Penn Line TOD Study
TOD Opportunity Analysis

Bowie State Station

Preliminary Design Options, March 08, 2024

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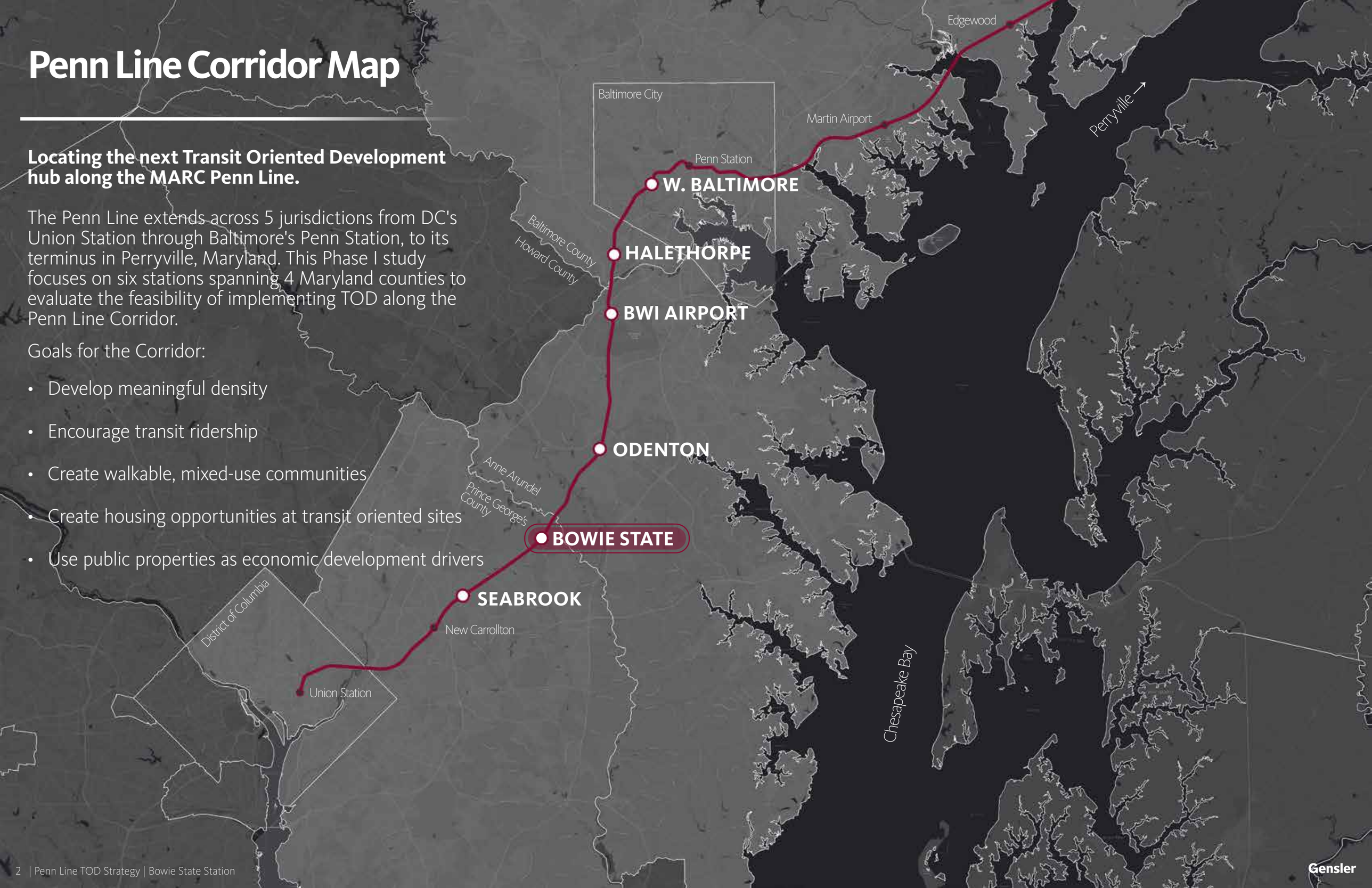
Penn Line Corridor Map

Locating the next Transit Oriented Development hub along the MARC Penn Line.

The Penn Line extends across 5 jurisdictions from DC's Union Station through Baltimore's Penn Station, to its terminus in Perryville, Maryland. This Phase I study focuses on six stations spanning 4 Maryland counties to evaluate the feasibility of implementing TOD along the Penn Line Corridor.

Goals for the Corridor:

- Develop meaningful density
- Encourage transit ridership
- Create walkable, mixed-use communities
- Create housing opportunities at transit oriented sites
- Use public properties as economic development drivers



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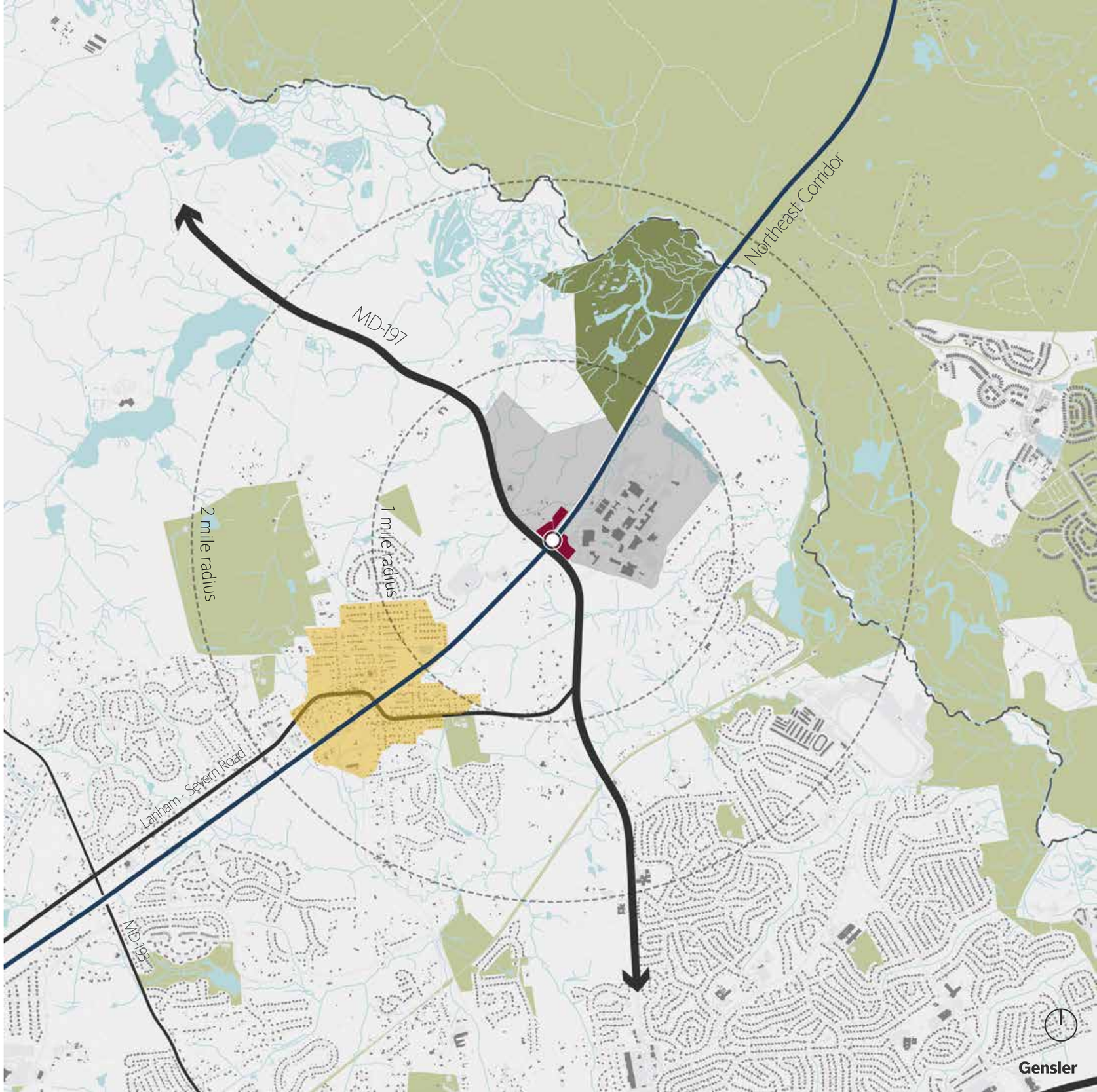
Local Context

PLAN 2035 CENTERS

- The study focus area is located at the heart of the BSU MARC Campus Center as delineated in the Bowie-Mitchellville and Vicinity Master Plan
- The Patuxent Research Refuge stretches south towards the Bowie State University campus, providing BSU students, faculty, and staff with environmental and recreational amenities in close proximity
- Old Town Bowie is a fantastic cultural and historic asset for the region, but provides limited community retail spaces that would support the needs and interests of the student population at Bowie State



Bowie State Station Focus Area
BSU MARC Campus Center
Patuxent Research Refuge
Designated parkland
Old Town Bowie

A Vision for Bowie State Station:

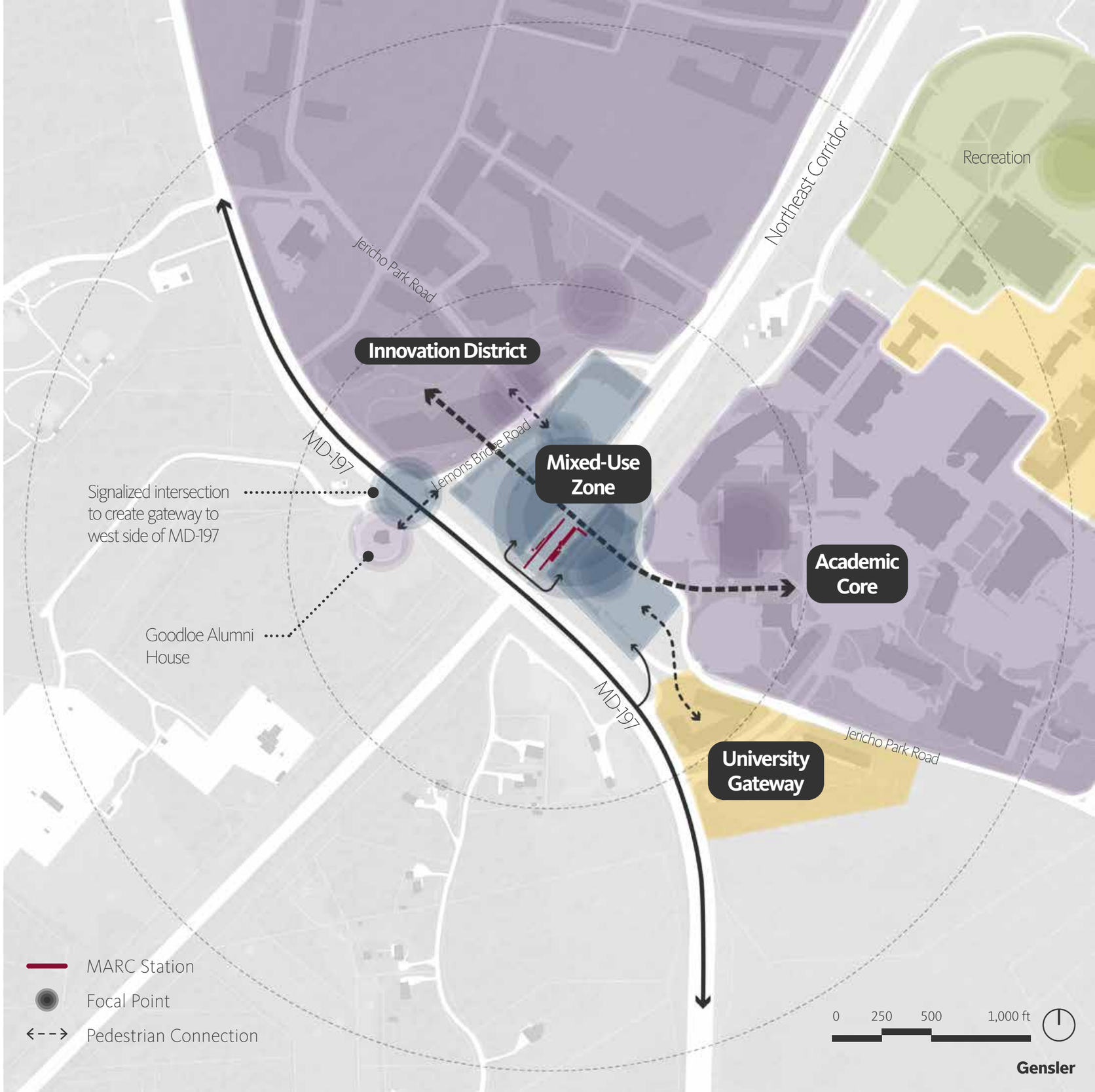
"Gateway to Innovation"

Catalyst for mixed-use development
Campus connector
Supporting university research & student life
Year-round population

Preliminary Planning Principles

KEY STRATEGIES

- Establish a transitional mixed-use zone between the university gateway, academic core, and potential innovation district on county land west of NEC
- Integrate convocation center into new development (confirm footprint)
- Create a clear and direct pedestrian connection from station to campus core
- Improve East-West pedestrian connectivity by improving facilities on the MD-197 bridge
- Manage student and commuter parking needs
- Re-think intersection of MD-197 and Lemons Bridge Road to better integrate the Alumni House into the west Marc Center Expansion, and create a presence on MD-197
- Catalyze development of county-owned property



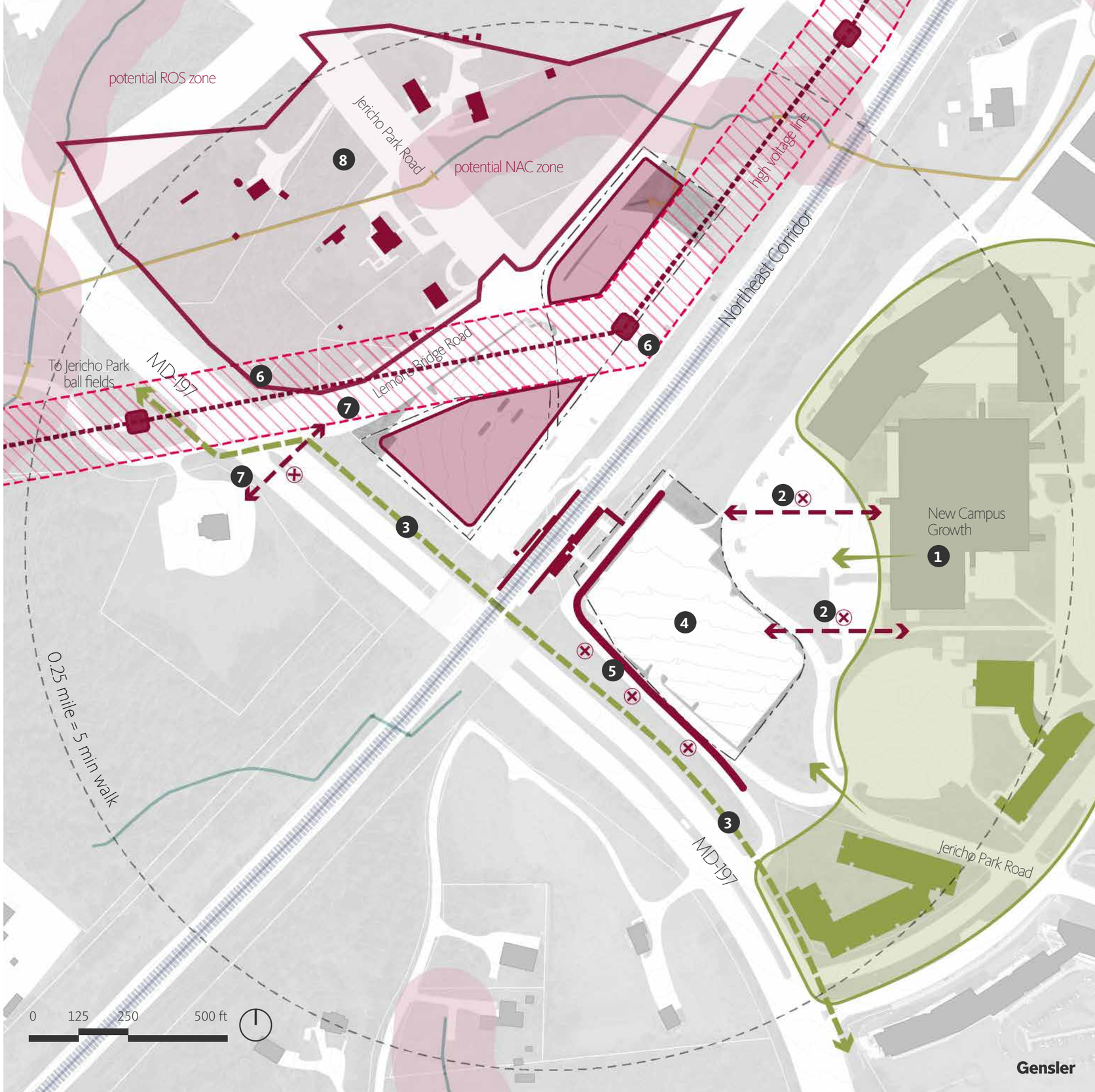
Opportunities & Constraints

OPPORTUNITIES

1. Build upon the development momentum underway at the Gateway parcel and leverage the proximity of programs such as the Graduate College and other cultural amenities near the east lot
2. There are currently no protected or marked pedestrian connections to campus from the BSU MARC station
3. Expand cycling/ped facilities along MD-197 to connect to the existing recreation facilities at Jericho Park
4. Reduced ridership and resulting decrease in parking utilization offers a chance to decrease the number of parking spaces provided on-site and increase potential developable area

CONSTRAINTS

5. As currently configured, the BGE access road constrains the redevelopment potential of the east lot and fails to provide direct vehicular access from MD-197; if redesigned, this could become an opportunity to improve access and visibility of new development
6. High voltage transmission lines and towers, utility easements, and other overhead utilities disrupt the continuity of developable areas in the west lot; consider relocation
7. The lack of pedestrian infrastructure along Lemons Bridge Rd. and the intersection of MD-197 isolates the Alumni House from campus and potential TOD
8. Proximity of private landowners to the west lot complicates potential near-term TOD and/or possible utility re-routing; consider purchase/assemblage

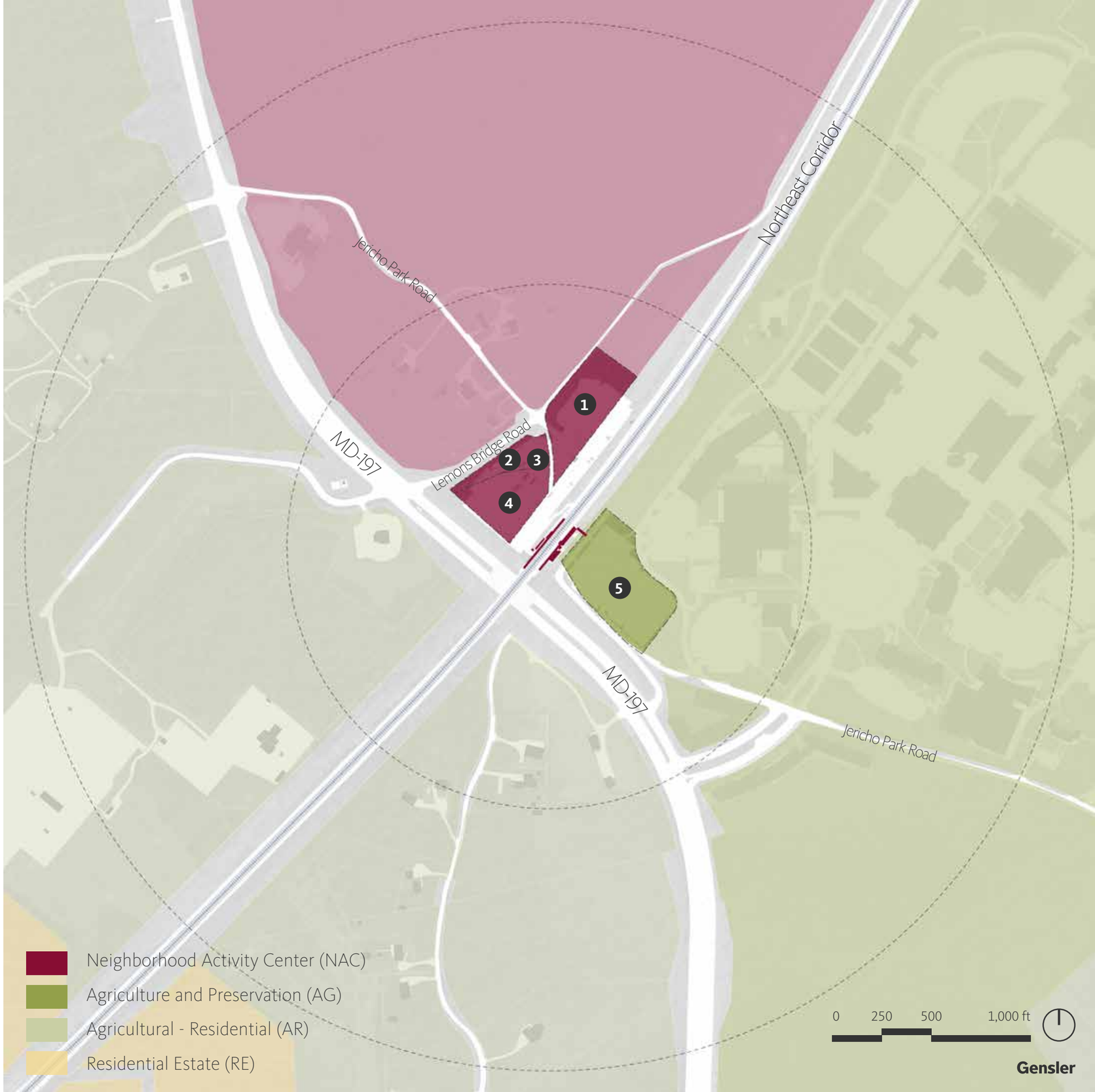


Current Zoning

PERMITTED USES AND DENSITIES

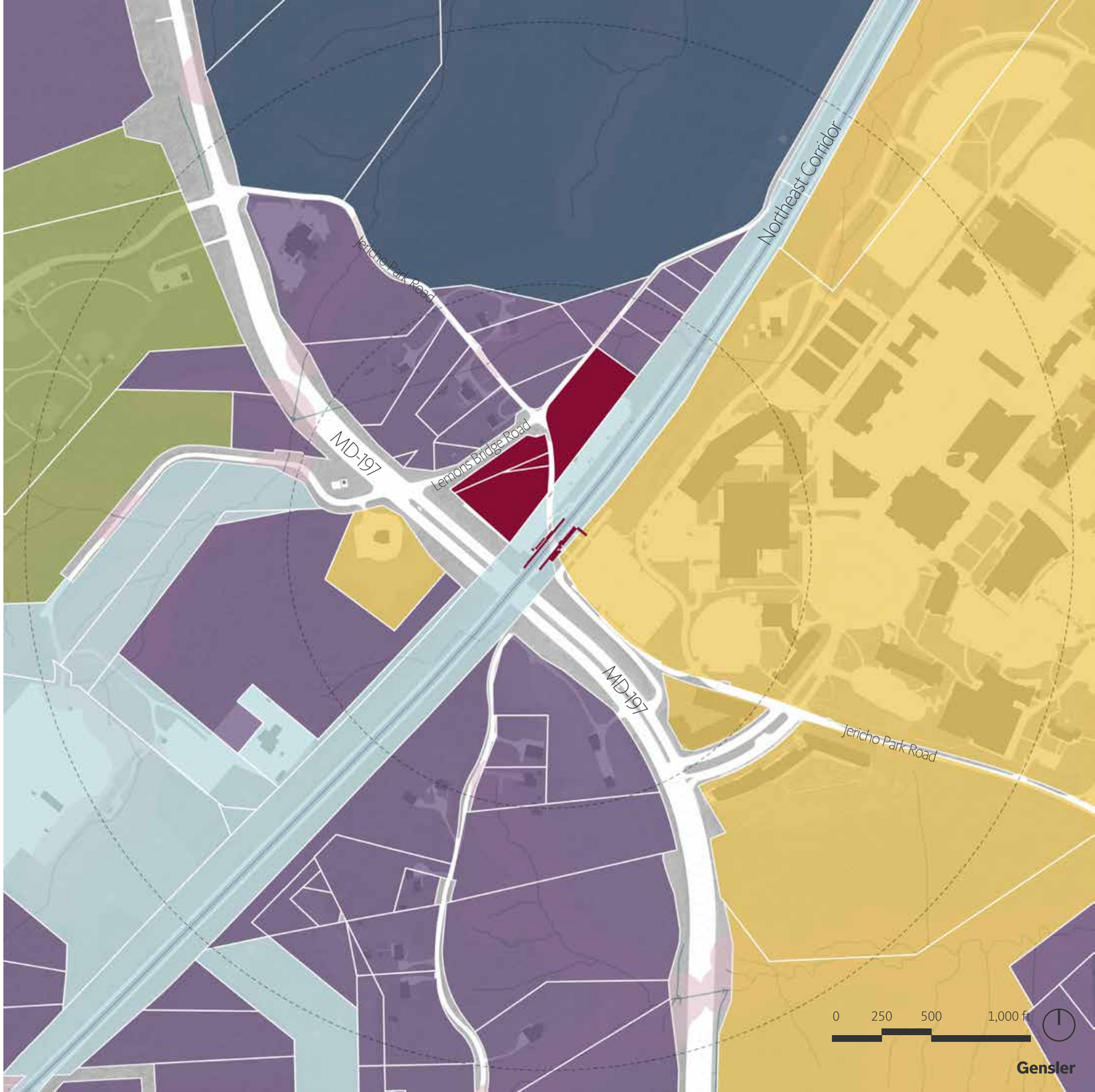
- The rezoning of the west lot from M-X-T (legacy mixed-use designation) to NAC (Neighborhood Activity Center):
  - reduced allowable FAR from 8.0 to 2.0
  - reduced allowable height from 110' to 50'
  - constrains maximum DU/ac to 30
- Patuxent Research Refuge (north of station area) designated as ROS (Reserved Open Space)
- Potential down-zoning case for the County-owned parcels north of Bowie State Station from M-X-T to ROS
- Bowie State University uses are not governed by underlying zoning designations, but rather the State
- All parcels immediately west of MD-197 near the station are zoned as Agricultural-Residential with very limited permissible uses and densities

ID	Parcel Description	Parcel (ac)	Ownership
1	West Parking Lot	1.98	MTA
2	West Parking Lot	0.62	MTA
3	West Parking Lot	0.28	MTA
4	East Parking Lot	1.75	MTA
5	East Parking Lot	2.90	MTA-deeded easement
		7.53	



Ownership

- PG County
- City of Bowie
- Public Utility (BGE, Amtrak)
- State Teacher's College (State of MD)
- MDOT (MTA)
- Other Private Owners



Planning Context

PRIOR PLANNING STUDIES AND REPORTS

- Bowie State University, the Bowie State MARC station, and the Prince George's County-owned land adjacent to the university all have had extensive planning efforts over their history with thoughtful energy and time invested
- This analysis seeks to validate these studies within the current context of the site today, current university enrollment trends, MARC ridership trends, and general development climate and market
- Some of the key plans referenced to inform this analysis include the following (listed A to D at right):

  A Bowie State MARC Station Area Concept (2019)

  B Bowie-Mitchellville and Vicinity Master Plan - BSU / MARC Campus Center Area (2023 update)

  C Bowie State University Facilities Master Plan (2020)

  D MARC Station Sector Plan (legacy) 2010

- Other plans such as the Bowie State University Economic Development Plan, Strategic Plan, and the ULI Technical Assistance Panel (2020) were also vital references to provide institutional priorities and values
- Per the Facilities Master Plan, the development of a convocation center is a key program element for west campus

Planning Context

MARC STATION AREA REIMAGINED (2023)

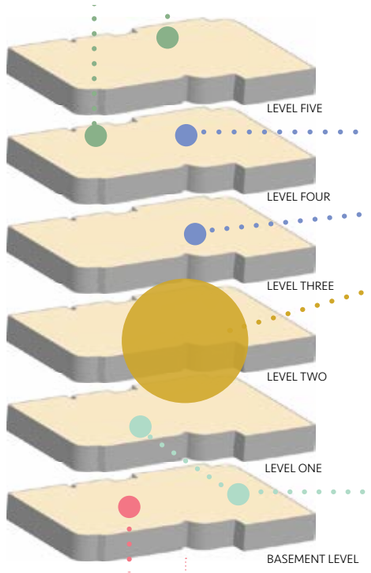
1) BSU can begin to utilize campus-owned parcels to kickstart development activity.

1. Develop a surface parking lot to accomodate the relocation of 200+ spaces for MARC Riders under the existing easement.

2. Create a gathering Courtyard/ Greenspace between the new parking lot, campus and convocation center

3. Construct a Transit-Oriented **Convocation Center Hub** with **retail** and other University Uses such as collabrative **office and learning spaces**

4. Enhance sidewalk network for connectivity and walkablity



IDENTIFIED PROGRAM

- University Office Space
- Convocation Center
- Retail (F&B/ Soft Goods)
- Collabrative Flex Work Space & Classrooms
- Innovation Hub

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Market Summary

EXECUTIVE SUMMARY | MULTIFAMILY SUMMARY

Bowie State University students currently choose between the limited supply of on-campus dorms or commuting to school from nearby towns. Students have indicated a preference for living on or near campus. On-campus dorms have a sizeable waitlist.

SITE DEVELOPMENT POTENTIAL

Residential	Baseline:	*300 units / 800-900 beds*
	10+ years:	*600 units / 1,500 - 1,700 beds*
Retail	15 - 28,500 SF	*merchandise, grocery, and misc.*
Office	potential industry partnership space	
Hotel	no projected near-term demand; likely to grow potential in long-term	

Source: Costar, ESRI, HR&A Demand Analysis, "The Gateway at Bowie" JLL Report. Unit to bed conversion derived from Gateway project unit to bed ratio (2.97:1).

Circulation + Mobility

ACTIVE TRANSPORTATION

- Create a clearly defined pedestrian access route with marked crossings between the station and campus
- Expand pedestrian circulation along Lemons Bridge Road and throughout the MTA parking lot west of campus as the parcels are redeveloped
- Integrate sidewalks and trails in all new development that occurs between the station and the County-owned lands to the north to encourge non-vehicular modes of transportation to the MARC for future residents
- Over the long-term, consider the additional of a signature bridge connection between the MTA parking lot west of the NEC and campus to strengthen physical access and visual continuity between both sides of the corridor

Option 1

PROGRAM SUMMARY

- **Commuter Parking:** 632 spaces

  100% replacement = 632 spaces

  Surface Lots: 56 spaces
  Shared Structure: 576 spaces

- **Residential:** 177 units
- **Retail Food & Beverage:** 7,200 SF
- **Convocation Center:** 576,000 SF

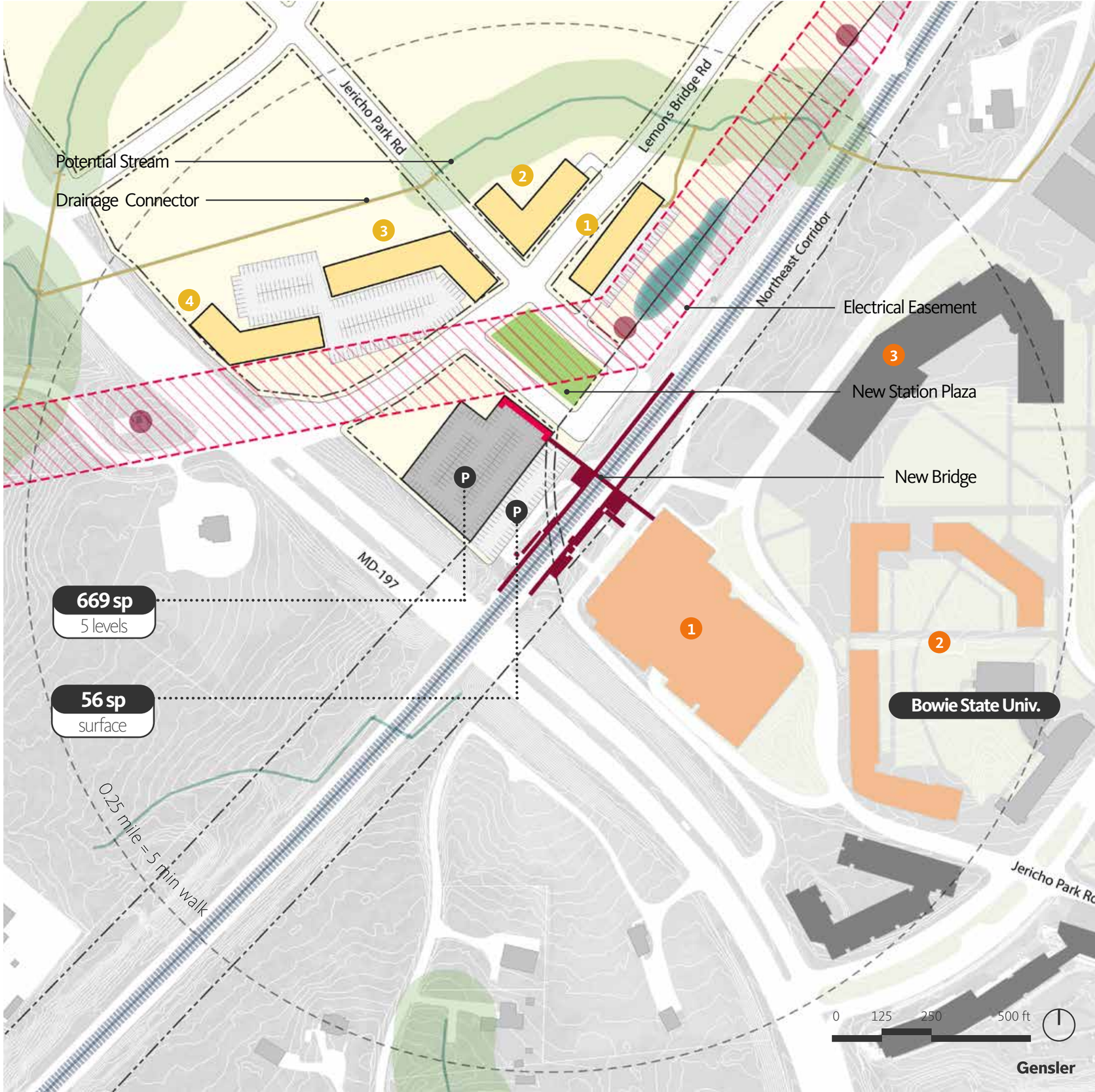
Market Rate Housing

1. 33 units, 3 stories
2. 32 units, 3 stories
3. 64 units, 3 stories
4. 48 units, 3 stories

University Program

1. Convocation Center
2. New Student Residential
3. MLK Jr. Communications Ctr.

- (P) Commuter Parking
- Residential
- Retail Food & Beverage
- Academic Expansion (BSU)
- Water Body
- Open Space
- Structured Parking
- Drainage Connector
- Stream
- Stream Setback (75' from centerline)
- Powerline Setback (75' from centerline)



Option 2

PROGRAM SUMMARY

- **Commuter Parking:** 278 spaces

  High replacement (120% utilization) = 224 spaces

  Surface Lots: 278 spaces

- **Residential:** 308 units
- **Convocation Center:** 576,000 SF

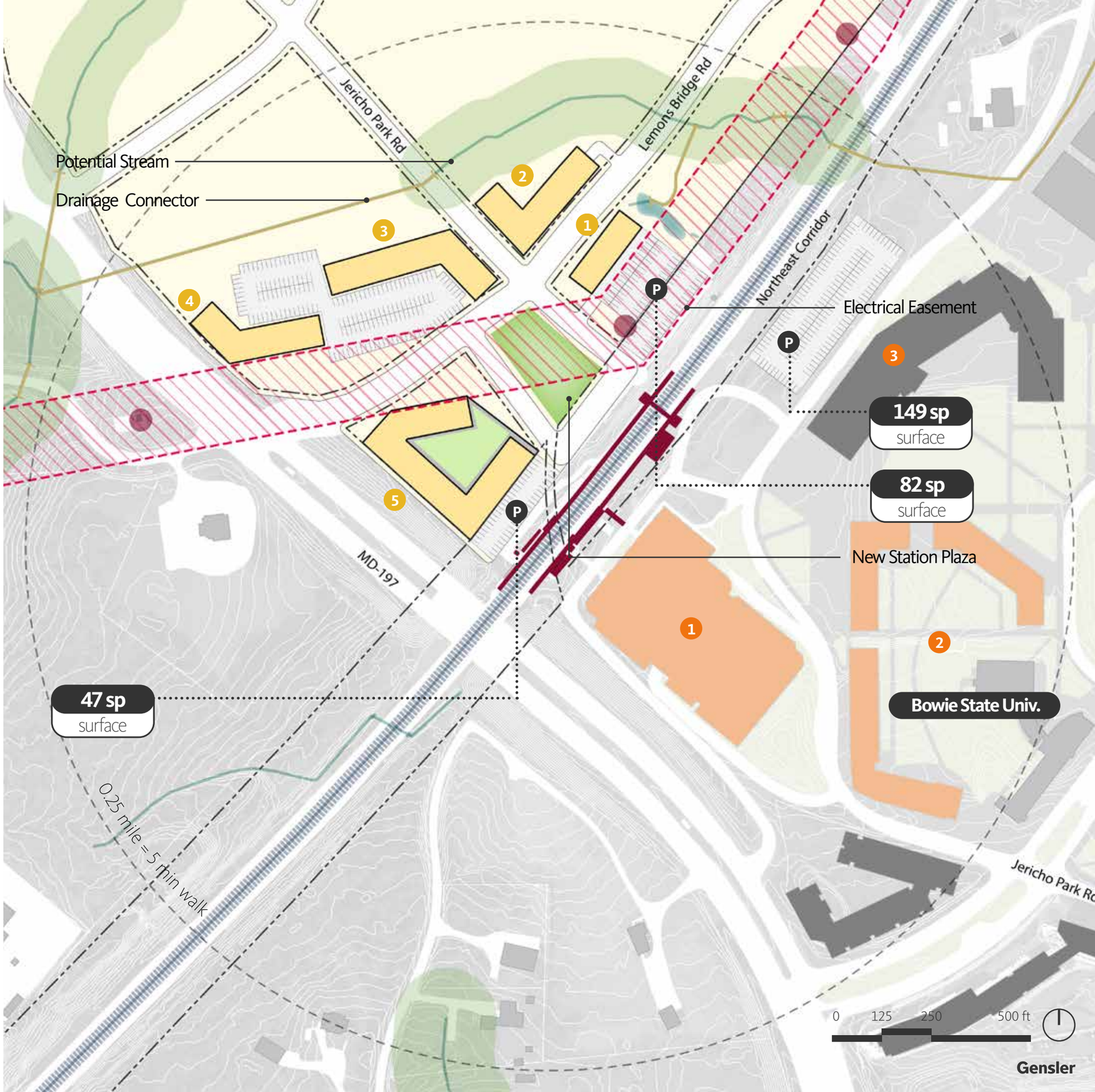
Market Rate Housing

1. 23 units, 3 stories
2. 32 units, 3 stories
3. 85 units, 4 stories
4. 64 units, 4 stories
5. 104 units, 4 stories

University Program

1. Convocation Center
2. New Student Residential
3. MLK Jr. Communications Ctr.

- Commuter Parking
- Residential
- Academic Expansion (BSU)
- Water Body
- Open Space
- Structured Parking
- Drainage Connector
- Stream
- Stream Setback (75' from centerline)
- Powerline Setback (75' from centerline)



Option 3

PROGRAM SUMMARY

- **Commuter Parking:** 360 spaces

  High replacement (120% utilization) = 224 spaces

  Structured Parking: 360 spaces

- **Residential:** 192 units
- **Academic:** 89,000 SF
- **Convocation Center:** 576,000 SF

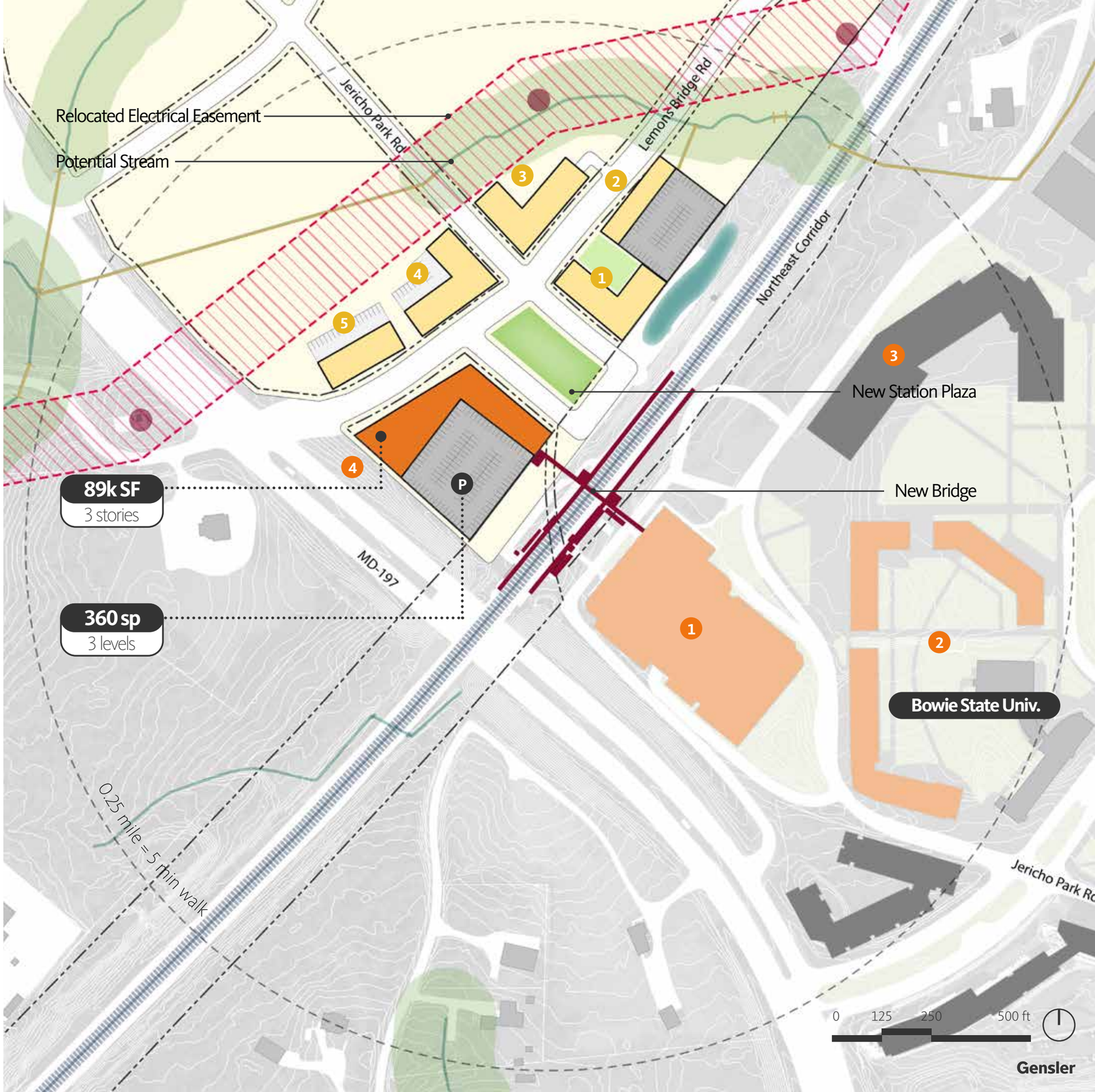
Market Rate Housing

1. 61 units, 4 stories
2. 30 units, 3 stories
3. 32 units, 4 stories
4. 43 units, 3 stories
5. 26 units, 3 stories

University Program

1. Convocation Center
2. New Student Residential
3. MLK Jr. Communications Ctr.
4. Academic & Innovation Expansion

- P — Commuter Parking
- Residential
- Academic Expansion (BSU)
- Water Body
- Open Space
- Structured Parking
- Drainage Connector
- Stream
- Stream Setback (75' from centerline)
- Powerline Setback (75' from centerline)



Appendix

Existing Parking Facilities

CURRENT CAPACITY OVERVIEW

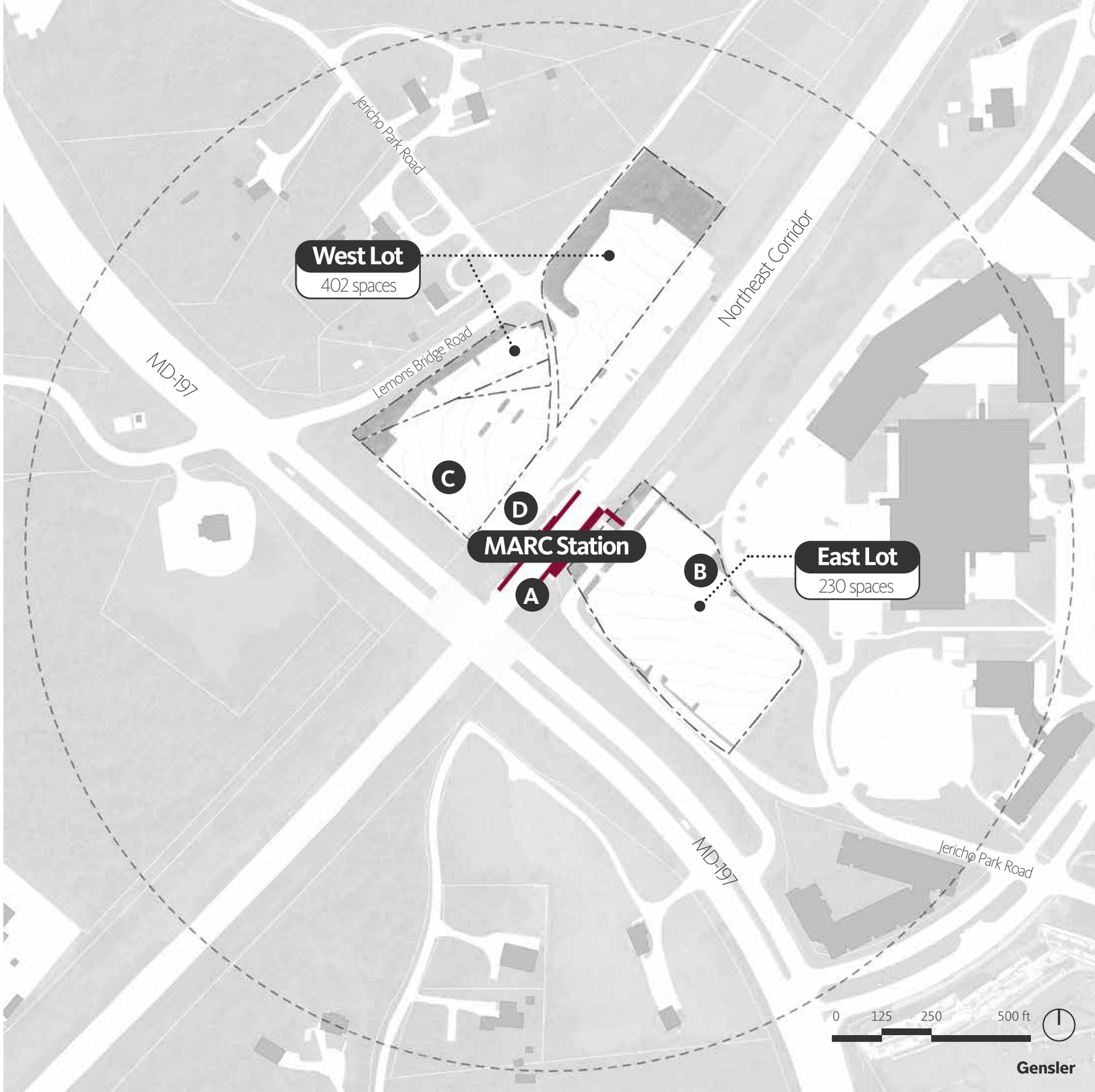
- Total surface parking on site, **632 spaces**
- Total space utilization, approximately 80% according to 2015 study; this figure was markedly lower based on MDOT's visual site survey in May 2023, which was closer to approximately 30% utilization
- Team observed students using commuter lots, which may skew the perceived level of utilization on the east lot
- The west lot appears to have even lower utilization

East parking lot has relatively high utilization attributed largely to student commuters and a moderate, but steady slope

Temporary construction parking and staff and faculty commuters quickly fill other peripheral parking lots off the Loop Road

The west lot is highly underutilized, with most of the area completely empty

A small cluster of commuters park near the southbound platform. Underutilized cycling infrastructure lies adjacent to the platform



Future Parking Considerations

RIDERSHIP TRENDS

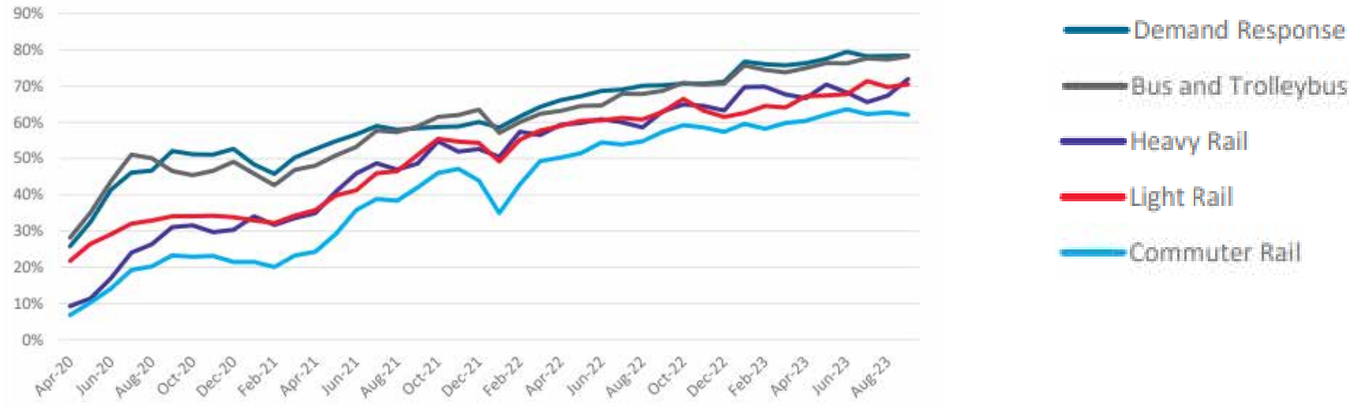
- While transit use has recovered since 2020, changes in commuting patterns continue to impact ridership:
  - **Commuter rail** ridership in 2023 is at **62% of pre-pandemic level**
  - **Penn Line** ridership in 2023 at study area stations averages **50% of pre-pandemic level**
  - **Bowie State** Station ridership in 2023 was at **67% of pre-pandemic ridership level,** but parking utilization was only observed at 30% (per May 2023 MDOT study), suggesting that ridership may consist of more students than park & ride commuters

PARKING REPLACEMENT

- Depending on policy, alternate parking scenarios may be considered:
  - Low (80% of estimated parking demand) - *150 spaces*
  - Medium (100% of estimated parking demand) - *187 spaces*
  - High (120% of estimated parking demand) - *224 spaces*

PUBLIC TRANSPORTATION RIDERSHIP

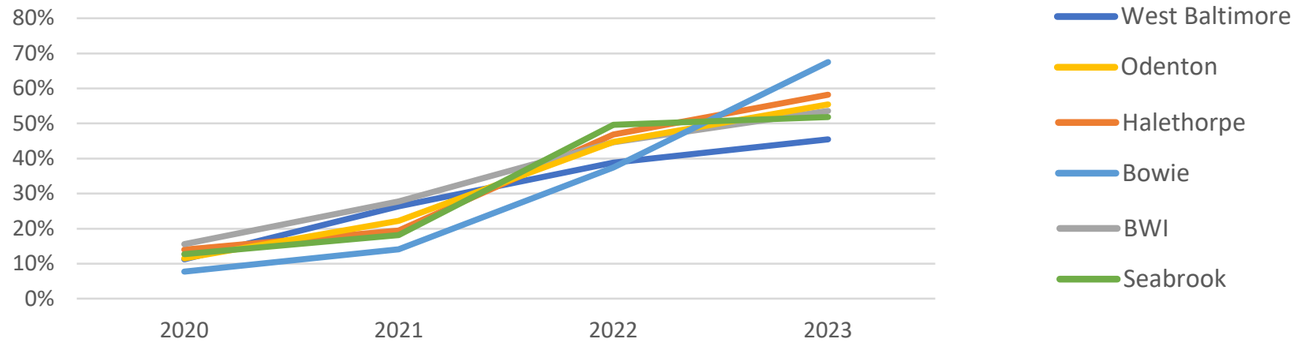
2020-2023, Percent of same month in 2019



Source: APTA Transit Ridership Update, December 2023

PENN LINE RIDERSHIP

2020-2023, Percent of same month in 2019



Station	Available Parking	2015 Parking Study		2023 Observed Parking (per MDOT)		
		Occupied Spaces	Utilization Rate	Ridership*	Occupied Spaces	Utilization Rate
Bowie State	632	503	80%	67%	187	30%

Source: MDOT

MARC Station Evaluation Criteria

- Our station analyses employ two separate but complementary processes to identify site constraints and opportunities and their accompanying recommendations / target areas for investment.
- GIS and other publicly available planimetric data was used to develop the TOD Readiness Index (detailed at right.) The tool documents existing station conditions under six key categories that characterize successful TODs. The findings from this effort provide our team with the information to:
  1. identify the most suitable sites within a given station area to target for TOD (i.e. viability)
  2. determine each individual parcel's overall readiness for TOD (i.e. near- vs. long-term)
  3. prepare a detailed diagnosis of the current soft spots / areas for improvement at each station that informs initial priorities and recommendations for reinvestment
- In addition, our physical analysis of existing station site conditions helps our team to highlight other important site constraints and opportunities and guides the development of initial planning principles and site organization strategies.

Transit Connectivity & Service

Transit Connectivity *(number of lines)*

Rail Service Frequency

Bus Service Frequency

Passenger Amenities

Walkability

Pedestrian Experience
(sidewalks, ped. crossings, tree cover, lighting)

Bikeability

Bicycle Infrastructure / Routes

Bicycle Amenities

Development Feasibility

Average Allowable FAR

Average Percent Developed

Average Parcel Size

Community Health & Wellbeing

Community Amenities *(Walk Score)*

Park Proximity *(within 5 min walk of station)*

Policies, Plans, and Projects

Station Area Plan In-Place

Coordinated Regional Plan In-Place

Major Institutional Presence

Bowie State Station Evaluation Criteria

Transit Connectivity & Service	Assessment	Note	Recommendation
Transit Connectivity *(number of lines)*	average	1 train line, 3 bus lines	Improve rail-bus connectivity and consider additional service outside peak commuting hours
Rail Service Frequency	below average	9 total trains (5 SB, 4 NB)	Sustain current level of rail service
Bus Service Frequency	below average	Three bus routes	Expand local bus route frequency and coverage
Passenger Amenities	below average	limited amenities, no digital signage, indoor waiting, restrooms, or staffed kiosk	Invest in standard amenities, digital signage, and an indoor waiting area
Walkability			
Pedestrian Experience *(sidewalks, ped. crossings, tree cover, lighting)*	below average	little to no existing sidewalks off of Bowie State's campus.	Invest in high-visibility crosswalks at MD-197 and Lemons Bridge Rd.; integrate multi-use path along the MD-197 ROW to improve access across the NE Corridor
Bikeability			
Bicycle Infrastructure / Routes	below average	designated routes and trail segments adjacent to station area	Focus on building connections into the existing trail network and incorporate clear route signage
Bicycle Amenities	below average	minimal bicycle amenities present and those provided are in poor condition	Locate new infrastructure along high-visibility routes and new connections to existing trails and paths
Development Feasibility			
Average Allowable FAR	average	zoning permits medium-high density and wide mix of uses	Leverage NAC zoning by concentrating university-affiliated development closest to the MARC
Average Percent Developed	below average	currently underdeveloped - mostly open space	Densify underdeveloped parcels
Average Parcel Size	above average	large, contiguous parcellation	Subdivide large parcels, consolidation could improve redevelopment viability of smaller parcels.
Community Health & Wellbeing			
Community Amenities *(Walk Score)*	below average	lost amenities are exclusive for Bowie State	Expand community retail options to support local residents and to encourage commuters to linger
Park Proximity *(within 5 min walk of station)*	below average	no public park available, limited sports & rec	Consider dedicating part of large open spaces as community parks
Policies, Plans, and Projects			
Station Area Plan In-Place	yes	Existing TOD, EDP, and TAP Plans	Execute vision of mixed-use TOD aligned to BSU growth
Coordinated Regional Plan In-Place	yes	Bowie-Mitchellville & Vicinity Master Plan	Provide retail/employment center adjacent to BSU
Major Institutional Presence	yes	Bowie State University	Provide BSU housing and innovation/research space