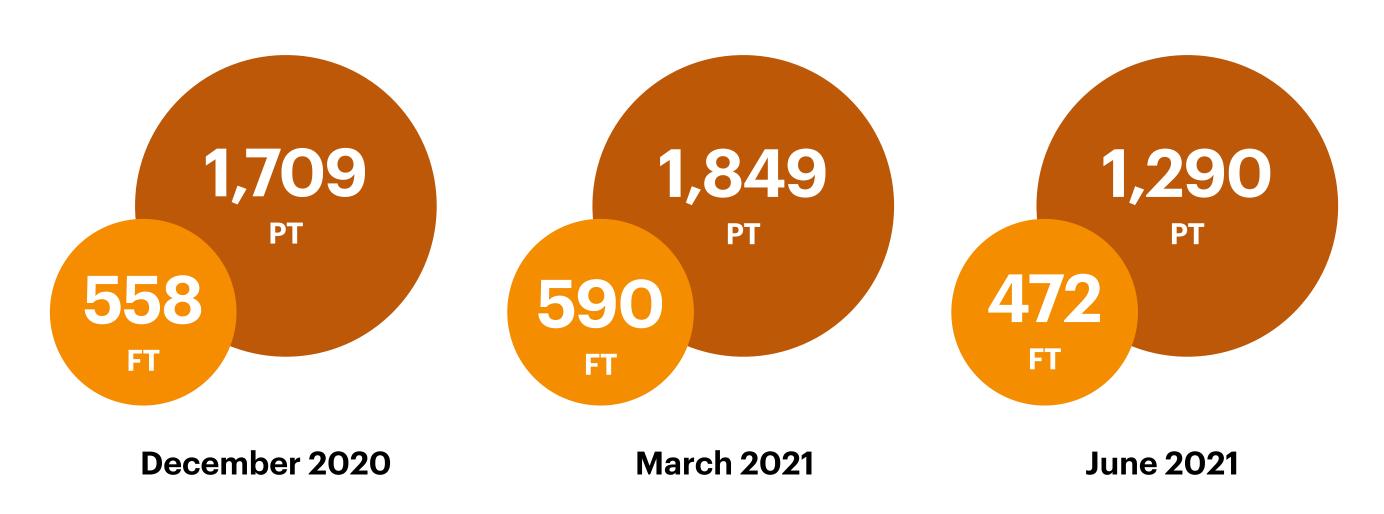
## PERMANENT JOB LOSS BY OCCUPATION (10 OCCUPATIONS WITH GREATEST LOSSES)

	FI	PI
Technical occupations related to museums and art galleries	12.8	143.64
Graphic designers and illustrators	60.25	24.48
Theatre, fashion, exhibit and other creative designers	48.6	30.99
Managers - publishing, motion pictures, broadcasting and performing arts	40.61	14.85
Editors	3.26	43.71
Musicians and singers	1.87	41.18
Film and video camera operators	14.79	15.79
Conservators and curators	6.75	20.93
Photographers	9.88	10.84

#### SECOND + THIRD WAVE | PROJECTED LAYOFFS/FURLOUGHS

In the case of a Second and Third wave, with less than 6 months between the end of the third wave and the end of this frame of analysis, it's not possible to speak to permanent job loss, though it is expected that following multiple waves of disruption high business/organizational failure rates will mean that it is likely that many of those layoffs and furloughs on 30 June are or will be permanent.

#### HIGHEST AVERAGE NUMBER OF LAYOFFS/FURLOUGHS (SEPT 2020 - JUN 2021)

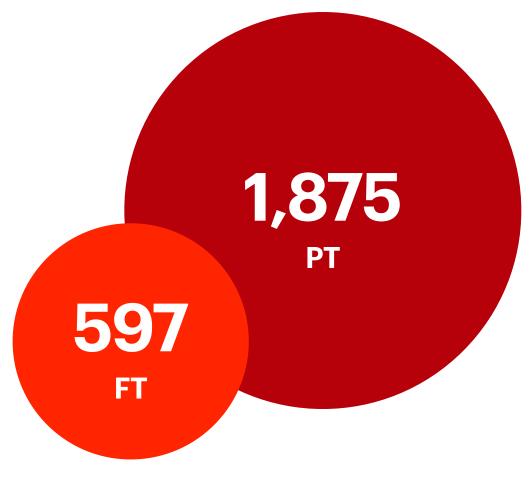


Library assistants and clerks	399	
Technical occupations related to		
museums and art galleries	264	
Library and public archive technicians	259	
Librarians	170	
Graphic designers and illustrators	155	
Editors	150	
Records management technicians	122	
Theatre, fashion, exhibit and other	105	
creative designers		
Managers - publishing, motion pictures,	100	
broadcasting and performing arts		

#### WORST CASE | PROJECTED LAYOFFS/FURLOUGHS

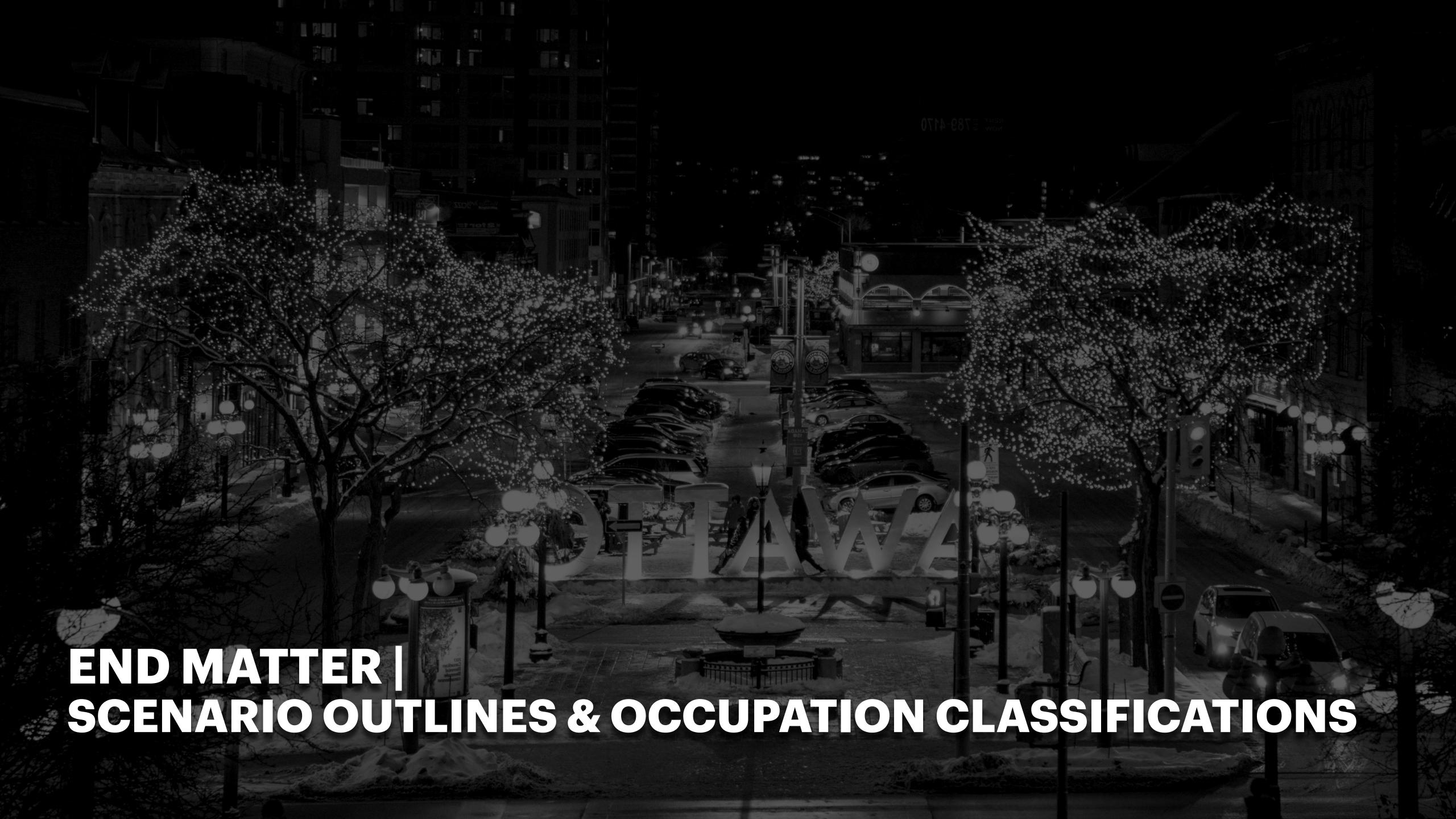
Under the Worst Case scenario, continued predicted instability means an accurate estimate of permanent job loss is not available for this scenario. At the 9, 12 and 15 month checkpoints (December 2020, March 2021 and June 2021) an estimated 566 FT jobs and 1,738 PT jobs will be missing from the sector, though as shown on the previous page, these figures will fluctuate between 472 and 671 FT jobs and 1,291 and 2,210 PT jobs from September 30, 2020 forwards.

## **Average Monthly Laid-off/Furloughed Workers September 2020 - June 2021**



## HIGHEST AVERAGE NUMBER OF LAYOFFS/FURLOUGHS (SEPT 2020 - JUN 2021)

Library assistants and clerks	411	
Technical occupations related to	276	
museums and art galleries		
Library and public archive technicians	267	
Librarians	176	
Graphic designers and illustrators	157	
Editors	155	
Records management technicians	126	
Theatre, fashion, exhibit and other	105	
creative designers		
Managers - publishing, motion pictures,	102	
broadcasting and performing arts	102	



## OCCUPATION LIST | ARTIST

## National Occupation Classification (NOC) Code

5121	Authors and writers
5132	Conductors, composers and arrangers
5133	Musicians and singers
5134	Dancers
5135	Actor and comedians
5136	Painters, sculptors and other visual artists
<b>5221</b>	Photographers
<b>5232</b>	Other performers, not elsewhere classified
<b>5241</b>	Graphic designers and illustrators
5243	Theatre, fashion, exhibit and other creative designers designers
<b>5244</b>	Artisans and craftspersons
5245	Patternmakers - textile, leather and fur products

## OCCUPATION LIST | TECHNICAL

## National Occupation Classification (NOC) Code

1253	Records management technicians
1423	Desktop publishing operators and related occupations
1451	Library assistants and clerks
2174	Computer programmers and interactive media*
5111	Librarians
5112	Conservators and curators
5131	Producers, directors, choreographers and related occupations
<b>5211</b>	Library and public archive technicians
5212	Technical occupations related to museums and art galleries
5222	Film and video camera operators
<b>5223</b>	Graphic arts technicians
5225	Audio and video recording technicians
5226	Other technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts
5227	Support occupations in motion pictures, broadcasting, photography and the performing arts

## OCCUPATION LIST | MANAGEMENT

## National Occupation Classification (NOC) Code

O511 Library, archive, museum and art gallery managers

**O512** Managers - publishing, motion pictures, broadcasting and performing arts

1213 Supervisors, library, correspondence and related information workers

**5113** Archivists

**5122** Editors

## PHOTO CREDITS

p 1 © Noémi Macavei-Katócz
p 4 © Natasha Reddy
p 7 © Tyler Farmer
p 10 © Rod Long
p 24 © Candice Spelow
p 43 © Naveen Kumar



