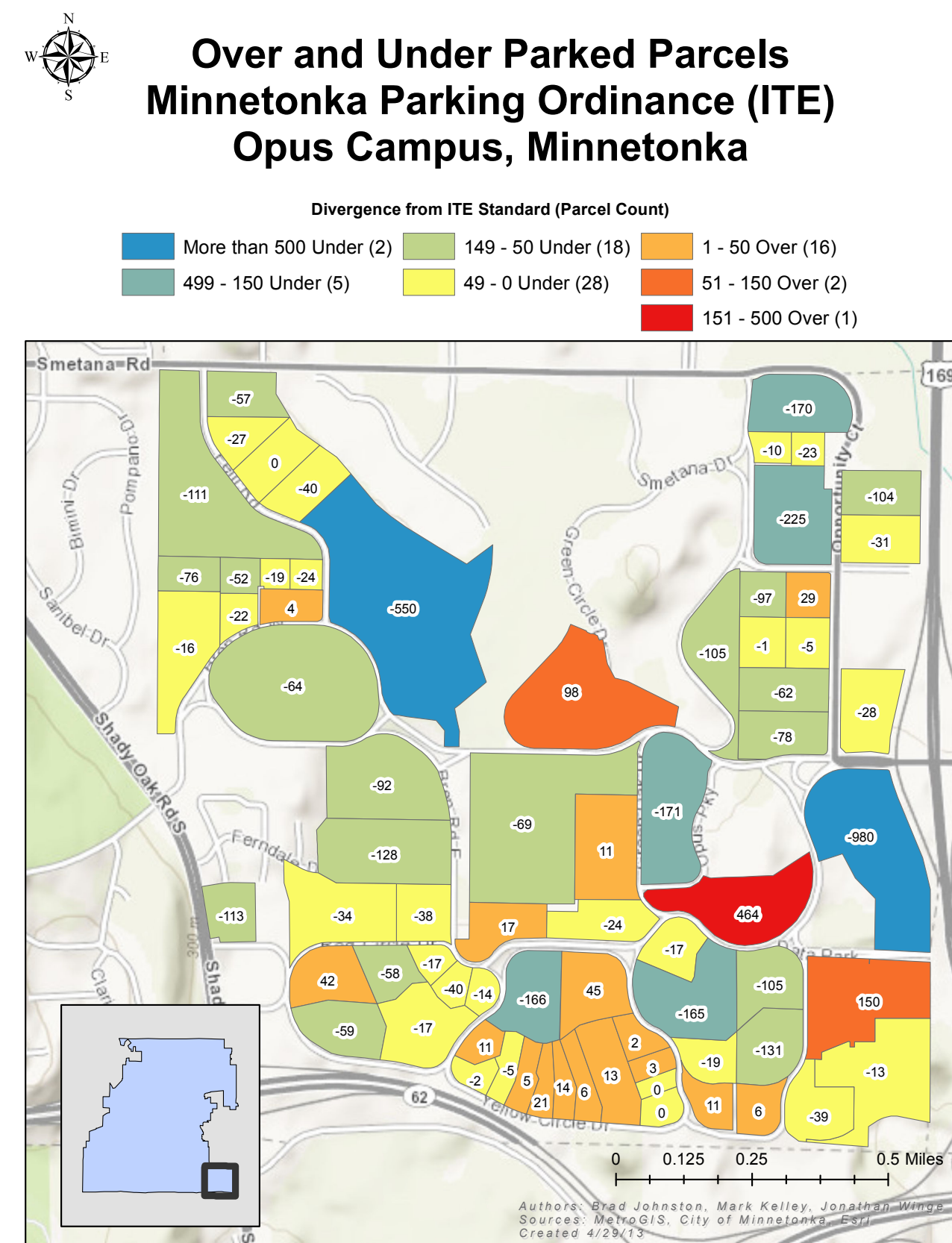


ITE Scenario

Assumptions: Hotels and restaurants are omitted due to intricate parking requirements and demand needs. Second, the remaining parcels are all office space. Finally, floor area from data is accurate.



Findings

The map and graph show most businesses have less parking space than the required minimum. However, the one parcel in red has considerably more spaces than is required.

City of Minnetonka Parking Regulations

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Course Title: Geog 5564 "Urban GIS and Analysis"
Course Instructor: Jeffrey Matson

Poster created by: Mark Kelley
6/7/2013

Issue

The research project was intended to better understand the parking situation within the Opus area and how varying parking regulations might affect each parcel and the whole.

Method

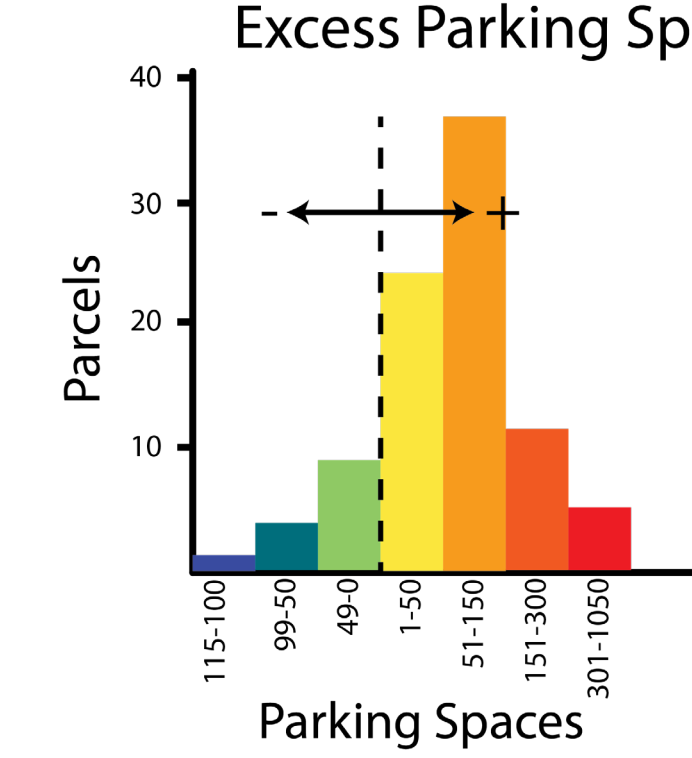
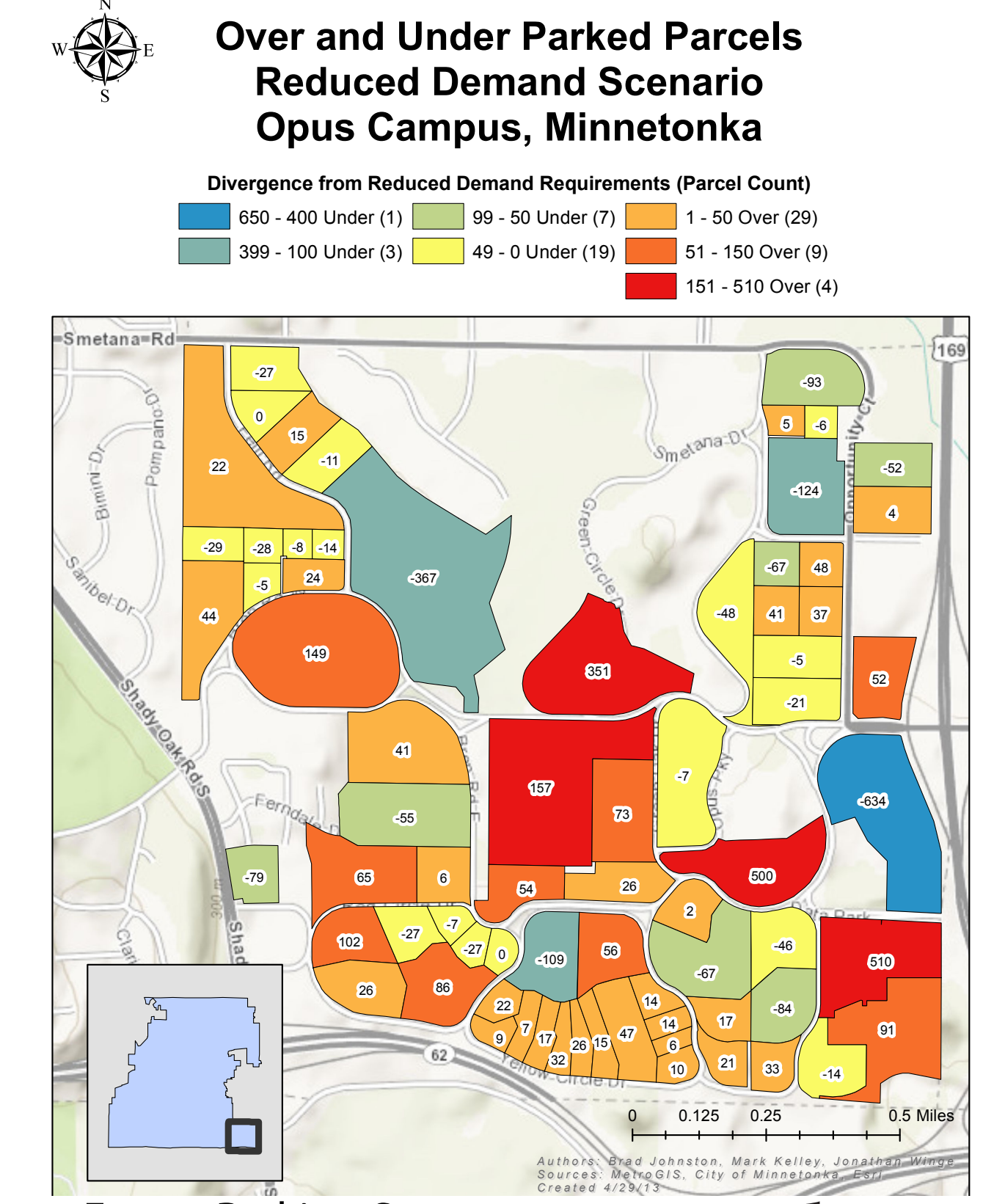
Map and graphs describe possible parking regulations. We utilized city parcel data, ArcGIS, and research of parking regulations utilized in Burlington, Sacramento, and ITE. Burlington, MA is highly comparable to Minnetonka due to the similar growth patterns and relationship to a bigger city. Sacramento is utilized to show the potential of TOD.

Current Parking Regulations

- Parking lots must be within 400 ft of building entrance.
- Four spaces per 1000 sq ft. for general office buildings.
- Twenty-five percent must accommodate compact cars.
- One Handicap stall per fifty spaces.
- Office buildings exceeding 100,000 sq ft can have reduced parking regulations based on demand, as prepared by registered traffic engineers or certified planners.

Reduced Demand Scenario

Assumptions: The current minimum would be altered to a maximum set at 3 parking spots per 1000 square feet, similar to what the City of Burlington has done.

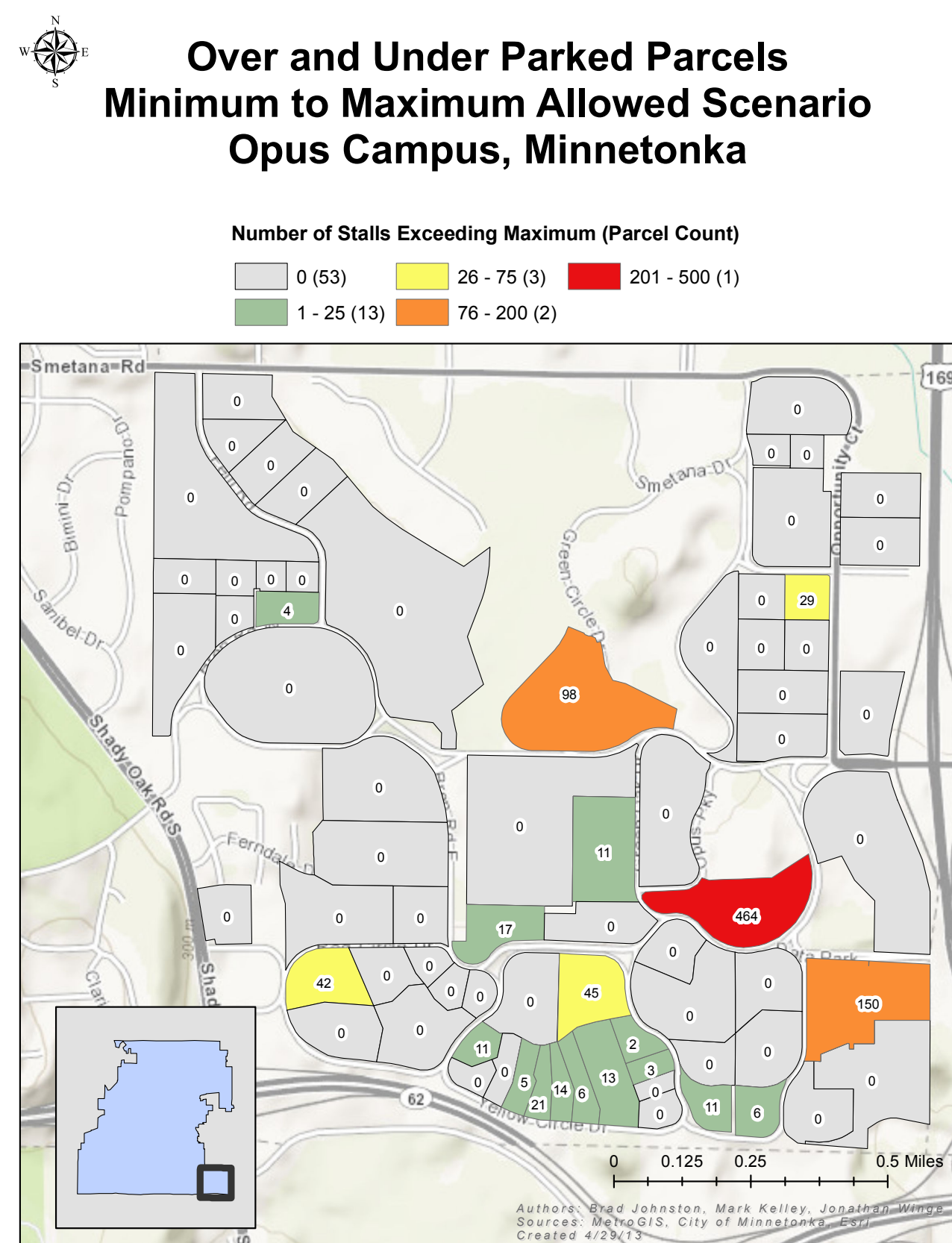


Findings

This scenario offers to set parking regulations moderately lower than the current situation. In order to achieve this it would be necessary to have 30 percent of the workers carpooling and 10 percent ride mass transit or another equivalent goal. Furthermore, parking spaces can be reduced with parking spots sharing between businesses.

Maximum Parking Scenario

Assumptions: The current minimum parking standards are altered to a maximum ordinance with no other changes.



Findings

Examining the map and graph it is clear few parcels go beyond the current minimum requirements. Thus, this scenario is essentially business as usual and will have little or no impact on the future development patterns of the Opus area.

Recommendations

1. Create a maximum rather than minimum parking requirement.
2. Implement Reduced Demand scenario in years before light rail is built.
3. Transition to Transit Oriented Scenario after light rail built.

Discussion

The City of Minnetonka is suburban and as such is highly dependent upon the personal vehicle for transportation to any locale or business. Since building patterns take decades to appreciably alter it is wise to understand how Minnetonka will be affected in the decades to come.

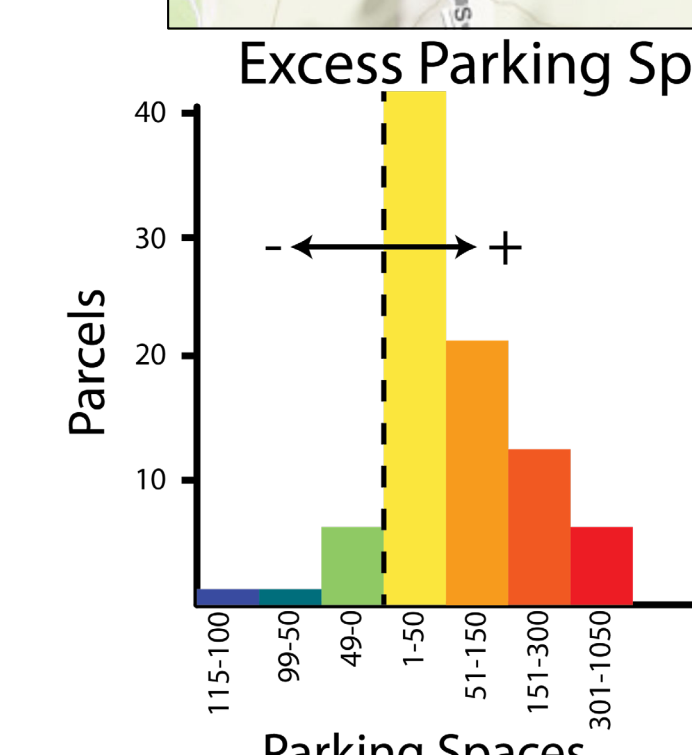
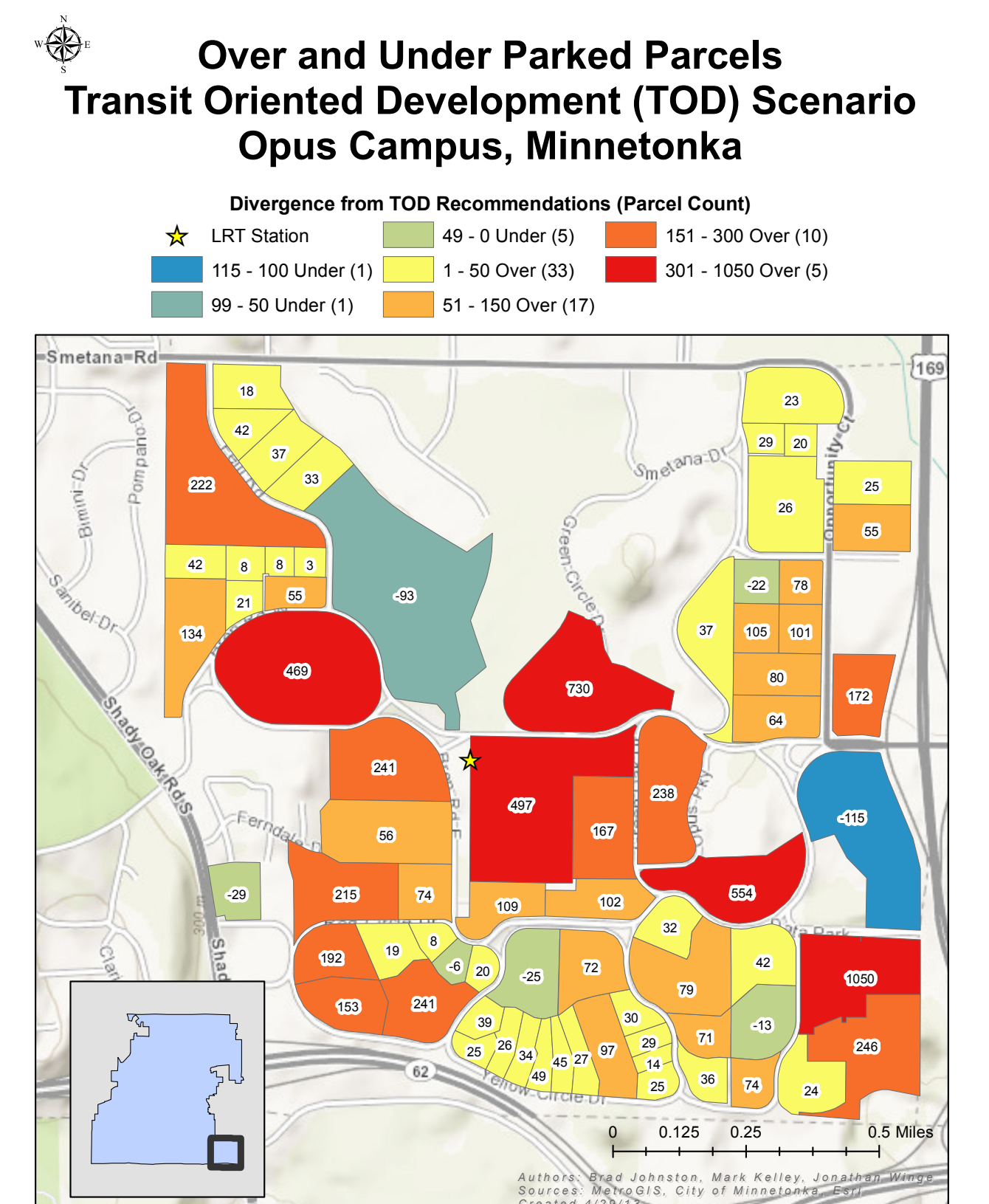
Parking regulations have considerable impact upon the development patterns of businesses and can be utilized to create a thriving community. If Minnetonka is to remain economically viable for middle class families parking regulations need to pre-emptively respond to any future changes in the economy. This study does not clarify what those changes might be, but does caution against building a city which is vulnerable to outside changes. Resilience is the buzzword. It entails a city built upon an economically, environmentally, and socially adaptable system. With respect to the Opus area it is recommended Minnetonka begin the long transition toward less car dependent development and make the necessary arrangements for transit oriented development.

Data Sources

- MetroGIS parcel data.
- Aerial imagery.
- City of Minnetonka Parking Ordinance.
- Parking scenarios from other cities.

TOD Scenario

Assumptions: The Southwest Corridor would be effectively utilized and reduce demand to 1.5 parking spots per 1000 square feet. The City of Sacramento utilized 1.5 and it shows how efficient mass transit can greatly reduce parking demand.



Findings

In order to fully develop the Opus area, land will need to incrementally be converted from parking into building space using a TOD parking regulation for new development. However, in the interim it would be necessary to provide park and rides and a bus shuttle to make all businesses easily accessible from the light rail stop.