

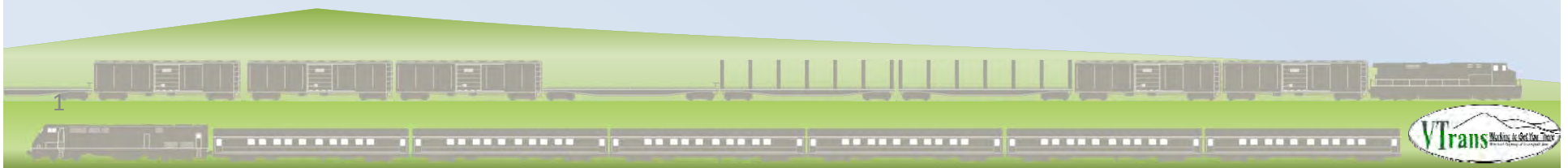


# Vermont State Rail Plan Status Update

**February 4, 2015 – 1:00 PM**

**Vermont Rail Advisory Council**

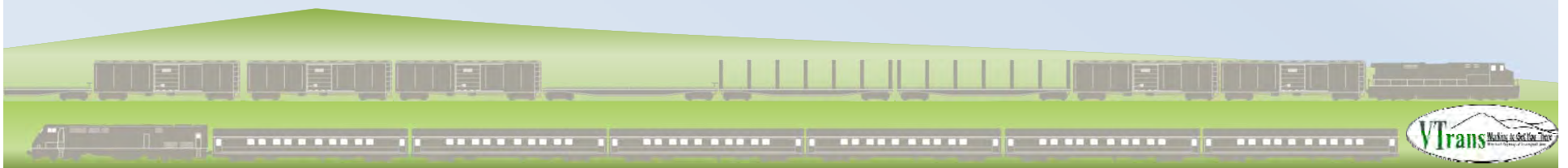
**VTrans Headquarters, Montpelier**



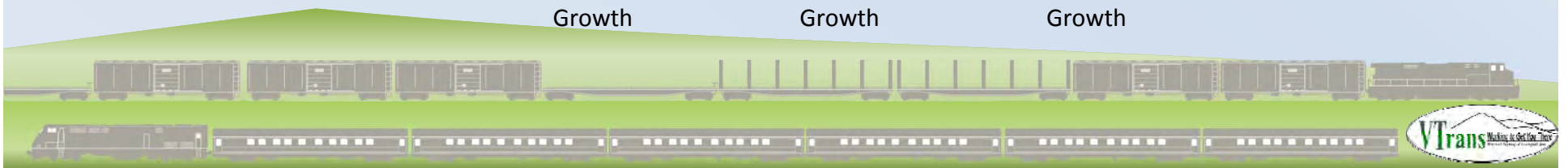
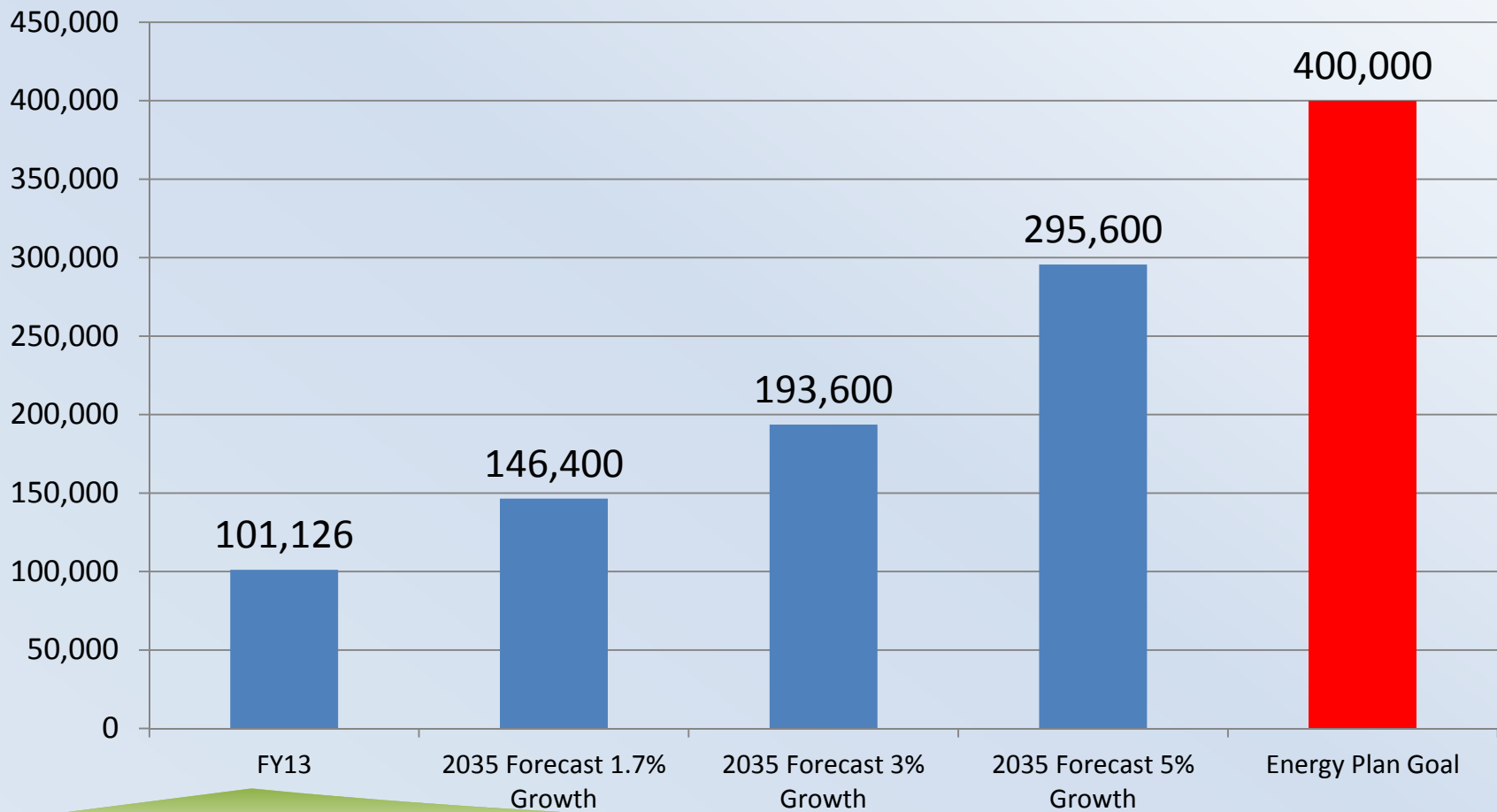
# Agenda

---

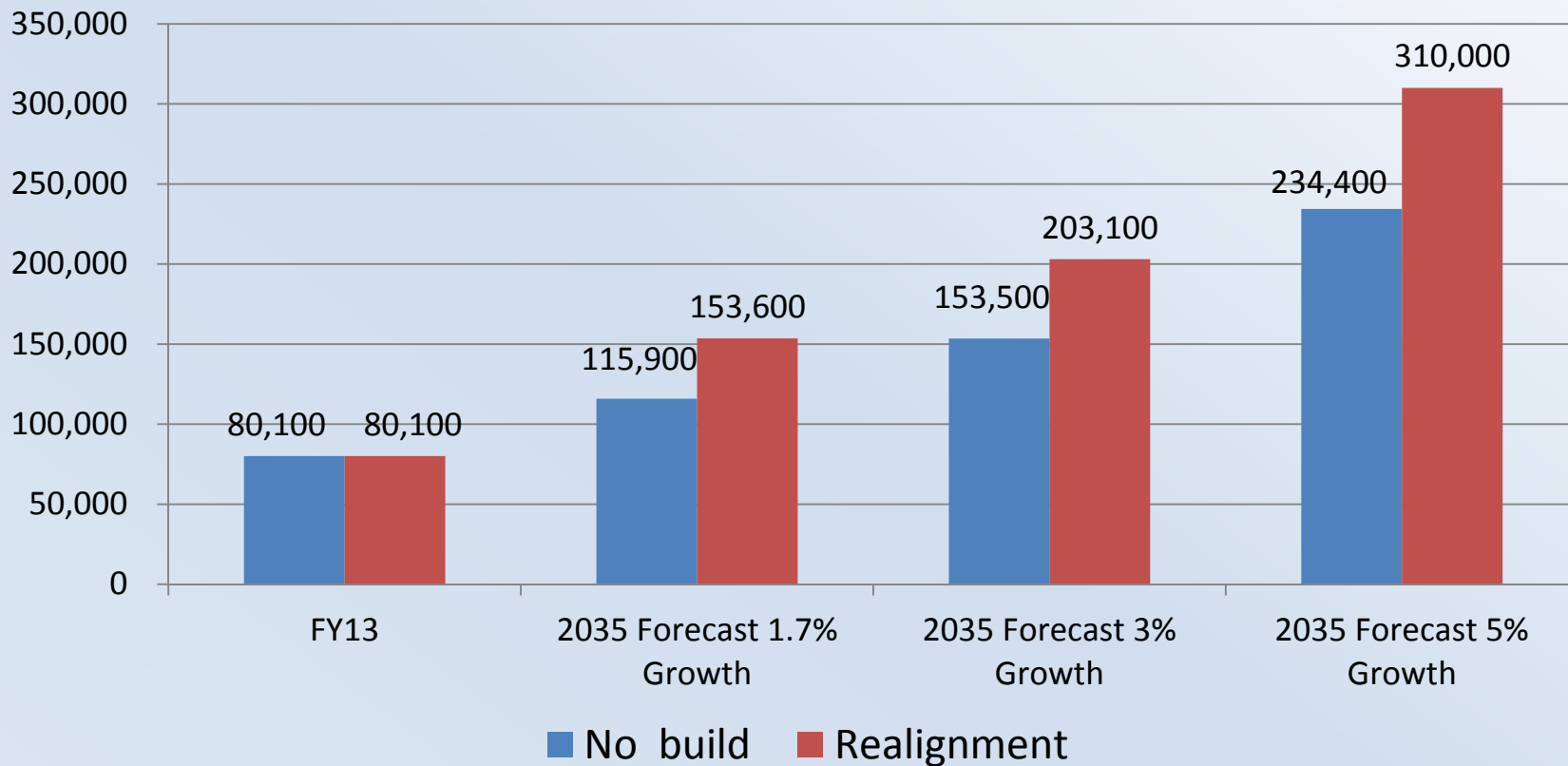
- **Passenger Rail Service Scenario – Ridership and Cost Forecast**
  - **Base Case Rail Vision**



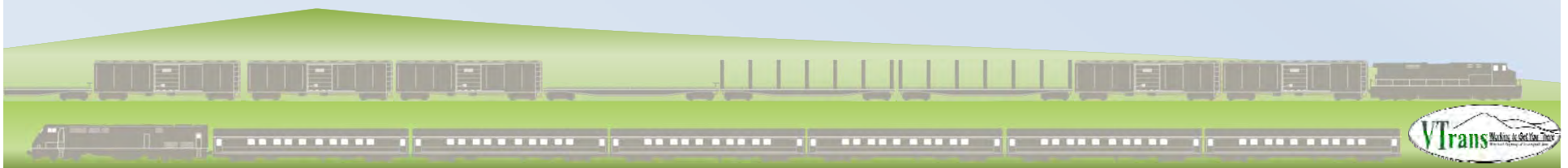
# Intercity Passenger Rail No-Build Scenarios - On and Offs at Vermont Stations



# Intercity Passenger Rail Knowledge Corridor Scenario - On and Offs at Vermonter Stations in Vermont



From *Knowledge Corridor Passenger Rail Study*, Adjusted



# On and Offs at Vermonter Stations in Vermont - Vermont Day Train Extension to Montreal

Station	FY2013 Ridership	1.7% Growth 2035 Forecast	3% Growth 2035 Forecast	5% Growth 2035 Forecast
St. Albans, VT	3,592	9,100	12,000	18,400
Essex Jct., VT	20,579	52,400	69,300	105,800
Waterbury, VT	5,501	14,300	18,900	28,900
Montpelier Jct., VT	8,081	19,900	26,300	40,200
Randolph, VT	2,009	4,200	5,600	8,500
White River Jct., VT	15,480	41,800	55,300	84,400
Windsor-Mt. Ascutney, VT	1,126	2,400	3,200	4,800
Claremont, NH	297	2,000	2,600	4,000
Bellows Falls, VT	4,774	10,100	13,400	20,400
Brattleboro, VT	18,661	43,000	56,900	86,800
<b>Total</b>	<b>80,100</b>	<b>199,200</b>	<b>263,500</b>	<b>402,200</b>

### Estimated Operating Cost

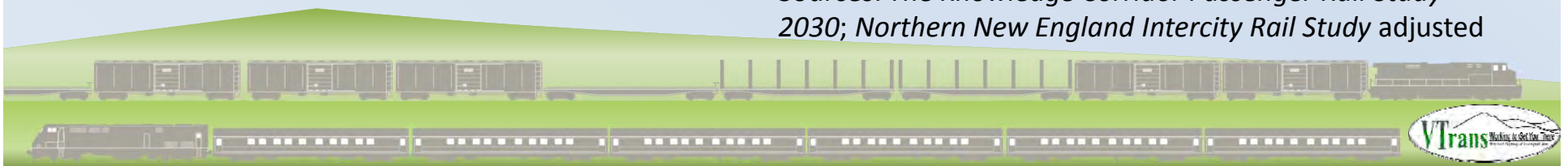
Total VT Operating Cost: \$11.0 million

Total VT Subsidy: \$4.9 million

(assumes constant real prices, VT only subsidizes to the border)

### Ridership Assumptions

- Day train service to Montreal
- New Haven – Hartford – Springfield service implemented by ConnDOT
- 60 MPH service
- Sources: *The Knowledge Corridor Passenger Rail Study 2030*; *Northern New England Intercity Rail Study* adjusted



## On and Offs at Vermonter Stations in Vermont - Vermonter Day Train Extension to Montreal – 2 Frequencies

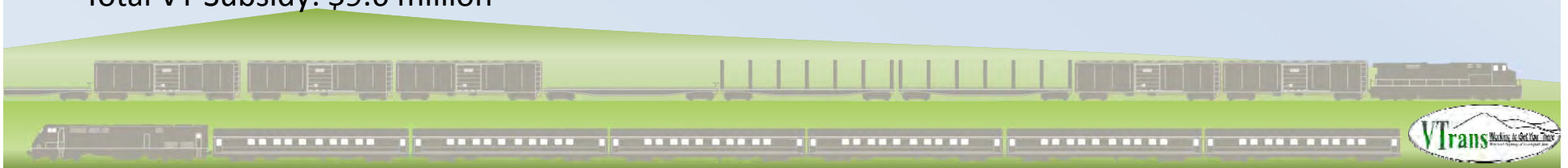
Station	FY2013 Ridership	1.7% Growth 2035 Forecast	3% Growth 2035 Forecast	5% Growth 2035 Forecast
St. Albans, VT	3,592	17,700	23,400	35,700
Essex Jct., VT	20,579	102,100	135,000	206,100
Waterbury, VT	5,501	28,000	37,000	56,500
Montpelier Jct., VT	8,081	38,800	51,300	78,300
Randolph, VT	2,009	8,200	10,800	16,600
White River Jct., VT	15,480	81,600	107,900	164,700
Windsor-Mt. Ascutney, VT	1,126	4,600	6,100	9,300
Claremont, NH	297	3,900	5,200	7,900
Bellows Falls, VT	4,774	19,600	25,900	39,600
Brattleboro, VT	18,661	83,800	110,800	169,200
<b>Total</b>	<b>80,100</b>	<b>388,300</b>	<b>513,400</b>	<b>783,900</b>

### Estimated Operating Cost

Single frequency multiplied by 195%  
 Total VT Operating Cost: \$21.5 million  
 Total VT Subsidy: \$9.6 million

### Ridership Assumptions

- Single frequency multiplied by 195%



## On and Offs at Ethan Allen Stations in Vermont - Ethan Allen Express Extension to Burlington

Station	FY2013 Ridership	1.7% Growth 2035 Forecast	3% Growth 2035 Forecast	5% Growth 2035 Forecast
Burlington	0	21,000	27,800	42,400
Middlebury	0	7,000	9,300	14,100
Rutland	16,815	25,400	33,600	51,300
Castleton	4,211	6,400	8,500	12,900
<b>Total</b>	<b>21,026</b>	<b>59,800</b>	<b>79,200</b>	<b>120,700</b>

### Estimated Operating Cost

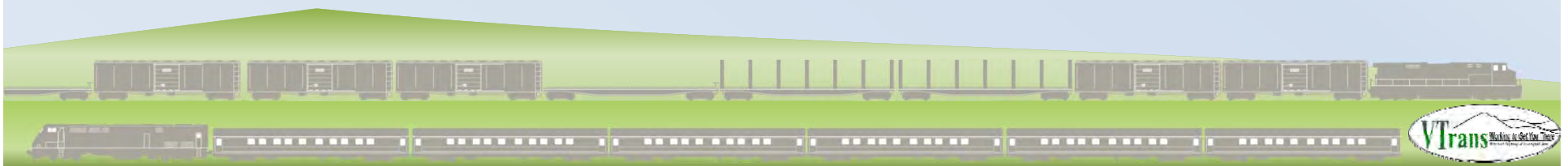
Total VT Operating Cost: \$5.5 million

Total VT Subsidy: \$1.6 million

Assumes operating expense of service extension is proportional to mileage

### Ridership Assumptions

- Extension to Burlington with a stop in Middlebury
- Rutland – Burlington track upgraded to 59 MPH, 90 minute trip time between Rutland and Burlington
- Source: *Environmental Assessment: Rutland – Burlington High-Speed Intercity Passenger Rail* adjusted



On and Offs at Western Corridor Stations in Vermont -  
Ethan Allen Express and New Albany – Burlington Service through Bennington

Station	FY2013 Ridership	1.7% Growth 2035 Forecast	3% Growth 2035 Forecast	5% Growth 2035 Forecast
Burlington	0	14,400	19,000	29,100
Middlebury	0	4,800	6,300	9,700
Rutland	16,815	32,000	42,300	64,600
Castleton	4,211	6,100	8,100	12,300
Manchester	0	7,400	9,800	14,900
N. Bennington	0	11,000	14,500	22,200
Mechanicville	0	7,800	10,300	15,700
<b>Total</b>	<b>21,026</b>	<b>83,500</b>	<b>110,300</b>	<b>168,500</b>

**Estimated Operating Cost**

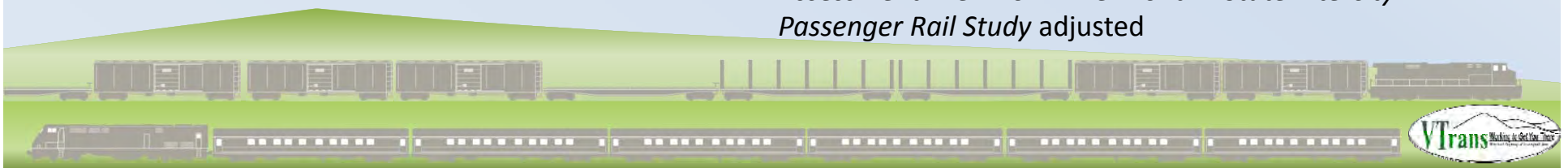
Total VT Operating Cost: \$9.6 million (\$5.2 for new service)

Total VT Subsidy: \$5.5 million (\$4.0 million for new service)

Costs from Bi-State study

**Ridership Assumptions**

- Includes No Build Ethan Allen Express
- Daily service between Albany and Burlington via Bennington
- Stations in Manchester, N. Bennington, Mechanicsville
- Sources: *Environmental Assessment: Rutland – Burlington High-Speed Intercity Passenger Rail*; *Environmental Assessment: New York – Vermont Bi-State Intercity Passenger Rail Study* adjusted





On and Offs at Western Corridor Stations in Vermont -  
Ethan Allen Express Extension to Burlington and  
Albany – Burlington Service through Bennington

Station	FY2013 Ridership	1.7% Growth 2035 Forecast	3% Growth 2035 Forecast	5% Growth 2035 Forecast
Burlington	0	35,500	46,900	71,700
Middlebury	0	11,800	15,600	23,800
Rutland	16,815	32,000	42,300	64,600
Castleton	4,211	6,400	8,500	12,900
Manchester	0	7,400	9,800	14,900
N. Bennington	0	11,000	14,500	22,200
Mechanicville	0	7,800	10,300	15,700
<b>Total</b>	<b>21,026</b>	<b>111,900</b>	<b>147,900</b>	<b>225,800</b>

**Estimated Operating Cost**

Total VT Operating Cost: \$10.7 million

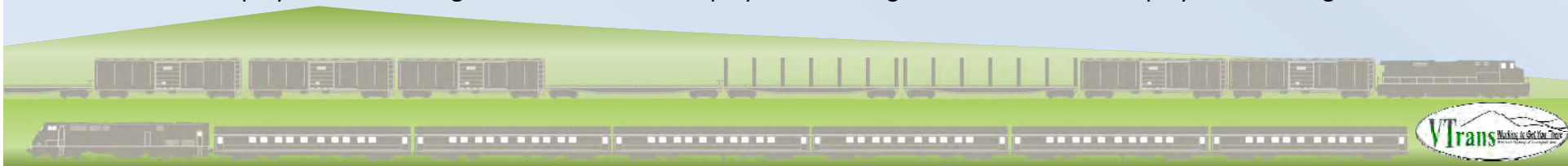
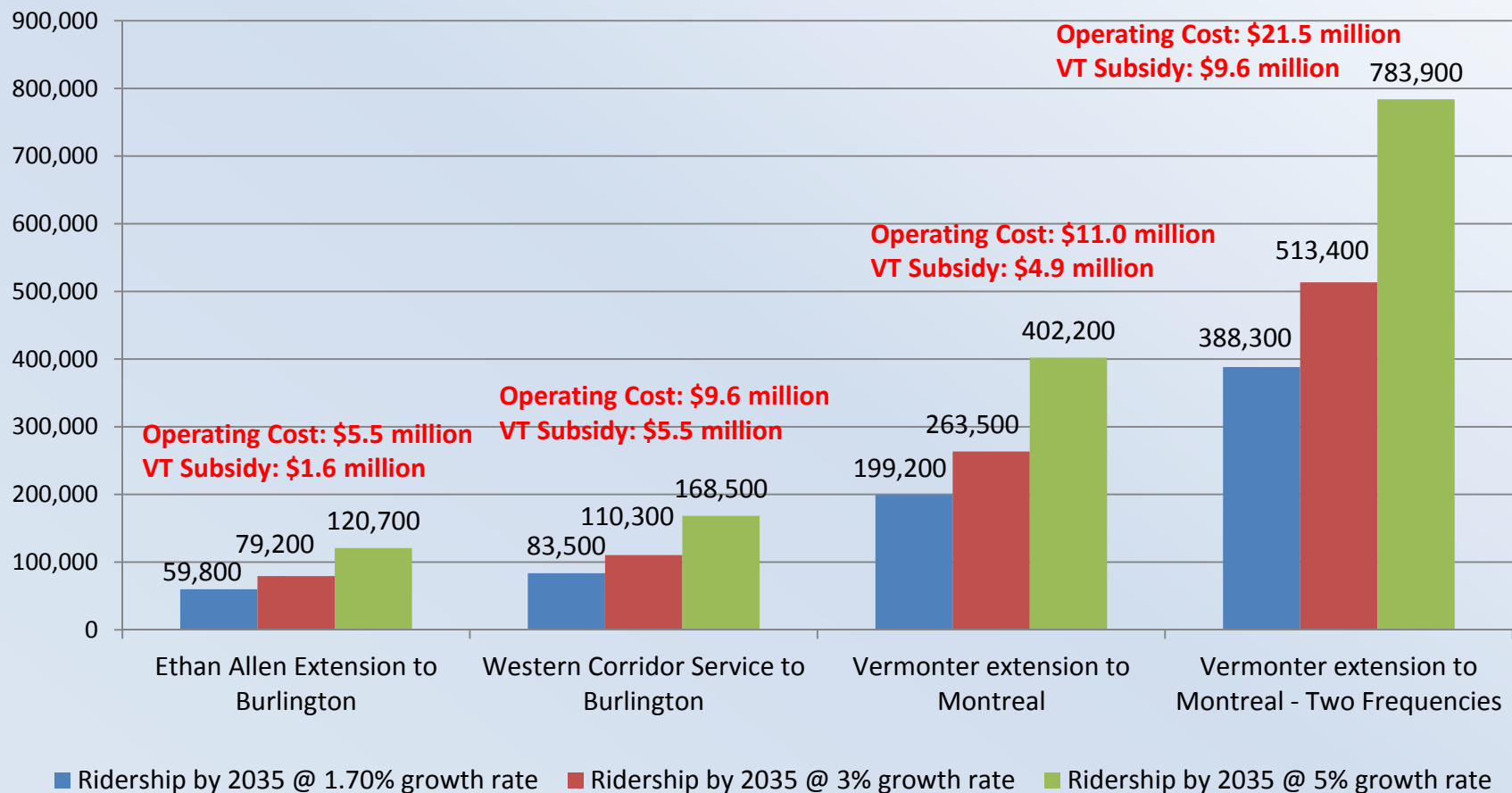
Total VT Subsidy: \$5.5 million

**Ridership Assumptions**

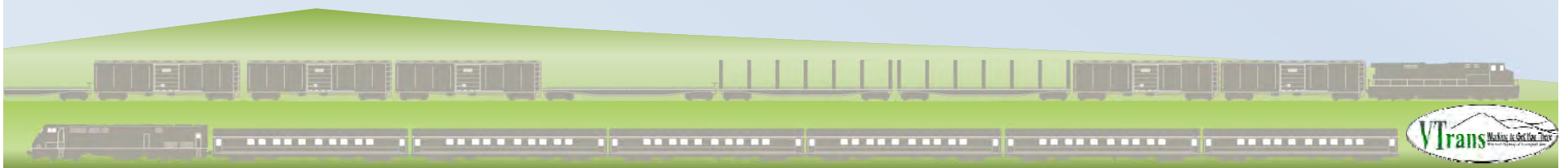
- Daily service between Albany and Burlington via Bennington
- Stations in Manchester, N. Bennington, Mechanicsville
- Sources: *Environmental Assessment: Rutland – Burlington High-Speed Intercity Passenger Rail; Environmental Assessment: New York – Vermont Bi-State Intercity Passenger Rail Study* adjusted



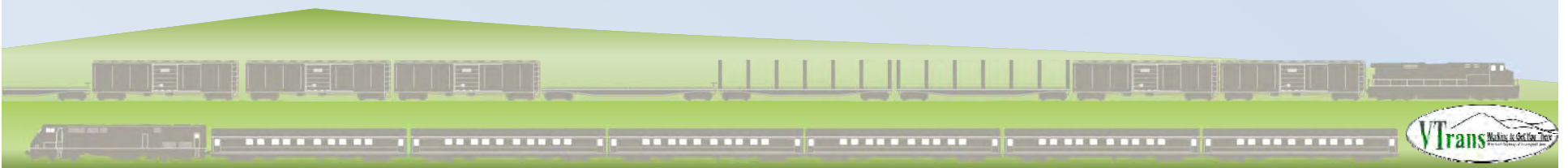
# Summary of Proposed Service Build out Options On and Offs at Vermont Stations in Year 2035



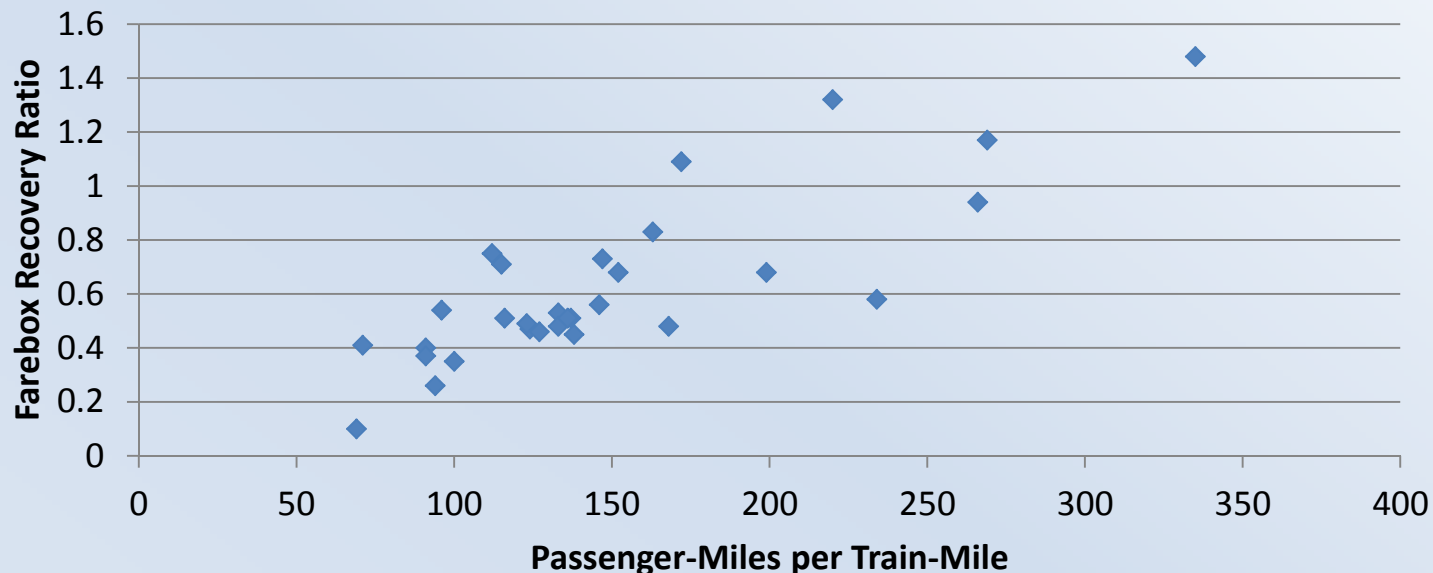
# Question and Comments



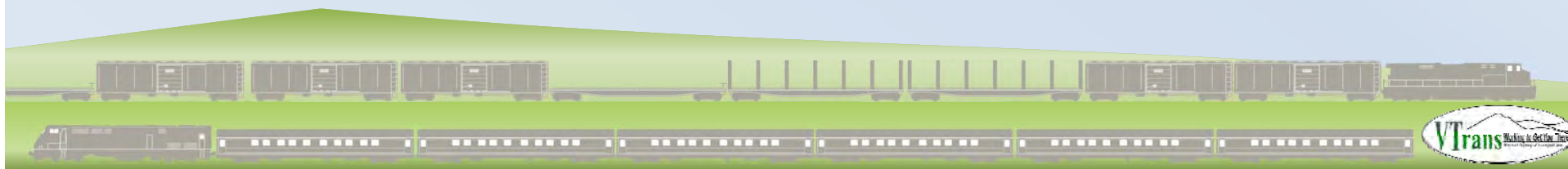
# As Needed Slides



# Relationship between Route Density and Financial Performance



	Ethan Allen Extension to Burlington	Albany - Burlington Service	Vermont Extension to Montreal
Passenger-Miles per Train-Mile	207	72	173
Farebox Recovery Ratio	72%	23%	55%



# General Assumptions

- Capacity is not constrained
- Ridership forecasts for 2035, assuming 1.7% increase if no change in frequencies, travel times, reliability
- New frequency is assumed to be 95% of ridership of existing service
- When a service change introduces a transfer - 32% reduction in ridership

