

University of Virginia Transportation Demand Management Plan



Presented to:



Presented by:





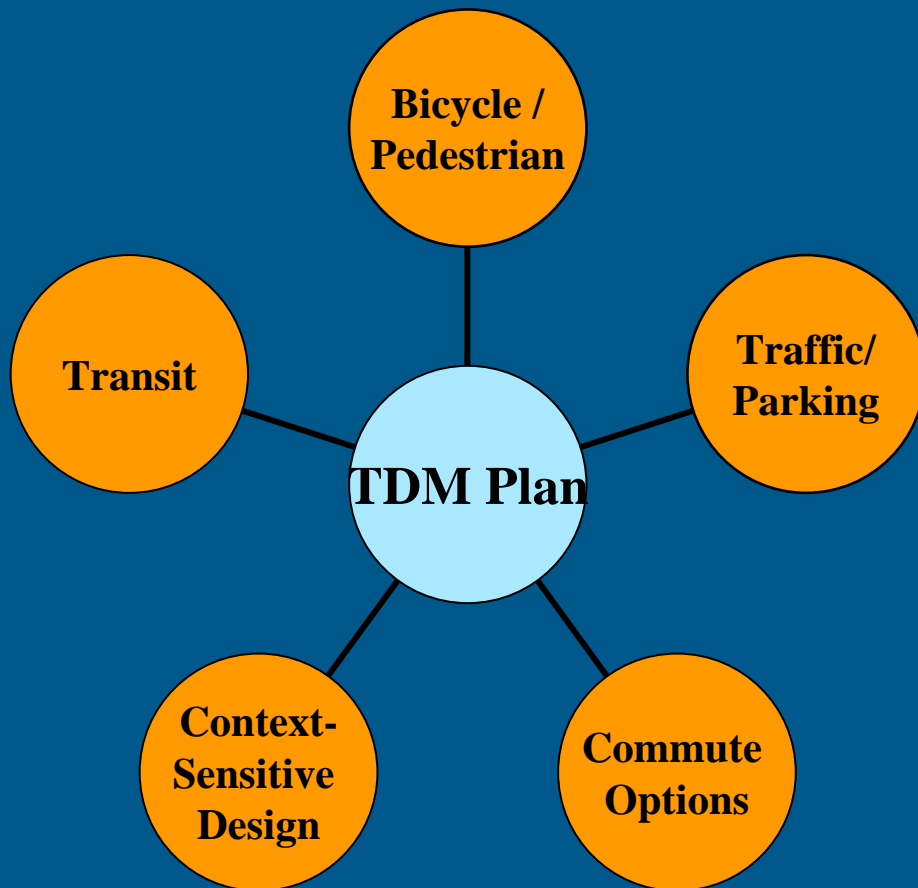
What is Transportation Demand Management (TDM)?

Transportation Demand Management is:

The art of influencing travel behavior for the purpose of reducing the demand for single occupant vehicle use



TDM Plan – Keys to Success



- Comprehensive
- Supportive of University vision and policies
- Tailored for different land uses and user groups
- Coupled with parking management
- Encourages investment in & use of alternative modes
- Reinforced by physical design elements
- Periodically monitored and modified



Transit

Goals

Provide commute options

- Regional transit service
- Remote parking

Reduce automobile traffic

- Circulation within Grounds and City
- Remote parking connection

Strategies

- Routing and coverage
- Frequency
- Reliability
- Connections
- Traveler information
- Vehicle comfort
- Branding/Identity
- Amenities
- Pricing





Pedestrian

Goals

Grounds and City circulation

- Intra-grounds travel
- Dining & shopping
- Parking access

Short-distance commutes

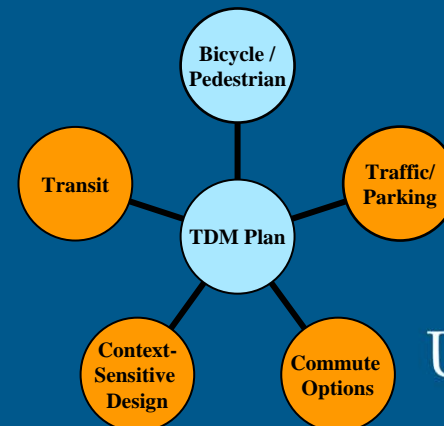
- Residences within walking distance (0 to 1 mi)

Reduce shuttle needs

- Encourage walking over riding

Strategies

- Network continuity
- Directness
- Street crossings
- Safety and security
- Wayfinding
- Mix and proximity of uses
- Amenities and facilities





Bicycle

Goals

Grounds and City circulation

- Intra-grounds travel
- Dining & shopping
- Parking access

Medium-distance commutes

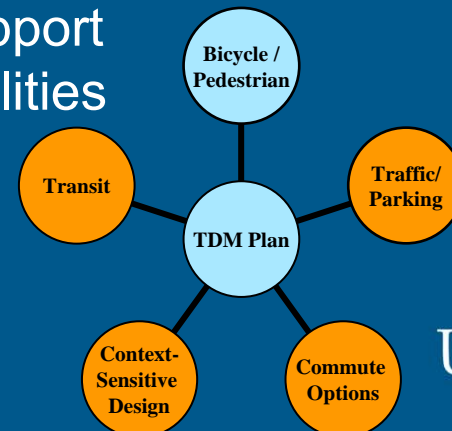
- Residences within biking distance (0 to 5+ mi)

Reduce shuttle needs

- Encourage biking over riding

Strategies

- Dedicated facilities
- Network continuity
- Wayfinding
- Directness
- Driver training
- Topography
- Storage
- Support facilities





Parking



Goals

Meet Needs

- Adequate supply
- Reasonable convenience
- Fair pricing

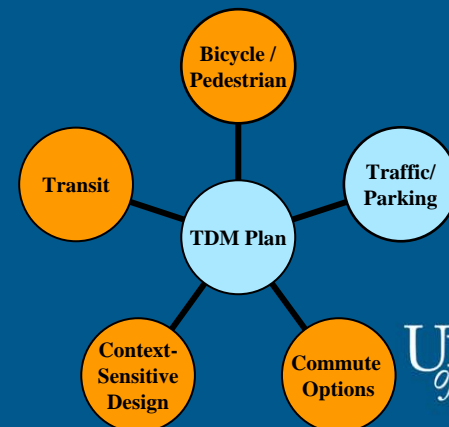
Minimize Physical Impacts

- Green space
- Aesthetics
- Development area
- Continuity

Efficient Use

Strategies

- Sizing
- Location
- Pricing/allocation policy
- Design
- Operations/management





Traffic Management and Design

Goals

Safety for all users

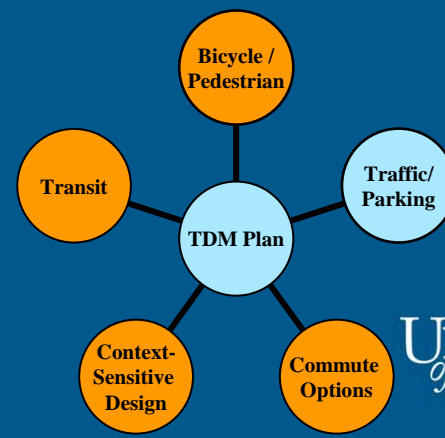
***Reinforce other policies
through physical design***

Efficient circulation

Appropriate aesthetics

Strategies

- Complete Streets
- Context-Sensitive Design
- Traffic Calming
- Transit Priority





Commute Options

Goals

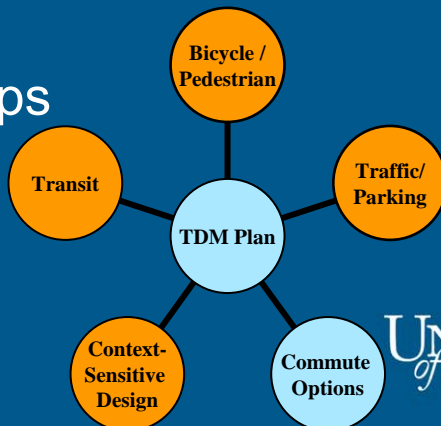
Encourage use of alternatives to driving alone

Encourage locating where alternatives are available

Provide fair and consistent policies

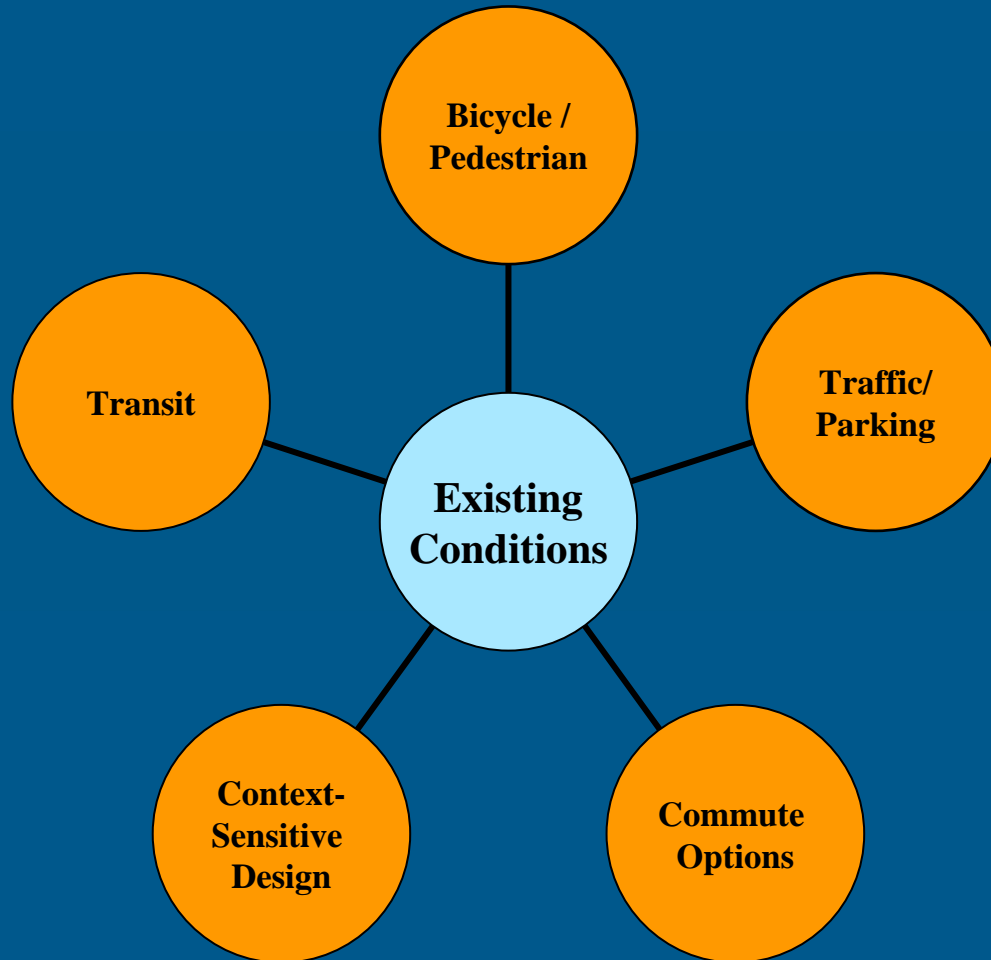
Strategies

- Parking pricing/cash out
- Transit incentives
- Car sharing
- Housing incentives
- Ride matching
- Preferential parking
- Remote parking
- LEV/ZEV
- Partnerships
- Marketing





User Group Meeting Summary





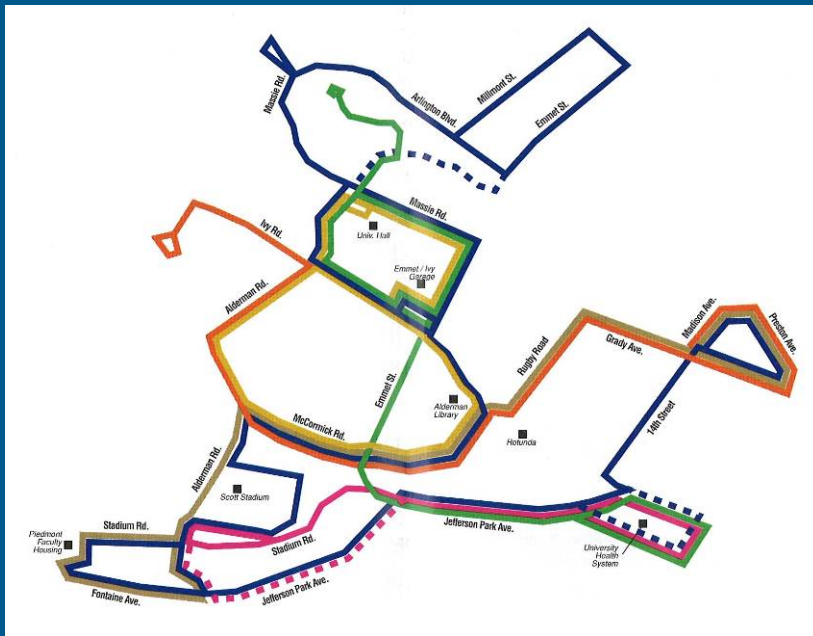
Transit

Strengths

- UTS works well around Grounds
- Trolley to downtown
- Availability during inclement weather

Weaknesses

- Congestion affects reliability
- CTS headways too long
- CTS schedule limits employee flexibility
- No service to Fontaine Research Park
- Little route identification at stops
- UTS buses often overcrowded
- Bus shelters/amenities need improvements





Pedestrian

Strengths

- Central Grounds walkable
- Access to HS is easy
- Crosswalks well marked
- Weather
- University culture supports walking



Weaknesses

- People use UTS bus system instead of walking
- Wayfinding
- Lack of/narrow sidewalks
- Pedestrian and traffic conflicts
- Intersections difficult to cross
- Difficulty of reaching North Grounds and Fontaine Research Park
- Conflicts with service vehicles
- Topography



Bicycle

Strengths

- Short distance to downtown
- New bicycle storage facilities
- Bicycle user groups established to improve conditions



Weaknesses

- Bicycle lanes not continuous
- Lack of street lighting
- Need additional bicycle storage
- UTS buses reduce need to bicycle
- Challenging topography
- Many employees live too far to bicycle commute



Parking

Strengths

- Parking costs are fair
- Vanpool opportunities
- Free parking for Health System patients and visitors
- Parking is plentiful at North Grounds and Fontaine Research Park
- Flexible parking is useful

Weaknesses

- Sense of entitlement to close, convenient parking
- Cost to add new parking
- Parking regulations not enforced
- Congestion around facilities
- New parking encourages more drivers
- Convenience of parking supply
- Event parking



Traffic

Strengths

- University roads are generally safe
- Drivers respect pedestrian crossings during the day
- Pedestrian crossings slows traffic flow



Weaknesses

- Congestion on roadways around the University
- Event traffic congestion
- Signals and timing need improvement
- Students exhibit poor driving behavior
- Growth outside the University



Commute Options

Strengths

- JAUNT rideshare
- Some housing developments provide shuttles
- Health System provides shuttles to parking

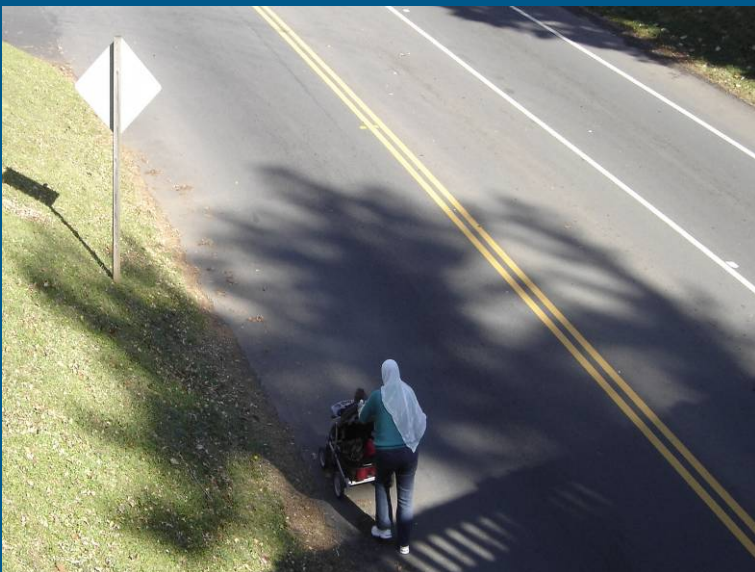


Weaknesses

- The University should try to influence commuting behavior
- Lack of awareness of options
- Variable work schedules
- No alternatives for people living west of the University
- Carpooling difficult for parents with children in daycare

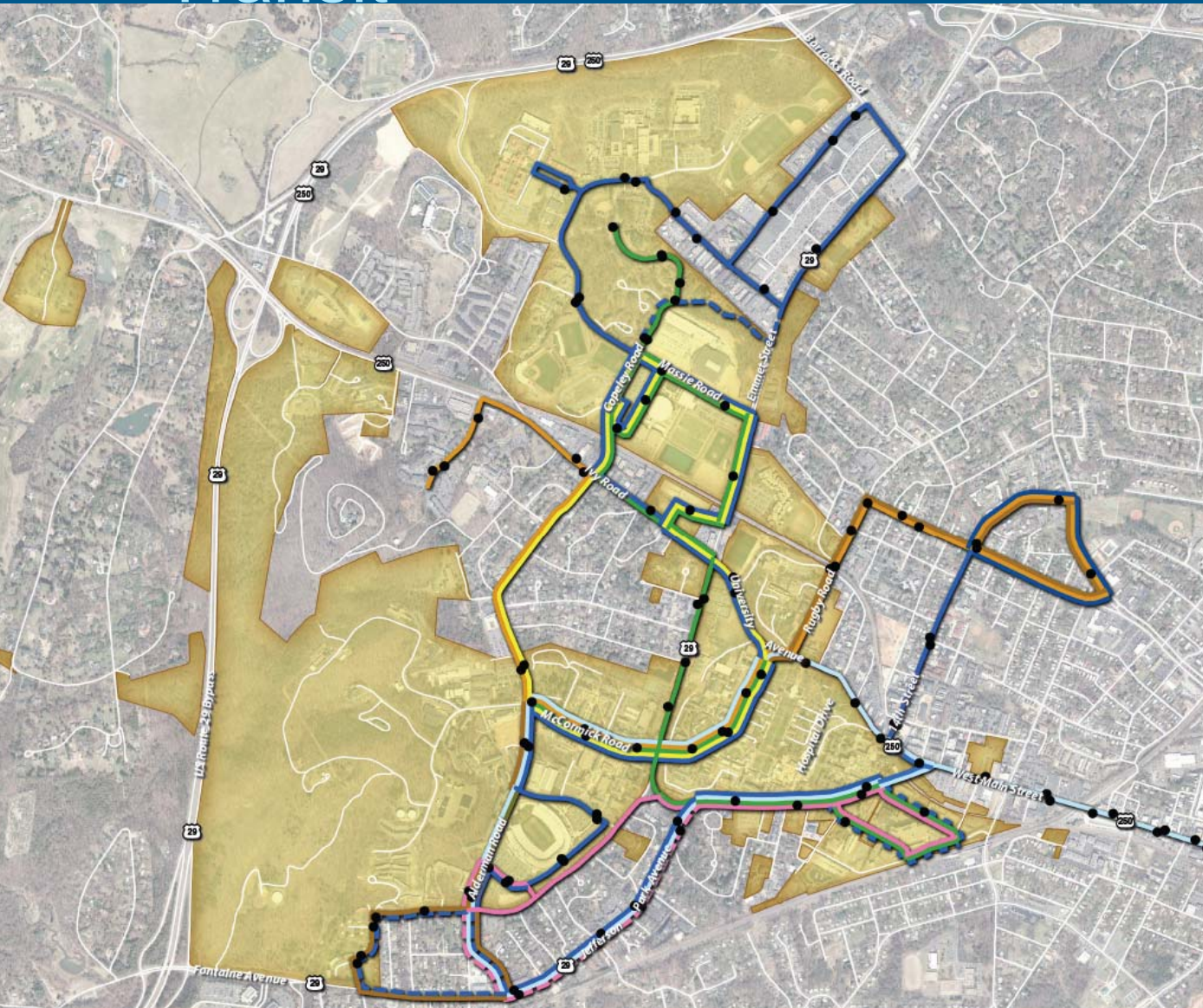


Existing Conditions





Transit

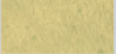







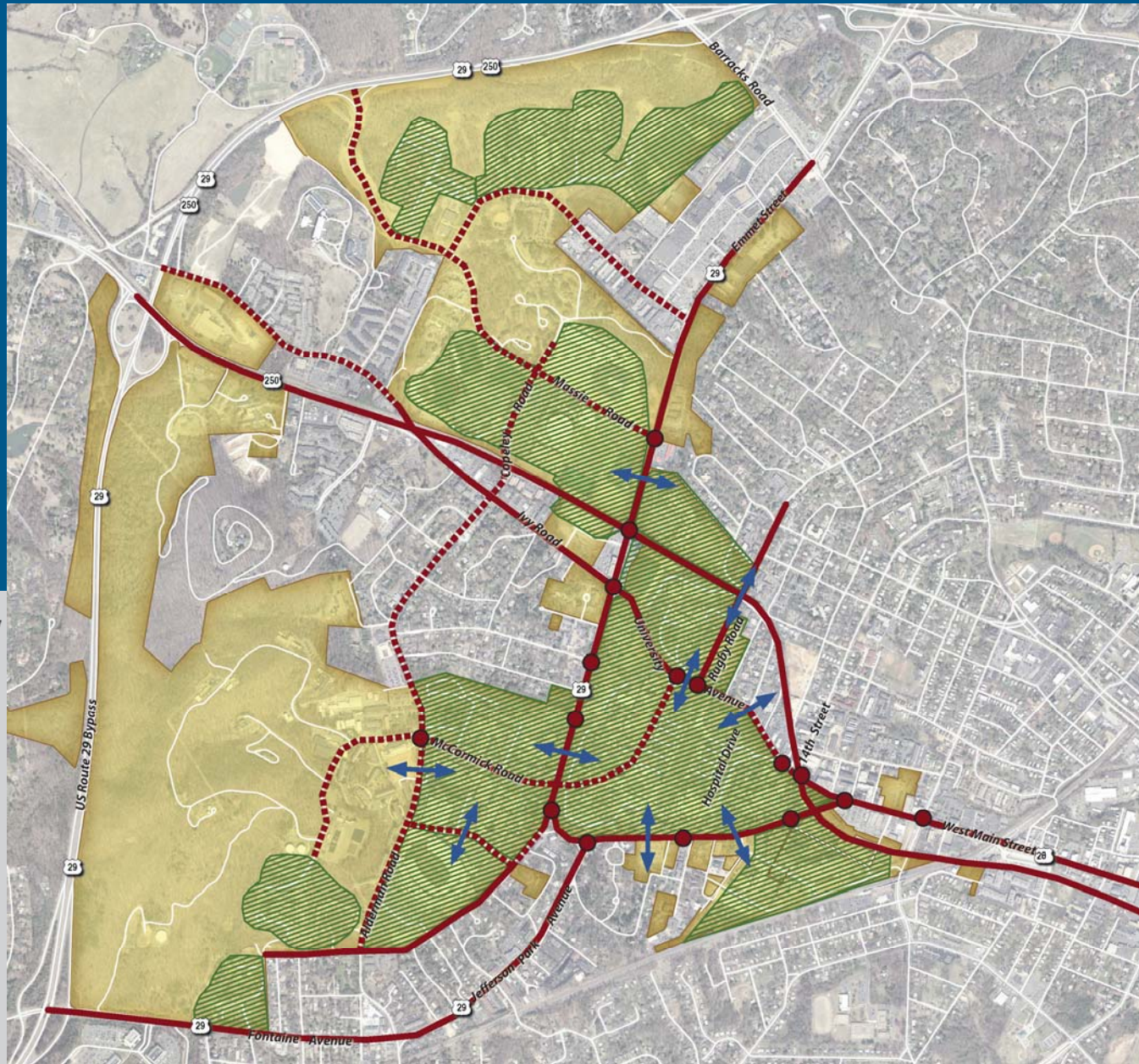
Legend

- University of Virginia Property
- Bus Stops
- Blue
- Orange
- Green
- Grounds
- Central Grounds Shuttle
- Health System Shuttle
- Free Trolley



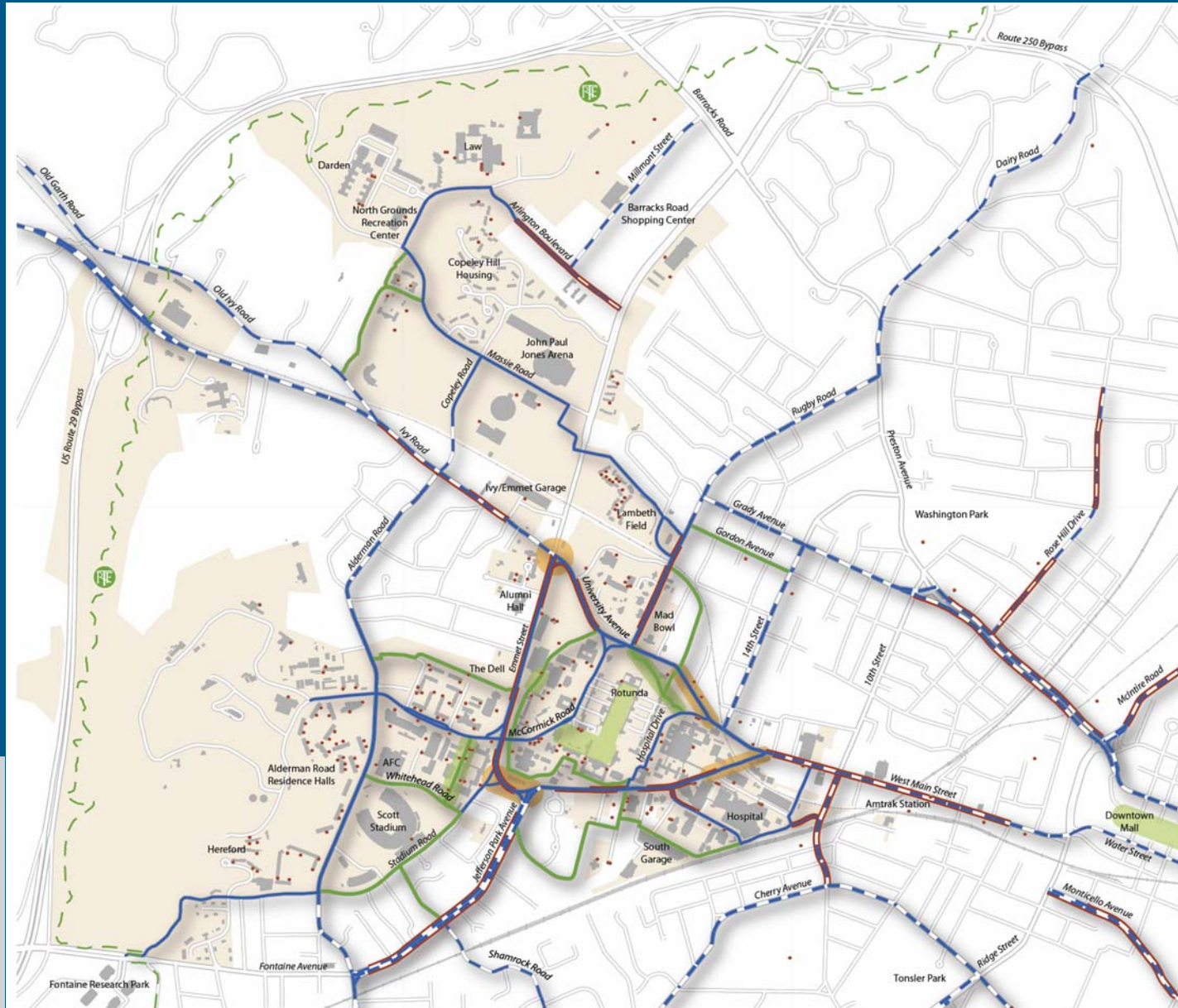
Pedestrian

-  University of Virginia Property
-  Pedestrian Zones
-  Significant Barriers
-  Moderate Barriers
-  Pedestrian Hot Spots
-  Linkages





Bicycle



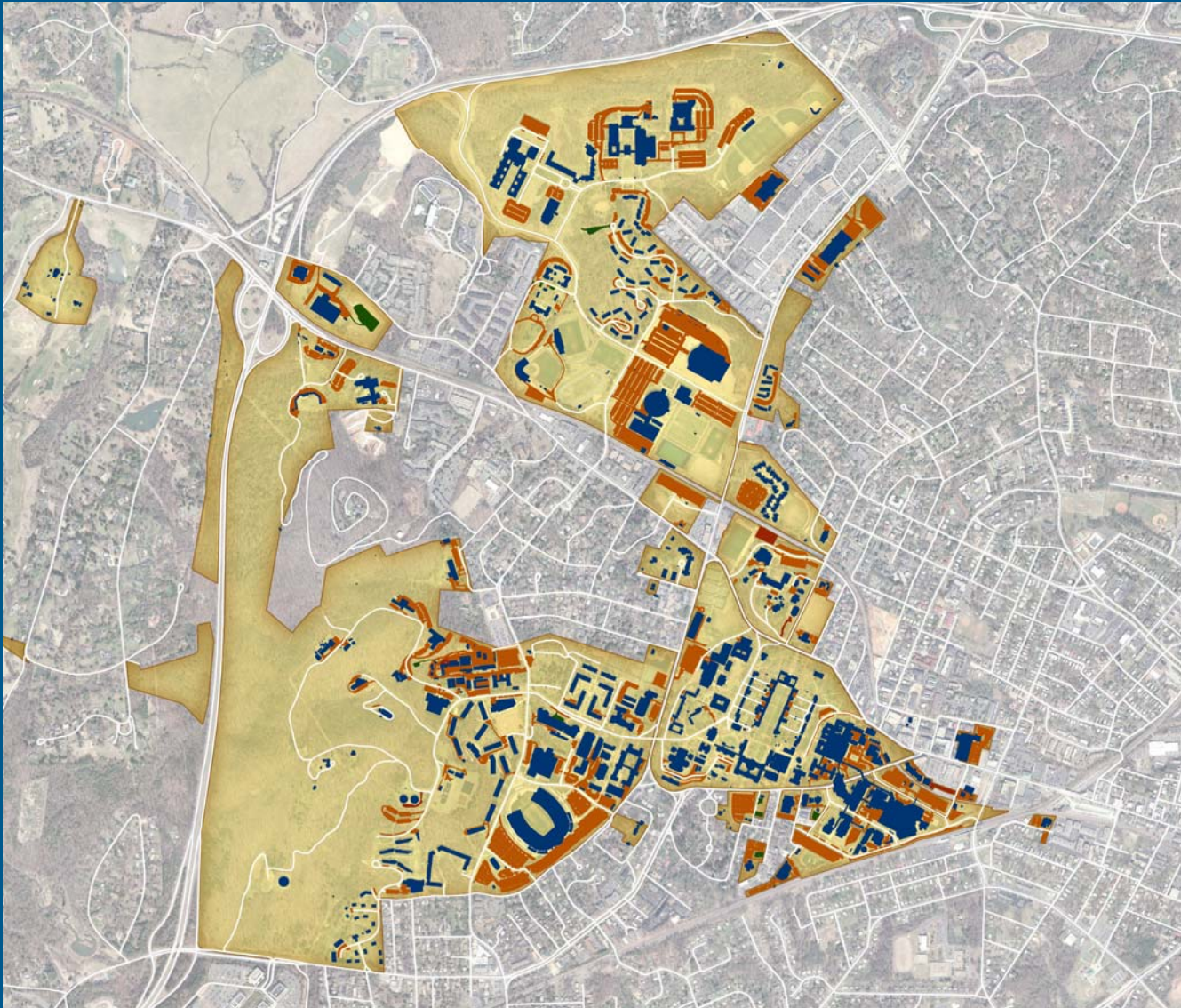
UVa Bicycle Map and Guide

Use this map to find bicycle friendly routes and bicycle racks around Grounds. Painted bicycle lanes are noted with red lines alongside the blue recommended routes. The green routes highlight roads and paths that provide a quieter alternative, but note that some of these routes are shared with pedestrians. The orange caution zones identify congested intersections and road segments, use extra care in these areas. University regulations require that you walk your bike in the green dismount areas.

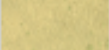
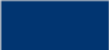
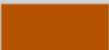

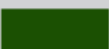
- Main Bicycle Route
- Quieter Bicycle Route
- Route with Painted Lanes
- City/County Bicycle Route
- Bicycle Racks
- Use Caution Zone
- Dismount Area
- University Grounds
- Other Road



Parking

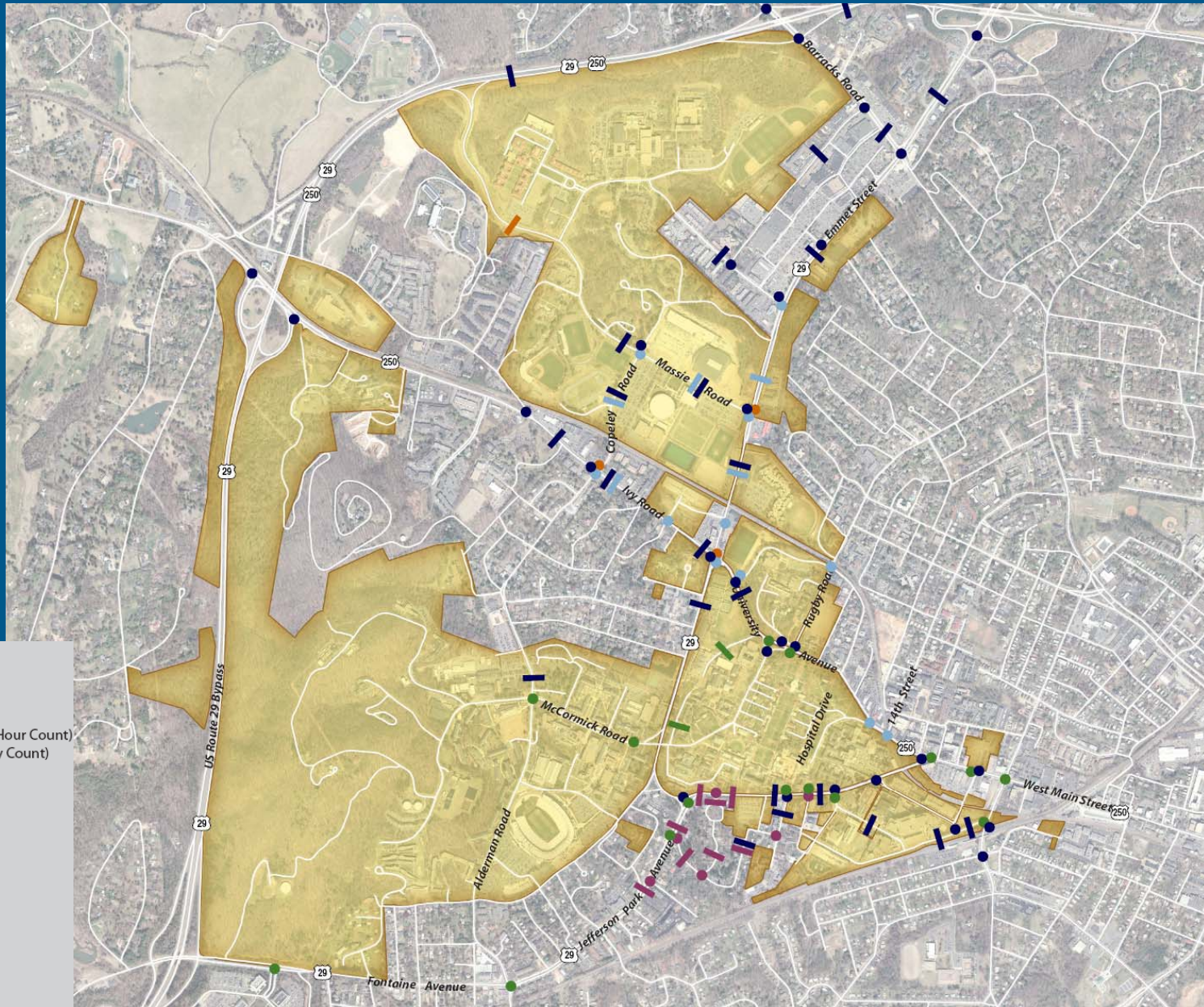


Legend

-  University of Virginia Property
-  University Buildings
-  Parking
-  Parking Construction
-  Unpaved Parking



Traffic



Legend

University of Virginia Property

TMC Turning Movement Count (Peak Hour Count)
ATR Automated Traffic Recorder (Daily Count)

2006	TMC	ATR
2005	TMC	ATR
2004	TMC	ATR
2003	TMC	ATR
2002	TMC	ATR



Context-Sensitive Design





Commute Options

- Transit
- Rideshare
- Bicycle/walking
- Teleworking
- Park and ride
- Occasional parking permits





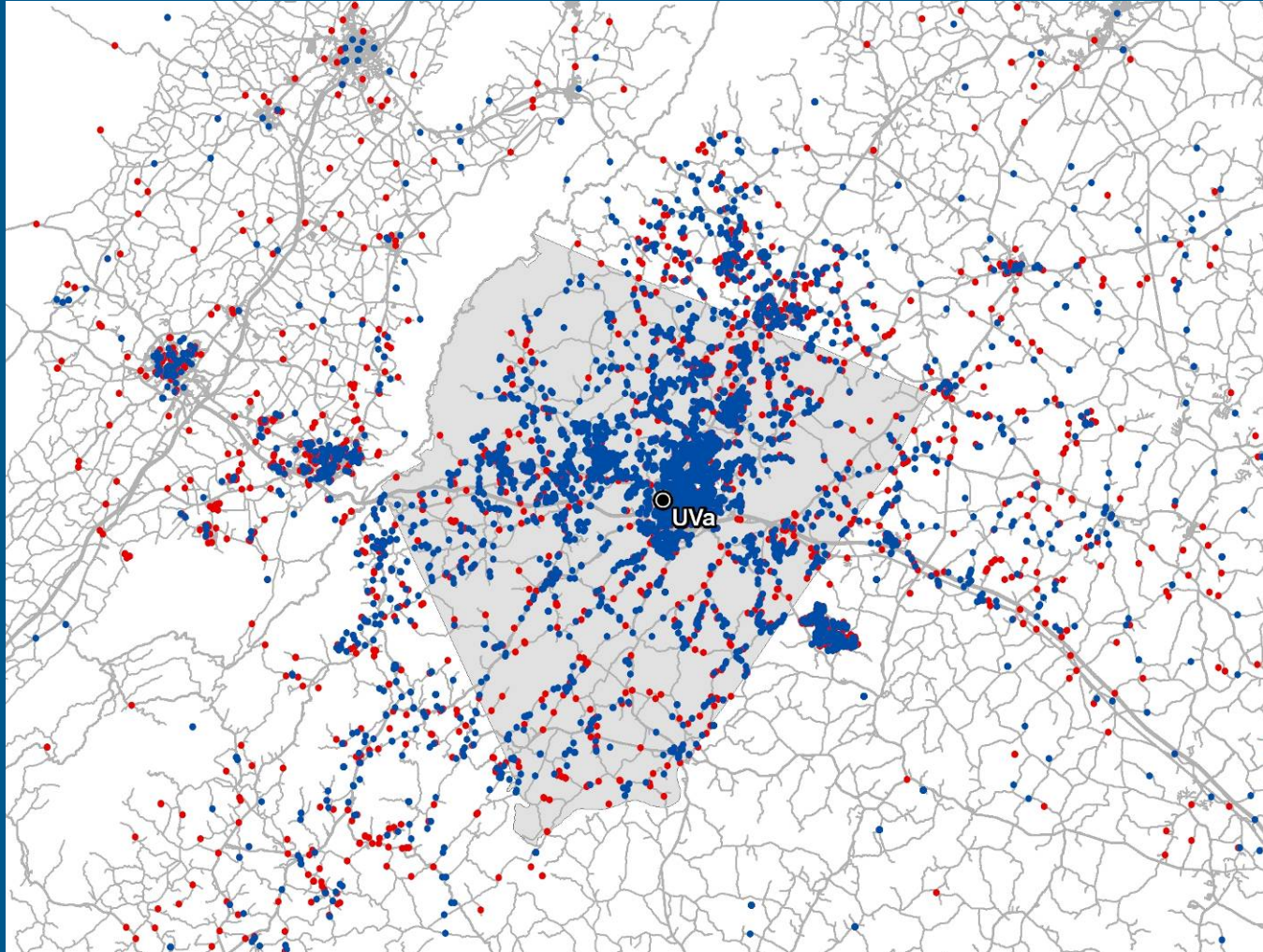
Next Steps

- Assess commuting patterns
- Study TDM Strategies of similar university settings
- Evaluate the University's physical plans for future development
- Evaluate potential TDM programs
- Develop recommendations
- Integrate TDM plan into Grounds Plan





Commuting Patterns

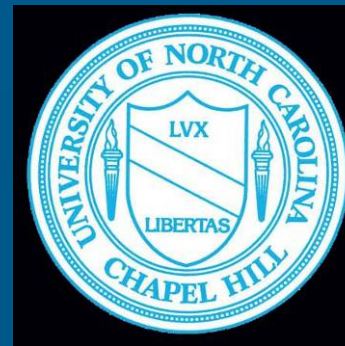


- Agency 207
- Agency 209



TDM at Peer Universities

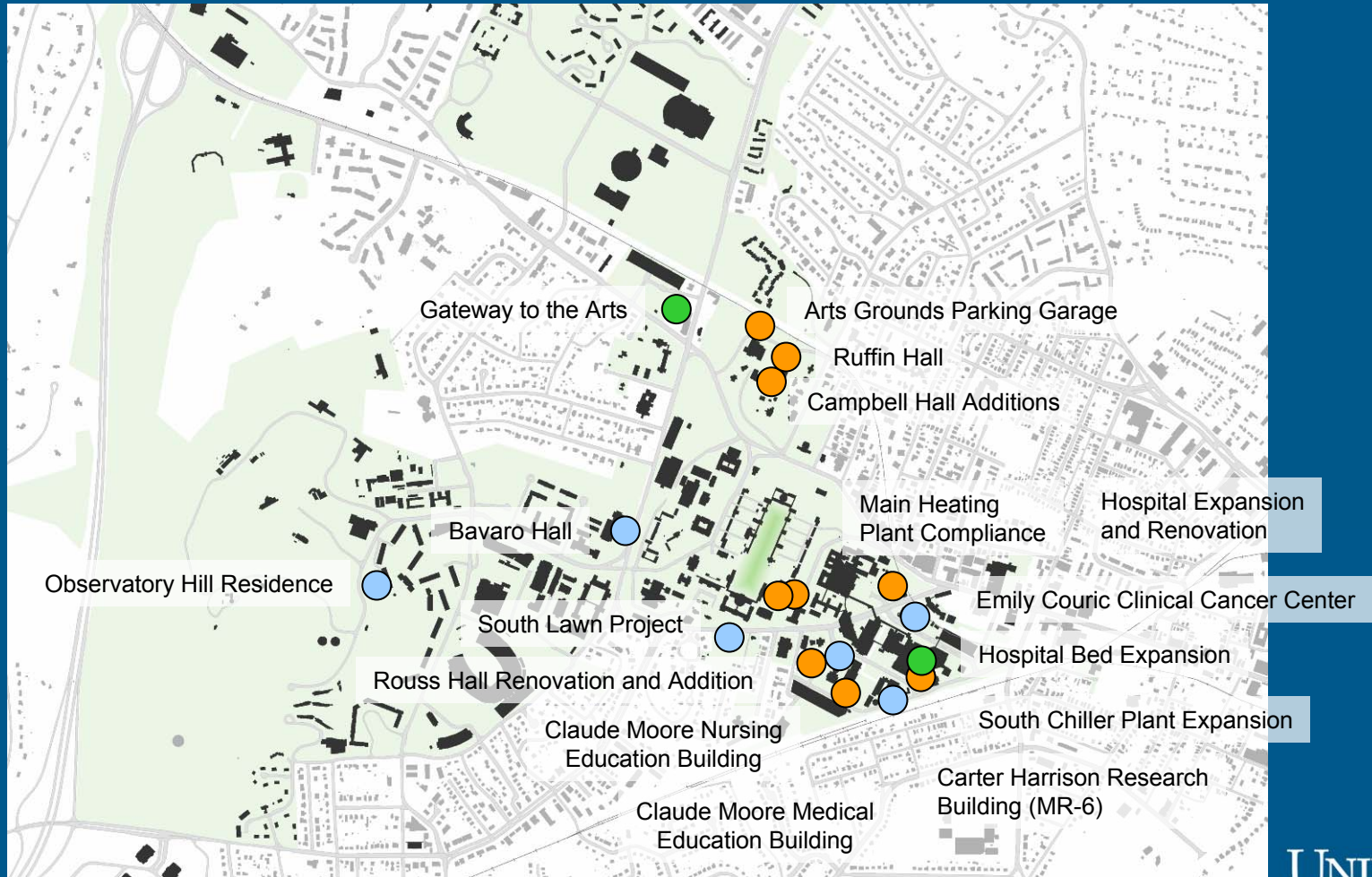
- TDM coordinators assist commuters
- Stress ecological benefits
- Provide financial incentives
- Parking is expensive
- Coordinate with local and regional transit
- Provide amenities for bicycling
- Market TDM at campus events and websites
- Offer rewards





Future Development

- Project In Construction
- Project with Approved Design
- Project In Design





Potential TDM Strategies

Programs

- Hire TDM coordinator
- Market existing programs
- Expand rideshare
- Add preferential parking for carpools
- Work with local and regional authorities to expand bus service
- Integrate transportation into sustainability initiatives
- Establish Car Sharing program

Physical Improvements

- Close McCormick Road to non-authorized vehicles
- Improve Emmet/Ivy intersection
- Extend Stadium Road to provide UTS connection to Fontaine
- Improve bicycle and pedestrian amenities throughout Grounds
- Enhance intercept parking as Grounds parking is reduced
- Improve Wayfinding
- Provide real-time bus information
- Set up kiosk to provide commuting option information



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