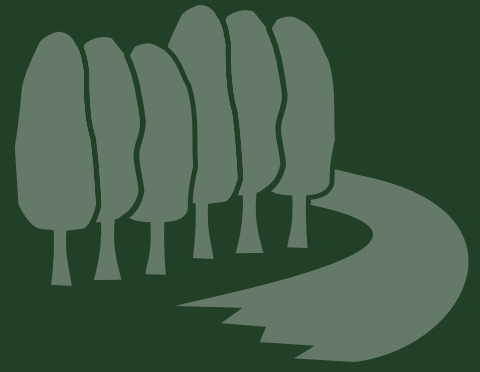


Hedgerow locations



In the context of rural roads, hedgerows are identified as narrow strips of trees and shrubs that border a road on one side and a field, lawn, or body of water on the other.

Hedgerow trees and plants create defining characteristics of the road's environment, demarcate the road edge, provide canopy cover for small mammals and birds, create windbreaks and shade, filter stormwater, and provide beauty and aesthetic qualities unique to Vermont backroads. Many homeowners also benefit from the privacy provided by hedgerow trees.

Identifying the presence of hedgerows helps us:

- highlight areas where landowners may be particularly sensitive to roadside tree cutting.
- highlight areas where hedgerows bordering agricultural fields may conflict with the goals of the farmer.
- evaluate where wildlife may be traveling through otherwise unforested landscapes.
- address whether scenic views are being impeded by hedgerows.



Recommendations

Identify where ash trees make up a large portion of the trees in a hedgerow.

Consider targeted [planting](#)¹ or interplanting (the planting of future shade or ornamental trees between historic or declining trees in these areas) to mitigate canopy loss when ash trees die.

Identify areas where historic trees are in decline and where interplanting can create a new generation of intentionally managed shade trees.

Identify landowners who may be willing to monitor for invasive species in hedgerows bordering their property.

Hedgerow trees grow in strips of manageable vegetation often less than 15 feet wide. Overstory and understory trees, shrubs, and tall grasses obscure both neighboring agricultural land and views to the mountains. Many hedgerows grow unintentionally; both the landowner and the town can plan for the ecological and social benefits they may provide.



This cedar hedgerow was likely planted by the landowner to create privacy and act as a living fence. Any roadwork that damages or removes these trees would be highly noticeable.

Identify where hedgerow trees and shrubs may have grown unintentionally. The town may note where scenic views are now obscured by hedgerows and consider selective thinning to promote healthy canopy trees and retain or renew scenic views. Utilize the expertise of the tree warden or another forester to plan for targeted and thoughtful tree pruning or removal.

To mitigate road erosion while retaining important historic or hedgerow trees, **utilize best management practices outlined in the *Better Roads Manual*²** to direct surface runoff from the road through outlets or ditching that extends into the existing travel lane. Recommendations about construction of turnouts are included in the *Better Roads Manual* on page 33.

Resources

1. Vermont Urban & Community Forestry, *Protecting the Investment: Tree Planting and Establishment*, bit.ly/VTUCF_TreePlanting.
2. Vermont Agency of Transportation, *Vermont Better Roads Manual* (January 2019), bit.ly/VT_BetterRoadsManual.

Average road width, cleared zone, and vegetation width



The tables below outline basic statistics taken from field assessments performed in five participating case study towns in the Rural Roads Resilient Right-of-Ways project. Measurements were collected to the nearest foot. Averages and ranges of these widths establish the breadth of possibilities of road and roadside land uses. However, the mode value, or the most frequently observed value during field surveys, reveals normal practices in a town.

ROAD WIDTH: distance between edges of traveled way

Assessed Roads	Average (ft)	Minimum (ft)	Maximum (ft)	Most frequent value (ft)
Town 1	21.4	16	33	22
Town 2	20.4	9	29	19
Town 3	18.0	10	29	18
Town 4	21.6	7	31	25
Town 5	17.7	9	24	22

CLEARED ZONE: distance from edge of traveled way to outside edge of frequently mowed, stone-lined, or bare roadside area

Assessed Roads	Average (ft)	Minimum (ft)	Maximum (ft)	Most frequent value (ft)
Town 1	8.5	0	17	7
Town 2	8.0	0	20	8
Town 3	8.0	0	18	7
Town 4	7.0	0	18	6
Town 5	9.7	2	20	8

MANAGEABLE VEGETATION WIDTH: distance between the edge of a frequently mowed, stone-lined, or bare roadside area to the outside edge of the right-of-way

Assessed Roads	Average (ft)	Minimum (ft)	Maximum (ft)	Most frequent value (ft)
Town 1	5.7	0	15	0
Town 2	6.6	0	20	6
Town 3	7.8	0	17	8
Town 4	6.9	0	19	8
Town 5	6.4	0	15	8