

MUNICIPAL AGGREGATE RESOURCE MANUAL



Manual Presentation

SARM Annual Convention
Thursday, March 15 2018



Agenda

1. Overview
2. Aggregate in Saskatchewan
3. Strategic Gravel Supply Best Practices
4. Aggregate Management Cycle
5. Cost Considerations
6. Tools & Templates

Overview



Project Team



Timelines



Engagement



**Final
Products**

What & Why

Problem

- Gravel is a non-renewable resource
- Increasing competition for gravel
- Limited access to affordable gravel stocks
- No centralized information on how to explore, how to manage pits, key agreements and processes, leading practices

Solution

- An Aggregate Resource Manual that outlines:
 1. The Current State of Aggregate in Saskatchewan
 2. The Best Practices with regards to Strategic Gravel Supply
 3. The Aggregate Management Cycle
 4. Cost Considerations
 5. Tools & Templates

Aggregate in Saskatchewan

Themes from Engagement

- RMs focused on long-term gravel security
- Value for money critical for RMs
- RMs looking for broad support from the Aggregate Resource Manual with information on exploration, tendering, financial analysis, innovations, partnership ideas and legal templates and agreements

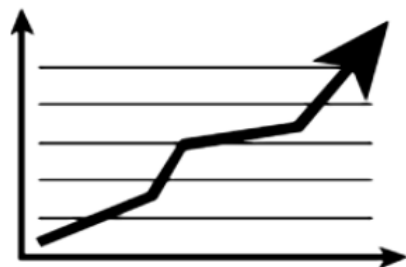
Regulatory Guidance

- Information on Relevant Legislation
- Processes and Considerations Related to Heritage Screening
- Environmental Considerations
- Who to Engage in Government
- Technical Expertise Required to Manage Risk

Strategic Gravel Supply Best Practices



**Gravel Supply
Options**



**Supply
Development Procurement**

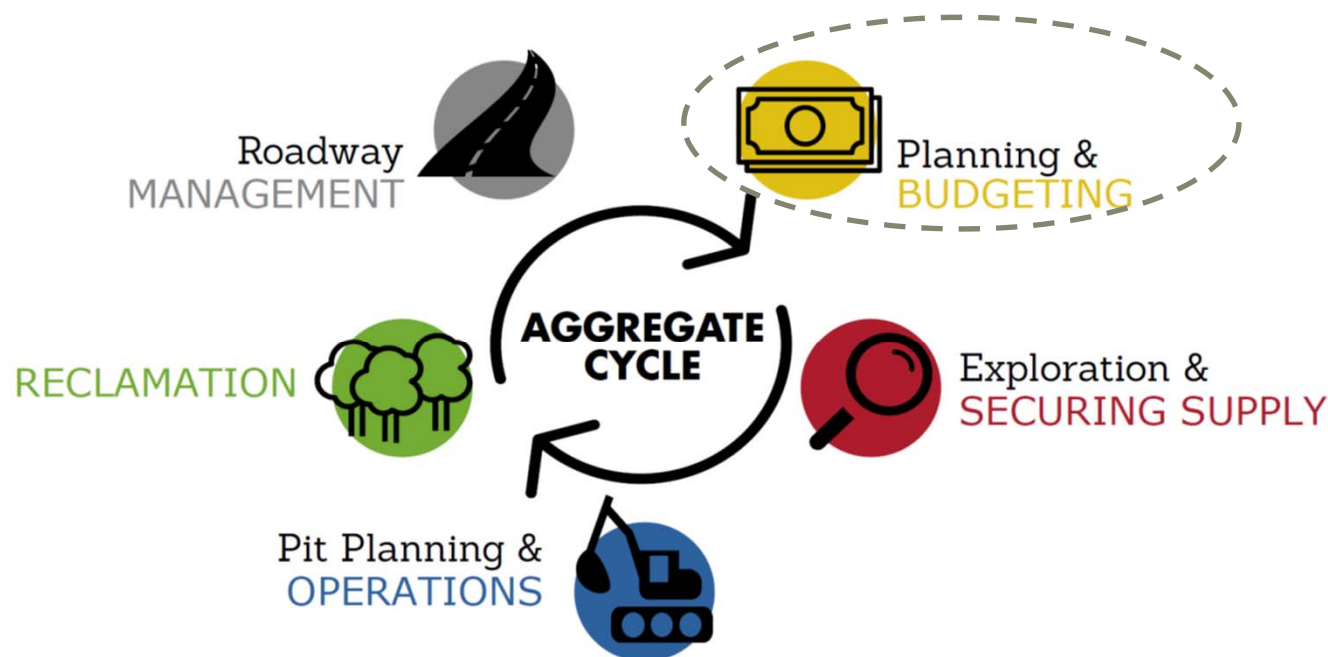


**Gravel
Procurement**

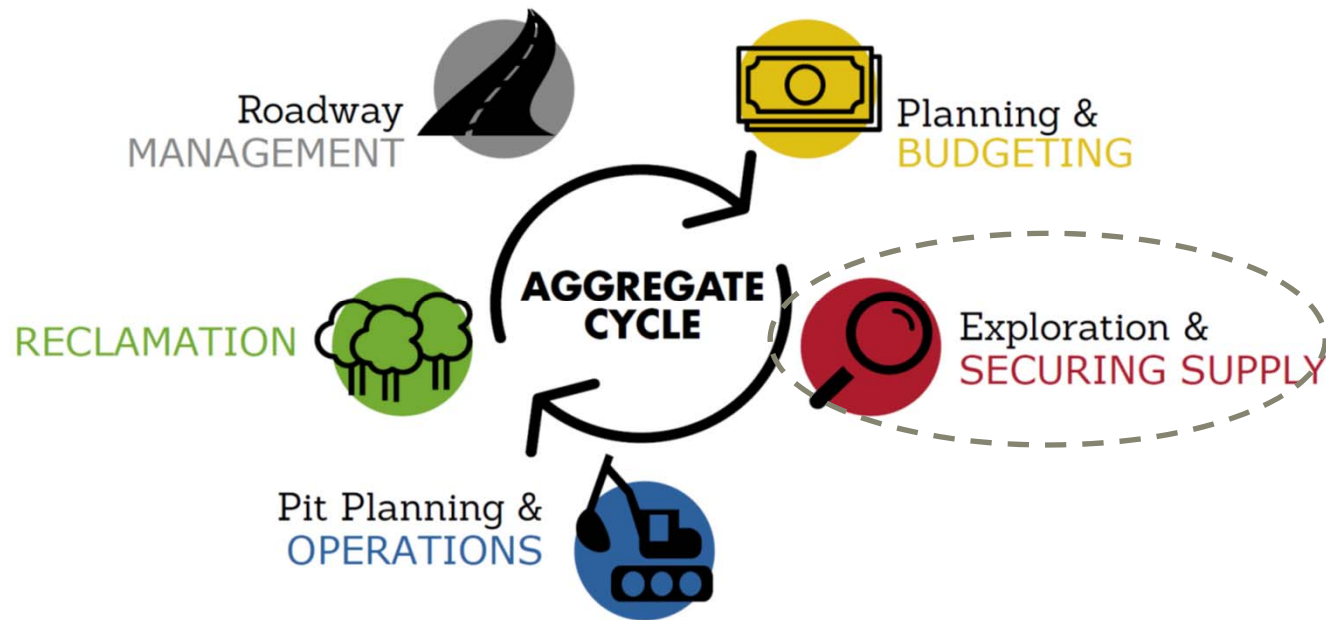


**Partnership
Models**

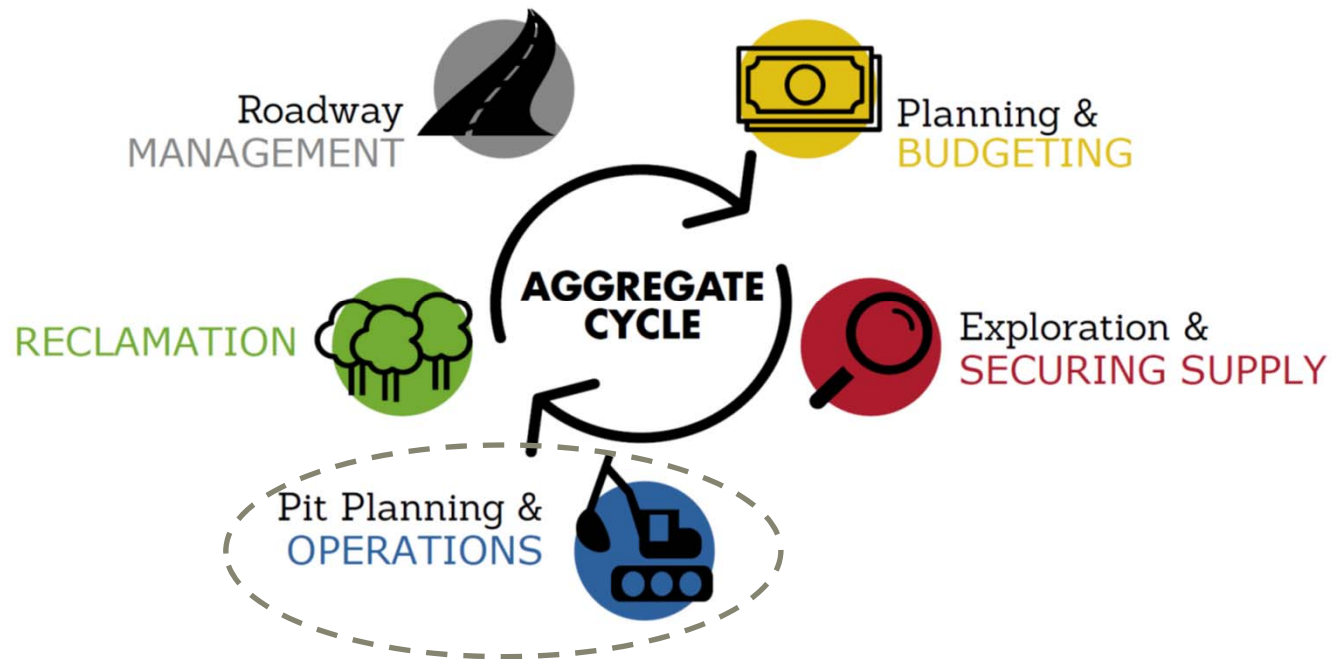
Aggregate Management Cycle



Aggregate Management Cycle



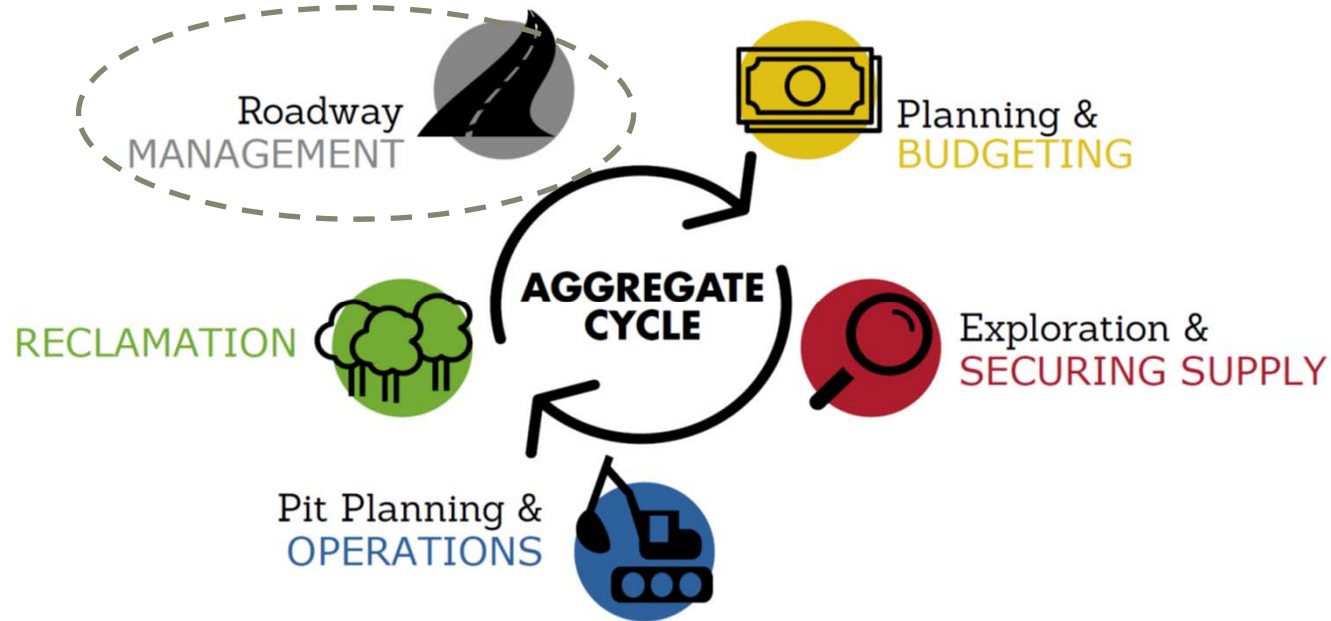
Aggregate Management Cycle



Aggregate Management Cycle



Aggregate Management Cycle



Cost Considerations

Existing Financial Information

- Gravel Extraction Fees
 - Hauling Fees
 - Road Maintenance Agreement Fees
- All-In Costs for Gravel
 - Commentary on MHI Study
 - Costs By Aggregate Type
 - Costs By Division
 - Challenges with general findings for a location-specific resource

New Processes and Tools

- Cost Collaboration Model
 - Framework for information sharing
 - Deployed by Parkland area RMs
 - Recommendation to develop a voluntary, regional model
- Cost Benefit Analysis (CBA)
 - Approach and Financial Evaluation Tool
 - Three sample CBA Scenarios (Innovation, Land Purchase, Trucking)

Tools, Templates & Appendices

Tools & Templates

1. Road Maintenance Agreement Template
2. Road Maintenance Agreement Template (GoS)
3. Gravel Tender Template
4. Gravel Crushing Tender Template
5. Gravel Hauling Tender Template
6. Gravel Crushing Agreement
7. RM and Private Land Agreement
8. Extraction Fee Bylaw and Form
9. Fuel Tank Emergency Plan Template
10. History of Aggregate Deposit Form

Appendices

1. Specifications: Sub-Base Course
2. Specifications: Granular Base Course
3. Specifications: Traffic Gravel
4. Aggregate Exploration Tools
5. Sand & Gravel Lease Policy: GoS

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Thank You

