

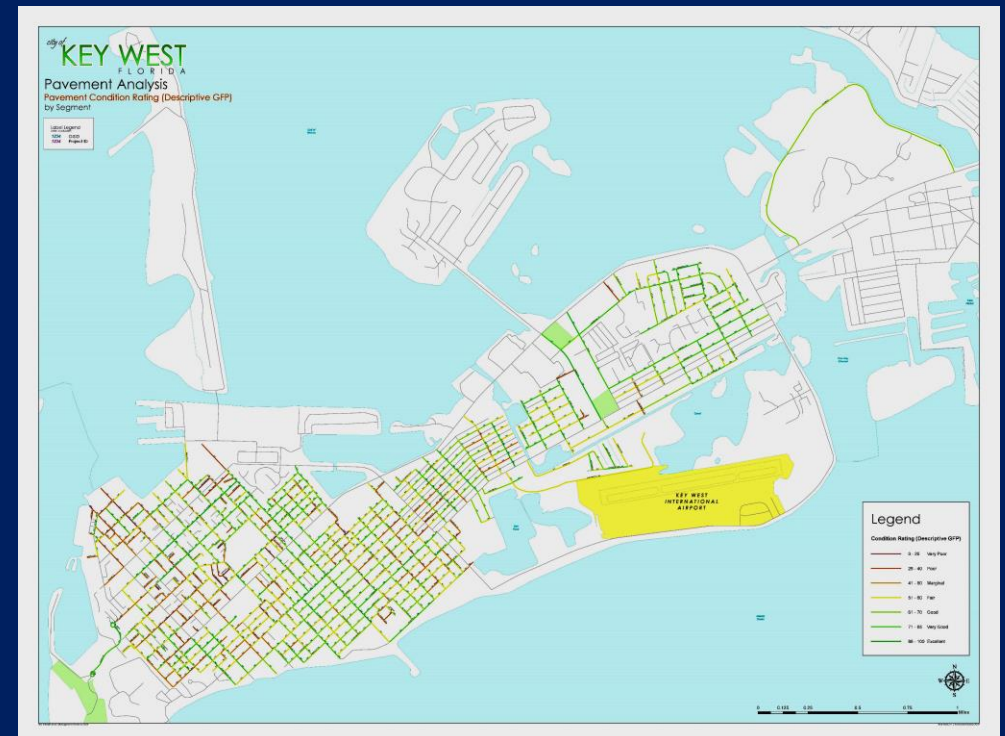
2019
Pavement Management Plan

City of Key West Engineering Department
Jacobs (CH2M Hill)
October 30, 2019

Pavement Management Overview

Methodical approach

- Analyze the entire roadway network condition
- Develop priorities and overall goal
- Develop funding levels to achieve pavement goals
- Select a program that meets budget constraints

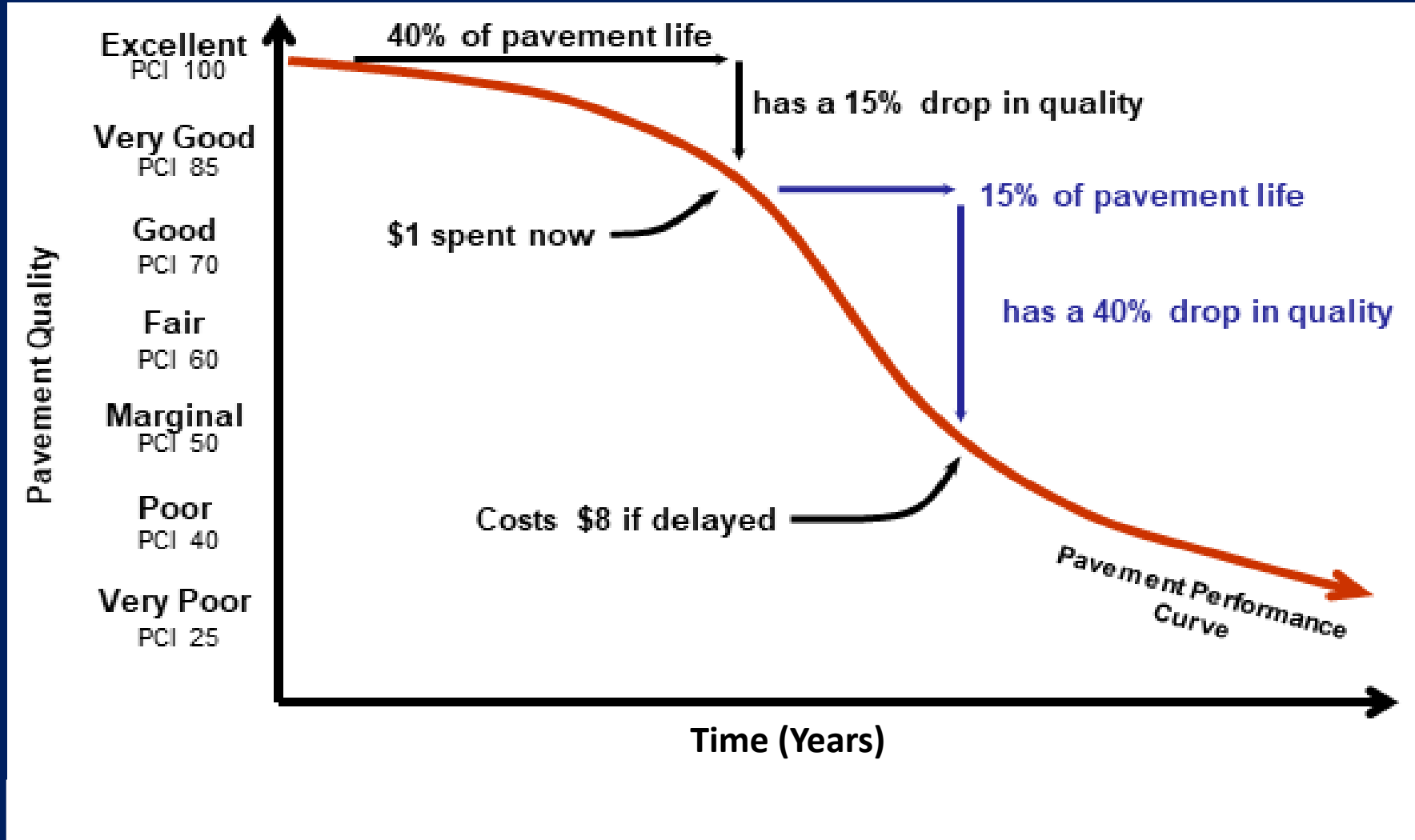


Principles of Pavement Management

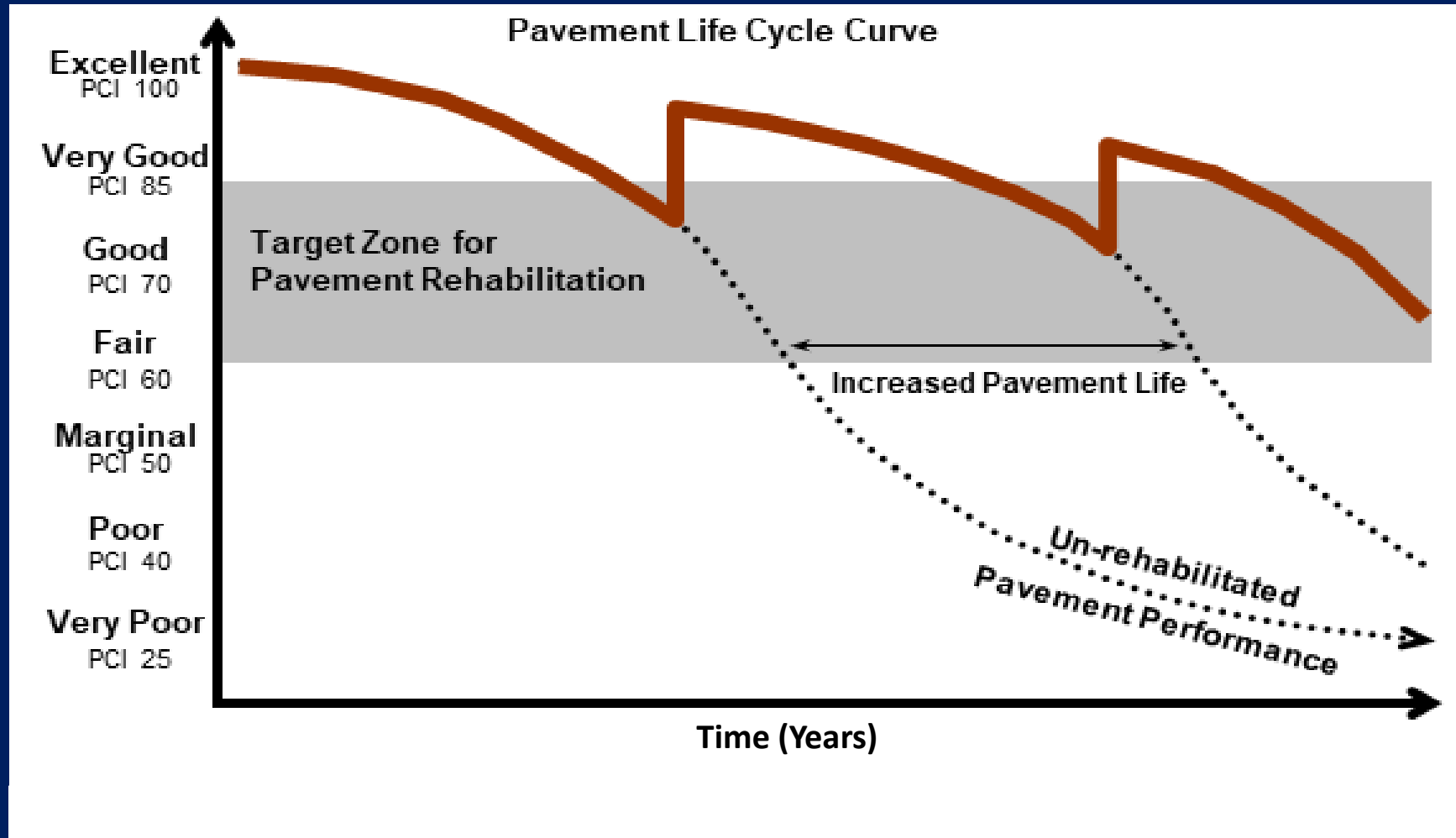
- Define the Pavement Condition Index (PCI)
- Extend the life of pavement
- Preventative maintenance (avoid Reactive)
- Rehabilitate roads before costlier repairs are needed
- Re-survey roads in 5 years (Evaluate progress)



Pavement Life Cycle



Benefit of Preventative Maintenance



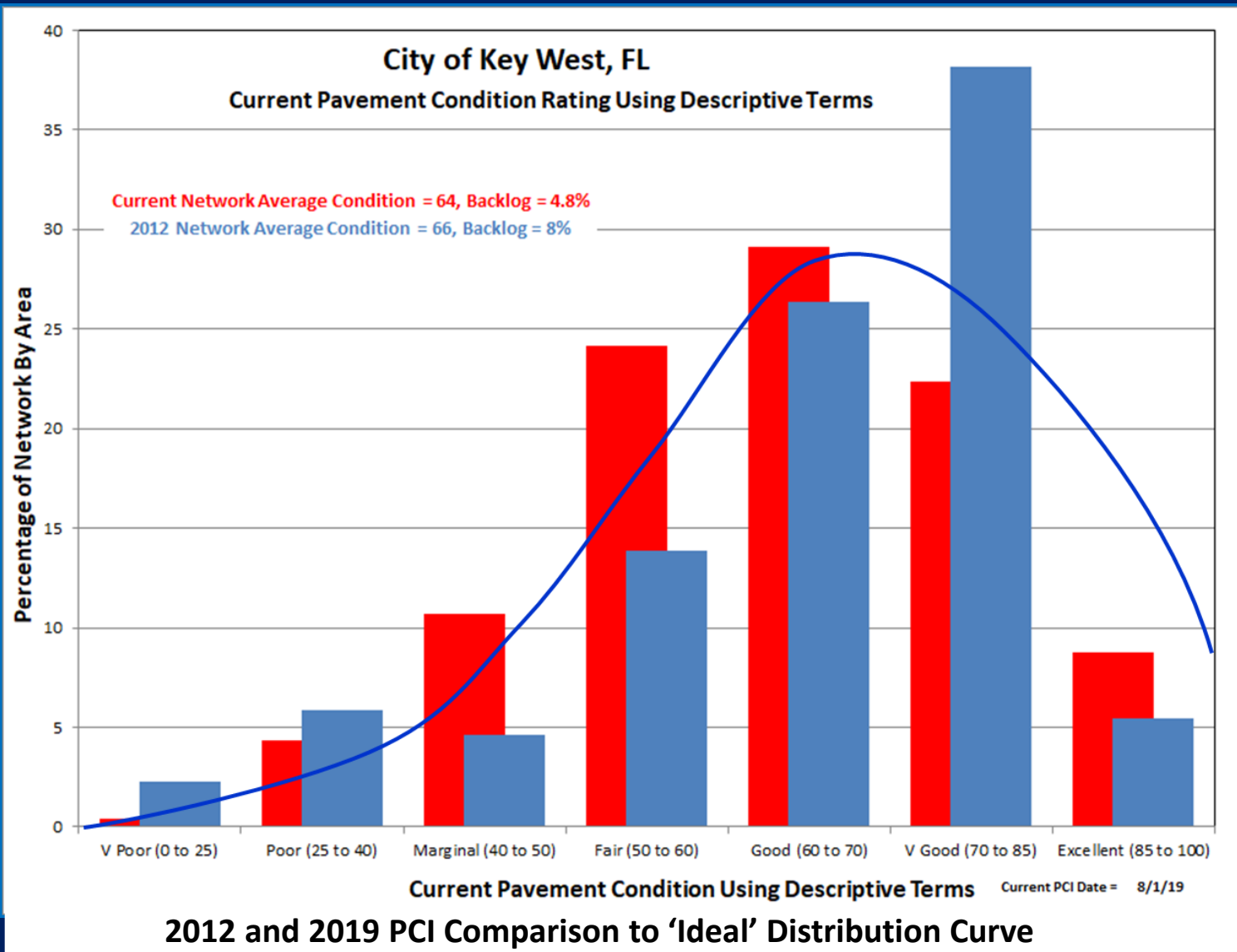
City Specific Management Measures

- Utility Coordination
 - FKAA, City of Key West Utilities Department
- Multi-Agency Coordination
 - FDOT, Monroe County
- 5 Year Roadway Construction Moratorium
 - Roadway cuts within 5 years require special restoration and/or permit fees

Analysis Results/Comparison

- 2012 Plan Results
 - PCI of 66
 - \$1.2M budget to reach a PCI of 70 by 2017
- 2019 Analysis Results
 - PCI of 63 (Will increase to 64 after current projects)
 - \$3.26M budget to reach a PCI of 70 by 2024

PCI Condition Comparison



- Thin blue line is 'Ideal'
- Blue bars = 2012
- Red bars = 2019
- Pavement quality is trending down

5-Year Budget Scenarios¹

Budget Scenario #	Annual Investment (5-Year Total)	Resulting 2024 PCI
1. Historical	\$1.50M (\$7.5)	PCI 61
2. Steady State	\$2.16M (\$10.8)	PCI 64
3. Catch Up	\$3.26M (\$16.3)	PCI 70
4. Fix All	\$7.94M (\$39.7)	PCI 89

Note 1: Does not include the cost for ADA sidewalks and surface drainage improvements

5-Year Paving Plan Methodology

- Assumes the “Catch-Up” Budget is Adopted
- Repair High Volume Old Town Streets
- Rehabilitate Mid Town and New Town Streets
- Implement Preventative Maintenance Measures
- Coordinate Planning Efforts with Utilities
- Coordinate Paving Efforts with Other Agencies
- Re-Survey After 5-Years and Reassess

FY 19/20 Paving Projects

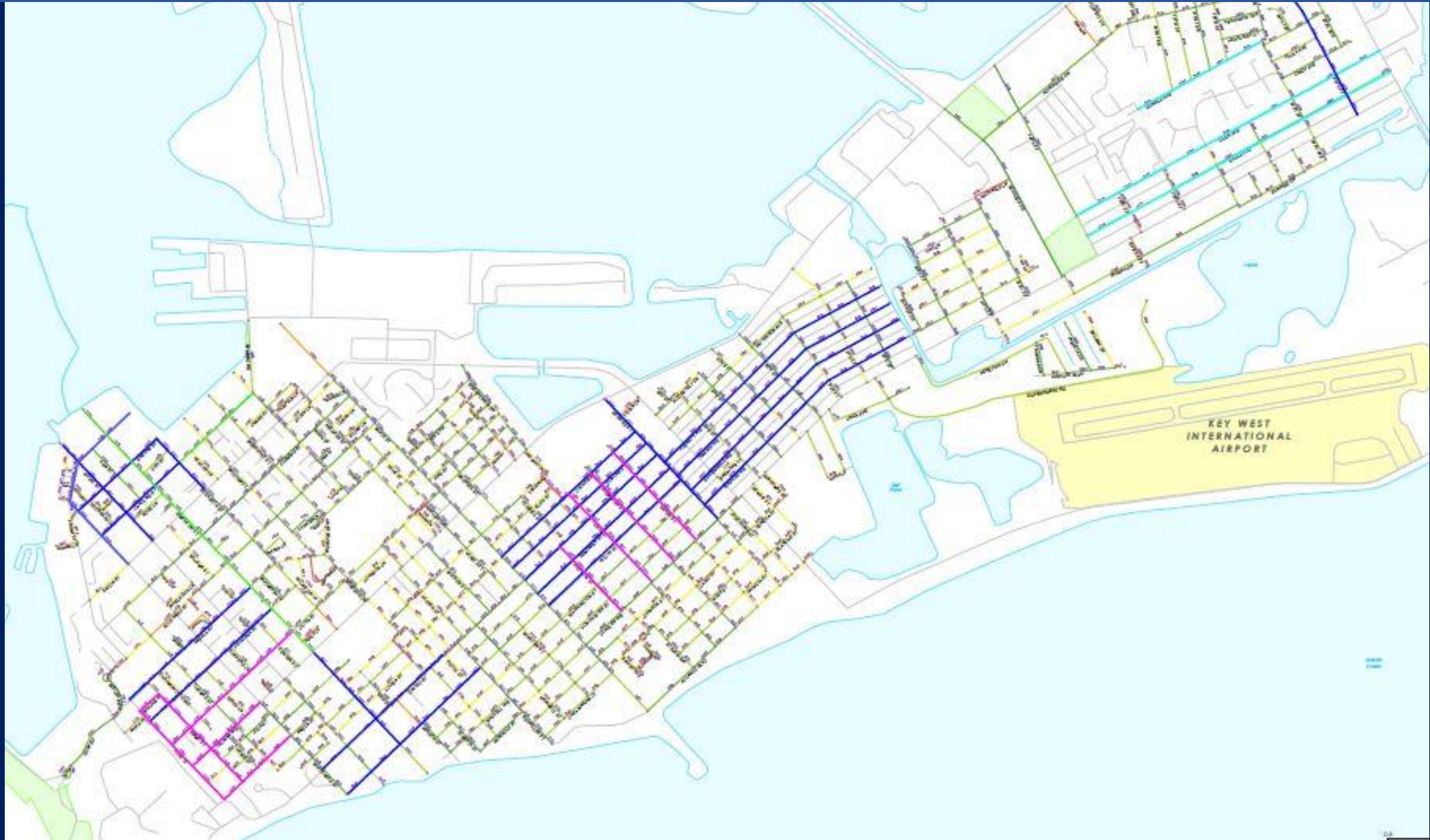
Planned Projects

- Greene (Design)
- 20th Street (Design)
- Front (Design)
- Whitehead (Design)
- Duval (Design)
- Midtown (TBD)

Budgeted Funds

- \$3.25M (Paving)
- \$900K (ADA Sidewalks)

Proposed 5-Year Paving Map



Funding Sources

- Internal Improvement Account 102 (Gas Tax)
- Caroline TIF Funds
- FKAA Reimbursement (Trench Cuts)
- FDOT Local Assistance Program (LAP) Funds
- Other Grants

QUESTIONS?