



Spring 2023 Solid Waste Forecast

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Forecast Summary

With inflation still high, the conditions supporting household wealth and construction remain weak. Regional waste should continue to decline through the first quarter of 2024.

Economics

Consumer Sentiment: The index of consumer sentiment, a measure of how consumers feel about the economy as it pertains to them, has been exhibiting an uneven, although upward trend since the middle of last year. In the near-term, high borrowing costs and slow economic growth create some setbacks for consumers, but the outlook is for continued consumer optimism as inflation continues to ease.

Inflation: The US Consumer Price Index has shown signs of easing, but remains high despite Federal Reserve (FED) actions to raise interest rates. One problematic area has been with rent inflation, which was triggered by interest rate increases that made home ownership less affordable. Financial conditions will thus remain tight for the remainder of this year in order for the FED to stay the course on its price stability mandate.

Gross Domestic Product (GDP): The top concern for the Federal Reserve is quelling inflation, and the way to do that is to engineer slower growth. Additional interest rate hikes and tighter financial conditions are expected, but the US should avoid an outright recession. Growth ahead will be more subdued for a lengthier period to tame inflation.

Employment: The labor market has proven to be more resilient than expected. Nonfarm payroll in the Portland region is solidly above its pre-pandemic peak. Unemployment is expected to increase but it will be more gradual in the current outlook. Job growth will see a pause, rather than an outright decline.

Mortgage rates: Mortgage rates hit 7% in early March ahead of the FED's announced rate increases, and they may yet rise further on future actual or anticipated hikes. However, the longer term outlook is to see mortgage rates ease as inflation gradually, and eventually subsides.

Housing and Construction: While it's too early to tell if the housing market is or will soon rebound, there is some evidence that things are getting better. Buyers, who had been priced out by last year's surge in mortgage rates and home prices, began returning to the market, and prices indexes have shown some easing. Builder sentiments also increased for the fourth month in a row.

Forecast Summary

Solid Waste

Regional Waste Outlook: Tons of regional solid waste increased by 5% coming out of the pandemic-induced recession which ended in the second quarter of 2020, and hit about 1.48 million tons in 2021. Starting in the fourth quarter of 2022, however, tonnage declined over 2% on a year-on-year (yoy) basis, and fell another 5% in the first quarter of 2023. Although consumer sentiment is poised to increase, it is still at very low levels, and mortgage rates have been on the rise. These factors led to the expected downturn in tonnage. Looking ahead, there aren't many supportive factors for tonnage growth, at least in the near-term. Yes, consumer sentiment is on the rise, GDP growth is weak but steady, and mortgage rates should ease in 2024. But real home prices (a major household wealth indicator) should fall and the construction sector (both in terms of employment, and permit activities) should continue to decline. It is therefore likely that the declines in tonnage growth we have been seeing since late last year will continue through the first quarter of 2024.

Source-Separation: In addition to the economic factors, the forecast continues to include additional food waste capture from the Business Food Waste Program, when the largest generators are expected to be in compliance starting September 30, 2023. The BFWP recovery should begin modestly, with about 6,000 additional tons this calendar year 2023 and grow from there. By the beginning of 2025, the quantity of additional capture should reach 27,000 tons per year. The forecast also includes additional residential food capture from a new curbside program in Tigard. Tigard has approximately 20,000 households and should capture an additional 500 tons of food waste per year. This assumption was not part of the fall 2022 forecast.

Waste Distribution: As reported last quarter, private facilities have been using less than their full wet waste tonnage allocations. In fall 2022, the forecast (which set the allocations for this calendar year 2023) expected that facilities would use about 98% of what they were given. This forecast lowers that expectation to a little over 93%. The portion of allocations that private facilities do not use will ultimately flow back to Metro facilities. The result is that Metro stations should see significantly more waste this fiscal year 2022-23, and should receive more than 40% of the regional wet waste this calendar year 2023, despite the economic headwinds. Other than more wet waste, Metro's shares of other waste types, namely dry, commercial and residential organics should remain roughly the same as current levels.

Post-Collection Recovery: Average regional mixed-waste recovery rates at private facilities stand at about 14% and are expected to remain at that level going forward.

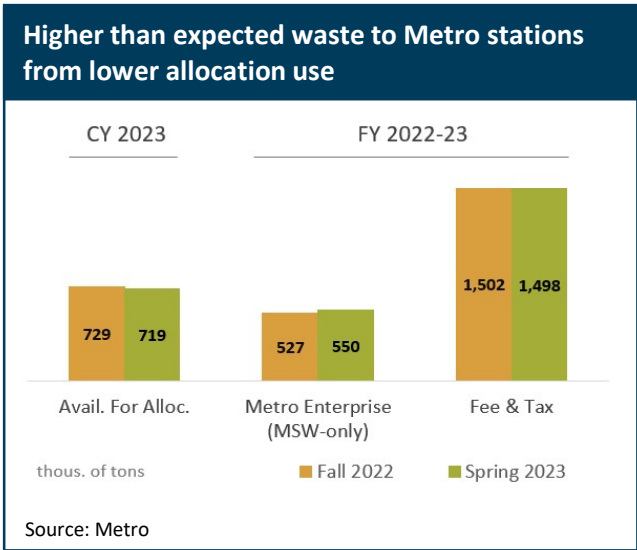
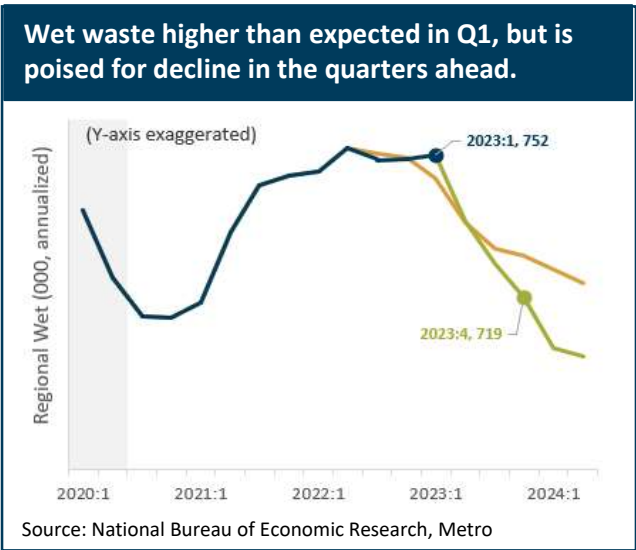
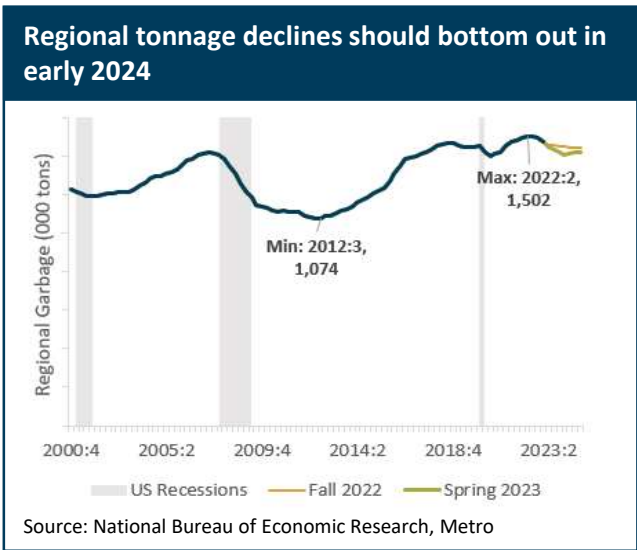
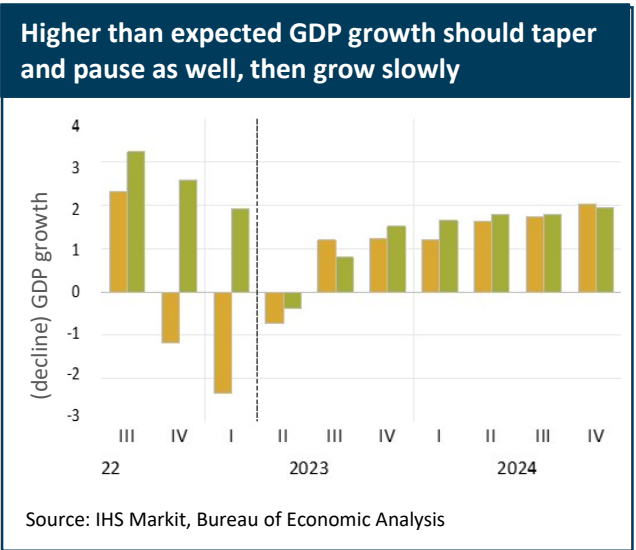
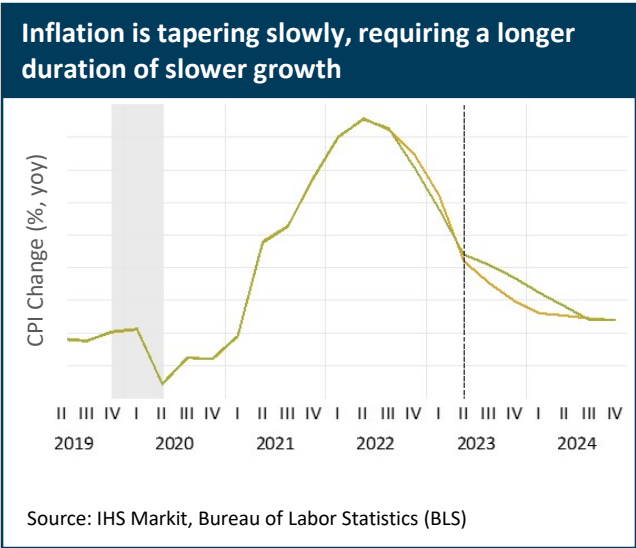
Forecast Flash

	Calendar Quarter					Calendar Year			
	2023:1	2023:2	2023:3	2023:4	2024:1	2022	2023	2024	2025
Key Economic Drivers* (seas-adj)									
Consumer Sentiment Index	64	63	63	66	70	59	64	76	87
yoy change (%)	1.5	8.2	13.2	12.7	8.6	(24.0)	8.7	18.1	15.0
change from fall fc (%)	0.2	(10.5)	(16.5)	(19.2)	(17.5)	1.2	(12.2)	(13.9)	(8.7)
Home Prices (real)	128	128	125	122	121	132	126	120	118
yoy change (%)	(2.5)	(5.5)	(5.9)	(5.8)	(5.2)	5.7	(4.9)	(4.2)	(2.3)
change from fall fc (%)	0.4	2.0	1.2	(0.3)	(0.8)	(0.1)	0.8	(0.1)	(1.6)
Mortgage Rates (real)	6.14	6.43	6.26	6.16	6.02	5.16	6.25	5.74	5.19
yoy change (%)	66.7	26.1	15.2	(4.3)	(2.1)	77.3	21.0	(8.2)	(9.6)
change from fall fc (%)	(3.6)	3.6	4.9	7.6	9.0	1.0	3.0	7.6	4.2
GDP (real, \$T)	20.3	20.3	20.3	20.4	20.5	20.0	20.3	20.6	21.0
annualized change (%)	1.9	(0.4)	0.8	1.5	1.7	2.1	1.4	1.5	1.9
change from fall fc (%)	2.2	2.3	2.2	2.3	2.4	0.3	2.3	2.4	2.3
Construction:Total Emp (ratio)	6.7	6.6	6.5	6.4	6.4	6.6	6.5	6.3	6.3
yoy change (%)	2.5	(0.7)	(1.7)	(2.9)	(4.7)	0.6	(0.7)	(3.2)	(0.9)
change from fall fc (%)	3.7	3.3	3.1	3.8	3.8	0.2	3.5	4.2	4.4
Home Permits (4QMA, thous)	3.3	3.3	3.0	3.0	2.7	13.8	12.6	10.8	12.1
yoy change (%)	(14.7)	(4.2)	(8.8)	(6.8)	(17.8)	(2.4)	(8.8)	(14.1)	11.9
change from fall fc (%)	6.9	5.3	(0.5)	(3.3)	(13.1)	0.4	2.1	(15.6)	(11.2)
Tri-County Core Tons (thous)									
yoy change (%)	(3.6)	(7.0)	(4.5)	(5.6)	(4.3)	0.8	(5.2)	0.4	3.0
change from fall fc (%)	---	(3.9)	(3.9)	(3.7)	(1.5)	0.0	(2.3)	(1.5)	0.1
Wet Tons Avail. For Alloc. (thous)									
yoy change (%)	1.6	(8.2)	(5.6)	(4.4)	(7.5)	0.5	(4.2)	(2.4)	0.6
change from fall fc (%)	---	(3.2)	(3.2)	(2.9)	(1.9)	(0.0)	(1.3)	(2.0)	(1.7)
	Calendar Quarter					Fiscal Year (ending)			
	2023:1	2023:2	2023:3	2023:4	2024:1	2022	2023	2024	2025
Metro Enterprise Tons									
MSW (thous)	135	136	138	131	129	576	550	537	550
yoy change (%)	(1.5)	(6.1)	(4.2)	(2.0)	(4.6)	5.8	(4.7)	(2.2)	2.3
change from fall fc (%)	---	(1.8)	(2.0)	(1.1)	1.0	0.0	4.4	(0.4)	1.5
Res. Organics (thous)	9.0	16.6	11.6	13.1	8.9	47.6	47.4	50.3	50.4
Com. Organics (thous)	3.0	3.8	4.2	4.1	6.4	11.1	13.0	21.2	29.0
Wood (hunds)	1.8	3.8	4.3	3.4	2.9	19.3	11.4	14.0	13.3
Yard debris (thous)	2.8	5.8	4.0	4.1	3.0	16.9	15.6	16.8	16.7
Staffed (thous)	70	88	91	66	70	343	325	319	335
Automated (thous)	29	30	30	29	29	120	119	119	124
Regional Fee/Tax Revenue Tons									
Regional System Fee (thous)	367	360	367	347	348	1,509	1,485	1,431	1,469
yoy change (%)	(1.2)	(7.1)	(6.6)	(5.2)	(5.1)	5.0	(1.6)	(3.7)	2.7
change from fall fc (%)	---	(3.9)	(4.0)	(3.7)	(1.2)	0.0	0.3	(2.6)	(0.6)
Excise Tax (thous)	372	365	372	352	353	1,528	1,506	1,451	1,490
Environmental Cleanup (thous)	39	49	55	48	46	244	173	197	200
Community Enhancement (thous)	266	285	278	271	257	1,147	1,110	1,096	1,117

* Forecasts are from IHS/Markit and Northwest Economic Research Center

Forecast Flash

Color Key:



Key Assumptions

	Current Forecast	Change from Fall 2022 Forecast
Consumer Sentiment	Growth of 9% in 2023, 18% in 2024 and 15% in 2025	Lower outlook
Real (inflation-adjusted) home prices	Declines of -5% in 2023, -4% in 2024, and -2% in 2025	No change 2023 and 2024, lower outlook in 2025.
Real (inflation-adjusted) mortgage rates	Increase of 21% in 2023, and then declines of -8% in 2024, and -10% in 2025	Higher outlook
Real (inflation-adjusted) GDP	Increases of 1.5% in 2023 and 2024, 2% growth in 2025	Higher outlook
Ratio of Portland MSA construction to total employment	Declines of $-\frac{3}{4}\%$ in 2023, -3% in 2024, and -1% in 2025	Higher outlook
Portland MSA home permits	Declines of -9% in 2023 and -14% in 2024, followed by increases of 12% in 2025	No change in 2023, lower outlook in 2024 and 2025

Key Assumptions

	Current Forecast	Change from Fall 2022 Forecast
Additional commercial food waste capture	Business Food Waste Program Groups 1 and 2 in compliance by Sept. 30, 2023. Group 3 in compliance by Sept. 30, 2024.	No change
Additional residential food waste capture	City of Tigard's 20,000 households will start capturing an additional 500 tons per year of food.	Higher outlook
Wet waste utilization	93 ½% in 2023 and beyond	Lower outlook
Metro dry waste share	35% in 2023 and beyond	No change
Metro organics waste shares	Residential share 33%, commercial share 61%	No change
Private facility mixed dry waste recovery	14% in 2023 and beyond	Lower outlook
Pre-consumer "special" wastes	Flat in 2023, and then grows slightly (3%) in 2024 and beyond	No change