

Project Details

Budget: A draft proposed budget is outlined separately. Costs are based on projections of the following key expense categories to fulfill the goals of the project:

Project Scope: The goal of this project is to effectively and sustainably reduce unacceptable recycling set outs in 3 to 5 curbside recycling routes in each of up to 8 participating municipalities. Data from audits of the targeted routes (approximately 32) and qualitative input from MRF Operators, as well as socio demographic information will be gathered to develop a customized behavior change strategy for each route. To reduce incorrect set out behavior the Project will utilize key environmental behavior research* and best practices, including the following:

- 1) **Messaging:** Develop and ensure message content (what and how to recycle properly) is correct, understandable to the targeted recycling households and businesses and consistent to meet MRF processing requirements and is accessible to all on route. The most common and problematic contaminants will be identified and targeted for more aggressive messaging. To address varying acceptable materials in different municipalities, an online application or similar tool will be researched for address based information about each address's recycling day, and acceptable materials list.
- 2) **Convenience of recycling to households/businesses on routes:** Ensure collection services are being delivered reliably and consistently to all parts of the routes.
- 3) **Behavior change approach:** Utilize a combination of positive normative messaging (such as commitments/pledges), incentives and regular cart monitoring with follow up using rewards and reminders. A combination of City staff and temporary labor would be coordinated to direct the most effective education outreach and follow up.

Recyclable Materials Audits: To assess the most frequently incorrectly recycled materials (materials that are considered unacceptable for current recycling processing), audits will be held at the beginning, during and at the conclusion of a defined program timeframe for behavior change strategies and tactics to take affect. Audits would be held in cooperation with participating recycling processors. Beginning and final audits would require more detailed sampling of recyclables collected on each of the targeted routes. Audits will be conducted under the supervision of a qualified audit supervisor or other qualified recycling professional and temporary staffing. It is estimated that pre and post audits will each require a team of 5 sort workers working 2 hours per route sample or a total of 64 hours, spread over two weeks. At least 2 Mid-Campaign audits would be a methodical visual examination of the recycling load of targeted routes by two qualified professionals, taking about 4 hours per day over a two-week period.

Final Report: A final report will provide a full analysis of the project findings with recommendations for replicating best practices in Hampton Roads and other U.S. communities.

* Osbaldiston, R., & Schott, J. (2012). Environmental sustainability and behavioral science: Meta-analysis of pro-environmental behavior. *Environment and Behavior*, 44, 257-299 .

* Schultz, P. W. (1999). Changing behavior with normative feedback interventions: A field experiment of curbside recycling. *Basic and Applied Social Psychology*, 21, 25-36.