Economic Evaluation Complete Report  
Test Project

# Analysis Base Information

* Number of Alternatives: 4
* Planning Horizon: 100 years
* Discount Rate: 3.0%
* Disaster Rate: Every 95 years
* Disaster Magnitude: ["['30']"]% of build cost
* Risk Preference: neutral
* Statistical Value of a Life: $7500000

# Summary

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Plan Title | Total Benefits ($) | Total Costs ($) | Net ($) | Net with externalities ($) | SIR (%) | IRR (%) | ROI (%) | Non-Disaster ROI (%) |
| Base | 30 | 394 | -364 | -273 | -0.92 | No Valid IRR | 0.08 | 0.00 |
| First Round 1 | 253,854 | 394 | 253,460 | 252,710 | 643.30 | No Valid IRR | 644.30 | 0.00 |
| First Round 2 | 2,540,211 | 395 | 2,539,816 | 2,539,816 | 6,429.91 | No Valid IRR | 6,430.91 | 2.02 |
| First Round 3 | 1,271,082 | 328 | 1,270,754 | 1,270,754 | 3,874.25 | No Valid IRR | 3,875.25 | 2.43 |
| First Round 4 | 2,547,264 | 82 | 2,547,182 | 2,547,273 | 31,063.20 | No Valid IRR | 31,064.20 | 107.89 |

# Base

### Alternative 0

## Fatalities Averted

Number of Statistical Lives Saved: 0.00

Value of Statistical Lives Saved: $0

## Disaster-Related Benefits

|  |  |  |
| --- | --- | --- |
| Title | Amount ($) | Effective Present Value ($) |
| Response and Recovery Cost Reductions |  | 0 |
| Direct Losses Prevented |  | 0 |
| Indirect Losses Prevented |  | 30 |
| A Base Ben | 90 | 30 |
| Total |  | 30 |

## Resilience Dividend

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Cost Reductions |  |  |  | 0 |
| Recurring Cost Reductions |  |  |  | 0 |
| Total |  |  |  | 0 |

## Costs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| Direct Costs |  |  |  | 394 |
| Base Direct | Start-Up | N/A | 394 | 394 |
| Indirect Costs |  |  |  | 0 |
| OMR Costs: One-Time |  |  |  | 0 |
| OMR Costs: Recurring |  |  |  | 0 |
| Total |  |  |  | 394 |

Base Direct: <enter a description for this cost>

## Externalities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Positive Externalities |  |  |  | 90 |
| Base Positive One | 1.0 | N/A | 93 | 90 |
| Recurring Positive Externalities |  |  |  | 0 |
| One Time Negative Externalities |  |  |  | 0 |
| Recurring Negative Externalities |  |  |  | 0 |
| Total |  |  |  | 90 |

Base Positive One: <enter a description for this externality>

# First Round 1

### Alternative 1

## Fatalities Averted

Number of Statistical Lives Saved: 0.11

Value of Statistical Lives Saved: $253,826

## Disaster-Related Benefits

|  |  |  |
| --- | --- | --- |
| Title | Amount ($) | Effective Present Value ($) |
| Response and Recovery Cost Reductions |  | 0 |
| Direct Losses Prevented |  | 28 |
| Multi Ben | 83 | 28 |
| Indirect Losses Prevented |  | 0 |
| Total |  | 28 |

## Resilience Dividend

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Cost Reductions |  |  |  | 0 |
| Recurring Cost Reductions |  |  |  | 0 |
| Total |  |  |  | 0 |

## Costs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| Direct Costs |  |  |  | 394 |
| First Direct | Start-Up | N/A | 394 | 394 |
| Indirect Costs |  |  |  | 0 |
| OMR Costs: One-Time |  |  |  | 0 |
| OMR Costs: Recurring |  |  |  | 0 |
| Total |  |  |  | 394 |

First Direct: <enter a description for this cost>

## Externalities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Positive Externalities |  |  |  | 0 |
| Recurring Positive Externalities |  |  |  | 0 |
| One Time Negative Externalities |  |  |  | 0 |
| Recurring Negative Externalities |  |  |  | 749 |
| First Negative Recurr | 6.0 | 89.0 | 839 | 749 |
| Total |  |  |  | -749 |

First Negative Recurr: Some comma based description, at this point I'm just testing things

# First Round 2

### Alternative 2

## Fatalities Averted

Number of Statistical Lives Saved: 1.05

Value of Statistical Lives Saved: $2,538,256

## Disaster-Related Benefits

|  |  |  |
| --- | --- | --- |
| Title | Amount ($) | Effective Present Value ($) |
| Response and Recovery Cost Reductions |  | 0 |
| Direct Losses Prevented |  | 28 |
| Multi Ben | 83 | 28 |
| Indirect Losses Prevented |  | 1,128 |
| Two Benefit | 3,333 | 1,128 |
| Total |  | 1,156 |

## Resilience Dividend

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Cost Reductions |  |  |  | 798 |
| Some Ben | 4 | N/A | 900 | 798 |
| Recurring Cost Reductions |  |  |  | 0 |
| Total |  |  |  | 798 |

## Costs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| Direct Costs |  |  |  | 395 |
| Second Direct | Start-Up | N/A | 395 | 395 |
| Indirect Costs |  |  |  | 0 |
| OMR Costs: One-Time |  |  |  | 0 |
| OMR Costs: Recurring |  |  |  | 0 |
| Total |  |  |  | 395 |

Second Direct: <enter a description for this cost>

## Externalities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Positive Externalities |  |  |  | 0 |
| Recurring Positive Externalities |  |  |  | 0 |
| One Time Negative Externalities |  |  |  | 0 |
| Recurring Negative Externalities |  |  |  | 0 |
| Total |  |  |  | 0 |

# First Round 3

### Alternative 3

## Fatalities Averted

Number of Statistical Lives Saved: 0.53

Value of Statistical Lives Saved: $1,269,128

## Disaster-Related Benefits

|  |  |  |
| --- | --- | --- |
| Title | Amount ($) | Effective Present Value ($) |
| Response and Recovery Cost Reductions |  | 0 |
| Direct Losses Prevented |  | 28 |
| Multi Ben | 83 | 28 |
| Indirect Losses Prevented |  | 1,128 |
| Three Benefit | 3,333 | 1,128 |
| Total |  | 1,156 |

## Resilience Dividend

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Cost Reductions |  |  |  | 798 |
| Some Ben | 4 | N/A | 900 | 798 |
| Recurring Cost Reductions |  |  |  | 0 |
| Total |  |  |  | 798 |

## Costs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| Direct Costs |  |  |  | 328 |
| Third Direct | Start-Up | N/A | 328 | 328 |
| Indirect Costs |  |  |  | 0 |
| OMR Costs: One-Time |  |  |  | 0 |
| OMR Costs: Recurring |  |  |  | 0 |
| Total |  |  |  | 328 |

Third Direct: <enter a description for this cost>

## Externalities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Positive Externalities |  |  |  | 0 |
| Recurring Positive Externalities |  |  |  | 0 |
| One Time Negative Externalities |  |  |  | 0 |
| Recurring Negative Externalities |  |  |  | 0 |
| Total |  |  |  | 0 |

# First Round 4

### Alternative 4

## Fatalities Averted

Number of Statistical Lives Saved: 1.05

Value of Statistical Lives Saved: $2,538,256

## Disaster-Related Benefits

|  |  |  |
| --- | --- | --- |
| Title | Amount ($) | Effective Present Value ($) |
| Response and Recovery Cost Reductions |  | 133 |
| The four ben | 394 | 133 |
| Direct Losses Prevented |  | 28 |
| Multi Ben | 83 | 28 |
| Indirect Losses Prevented |  | 0 |
| Total |  | 161 |

## Resilience Dividend

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Cost Reductions |  |  |  | 0 |
| Recurring Cost Reductions |  |  |  | 8,847 |
| 4 Ben | 1 | 77 | 8,293 | 8,847 |
| Total |  |  |  | 8,847 |

## Costs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| Direct Costs |  |  |  | 82 |
| Fourth Direct | Start-Up | N/A | 82 | 82 |
| Indirect Costs |  |  |  | 0 |
| OMR Costs: One-Time |  |  |  | 0 |
| OMR Costs: Recurring |  |  |  | 0 |
| Total |  |  |  | 82 |

Fourth Direct: <enter a description for this cost>

## Externalities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Start Year | Recurrence (Years) | Amount ($) | Effective Present Value ($) |
| One Time Positive Externalities |  |  |  | 90 |
| Base Positive One | 1.0 | N/A | 93 | 90 |
| Recurring Positive Externalities |  |  |  | 0 |
| One Time Negative Externalities |  |  |  | 0 |
| Recurring Negative Externalities |  |  |  | 0 |
| Total |  |  |  | 90 |

Base Positive One: <enter a description for this externality>