



Capital Projects and Project Delivery

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Finance and Intergovernment Committee: April 15, 2020

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

Board Request

Staff were directed to:

- conduct an independent review of the processes and decision-making related to major infrastructure projects; and,
- bring forward for Board consideration recommendations arising from the review.

Outline

- Challenges
 1. Scale
 2. Complexity
 3. Market Influences
- Best Practices Response
 1. Re-organization
 2. Independent high level review by KPMG of major projects
 3. Response to KPMG's strategic recommendations

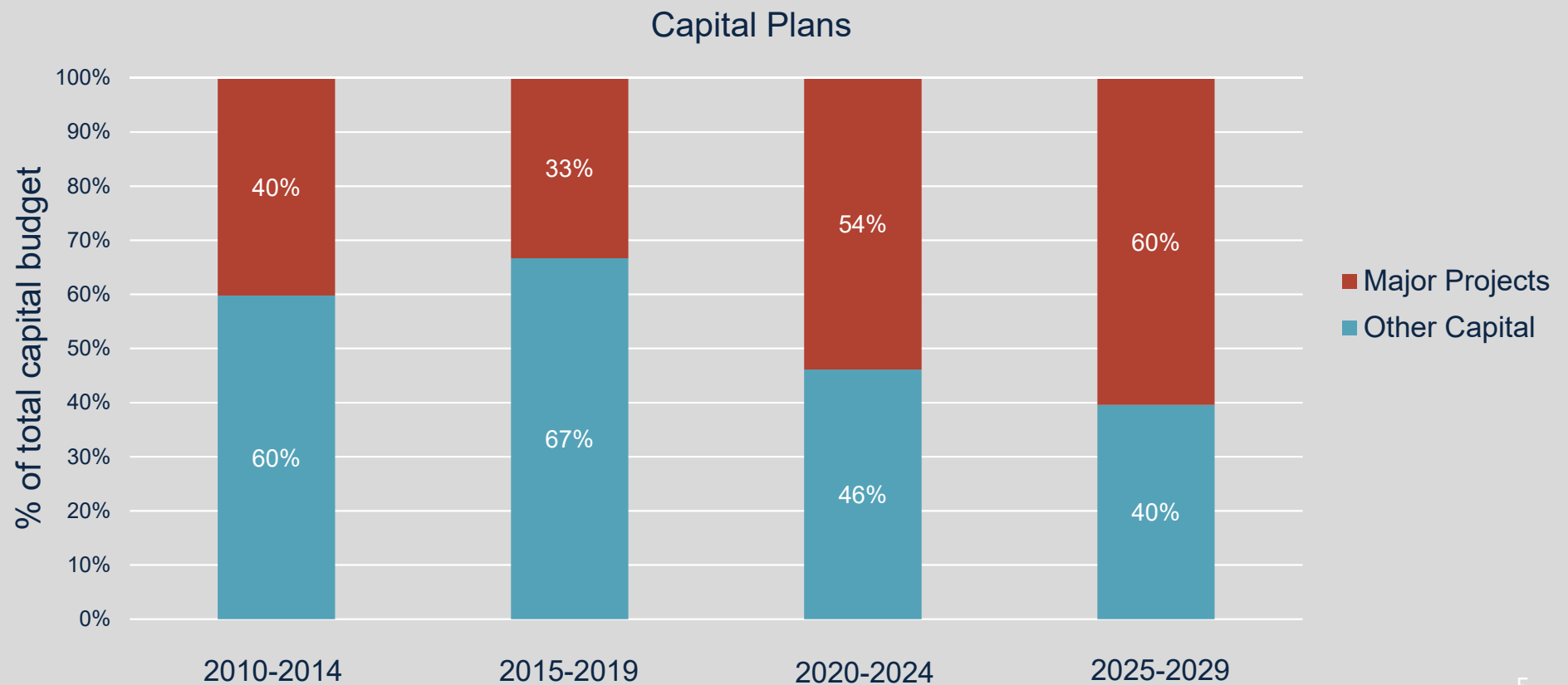


Challenge 1: Scale



Challenge 1: Scale

Major Capital Projects as Percentage of Plans



Challenge 2: Complexity

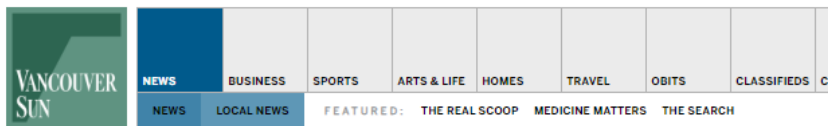


Challenge 2: Complexity

- Contract structures
- Environmental requirements
- Stakeholder involvement
- Funding approaches
- Regulatory requirements
- Community benefits
- Indigenous partnerships



Challenge 3: Market Influences



Pattullo Bridge contract awarded to Fraser Crossing Partners

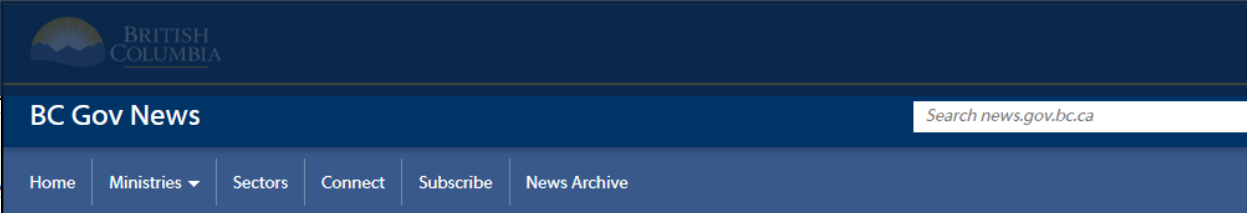
According to an order in council, the B.C. Transportation Financing Authority can sign agreements with Fraser Crossing

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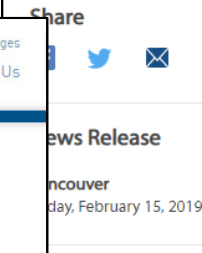
YVR Breaks Ground on Multi-Year Expansion Projects to Further its Position as a World-Class Connecting Hub and Strong Economic Generator for British Columbia

June 14, 2018 • Richmond, B.C.

YVR investing \$9.1 billion into the airport under its 20-year



Transportation and Infrastructure Broadway Subway project launched with procurement step

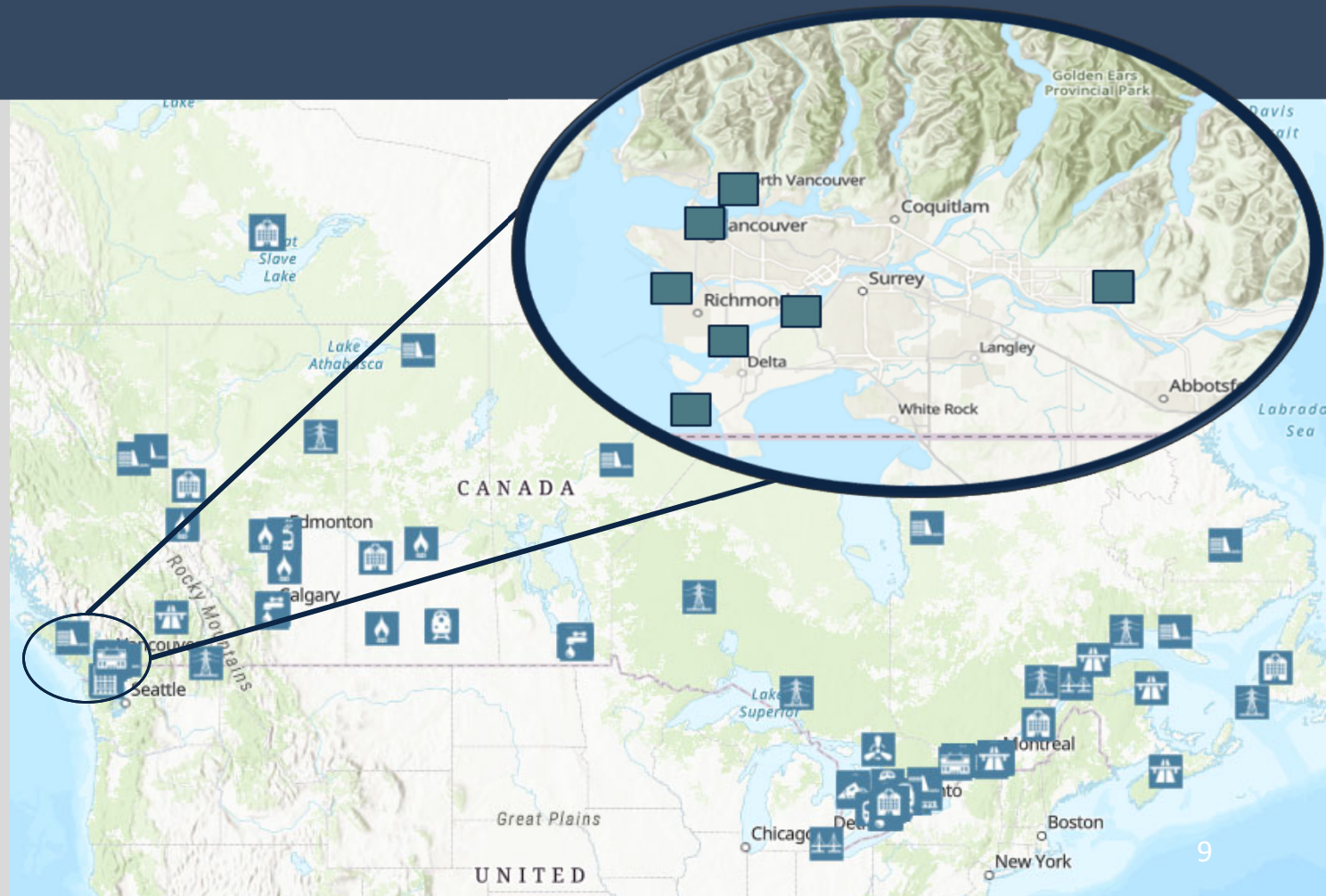


Challenge 3: Market Influences

Metro Vancouver Region Projects:

- Broadway Extension
- Roberts Bank Terminal 2
- Vancouver International Airport Upgrades
- Surrey Langley SkyTrain
- Pattullo Bridge Replacement
- North Shore Wastewater Treatment Plant
- Annacis Island Wastewater Treatment Plant Expansion
- George Massey Tunnel Replacement Project

Source: Top100Projects.ca/2019

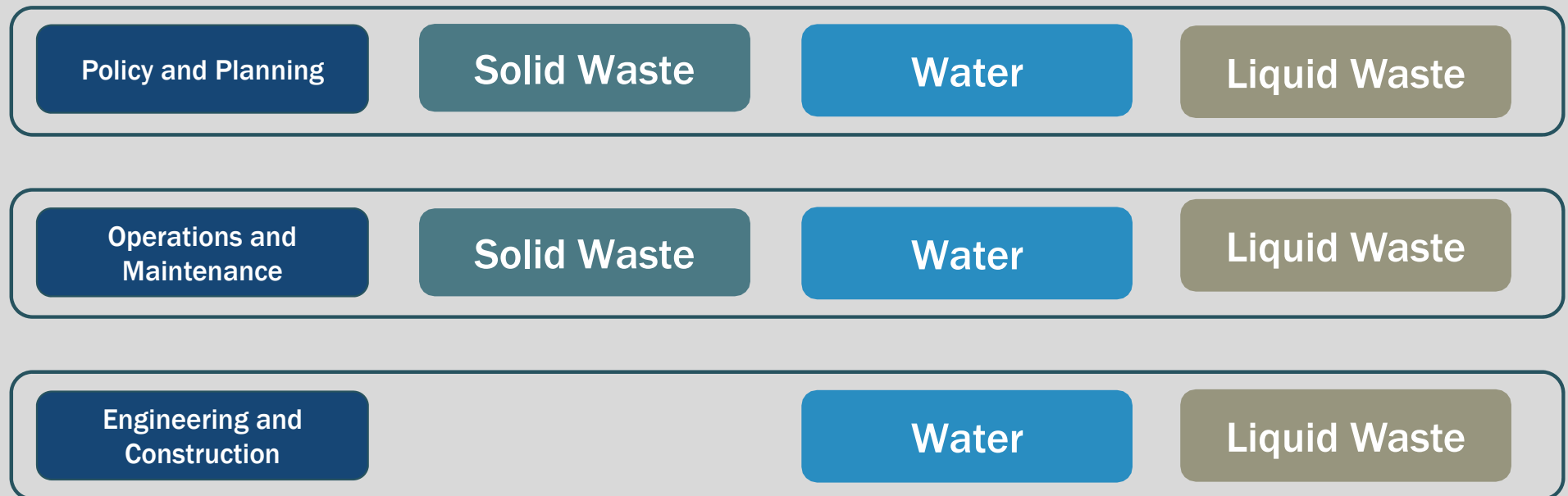


Best Practices Response



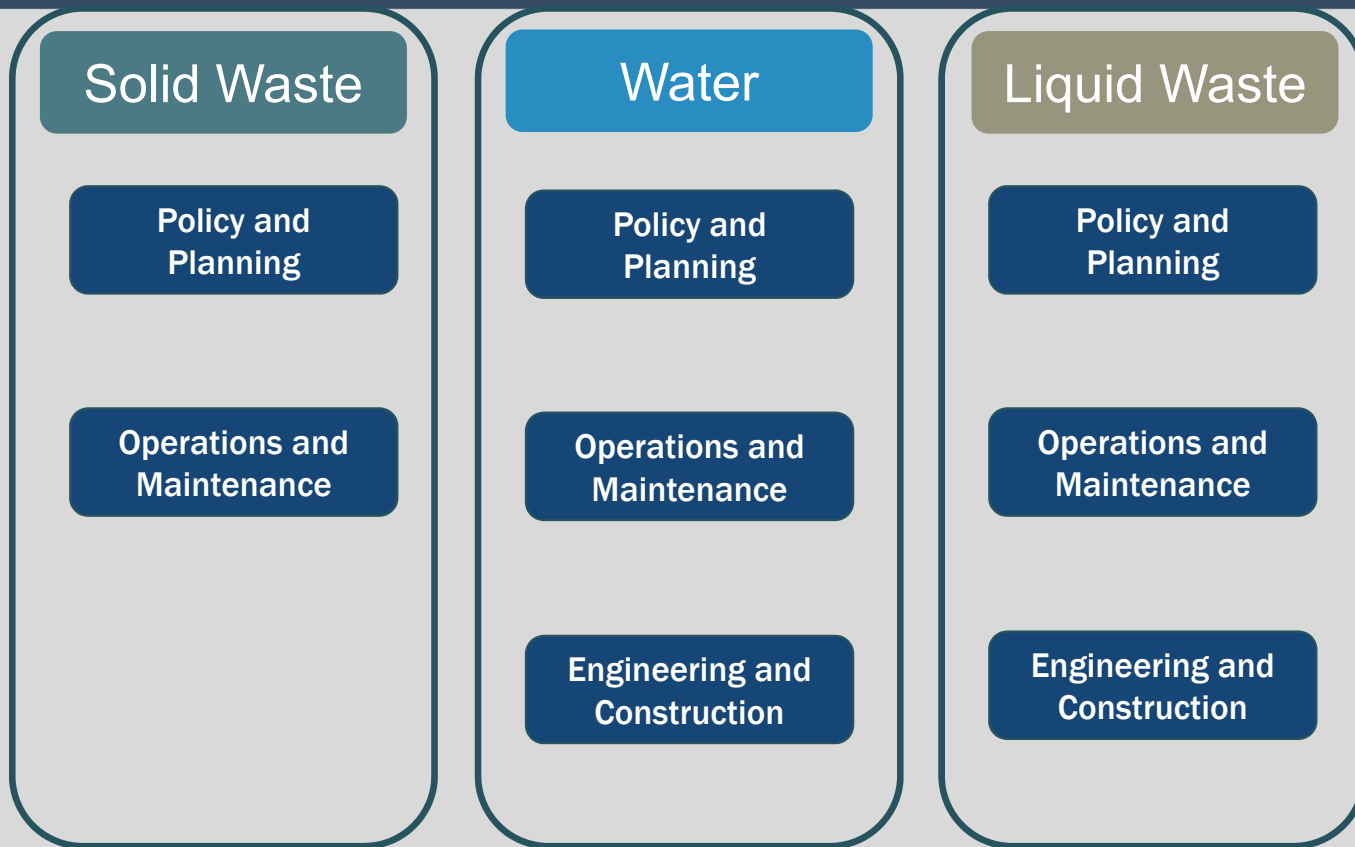
Best Practices Response 1: Re-organization

Pre-2012 Organizational Structure



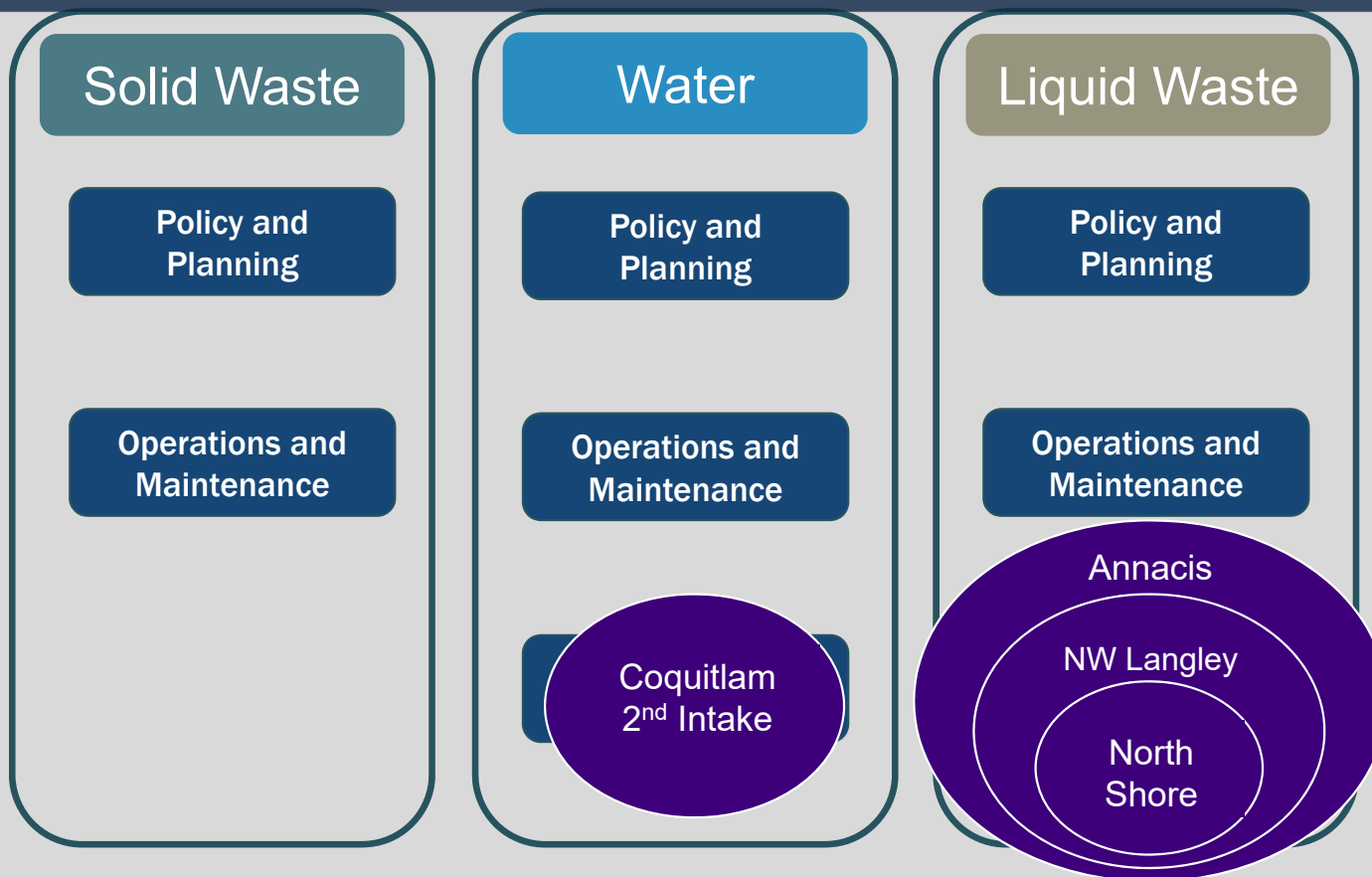
Best Practices Response 1: Re-organization

2012-2019 Organizational Structure



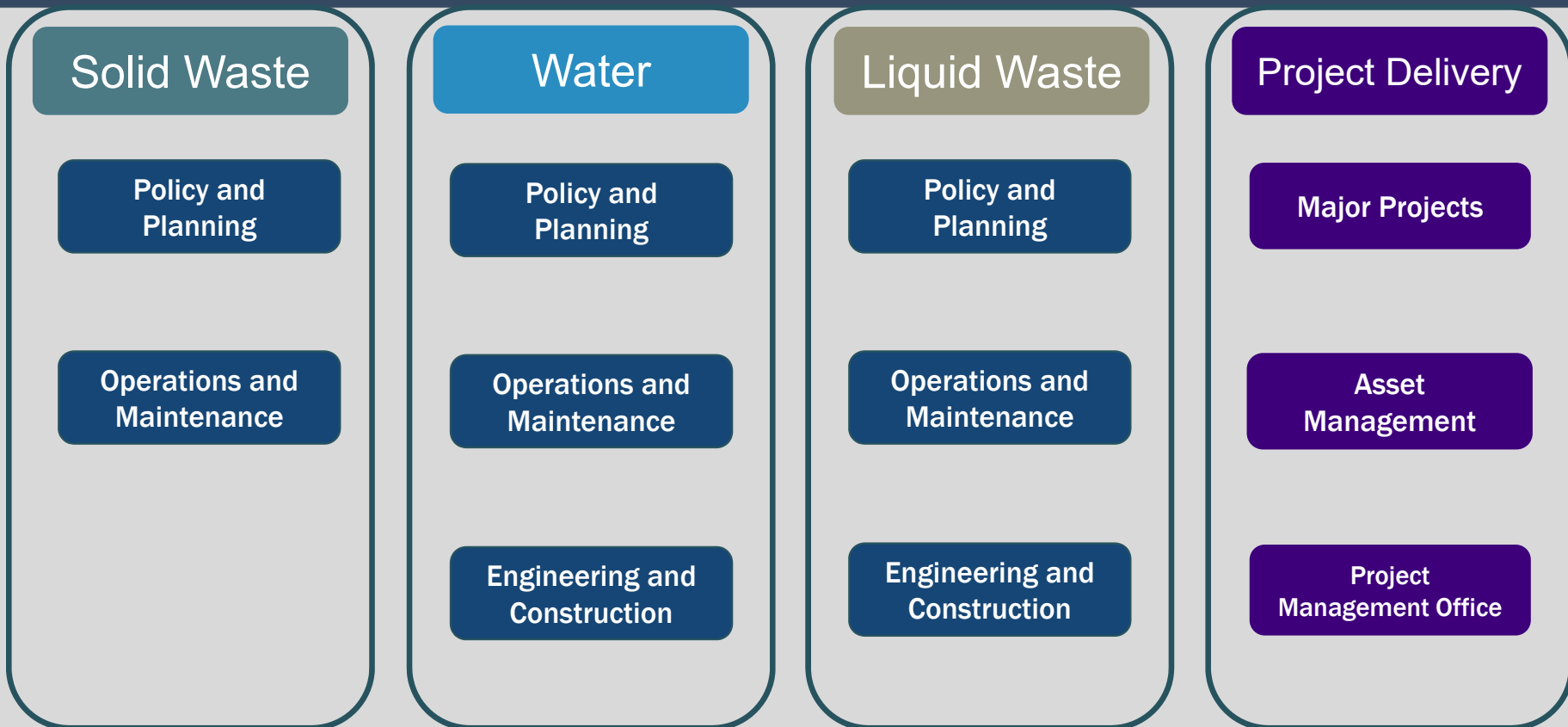
Best Practices Response 1: Re-organization

2012-2019 Organizational Structure



Best Practices Response 1: Re-organization

2020 Organizational Structure



Best Practices Response 1: Re-organization

Project
Management
Office Centre of
Expertise

Major Projects
Delivery

Asset
Management

Best Practices Response 1: Re-organization

Functions of a Centre of Expertise

Project Management Framework

Policy, Processes and Procedures, Standards and Controls

Quality Assurance

Quality Assurance and Control, Monitoring, and Training

Asset Management

Asset Management Strategy and Plan, Policy, Processes and Procedures, Standards, Corporate Reporting

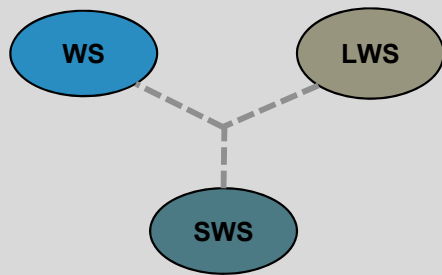
Project Delivery

Project Management of Major Complex Projects

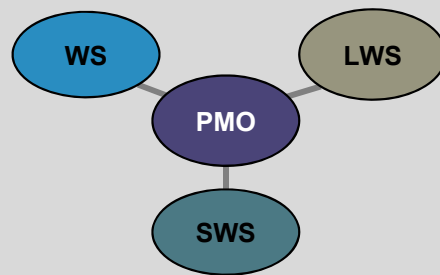
Best Practices Response 1: Re-organization

Project Management Models

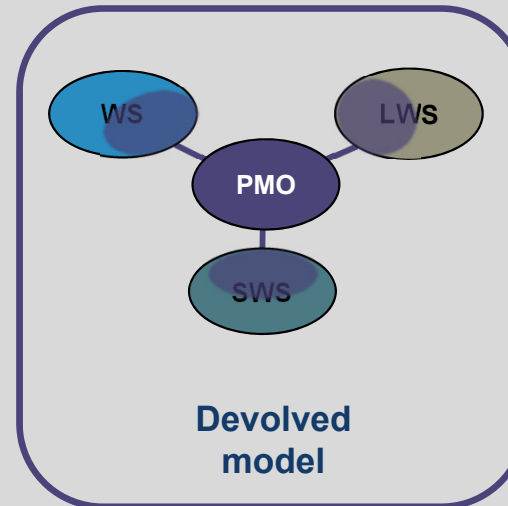
Increasing Project / Department Autonomy



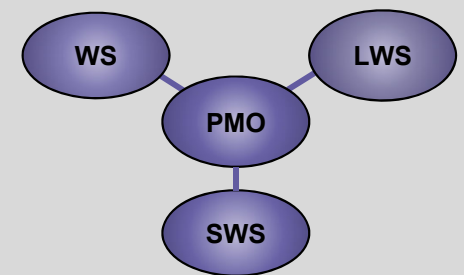
Decentralized
model



Influencing
model



Devolved
model



Centralized
model

Increasing Centralization of Control

Best Practices Response 2: Independent Review

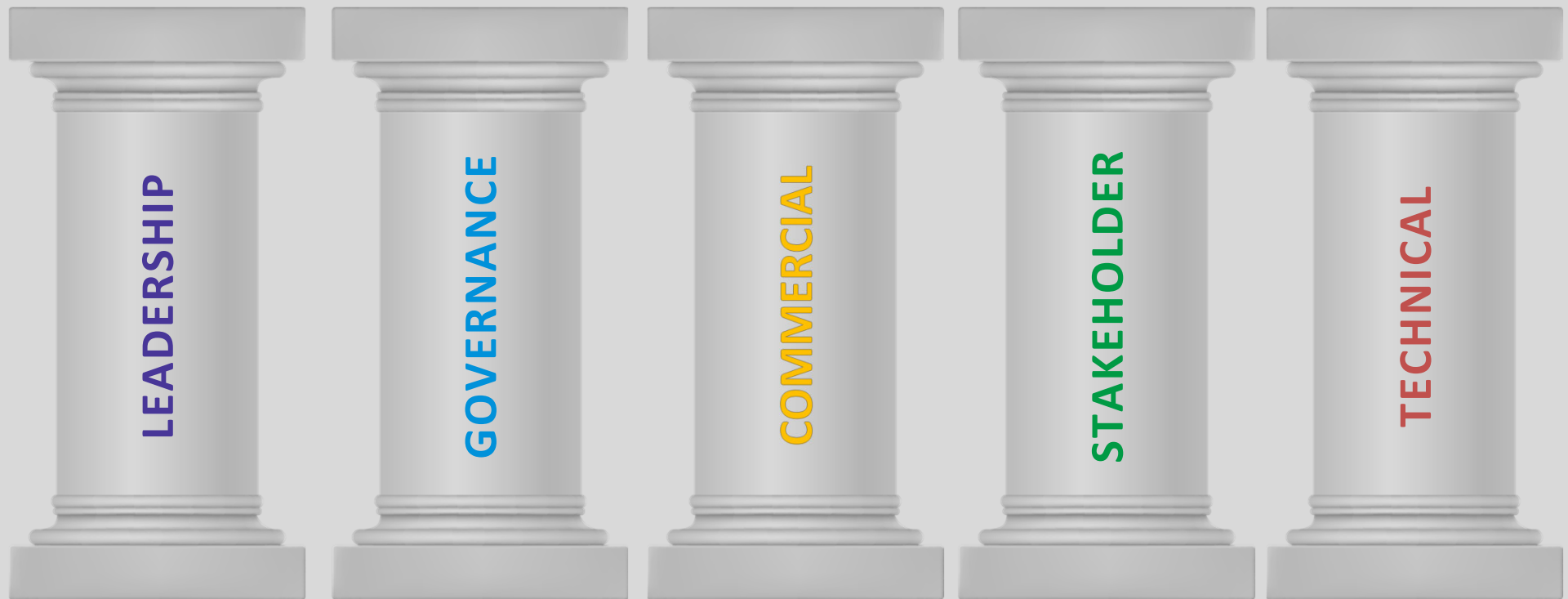
KPMG Approach to Project Delivery

Key steps:

- Document review: key documents including reports from major projects
- Interviews: key project personnel involved in the delivery of major projects and programs
- Focus Group: validation and review of findings with General Manager working group

Best Practices Response 2: Independent Review

Best Practice Project Delivery Framework - KPMG



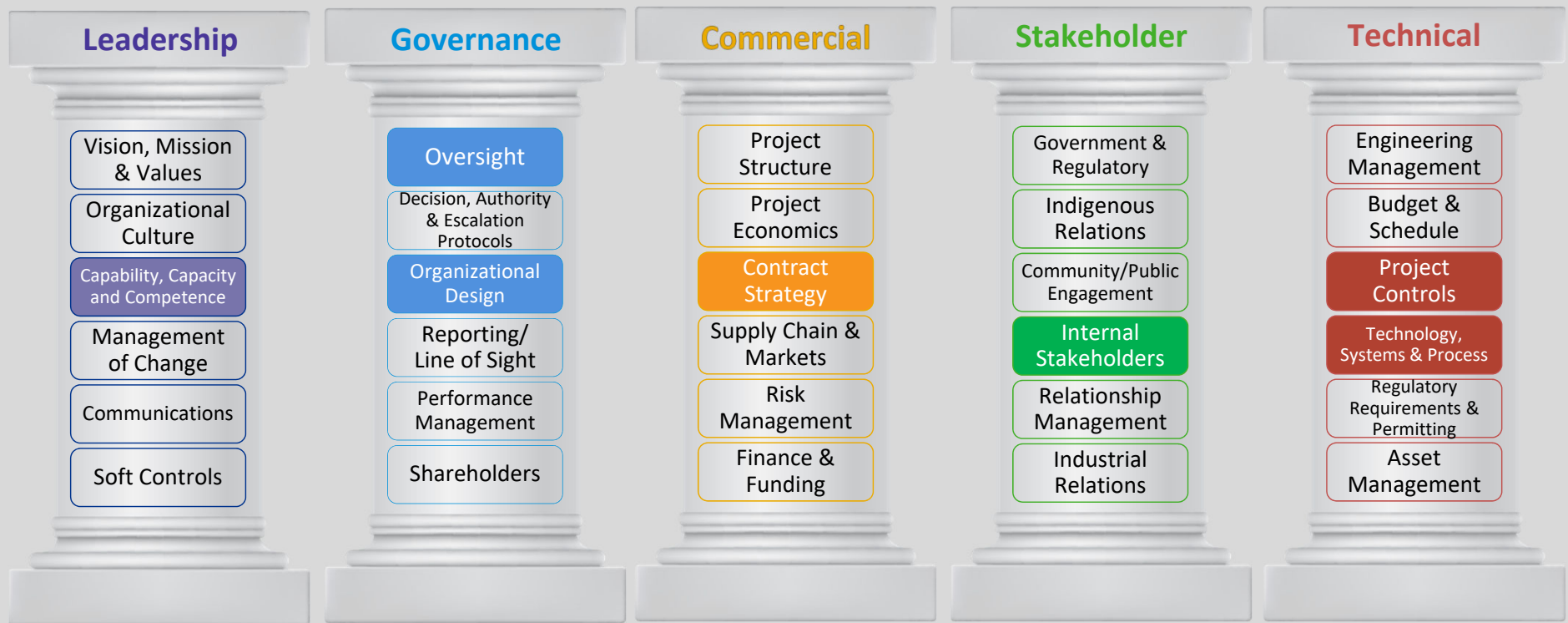
Best Practices Response 2: Independent Review

The 5 Pillar Framework



Best Practices Response 2: Independent Review

Strategic Areas of Opportunity



Best Practices Response 3: Response to Recommendations

Next Steps

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	12 Month Review
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Project Delivery Department (PDD)– Initiate PDD - Complete				Initiate new Department											
PA1	Leadership – Capability, Capacity and Competence Needs Assessment and Resourcing Strategy			Needs, Resourcing Strategy & Key Hires											
PA2	Governance – Oversight Oversight Model Development and Alignment			Oversight Model Review											
PA3	Governance – Organizational Design Organisational Design Model Assessment			Org Model Review											
PA4	Commercial – Contract Strategy Development and Implementation Assessment			Contract Strategy – Process Review and Individual Project Assessment											
PA5	Stakeholder – Internal Stakeholder – Internal Interface Agreements and Communications Plan			Internal Stakeholder Agreements											
PA6	Technical – Project Controls Controls and Assurance Function Planning			Project Controls Functionality											
PA7	Technical – Technology, Systems and Process Project Management Tools Assessment and Developments			PM Tools and Templates											
Change Management and ongoing initiatives To be layered into the development of the Department				Change Management Plan											
Updates to Boards, Committees, and Advisory Committees Regular updates on Project Delivery department progress															

Source:
KPMG

COVID-19 Response

Next Steps

- \$1.7 Billion in work underway
- Over 40 claims received to date
- Coordinated approach to address risk
- Working with the Province and industry on COVID response
- Scenario analysis is currently being conducted to identify the range of potential impacts

A photograph of an industrial facility, likely a water treatment plant, featuring large metal structures and green hoses. The scene is set outdoors under a clear blue sky with some clouds. In the background, a tall communication tower is visible. The foreground shows a blue metal platform with a ladder.

Discussion



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