KITTELSON & ASSOCIATES
851 SW 6th Avenue, Suite 600
Portland, OR 97204
P 503.228.5230

TECHNICAL MEMORANDUM

October 22, 2024 Project# 293380.000

To: Chris, Andrejko
Rowell Brokaw Architects
1203 Willamette, Suite 210
Eugene, OR 97401

From: Phill Worth

CC:

RE: Next Generation Housing Development Plan, Transportation Summary

This transportation summary is provided to support communications between the University of Oregon (UO), the campus community, and the surrounding Eugene community with regard to the Next Generation Housing Development Plan. To date, Kittelson & Associates, Inc., has had the opportunity to:

- Measure, observe, and review travel conditions on the University of Oregon main campus in Eugene, Oregon during normal campus operations;
- Review current campus plans and policies related to land use, transportation, and campus operations; and
- Inform and review concepts that will ultimately form the housing development plan.

TRANSPORTATION OVERVIEW

The vibrancy and dynamism of campus is evidenced by the ebb and flow of people from early morning until well into the evening on any given day of classes. The condensed and residential nature of campus generates peaks of pedestrian, bicycle, scooter, and skateboarding activity on virtually an hourly basis, as well as fairly typical morning and evening motor vehicle commuting patterns for the thousands of employees that work on the campus.

The preponderance of daily academic life occurs on the area of campus between Kincaid Street and Agate Street, Franklin Boulevard and 18th Avenue. While new student housing has recently developed along the west side of Agate Street, the majority of on-campus student housing is located between Agate Street and Villard Street, 13th Avenue and 17th Avenue.

Generalizing that most academic activity is west of Agate Street and most student housing is east of Agate Street; large volumes of pedestrians can be seen crossing this street throughout the day and in concentrations during class change periods. These crossings most commonly occur between 13th Avenue and 15th Avenue today.

Agate Street carries relatively low motor vehicle volumes, given its classification as a Minor Arterial by the city of Eugene. Much of the vehicle traffic on the street is related to campus activities (commuters,

resident students, visitors, and service vehicles), with a lower portion due to travelers passing through the area. Surface parking, located in the area between Agate Street and Villard Street, 15th Avenue and 17th Avenue, is another contributor to the motor vehicle traffic on Agate Street.

NEXT GENERATION HOUSING DEVELOPMENT

The Next Generation Housing Development contemplates the expansion of housing opportunities and housing capacity for UO students. Potentially 3,500 to 3,800 new beds could be achieved over an extended period of time (possibly decades). The range of housing extends from entering Freshman to Graduate students and their families. The area of campus contemplated for this housing development is generally bounded by Agate Street and Villard Street, from north of 15th Avenue to south of 17th Avenue.

In order to achieve the development potential represented by the Next Generation Development Plan, new buildings would be constructed and most of the surface parking and many of the low-density residential buildings in the study area would be removed.

Transportation Implications

The most likely outcome of increased student housing in this area of campus will be increased pedestrian activity from early morning and well into the evening. Sidewalks along 17th Avenue, 15th Avenue, and Agate Street will experience much greater demands from pedestrians, as well as cyclists and other micromobility users. Pathways that link this expanded residential neighborhood to other areas of campus will also see increased demand by all active modes. Finally, pathways that interconnect buildings and open spaces will be needed to complete the neighborhood pedestrian network.

The displacement of surface parking could result in one of two options. The study area could end up with a net reduction in motor vehicle parking or a parking garage could be constructed in the study area to partially or fully offset those that would be displaced.

- Should large numbers of parking spaces be permanently displaced, the result would be a noticeable reduction in motor vehicle activity in the area, particularly on Agate Street, Villard Street, 15th Avenue, and 17th Avenue. Such a reduction is seen as favorable, given the anticipated high pedestrian activity and the residential character of the area.
- If a parking garage is constructed as a partial or complete replacement of the surface parking in the area, total motor vehicle volumes may not noticeably change, but patterns may be affected in the areas closest to the garage.

Early Recommendation for Transportation Improvements

It is paramount that pedestrians and other active transportation modes are safely and comfortably accommodated as they move within this expanded residential neighborhood, as well as to all other areas of the campus and beyond. New and expanded pedestrian and bicycle facilities are likely to develop along 15th Avenue, 17th Avenue, and Agate Street. Pedestrian scale lighting, benches, trash receptacles, and other pedestrian amenities would all support pedestrian travel as the primary and preferred mode on the campus.

Bicycle and other micromobility facilities, especially along 15th Avenue, 17th Avenue, and Agate Street are also expected to be improved to encourage and accommodate these user types. This will include safe and efficient connections to transit options that are available locally and regionally.

A key concern exists with Agate Street and its high volume of pedestrian crossing activity that is expected to increase over time. What magnifies this concern is motorist behavior, particularly excessive speeds. The segment of Agate Street between 15th Avenue and 19th Avenue is wide and includes a painted median, as well as bike lanes and on-street parking in both directions. This segment also has no stop controls on Agate Street. These conditions lead to some motorists traveling well above the target speed for a street with such heavy pedestrian activity.

Early recommendations being considered to better manage motorist speeds and improve conditions and accommodation for pedestrians (on Agate, 15th, and 17th) include the following:

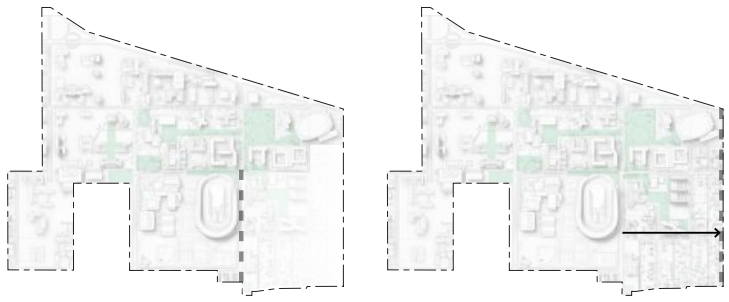
- Curb bulbouts at intersections to shorten the pedestrian crossing distance and narrow the line of travel for motorists.
- Raised crosswalks to eliminate the need for ramps and provide motorists with additional cues that this is a pedestrian area.
- Tabletop intersections that bring all elements of the intersection up to the pedestrian level and provide motorists with cues that this is a pedestrian area.
- Pinch point treatments that briefly narrow the roadway and the visual line of travel for motorists.
- Possibly installing all-way stop controls on Agate Street at 17th Avenue and/or 18th Avenue.

TRANSPORTATION: CAMPUS VISION

NEXT GENERATION CHANGES

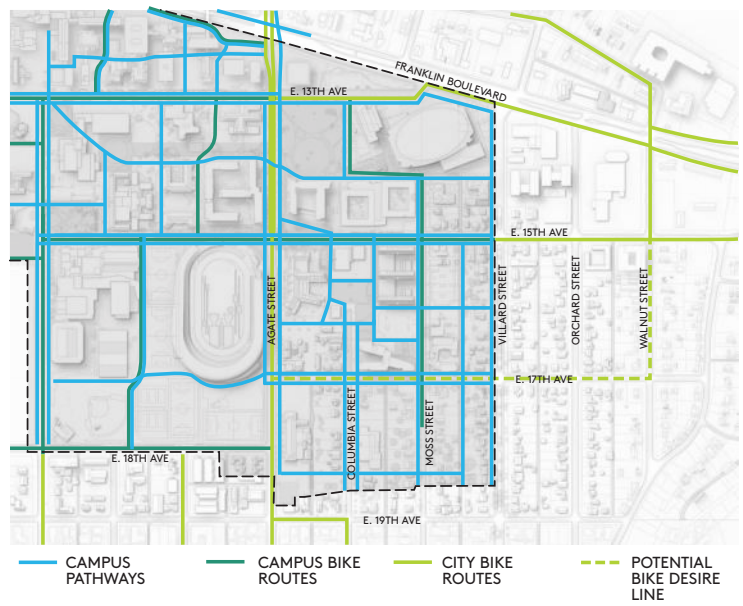
UO STUDENTS EAST OF AGATE:

2024:	2,380 - 2,820	UNDERGRADUATE
	230	GRADUATE
2028:	3,980 - 4,420	UNDERGRADUATE
	230	GRADUATE
LONG-TERM:	5,800 - 6,340	UNDERGRADUATE
	230-290	GRADUATE

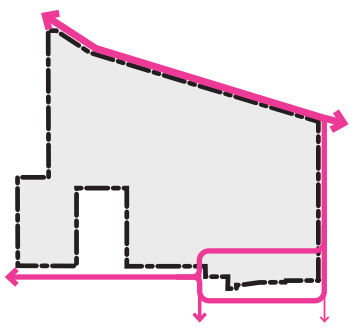


UO NEXT GENERATION CAMPUS:
Brings campus into focus out to Villard, the east edge of the UO Campus

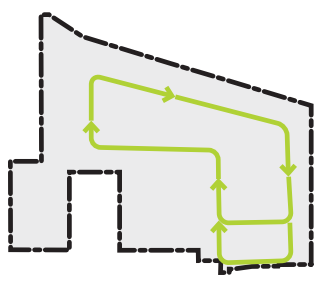
PROPOSED PEDESTRIAN & BIKE NETWORK



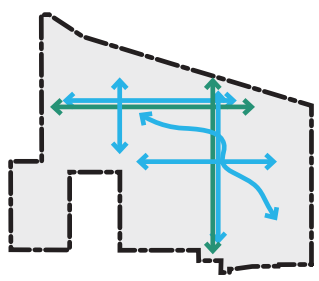
BALANCING ALL MODES IN AND AROUND CAMPUS



"COMPLETE STREET" IMPROVEMENTS ALLOW EFFICIENT VEHICULAR MOVEMENT ALONG THE EDGE OF CAMPUS WHILE SHAPING PLEASANT NEIGHBORHOOD STREETS

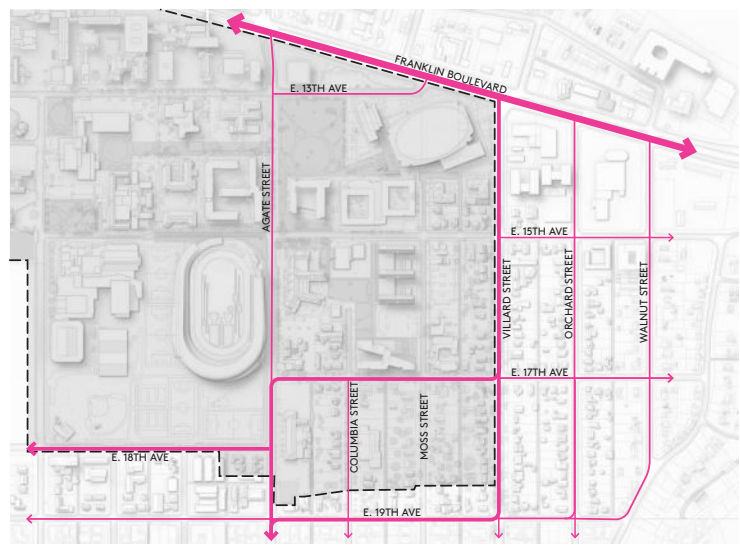


SERVICE ROUTES PRIMARILY OPERATE WITHIN CAMPUS INTERIOR



PEDESTRIANS AND BIKES PRIORITIZED WITHIN CAMPUS

PROPOSED VEHICULAR NETWORK



VISION FOR CORRIDOR CHARACTER

15TH: PEDESTRIAN PLAZA
A CONTINUATION OF POWELL PLAZA'S CHARACTER AS A PRIMARY ROUTE FOR PEDESTRIANS AND BIKES THAT ALSO PROVIDES SERVICE ACCESS

17TH: MOVEMENT STREET
A CLEAR CONNECTOR FOR VEHICLES AND BIKES, WITH SAFE CROSSINGS AND SIDEWALKS FOR PEDESTRIANS

MOSS: ACTIVITY STREET
A NEXUS OF ACTIVITY AND ENERGY, WITH INDOOR/OUTDOOR POROSITY AND GENEROUS PEDESTRIAN SPACE FOR MOVING AND GATHERING

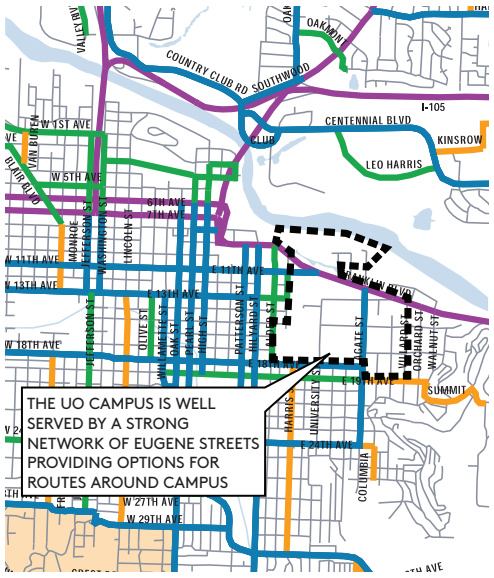
AGATE: CAMPUS GATEWAY
A CAMPUS CONNECTOR AND GATEWAY, WITH BIKE LANES AND SAFE CROSSINGS FOR PEDESTRIANS

VILLARD: RESIDENTIAL BOULEVARD
A GREEN RESIDENTIAL STREET WITH MATURE TREE CANOPY THAT OFFERS A GATEWAY ONTO CAMPUS

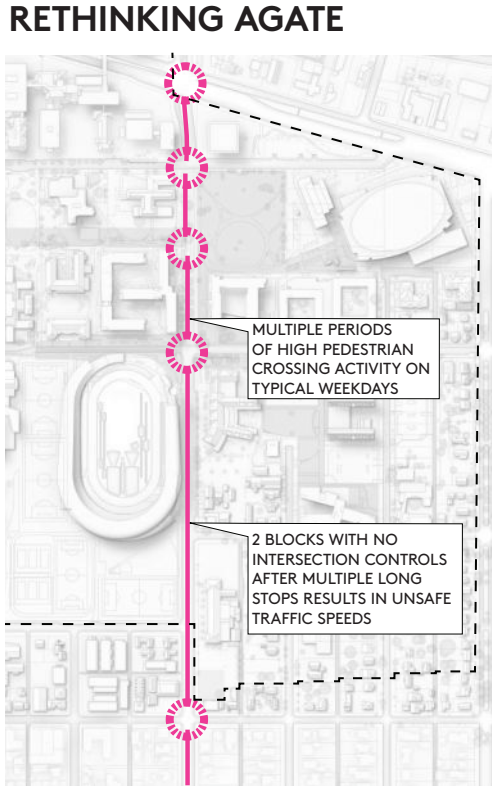
COLUMBIA: STORMWATER STREET
A CLEAR CONNECTOR FOR VEHICLES AND BIKES, WITH SAFE CROSSINGS AND SIDEWALKS FOR PEDESTRIANS

TRANSPORTATION: IMPLEMENTING A STRONG NETWORK

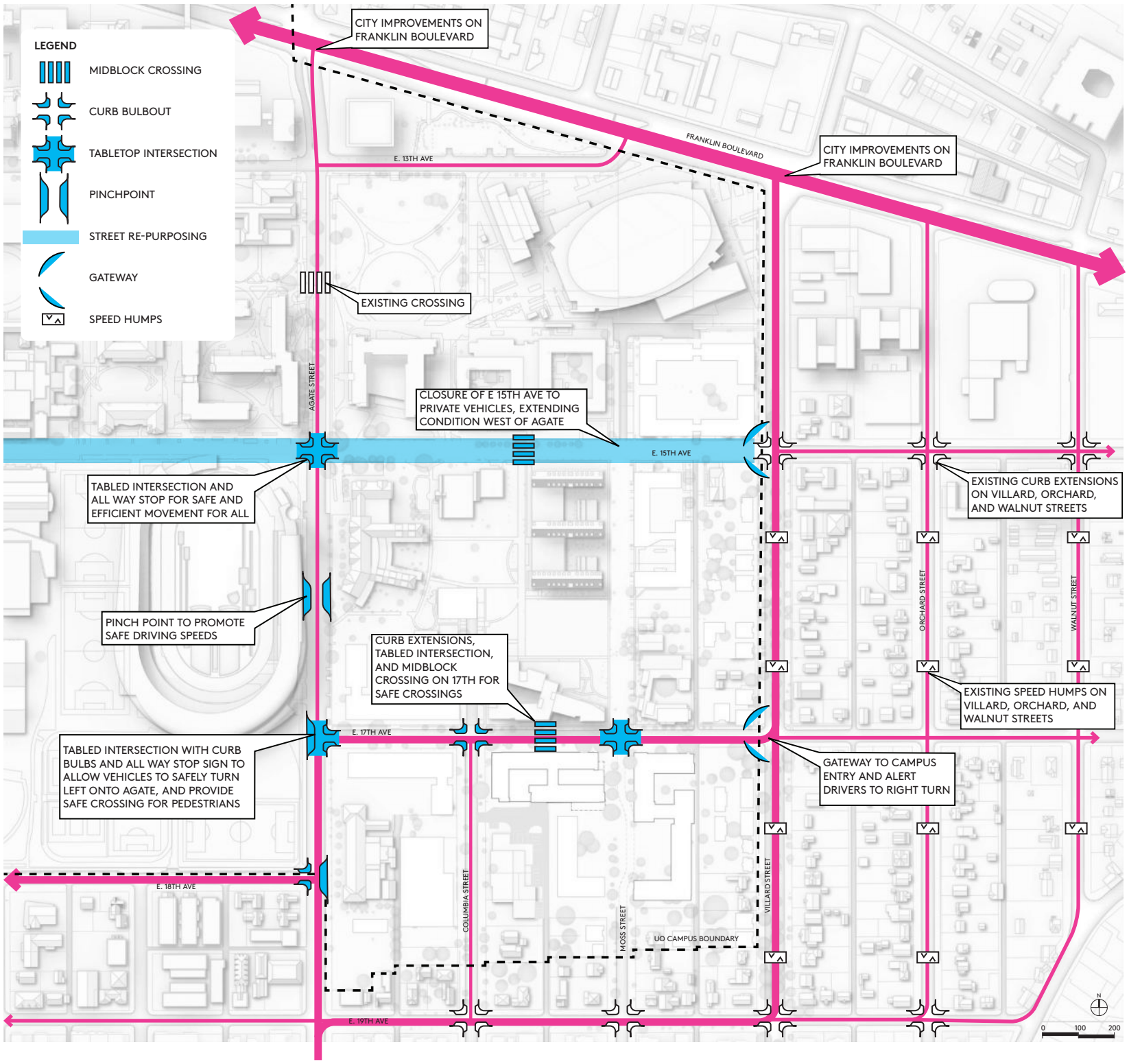
STREET CLASSIFICATION



RETHINKING AGATE

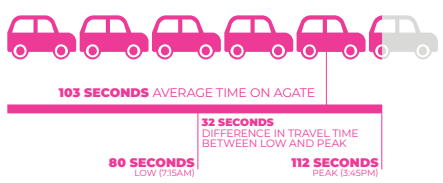


POSSIBLE LONGTERM TRANSPORTATION IMPROVEMENTS

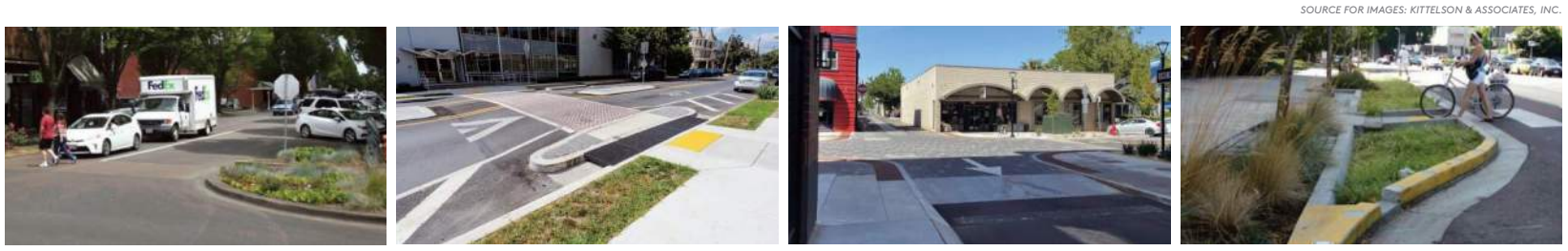


SOURCE FOR IMAGES: KITTELSON & ASSOCIATES, INC.

WHAT ABOUT CONGESTION?



SOURCE FOR TRAVEL TIMES:
INRIX PROBE DATA (AVERAGE OF NORTHBOUND AND SOUTHBOUND BETWEEN FRANKLIN AND E. 18TH AVE, JAN/FEB 2024, TUES, WED, THURS 7AM-7PM)



Curb extension or bulbout

Raised midblock crossing

Raised or tabletop intersection

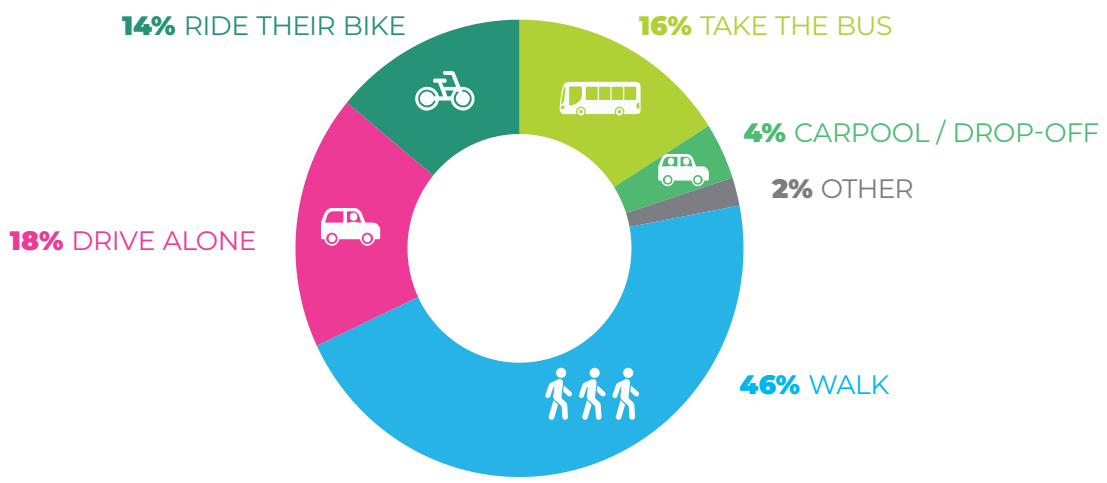
Pinchpoint

PROVIDING MORE HOUSING FOR STUDENTS ON CAMPUS HAS THE NET EFFECT OF **REDUCING CAR TRIPS TO CAMPUS.**

PROVIDING SAFE AND APPEALING ALTERNATIVE CROSSINGS **REDUCES THE VOLUME** OF PEDESTRIANS CROSSING AT 15TH & AGATE.

INTERSECTION IMPROVEMENTS INCLUDING ALL-WAY STOPS AND CURB EXTENSIONS SHORTEN THE CROSSING DISTANCE FOR PEDESTRIANS TO **REDUCE STOPPED TIME FOR VEHICLES**.

HOW DO STUDENTS COMMUTE ON / TO CAMPUS?



WHAT ABOUT PARKING?

PARKING IN THIS AREA IS CURRENTLY THE LAST ON CAMPUS TO SELL OUT. MORE PARKING WOULD MEAN MORE DRIVERS AND CONGESTION.

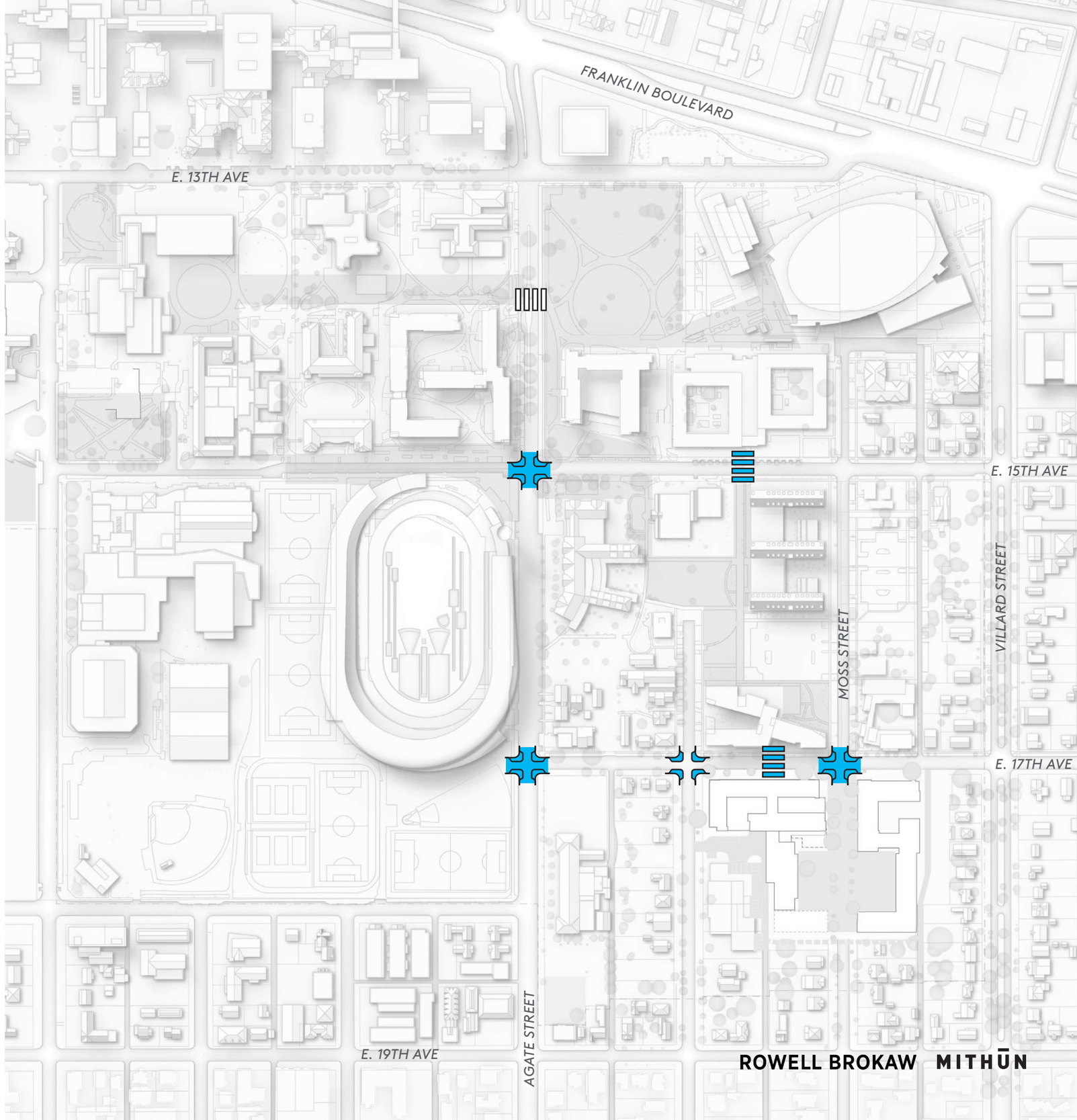
THIS PLAN CONSIDERS HOW DISPLACED SURFACE PARKING COULD BE REPLACED VIA STRUCTURED OR SURFACE PARKING, BUT DISCOURAGES THE ADDITION OF PARKING STALLS BEYOND WHAT CURRENTLY EXISTS.

RECOMMENDED IMPROVEMENTS FOR A SAFE & COMFORTABLE SYSTEM—

POSSIBLE TRANSPORTATION IMPROVEMENTS - PHASES 1 & 2

LEGEND

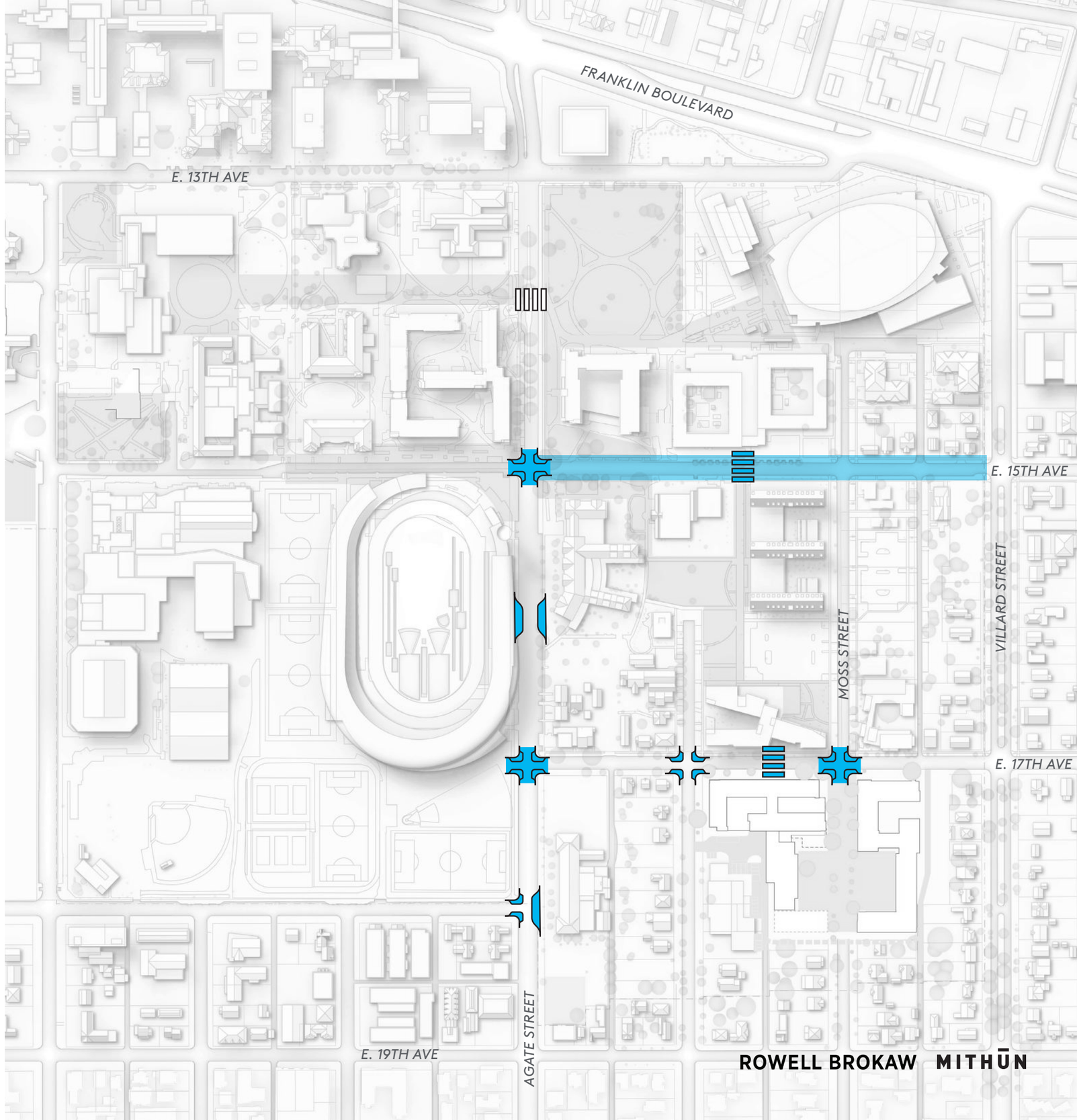
- MIDBLOCK CROSSING
- CURB BULBOUT
- TABLETOP INTERSECTION



POSSIBLE TRANSPORTATION IMPROVEMENTS - NEXT GENERATION PLAN BUILDOUT

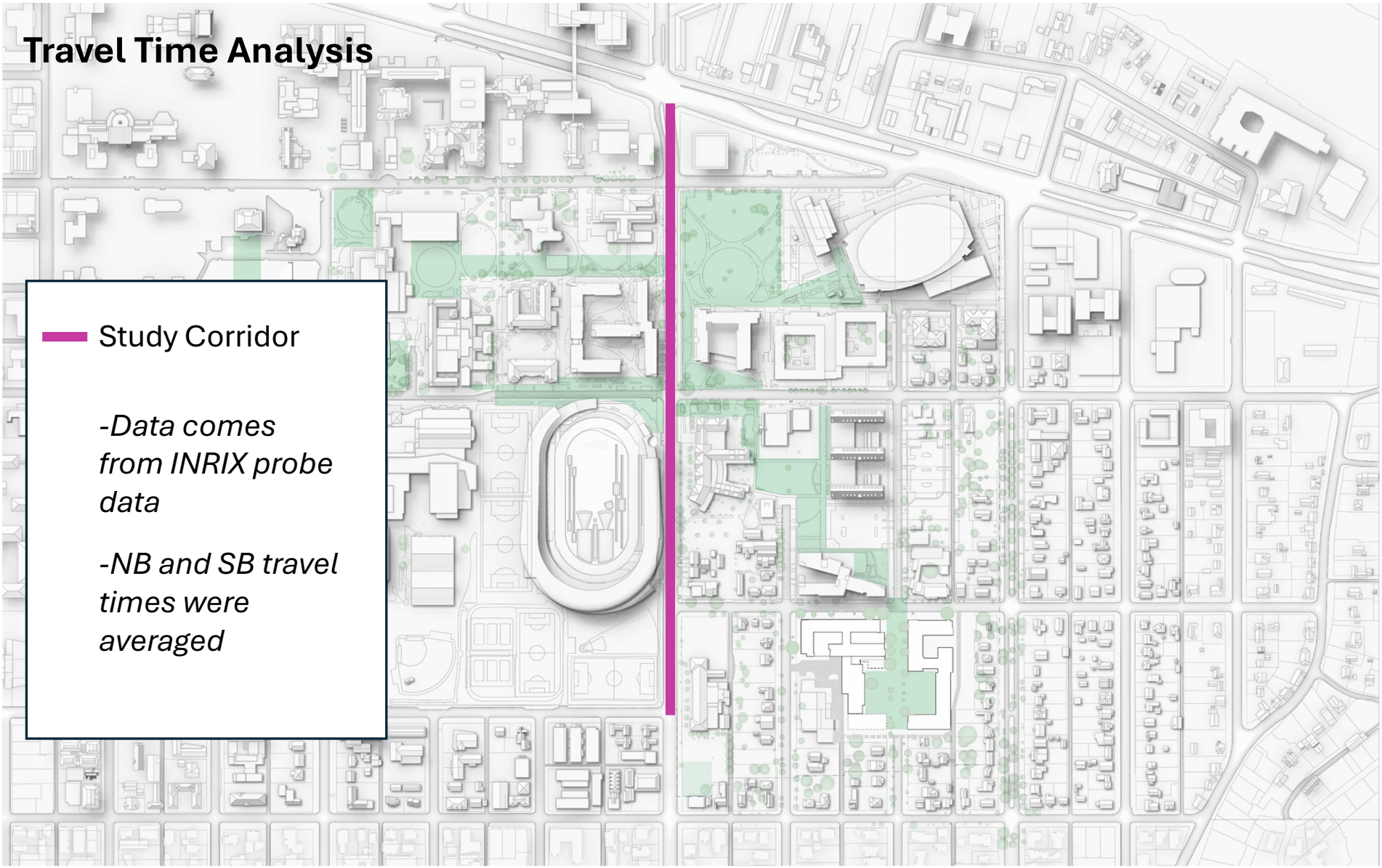
LEGEND

- MIDBLOCK CROSSING
- CURB BULBOUT
- TABLETOP INTERSECTION
- PINCHPOINT
- STREET REPURPOSING

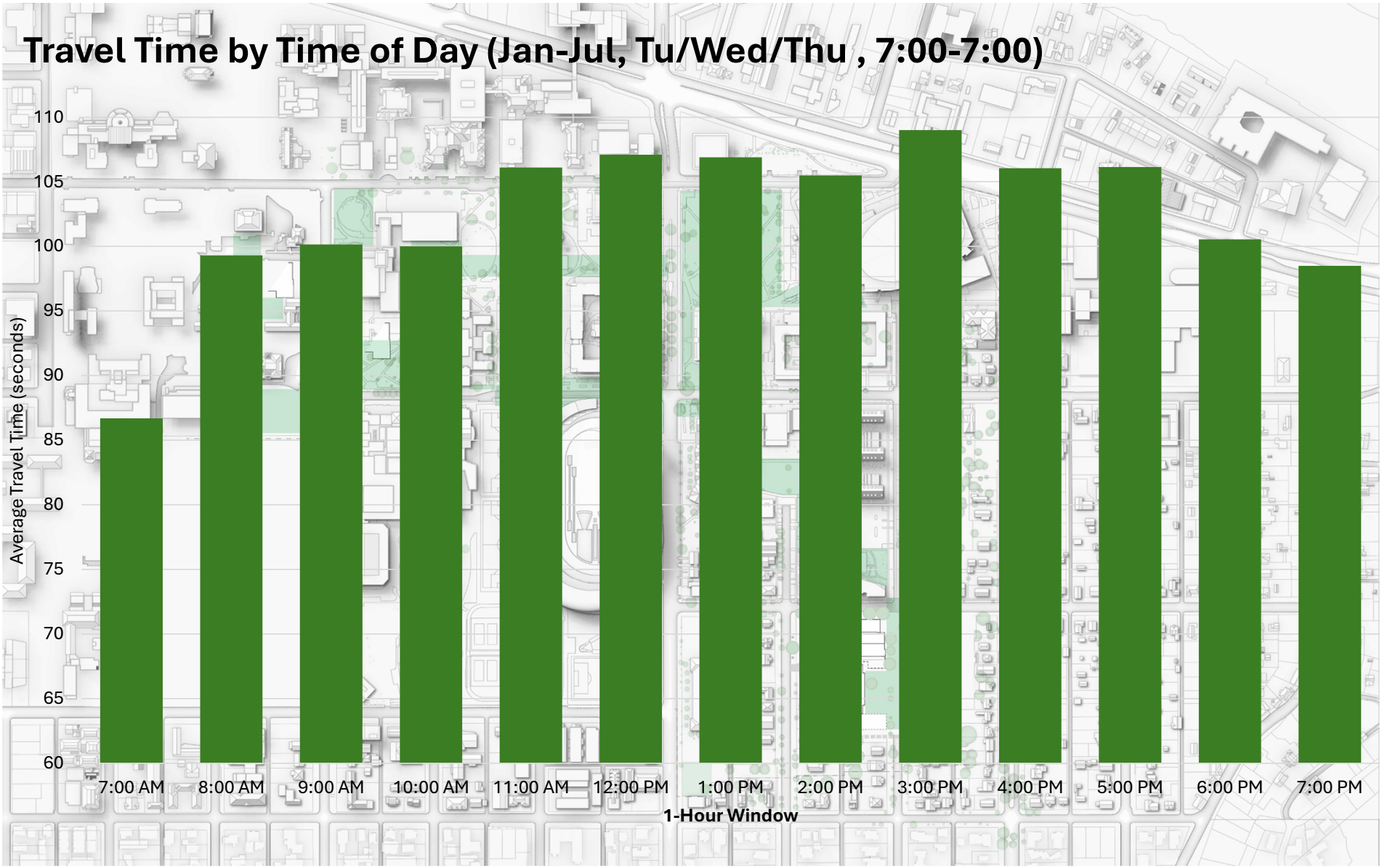


TRAFFIC ANALYSIS —

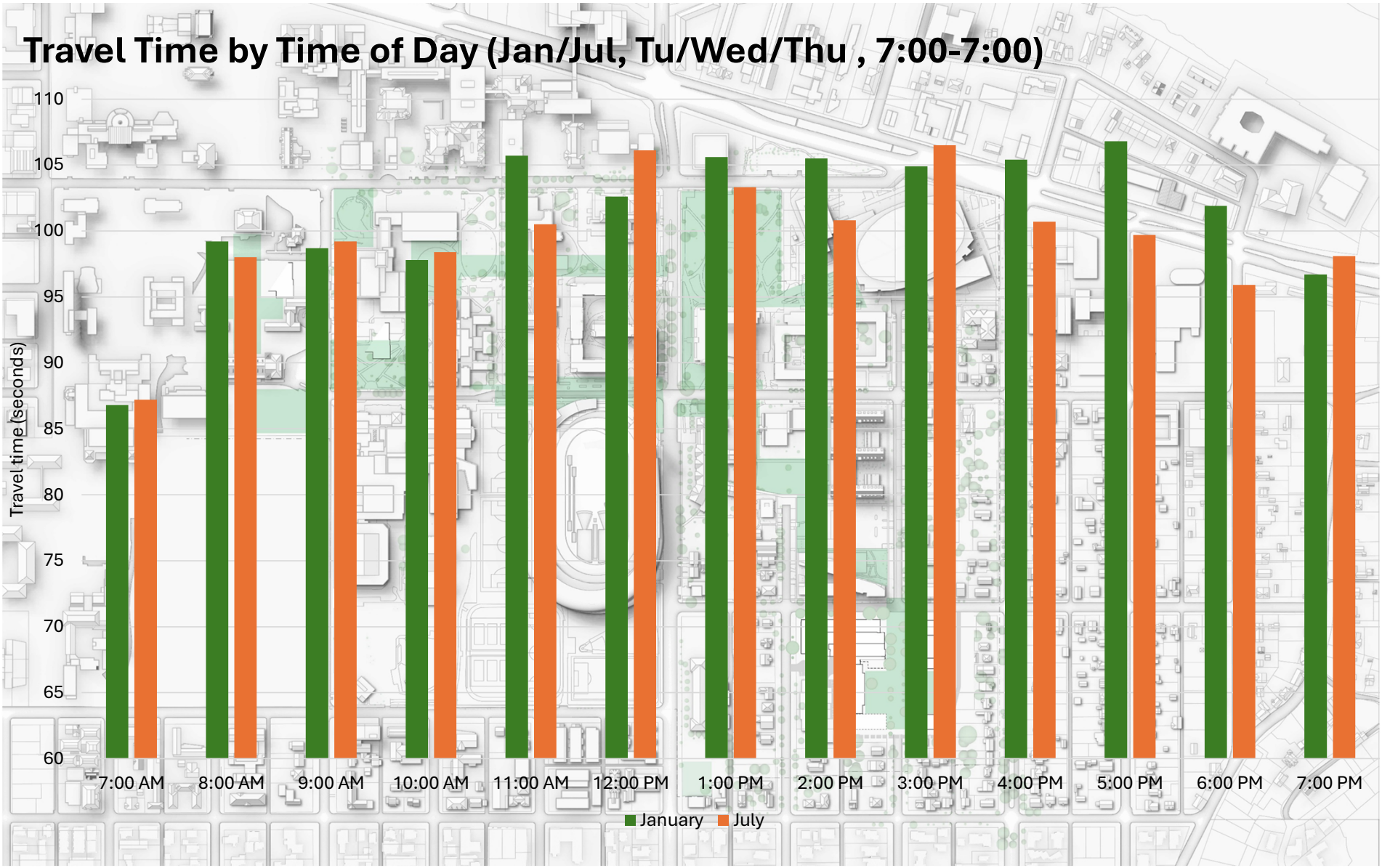
Travel Time Analysis



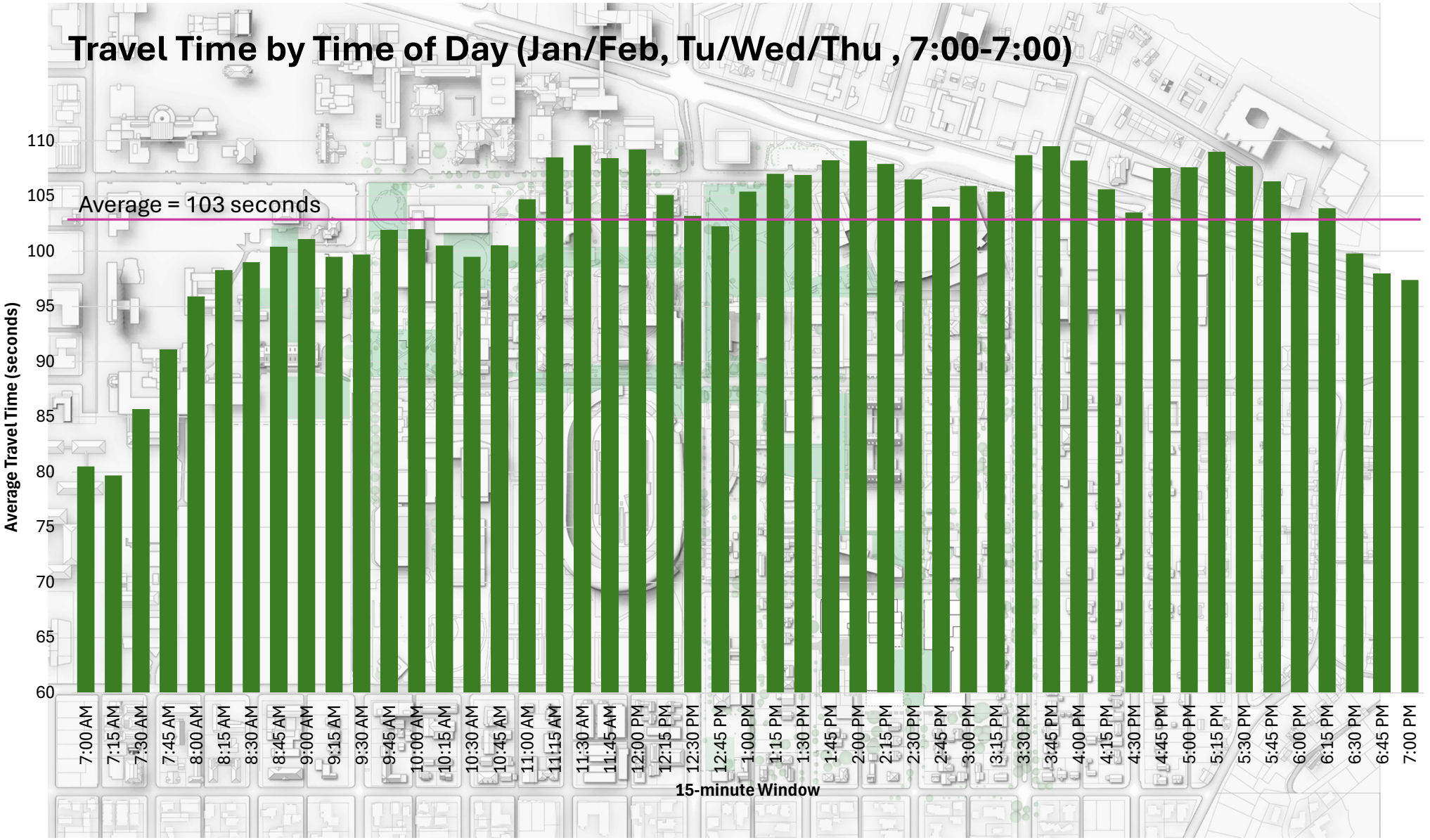
Vehicle Travel Time



Vehicle Travel Time



Vehicle Travel Time



Vehicles, Pedestrians, and Travel Time (Jan 30, 15-minute buckets, 7:30-4:30)