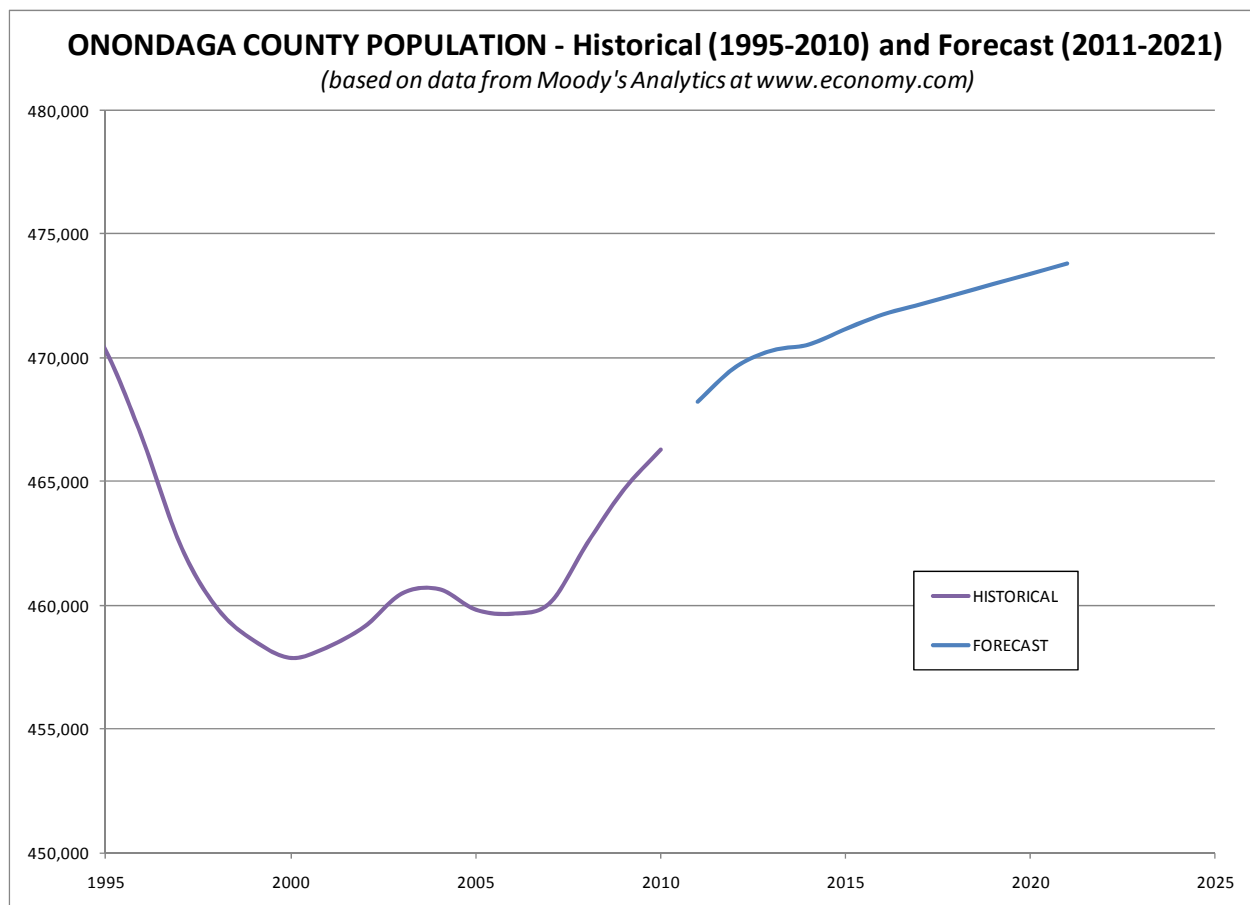


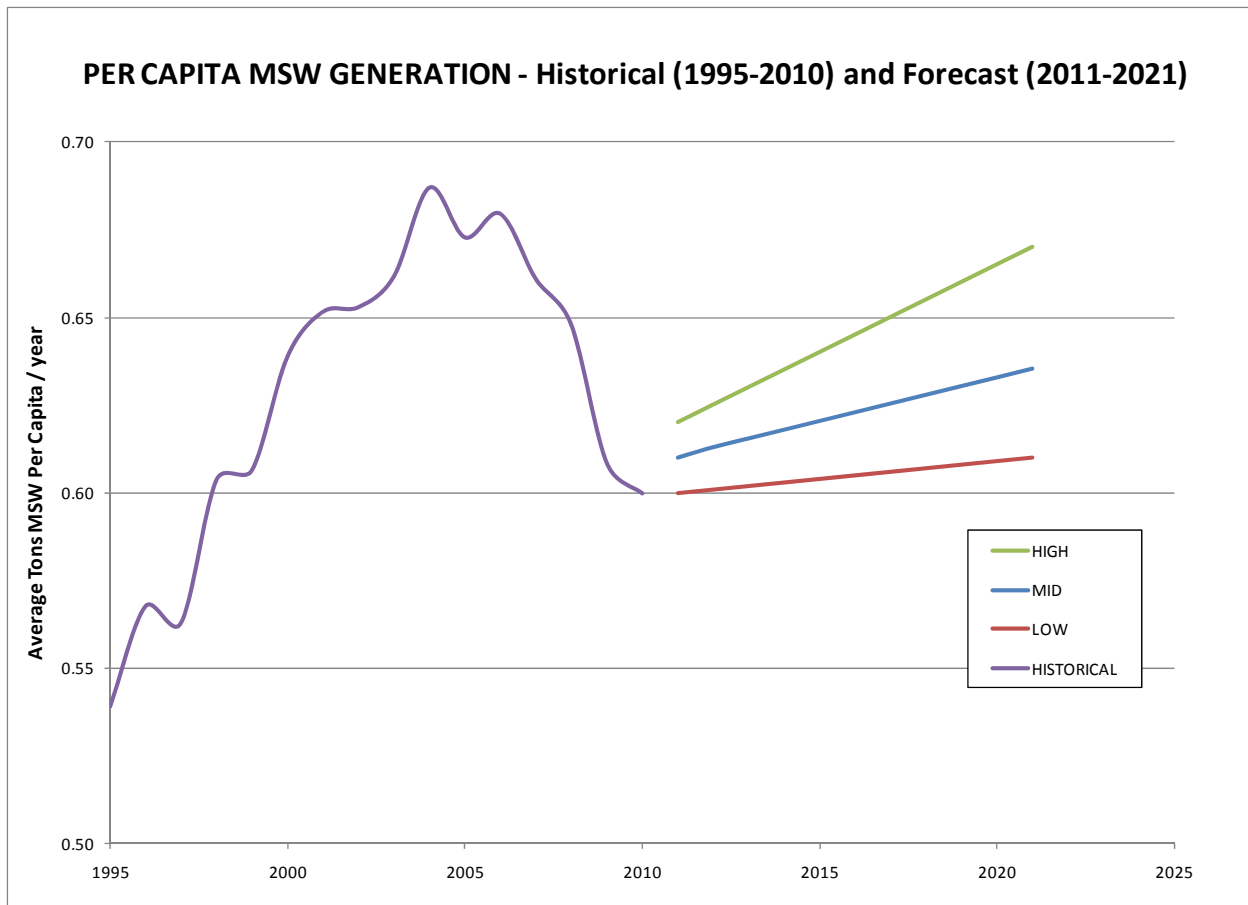
OCRRA's Forecast for MSW Generation

There's no question that the recent economic recession has had a significant impact on the generation of residential and commercial municipal solid waste (MSW). Across the nation, solid waste managers noted a steep decline, similar to what OCRRA observed. With less disposable income, people buy and, ultimately, dispose of less. With some financial experts predicting that the economy may not rebound for several years, it's difficult to forecast what will happen with MSW generation in the next decade. However, for planning purposes, this analysis tries to do just that.

Given the uncertainty associated with the economy, this forecast includes low, mid, and high MSW generation estimates that take into account population growth and estimated per capita MSW generation rates. Population data (historical and forecast) is from Moody's Analytical (www.economy.com). It indicates very slow population growth (averaging about 0.15% per year) for Onondaga County over the next decade (see graph below).



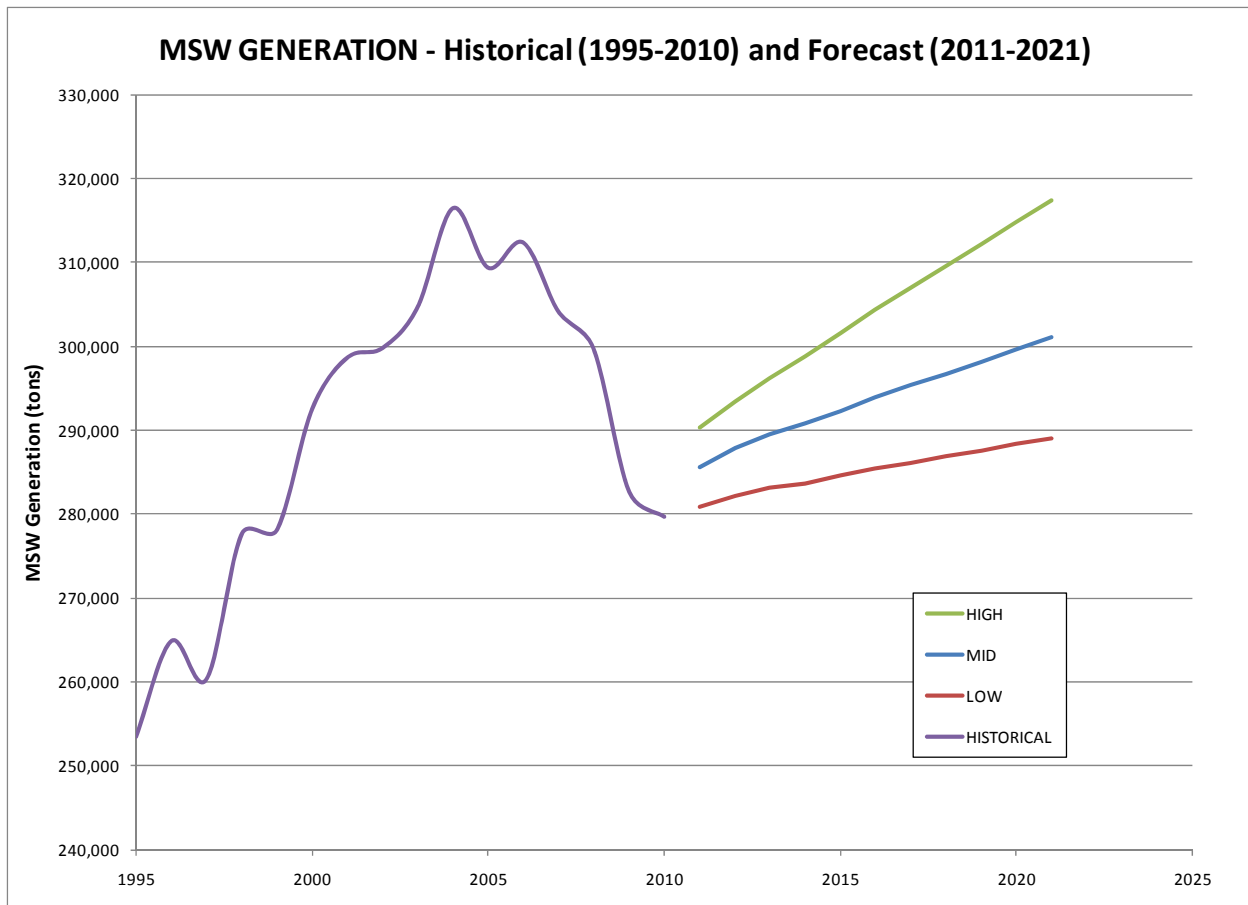
Historical per capita MSW generation rates were calculated using the Moody's Analytics population data and OCRRA's total system MSW data. From 1995 until about 2005, per capita MSW generation increased significantly. However, over the past five years, per capita MSW generation rates have been declining – likely due to the state of the economy.



Future per capita MSW generation rates are estimated as low, mid, and high. The low generation rates correspond to a very slowly recovering economy, with an average per capita generation rate of about 0.61 tons MSW per capita per year. The low generation rate indicates permanent changes in habits of consumption and disposal – people buying (and disposing of) less “stuff” for the decade to come. Some experts are, in fact, predicting that the old consumer economy is gone. According to an article in the New York Times (“We’re Spent,” 7/17/2011), “... consumer spending will not soon return to the growth rates of the 1980s and ‘90s.”

The mid generation rates correspond to a moderate economic recovery over the next decade, with consumer confidence and spending increasing slowly – but not to historical highs. The average mid generation rate for the next decade roughly equals the average generation rate for the previous decade. This is perhaps the most likely scenario. Lastly, the high generation rates correspond to a complete economic recovery – with consumer spending (and disposal) rates returning to their historical highs. This is probably the most unlikely scenario, but it remains a possibility.

OCRRA’s MSW generation forecast for the next decade combines the Onondaga County population growth forecast with the per capita MSW generation predictions, ultimately resulting in a reasonable range of estimated tonnage. While this range takes into consideration OCRRA’s current recycling efforts, it does not take into account potential future waste reduction and recycling opportunities.



In addition to developing this MSW generation forecast, OCRRA evaluated the historical correlation of MSW generation with other economic indicators, such as retail sales, real gross domestic product (GDP), total employment, rate of unemployment, and per capita or household income. Unfortunately, none exhibited a strong correlation with MSW generation.

The table below provides the annual estimates for total MSW generation in the OCRRA system, based on the model developed using population growth and per capita MSW generation rates. Given the uncertainty with respect to economic recovery, this reflects OCRRA’s best prediction of MSW generation for the next decade.

	LOW	MID	HIGH
2011	280,900	285,600	290,300
2012	282,200	287,900	293,500
2013	283,100	289,500	296,300
2014	283,700	290,800	298,800
2015	284,600	292,300	301,500
2016	285,400	293,900	304,300
2017	286,100	295,300	306,900
2018	286,800	296,800	309,500
2019	287,600	298,200	312,200
2020	288,300	299,700	314,800
2021	289,000	301,100	317,400