
As a capital city, Springfield has many critical and community facilities located in its city center. Many of these facilities, such as the Lincoln Depot and the Dana Thomas House, are important because of their history and have become part of the city's architectural and cultural heritage. Others developed due to Springfield being the seat of State government and the location of the downtown. Some, such as schools, were located due to their proximity to the population base or because of the centrality of their location at the time they were built. Other newer uses, such as those in the Mid-Illinois Medical District, have grown into the fabric of the city due to business clustering or other reasons.

As indicated in our initial consideration of planning issues associated with the high speed rail project¹, any consideration of the impact of increased rail traffic should take facilities such as these into account. This is particularly true in regard to fragile structures that might be affected by vibration, community facilities that draw pedestrian or large amounts of auto traffic, and critical facilities that might require quick or other special access by the public. In this report the Springfield-Sangamon County Regional Planning Commission (SSCRPC) attempts to identify critical and community facilities near both Springfield's 3rd and 10th Street rail corridors in light of the proposed high speed rail project.

In general the SSCRPC found that:

- Both corridors are located near identifiable critical and community facilities.
- Because the corridors are not far apart, some facilities are affected by both routes.
- As might be expected because of its location and how the city center developed, there are significantly more of these facilities located near the 3rd Street corridor than near the 10th Street one.
- While such facilities exist proximate to both corridors, they are much more dense and numerous the closer one moves toward the 3rd Street corridor than to the 10th Street corridor.
- Special problems are associated with proximity to facilities in the Mid-Illinois Medical District and historic areas and should be taken into account in any environmental impact study.

¹ Sims, N. (July 20, 2009). *An Initial Consideration of Planning Issues Associated with High Speed Rail and Increased Freight on Springfield's 3rd Street Rail Corridor*. SSCRPC: Springfield, IL.

The results of our analysis, quantifying the number of such facilities, are presented below. In addition, maps are included at the end of this report showing the facilities identified. This does not represent a complete inventory of such facilities adjacent to either corridor as such a census is beyond our current resources.

The Identification of Facilities

To assess the number of critical and community facilities proximate to the two rail corridors, the SSCRPC reviewed existing structures within ¼ mile and ½ mile of the rail lines in Springfield's city center (please see aerial photography maps at the end of this report). The ¼ and ½ mile limits were selected because these distances are generally considered amenable to pedestrian travel, and we believe structures and uses within these distances would be the ones most likely affected by additional significant passenger and freight train volume. Both corridors were reviewed from about Sangamon Ave. to Iles Ave. These areas were selected primarily because while some critical and community facilities may exist north and south of these zones, it was clear from the initial review that the vast majority of them, at the greatest density, existed in these areas. This is also an area similar to that reviewed in our earlier report related to impact on residential properties.²

The facilities were largely identified by reviewing aerial photography of the structures within the study area. We have not conducted field research at this point that would allow for a complete census of facilities along the corridors, as that is beyond our current resources. We recognize that it is likely that a small number of facilities along the corridors that could be included in a final and more comprehensive inventory have been missed. However we believe that the facilities identified provide a reasonably good approximation of these uses along both corridors.

It is also important to note that because the two rail corridors are so close together (being about ½ mile apart at the furthest separation), a significant number of the facilities identified are inbetween the two corridors, falling within either the ¼ or ½ mile study zones of both. This means that they would be affected by either route.

Categorizing the Facilities

To aid in the analysis we categorized the facilities as being of two types: critical facilities and community facilities. These facilities are identified by colored shadings on the aerial maps at the end of this report.

To identify critical facilities, we began with those identified as critical in the Sangamon County Multi-Jurisdictional Natural Hazards Mitigation Plan.³ This plan included the following as examples of critical facilities:

² Walker, D., et al (Sept. 2, 2009). *Effect of Increased Freight Trains on Property Values Along Springfield's 3rd Street Rail Corridor*. SSCRPC: Springfield, IL.

³ SSCRPC (Aug. 2008). *Sangamon County Multi-Jurisdictional Natural Hazards Mitigation Plan*. Springfield-Sangamon County Regional Planning Commission: Springfield, IL.

- Government Facilities: city hall, fire station, government office/facility, library, military facility, primary police station, school.
- Infrastructure Facilities: airport, bus station, communication tower, media location, power plant, railroad, sewer plant, train station, utility substation, water plant, water tower.
- Medical Facilities: hospital, medical clinic.
- Gathering Places: fairgrounds, park, and primary tourist attraction.
- Residential Facilities: nursing home, residential group home.
- Other Facilities: facility storing a chemical hazard, grain elevator, social service agency providing shelter/relief.

The critical facilities map used for the Natural Hazards Mitigation Plan was the base map used to map facilities for this report.

Along with critical facilities we have attempted to identify what we termed community facilities. Community facilities are considered those that residents and visitors would deem important amenities, or important to future economic growth and development. They sometimes overlap with critical facilities. Examples of community facilities include:

- Infrastructure Facilities: parking ramps for either employees or visitors, significant private utility infrastructure.
- Gathering Places: larger hotels and conference facilities.
- Medical Facilities: minor medical facilities, such as doctor's offices and urgent care centers.
- Other Facilities: public service facilities (e.g., Hoogland Center for the Arts, Boys & Girls Clubs of Springfield), destination and tourist attractions (e.g., Lincoln-Herndon Law office, Dana Thomas house.)

The community facilities listed above may not rise to the critical level of hospital, fire or primary police station, but they can be considered important and often fragile structures. For this reason we included them in this review.

Drawing from the examples provided above, and recognizing that some types of facilities were not located within the study zone, we categorized the facilities identified into eight types for analysis: Medical Facilities; Government Facilities; Infrastructure Facilities; Schools and Educational Facilities; Residential Facilities; Gathering Places; Parks; Other.

It should be noted that the geographic center of each facility was used to identify its proximity to the rail corridor. There may be instances where a facility's property lies within the ¼ to ½ mile buffer zone, but it is not included in our analysis unless the

center of the structure falls within the zone. This measurement method was used for both corridors.

As noted previously, the aerial maps at the end of this report show a cross section of each rail corridor.

Results of the Review

The results of our review are presented in the tables below. Table 1 reports the number of critical and community facilities within ¼ mile of the centerline of the two corridors, while Table 2 reports the same information within ½ mile.

It is important that the reader understand that the tables represent a purely quantitative assessment of the location of these facilities – the number of them – not a qualitative assessment – the nature or importance of them – as the SSCRPC had no way to make a qualitative judgment.

TABLE 1: Critical and Community Facilities Count: ¼ mile from track centerline

Facility Type	3 rd Street Corridor	10 th Street Corridor	Difference
Medical Facilities	14	9	5
Government Facilities	44	18	26
Infrastructure Facilities	13	5	8
Schools & Educational Facilities	7	3	4
Residential Facilities	4	1	3
Gathering Places	7	2	5
Parks	5	6	1
Other Facilities	2	6	4
TOTAL	96	50	46

TABLE 2: Critical and Community Facilities Count: ½ mile from track centerline

Facility Type	3 rd Street Corridor	10 th Street Corridor	Difference
Medical Facilities	42	16	26
Government Facilities	76	44	32
Infrastructure Facilities	17	15	2
Schools & Educational Facilities	10	11	1
Residential Facilities	8	4	4
Gathering Places	9	8	1
Parks	10	8	2
Other Facilities	7	10	3
TOTAL	179	116	63

Analysis of the data presented in the tables above indicates that while there are many critical and community facilities proximate to both rail corridors, there are many more

proximate to the 3rd Street corridor than to the 10th Street one, and they appear to be more dense.

Important findings drawn from the results include:

- Overall, the 3rd Street corridor contains approximately 92% more critical and community facilities within ¼ mile of the rail lines than does the 10th Street corridor. There were 96 such facilities within this distance of the 3rd Street corridor compared to 50 facilities within the same distance of the 10th Street corridor.
- This changes as one moves further away from the 3rd Street line, indicating the density of facilities closer by. The 3rd Street corridor contains approximately 55% more critical and community facilities within ½ mile of the rail lines than does the 10th Street corridor. The SSCRPC found 179 such facilities within this distance of the 3rd Street line compared to 116 facilities within the same distance of the 10th Street corridor.
- Primarily because it is nearer the seat of state government, the 3rd Street corridor contains approximately 145% more governmental facilities within ¼ mile than the 10th Street corridor. We found 44 government facilities within ¼ mile of the 3rd Street corridor compared to 18 within ¼ mile of the 10th Street lines. As one moves further away from the lines the difference in the density of government facilities is reduced, but is still very significant. There are approximately 73% more government facilities within ½ mile of the 3rd Street corridor than 10th Street, as the 3rd Street corridor contains 76 such facilities within this distance while 10th Street includes 44.
- Because the 3rd Street corridor runs through the Mid-Illinois Medical District while the 10th Street corridor is only adjacent to it on the east, the 3rd Street corridor contains approximately 56% more medical facilities within ¼ mile than the 10th Street corridor. The SSCRPC found 14 medical facilities within ¼ mile of the 3rd Street line compared to 9 within the same distance of the 10th Street corridor. We believed that because of the centrality of the 3rd Street line to the Medical District and the density of these facilities in the area, this percentage would change significantly as one moved further away. It did not. The 3rd Street rail corridor was found to contain approximately 163% (42) more medical facilities than the 10th Street corridor (16) within ½ mile.
- There are facility categories in which more facilities are closer to the 10th Street line than the 3rd Street one, but this can differ by distance. For example, there are more schools and educational facilities within ¼ mile of the 3rd Street lines than the 10th (7 vs. 3), but when one applies the ½ mile distance there are more schools closer to the 10th Street corridor than the 3rd (11 vs. 10). Conversely, there are more parks closer to the 10th Street corridor at ¼ mile (5 vs. 6), but this changes when the study area is broadened to ½ mile (10 vs. 8). There is no change by distance for facilities

we classified as Other, as there are more of these facilities closer to the 10th Street corridor than the 3rd Street corridor at either distance (¼ mile: 2 vs. 6; ½ mile: 7 vs. 10).

Conclusions

Overall we find that there are significant differences in the number and type of critical and community facilities located near the two rail corridors. We would remind the reader that these are quantitative, numerical, differences rather than qualitative ones. Additional research would be needed to make qualitative judgments. This differentiation should be addressed in any new environmental impact study.

We do believe that two special cases should be addressed. The first relates to the Medical District, and we include a map showing the boundaries of the district in relationship to the rail line among the other aerial maps at the end of this report. We believe that the Medical District should receive added focus – particularly in any qualitative assessment – because of the health-related employment growth trends in the area and the importance of availability of medical services not only to Springfield but to the surrounding region. Leaders representing the medical community have expressed concerns about the future of medical district development, citing rail expansion within the medical district as a primary concern.

We also believe that a simple counting of facilities under-estimates the importance of historic areas and structures in Springfield that might be affected by additional rail use on either corridor, or by attempts to mitigate additional rail traffic. We have included a map at the end of this report that shows areas shaded in orange where there are concentrations of historic structures that have received special designation. One is the National Register Historic District in the downtown that includes such historic sites as the Old State Capitol and the Lincoln-Herdon Law Offices. The other two areas shaded in orange on the lower portion of the map are specially zoned historic areas. These areas include such facilities as the Governor’s Mansion (close to the 3rd Street line), the Lincoln Depot (beside the 10th Street line), and the Lincoln Home site (closer to the 10th Street line). The highlighted areas fall within the ½ mile zone of both the 3rd and 10th Street corridors, with the greatest concentration falling within the 3rd Street one.

We recognize that there will be an impact on the areas surrounding both rail corridors and the facilities located there if rail traffic increases on either. But we also recognize that the number, quality and density of the facilities discussed here should be taken into account when the route decision is made.

List of Maps

Map 1: 3rd Street Center Detail with ¼ Mile Buffer

Map 2: 10th Street Center Detail with ¼ Mile Buffer

Map 3: 3rd Street Center Detail with ½ Mile Buffer

Map 4: 10th Street Center Detail with ½ Mile Buffer

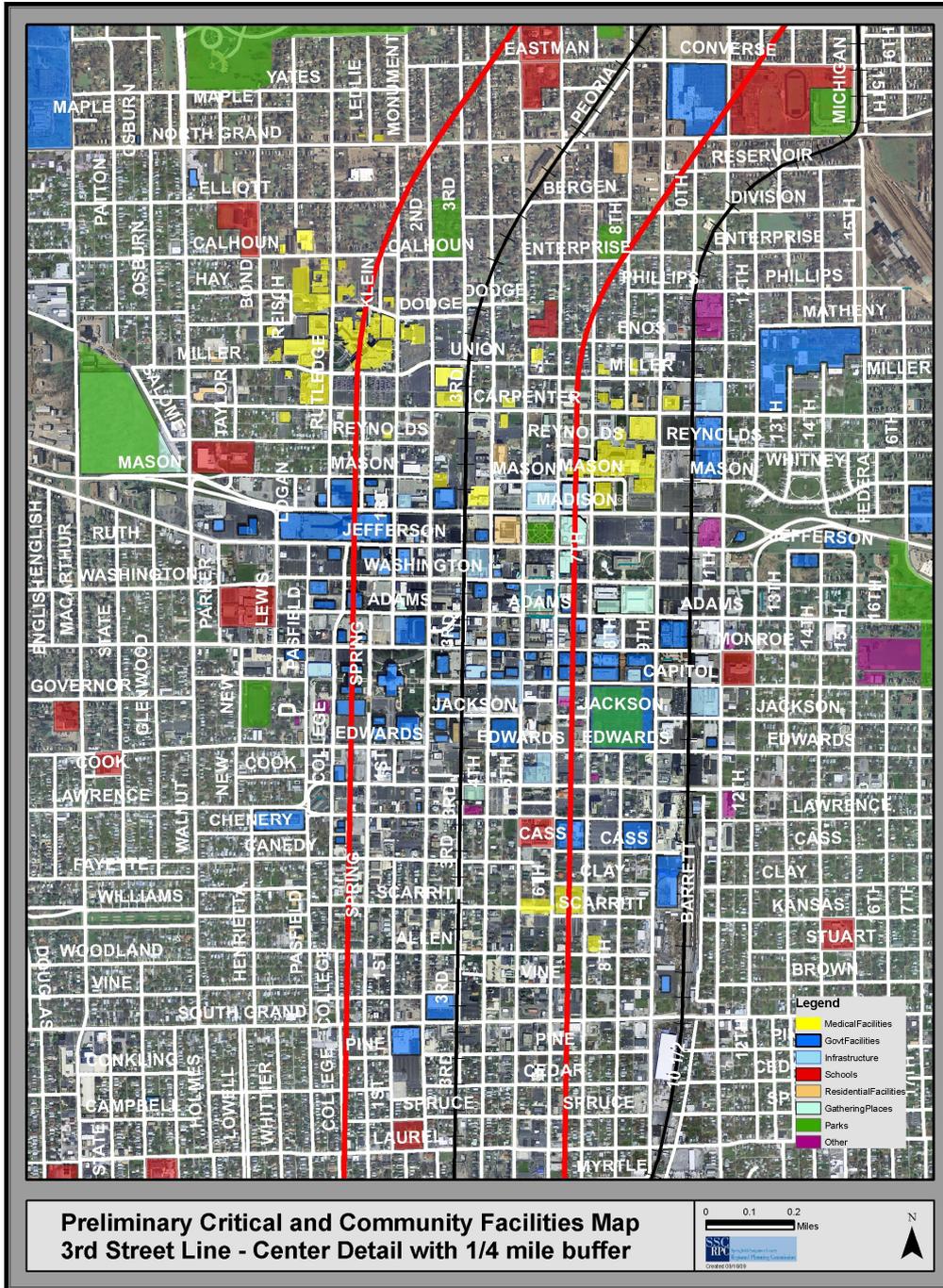
Map 5: 3rd Street Historical Areas with ¼ Mile Buffer

Map 6: 10th Street Historical Areas with ¼ Mile Buffer

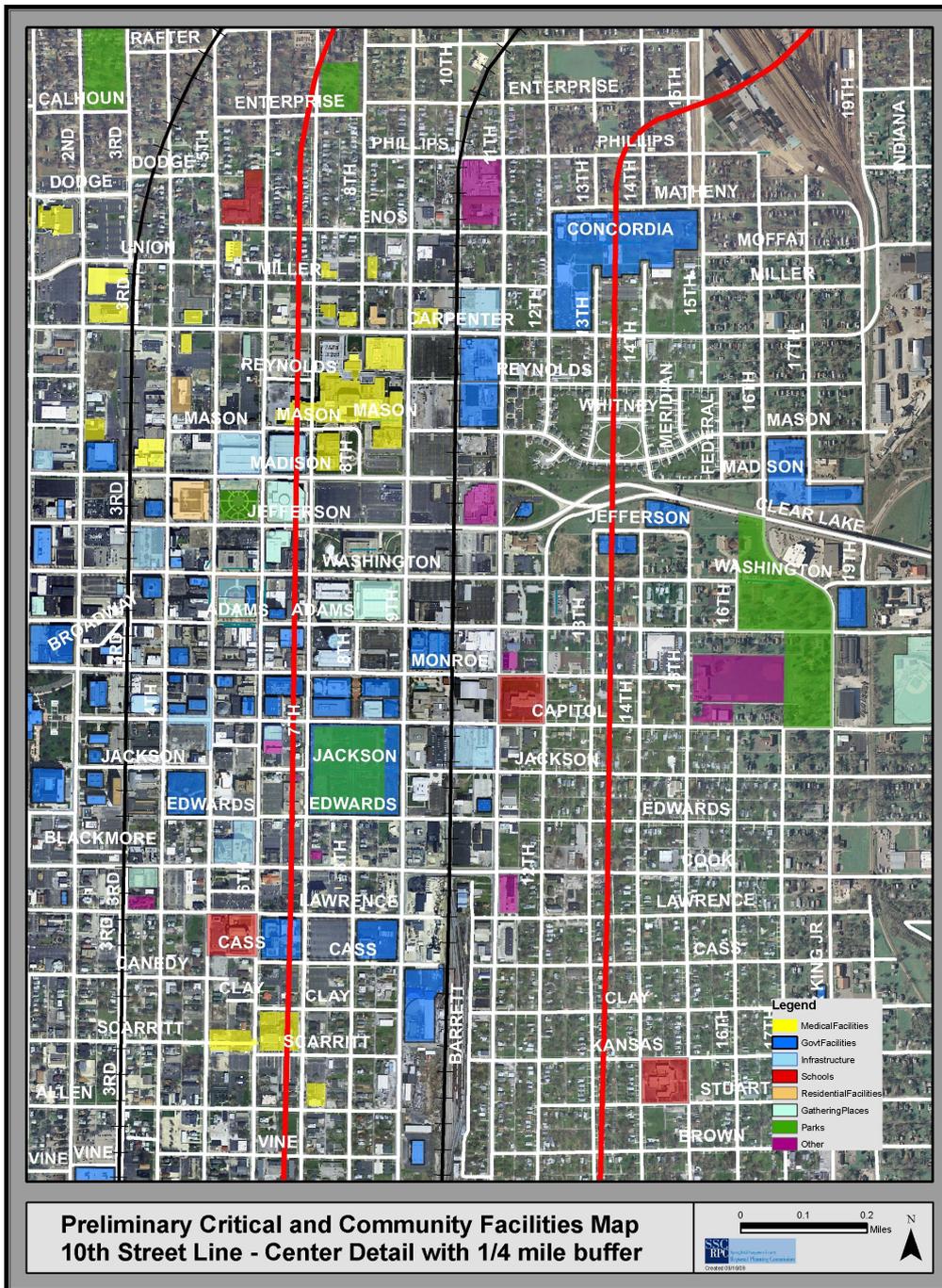
Map 7: Rail Corridors – Detail of Medical District

Map 8: Rail Corridors – Full View

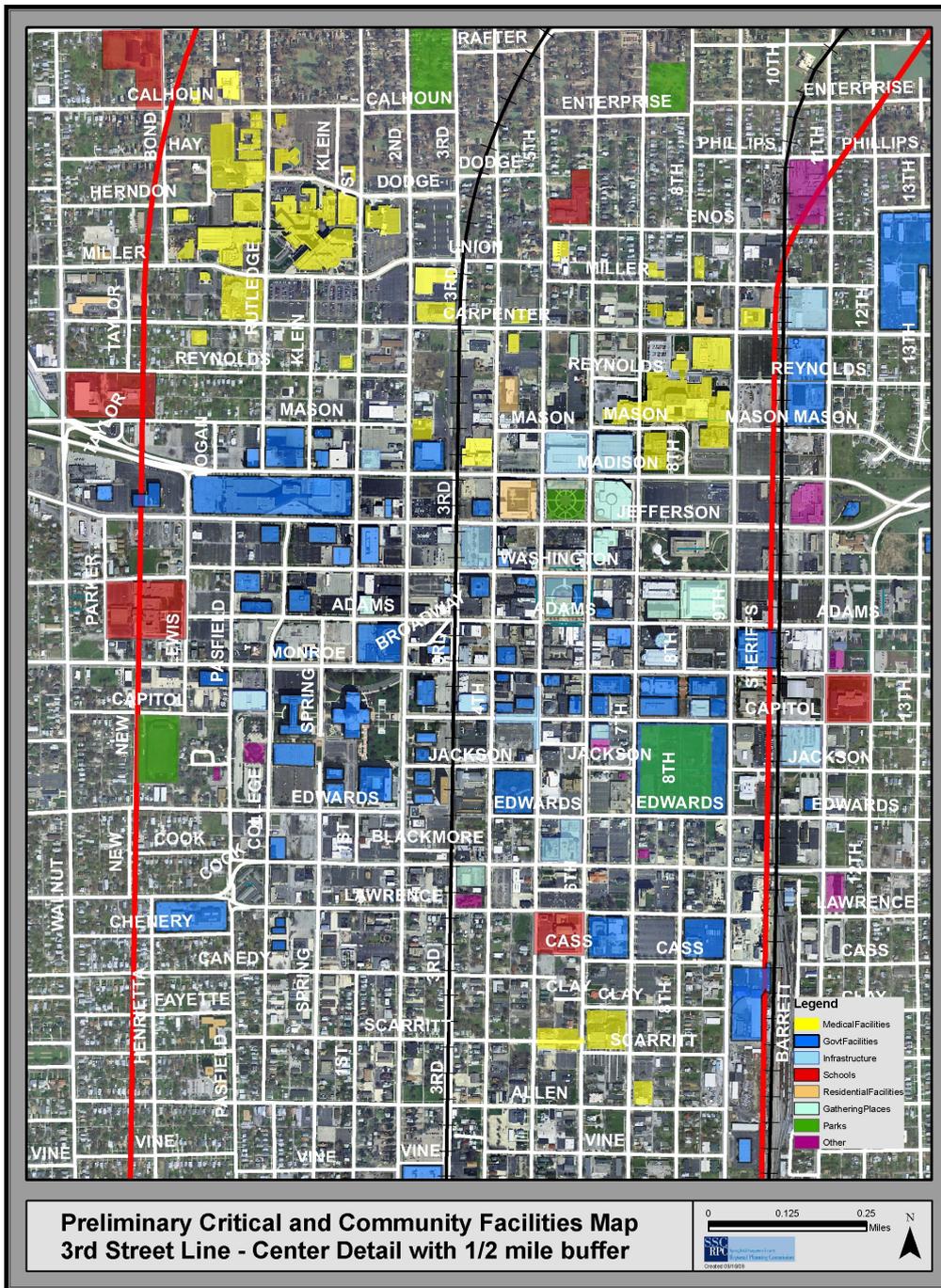
Map 1: 3rd Street Center Detail with 1/4 Mile Buffer



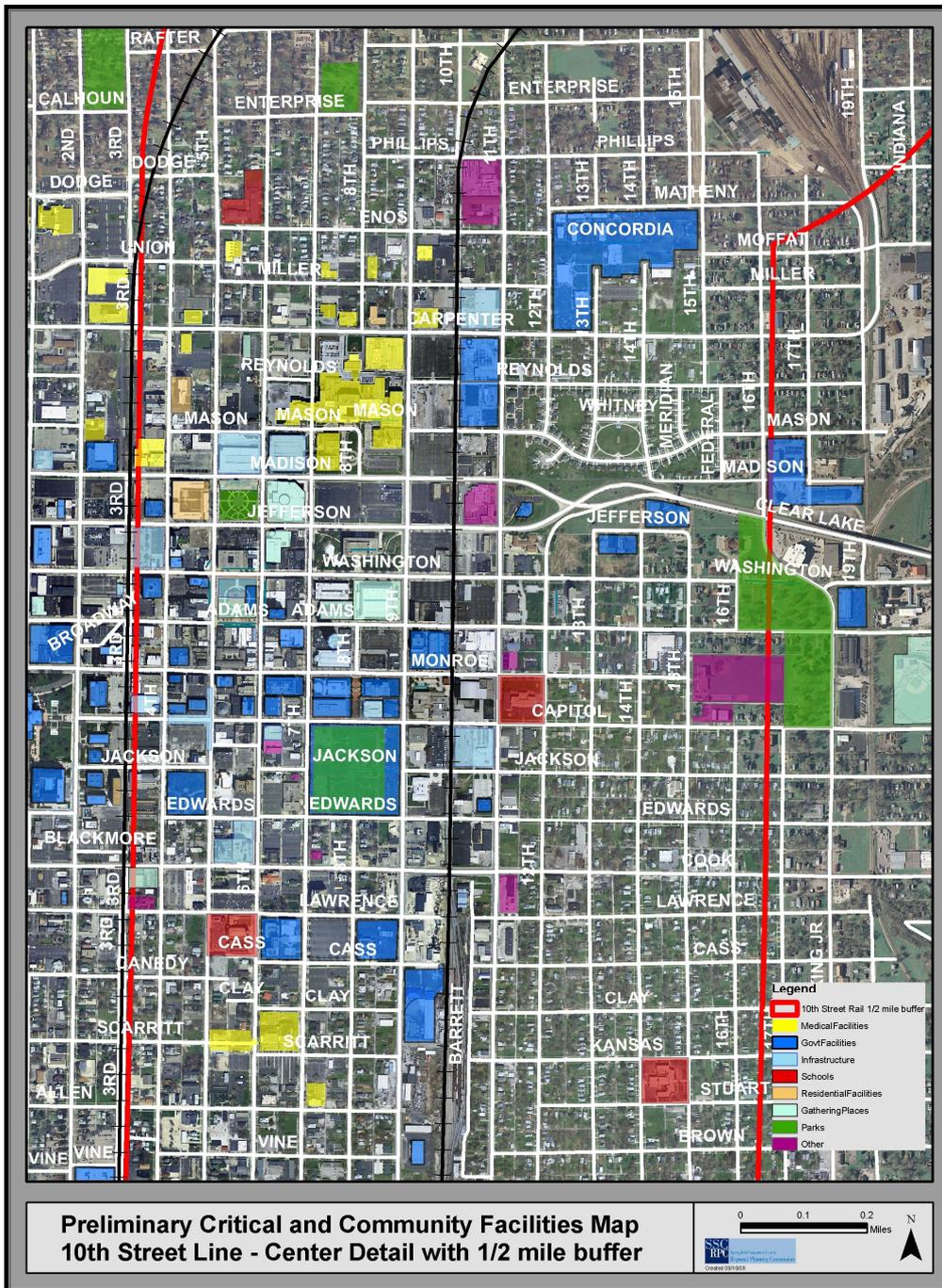
Map 2: 10th Street Center Detail with ¼ Mile Buffer



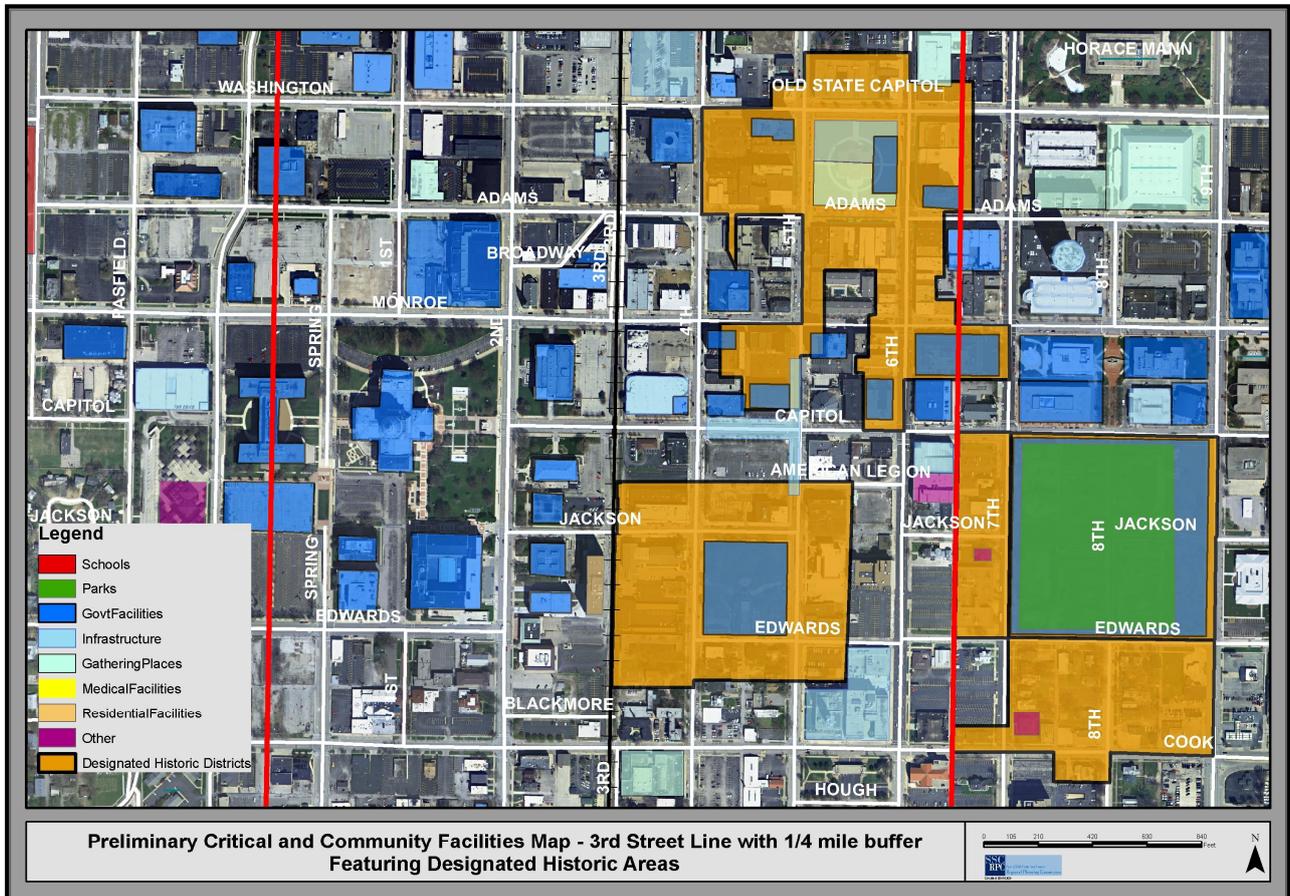
Map 3: 3rd Street Center Detail with 1/2 Mile Buffer



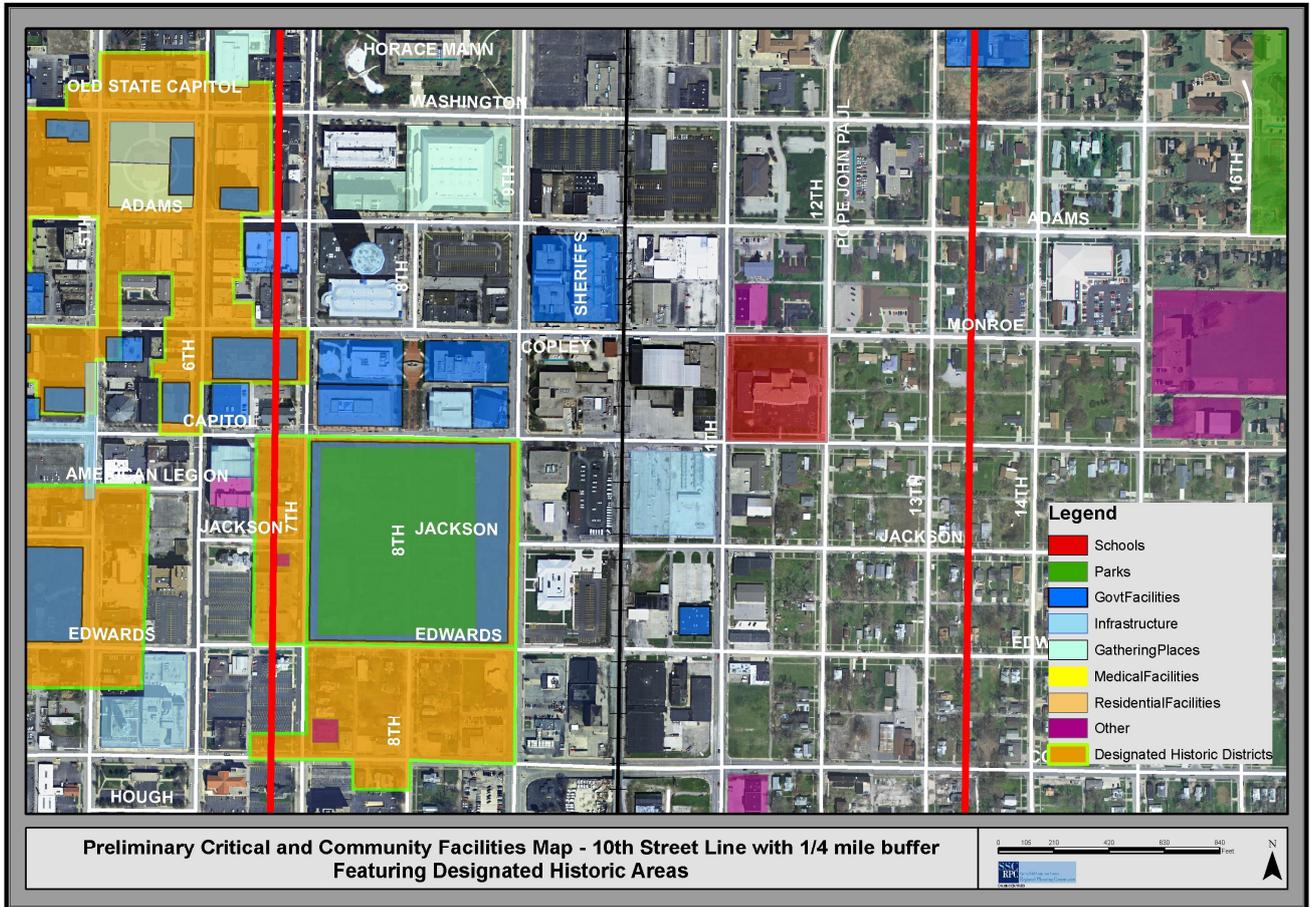
Map 4: 10th Street Center Detail with 1/2 Mile Buffer



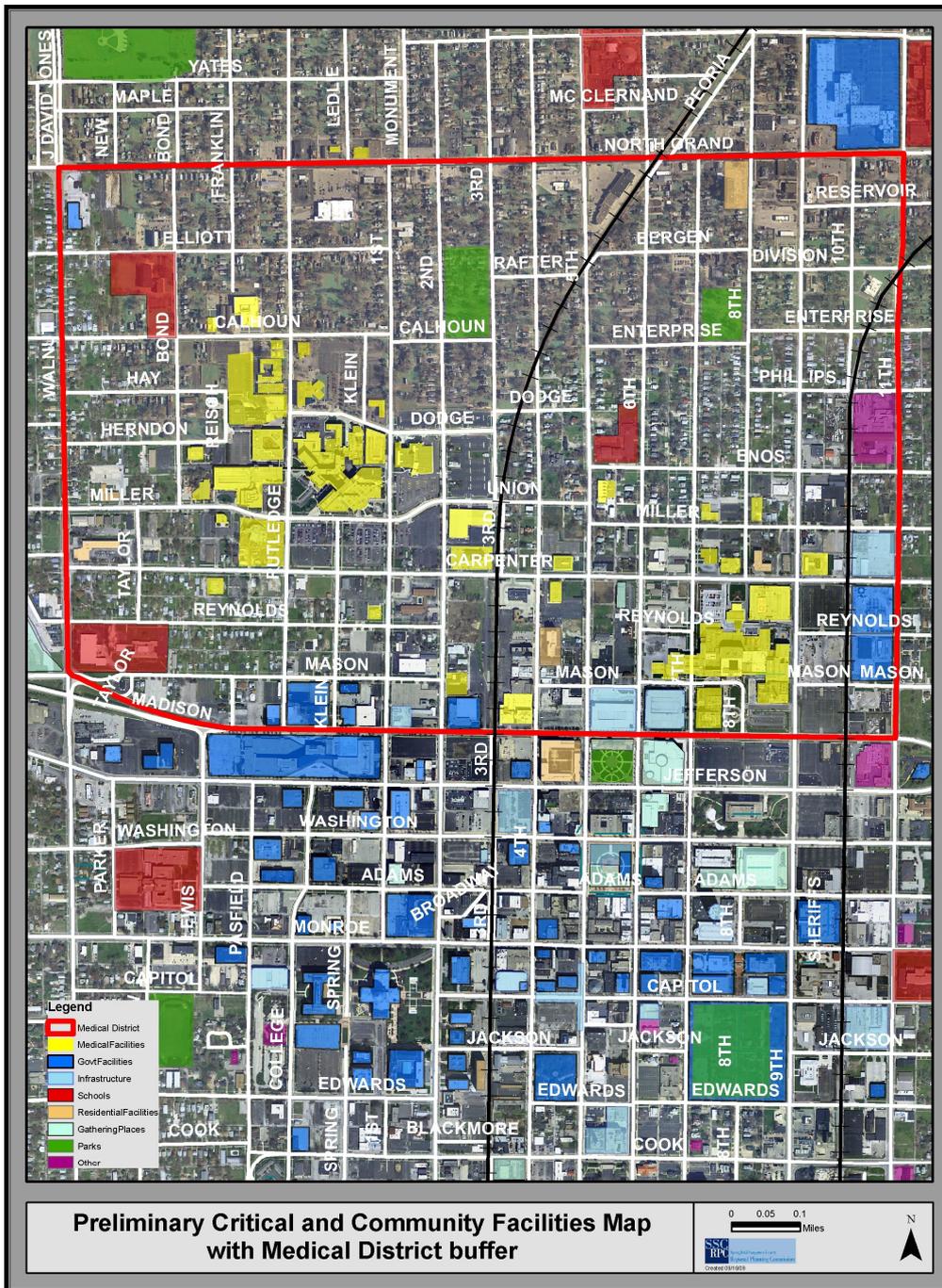
Map 5: 3rd Street Historical Areas with 1/4 Mile Buffer



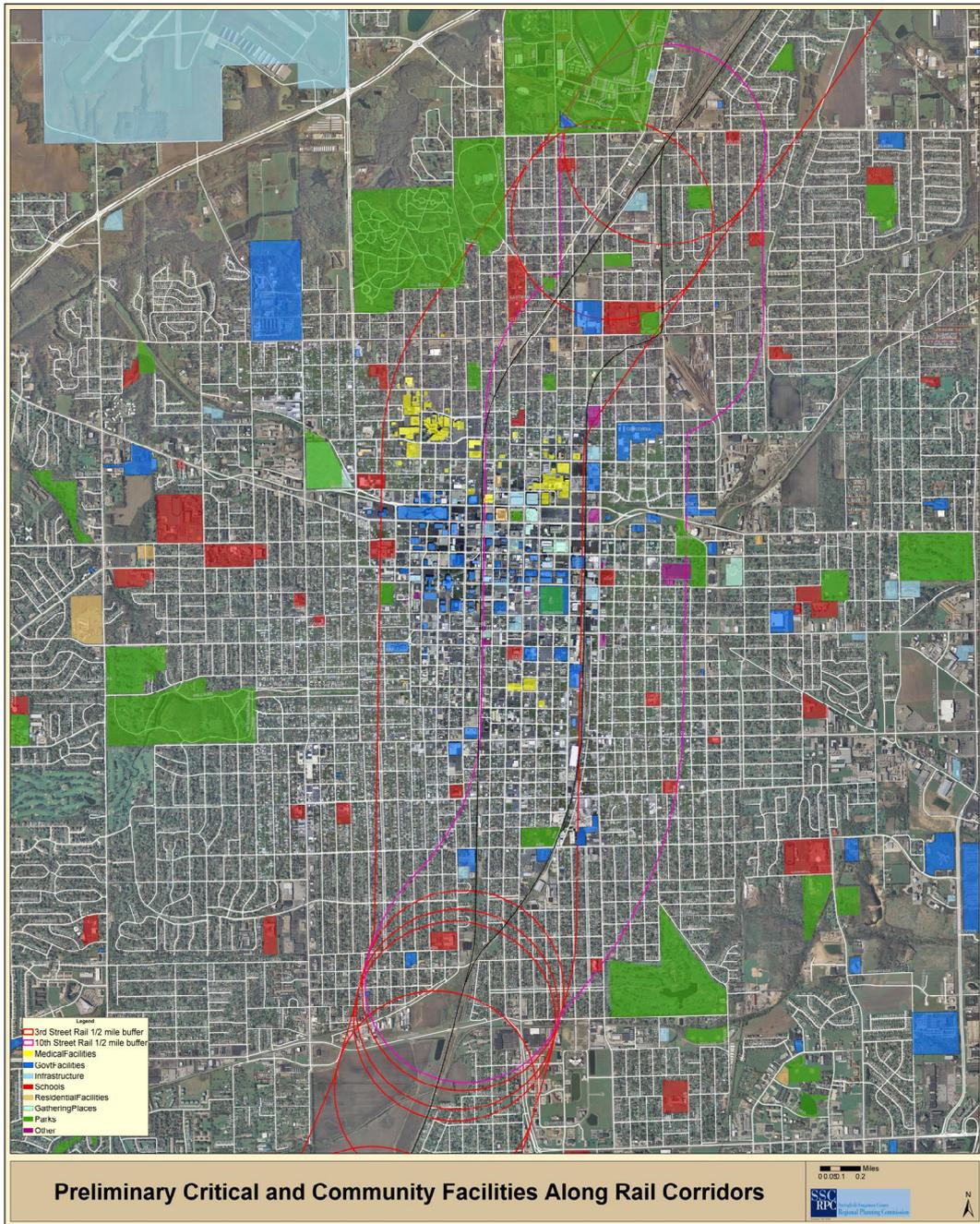
Map 6: 10th Street Historical Areas with 1/4 Mile Buffer



Map 7: Rail Corridors – Detail of Medical District



Map 8: Rail Corridors – Full View



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The Springfield-Sangamon County Regional Planning Commission (SCRPC) serves as the joint planning body for Sangamon County and the City of Springfield, as well as the Metropolitan Planning Organization for transportation planning in the region.

The Commission has 17 members including representatives from the Sangamon County Board, Springfield City Council, special units of government, and six appointed citizens from the city and county. The Executive Director is appointed by the Executive Board of the Commission.

The Commission works with other public and semi-public agencies throughout the area to promote orderly growth and redevelopment, and assists other Sangamon County communities with their planning needs. Through its professional staff, the SSCRPC provides overall planning services related to land use, housing, recreation, transportation, economics, environment, and special projects. It also houses the Sangamon County Department of Zoning and Building Safety which oversees zoning, building permits and code, and liquor licensing for the County.

The Commission prepares area-wide planning documents and assists the County, cities, and villages, as well as special districts, with planning activities. The staff reviews all proposed subdivisions and makes recommendations on all Springfield and Sangamon County zoning and variance requests. The agency serves as the county's Plat Officer, Floodplain Administrator, Census coordinator, and local A-95 review clearinghouse to process and review all federally funded applications for the county. The agency also maintains existing base maps, census tract maps, township and zoning maps and the road name map for the county.

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