REDUCING WASTE REMOVAL COSTS IN MISSOURI DOC

Capstone Project - Executive Summary, September 2026

BACKGROUND

The Missouri Department of Corrections (DOC) faces significant expenditure on waste removal at its 24-hour facilities. Current data show ~$1,740,000 is spent annually on waste removal services for transition centers and prisons. These costs are driven largely by the frequency of pickups and the volume of food waste generated across sites.

PROBLEM STATEMENT

High costs for waste removal services at DOC facilities could be reduced over the next 12–24 months by integrating food-waste composting programs.

PILOT OPPORTUNITY: OZARK CORRECTIONAL CENTER (OCC)

OCC has been identified as a strong candidate for a composting pilot. Baseline figures include annual waste removal costs of $35,212, weekly food waste of 2,181 lbs, and an average of 11 days between pickups. A diversion rate of approximately 85% is assumed under composting, with an estimated extension of pickup intervals to 30 days. Setup costs are estimated at up to $25,000, with annual maintenance of approximately $5,000.

Scan to learn more about OCC's success with composting from 2014!

Key Benefits

COST REDUCTION:
Lower volume & fewer pickups can reduce statewide waste-management expenses.

VOCATIONAL DEVELOPMENT:
Provides offender vocational training that improves job readiness & supports community reintegration.

COMMUNITY & INTERAGENCY PARTNERSHIPS:
Collaboration with external composting experts & state agencies strengthens sustainable practices.

RESTORATIVE JUSTICE
Constructive, skill-building activities align with restorative justice values.

Next Steps

- Conduct contract reviews & waste-stream analysis at candidate facilities.
- Formalize composting operations & succession plans.
- Identify & prioritize additional sites, including the highest-cost facility for a comparative pilot.
- Secure leadership support, funding, & facility-level commitment.
- Establish monitoring metrics for cost savings, program continuity, and vocational outcomes.

Considerations & Restraints

- Contract renewal timelines and policy revisions may affect implementation.
- Site selection should account for proximity to community partners.
- Success criteria (e.g., pilot launch, measurable cost reduction, participation metrics) should be defined before rollout.
- Succession planning for long term stability.