



West End Neighborhood Traffic Evaluation – 2018

~~Produced for The City of Portland~~



Cap COMMENTS 3/21/19

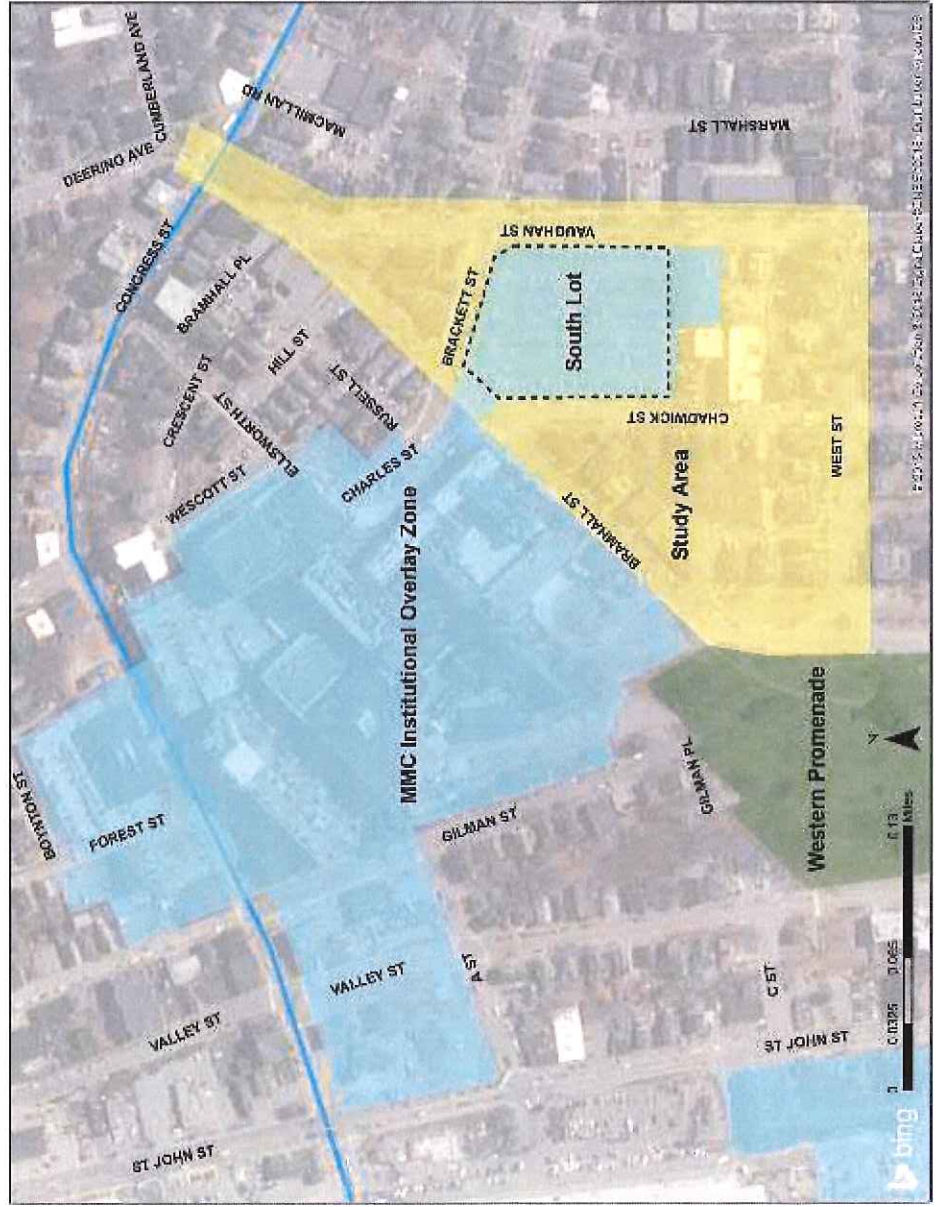
Study Goals

- Assess existing transportation conditions for the West End neighborhood.
- Evaluate alternatives to improve access, circulation, efficiency, and pedestrian/bicycle safety including:
 - Reduce hospital vehicle trips on neighborhood streets
 - Improve intersection safety at key locations
 - Improve pedestrian crossing safety along Bramhall Street
 - Provide improved bicycle accommodations
 - Improve hospital wayfinding
- Determine and assess future conditions with each alternative

How are these used?

Does the concept achieve all of these?

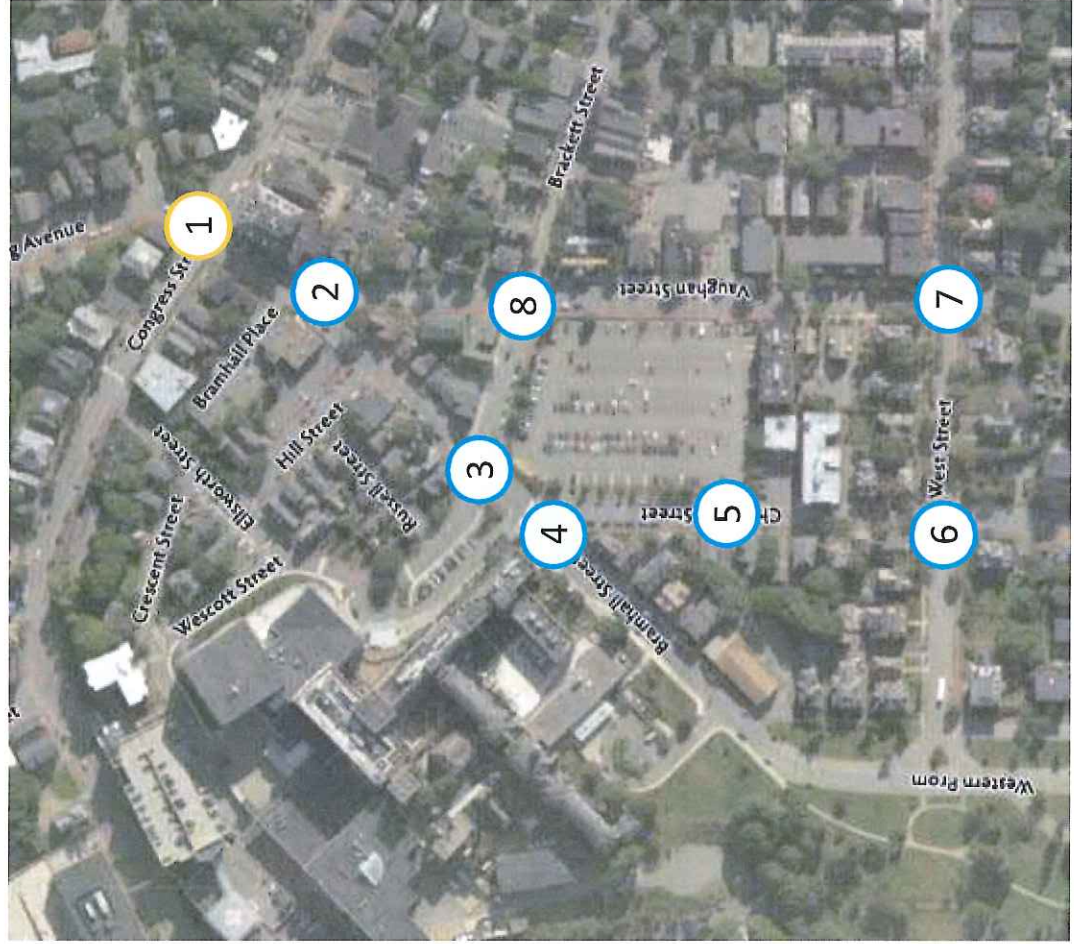
Site Context & Study Area Map



- Major Route
- MMC Institutional Overlay Zone
- Study Area
- South Lot
- Western Promenade



Study Area Intersections

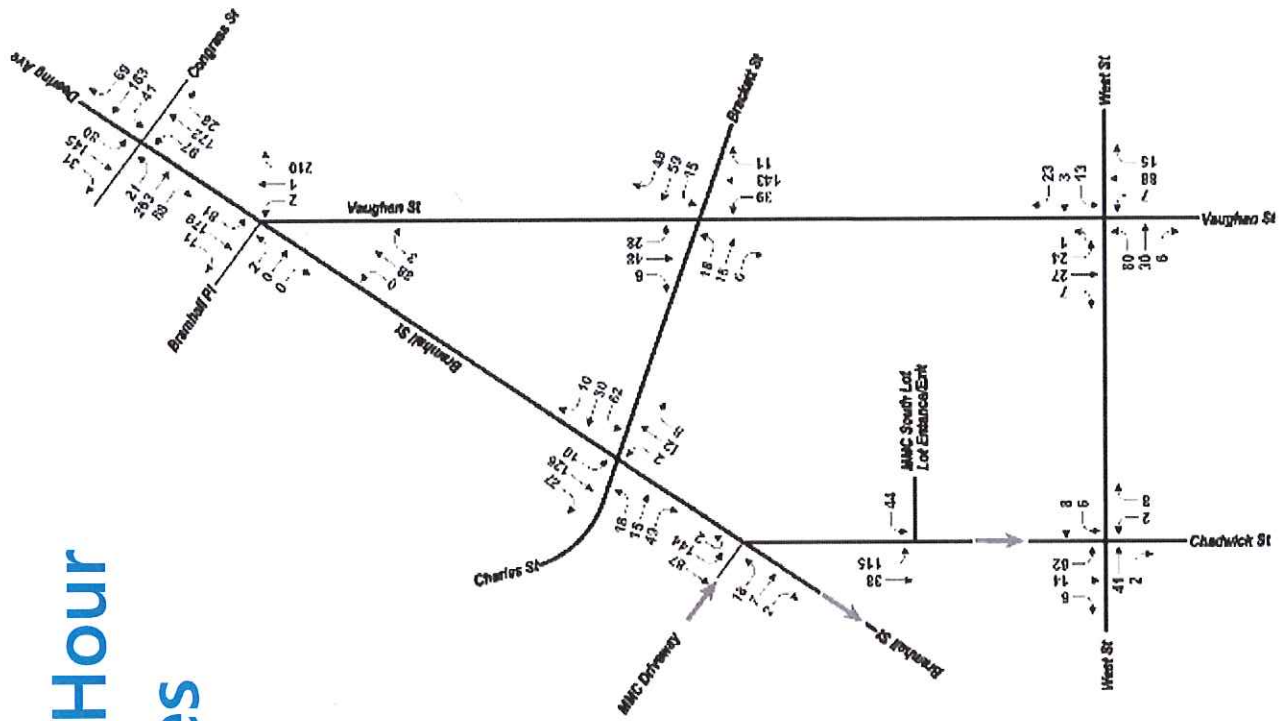


- | # | Signalized | # | Unsignalized |
|---|------------|---|--------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |

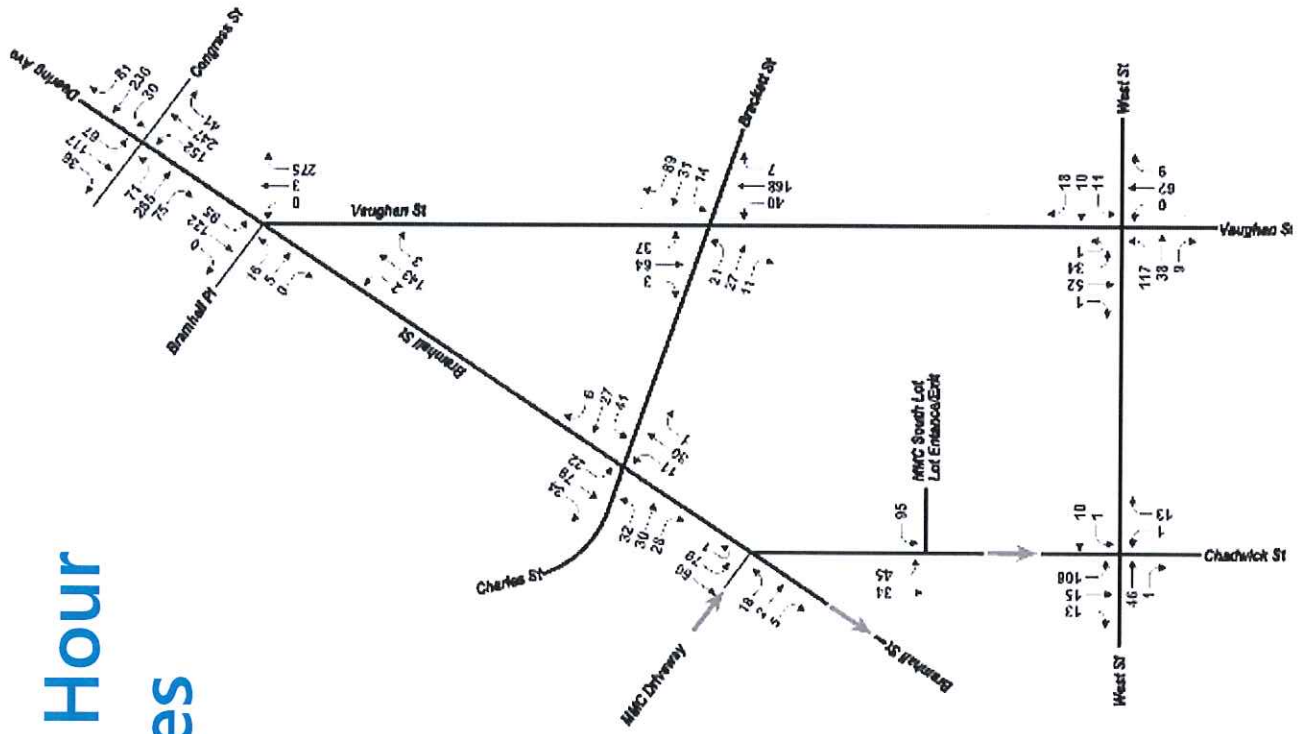
Study Conducted in July 2018



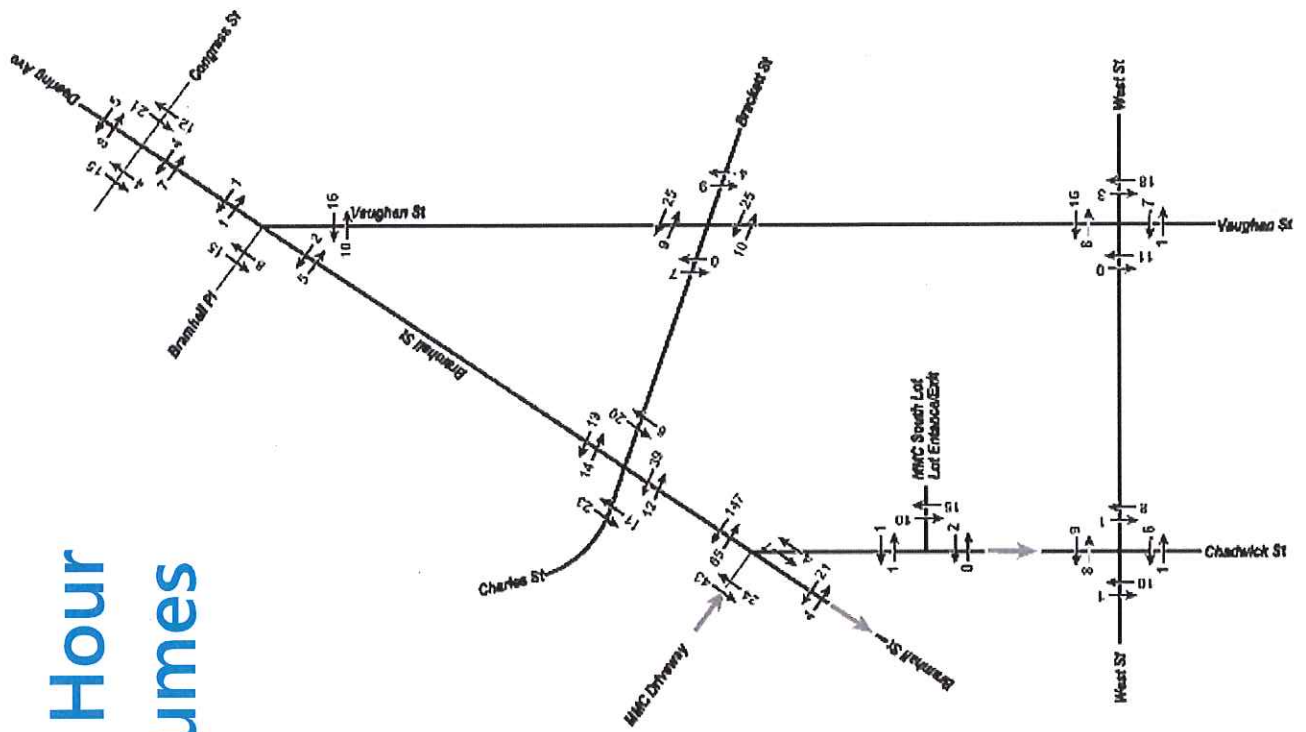
2018 AM Peak Hour Vehicle Volumes (7:30 – 8:30)



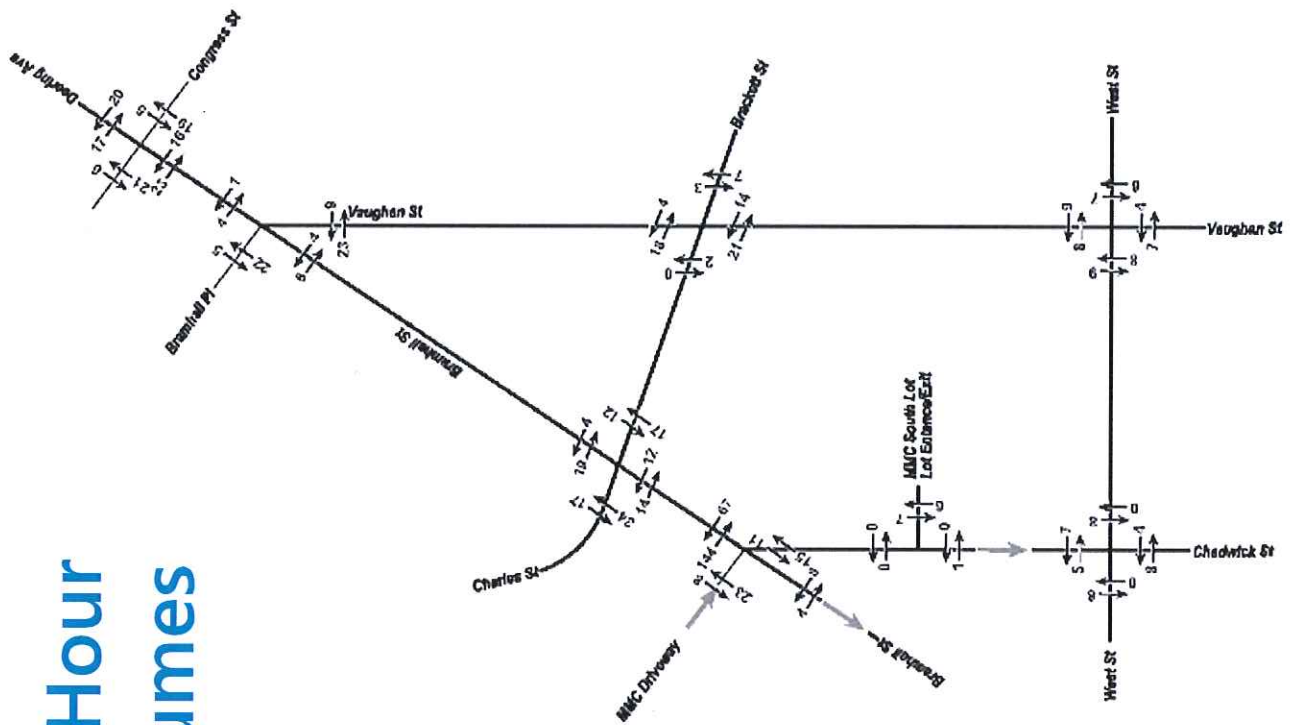
2018 PM Peak Hour Vehicle Volumes (4:00 – 5:00)



2018 AM Peak Hour Pedestrian Volumes (7:30 – 8:30)

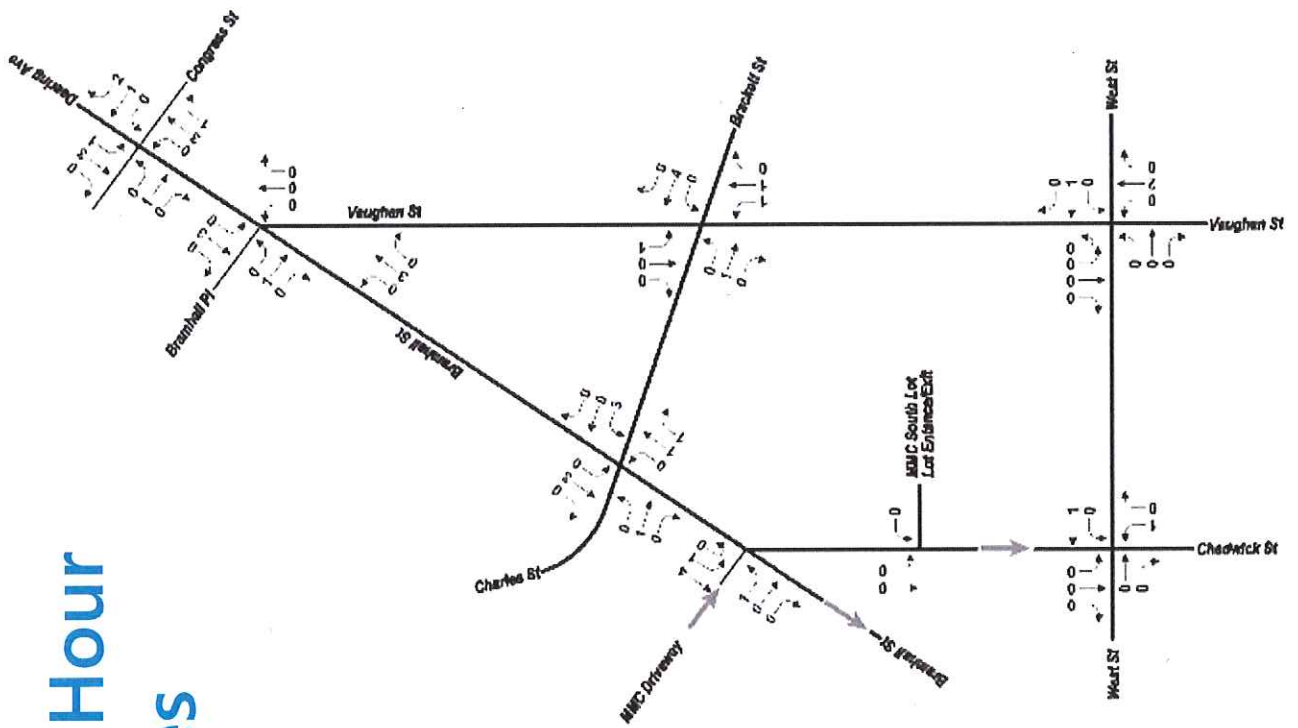


2018 PM Peak Hour Pedestrian Volumes (4:00 – 5:00)

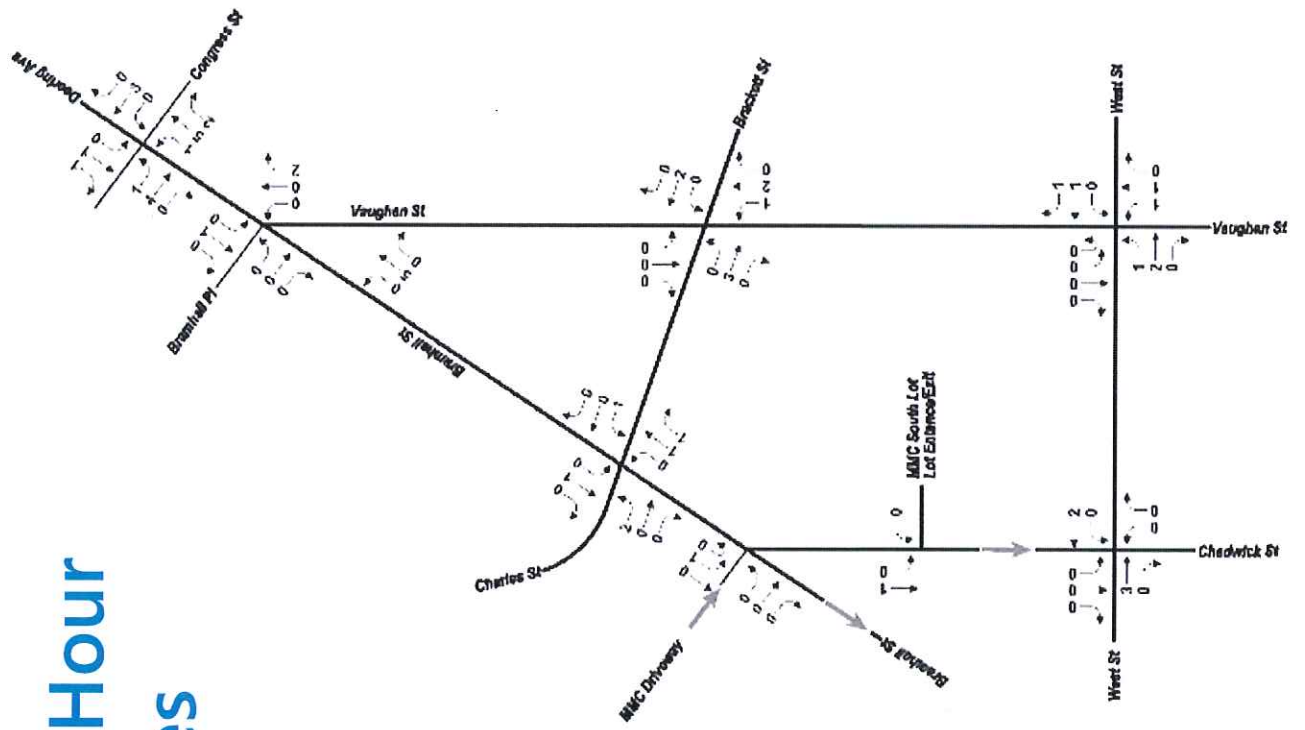


2018 AM Peak Hour Bicycle Volumes

(7:30 – 8:30)

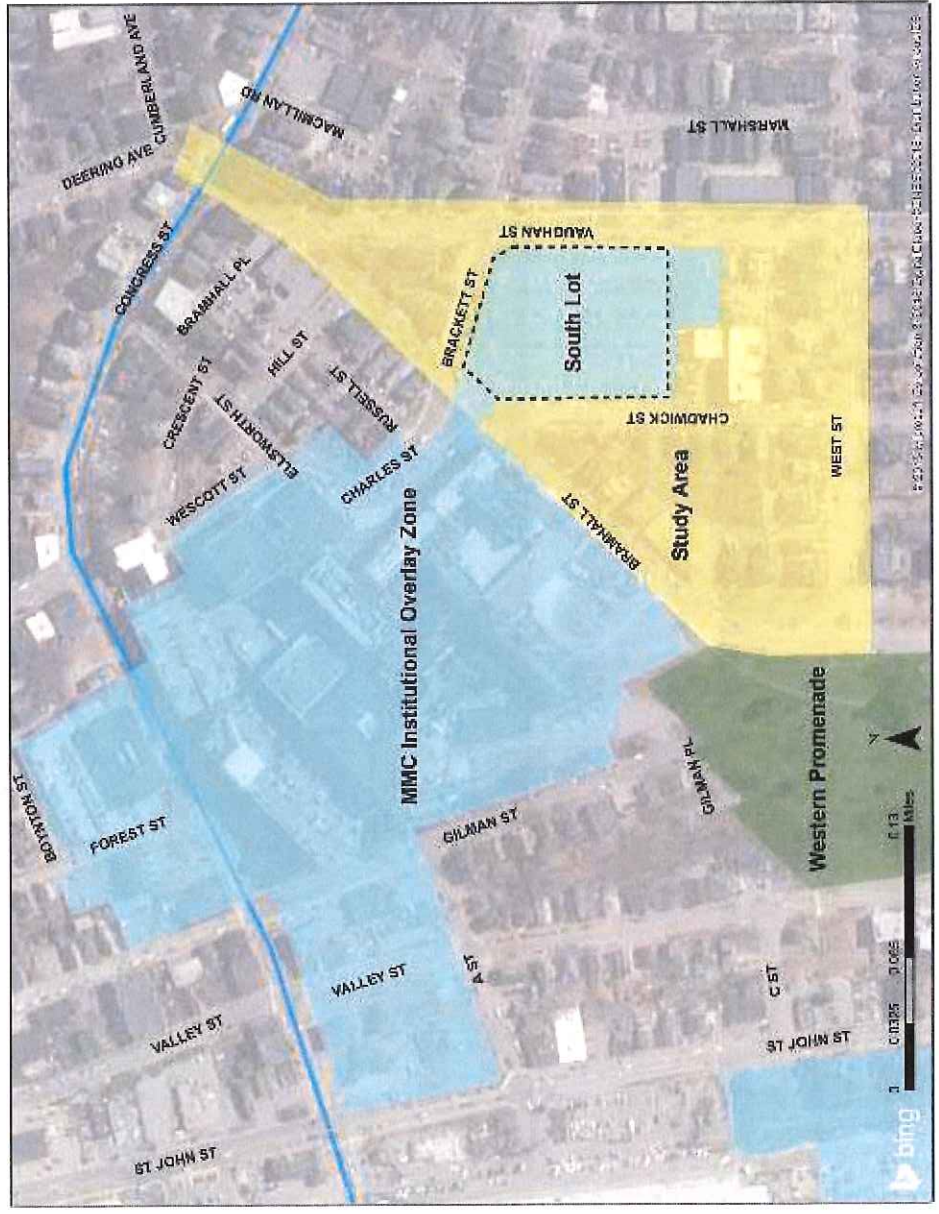


2018 PM Peak Hour Bicycle Volumes (4:00 – 5:00)



Study Area Issues, Challenges, Opportunities

1. Inefficient Traffic Circulation
 2. Traffic Control Driver Non-Compliance
 3. Intersection Safety
 4. Pedestrian Accommodations/ Safety
 5. Bicycle Accommodations/ Safety
 6. Wayfinding
- Major Route
 - MMC Institutional Overlay Zone
 - Study Area
 - ⋯ South Lot
 - Western Promenade



Study Area Issues, Challenges, Opportunities

1. Traffic Circulation

1. Traffic Circulation

- Vehicles exiting South Lot
- Vehicles lost on campus or searching for parking

Traffic circulates West End due to Chadwick St and Bramhall St being one-way.

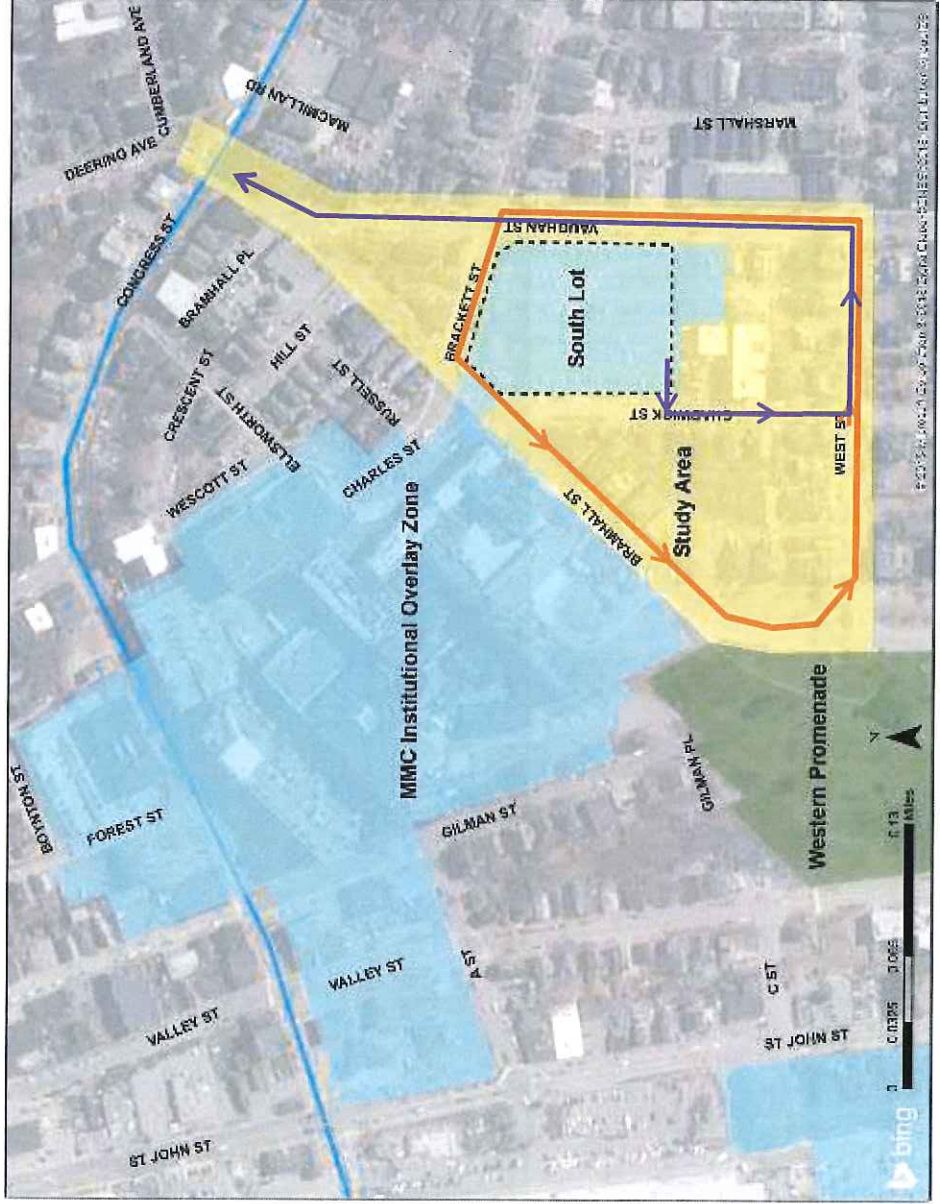
Percent of total Chadwick St traffic attributed to South Lot egress:

- 53% during AM Peak Hour
- 74% during PM Peak Hour

Percentage of total Vaughan St NB traffic attributed to South Lot egress:

- 42% during AM Peak Hour
- 86% during PM Peak Hour



Additional hospital-related traffic may park on-street or circulate in the West End due to lack of clear signage



Study Area Issues, Challenges, Opportunities

2. Traffic Control: Driver Non-Compliance

1. Traffic Circulation

-  Vehicles exiting South Lot
-  Vehicles lost on campus or searching for parking

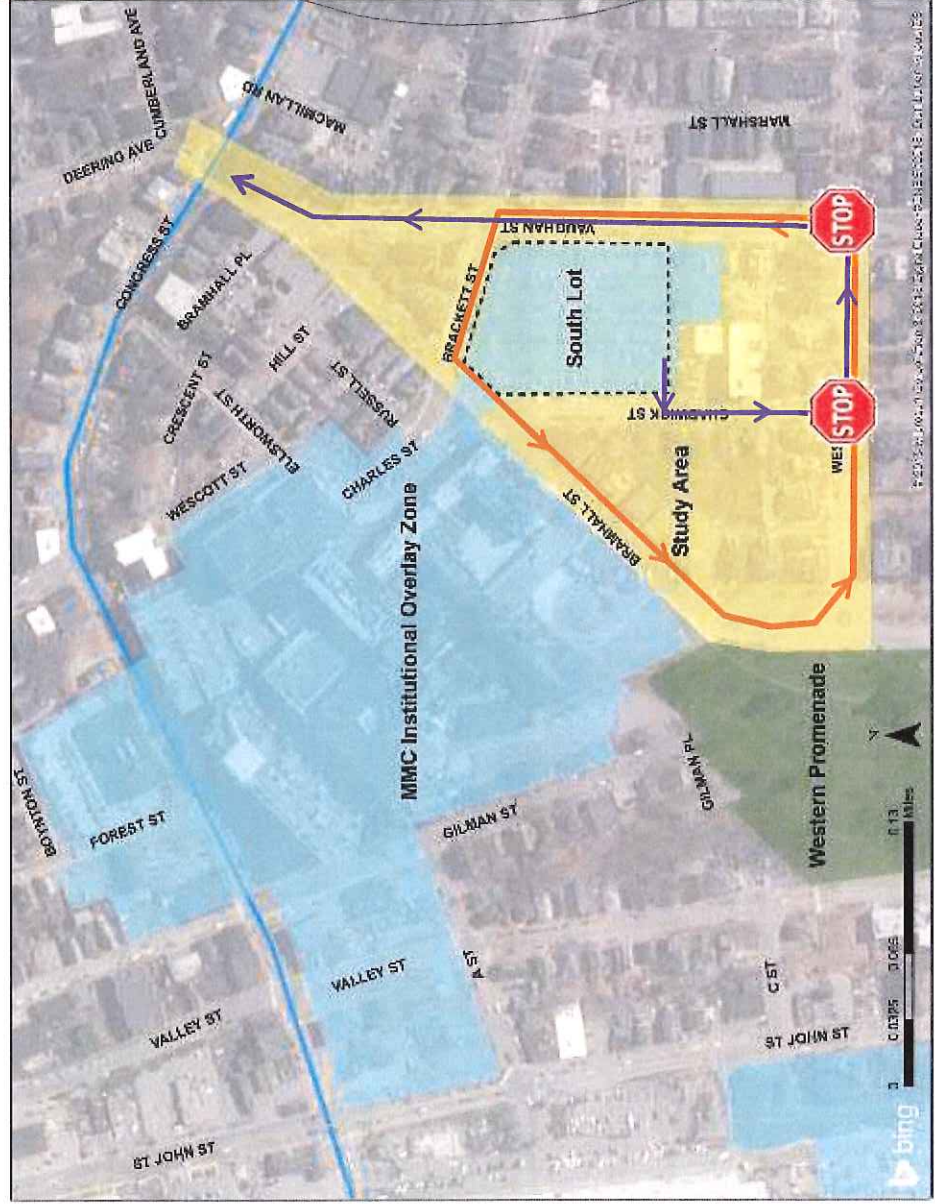


2. Traffic Control: Driver Non-Compliance

Neighborhood concern regarding drivers not complying with STOP control at the intersection of Chadwick Street / West Street



Was this observed at all?



Study Area Issues, Challenges, Opportunities

3. Intersection Safety: Vaughan St at Bramhall St

1. Traffic Circulation

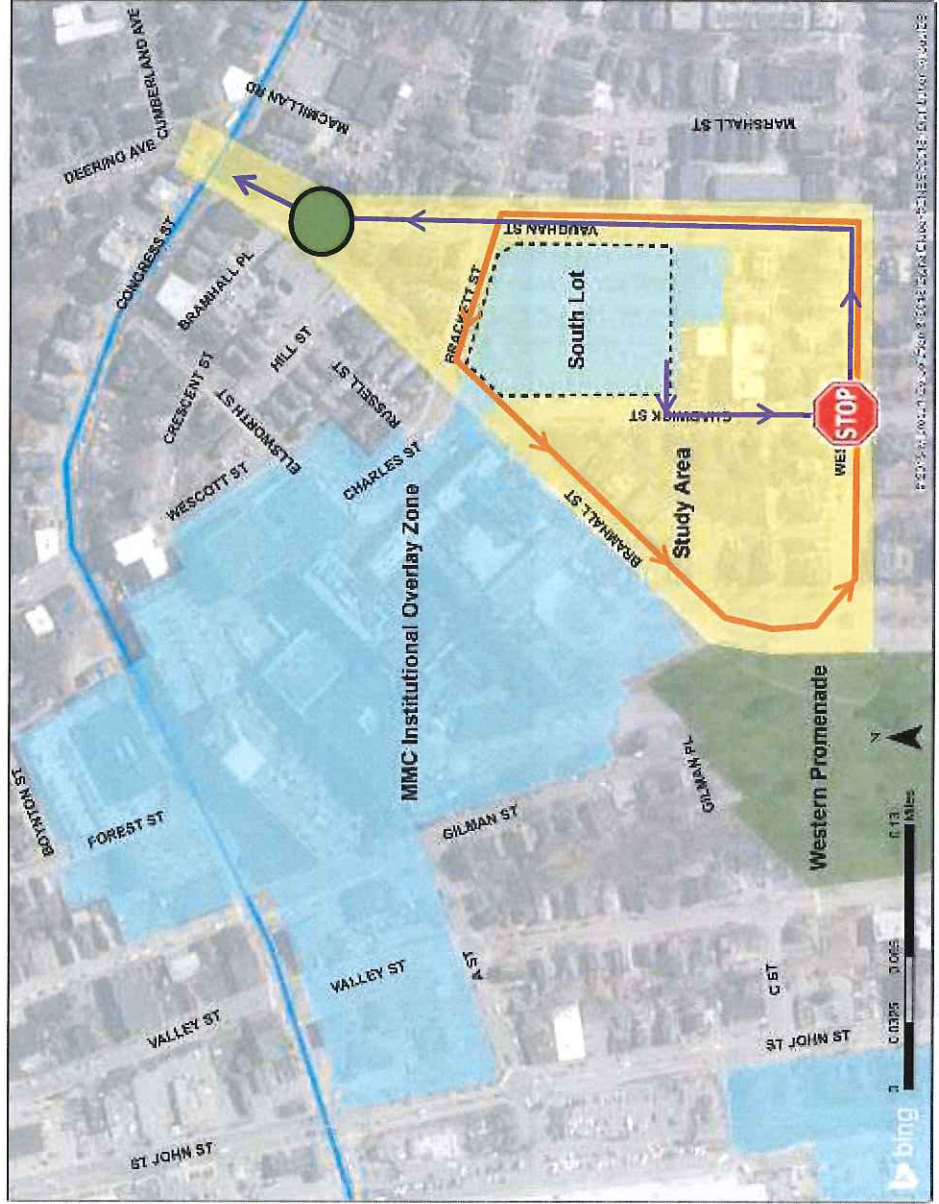
- Vehicles exiting South Lot
- Vehicles lost on campus or searching for parking

-  2. Traffic Control: Driver Non-Compliance

3. Intersection Safety: Vaughan Street at Bramhall Street

- Stop control on Bramhall Street northbound but not Vaughan Street
- Sight distance issues
- Difficult for pedestrians and cyclists to travel through (70-foot crossing on Vaughan Street)

Which direction?



Study Area Issues, Challenges, Opportunities

4. Pedestrian Accommodations/Safety



1. Traffic Circulation
 - Vehicles exiting South Lot
 - Vehicles lost on campus or searching for parking



2. Traffic Control: Driver Non-Compliance
3. Intersection Safety: Vaughan Street at Bramhall Street



- ### 4. Pedestrian Accommodations/Safety
- Faded or non-existent crosswalk and lane markings
 - Wide Crossings
 - Missing Tactile Warning Strip on key corner of hospital to cross to patient parking lot

Bramhall Street crossing

- 50-foot across
- 232 pedestrians during AM Peak

Chadwick Street crossing

- 75-foot across
- 26 pedestrians during AM Peak



Study Area Issues, Challenges, Opportunities

5. Bicycle Accommodations/Safety

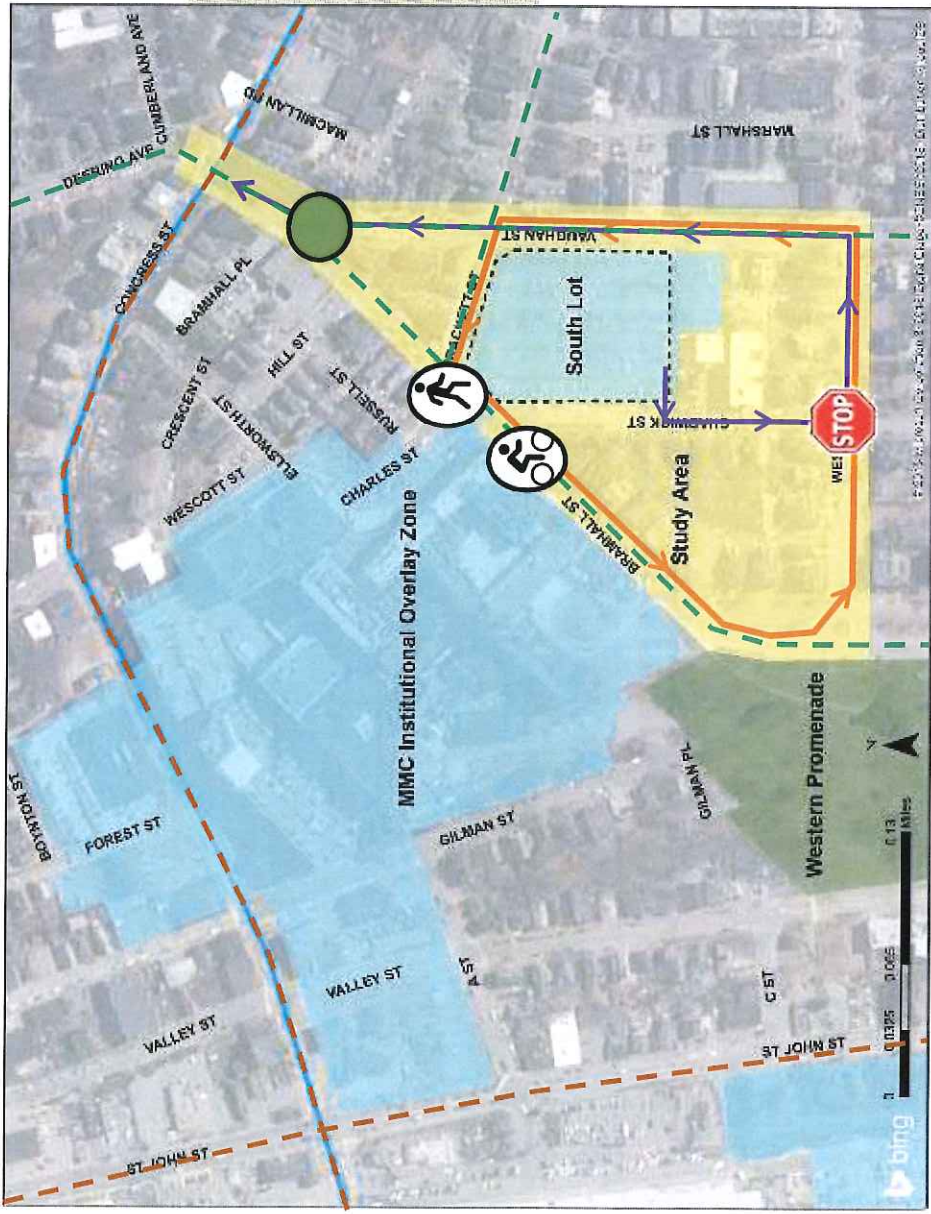
- 1. Traffic Circulation
 - Vehicles exiting South Lot
 - Vehicles lost on campus or searching for parking

- 2. Traffic Control: Driver Non-Compliance

- 3. Intersection Safety: Vaughan Street at Bramhall Street

- 4. Pedestrian Accommodations/Safety

- 5. Bicycle Accommodations/Safety
 - Planned On Road Bikeway
 - Planned Neighborhood Byway
- No in-road bicycle accommodations; all still planned



Study Area Issues, Challenges, Opportunities

6. Wayfinding



1. Traffic Circulation
 - Vehicles exiting South Lot
 - Vehicles lost on campus or searching for parking

2. Traffic Control: Driver Non-Compliance
3. Intersection Safety: Vaughan Street at Bramhall Street

4. Pedestrian Accommodations/Safety
 5. Bicycle Accommodations/Safety
- Planned On Road Bikeway
 - Planned Neighborhood Byway

H 6. Wayfinding



Lack of clear signage for patients/visitors accessing drop-off and parking

- Congress Street signage not close enough to indicate where to turn *to what? what types are we missing?*
- No signage at Vaughan Street from Bramhall Street
- Unclear South Lot parking signage



Study Area Issues, Challenges, Opportunities Summary

1. Traffic Circulation

-  Vehicles exiting South Lot
-  Vehicles lost on campus or searching for parking



2. Traffic Control: Driver Non-Compliance



3. Intersection Safety: Vaughan Street at Bramhall Street



4. Pedestrian Accommodations/Safety

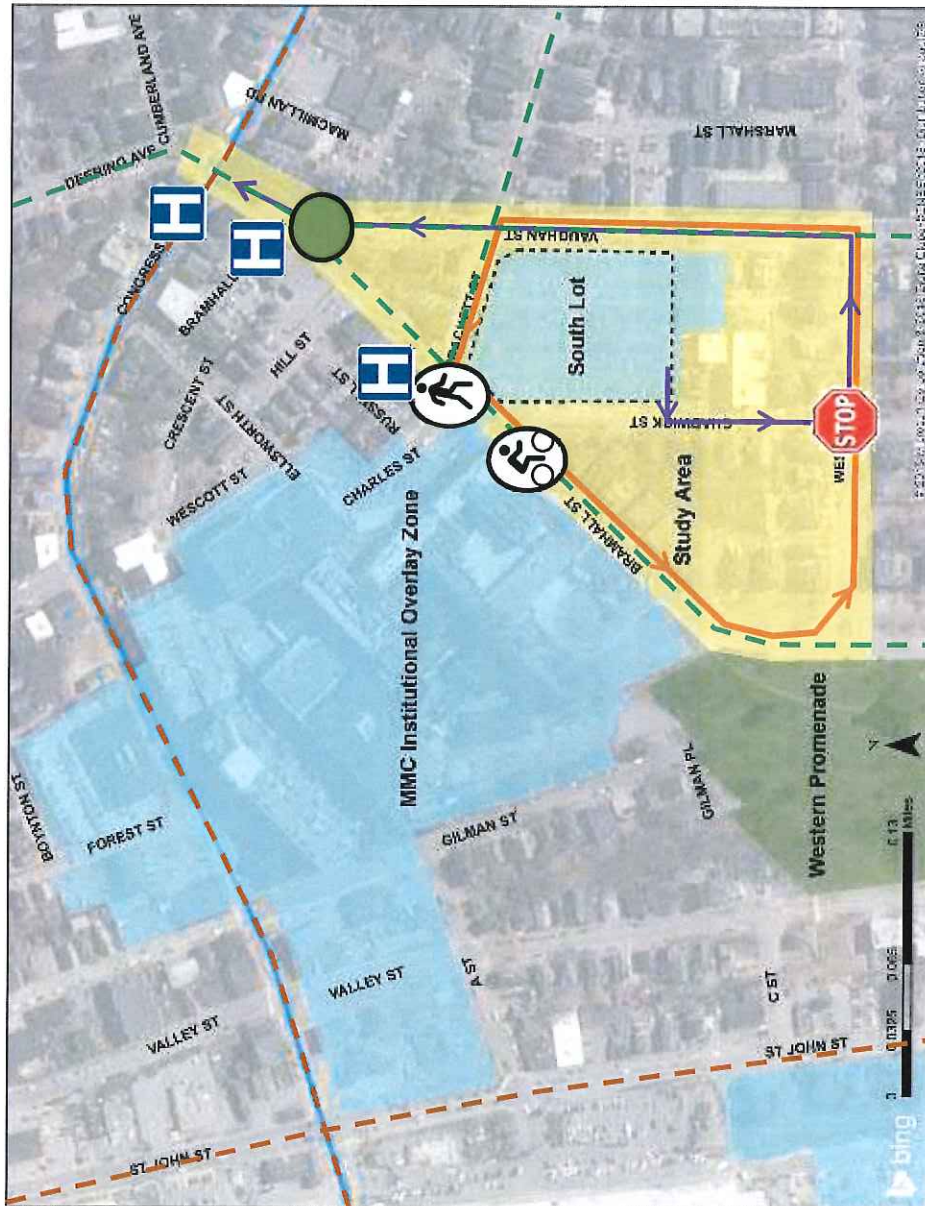


5. Bicycle Accommodations/Safety

-  Planned On Road Bikeway
-  Planned Neighborhood Byway



6. Wayfinding



Potential Improvement Actions to Consider

Conceptual Plan:

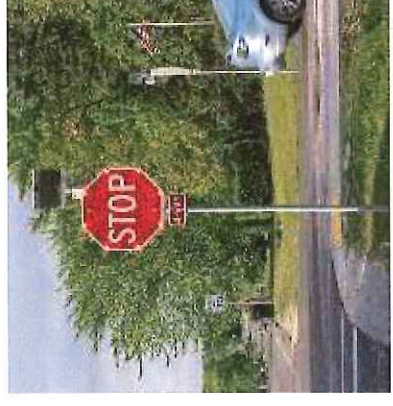
- **Traffic Circulation**
 - Make Chadwick Street two-way between West Street and Bramhall Street.
- **Pedestrian and Bicycle Safety**
 - Provide curb extensions along Bramhall St after/before edge of parking at intersections to extend pedestrian area and shorten crossing distance at Bramhall Street/Chadwick Street, Bramhall Street/Brackett Street.
 - Restripe pedestrian crosswalks so they are fresh and more visible.
 - Install tactile warning strip at key hospital crossing across Bramhall Street.
 - Add sharrows and bike lanes on Bramhall Street, Vaughan Street and Brackett Street where they fit. Consistent with City's neighborhood byway plan.
 - Remove perpendicular on-street handicapped parking at intersection of Bramhall and Chadwick Street.
 - Improve bus stop on Bramhall Street.

■ **Intersection Safety: Bramhall Street at Vaughan Street**

- Change geometry of Bramhall Street and Vaughan Street by adding curb extensions to improve safety for pedestrians and shorten crossing distance.
- Restripe pedestrian crosswalks so they are fresh and more visible.
- Consider Vaughan Street stop control instead of Bramhall St northeast bound due to poor sight distance and re-routed South Lot traffic.
- Install LED flashing STOP signs and add stop bars.

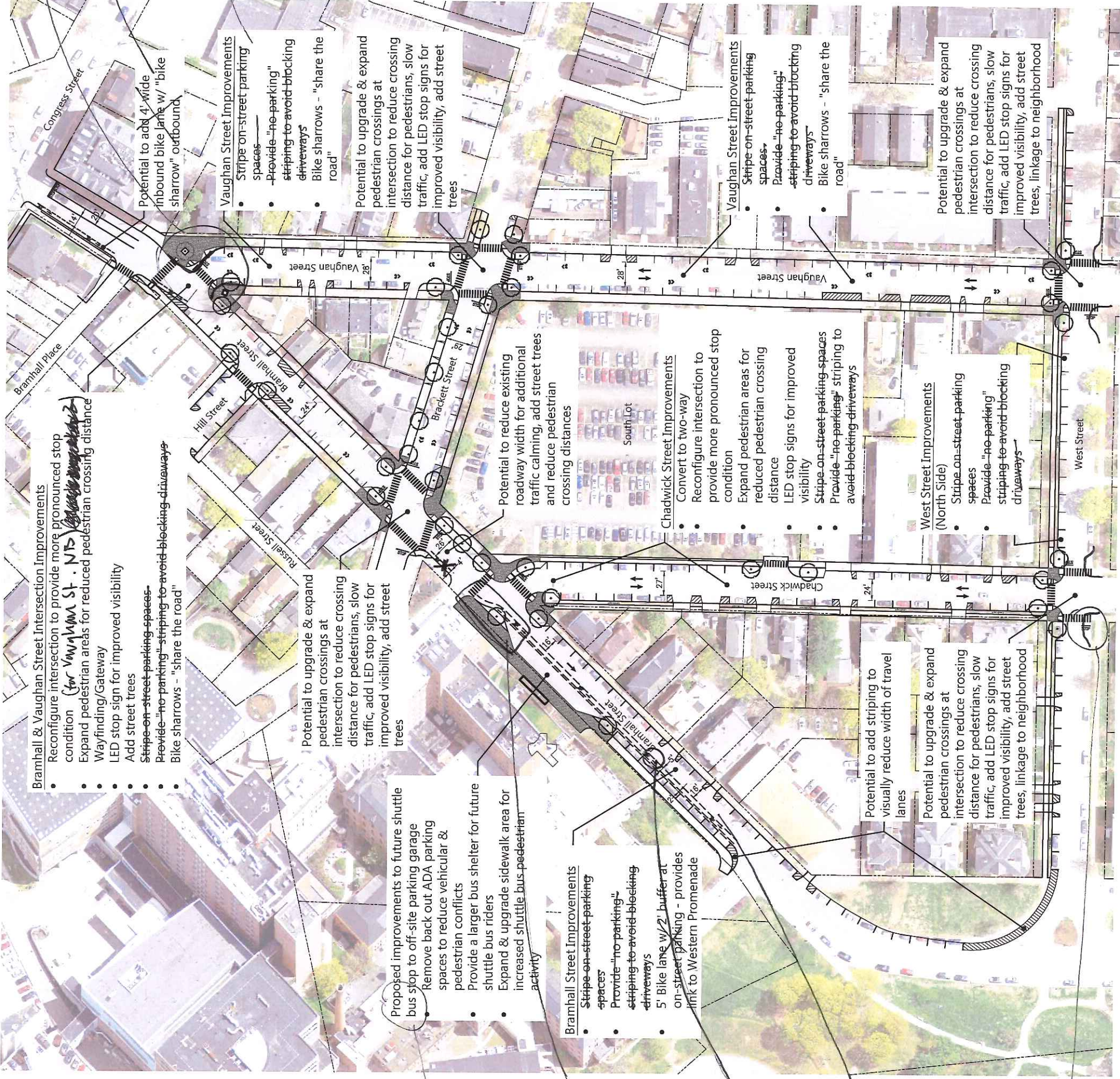
■ **Improve Wayfinding**

- **Increased Patient/Visitor Parking**
 - Will help reduce hospital related visitors from circulating looking for parking or getting lost trying to find MMC's South Lot



Questions/Next Steps





6) Mostly to bring in at right angle
Add US treatments - more ex. drain
on Bramhall
No no bike lane - use
sharrows instead.

7) We do not stripe individual spaces
Sometimes we stripe a parking lane,
but not sure this would be beneficial here.

8) Add plan for Crescent/Wescott parking
to this graphic -

9) MMC BDO AT
BDO comment - can we do anything there?
NAME ON STREET City of Portland
SIDE OF STRIPES?

- Bramhall & Vaughan Street Intersection Improvements**
- Reconfigure intersection to provide more pronounced stop condition (for Vaughan St. NB)
 - Expand pedestrian areas for reduced pedestrian crossing distance
 - Wayfinding/Gateway
 - LED stop sign for improved visibility
 - Add street trees
 - Stripe on-street parking spaces
 - Provide "no-parking" striping to avoid blocking driveways
 - Bike sharrows - "share the road"

- Potential to upgrade & expand pedestrian crossings at intersection to reduce crossing distance for pedestrians, slow traffic, add LED stop signs for improved visibility, add street trees

- Proposed improvements to future shuttle bus stop to off-site parking garage
- Remove back out ADA parking spaces to reduce vehicular & pedestrian conflicts
 - Provide a larger bus shelter for future shuttle bus riders
 - Expand & upgrade sidewalk area for increased shuttle bus pedestrian activity

- Bramhall Street Improvements**
- Stripe on-street parking spaces
 - Provide "no-parking" striping to avoid blocking driveways
 - 5' Bike lane w/ 2' buffer at on-street parking - provides link to Western Promenade

- Potential to reduce existing roadway width for additional traffic calming, add street trees and reduce pedestrian crossing distances

- Chadwick Street Improvements**
- Convert to two-way
 - Reconfigure intersection to provide more pronounced stop condition
 - Expand pedestrian areas for reduced pedestrian crossing distance
 - LED stop signs for improved visibility
 - Stripe on-street parking spaces
 - Provide "no-parking" striping to avoid blocking driveways

- West Street Improvements (North Side)**
- Stripe on-street parking spaces
 - Provide "no-parking" striping to avoid blocking driveways

- Potential to add striping to visually reduce width of travel lanes
- Potential to upgrade & expand pedestrian crossings at intersection to reduce crossing distance for pedestrians, slow traffic, add LED stop signs for improved visibility, add street trees, linkage to neighborhood

- Potential to add 4'-wide inbound bike lane w/ "bike sharrows" outboard.
- Vaughan Street Improvements**
- Stripe on-street parking spaces
 - Provide "no-parking" striping to avoid blocking driveways
 - Bike sharrows - "share the road"

- Potential to upgrade & expand pedestrian crossings at intersection to reduce crossing distance for pedestrians, slow traffic, add LED stop signs for improved visibility, add street trees

- Vaughan Street Improvements**
- Stripe on-street parking spaces
 - Provide "no-parking" striping to avoid blocking driveways
 - Bike sharrows - "share the road"

- Potential to upgrade & expand pedestrian crossings at intersection to reduce crossing distance for pedestrians, slow traffic, add LED stop signs for improved visibility, add street trees, linkage to neighborhood

1) waiting on comments from Metro - Why is this so wide? How would this accommodate Metro + shuttles?

2) Eliminate bumpout in favor of on street parallel ADA parking.

3) Eliminate bike lane + buffer in favor of sharrows

4) Show this stretch of Bramhall two-way
 23' ->
 11.5' | 11.5' P
 + address intersection + address intersection with west.

5) Add curb extensions on West

