2024 Road Inventory Data Dictionary

Fields

Field name	Alias	Domain	Type	Description
route_id	Route ID		String	Unique identifier for contiguous sequence of road segments belonging to a logical route
from_measure	From Measure		Double	The measured length along the specified Route feature where this Road Inventory segment starts.
to_measure	To measure		Double	The measure length along the Route feature where this Road Inventory segment ends
Route_System	Route System	Route System	String	A categorization method for routes.
Route_Number	Route_Number		String	The official route numbers.
Route_Direction	Route_Direction		String	The direction a route traverses (NB, SB, EB, WB). NB and EB are primary (inventory) direction routes. SB and WB are opposing (non-inventory) direction routes.
Rd_Seg_ID	Road Segment ID		Integer	IDs that were automatically generated for each intersection-to-intersection segment in legacy Road Inventory (2003-2014).
Facility	Facility Type	Facility Type	SmallInteger	The intended function of a road. Facilities with a value less than 7* are included in official statewide road centerline mileage.
Mile_Count	Mileage Counted	Mileage Counted	SmallInteger	Describes whether the segments length is counted towards the official statewide road centerline mileage.
Urban_Area	Urbanized Area	Urbanized Area	String	The urbanized area derived from the U.S. Census Bureau
Urban_Type	Urban Type	Urban Type	SmallInteger	Census-defined urbanization classification
F_F_Class	Federal Functional Class	Federal Functional Class	SmallInteger	A classification method created by the Federal Highway Administration to stratify roads.
Jurisdictn	Jurisdictn	Jurisdiction	String	The agency or entity that owns and has administrative authority over a roadway.
NHS	NHS	NHS Status	SmallInteger	The National Highway System Status

Fd_Aid_Rd	Federal Aid Eligible Road	Federal Aid Road	SmallInteger	Indicates whether a road is eligible for federal aid.
Control	Access Control	Access Control	SmallInteger	Designates whether a road allows for ease of exiting or entering the road. Full access control represents interstate highways while no access control is a local road where traffic can enter and exit at many points. A partial access control represents state highways with road local or commercial road connections.
Num_Lanes	Number of Travel Lanes	Number of Lanes	Integer	Number of travel lanes (for undivided roadways, number of lanes in both directions of travel, for divided roadways, number of lanes on the given segment only).
Opp_Lanes	Opposite Number of Travel Lanes	Number of Lanes	Integer	Number of travel lanes in the opposite direction of a divided roadway.
Surface_Tp	Surface Type	Surface Type	SmallInteger	The road's surface material.
Surface_Wd	Surface Width		Double	Surface width in feet; measurement of traveled way, excluding shoulders/auxiliary lanes.
Shldr_Lt_W	Shoulder Width Left		Double	Width of shoulder in feet on the left side of the road traveling in the primary (NB/EB) direction of travel.
Shldr_Lt_T	Shldr_Lt_T	Shoulder Type	SmallInteger	Type of shoulder on the left side of the road traveling in the primary (NB/EB) direction of travel; for divided roadways median shoulders are assumed to be of the same type.
Shldr_Rt_W	Shoulder Width Right		Double	Width of shoulder in feet on the right side of the road traveling in the primary (NB/EB) direction.
Shldr_Rt_T	Shldr_Rt_T	Shoulder Type	SmallInteger	Type of shoulder on the right side of the road traveling in the primary (NB/EB) direction of travel.
Shldr_UL_W	Shoulder Width Left		Double	The shoulder width in feet on the left side of an undivided roadway.
Shldr_UL_T	Shldr_UL_T	Shoulder Type	SmallInteger	Type of shoulder on the opposing side of an undivided road.
Med_Width	Median Width		Double	Width of median on divided roadways in feet
Med_Type	Med_Type	Median Type	SmallInteger	Type of median on divided roadways
Curb	Curb	Curb	SmallInteger	Specifies whether there is a curb on the left side, right side, or median of a roadway.
Lt_Sidewlk	Left Sidewalk Width		SmallInteger	Sidewalk width in feet on the left side of the road traveling in the primary (NB/EB) direction; on divided roadways, this will fall on the opposing direction.
Rt_Sidewlk	Right Sidewalk Width		SmallInteger	Sidewalk width in feet on the right side of the road traveling in the primary (NB/EB) direction.
Pd_Sf_Type	Pedestrian Surface Type	Pedestrian Surface Type	SmallInteger	Surface material for pedestrian routes.

Field	Name	Link	Type	Description
Pd_Fc_Type	Pedestrian Facility Type	Pedestrian Facility Type	SmallInteger	Facility type for pedestrian routes.
Cr_Slope	Cross Slope		Double	Cross Slope
Path_Width	Off-road Path Width		Double	Width in feet of an off-road path.
Operation	Street Operation	Street Operation	SmallInteger	Specifies one-way roads vs two-way roads.
Speed_Lim	Speed Limit		SmallInteger	Speed limit as posted on speed limit signs.
Op_Dir_SL	Speed Limit Opposing Direction		SmallInteger	Opposing direction speed limit as posted on signs.
Speed_Reg	Speed Regulation		Integer	Speed limits that have special speed regulation established in accordance with MGL.
T_Exc_Type	Truck Exclusion Type	Truck Exclusion Type	SmallInteger	Describes the weight and axle layouts of heavy commercial vehicles not permitted.
T_Exc_Time	Truck Exclusion Time	Truck Exclusion Time	SmallInteger	What time of day heavy commercial vehicles are not permitted.
Trk_Permit	Truck Permit		String	If a truck permit is required, this provides a link to the Highways District's truck exclusion permit.
Trk_Netwrk	Truck Network	Truck Network	SmallInteger	Indicates if a route is on or off that national truck network.
Truck_Rte	Truck Route	Truck Route	SmallInteger	Routes that restrict truck travel.
ROW_Width	Right Of Way Width		Double	Width of the right-of-way in feet.
Terrain	Terrain Type	Terrain Type	SmallInteger	Terrain type
Toll_Road	Toll Road		SmallInteger	Identifies whether a road charges tolls in both directions, one direction or neither.
MHS	Metropolitian Highway System	MHS	Integer	Metropolitian Highway System that a route segment is a part of, specifically routes that connect with the Boston-area.
City	City	City	SmallInteger	The city the route segment is in, organized alphabetically from 1 to 351.
Mun_Type	Municipal Type		SmallInteger	Specifies whether a municipality is a city or town.
County	County	County	SmallInteger	The name of the county the road segment is within.
Hwy_Dist	Highway District		SmallInteger	The MassDOT Highway District the route segment is within, ranging from District 1 in the West to District 6 in the Boston Area.
RPA	RPA		String	The name of the Regional Planning Agency a route segment is within.
RTA	RTA		String	The name of the Regional Transit Authority a route segment is within.
MPO	MPO	MPO	SmallInteger	The Metropolitan Planning Organization that the road segment is within.
St_Name	Street Name		String	The name of the street a route segment is located on.
City_Maint	City Maintenance	City	SmallInteger	The name of the municipality that maintains the RoadInventory segment.

Length	Length		Double	The measured length of the RoadInventory segment in miles.
Record_ID	Record_ID		String	Record ID
GlobalID	GlobalID		GlobalID	Global ID
Local_Priority	Local_Priority		SmallInteger	Indicates the priority of the route when concurrent with other route segments. 1 indicates a priority route.
Oneway	Oneway	Oneway	String	Describes the direction of travel on one-way roads in relation to the digitization of the route.
Shape	Shape		Geometry	Geometry
Shape.STLength()	Shape.STLength()		Double	Shape Length (meters)

Domains

Domain	Coded Values
Federal Shoulder Type	1: None or Inadequate 2: Surfaced shoulder exists bituminous concrete (AC) 3: Surfaced shoulder exists Portland Cement Concrete surface (PCC) 4: Stabilized shoulder exists 5: Combination shoulder exists 6: Earth shoulder exists 7: Barrier curb exists; no shoulder in front of curb
MPO	1: Berkshire 2: Boston Region 3: Cape Cod 4: Central Massachusetts 5: Franklin 6: Martha's Vineyard 7: Merrimack Valley 8: Montachusett 9: Nantucket 10: Northern Middlesex 11: Old Colony 12: Pioneer Valley 13: Southeastern Massachusetts
Mileage Counted	0: Mileage Not Counted For HPMS 1: Mileage Counted For HPMS
Terrain Type	0: N/A 1: Level Terrain 2: Rolling Terrain 3: Mountainous Terrain

Surface Type	1: Unimproved, graded earth, or soil surface road
	2: Gravel or stone road
	3: Brick road
	4: Block road
	5: Surface-treated Road
	6: Bituminous concrete road
	7: Portland cement concrete road
	8: Composite road; flexible over rigid
	9: Composite road; rigid over flexible or rigid over rigid ("white topping")
	10: Stone Dust
	11: Boardwalk
Pedestrian Facility Type	1: Sidewalk - Associated with road
	2: Footpath - Not Associated with road
	3: Shared-Use Path - Bicycle and Pedestrian Path
	4: Unimproved Trail - Unpaved Recreational Footpath
Truck Exclusion Type	1: Open to all vehicles
	2: All vehicles over 2.5 tons excluded
	3: All vehicles over 3 tons excluded
	4: All vehicles over 5 tons excluded
	5: All vehicles over 10 tons excluded
	6: All vehicles over 2000 pounds excluded
	7: All vehicles over 28 feet in length excluded
	8: Gross vehicle weight over 18 tons and greater than 2 axles excluded
	9: Gross vehicle weight over 30 tons and greater than 4 axles excluded
	10: Commercial vehicles over 5 tons carry capacity excluded
	11: All vehicles over 20 tons excluded
	12: Hazardous Truck Route
	13: Cambridge Overnight Exclusions
Street Operation	1: One-way traffic
	2: Two-way traffic
	3: One-way traffic – dual carriageway
Urban Type	1: Large Urbanized Area
	2: Small Urbanized Area
	3: Large Urban Cluster
	4: Small Urban Cluster
	5: Rural
	6. Urbanized Area
	7. Urban Area
Federal Function Class	1: Interstate
	2: Principal Arterial - Other Freeways or Expressways
	3: Principal Arterial - Other
	4: Minor Arterial
	5: Major Collector
	6: Minor Collector
	7: Local
Route System	I: Interstate
	US: US Highway
	SR: State Route
	R: Ramp
	L: Local Road
	M: Miscellaneous
	N: Not a numbered route (Arterial and Collector)
	B: Bicycle/ Pedestrian
Truck Network	1: Section is on the National Network (NN)
	2: Other State-designated truck route (optional)

Urbanized Area	0: RURAL
	03790: Athol
	34678: Great Barrington
	34975: Greenfield
	48745: Lee
	61003: Nantucket
	63460: North Adams (MA-VT)
	63568: North Brookfield
	72532: Provincetown
	84169: Stafford (CT-MA)
	90757: Vineyard Haven
	91756: Ware
	61786: New Bedford
	49096: Leominster-Fitchburg
	69778: Pittsfield
	61165: Nashua (NH-MA)
	72505: Providence (RI-MA)
	05167: Barnstable Town
	83926: Springfield (MA-CT)
	97291: Worcester (MA-CT)
	83156: South Deerfield
	09271: Boston (MA-NH-RI)
Jurisdiction	2: City or Town accepted road
	6: State Park or Forest
	7: State Institutional
	8: Federal Park or Forest
	0: Unaccepted by city or town
	B: State college or university
	D: US Army Corps of Engineers
	E: Federal Institutional
	F: Other Federal
	G: Federal Bureau of Indian Affairs
	H: Private
	3: Department of Conservation and Recreation
	5: Massachusetts Port Authority
	I: US Army
	J: US Navy
	9: County Institutional
	1: Massachusetts Department of Transportation
	C: US Air Force
NHS Status	0: Not on NHS
	2: NHS - Strategic Defense Highway System (STRAHNET)
	3: NHS - STRAHNET Connector
	4: NHS - Other - One-way pair
	5: NHS - Other truck route exclusion
	6: NHS - Major Airport
	7: NHS - Major Port Facility
	8: NHS - Major Amtrak Station
	9: NHS - Major Rail/Truck terminal
	10: NHS - Major Intercity Bus Terminal
	11: NHS - Major Public Transit or Multi-Modal Passenger Terminal
	12: NHS - Major Pipeline Terminal
	13: NHS - Major Ferry Terminal
	14: NHS - Other (not in above categories)
	1: NHS - Interstate
	15: NHS - Principal Arterial (MAP-21)

Access Control	1: Full Access Control 2: Partial Access Control 0: No Access Control
Truck Exclusion Time	4: 6AM to 6PM, 7 Days 5: 6AM to 7PM, 7 Days 6: 6AM to 10PM, 7 Days 7: 7AM to 6PM, 7 Days 8: 7AM to 11PM, 7 Days 9: 4PM to 6PM 10: 6PM to 6AM, 7 Days 11: 7PM to 7AM, 7 Days 12: 8PM to 6AM, 7 Days 13: 8PM to 7AM, 7 Days 14: 9PM to 6AM, 7 Days 15: 9PM to 7AM, 7 Days 16: 10PM to 6AM, 7 Days 1: None 2: 24 Hours, 7 Days 3: 5AM to 8PM, 7 Days 17: 11PM to 6AM, 7 Days 18: 11PM to 6AM, NB Only, 7 Days 19: 11PM to 7AM, 7 Days 20: 8AM to 930AM and 2PM to 330PM, School Days Only
Truck Route	0: Not a parkway - not on a designated truck route 1: Designated truck route under Federal Authority in 23 CFR 658 Available to STAA vehicles (Twin 28' Semitrailer-trailer and 48' Semitrailer combinations) 2: Designated truck route ONLY under State Authority. Fully available to both types of STAA vehicles described above. 3: DCR Parkway - Recreational Vehicles Only
Shoulder Type	0: No Shoulder 1: Stable - Unruttable compacted subgrade 2: Unstable shoulder 3: Hardened bituminous mix or penetration 4: Combination shoulder 5: Earth Shoulder Exists 6: Barrier curb exists; no shoulder in front of curb 7: Surface shoulder exists - Portland Cement Concrete surface
Facility Type	1: Mainline roadway 3: Tunnel 4: Doubledeck 5: Rotary 6: Causeway 10: Collector - Distributor 8: Ramp - NB/EB 9: Ramp - SB/WB 11: Simple Ramp - Tunnel 2: Roundabout 13: Commercial 14: Private Way 12: Bicycle/ Pedestrian 7: Simple Ramp/ Channelized Turning Lane

Surface Type	0: Mixed 1: Unimproved, graded earth, or soil surface 2: Gravel or stone 3: Brick 4: Block 5: Surface-treated 6: Bituminous concrete 7: Portland cement 8: Composite road; flexible over rigid 9: Composite road; rigid over flexible or rigid over rigid ("white topping") 10: Stone Dust 11: Boardwalk
County	1: Barnstable 3: Berkshire 5: Bristol 7: Dukes 9: Essex 11: Franklin 13: Hampden 15: Hampshire 17: Middlesex 19: Nantucket 21: Norfolk 23: Plymouth 25: Suffolk 27: Worcester
Oneway	FT: From-to (with line digitization direction) TF: To-from (against line digitization direction)
Curb	0: None 1: Left side only 2: Right side only 3: Both sides 4: Along median only 5: All curbs (divided highway) 6: Other
Federal Aid Road	0: Not Eligible 1: Interstate - NHS 2: Other Road - NHS 3: STP Eligible 4: STP Road - C15
MHS	0: Not on MHS 1: MHS
Median Type	0: None 3: Unprotected 2: Positive Barrier - unspecified 4: Positive Barrier flexible 5: Positive Barrier semi-rigid 6: Positive Barrier rigid 7: Depressed Median 1: Raised Median

City			
1: Abington	57: Chelsea	113: Great Barrington	169: Marion
2: Acton	58: Cheshire	114: Greenfield	170: Marlborough
3: Acushnet	59: Chester	115: Groton	171: Marshfield
4: Adams	60: Chesterfield	116: Groveland	172: Mashpee
5: Agawam	61: Chicopee	117: Hadley	173: Mattapoisett
6: Alford	62: Chilmark	118: Halifax	174: Maynard
7: Amesbury	63: Clarksburg	119: Hamilton	175: Medfield
8: Amherst	64: Clinton	120: Hampden	176: Medford
9: Andover	65: Cohasset	121: Hancock	177: Medway
10: Arlington	66: Colrain	122: Hanover	178: Melrose
11: Ashburnham	67: Concord	123: Hanson	179: Mendon
12: Ashby	68: Conway	124: Hardwick	180: Merrimac
13: Ashfield	69: Cummington	125: Harvard	181: Methuen
14: Ashland	70: Dalton	126: Harwich	182: Middleborough
15: Athol	71: Danvers	127: Hatfield	183: Middlefield
16: Attleboro	72: Dartmouth	128: Haverhill	184: Middleton
17: Auburn	73: Dedham	129: Hawley	185: Milford
18: Avon	74: Deerfield	130: Heath	186: Millbury
19: Ayer	75: Dennis	131: Hingham	187: Millis
20: Barnstable	76: Dighton	132: Hinsdale	188: Millville
21: Barre	77: Douglas	133: Holbrook	189: Milton
22: Becket	78: Dover	134: Holden	190: Monroe
23: Bedford	79: Dracut	135: Holland	191: Monson
24: Belchertown	80: Dudley	136: Holliston	192: Montague
25: Bellingham	81: Dunstable	137: Holyoke	193: Monterey
26: Belmont	82: Duxbury	138: Hopedale	194: Montgomery
27: Berkley	83: East Bridgewater	139: Hopkinton	195: Mount Washington
28: Berlin	84: East Brookfield	140: Hubbardston	196: Nahant
29: Bernardston	85: East Longmeadow	141: Hudson	197: Nantucket
30: Beverly	86: Eastham	142: Hull	198: Natick
31: Billerica	87: Easthampton	143: Huntington	199: Needham
32: Blackstone	88: Easton	144: Ipswich	200: New Ashford
33: Blandford	89: Edgartown	145: Kingston	201: New Bedford
34: Bolton	90: Egremont	146: Lakeville	202: New Braintree
35: Boston	91: Erving	147: Lancaster	203: New Marlborough
36: Bourne	92: Essex	148: Landsborough	204: New Salem
37: Boxborough	93: Everett	149: Lawrence	205: Newbury
38: Boxford	94: Fairhaven	150: Lee	206: Newburyport
39: Boylston	95: Fall River	151: Leicester	207: Newton
40: Braintree	96: Falmouth	152: Lenox	208: Norfolk
41: Brewster	97: Fitchburg	153: Leominster	209: North Adams
42: Bridgewater	98: Florida	154: Leverett	210: North Andover
43: Brimfield	99: Foxborough	155: Lexington	212: North Brookfield
44: Brockton	100: Framingham	156: Leyden	213: North Reading
45: Brookfield	101: Franklin	157: Lincoln	214: Northampton
46: Brookline	102: Freetown	158: Littleton	215: Northborough
47: Buckland	103: Gardner	159: Longmeadow	216: Northbridge
48: Burlington	104: Aquinnah	160: Lowell	217: Northfield
49: Cambridge	105: Georgetown	161: Ludlow	218: Norton
50: Canton	106: Gill	162: Lunenburg	219: Norwell
51: Carlisle	107: Gloucester	163: Lynn	220: Norwood
52: Carver	108: Goshen	164: Lynnfield	221: Oak Bluffs
53: Charlemont	109: Gosnold	165: Malden	222: Oakham
54: Charlton	110: Grafton	166: Manchester by the Sea	223: Orange
55: Chatham	111: Granby	167: Mansfield	224: Orleans
56: Chelmsford	112: Granville	168: Marblehead	225: Otis

226: Oxford
227: Palmer
228: Paxton
229: Peabody
230: Pelham
231: Pembroke
232: Pepperell
233: Peru
234: Petersham
235: Phillipston
236: Pittsfield
237: Plainfield
238: Plainville
239: Plymouth
240: Plympton
241: Princeton
242: Provincetown
243: Quincy
244: Randolph
245: Raynham
246: Reading
247: Rehoboth
248: Revere
249: Richmond
250: Rochester
251: Rockland
252: Rockport
253: Rowe
254: Rowley
255: Royalston
256: Russell
257: Rutland
258: Salem
259: Salisbury
260: Sandisfield
261: Sandwich
262: Saugus
263: Savoy
264: Scituate
265: Seekonk
266: Sharon
267: Sheffield
268: Shelburne
269: Sherborn
270: Shirley
271: Shrewsbury

272: Shutesbury
274: Somerville
275: South Hadley
276: Southampton
277: Southborough
278: Southbridge
279: Southwick
280: Spencer
281: Springfield
282: Sterling
283: Stockbridge
284: Stoneham
285: Stoughton
286: Stow
287: Sturbridge
288: Sudbury
289: Sunderland
290: Sutton
291: Swampscott
292: Swansea
293: Taunton
294: Templeton
295: Tewksbury
296: Tisbury
297: Tolland
298: Topsfield
299: Townsend
300: Truro
301: Tyngsborough
302: Tyringham
303: Upton
304: Uxbridge
305: Wakefield
306: Wales
307: Walpole
308: Waltham
309: Ware
310: Wareham
311: Warren
312: Warwick
313: Washington
314: Watertown
315: Wayland
316: Webster
317: Wellesley
318: Wellfleet

319: Wendell
320: Wenham
321: West Boylston
322: West Bridgewater
323: West Brookfield
324: West Newbury
325: West Springfield
326: West Stockbridge
327: West Tisbury
328: Westborough
329: Westfield
330: Westford
331: Westhampton
332: Westminster
333: Weston
334: Westport
335: Westwood
336: Weymouth
337: Whately
338: Whitman
339: Wilbraham
340: Williamsburg
341: Williamstown
342: Wilmington
343: Winchendon
344: Winchester
345: Windsor
346: Winthrop
347: Woburn
348: Worcester
349: Worthington
350: Wrentham
351: Yarmouth