Mapping Community Development in Kansas City
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Introduction

Within our urban communities, diverse groups exist with diverse development agendas. These include the following (not necessarily mutually exclusive) groups:

- Private sector, profit-oriented metropolitan development interests
- Local government interests, including urban planners, administrators, revenue offices, and political leadership
- "Civic" leadership[1]
- Corporate business interests with national and global market penetration
- Local and national-level charitable foundations
- Governmental and non-profit sector social service agencies and funders (such as United Way)
- Non-profit community-based development organizations (CDCs, CCIs, etc.)
- State and Federal agencies with an urban mission, such as HUD (the U.S. Department of Housing and Urban Development)
- Last (and often least), neighborhood/community residents, activists, and leaders

From this diversity of groups with diverse development interests emerges a diversity of goals, policy preferences, and prescriptions. There exists an ongoing need for the most rigorous tools and methods available which can help these groups with the choice and evaluation of alternative policy implementations.

The relatively recent emergence of GIS (Geographic Information Systems)[2] applications has introduced the potential for new tools and methods in the field of urban and community development. In Kansas City, the GPLAN Project is emerging as a collaborative, parcel-based GIS model and methodology with the potential to help evaluate this diversity of metropolitan development policy agendas.

Evolution of the GPLAN Project and the residential conditions survey

The Neighborhood GPLAN project evolved in Kansas City between 1997 and 1999 as one outcome of the activities funded by a HUD COPC grant to the University of Missouri--Kansas City (UMKC), involving the joint effort of The Center for Economic Information (CEI) and The Urban Affairs Program in the College of Arts and Sciences.

The specific grant activity which provided the organizing momentum for the GPLAN project was generically called neighborhood "asset mapping." Asset mapping is an exercise which usually employs the idea of "mapping" in a relatively figurative sense. The CEI's ability to work with GIS software applications provided an opportunity to perform this exercise literally.

[1] This is a term often used to refer to the active leadership of relatively wealthy and successful private sector interests who are well-established among the local metropolitan social elite.

[2] Geographic Information Systems, or GIS, is the name for computer software applications that utilize digital mapping functions in conjunction with relational database functions to provide the capacity to represent and analyze the geographic, or spatial, dimensions and relationships of "natural" and "socio-economic" data.

As we began to meet with neighborhood activists to organize and implement our "asset-mapping" activity, we encountered the "Neighborhood Codes Academy," developed and administered by the Kansas City Neighborhood Alliance (KCNA),[3] underway as a pilot project in the 49/63 Neighborhood Coalition, financed by a Jackson County COMBAT[4] grant to 49/63. Neighborhood volunteers were trained to perform inspections of residential property with respect to the issues addressed by property maintenance codes. This was accomplished by evaluation on a five-point scale of the conditions of property features such as roofs, foundation & walls, windows & doors, exterior paint, private sidewalks & drives, lawns & shrubs, litter, etc. Also rated on the same scale were the conditions of public infrastructure such as streets, sidewalks, lighting, etc. In all, for each property, eleven "private" and five "public" features were rated. Inspectors performed "windshield evaluations," working as teams of two in vehicles. In the 49/63 pilot project, inspections were performed by neighborhood and Americorps volunteers, and by UMKC students working for the CEI. All inspectors were required to go through a standardized training process developed and delivered by KCNA neighborhood specialists. Issues of inter-reliability among inspectors and quality control were addressed, but were not quantified in the pilot project.

It became our task at CEI, in performance of the neighborhood "asset-mapping" activity financed by the COPC grant, to convert the Codes Academy inspection project into an electronic database, link that database to "parcel-level" geography in a GIS system, and make the resulting GIS database available to various community constituencies for neighborhood analysis and planning.

Potential of the GPLAN Project

The GPLAN Project's interpretation and realization of "asset-mapping" (parcel-level inventory and GIS-mapping of the physical conditions of residential property and public infrastructure) has two important features.

First, parcel level mapping of residential property conditions is of real interest in its own right, to several major urban and community development constituencies. Conventional CDCs whose principle activity is the development of affordable housing in low-income neighborhoods, city urban planners, neighborhood residents themselves, and a variety of private sector interests including developers, real estate agencies, mortgage bankers, construction contractors, and insurance companies, just to name the most obvious, all have a keen interest in the collection and mapping of residential conditions data.

Over a period of several months, the GPLAN pilot project in 49/63 came to the attention of planners and administrators in the City of Kansas City's Department of Housing and Community Development. The real value of this project for the development community was clearly ratified in April 2000 with the award of a contract to the GPLAN partnership. The contract was to apply the survey, mapped on the City's electronic geographic parcel-level database, to 100 percent of the residential structures (approximately 87,000 parcels) in the urban core (defined as a contiguous area of 118 neighborhoods with specific boundaries), with a 5 percent tract-level sample applied to the remaining areas of the city. That contract runs through May 2001. See the

[3] KCNA, established in 1979, is one of the most active and successful CDCs in the Kansas City area.

[4] COMBAT is the acronym for COM(munity) B(ased) A(nti-drug) T(ax), a sales tax passed by residents of Jackson County, Missouri, for the express purpose of funding county-wide strategies for "combating" the social problems of substance abuse and addiction.

Map Appendix for detail on the geographic scope of the city contract, and a representative illustration of the kind of information and output which will be available.

As a result of the residential conditions survey contract with Kansas City, Missouri, the project has a relatively high profile among the entire range of urban/community planning and development constituencies in the entire Kansas City MSA, which crosses the Missouri/Kansas state line. Negotiations are in progress for a similar contract with the Unified Government of Kansas City, Kansas, and Wyandotte County.

The second (arguably even more) important feature of the GPLAN project is that it establishes a methodological framework for geographic community modeling with virtually unlimited potential. The development of a parcel-level geographic database allows the collection and representation of social and economic data at the finest possible level of "social resolution," i.e., the houshold.[5] Higher level social "geographies" (e.g. "blocks" or "neighborhoods" or "communities") are (more or less) easily added to the household/institution/enterprise-level model. This, of course, includes the conventional social geographies such as low-level census geography (blocks, block groups and tracts), zip codes, school districts, voting districts, cities, counties, and MSAs.[6] The database functions of GIS allow the linkage of virtually unlimited datasets to whatever levels of geography for which they may be relevant and available. The implicit role of space and spatial relationships in the study of community development is rendered integral, explicit, and amenable to formal analysis.

As a result of its activity of the last three years, the GPLAN project partnership (CEI & Urban Affairs at UMKC, and the Kansas City Neighborhood Alliance) has also developed significant expertise and efficiency in the management of a standing and active field survey team, survey instrument design and application, survey team training and managment, database processing, and the network/desktop delivery of GIS applications and network map servers. The GPLAN project to date has provided a means by which to cover the high overhead costs which exist in terms of learning how to manage, manipulate, and process the parcel geography for parcel and block-level mapping. City and county resources are rarely adequate to keeping the geographic and data attribute components of the parcel geography current with the real estate land use, value, and tax records which are their basis (and which also represent important parcel-level data available to us.) GPLAN project staff at CEI have learned some of the intricacies and idiosyncracies of this parcel geography; the city contract has provided a context within which our staff can collaborate with city personnel to identify and correct certain kinds of errors, maintaining a relatively "clean" database which will significantly reduce the cost of mapping additional parcel and block-level information. CEI staff have invested significant time and effort in defining and constructing a "block-level"[7] geography derived from the parcel level. See Map 2 for an example.

All this represents an investment in a parcel-level GIS model and methodology that can be leveraged for additional relatively low-cost application as a development policy evaluation tool.

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[5] Or, in the case of non-residential property, commercial and industrial enterprise, institutions, etc.

[6] Metropolitan Statistical Areas, which are usually defined as aggregates of counties.

[7] Among GIS practitioners, "block-level" geography is usually understood in terms of physical blocks, such as the census block geography, which is a layer of conventional enclosed polygon geographic features. Among community development constituencies, "block-level" is understood to refer to "face blocks", the property and structures situated on facing sides of a street block. Face block geography cannot be easily represented as a set of conventional closed polygons. The GPLAN block level geography derived from the parcel level is a true face-block social geography, entailing an aggregation of relevant parcels to the "block" on which they are located.

Additional leverage for the GPLAN project as a development policy evaluation tool comes from the institutional network of collaboration and partnership which has brought the project this far along its path. Active institutional partners in the GPLAN project presently include:

- at UMKC --
  - CEI and the Dept. of Economics
  - The Urban Affairs Program and Dept. of Sociology
  - University Extension
- HUD (U.S. Department of Housing and Urban Development)
- KCNA
- City of Kansas City, Missouri
- The Kauffman Foundation
- Economic Development Corporation of Kansas City, Missouri
- KCPD Planning & Research Unit
- Numerous KCMo neighborhood associations and other CBOs

The list of organizations with a potential partnership interest in GPLAN is even longer.

- at UMKC --
  - The Health Research Group in the Community Psychology Program
  - The GIS Laboratory in the Department of Geosciences
  - Researchers in the Departments of Political Science and AOJ
  - The Social Science Consortium
- KC KS
  - City of Kansas City, Ks
  - KC Ks neighborhood associations and other CBOs
  - Wyandotte County DOTTES
  - KC Ks School District
  - KCK Community College Research Center
- Local Initiatives Support Coalition (LISC)
- Mid-America Regional Council (MARC)
- KC Area Development Corporation (KCADC)
- Greater KC Chamber of Commerce
- Fannie Mae
- The Red Cross
- The Local Investment Commission (LINC)

Discussions aimed at active participation are already underway with several of these organizations.

Development and pilot application of the non-residential parcel inventory

In order to advance the GPLAN project as a useful tool and methodology for community development and policy evaluation, it is crucially necessary to map more than residential property conditions. However, as with any research problem, the most fundamental and often deceptively simple issue is the choice and design of what indicators/variables to observe. A good illustration of the deceptively simple significance of these choices would be the interesting result of a technical choice to map the first categorical variable of the residential conditions survey, which was designed to establish the parcel typology among residential and non-residential structures, and vacant lots. The real information of interest was, presumably, the

observed physical condition of standing residential structures. However, mapping the typology variable (for a no more profound purpose than management of the inspection process) immediately results in the interesting and dramatic display of the spatial pattern and intensity of abandoned property, together with a (partial)[8] display of standing residential vs. non-residential land use. (This is illustrated in Map 3.)

The most obvious extension of the program would seem to be in the direction of a comprehensive parcel-level property inventory which would provide the capacity to map both residential and a wide variety of non-residential parcel usage. The ability to map residential, commercial, institutional, industrial, and civil property use and conditions within the confines of a specific area, or neighborhood, would be of clear interest to the neighborhood/community, the private-sector economic development, and the municipal planning constituencies of the GPLAN project. And it is precisely within the context of such a jointly-owned analytical and planning tool that we might expect the often diverse interests of these groups to be brought together in a constructive metropolitan-level dialogue.

Beyond the scope of the comprehensive parcel-level property survey, the possibilities for what characteristics of the neighborhood, urban, suburban, and metropolitan communities to observe and map are virtually unlimited. A comprehensive data development framework for the project, called the Community Development Indicators (CDI) program is presently in the design phase. As presently articulated, its components are:

- the comprehensive parcel-level inventory, detailing both residential and non-residential property use and conditions
- a "development status" survey, (variously represented as parcel, block, point, and line-type features) which represent the investment of new or rehabilitated physical assets; a qualitative neighborhood-level development survey will employ a combination of field survey, observation, and interview data collection methods to identify intangible (i.e. social, or social capital) community development "assets." These "development" features may be mapped at the point, line, parcel, block, and even neighborhood levels.
- a block-level survey, including both a general and detailed typology (residential, commercial, urban, suburban, low/high density, etc.), indexes for both blight and aesthetics, and block-level digital photography
- a "secondary data" program, which would incorporate a vast array of existing data resources, such as block group, tract, and neighborhood-level census data, block-level offense and arrest statistics, real estate value and tax data, address-level mortgage loan data, and zip-code-level business activity.
- an Economic Development Indicators (EDI) program, specifically focused on the interests and needs of the public/private sector economic development community

[8] Non-residential parcels were not comprehensively inventoried. Primarily commercial and industrial districts were excluded from the inspection a priori, although "mop-up" procedures were designed to capture as many residential structures/uses as possible in those areas. Non-residential structures/uses found within the primarily residential areas in which the survey was conducted were mapped.

Incorporation of extensive census data in the GPLAN project (including both 1990 and 2000 decennial data and eventually the ACS[9]) simultaneously accomplishes two complementary goals. One, it adds unquestionable value to GPLAN as an analytical and planning tool; and 2) it represents a significant realization of the value of Census data to a constituency (grass-roots neighborhood and community organizations) which have historically underutilized the potential of census data. This second goal is mandated by the CEI's mission are a member of the Missouri State Census Data Center (MSCDC) core agency group.

In addition to these relatively well-defined program elements detailed above, additional elements are in various stages of discussion with collaborators, including

- natural geography, land use, and cover derived from satellite photography
- community health conditions
- political and civic participation

And, as already noted, the list of potential additional elements in the program can easily grow to include the interests of any group or constituency who wants to join the project.

Lacking the immediately available resources to implement the comprehensive parcel, block and neighborhood level survey elements of the CDI program throughout the urban core, at least four potential target areas can be identified for application of a pilot survey project:

- the Westside neighborhood (characterized by widely heterogeneous mixed land use--residential, commercial, and industrial), where a collaborative relationship between CEI and the Hispanic Economic Development Corporation (HEDC) has already generated an intense interest;
- the Troost corridor, a commercial corridor running along the north/south backbone of the city, serving as a stark black/white racial demarcation line, and bounding some of the most distressed neighborhoods of the urban core;
- the Midtown TIF district, where a major urban re-development initiative is underway with proposed subsidy by tax-increment financing, and
- the 3rd City Council District, which bounds probably the most distressed contiguous area of the city.

Each of these areas have various characteristics (some similar, some different) which make them attractive candidates for pilot application of the comprehensive survey. Identification of an optimal pilot area will possibly include more than one, in whole or in part.

Analytical potential

Incorporation of parcel, street block, and neighborhood geography, together with indicator/attribute data for these geographic levels as described above, provides us with the opportunity to develop (and possibly estimate) a multi-level community hierarchy analytical model. A proposed linear regression model of exactly this kind can be found in recently published research literature from the fields of urban sociology and criminology.[10]

[9] The American Community Survey, scheduled to be fully implemented around 2006, will eventually supercede the decennial long form, making detailed, high-quality, low-level demographic and socio-economic data available on an annual basis for most heavily urbanized areas.

[10] See Taylor (1997).

Less formal (and more *ad hoc*) methods of analysis, however, constitute the principal analytical approach, at least initially, enabled by the GPLAN project. Employment of the ad hoc approach may plausibly lead to the development of estimable, formal regression models.

Sophisticated application software exists to support a variety of ad hoc strategies. Anselin's work in the field of spatial econometrics[11] has led to the development of two software extensions to ESRI's Arcview GIS which provide valuable GIS functionality in both exploratory spatial data analysis (ESDA) and spatial econometrics (intergrated with Anselin's own spatial econometrics software package, SpaceStat). Exploratory analysis of the GPLAN project's muli-level community hierarchy geography, using Anselin's ESDA extension for Arcview, could potentially yield significant insight into the relationships which exist among those levels. Incorporation of spatial dependence in regression models can be accomplished with employment of spatial econometric methods supported by SpaceStat and linked to Arcview GIS through Anselin's SpaceStat extension. Other useful ad hoc methods--such as point pattern, spatial surface, and network analysis--are supported by standard ESRI extensions to Arcview.

Methods such as those detailed above might also be employed within the framework of another kind of ad hoc analytical method with very intriguing potential that we might plainly refer to (for lack of any prior referent) as *neighborhood/community analysis*. The GPLAN Project's comprehensive parcel and block-level mapping, together with the identification of both material and social development "assets," provides the intriguing opportunity to begin to comprehensively map and study both the static and dynamic constitution of neighborhood and community as social, material, and spatial constructs, and thus the potential dissonance between both our common sense and our formal perceptions of neighborhood and community, and their reality.

Application to policy and program evaluation

The CDI program as outlined above provides the crucial information baseline for the GPLAN project as a program and policy evaluation tool for neighborhood, community, and economic urban development. Program and policy evaluation is made possible with the ability to monitor change in the information baseline of component indicators of interest. This requires an ongoing commitment to follow-up surveys, maintenance, and update of the CDI database, always an issue in an arena where financing is chronically inadequate. Of course, the shortage of financial resources for community development programs and projects is precisely the dynamic driving the interest in GPLAN as an evaluation and planning tool.

The utility of the GPLAN project as a whole, however, entails much more than the CDI program alone. The essense of the project is its employment of low-level parcel geography, from which "social" block (i.e. "face" block, or "street" block) and neighborhood geographies can be aggregated. The combination of this geography with the CDI database in a GIS environment allows us to:

- present indicator information related to the geographic dimensions of interest in intuitively appealing and insightful ways;
- use geographic representations as a convenient, efficient, and effective information inquiry interface;
- explicitly and formally incorporate spatial relationships in our analysis of communities and neighborhoods.

[11] Anselin (1999a, 1999b).

And eventually, community development indicator mapping in a multi-layered geographic hierarchy combined with GIS analytical tools may well give us the capacity to develop a bona-fide and useful tool for the promotion of community development.

We have frequently stated our belief that the GPLAN project has the potential to serve a wide range of development interests in the Kansas City metropolitan area. Much of what has already been said here clearly illustrates the diversity of development constituencies who, despite the diversity of their development agendas, share a common interest in the GPLAN project. Specification of a distinct Economic Development Indicators (EDI) program within the CDI program is an explicit reflection of the carefully crafted diverse appeal of the GPLAN project.

In spite of an obvious and relatively undisputed relationship between "economic" and "community" development, the interests of "economic" and "community" development constituencies are often the most widely diverse of all. "Economic" development constituencies are usually driven primarily by interests in population and economic growth, land use intensification, and the profits which flow as a result. "Community" development constituencies are usually interested in the non-economic, non-profit-oriented values associated with urban land use, such as public green space, the preservation, or development, of "livable" neighborhoods, and remedial/support services for distressed populations of the urban core. City planners are often caught in the conflict between the two groups, although the access to resources conferred on economic development interests by the asymmetrical power relations of the business system, more often than not, tips the scales on the side of "economic" development. Not incidentally, this frequently leads to a certain distrust of city planning offices by some "community" development constituencies, particularly grass-roots neighborhood organizations--often the groups with the most limited of access to resources.

From its inception, the GPLAN project was commissioned by the HUD COPC grant which financed the 49/63 pilot as a tool for grass-roots neighborhood empowerment. The assurance of grass-roots access to GPLAN has always been an integral part of the project's strategic plan. During the 49/63 pilot stage, access for the inspection database to the City's Neighborhood IMS (internet map server) was explored, but the City indicated it did not have sufficient personnel resources to provide the necessary interface. Failing to gain access to the City's Neighborhood IMS, the CEI built a prototype GPLAN IMS on its own web server platform (address: *cei.umkc.edu/gplan*), using residential inspection data from the 49/63 pilot, and subsequent Citizen Codes Academy inspection data for several more neighborhoods.[12] The GPLAN strategic plan calls for its eventual implementation on a fully functional server platform. For a good example of how this kind of technology can serve grass-roots neighborhood interests, see the "Neighborhood Knowledge Los Angeles" website (address: *nkla.sppsr.ucls.edu*), maintained by the Community Information Technology Center (CITC) at the UCLA Advanced Policy Institute.

Reference to the earlier section detailing current and potential institutional and organizational partnerships in the GPLAN project, including a significant number of grass-roots neighborhood organizations, will provide a clear indication of the appeal which it is has generated across a very wide spectrum of diverse interests. This wide diversity of interests, and partners, is specifically reflected in the content of the CDI/EDI program.

[12] The Citizen's Codes Academy is the neighborhood residential inspection program administered by KCNA, which trains and employs neighborhood volunteers to conduct the residential conditions survey in their own neighborhoods. The program was subsidized by the City Council with prioritization of City services for participating neighborhoods.

Partnership enterprise in the GPLAN project implies a common "ownership." Common ownership of the GPLAN project and the associated CDI/EDI program can provide a common venue for diverse, and often conflictual, development interests to come together and find accommodation in policy and program planning and evaluation.

The diversity of interests reflected in the CDI/EDI program is just a beginning. By design, there is virtually no limit to its scope and content. Once GPLAN is up and running, the marginal cost of adding any given set of indicator data drops significantly. Private-sector developers, city planners and politicians, academic researchers, civic leadership, public and private sector social service agencies, CDCs, and grass-roots neighborhood interests, all have equal access. Everybody's development agenda can be "on the map."

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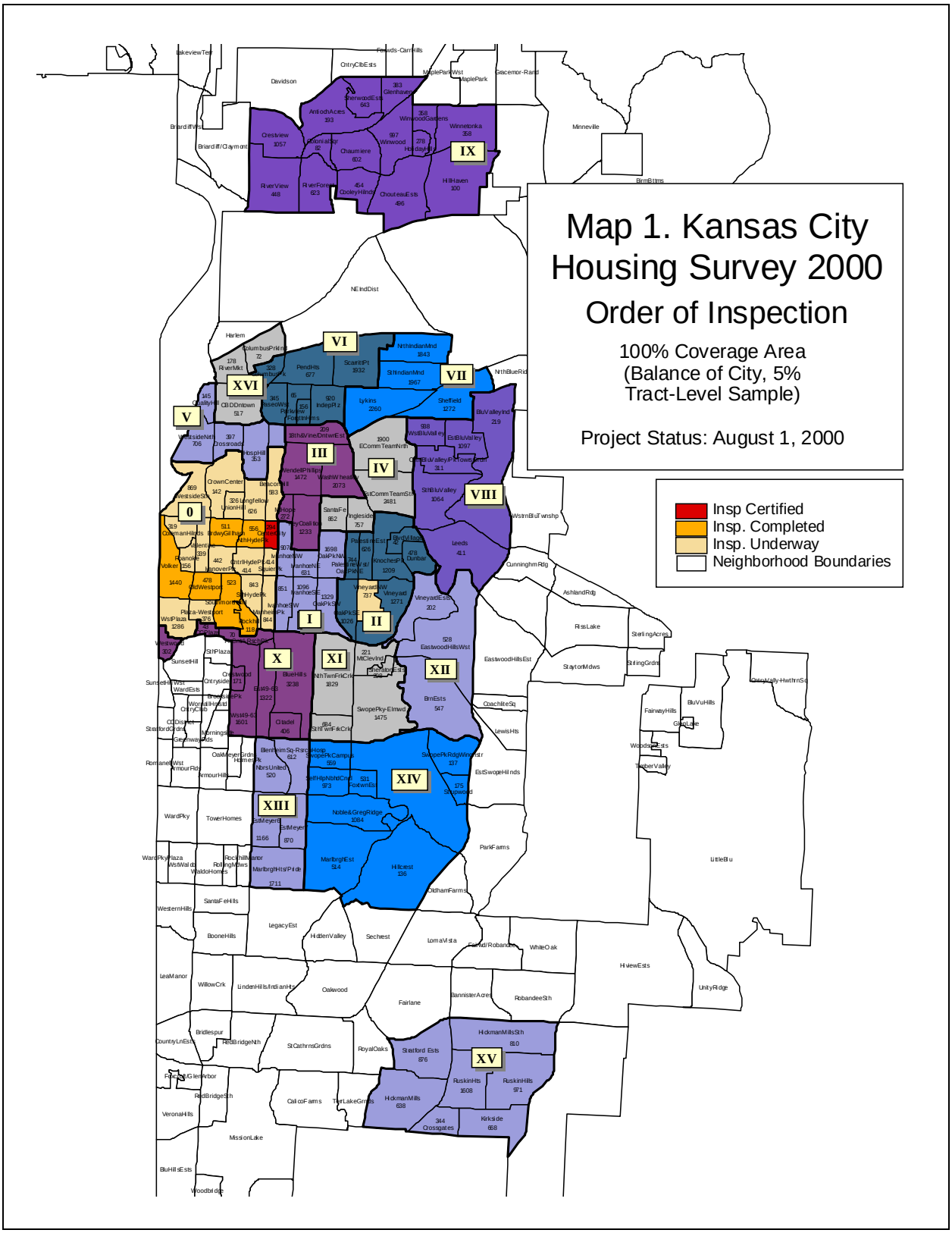
Map 1. Kansas City Housing Survey 2000
Order of Inspection
100% Coverage Area
(Balance of City, 5% Tract-Level Sample)
Project Status: August 1, 2000
Insp Certified
Insp. Completed
Insp. Underway
Neighborhood Boundaries
0
I
II
III
IV
V
VI
VII
VIII
IX
X
XI
XII
XIII
XIV
XV
XVI


31ST ST
LINWOOD BLVD
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35TH ST
ARMOUR BLVD
TROOST AVE
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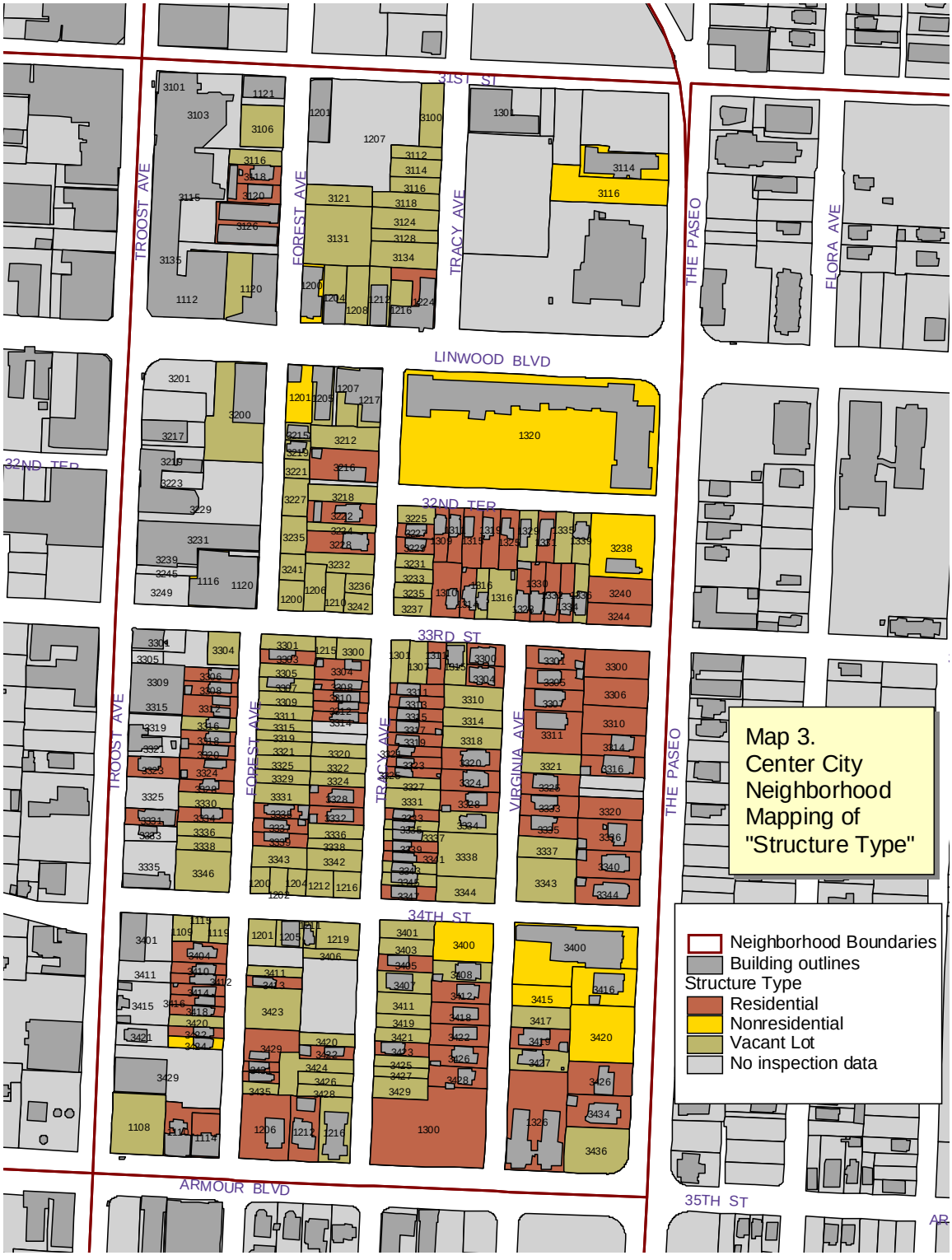
TRACY AVE
VIRGINIA AVE
THE PASEO
FLORA AVE
Map 2.
Center City
Block Map
067.0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FLORA AVE
Map 3.
Center City
Neighborhood
Mapping of
"Structure Type"
Neighborhood Boundaries
Building outlines
Structure Type
Residential
Nonresidential
Vacant Lot
No inspection data


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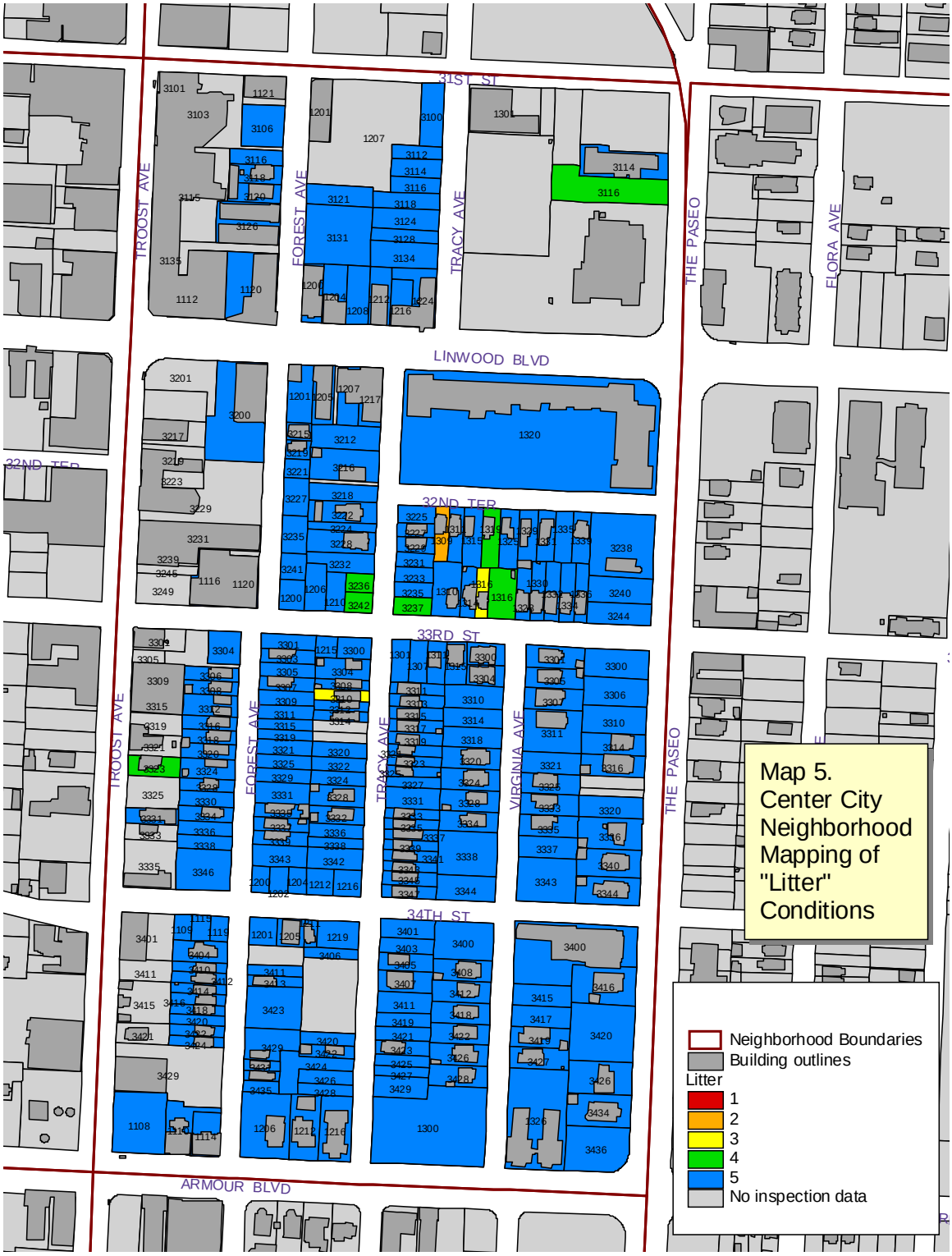
FOREST AVE
TRACY AVE
VIRGINIA AVE
THE PASEO
FLORA AVE
Map 4.
Center City
Neighborhood
Mapping of
"Exterior Paint"
Conditions
Neighborhood Boundaries
Building outlines
Exterior Paint
1
2
3
4
5
No inspection data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THE PASEO
FLORA AVE
Map 5.
Center City
Neighborhood
Mapping of
"Litter"
Conditions
Neighborhood Boundaries
Building outlines
Litter
1
2
3
4
5
No inspection data


Map 6.
Center City
Neighborhood
Mapping of
"Disabled
Vehicle"
Conditons
Neighborhood Boundaries
Building outlines
Vehicles
1
2
3
4
5
No inspection data
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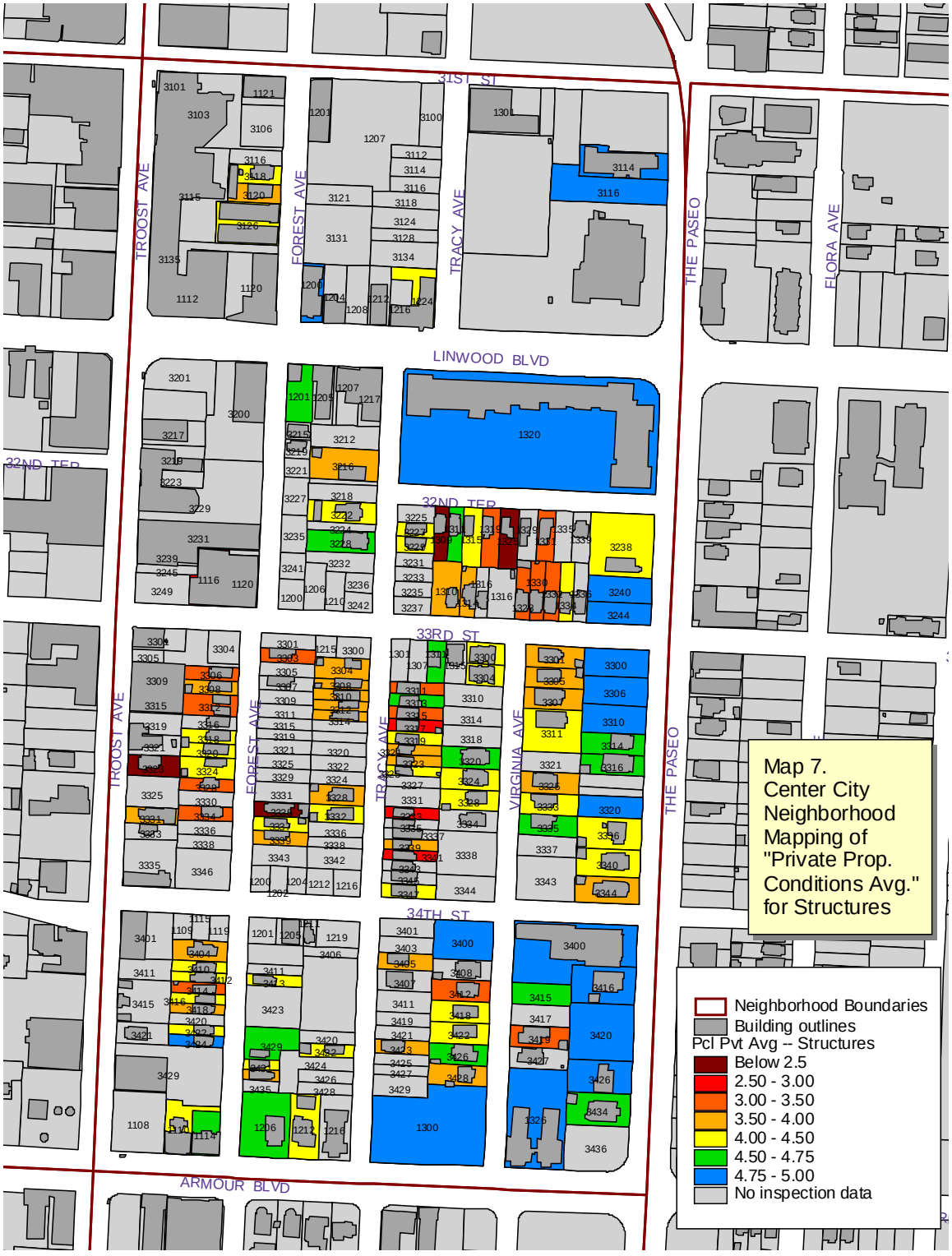
THE PASEO
FLORA AVE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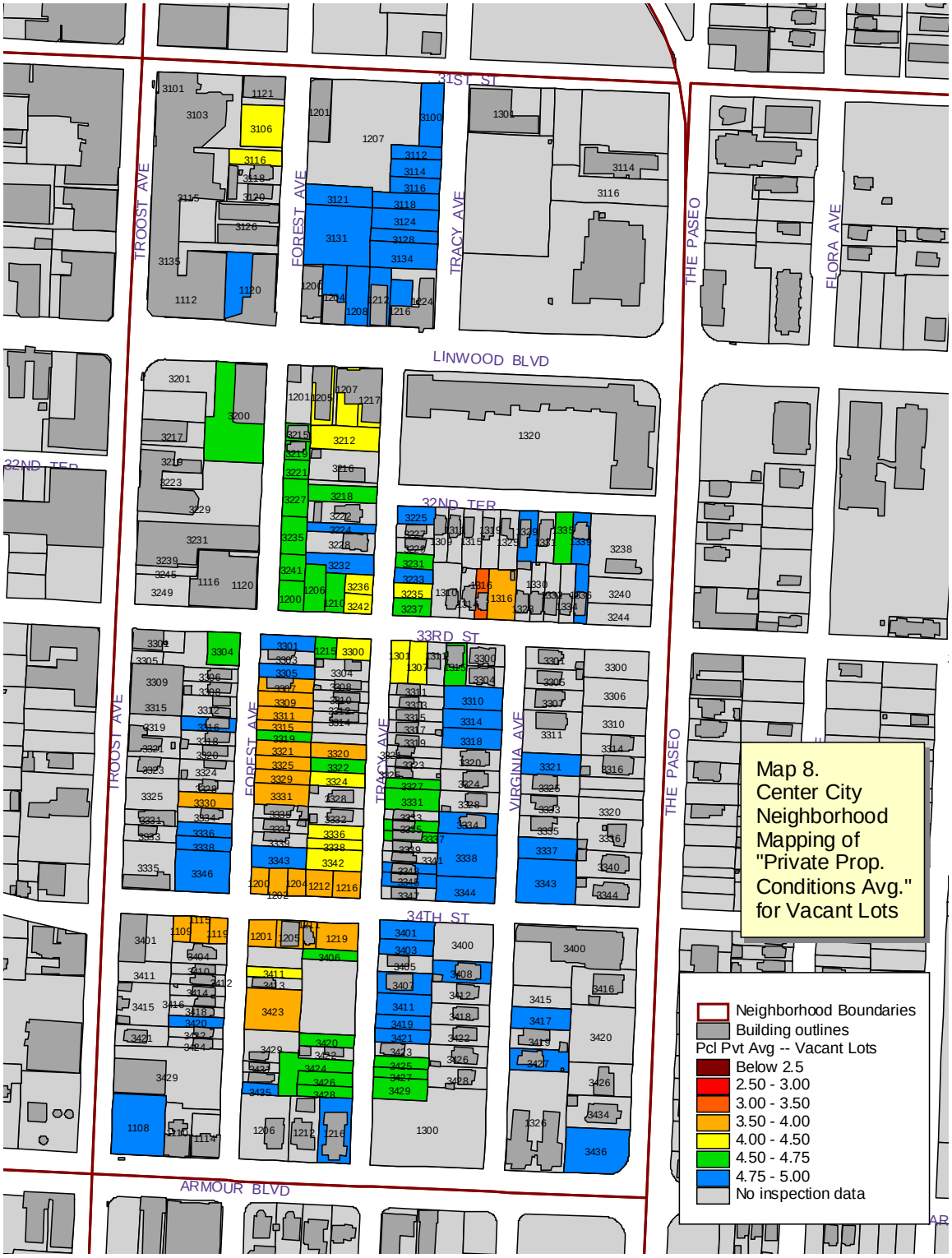
THE PASEO
FLORA AVE
Map 7.
Center City
Neighborhood
Mapping of
"Private Prop.
Conditions Avg."
for Structures
Neighborhood Boundaries
Building outlines
Pcl Pvt Avg -- Structures
Below 2.5
2.50 - 3.00
3.00 - 3.50
3.50 - 4.00
4.00 - 4.50
4.50 - 4.75
4.75 - 5.00
No inspection data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ARMOUR BLVD
TROOST AVE
FOREST AVE
TRACY AVE
VIRGINIA AVE
THE PASEO
FLORA AVE
Map 8.
Center City
Neighborhood
Mapping of
"Private Prop.
Conditions Avg."
for Vacant Lots
Neighborhood Boundaries
Building outlines
Pcl Pvt Avg -- Vacant Lots
Below 2.5
2.50 - 3.00
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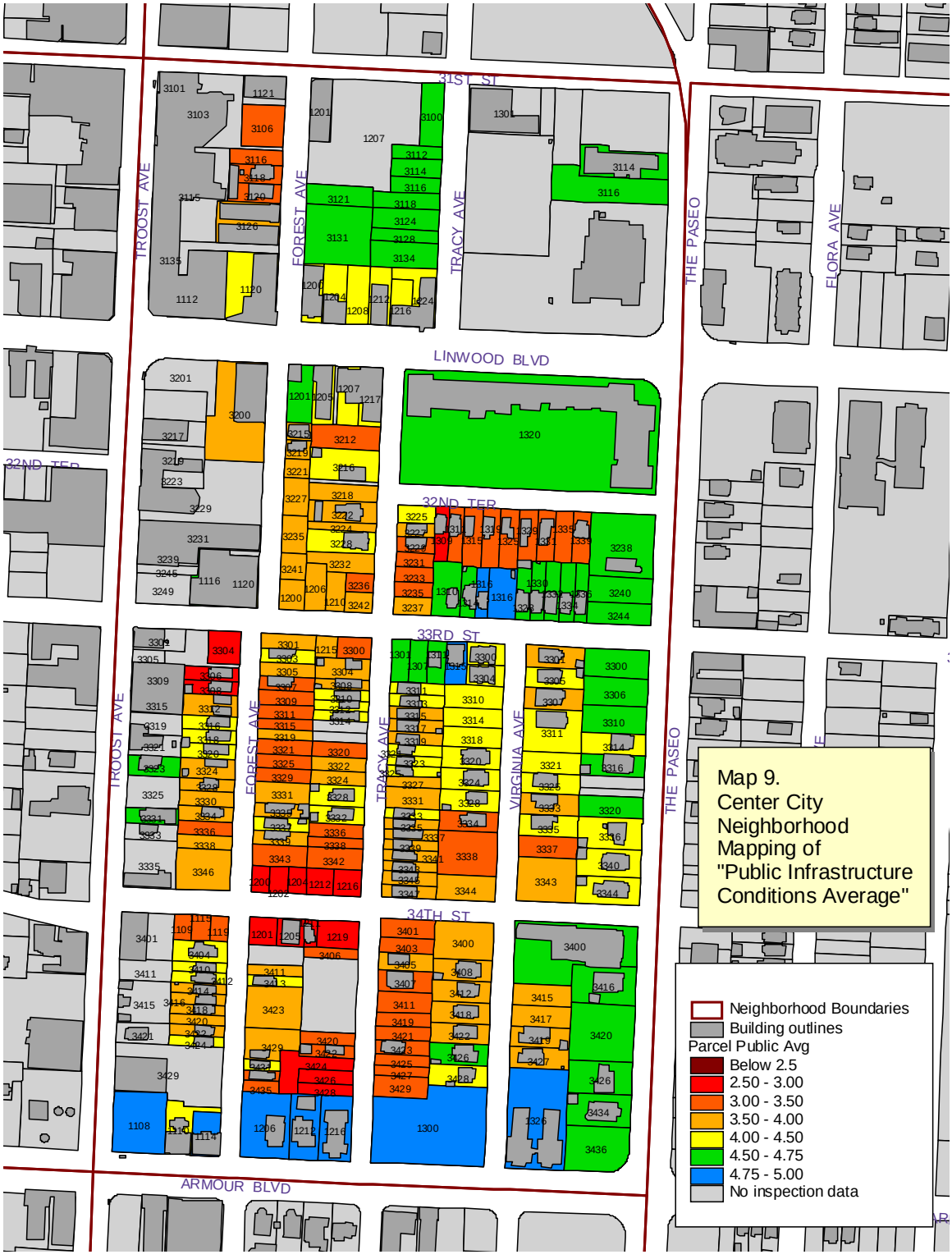
4.75 - 5.00
No inspection data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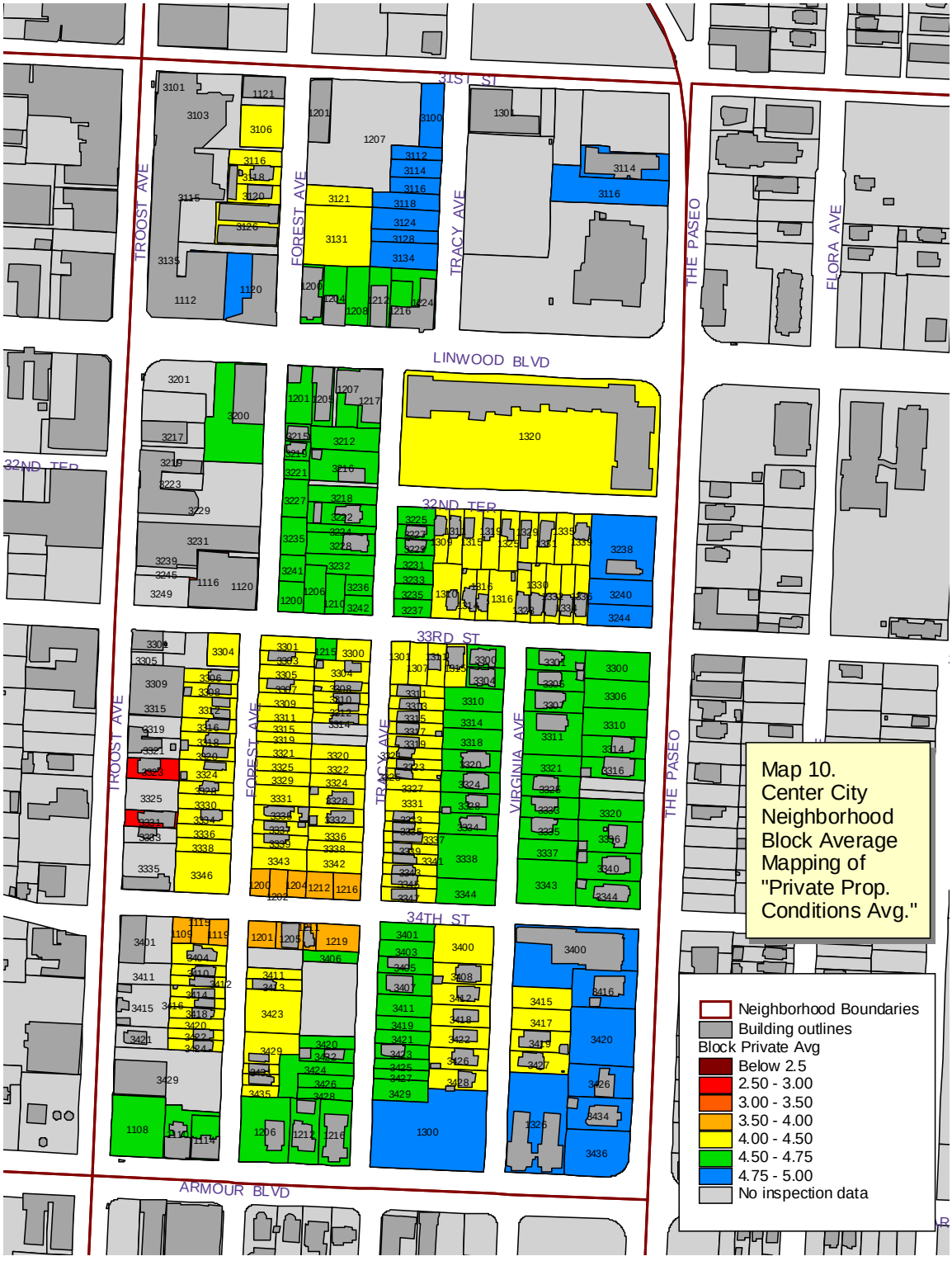
ARMOUR BLVD
TROOST AVE
FOREST AVE
TRACY AVE
VIRGINIA AVE
THE PASEO
FLORA AVE
Map 9.
Center City
Neighborhood
Mapping of
"Public Infrastructure
Conditions Average"
Neighborhood Boundaries
Building outlines
Parcel Public Avg
Below 2.5
2.50 - 3.00
3.00 - 3.50
3.50 - 4.00
4.00 - 4.50
4.50 - 4.75
4.75 - 5.00
No inspection data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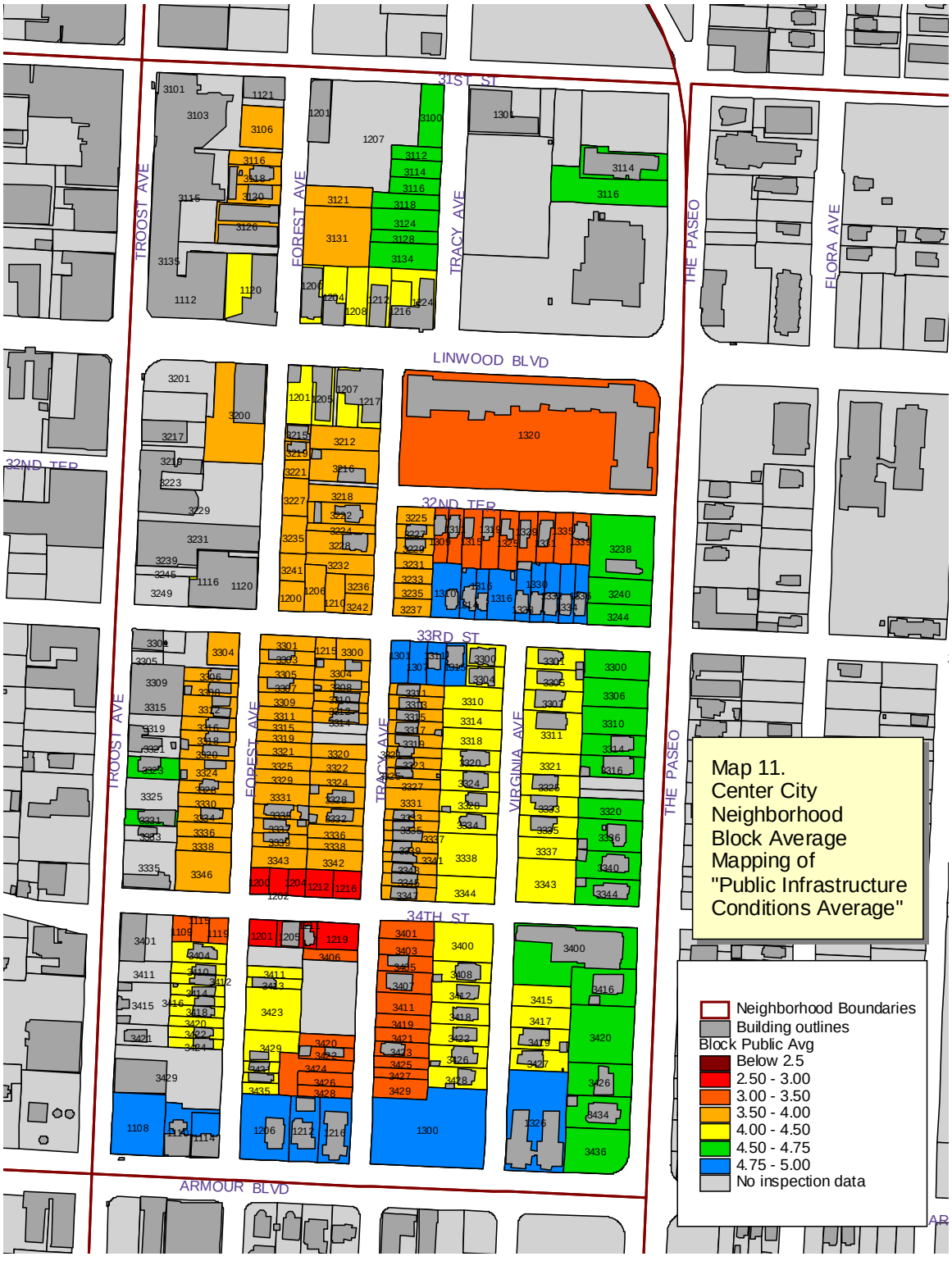
TROOST AVE
FOREST AVE
TRACY AVE
VIRGINIA AVE
THE PASEO
FLORA AVE
Map 10.
Center City
Neighborhood
Block Average
Mapping of
"Private Prop.
Conditions Avg."
Neighborhood Boundaries
Building outlines
Block Private Avg
Below 2.5
2.50 - 3.00
3.00 - 3.50
3.50 - 4.00
4.00 - 4.50
4.50 - 4.75
4.75 - 5.00
No inspection data


31ST ST
LINWOOD BLVD
32ND TER
33RD ST
34TH ST
ARMOUR BLVD
TROOST AVE
FOREST AVE
TRACY AVE
VIRGINIA AVE
THE PASEO
FLORA AVE
Map 11.
Center City
Neighborhood
Block Average
Mapping of
"Public Infrastructure
Conditions Average"
Neighborhood Boundaries
Building outlines
Block Public Avg
Below 2.5
2.50 - 3.00
3.00 - 3.50
3.50 - 4.00
4.00 - 4.50
4.50 - 4.75
4.75 - 5.00
No inspection data

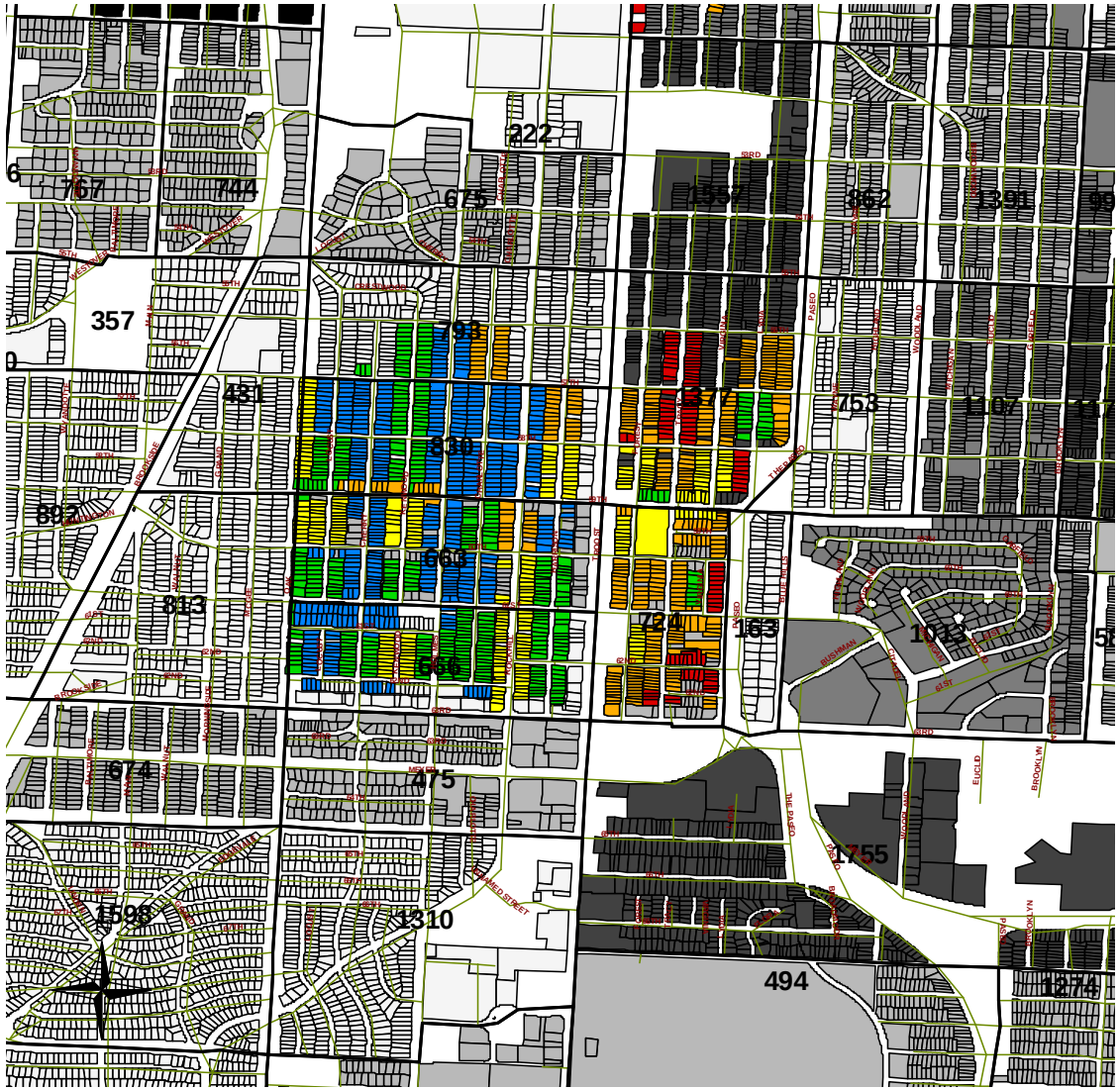
Map 12. Neighborhood Geographic Planner (GPLAN)

49/63 inspection data -- block averages of prvt. prop. ratings, and selected surrounding demographic characteristics

Population/Census Block Group
Insp's - Block Avg of Pvt Prop Conds.
- 3.00 - 3.75
- 3.75 - 4.25
- 4.25 - 4.50
- 4.50 - 4.75
- 4.75 - 5.00

Streets

Persons in Renter-occupied Hsg
- 0 - 142
- 143 - 292
- 293 - 472
- 473 - 788
- 789 - 1496



Data sources are 1990 Decennial Census, and the Neighborhood Codes Academy (1999)