Appendix A: Additional Analysis on Proximity to Transit, Frequency of Service, and Access to Jobs

Proposed Draft Network

The Proposed Draft Network is designed to be very different from the Existing Network. Key changes include:

- **HIGHER FREQUENCY:** Four routes (A, B, C and D) would run **every 15 minutes or better**. All eight main routes (A through H) would run every 30 minutes or better, on weekdays from 6 AM to 8 PM[1]. Most routes would run every 30 minutes or better from 5 PM to midnight, seven days a week.
- **DIRECT TRAVEL:** Service would be concentrated onto **fewer, straighter routes that provide direct service between many people, jobs and opportunities.**
- **FEWER TRANSFERS:** Passengers in outlying areas would no longer be required to go through a Transfer Point for nearly every trip. Instead, routes would be designed to connect on-street as they travel from one end of Madison to the other.

The consequence of these choices is also that there would be:

- **LESS COVERAGE: Some areas would be a longer walk from service**. For some people, transit may become too far to walk to.

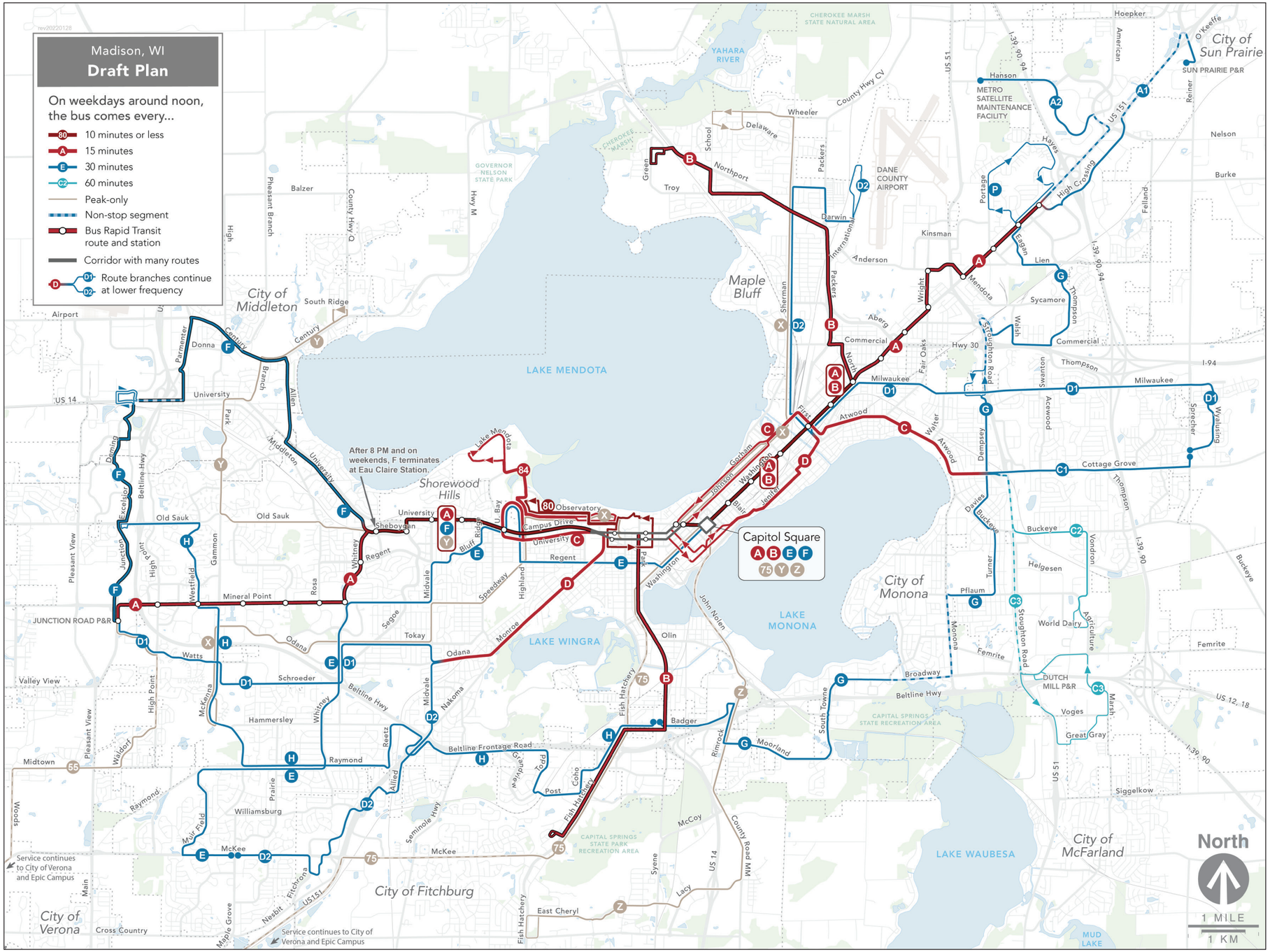

Figure 1: Map of the Proposed Draft Network.

1 Service on the UW campus would also remain frequent. Details of on-campus service may change as reopening proceeds.

Some people would live farther from transit.

In the map at right, each dot represents five residents. The color of the dots on this map indicates whether residents in a particular area would live closer to, or farther from the nearest bus stop with all-day service.

- **Green** show places where people would be at least 1/8-mile closer to the nearest all-day bus stop.
- Areas where people would not experience a significant change are shown in white.
- **Pink** areas show where would live at least 1/8-mile farther from the nearest all-day bus stop.

If the proposed Draft Network were implemented, about[1]:

- 8% of Madison residents would live closer to all-day bus service
- **72% of Madison residents would live at about the same distance from the nearest all-day bus.**
- 20% of Madison residents would live farther from all-day bus service.

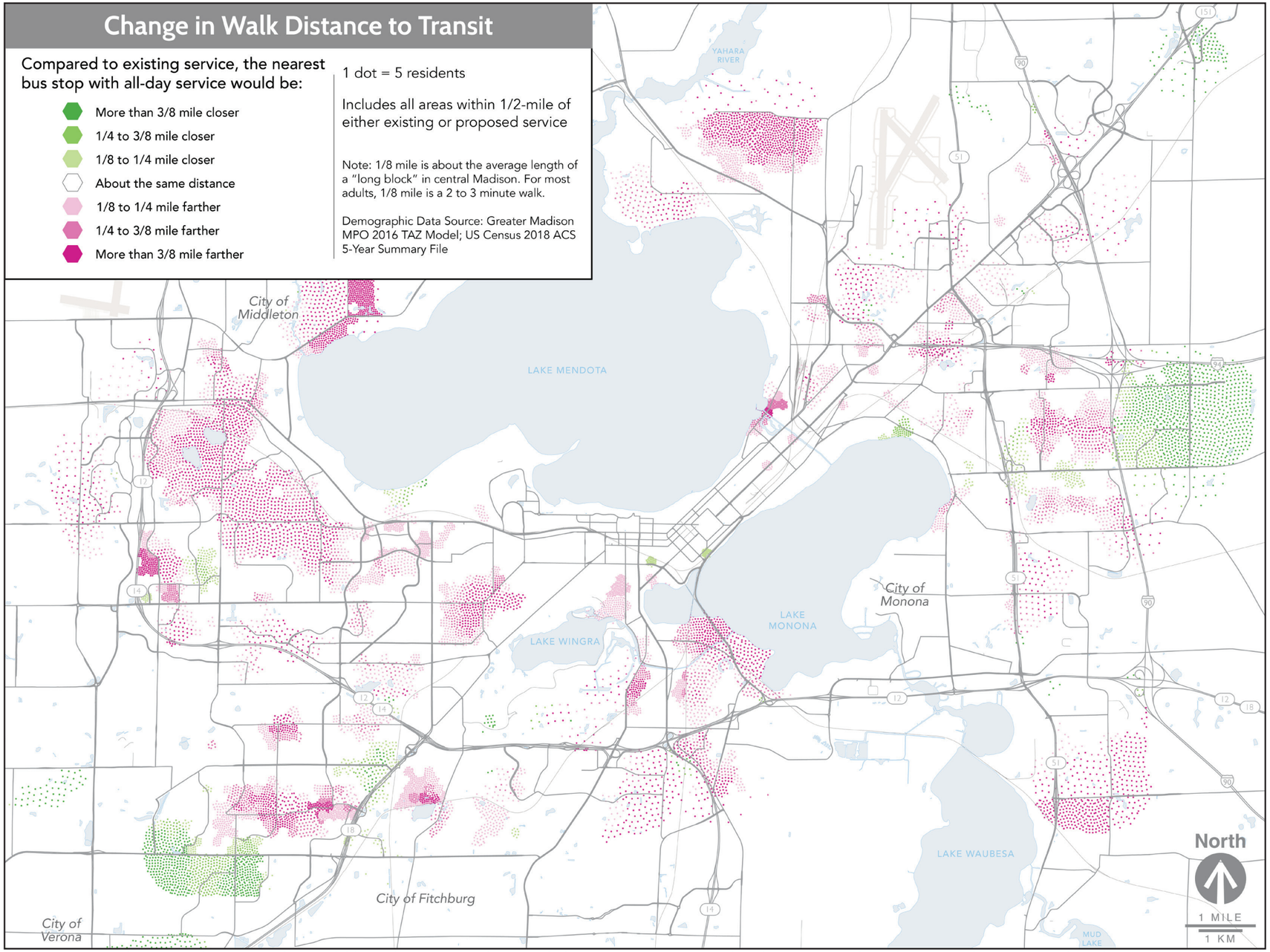

Figure 2: Map showing where people would live closer or further to al-day transit service under the proposed Draft Network, compared to the Existing Network.

1 Please note that these numbers do not include peak-only service. Several of the areas that appear in pink on this map would be served by additional routes operating on weekday morning and afternoon rush hours.

But most people would live near more frequent (and direct) service.

In the map at right, each dot represents five residents. The color of the dots on this map indicates whether residents in a particular area would live closer to a service that would be more or less frequent[1].

- **Green** show places where all-day service frequency would improve.
- **Gray** areas show places where all-day service frequency wouldn't change.
- **Pink** areas show where all-day service frequency would be reduced, or where all-day service would be located at least 1/2-mile away.

If the proposed Draft Network were implemented, about[2]:

- **67% of Madison residents would live nearest to more frequent service.**
- 32% of Madison residents would live nearest to the same frequency service.
- Fewer than 1% of Madison residents would live near less frequent service.
- About 7% would live more than 1/2-mile from all-day service. It may not matter whether the proposed nearest service is more or less frequent if it is located farther away than most people will walk.

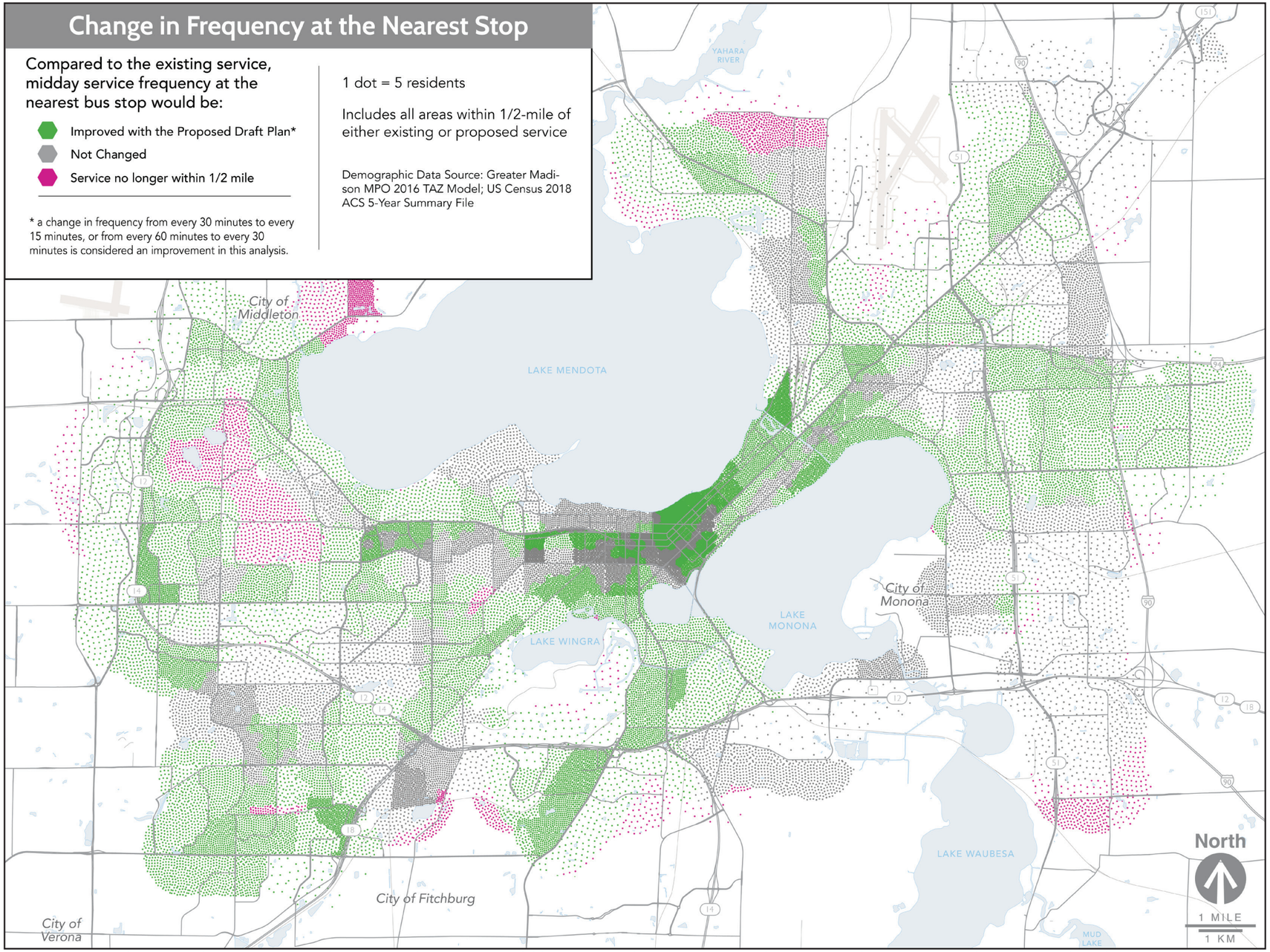

Figure 3: Map showing where service at the nearest bus stop would be more or less frequent in the proposed Draft Network, compared to the Existing Network.

1 "Frequency" means the typical time between two buses serving many of the same places. In some parts of central Madison, existing service may include many overlapping routes, but still have low frequency. This can be because the time between buses varies a lot,or because overlapping routes serve very different areas, to the point that most passengers must wait for one specific route and let others buses go by.

2 Please note that these numbers do not include peak-only service. Several pink areas on this map would be served by additional routes operating every 30 minutes on weekday morning and afternoon rush hours.

So most people could reach many more places within 45 minutes.

In the map at right, each dot represents five residents. The color of the dot indicates whether residents in a particular area would experience an increase or a decrease in job access[1] by transit in 45 minutes or less[2].

- **Green** show places where people's access to jobs by transit would increase compared to the Existing Network.
- **Gray** areas show places where people's access to jobs by transit would not change much.
- **Pink** areas show where people's access to jobs by transit would decrease.

If the proposed Draft Network were implemented, about[3]:

- **89% of Madison residents would live in areas where transit would provide access to more jobs in 45 minutes or less.**
- 7% of Madison residents would live in areas where transit would provide access to fewer jobs in 45 minutes or less.
- 4% of Madison residents would live in areas where job access by transit would not change.
- The median Madison resident could access +20,000 more jobs in 45 minutes or less, an 83% increase over existing service.

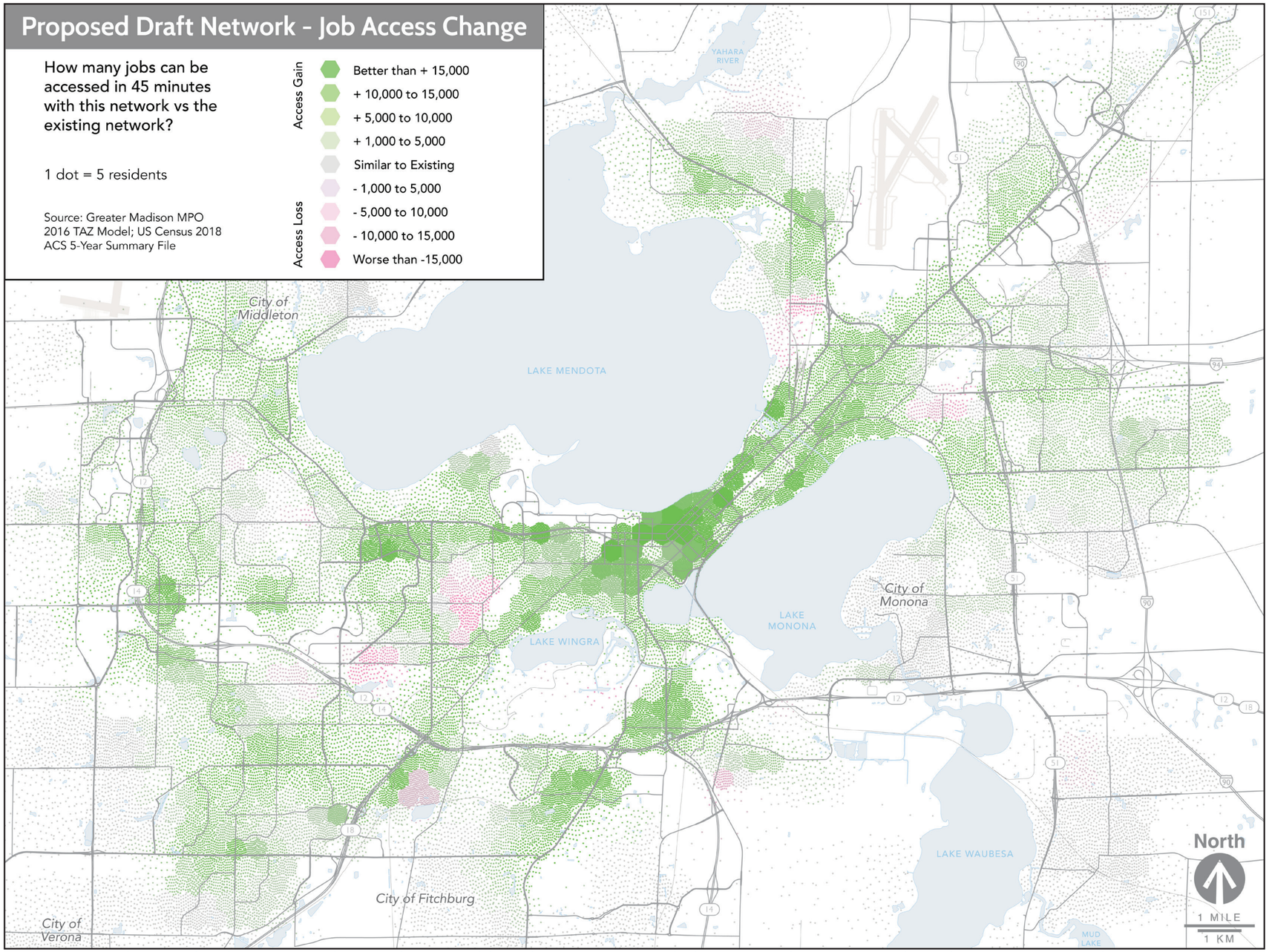

Figure 4: Map showing the change in number of jobs accessible within 45 minutes with the Proposed Draft Network vs. the Existing Network from residential locations throughout Madison and surrounding communities.

1 This map portrays change in access to jobs, because reliable data exists on job numbers and locations, and because most places people need to go regularly (work, school, retail, services etc.) are places of employment.

2 "In 45 minutes or less" refers to an estimate of the entire travel time, door-to-door, including walking, waiting, time in-vehicle and any required transfers. In calculating this measure, we assume the average wait for a bus is half of the time between two buses.

3 Please note that These numbers are for weekday midday service. Some areas would experience more service and higher job access levels at rush hours.