



OCTOBER 15, 2018

CITY OF INDIANOLA

TRANSPORTATION MASTERPLAN PROGRESS REVIEW

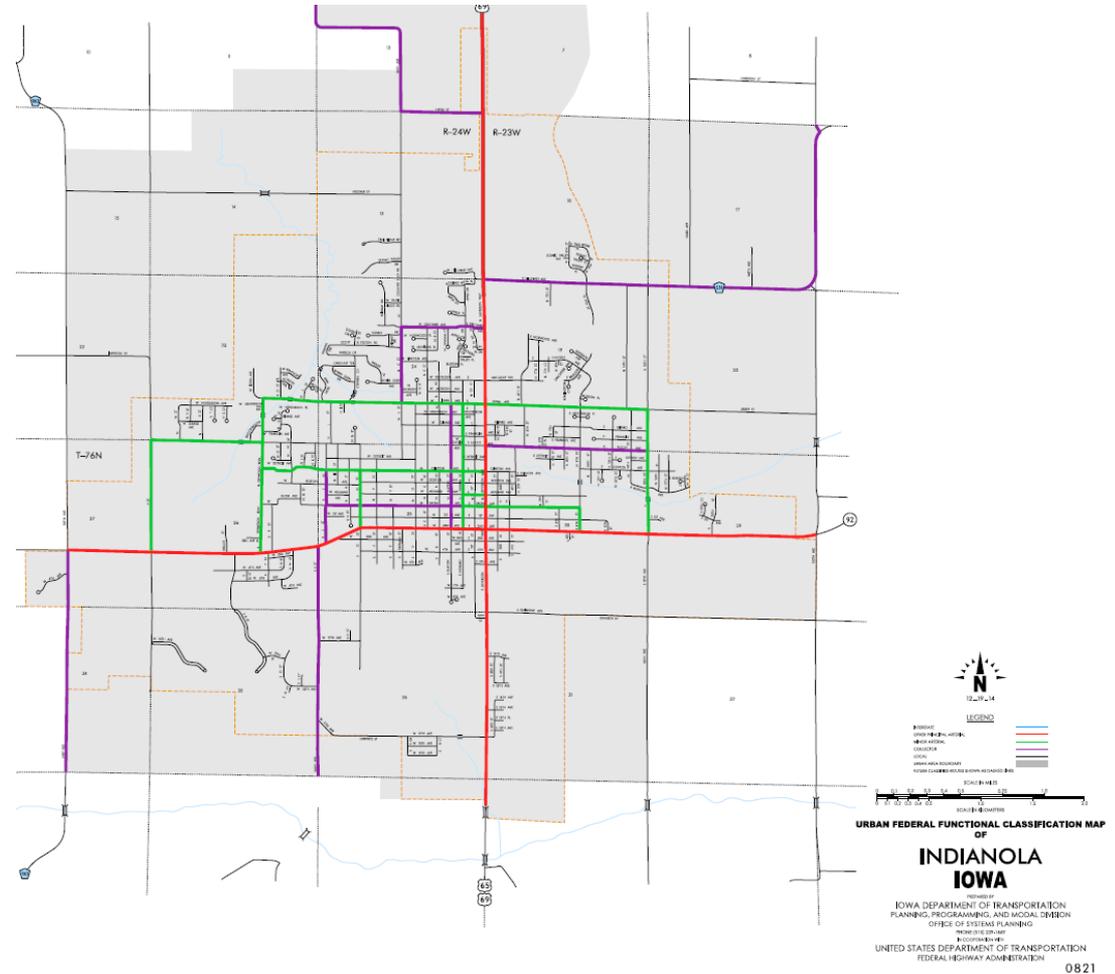
PAVEMENT INVENTORY AND ANALYSIS

2018 Effort for Masterplan

- Complete paver data-base set-up
- Inspect all classified roadways
- Develop interim strategy

Urban Federal Functional Classification Map

- Official map through CIRTPA, eligible for federal funding



Inspection Results

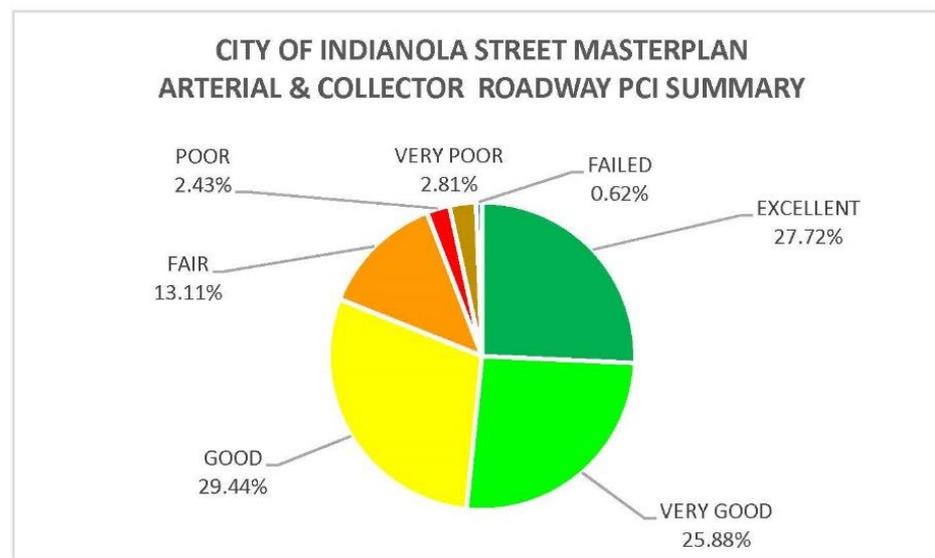
15.1 lane-miles

24% of system

Area Weighted

Average PCI=69

PCI Range 3 to 100



Inspection Results

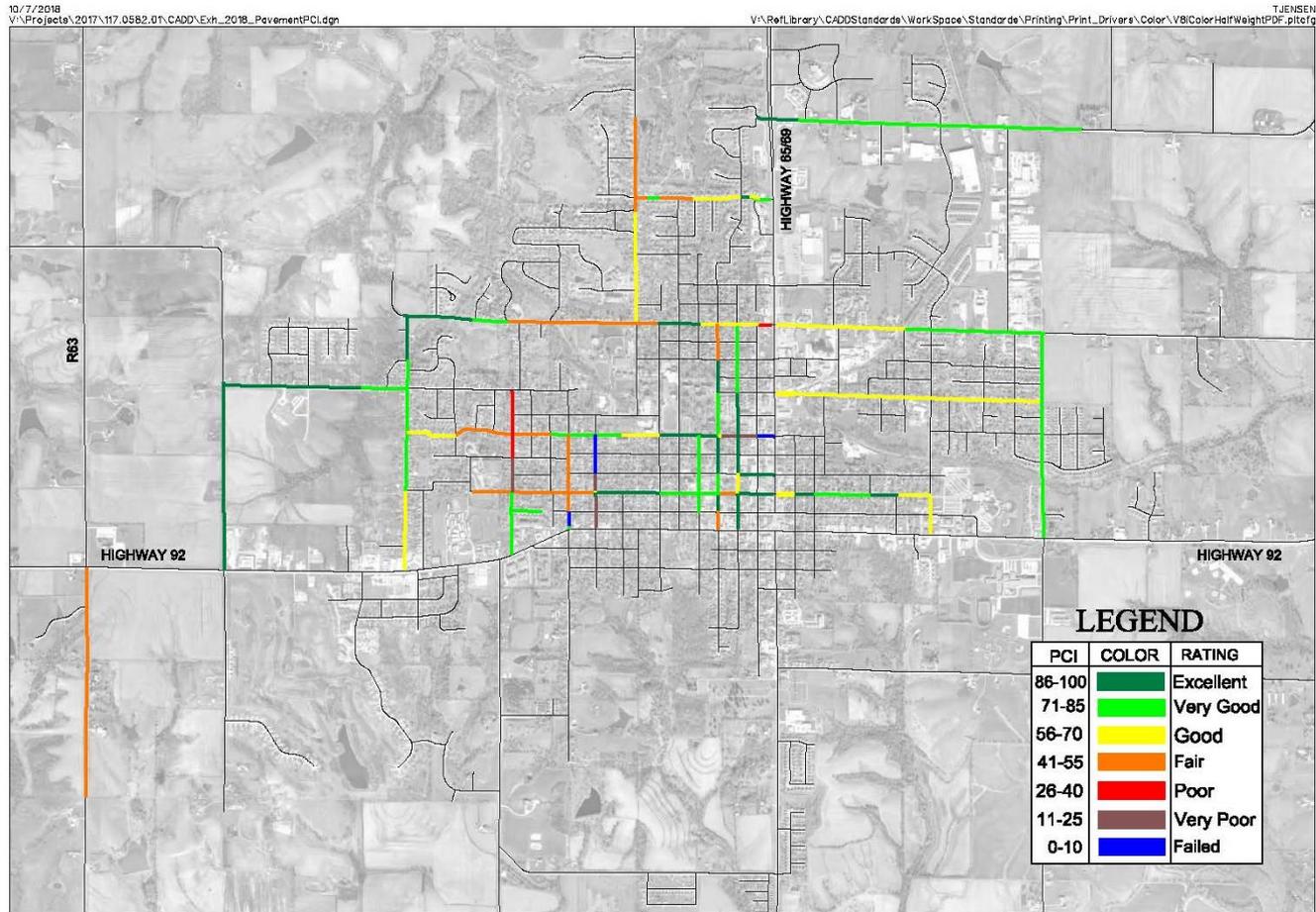


Exhibit 1 - Arterial & Collector PCI Summary

Street Masterplan | City of Indianola, IA | 10/08/2018



Inspection Results

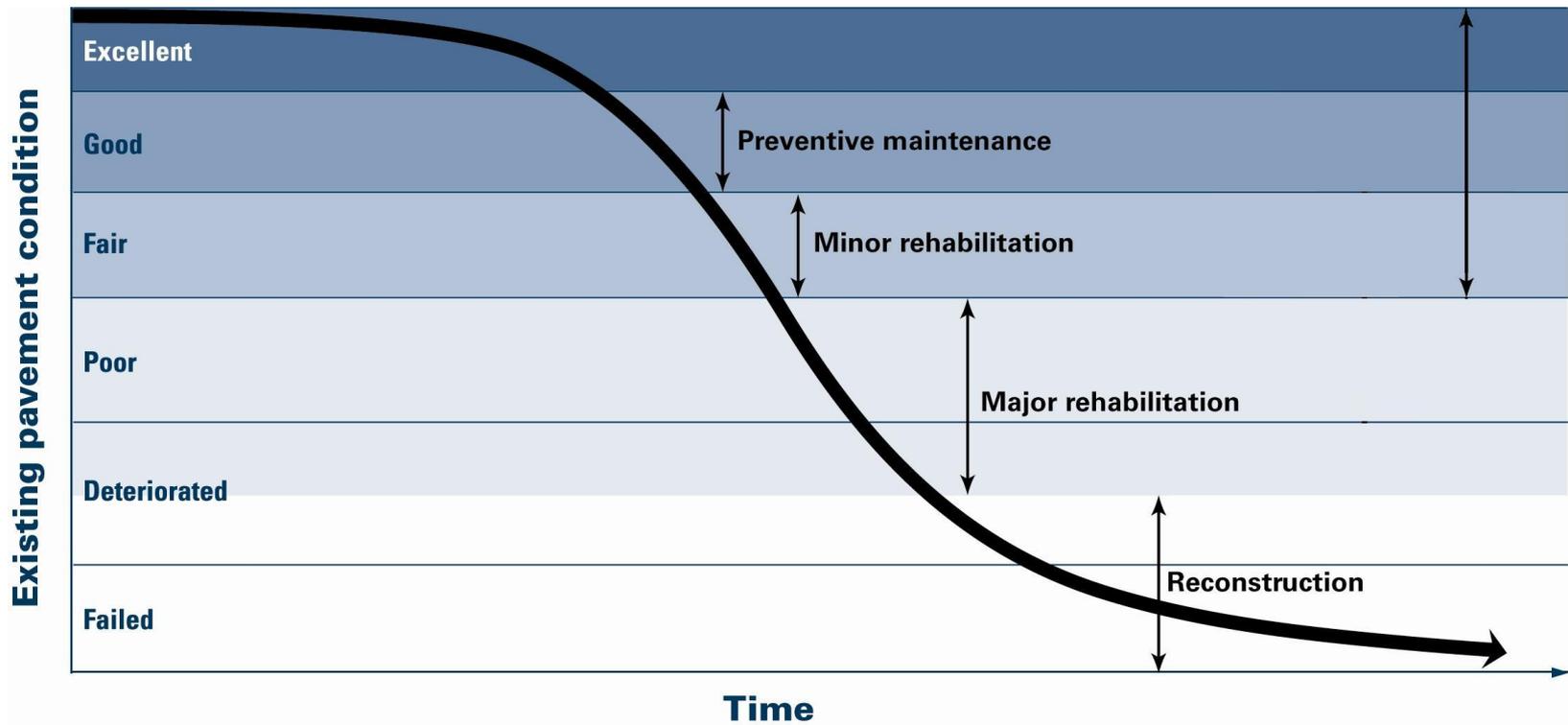
- Capital improvement plan development
- Pavement performance evaluation
- Candidate street segments action categories

Inspection Results

- Pavement performance evaluation
 - Durability
 - Mode of failure
- Influences maintenance techniques
- Influences design and construction standards

Inspection Results

- Candidate street segments action categories



Inspection Results

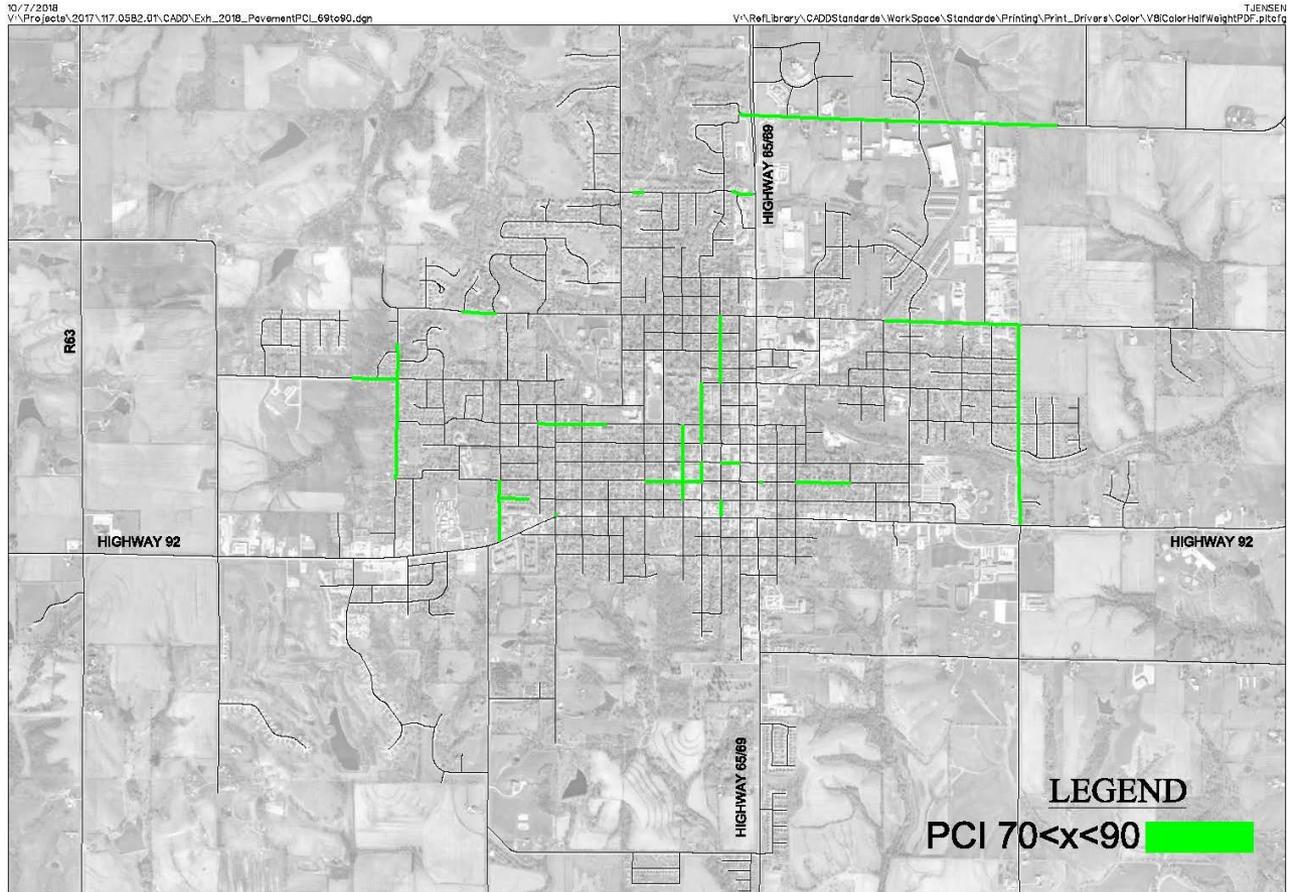


Exhibit 2 - Arterial & Collector Routine Maintenance

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Inspection Results

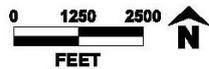
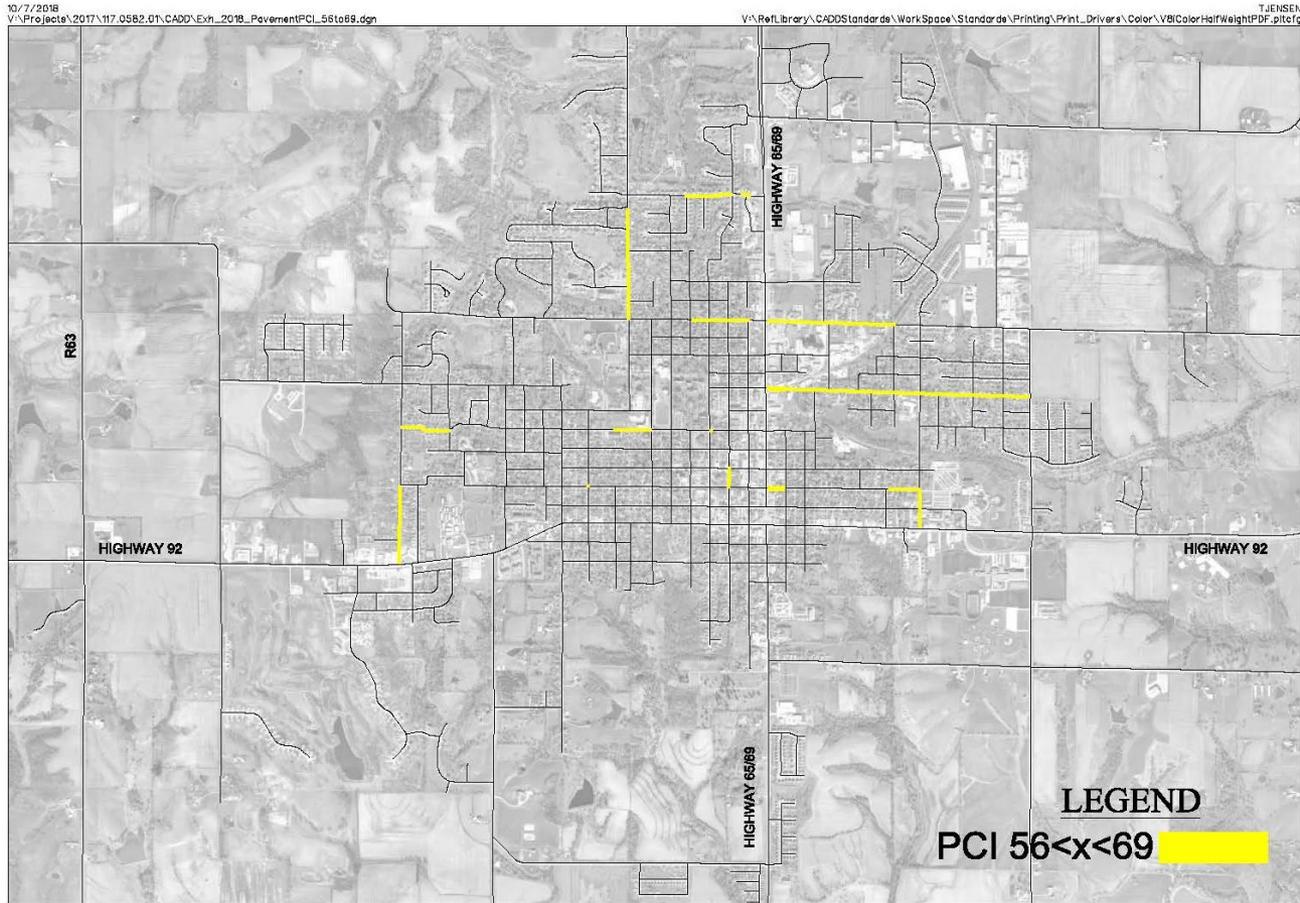


Exhibit 3 - Arterial & Collector Preferred Maintenance

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Inspection Results

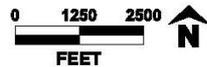
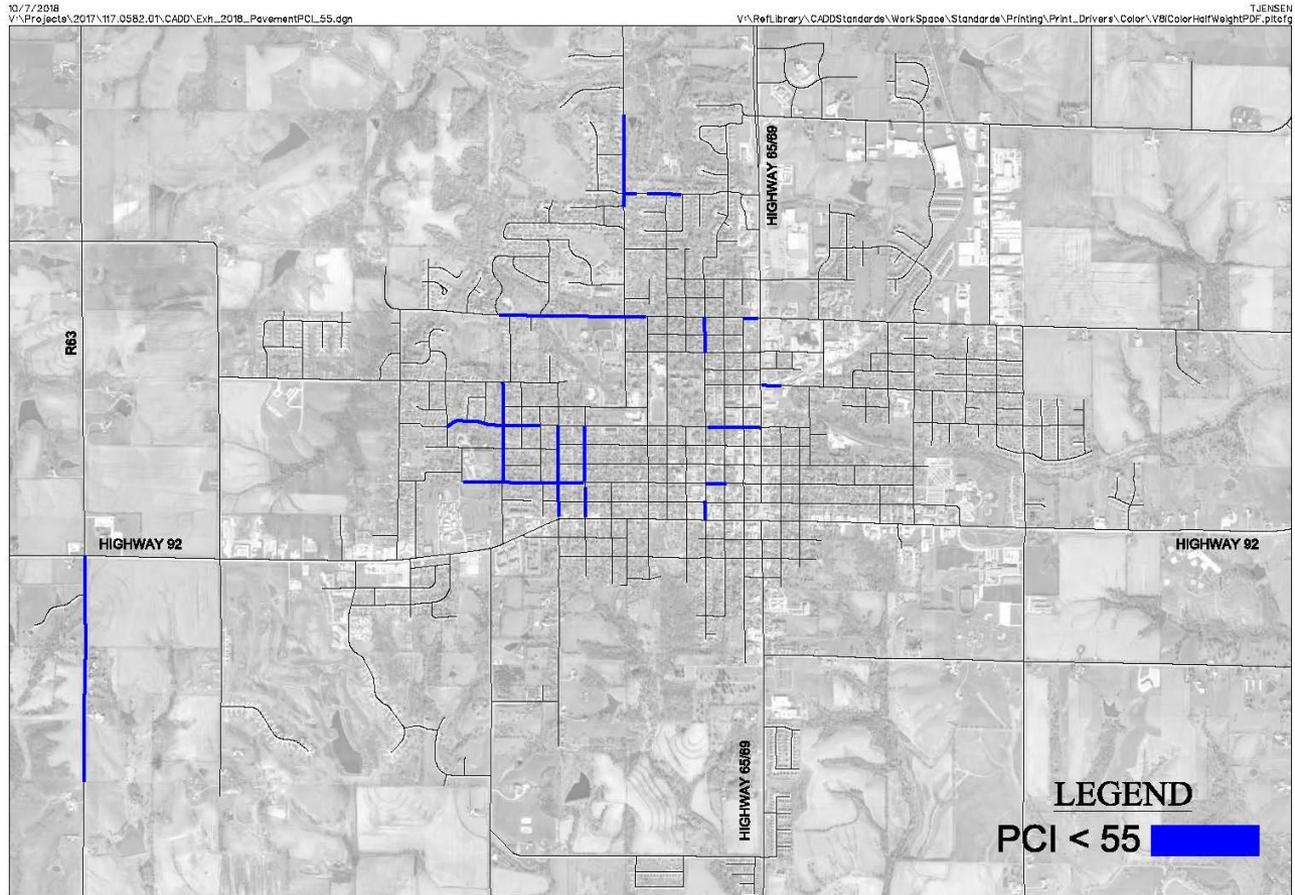


Exhibit 4 - Arterial & Collector Deferred Maintenance

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Next Masterplan Steps (2019)

- Develop data driven interim strategy
- Inspect additional 25%-30% of the system
- Identify appropriate maintenance activities
- Identify critical PCI and system average
PCI Goals

INTERIM STRATEGY

Strategy Objective

- Develop a data-driven systematic approach to a capital and maintenance street improvement plan to make timely repairs to efficiently maintain sustainability of the roadway level of service.
 1. Understand system needs and condition
 2. Develop appropriate techniques and strategies
 3. Develop appropriate budgetary levels
 4. Continue to evaluate implementation effectiveness

Interim Strategy

Leverage the strengths of the existing Street Department equipment and staff at existing budget levels to improve the overall level of service of transportation network prioritizing emergent needs until system wide needs are analyzed.

Leveraging strengths and “knowns”

- 2017/2018 consumed by emergency repairs



Leveraging strengths and “knowns”

- CIP streets have been planned for the next five years
- Functional classified street condition is known
- Street department is very good at full-depth concrete patching
- Infrastructure age suggests emergency pavement/drainage failures will continue
- Routine maintenance by PCI and pavement age

Interim Strategy

- Routine maintenance
 - Same budget amount
 - Location by age and condition
 - Priority by functional classification
- Patching program
 - Same budget amount
 - 40% for emergency repairs
 - Consult with CIP and deferred maintenance maps
 - 60% for planned locations
 - Priority by functional classification

IOWA DOT COORDINATION

Coordination Meeting

- Three lane approach at 2nd Avenue/IA Hwy 92 and Kenwood
- Continued coordination of operations
- Upcoming projects
 - Traffic safety fund and ICAAP projects
 - IA Hwy 92 resurfacing

Iowa Highway 92 Resurfacing

- Project will be let in Spring 2019 for construction in 2019.
- Project is from N Street in Indianola to the west IA 5 junction.
- Within the City, 2” milling and a 2” overlay on the existing asphalt sections and patch the existing concrete sections. Paved shoulders on rural section.
- ADA curb ramps will be updated along IA Hwy 92
- DOT requests consideration of 3-lane conversion

IA Hwy 92 Resurfacing

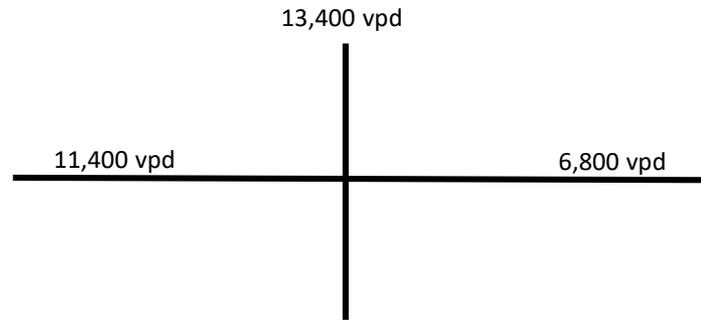
- DOT recommends and supports the conversion of the existing 4-lane to a 3-lane roadway.
 - It makes sense to include the conversion with the upcoming project
 - DOT requests a resolution from the City with their support and approval
 - Supporting information
 - DOT's 4 to 3-lane conversion video:
<https://vimeo.com/287317281/f23c286f9a>
 - DOT's Potential Lane Reconfiguration report:
https://iowadot.gov/systems_planning/pr_guide/Safety/StatewideScreeningforPotentialLaneReconfiguration.pdf

IA Hwy 92 Resurfacing

- Brief review and analysis
 - Traffic volume
 - Access control
 - Crash experience
 - Operational experience

Iowa Highway 92 Resurfacing

- Traffic Volume



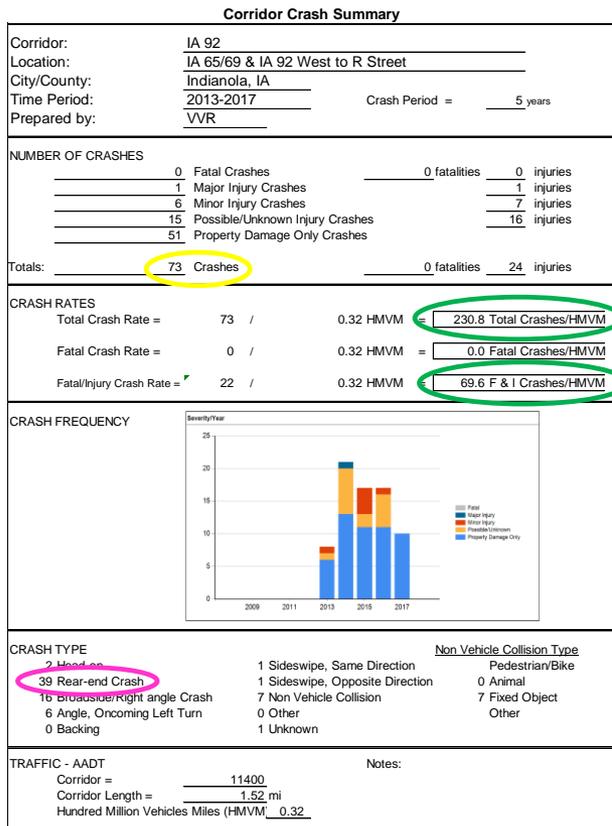
- Access Control



Iowa Highway 92 Resurfacing

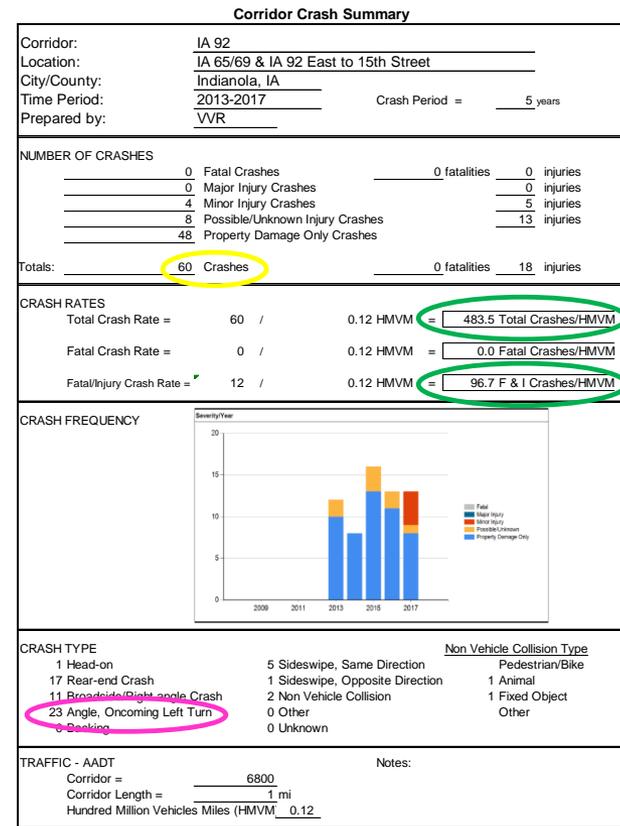
Crash Experience

IA Hwy 92 west – Existing 3-lane



Crash Experience

IA Hwy 92 east – Existing 4-lane



Iowa Highway 92 Resurfacing

- Operational Concerns
 - Traffic Signal Phasing timing and signal indication positions
 - School Bus Traffic
 - Event Traffic & on-street queuing

Highway 92 resurfacing

- Options and next steps
 - Say Yes to 3-lanes
 - Say No to 3-lanes
 - Say Maybe to 3-lanes. Further evaluation?
 - Either way, continue coordination and inspect intakes through project area and schedule repairs to avoid patching new improvements

QUESTIONS?

