



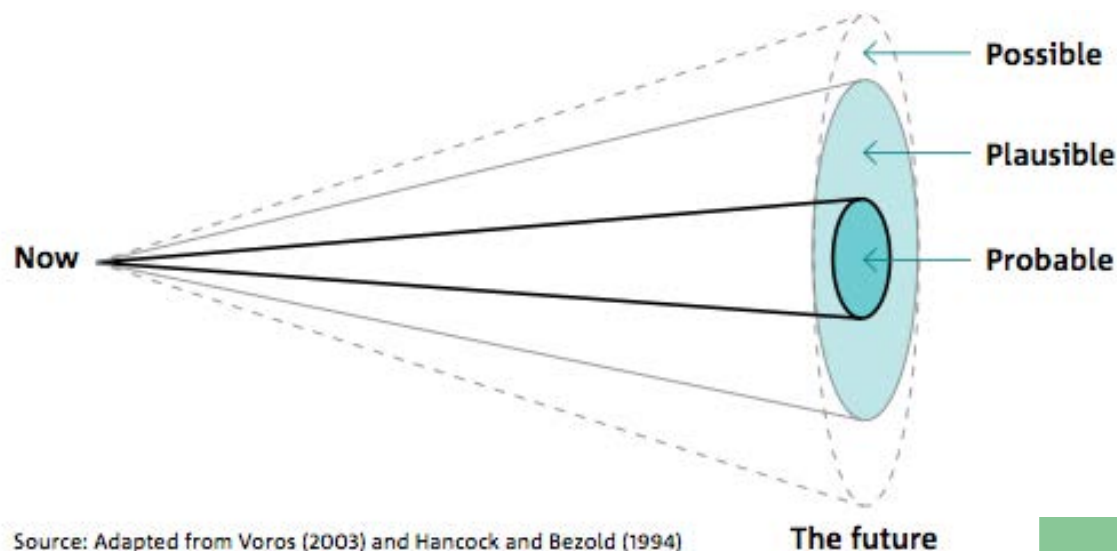
A Region's First Foray into Scenario Planning



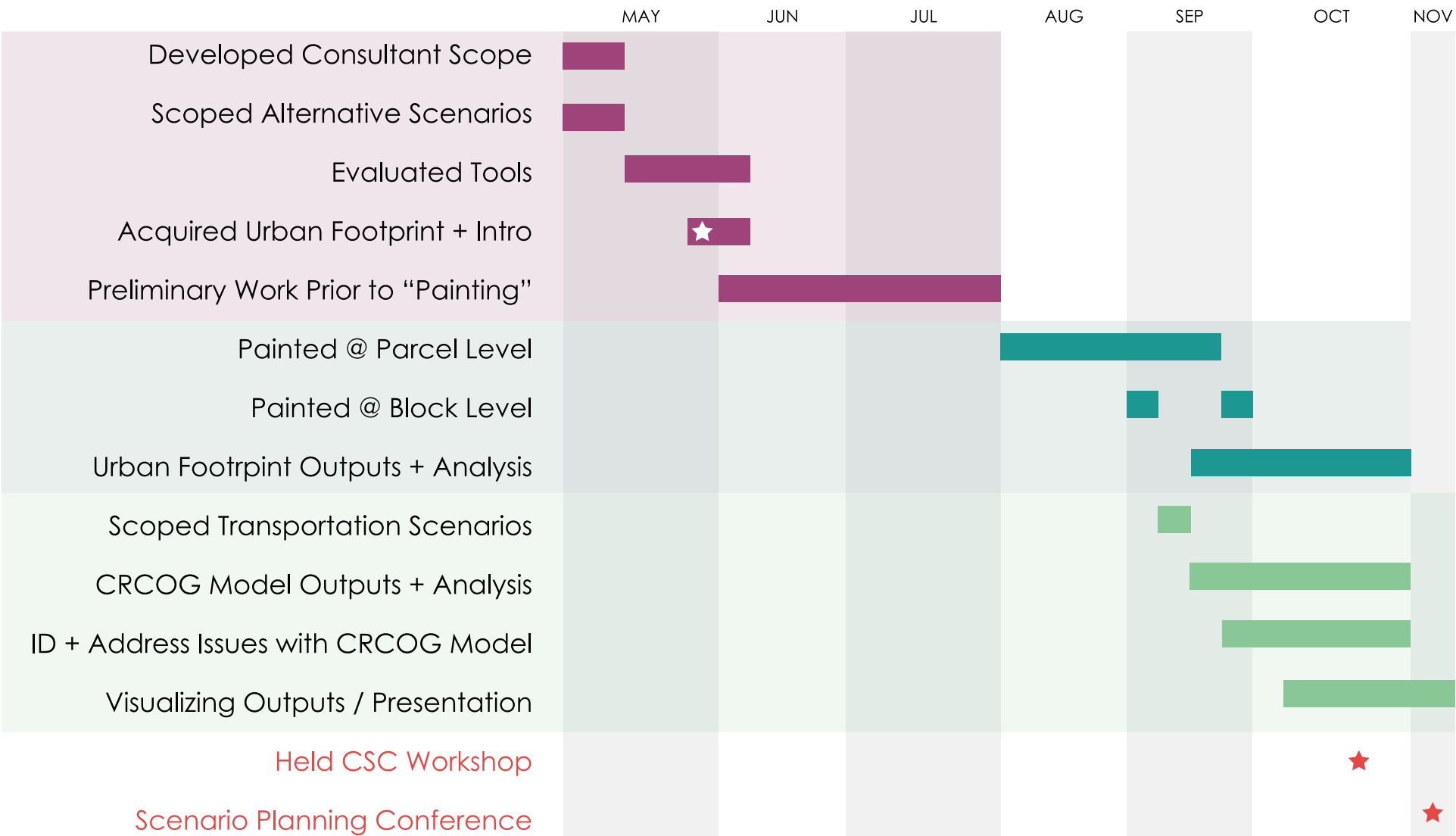
What is Scenario Planning?

Scenario planning is a strategic planning method that organizations and communities can use to **plan for an uncertain future** by **exploring the possibilities of what *might* happen**.

By considering various futures we can more effectively plan, make policies, and respond to the unknown.

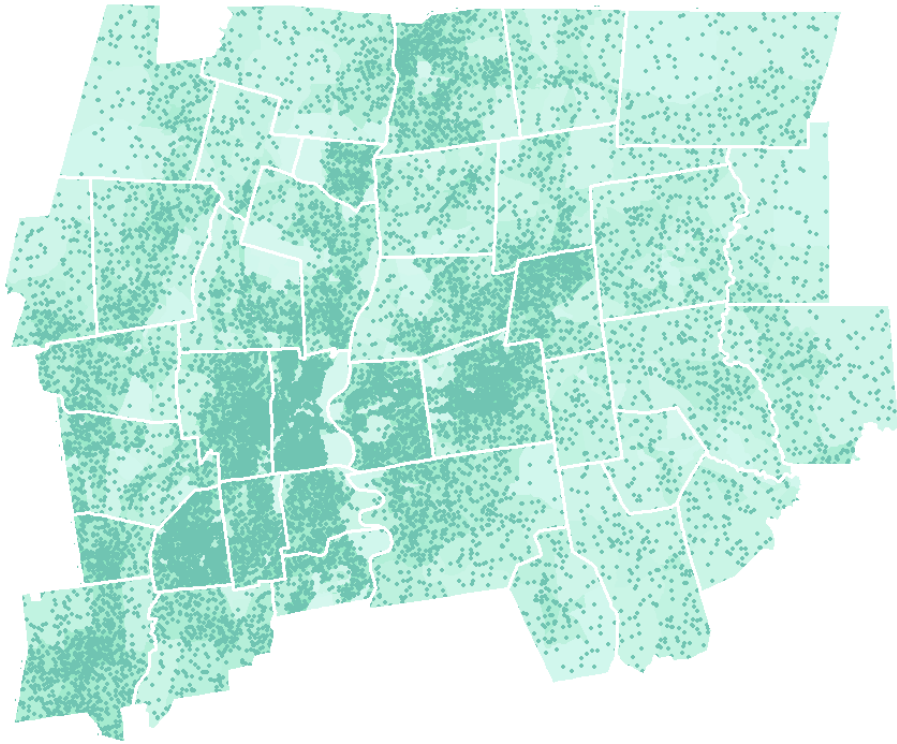


Project Timeline

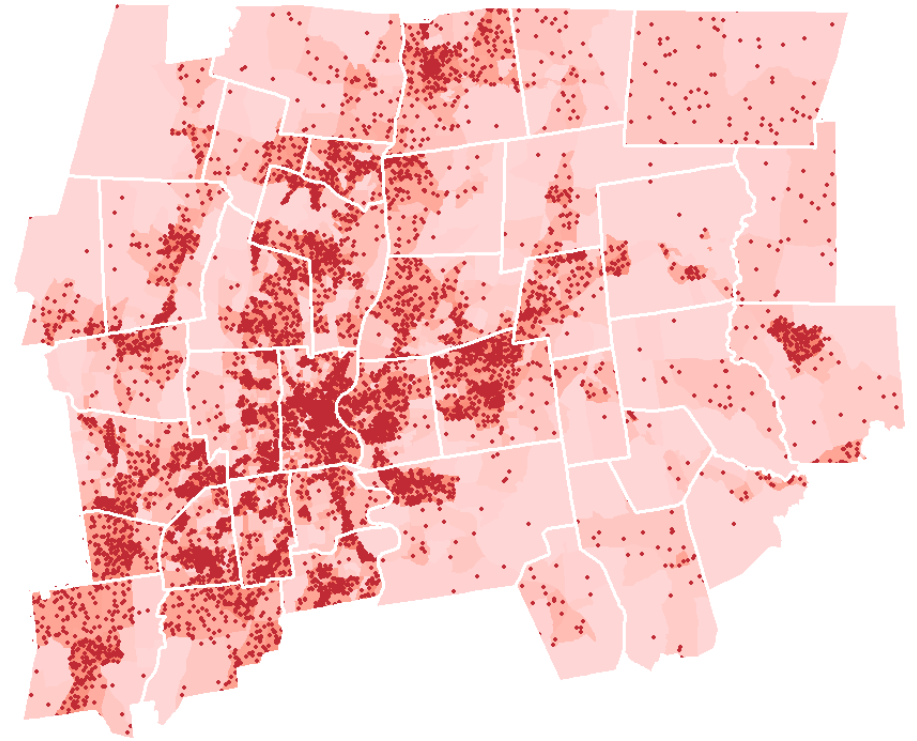


Preliminary Work Urban Footprint Travel Demand Model Special Events

Existing Conditions



Population Density
(973,960 Total)



Employment Density
(496,703 Total)

Existing Conditions

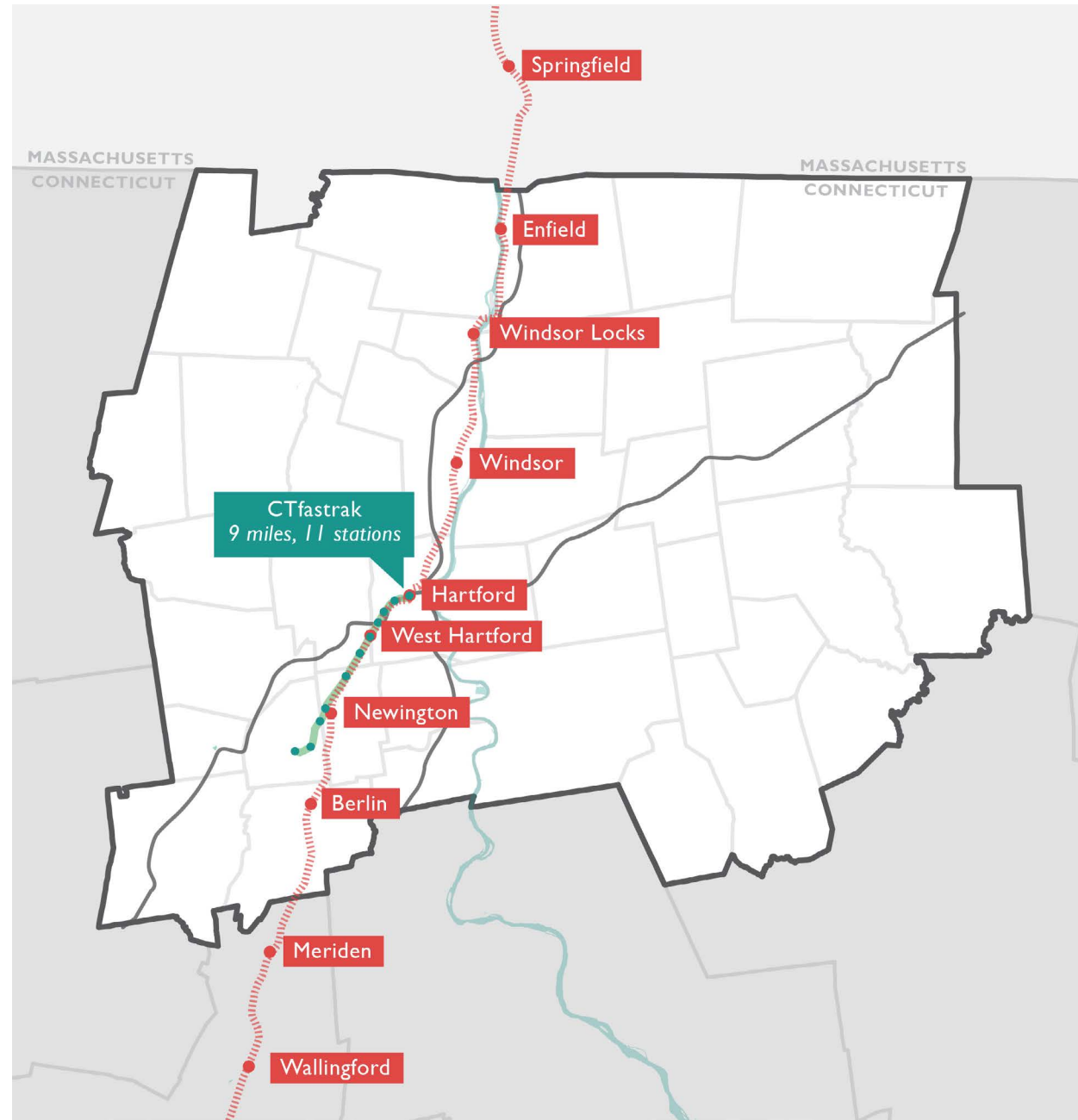
~100 miles from Boston
and NYC

4 existing + 3 planned
CTrail stations

11 **CTfastrak** stations

CTtransit Local +
Express bus service

2 major interstates



General Question:

Based on our region's 2045 projections for population + employment growth, **what are potential consequences of various land use patterns and transportation investments?**


Meet our Urban Footprint Scenarios




BASE - Urban Footprint existing conditions



THE LAND OF STEADY HABITS - Growth for region applied in the manner in which it is projected by CTDOT (2045)

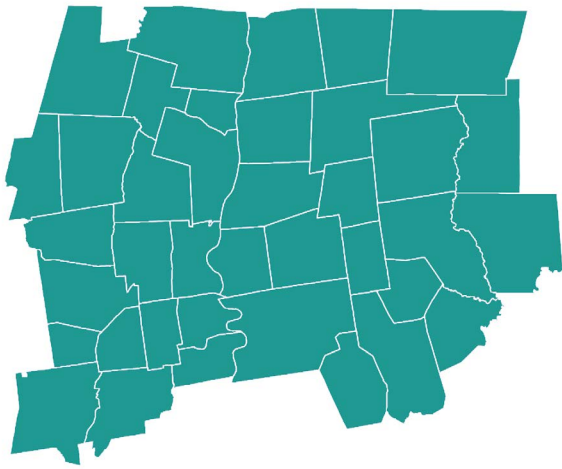


MARKET READY TOD- Growth focused along transit corridors - CTfastrak and CTrail - utilizing the CRCOG Sustainable Land Use Code for varying station area types on “soft” parcels

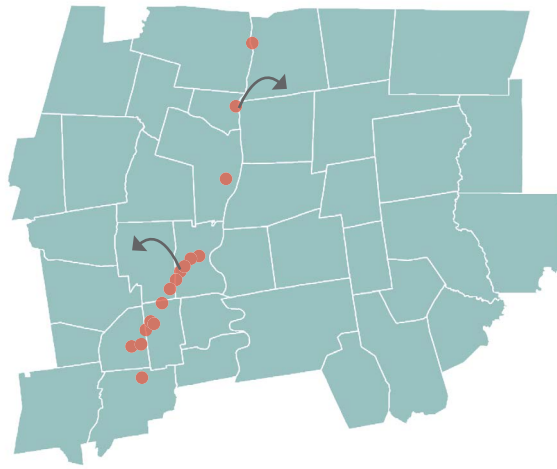


MAXIMUM TOD - 100% of 2045 projected growth focused along transit corridors

Meet our Urban Footprint Scenarios

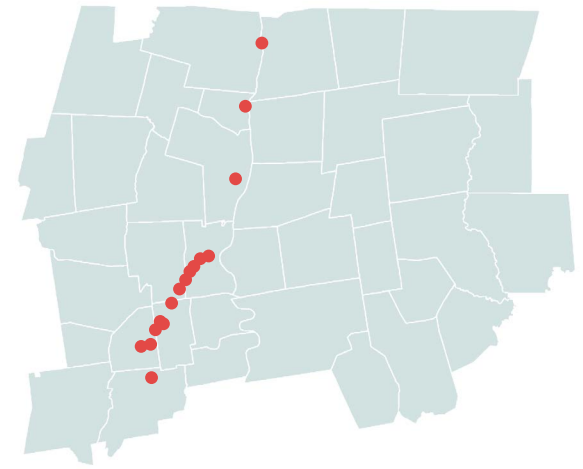


Population + employment distributed across the region as per State projections.



Population + employment growth focused in corridors per model land use code.

“Remainder” of growth (what didn’t fit along the corridor) distributed across the region proportionally, relative to State projections.

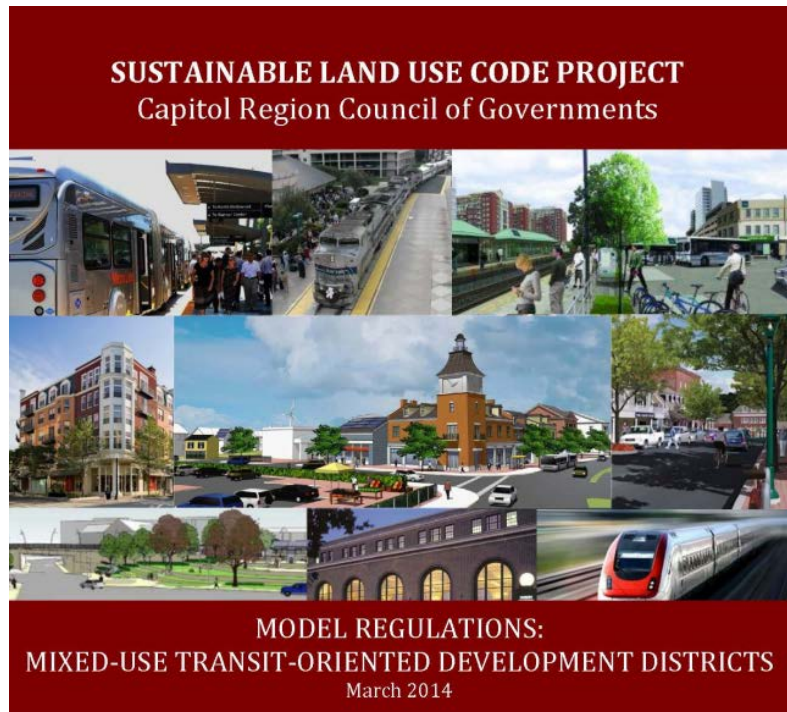


100% of population + employment growth focused in corridors per model land use code.

No “remainder” allocated elsewhere in the region.

Urban Footprint Process

Created unique “Development Types” in UF to reflect the recommended land use intensities recommended in the CRCOG “Sustainable Land Use Model Code”



1.5.1. TABLE OF INTENSITY AND DIMENSIONAL STANDARDS²⁴

1.6 Table 1.5.1: Intensity and Dimensional Standards			
Subdistrict:	TOD-Core	TOD-Ring	
Use:	All Uses	Nonresidential & Mixed-Use	Residential
Block and Lot Standards			
Block length (min max)	200 ft 400 ft	400 ft 800 ft	400 ft 800 ft
Lot area (min)	1,500 sf	3,000 sf	5,000 sf ¹
Lot Width (min)	20 ft	30 ft	50 ft ²
Intensity			
Residential density (min max) ³	20du/ac 40du/ac	n/a	10du/ac 20du/ac
Floor area ratio (min max) ⁴	1.75 6.0	0.75 3.0	n/a
Lot coverage (min max)	60% 100%	40% 85%	n/a 70%
Open space (min, as % of lot area) ⁵	n/a	15%	20%
Building Placement			
Build-to line (min max) ⁶	0 ft/5 ft	0/12 ft	0/20 ft
Building width in build-to zone (min, as % of lot width)	80% ⁷	70% ⁷	50% ⁷
Front setback (min) ⁸	0 ft	0 ft	10 ft
Side setback (min)	0 ft	0 ft	5 ft ⁹
Corner side setback (min)	0 ft	0 ft	0 ft
Rear setback (min)	0 ft	0	5 ft
Height			
Structure height (min max) ¹⁰	3 stories n/a	2 story 6 stories	2story 4 stories
	35 ft n/a	25 ft 75 ft	25 ft 60 ft

Urban Footprint Process

Painted these at the parcel level and checked them for appropriate + consistent use of Development Types.

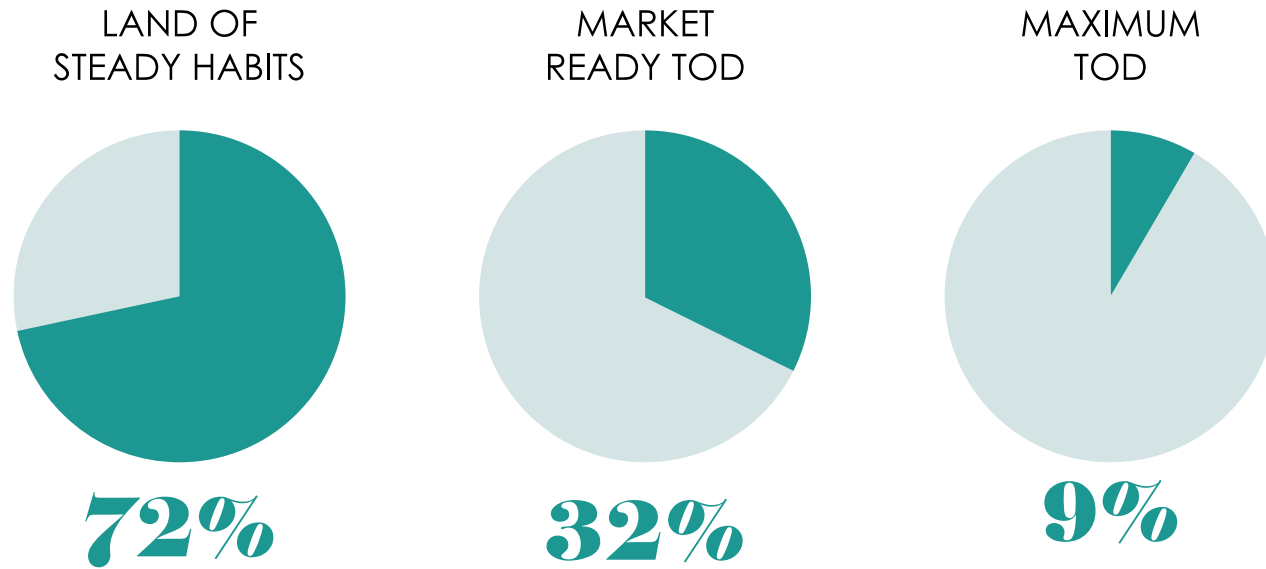


First “painting” attempt with model code Development Types.



Revised and left Downtown New Britain as “Urban” station area and repainted station to the east as “Suburban” and better defined core and ring areas.

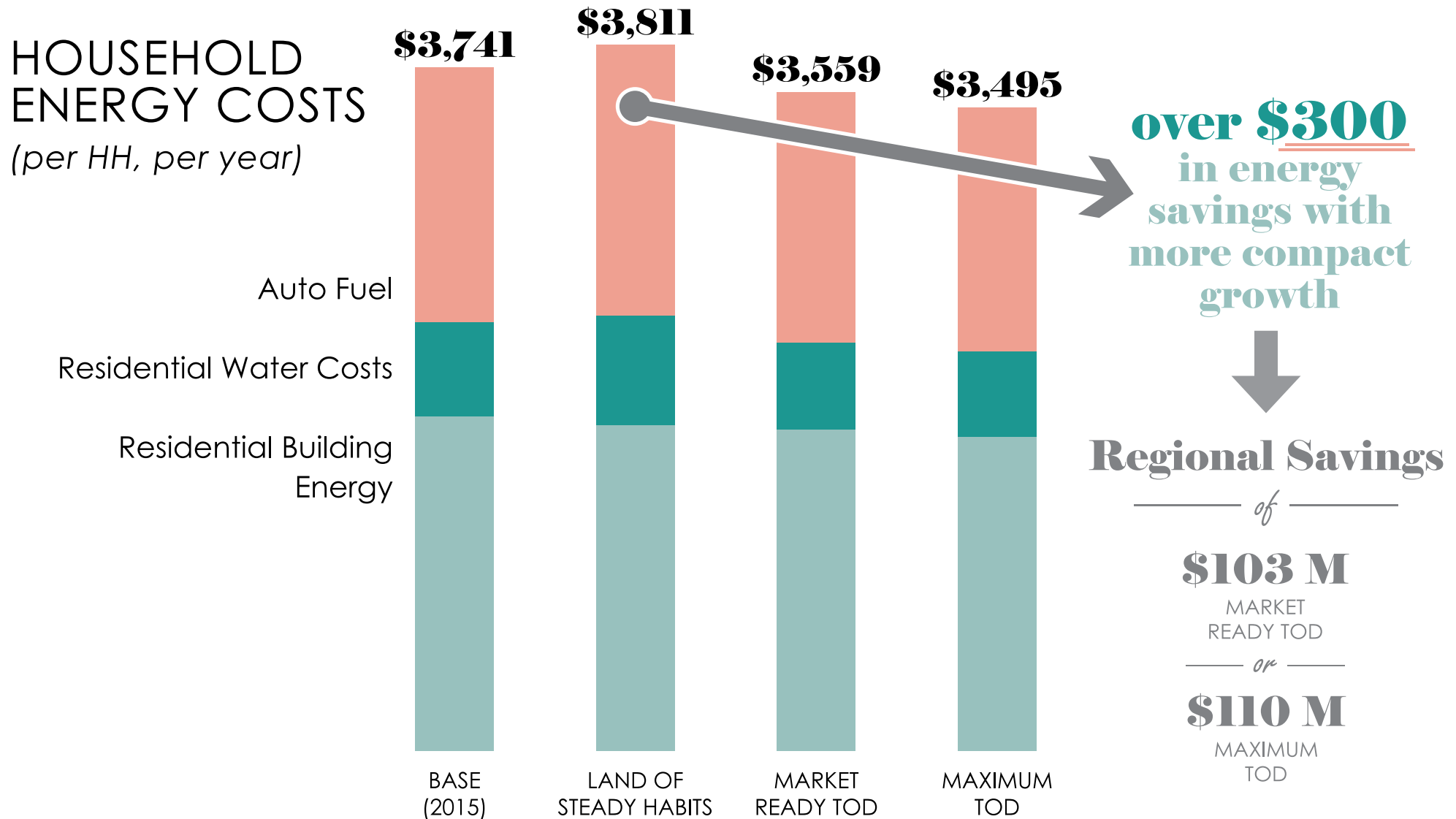
Urban Footprint Results



PERCENT OF TOTAL REDEVELOPED ACRES THAT WERE "GREENFIELDS"

TOD pattern growth significantly reduces the potential for greenfield, woodland, and agricultural land to be redeveloped.

Urban Footprint Results



Meet our Travel Demand Model Scenarios



PLANNED TRANSPORTATION NETWORK

Includes multiple transportation projects approved in our Metropolitan Transportation Plan



HIGHWAY IMPROVEMENTS

Includes I-84 viaduct and I-84/I-91 interchange



TRANSIT IMPROVEMENTS

Includes various reduced headways for bus and rail



HIGHWAY AND TRANSIT IMPROVEMENTS

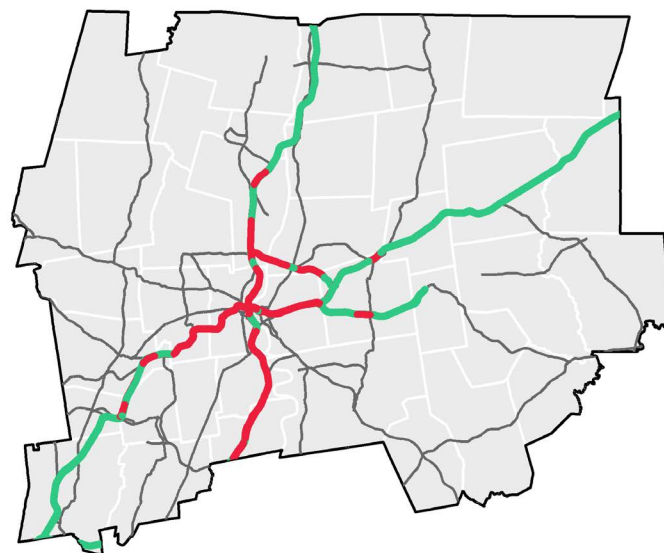
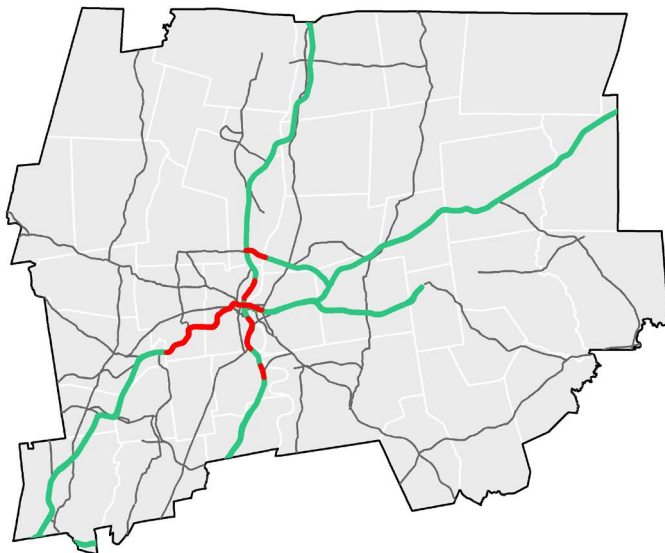
Includes improvements from both the highway and transit scenarios

CRCOG Model Results

“Land of Steady Habits” anticipates congestion associated with ~14% growth in Vehicle Miles Traveled (VMT).

Paired with Highway Improvements, congestion growth is appreciably lowered and VMT and is very slightly increased

Paired with Transit Improvements, VMT and congestion growth are each lowered slightly

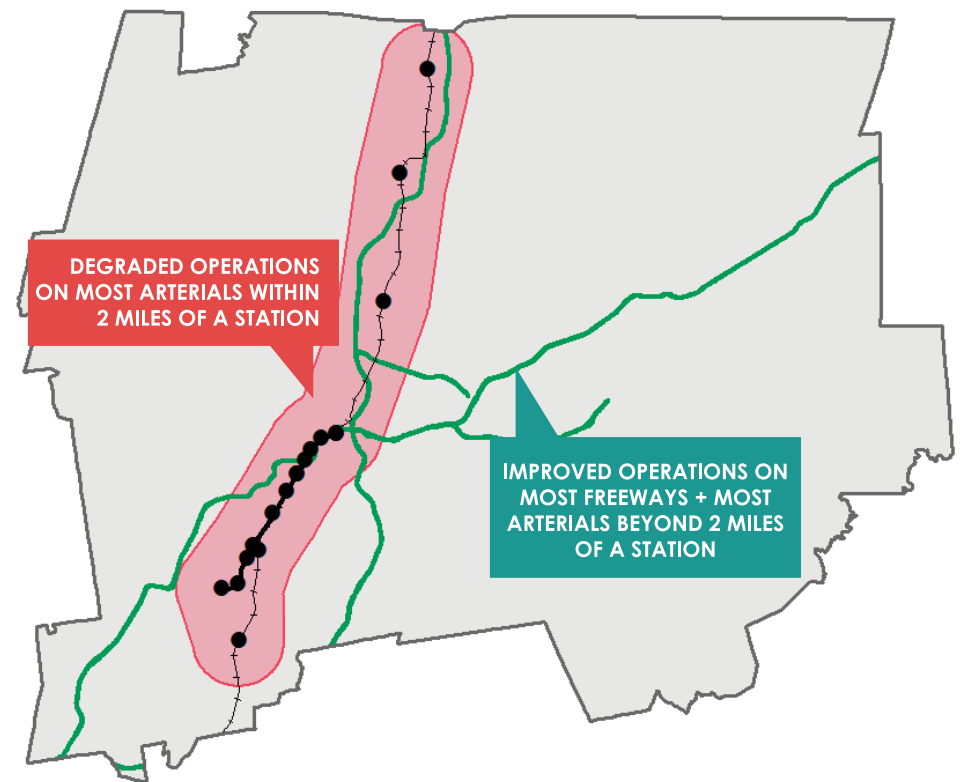


CRCOG Model Results

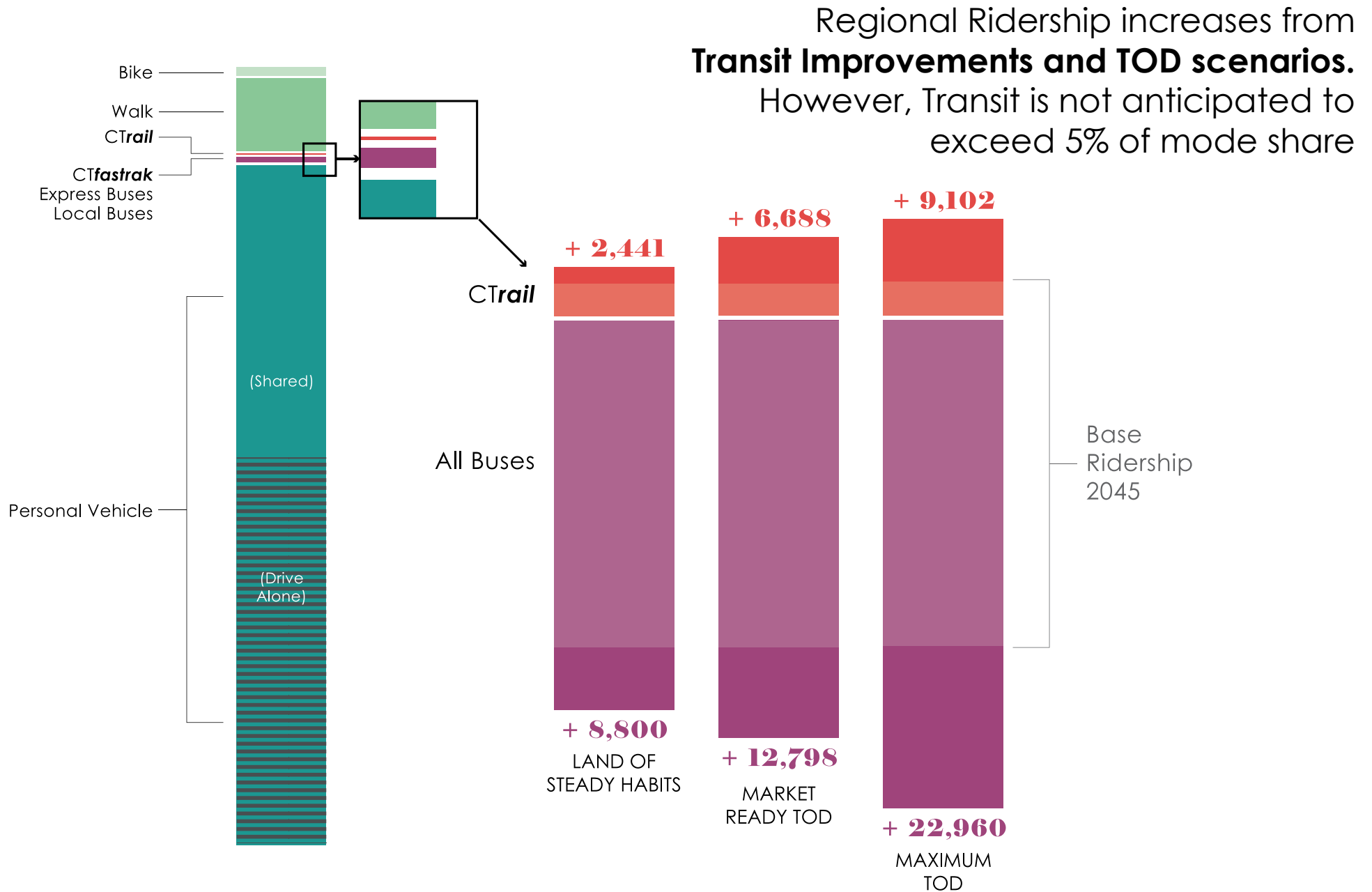
Identified TOD scenarios most significantly reduced regional growth in VMT and congestion

Unintended congestion can result if appropriate infrastructure is not provided in TOD areas

Although not as significantly as “Land of Steady Habits,” all tested Scenarios appear to increase both VMT and congestion compared to existing conditions



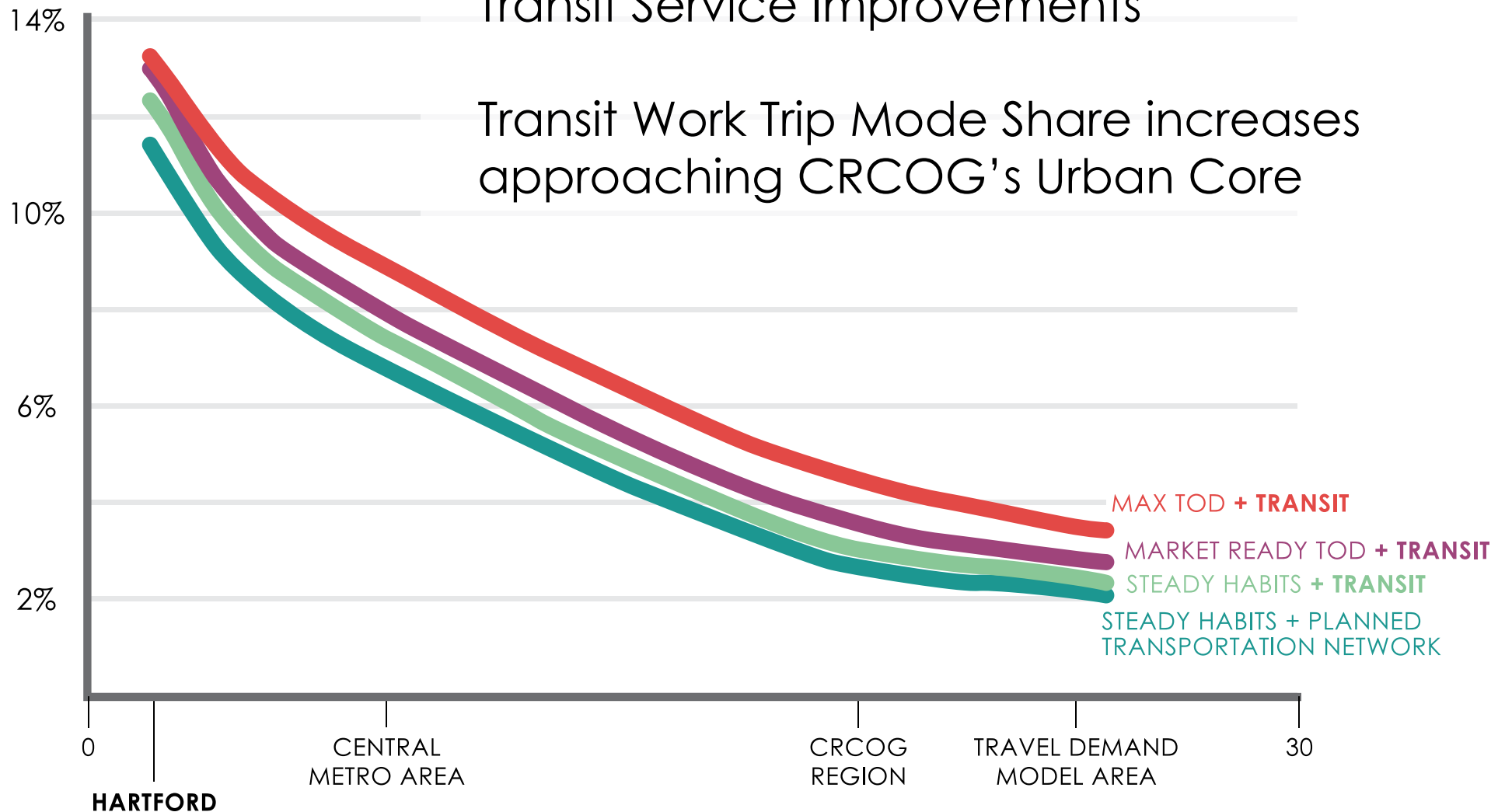
CRCOG Model Results



CRCOG Model Results

Transit Ridership was about equally sensitive to the identified Land Use and Transit Service Improvements

Transit Work Trip Mode Share increases approaching CRCOG's Urban Core



Potential Benefits of TOD Scenarios:

- Significant reduction in redevelopment of greenfields lands (55% to 85%)
- ~\$100 million in household energy savings annually
- ~10% reduction in roadway congestion (significant reduction on freeways)
- ~5% reduction in VHT (vehicle hours traveled)
- ~3% reduction in VMT (vehicle miles traveled)

Next Steps

Explore other regional scenarios

- Population Growth
- Transportation
- Land Use

Coordination with future CRCOG plans (MTP, POCD, CEDS, etc.)

Offer scenario planning as a service to municipalities in our region, i.e. corridor studies, “district” or small area plans

Refine scenario planning methodology

Look into additional tools... predictive land use models, population growth, employment growth, economic benefits

All Knowledge Corridor regional agencies on same platform



Thank You!