Monroe County
Countywide Active Transportation Plan

Project Advisory Committee Meeting #4

February 28, 2023 | 11:00 AM-12:00 PM

Adam J. Bello
COUNTY EXECUTIVE

GTC

TOOLE DESIGN

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

Michael Blau

Agenda

TIME	AGENDA ITEMS
11:00-11:10	Welcome and Schedule Update
11:10-11:15	Engagement Updates
11:15-11:45	Implementation Strategies
11:45-12:00	Q&A, Next Steps

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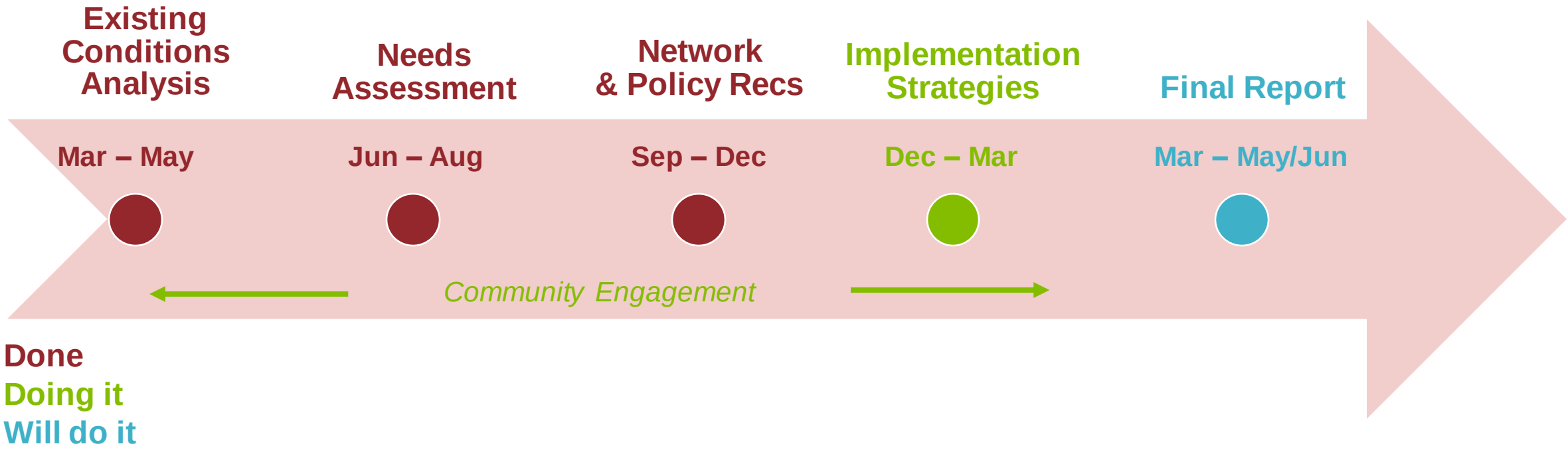
Schedule Update



Done
Doing it
Will do it

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Yixuan Lin

Engagement Updates

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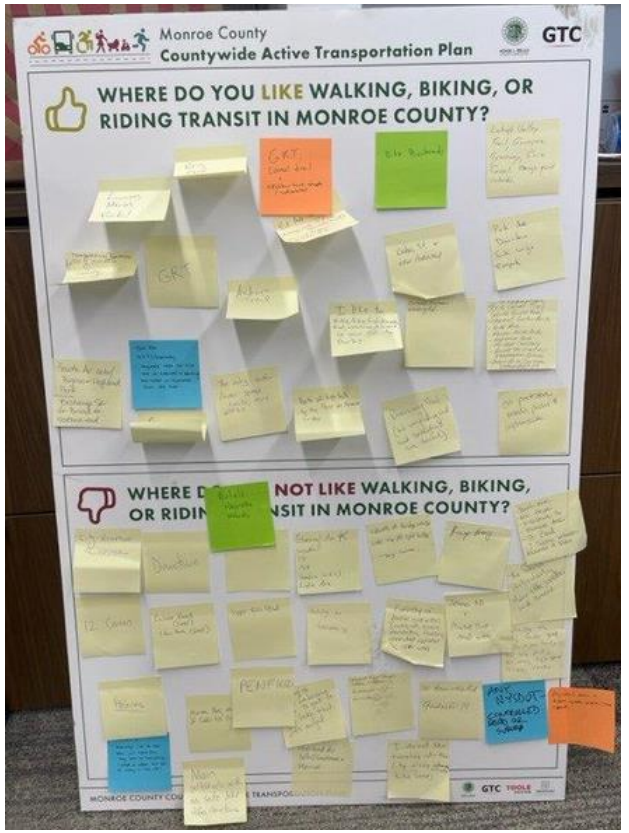
Yixuan Lin

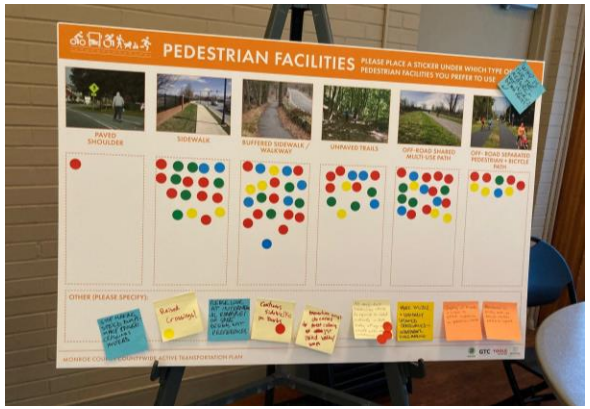
Public Workshop #2

- March 22 ,Wed. 4 - 6 pm
- RTS Board Room

  1372 East Main Street

  Rochester, NY 14609





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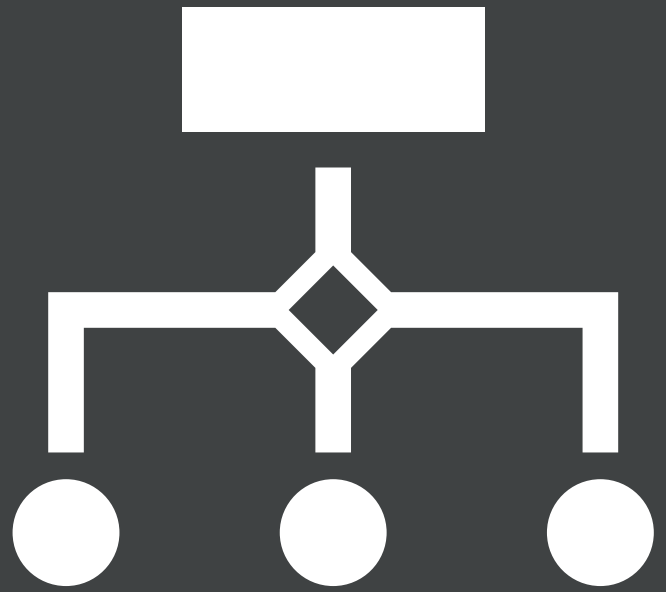
Implementation Strategies



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Implementation Tasks

1. **Roles and Responsibilities:** For the planning, design, funding, construction, maintenance, and operations of AT facilities.
2. **Funding Sources:** For the implementation of recommended projects and programs.
3. **Network Scenario Cost Estimates:** Cost of the network scenarios.
4. **Performance Measures:** To assess the performance of the active transportation network on an ongoing basis.

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Roles and Responsibilities

- Flow chart includes three stakeholders:
  1. Local Municipalities
  2. Monroe County
  3. State and Regional Agencies

- Reference for County staff and local agency partners to help facilitate coordination while implementing active transportation projects.
- Does not preempt or supersede any existing project development processes that Monroe County's partners currently follow.

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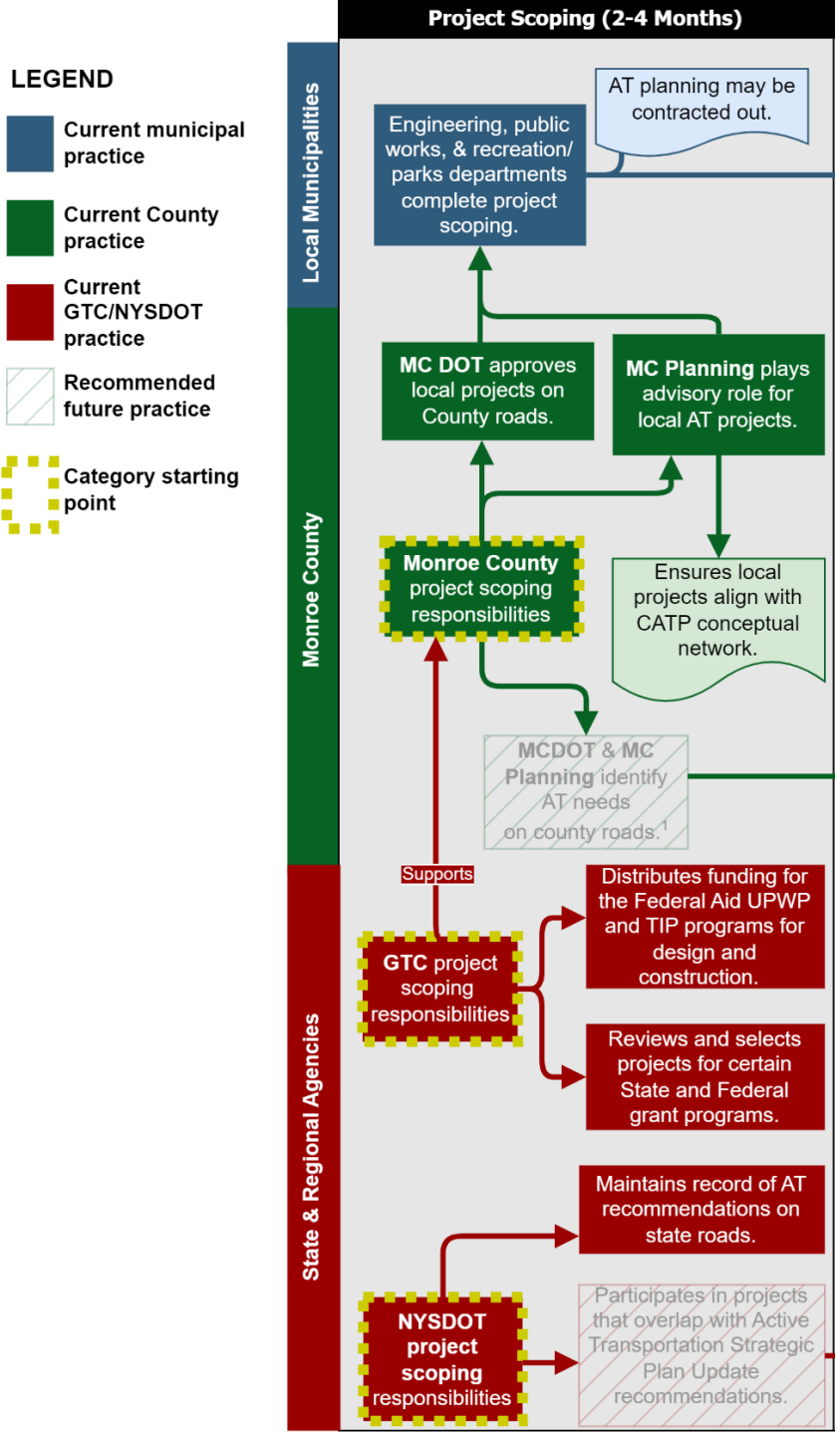
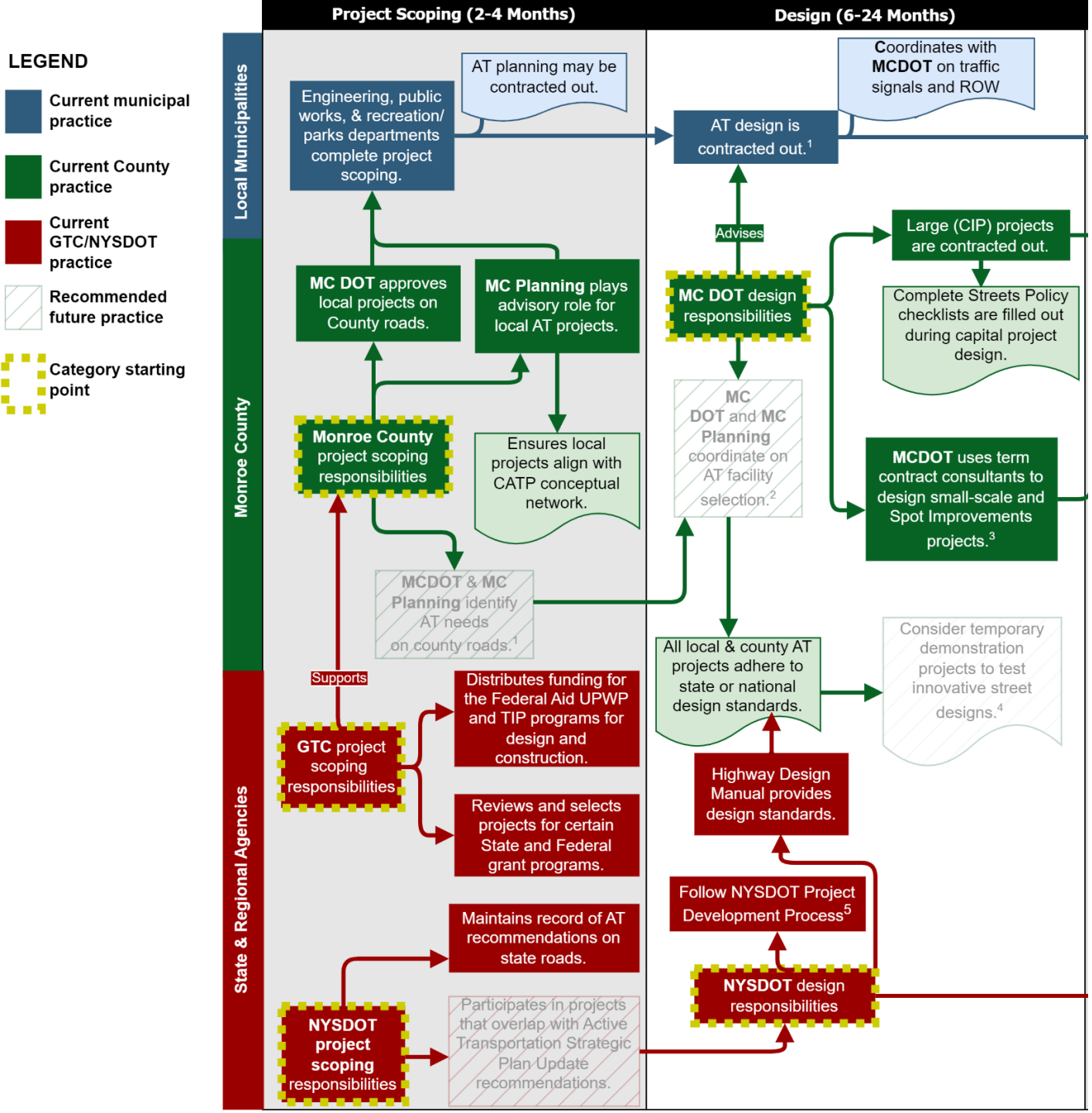

LEGEND
Current municipal practice
Current County practice
Current GTC/NYSDOT practice
Recommended future practice
Category starting point
Project Scoping (2-4 Months)
Local Municipalities
Monroe County
State & Regional Agencies
Engineering, public works, & recreation/ parks departments complete project scoping.
AT planning may be contracted out.
MC DOT approves local projects on County roads.
MC Planning plays advisory role for local AT projects.
Monroe County project scoping responsibilities
Ensures local projects align with CATP conceptual network.
MCDOT & MC Planning identify AT needs on county roads.[1]
Supports
GTC project scoping responsibilities
Distributes funding for the Federal Aid UPWP and TIP programs for design and construction.
Reviews and selects projects for certain State and Federal grant programs.
Maintains record of AT recommendations on state roads.
NYSDOT project scoping responsibilities
Participates in projects that overlap with Active Transportation Strategic Plan Update recommendations.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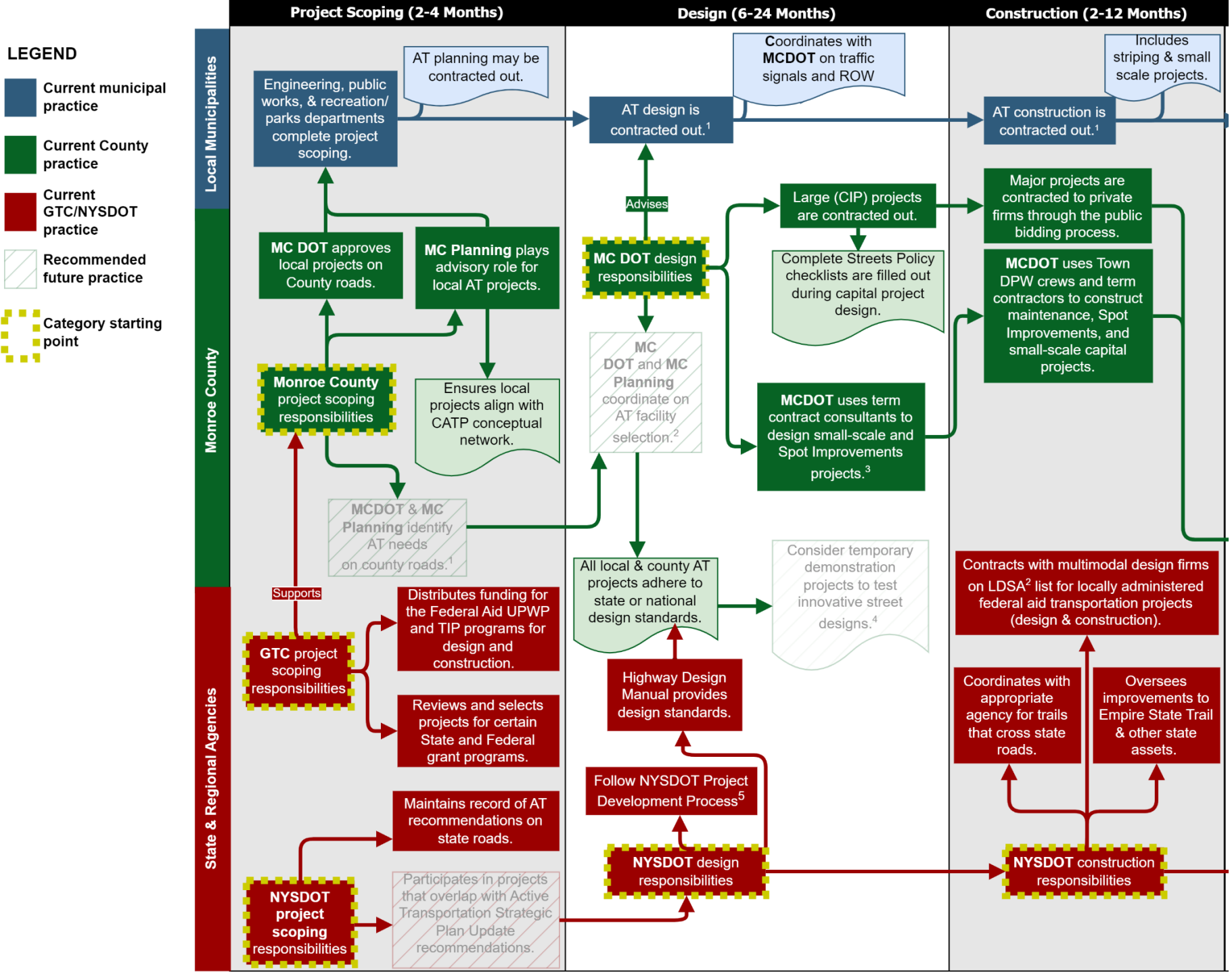
Category starting point
Project Scoping (2-4 Months)
Design (6-24 Months)
Local Municipalities
Monroe County
State & Regional Agencies
Engineering, public works, & recreation/ parks departments complete project scoping.
AT planning may be contracted out.
AT design is contracted out.[1]
Coordinates with MCDOT on traffic signals and ROW
Advises
MC DOT approves local projects on County roads.
MC Planning plays advisory role for local AT projects.
MC DOT design responsibilities
Large (CIP) projects are contracted out.
Complete Streets Policy checklists are filled out during capital project design.
Monroe County project scoping responsibilities
Ensures local projects align with CATP conceptual network.
MC DOT and MC Planning coordinate on AT facility selection.[2]
MCDOT uses term contract consultants to design small-scale and Spot Improvements projects.[3]
MCDOT & MC Planning identify AT needs on county roads.[1]
All local & county AT projects adhere to state or national design standards.
Consider temporary demonstration projects to test innovative street designs.[4]
Supports
Distributes funding for the Federal Aid UPWP and TIP programs for design and construction.
GTC project scoping responsibilities
Reviews and selects projects for certain State and Federal grant programs.
Highway Design Manual provides design standards.
Follow NYSDOT Project Development Process[5]
Maintains record of AT recommendations on state roads.
NYSDOT design responsibilities
NYSDOT project scoping responsibilities
Participates in projects that overlap with Active Transportation Strategic Plan Update recommendations.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Design (6-24 Months)
Construction (2-12 Months)
Local Municipalities
Monroe County
State & Regional Agencies
Engineering, public works, & recreation/ parks departments complete project scoping.
AT planning may be contracted out.
AT design is contracted out.[1]
Coordinates with MCDOT on traffic signals and ROW
AT construction is contracted out.[1]
Includes striping & small scale projects.
Advises
MC DOT approves local projects on County roads.
MC Planning plays advisory role for local AT projects.
MC DOT design responsibilities
Large (CIP) projects are contracted out.
Major projects are contracted to private firms through the public bidding process.
Complete Streets Policy checklists are filled out during capital project design.
MCDOT uses Town DPW crews and term contractors to construct maintenance, Spot Improvements, and small-scale capital projects.
Monroe County project scoping responsibilities
Ensures local projects align with CATP conceptual network.
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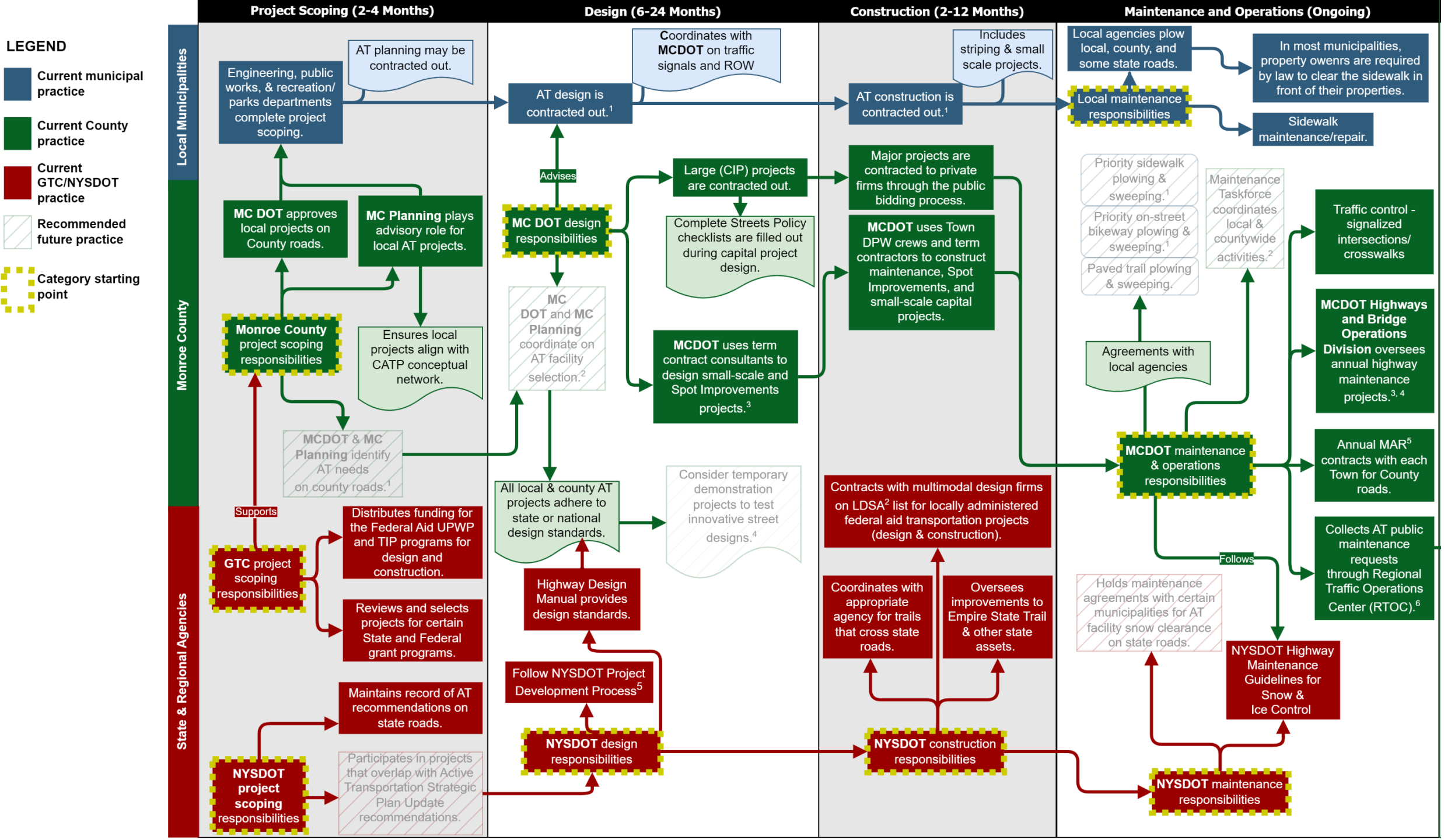
All local & county AT projects adhere to state or national design standards.
Consider temporary demonstration projects to test innovative street designs.[4]
Supports
Distributes funding for the Federal Aid UPWP and TIP programs for design and construction.
GTC project scoping responsibilities
Contracts with multimodal design firms on LDSA[2] list for locally administered federal aid transportation projects (design & construction).
Reviews and selects projects for certain State and Federal grant programs.
Highway Design Manual provides design standards.
Coordinates with appropriate agency for trails that cross state roads.
Oversees improvements to Empire State Trail & other state assets.
Maintains record of AT recommendations on state roads.
Follow NYSDOT Project Development Process[5]
NYSDOT project scoping responsibilities
Participates in projects that overlap with Active Transportation Strategic Plan Update recommendations.
NYSDOT design responsibilities
NYSDOT construction responsibilities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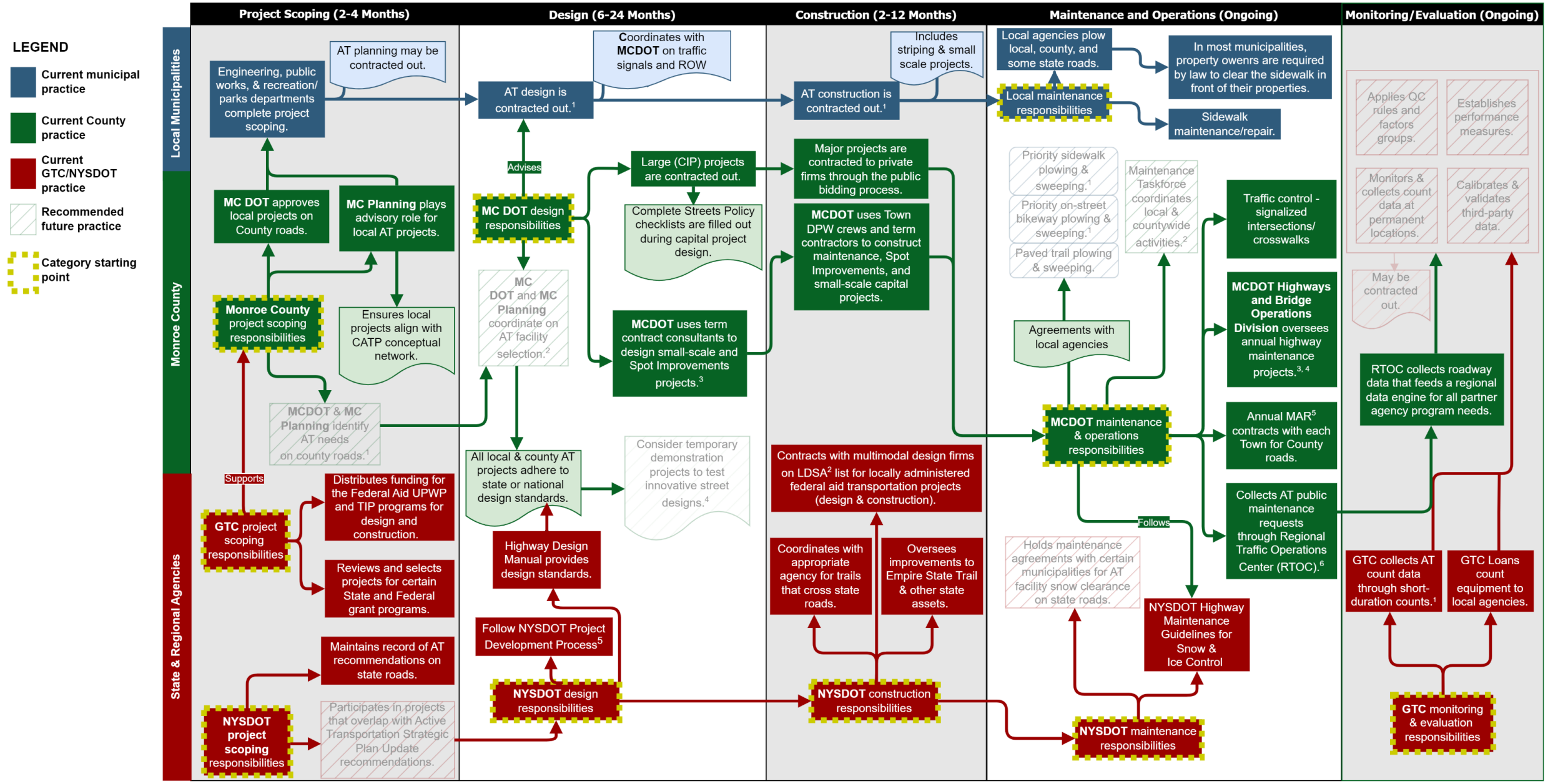
Category starting point
Project Scoping (2-4 Months)
Design (6-24 Months)
Construction (2-12 Months)
Maintenance and Operations (Ongoing)
Local Municipalities
Monroe County
State & Regional Agencies
AT planning may be contracted out.
Engineering, public works, & recreation/ parks departments complete project scoping.
Coordinates with MCDOT on traffic signals and ROW
AT design is contracted out.[1]
Includes striping & small scale projects.
AT construction is contracted out.[1]
Local agencies plow local, county, and some state roads.
Local maintenance responsibilities
In most municipalities, property owenrs are required by law to clear the sidewalk in front of their properties.
Sidewalk maintenance/repair.
Advises
MC DOT approves local projects on County roads.
MC Planning plays advisory role for local AT projects.
MC DOT design responsibilities
Large (CIP) projects are contracted out.
Complete Streets Policy checklists are filled out during capital project design.
Major projects are contracted to private firms through the public bidding process.
MCDOT uses Town DPW crews and term contractors to construct maintenance, Spot Improvements, and small-scale capital projects.
Priority sidewalk plowing & sweeping.[1]
Priority on-street bikeway plowing & sweeping.[1]
Paved trail plowing & sweeping.
Maintenance Taskforce coordinates local & countywide activities.[2]
Traffic control - signalized intersections/ crosswalks
Monroe County project scoping responsibilities
Ensures local projects align with CATP conceptual network.
MC DOT and MC Planning coordinate on AT facility selection.[2]
MCDOT uses term contract consultants to design small-scale and Spot Improvements projects.[3]
Agreements with local agencies
MCDOT Highways and Bridge Operations Division oversees annual highway maintenance projects.[3, 4]
MCDOT & MC Planning identify AT needs on county roads.[1]
MCDOT maintenance & operations responsibilities
Annual MAR[5] contracts with each Town for County roads.
Supports
Distributes funding for the Federal Aid UPWP and TIP programs for design and construction.
GTC project scoping responsibilities
Reviews and selects projects for certain State and Federal grant programs.
All local & county AT projects adhere to state or national design standards.
Consider temporary demonstration projects to test innovative street designs.[4]
Contracts with multimodal design firms on LDSA[2] list for locally administered federal aid transportation projects (design & construction).
Collects AT public maintenance requests through Regional Traffic Operations Center (RTOC).[6]
Follows
Holds maintenance agreements with certain municipalities for AT facility snow clearance on state roads.
Highway Design Manual provides design standards.
Coordinates with appropriate agency for trails that cross state roads.
Oversees improvements to Empire State Trail & other state assets.
NYSDOT Highway Maintenance Guidelines for Snow & Ice Control
Maintains record of AT recommendations on state roads.
Follow NYSDOT Project Development Process[5]
NYSDOT project scoping responsibilities
Participates in projects that overlap with Active Transportation Strategic Plan Update recommendations.
NYSDOT design responsibilities
NYSDOT construction responsibilities
NYSDOT maintenance responsibilities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State & Regional Agencies
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Construction (2-12 Months)
Maintenance and Operations (Ongoing)
Monitoring/Evaluation (Ongoing)
Engineering, public works, & recreation/ parks departments complete project scoping.
AT planning may be contracted out.
AT design is contracted out.[1]
Coordinates with MCDOT on traffic signals and ROW
AT construction is contracted out.[1]
Includes striping & small scale projects.
Local agencies plow local, county, and some state roads.
Local maintenance responsibilities
In most municipalities, property owenrs are required by law to clear the sidewalk in front of their properties.
Sidewalk maintenance/repair.
Applies QC rules and factors groups.
Establishes performance measures.
Monitors & collects count data at permanent locations.
Calibrates & validates third-party data.
MC DOT approves local projects on County roads.
MC Planning plays advisory role for local AT projects.
Advises
MC DOT design responsibilities
Large (CIP) projects are contracted out.
Complete Streets Policy checklists are filled out during capital project design.
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MCDOT uses term contract consultants to design small-scale and Spot Improvements projects.[3]
Agreements with local agencies
MCDOT Highways and Bridge Operations Division oversees annual highway maintenance projects.[3, 4]
May be contracted out.
RTOC collects roadway data that feeds a regional data engine for all partner agency program needs.
MCDOT & MC Planning identify AT needs on county roads.[1]
MCDOT maintenance & operations responsibilities
Annual MAR[5] contracts with each Town for County roads.
Supports
GTC project scoping responsibilities
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Collects AT public maintenance requests through Regional Traffic Operations Center (RTOC).[6]
Follows
Holds maintenance agreements with certain municipalities for AT facility snow clearance on state roads.
NYSDOT Highway Maintenance Guidelines for Snow & Ice Control
GTC collects AT count data through short-duration counts.[1]
GTC Loans count equipment to local agencies.
Highway Design Manual provides design standards.
Follow NYSDOT Project Development Process[5]
Maintains record of AT recommendations on state roads.
NYSDOT project scoping responsibilities
Participates in projects that overlap with Active Transportation Strategic Plan Update recommendations.
NYSDOT design responsibilities
NYSDOT construction responsibilities
Coordinates with appropriate agency for trails that cross state roads.
Oversees improvements to Empire State Trail & other state assets.
NYSDOT maintenance responsibilities
GTC monitoring & evaluation responsibilities

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Funding Sources

- List of federal, regional, and state funding opportunities for active transportation projects.

- Includes key information:
  - Administrating agencies
  - Total available funds or amount granted per project
  - Purpose of program or source
  - Eligible project types
  - Eligible recipient types
  - Matching requirements
  - Other requirements as applicable
  - Application cycle / timeline
  - Link to more information

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Pedestrian and Bicycle Funding Opportunities: U.S. Department of Transportation Transit, Safety, and Highway Funds

Key: $ = Activity may be eligible. Restrictions may apply, see program notes and guidance. ~$ = Eligible, but not competitive unless part of a larger project.

Activity or Project Type	FEDERAL																						REGIONAL		STATE					
	OST Programs							Federal Transit				NHTSA		Federal Highway Administration																	
	RAISE	INFRA	RCP	SS4A	Thrive	RRIF	TIFIA	FTA	ATI	TOD	AoPP	402	405	BFP BIP BRR	CRP	CMAQ	HSIP	RHCP	NHPP	PROTECT	STBG	TA	RTP	SRTS	TIP	STBG	DRINYF	STIP	TAP	HSIP	CMAQ	RTGP
Access enhancements to public transportation (benches, bus pads)	$	$	$	$		~$	~$	$	$		~$				$	$			$	$	$	$			$	$					$	
Americans with Disabilities Act (ADA)/504 Self Evaluation / Transition Plan				$	TA					$	$				$						$	$	$									
Barrier removal for ADA compliance	$	$	$	$		~$	~$	$	$	~$	~$			$	$				$	$	$	$	$	$								
Bicycle plans			~$	$				$		$	$				$					$	$	$		$								
Bicycle helmets (project or training related)												$									$	$		$								
Bicycle helmets (safety promotion)																					$	$		$								
Bicycle lanes on road	~$	~$	$	$		~$	~$	$	$		~$				$	$	$	$	$	$	$	$		$	$	$						
Bicycle parking (see Bicycle Parking Solutions)	~$	~$	$	$		~$	$	$	$		~$				$	$			$		$	$	$	$	$	$		$	$		$	
Bike racks on transit	~$		$	~$			~$	$	$		~$				$	$					$	$									$	
Bicycle repair station (air pump, simple tools)	~$		$	~$		~$	~$	$	$						$						$	$									$	
Bicycle share (capital and equipment; not operations)	~$	~$	$	~$		~$	~$	$	$						$	$			$		$	$									$	
Bicycle storage or service centers (example: at transit hubs)	~$		$	~$		~$	$	$	$						$	$					$	$									$	
Bridges / overcrossings for pedestrians and/or bicyclists	$	$	$	$		~$	~$	$	$					$	$	$	$	$	$	$	$	$	$	$	$	$		$	$		$	
Bus shelters and benches	$	$	$	~$		~$	~$	$	$						$	$			$	$	$	$										
Coordinator positions (State or local) (limits on CMAQ and STBG)				$							$					$					$	$		$								

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Network Scenario Cost Estimates

1. High Coverage Network

- Connects large and mid-sized communities to each other and to important regional destinations.
- Links every corner of the county to provide a network that reaches the most people possible.

2. High Need Segments

- Highlights segments with high trip potential and low connectivity scores.
- Prioritizes underserved populations based on race, poverty, and vehicle access.

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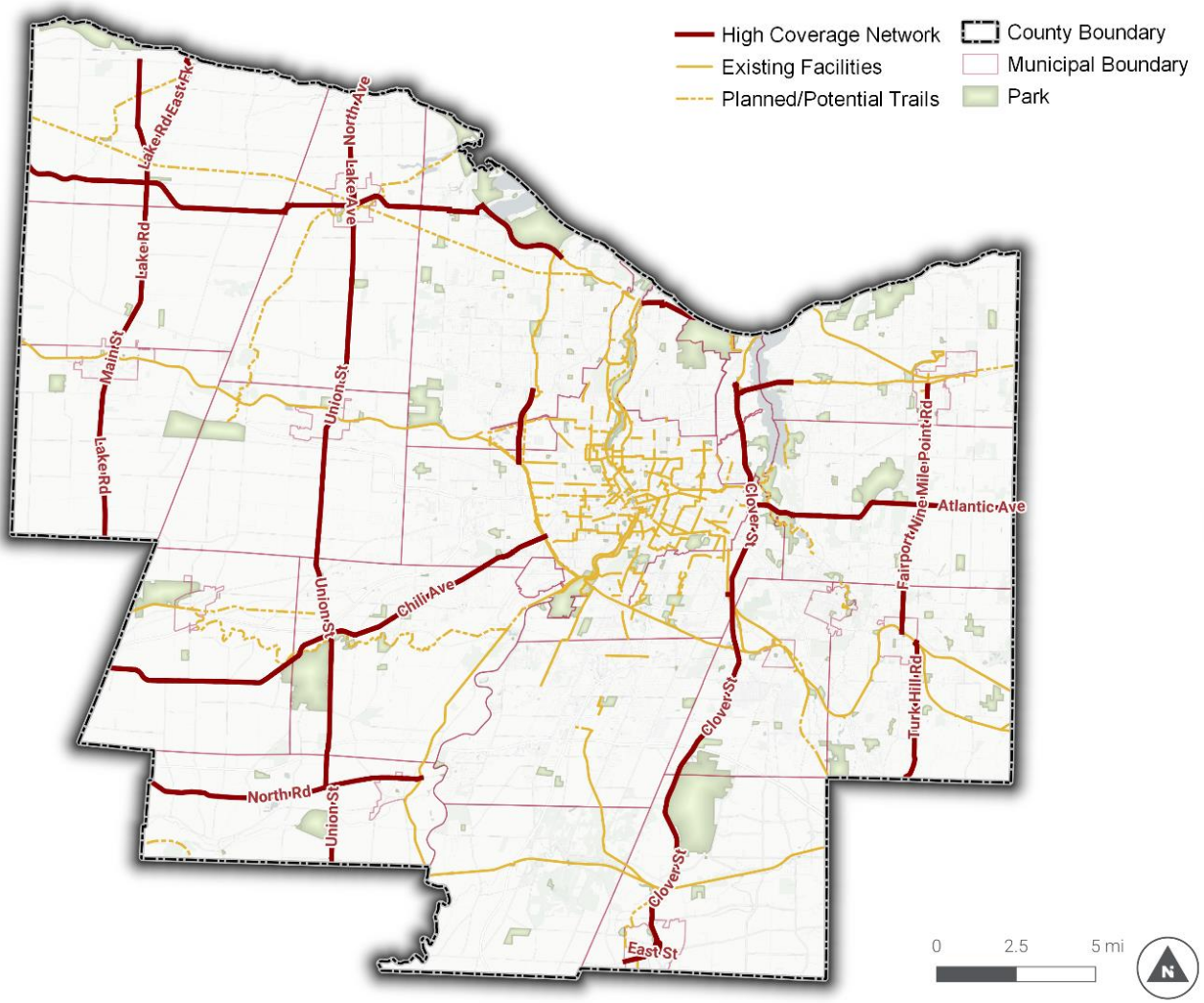
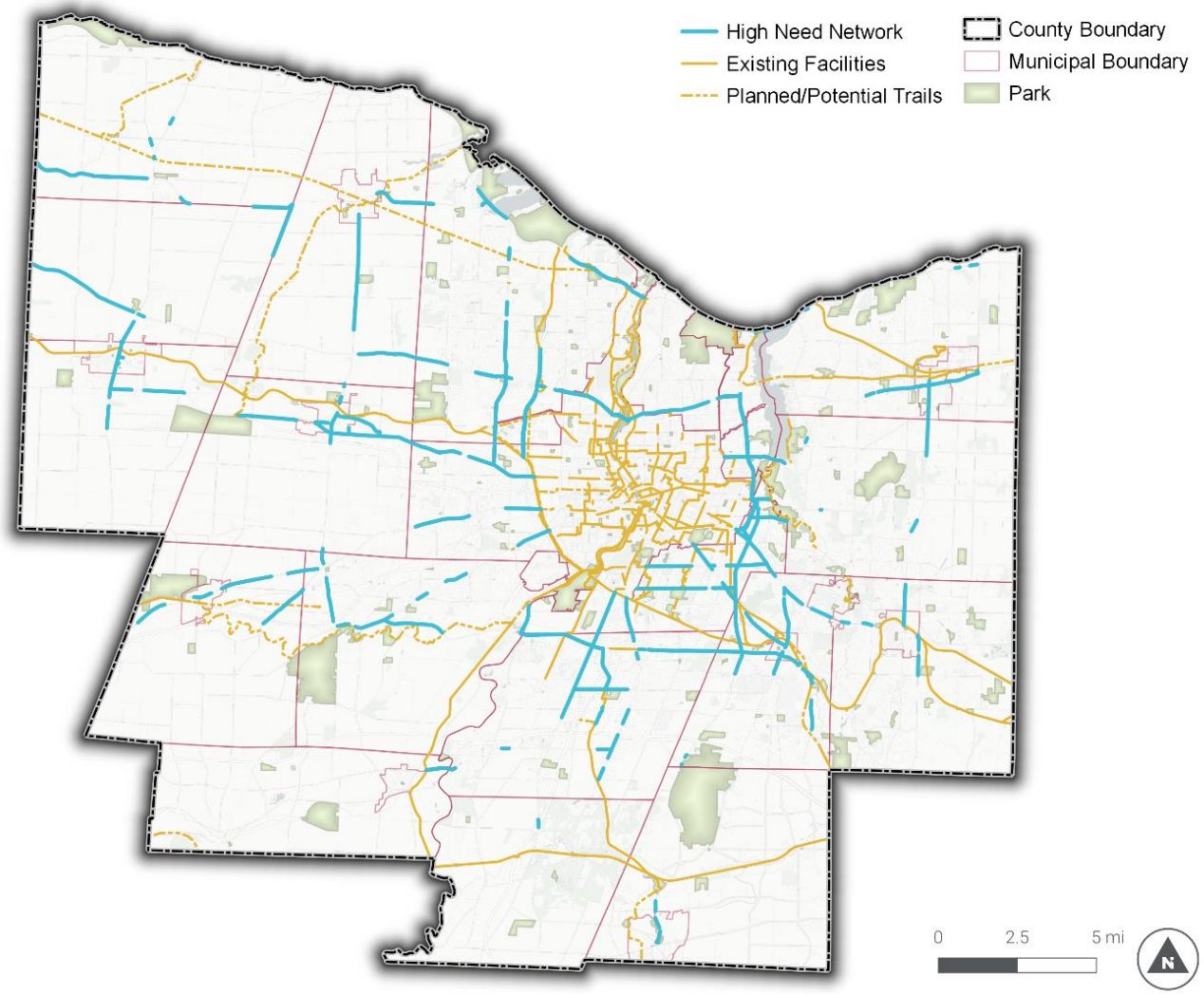
High Coverage Network



High Need Segments



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Network Scenario Cost Estimates

Cost estimate step 1 – Estimate network mileage by facility type

	LTS 1 or 2	LTS 3	LTS 4
Rural *(trip potential below 50)*	Add signage only	4' paved shoulder each side (4 feet minus existing paved shoulder width)	Speed above 45 and/or ADT above 7,000: sidepath Else: 6' paved shoulder (6 feet minus existing paved shoulder width)*
Suburban *(trip potential 50 to 70)*	Add signage only	Bike lanes (5 feet minus existing paved shoulder width)	Speed above 35 and/or ADT above 6k: sidepath Else: bike lanes (5 feet minus existing paved shoulder width)
Urban *(trip potential above 70)*	Add signage only	Bike lanes (5 feet minus existing paved shoulder width)	Speed above 35 and/or ADT above 6,000: separated bike lane Else: bike lanes (5 feet minus existing paved shoulder width)

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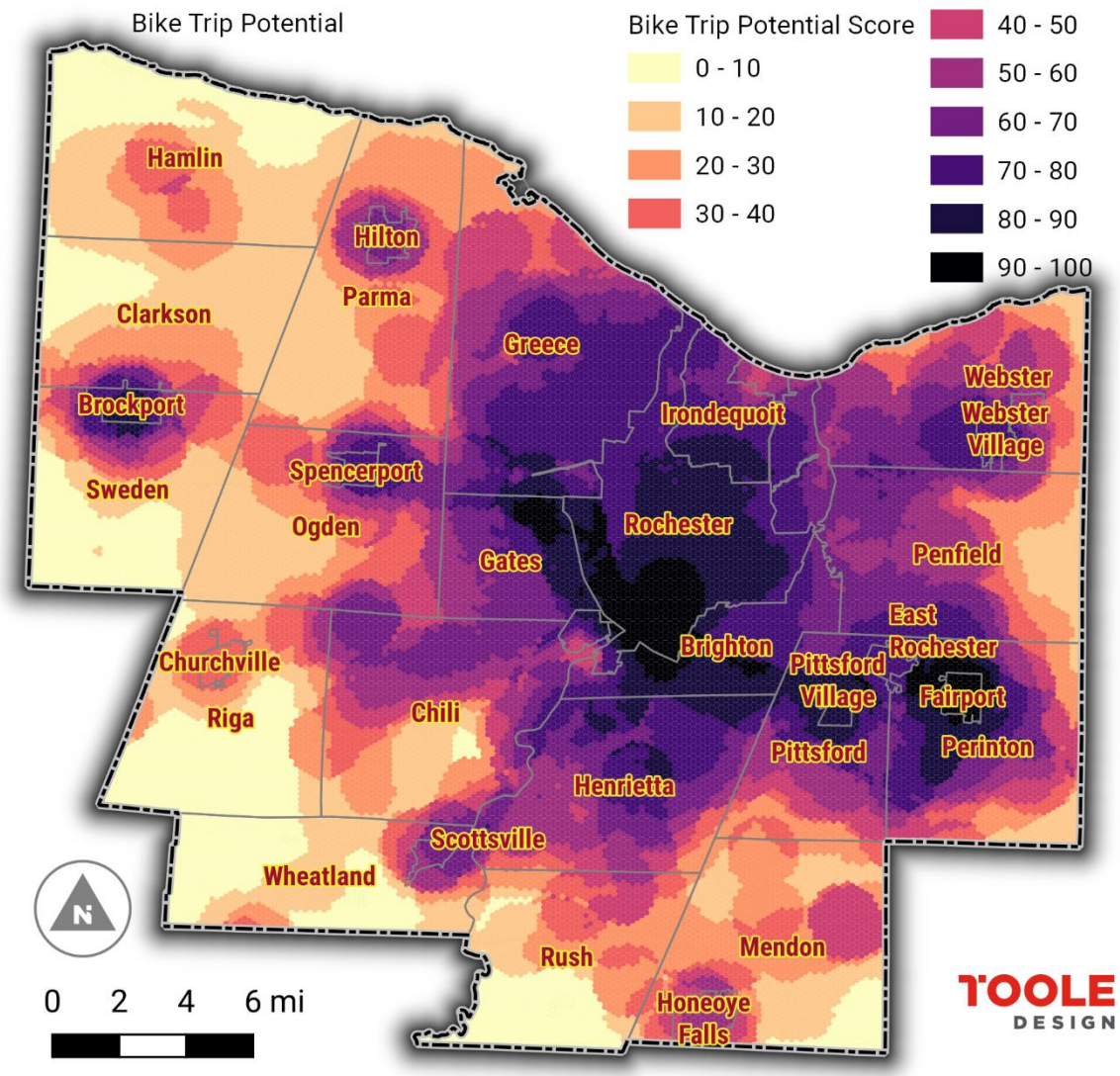
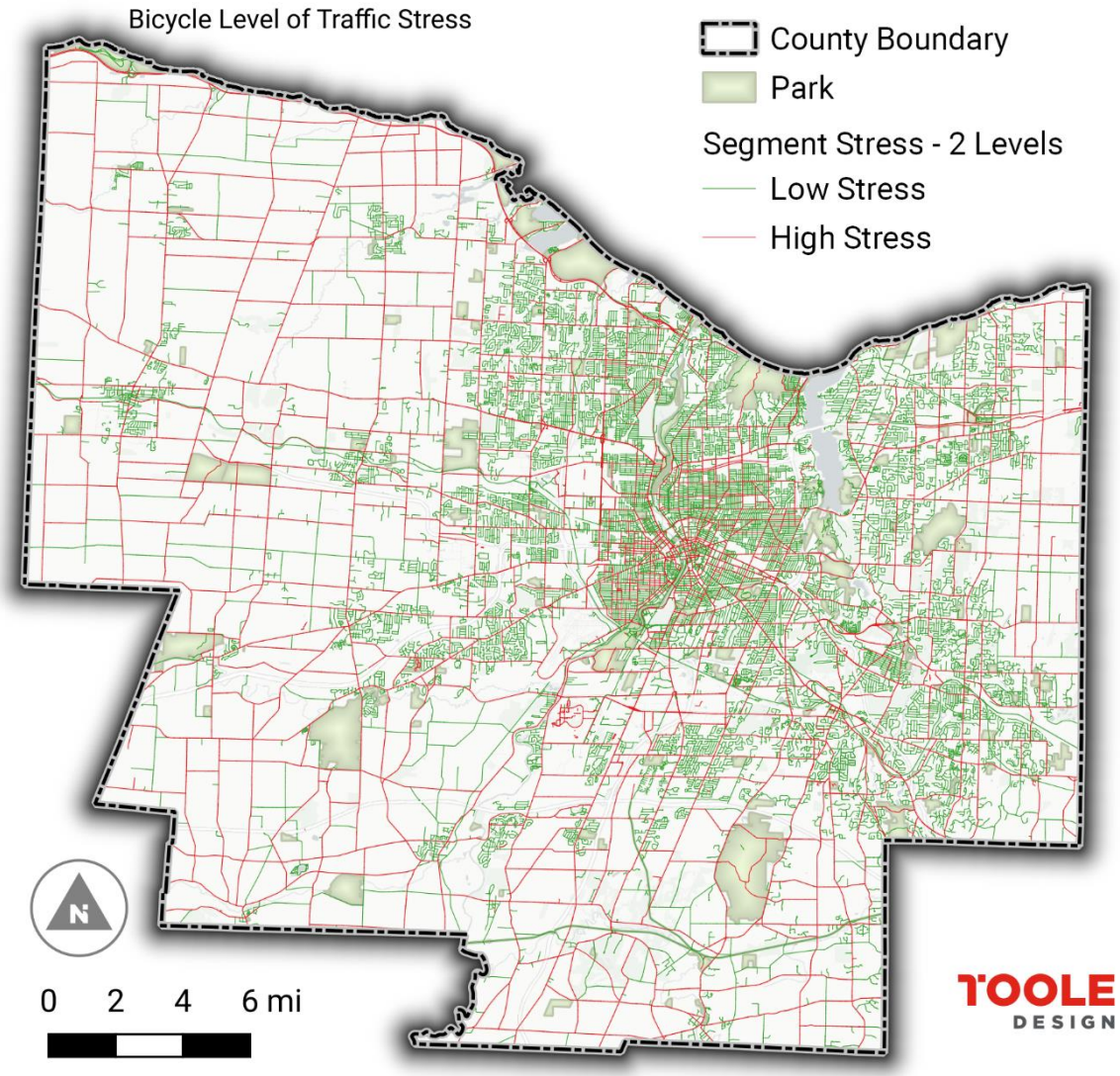
Trip Potential



Level of Traffic Stress



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Network Scenario Cost Estimates

Cost estimate step 2 – Apply unit costs to facility types

Facility Type	Unit Costs (per mile)
Bike lane	$60,000
Separated bike lane	$100,000
Shoulder widening	$105,000
Sidepath, rural	$1,000,000
Sidepath, suburban	$1,300,000
Signage	$7,000

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Network Scenario Cost Estimates

Cost estimate step 3 – Develop network-level cost estimates

	High Needs Segments		High Coverage Network	
Facility type	Mileage	Estimated cost	Mileage	Estimated cost
Bike lane	10	$600,000	5	$300,000
Separated bike lane	80	$8,000,000	20	$2,000,000
Shoulder widening	30	$3,150,000	90	$9,450,000
Sidepath rural	15	$15,000,000	10	$10,000,000
Sidepath suburban	30	$39,000,000	45	$58,500,000
Signage	5	$35,000	5	$35,000
Unknown	20	$390,000	15	$460,000
Average cost/mile	--	$390,000	--	$460,000
Extrapolated cost		**$74,100,000**	--	**$87,400,000**
Unknown treatment mileage %		10.53%	--	7.89%

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Network Scenario Cost Estimates

High Coverage Network

$87 million

High Need Segments

$74 million

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Performance Measures

- Performance measures = business case for continued improvement of and investment in multimodal infrastructure.
- Inventory measures vs. outcome measures.
- Memo provides a starting point.

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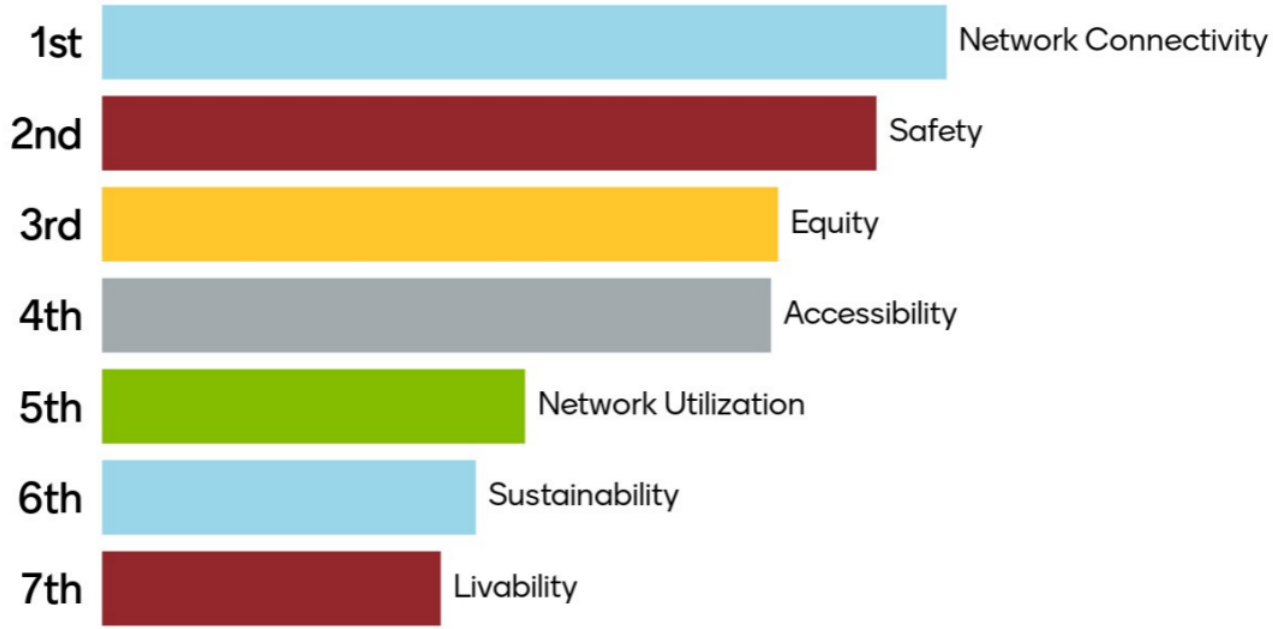
First PAC Meeting Survey Result

What are the most important elements that the plan should address?



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Performance Measures

- **PAC identified plan goal –** The table sorts recommended performance measures based on the most important plan goals identified by the Project Advisory Committee (listed in order of importance).
- **Performance Measure –** The metric to be recorded for tracking changes.
- **Unit of measurement –** The quantifiable value of each performance measure.
- **Example Target –** Where available, example targets from other communities are included for reference.
- **Example Application –** Where available, the table lists other communities that have successfully enacted the performance measure, with resources linked below.
- **Data source/ collection method**

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PAC identified plan goal	Performance Measure	Unit of measurement	Example Target	Example Application	Data source
Network Connectivity	Increase miles of bicycle network built annually	X% increase per year.	5% annual growth of miles of county roadways with shoulder widths greater than 4 feet.	N/A	▪ Inventory data
	Increase miles of pedestrian network built annually	X% increase per year.	N/A	N/A	
	Route directness	Calculate the ratio of the shortest path route distance to straight-line distance for two selected points. The lowest number achievable would be 1.0, although unlikely, and lower results indicate strong, connected networks with little out-of-direction travel.	N/A	Bellingham, WA Skagit Island Regional Transportation Planning Organization	▪ Maps of travel networks by mode ▪ Location of origin and destination ▪ GIS transportation networks for each mode ▪ GIS information on land use (origins and destinations)
Safety	Pedestrian and bicyclist injury rate	# of crashes per X miles traveled on network segment.	10% reduction over two years	New York, NY Richmond, VA St. Louis, MO	Crash reports/police data, surveys
		Ratio of reported crashes to pedestrian and bicycle trips.			Calculated by dividing # of police-reported on-street bicycle collisions by recorded bike/ped counts
	Vehicular speeds	80th percentile speed.	Depends on existing conditions	Calgary, AB	Automatic Traffic Recorders

Questions?

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Next Steps

- **PAC: provide feedback on Implementation Strategies Memo by FRIDAY, MARCH 10**
- Revise Implementation Strategies Memo
- Develop Final Plan

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Thank You!

- Yixuan Lin – YixuanLin@monroecounty.gov
- Michael Blau – mblau@tooledesign.com

Next Meeting: TBD

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