Memo

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Date: Tuesday, April 7, 2020

To: Cinnamon Williams, Acting Deputy Chief Financial Officer

From: Joel Sherman, Solid Waste Forecaster, and Dennis Yee, Metro Economist

Subject: Memo 2 of 2: COVID-19 Forecast Changes and Detailed Results

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Purpose

This memo is a companion to the memo dated April 6, 2020 (Memo 1 of 2: COVID-19 Revenue Implications this Fiscal Year) and provides more information about the COVID-related changes to our economic and solid waste forecasts, as well as more detailed tonnage and revenue results.

Economic Expectations

Available data suggest that the US and regional economies experienced unprecedented declines in employment, and while the National Bureau of Economic Research is likely months away from making it official, the economy is very likely in recession. The macroeconomic assumptions that underpin the forecast are consistent with IHS/Markit's latest baseline forecast, and are summarized below. We are preparing alternative scenarios to this one, in order to provide high and low bookends to our results here. We can be prepared to summarize those alternative scenarios in the coming weeks, but for our baseline:

- ***US Gross Domestic Product:*** IHS/Markit expects a small decline in GDP in the first quarter of this year as business closures and social distancing rules were being enacted at the end this quarter. US GDP will sharply decline in the second quarter of this year, and bottom-out in the third quarter. By the fourth quarter of 2020 US, growth will resume and the economy will see sharp upticks in GDP growth through 2021; a classical V-shaped recovery.

- ***Employment:*** The jump in initial US unemployment claims for the week of March 20 was unprecedented, with 3.3 million claims filed and jumping to an additional 6.6 million the following week. Oregon had 180,000 claims over the two week period. IHS forecasts the US unemployment rate will climb to 8.8% by the fourth quarter of this year, from 3.5% in the fourth quarter of last year. In the Metro region, we forecast the unemployment rate will peak at 9.9%, and job losses in the region will reach 74,000 employees.

- ***The Federal Reserve and Interest Rates:*** Monetary policymakers have been using a wide range of stimulus measures to stabilize the US economy. The Federal Reserve lowered its federal funds rate target by 50 basis points, to 1 to 1-1/4 percent, and is bringing back Great Recession-era credit and funding sources to ease liquidity concerns. IHS anticpates additional rate cuts in the second quarter of this year to bring the target rate to the zero boundary (i.e., 0.1 percent federal funds rate), setting the stage to boost US growth in coming quarters. IHS lowered its long-term interest rate forecast (e.g., 30-year fixed mortgage rate) in step with the cuts to targeted interest rates.

- ***Home Prices and Construction:*** While there are likely to be local economic declines in some real estate sectors, the breadth and depth of the impacts are not expected to be as widespread as they were during the Great Recession. Home values should remain largely unaffected post-COVID, and IHS does not foresee any sharp decline in prices at any time during the contraction. In addition, the decline in construction jobs should be relatively muted, far less than the job decline during the Great Recession. Building permits, initially deferred as people and institutions adapt to social distancing rules, are projected to surge after the worse of the crisis is behind us.

Regional Solid Waste Outlook

The result of this economic outlook is to expect waste declines over the coming quarters, but not nearly as deep, and not nearly as long as the declines experienced during the last Great Recession. Why? The last recession was marked by an upheaval in the global and US financial system, the bankruptcy and closure of US banks and financial firms, major corrections in debt and equity markets, sharp decreases in residential asset prices, and steep downturns in the construction industry. So damaged were the balance sheets of households and businesses from this contraction that the contagion spread into other industries, and widespread declines in employment were seen in all but a few sectors of the economy. As a result, the last recession saw dry waste plummet fast and deeply, and wet waste, typically referred to as solid waste "base load", fell as well.

As is the case with all recessions, this recession will be different. The bull market in equities and other assets was seemingly "correct", or at least, there were no immediate indications before COVID that indicated a bubble. Employment declines, so far, seem contained to certain sectors of the economy, like brick and mortar retail, personal services (e.g., hair dressers, dentists, elective medical care, sit-down restaurants), and entertainment and tourism (i.e., convention center services, hospitalities, movie theaters, airlines). And construction, still considered a vital industry, seems to continue moving forward, whittling down projects that are currently in the pipeline. All of this, coupled with record fiscal stimulus like CARES and additional fiscal and monetary policy measures, should preserve consumers' balance sheets and provide a temporary financial backstop to the unemployed. These supportive economic measures and the pent-up demand during this crisis sets the stage for a rapid recovery once the worst of the pandemic is behind us. While waste should decline over the coming quarters, the decline won't be as deep or as long as it was during the Great Recession.

As we mentioned in our initial memo, we also expect significant food waste generation to change sectors, moving from commercial to residential, although clearly some commercial sectors like grocers will continue to put waste out for collection. This should reduce the deliveries of tons of source-separated commercial food waste to Metro, and increase tons of residential food waste mixed with yard debris, relative to our previous expectations.

Another important assumption in this forecast is that Metro will reduce private facility wet waste tonnage allocations this calendar year 2020, so that Metro transfer stations meet the 40% tonnage floor. If this assumption changes, and private facilities are allowed to use all of their original allocations, the hits to revenue of all categories, especially Metros enterprise revenue, this fiscal year 2019-20, should be larger than we showed in our first memo, and in the detailed results in this memo.

Detailed Results

The attached figures (below, and in the supplemental PrimaryOutputs.xlsx) contain detailed results of this forecast ("COVID"), our forecast last November ("Nov19") and our forecast from November 2018 ("Budget") by fiscal year. We can provide more information upon request.

Alternative Scenarios

It is important to note that economic conditions are very fluid at the moment, with new data and news coming out every day or more frequently. The risks of this forecast are large and assymetric, meaning that there are likely alternative scenarios that are more dire, and equally plausible. We are currently constructing and modeling those scenarios with the best available information that we have, and can be ready to provide those should you need to look at alternatives.

Should you have any questions about the forecast, please feel free to email us at joel.sherman@oregonmetro.gov or dennis.yee@oregonmetro.gov

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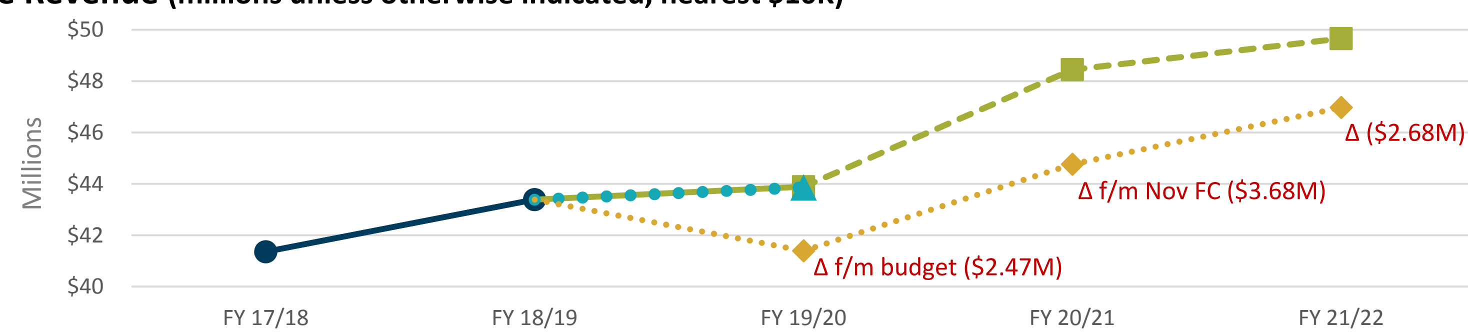
Metro Enterprise Revenue (Tonnage)

		<----Actuals	Forecasts---->						
				FY 2019-20		FY 2020-21		FY 2021-22	
	FY 2017-18	FY 2018-19	Budget	Nov19	COVID	Nov19	COVID	Nov19	COVID
Central Tons									
MSW	247,475	256,247	260,642	248,180	238,763	258,999	240,910	266,127	251,615
Res. Organics	23,594	23,967	21,791	24,188	23,636	24,698	24,543	24,698	23,839
Com. Organics	13,621	17,663	16,585	18,023	15,186	24,070	13,719	29,472	21,746
Wood	733	750	695	947	915	868	868	868	868
Yard debris	2,217	2,136	1,866	2,035	2,086	2,042	2,042	2,042	2,042
Central Loads									
Staffed	92,509	99,137	102,284	112,187	103,621	111,674	103,683	111,191	108,674
Automated	58,180	62,330	62,427	61,696	59,095	64,901	58,997	66,996	62,746
South Tons									
MSW	284,858	292,896	296,138	287,689	268,900	298,807	277,585	304,417	290,311
Res. Organics	21,064	19,015	14,680	21,639	21,281	21,003	20,840	21,003	20,255
Com. Organics	0	0	0	0	0	0	0	0	0
Wood	1,558	1,636	1,148	2,347	2,230	2,260	2,260	2,260	2,260
Yard debris	11,738	12,464	11,522	15,236	12,562	14,476	14,476	14,476	14,476
South Loads									
Staffed	195,592	195,613	202,643	215,829	200,550	215,133	199,927	213,998	209,371
Automated	46,417	49,909	47,453	50,428	47,206	52,116	48,746	52,993	50,681

Metro Enterprise Revenue **(millions unless otherwise indicated, nearest $10K)**

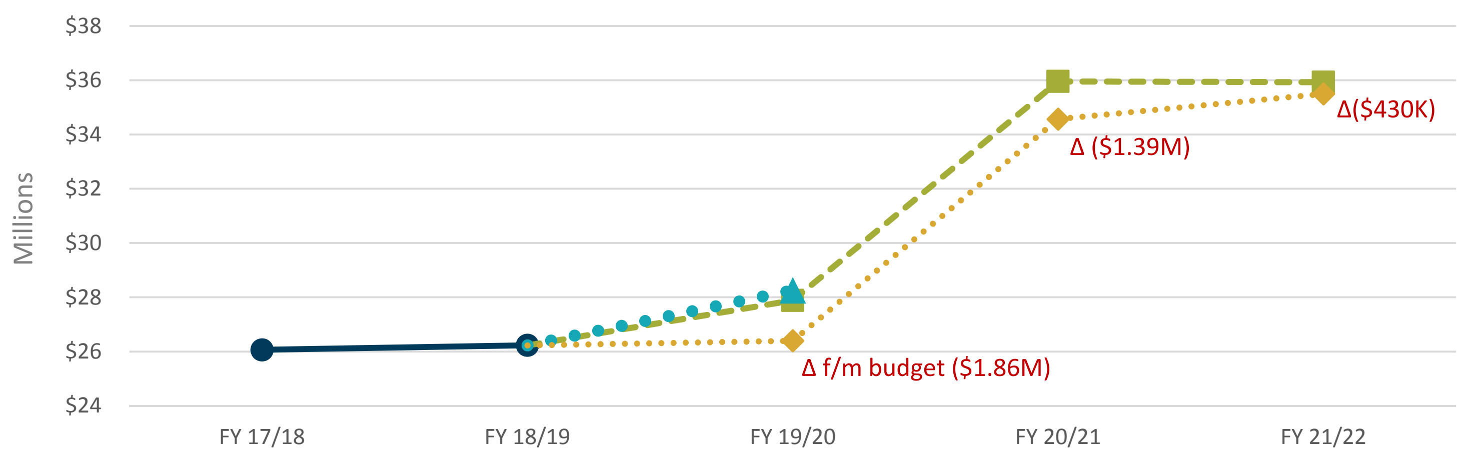


	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22
Actuals	$41.36M	$41.39M			
Budget			$43.87M		
Nov 19			$43.89M	$48.45M	$49.66M
COVID			$41.40M	$44.77M	$46.98M

Regional System Fee Revenue (Tonnage)

	<----Actuals		Forecasts---->						
			FY 2019-20			FY 2020-21		FY 2021-22	
	FY 2017-18	FY 2018-19	Budget	Nov19	COVID	Nov19	COVID	Nov19	COVID
Full-freight	1,400,326	1,445,177	1,477,270	1,473,734	1,402,543	1,477,385	1,419,208	1,473,769	1,455,619
ECU reduced	273,996	195,544	326,219	202,057	135,435	219,661	219,685	242,667	242,691

Regional System Fee Revenue **(millions unless otherwise indicated, nearest $10K)**

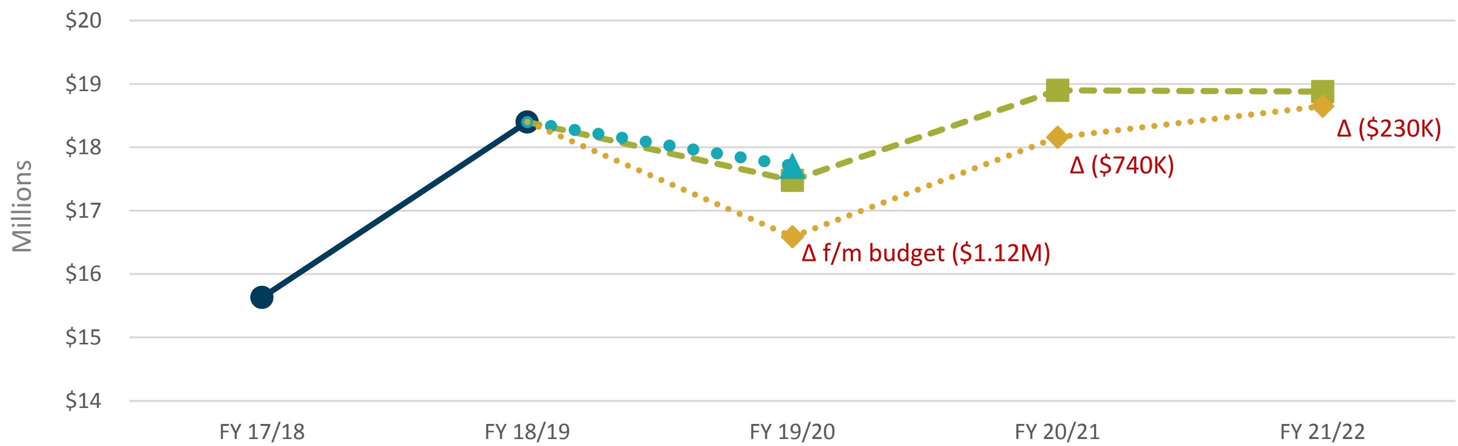


	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22
Actuals	$26.06M	$26.23M			
Budget			$28.26M		
Nov 19			$27.89M	$35.96M	$35.93M
COVID			$26.40M	$34.57M	$35.50M

Excise Tax Revenue (Tonnage)

	<----Actuals		Forecasts---->						
			FY 2019-20			FY 2020-21		FY 2021-22	
	FY 2017-18	FY 2018-19	Budget	Nov19	COVID	Nov19	COVID	Nov19	COVID
Full-freight	1,420,785	1,466,723	1,502,310	1,492,911	1,422,109	1,498,043	1,439,027	1,494,939	1,476,322
ECU reduced	273,996	195,544	326,219	202,057	135,435	219,661	219,685	242,667	242,691

Excise Tax Revenue (millions unless otherwise indicated, nearest $10K)



	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22
Actuals	$15.63M	$18.40M			
Budget			$17.71M		
Nov 19			$17.48M	$18.90M	$18.88M
COVID			$16.59M	$18.16M	$18.65M