



Mobility Planning: From Vision to Implementation



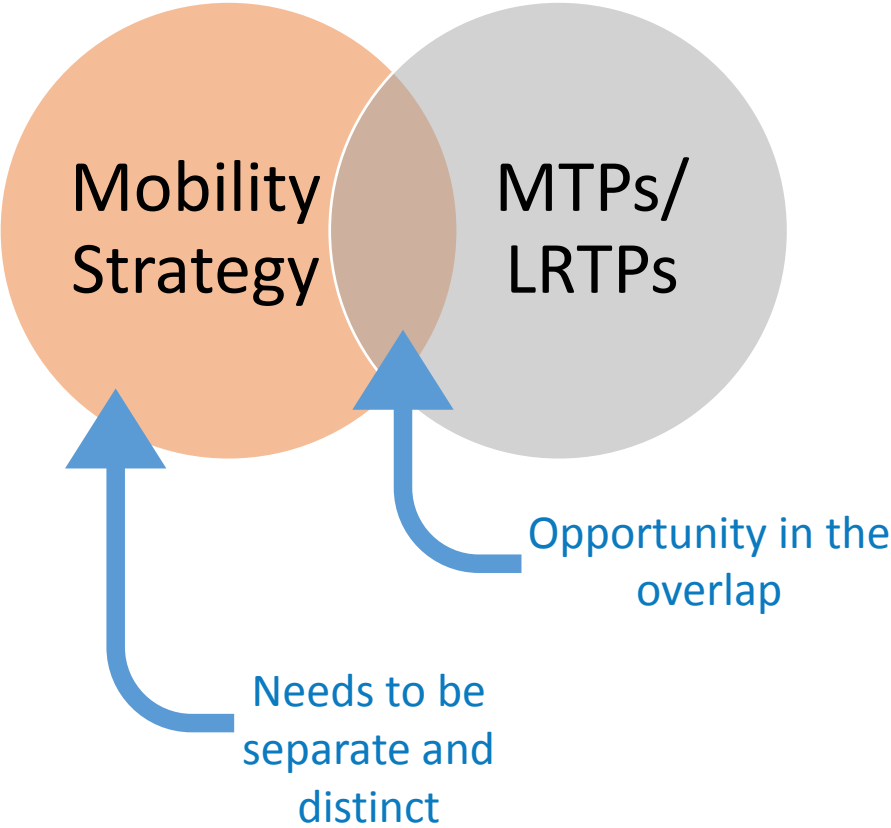
Kimley»Horn

Mobility Plans: *a new paradigm*

- Cities are constrained places
- Cities represent the best place for mode-shift opportunities
- There is a history of mono-modal planning
- The competition for space and resources is often handled in an ad-hoc way
- Complete Streets Policies were thought to be a remedy
- Can harmony be found between MTPs/LRTPs and local mobility plans?



Relationship to MPO Planning



**FAST
ACT**

Continuing the mission of MAP-21's focus on performance target areas

Restructuring funding sources;
Creating new programs

New focus on safety, freight, resiliency, intercity transit, and tourism

Why isn't the rate of
change occurring faster?

Over 700 agencies at the local, regional,
and state levels have adopted Complete
Streets policies

- *National Complete Streets Coalition*

Complete Streets Policy

“The City Council approved a Complete Streets policy that ensures transportation planning and street maintenance that accommodates pedestrians, bicyclists, transit riders, people with disabilities, children and the elderly among others. Supporting multi-modal transportation in the City is one of City Council’s strategic goals.”

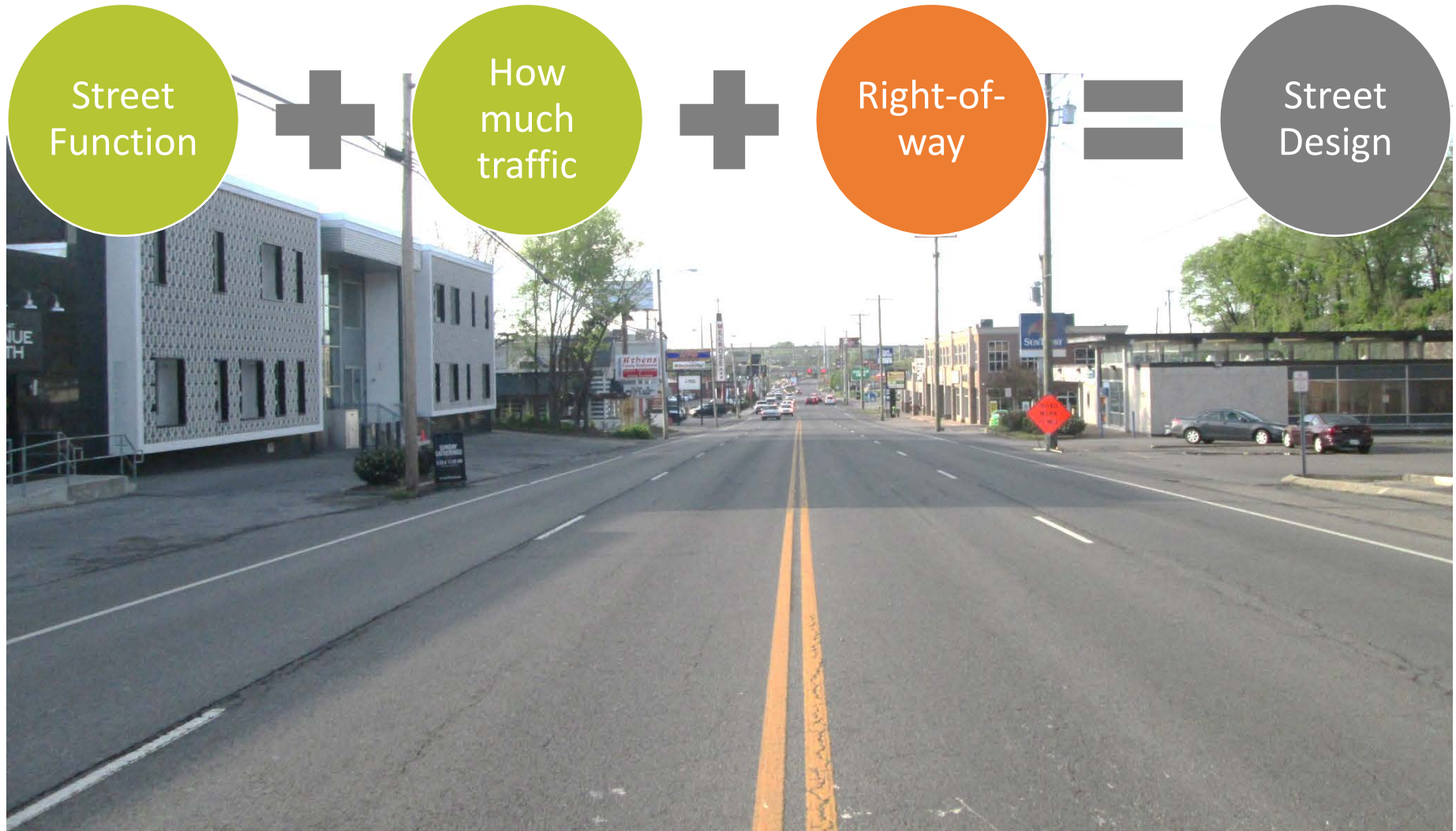


-Image, Smart Growth America

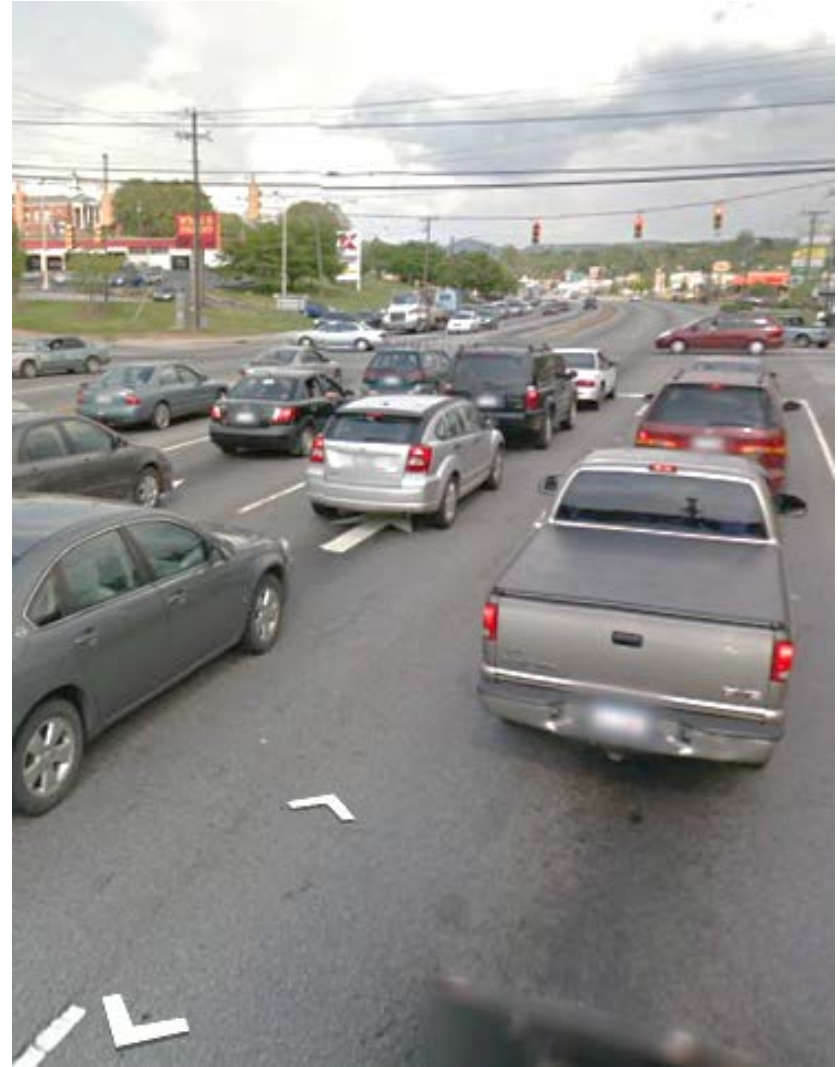
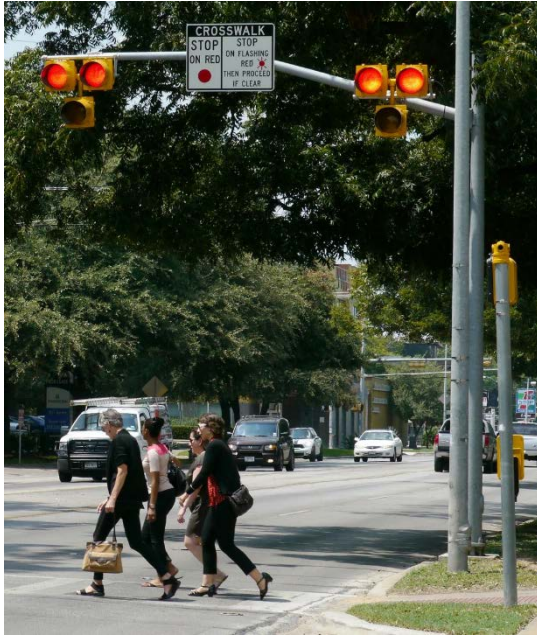
Complete Streets principles will be applied in all street construction, retrofit, and reconstruction projects except in the following circumstances:

- Where pedestrians and bicyclists are prohibited by law.
- Where existing ROW doesn't allow for accommodation of all users.
- The cost of establishing walkways or bikeways or other accommodations would be disproportionate to the need, particularly if alternative facilities are available within a reasonable walking and/or bicycling distance.
- Where they are unnecessary or inappropriate because it would be contrary to public safety and increase risk of injury or death.
- The construction is not practically feasible or cost effective because of unreasonable adverse impacts resulting from right-of-way acquisition.
- Ordinary maintenance activities designed to keep street and other transportation assets in serviceable condition.

Traditional Decision-Making



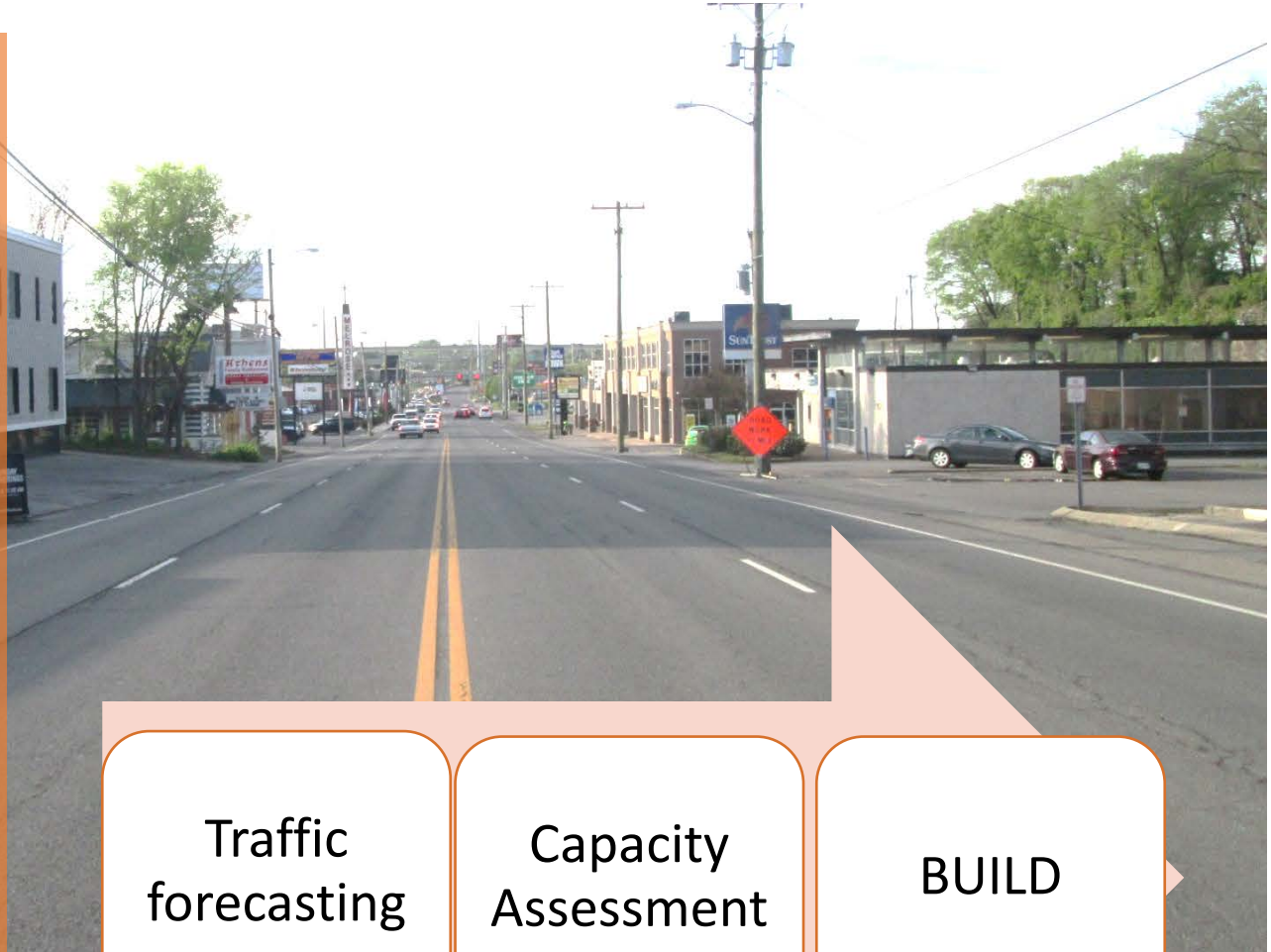
Competition Between Plans



“Plans should seek to resolve conflict rather than propagate conflict.”

Risk of the Conventional Approach

- Limited mobility choices
- Failure to implement mode-specific plans
- Missed opportunities to advance community goals
- Influences to vitality
- Neighborhood Isolation



Traffic
forecasting

Capacity
Assessment

BUILD

Why are cities changing their priorities and street design?

Why are they changing their strategy?



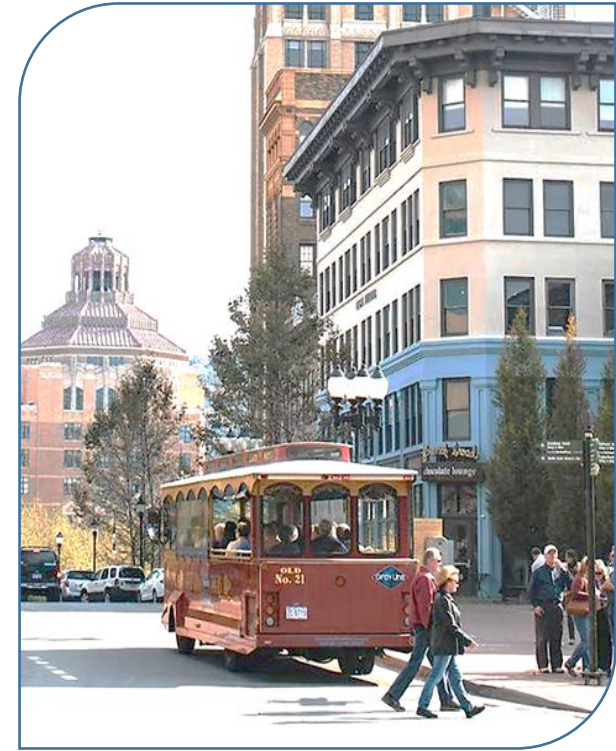
Washington DC

Historic focus on in-migration
Extreme Constraints
Strategy Not Sustainable
Change in Housing Market
Emphasis on Placemaking



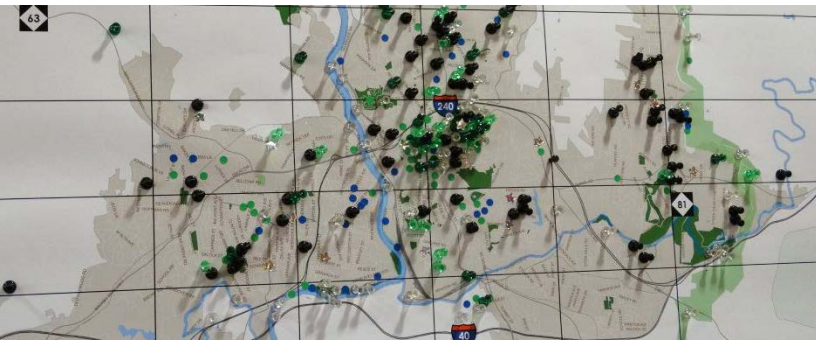
Austin, TX

Extreme congestion
Imagine Austin
Goal: Compact & Connected
New Development CodeNext
Affordable Housing



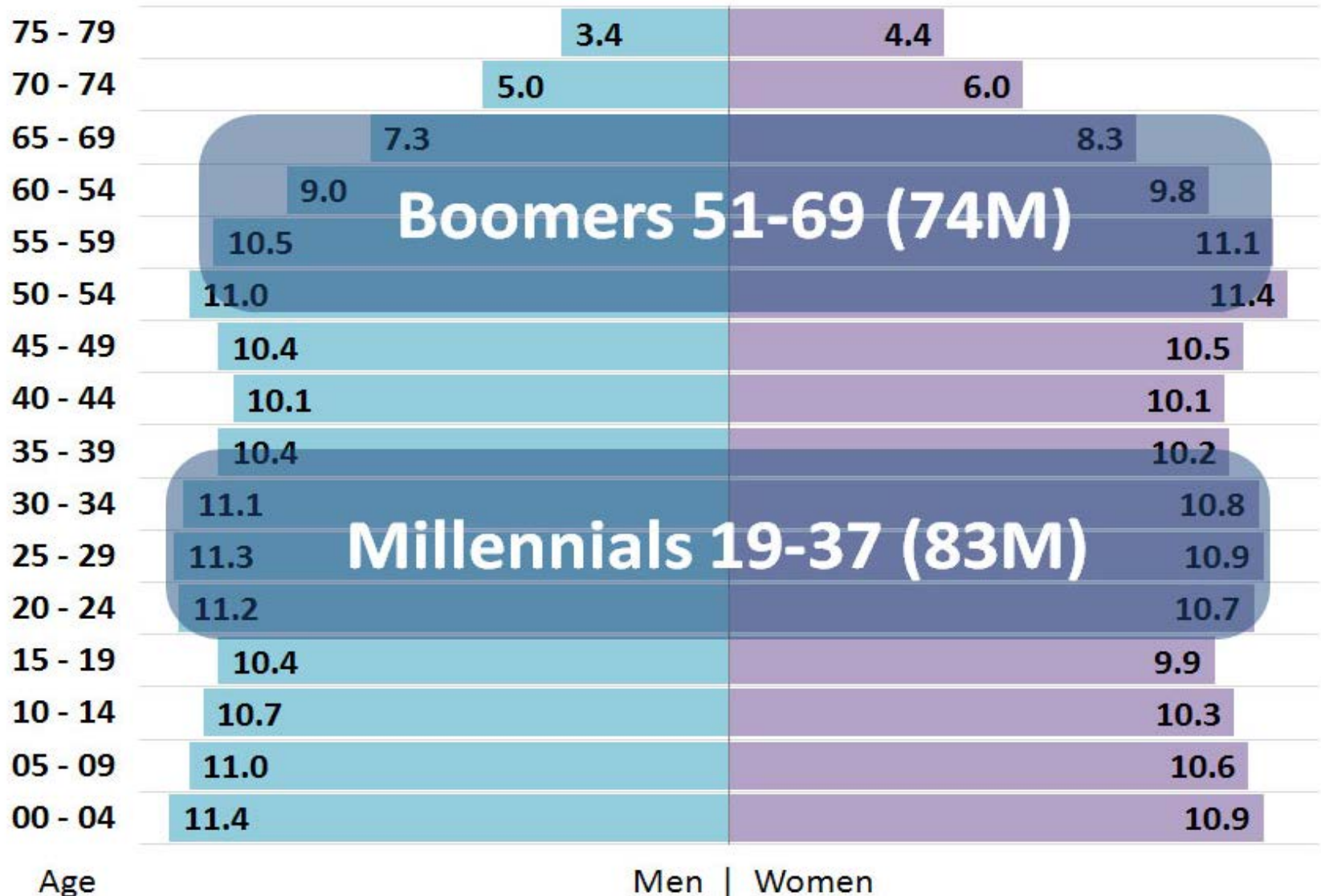
Asheville, NC

Extreme Constraints
Limited Funding
Affordable Housing
Hospitality Economy
Changing Demographics



Communities Are Demanding It

This is who we are.

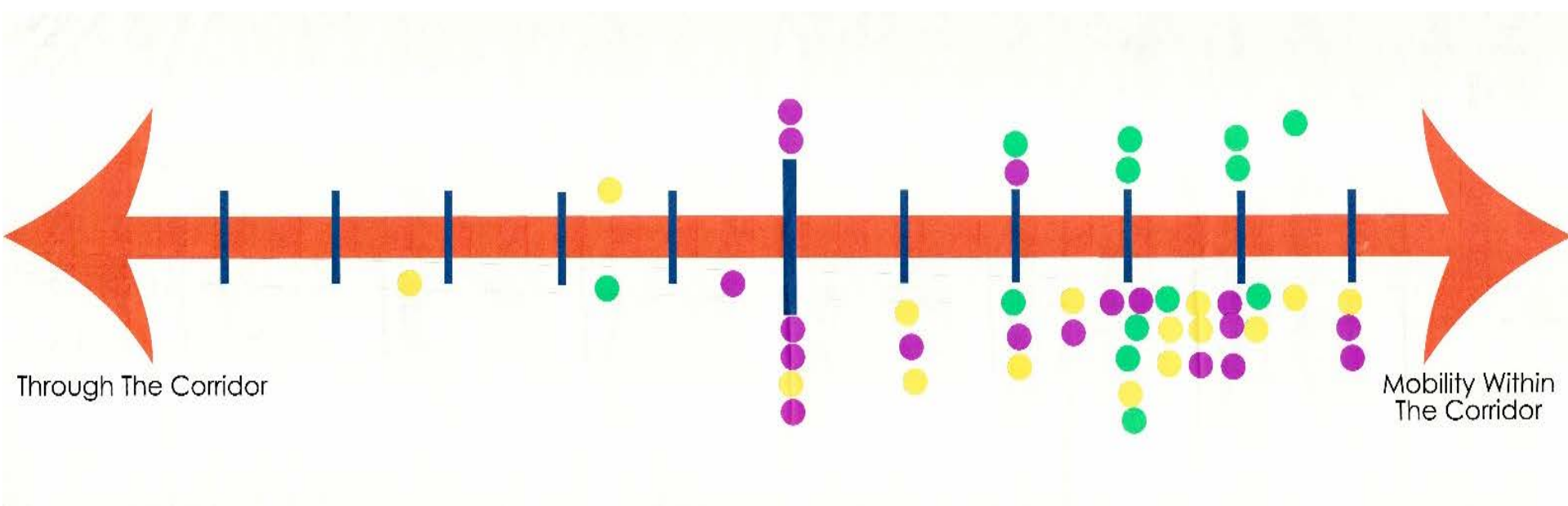




Millennials and boomers are driving less and looking for other transportation options.



Mobility Continuum



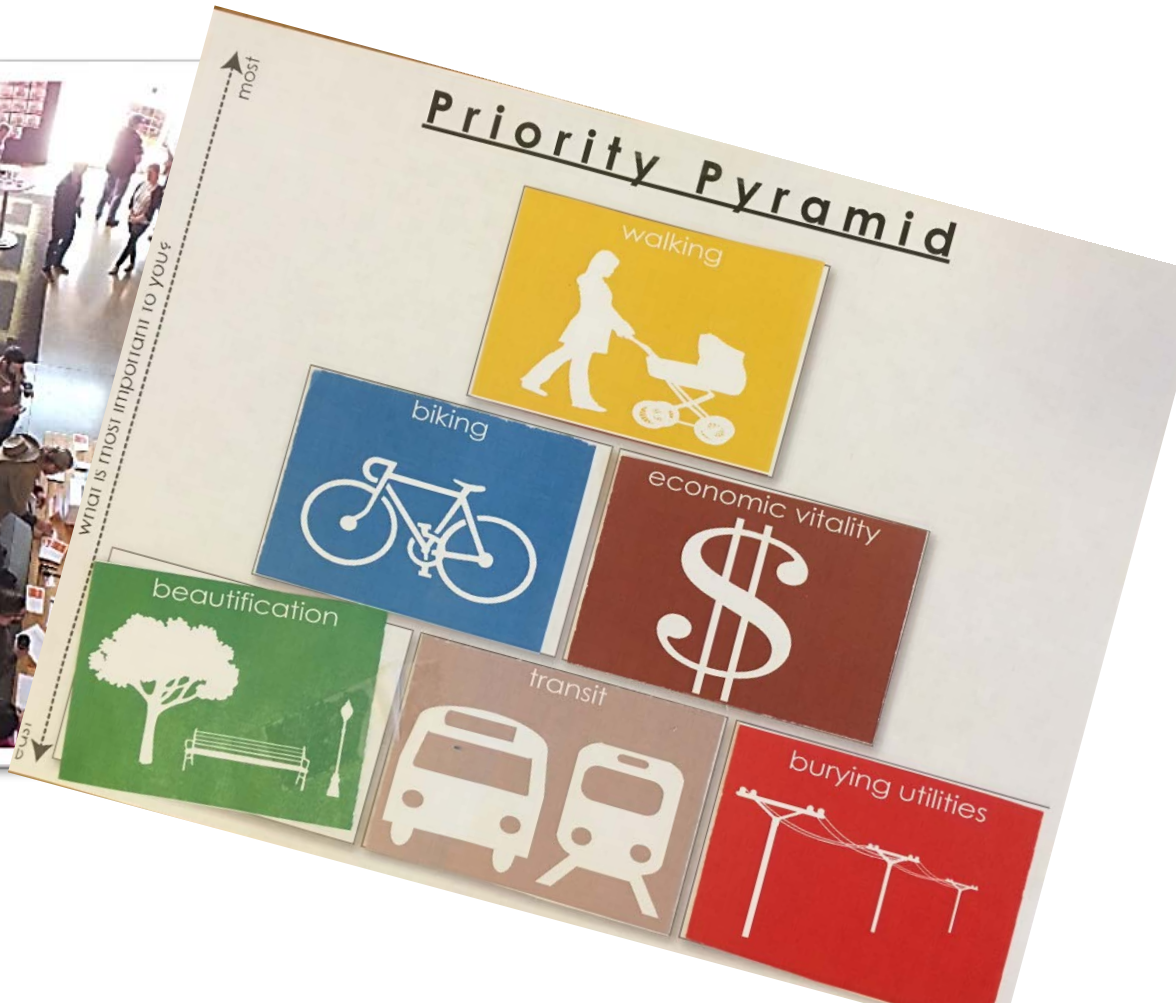
NOW

named antagonistic
jumble transitioning
hectic Franklin concrete
turnpike hospitable
busy unplanned
cluttered messy
Pike way
disconnected confusing
dangerous
outdated unsafe
oriented up-and-coming
inconsistent kroger
sidewalks
unorganized
burgeoning
car-centric



IN THE FUTURE

Priority Pyramid



Pyramid Ranking in Constrained Settings

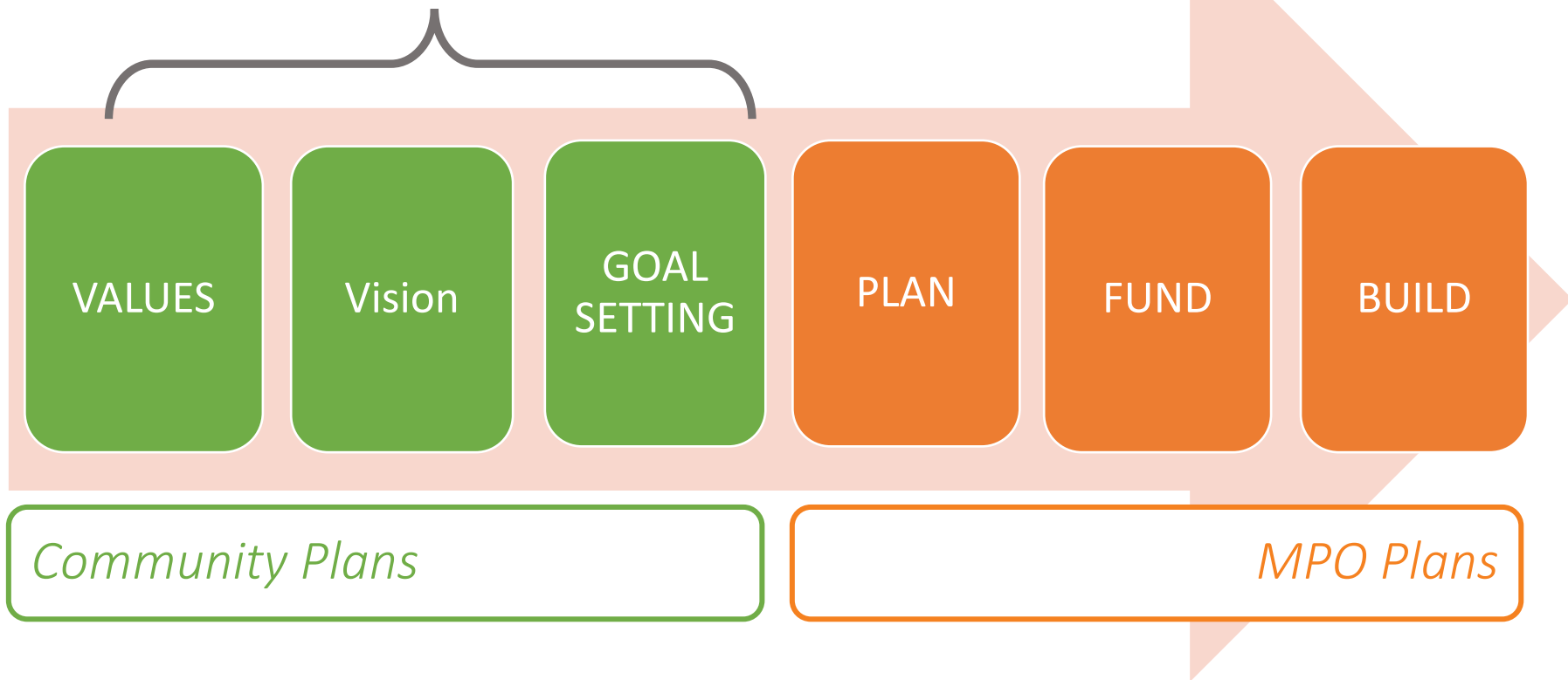
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th
Priority Theme	Walking	Transit	Economic Vitality	Biking	Beautification	Congestion	Parking	Burying Utilities
Weighted Average	86.1	61.1	49.2	47.4	33.1	30.5	20.4	10.3
Percent Responses by Tier	1 st Tier: 38% 2 nd Tier: 33% 3 rd Tier: 21% Unranked: 8%	1 st Tier: 19% 2 nd Tier: 35% 3 rd Tier: 35% Unranked: 11%	1 st Tier: 15% 2 nd Tier: 29% 3 rd Tier: 38% Unranked: 18%	1 st Tier: 6% 2 nd Tier: 40% 3 rd Tier: 19% Unranked: 35%	1 st Tier: 10% 2 nd Tier: 19% 3 rd Tier: 65% Unranked: 6%	1 st Tier: 8% 2 nd Tier: 19% 3 rd Tier: 23% Unranked: 50%	1 st Tier: 4% 2 nd Tier: 15% 3 rd Tier: 38% Unranked: 43%	1 st Tier: 0% 2 nd Tier: 10% 3 rd Tier: 65% Unranked: 25%

Not where it used to be...



How are cities changing their priorities and street design?

Process Innovations



Project Prioritization Considerations

Traffic Flow

Travel Safety

Economic
Vitality

Environmental
Preservation

Network
Connectivity

Freight
Movement

Affordable
Housing

Commute Mode
Shift

Social Equity

Public Support

Tourism &
Recreation

many others

Project Evaluation and Screening



- Considering FAST Act/MAP-21 performance measures when developing criteria
- Linking evaluation criteria with processes associated with MTP/LRTP
- Community outreach

Report Card Elements

Safety

- Responds to known safety challenges
- Pedestrian, Bike, and Traffic
- Reduce travel speeds

Walkability

- Quality of pedestrian realm
- Reduced time at risk
- Quality walkscore

Transit

- Opportunities for enhanced shelters and design
- Transit ready environment
- Enhanced ridership characteristics

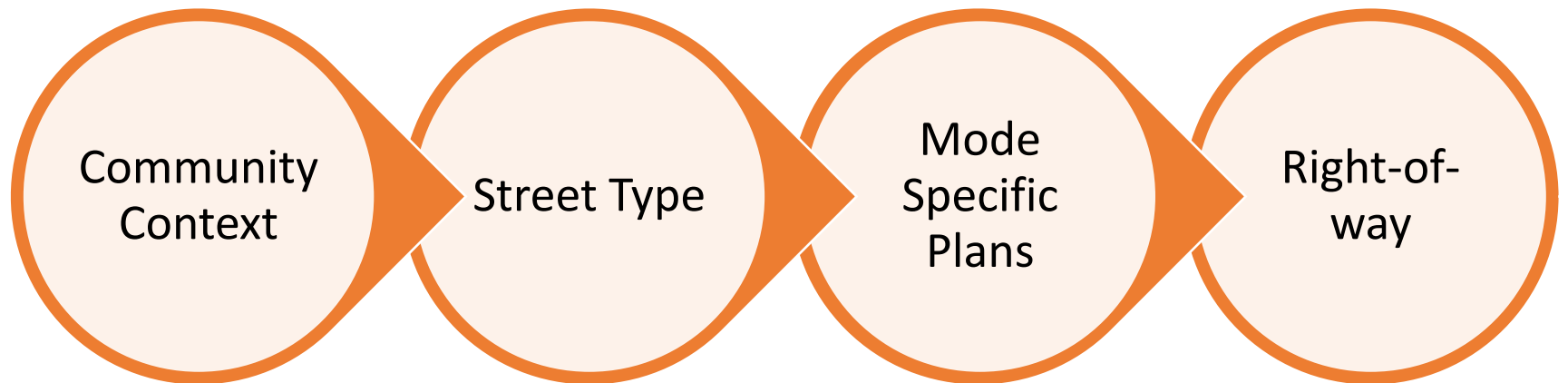
Corridor Vibrancy

- Local business environment vs pass-by auto-centric
- Enhanced Aesthetic
- Improved accessibility by multiple travel modes

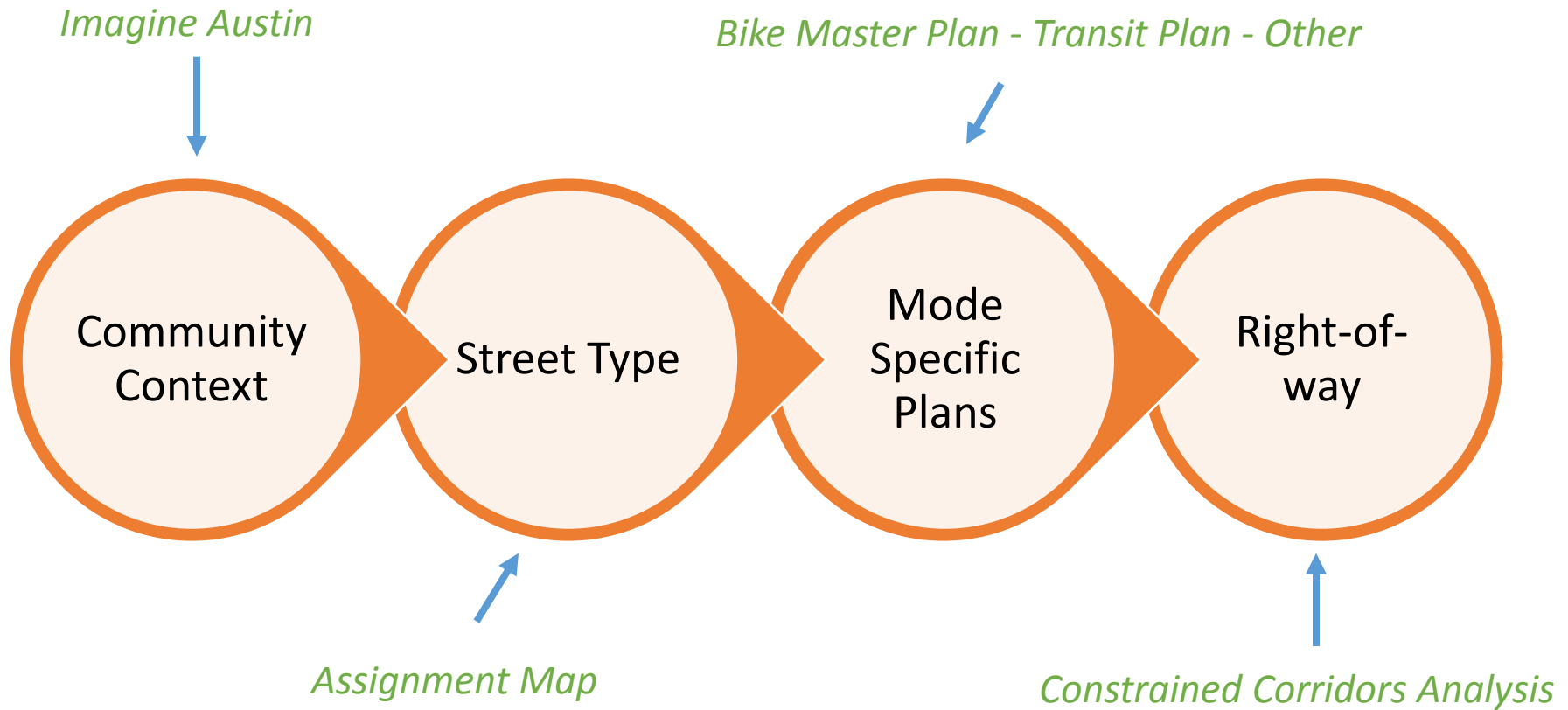
Traffic

- Accommodates acceptable LOS
- Accommodates additional weekday trips
- Truck traffic accommodations

Typology Considerations



Typology Ingredients



Ingredients: Community Context

A

B

C



Safety



Walk/Bike



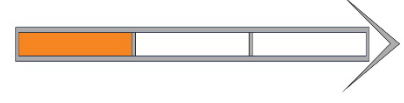
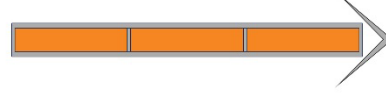
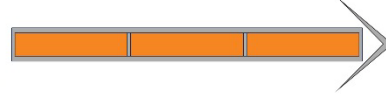
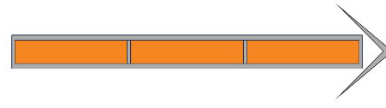
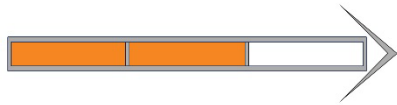
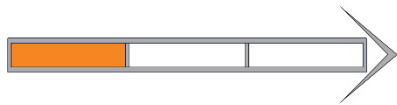
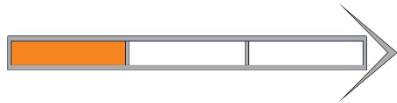
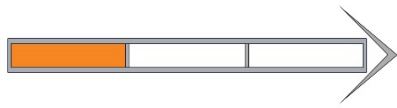
Transit



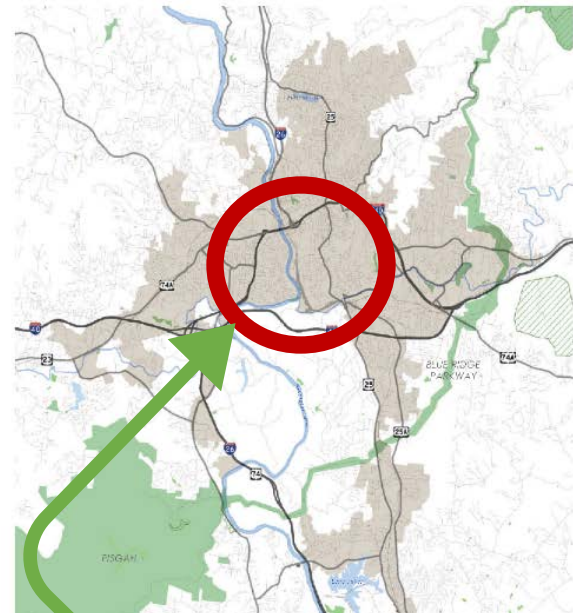
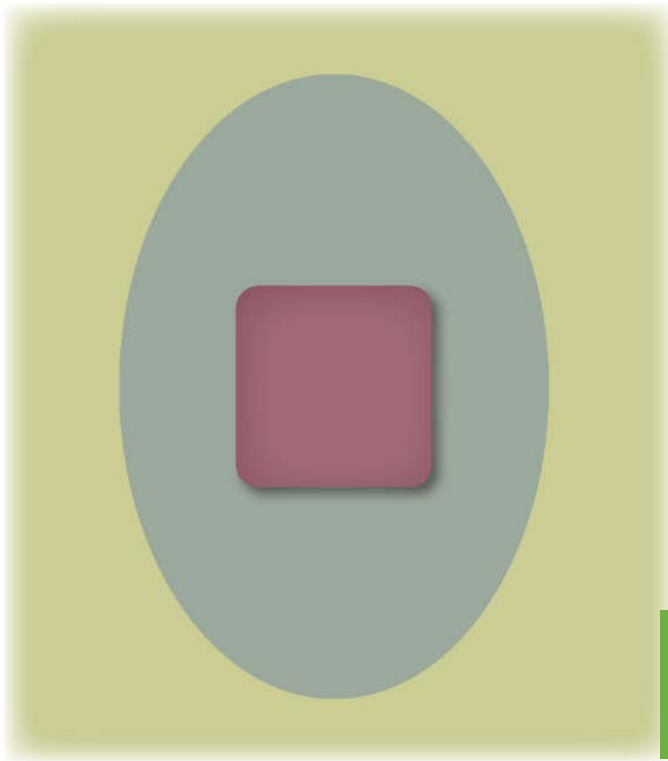
Economic
Vitality



Traffic



Return on Investment



These are also the places with the greatest constraints

Mobility District

- Population Density
- Employment Density
- Development Intensity
- Efficiency
- Constraint
- Return On Investment (ROI)

Blended District

- Population Density
- Employment Density
- Development Intensity
- Efficiency
- Constraint
- Return On Investment (ROI)

Autocentric District

- Population Density
- Employment Density
- Development Intensity
- Efficiency
- Constraint
- Return On Investment (ROI)

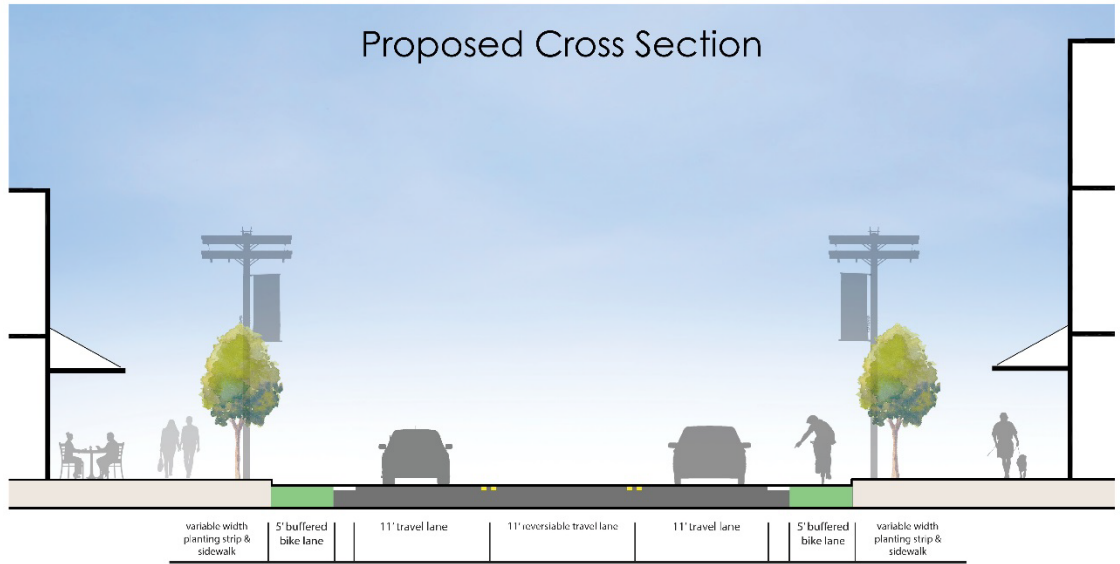


Scenario C

Three Lane with Center Reversible Lane

Design Characteristics:

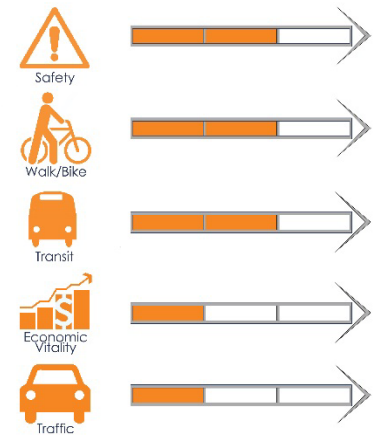
- Single travel lanes in each direction
- Center reversible lane
- Buffered bike lanes in each direction
- 25 mph design speed



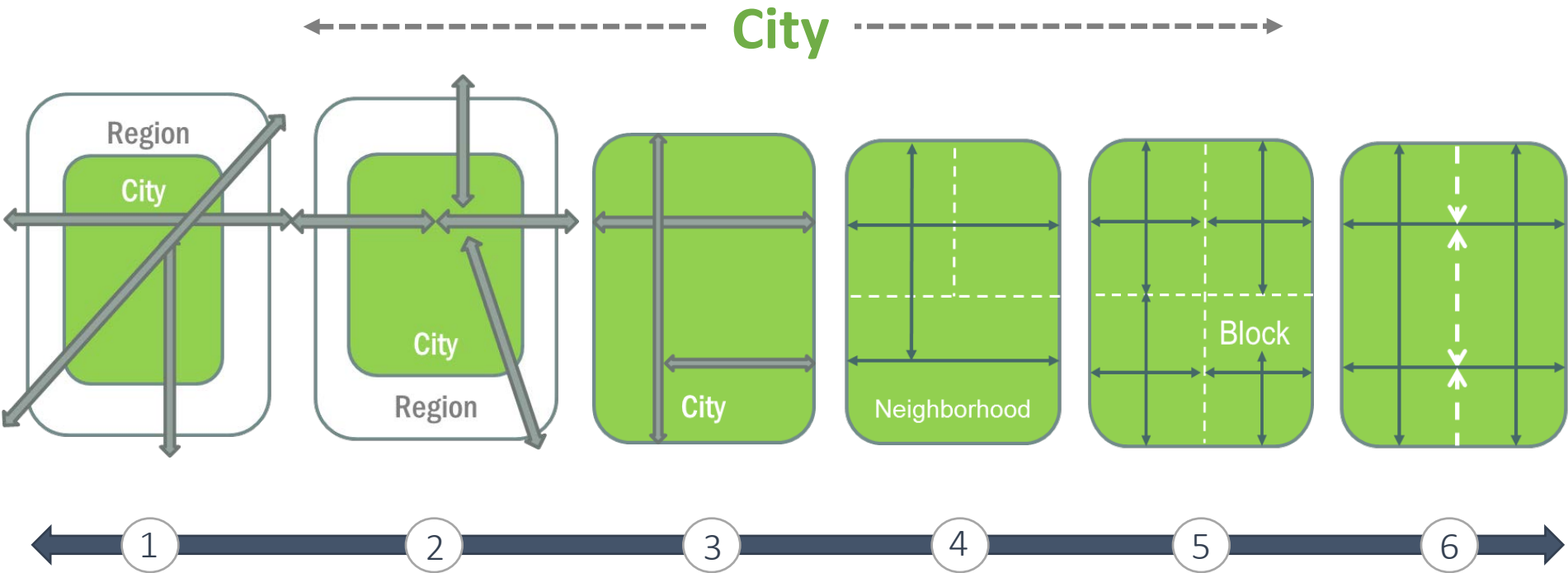
Scenario C		
	AM Peak Hour	PM Peak Hour
Wedgewood	F (116.9)	F (110.1)
Bradford	A (8.0)	B (10.1)
Craighead	D (44.1)	F (174.4)
Kirkwood	C (22.6)	F (296.9)
Berry	E (73.9)	F (84.1)
Travel Time (min)	4.4	10.9



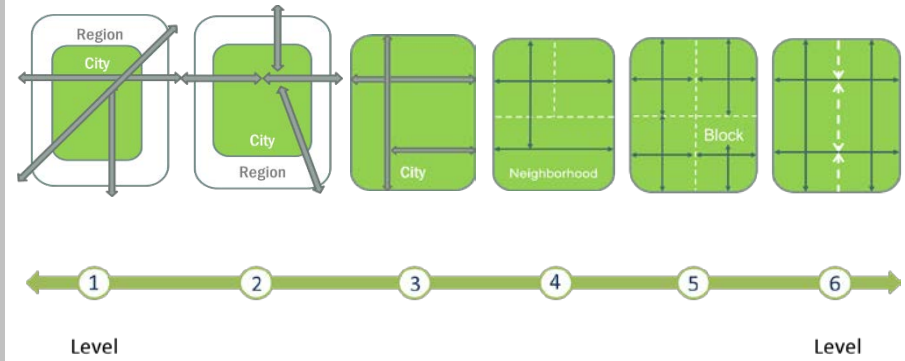
Report Card



Ingredients: Street Types



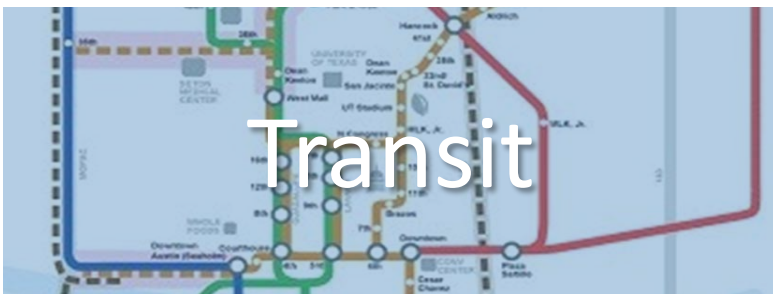
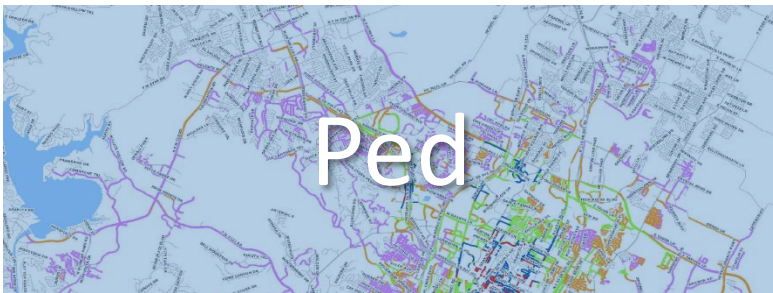
Ingredients: Street Types



Legend

	Level 1
	Level 2
	Level 3
	Level 4
	Level 5

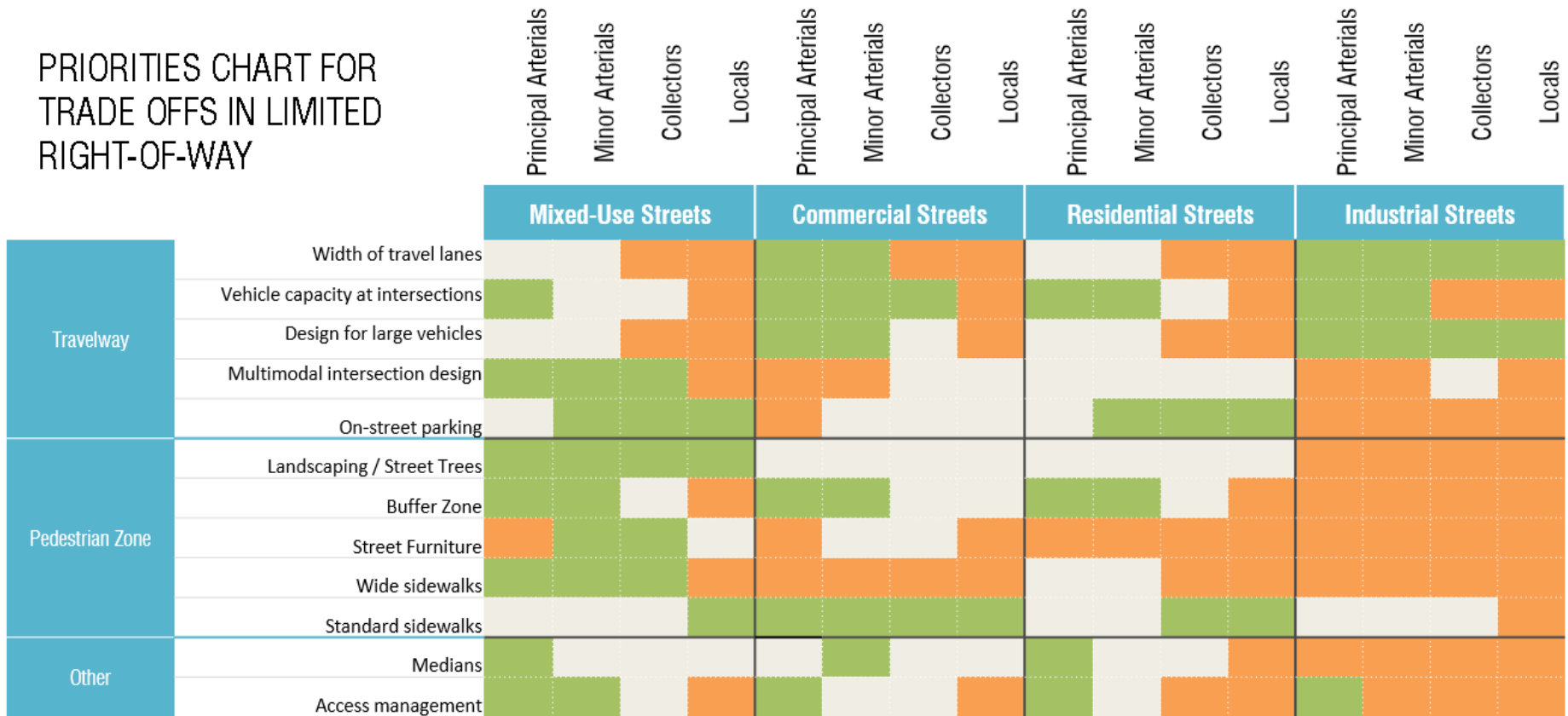
Ingredients: Framework Plans



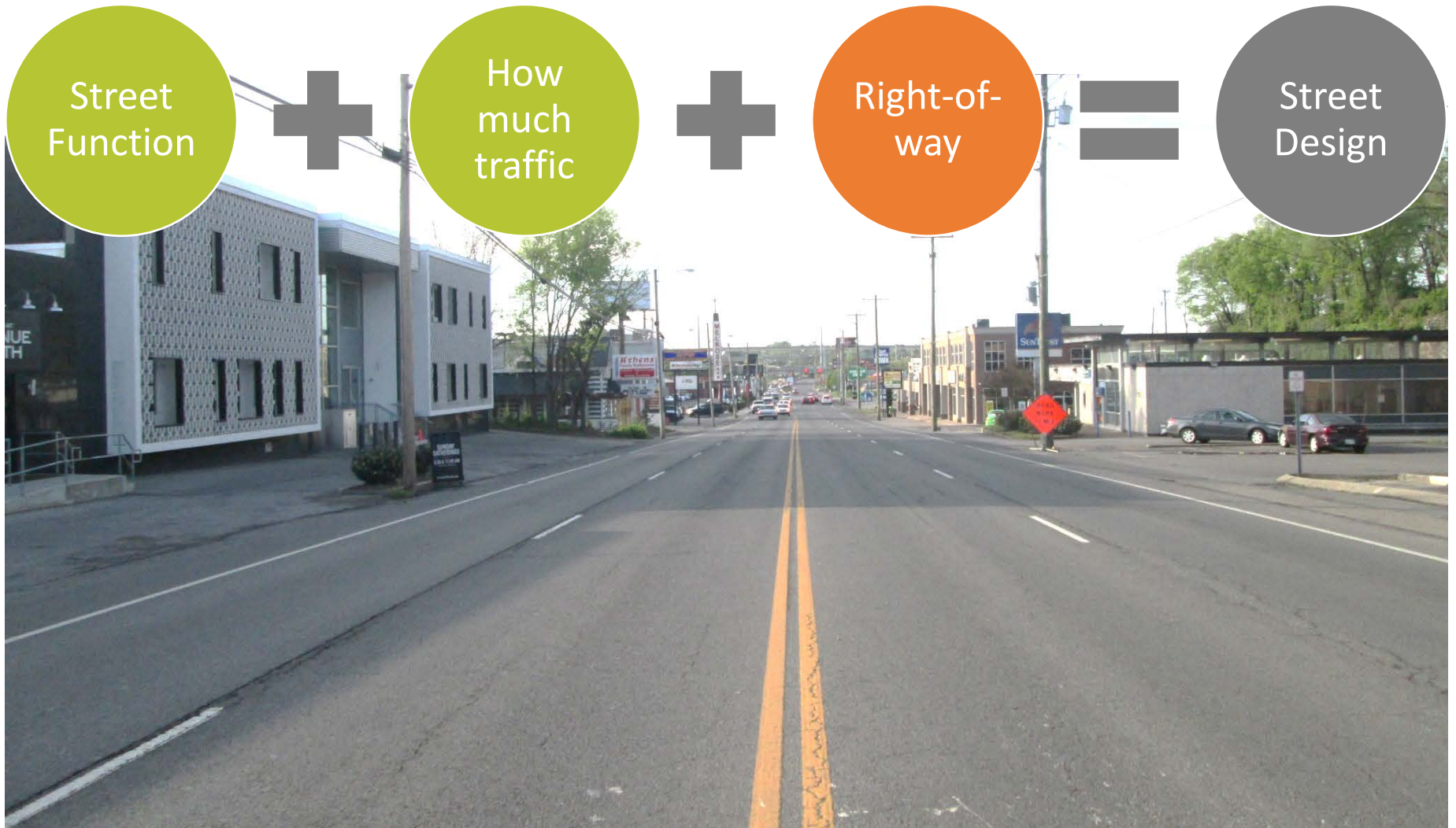
Framework
Plans
(mono-modal)

Ingredients: Constrained Corridors Analysis

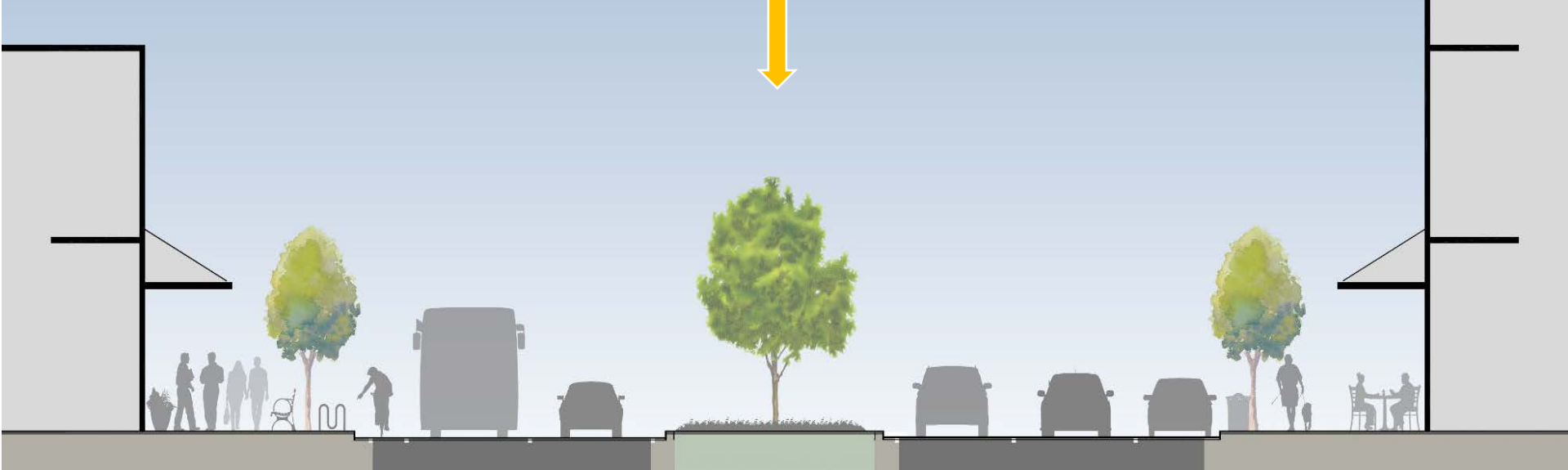
PRIORITIES CHART FOR TRADE OFFS IN LIMITED RIGHT-OF-WAY



Traditional Decision-Making



Positioning our area for Successful Street Design





MPO

Respect MPO process for integrating the best information from all levels

Recognize the important role of the MPO in regional decision-making

Community

Respect community decisions when a clear strategy is defined

Recognize community planning as an educational and advocacy tool



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