

Response to March 17, 2015 Question from the Legislative Analyst's Office
on the Cost of Alternatives
Air Resources Board's Proposed Southern California Consolidation Project

1. Direct and Indirect Cost Estimates: Please provide more detail on the direct and indirect cost estimates for both alternatives. Based on per square foot cost estimates in the IBI analysis, I'm getting slightly lower direct cost estimates than the ones in your response.

Response: In the February 12, 2015 response, ARB presented details on two alternatives. In Alternative 1, ARB outlined the costs of constructing a new testing facility for only heavy-duty vehicles, while retaining the State-owned and leased buildings. Alternative 1 does not meet program needs. In Alternative 2, ARB outlined the costs of constructing a new testing facility that would include just testing activity and laboratories sufficient to meet program needs, with only limited office and shared space. ARB would continue to lease office space in El Monte and would use the existing State-owned space to conduct limited light-duty testing. Alternative 2 meets program needs, but imposes operational inefficiencies. The costs are based on the following:

- The dollars per square foot are based on the IBI Program Summary, dated January 7, 2015. Note that the estimate for sitework is based on the total sitework costs (\$19,497,585) divided by the acreage (14 acres). This results in an estimated cost per square foot of \$31.97. This is also consistent with the data presented in the Clarke Project Solutions Report.
- Note 1. The Other-New Facility Costs are estimated based on the ratio of the Total Estimated Project Costs for the preferred alternative stated in the Capital Outlay Budget Change Proposal Attachment 1 (\$258,178,000) to the Direct Costs for the preferred alternative (\$189,191,000). The calculation is as follows:

$$\text{Other Facility Costs} = \frac{258,178,000}{189,191,000} \times (\text{Direct Costs}) - \text{Direct Costs}$$

- Note 2. See the response to Question 6 for a description of how the \$20,000,000 was estimated for Alternative 1. The estimate of \$5,000,000 for Alternative 2 was based on the need to upgrade the existing HSL laboratory. The estimates are generally based on our experience with retrofits to the test cells at the facility.
- Note 3. For Alternative 1, the Present Value of El Monte Lease Payments was based on existing lease costs of approximately \$2,000,000, with the assumption that these costs would escalate at two percent per year for 25 years. For Alternative 2, we reduced the lease costs by 1/3 as some staff are relocated to the new facility.
- Note 4. The Equipment Costs and Site Assessment and Performance Criteria Costs are the same as those presented in the COBCP.

The table below provides the detailed breakdown for both Alternatives 1 and 2. Alternative 1 costs are higher than the response provided on February 12, 2015, because the original calculation was based on a 30,000 square foot parking garage and it should have been a 50,000 square foot parking garage. Alternative 2 costs are higher due to the use of inaccurate dollars per square foot for the light-duty and heavy-duty testing categories. A slightly different methodology for discounting the present value of lease payments was used that resulted in a less than one percent change. The total difference for Alternative 1 is

less than one percent, while the total difference in Alternative 2 is about two percent. Table 2 compares the costs from this analysis to the original analysis.

**Table 1
Detailed Cost Calculations for Alternatives 1 and 2**

| Program Area | Cost Basis | Alternative 1 | | Alternative 2 | |
|--|---------------|---------------|----------------------|---------------|----------------------|
| | | Sq. Ft. | Cost | Sq. Ft. | Cost |
| Light-Duty Testing | 487.05/sq.ft. | N/A | N/A | 70,000 | \$34,093,500 |
| Heavy-Duty Testing and OBD | 650.75/sq.ft. | 62,300 | \$40,541,725 | 62,300 | \$40,541,725 |
| Portable Emission Measurement Systems | 382.17/sq.ft. | 6,700 | \$2,560,539 | N/A | N/A |
| Chemistry Laboratory | 694.63/sq.ft. | 20,000 | \$13,892,600 | 40,000 | \$27,785,200 |
| Offices and Shared Operation | 407.82/sq.ft. | 10,000 | \$4,078,200 | 50,000 | \$20,391,000 |
| Administrative Services | 259.23/sq.ft. | 1,000 | \$259,230 | 10,000 | \$2,592,300 |
| Parking | 78.37/sq.ft. | 50,000 | \$3,918,500 | 90,000 | \$7,053,300 |
| Site Footprint | 31.97/sq.ft. | 217,800 | \$6,963,066 | 522,720 | \$16,711,358 |
| Direct Costs – New Facility | | | 72,213,860 | | \$149,168,383 |
| Other-New Facility Costs | Note 1 | | \$26,332,212 | | \$54,393,070 |
| Total New Facility Costs | | | \$98,546,072 | | \$203,561,453 |
| HSL Facility Modifications | Note 2 | | \$20,000,000 | | \$5,000,000 |
| Present Value of El Monte Lease Payments | Note 3 | | \$39,046,913 | | \$26,031,269 |
| Total Facility Costs | | | \$157,592,985 | | \$234,592,722 |
| Equipment Costs | Note 4 | | \$101,800,000 | | \$101,800,000 |
| Site Assessment and Performance Criteria Costs | Note 4 | | \$5,900,000 | | \$5,900,000 |
| Total Project Costs | | | \$265,292,985 | | \$342,292,722 |

**Table 2
Comparison of Costs for Alternatives 1 and 2**

| Description | Estimated Costs for Alternative 1 | | Estimated Costs for Alternative 2 | |
|--|-----------------------------------|--------------------|-----------------------------------|--------------------|
| | 2/12/15 Estimate | Revised Estimate | 2/12/15 Estimate | Revised Estimate |
| Direct Costs-New Facility | 70,640,000 | 72,213,860 | 143,890,000 | 149,168,383 |
| Other New Facility Costs | 25,790,000 | 26,332,212 | 52,530,000 | 54,393,070 |
| Total New Facility Costs | 96,430,000 | 98,546,072 | 196,420,000 | 203,561,453 |
| HSL Facility Modifications | 20,000,000 | 20,000,000 | 5,000,000 | 5,000,000 |
| Present Value of Lease Payments | 39,400,000 | 39,046,913 | 26,210,000 | 26,031,269 |
| Total Facility Costs | 155,830,000 | 157,592,985 | 227,630,000 | 234,592,722 |
| Equipment Costs | 101,800,000 | 101,800,000 | 101,800,000 | 101,800,000 |
| Site Assessment and Performance Criteria Costs | 5,900,000 | 5,900,000 | 5,900,000 | 5,900,000 |
| Total Project Costs | 263,530,000 | 265,292,985 | 335,330,000 | 342,292,722 |