PROXY FOR MODELING COVID-19

LABOR MARKET ACTIVITY

March 12, 2020

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Proxy for Modeling COVID-19 Labor Market Activity

The Department of Labor and Industrial Relations (DLIR) has used the economic impact following September 11, 2001 to simulate the anticipated impact on Hawaii's labor force for the COVID-19 outbreak. We selected **9/11** as it triggered an economic downturn of critical business activity due to the sudden reduction in airline travel to Hawaii.

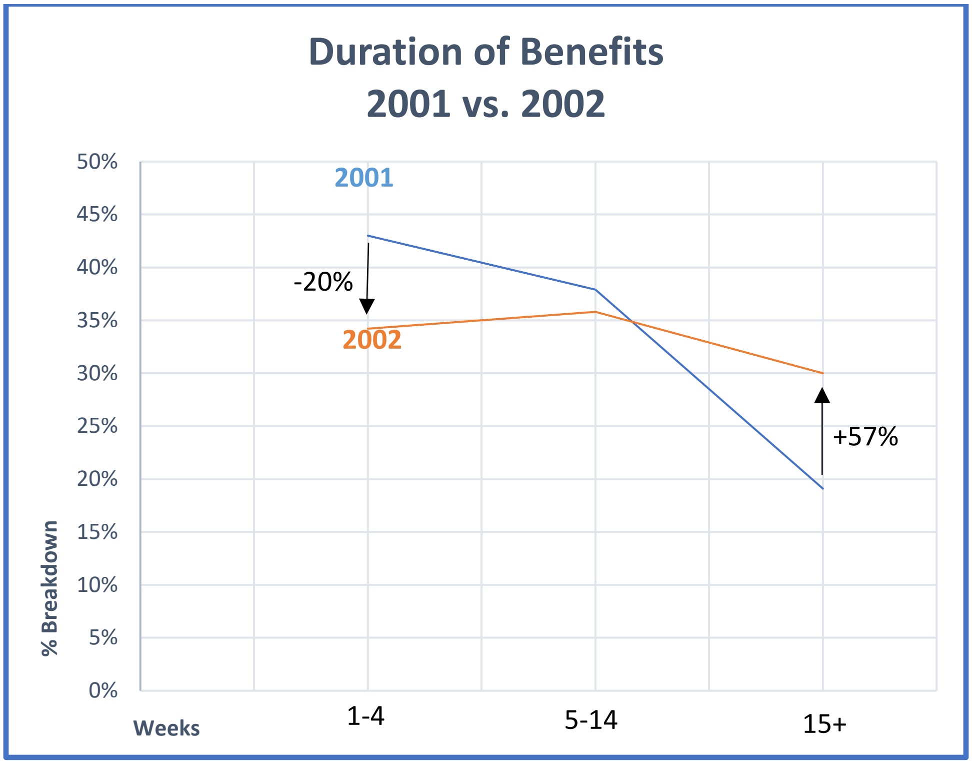
2001—2002 Labor Market Dynamics: Year to Year Comparison – Reported on a Calendar Year Basis

In 2001, Hawaii's civilian labor force was approximately 591,400—564,200 were employed and 27,150 were unemployed, which resulted in an unemployment rate of 4.6%. Following the events of **9/11** in 2002, Hawaii's civilian labor was 582,000—557,450 were employed and 24,750 were unemployed resulting in an unemployment rate of 4.2%. 9,150 residents dropped out of the Hawaii's labor force between 2001 and 2002. Adding in the 24,750 unemployed residents for 2002, results in a total of 33,900 residents who were out of work.

In 2001, the Accommodations and Food Service industry reported the highest percentage of workers unemployed followed by the Construction Industry.

It's also important to note that in 2001, of the total benefits paid to claimants:

- 43% of the benefits were paid for a duration of 1 to 4 weeks (less than equal to 1 month),
- 38% of the benefits were for a period of 5 to 14 weeks (great than 1 month but less than 3.5 months), and
- 19% of the benefits were for 15 weeks and over (over 3.5 months).



In the post 9/11 period, of the total benefits paid to claimants:

- 34% were paid for a duration of 1 to 14 weeks,
- 36% of the benefits were for a period of 5 to 14 weeks, and
- 30% of the benefits were for a period of over 15 weeks.

In 2002, claimants received benefits for a much longer period of time.

12-Month Activity between July 2001 to June 2002

The Bureau of Labor Statistics (BLS) report on the Number of Private Sector Establishments by Direction of Employment Change, seasonally adjusted for Hawaii between July 1, 2001 through June 30, 2002, allowed us to examine the impact of the **9/11** terrorist attack on a quarterly basis for the 12-month period:

- 4,913 business closures that resulted in 21,574 jobs lost, and
- 6,478 establishments each quarter experienced some level of business contraction impacting approximately 22,831 jobs.

Projections for COVID-19 for Unemployment Insurance (UI)

There are two major funding components to the Federal Unemployment Insurance program:

1) Federal Administrative funding that comes from the U.S. DOL's Employment and Training Administration (ETA). The state's allotment of funding is calculated using a 2-year moving formula that accounts for (among other factors) the current unemployment rate.
2) The Unemployment Compensation Trust Fund is the financial reserve that provides funding to pay income replacement benefits to eligible claimants. These funds are held in reserve by the United States Treasury.

Cost Estimate to Administer UI Benefits to Mitigate Economic Deceleration from COVID-19

Our first question as a Department was:

"Do we have enough people to administer benefits to Hawaii's claimants should the economic deceleration from COVID-19 replicate the 12-month post ***9/11*** *period?"*

The simple answer was a resounding *"No"*. Below is the DLIR's estimate of additional staff and associated cost estimates anticipated from the economic deceleration triggered by COVID-19.

Our comparative assessment between our UI Division's current staffing and funding levels, and the funding and staffing levels in the post **9/11** period, suggests that the UI Division will require funding for 28 additional persons, fringe benefits, equipment, and other operating and administrative costs totaling $4,265,826. This amount does not include the $4,000,000 in administrative cost requested in the 2020 budget request and does not afford the UI division to pay out additional benefits should this be necessitated due to an increase in the length of time that benefits are paid.

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Description	FTE
2001 UI Staffing Level (FTE in 2001)	228
Modernization Impact (assumes a 40% gain in efficiency)	-91
Staffing needed 2020	137
Current UI Staffing Level (FTE 2020)	109
Additional FTE to meet the projected increase in UI Claims	**28**

COVID-19 UI Supplemental Funding Request (to Administer the UI Program)					
Description		**Quantity**	**Unit Cost**	**Subtotal**	**Total**
Salaries and Wages					$1,530,385
	Claims Examiner	8	$65,556	$524,445	
	Customer Service Rep	15	$45,432	$681,473	
	Auditors	5	$64,893	$324,468	
Fringe Benefits					$964,140
	Claims Examiner	8	$41,300	$330,400	
	Customer Service Rep	15	$28,622	$429,328	
	Auditors	5	$40,883	$204,415	
Administrative, Staff & Technical					$523,851
Staffing Overtime					$631,498
Materials and Supplies					$70,400
Xerox & Postage					$165,300
Equipment and Phone Service					$51,250
ETS					$329,000
Total COVID-19 Supplemental Funding Request					**$4,265,826**

UI Benefits to be Paid to Claimants to Mitigate Economic Deceleration from COVID-19

Our second question as a Department was:

"Given the conditions of question 1, do we have enough funding to cover the replacements for eligible claimants?"

COVID-19 Benefits	
Description	**Amounts**
2001 UI Trust Balance (7/1/01)	$321.4 M
Post 9/11 - State Additional Benefit (11/01-4/02)	$11.8 M
Post 9/11 - Federal Additional Benefits (4/02-10-03)	$55.5 M
Total Post 9/11 Benefits Available	$299.5 M
Current 2020 UI Trust Balance	$594.6 M
COVID-19 Benefits	0

Projections for COVID-19 for the Disability Compensation Division

Unlike the events of **9/11**, COVID 19 is a public health issue that we believe will have implications on Hawaii's Workers' Compensation, Temporary Disability and Prepaid Health Care Programs. These three worker protection programs fall under DLIR's Disability Compensation Division (DCD). The DCD manages three (3) trust funds that have the capability to pay out benefits to qualified claimants.

The lack of actual historical information of the impacts of a modern-day pandemic on Workers' Compensation, TDI and Prepaid Health Care premiums impedes our ability to develop a logic model with a high degree of confidence. This section identifies the specific trust funds, their current balances and applicable uses within DLIR's administration that can provide worker protection and possible business relief.

Special Compensation Fund – Workers' Compensation Payments Exclusively

The Special Compensation Fund currently has a balance of $8,800,000. This fund is specific to paying Workers' Compensation claims and incurs a monthly average expenditure of $1,200,000. Under statute, the fund cannot fall below an amount determined to be insufficient ($4.5 M).

We anticipate COVID-19 will increase the average monthly expenditure to the Special Compensation Fund in the following ways:

1. Increase in workers’ compensation claims from workers who became infected by COVID-19 and believe that COVID-19 was directly attributed to their jobs.
2. Survivor benefits for beneficiaries of workers who passed from COVID-19 contracted while on the job (determined to be directly attributed to their jobs).
3. Currently there are 4,000 employers who are non-compliant. We anticipate an increase in employers who will become non-compliant due to financial hardships (cannot afford to pay for health insurance) due to the economic deceleration because of COVID-19.
4. Delays in prompt payment from carriers to employees due to financial hardships associated with an economic deceleration due to COVID-19.

Trust Fund for Disability Benefits – Nonoccupational Sickness or Injury

The Trust Fund for Disability Benefits pays for benefits to workers injured for reasons outside of employment. Hawaii’s TDI program is privatized. The initial start up of the TDI program in Hawaii was accompanied by a levy on businesses. However, since the initial levy in 1969, no further assessments have been levied.

The TDI Trust Fund has a current balance of $2,500,000 and is used to pay benefits under any of the following conditions:

1. Non-compliant employers,
2. Delinquent employers, or
3. Unemployed not receiving UI benefits.

We anticipate an increase in expenditures from the TDI fund due to both a projected number of workers who become infected with COVID-19 but did not contract it from work, and the impact of the slowing economy. The slowing economy is anticipated to result in increases in the number of Hawaii’s businesses not having TDI coverage, increases in filing of bankruptcies, or from businesses allowing their insurance to lapse due to financial hardship. Currently, approximately 9,000 businesses a year are non-compliant or delinquent.

Premium Supplementation Trust Fund – Health Care Benefits & Health Care Premiums for Hawaii's Small Employers

The Premium Supplementation Trust Fund has a current balance of $30,293. This trust fund supplements health care premiums for very small employers (8 employees or less) as well as pays for medical benefits for employees whose employers are not in compliance or are bankrupt.

The anticipated economic slowdown due to COVID-19 will increase the number small businesses meeting the statutory employee threshold for premium relief, and an increase in benefit payments for delinquent or non-compliant employers.

Cost Estimate to Administer DCD Benefits to Mitigate Economic Deceleration from COVID-19

Our first question as a Department was:

"Do we have enough people to administer benefits to Hawaii's claimants should the economic deceleration from COVID-19 replicate the 12-month post 9/11 period?"

The simple answer was a *"No"*. Following the great recession, the Disability Compensation Division experience a reduction in force from a high of 144 in 1995 to a current FTE of 101. Our estimates suggest that that in order to meet projected increases in DCD claims, additional staffing of 42 FTEs will be required.

Description	FTE
1995 (WC reform) Staffing Level (FTE)	144
Staffing needed 2020	143
Current DCD Staffing Level (FTE 2020)	-101
Additional FTE to meet the projected increase in DCD Claims	**42**

COVID-19 DCD Supplemental Funding Request (to Administer the DCD Programs)					
Description		Quantity	Unit Cost	Subtotal	Total
Salaries and Wages (WC, TDI, PHC)					$2,522,538
	Hearings Officer (SR-26)	3	$97,488	$292,464	
	Claims (SR-10)	30	$50,304	$1,509,120	
	Auditors/Spec (SR-22)	9	$80,106	$720,954	
Fringe Benefits (WC, TDI, PHC)*					$1,589,214
	Hearings Officer	3	$61,418	$184,253	
	Claims (SR-10)	30	$31,692	$950,760	
	Auditors/Spec (SR-22)	9	$50,467	$454,201	
*Costs associated with DAGS					
Administrative Services					$927,232
Materials, Supplies, & Equipment					$231,000
Total COVID-19 Supplemental Funding Request					**$5,266,984**

DCD Estimate of Benefits to be Paid to Claimants to Mitigate Economic Deceleration from COVID-19

Claim Count for COVID-19								
Base	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months	18 Months	Up to 5 Years
Non-Compliant Employer	13,426	14,050	15,415	28,100	28,900	4,226	4,226	4,226
Claim Count	134.26	702.50	3,083	8,430	2,890	211.3	84.52	84.52
	1%	5%	20%	30%	10%	5%	2%	2%
					TDI – 26 weeks	WC forward		

State Fund Cost Estimates for COVID-19 Claims

Base	1 Month	2 Months	3 Months	6 Months
PHC	$155,070	$811,387	$3,560,865	$9,736,650
WC/TDI Indemnity	$87,269	$456,625	$2,003,950	$5,479,500
TOTALS	$242,339	$1,268,012	$5,564,815	$15,216,150

Base	9 Months	12 Months	18 Months	Up to 5 Years	TOTALS
PHC	$3,337,950	$244,051	$97,620	$97,620	$18,041,215
WC/TDI Indemnity	$2,053,500	$195,452	$78,181	$390,905	$10,745,382
TOTALS	$5,391,450	$439,504	$175,801	$488,525	$28,786,598

Level of Confidence in Projections

We have a moderately high level of uncertainly to our projections. Although we're confident in the logic model for UI of the application of the post 9/11 economic deceleration to COVID-19, comparative labor market analysis between 2001 and 2020 and our FTE and financial projections, we are highly uncertain about the duration of any economic downturn as well as the impacts on Hawaii's health care market. These two (2) unknowns create greater uncertainty for our DCD model. The following three (3) issues further increase our uncertainty in both the UI and DCD projects.

1. COVID-19 is a public health issues and we lack historical data and experience of the health and wellness implications on Hawaii's residents, economy, and its workforce.
2. As of the date of our planning, the contagion rate of COVID-19 is unknown.

In addition to the uncertainty associated with the duration of a COVID-19 induced economic downturn and the implications on Hawaii's health care market, we also have uncertainty around the ability of other industries in Hawaii to absorb the dislocation of workers from the economic cluster of tourism.

Given the high level of uncertainty, our best defense is to remain vigilant in our monitoring of Hawaii's economy and the flexible in our analysis and administration of our programs. The next section identifies how DLIR is monitoring available data, and in particular, leading indicators that would suggest the possible deceleration of Hawaii's economy.

Monitoring for Economic Deceleration

This section of the report utilizes the State of Hawaii Department of Business Economic Development and Tourism (DBEDT) report on Daily Passenger Counts that can be assessed at the following URL. https://dbedt.hawaii.gov/visitor/daily-passenger-counts/.

The Department has applied 5-day and 10-day moving averages of international visitor arrivals to Hawaii. We focused monitoring on International visitors as the COVID-19 outbreak started in China and has resulted in government travel restrictions from international points of origin. COVID-19 and the subsequent travel restrictions have resulted in declining international travel market behavior which is alarming to our Department. Our monitoring includes and will intensify around domestic travel, but as of this initial report, domestic travel advisories have not been issued.

Our Department is monitoring the change in daily scheduled passenger arrivals to Hawaii from Japan and other international locations as this allows us to understand and accumulated loss in sales for airlines serving Hawaii. We identified an alarming trend of consistent declines in travel visitors from Japan beginning on February 25, 2020. This suggested that we examine more closely, the recent changes for the 10-day period beginning February 24, 2020.

Daily Change in International Visitor Arrivals

Average Daily Change from January	-60	-35	-25
Average Daily Change for January	-17	-23	7
Average Daily Change for February	-93	-56	-36
Average Daily Change for March	-143	36	-179
5 Day Average	-146	-129	-18
10 Day Average	-266	-43	-158

Assumptions:

1. The average daily decline remains constant and is linear,
2. Forecast period of 30 days, and

3. Average cost of airfare to Hawaii from international destinations was $1,000.00 per seat.

The 10-Day Moving Average – Daily Decline in Visitors (-266)
A daily decline of 266 visitors per day over the next 30 days would result in a total decline of 7,980 visitors and an estimated $7,980,000 in lost airlines revenue. Should the change in daily international visitor arrivals continue to decline along the lines of the assumptions above, our Department anticipates an increase of 57 claims.

Reducing Unemployment Disruption & Driving Economic Regeneration (RUDDER)

Background

The Wagner-Peyser Act of 1933 established the U.S.' public workforce development system. A federal, state and local partnership, the system provides support for the ever-evolving needs of the nation and prepares our workforce for success. The latest iteration of the federal workforce system was enacted as the Workforce Innovation and Opportunity Act (WIOA), which serves as the primary federal workforce development program to bring about increased coordination among federal workforce development and related programs.

Title I of WIOA authorizes programs to provide job search, education, and training activities for individuals seeking to gain or improve their employment prospects, and changed the One-Stop delivery system into the American Job Centers (AJCs). One of the characteristics of the WIOA is the establishment of a central point of service (AJCs) for those seeking employment, training, and related services. To this end, WIOA requires that certain partner programs provide access to career services in the AJCs.

In addition, Title I of WIOA establishes the governing structure and the performance accountability for all programs authorized under WIOA. The Workforce Development Council (WDC) serves as the State Workforce Investment Board and is responsible for preparing and overseeing the comprehensive state plan for workforce development.

Title III of WIOA amends the Wagner-Peyser Act of 1933, which authorizes the Employment Service, to make the Employment Services an integral part of the AJCs. In Hawaii, the Unemployment Insurance Division (UID) and Workforce Development Division (WDD) constitutes Employment Services.

State components of workforce development have largely been federally funded though Wagner-Peyser and currently the WIOA. Major State components supported by general funds include the State Apprenticeship Program, the Employment & Training Fund (ETF) activities, and State Workforce Advisory Boards that target specific sectors (Ag, Healthcare, STEM) to promote the expansion and development of those industries in the State.

Proxy for Modeling Covid-19 State Workforce Activities

The American Recovery and Reinvestment Act of 2009 (ARRA) had the primary objective of saving existing jobs and creating new ones as soon as possible. The ARRA's rationale was based on the Keynesian economic theory that, during recessions, the government should offset the decrease in private spending with an increase in public spending in order to save jobs and stop further economic deterioration. Surveys of economists show overwhelming agreement that the ARRA reduced unemployment.

The workforce component of the ARRA included $82 B to aid low-income workers, the existing Employment Services Programs (largely through extended unemployment benefits), and support rapid diffusion of the then current federal workforce program through the Workforce Investment Act.

Proposal for Workforce Mitigation in the COVID-19 Response.

Similar to the ARRA, to arrest further economic deterioration and generate economic regeneration, the Department is proposing to use the pre-existing ETF and apprenticeship programs. The ETF program gives the Department the authority to "…contract for employment, education, and training services from public and private agencies and nonprofit corporations… exempt from chapter 103F so funds for these services may be expended in a timely manner to effectuate the purposes of this section."

The post **9/11** economy showed an interesting labor market dynamic. Between 2001 and 2002, Hawaii's air transportation and leisure and hospitality sectors reported sharp declines in jobs. However, during the same period, there were increases in jobs reported in the education, health services and government sectors.

Given the nature of COVID-19, it's safe to assume that Hawaii's health care industry will see a significant increase in the need for workers. In a recent study conducted by the Healthcare Association of Hawaii of its members, "between the last quarter of 2018 and the first quarter of 2019, there were 2,200 open non-physician healthcare positions in Hawaii". The study reported that were jobs were for 76 patient facing professions.

The Healthcare Association of Hawaii further reported:

1) Overall, the Hawaii healthcare organizations survey have 10% of their positions unfilled,
2) On average, open positions are taking between 6 to 12 months to fill, and
3) There is a very clear need for workers in the following professions:
    a. Medical Assistant
    b. Nurse Aides
    c. Registered Specialty Nurses
    d. Patient Services Representatives
    e. Phlebotomists

This allows us to focus on developing an efficient means of transferring current workers from jobs in air transportation and leisure and hospitality to employment opportunities in health care. This transfer would reduce the impact of Hawaii's economic deceleration while simultaneously improving our state's ability to address the health care issues related to COVID-19. In short, our state could reduce our economic vulnerability while increase our COVID-19 preparedness.

Modern labor market analytics tools allow us the capability to identify the compatibility based on knowledge, skills, and abilities between occupations. This affords us the opportunity to facilitate a more efficient exchange in Hawaii's labor market.

Transitioning Incumbent Workers - Workforce Development Division

Exhibit A identifies the workforce programs currently under the jurisdiction of the Department of Labor and Industrial Relations as well as the jurisdiction of the Workforce Development Council. Exhibit A illustrates the status of employment served, current funding amounts, sources of funds, jurisdiction, solutions and actions that been take towards a timely mitigation of the economic deceleration from COVID-19.

The workforce development programs in this table have been prioritized based on the program's ability to:

1. Preserve employment and thereby maximizing our ability to stabilize Hawaii's economy,
2. Simultaneously offer employment and training,
3. Offer short-term training that results in returning Hawaii's unemployed claimants to gainful employment in the shortest amount of time, and
4. Flexible program based on jurisdiction and statutory requirements.