



Reduce Solid Waste and Improve Recycling

Park Nicollet Health Services Clinics

Hannah Brady

Company Supervisor: Farrukh Bashir

MnTAP Project Advisor: Anna Arkin



UNIVERSITY OF MINNESOTA

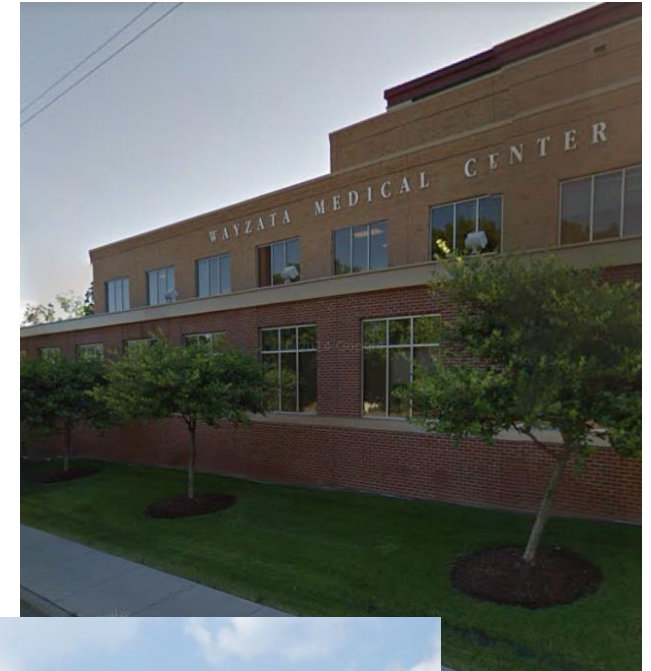
Driven to DiscoverSM

Park Nicollet Health Services

- More than 55 medical and surgical services
- More than 8,200 employees
- 29 different locations in West Metropolitan Area
- St. Louis Park Clinic is one of the largest multispecialty clinics in the United States

Project Focus

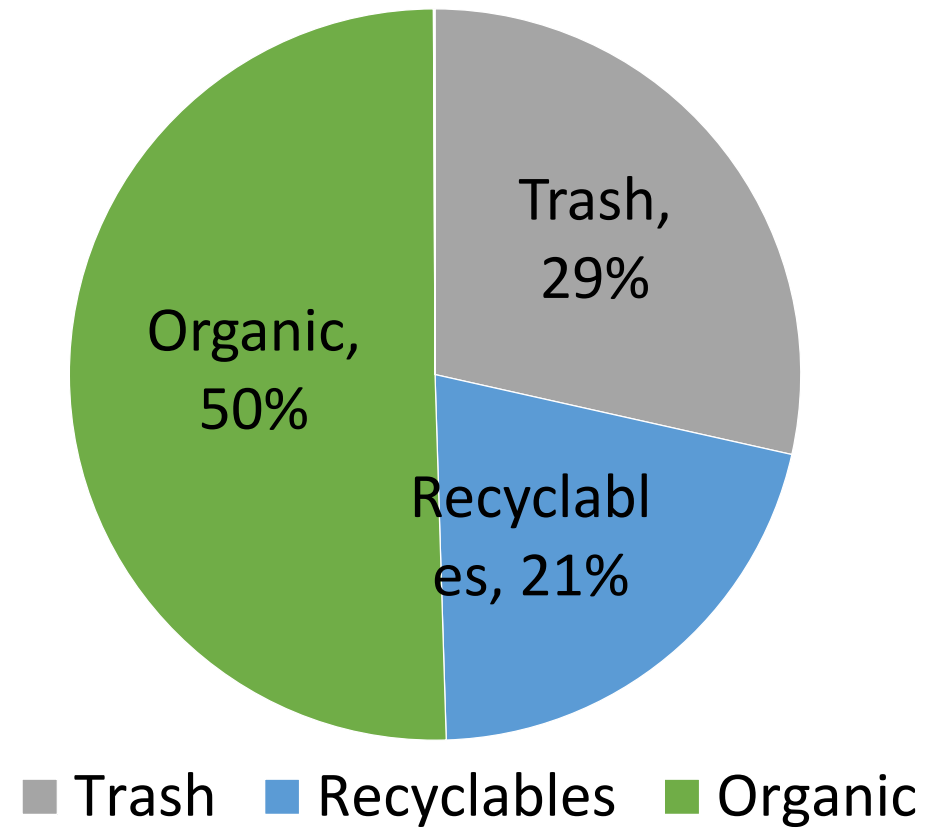
- Clinics
- Wayzata, Shakopee, and St. Louis Park
- Solid waste
 - Paper (Protected Health Information – PHI)
 - Recyclables (Lunchtime waste, packaging, plastics, blue wrap)
 - Organics (Paper towels and food waste)



Incentives to Change

- **Sustainability Goals 2020**
 - Reduce waste generated
 - Develop and improve access to Sustainability Program
 - Reduce paper use
- **Improve health, the environment, and affordability**

2015 Average Waste Sort Results



Motivations for MnTAP Intern Project

- Increase sustainability in clinics
- Develop waste station concept
 - Economic analysis
 - Implementation process
- Assist with paper reduction pilot program



Approach

- **Identify materials for source reduction or recycling**
 - Waste sorts
 - MN Waste Wise Business Site Visit Reports for Park Nicollet Clinics
 - Interviews and clinic walk-throughs
 - Employee survey
- **Estimate reduction/diversion potentials by collecting data**
- **Propose solutions and develop implementation processes**
- **Pilot where possible to get more accurate reduction potentials**

Recommendations Overview

- **Diversion options:**
 - Increase recycling rates via infrastructure and education
 - Implement organics composting program
- **Reduction options:**
 - Default printers to duplex
 - Install hand dryers whenever possible



Increase Recycling Rates

- Waste sort revealed 9% capture rate at Wayzata Clinic
- Walk-through and survey showed limited access to recycling bins and an opportunity to increase knowledge of recycling program
- Two part solution:
 - Infrastructure
 - Education

Recommendation	Clinic Location	Annual Environmental Savings	Annual Savings	Payback Period	Status
Waste stations and education	Wayzata	9 tons	\$ 2,500	7 months	Pilot planned

Recycling Infrastructure

Standard waste stations

Public Waste Station

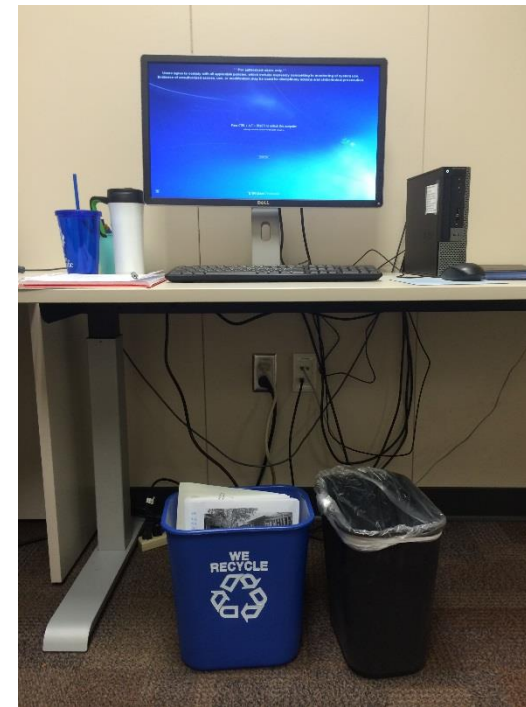


Staff Waste Station

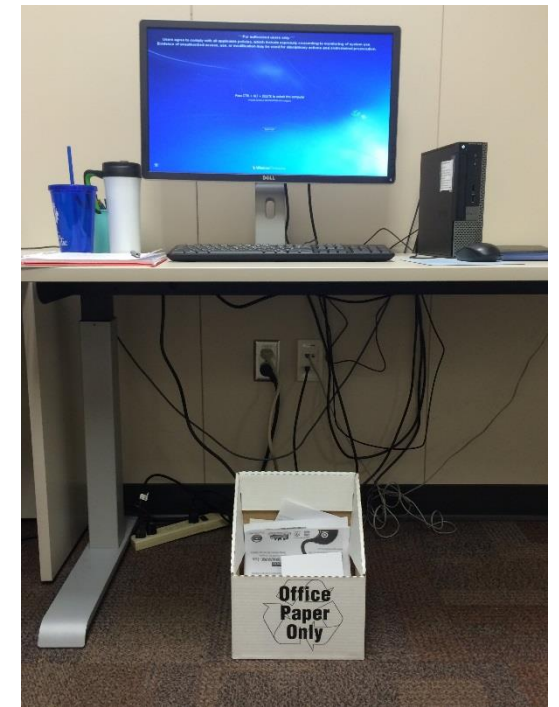


Eliminating trash bins underneath desks

Before



After



Recycling Education

- PowerPoint presentation
- Break room poster
- Desk side cheat sheets
- Aimed at increasing knowledge and staff engagement with the recycling program



Reducing Paper Use

- Park Nicollet buys nearly 300 tons of paper annually
- Shakopee clinic piloting defaulting printers to duplex
- 16% reduction after week 2

Recommendation	Clinic Location	Annual Environmental Savings	Annual Savings	Payback Period	Status
Default duplex	Shakopee	0.5 tons	\$ 800	Immediate	Piloting

Diverting Organics

- Clinic waste sorts reveal that 50% of trash by weight is organics
 - Food waste and paper towels
- Education is important and Hennepin County provides many resources at no charge
- Wayzata clinic

Recommendation	Clinic Location	Annual Environmental Savings	Annual Savings	Payback Period	Status
Composting program	Wayzata	15 tons	\$ 2,100.00	7 months	Recommended

High-Efficiency Hand Dryers

- Composting diverts but hand dryers reduce waste
- LCAs suggest much better
- Expensive
- Hygiene concerns
- Retrofitting not recommended but should be considered during renovations and construction

Recommendation	Clinic Location	Annual Environmental Savings	Annual Savings	Payback Period	Status
High-efficiency hand dryers	St. Louis Park	3 tons	\$15,400.00	2 years	Recommended

Other Ideas/Potential Future Projects

- Green Champion Program
- Website
- Electronic faxing



Personal Outcomes

- Communication skills
- Independent motivation
- Economic analysis skills
- Exposure to climate of a large organization
- Helping the environment



Recommendation	Clinic Location	Annual Environmental Savings	Annual Savings	Payback Period	Status
Waste stations and education	Wayzata	9 tons	\$ 2,500	7 months	Pilot planned
Default duplex	Shakopee	0.5 tons	\$ 800	Immediate	Piloting
Composting program	Wayzata	15 tons	\$ 2,100.00	7 months	Recommended
High-efficiency hand dryers	St. Louis Park	3 tons	\$15,400.00	2 years	Recommended
Total		28.5 tons	\$ 20,800		