

LAND USE MODEL

TN Comptroller of the Treasury

11/14/19



LAND USE MODEL

What is the Land Use model?

- 🌐 The Comptroller's Land Use model is a public release of parcel data and maps as it relates to the current functional uses of land for the 84 counties our office maintains. (2 million parcels)
- 🌐 We use a classification system that describes how the property is currently being utilized.



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Land Use past

- 🌐 Land use data was previously generated by the Local Planning Assistance Office in the Tennessee Department of Economic and Community Development.
- 🌐 In 2010 that office was disbanded and so was the land use data.



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Land Use past

- 🌐 It made sense on why we took on the challenge.
- 🌐 The Parcels, CAMA system, and the City boundaries are maintained by our office.
- 🌐 Should be an easy transition?



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Land Use past

- 🇺🇸 This was not an easy task.
- 🇺🇸 We had switch CAMA vendors.
- 🇺🇸 The model used in 2010 was outdated.
- 🇺🇸 We had little background in planning.



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Land Use present

- 🌐 First step was engage planners and get feedback on classifications.
- 🌐 Overwhelmingly, planners asked us to keep the old classifications and symbology.
- 🌐 Asked for enhancements



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Land Use Classifications




























- Our goal was to mimic the old land use in classifications and symbology.
- These classifications contain detailed categories such as single and multi-family dwellings, offices, general commercial uses, industrial sites, and agricultural and timber lands.



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Classifications

Land Use Code

• Residence in Floodplain	 Duplex (2 units)	 Misc Commercial	 Agricultural Tract
• Residence on Timber or Agricultural Tract	 Multifamily (3 or more units)	 Light Industrial / Warehousing	 Timber Tract
 Airports	 Mobile Home (1-4)	 Heavy Industrial	 Water Feature
 City Limits	 Mobile Home Park (5 or more)	 Public Use	 Road/Rail ROW
 DFIRM	 Resort Residential	 Semi-Public Use	 Unclassified improvements <\$30,000
 SFR < 5 acres	 General Commercial	 Utilities	 Unclassified improvements >= \$ 30,000
 SFR >= 5 acres	 Office (Prof/Medical/Gen)	 Vacant	 CAAS data unavailable for Parcel
			 Uncoded by Land Use Model

Created on: 9/16/2018

Source: TN Comptroller Digital Parcel and CAMA data



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How is it created?

- 🌐 We had to create a parcel layer for the data we have. (2 millions parcels)
- 🌐 Extract the records from our CAMA data. (2 million + records) Fields:
 - Parcel Type, Improvement Type, Number of Mobile Homes, Land Value, Improvement Value, Appraisal, Land Description, and Number of Dwelling Units.
- 🌐 Updated daily by Property Assessors, their staff, and our staff.



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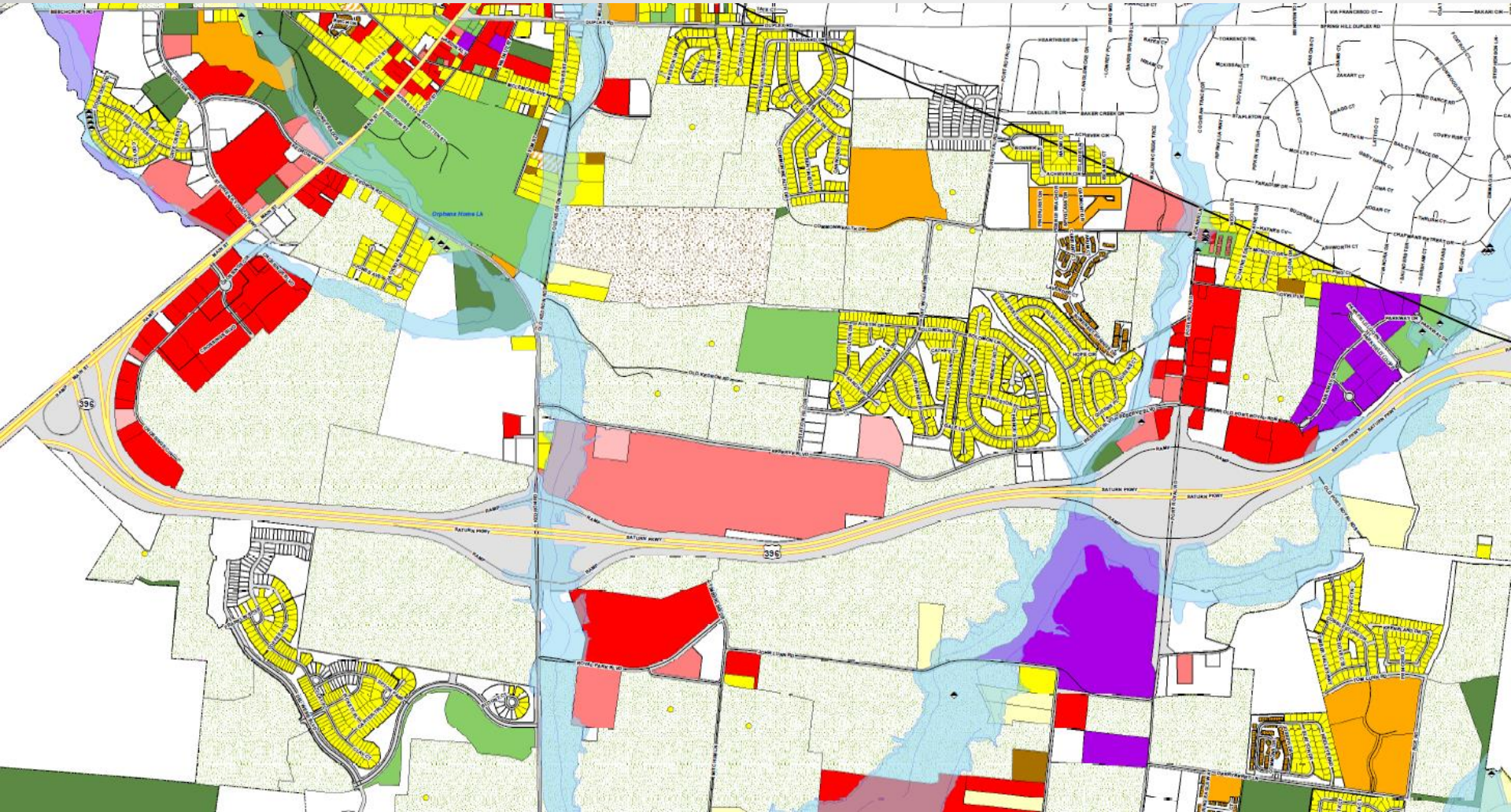
How is it created?

- 🌐 Then using model builder we began to piece together the puzzle.
- 🌐 Went one-by-one through each classification and built the parameters.
 - Less than 5 Acres, Single family resident improvement type.



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End Result



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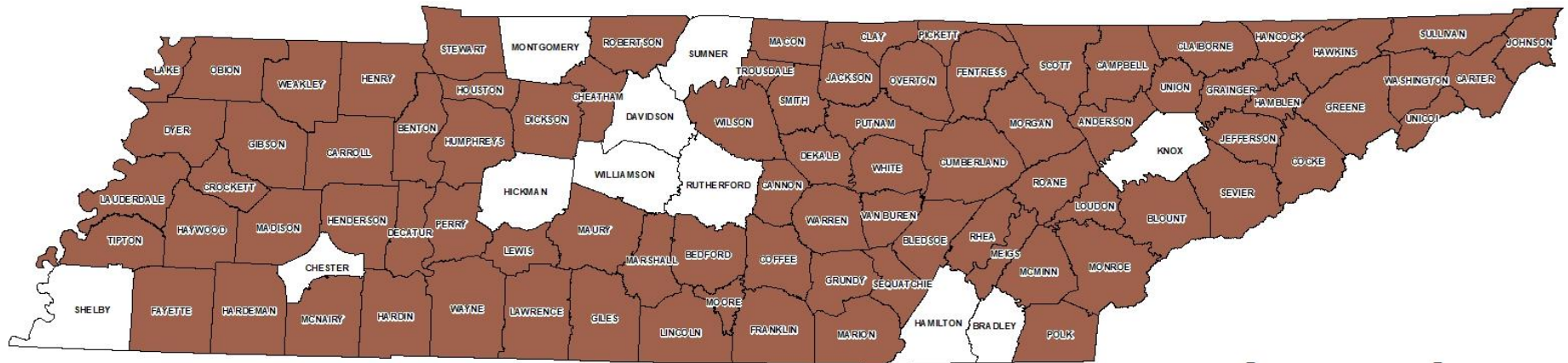
Issues

- One limiting factor in the development of Statewide land-use data is the availability of property assessment data and parcel polygon data.



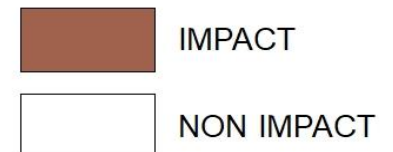
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LANDUSE INVENTORY



Legend

Counties



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Issues

- 🌐 In counties where our CAMA system is not used, the property assessor maintains assessment data in a unique system.
- 🌐 For simplicity, this land-use model has been created to work with the CAMA data our office maintains.



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Issues

- ❁ Another limitation of the CAMA and BMP datasets involves their accuracy. Property changes ownership every day, and parcels are constantly subdivided and reconfigured; The data we provide is a snapshot. It is not updated daily or weekly.
- ❁ Discrepancies between the Parcel data and the CAMA data. The CAMA data may contain data for parcels not reflected in the parcel data, and vice versa.



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Issues

- ❁ Discrepancies in assessment data. Improvement types and property types may be entered in wrong.
- ❁ How assessment data is collected. One county may put mobile homes under buildings instead of the mobile home field. This can throw off the mobile home classifications.
- ❁ Improvement types may not cover all aspects of assessment needs. A performance theater may be coded as a warehouse.



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Accessing the data

🇺🇸 Comptroller website

<https://www.comptroller.tn.gov/lg/LandUseMain.asp>

🇺🇸 At the bottom of the page there will be:

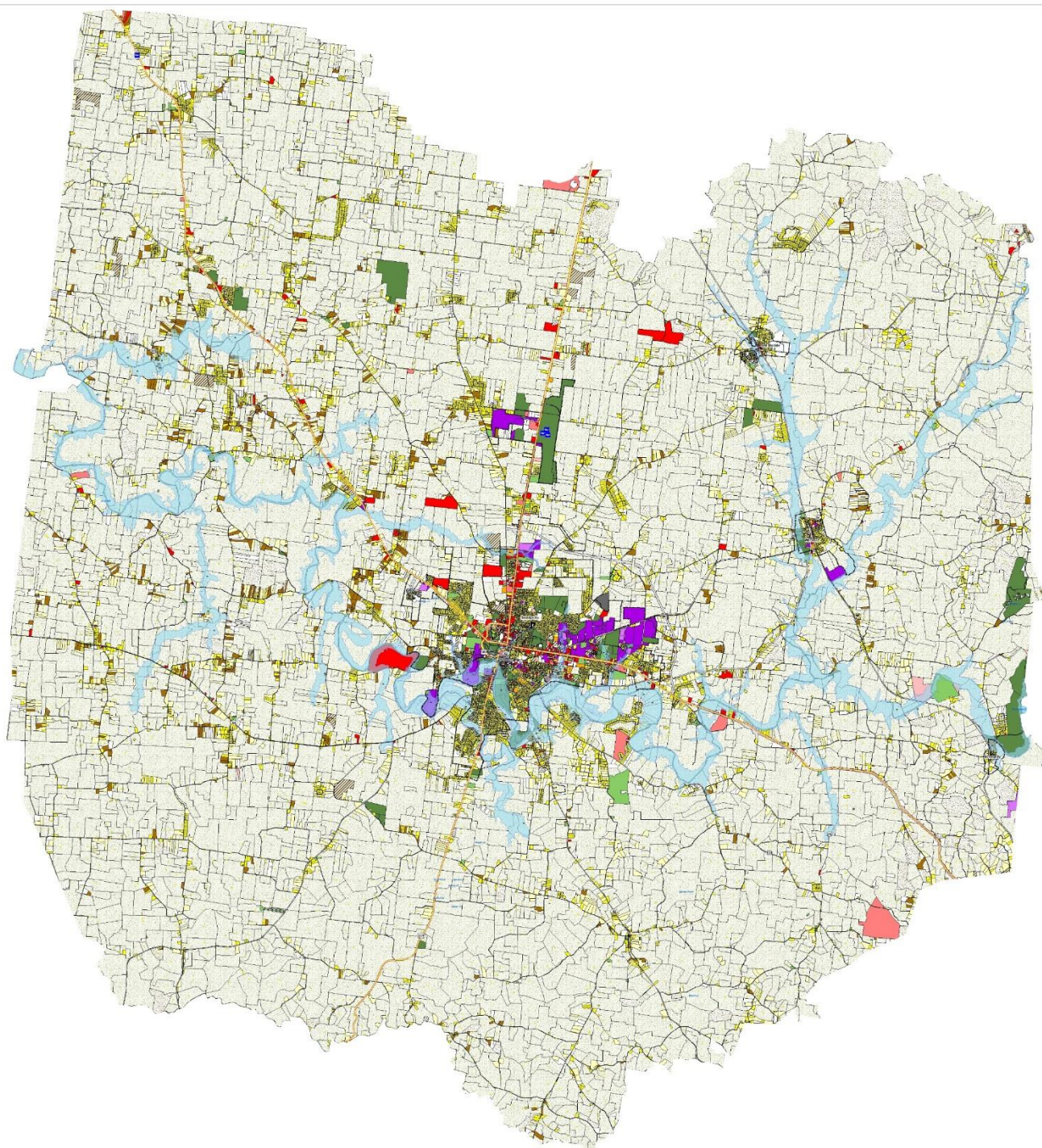
- View and Download Maps and Data
- View City Land Use Maps
- Land Use Description Codes
- Land Use Field Attributes



EXISTING LAND USE BEDFORD COUNTY, TENNESSEE

Land Use Code

- Residence in Floodplain
- Residence on Timber or Agricultural Tract
- Airports
- City Limits
- CountiesJoin
- OFIRM
- SFR < 5 acres
- SFR >= 5 acres
- Duplex (2 units)
- Multifamily (3 or more units)
- Mobile Home (1-4)
- Mobile Home Park (5 or more)
- Resort Residential
- General Commercial
- Office (Prof/Medical/Gen)
- Misc Commercial
- Light Industrial / Warehousing
- Heavy Industrial
- Public Use
- Semi-Public Use
- Utilities
- Vacant
- Agricultural Tract
- Timber Tract
- Water Feature
- Road/Rail ROW
- Unclassified improvements <\$30,000
- Unclassified improvements >= \$ 30,000
- CAAS data unavailable for Parcel
- Uncoded by Land Use Model



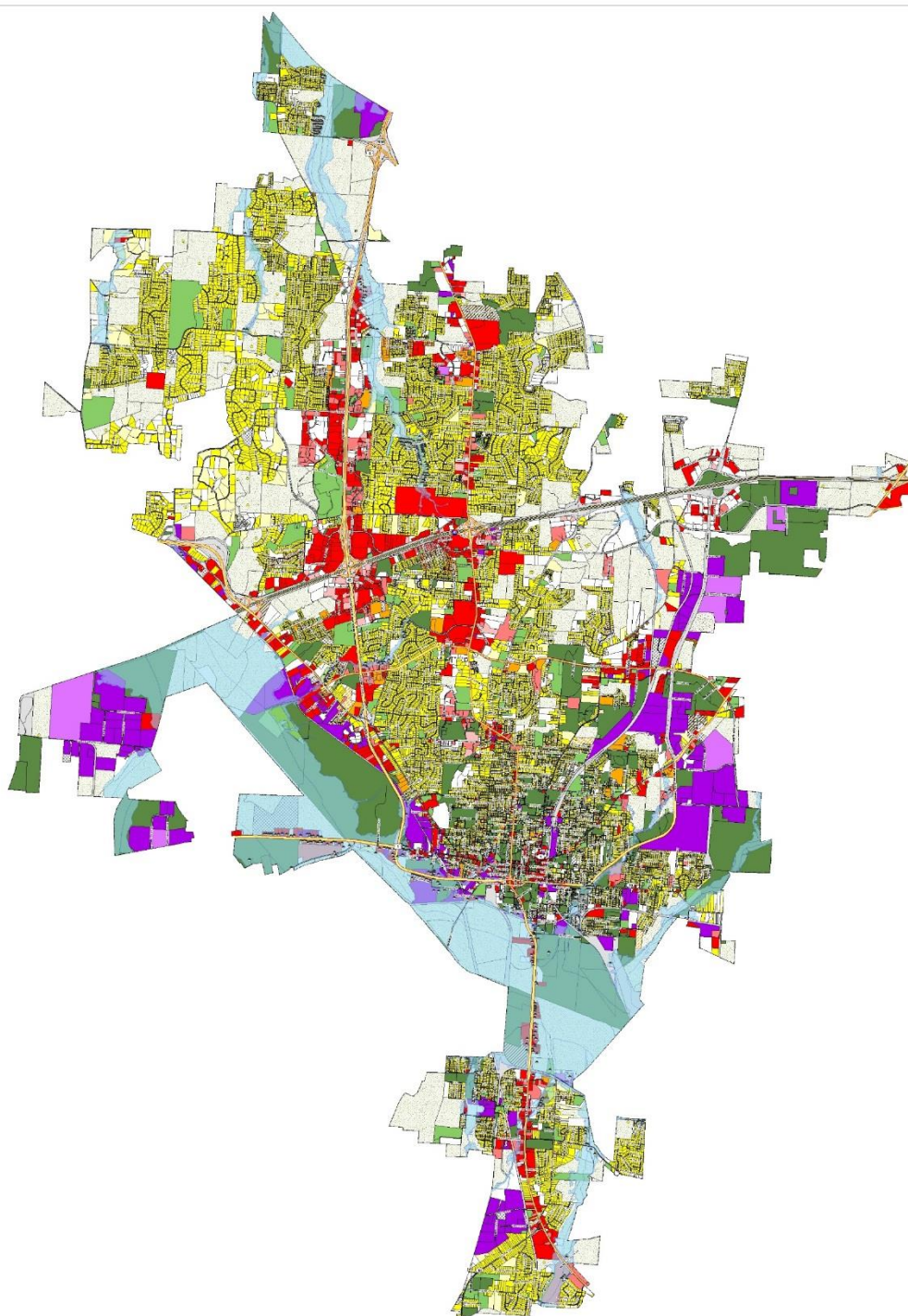
TENNESSEE
COMPTROLLER
OF THE TREASURY



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Created on: 10/17/2018

Source: TN Comptroller Digital Parcel and CADA data



EXISTING LAND USE Jackson, TENNESSEE

Land Use Code

- Residence in Floodplain
- Residence on Timber or Agricultural Tract
- Airports
- City
- DFIRM
- SFR < 5 acres
- SFR >= 5 acres
- Duplex (2 units)
- Multifamily (3 or more units)
- Mobile Home (1-4)
- Mobile Home Park (5 or more)
- Resort Residential
- General Commercial
- Office (Prof/Medical/Gen)
- Misc Commercial
- Light Industrial / Warehousing
- Heavy Industrial
- Public Use
- Semi-Public Use
- Utilities
- Vacant
- Agricultural Tract
- Timber Tract
- Water Feature
- Road/Rail ROW
- Unclassified improvements <\$30,000
- Unclassified improvements >= \$ 30,000
- CAAIS data unavailable for Parcel
- Uncoded by Land Use Model



Population Statistics

2010 Population	65,211
2011 Population	66,742
2012 Population	67,131
2013 Population	67,561
2014 Population	67,220
2015 Population	66,914
2016 Population	67,005
% Change since 2010	2.8%
Population Growth Rank	111
TN Largest City Rank	8



Demographics

Total Veterans	3,888
Total People in Poverty	14,830
Median Age	35.5
Median Male Age	34.2
Median Female Age	36.8



Income and Housing Data

Median Household Income	\$39,747.00
# of Housing Units	29,736
Median Year Built	1979
Median House Value	\$128,700.00
Rent as % of Income	34.6%
Median Gross Rent	\$798.00



Education Attainment Data

High School	11,605
GED	2,171
Associates	2,846
Bachelors	7,884
Masters	2,414
Professional	791
Doctorate	915

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Source: TN Comptroller Digital Parcel and CAAIS data
ACE 03/10/2016



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- 🌐 **Digital data available to download**
 - **Parcel**
 - **Acreage**
 - **Land use classification**
 - **Improvement and land values**
 - **Number of buildings and mobile homes**
 - **Year built**
 - **Address**



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Enhancements

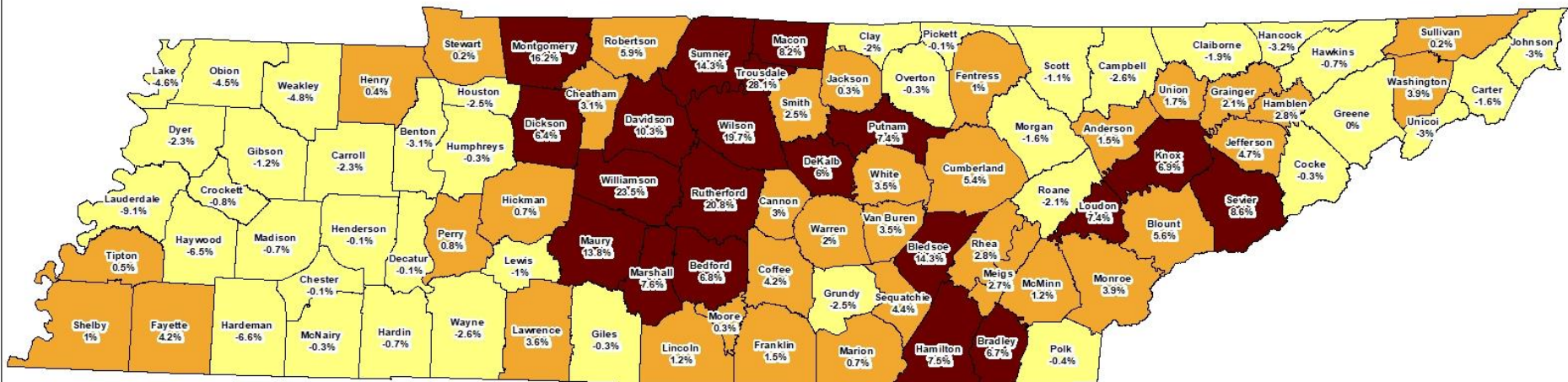
🌐 Additionally, we added other fields planners had asked for.

- If the parcel is in the floodplain
- % of parcel in the floodplain
- % of parcel covered in trees
- Interstate access within 10 minutes
- Borders a railroad
- Major road frontage
- Employment hub
- Projected population growth (thru 2023)
- Traffic Counts 2016-2018



Why is it important?

- ## POPULATION PERCENT CHANGE SINCE 2010 BASED ON 2017 ESTIMATES



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Why is it important?

- Population projections forecast that Tennessee's population will grow another 16% from 2018-2040
- A 2016 report said: 120,000 acres of open land had been developed in Middle Tennessee since 1999. Of that, 55,000 acres were formerly farm and forest land.

Source: <http://tndata.utk.edu/sdcpopulationprojections.htm>

Source: https://www.cumberlandregiontomorrow.org/about/resources/5818crt_open_space_report_final_update5-7-3.pdf



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Going forward

- 🌐 It will be updated semi-annually.
- 🌐 Living model – In that we expect it to evolve as time goes by. Improvement types are being added.
- 🌐 We plan on using feedback to further enhance the data.
 - Slope?
 - Highest and best use?
 - What can we do to help you?



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Questions?

- Comptroller website/Landuse Data
<https://www.comptroller.tn.gov/lg/LandUseMain.asp>

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