


Phase 6 Land Use “Road Right of Ways”

April 6, 2015

Goal

- Identify the “Road Right of Ways” (ROW) in the Turf Overlay/Mask
 - Identify low vegetation adjacent to roadways that should be classified as turf grass
- Tasks
 - Explore various ROW widths for 3 target roadway types on a state by state basis
 - Compare pre-existing ROW boundary layers (e.g. MDOT) with the street (centerline) layer (NAVTEQ)
 - Explore various ROW widths by identifying “gaps” in county parcel layers
 - Pilot Counties:
 - Maryland: Prince George’s*, Baltimore, Washington
 - New York: Chenango
 - Delaware: Kent
 - Virginia: Newport News/Hampton

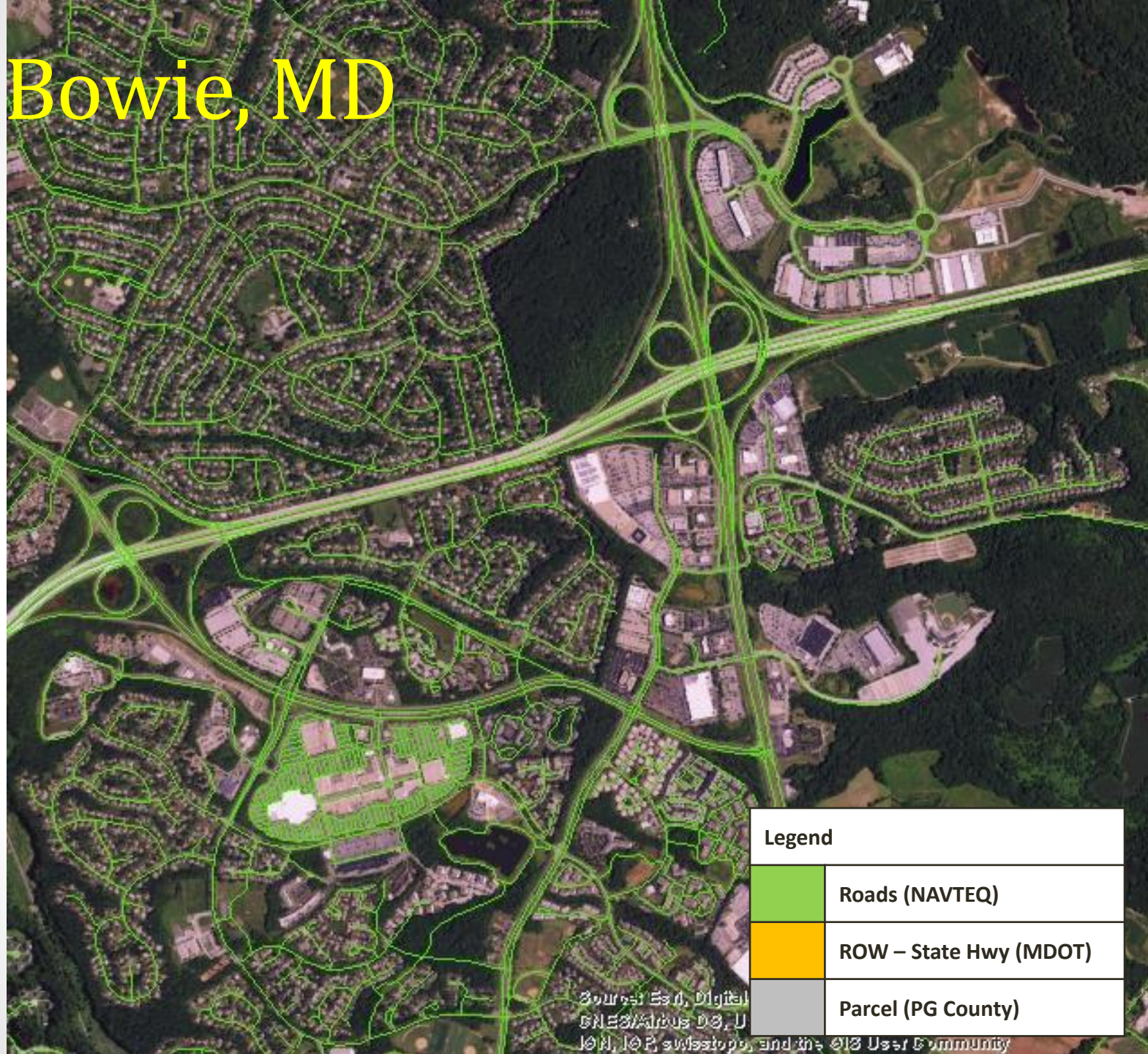
Bowie, MD

Legend	
	Roads (NAVTEQ)
	ROW – State Hwy (MDOT)
	Parcel (PG County)

Source: Esri, Digital
GNE/Arbus DB, U
ION, IOP, satellite, and the GIS User Community

Source: Esri, Digital GNE3/Airbus DS, U ION, IOP, GeoEye, and the Geo User Community	Parcel (PG County
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Bowie, MD

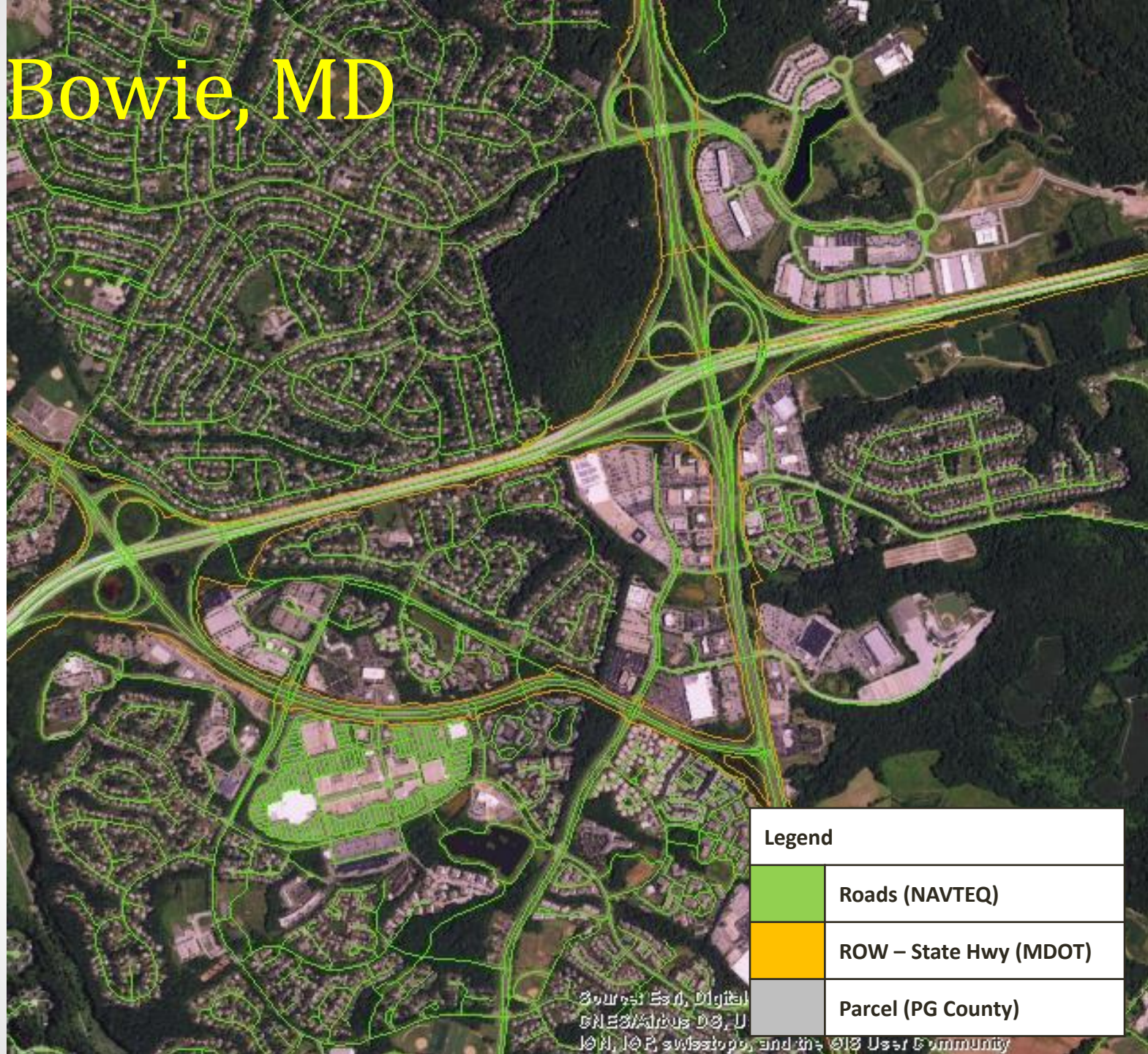


Legend

	Roads (NAVTEQ)
	ROW – State Hwy (MDOT)
	Parcel (PG County)

Source: Esri, Digital
Globe/Airbus DS, U
TM, JP, swisstopo, and the GIS User Community

Bowie, MD



Legend

	Roads (NAVTEQ)
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Source: Esri, Digital
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Bowie, MD

Legend

- Roads (NAVTEQ)
- ROW – State Hwy (MDOT)
- Parcel (PG County)

Source: Esri, DigitalGlobe, GeoEye, IGN, GeoEye, and the GIS User Community

Source: Esri, Digital
ONEmap, Airbus DS, U.S.
IGN, IGN, Suiasstopo, and the GIS User Community

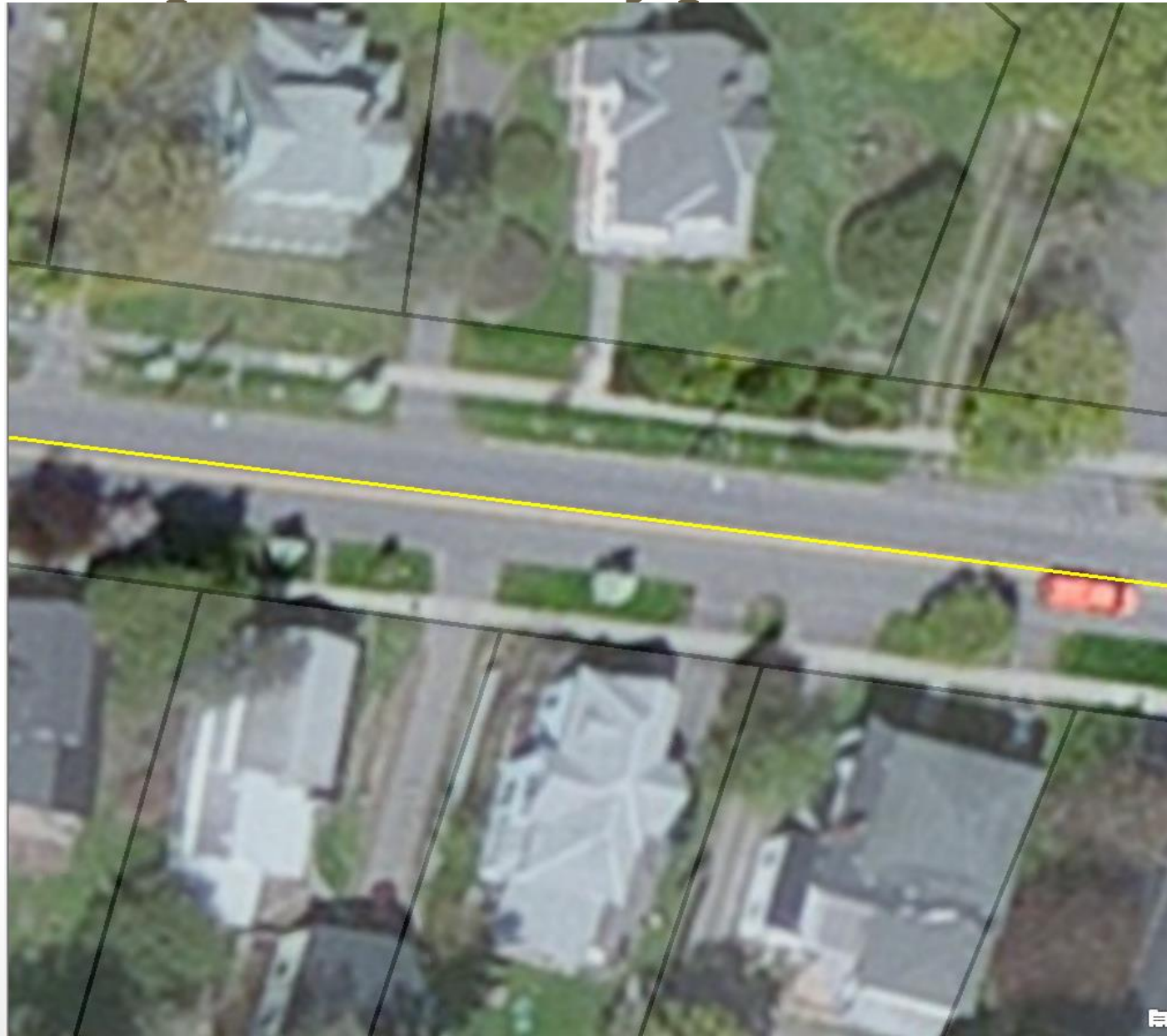
Road Types

Class	Number of Lanes	Example
1	1	Exit Ramps and Local Roads State St. in Chenango County, NY I-70 in Washington County, MD
2	2 - 3	I-495 in PG County, MD I-70 in Washington County, MD
3	4 or more	I-664 in Newport News, VA

Options to Create the ROW Mask

- Option A: Identify ROW widths only using governmental and peer-reviewed publications, and apply the buffer widths to the street layer by road type
- Option B: Use county parcel boundaries and existing ROW GIS layers
- Option C: (a) Use county parcel boundaries, (b) for counties without parcel boundaries, sample the ROW widths for each road type created using parcel boundaries from counties in the respective state, and (c) apply buffer widths to the street layer by road type
- Option D: Use county parcel boundaries and 1m land cover data

Example: Road Type #1



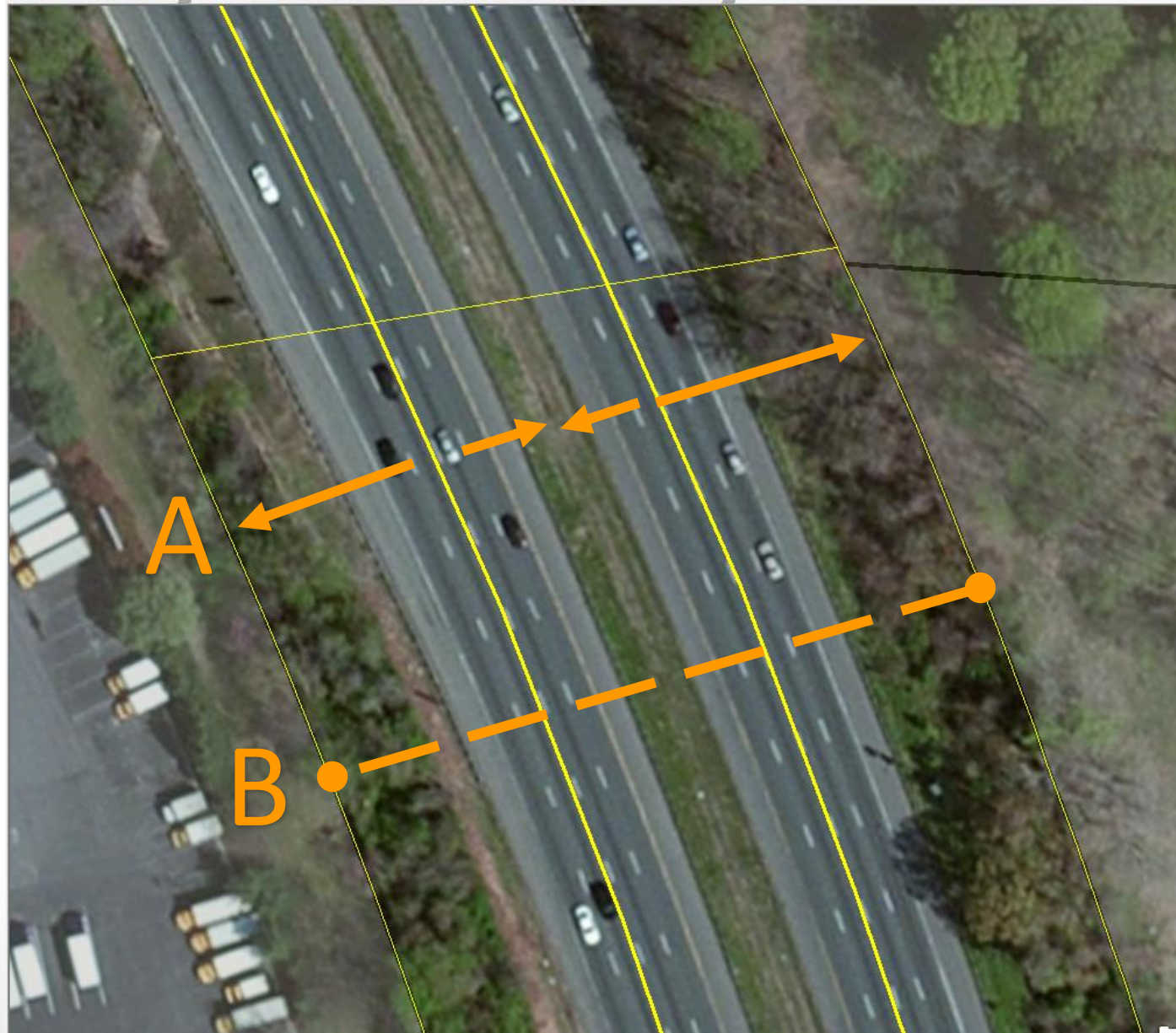
Example: Road Type #1



Example: Road Type #2



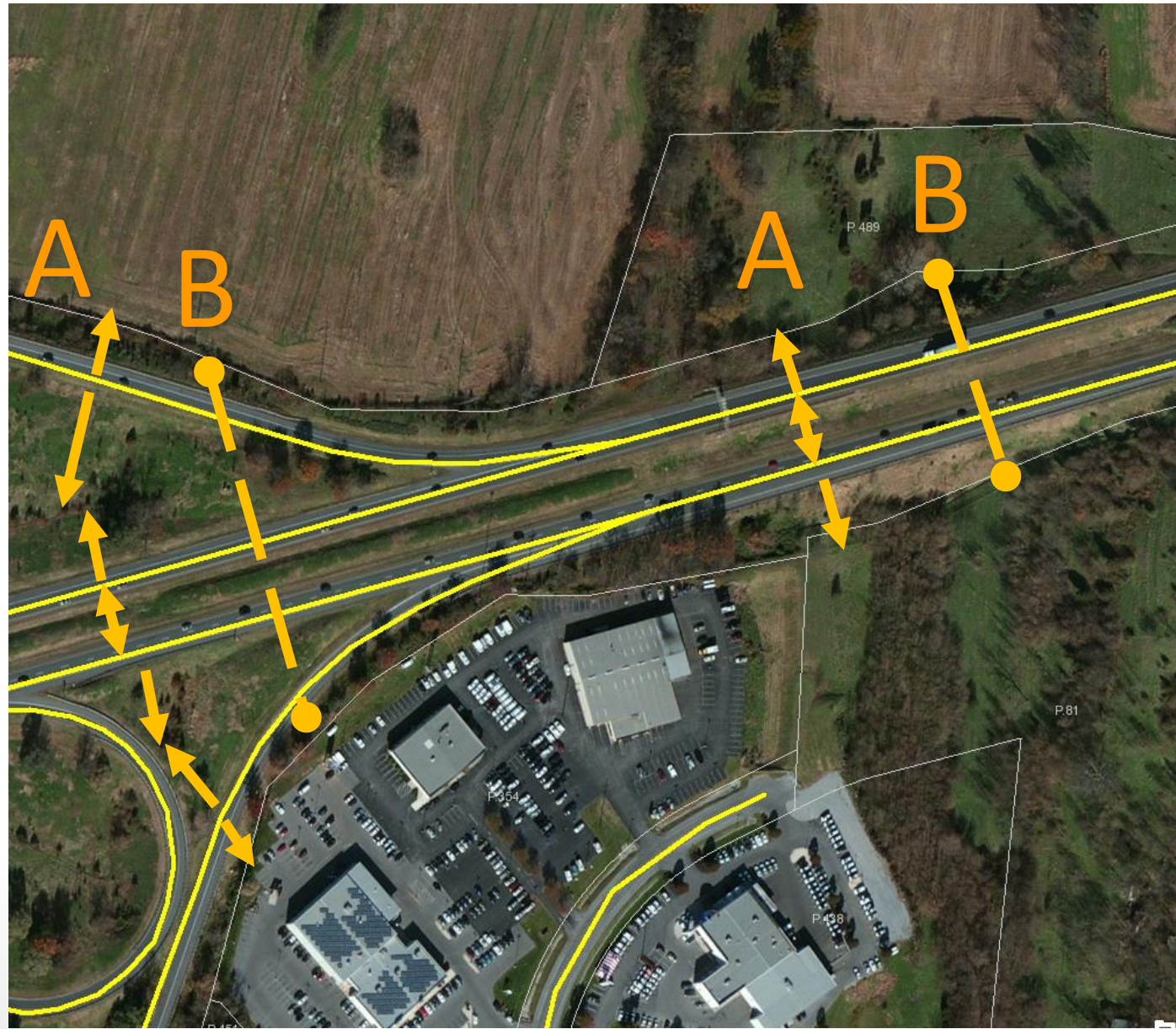
Example: Road Type #2



Example: Road Types #1 & 2



Example: Road Types #1 & 2



Example: Road Types #1 & 2



Example: Road Types #1 & 2



Limitations and Challenges

- Addressing potential variations in land use classification or ownership in the parcel layers
 - Reason for sampling parcel boundaries and ROW widths on a state by state basis
- Uncertain on the benefits of focusing on all road types versus only on highways (Type 3)
- Addressing odd shapes and random inconsistencies of parcel polygons

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