TUNNEL DATA.

GROUP	MATERIAL PENETRATED.	CONT.	NAME.	OWNER.	WORKING METHOD.	DATE.	TRACKS	LENGTH IN FEET.	ALIGNMENT.	GRADE PER CENT	DIMENSIONS OF TUNNEL. LINED: MATERIAL	LINED: LENGTH FEET	LINED: WIDTH FEET	LINED: HEIGHT FEET	UNLINED: LENGTH FEET	UNLINED: WIDTH FEET	UNLINED: HEIGHT FEET	TIMBER FINISH	WORK IN PARTS	BEARING PT. AND MO. SINGLE TRACK: HIGH	SINGLE TRACK: LOW	SINGLE TRACK: AVG	TOT. AVG	COST. EXC. CU. YD.	LIN. FT. LINED.	LIN. FT. UNLINED.	LIN. FT. AVG.	CU. FT. (NET) LINED.	CU. FT. (NET) UNLINED.	CU. FT. (NET) AVG.	TOTAL.
HARD ROCK.	Trap	AM.	Weehawken	N.Y.C.&H.R.R.R.	American	1881-83	2	3983	Tangent	0.3 & 0.34	Brick	1000	30	18	700			2983	508	53	10			173	1.54	209	110	132	0.38	0.24	0.34	325,000
	Granite and Sand	AM.	West Point	N.Y.C.&H.R.R.	American	1862-64	2	2864	Tangent	0.4 & 0.7	Brick	2.5	30	18	700			2164	700	73	8			83	1.00	209	110	132	0.38	0.24	0.34	434,000
	Trap	AM.	Fishkill	N.Y.C.&H.R.R.	American	1882-84	2	1964	Tangent	0.4 & 0.7	Brick	2.5	30	18	700					18	8			38	1.00	195		195	0.38		0.38	45,300
	Granite	AM.	Cold Spring	N.Y.C.&H.R.R.	American	1882-83	2	780	Tangent	Avg. 0.36	Concrete	20.5	30	18	700	584	635	1	2	52	10.8			52	1.00	85	78	100	0.30	0.12	0.16	10,04.5
	Granite and Mica Schist	AM.	St. Nicholas Path	N.Y.C.&H.R.R.	American	1904-05	2	490	Tangent	1.4 & 0.6	Concrete	20.5	30	18	700			1	2	36	7.1			36	1.00	35		100	0.30		0.30	77,730
	Mica Schist, Gneiss and Slate	AM.	Hoosac	B.&M.R.R.	English	1854-76	2	25,081	Tangent	0.72	Brick	16.50	30	20	720	17,431	440	176	1	157	10	40	161	1.00			389				0.36	10,000,000
	Gneiss	AM.	Bergen Hill No. 1	Erie R.R.	English	1853-54	2	4368	Tangent	0.19	Brick	17.5	30	20		3,440	580	30	1.5				104	1.00			104				0.42	450,000
	Red Shale, Conglom., Coal	AM.	Nesquehoning	Lehigh Valley	English	1872-75	1	4800			Brick	17.5	30	20	670	3,970	510	39	6	144	36	81	130	1.00	361	135	174	1.16	0.40	0.34	2,000,000
	Shale, Limestone, Clay	AM.	Mahanoy Creek	Lehigh Valley	English	1872-75	1	4800	Tangent	1.2 - 0.8	Brick	16.5	30	20		3,910	510	39	6				114	1.00		38	38				0.34	2,000,000
	Coal	AM.	Shamokin	Pa. R.R.	American	1873-75	1	1163	Tangent							1163	297	1.6	2				177	1.00		82	82				0.36	368,000
	Granite	AM.	Sixth	Pelo. Midland	American	1892-93	1	9395	Tangent	1.4	Timber	7330	16.5	5.75	2065	2.7		38	2	208		162	247				162			0.45	2,840,000
	Granite	AM.	Cascade	Silverton R.R.	American	1891-92		13,572	Tangent		Concrete	7.875	3.4	5.5				37	4	154	36	70	251				247			0.64	3,800,000
	Mica Schist and Gneiss	AM.	Nyack	New York City		1900-04	Twin	1,000	Tang. Curve	0.5 - 2.0	Concrete	10.5	3.6	4.90				67	6	126	16	70	152				251			0.53	2,800,000
	Mica Schist and Gneiss	AM.	Jerome Ave.	New York City		1900-04	2	1,368	Tangent	1.36	Concrete	10.5	3.6	4.90				38	5	108	46	117	108				218			0.53	2,800,000
	Mica Schist and Gneiss	AM.	Central Park	New York City		1901-03	2	4045	Tang. Curve	1.24	Concrete	10.5	3.6	4.90																		
SOFT ROCK.	Limestone, Slate, etc.	EU.	Ulf Gons	Victor Emmanuel Ry.	Belgian	1863-71	2	3,157	Tang. Curve	0.4 - 2.2	Steel	31.67	3.8	6.6			390	390	162	1	202	37	167	251				337			0.70	14,200,000
	Limestone, Sandstone, etc.	EU.	Mont Cenis	Fr. Italian Ry.		1872-81	2	38,004	Tangent & Curve	1.5 - 0.1	Steel	4.80						116	2	563	46	250	240				240			0.70	14,200,000
	Limestone, Gneiss, etc.	EU.	Albula	Swiss Ry.	English	1890-94	2	33,653	Tangent	0.2 - 1.5	Steel	33.653	3.9					49	2	135		364	640		244		244	0.81		0.81	8,500,000
	Granite	EU.	Gravehals	Christiania Ry.		1885-94	1	11,420	Tangent	0.4			3.5	4.5			16,900	3.5	1				124				124			0.41	8,500,000
	Limestone, Shale, etc.	EU.	Simplon	Austrian Ry.	Austrian	1898-05	Twin	64,731	Tang. Curve	0.0 - 0.2 - 0.7	Steel	14.73	3.5	4.24				78	4	660	36		230		187		187	0.58		0.58	12,125,000
	Sandstone	AM.	Tuxedo	N.Y.C.&H.R.R.	American	1900-02	1	2116	Tang. & Curve	0.8	Concrete	8.25	3.7	5.25	1890	3.35		16	4	78	6.5	35	226	1.90	195	46	60	0.32	0.12	0.18	162,204
	Sandstone	AM.	Shenksville	N.Y.C.&H.R.R.	American	1901-02	1	1794	Tang. & Curve	0.8	Concrete	17.5	3.3	5.33				11	2	124	35	82	183	1.90	193		193	0.38		0.38	239,400
	Sandstone	AM.	Tyrone	N.Y.C.&H.R.R.	American	1900-06	1	1153	Tang. & Curve	0.8	Concrete	11.25	3.7	5.25				11	2	161	20	80	110	1.90	131		131	0.34		0.34	1,340,000
	Marl Stone	AM.	Astoria	N.Y.C.&H.R.R.	American	1901-02	1	1431	Tang. & Curve	0.3	Concrete	24.5	3.7	5.25	1016	3.64		11	2	108	35	65	130	2.90	111	44	66	0.33	0.12	0.18	93,212
	Sandstone, Slate and Coal	AM.	Shipland	Pennsylvania R.R.	English	1873-74	2	3612	Tangent	1.0	Brick & Stone	36.0	3.5	5.25				33	2				93	1.07								
	Coal and Shale	AM.	Kingston	Wyoming Ry.	American	1890-91	1	2,500	Tangent	0.4	Timber	5.00	3.5	4.24				24	2	274	101	206	392				118			0.35	1,160,000
	Coal	AM.	Ashley	Lehigh Valley	American	1888-91	1	9900	Tangent	0.4	Timber	5.00	3.5	4.25				23	2	306		128	257									
	Sandstone, Slate and Coal	AM.	Gallitzin	Penna. R.R.	American	1903-04	1	3000	Tangent	1.8	Timber	3.00	3.5	4.17				23	2				164		138		138	0.36		0.39	414,000
	Sandstone	AM.	Scranton	L.&W.R.R.	American	1904-05	1	4747	Tang. Curve	1.0 - 0.8	Timber	3.00	3.5	4.25	1302	3.43		72	2	261	11	104	396	3.35	119	46	90	0.35	0.13	0.26	427,250
EARTH.	Blue Clay, Sand, etc.	AM.	Detour Approach	N.Y.C. Lines	Eng. & Dem.	1906-09	Twin	5,328	Tang. & Curve	1.5 - 2.0	Concrete	5.321	3.8	7.02				32	4				166		467		467	0.20		0.20	2,487,000
	Blue Clay	AM.	Sarnia Approach	Grand Trunk Ry.	Shield	1892-00	1	3,770	Tangent	2.0	Cast Iron	3.716	3.8	5.92				8	2	306	110	206	411		417		417	1.35		1.35	1,545,875
	Sand, Clay and Gravel	AM.	Harvard St.	B.&O.R.R.	Eng. & Dem.	1900-03	2	8,350	Tang. Curve	0.8	Brick	8.350	3.20	5.00				26	10	20	50	70	321		208		208	0.40		0.40	1,750,000
	Blue Clay, Gravel	AM.	E. Boston App.	City of Boston	Bore Shield	1900-04	2	2,436	Tang. Curve	2.5-4.0 & 0	Concrete	22.00	3.8	6.05				42	2	211			103		322		322	0.90		0.90	759,000
	Clay, Sand, Decomposed Shale	EU.	Belchingley	S.E. Eastern Ry.	English	1844-47	2	3,972	Tangent	0.054	Brick	3.97	4.88	6.94				21	21				159		116		116	0.24		0.24	452,000
	Clay, Sand, Decomposed Shale	EU.	Saltwood	S.E. Eastern Ry.	English	1844-47	2	2,896	Tangent	0.41	Brick	2.896	4.88	6.94				14	23				133		98		98	0.24		0.24	459,000
	Chalk, Gypsum, Loam, Sand	EU.	Sarnia	Intercolonial Ry.	Belgian	1853-58	1	3,150	Tang. Curve	1.1		2.50	4.88	1.012											298		298	0.46		0.46	459,000
	Clay	EU.	Howard	Hungarian Ry.	Austrian		1	2,083	Tangent	1.0	Timber	2.00	3.5												92		92	0.28		0.28	170,336
	Stone, Wet Clay	EU.	Clifton	Ill. & Neuville	Italian	1865-71	1	1,600			Stone	4.00	3.94	7.00				69	16			20	70		533		533	0.83		0.83	1,057,300
	Shale, Marl, Sandstone, etc.	EU.	Severn Approach	S.E. Eastern Ry.	English	1873-85	2	12,492	Tangent	1.0 - 0.9	Brick	12.492	3.28	8.00				146	9				86									
SUB-AQUEOUS.	Blue Clay, Sand, etc.	Am.	Detour River	N.Y.C. Lines	Wilgus	1906-09	Twin	2,624	Tang. & Curve	1.5 - 2.0	Concrete	2.624	3.28	1.900				32					32		371		371	1.65		1.65	2,327,000
	Blue Clay	Am.	Sarnia	Grand Trunk Ry.	Shield	1892-00	1	2,290	Tangent	0.1 - 2.0	Cast Iron	2.290	3.29	5.56				5	2	352	182	229	438		417		417	1.35		1.35	954,175
	Blue Clay, Boulder Clay, Gravel	Am.	East Boston	C.B. of Boston	Bore Shield	1900-04	2	2,700	Tang. Curve	0.5 - 4.1	Concrete	22.0	3.27	5.20				45	2	211			103		352		352	0.90		0.90	950,000
		Am.	Harlem River	N.Y.&N.E.R.R.	Wilgus	1904-04	Twin	2,441	Tangent	3.2	Concrete	5.41	3.27	5.41				36					18		780		780	2.38		2.38	500,000
		Am.	East River	N.Y.&N.E.R.R.	Shield	1904-07	Twin	3,215	Tangent	0.1-0.25-1.5	Concrete	3.215	3.3	1.734											2000		2000	1.76		1.76	1,530,000
		Am.	East River	N.Y.&L.I.R.R.														48	4	310	17	70	278		298		298	1.28		1.28	3,100,000
		Am.	East River	New York City	Shield	1903-07	Twin	6,547	Tangent	3.5	Conc.-C.I.	6.547	3.8	7.67				22	2	180	16.6	173	330		1000		1000	1.76		1.76	6,590,000
		Am.	North River	Penna. R.R.	Shield	1904-07	Twin	6,590	Tangent	1.3-0.53-1.9	Conc.-C.I.	6.590	3.67	8.67																		
	Gravel and Sand	EU.	Thames River	London Ry.	Brunels'	1825-43	2	1,200	Tangent		Brick	1.200	3.33	8.55				26	2				13		1958		1958	5.11		5.11	2,350,000
	Shale, Marl, Sandstone, etc.	EU.	Severn River	S.E. Western Ry.	English	1873-85	2	10,500	Tangent	1.0 - 0.9	Brick	10.500	3.28	8.00				146	2				72									