



# Opinion of Cost





## OPINION OF COST BREAKDOWN

The Opinion of Cost has been broken down into 6 segments, which reflect each town the proposed trail runs through including the various villages and hamlets held within that specific town. By breaking the opinion of cost down in this way it allows each town the ability to receive their own opinion of cost for the segment of trail that passes through their own town boundary. Refined trail routings, amenity decisions, and unknown existing conditions may have a significant impact on the costs referenced in the following pages. These preliminary opinions of cost are intended to be visited as a planning guide to determine segment by segment priority and feasibility. Note that the costs presented within do not include any fees associated with right-of-way acquisitions or easements, as these costs are based on the fair-market value of the subject property at the time of purchase and vary widely from parcel to parcel.

The opinions of cost that follow are all inclusive and assume a contractor installation. They include items such as design services, construction inspection, contractor prevailing wages, and a general contingency. Costs can be reduced through a value engineering process or through installation by local focus, such as DPW (department of public works) crews.

### MAP OF TOWNS IN SULLIVAN COUNTY

The following is a map illustrating the town boundaries in Sullivan County and the proposed route of the trail.



# TOWN OF THOMPSON

## SEGMENT 1 OF 6

The following is the opinion of cost for the segment of trail that passes through the Town of Thompson and includes the Village of Monticello.

Item	Quantity	Unit	Unit Cost	Item Total
<b>THOMPSON</b>				
<b>1. Trail construction</b>				
New stone dust trail - 12' wide, complex section (Includes Equestrian Use)	19,946	LF	\$ 130.00	\$ 2,592,980.00
<b>Item 1 Total:</b>				<b>\$ 2,592,980.00</b>
<b>2. Bridges</b>				
<b>Item 2 Total:</b>				<b>\$ -</b>
<b>3. Drainage</b>				
<b>Item 3 Total:</b>				<b>\$ -</b>
<b>4. Fencing, Furnishings and Signage</b>				
Slope protection fencing - 48" wood 3 rail	285	LF	\$ 24.26	\$ 6,914.10
<b>Item 4 Total:</b>				<b>\$ 6,914.10</b>
<b>5. Roadway Crossings</b>				
Marked and Signed Crossing	3	EA	\$ 2,500.00	\$ 7,500.00
Marked Crossing with Yield Lines	1	EA	\$ 2,600.00	\$ 2,600.00
<b>Item 5 Total:</b>				<b>\$ 10,100.00</b>
<b>6. On-Road Segments</b>				
Marked Shared Roadway	7,495	LF	\$ 2.00	\$ 14,990.00
<b>Item 6 Total:</b>				<b>\$ 14,990.00</b>
<b>7. Trailheads</b>				
Pedestrian Trailhead Sign	-	EA	\$500-\$3,200	
Kiosk	-	EA	\$900-\$6,000	
Solar Charging Station	-	EA	\$ 5,000	
Area Map	-	EA	\$500-\$2,700	
Wooden Bench	-	EA	\$800-1,800	
Bike Racks (3)	-	EA	\$ 1,200	
Bike Repair Station	-	EA	\$ 1,650	
Canopy Trees-2" Caliper	-	EA	\$ 1,200	
Understory Trees-1" Caliper	-	EA	\$ 600	
Herbaceous Plants	-	EA	\$ 30	
Pavers	-	SF	\$ 18	
Gravel Parking	-	SF	\$ 10	
Directional Sign	-	EA	\$600-\$3,150	
Mile Marker	-	EA	\$100-\$1,200	
<b>Item 7 Total:</b>				<b>\$ -</b>
<b>Total - Items 1-7</b>				<b>\$ 2,624,984.10</b>
<b>8. Misc. construction costs</b>				
Minor items			10%	\$ 262,500.00
Work zone traffic control			3%	\$ 78,800.00
Field change order			5%	\$ 131,300.00
Mobilization			4%	\$ 105,000.00
<b>Item 8 Total:</b>				<b>\$ 577,600.00</b>
<b>Construction Total</b>				<b>\$ 3,203,000.00</b>
Escalation on Construction (5% per year for two years)			10%	\$ 321,000.00
Engineering and survey			18%	\$ 577,000.00
General contingency			25%	\$ 801,000.00
<b>Project Total</b>				<b>\$ 4,902,000.00</b>
Third Party Engineering Inspection			7%	\$ 225,000.00
<b>Updated Project Total</b>				<b>\$ 5,127,000.00</b>



# TOWN OF FORESTBURGH

## SEGMENT 2 OF 6

The following is the opinion of cost for the segment of trail that passes through the Town of Forestburgh.

Item	Quantity	Unit	Unit Cost	Item Total
<b>FORESTBURGH</b>				
<b>1. Trail Construction</b>				
New stone dust trail - 12' wide, complex section (Includes Equestrian Use)	40,176	LF	\$ 130.00	\$ 5,222,880.00
Rough grading sites, 8,100-10,000 S.F., skid steer & labor	1	EA	\$ 1,792.13	\$ 1,792.13
Minor demolition, railroad ties and track, remove, excludes hauling	2,344	LF	\$ 16.00	\$ 37,509.33
<b>Item 1 Total:</b>				<b>\$ 5,262,181.46</b>
<b>2. Bridges</b>				
Boardwalk	2,088	SF	\$ 75.00	\$ 156,600.00
1st Bush Kill Crossing (Includes necessary construction, installation, and mobilization costs)	1	EA	\$ 62,600	\$ 62,600.00
2nd Bush Kill Crossing (Includes necessary construction, installation, and mobilization costs)	1	EA	\$ 62,600	\$ 62,600.00
<b>Item 2 Total:</b>				<b>\$ 281,800.00</b>
<b>3. Drainage</b>				
<b>Item 3 Total:</b>				<b>\$ -</b>
<b>4. Fencing, Furnishings and Signage</b>				
Slope protection fencing - 48" wood 3 rail	390	LF	\$ 24.26	\$ 9,461.40
<b>Item 4 Total:</b>				<b>\$ 9,461.40</b>
<b>5. Roadway Crossings</b>				
Marked and Signed Crossing	3	EA	\$ 2,500.00	\$ 7,500.00
<b>Item 5 Total:</b>				<b>\$ 7,500.00</b>
<b>6. On-Road Segments</b>				
<b>Item 6 Total:</b>				<b>\$ -</b>
<b>7. Trailheads</b>				
Pedestrian Trailhead Sign	-	EA	\$500-\$3,200	
Kiosk	-	EA	\$900-\$6,000	
Solar Charging Station	-	EA	\$ 5,000	
Area Map	-	EA	\$500-\$2,700	
Wooden Bench	-	EA	\$800-1,800	
Bike Racks (3)	-	EA	\$ 1,200	
Bike Repair Station	-	EA	\$ 1,650	
Canopy Trees-2" Caliper	-	EA	\$ 1,200	
Understory Trees-1" Caliper	-	EA	\$ 600	
Herbaceous Plants	-	EA	\$ 30	
Pavers	-	SF	\$ 18	
Gravel Parking	-	SF	\$ 10	
Directional Sign	-	EA	\$600-\$3,150	
Mile Marker	-	EA	\$100-\$1,200	
<b>Item 7 Total:</b>				<b>\$ -</b>
<b>Total - Items 1-7</b>				<b>\$ 5,560,942.86</b>
<b>8. Misc. construction costs</b>				
Minor items			10%	\$ 556,100.00
Work zone traffic control			3%	\$ 166,900.00
Field change order			5%	\$ 278,100.00
Mobilization			4%	\$ 222,500.00
<b>Item 8 Total:</b>				<b>\$ 1,223,600.00</b>
<b>Construction Total</b>				<b>\$ 6,785,000.00</b>
Escalation on Construction (5% per year for two years)			10%	\$ 679,000.00
Engineering and survey			18%	\$ 1,222,000.00
General contingency			25%	\$ 1,697,000.00
<b>Project Total</b>				<b>\$ 10,383,000.00</b>
Third Party Engineering Inspection			7%	\$ 475,000.00
<b>Updated Project Total</b>				<b>\$ 10,858,000.00</b>



# TOWN OF MAMAKATING

## SEGMENT 3 OF 6

The following is the opinion of cost for the segment of trail that passes through the Town of Mamakating.

Item	Quantity	Unit	Unit Cost	Item Total
<b>MAMAKATING</b>				
<b>1. Trail construction</b>				
New HMA trail - 12' wide, complex section	134	LF	\$ 140.00	\$ 18,760.00
New stone dust trail - 12' wide, complex section	31,806	LF	\$ 130.00	\$ 4,134,780.00
Rough grading sites, 5,100-8,000 S.F., skid steer & labor	1	EA	\$ 3,316.94	\$ 3,316.94
<b>Item 1 Total:</b>				<b>\$ 4,156,856.94</b>
<b>2. Bridges</b>				
<b>Item 2 Total:</b>				<b>\$ -</b>
<b>3. Drainage</b>				
Culvert, Piping, Aggregate, Excavation and Backfill	4	EA LS	\$ 10,446	\$ 41,785.15
<b>Item 3 Total:</b>				<b>\$ 41,785.15</b>
<b>4. Fencing, Furnishings and Signage</b>				
Slope protection fencing - 48" wood 3 rail	3,036	LF	\$ 24.26	\$ 73,653.36
<b>Item 4 Total:</b>				<b>\$ 73,653.36</b>
<b>5. Roadway Crossings</b>				
Marked and Signed Crossing	2	EA	\$ 2,500.00	\$ 5,000.00
Paving for Crossing	30	LF	\$ 60.00	\$ 1,800.00
<b>Item 5 Total:</b>				<b>\$ 6,800.00</b>
<b>6. On-Road Segments</b>				
<b>Item 6 Total:</b>				<b>\$ -</b>
<b>7. Trailheads</b>				
Pedestrian Trailhead Sign	-	EA	\$500-\$3,200	
Kiosk	-	EA	\$900-\$6,000	
Solar Charging Station	-	EA	\$ 5,000	
Area Map	-	EA	\$500-\$2,700	
Wooden Bench	-	EA	\$800-1,800	
Bike Racks (3)	-	EA	\$ 1,200	
Bike Repair Station	-	EA	\$ 1,650	
Canopy Trees-2" Caliper	-	EA	\$ 1,200	
Understory Trees-1" Caliper	-	EA	\$ 600	
Herbaceous Plants	-	EA	\$ 30	
Pavers	-	SF	\$ 18	
Gravel Parking	-	SF	\$ 10	
Directional Sign	-	EA	\$600-\$3,150	
Mile Marker	-	EA	\$100-\$1,200	
<b>Item 7 Total:</b>				<b>\$ -</b>
<b>Total - Items 1-7</b>				<b>\$ 4,279,095.45</b>
<b>8. Misc. construction costs</b>				
Minor items			10%	\$ 428,000.00
Work zone traffic control			3%	\$ 128,400.00
Field change order			5%	\$ 214,000.00
Mobilization			4%	\$ 171,200.00
<b>Item 8 Total:</b>				<b>\$ 941,600.00</b>
<b>Construction Total</b>				<b>\$ 5,221,000.00</b>
Escalation on Construction (5% per year for two years)			10%	\$ 523,000.00
Engineering and survey			18%	\$ 940,000.00
General contingency			25%	\$ 1,306,000.00
<b>Project Total</b>				<b>\$ 7,990,000.00</b>
Third Party Engineering Inspection			7%	\$ 366,000.00
<b>Updated Project Total</b>				<b>\$ 8,356,000.00</b>



# TOWN OF FALLSBURG

## SEGMENT 4 OF 6

The following is the opinion of cost for the segment of trail that passes through the Town of Fallsburg and includes the Village of Woodridge.

Item	Quantity	Unit	Unit Cost	Item Total
<b>FALLSBURG</b>				
<b>1. Trail construction</b>				
New stone dust trail - 12' wide, complex section	33,109	LF	\$ 130.00	\$ 4,304,170.00
Rough grading sites, 1,100-3,000 S.F., skid steer & labor	1	EA	\$ 1,421.54	\$ 1,421.54
Repair Existing Stone Dust Trail	9,287	LF	\$ 60.00	\$ 557,220.00
<b>Item 1 Total:</b>				<b>\$ 4,862,811.54</b>
<b>2. Bridges/Tunnel</b>				
Bridge 1 - Tomsco Falls (Includes necessary construction, installation, shallow footings and mobilization costs)	1	LS	\$ 288,400	\$ 288,400.00
Bridge 1a - Tomsco Falls (Includes necessary construction, installation, shallow footings and mobilization costs)	1	LS	\$ 212,600	\$ 212,600.00
Bridge 2 - Sandburg Creek Crossing (Includes construction, installation, footing and mobilization costs)	1	LS	\$ 137,600	\$ 137,600.00
Bridge 3 - Neversink (Includes necessary construction, installation, and mobilization costs)	1	LS	\$ 750,000	\$ 750,000.00
Tunnel Bypass	1	LS	\$ 365,000	\$ 365,000.00
<b>Item 2 Total:</b>				<b>\$ 1,753,600.00</b>
<b>3. Drainage</b>				
Culvert, Piping, Aggregate, Excavation and Backfill	5	EA LS	\$ 10,446	\$ 52,231.43
<b>Item 3 Total:</b>				<b>\$ 52,231.43</b>
<b>4. Fencing, Furnishings and Signage</b>				
Slope protection fencing - 48" wood 3 rail	8,840	LF	\$ 24.26	\$ 214,458.40
Slope protection fencing - 4' Heavy Duty	1,250	LF	\$ 50.00	\$ 62,500.00
<b>Item 4 Total:</b>				<b>\$ 276,958.40</b>
<b>5. Roadway Crossings</b>				
Marked and Signed Crossing	11	EA	\$ 2,500.00	\$ 27,500.00
Minor Crossing	2	EA	\$ 400.00	\$ 800.00
<b>Item 5 Total:</b>				<b>\$ 28,300.00</b>
<b>6. On-Road Segments</b>				
Shoulder Bikeway	1,181	LF	\$ 7.00	\$ 8,267.00
Marked Shared Roadway	11,220	LF	\$ 2.00	\$ 22,440.00
<b>Item 6 Total:</b>				<b>\$ 30,707.00</b>
<b>7. Trailheads</b>				
Pedestrian Trailhead Sign	-	EA	\$500-\$3,200	
Kiosk	-	EA	\$900-\$6,000	
Solar Charging Station	-	EA	\$ 5,000	
Area Map	-	EA	\$500-\$2,700	
Wooden Bench	-	EA	\$800-1,800	
Bike Racks (3)	-	EA	\$ 1,200	
Bike Repair Station	-	EA	\$ 1,650	
Canopy Trees-2" Caliper	-	EA	\$ 1,200	
Understory Trees-1" Caliper	-	EA	\$ 600	
Herbaceous Plants	-	EA	\$ 30	
Pavers	-	SF	\$ 18	
Gravel Parking	-	SF	\$ 10	
Directional Sign	-	EA	\$600-\$3,150	
Mile Marker	-	EA	\$100-\$1,200	
<b>Item 7 Total:</b>				<b>\$ -</b>
<b>Total - Items 1-7</b>				<b>\$ 7,004,608.37</b>
<b>8. Misc. construction costs</b>				
Minor items			10%	\$ 700,500.00
Work zone traffic control			3%	\$ 210,200.00
Field change order			5%	\$ 350,300.00
Mobilization			4%	\$ 280,200.00
<b>Item 8 Total:</b>				<b>\$ 1,541,200.00</b>
<b>Construction Total</b>				<b>\$ 8,546,000.00</b>
Escalation on Construction (5% per year for two years)			10%	\$ 855,000.00
Engineering and survey			18%	\$ 1,539,000.00
General contingency			25%	\$ 2,137,000.00
<b>Project Total</b>				<b>\$ 13,077,000.00</b>
Third Party Engineering Inspection			7%	\$ 599,000.00
<b>Updated Project Total</b>				<b>\$ 13,676,000.00</b>



# TOWN OF LIBERTY

## SEGMENT 5 OF 6

The following is the opinion of cost for the segment of trail that passes through the Town of Liberty.

Item	Quantity	Unit	Unit Cost	Item Total
<b>LIBERTY</b>				
<b>1. Trail construction</b>				
New asphalt trail - 12' wide, complex section	8,976	LF	\$ 140.00	\$ 1,256,640.00
New stone dust trail - 12' wide, complex section	37,441	LF	\$ 130.00	\$ 4,867,330.00
Rough grading sites, 5,100-8,000 S.F., skid steer & labor	1	EA	\$ 3,316.94	\$ 3,316.94
Rough grading sites, 8,100-10,000 S.F., skid steer & labor	2	EA	\$ 4,451.83	\$ 8,903.66
Repair Existing Stone Dust Trail	7,124	LF	\$ 60.00	\$ 427,440.00
<b>Item 1 Total:</b>				<b>\$ 6,563,630.60</b>
<b>2. Bridges</b>				
<b>Item 2 Total:</b>				<b>\$ -</b>
<b>3. Drainage</b>				
<b>Item 3 Total:</b>				<b>\$ -</b>
<b>4. Fencing, Furnishings and Signage</b>				
Slope protection fencing - 48" wood 3 rail	809	LF	\$ 24.26	\$ 19,626.34
<b>Item 4 Total:</b>				<b>\$ 19,626.34</b>
<b>5. Roadway Crossings</b>				
Marked and Signed Crossing	9	EA	\$ 2,500.00	\$ 22,500.00
Minor Crossing	1	EA	\$ 400.00	\$ 400.00
<b>Item 5 Total:</b>				<b>\$ 22,900.00</b>
<b>6. On-Road Segments</b>				
Shoulder Bikeway	4,184	LF	\$ 7.00	\$ 29,288.00
Marked Shared Roadway	10,922	LF	\$ 2.00	\$ 21,844.00
Marked Shared Roadway with Traffic Calming	214	LF	\$ 14.00	\$ 2,996.00
Sidepath	250	LF	\$ 50.00	\$ 12,500.00
<b>Item 6 Total:</b>				<b>\$ 66,628.00</b>
<b>7. Trailheads</b>				
Pedestrian Trailhead Sign	-	EA	\$500-\$3,200	
Kiosk	-	EA	\$900-\$6,000	
Solar Charging Station	-	EA	\$ 5,000	
Area Map	-	EA	\$500-\$2,700	
Wooden Bench	-	EA	\$800-1,800	
Bike Racks (3)	-	EA	\$ 1,200	
Bike Repair Station	-	EA	\$ 1,650	
Canopy Trees-2" Caliper	-	EA	\$ 1,200	
Understory Trees-1" Caliper	-	EA	\$ 600	
Herbaceous Plants	-	EA	\$ 30	
Pavers	-	SF	\$ 18	
Gravel Parking	-	SF	\$ 10	
Directional Sign	-	EA	\$600-\$3,150	
Mile Marker	-	EA	\$100-\$1,200	
<b>Item 7 Total:</b>				<b>\$ -</b>
<b>Total - Items 1-7</b>				<b>\$ 6,672,784.94</b>
<b>8. Misc. construction costs</b>				
Minor items			10% \$	667,300.00
Work zone traffic control			3% \$	200,200.00
Field change order			5% \$	333,700.00
Mobilization			4% \$	267,000.00
<b>Item 8 Total:</b>				<b>\$ 1,468,200.00</b>
<b>Construction Total</b>				<b>\$ 8,141,000.00</b>
Escalation on Construction (5% per year for two years)			10% \$	815,000.00
Engineering and survey			18% \$	1,466,000.00
General contingency			25% \$	2,036,000.00
<b>Project Total</b>				<b>\$ 12,458,000.00</b>
Third Party Engineering Inspection			7% \$	570,000.00
<b>Updated Project Total</b>				<b>\$ 13,028,000.00</b>



# TOWN OF ROCKLAND

## SEGMENT 6 OF 6

The following is the opinion of cost for the segment of trail that passes through the Town of Rockland.

Item	Quantity	Unit	Unit Cost	Item Total
<b>ROCKLAND</b>				
<b>1. Trail construction</b>				
New stone dust trail - 12' wide, complex section	10,906	LF	\$ 130.00	\$ 1,417,780.00
Rough grading sites, 1,100-3,000 S.F., skid steer & labor	1	EA	\$ 1,421.54	\$ 1,421.54
Rough grading sites, 3,100-5,000 S.F., skid steer & labor	1	EA	\$ 2,162.69	\$ 2,162.69
Rough grading sites, 5,100-8,000 S.F., skid steer & labor	1	EA	\$ 3,316.94	\$ 3,316.94
<b>Item 1 Total:</b>				<b>\$ 1,424,681.17</b>
<b>2. Bridges</b>				
<b>Item 2 Total:</b>				<b>\$ -</b>
<b>3. Drainage</b>				
Culvert, Piping, Aggregate, Excavation and Backfill	5	EA LS	\$ 10,446	\$ 52,231.43
<b>Item 3 Total:</b>				<b>\$ 52,231.43</b>
<b>4. Fencing, Furnishings and Signage</b>				
Slope protection fencing - 48" wood 3 rail	1,310	LF	\$ 24.26	\$ 31,780.60
<b>Item 4 Total:</b>				<b>\$ 31,780.60</b>
<b>5. Roadway Crossings</b>				
<b>Item 5 Total:</b>				<b>\$ -</b>
<b>6. On-Road Segments</b>				
Shoulder Bikeway	8,455	LF	\$ 7.00	\$ 59,185.00
Marked Shared Roadway	3,322	LF	\$ 2.00	\$ 6,644.00
<b>Item 6 Total:</b>				<b>\$ 65,829.00</b>
<b>7. Trailheads</b>				
Two Lookouts over Little Beaver Kill	2	EA	\$ 45,000	\$ 90,000.00
Pedestrian Trailhead Sign	-	EA	\$500-\$3,200	
Kiosk	-	EA	\$900-\$6,000	
Solar Charging Station	-	EA	\$ 5,000	
Area Map	-	EA	\$500-\$2,700	
Wooden Bench	-	EA	\$800-1,800	
Bike Racks (3)	-	EA	\$ 1,200	
Bike Repair Station	-	EA	\$ 1,650	
Canopy Trees-2" Caliper	-	EA	\$ 1,200	
Understory Trees-1" Caliper	-	EA	\$ 600	
Herbaceous Plants	-	EA	\$ 30	
Pavers	-	SF	\$ 18	
Gravel Parking	-	SF	\$ 10	
Directional Sign	-	EA	\$600-\$3,150	
Mile Marker	-	EA	\$100-\$1,200	
<b>Item 7 Total:</b>				<b>\$ 90,000.00</b>
<b>Total - Items 1-7</b>				<b>\$ 1,664,522.20</b>
<b>8. Misc. construction costs</b>				
Minor items			10% \$	166,500.00
Work zone traffic control			3% \$	50,000.00
Field change order			5% \$	83,300.00
Mobilization			4% \$	66,600.00
<b>Item 8 Total:</b>				<b>\$ 366,400.00</b>
<b>Construction Total</b>				<b>\$ 2,031,000.00</b>
Escalation on Construction (5% per year for two years)			10% \$	204,000.00
Engineering and survey			18% \$	366,000.00
General contingency			25% \$	508,000.00
<b>Project Total</b>				<b>\$ 3,109,000.00</b>
Third Party Engineering Inspection			7% \$	143,000.00
<b>Updated Project Total</b>				<b>\$ 3,252,000.00</b>

