

Infrastructure Analysis and Costing Update: Sustainable Return on Investment

March 15, 2022





Sustainable Return on Investment (SROI)

Framework to quantify environmental, social, and economic impacts of each scenario (Triple Bottom Line)

Quantify costs and benefits that are not traditionally accounted for in a traditional analysis

High-level analysis to be built upon as scenarios are refined

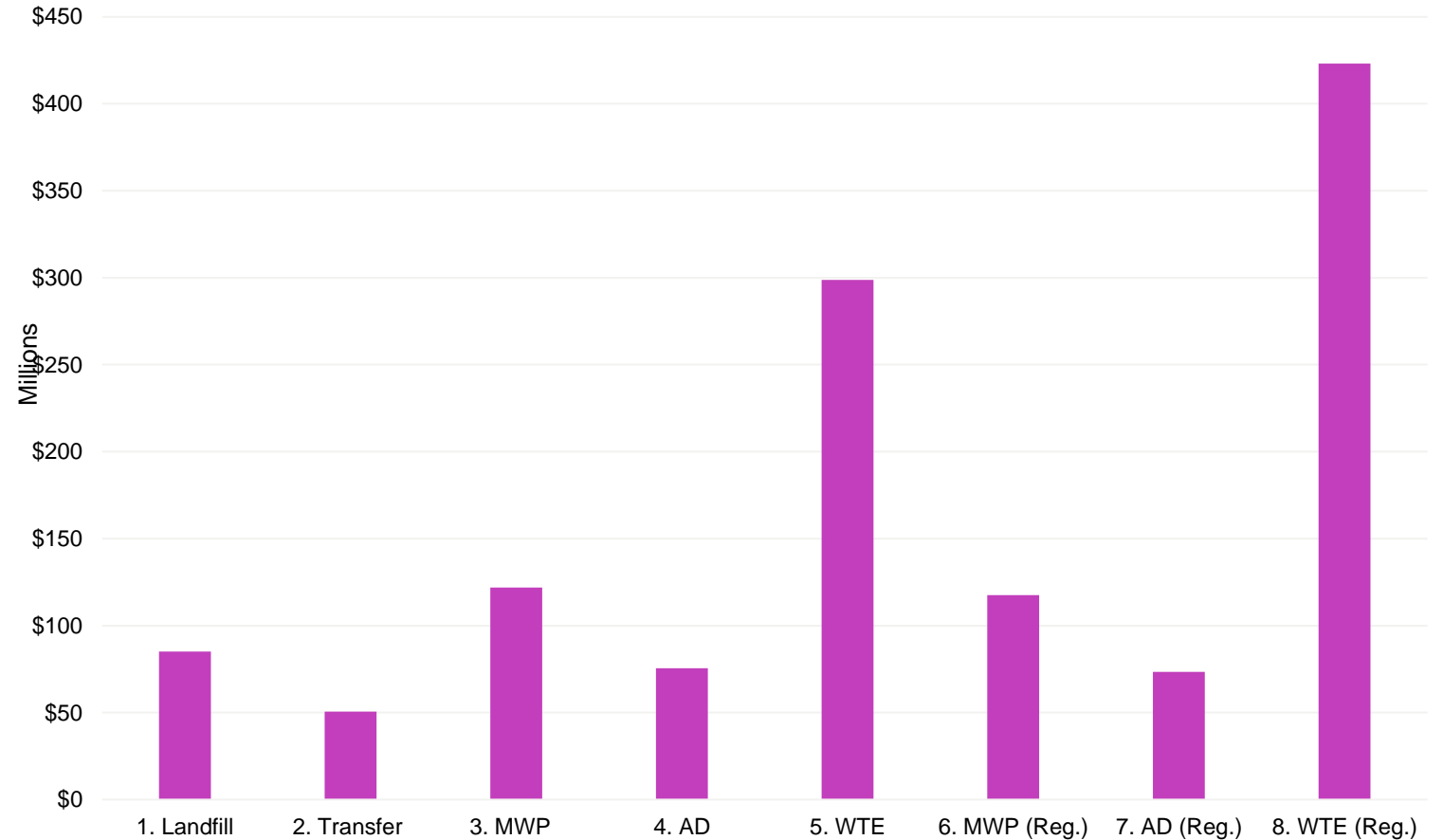


Calculating SROI



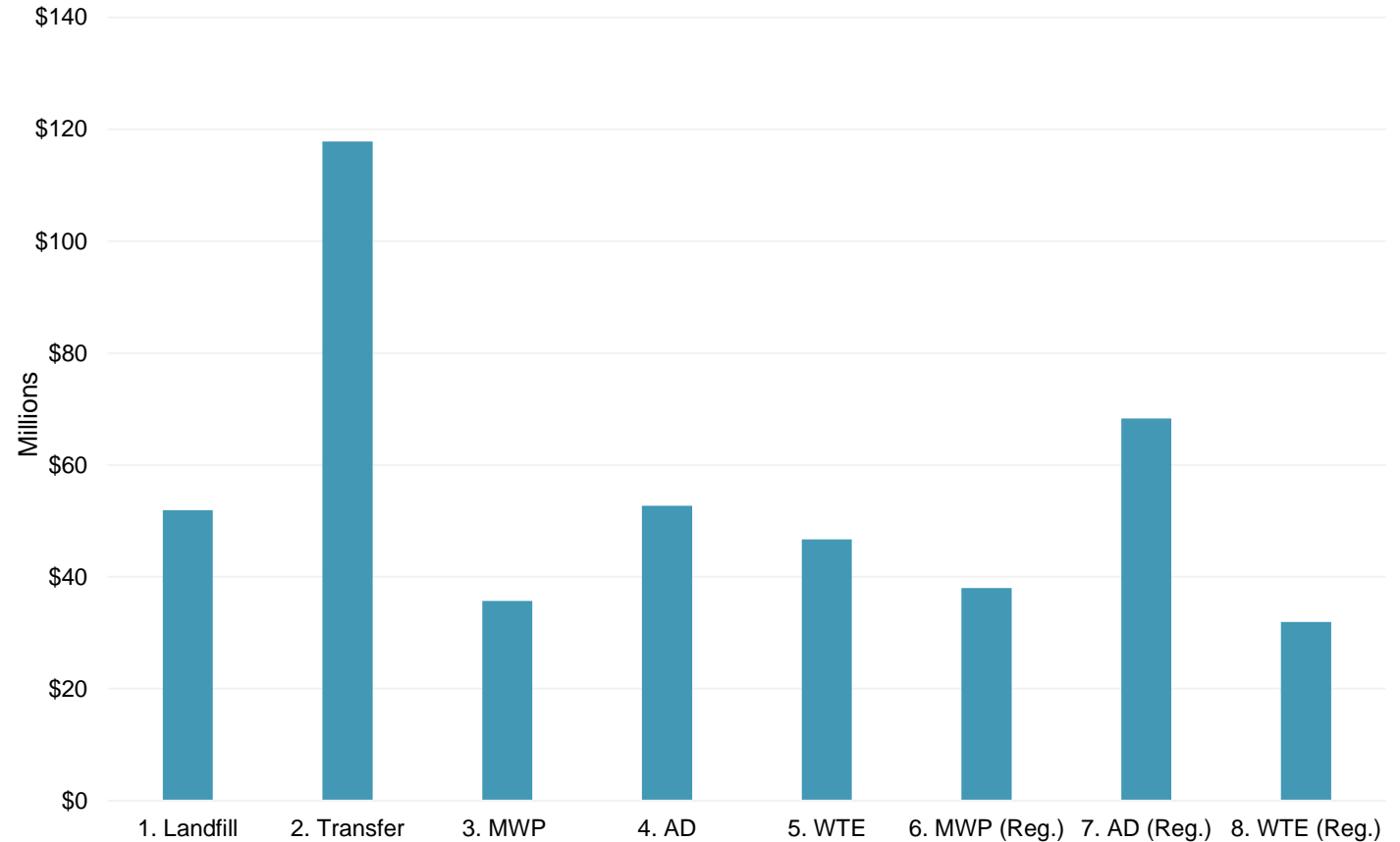
Net Capital Project Costs (Cash)

- 50-year cost for capital costs for building each scenario



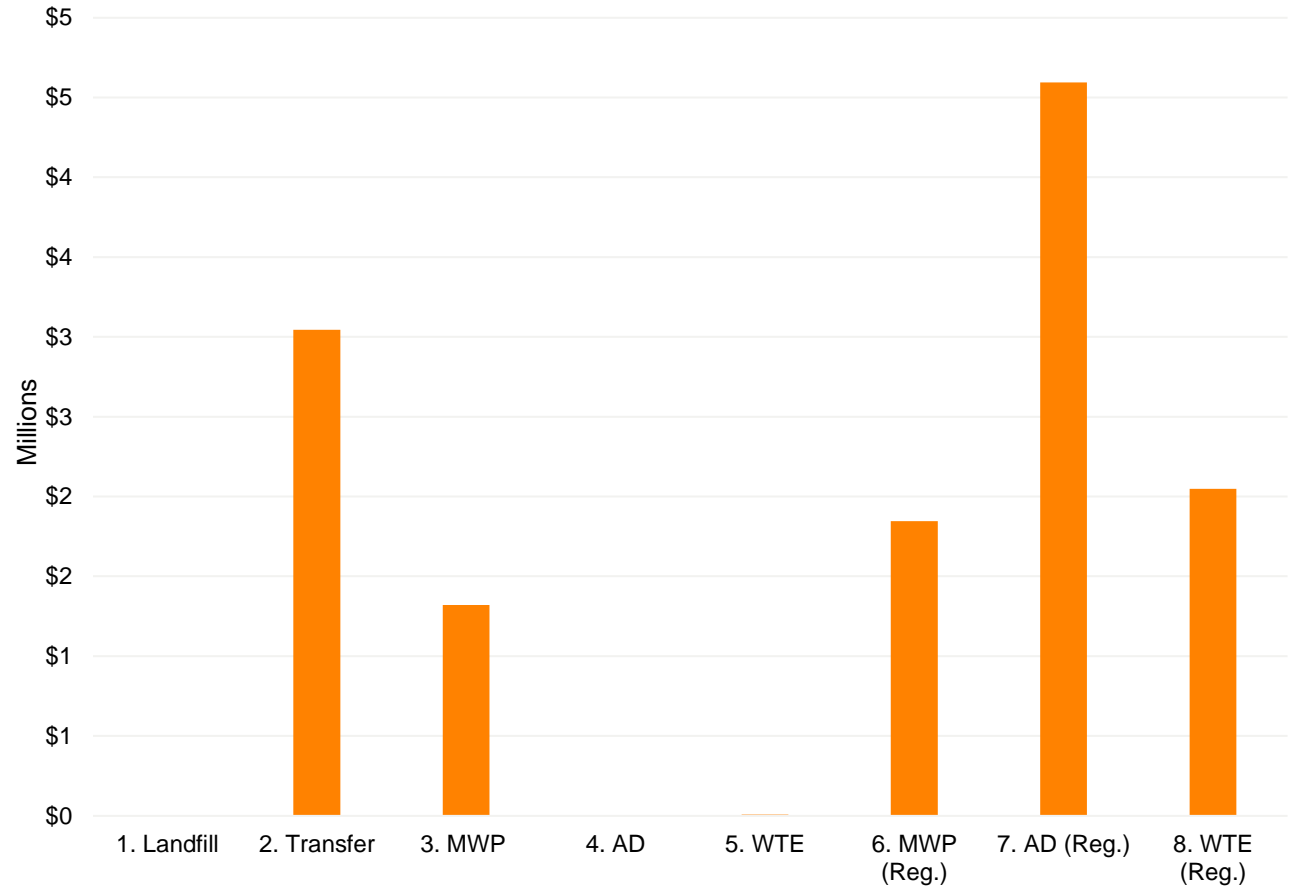
Net Economic Costs & Benefits (Cash)

- User costs from material handling
- Revenues from material handling byproducts
- Revenue from excess energy exported to the grid
- Cost of electricity purchased
- Residual value of capital investments



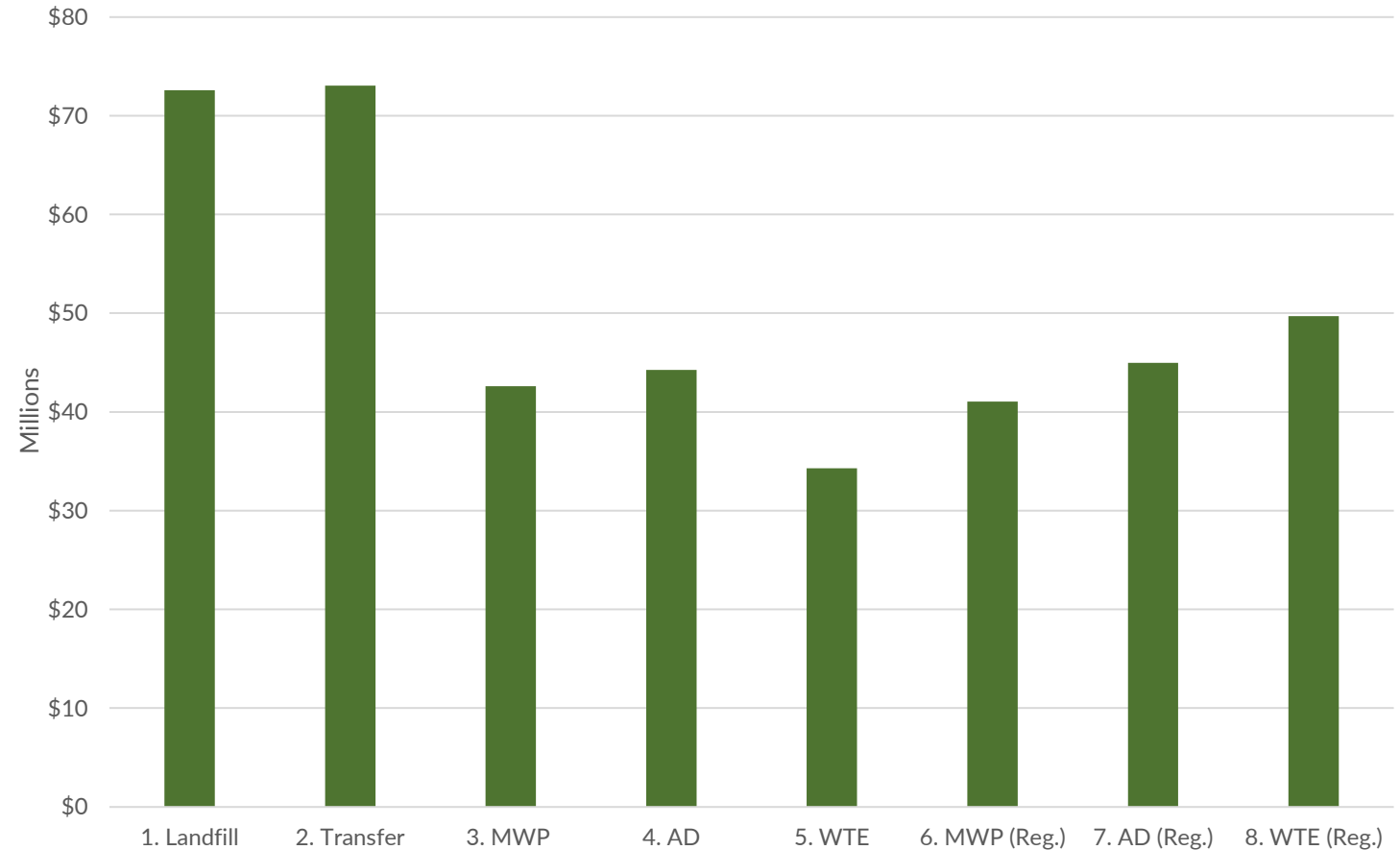
Net Transportation Costs & Benefits (Non-Cash)

- Cost of pavement damage from transportation of waste
- Vehicle operating costs for transporting waste
- Accident costs from transportation of waste

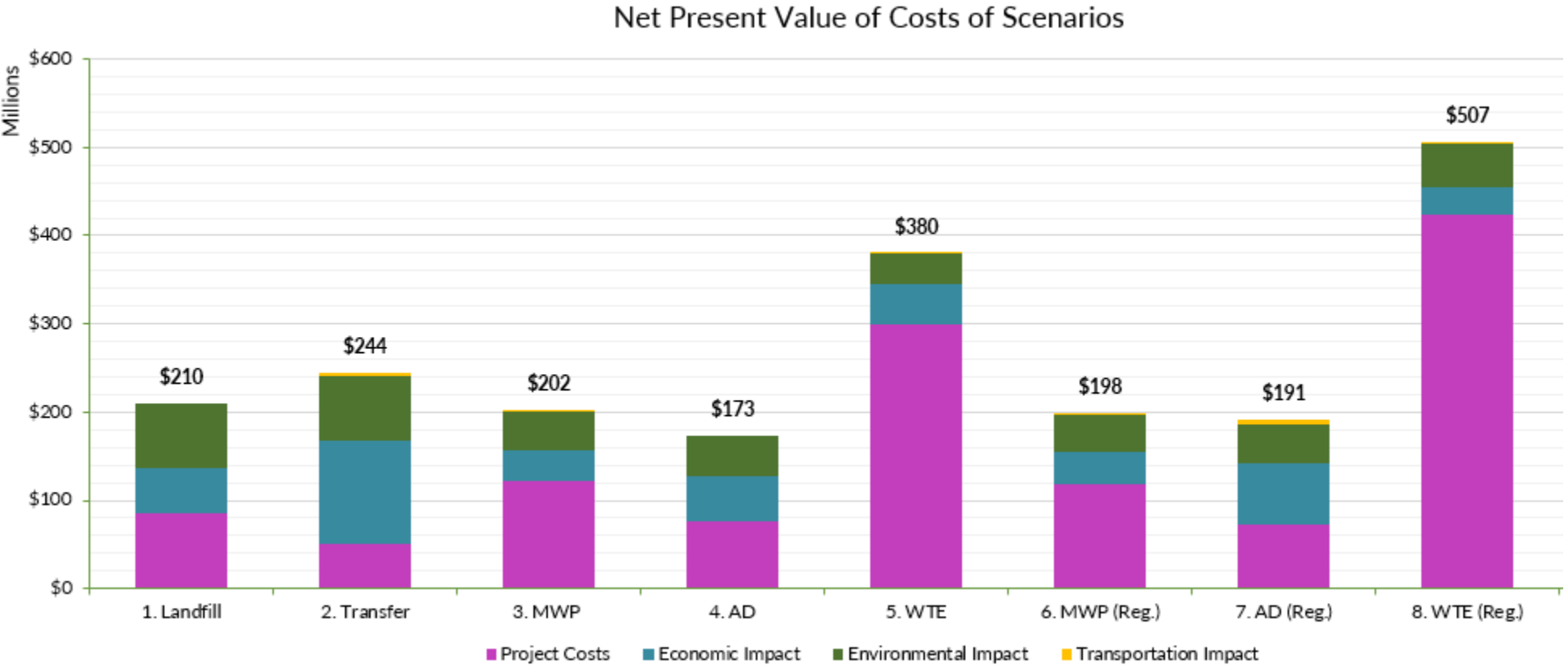


Net Environmental Costs & Benefits (Non-Cash)

- Reduced greenhouse gas emissions from electricity generation
- Reduced air contaminant emissions
- Cost of greenhouse gas emissions from waste management
- Cost of greenhouse gas emissions from transportation



Net Present Value of Costs of Scenarios



Findings – SROI Analysis

- All the scenarios have economic and environmental impacts
- Emissions from landfills when not owned by the Agency are not included and would add to overall environmental impacts of Scenarios 2, 6, 7 and 8
- Scenario 4 has the lowest combined cost (including project costs, economic impact, environmental impact, and social impact)

Next Steps

- **Environmental Justice:** Evaluate potential impacts of each of the new solid waste system scenarios to understand
 - Impact in environmental justice tracts
 - Potential risks and impacts
- **Engagement:** Host meetings with public, business, and regional stakeholders
 - Public Meetings in April and May
- **Board Workshop:** Funneling discussion that brings together costing, SROI, Environmental Justice, and engagement input.