

## Westshore Fact Sheet

### **Proposed Terminals:**

Royal Bay, Esquimalt, and Ships Point

### **Vessel Design:**

Damen Fast Ferry 3209, 294 passengers, diesel, 25 knots, significant wave height of 2.5m

### **Weather Delays/Cancellations:**

Based on 25 years of data, estimated 0.2% of the time – consistent with current BCF weather cancellation stats

**Demand Forecast:** Based on CRD transportation model, no surveys conducted

2021 – 3,100 riders @ \$2.50 = \$2.59 million revenue

2038 – 4,000 riders @ \$2.50 = \$3.34 million revenue

### **Annual Growth Rate:**

Estimated to be 2.7% (Royal Bay/Ships Point) and 0.8% (Royal Bay/Esquimalt)

### **Capital Costs:**

Royal Bay - \$27,900,000 (\$15.2 marine, \$12.7 upland)

Esquimalt - \$10,000,000 (\$9.5 marine, \$.5 upland)

Ship Point - \$3,700,000 (\$3.2 marine, \$.5 upland)

### **Operational Costs:**

Crewing – 4 people per vessel with 3 crews for each vessel = \$7M/year

Fuel – Assuming diesel fuel at 0.952/l = \$3.2M/year

### **Financial Business Case:**

Base case shows yearly losses of 8M/year and NPV over 40 years of negative \$230M

### **Sensitivity Cases Include:**

Considering each proposed route in isolation

Reduced vessel staffing

Reduced vessels and frequency

Reduced service hours

Alternative fuels

Raising fare prices

When all sensitivity measures are used in combination the initial yearly losses are \$280k/year until demand and revenue growth turns the service cash positive around 2026. NPV for the 40-year period is negative \$50M.

### **Alternative Scenario Considered:**

2 ships

30 minute intervals - assuming we can travel through the inner harbour at 10 knots, which we will be discussing with the harbour master very soon

\$5.75 fare  
 2x8 hour shifts (16 hour day)  
 7 days a week  
 Smaller vessel with 200 person capacity so we can operate with 2 crew

As the ferry service is faster, it becomes more appealing to commuters and the demand numbers are increased fairly significantly, meaning revenue is considerably higher.

We have assumed the vessel purchase price remains the same.

We are assuming that an LNG version becomes available.

The fuel costs are about three times more than the previous best case Option 2C, because it is running a full day of 16hrs rather than 8hrs, faster cruising speed, more trips and less down-time at the berth.

| Option                    | Ref. | Route  | Headway (mins) | Schedule            | No. of Ferries | No. of Crews / Ferry | Crew Size | Fuel Type | Fuel Consumption/yr/ vessel (lbs/DLE) | Fare    | Demand Growth |             | Daily Ridership (2021) | Annual Revenue (2021) | Total Project Initial Capital Cost (2020) | Net Annual Cash Flow (2021) | Net Present Value |
|---------------------------|------|--------|----------------|---------------------|----------------|----------------------|-----------|-----------|---------------------------------------|---------|---------------|-------------|------------------------|-----------------------|---|-----------------------------|-------------------|
|                           |      |        |                |                     |                |                      |           |           |                                       |         | 2021 – 2038   | 2039 – 2058 |                        |                       |   |                             |                   |
| Full Day Full Fleet       | 1a   | RB-SP  | 20             | Full day (16 hours) | 4              | 3                    | 4         | Diesel    | 686,400                               | \$ 2.50 | 2.65%         | 1.99%       | 2834                   | \$ 2,384,376          | \$ 97,975,966                             | -\$ 8,395,638               | -\$ 227,370,553   |
|                           |      | RB-ESQ | 60             | Full day (15 hours) | 1              | 3                    | 4         | Diesel    | 571,700                               | \$ 2.50 | 0.79%         | 0.59%       | 243                    | \$ 209,368            |   |                             |                   |
|                           | 2a   | RB-SP  | 20             | Full day (16 hours) | 4              | 3                    | 4         | Diesel    | 686,400                               | \$ 2.50 | 2.65%         | 1.99%       | 3031                   | \$ 2,550,463          | \$ 76,658,353                             | -\$ 6,373,802               | -\$ 169,925,435   |
|                           | 3a   | RB-ESQ | 60             | Full day (15 hours) | 1              | 3                    | 4         | Diesel    | 571,700                               | \$ 2.50 | 0.79%         | 0.59%       | 318                    | \$ 273,734            | \$ 49,922,088                             | -\$ 2,414,425               | -\$ 92,730,472    |
| Full Day Reduced Fleet    | 1b   | RB-SP  | 40             | Full day (16 hours) | 2              | 3                    | 4         | Diesel    | 686,400                               | \$ 2.50 | 2.78%         | 2.08%       | 2318                   | \$ 1,947,609          | \$ 74,072,057                             | -\$ 4,693,353               | -\$ 141,835,628   |
|                           |      | RB-ESQ | 60             | Full day (15 hours) | 1              | 3                    | 4         | Diesel    | 571,700                               | \$ 2.50 | 0.79%         | 0.59%       | 247                    | \$ 213,434            |   |                             |                   |
|                           | 2b   | RB-SP  | 40             | Full day (16 hours) | 2              | 3                    | 4         | Diesel    | 686,400                               | \$ 2.50 | 2.78%         | 2.08%       | 2427                   | \$ 2,038,952          | \$ 52,754,444                             | -\$ 2,750,307               | -\$ 86,232,495    |
|                           | 3b   | RB-ESQ | 60             | Full day (15 hours) | 1              | 3                    | 4         | Diesel    | 571,700                               | \$ 2.50 | 0.79%         | 0.59%       | 318                    | \$ 273,734            | As per 3a                                 |                             |                   |
| Reduced Day Reduced Fleet | 1c   | RB-SP  | 40             | 4 hrs AM & 4 hrs PM | 2              | 2                    | 2         | LNG       | 343,200                               | \$ 5.75 | 3.25%         | 2.44%       | 710                    | \$ 1,359,123          | \$ 82,069,007                             | -\$ 1,133,587               | -\$ 91,682,566    |
|                           |      | RB-ESQ | 60             | 4 hrs AM & 4 hrs PM | 1              | 2                    | 2         | LNG       | 228,700                               | \$ 5.75 | 1.43%         | 1.07%       | 68                     | \$ 133,283            |   |                             |                   |
|                           | 2c   | RB-SP  | 40             | 4 hrs AM & 4 hrs PM | 2              | 2                    | 2         | LNG       | 343,200                               | \$ 5.75 | 3.25%         | 2.44%       | 866                    | \$ 1,656,833          | \$ 58,085,744                             | -\$ 277,563                 | -\$ 49,742,702    |
|                           | 3c   | RB-ESQ | 60             | 4 hrs AM & 4 hrs PM | 1              | 2                    | 2         | LNG       | 228,700                               | \$ 5.75 | 1.43%         | 1.07%       | 177                    | \$ 346,731            | \$ 52,587,738                             | -\$ 967,888                 | -\$ 70,231,787    |
|                           | 4    | RB-SP  | 30             | Full day (16 hours) | 2              | 3                    | 2         | LNG       | 1,092,080                             | \$ 5.75 | 2.91%         | 2.18%       | 1558                   | \$ 3,301,561          | \$ 58,085,744                             | \$ 173,874                  | -\$ 30,750,360    |

If the project is to move forward:

- Investigate financing and joint-funding options
- Investigate viability of lower crew levels
- Investigate whether smaller vessels could service the route
- Investigate whether LNG could work with proposed vessels
- Geotechnical investigation at Royal Bay
- Assessment of off-peak demand and survey of potential users
- Coastal modelling to assess impacts near Royal Bay
- Further First Nations consultation
- Further stakeholder consultation