



# **British Columbia Highway Maintenance Contract Model**

**Pacific Northwest Snowfighters  
June 7, 2016  
Portland**





# Investment in Infrastructure

- **Capital Expansion**
  - \$300-400 million
- **Rehabilitation**
  - \$325 million
- **Maintenance**
  - \$400 million (Highway Maint.)
  - \$11 million (Pavement Marking)
  - \$10 million (Electrical Maintenance)

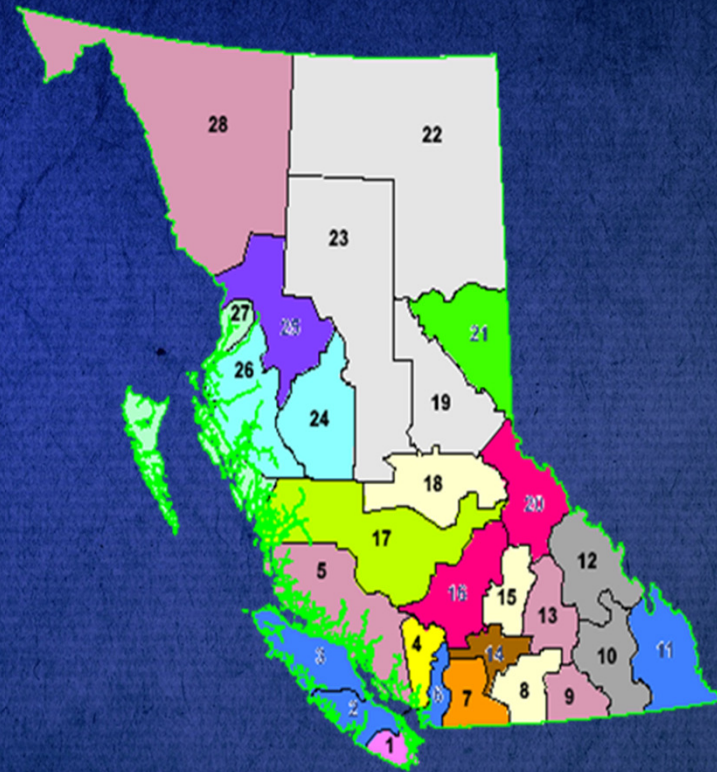






# Contract Scope

- **Maintenance of:**
  - 47,000 road km of highways and side roads (91,000 lane km)
  - 2,800 structures
- **60% of highways are hard surfaced, 40% are gravel/dirt roads**
- **Includes roads within unincorporated areas**
- **Does not include roads within municipalities**

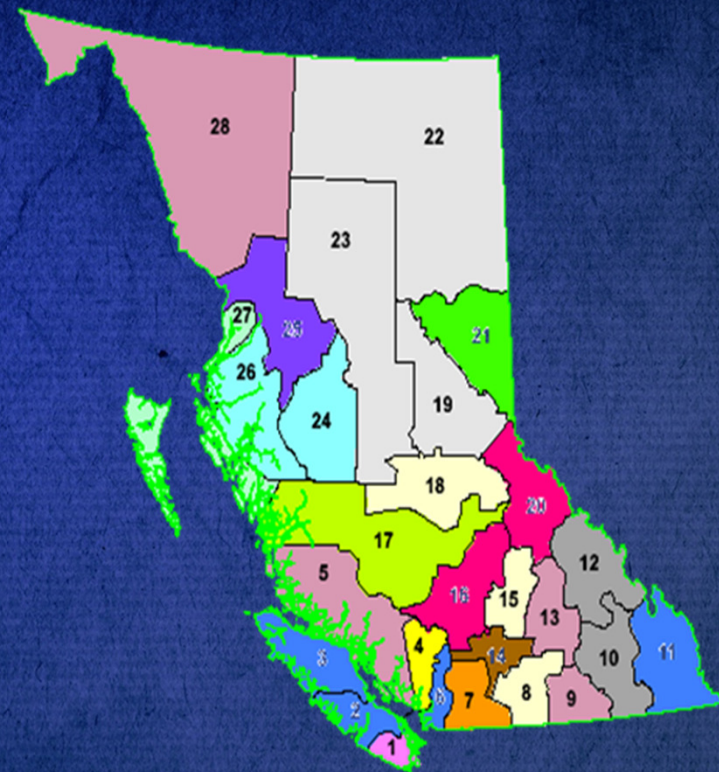






# Service Areas

- 28 Service Areas
- 14 Contractors
- Average lane km: 3,250
  - Smallest: 600 lane km (SA27 – North Coast)
  - Largest: 7,000 lane km (SA22 – North Peace)
- Limit of 4 Service Areas per Contractor







# Contracting History

- Privatized highway maintenance in 1988
- In our 4<sup>th</sup> round of contracts
- Changes that have occurred over time:
  - Length of contract term: 3-5-10
  - Contract language & specs: prescriptive to performance
- Current contracts were tendered in 2003/04





# Contract Highlights

- Long term contracts – originally 10 years but were extended to 15
- Performance based, or end product specifications
- Contractor supplies equipment, workforce and maintenance yards
- Government supplies gravel sources
- Contractor is responsible for quality
- Must provide a Quality Management system (QMS)
- Government performs quality audits and daily monitoring





# Contract Highlights

- **Lump sum contract comprised of two parts:**
  - **Routine Work**
    - Work is hard to quantify, or very cyclical
    - Higher risk to contractor
  - **Quantified work**
    - Work is easy to quantify
    - Risk to contractor is lower





# Routine Activities

- **All winter maintenance**
  - Snow plowing
  - Sanding
  - Salting
- **Some summer maintenance**
  - Bridge cleaning
  - Sweeping
- **Temporary maintenance**
  - Temporary pothole patching
  - Temporary bridge repairs
- **Patrol and inspection**







# Quantified Activities

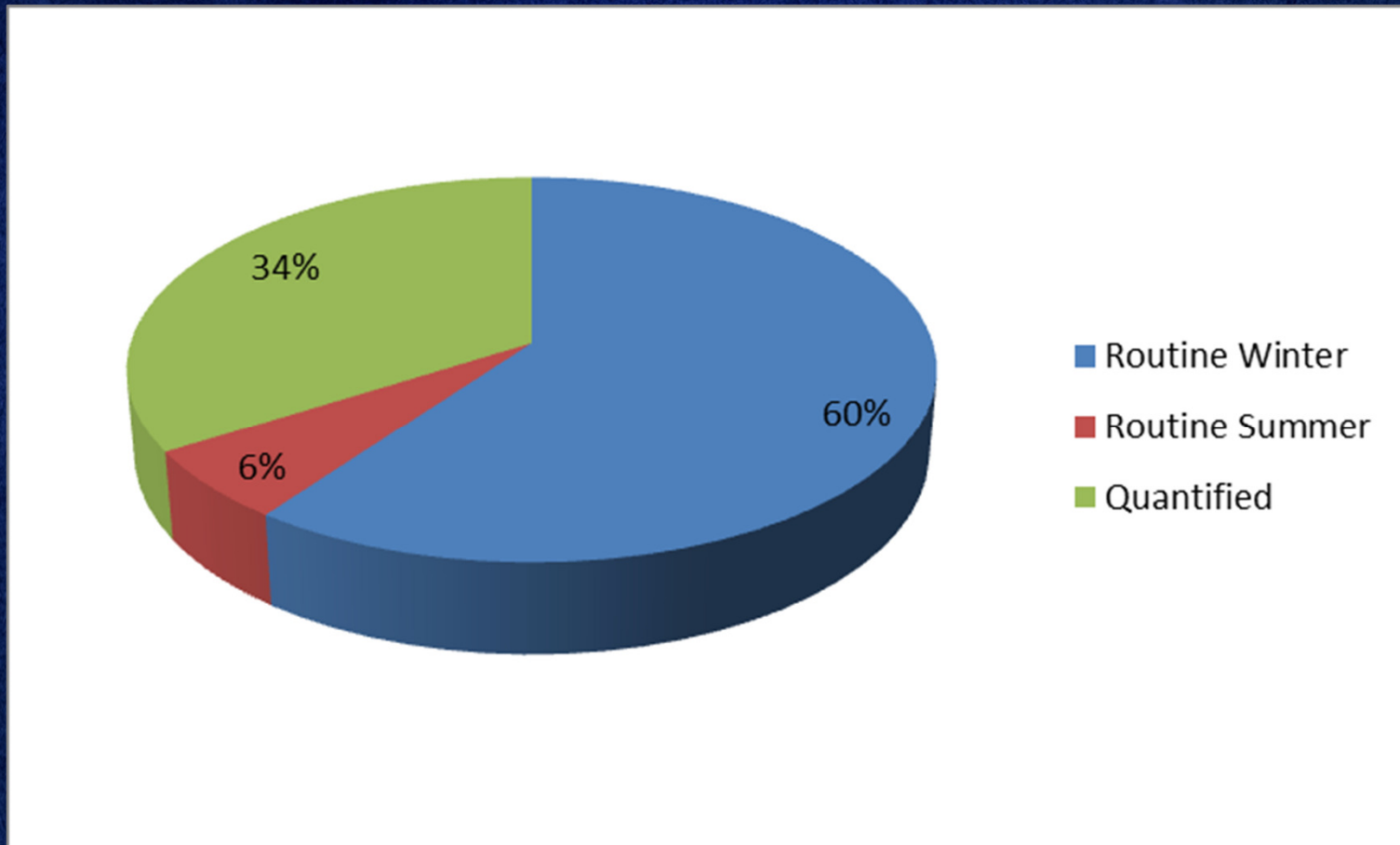
- **Surface Maintenance**
  - Permanent patching
  - Grading
  - Shoulder Maintenance
- **Roadside Maintenance**
- **Drainage Appliance Maintenance**
- **Sign Maintenance**
- **Bridge Maintenance**







# Estimated Cost Breakdown







# Excluded Activities

- Pavement Marking
- Electrical Maintenance
- Snow Avalanche Control
- Rock Scaling
- Engineering
- Rehabilitation
- Expansion Projects







# Service Levels/Road Classifications

- **Service levels determined by:**
  - 8 summer classes
  - 6 winter classes
- **Based on:**
  - Type and volume of traffic
  - Routes and use
    - School buses
    - Industrial
    - hospitals
- **Higher classification warrants higher service level**







# Specifications

- End-product approach
- Limited the use of methods, procedures
- Examples
  - Maximum snow accumulations
  - Response times







# Winter Maintenance

- **Emphasis on pro-active approach and local stakeholder needs**
- **Contractor assumes risk for winter weather related events/work**
  - Continuous weather events
  - Longer than normal winter periods







# Summer/Quantified Maintenance

- Contractor submits annual plan
- Reviewed by district offices
- Quantities for various items can be traded value for value based on needs of the infrastructure
  - ie: in a dry year may trade mowing credits for dust control
  - We may allow a contractor to carry over patching credits over a couple of years to allow contractor to benefit from economies of scale







# Emergencies

- Includes rock/mud slides, floods/washouts and structure damage
- Financial caps protect the contractor
- Work up to the caps is routine
- Work beyond the caps is cost plus







# Additional Work

- Some activities have financial caps (drainage maintenance, bridge work)
- Work beyond the cap is usually assigned to the contractor and paid at cost plus







# Quality Management System (QMS)

- **Contractors must follow the principles of the ISO 9000:2000 standard**
  - No requirement to be ISO certified
- **Contractor is responsible for ensuring quality**

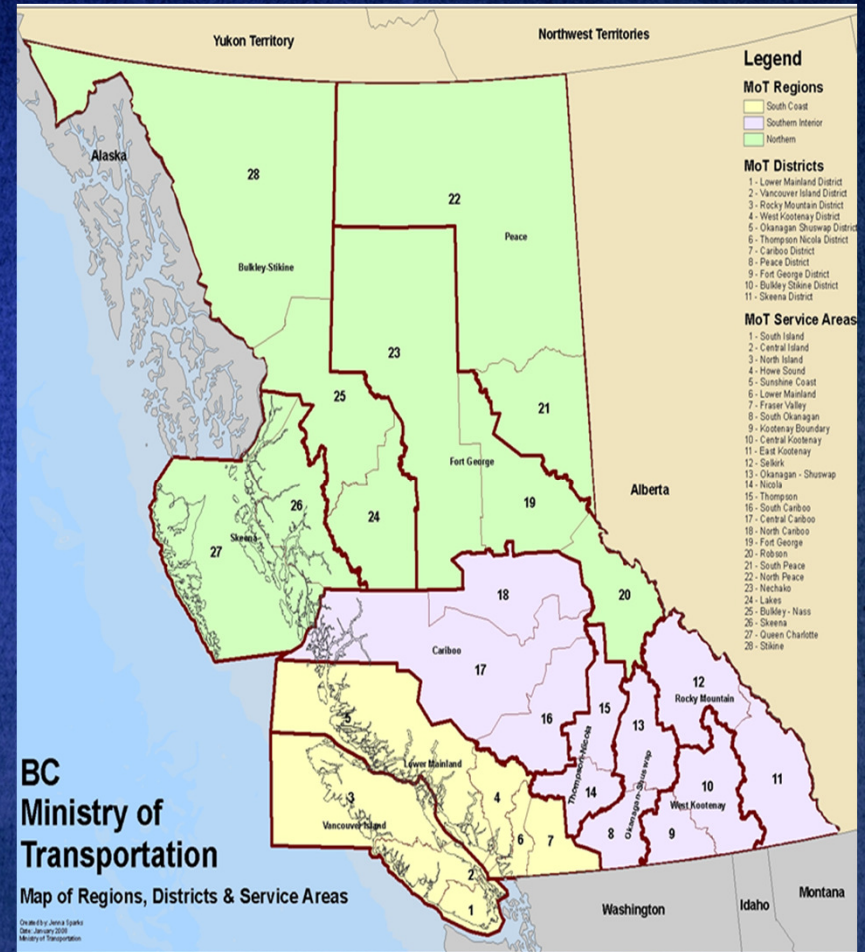






# MoTI Administration

- **3 Regions / 11 Districts**
- **Contracts administered by:**
  - Approx 100 Area Managers
  - Report to 21 Operations Managers
  - 11 District Transportation Managers
- **3 Regional Directors involved at a higher level**







# Quality Plan

- **Monitoring**
  - Staff look at the state of the infrastructure on a daily basis
  - Note work being done as well as deficiencies
  - 11 District Transportation Managers
- **3 Regional Directors involved at a higher level**







# Audits

- **3 types of audits**
  - Local audits by Area Managers on a regular basis
  - 2 regional audits (summer & winter) done by staff from another District
  - Stakeholder assessment audits
    - Police, fire depts. trucking firms etc.
- **Results of audits feed into the Contractor Assessment Program (CAP)**

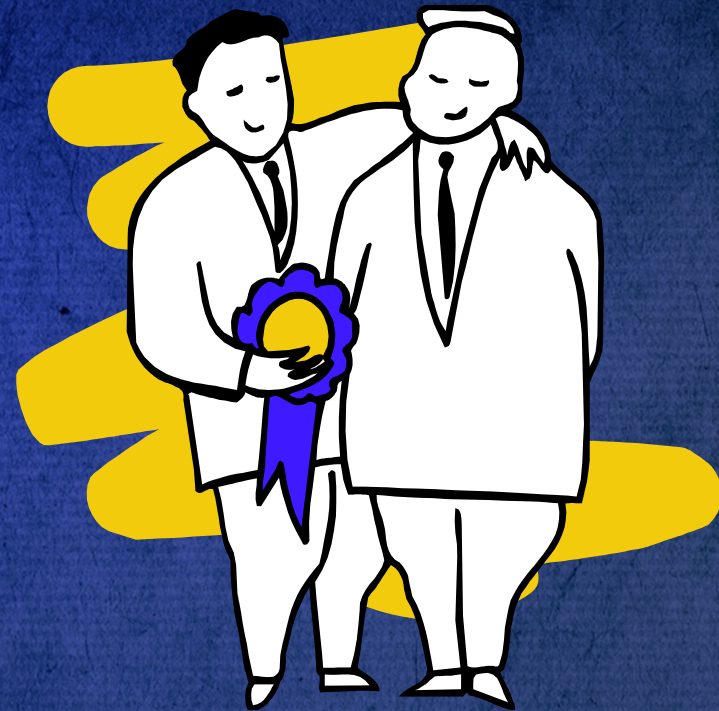






# Contractor Assessment Program

- **Objectives**
  - Encourage contractors to exceed minimum requirements
  - Reward outstanding contractors
- **Rate contractors based on**
  - 50% of local audit
  - 30% on regional audit
  - 20% on stakeholder assessment
- **Potentially 2% of annual contract price available**
  - \$13.5M contract, performance payment could be \$270K







# Tendering Approach

- **RFP using upset pricing**
  - Allows setting and controlling of operations budget
  - Price is adjusted annually to account for inflation
    - Labour
    - Fuel
    - Non-Residential Construction Index
- **Third party documents**
  - Insurance, bonding requirements
- **2 envelope system**
  - Service proposal (QMS and local knowledge) worth 30%
  - Price, worth 70%







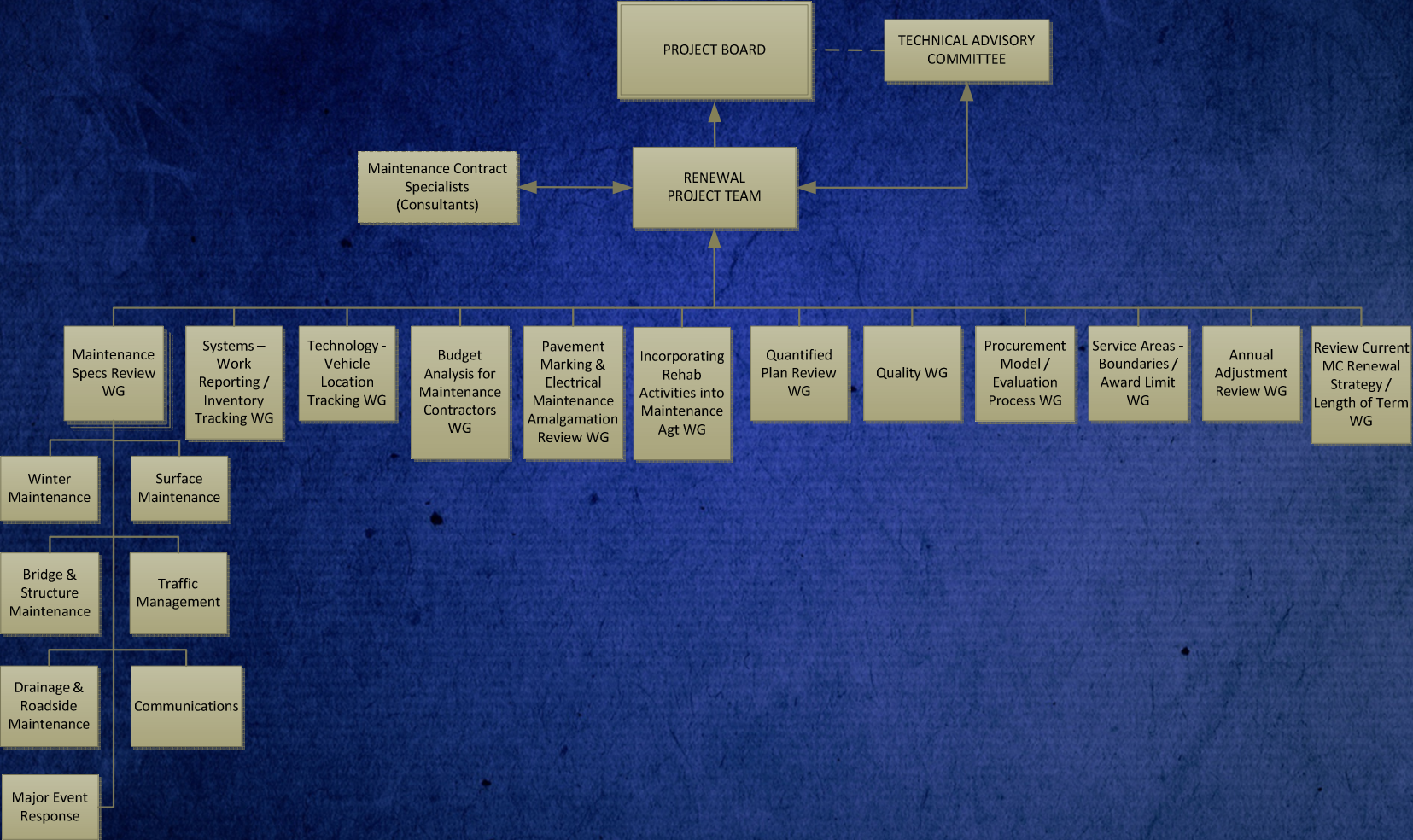
# Upcoming Contract Renewal

- **One contract will expire this September**
  - Just completed RFP process and chosen a preferred proponent
  - Used a slightly updated version of the existing contract
- **Remaining 27 Service Areas will expire in 2018/19**
  - Undertaking the renewal process now





# Project Governance







## **Key Milestone Dates**

- **End of Aug 2016: Board approval of working Group options**
- **End of October 2016: Presentation to cabinet**
- **Early Dec. 2016: Treasury Board submission**
- **March 19<sup>th</sup>, 2017: Writ of election issued**
- **May 9<sup>th</sup>, 2017: Next Provincial election**
- **July 31<sup>st</sup>, 2017: First 8 RFPs on BC Bid**
- **Aug 31<sup>st</sup>, 2018: First 8 contracts expire**





## For Further Information

- Boilerplate contract agreement and specifications and other maintenance related info available at:
  - <http://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/contracting-to-transportation/highway-bridge-maintenance>
- Contact: Ian Pilkington at:
  - [Ian.Pilkington@gov.bc.ca](mailto:Ian.Pilkington@gov.bc.ca)
  - Or call **(250) 387-7627**





# Questions?

