



# Downtown Area Infrastructure Improvements Discussion

November Public Works Committee Meeting 2020  
Michael Park, PE, PTOE  
City Traffic Engineer



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# Agenda

## Discussion...Identify Plan “Vision”

### A. General

- Policy and Standards (Current)
- Historical Approach and Projects/Prioritization
- Re-Development and Development Influence

### B. Infrastructure

- Water/Sewer (Annual Rehab Programs based on WU Condition)...Underway
- Storm Water
- Transportation (Roads, Sidewalks)

### C. Approach

- Location (**What is the boundary/area focus?**)
- Applicable Types of Infrastructure Conditions (**What does it look like that needs or wants to be improved?**)
- Improvement Standards (**How should it look?**)
- Policy Discussion for CIP and Development (Next Steps)
- Prioritization (Next Steps)
- Funding Plan (Next Steps)

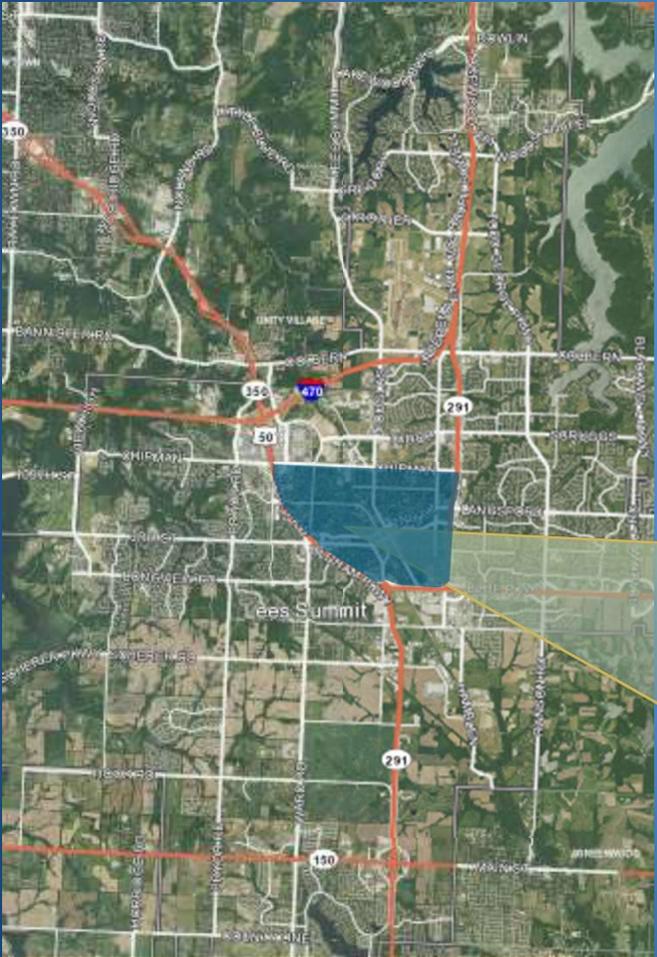


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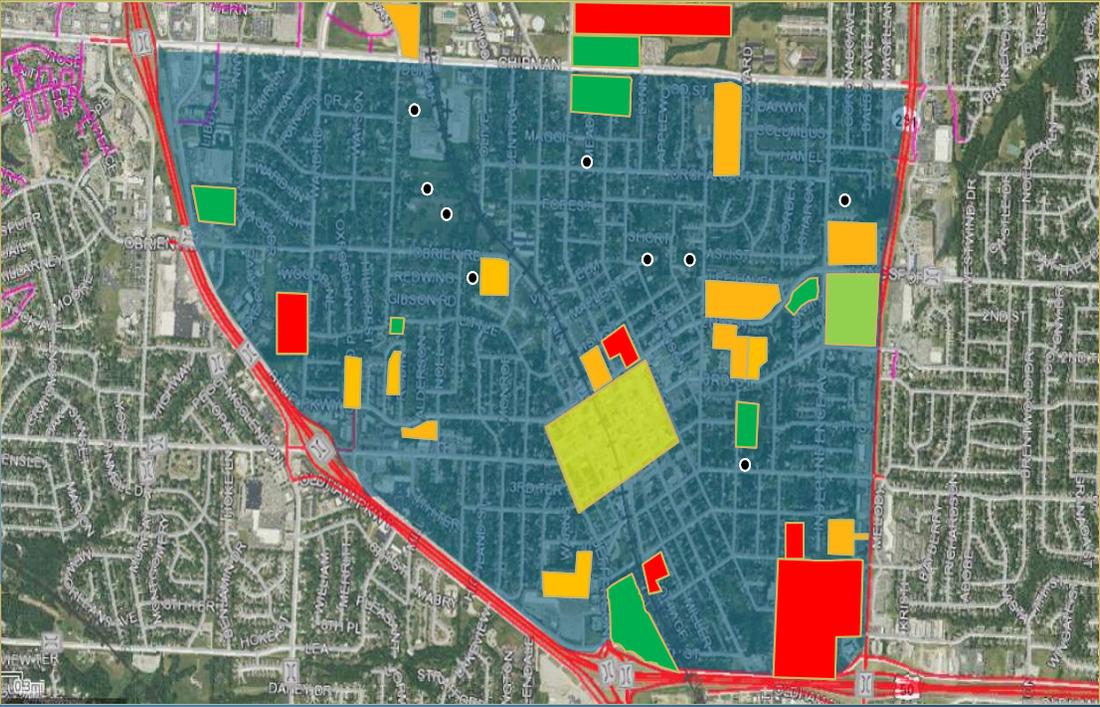
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# Location



## Greater Downtown Area



- Downtown Core
- Public School
- Parks
- Multi-Family Residential
- Cemetery



# Storm Water

## Storm Water Infrastructure

### A. Background

- Policy and Standards
- Approach and Past Projects/Prioritization
- Re-Development and Development

### B. Location

- These issues exist throughout Lee's Summit, beyond "Downtown".
- Public Infrastructure, ROW
- Not Private Property Storm Water Issues

### C. Issues

- Safety – Flooding, Sink Holes
- Capacity – System Design & Detention
- Condition – Materials, Disrepair/Replacement, Maintenance
- Growth – Accommodating Re-Development, Development
- Aesthetics – Standards (e.g. Curb, Open Ditch, Enclosed Storm Sewers)

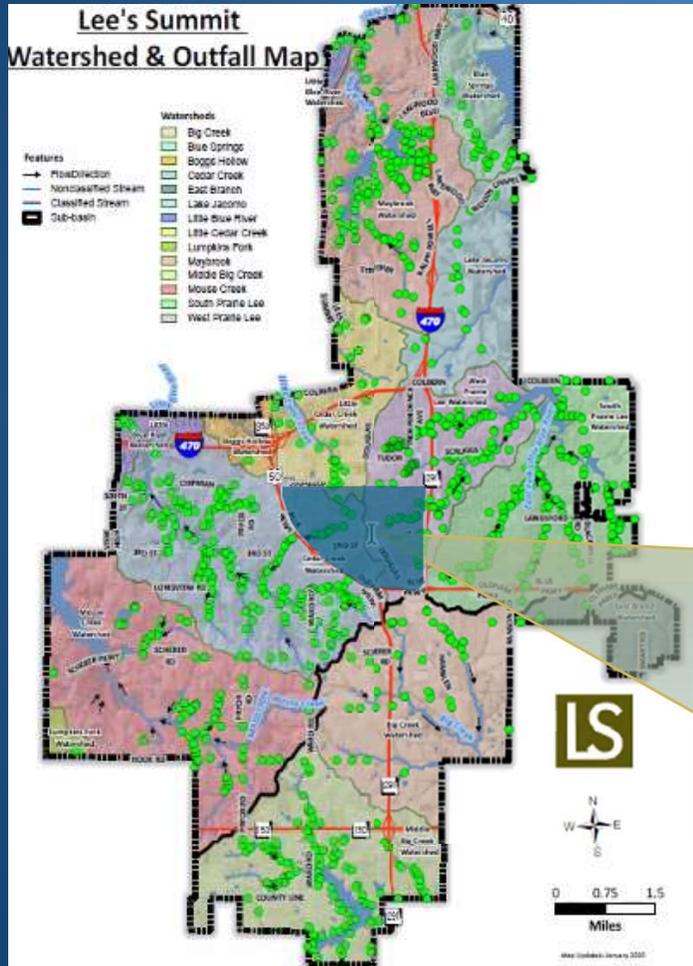


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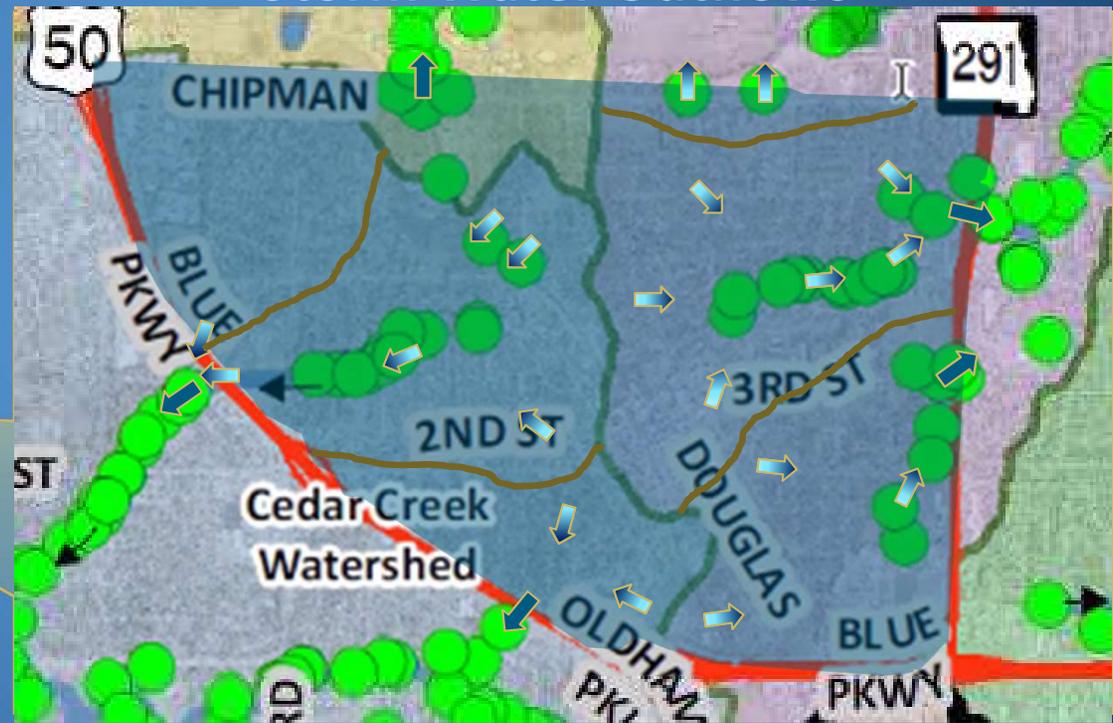
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# Storm Water



## Greater Downtown Area Storm Water Outflows

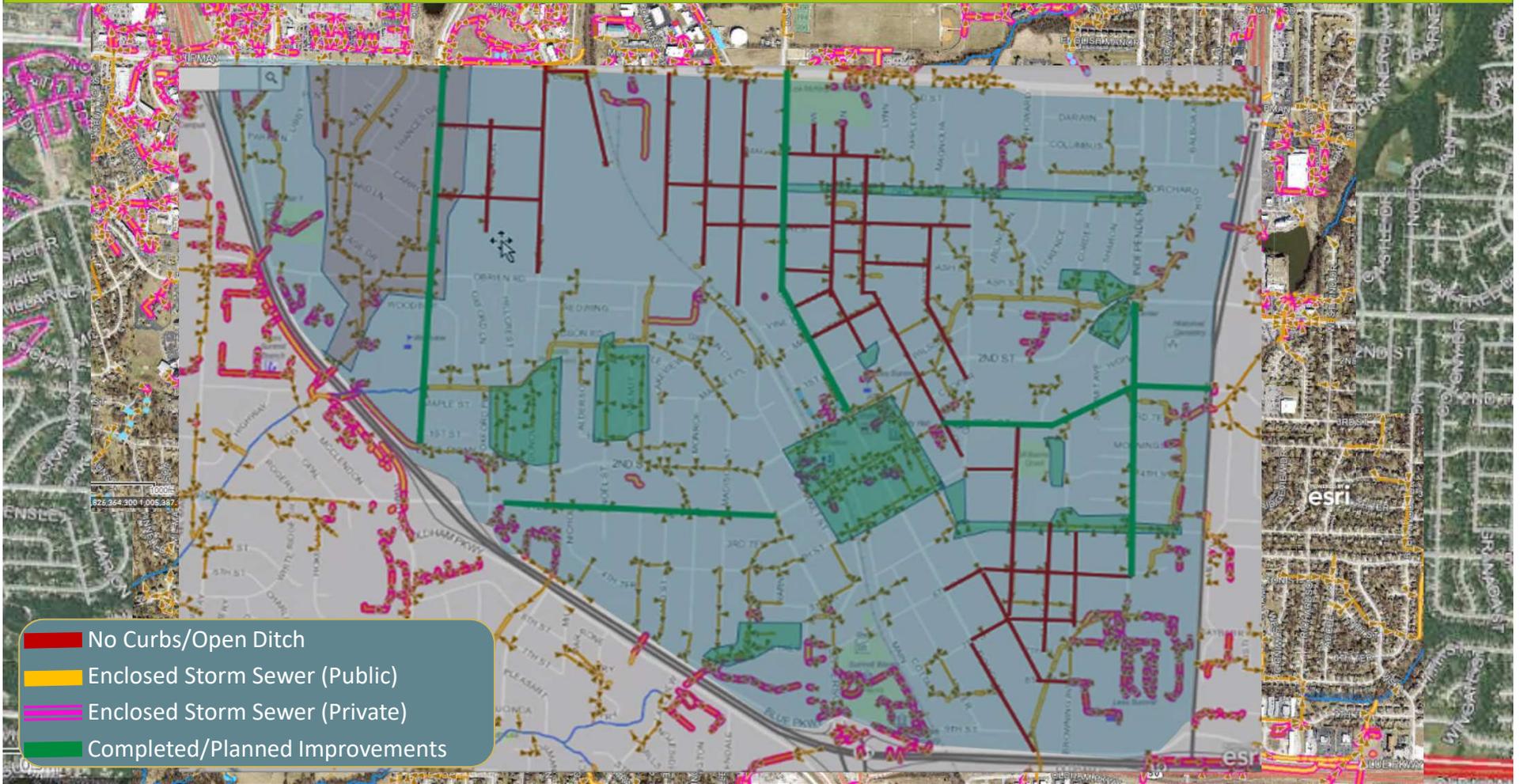


← Watersheds

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# Storm Water Infrastructure



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# Storm Water Infrastructure

## Inventory “Scan” for Discussion Purposes

### Storm Water Focused/Greater Downtown Area

- Not an assessment of condition for curb, inlets, outlets, ditches, capacity, etc.
- Not a report of capital replacement or maintenance needs.
- Not an indication of severity, event frequency, right-of-way needs, property impacts, culverts/bridges.

Storm Water System	ROW	EASMENT	PRIVATE
RCP			
CMP			
Flooding Reports			
Structures (Inflow and Outflow)			
Condition			
Ditch and Sink Hole Issues			

STUDY

Storm Water Study Needed for Next Steps



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# Transportation

## Transportation Infrastructure

### A. Background

- Policy and Standards
- Master Plans
- Approach and Past Projects/Prioritization
- Re-Development and Development

### B. Location

- These non-urban roads exist throughout Lee's Summit, beyond "Downtown".
- Study Area - "Vision of the Heart"

### C. Issues

- Accessibility – Availability of Infrastructure (e.g. Sidewalk), ADA Compliance
- Safety – Crashes, Multi-modal Separation, Traffic Control, Narrow Roads, Managing Conflicts
- Capacity – Delay, Congestion, Traffic Control, Parking
- Growth – Accommodating Re-Development, Development
- Aesthetics – Standards (e.g. Curb)



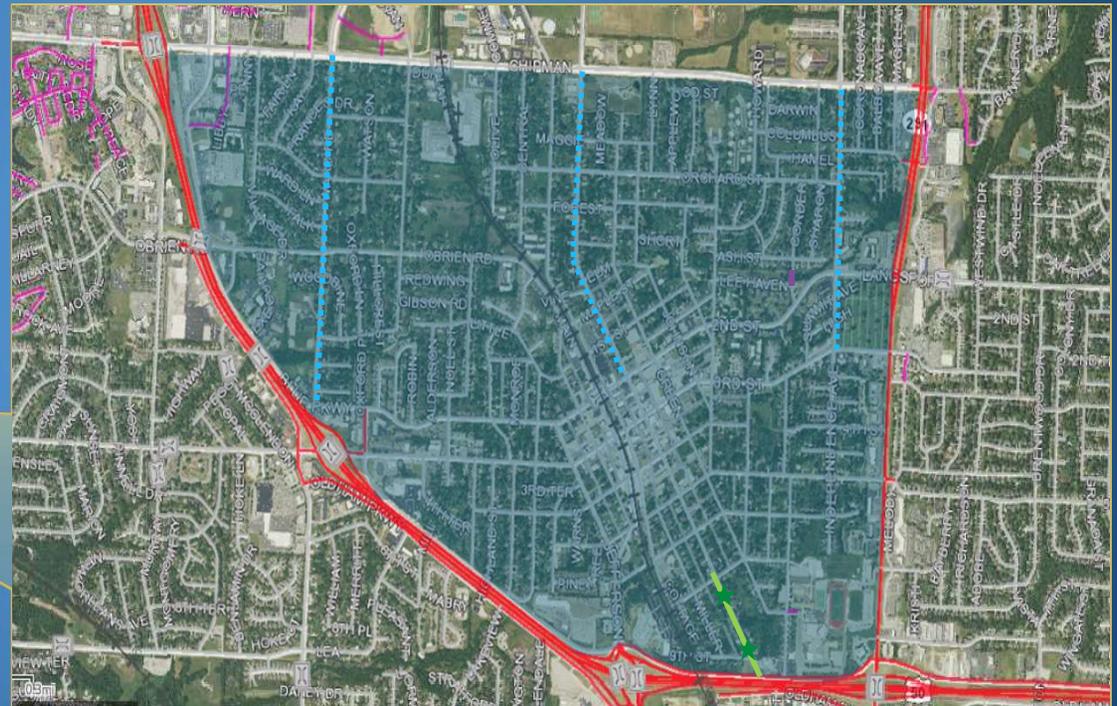
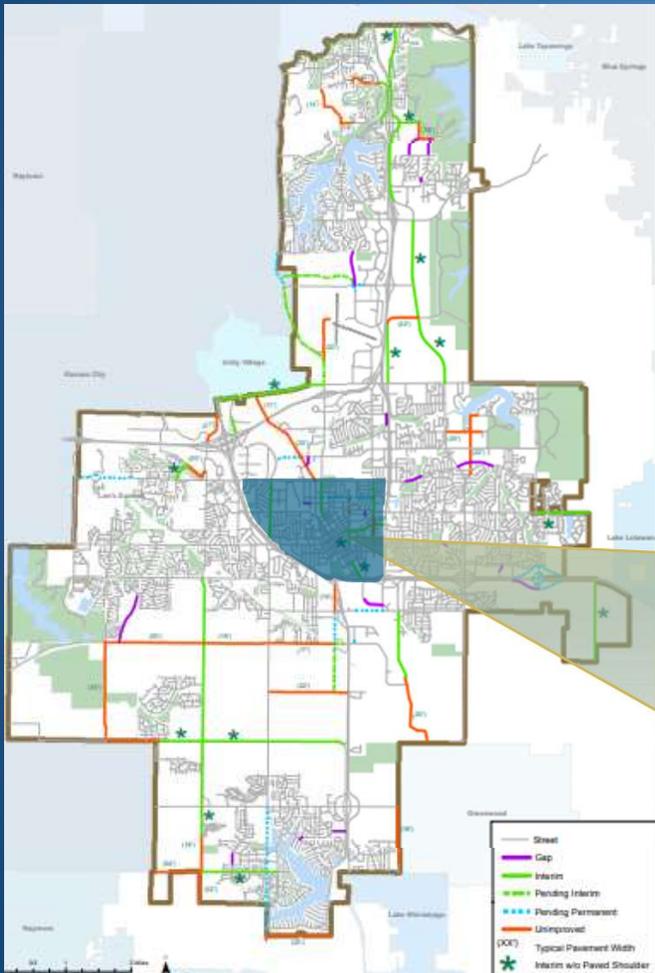
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# Transportation

## Greater Downtown Area Roads & Sidewalks



← Unimproved/Interim Policy Roads

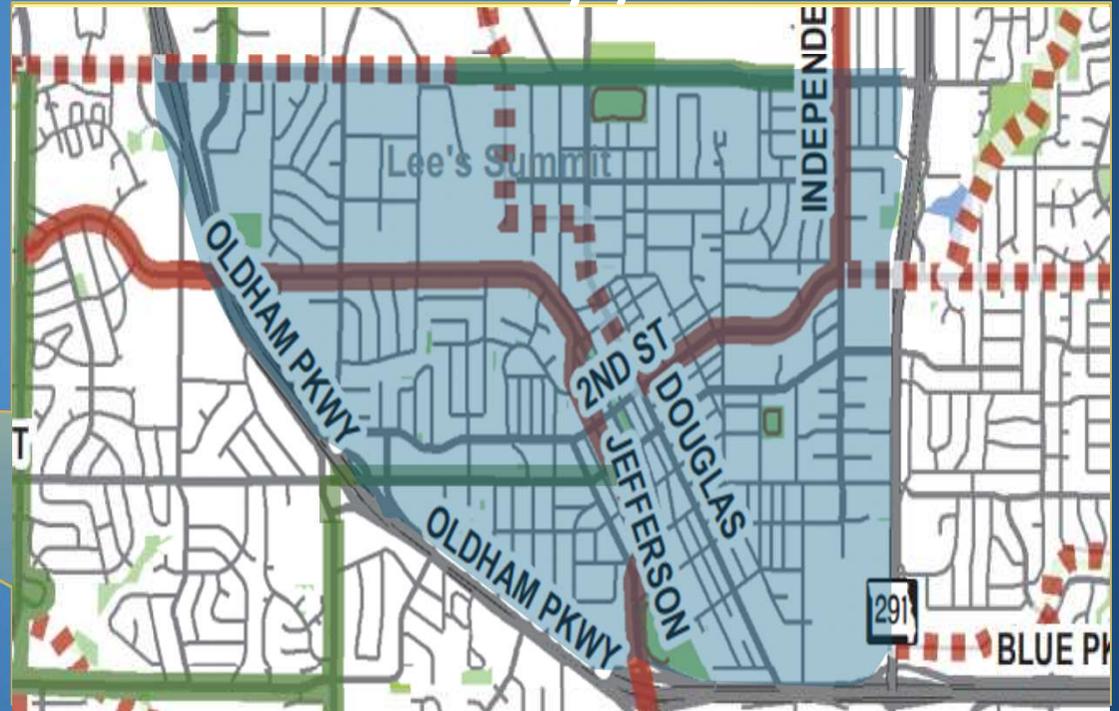
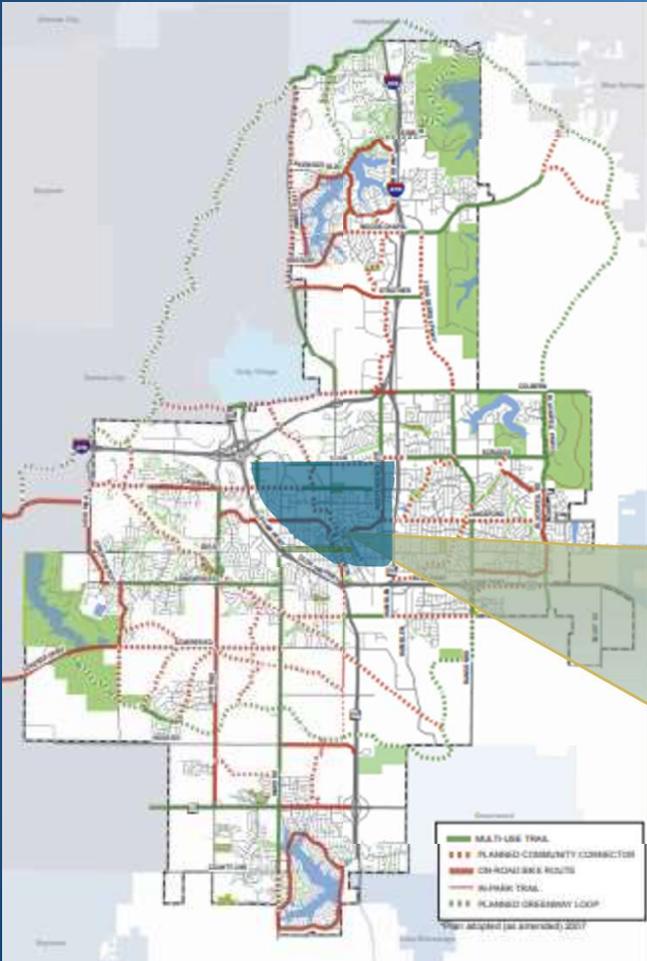
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# Transportation

## Greater Downtown Area Greenways/Trails



← Greenway/Trail Network



# Transportation Infrastructure

## Discussion:

### A. Standards

- Curb Required; Open Ditch Sustainability
- Sidewalks
  - Both Sides of All Collectors/Arterials/Commercial Local/Downtown Core
  - Single Side of All Residential Local Streets (Except RP-2 and Above Density)

### B. Unimproved Road Policy

- Not intended for residential local and collector streets.
- No Policy for Development (In-Fill) and Re-Development in Downtown Area

### C. CIP Completed Projects & Prioritization

- COMPLETED: 5<sup>th</sup> St. (Green to M-291), Orchard (Douglas to Independence), Downtown Core Streetscapes
- PENDING: 3<sup>rd</sup> St. (US-50 to Jefferson)
- PLANNED: Ward Road (Blue Pkwy to O'Brien), Independence Ave. (Chipman to 5<sup>th</sup> St.), Douglas (Chipman to 2<sup>nd</sup> St.), 3<sup>rd</sup> St. (Green to M-291)

### D. What's built, wanted changed, or need improved?

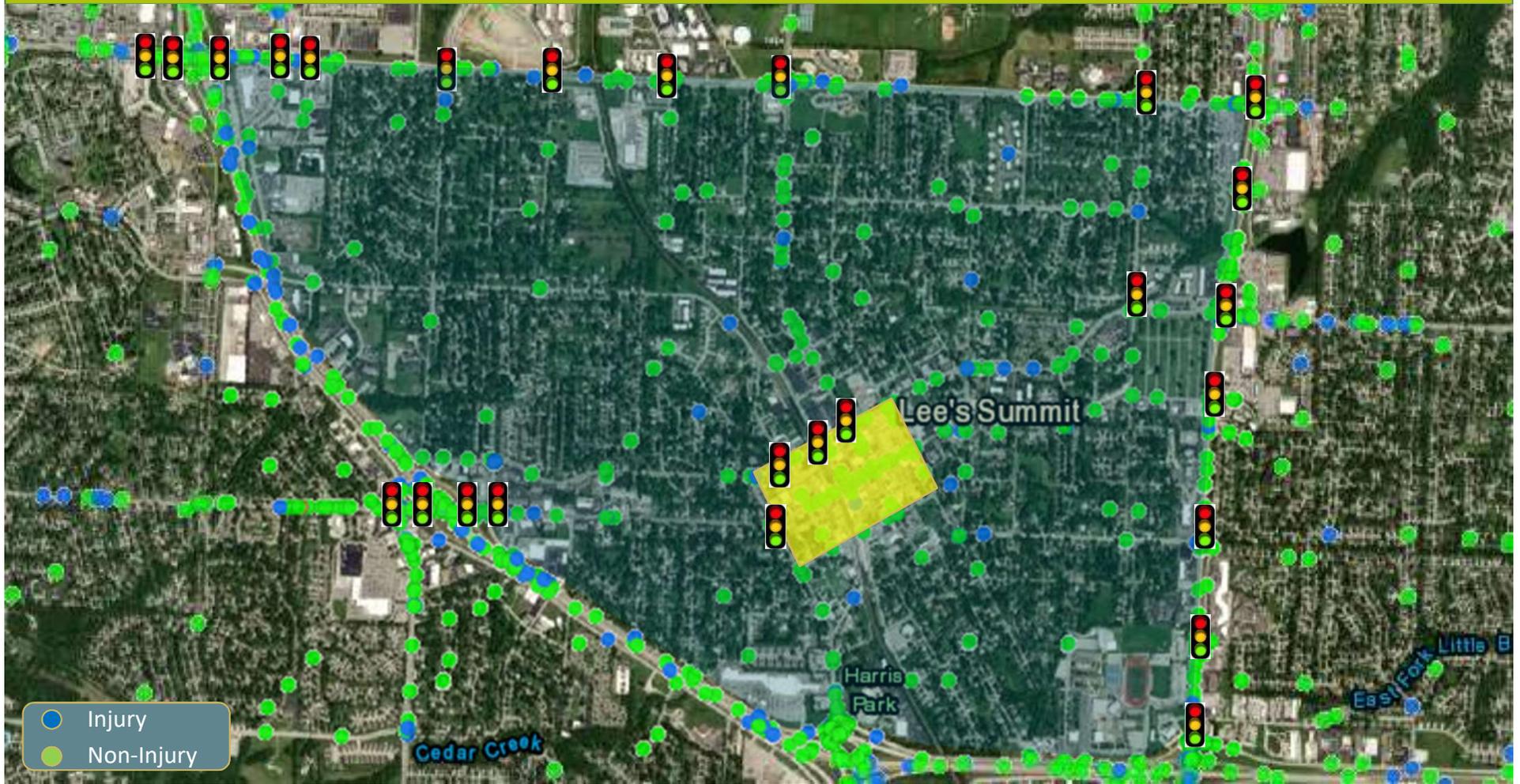


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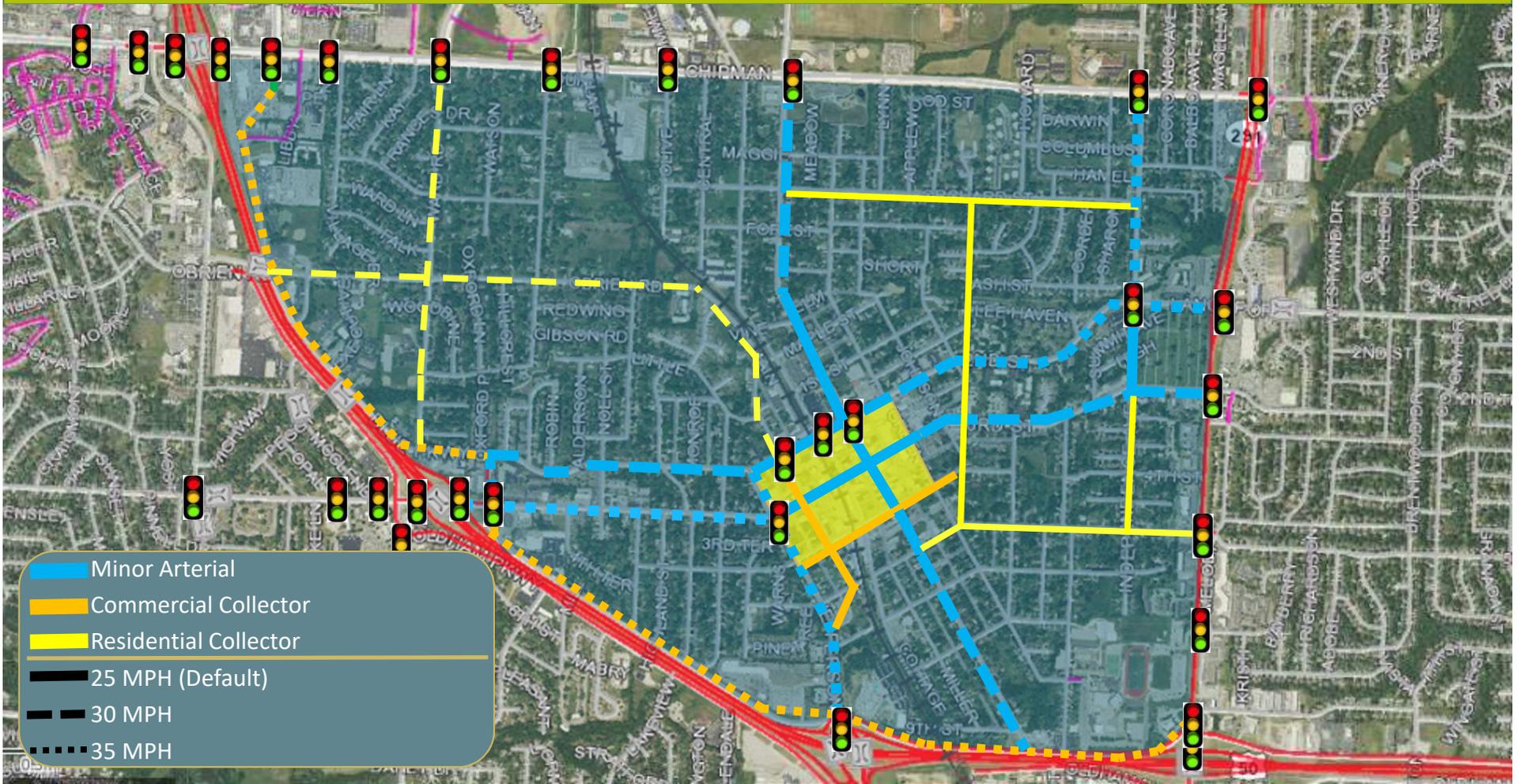


# Transportation Crash History & Congestion





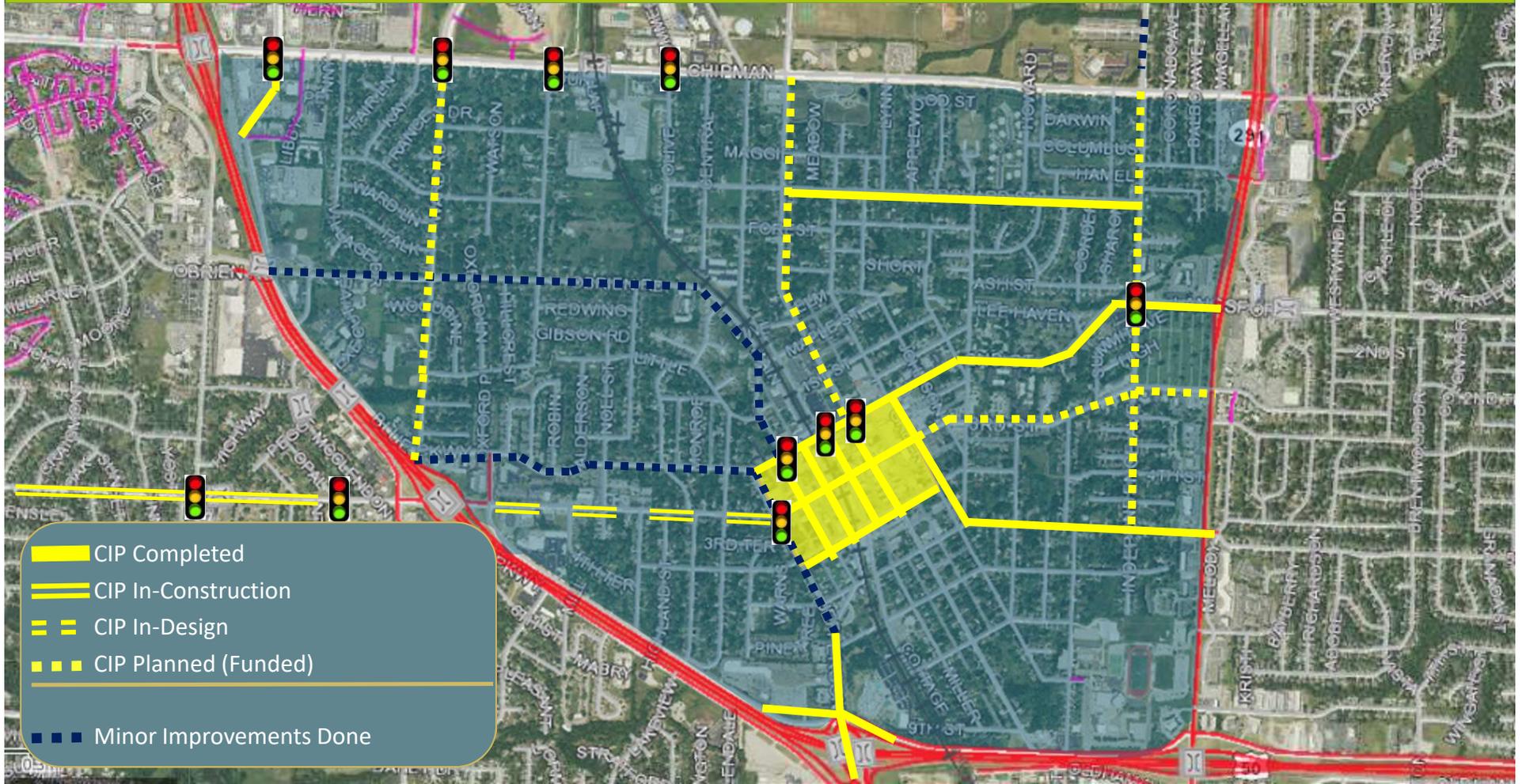
# Transportation Street Function & Speed Limits



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# Transportation CIP Road Improvements



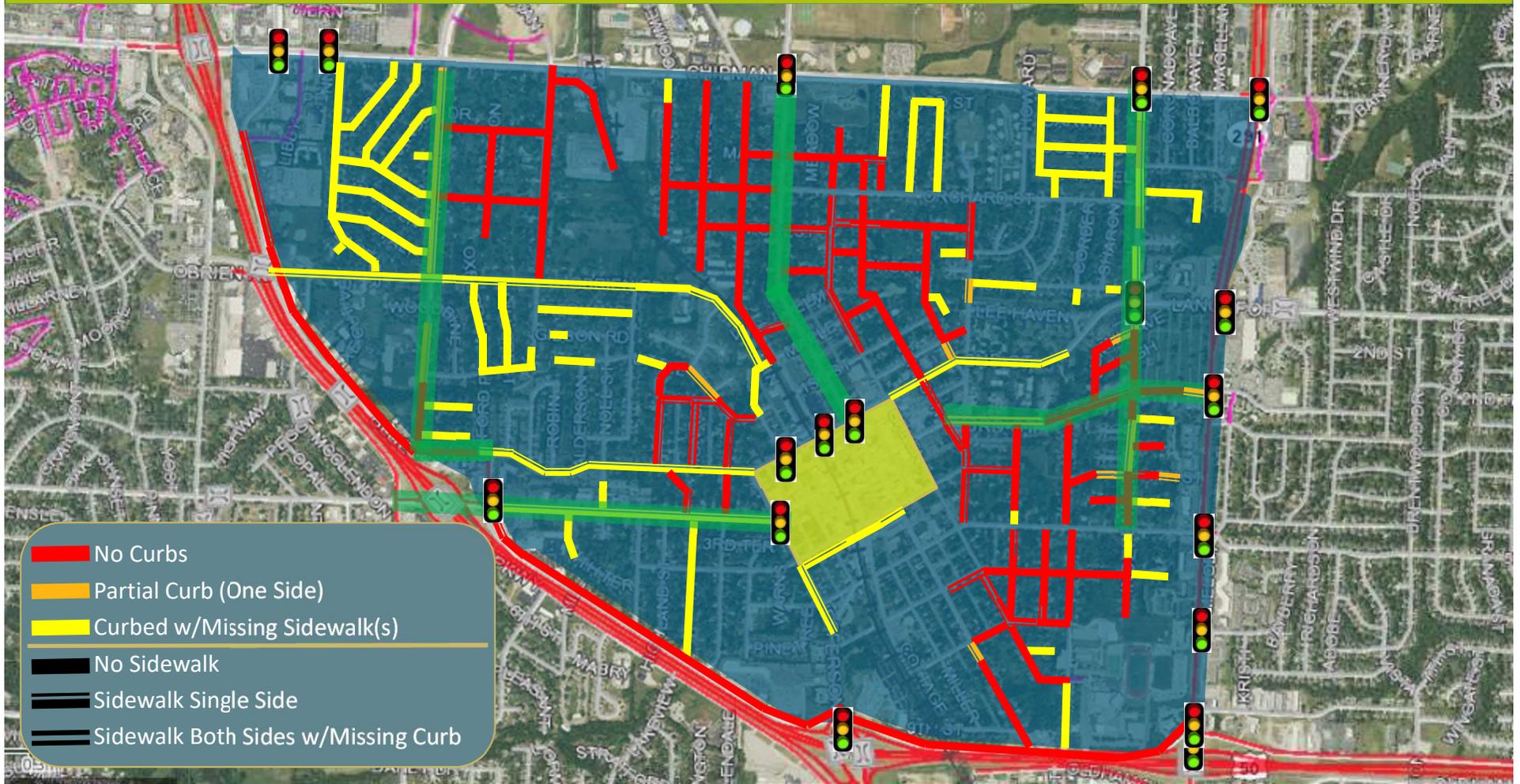
- CIP Completed
- == CIP In-Construction
- - - CIP In-Design
- · · CIP Planned (Funded)
- - - Minor Improvements Done

0.5 mile

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# Transportation Curb/Sidewalk Presence



Green Highlight – Improvements

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# Existing Conditions (No Curb/No Sidewalk)

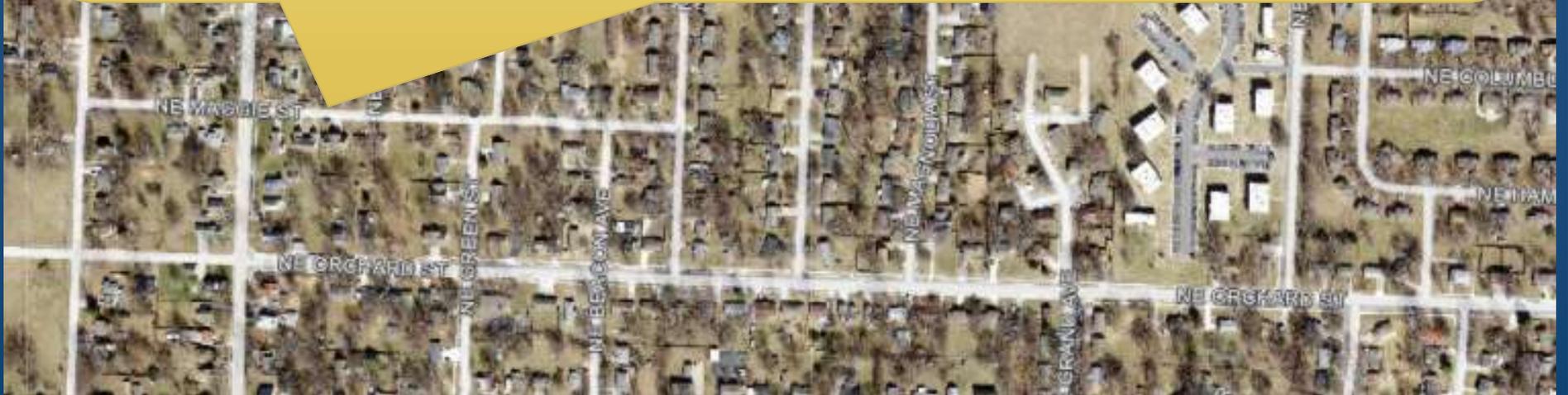


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# Existing Conditions (No Curb/No Sidewalk)



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# Existing Conditions (No Curbs/Sidewalk)



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# Existing Conditions (No Curbs/Sidewalks)



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# Existing Conditions (Part Curb/Sidewalk)



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# Existing Conditions (Curbs/No Sidewalks)

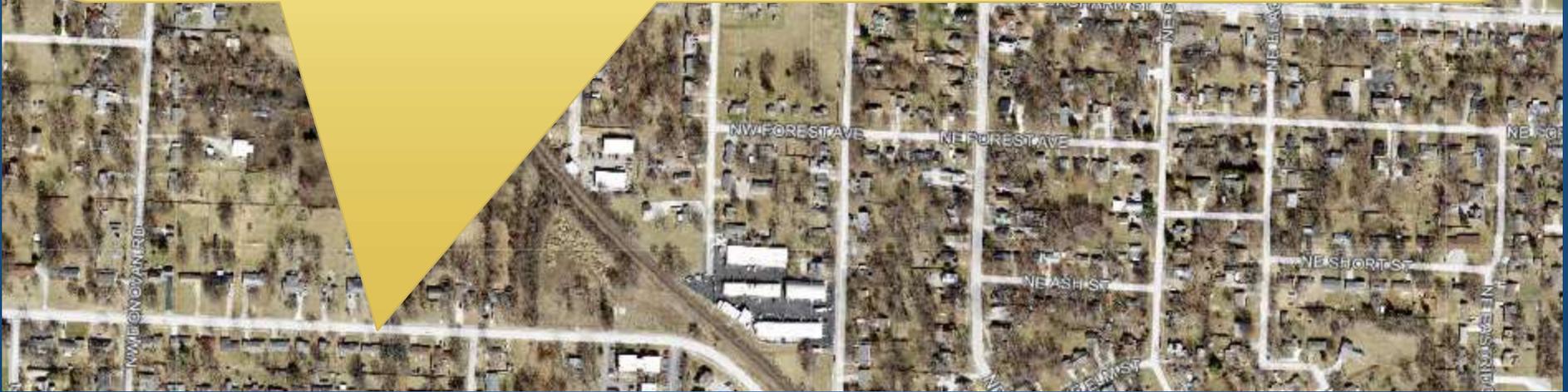


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# Existing Conditions (Curbs/Part Sidewalk)



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# Existing Conditions (Curbs/Sidewalk)



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# Existing Conditions (Curbs/Sidewalks)





# Transportation Infrastructure

## Inventory “Scan” for Discussion Purposes

### Transportation Focused/Greater Downtown Area

- Not an assessment of condition for curb, pavement, street width, sidewalk, sidewalk width, etc.
- Not an identification of missing ADA sidewalk ramps or single lot gaps.
- Not an indication of challenge, topography, right-of-way needs, drainage impacts, driveway replacements.

Road Classification	No Curbs No SW	Partial Curb No SW	Curbs No SW	No Curbs Full SW	Curbs Partial SW
US50 Frontage Road (Blue Pkwy)	2.33 mi	-	-	0.17 mi	-
Minor Arterial	0.42 mi	0.37 mi	-	-	2.10 mi
Collector	0.67 mi	0.72 mi	0.37 mi	0.27 mi	1.45 mi
Local/Access	7.68 mi	0.42 mi	5.57 mi	1.74 mi	-



# Infrastructure Improvements

## Greater Downtown Area Plan Goals “Vision”:

1. What is the boundary/area focus?
2. What needs or wants to be improved?
  - Infrastructure (Curbs, Sidewalks, Storm Sewer)
  - Issues (Accessibility, Complaints, Aesthetics)
  - Road Classifications (Local, Collector, Arterial)
3. How should it look?
  - Consistent or Variable Standards



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# Infrastructure Improvements

## Next Steps:

1. Define Applicable Conditions & Quantify
2. Develop an Improvement Approach
  - Coordinate with Comprehensive Plan
  - Policy for Development (ReDevelopment)
  - Prioritization for Capital Projects
3. Plan for Funding

