



Population and Economic Forecast and Selection of Discount Rate

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Population Forecast

- Used in the baseline forecast of greenhouse gas emissions and in evaluating mitigation options
- Discussed in several WGs considering following sources:
 - **EIA**
 - **Charles Colgan, University of Southern Maine**
 - **Maine State Planning Office**



Population Forecasts

	EIA's Annual Energy Outlook 2004 [1]	Charles Colgan, USM [2,3]	Maine State Planning Office [2]
Forecast Period	2004-2025	2004-2025	2004-2017
POP (low)	0.60%	1.00%	
POP (med)	0.80%	1.15%	0.70%
POP (high)	1.00%	1.30%	

[1] National

[2] State of Maine

[3] Preliminary



Population Forecast

- The Building Facilities Manufacturing Work Group felt most comfortable with the Charles Colgan's mid-range forecast
 - **used Maine data**
 - **covered the time period of the analysis**
- This was supported by the Energy and Solid Waste Working Group.



Economic Forecast

- Used in the baseline forecast of greenhouse gas emissions and in evaluating mitigation options
- Discussed in several WGs considering following sources:
 - **EIA**
 - **Charles Colgan, University of Southern Maine**
 - **Maine State Planning Office**



Economic Forecasts

	EIA's Annual Energy Outlook 2004 [1]	Charles Colgan, USM [2,3]	Maine State Planning Office [2,3]
Forecast Period	2004-2025	2004-2025	2004-2007
GDP (low)	2.40%	3.0%	
GDP (med)	2.97%	3.5%	2.85%
GDP (high)	3.45%	4.0%	

[1] National Gross Domestic Product

[2] Gross State Product

[3] Preliminary



Economic Forecast

- The BFM Work Group felt most comfortable with the Charles Colgan's mid-range forecast
 - **used Maine data**
 - **covered the time period of the analysis**
 - **However, interested in breaking out industrial component of GSP forecast (no growth expected)**
- This was supported by the Energy and Solid Waste Working Group.



Discount Rate

- The Maine DEP has recommended the use of a consistent discount rate across all sectors (e.g., transportation, industry, residential, etc.)
- Consistency is important for policy analysis as it allows decision-makers to compare the cost-effectiveness of different measures across various sectors.



Discount Rate

Source	Rate
Federal Reserve Prime Rate (5 yr avg)	6.58%
Federal Reserve Prime Rate (Current)	4.12%
OMB recommendation for regulatory analysis	7%
Approx. State discount rate	5%
Maine recommendation for regulatory analysis	None known
Rhode Island's Legislature's Policy Offices	5%



Discount Rate

- BFM WG pointed out that the private sector uses higher discount rates to evaluate investments
 - **capital constraints**
 - **preference for short payback periods**
 - **high internal rates of return that are often required**
- Application of a private discount rate might be more appropriate in the future during the stage of final program design
 - **Current process will not determine sector making investment (i.e., gov't or private)**