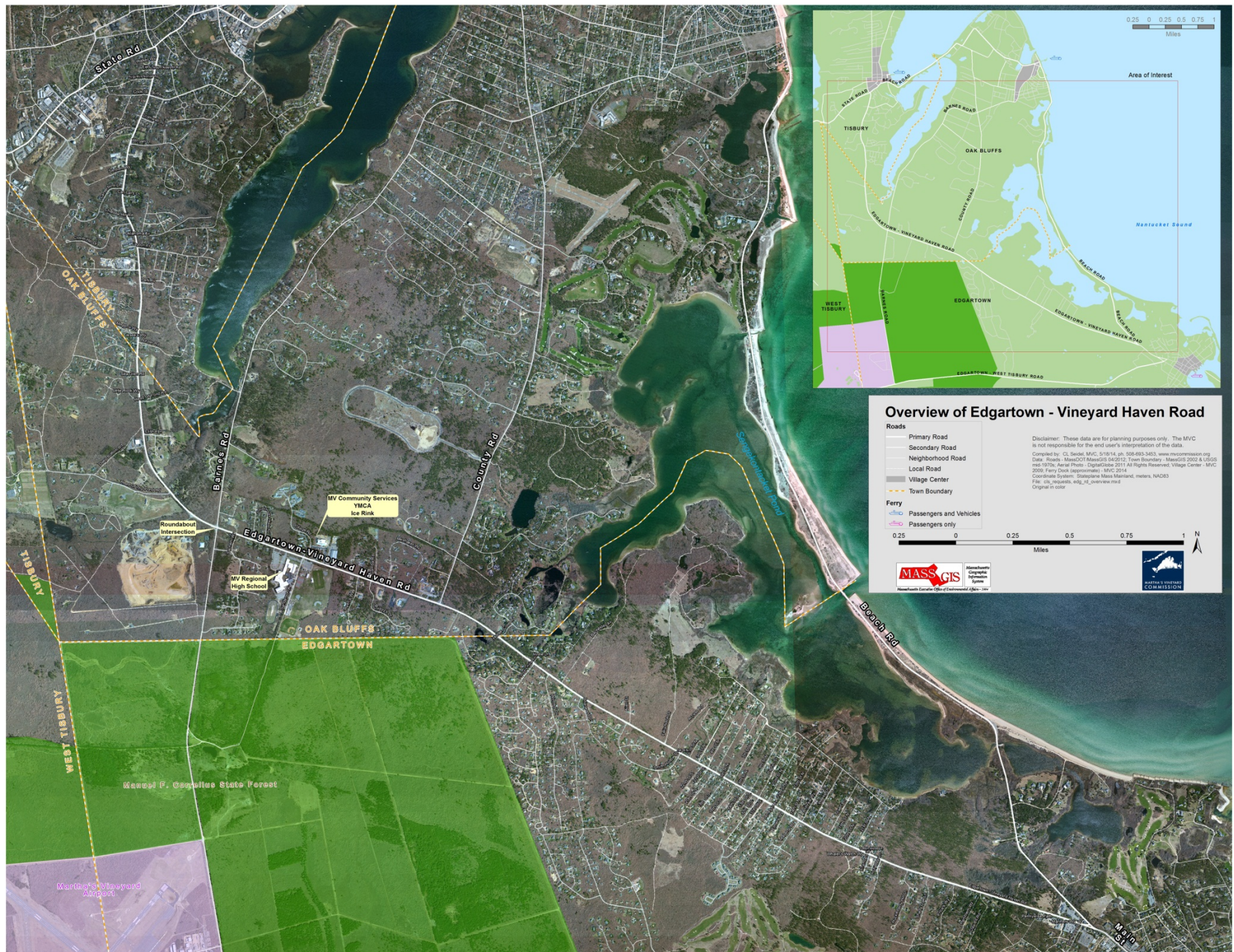


Edgartown – Vineyard Haven Road Options for Discussion

Public Meeting – December 3, 2014

1. Introduction
2. Existing Situation
3. Road Components
4. Options
5. Next Steps



1. Introduction

1. Introduction

Transportation Improvement Program

- Martha's Vineyard has \pm \$500,000 per year available for federal-aid eligible road improvements that are designed and permitted.
- “Edgartown - Vineyard Haven Road Resurfacing” is programmed for FFY2015 and FFY 2016 for about \$1 million of improvements (may be postponed).
- This is the first phase of the project work estimated to cost \$3 million or more, depending on concepts, over the coming decade.

1. Introduction

Objectives - some may conflict with others

Balance scenic character and recreational use, with the need to provide safe access and use.

1. Improve Safety for all Modes

- *Improve SUP buffer (widen/vertical barrier)*
- *Widen SUP*
- *Widen shoulders*
- *Calm motorized traffic in conflict areas*

2. Improve Scenic Appearance

- *Increase vegetation*
- *Reduce pavement width*

1. Introduction

Objectives continued

3. Reduce Congestion

- *Avoid excessively narrow lane widths*
- *Provide bus pull-offs*

4. Ensure Structural and Operational Integrity

- *Resurface road before further deterioration*
- *Redo drainage structures*
- *Provide adequate shoulders for structural integrity and drainage*

2. Existing Situation

2. Existing Situation

Ownership

Towns of Tisbury, Oak Bluffs, and Edgartown.

Functional Classification

Minor Arterial Road

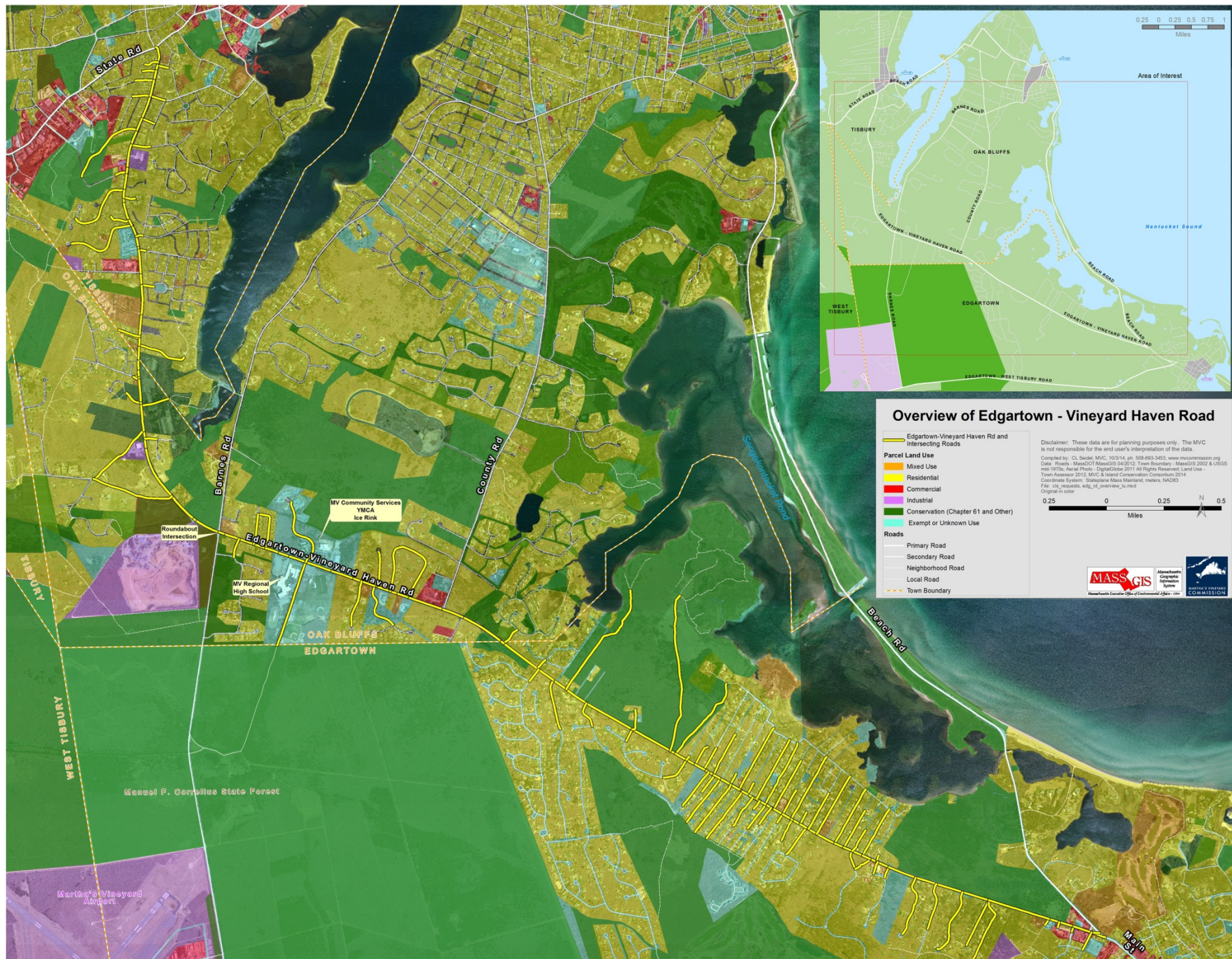
- *Classified by the Federal Highway Administration*
- *High-volume road connecting more than one town*

2. Existing Situation

Adjacent Uses

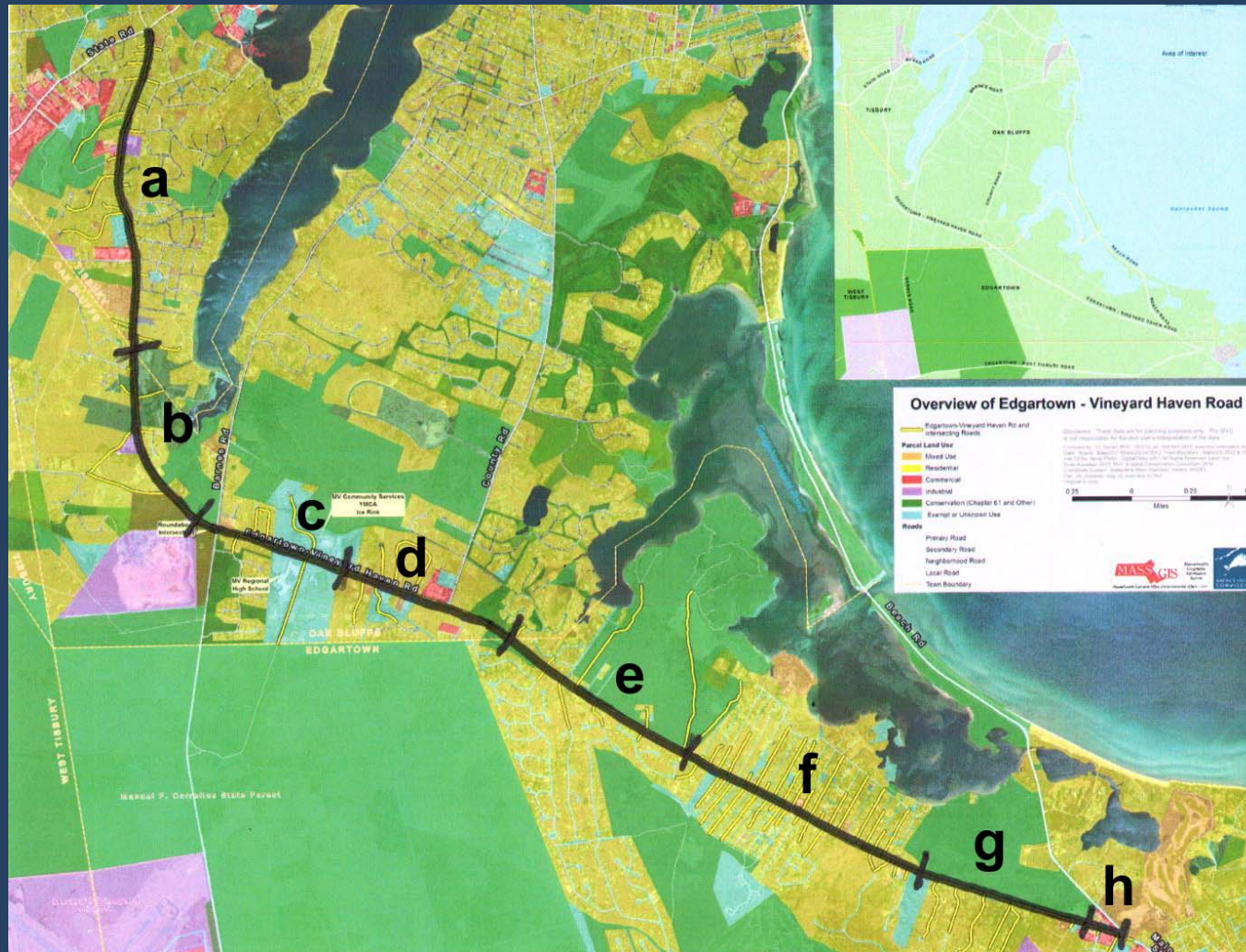
Generate traffic, concentrations of curb cuts for roads and driveways, demand for many bus stops.

- Residential
“numbered streets”, Majors Cove, Dodgers Hole
- Open Space
State Forest, Felix Neck Wildlife Sanctuary
- Institutional
High School, YMCA, Arena, and Community Services
- Commercial & Industrial
“Triangle”, Goodale



Existing Situation

Road Segments



Existing Situation

Road Segments continued

Segment	Town	Land Uses	Length
.a	Tisbury	Residential	
.b	Oak Bluffs	Mixed	
.c	Oak Bluffs	Roundabout, Institutional	
.d	Oak Bluffs	Mixed	
.e	Edgartown	Mixed	
.f	Edgartown	Residential	
.g	Edgartown	Mixed	
.h	Edgartown	Commercial	

2. Existing Situation

Traffic

- Vehicles: Average Daily Traffic (ADT) summer is 10,000 to 12,000 vehicles per day
compared to 1,000 on Moshup Trail; 2,000 to 3,000 on North Road; 4,000 to 8,000 on the Edgartown West Tisbury Road
- Trucks: $\pm 2.6\%$ or about 300 per day
- Bicycles: $\pm 1,000$ per day; guestimate of $\pm 5\%$ on the road

2. Existing Situation

Speed

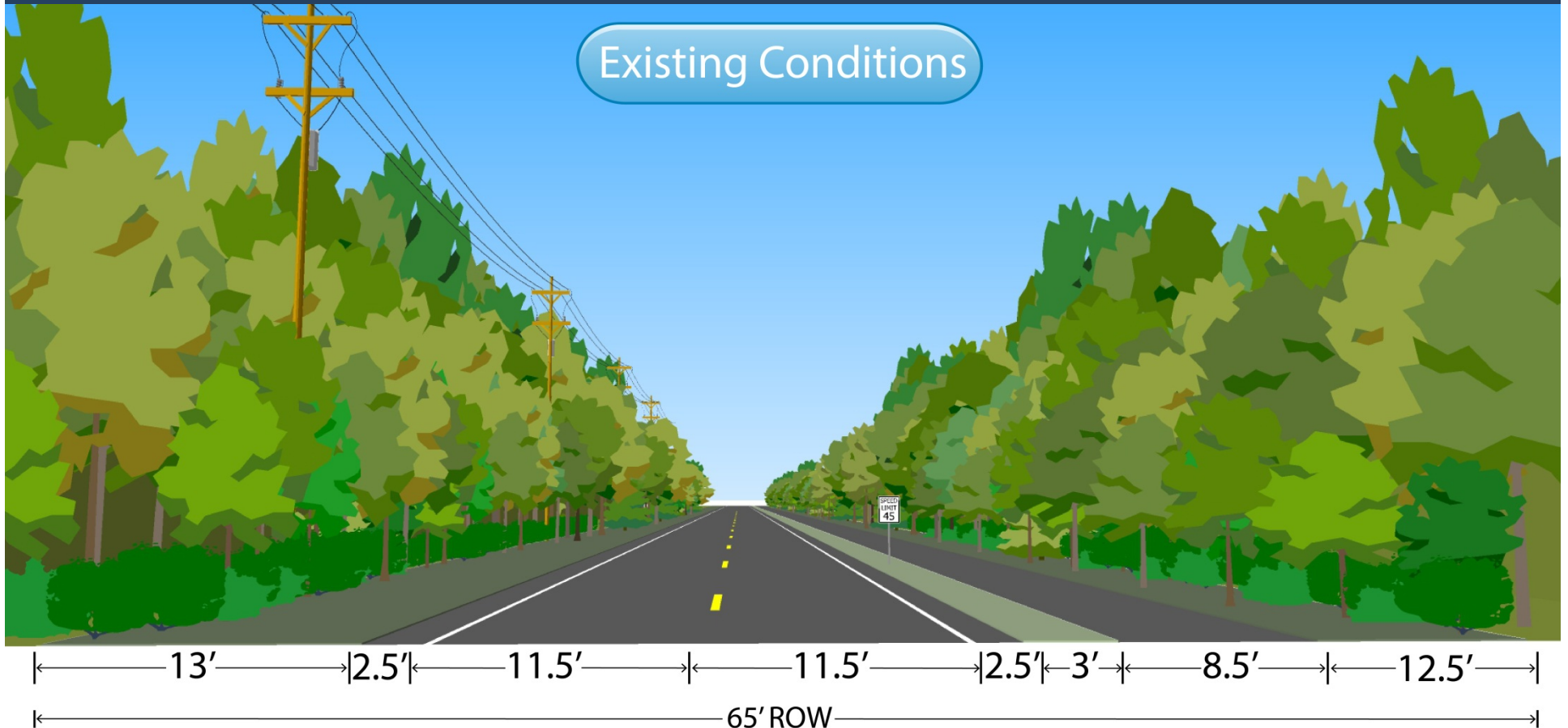


Mostly 45 mph. Some areas 15, 20, 30, and 35 mph.

Existing Situation

Typical Cross Section

Existing Conditions









Lack of vegetation in some areas on the Edgartown Vineyard Haven Road.

3. Road Components

3. Road Components

Travel Lanes

General guidance

- 11' lanes minimum for
 - medium/high traffic volumes (2000+ v.p.d.),
 - higher design speeds (35 mph or more),
 - higher truck/bus presence (over 30 per hour),
 - rural areas.
- 10' may be acceptable for
 - low traffic volumes (under 2000 v.p.d.),
 - lower design speeds,
 - few trucks/buses,
 - constrained urban areas.

3. Road Components

Shoulders

- Lane departure - space to recover
- Wide vehicles - encroachment and off-tracking
- Emergency Vehicles and Breakdown – room to pull over
- Stormwater - drainage and standing water
- Snow – pile without blocking travel lane.
- Structural support of roadway.
- Space for pedestrians and cyclists.

MassDOT calls for 5' shoulders if accommodating bicycles, and generally accepts 2' shoulders if not accommodating bicycles.

3. Road Components

Buffer

- Difficult to maintain vegetation with only 3' width.
- Widening to 5' or more makes vegetation more viable.



Most buffers are patchy grass and sand (left)

Even a thin band of flowers, protected by a reflector, screens the SUP. (above)

3. Road Components

Vegetation

Trees and bushes closer to the road would significantly reduce the visual scale.



Bushes and trees close to road and in buffer (State Road, West Tisbury)

3. Road Components

Shared Use Path

- Most (slower) bicycles, pedestrians, roller blades, other non-motorized travel.
- Normally 10' wide (this one is 8.5').
- MassDOT recommends widening to 10' or 12'.



3. Road Components

Bus Pullofs

- Allow vegetation between fixed stops.
- Reduce congestion caused by stops in high traffic volumes areas.
- Now on north side. Not on south due to lack of space (except roundabout).

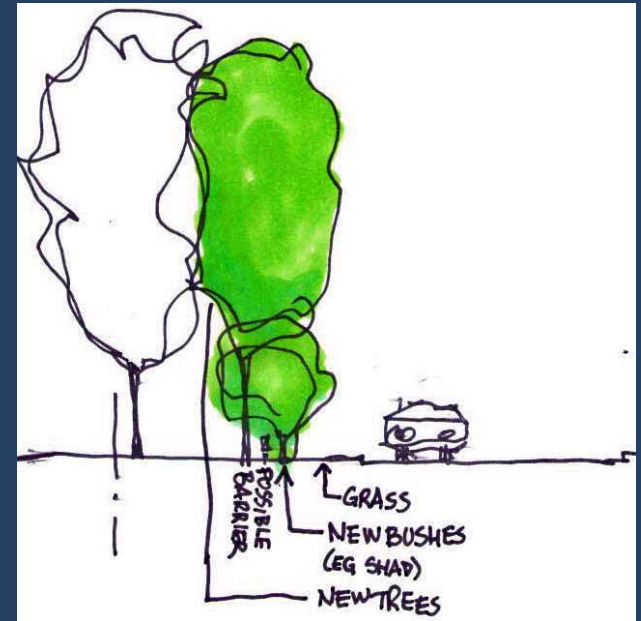


4. Options

4. Options

Plant trees and bushes closer to the road.

- Shield trees with crash-resistant barriers?
- Fund vegetation by towns to avoid MassDOT requirements?



4. Options

Lane Width: 11' or 10'?

Shoulder Width: 3', 2', 1', or none?

Buffer: 3', 5', 7', or 10'?

SUP: 8.5' or 10'?

Bus Pullouts: yes or no?

Of many possible combinations discuss 6.

- Cross sections could vary along the road.
- Some may not be funded by MassDOT.
- Preliminary scales of intervention to be replaced by engineering estimates.

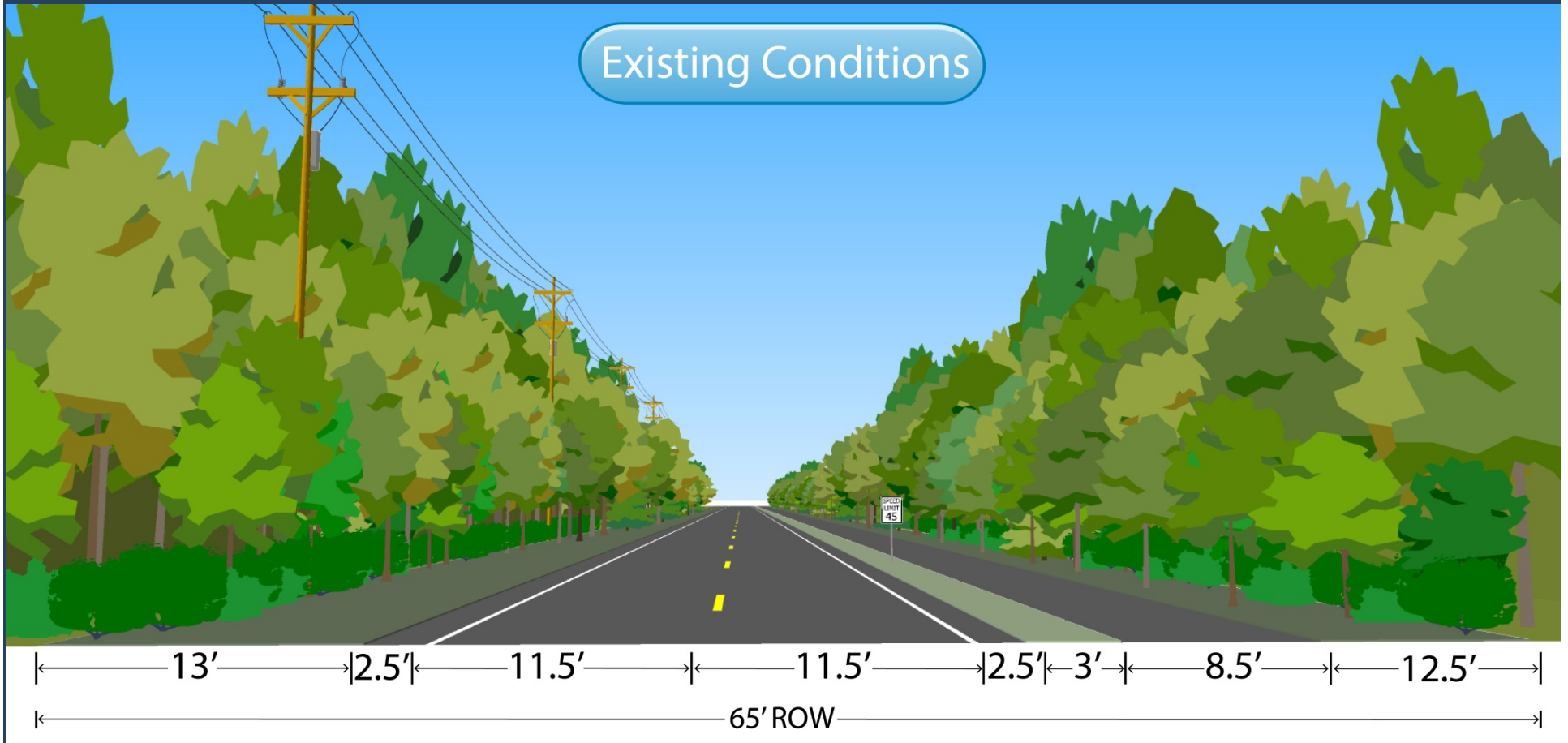
Options

	Scale of Work	Dimensions			
		Travel Lanes	Shoulder	Buffer	SUP
<i>Existing</i>		11.5'	2.5'	3.0'	8.5'
A - Footprint Layout and Restriping	\$	11.0'	3.0'	3.0'	8.5'
B – Narrow Road, Widen Buffer	\$	11.0'	2.0'	5.0'	8.5'
C – Narrow Road, Widen Buffer	\$\$	11.0'	1.0'	7.0'	8.5'
D - Travel Lane 10', No Shoulders	\$\$\$	10.0'	0'	11.0'	8.5'
E - Shift SUP	\$\$\$\$	11.0'	1.0'	10.0'	8.5'
F - Shift Road	\$\$\$\$	11.0'	1.0'	10.0'	8.5'

Existing Situation

Typical Cross Section

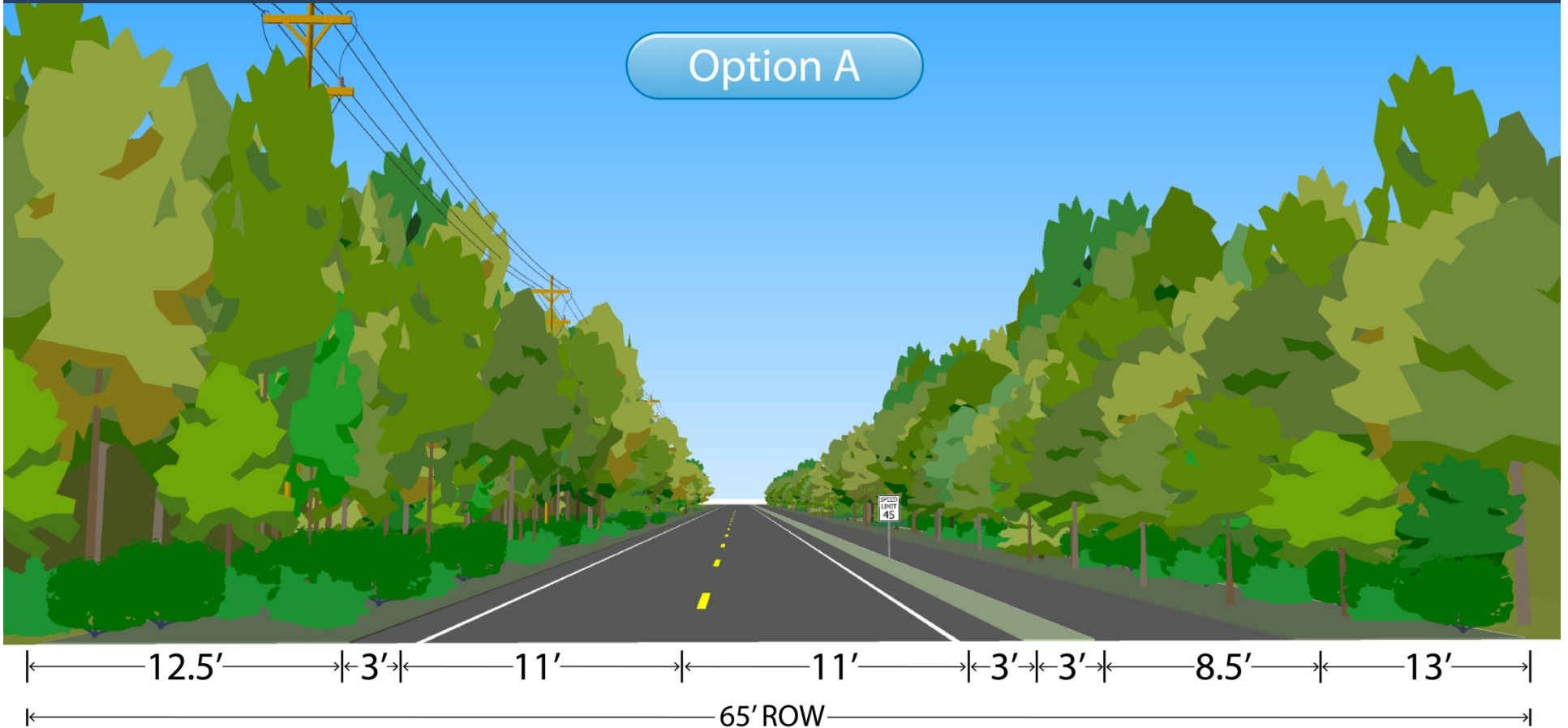
Existing Conditions



4. Options

A Footprint Layout and Restriping

Option A

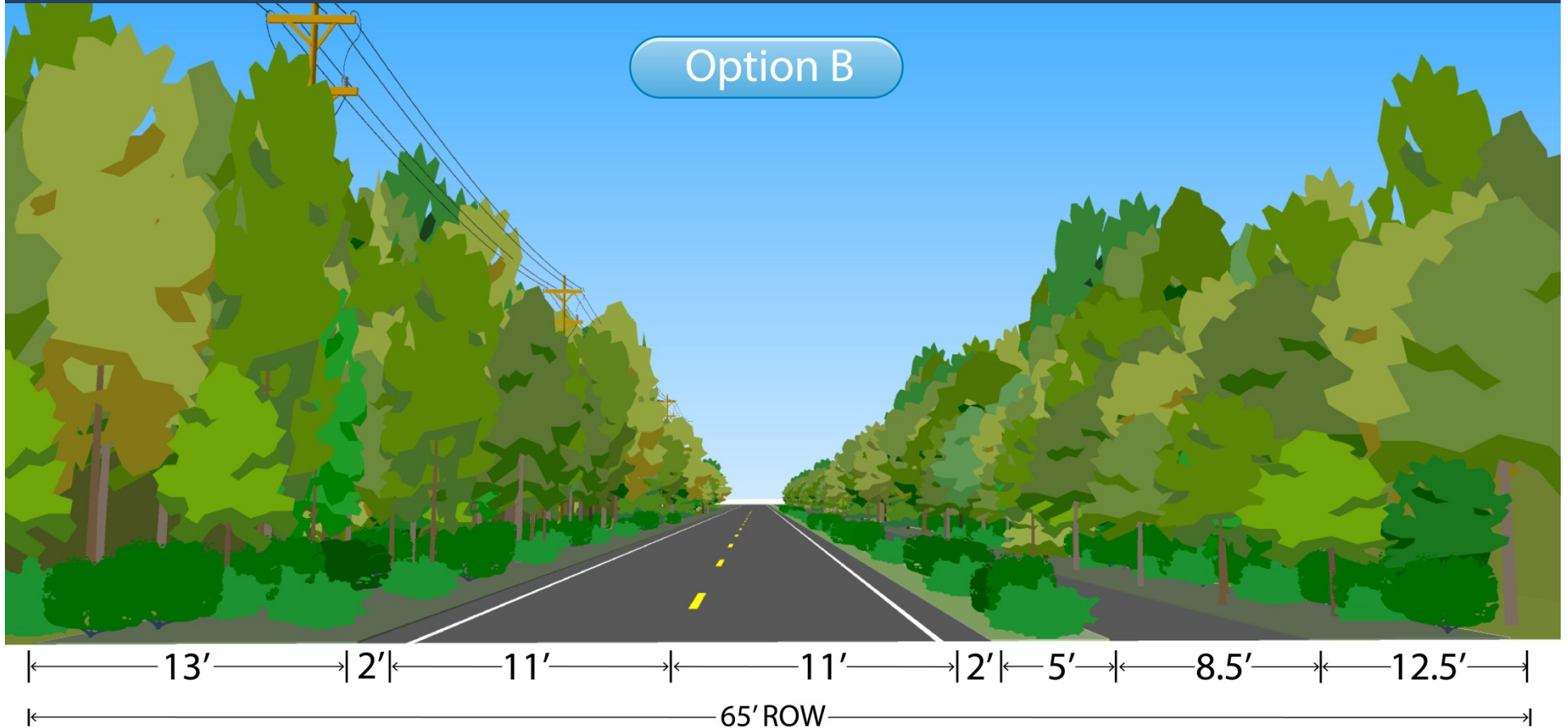


4. Options

B

Narrow Road, Widen Buffer

Option B

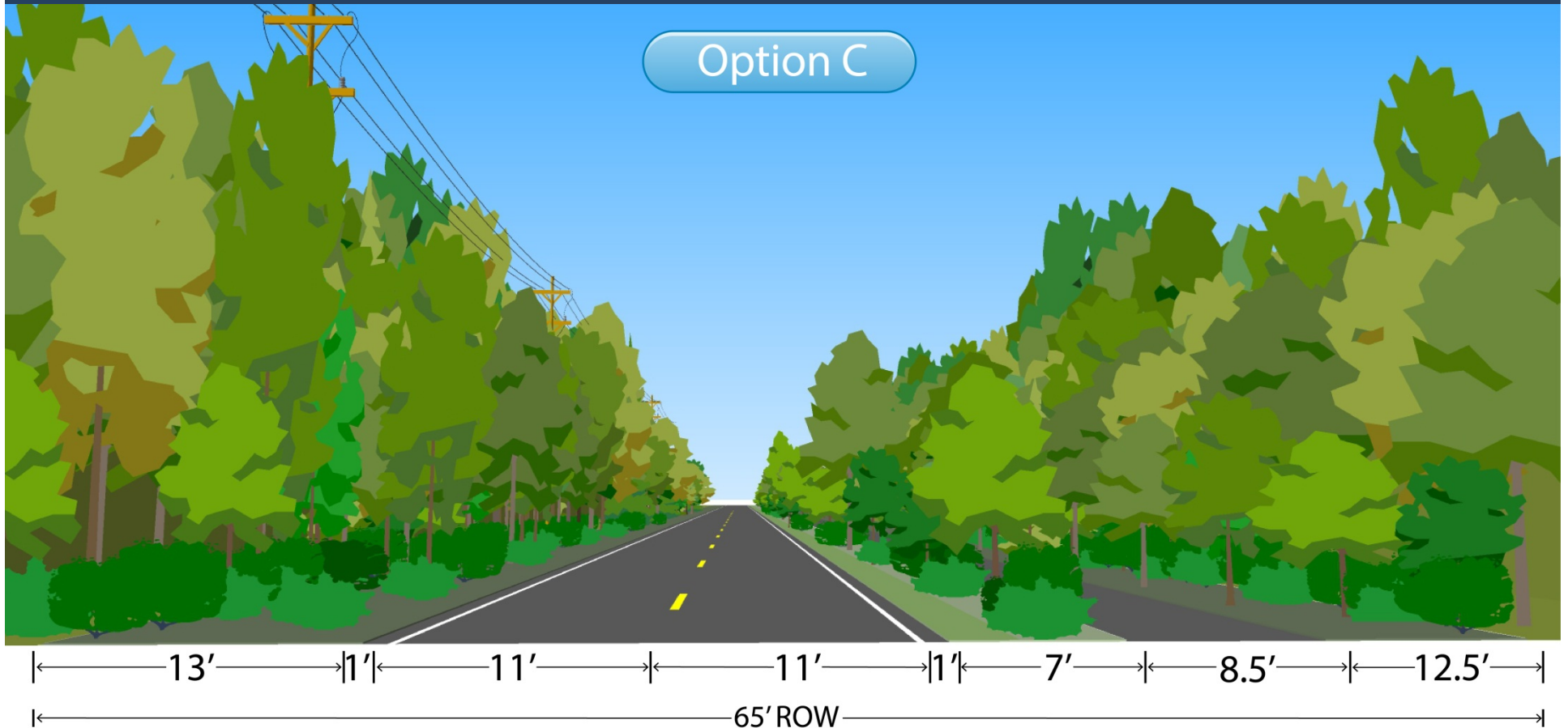


4. Options

C

Narrow Road, Widen Buffer

Option C

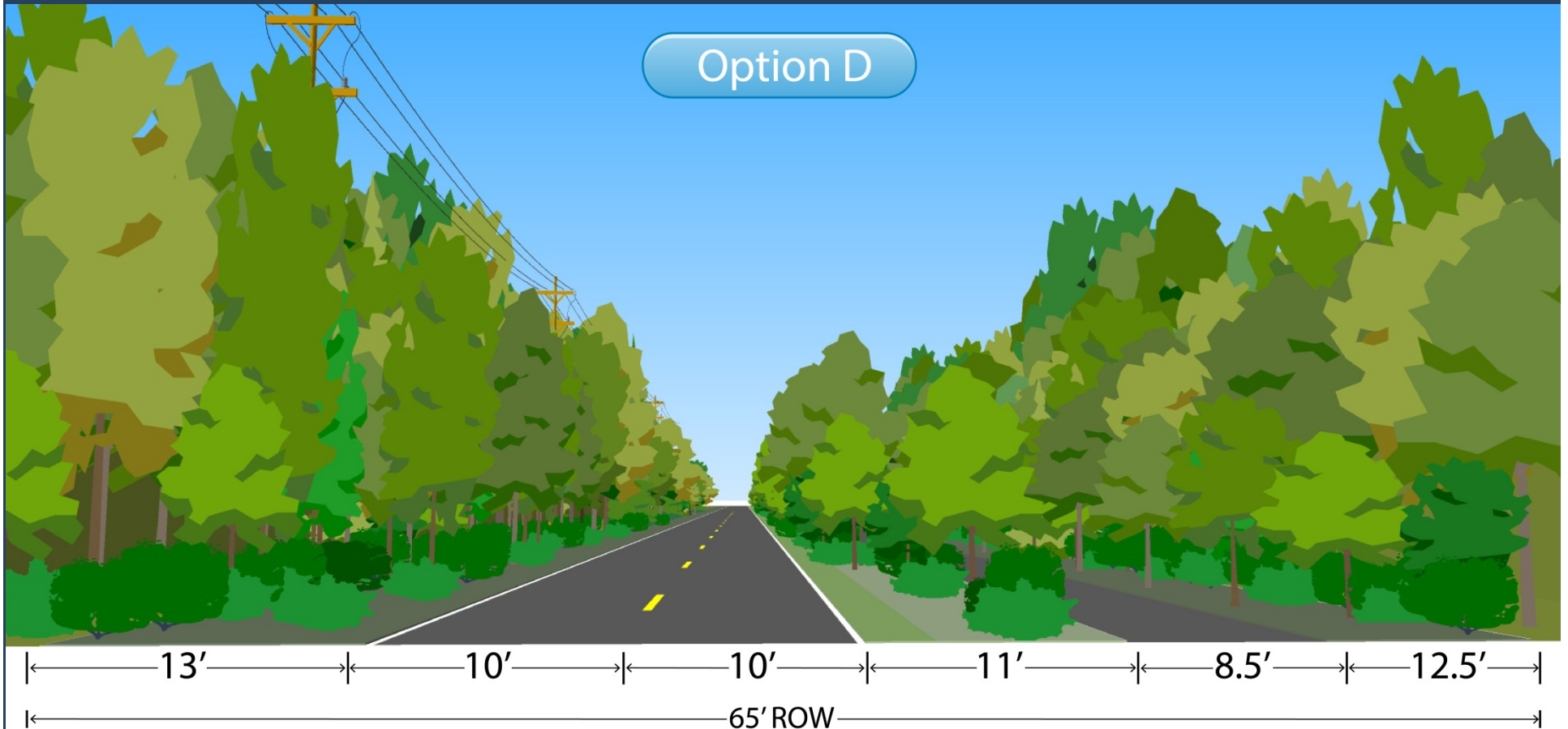


Options

D

Travel Lane 10', No Shoulders

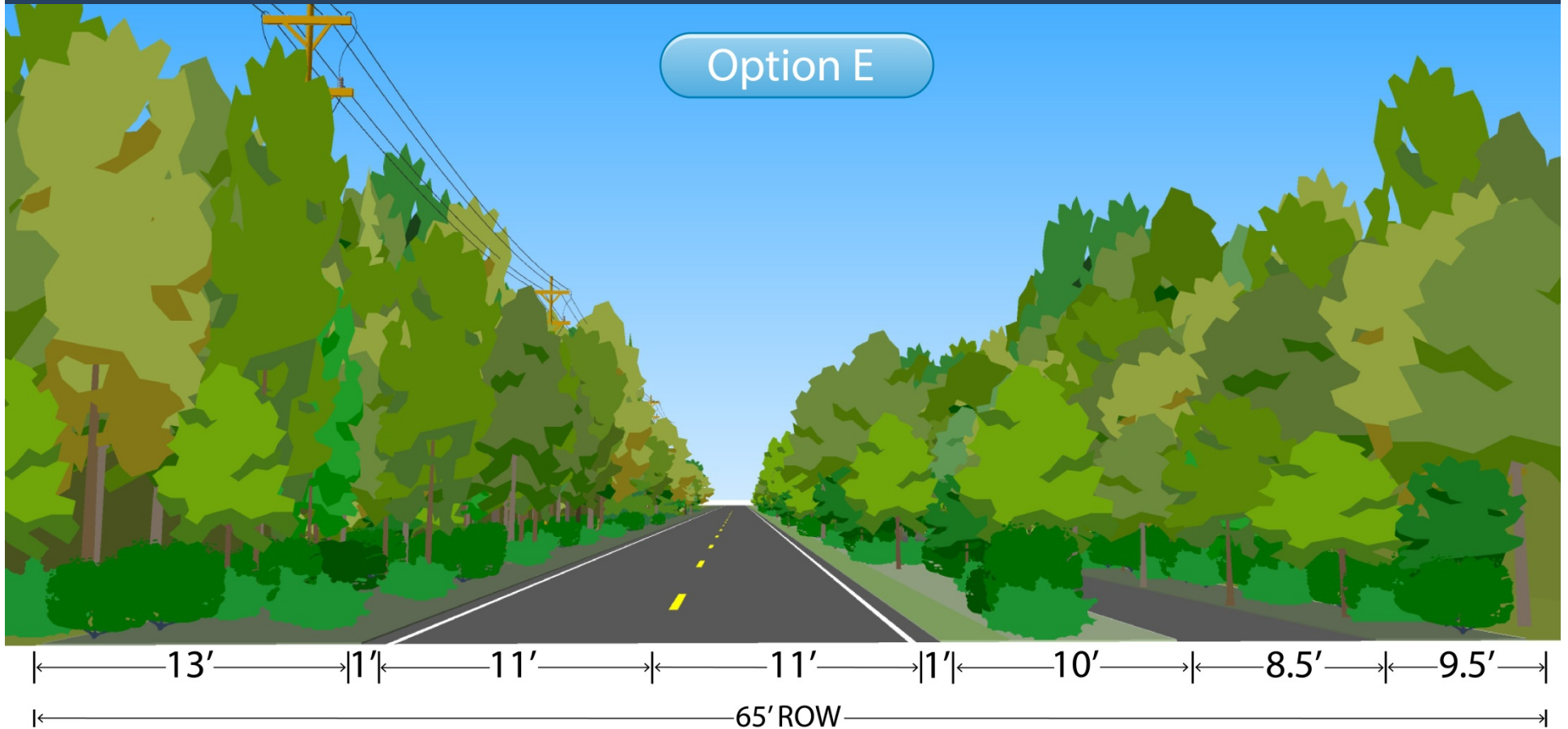
Option D



4. Options

E Shift SUP

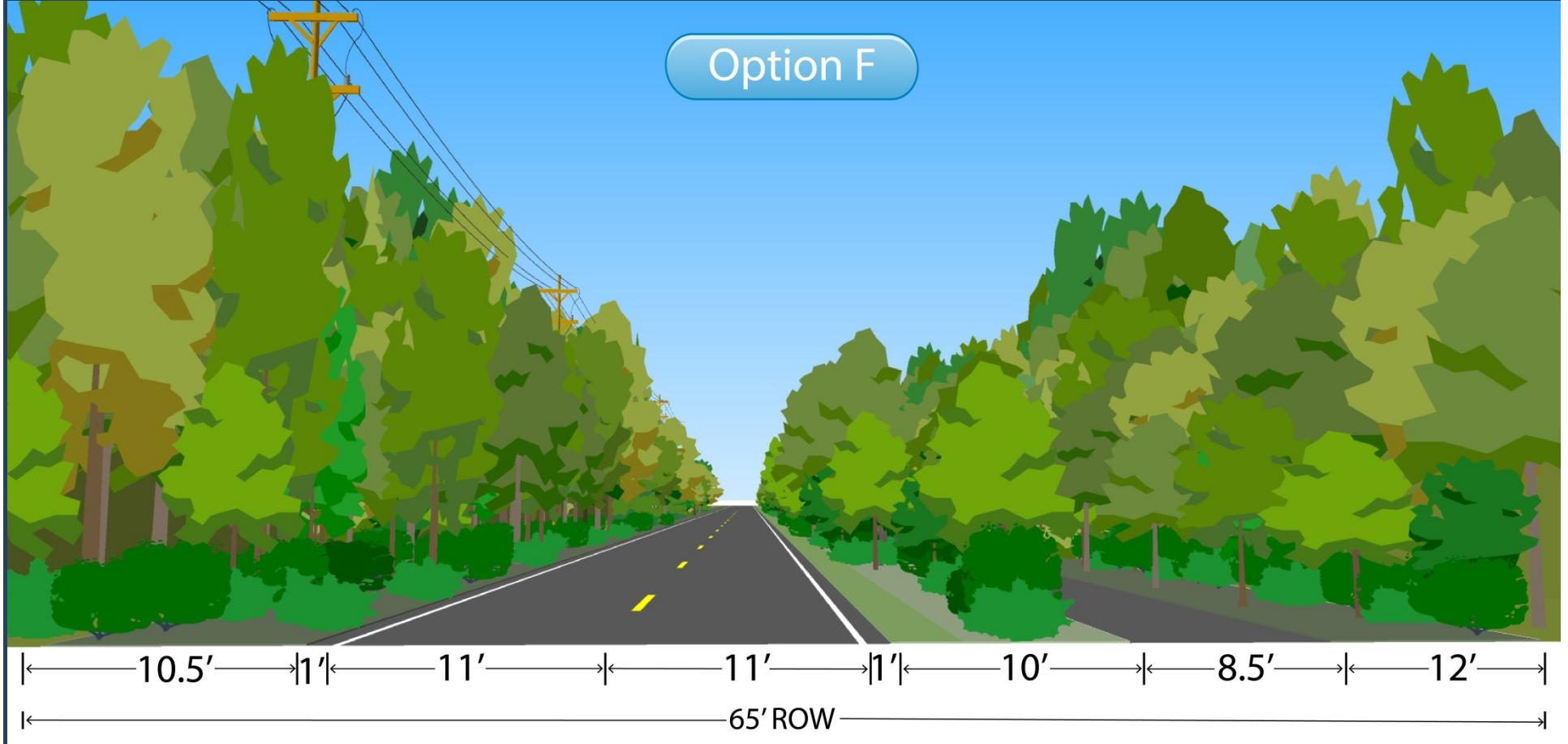
Option E



4. Options

F Shift Road

Option F

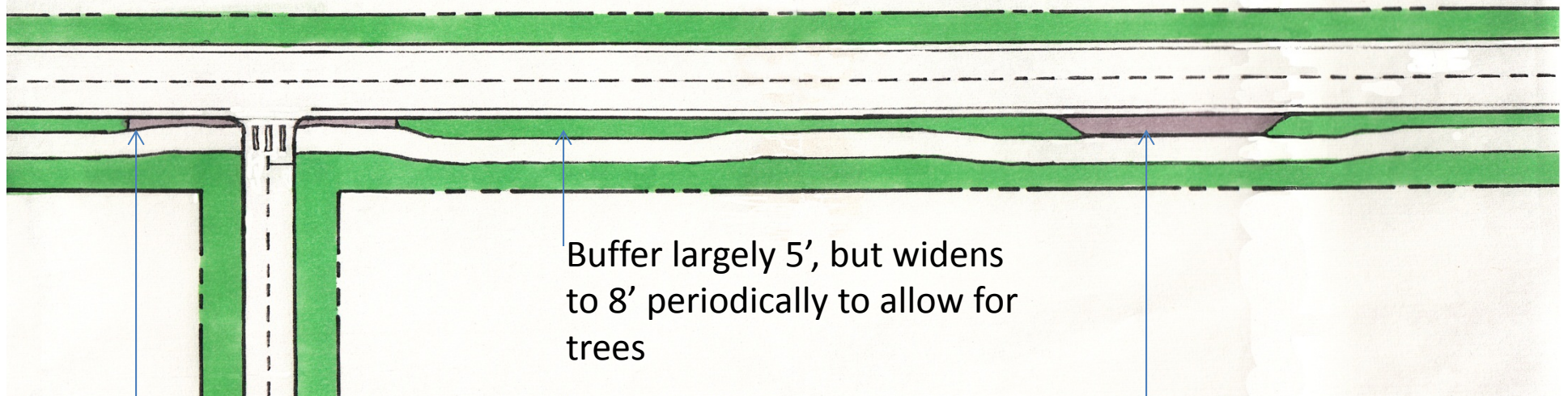


Options – Pros and Cons						
<i>best (green) to worst (red) for each objective</i>	A	B	C	D	E	F
IMPROVE SAFETY						
Reduce travel lane for traffic calming						
Improve SUP buffer						
Widen SUP						
Widen shoulders for bikes, mopeds						
Calm motorized traffic in conflict areas						
SCENIC APPEARANCE IMPROVEMENT						
Increase vegetation						
Reduce pavement width						
CONGESTION						
Avoid excessively narrow lane widths						
Provide bus pull-offs						
STRUCTURAL AND OPERATIONAL INTEGRITY						
Resurface road						
Redo drainage structures						
Adequate shoulders - structural integrity, drainage						
COST						

4. Options

Possible typical layout combining options B and E, with bus pullouts

11' lanes, 2' shoulders



Buffer narrows at intersections for greater visibility of SUP

Buffer largely 5', but widens to 8' periodically to allow for trees

Buffer widens to incorporate bus pullouts

5. Next Steps

5. Next Steps

Proposed First Phase of Implementation

Edgartown town line to east edge of Felix Neck
(Segment e)

Possible prototype for other sections, though having the design vary along the road could provide variety and respond to local conditions.





5. Next Steps

To Be Decided

1. Travel Lane Width?
2. Shoulder Width?
3. Buffer Width
4. SUP Width?
5. Shift Road or SUP?
6. Bus Stop Pullouts?
7. Should SUP meander, e.g. around bus stops?
8. Barrier in buffer?
9. Vegetation? – possibly done by towns later

5. Next Steps

Meetings

- Martha's Vineyard Joint Transportation Committee – October 29
- Edgartown Planning Board – November 18
- Public Meeting – December 3
- Edgartown Board of Selectmen decision on starting with drainage structures and/or priority section location and design – December 8 (tentative)