



City of Corpus Christi Streets

Hot mix Plants

Goal: Plant to pavement **faster**



Max Plant production = AVG 800 to 2,000 tons per day

Current City HMA utilization = AVG 334 tons per day

IMP Program Goals

RSRP

- New pavement (reconstruction/rehabilitation)
- Improve curb and gutter
- Improve sidewalk
- Improve storm water
- New ADA ramps

PW IH

- New pavement (rehabilitation)
- Spot curb and gutter
- Spot sidewalk

SPMP

- New pavement (rehabilitation)
- Spot curb and gutter
- Spot sidewalk
- New ADA ramps

Note: Future Street Projects will Now include Improving Existing Utilities in Addition to Program Goals

Current IMP Productivity

RSRP

PW IH

SPMP

6 CL miles/year

9,564 tons/year

47 tons/day

9 CL miles/year

23,500 tons/year

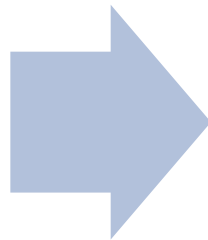
115 tons/day

12 CL miles/year

35,115 tons/year

172 tons/day

Current
Overall
program
productivity



27 CL miles/year

68,179 tons/year

334 tons/day

Impact to Productivity

Current IMP Productivity

27 CL miles/year
68,179 tons/year
334 tons/day

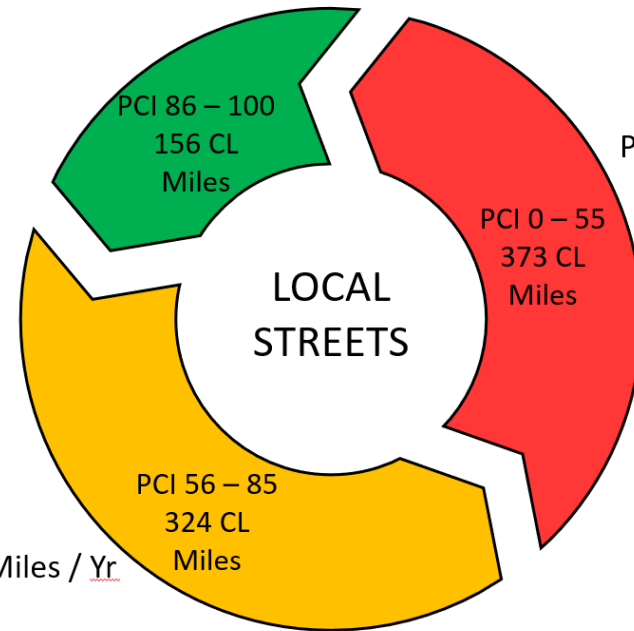
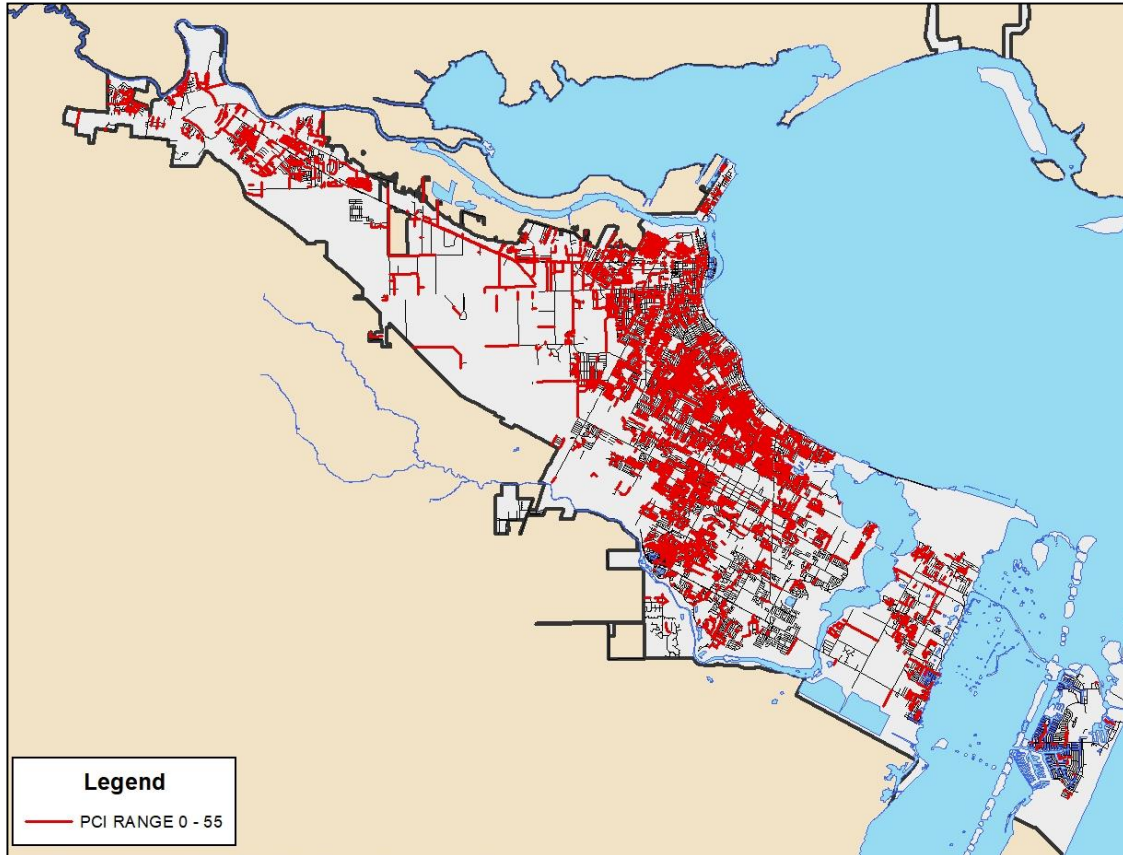


Current IMP Productivity w/Utilities

24.75 CL miles/year
64,187 tons/year
315 tons/day

Analysis of Current Situation

Local Streets w/ PCI 0 -55



AVG
RSRP = 6 CL Miles / Yr
Productivity

AVG = 12 CL Miles / Yr
Degradation

Local streets

- 373 CL miles rated with PCI 0 – 55 (Failed to Very Poor)
- 12 Mile Degradation – 6 Mile Productivity = 6 Degradation Annually Despite Repairs
- Current RSRP Productivity (w/o Degradation)
 - 62 years to complete
 - \$930 Million (2023 Estimate)

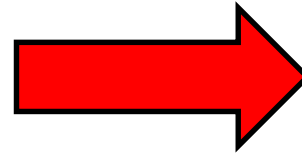
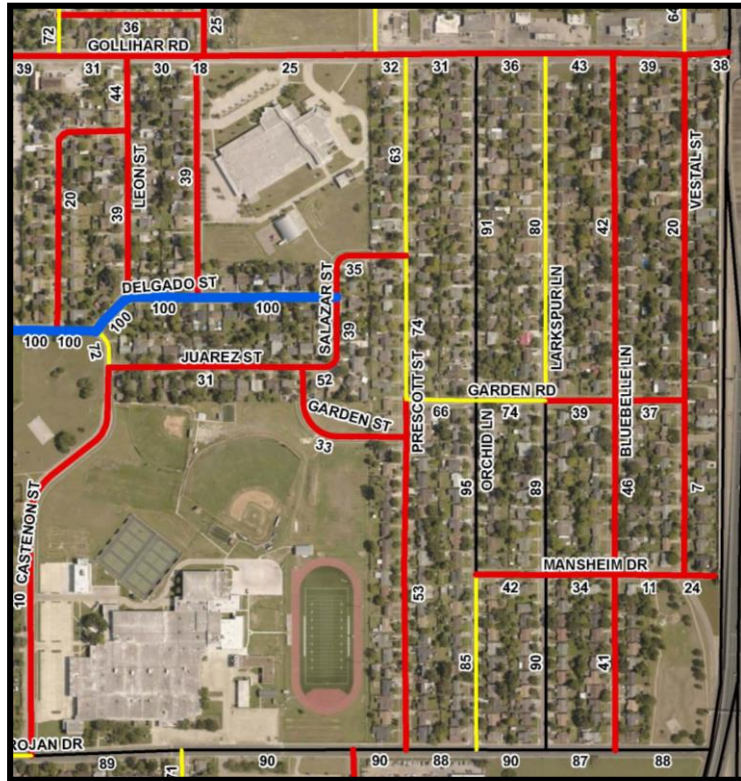
Pavement Treatments

PCI	Street Maintenance Type & Applications
86-100	Preventative Maintenance- Crackseal, Ultrathin
71-85	Maintenance- Mill & Overlay
56-70	Rehabilitation- Mill & Overlay, base repairs
0-55	Reconstruction- Full depth pavement reconstruction

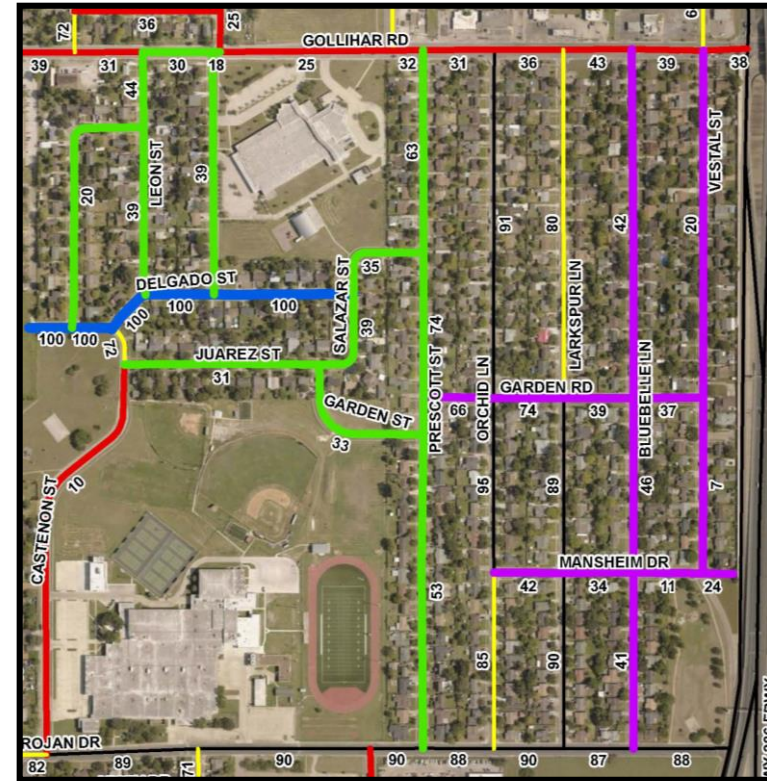


Recommendation

Existing IMP

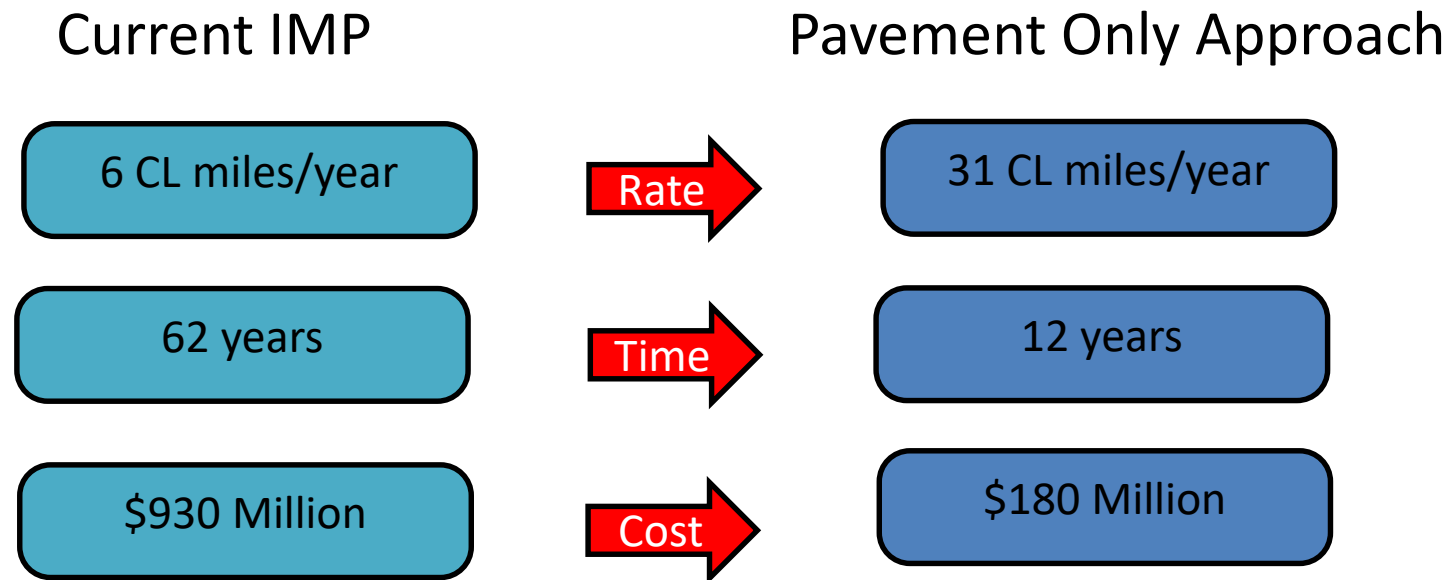


Pavement Only Approach



Recommendation

Comparison of approaches to improve 373 CL miles of local streets with PCI 0 – 55 (Failed to Very Poor)



Note: 5 times as many street CL miles will be paved with the Pavement Only Approach

Recommendation

Project Level Plan

Anderson
Columbia

Bay

Reclaim
(cement slurry)



PW IH

HAC

BAY

J. CARROL

A. ORTIZ

JE

ROVAN

GRACE

CLARK

MAKO




JHABORES

Pavement Only Approach

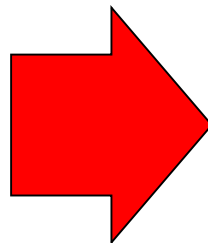
Utilize all paving capacity to resurfacing streets

Target Productivity

LOCAL AND COLLECTOR STREETS

15 CL miles/year		31 CL miles/year
33,064 tons/year		85,787 tons/year
162 tons/day		420 tons/day

Overall
program
estimated
TARGET
productivity



37.25 CL miles/year
147,837 tons/year
724 tons/day

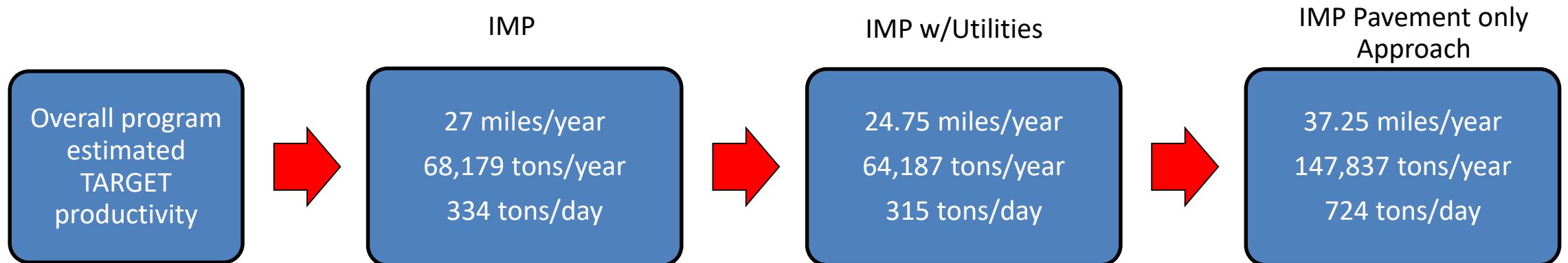
Outcome

Direct Results

- Faster fix to bad streets
- Improved safety to due to resurface streets
- Reduce vehicle damage
- Better public perception
- Fewer potholes to repair
- Less call-in complaints
- Less 311 work orders

Indirect Results

- Less consultant cost
- Reduced testing cost
- Reduced detours
- Less concrete cost
- Less flexbase cost
- Increase in funds to fix streets
- Higher PCI result (with exception)
- Assist with bridging gap until start of Bond Projects



Summary

- Minimum 12 year duration; Establish baseline
- Projected PCI will be 72 with current published IMP
- Increase project production from 27 CL miles/year to 37 CL miles/year
- Increase HMAC production from 334 tons/day to 724 tons/day
- Utilize bonds to address arterials and collectors
- Incorporate a score based assessment of curbs, gutters, and sidewalks