

May 23, 2019

Municipal Solid Waste Utility Funding Models

Solid Waste Association of America (SWANA) Northern Lights
Chapter (NLC)





Our Topic

Solid Waste Utilities operate within a dynamic, multi-market world –
their financial plans and funding models ought to match

**External Challenges
& Disrupters**



**Operating Model
Implications**



**Funding Model
Considerations**





Myron Moore (P. Eng., MBA, PMP)

Partner with Stack'd Consulting Inc.

10+ years working with a variety of Western Canadian
municipal solid waste utilities

Focus on strategy, performance improvement,
governance, cost of service, rate making, and fiscal policy

Our Service Offerings



Strategy

- Strategic and Business Planning
- Feasibility Assessment
- Business Model Design
- Funding Model Design & Sustainability
- Stakeholder Engagement & Facilitation



Operational Performance

- Cost of Service & Rate Design
- Service Delivery Model & Program Review
- Operating Model Design
- Performance Improvement & Cost Reduction
- Performance Measurement & Reporting



Organizational Development

- Organizational Transformation
- Organization Design & Implementation
- Change Management
- Culture Assessment & Transformation
- Process Assessment & Redesign



Governance

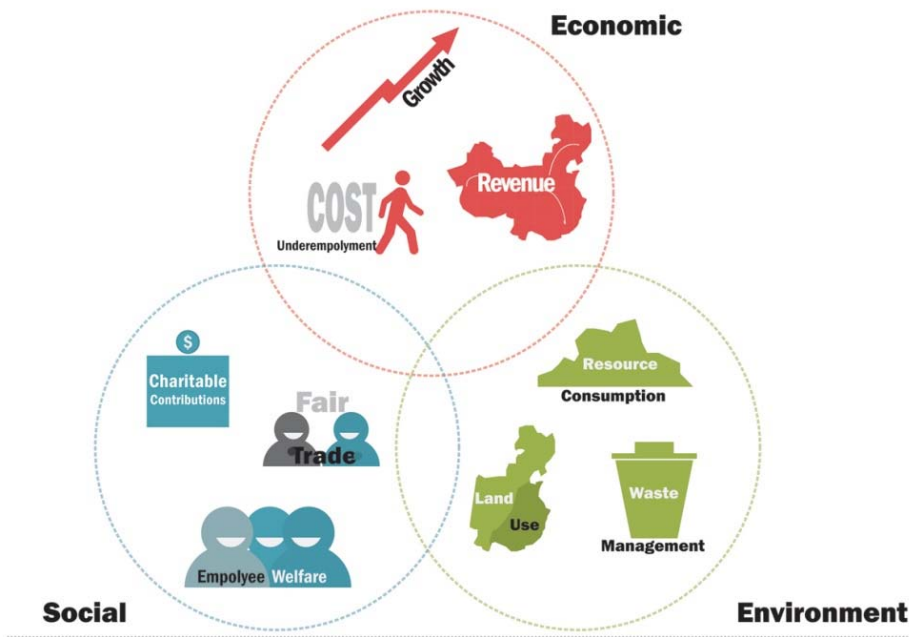
- Governance Model Review & Development
- Rate Regulatory Advisory
- Regional Services Cooperative Model Design
- Amalgamation & Business Integration
- Strategic Portfolio & Program Management



Funding Model Considerations for Municipal Waste Management Systems

SUSTAINABILITY

What does it mean for a municipal utility to be sustainable?



Typical characteristics include...

- Supporting community environment & social priorities
- Selecting investments based on full life-cycle cost analysis
- Ensuring sufficient, reliable funding for investments, ongoing costs, and risks

EXTERNAL CHALLENGES & DISRUPTERS



Political:

- Manage Rate Increases
- Support for Local Economic Development / Private Sector
- Push for Extended Producer Responsibility

Environmental:

- Desire for More Waste Diversion / Less Landfilling
- Increased Regulatory Standards
- Protection of Air, Land, and Water

Customer:

- Heightened Customer Experience
- Increased Rate Equity

Technology:

- Resource Recovery
- RFID, GPS, AI, Social Media, etc.

Markets:

- Unstable Commodity Markets

OPERATING MODEL IMPLICATIONS



Diversion Programming

- More Tonnes Diverted
- Fewer Tonnes Landfilled
- Higher Waste Mgmt Facility Complexity



Environmental Outcomes

- Residential – ICI Waste Diversion
- Climate Change
- Groundwater & Toxins Mgmt



Customer Experience

- Customer Service
- Community Programs
- Increased Transparency



Focus on Risk Management

- P3 & Outsourcing Agreements
- Operational Variability
- Revenue & Cost Risks

FUNDING MODEL DEPENDENCIES



A preferred funding model (and financial plan) ideally is dependent on how a Municipal Solid Waste Utility answers the following series of questions:



1. What are your strategic mandate and priority objectives?



2. What business are you in?



3. What services do you provide and to whom?



4. What investments are required & how will they impact cost structure?



5. What financial obligations and risks do you face?

STRATEGIC MANDATE & OBJECTIVES



Answering these questions will provide the basis for prioritizing Funding Model Objectives

Strategic Questions

- What Triple-Bottom-Line Community Outcomes are desired?
- What Role Should the Utility Play?
- What are the Utility's Targeted Program Results?
- What Trade-Offs are required when Prioritizing Competing Objectives?
- What are the Shareholder's Expectations?

Funding Model Priorities

- Waste Diversion
- Customer Equity
- Ease of Administration
- Funding Sufficiency
- Customer Impact / Rate Stability
- Affordability
- Economic Development
- Others

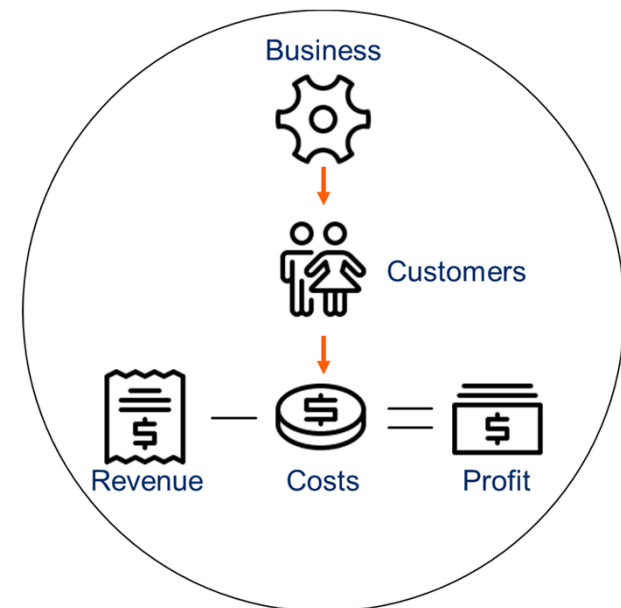
BUSINESS MODEL



Your business model defines what you do to create value for your customers and your stakeholders

Defining / Rethinking Your **Business Model**

- 1 What business are you in?
- 2 Who are your customers?
- 3 How do you generate revenue?
- 4 What drives your costs?



SERVICES



An inventory of your solid waste and diversion services needs consider both external and internal factors

Who Are Your Customers?



What are Market Dynamics?



What is Your Cost of Service?

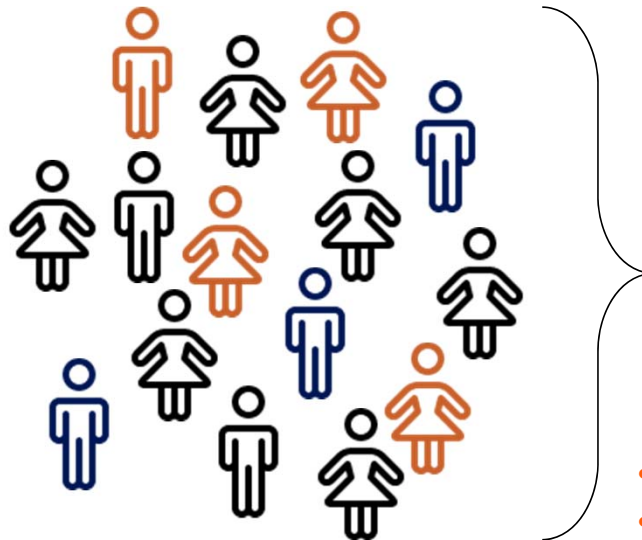


WHO ARE YOUR CUSTOMERS

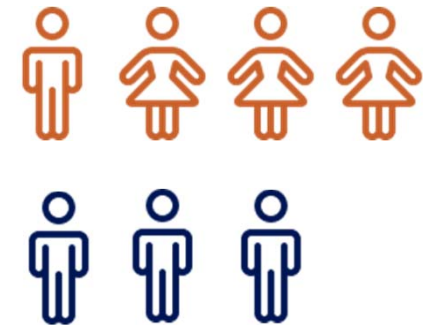
Too often business owners don't critically know who their customers are or what they want



Who Are Your Customers?



Market



Customer Insight:

- Understand how big is the market
- What are their needs and wants?
- Why do your customers choose you?

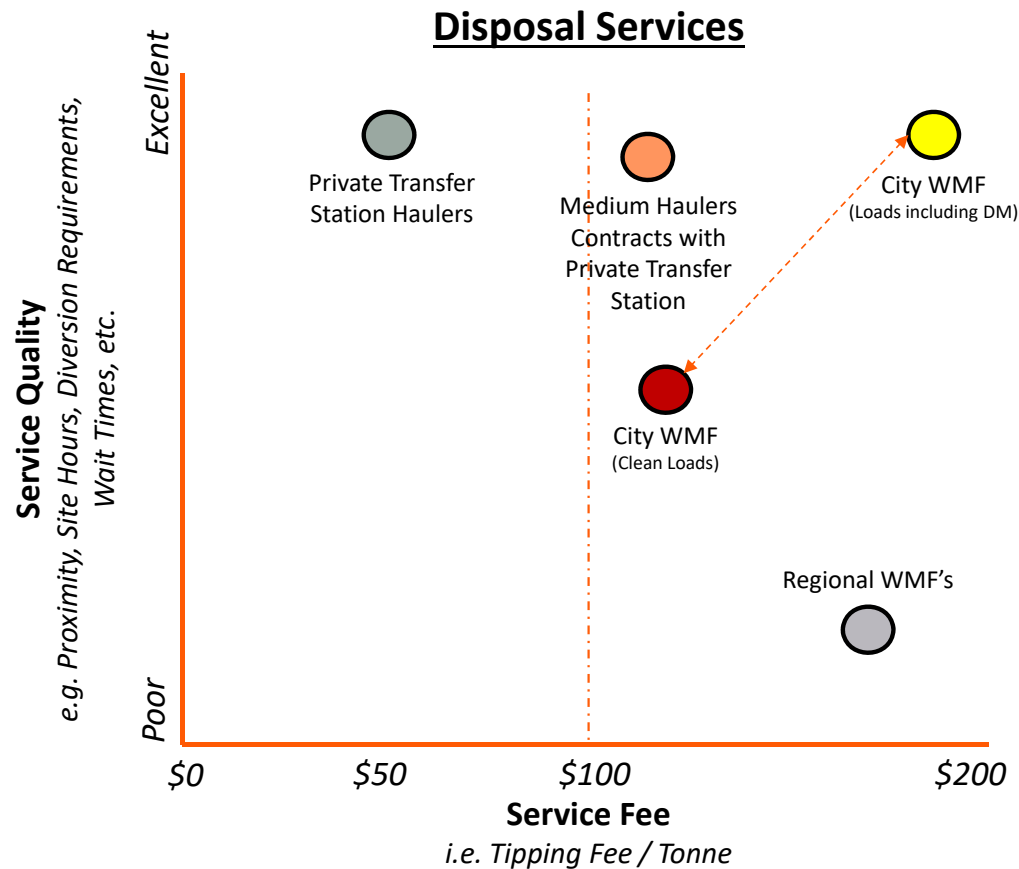
MARKET DYNAMICS

Each type of service needs to consider its end-users and type of market it operates in



Type of Service	Example End-Users	Market
Residential Collections	<ul style="list-style-type: none">Residential Customers	Monopoly
Community Programs	<ul style="list-style-type: none">SF & MF ResidentsSmall Businesses	Government
Commercial Collections	<ul style="list-style-type: none">Non-Residential Premises	Competitive
Landfill / Waste Facility	<ul style="list-style-type: none">Residential CustomersNon-Residential Customers	Oligopoly

EXAMPLE: COMPETITIVE & ELASTICITY ANALYSIS



Elements Impacting Disposal Service Quality:

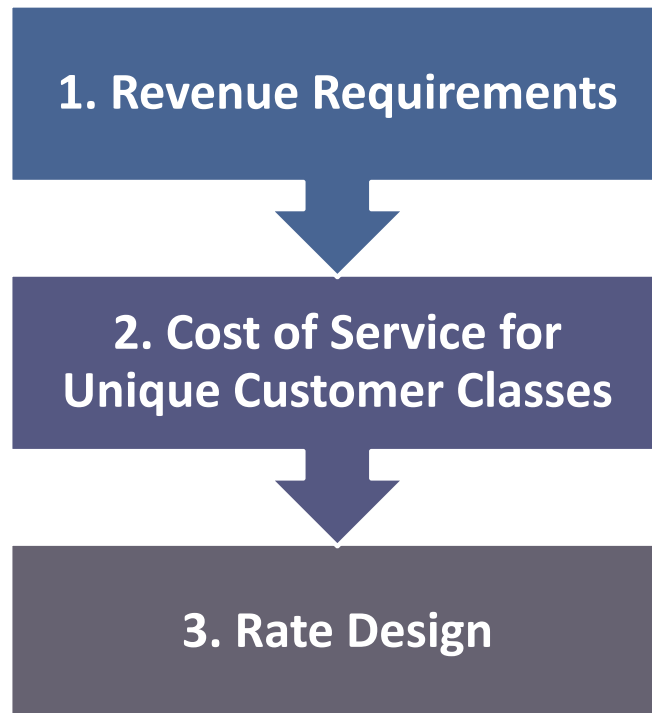
Non-Financial

- Site Operations (i.e. Hours of Operation, Days of the Week)
- Diversion Requirements (Acceptability, Separation & Enforcement)
- Access (i.e. Exclusivity)
- Services Provided (Core vs. Peripheral)
- Proximity

Financial

- Tipping Fee
- Additional Fees (e.g. Specific materials rate)

COST OF SERVICE



Identifies all funding requirements, including capital, operating, financing, reserve contributions, dividend, etc.

Allocates ***“Cradle-to-Grave”*** revenue requirements to various customer classes in a fair & equitable manner

Considers both the level & structure of the rate design to collect revenue from each class of service



CAPITAL INVESTMENTS

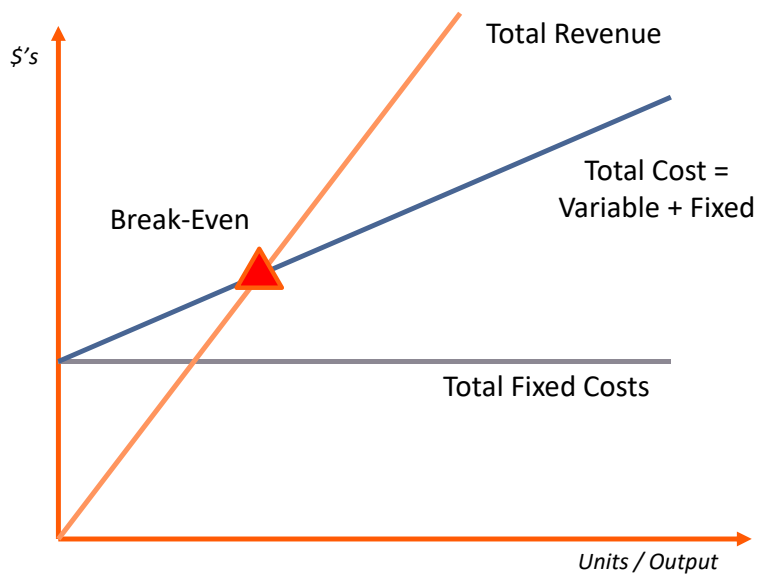
Sustainability isn't just about looking at today – it's about having a portfolio view of investments to support tomorrow

Key Investment Drivers:

- 1 **Growth:** what net-new infrastructure and operational capacity is needed?
- 2 **Regulatory:** what do we need to do to maintain compliance?
- 3 **Enhancements:** what is required to meet ongoing service level expectations?
- 4 **Asset Management:** what do we need to do to maintain infrastructure performance?

WHAT DRIVES YOUR OPERATING COST STRUCTURE? \$

Understanding what drives your costs will help you make investment and pricing decisions



Cost Analysis

- 1 Fixed costs remain constant as tonnes / HH's are managed
- 2 Variable costs change as tonnes / HH's increase / decrease
- 3 Break-even is the point where revenue and expenses are equal (no profit or loss)

OBLIGATIONS & RISKS



A financial plan and funding model has to address how liabilities will be addressed and how risks will be managed

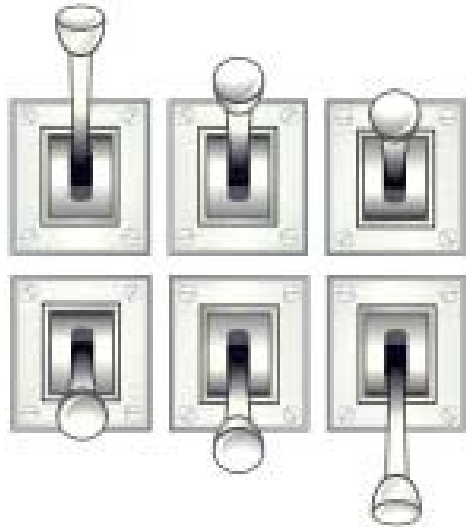
Liabilities & Obligations

- Long-Term Debt
- Landfill Closure
- Monitoring & Remediation of Closed Landfills
- Current Liabilities
- Minimum Contractual Obligations
- Shareholder Dividend Requirements

Financial Risks

- Fronting Growth Investments
- Declining Landfill Tipping Fee Revenues
- Minimum Tonnage Requirements for P3 Facilities
- Capital Contingencies
- Access to Recyclables Markets
- Year-to-Year Variation in Customer Demand

KEY LEVERS OF A UTILITY FINANCIAL PLAN & FUNDING MODEL



1. Sources vs. Uses of Funds
2. Capital Planning
3. Financing Tools
4. Reserve Management
5. Rate Design
6. Risk Management
7. Utility Fiscal Policies
8. Performance Measurement



Questions for Discussion

Thank you for your time!



210, 805 1 Street SW, Calgary, AB T2P 7N2
403.454.7125 • info@stackdconsulting.com

stackdconsulting.com