

FORECASTING GARBAGE DISPOSAL

Transfer Plan Review Workshop 1

July 26, 2013



Department of Natural Resources and Parks

Solid Waste Division

Forecasting Methodology

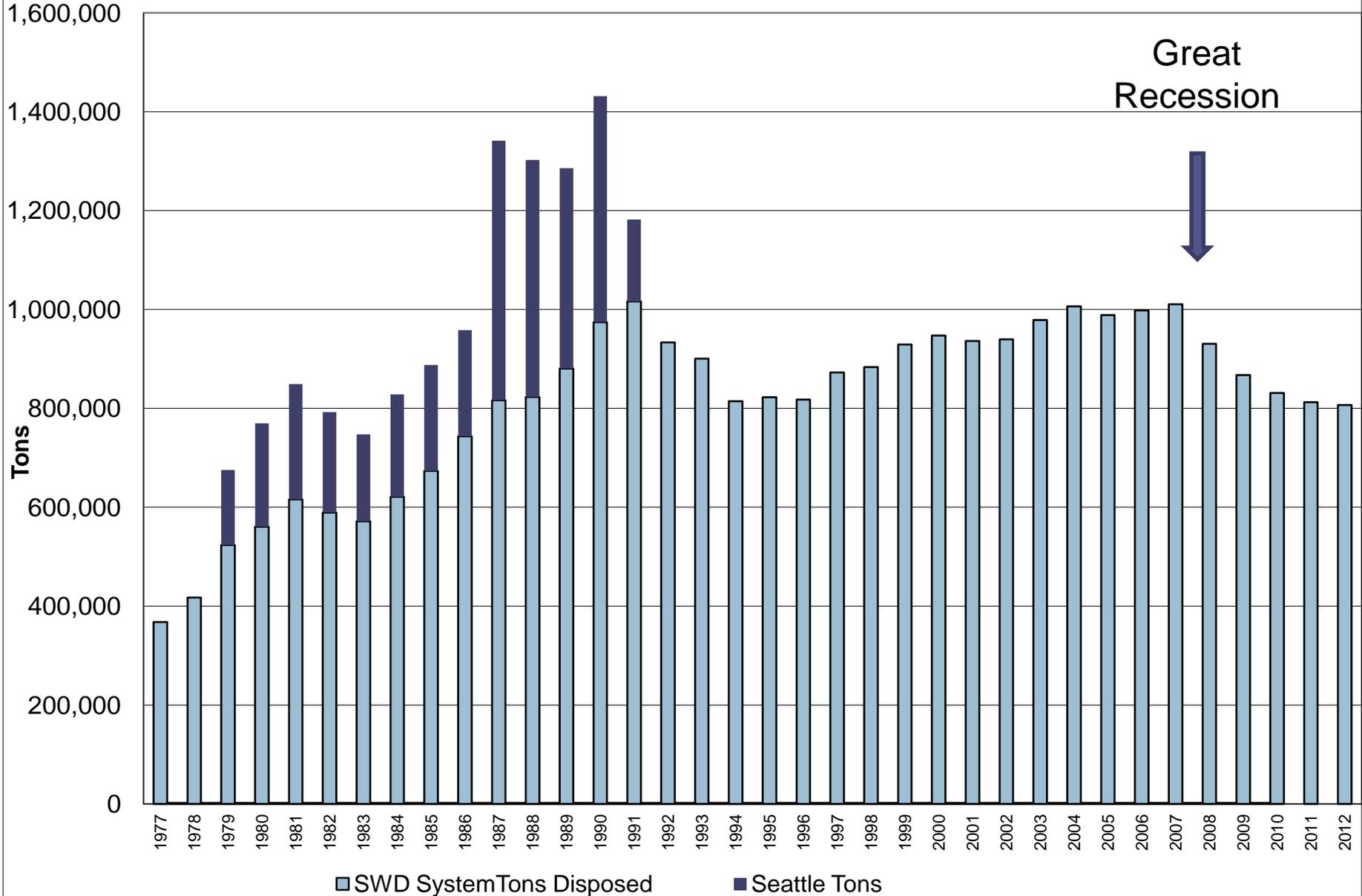
Tonnage is forecasted in a multi-step process

- Annual tonnage growth based on a regression model that linked garbage tons to population, jobs, income, household size, and tip fee is unsuitable after Great Recession
- Recession impact: 20 percent loss of tonnage resulted in lower absolute levels, slow recovery, lower rates of overall growth due to higher ecological efficiency in non-residential sector
- Adjust for recession impact over 7 to 10 years. 2008 to 2017 flat, slow growth
- Adjust for increased recycling rate by one percent per year up to 70 percent and switch to model based on estimated generation
- Adjust for other materials potentially collected
- Adjust for changes in system configurations

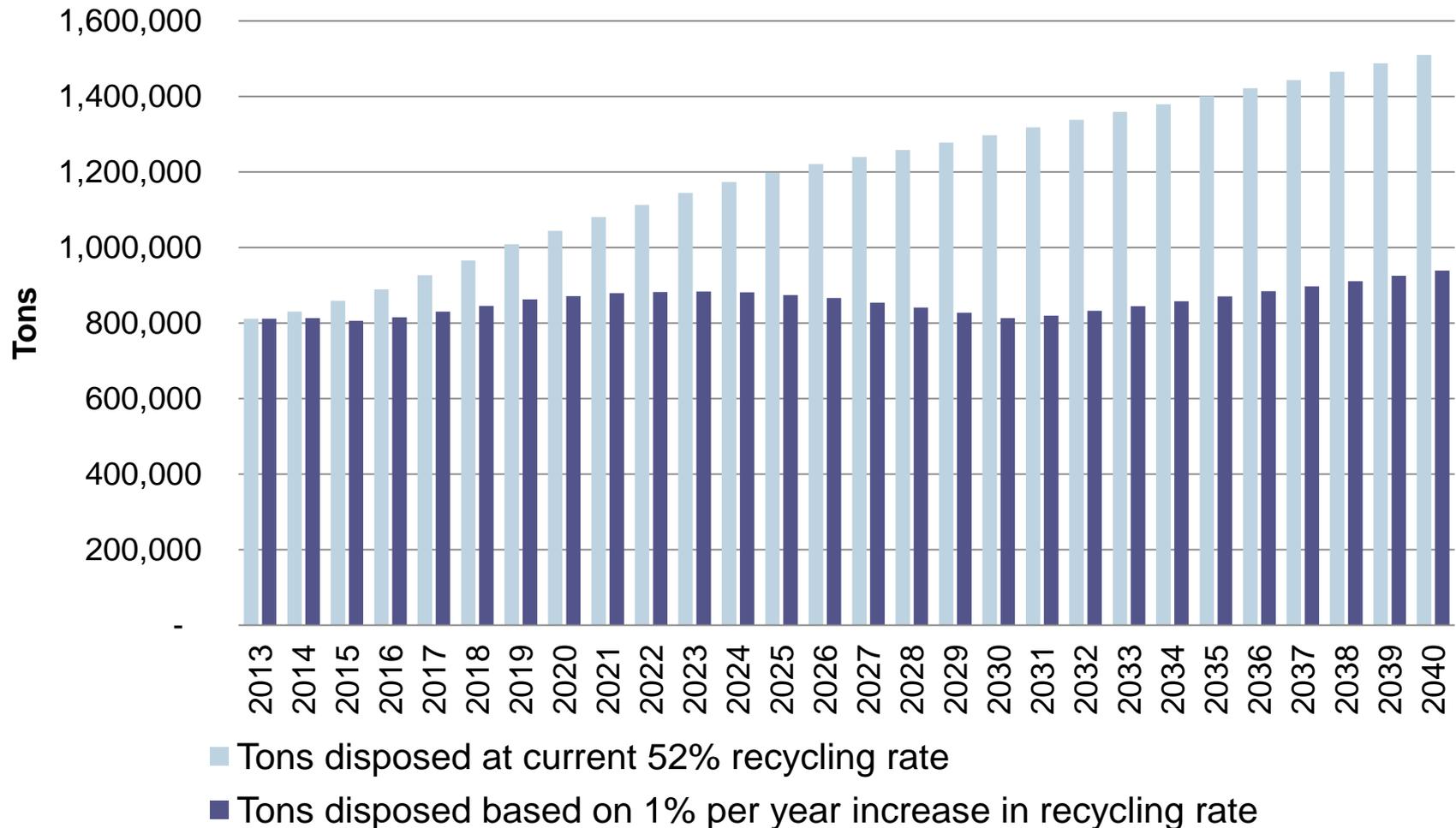
Sources for Forecasting

- Disposal tonnage (SWD)
- Recycling (SWD/Hauler Data/Survey WA Ecology)
Assumption: one percent increase per year until we reach 70 percent
- Disposal + Recycling = Generation: + 86 percent (2040)
- Demographic/Economic Data
 - Population (Puget Sound Regional Council) + 25 percent (2040);
0.83 percent per year
 - Employment (Puget Sound Regional Council 2006) + 46 percent
(2040), 1.27 percent per year
 - Real per capita income (Conway 2013) + 66 percent (2040),
1.9 percent per year

Total Tons Disposed SWD System 1977 - 2012

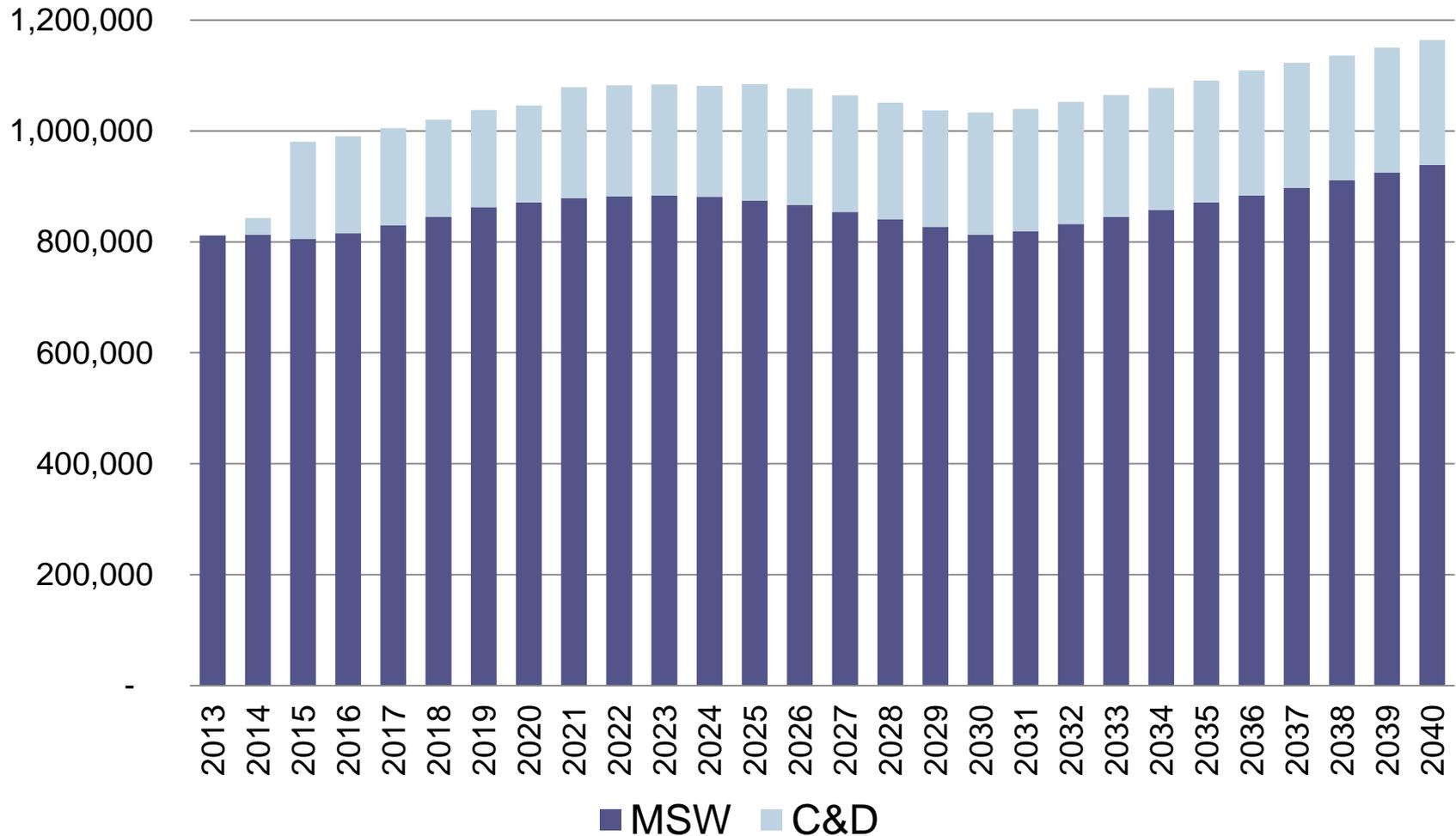


Tons of Waste Disposed: Current vs. Increasing Recycling Rate



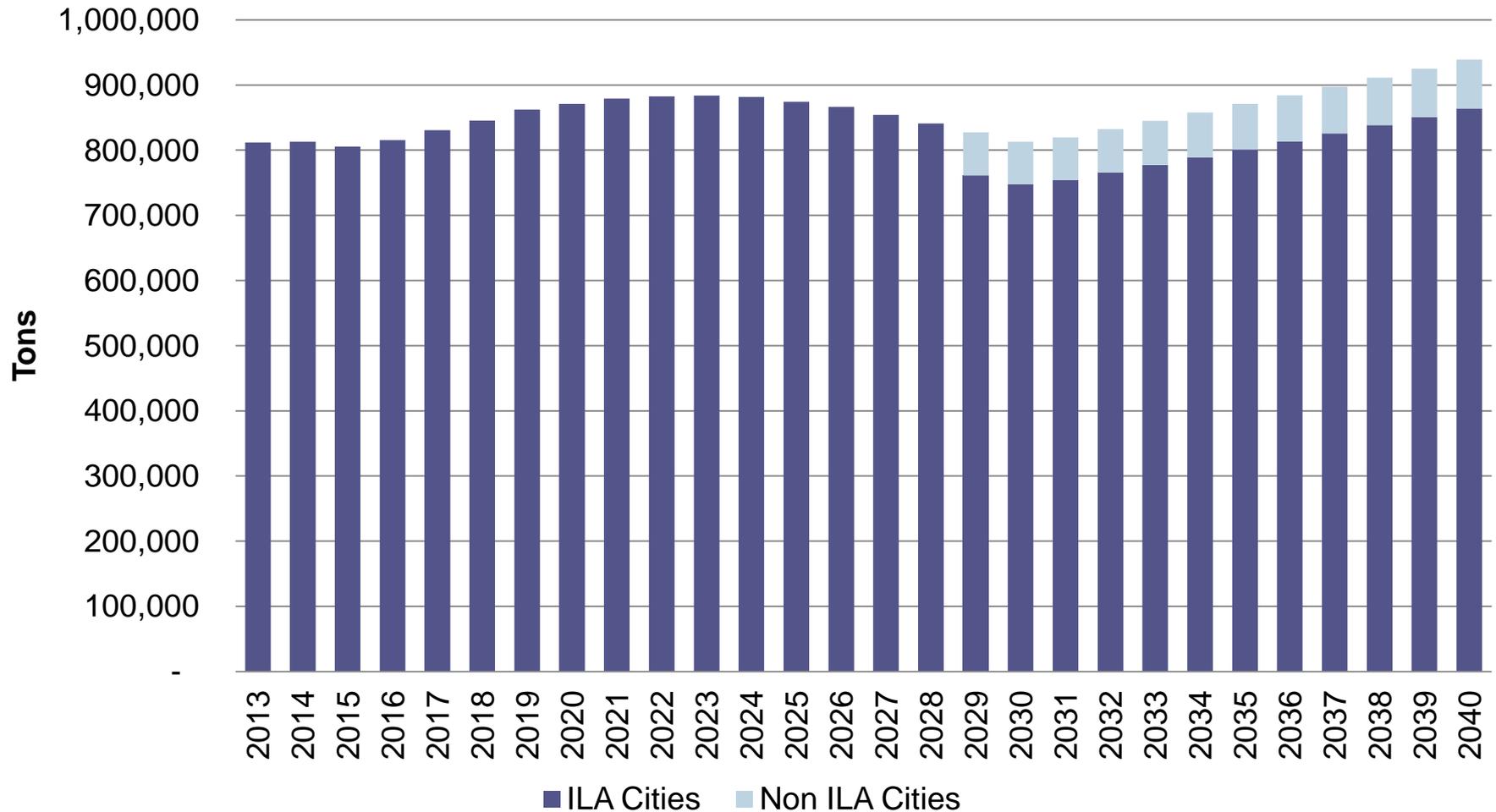
Forecast: Garbage and Construction & Demolition Debris

Assumption: Potential system capacity for 175,000 tons C&D per year starting 2014



Long-term Tonnage Forecast of Waste Disposed

Assumptions: 1 percent recycling rate increase per year to 70 percent
 8 percent of total garbage tons from Bellevue and 4 point Cities





King County

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