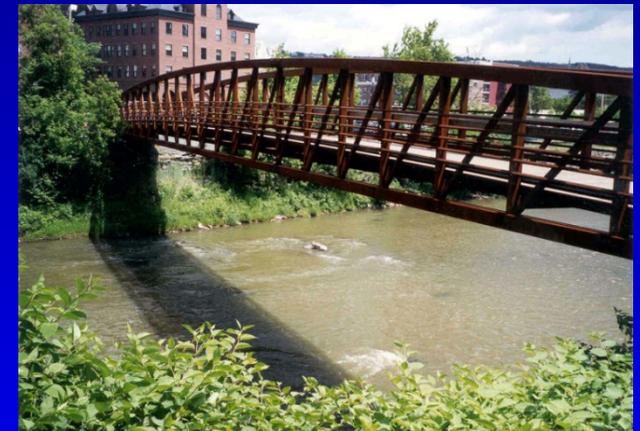


Development Review, Walking and Bicycling

SWCRPC Towns -
June 23, 2020

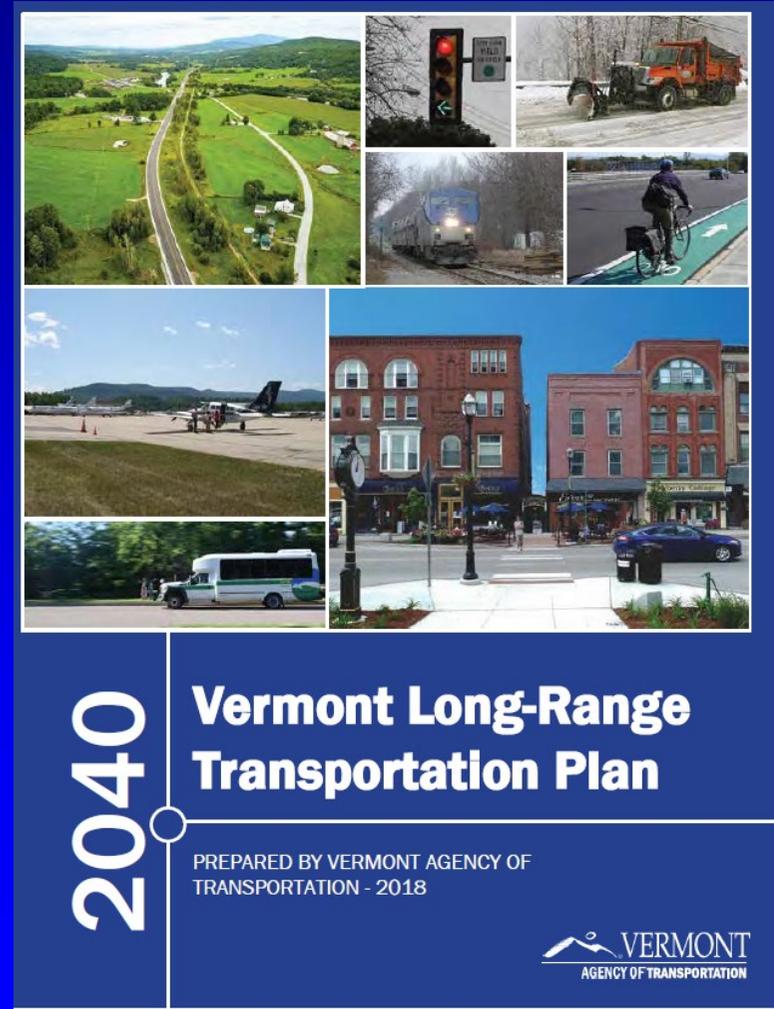


What will be covered

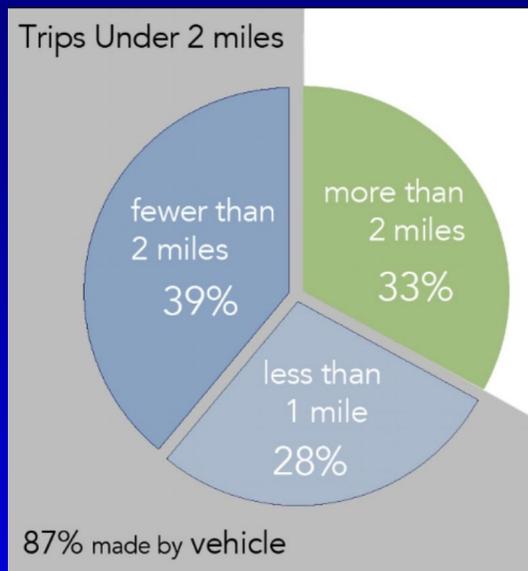
- Context of Bike/Ped at Vtrans and within Act 250
- Complete Streets – What does it mean?
- Case Studies Illustrating good and bad examples of:
 - Relationship of development to existing bike or ped networks
 - Ped access from road network/transit to site
 - Avoid site or road improvements that negatively impact bicycling or walking
- Answering your questions

Vermont 2040 Long Range Transportation Plan

- Increase the viability of **active forms of transportation** through improved infrastructure and connectivity
- Make transportation **investments that promote active transportation** and reduce social isolation

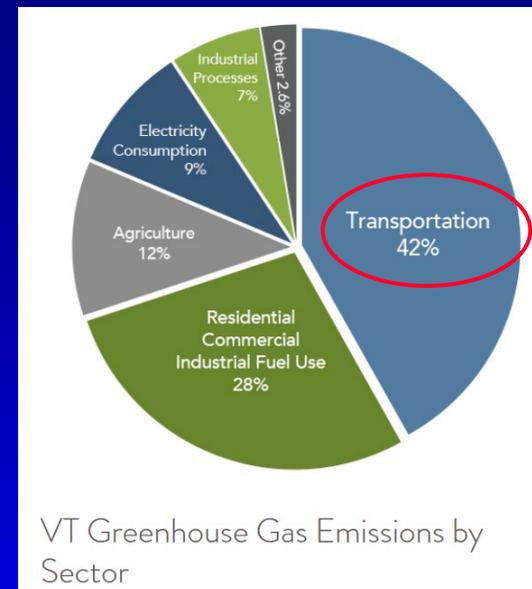


VT Transportation Demographics



Majority of trips < 2 Miles

- Americans who don't drive = 15 %
- 31% of Vermonters dissatisfied with the availability of Sidewalks
- 42% dissatisfied with the availability of bike facilities



Impact on climate change

Act 250 – Criterion 5 (A)

Will not cause unreasonably dangerous or congested conditions with respect to highways ...and other means of transportation existing or proposed.



Act 250 – Criterion 5 (B)

- As appropriate, will incorporate transportation demand management strategies and **provide safe access and connections** to adjacent lands and facilities and **to existing and planned pedestrian, bicycle, and transit networks and services**.
- Appropriate = action that a reasonable person would take given the type, scale, and transportation impacts of the proposed development or subdivision.

Act 250 and Local Review

- Local review typically happens first
- Difficult when Town says a plan is OK and then the state disagrees



VTrans 2019 Traffic Impact Study Guidelines

- Study Elements Checklist:

“Consideration of bicycle and pedestrian access and safety”

Also refers to “Existing and committed bicycle and pedestrian facilities in the area.”



T.I.S. Guidelines (cont.)

Study Elements Checklist: The Traffic Impact Study should address proper roadway geometry to safely accommodate bicycle traffic on the site and adjacent to the site, as well as to the general connectivity of the site to the public network. The quality and completeness of the bicycle and pedestrian network should be addressed.

Infrastructure changes proposed to mitigate traffic impacts should not result in the degradation of bicycle or pedestrian access or safety.

Appendix G: Checklist for Bicycle and Pedestrian Considerations

Complete Streets in VT

- Act 34 went into effect July 1, 2011
- “. . . purpose . . . is to ensure that the **needs of all users** of Vermont’s transportation system—including motorists, bicyclists, public transportation users, and pedestrians of all ages and abilities—**are considered in all . . . transportation projects and project phases**, including planning, **development**, construction, and maintenance.”

Complete Streets

Site and Road Design that Provides for:

- Pedestrians
- Bicyclists
- Transit
- Trucks/Deliveries
- Cars



Typical Sidewalk issues



No separation from road

Lack of sidewalks



Discontinuous sidewalks



Sidewalk Design Basics

- 5 feet wide is standard
- Separate from road
- Greenstrips where possible
- Curb ramps at intersections
- Visible crosswalks
- Pedestrian-scale lighting



Pedestrian Signals



- Accessibility features
- Timing of Walk phase
- Leading pedestrian interval
- Countdown signal
- No Right turn on Red

Bicycle lanes

So. Burlington, VT



Springfield, VT

W. Brattleboro, VT



- Intended for congested areas
- Minimum 4' wide
- Pavement markings and signs

Next Generation Bike Lanes



Buffered Lane



Green Markings

Shared Use Paths



- Generally on an independent alignment
- Multiple users
- Minimum width = 8 feet
- Often include structures



Bicycle Parking

- Locate close to building entrance
- Simple design is best
- Long-term may be covered or indoors



- Adequate parking for expected use
- NO wheel benders

Important considerations

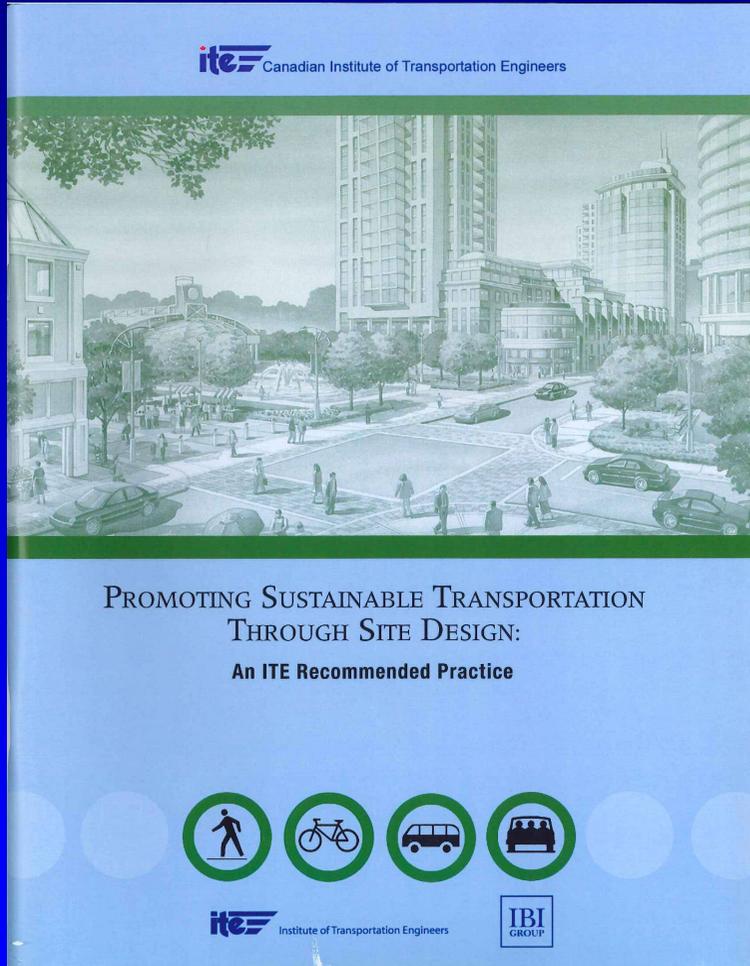
- Proximity to existing or planned network
- Access by walking or bicycling
- Safety for everyone, regardless of mode choice
- Be specific with permit – “shall designate the pedestrian area”



Vs.

- “shall construct a sidewalk”

Resources for Project Design and Review



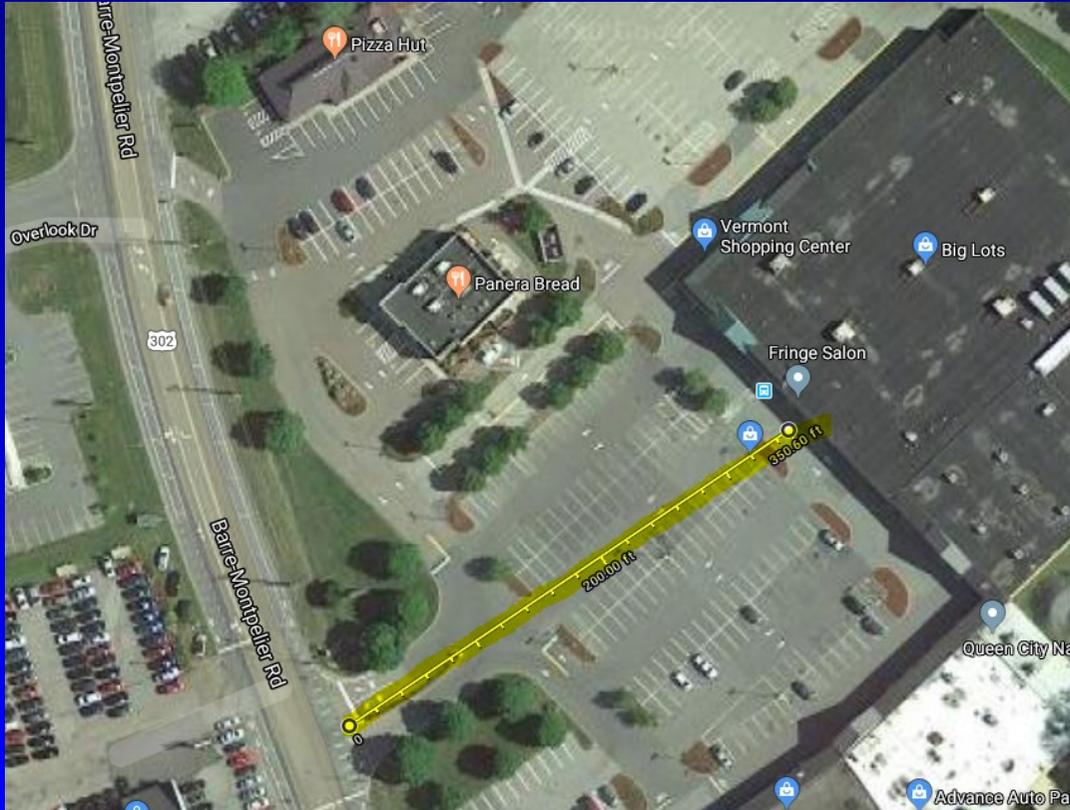
This?

OR



This?

Case Study - Berlin

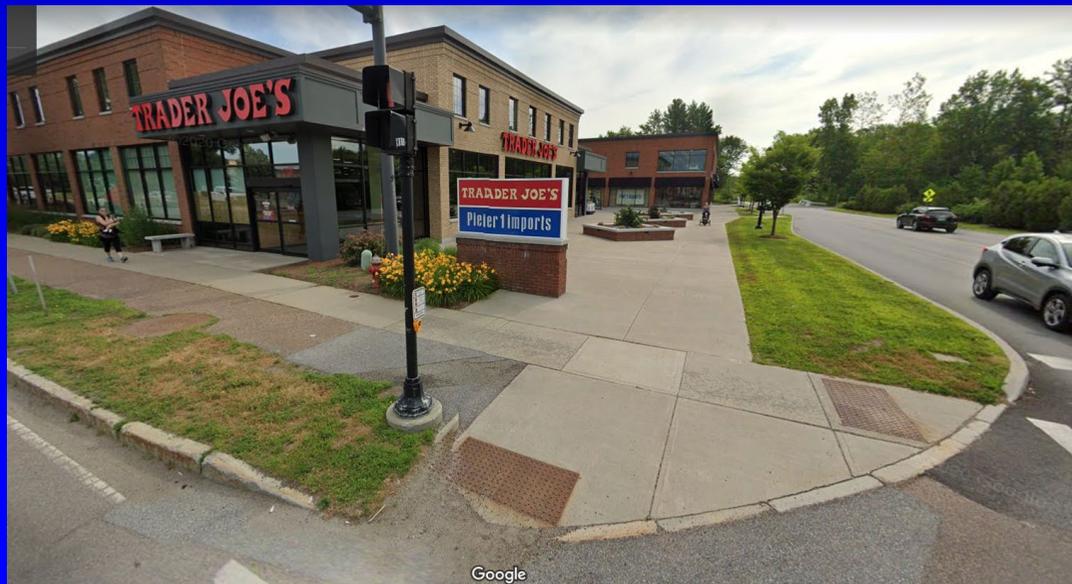


- Building/parking orientation – 1.5 minutes to walk from street to front of building
- Parking lot design – no ped access
- Transit users not well provided for

Case Study – So. Burlington



- Building/parking orientation – immediately adjacent to sidewalk/path
- Parking lot design – behind building
- Bike parking near entrance
- Transit stops near ped crossing



Case Study - Rutland

- Business itself not a large ped generator
- Need to think about employees walking to work or accessing services



Case Study - Ludlow

- New hotel < 1/2 mile from downtown
- 200 Ft from new building front to existing sidewalk
- Existing bridge doesn't have sidewalk
- DRB didn't address peds



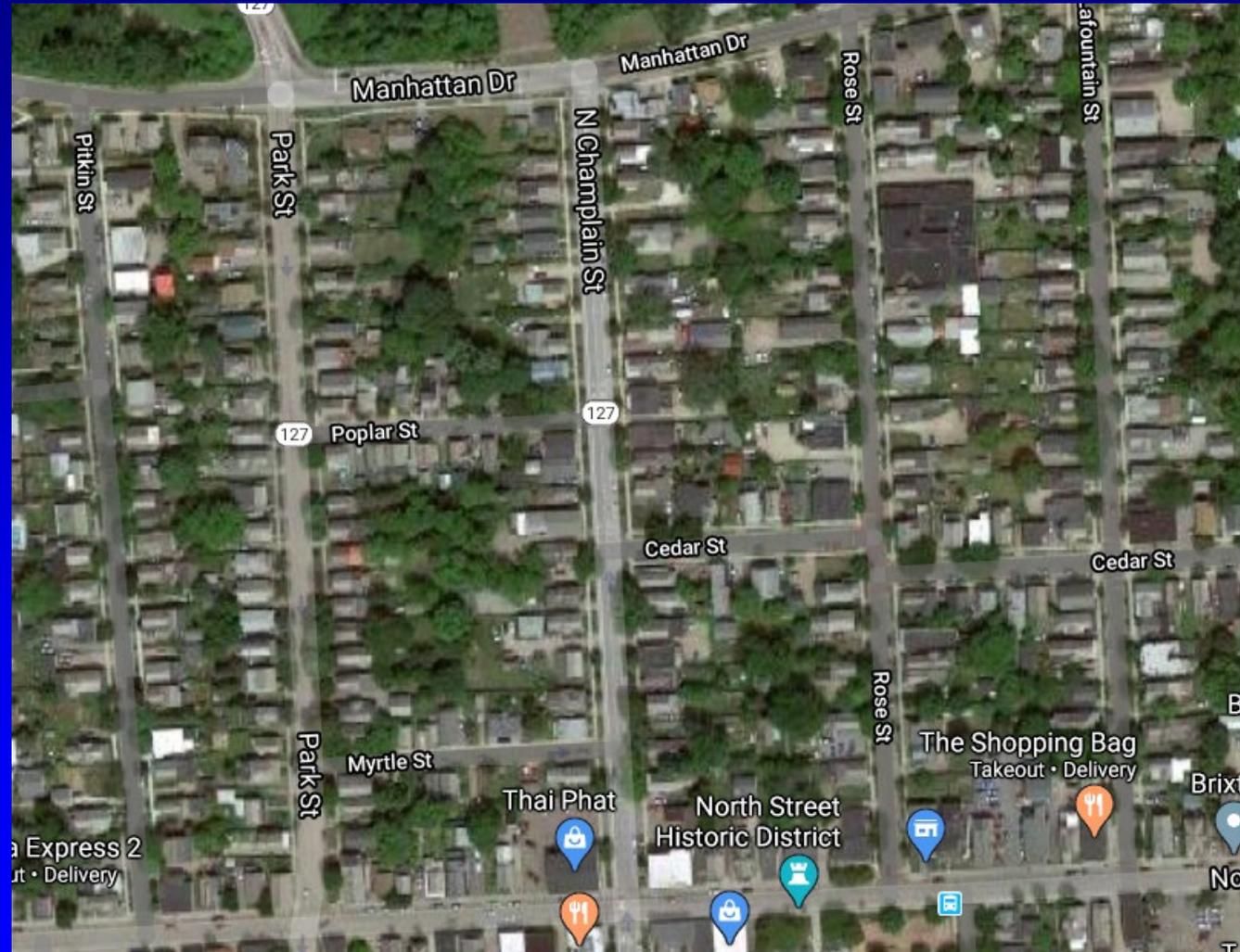
Case Study – Turn Lane Development

- If development requires a turn lane, maintain bicycle access.
- Don't provide turn lane at the expense of the bicycle facility



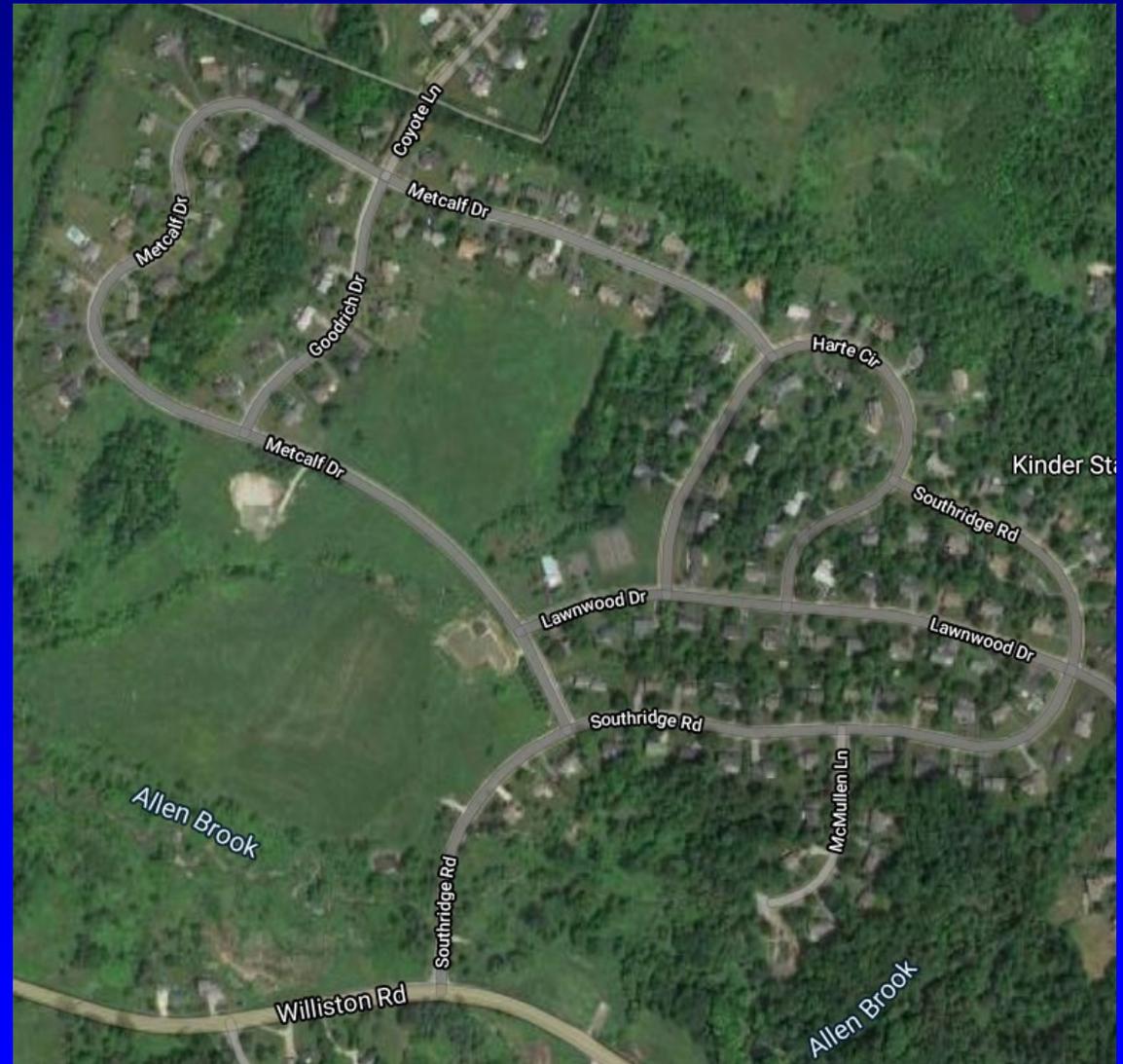
Residential development and Street Network

- Traditional pattern – grid network, multiple options
- Easy to walk/bike to destinations



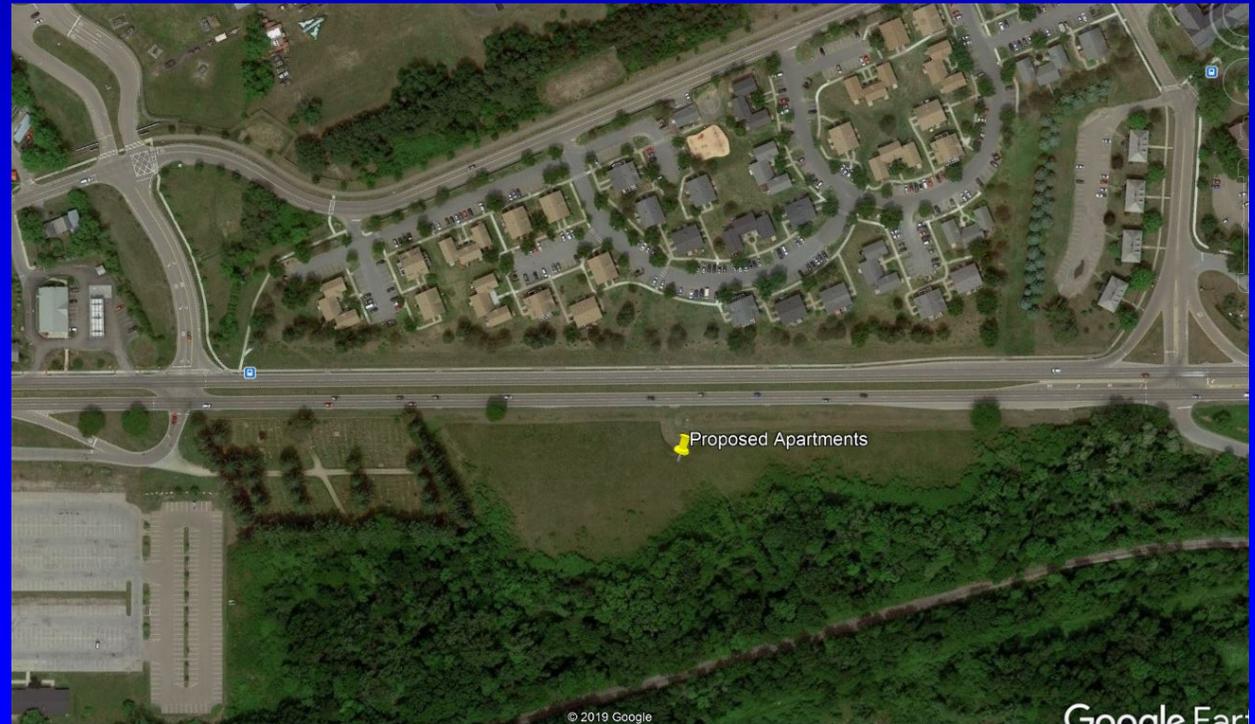
Residential development and Street Network

- Cul de sacs, dead end streets force all trips out to a main road
- Longer trips less likely to be done as walk/bike



Case Study – Rt. 15 Colchester

- Planned shared use path on the north side of Route 15
- Transit in the corridor
- Planned signalized ped crossing to the west



QUESTIONS??

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